

OCD-ARTESIA

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

EC

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER

☐ Other ☒ Single Zone ☐ Multiple Zone

contact: LINDA GUTHRIE
E-Mail: linda.guthrie@dmv.com

DEVON ENERGY PRODUCTION CO LP
20 NORTH BROADWAY SUITE 1500
OKLAHOMA CITY OK 73102

3b. Phone No. (include area code)
Ph: 405.228.8209
Fx: 405.552.4621

4. Location of Well (Report location clearly and in accordance with any State requirements.)*

At surface SWSE 990FSL 1750FEL

At proposed prod. zone

RECEIVED

DEC 23 2004

14. Distance in miles and direction from nearest town or post office*

OCD-ARTESIA

5. Lease Serial No.
NMNM025528

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No.
EAGLE 330 FEDERAL 20

9. API Well No.

30-015-33832

10. Field and Pool, or Exploratory
RED LAKE; GLORIETA-YESO

11. Sec., T., R., M., or Blk. and Survey or Area

Sec 33 T17S R27E Mer NMP
SME: BLM

12. County or Parish
EDDY

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

360.00

17. Spacing Unit dedicated to this well

40.00

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

19. Proposed Depth

4000 MD

20. BLM/BIA Bond No. on file

21. Elevations (Show whether DF, KB, RT, GL, etc.)
3502 GL

22. Approximate date work will start
10/15/2004

23. Estimated duration

24. Attachments ROSWELL 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:

- 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
(Electronic Submission)

Name (Printed/Typed)
LINDA GUTHRIE

Date
08/31/2004

Title
REGULATORY SPECIALIST

Approved by (Signature)
/s/ Tony J. Herrell

Name (Printed/Typed)
/s/ Tony J. Herrell

Date
22 DEC 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 #35477 verified by the BLM Well Information System
For DEVON ENERGY PRODUCTION CO LP, sent to the Carlsbad
Committed to AFMSS for processing by LINDA ASKWIG on 08/31/2004 (04LA0782AE)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

** BLM REVISED ** BLM REVISED ** BLM RE

Witness Surface Casing.

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

Additional Operator Remarks:

Devon Energy Production Company, LP proposes to drill a San Andres, Glorieta Yeso well per the approved Master Drilling and Surface Use Plan for the Red Lake Field Area to 4000' TD for commercial quantities of oil and gas. If the well is deemed noncommercial the wellbore will be plugged and abandoned per Federal regulations.

No additional new access road is anticipated.

Directions: From the junction of US Hwy 82 and county Rd 201, go south on 201 to Co. Rd. 227 then east on 227 approximately 2 miles to a lease road north, then north approximately 500' to a "Y", go right approximately 2500 feet to a lease road west, then west approximately 4000 feet to location.

Please see attached MDSUP.

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

DISTRICT II
811 South First, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Ed., 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
Property Code	Property Name EAGLE "33 0" FEDERAL	Well Number 20
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY LP	Elevation 3502'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	33	17 S	27 E		990	SOUTH	1750	EAST	EDDY

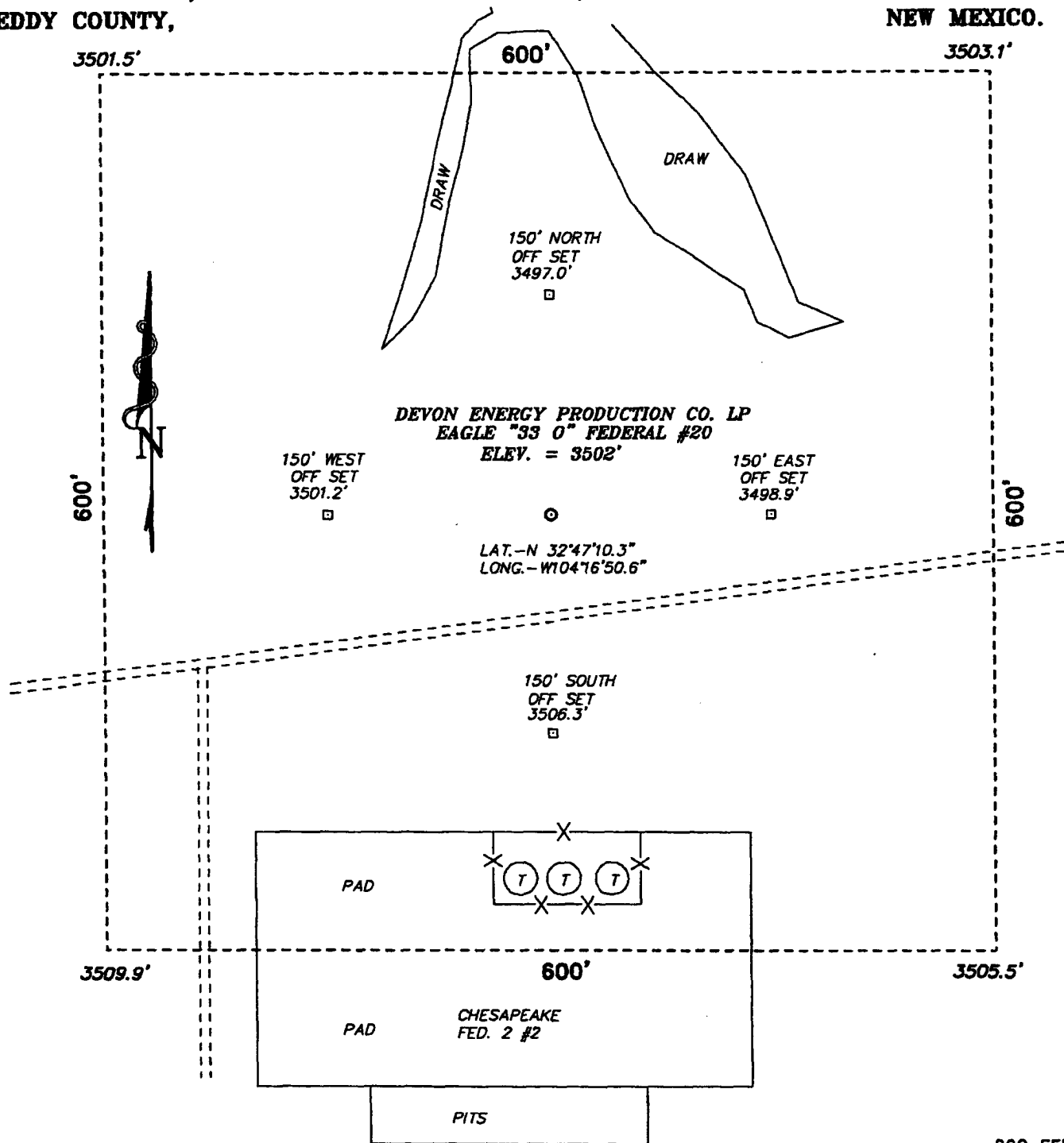
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40	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 Linda Guthrie Printed Name Regulatory Specialist Title 08/31/04 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. JUNE 25, 2004 Date Surveyed Signature of GARY L. JONES Professional Surveyor NEW MEXICO 7977 W.O. No. 438 Certification No. Gary L. Jones 7977 JLP BROAD SURVEYS

**SECTION 33, TOWNSHIP 17 SOUTH, RANGE 27 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.**



Directions to Location:

FROM THE JUNCTION OF US HWY B2 & CO. RD. 201, GO SOUTH ON 201 TO CO. RD. 227 THEN EAST ON 227 APPROX. 2 MILES TO A LEASE ROAD NORTH THEN NORTH APPROX 500' TO A "Y" GO RIGHT APPROX 2500 FEET TO A LEASE ROAD WEST, THEN WEST APPROX 4000 FEET TO LOCATION.

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

W.O. Number: 4387

Drawn By: JAMES PRESLEY

Date: 06/28/04

Disk: JLP #1 - DEV4387A

DEVON ENERGY PRODUCTION CO. LP.

REF: EAGLE "33 0" FEDERAL #20 / Well Pad Topo

EAGLE "33 0" FEDERAL #20 LOCATED 990' FROM THE SOUTH LINE AND 1750' FROM THE EAST LINE OF SECTION 33, TOWNSHIP 17 SOUTH, RANGE 27 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 06/25/04

Sheet 1 of 1 Sheets

2

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Important Geologic Markers:

Queen	879'
Grayburg	1330'
San Andres	1610'
Glorieta-Yeso	2960'

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

Water

Possible small amounts of fresh water from surface to 1130'.

Oil

Grayburg:	1330'
San Andres:	1610'
Glorieta-Yeso	2960'

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 8 5/8" casing at approximately 1150' and circulating cement back to surface. A shallower setting depth may be required to prevent the surface casing from being set through the Premier Sand. The Grayburg and San Andres intervals will be isolated by setting 5-1/2" casing to total depth (4000'±) and circulating cement to surface.

4. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>Csg OD</u>	<u>Weight, Grade, Type</u>
17 1/2"	0- 40'	14"	Conductor, 0.30" wall
12-1/4"	0-1150'	8-5/8"	24#, J-55 ERW or seamless ST&C R-3
7-7/8"	0-TD	5-1/2"	15.5# J-55, ERW, FBN or seamless LT&C, R-3

WITNESS

5. Cementing Program:

13 3/8" Conductor Casing:	Cemented with redimix to surface.
8 5/8" Surface Casing:	Cemented to surface with 350 sks Lite + 5% salt + 1/4 lb/sk cellophane flakes and 200 sks Class C + 2% CaCl ₂ + 1/4 lb/sk cellophane flakes. Circulate to surface.
5-1/2" Production:	Cemented to surface with 380 sks Lite + 5#/sx salt + 1/4 lb/sk cellophane flakes and 370 sks 50:50 Pos 'C' w/3% salt, Fluid loss, 1/4#/sx flake.

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.

6. Minimum Specifications for Pressure Control:

The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of either a single annular preventor or a double ram type preventor (2000 psi WP). The unit will be hydraulically operated and will be equipped with either a single annular preventor or a set of double rams (blind rams and 4-1/2" drill pipe rams). The BOP will be installed on the 8 5/8" surface casing and utilized continuously until total depth is reached. Prior to drilling out the 8 5/8" casing shoe, the BOP's will be tested with the rig pump to 1000 psi.

The BOP system will be function tested 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 driller's log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold.

6. Types and Characteristics of the Proposed Mud System:

The well will be drilled to total depth using a fresh water mud system. Depths of systems are as follows:

<u>Depth</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Viscosity (1/sec)</u>	<u>Water Loss (cc)</u>
0 - 1150'	Fresh Water	8.4-8.8	34-38	No Control
1150' - TD	Fresh Water/Cut Brine	8.4-8.6	28-32	No Control

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.

8. Logging, Testing and Coring Program:

- A. No drill stem tests are planned.
- B. The open hole electrical logging program will be:
 - T. D. to 1150': Dual Induction-Micro SFL with Gamma Ray, and Caliper
 - T. D. to 1150': Compensated Neutron-Litho Density with Gamma Ray and Caliper
 - T. D. to surface: Gamma Ray/Neutron
- C. No cores are planned.

9. Abnormal Pressures, Temperatures and Potential Hazards:

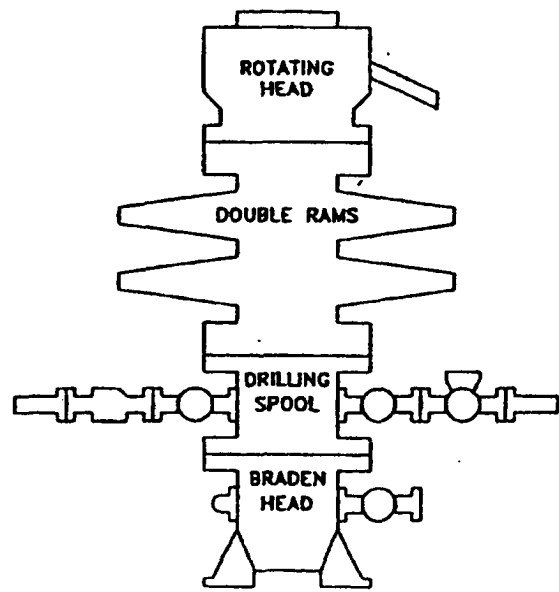
No abnormal pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is 90 degrees and maximum bottom hole pressure is 800 psi. No major loss circulation intervals have been encountered in adjacent wells. An H₂S Drilling Operations Plan is included as Exhibit #6.

10. Anticipated Starting Date and Duration of Operations:

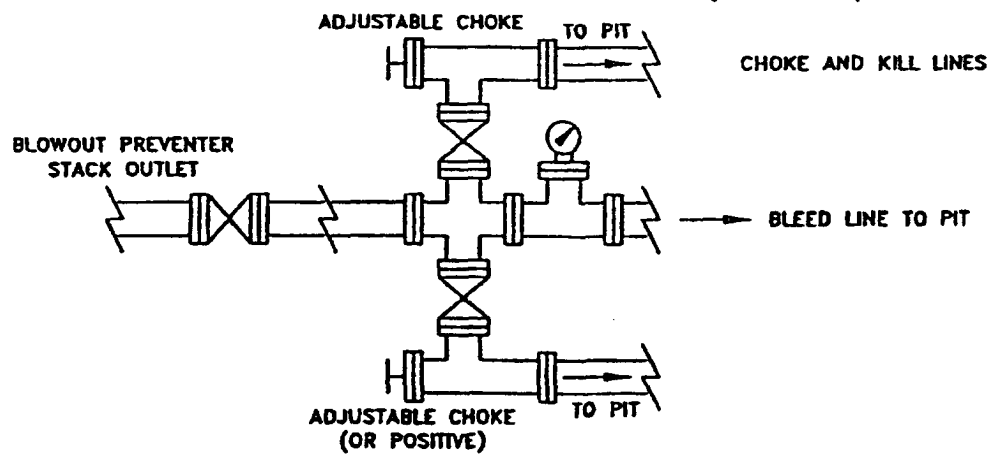
Road and location preparation will not be undertaken until approval has been received from the BLM. The anticipated spud date will be provided with each well application. The drilling operation should require approximately 10 days. If the well is deemed productive, completion operations will require, at minimum, an additional 30 days of testing to ascertain whether the well will be connected to an existing production facility.


Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTORS
West Red Lake Area
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 preventor and all associated fittings will be in operable condition and tested to 1000 psi with the rig pump.
4. All fittings will be flanged.
5. A full bore safety valve 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. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.
11. **BOP will consist of either a single annular preventor or a set of double rams as shown in Exhibit #1.**



CHOKE MANIFOLD REQUIREMENT (2000 psi WP)





WEST RED LAKE AREA
CHRY COUNTY, NEW MEXICO

SCHEMATIC

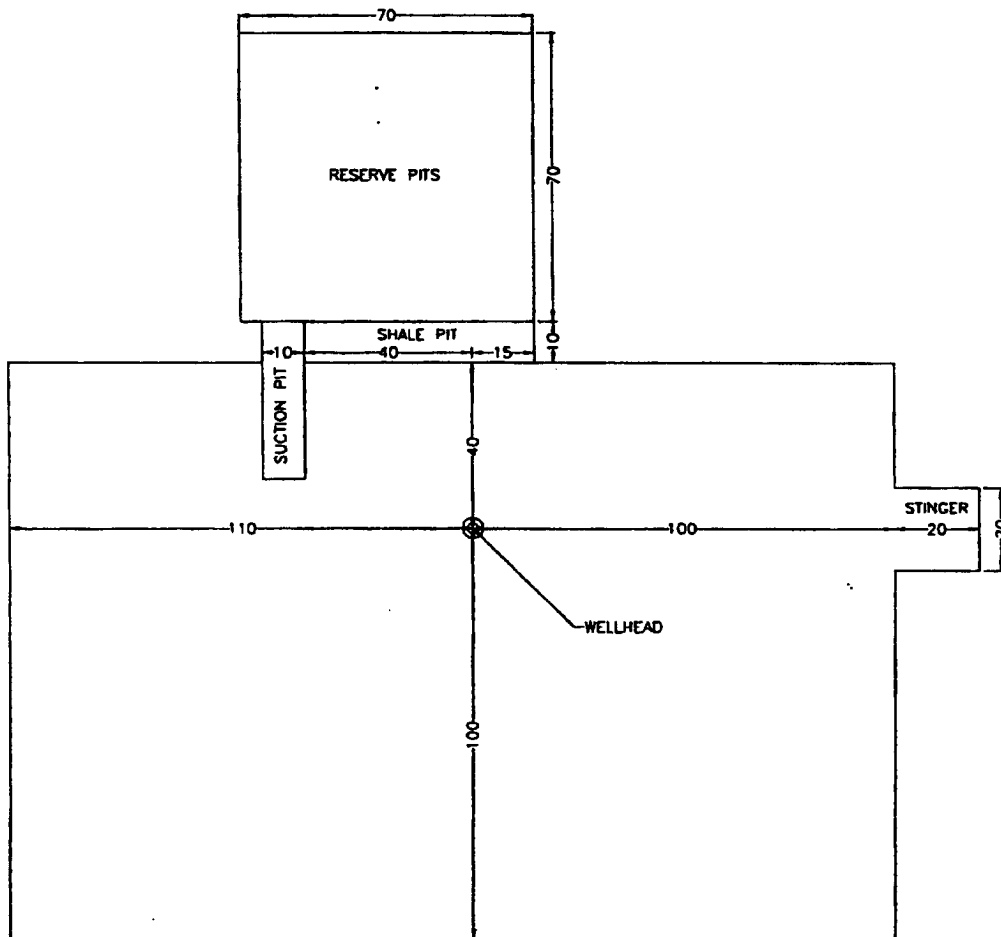
BLOWOUT PREVENTOR
(2000 PSI WORKING WP)

Q:\PROJECTS\EXPANDED

WRLBP	

CS

8/98



FILE:

devon
ENERGY SERVICES

WEST RED LAKE AREA

EDDY COUNTY, NEW MEXICO

DRILLING PAD

EXHIBIT 5

Scale in Feet

25 0 25 50 75 100

EB

6/96

DEVON ENERGY CORPORATION

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

A. Hydrogen Sulfide Training

All rig crews and company personnel will receive training from a qualified instructor in the following areas prior to penetrating any hydrogen sulfide bearing formations during drilling operations:

1. The hazards and characteristics of hydrogen sulfide (H₂S).
2. The proper use and maintenance of the H₂S safety equipment and of personal protective equipment to be utilized at the location such as H₂S detection monitors, alarms and warning systems, and breathing equipment. Briefing areas and evacuation procedures will also be discussed and established.
3. Proper rescue techniques and procedures will be discussed and established.

In addition to the above, supervisory personnel will be trained in the prevention of oil and gas well blowouts in accordance with Minerals Management Service Standards Subpart - 0 - 250 - 212.

Prior to penetrating any known H₂S bearing formation, H₂S training will be required at the rig sight for all rig crews and company personnel that have not previously received such training. This instruction will be provided by a qualified instructor with each individual being required to pass a 20 question test regarding H₂S safety procedures. All contract personnel employed on an unscheduled basis will be required to have received appropriate H₂S training.

This Hydrogen Sulfide Drilling And Operations Plan shall be available at the wellsite during drilling operations.

B. H₂S Safety Equipment And Systems

All H₂S safety equipment and systems will be installed, tested, and operational when drilling operations reach a depth approximately 500' above any known or probable H₂S bearing formation. The safety systems to be utilized during drilling operations are as follows:

1. Well Control Equipment

- (a) Double ram BOP with a properly sized closing unit and pipe rams to accommodate all pipe sizes in use.
- (b) A choke manifold with a minimum of one remote choke.

2. H2S Detection And Monitoring Equipment

- (a) Three (3) H2S detection monitors will be placed in service at the location. One monitor will be placed near the bell nipple on the rig floor, one will be placed at the rig substructure, and, one will be at the working mud pits or shale shaker. This monitoring system will have warning lights and audible alarms that will alert personnel when H2S levels reach 10 ppm.
- (b) One (1) Sensidyne Pump with the appropriate detection tubes will also be available to perform spot checks for H2S concentrations in any remote or isolated areas.

3. Protective Equipment For Essential Personnel

Protective equipment will consist of the following:

- (a) Four (4) - five minute escape packs located at strategic points around the rig.
- (b) Two (2) - thirty minute rescue packs to be located at the designated briefing areas.

4. Visual Warning System

Visual warning system will consist of the following:

- (a) Two wind direction indicators.
- (b) One condition / warning sign which will be posted on the road - providing direct access to the location. The sign will contain lettering of sufficient size to be readable at a reasonable distance from the immediate location. The sign will inform the public that a hydrogen sulfide gas environment could be encountered at the location.

5. Mud Program

- (a) The mud program has been designed to minimize the volume of H₂S circulated to surface. Proper mud weight and safe drilling practices (for example, keeping the hole filled during trips) will minimize hazards when drilling in H₂S bearing formations.

6. Metallurgy

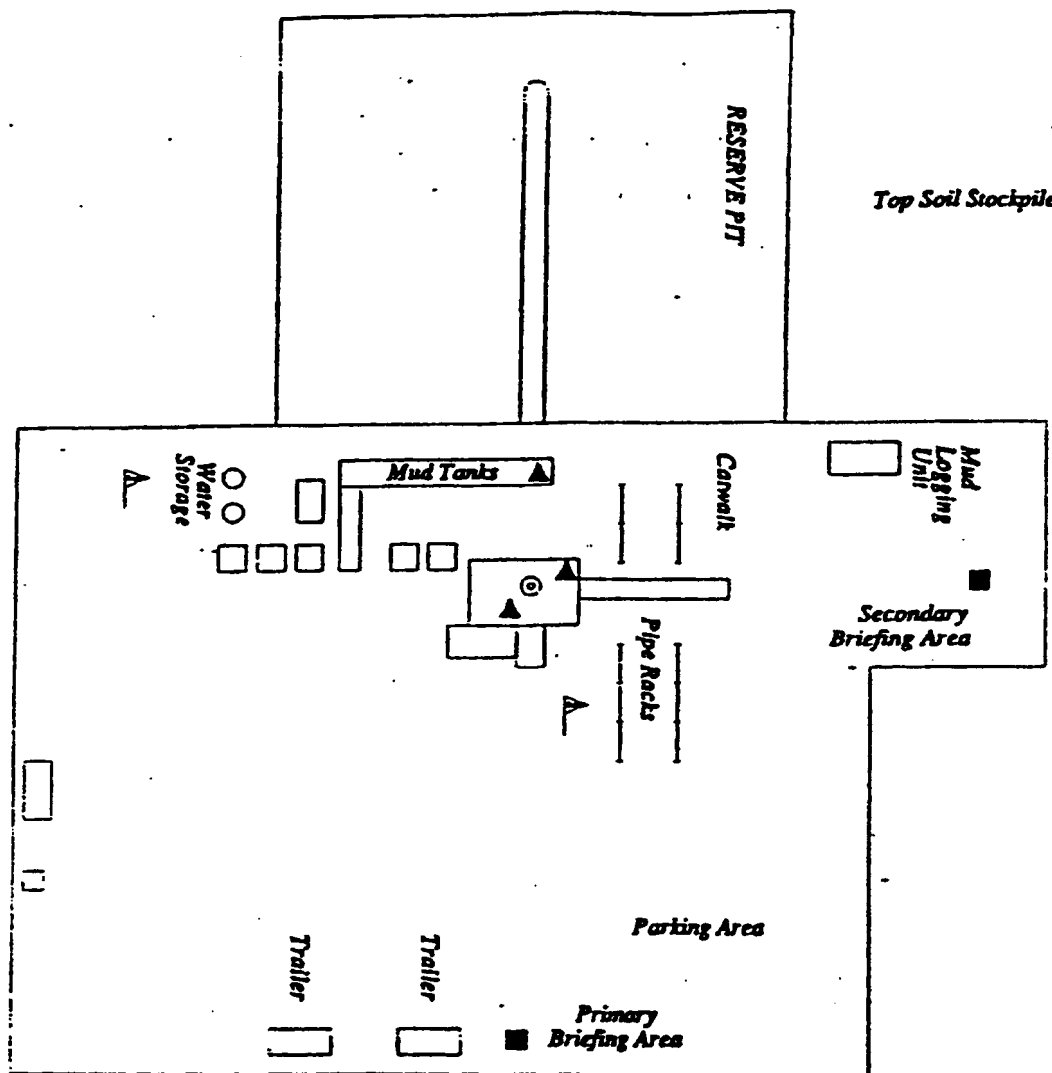
- (a) All drill strings, casings, tubing, wellhead, blowout preventers, drilling spools, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.

7. Communication

- (a) Two way radio and cellular telephone communication will be available in company vehicles.

C. Diagram of Drilling Location

1. Attached is a diagram representing a typical location layout as well as the location of H₂S monitors, briefing areas, and wind direction indicators.



- ▲ H2S MONITORS WITH ALARMS AT THE BELL NIPPLE, SUBSTRUCTURE, AND SHALE SHAKER
- ┆ WIND DIRECTION INDICATORS
- SAFE BRIEFING AREAS WITH CAUTION SIGNS AND PROTECTIVE BREATHING EQUIPMENT



devon	
WEST RED LAKE AREA	
<small>WESTERN COUNTY, NEW MEXICO</small>	
H2S PLAN	
<p>Scale in Feet</p> <p>25 0 25 50 75 100</p>	



RECEIVED
NOV 05 2004
OCD-ARTESIA

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

Hydrogen Sulfide (H₂S) Contingency Plan

For

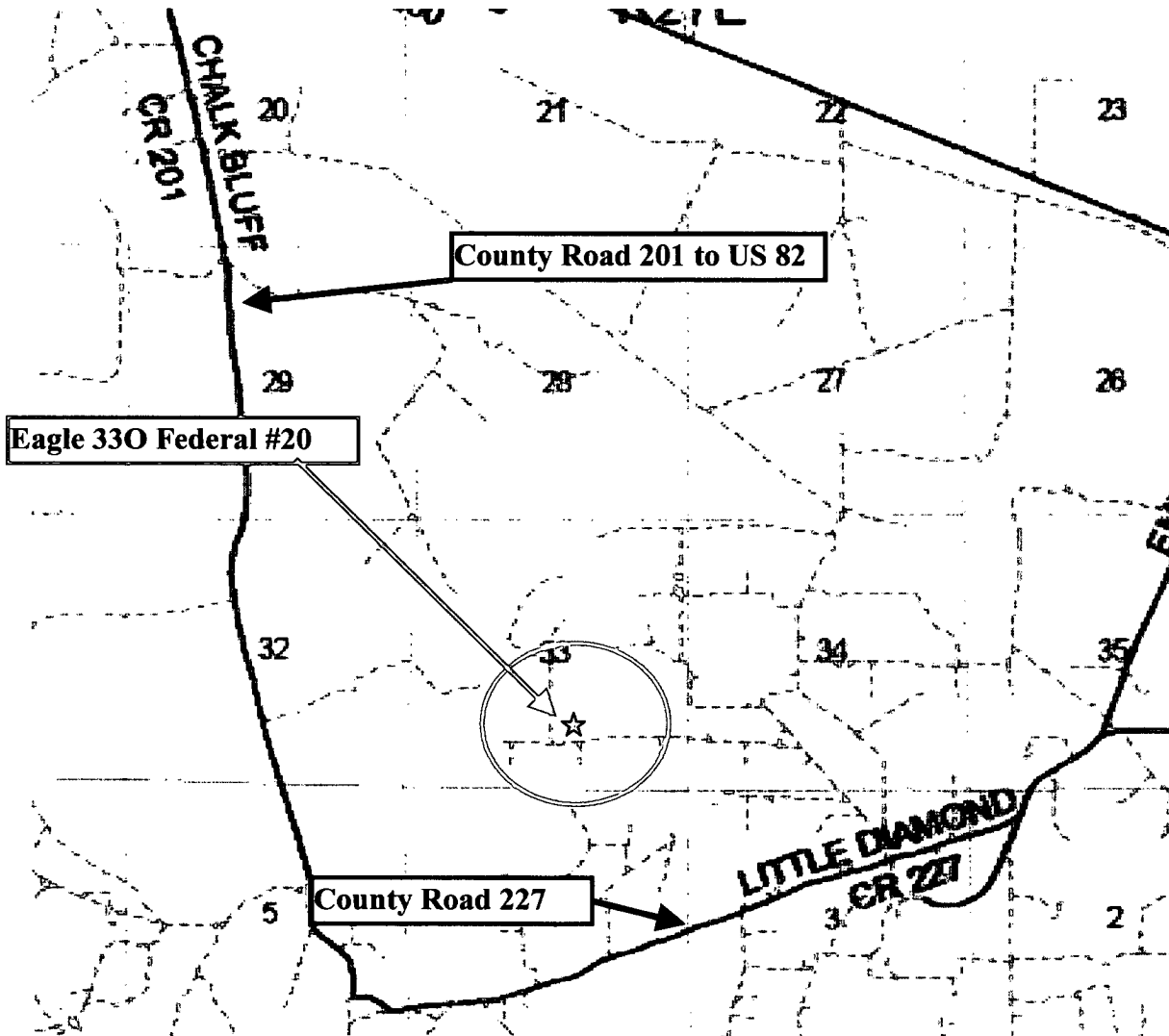
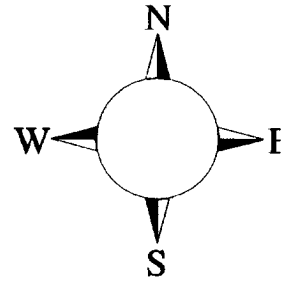
Eagle 33O Federal # 20

**990' FSL & 1750' FEL,
Sec-33, T-17S R-27E**

Eddy County NM

Eagle 330 Federal # 20

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



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

Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated West lease road to County road 201. Crews should then block entrance to the location from the lease road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE There are no homes or buildings in or near the ROE.

Emergency Procedures

In the case of a release of gas containing H₂S, the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. 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 H₂S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H₂S 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 (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H₂S and SO₂

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

Contacting Authorities

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

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
Mike Myers	(505) 513-0782....	(505) 748-0187 ...	(505) 395-3020
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;

