

## OCD-ARTESIA

Form 3160-3  
(August 1999)FORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000UNITED 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. NMNM53218
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator DEVON ENERGY PRODUCTION CO L P		7. If Unit or CA Agreement, Name and No.
Contact: LINDA GUTHRIE E-Mail: linda.guthrie@dvn.com		8. Lease Name and Well No. RIGHTHAND CANYON 35 FEDERAL 5
3a. Address 20 NORTH BROADWAY SUITE 1500 OKLAHOMA CITY, OK 73102	3b. Phone No. (include area code) Ph: 405.228.8209 Fx: 405.552.1319	9. API Well No. 30-015 - 33625
4. Location of Well (Report location clearly and in accordance with any State requirements) At surface SENW 2334FNL 1485FWL At proposed prod. zone NWNW 990FNL 660FWL		10. Field and Pool, or Exploratory INDIAN BASIN UPPER PENN ASSOC
14. Distance in miles and direction from nearest town or post office* 15 MILES WEST OF CARLSBAD, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec 35 T21S R24E Mer NMP SME: BLM
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	12. County or Parish EDDY
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 8600 MD TVD 8745 TVD MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 3913 GL	22. Approximate date work will start 07/30/2004	17. Spacing Unit dedicated to this well 324.00
23. Estimated duration 32 DAYS		20. BLM/BIA Bond No. on file

## 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.  | 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 shall be filed with the appropriate Forest Service Office). | 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 06/16/2004
Title REGULATORY SPECIALIST		
Approved by (Signature) /s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe G. Lara	Date 8/20/04
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 #32072 verified by the BLM Well Information System  
For DEVON ENERGY PRODUCTION CO L P, sent to the Carlsbad  
Committed to AFMSS for processing by LINDA ASKWIG on 06/22/2004 (04LA0492AE)APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

Witness Surface Casing

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

**Additional Operator Remarks:**

Devon Energy Production Company, LP respectfully requests approval to drill a Penn oil well to TVD 8,600' for commercial quantities of oil. If the well is deemed noncommercial, the well bore will be plugged and abandoned per Federal regulations. Programs to adhere to onshore oil and gas regulations are outlined in the following exhibits and attachments.

No additional roads need to be built as the well will be drilled from an existing location.

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-144  
June 1, 2004

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

For drilling and production facilities, submit to appropriate NMOCD District Office.  
For downstream facilities, submit to Santa Fe office

**Pit or Below-Grade Tank Registration or Closure**

Is pit or below-grade tank covered by a "general plan"? Yes ☒ No ☐

Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: DEVON ENERGY PRODUCTION CO., LP Telephone: 405 228-8209 e-mail address: linda.guthrie@dvn.com

Address: PO Box 250 Artesia, NM 88211

Facility or well name: Righthand Canyon 35 Fed #5 U/L or Qtr/Qtr J Sec 35 T21S R24E

County: Eddy Latitude \_\_\_\_\_ Longitude \_\_\_\_\_ NAD: 1927 ☐ 1983 ☐ Surface Owner Federal ☐ State ☐ Private ☐ Indian ☐

**Pit**

Type: Drilling ☒ Production ☐ Disposal ☐

Workover ☐ Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☒ Thickness 12 mil Clay ☐

Pit Volume \_\_\_\_\_ bbl

**Below-grade tank**

Volume: \_\_\_\_\_ bbl Type of fluid: \_\_\_\_\_

Construction material: \_\_\_\_\_

Double-walled, with leak detection? Yes ☐ If not, explain why not. \_\_\_\_\_

**RECEIVED**

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)

Less than 50 feet

(20 points)

50 feet or more, but less than 100 feet

(10 points)

100 feet or more

(0 points)

SEP 09 2004

ARTESIA

Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)

Yes

(20 points)

No

(0 points)

Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)

Less than 200 feet

(20 points)

200 feet or more, but less than 1000 feet

(10 points)

1000 feet or more

(0 points)

Ranking Score (Total Points)

0

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☐ offsite ☐ If offsite, name of facility \_\_\_\_\_. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface \_\_\_\_\_ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:

pit location @ Righthand Canyon 35 Federal #3 wellpad.

As a condition of approval

a detailed closure plan

must be filed before

closure may commence.

I hereby \_\_\_\_\_ the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☒, or an (attached) alternative OGD-approved plan ☐.

Date: 09/08/04

Printed Name/Title Linda Guthrie/Regulatory Specialist

Signature Linda Guthrie

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

Printed Name/Title Gail Sep 10

Signature [Signature]

SEP 10 2004

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 33685	Pool Name INDIAN BASIN UPPER PENN ASSOC
Property Code 33372	Property Name RIGHT HAND CANYON "35" FEDERAL	Well Number 5
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY LP	Elevation 3913'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	35	21-S	24-E		2334	NORTH	1485	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
D	35	21-S	24-E		990'	NORTH	660'	WEST	EDDY
Dedicated Acres 330	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

	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Linda Guthrie</i> Signature</p> <p>Linda Guthrie Printed Name</p> <p>Regulatory Specialist Title</p> <p>06/16/04 Date</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>JUNE 3, 2004</p>
	<p>Date Surveyed</p> <p>Signature &amp; Seal of Professional Surveyor</p> <p><i>[Signature]</i></p>
	<p>W.D. No. 4325</p> <p>Certificate No. Gary L. Jones 7977</p> <p>JLP</p>

EC

OCD-ARTESIA

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.**5. Lease Serial No.  
NMNM53218

6. If Indian, Allottee or Tribe Name

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

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other8. Well Name and No.  
RIGHTHAND CANYON 35 FEDERAL 5

2. Name of Operator

DEVON ENERGY PRODUCTION CO L P

Contact: LINDA GUTHRIE

E-Mail: linda.guthrie@dv.com

9. API Well No.

3a. Address

20 NORTH BROADWAY SUITE 1500  
OKLAHOMA CITY, OK 73102

3b. Phone No. (include area code)

Ph: 405.228.8209

Fx: 405.552.4621

10. Field and Pool, or Exploratory  
INDIAN BASIN UPPER PENN ASSOC

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 35 T21S R24E SENW 2334FNL 1485FWL

11. County or Parish, and State

EDDY COUNTY, NM

RECEIVED

SEP 13 2004

OCD-ARTESIA

## 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomple horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recomple in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Devon Energy Production Co., LP respectfully requests approval to amend the Application for Permit to Drill to specify that this well will be drilled utilizing a closed system for drilling fluids and that cuttings will be disposed of in a new pit to be dug at the Righthand Canyon 35 Federal #3 location at 1650 FSL & 1980 FEL. We request the pit be at the RHC 35-3 due to the inability to dig a pit at the current location without blasting. The current location has a producing well and to protect the integrity of the wellbore, Devon requests approval to haul the cuttings to the 35-3 where the pit can be dug without blasting.

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #35815 verified by the BLM Well Information System  
For DEVON ENERGY PRODUCTION CO L P, sent to the Carlsbad  
Committed to AFMSS for processing by LINDA ASKWIG on 09/08/2004 (04LA0813SE)

Name (Printed/Typed) LINDA GUTHRIE

Title REGULATORY SPECIALIST

Signature (Electronic Submission)

Date 09/08/2004

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

/s/ Joe G. Lara

Title

FIELD MANAGER

Date SEP 2004

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

CARLSBAD FIELD OFFICE

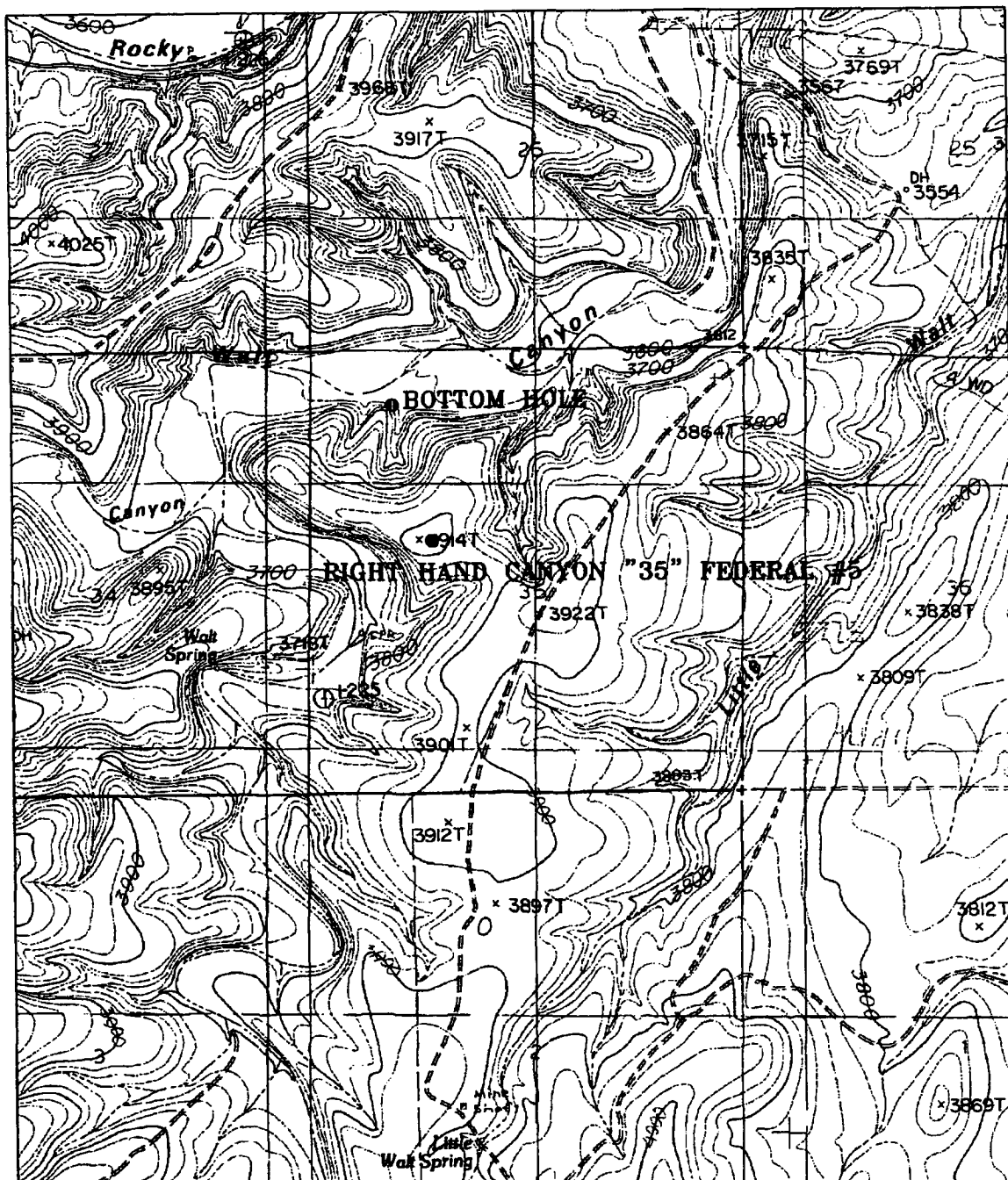
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

100 0 100 200 FEET

SCALE: 1" = 100'

Sheet 1 of 1 Sheets



## RIGHT HAND CANYON "35" FEDERAL #5

Located at 2334' FNL and 1485' FWL

Section 35, Township 21 South, Range 24 East,  
N.M.P.M., Eddy County, New Mexico.



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: 4323AA - JLP #1

Survey Date: 06/03/04

Scale: 1" = 2000'

Date: 06/04/04

**DEVON ENERGY  
PRDUCTION  
COMPANY LP.**

## DRILLING PROGRAM

Devon Energy Production Company, LP

### **Righthand Canyon 35 Federal #5**

Surface Location: 2334' FNL & 1485' FWL, Unit F, Sec 35 T21S R24E, Eddy, NM

Bottom hole Location: 990' FNL & 660' FWL, Unit D, Sec 35 T21S R24E, Eddy, NM

#### **1. Geologic Name of Surface Formation**

- a. Quaternary Aeolian Deposits

#### **2. Estimated tops of geological markers:**

a. San Andres	1,137'
b. Glorieta/Yeso	2,793'
c. Bone Spring	3,095'
d. Third Bone Spring	6,791'
e. Wolfcamp	7,186'
f. Cisco-Canyon	7,761'
g. Top of dolomite	7,784'
h. Base of dolomite	8,262'
i. ETD	8,600'

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

- |                            |         |
|----------------------------|---------|
| a. San Andres              | Water   |
| b. Wolfcamp, Cisco, Canyon | Oil/Gas |

#### **4. Casing Program:**

<u>Hole Size</u>	<u>Interval</u>	<u>OD Csg</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
25"	0' - 40'	20"	Na	Na	Conductor
12 1/4"	0' - 1,600'	9 5/8"	36#	ST&C	J-55 WITNESS
8 3/4"	0' - 8,600'	7"	23	LT&C	L-80/J55/ HCL80

#### **5. Cement & Setting Depth:**

- |                             |            |  |
|-----------------------------|------------|--|
| a. 20"                      | Conductor  | Set 40' of 20" conductor and cement to surface with Redi-mix   |
| b. 9 5/8"                   | Surface    | Set 1600' of 9 5/8", 36#, H-40 ST&C casing. Cement with 400 sx of Class C 35:65 Poz + 2% CaCl + 1/4# Celoflakes/sx + 3#/sx of Kolseal, + 6% Bentonite, tail in with 200 sx of Class C cement + 2% Cacl, + 1/4# Celoflakes/sx. Circulate cement to surface. |
| c. 7"                       | Production | Set 8,600' of 7" casing as follows 1200' of 7", 23#, HLC-80  |
| DV Tools @ ±4000' & ±7,625' |            | LT&C, 7400' of 7" 23# L8 LT&C casing. Cement with 200 sx of Class C 15:61:11 Super Mod C + 600 sx 60/40/ Poz Class C + 700 sx 60/40/ Poz Class C, The cement volumes for the 7" casing will be revised pending the caliper measurement from open hole logs |



6. **Pressure Control Equipment:**

The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (3000 psi WP) preventor and a bag-type (Hydril) preventor (3000 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. Both BOP's will be installed on the 9 5/8" surface casing and utilized continuously until total depth is reached. **The BOP will be pressure tested with the rig pump to 1200 psi prior to drilling out the 9 5/8" casing shoe.** As per BLM Drilling Operations Order #2, prior to drilling out the 9 5/8" casing shoe, the BOP's and Hydril will be function tested.

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 driller's 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 3000 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' - 1600'	8.5 - 8.7	29-34	NC	Air or Fresh Water
1600' - TD	8.4 - 9.0	29-40	10-15	FW mud or Drispac system

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, & casing the viscosity and/or water loss may have to be adjusted to meet these needs.

8. **Logging, Coring, and Testing Program:**

- Open hole logs: Dual Induction, SNP, LDT, MSFL, Gamma Ray, Caliper from TD to 1600'. Run Gamma Ray, neutron from 1600' to surface.
- Mud Logger may be rigged up on hole at the request of the operator
- No cores or DST's are planned at this time.
- After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones

9. **Potential Hazards:**

- No abnormal pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is 144 degrees and maximum bottom hole pressure is 1000 psig. Hydrogen sulfide gas may be encountered in this area. A H2S Contingency plan will be available at the location and implemented prior to penetrating the Penn. Lost circulation intervals have been encountered in the Cisco-Canyon zones in adjacent wells.

10. **Anticipated Starting Date and Duration of Operations:**

- The road and location were constructed for the drilling of a previous well, therefore there is no additional construction needed. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling are expected to take 32 days.

## **SURFACE USE PLAN**

Devon Energy Production Company, LP

### **Righthand Canyon 35 Federal #5**

Surface Location: 2334' FNL & 1485' FWL, Unit F, Sec 35 T21S R24E, Eddy, NM

Bottom hole Location: 990' FNL & 660' FWL, Unit D, Sec 35 T21S R24E, Eddy, NM

#### **1. Existing Roads:**

- a. The well site and elevation plat for the proposed are reflected on Exhibit 2. The well was staked by Basin Surveys.
- b. All roads into the location are depicted on Exhibit 3.

#### **2. Directions to Location:** From the junction of US Hwy 285 and State 137, go southwesterly on 137 for 6.4 miles to a lease road left; then follow winding lease road for 2.2 miles to a cattle guard and lease road.

- a. Exhibit #3 shows the existing roads. No new construction will be necessary.
- b. No cattle guards, grates or fence cuts will be required. No turnouts are planned.

#### **3. In the event the well is found productive, existing facilities will be utilized.**

#### **4. Methods of Handling Waste Material:**

- a. Drill cuttings will be disposed of in the existing lined reserve pit.
- 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. Salts remaining after completion of well will be picked up by the supplier, including broken sacks.
- d. Waste water 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 closed. The pit will be closed pursuant to New Mexico OCD rules and guidelines. 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 location was utilized for the drilling of the Righthand Canyon 35 Federal #4.
- c. This exhibit indicates location of reserve and sump pits and living facilities.
- d. Mud pits in the active circulating system will be steel pits & the existing reserve pit is currently lined.
- 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. 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 soil is shallow, calcareous, and grayish-brown, loose to slightly compact, stony, silty loam overlying limestone bedrock; slopes consist primarily of limestone rock and small pockets of colluvium and alluvium.
- b. The surface and minerals are owned by the US Government and 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. An archaeological survey has been conducted of the well pad location and the results were filed with the Bureau of Land Management in Carlsbad Field office.
- 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.

Robert Elliott  
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

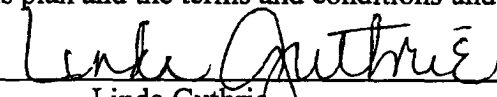
(405) 228-8609 (office)  
(405) 323-4616 (Cellular)

(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: \_\_\_\_\_

  
Linda Guthrie  
Regulatory Specialist

Date: June 16, 2004

## **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. Drillstem 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.
9. 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 BLOWOUT PREVENTER REQUIREMENTS

3,000 psi Working Pressure

3 MWP

EXHIBIT # 1

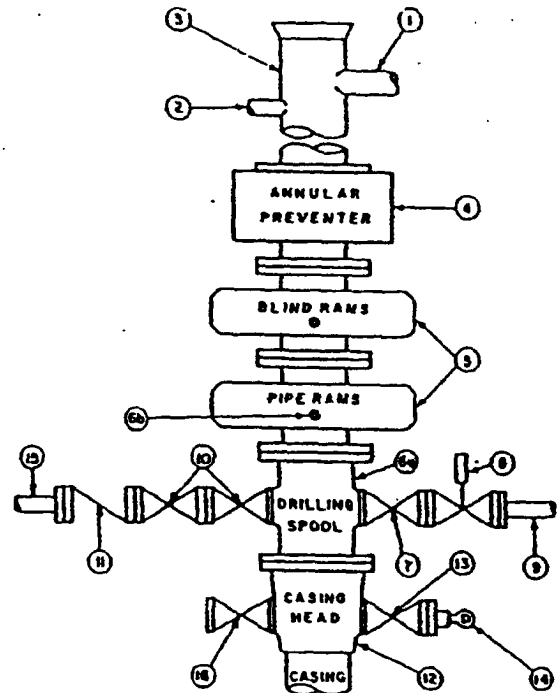
## STACK REQUIREMENTS

No.	Item	Min. I.D.	Min. Nominal
1	Flowline		
2	Fill up line		2"
3	Drilling nipple		
4	Annular preventer		
5	Two single or one dual hydraulically operated rams		
6a	Drilling spool with 2" min. kill line and 3" min choke line outlets		
6b	2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above.)		
7	Valve <span style="float:right">Gate <input type="checkbox"/> Plug <input type="checkbox"/></span>	3-1/8"	
8	Gate valve—power operated	3-1/8"	
9	Line to choke manifold		3"
10	Valves <span style="float:right">Gate <input type="checkbox"/> Plug <input type="checkbox"/></span>	2-1/16"	
11	Check valve	2-1/16"	
12	Casing head		
13	Valve <span style="float:right">Gate <input type="checkbox"/> Plug <input type="checkbox"/></span>	1-13/16"	
14	Pressure gauge with needle valve		
15	Kill line to rig mud pump manifold		2"

## OPTIONAL

16	Flanged valve	1-13/16"	
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CONFIGURATION A



## CONTRACTOR'S OPTION TO FURNISH:

1. All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 psi, minimum.
2. Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
3. BOP controls, to be located near drillers position.
4. Kelly equipped with Kelly cock.
5. Inside blowout preventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
6. Kelly saver-sub equipped with rubber casing protector at all times.
7. Plug type blowout preventer tester.
8. Extra set pipe rams to fit drill pipe in use on location at all times.
9. Type RX ring gaskets in place of Type R.

## MEC TO FURNISH:

1. Bradenhead or casinghead and side valves.
2. Wear bushing, if required.

## GENERAL NOTES:

1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through choke. Valves must be full opening and suitable for high pressure mud service.
3. Controls to be of standard design and each marked, showing opening and closing position.
4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
5. All valves to be equipped with handwheels or handles ready for immediate use.
6. Choke lines must be suitably anchored.

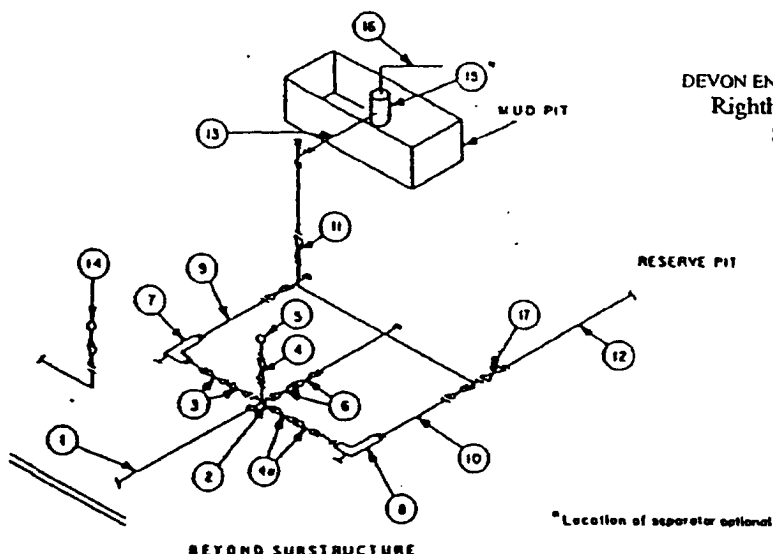
7. Handwheels and extensions to be connected and ready for use.
8. Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
9. All seamless steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
10. Casinghead connections shall not be used except in case of emergency.
11. Do not use kill line for routine fill-up operations.

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

**3 MWP - 5 MWP - 10 MWP**

**EXHIBIT # 1**

DEVON ENERGY PRODUCTION COMPANY, L.P.  
 Righthand Canyon "35" Federal #4  
 Section 35-T21S-R24E  
 Eddy Cnty, NM



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.

Attachment to Exhibit #1  
NOTES REGARDING BLOWOUT PREVENTERS  
Devon Energy Production Company, LP

**Righthand Canyon 35 Federal #5**

Surface Location: 2334' FNL & 1485' FWL, Unit F, Sec 35 T21S R24E, Eddy, NM

Bottom hole Location: 990' FNL & 660' FWL, Unit D, Sec 35 T21S R24E, 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 preventor and all associated fittings will be in operable condition to withstand a minimum 3000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum 3000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
6. All choke lines will be anchored to prevent movement.
7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
8. Will maintain a kelly cock attached to the kelly.
9. Hand wheels and wrenches will be properly installed and tested for safe operation.
10. Hydraulic floor control for blowout preventor 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 Corp**

**2401 Pecos Ave  
Artesia NM 88210**

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

**For**

**Righthand Canyon 35 Federal #5**

**2334 FNL & 1485 FWL,  
Unit F, Sec-35 T-21S R-24E**

**Eddy County NM**

RECEIVED

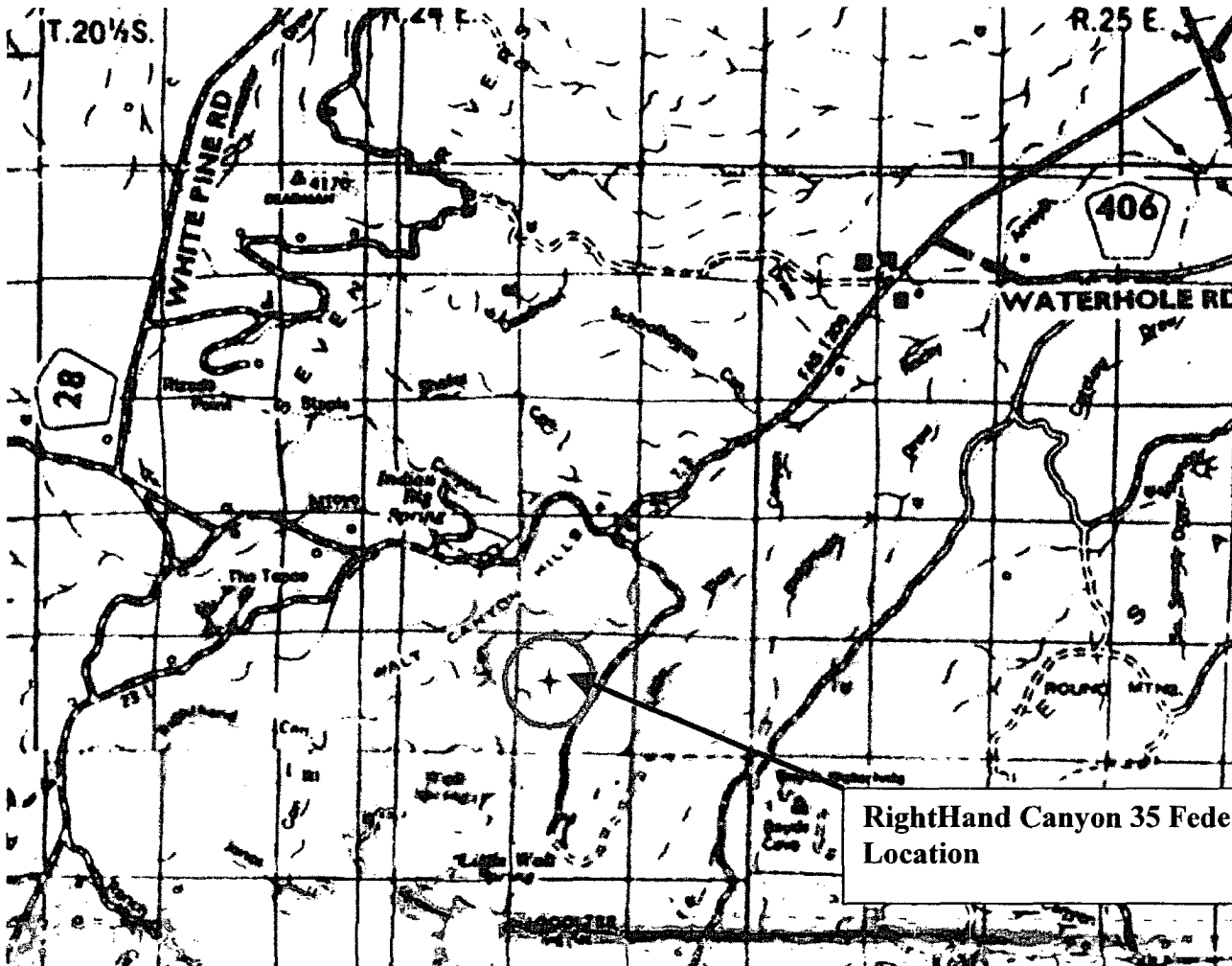
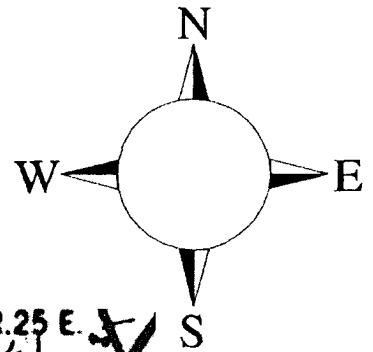
JUN 21 2004

OCC-ARTESIA



## Righthand Canyon 35 Federal #5

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.



Righthand Canyon 35 Federal # 5  
Location

Assumed 100 ppm ROE = 3000'

100 ppm H<sub>2</sub>S concentration shall trigger activation of this plan.

## 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 – Robert Elliott .....	(405) 323-4616....	(405) 228-8609 ...	

### 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;

