

EC

OCD-ARTESIA

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

J-04-24

## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM96568
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 Contact: LINDA GUTHRIE E-Mail: linda.guthrie@dvn.com		7. If Unit or CA Agreement, Name and No.
3a. Address PO BOX 250 ARTESIA, NM 88211	3b. Phone No. (include area code) Ph: 405.228.8209 Fx: 405.552.4621	8. Lease Name and Well No. FILAREE 25A FEDERAL 2
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SESE 165FSL 705FEL At proposed prod. zone NENE 660FNL 660FEL		9. API Well No. 30-015-33617
14. Distance in miles and direction from nearest town or post office* APPROXIMATELY 6 MILES NW OF CARLSBAD, NM		10. Field and Pool, or Exploratory HAPPY VALLEY- MORROW
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 880.00	11. Sec., T., R., M., or Blk. and Survey or Area Sec 24 T22S R25E Mer NMP SME: BLM
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 12000 MD	12. County or Parish EDDY
21. Elevations (Show whether DF, KB, RT, GL, etc.) 3453 GL	22. Approximate date work will start 08/20/2004	13. State NM
23. Estimated duration 30 DAYS		17. Spacing Unit dedicated to this well 320.00
24. Attachments CARLSBAD CONTROLLED WATER BASIN		

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

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

25. Signature (Electronic Submission)	Name (Printed/Typed) LINDA GUTHRIE	Date 07/16/2004
Title REGULATORY SPECIALIST		
Approved by (Signature) /s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe G. Lara	Date 9 SEP 2004
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify 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.

## Additional Operator Remarks (see next page)

Electronic Submission #33057 verified by the BLM Well Information System

For DEVON ENERGY PRODUCTION CO LP, sent to the Carlsbad

APPROVAL SUBMITTED to AFMSS for processing by ARMANDO LOPEZ on 07/16/2004 (04AL0264AE)

GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHEDWitness Surface &  
Intermediate Casing

\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*

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	Pool Name
		Happy Valley; Morrow (Gas)
Property Code	Property Name	Well Number
	FILAREE "25A" FEDERAL	2
OGRID No.	Operator Name	Elevation
6137	DEVON ENERGY PRODUCTION CO., L.P.	3453'

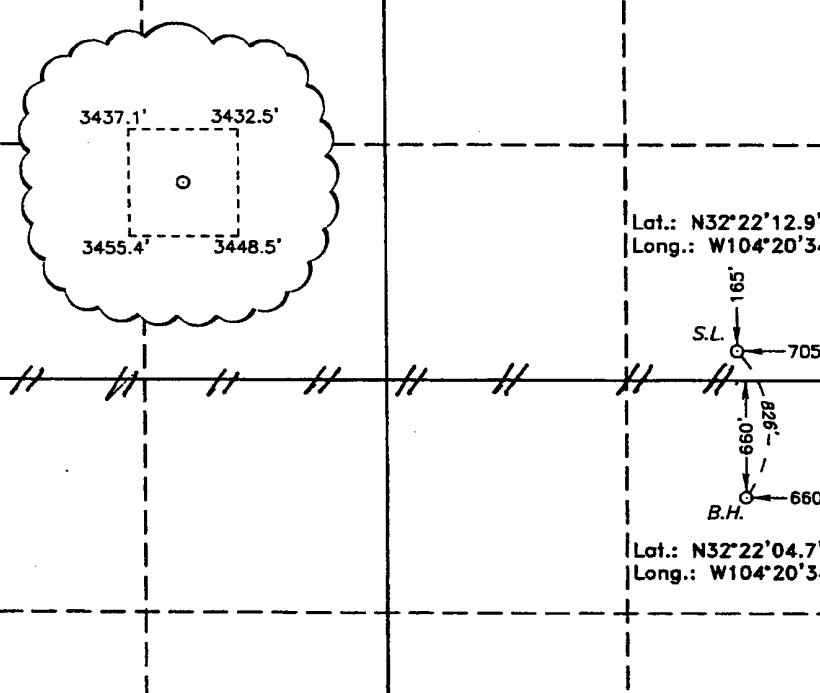
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	24	22 S	25 E		165	SOUTH	705	EAST	EDDY

Bottom Hole Location If Different From Surface

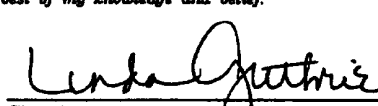
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	25	22 S	25 E		660	NORTH	660	EAST	EDDY
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						
320									

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

1/4 COR		1/4 COR
SEC. 24 SEC. 25		
1/4 COR		1/4 COR

**OPERATOR CERTIFICATION**

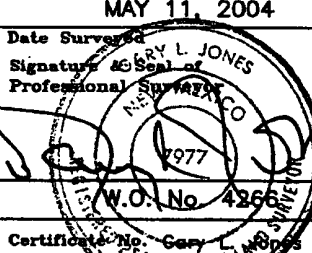
I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.



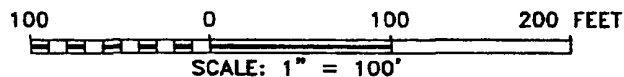
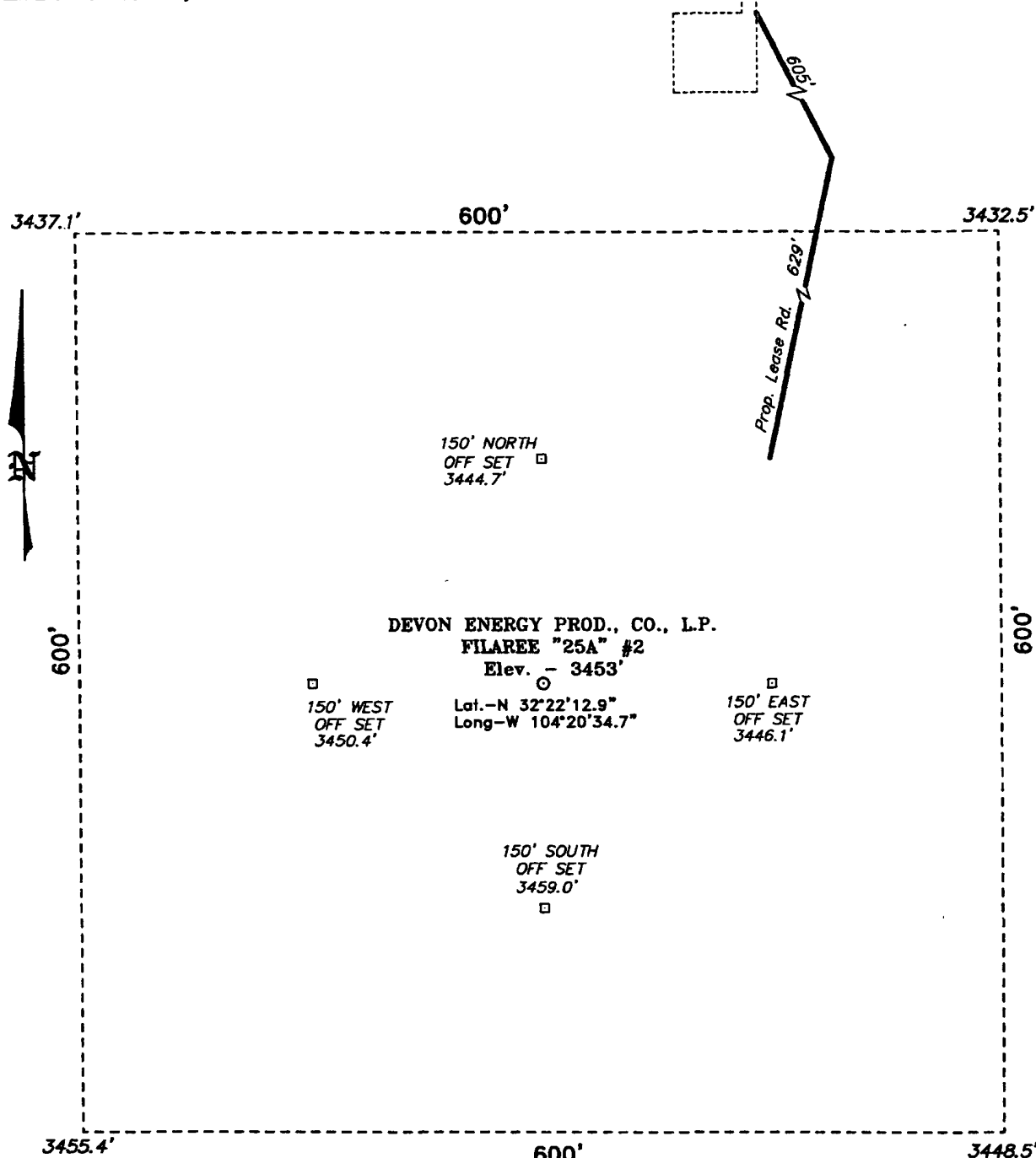
Signature  
Linda Guthrie  
Printed Name  
Regulatory Specialist  
Title  
07/14/04  
Date

**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.

MAY 11, 2004  
Date Surveyed  
Signature & Seal of  
Professional Surveyor  
  
W.O. No. 4266  
Certificate No. Gary L. Jones 7977  
BASIC 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 US HWY 62/180, GO WESTERLY ON CO. RD. 429 FOR APPROX. 6.0 MILES TO A LEASE ROAD; THENCE SOUTH ON LEASE ROAD FOR APPROX. 0.25 MILE TO A EXISTING WELL PAD AND PROPOSED LEASE ROAD.

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

W.O. Number: 4266

Drawn By: K. GOAD

Date: 05-13-2003

Disk: KJG CD#4 - 4266A.DWG

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

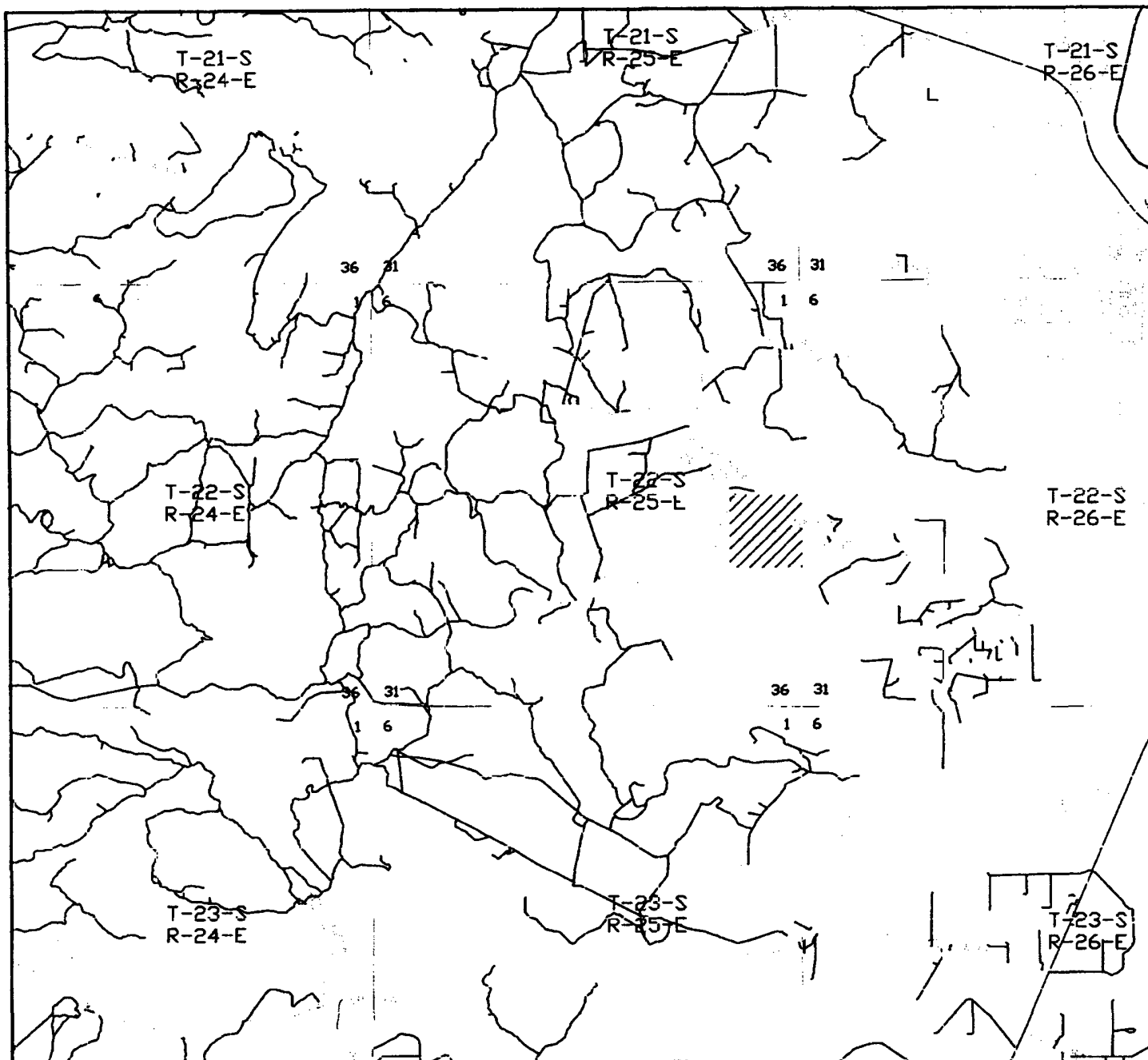
REF: FILAREE "25A" No. 2 / Well Pad Topo

THE FILAREE "25A" No. 2 LOCATED 165' FROM  
THE SOUTH LINE AND 705' FROM THE EAST LINE OF  
SECTION 24, TOWNSHIP 22 SOUTH, RANGE 25 EAST,  
N.M.P.M., EDDY COUNTY, NEW MEXICO.

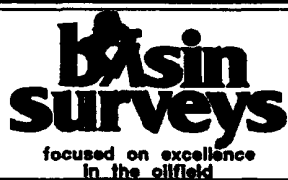
Survey Date: 05-11-2004

Sheet 1 of 1 Sheets





**FILAREE "25A" #2**  
 Located at 165' FSL and 705' FEL  
 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: 4266AA - KJG #1

Survey Date: 05-11-2004

Scale: 1" = 2 MILES

Date: 05-13-2004

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

## DRILLING PROGRAM

Devon Energy Production Company, L.P.  
FILAREE "25A" FEDERAL #2  
165' FSL & 705' FEL, Unit P, Section 24-T22S-R25E  
BHL: 660 FNL & 660 FEL, Unit A, Section 25-T22S-R25E  
Eddy County, New Mexico

1. Geologic Name of Surface Formation

Quaternary deposits

2. Estimated Tops of Important Geologic Markers

Delaware	2,300'
Bone Spring	4,550'
Canyon	9,420'
Strawn	9,725'
Atoka	10,050'
Morrow	10,680'
Lower Morrow	11,100'
Barnett Shale	11,275'
TD	±11,475'

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

The estimated depths at which water, oil and gas will be encountered are as follows.

Water: Random fresh water from surface to approximately 350'  
Oil: Bone Spring  
Gas: Strawn, Atoka, Morrow

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 475' and circulating cement back to surface. The intermediate intervals will be protected by setting 9 5/8" casing at 2,650' and circulating cement to surface. The production intervals will be isolated by setting 5 1/2" casing to total depth and circulating cement to surface.

4. Casing Program

Hole Size	Interval	Casing OD	Weight, ppf	Grade	Type	
17 1/2"	0-475' <sup>2,200'</sup>	13 3/8"	48	H-40	ST&C	WITNESS
12 1/4"	0-2,650'	9 5/8"	36	J-55	LT&C	WITNESS
8 3/4"	0-11,350±	5 1/2"	17	HCP-110	LT&C	

Cementing Program

13 3/8" Surface Casing      Cement to surface - with approximately 433 sx Class C

9 5/8" Intermediate Casing      Cement to surface - with approximately 629 sx 35:65 Pozmix + 250 sx Class C

5 1/2" Production Casing      Cement to surface - with approximately 1100 sx Super H + 1050 sx Class C  
Lite + 200 sx Class C neat

The cement volumes for the 5 1/2" casing will be revised pending the caliper measurement from the open hole logs.

5. Minimum Specifications for Pressure Control

Exhibit 1 Prior to intermediate, the blowout preventor equipment will consist of a 2M system. A 2000 psi WP pipe ram and/or a 2000 psi (Hydril) preventor. After Td'ing intermediate, a Blow-out Preventer (5,000/10,000 PSI working pressure) consisting of double ram type preventer with bag type preventor will be used. Units will be hydraulically operated. A choke manifold and a closing unit will be used.. Blind rams on top, pipe rams on bottom to correspond with size of drill pipe in use. BOP will be tested as well as choke manifold. BOP will be worked at least once each day while drilling & blind ram will be worked on trips when no drill pipe is in hole. Full opening stabbing valve and upper Kelly cock will be utilized. **The 2M BOP & associated wellhead equipment will be tested to 1215# with the rig pump.** After setting the 9 5/8" casing a 5000# casing head & 5000# BOP will be installed & tested to with an independent tester in accordance with Onshore Order No. 2

6. Types and Characteristics of the Proposed Circulating Mud System

The well will be drilled to total depth with fresh water/brine/starch mud systems. Depths of systems are as follows.

Depth	Type	Weight (ppg)	Viscosity (1/sec)	Water Loss (cc)
0' - 475'	Fresh water/paper	8.5-9.5	29 - 34	No control
475' - 2650'	Fresh wtr/paper/lime	8.5 - 10.5	29 - 34	No control
2650' - 9000'	Cut Brine/paper/ lime/gel	10 - 10.6	29 - 34	No control
9000' - TD	Brine/Dris-pac/ soda ash/starch	10 - 10.8	32 - 38	10 or less

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. 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 (Compliance Package) will be in operation from drilling out the 9 5/8" casing shoe until the 5 1/2" casing is cemented.

8. Logging, Testing and Coring Program

- A. No cores or drill stem tests are planned at this time.
- B. The open hole electrical logging program will be as follows.

Schlumberger Platform Express Azimuthal Laterlog/MCFL/NGT and Three Detector Litho-Density Compensated Neutron/NGT logs from TD to base of surface casing.

A formation pressure testing tool and a formation imaging tool may be run.

- C. 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.

9. Abnormal Pressures, Temperatures and Potential Hazards

No abnormal pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is 170 degrees and maximum bottom hole pressure is 4500 psig. Hydrogen sulfide gas may be encountered in this area and a Contingency Plan will be available at the location. Lost circulation intervals have been encountered in adjacent wells.

10. Anticipated Starting Date and Duration of Operations

A cultural resources examination will be submitted to the BLM in Carlsbad.

Road and location preparation will not be undertaken until approval has been received from the BLM. If approved, this well will be drilled as part of a development project. The anticipated spud date for the project is August, 2004. The drilling operation should require approximately 40-45 days. If the well is deemed productive, completion operations will require, at minimum, an additional 30 days of testing to ascertain whether permanent production facilities will be constructed.

11. Other Facets of Operations

After running casing a cement bond/gamma ray/collar log will be run.

The Morrow pay will be perforated and stimulated. The well will be swab tested and potentialized as a gas well.



**SURFACE USE AND OPERATING PLAN**

Devon Energy Production Company, L.P.  
FILAREE 25A FEDERAL #2  
165' FSL & 705' FEL, Unit P, Section 24-T22S-R25E  
BHL: 660 FNL & 660 FEL, Unit A, Section 25-T22S-R25E  
Eddy County, New Mexico

1. **Existing Roads**

The well site and elevation plat for the proposed Filaree "25A" Federal . #2 are reflected on Exhibit #2. This well was staked by Basin Surveys in Hobbs, New Mexico.

- A. All roads into the location are depicted in Exhibit #3. Access to this location will require the construction of approximately 1234' of new road from existing lease road. All new construction will conform to the specifications outlined in Item #2 below.
- B. Directions to location: From Carlsbad, New Mexico, take US Hwy 62-180 west to junction with Hidalgo Road (County Road 672). Turn right and follow Hidalgo Road for approximately 3.5 miles to McKittrick Road (County Road 429). Then follow McKittrick Road for approximately 6.0 miles to a lease road. Turn south on lease road for approx 0.25 miles to existing well pad and proposed lease road.

2. **Proposed Access Road**

Exhibit #3 shows the proposed lease road. Access to this location will be from an existing location. All new construction will adhere to the following.

- A. The maximum width of the road will be 15'.
- B. 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.
- D. The average grade will be less than 5%.
- E. No cattle guards, grates or fence cuts will be required.
- F. No turnouts are planned.

3. **Location of Existing Wells**

Exhibit #4 shows all existing wells within a one-mile radius of the proposed well.

4. **Location of Existing and/or Proposed Facilities**

- A. In the event the well is found productive, a tank battery would be constructed and the necessary production equipment will be installed at the well site.
- B. The tank battery, all connections and all lines will adhere to API standards.
- C. The well may be operated by means of an electric prime mover. Electric power poles will be set along side of the access road.

D. If the well is productive, rehabilitation plans are as follows.

1. The reserve pit will be closed pursuant to New Mexico OCD rules and guidelines.
2. 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.

5. Location and Type of Water Supply

The Filaree "25A" Federal 2 will be drilled using a combination of brine and fresh water mud systems (outlined in Drilling Program). The water will be obtained from commercial sources and will be transported over the existing and proposed roads. No water well will be drilled on the location.

6. Methods of Handling Water Disposal

- A. Drill cuttings will be disposed into the reserve pit.
- B. Drilling fluids will be contained in steel mud tanks. The reserve pit will contain excess drilling fluid or fluid from the well during drilling, cementing and completion operations. The reserve pit will be an earthen pit roughly 120' x 165' x 6', or smaller, in size.
- C. The reserve pit will be fenced on three sides throughout drilling operations and will be totally isolated upon removal of the rotary rig. The pit will be lined using a 12 mil synthetic woven liner pursuant to NM OCD rules and guidelines.
- D. Water produced from the well during completion operations will be disposed into a steel tank or reserve pit, if volumes prove excessive. After placing the well on production through the production facilities, all water will be collected in tanks. Produced oil will be separated into steel stock tanks until sold.
- E. A portable chemical toilet will be available on the location for human waste during the drilling operations.
- F. Garbage, trash and waste paper produced during drilling operations will be collected in a contained trailer and disposed at an approved landfill. All waste material will be contained to prevent scattering by the wind. All water, fluids, salt or other chemicals will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be generated by this operation.
- G. All waste material will be removed within 30 days after the well is either completed or abandoned. The reserve pit will be completely fenced until it has dried. The reserve pit will be closed pursuant to New Mexico OCD rules and guidelines and reclaimed as per BLM specifications. Only the portion of the drilling pad used by the production equipment (pumping unit and tank battery) will remain in use. If the well is deemed non-commercial only a dry hole marker will remain.

8. Ancillary Facilities

No permanent campsite or other facilities will be constructed as a result of this well.

9. Well Site Layout

- A. The drill pad is shown on Exhibit #6. Approximate dimensions of the pad, pits and general location of the rig equipment are displayed. Top soil will be stored adjacent to the pad until

reclamation efforts are undertaken. Only modest cuts will be necessary to build the pad which will be covered with 6" of compacted caliche.

- B. No permanent living facilities are planned, but temporary trailers for the tool pusher, drilling foreman and mud logger may be on location throughout drilling operations.

10. Plans for Restoration of Surface

- A. After concluding the drilling and/or completion operations, if the well is found non-commercial, the road will be reclaimed as directed by the BLM. The reserve pit will be closed and the original top soil, if any, will be returned to the pad and contoured, as close as possible, to the original topography.
- B. The pit lining will be buried or hauled away.
- C. The reserve pit will be fenced on three sides throughout drilling operations. After the rotary rig is removed, the reserve pit will be fenced on the fourth side to preclude endangering wildlife. The fencing will be in place until the pit is reclaimed.
- D. If the well is deemed commercially productive, the reserve pit will be restored and unused areas of the drill pad will be contoured, as close as possible, to match the original topography.

11. Surface Ownership

The well site is owned by the Bureau of Land Management.

Road routes have been approved and the surface location will be restored as directed by the BLM.

12. Other Information

- A. The project is located on in an area of rolling limestone hills used for ranching and raising cattle. Drainage is to the east toward the Pecos River via Little McKittrick Draw. Regionally the slopes average 1-3% and the calcareous land area consists of aridisols ranging from loamy sand to clay. Vegetation consists of mesquite, creosote, algerita, acacia, cholla, snakeweed, yucca cactus, and various grasses.
- B. There is no permanent water in the immediate area.
- C. Upon completion a cultural resources examination will forwarded to the BLM office in Carlsbad, New Mexico, by Southern New Mexico Archeological Resources, Inc., in Bent.

13. Lessee's and Operator's Representative

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

Wyatt Abbitt  
Operations Engineering Advisor  
Devon Energy Production Company, L.P.  
20 North Broadway, Suite 1500  
Oklahoma City, Oklahoma 73102-8260  
(405) 552-8137 (office)  
(405) 245-3471 (cell)

Don Mayberry  
Superintendent  
Devon Energy Production Company, L.P.  
Post Office Box 250  
Artesia, New Mexico 88211-0250  
(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: \_\_\_\_\_

  
Linda Guthrie  
Regulatory Specialist

Date: July 12, 2004

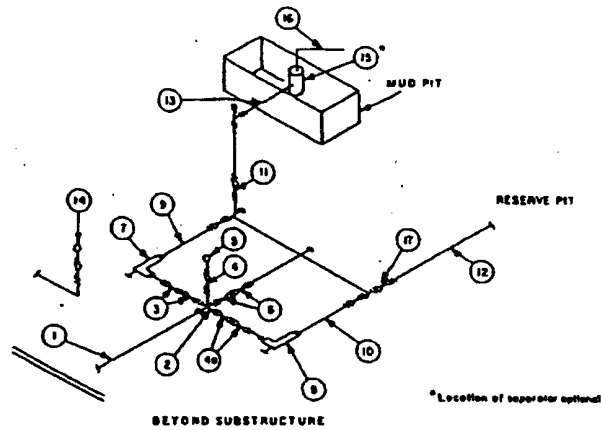
Attachment to Exhibit #1  
NOTES REGARDING BLOWOUT PREVENTERS  
Devon Energy Production Company, L.P.  
FILAREE "25A" FEDERAL #2  
165' FSL & 705' FEL, Unit P, Section 24-T22S-R25E  
BHL: 660 FNL & 660 FEL, Unit A, Section 25-T22S-R25E  
Eddy County, New Mexico

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.

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

3 MWP - 5 MWP - 10 MWP

EXHIBIT # 1



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

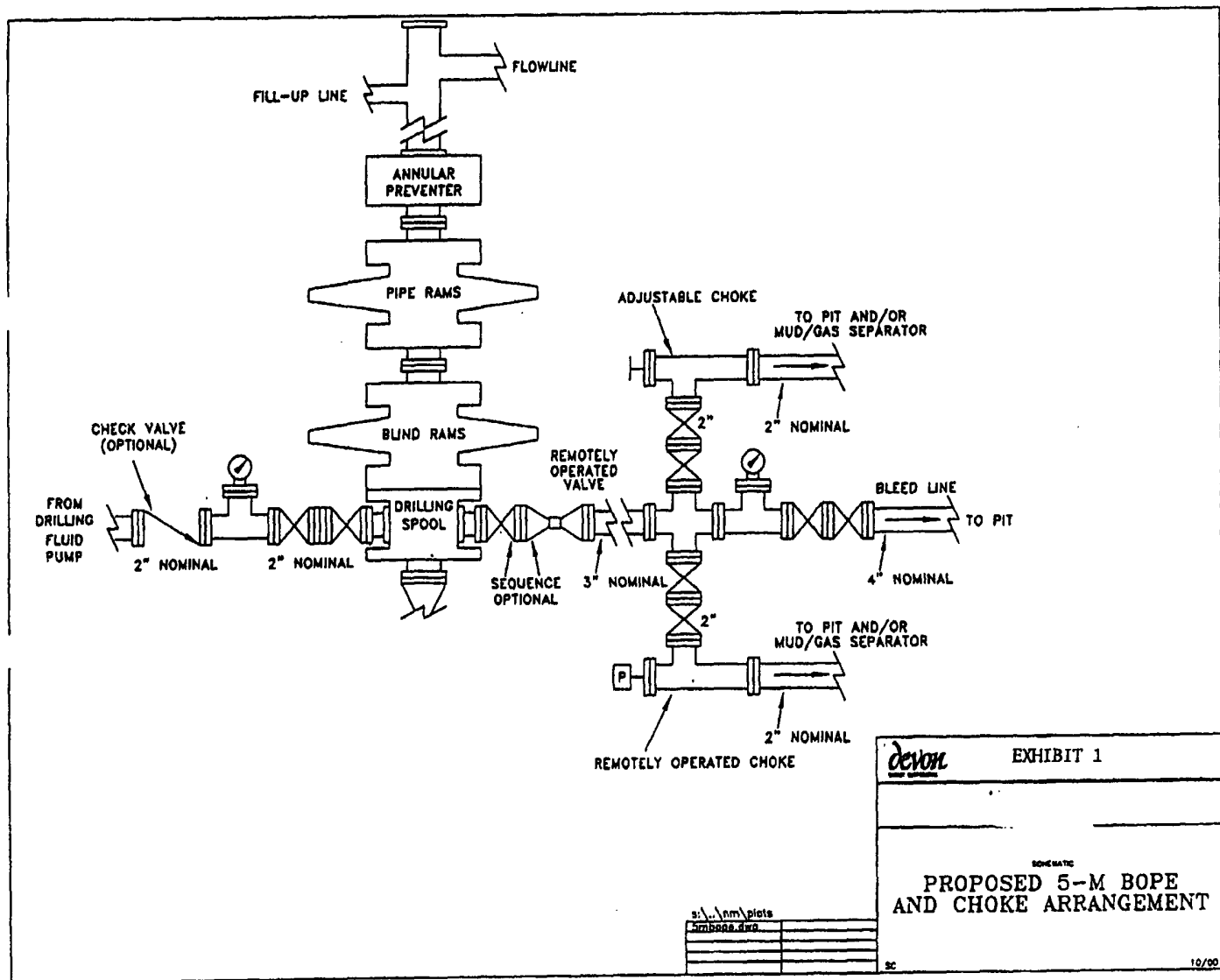
(1) Only one required in Class 3M.

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

# **Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan**

**For**

**Filaree "25A" Federal # 2**

**165' FSL & 705' FEL,  
Sec-24, T-22S R-25E**

**Eddy County NM**

**RECEIVED**

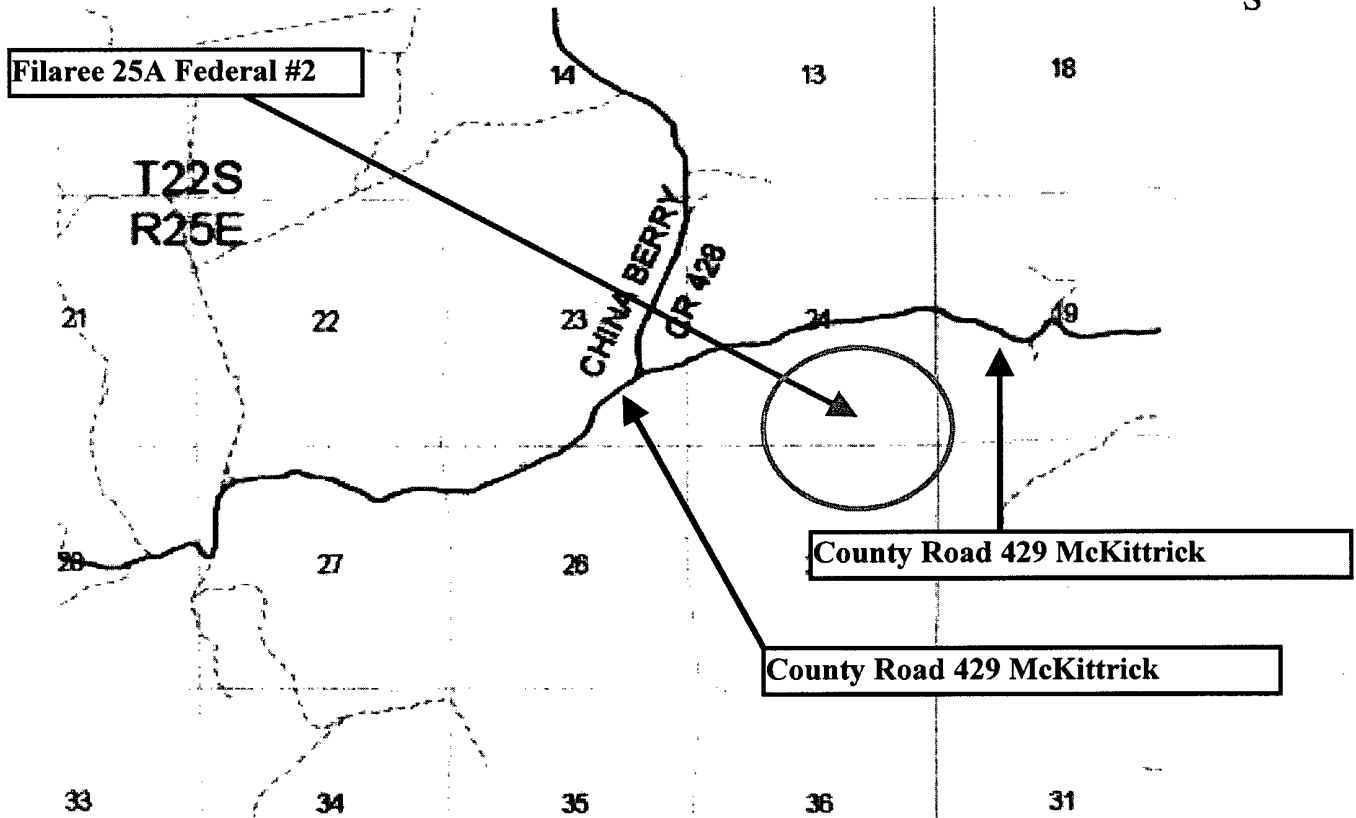
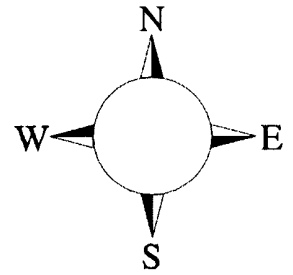
**AUG 02 2004**

**OGD-ARTESIA**



## Filaree "25A" Federal # 2

This is an open drilling site. H<sub>2</sub>S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H<sub>2</sub>S, including warning signs, wind indicators and H<sub>2</sub>S monitor.



**Assumed 100-ppm ROE = 3000' (Radius of Exposure)**  
100 ppm H<sub>2</sub>S concentration shall trigger activation of this plan.

### Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated North on lease road. Crews should then block the entrance to the lease road so as not to allow anyone traversing into a hazardous area. There are no homes or buildings in or near the ROE.

## Emergency Procedures

In the case of a release of gas containing H<sub>2</sub>S, the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

All responders must have training in the detection of H<sub>2</sub>S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H<sub>2</sub>S monitors and air packs in order to control the release. Use the "buddy system" to ensure no injuries during the response.

## Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

## Characteristics of H<sub>2</sub>S and SO<sub>2</sub>

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

## Contacting Authorities

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

## Devon Energy Corp. Company Call List

<u>Artesia (505)</u>	<u>Cellular</u>	<u>Office</u>	<u>Home</u>
Foreman – BJ Cathey.....	390-5893 .....	748-0176.....	887-6026
Asst. Foreman – Bobby Jones.....	748-7447 .....	748-0176.....	746-3194
Cecil Thurmond.....	748-7180 .....	748-0171.....	887-1479
David Purdy.....	(432)631-2969.....	(432)495-7279 ....	(432)683-0735
Engineer – Tom Pepper .....	(405) 203-2242.....	(405) 552-4513 ...	(405) 728-8641

### Agency Call List

#### Eddy County (505)

##### **Artesia**

State Police .....	746-2703
City Police.....	746-2703
Sheriff's Office .....	746-9888
Ambulance.....	911
Fire Department.....	746-2701
LEPC (Local Emergency Planning Committee) .....	746-2122
NMOCD.....	748-1283

##### **Carlsbad**

State Police .....	885-3137
City Police.....	885-2111
Sheriff's Office.....	887-7551
Ambulance.....	911
Fire Department.....	885-2111
LEPC (Local Emergency Planning Committee).....	887-3798
US Bureau of Land Management.....	887-6544

New Mexico Emergency Response Commission (Santa Fe)	(505)476-9600
24 HR .....	(505) 827-9126
National Emergency Response Center (Washington, DC)	...(800) 424-8802

##### **Other**

Boots & Coots IWC .....	1-800-256-9688 or (281) 931-8884
Cudd Pressure Control.....	(915) 699-0139 or (915) 563-3356
Halliburton .....	(505) 746-2757
B. J. Services.....	(505) 746-3569
Flight For Life -4000 24th St, Lubbock, TX .....	(806) 743-9911
Aerocare -Rr 3 Box 49f, Lubbock, TX .....	(806) 747-8923
Med Flight Air Amb 2301 Yale Blvd SE #D3, Albuq, NM .....	(505) 842-4433
S B Air Med Svc 2505 Clark Carr Loop SE, Albuq, NM ....	(505) 842-4949

Prepared in conjunction with  
Wade Rohloff of;

