

VRM class III  
Floodplain

# Split Estate

OCD-ARTESIA  
FEB 10 2009

121

ATS-09-72

S

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

## APPLICATION FOR PERMIT TO DRILL OR REENTER

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

5 Lease Serial No. **NM118703**  
6 If Indian, Allottee or Tribe Name

1a. Type of work: ☒ DRILL ☐ REENTER

7 If Unit or CA Agreement, Name and No.

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

8. Lease Name and Well No.  
**Condor 7 Federal Com 3 H**

2. Name of Operator  
**Devon Energy Production Company, LP**

9. API Well No.  
**30-015-36970**

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

3b Phone No. (include area code)  
**405-552-8198**

10 Field and Pool, or Exploratory  
**Red Lake; Glorieta-Yeso, 51120**

4. Location of Well (Report location clearly and in accordance with any State requirements\*)  
At surface **1585 FNL & 2225 FWL, Unit F**  
At proposed prod zone **1650 FNL & 330 FEL, Unit H**

**UNORTHODOX  
LOCATION**

11 Sec, T. R. M. or Blk. and Survey or Area  
**Sec 7, T18S R27E, Unit F; Unit H**

14 Distance in miles and direction from nearest town or post office\*  
**Approximately 7 miles southeast of Artesia, NM**

12 County or Parish  
**Eddy County**

13. State  
**NM**

15 Distance from proposed\* location to nearest property or lease line, ft (Also to nearest drg unit line, if any)  
**330'**

16 No. of acres in lease  
**40 acres in each lease**

17 Spacing Unit dedicated to this well  
**120 acres**

18 Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft  
**101'**

19 Proposed Depth  
**5231' MD 2790' TVD**

20 BLM/BIA Bond No on file  
**CO-1104**

21 Elevations (Show whether DF, KDB, RT, GL, etc.)  
**3290' GL**

22 Approximate date work will start\*  
**11/30/2008**

23. Estimated duration  
**30 days**

### 24. Attachments

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

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

Title

**Sr. Staff Eng. Tech**

Name (Printed/Typed)

**Norvella Adams**

Date

**10/27/2008**

Approved by (Signature)

**/s/ Don Peterson**

Name (Printed/Typed)

**/s/ Don Peterson**

Date **FEB 09 2009**

Title

**FOR FIELD MANAGER**

Office

**CARLSBAD FIELD OFFICE**

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon  
Conditions of approval, if any, are attached.

**APPROVAL FOR TWO YEARS**

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

\*(Instructions on page 2)

**ROSWELL CONTROLLED WATER BASIN**

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

**APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED**



PRIVATE SURFACE OWNER AGREEMENT

OPERATOR: Devon Energy Production Company, LP

WELL NAME: Condor 7 Federal Com 3H

SECTION: 7 TOWNSHIP: 18 S RANGE: 27E

LOCATION: 1585 FNL 2225 FWL

COUNTY: Eddy STATE: NM


LEASE NUMBER: SL: <sup>NM 7715</sup>~~NM 118703~~ & BHL: NM118703 *PS*

STATEMENT OF SURFACE USE

The surface to the subject land is owned by Mr. Kenneth Benally.

The surface owner has been contacted regarding the drilling of the subject well, and an agreement for surface use has been negotiated.

CERTIFICATION: I hereby certify that the statements made in this statement are to the best of my knowledge, true and correct.

  
\_\_\_\_\_  
Signature

NAME: Norvella Adams

DATE: December 22, 2008

TITLE: Sr. Staff Engineering Technician

To expedite your Application to Drill please fax the completed form to the  
Bureau of Land Management (505) 234-5927 or (505) 885-9264  
Attention: Legal Instruments Examiner  
620 E. Green Street  
Carlsbad, NM 88220

The original document with signature should be mailed as soon as possible. Thank you for your cooperation.

RECEIVED  
DEC 24 AM 10:13  
BUREAU OF LAND MANAGEMENT  
CARLSBAD, NEW MEXICO

## DISTRICT I

1625 N. French Dr., Hobbs, NM 88240

## DISTRICT II

1301 W. Grand Avenue, Artesia, NM 88210

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

## DISTRICT IV

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

State of New Mexico  
Energy, Minerals and Natural Resources Department

## OIL CONSERVATION DIVISION

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

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

|                             |   |                                      |
|-----------------------------|---|--------------------------------------|
| API Number<br>30-015-36 970 | Pool Code<br>51120                                  | Pool Name<br>Red Lake; Glorieta-yeso |
| Property Code<br>37608      | Property Name<br>CONDOR "7" FEDERAL COM             | Well Number<br>3H                    |
| OGRID No.<br>6137           | Operator Name<br>DEVON ENERGY PRODUCTION COMPANY LP | Elevation<br>3290'                   |

## 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             | 7       | 18 S     | 27 E  |         | 1585          | NORTH            | 2225'         | WEST           | EDDY   |

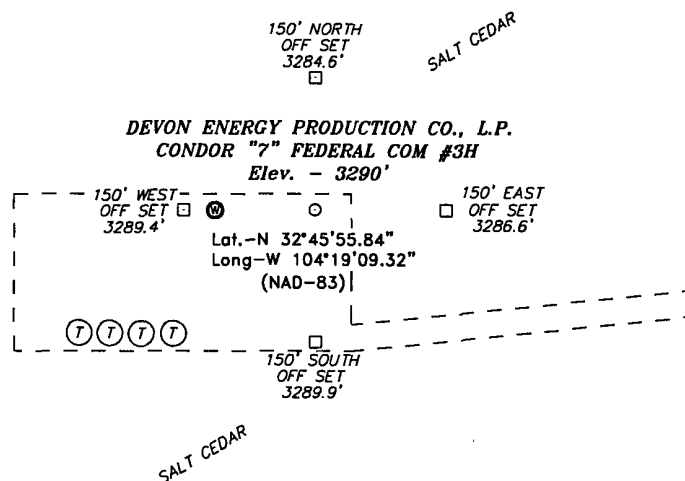
## Bottom Hole Location If Different From Surface

| UL or lot No.          | Section              | Township           | Range     | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|------------------------|----------------------|--------------------|-----------|---------|---------------|------------------|---------------|----------------|--------|
| H                      | 7                    | 18 S               | 27 E      |         | 1650          | NORTH            | 330'          | EAST           | EDDY   |
| Dedicated Acres<br>120 | Joint or Infill<br>✓ | 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>N: 643776.648<br/>E: 543439.141<br/>LAT: 32°45'11.194"<br/>LONG: -104°19'35.385"</p> <p>1585'</p> <p>2225'</p> <p>3445.4'</p> <p><b>SURFACE LOCATION</b><br/>Lat - N32°45'55.84"<br/>Long - W104°19'09.32"<br/>SPC- N.: 642154.867<br/>E.: 545665.078<br/>(NAD-83)</p> <p>1650'</p> <p>330'</p> <p><b>BOTTOM HOLE LOCATION</b><br/>Lat - N32°45'54.14"<br/>Long - W104°18'29.87"<br/>SPC- N.: 642041.163<br/>E.: 549103.365<br/>(NAD-83)</p> <p>N: 641057.673<br/>E: 548773.421<br/>LAT: 32°45'44.281"<br/>LONG: -104°18'32.916"</p> <p>N: 638493.387<br/>E: 543446.990<br/>LAT: 32°45'18.915"<br/>LONG: -104°19'35.297"</p> <p>N: 638418.538<br/>E: 548770.361<br/>LAT: 32°45'18.167"<br/>LONG: -104°18'32.959"</p> | <p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature: <i>[Signature]</i> Date: 6/27/08</p> <p>Printed Name: Norvella Adams</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 27, 2008</p> <p>Date Surveyed: <i>[Signature]</i><br/>Signature: <i>[Signature]</i><br/>Professional Surveyor</p> <p>W. Gary L. Jones</p> <p>Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p> |
|---|--|

## N



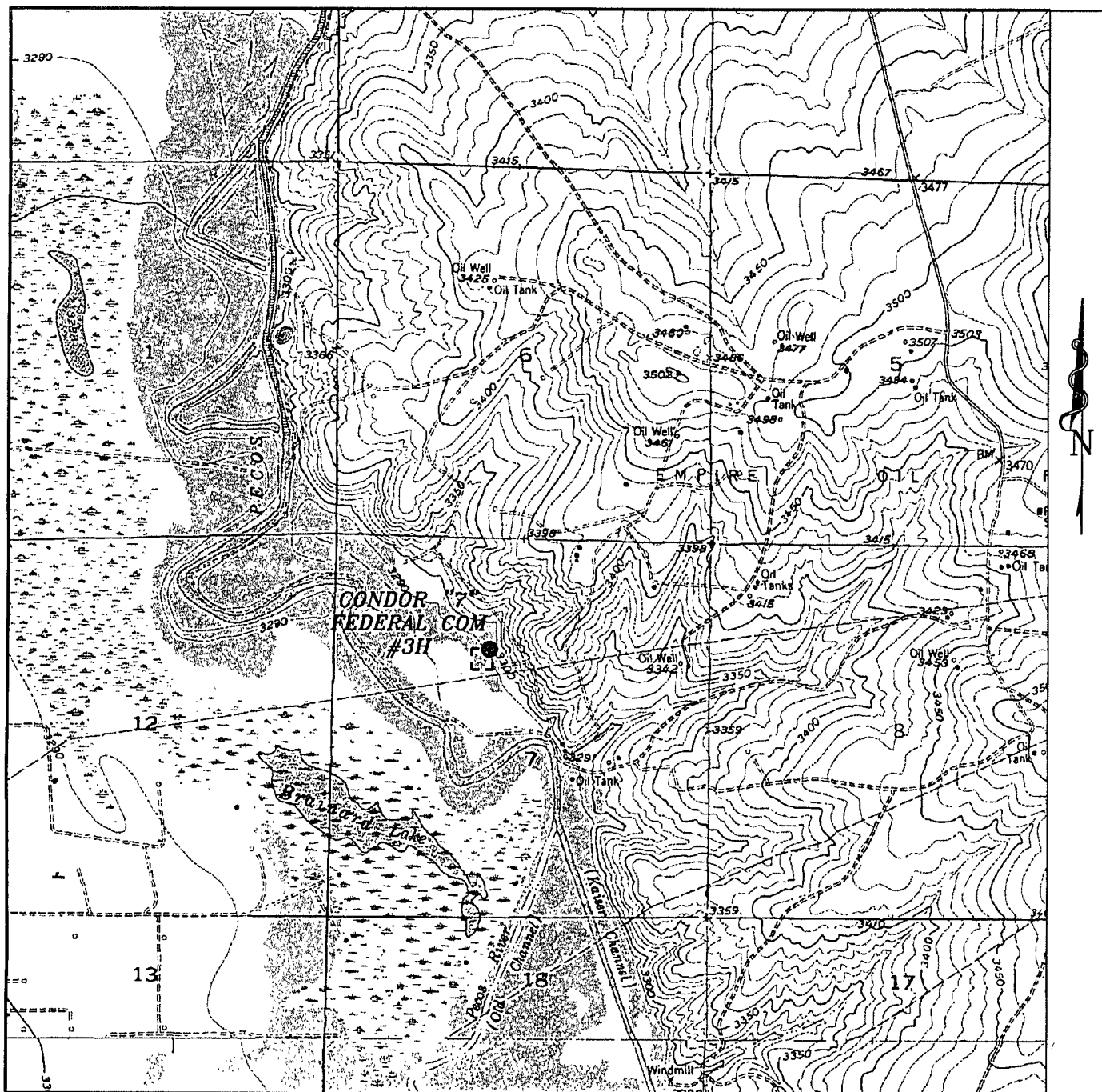
200 0 200 400 FEET

SCALE: 1" = 200'

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

THE CONDOR "7" FEDERAL COM #3H LOCATED 1585' FROM  
THE NORTH LINE AND 2225' FROM THE WEST LINE OF  
SECTION 7, TOWNSHIP 18 SOUTH, RANGE 27 EAST,  
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Sheet 1 of 1 Sheets



CONDOR "7" FEDERAL COM #3H  
 Located at 1585' FNL AND 2225' FWL  
 Section 7, Township 18 South, Range 27 East,  
 N.M.P.M., Eddy County, New Mexico.

**basin**  
**surveys**  
 focused on excellence  
 in the oilfield

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

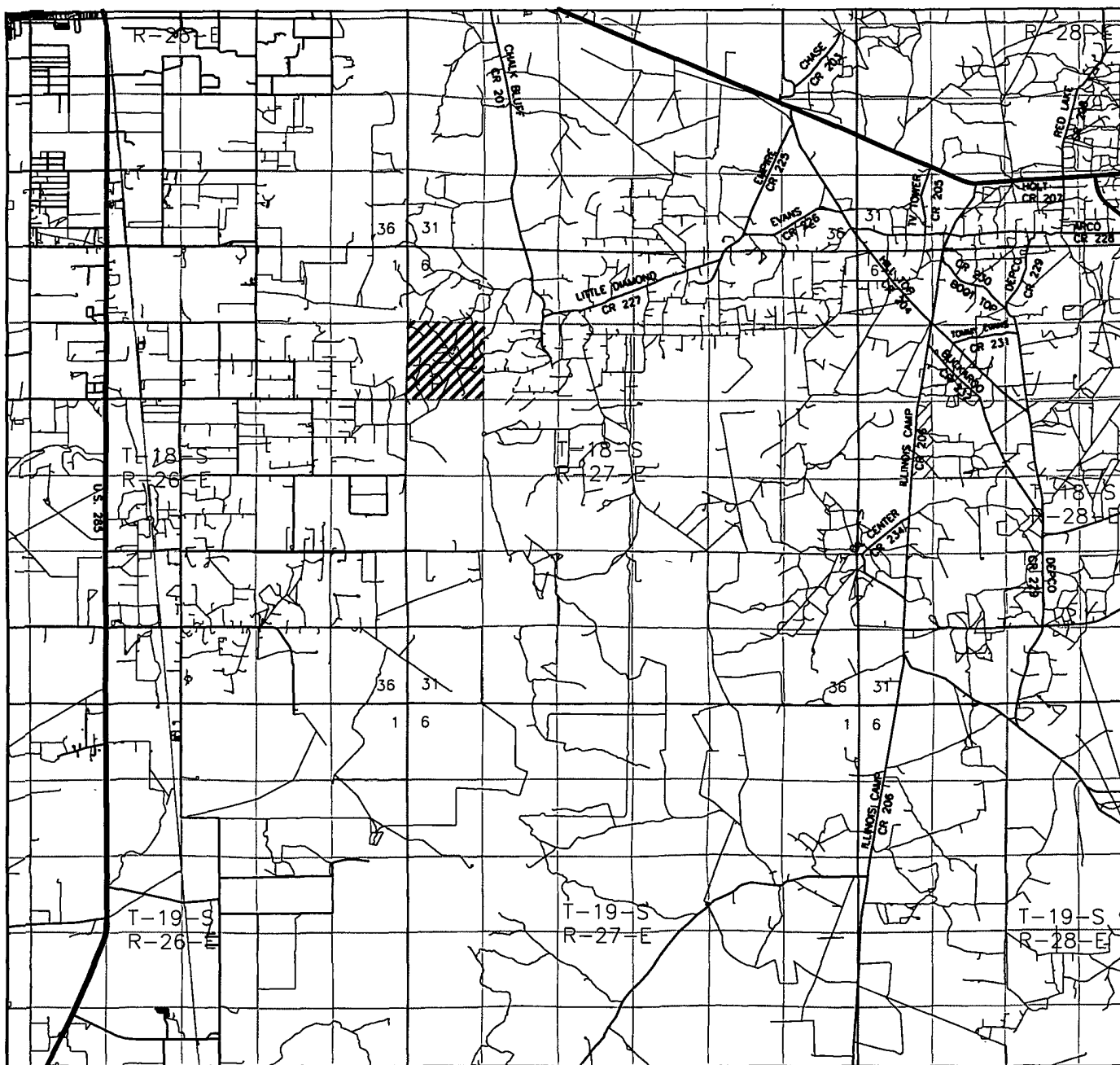
W.O. Number: JMS 19913

Survey Date: 06-27-2008

Scale: 1" = 2000'

Date: 06-30-2008

DEVON ENERGY  
 PROD. CO., L.P.



CONDOR "7" FEDERAL COM #3H  
 Located at 1585' FNL AND 2225' FWL  
 Section 7, Township 18 South, Range 27 East,  
 N.M.P.M., Eddy County, New Mexico.

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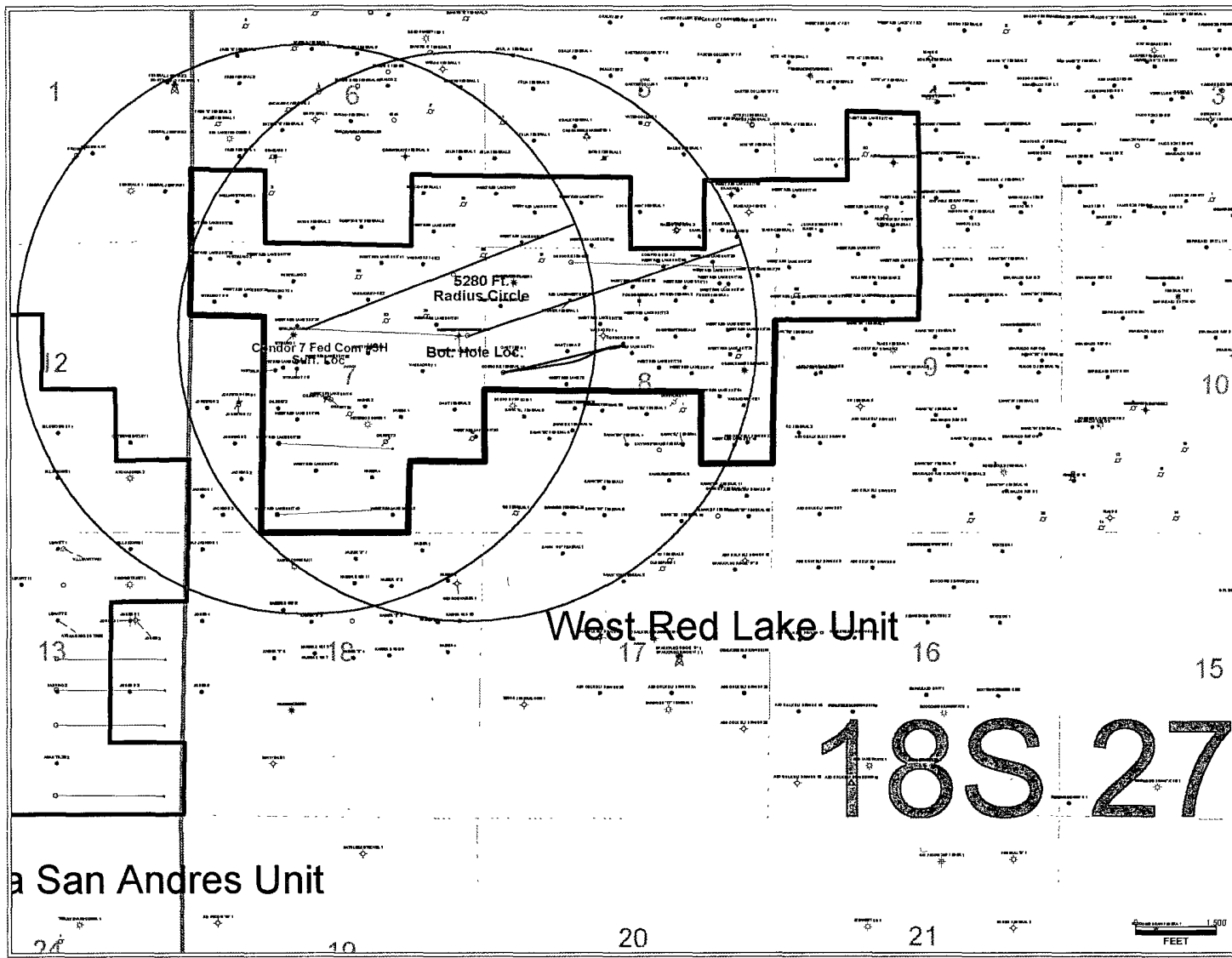
W.O. Number: JMS 19913

Survey Date: 06-27-2008

Scale: 1" = 2 MILES

Date: 06-30-2008

DEVON ENERGY  
 PROD. CO., L.P.



## DRILLING PROGRAM

Devon Energy Production Company, LP

### **Condor 7 Federal Com 3H**

Surface Location: 1585' FNL & 2225' FWL, Unit F, Sec 7 T18S R27E, Eddy, NM

Bottom Hole Location: 1650' FNL & 330' FEL, Unit H, Sec 7 T18S R27E, Eddy, NM

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

a. Permian

#### **2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:**

|                |       |           |
|----------------|-------|-----------|
| a. Queen       | 399'  |           |
| b. Grayburg    | 824'  | Oil & Gas |
| c. San Andres  | 1059' | Oil & Gas |
| d. Glorieta    | 2414' | Oil & Gas |
| e. Yeso        | 2549' | Oil & Gas |
| f. Total Depth | 5231' |           |

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 7" casing at 3120' and circulating cement back to surface. The Yeso intervals will be isolated by setting 7" casing to 3120' and setting 4 1/2" casing with a peak open hole system to total depth.

#### **3. Casing Program:**

| <u>Hole Size</u>  | <u>Hole Interval</u> | <u>OD Csg</u> | <u>Casing Interval</u> | <u>Weight</u> | <u>Collar</u> | <u>Grade</u> |
|-------------------|----------------------|---------------|------------------------|---------------|---------------|--------------|
| 30"               | 0' - 40'             | 20"           | 0' - 40'               |               |               | Conductor    |
| See COA → 12 1/4" | 40' - 450' 4/10      | 9 5/8"        | 0' - 450' 4/10         | 36#           | ST&C          | H-40         |
| 8 3/4"            | 450' - 3118' 3/20    | 7"            | 0 - 2000'              | 26#           | LT&C          | L-80         |
| 8 3/4"            | 450' - 3118' 3/20    | 7"            | 2000' - 3120'          | 26#           | BT&C          | L-80         |
| 6 1/8"            | 3118' - 5231'        | 4 1/2"        | 3070' - 5231'          | 11.6#         | BT&C          | L-80         |

*1/17/09*  
*2-80 per operator*  
The liner will be comprised of 4 1/2" P-110, 11.6#, BT&C casing to be hung off +/- 50' inside the 7" at +/- 3,070'. The liner will consist of a 5 stage open hole isolation tool (Peak) and will not be cemented. It will be TD'd at 5,231'. This liner will be run in a 6 1/8" hole. *See COA*

#### **Design Parameter Factors:**

| <u>Casing Size</u> | <u>Collapse Design Factor</u> | <u>Burst Design Factor</u> | <u>Tension Design Factor</u> |
|--------------------|-------------------------------|----------------------------|------------------------------|
| 9 5/8"             | 10.56                         | 2.50                       | 2.57                         |
| 7"                 | 4.19                          | 1.5                        | 2.20                         |
| 4 1/2"             | 4.09                          | 1.63                       | 1.91                         |



4. **Cement Program: (Note yields; and dv tool depths if multiple stages)**

- a. 9 5/8" Surface 225 sx Premium Plus C + 2% CaCl<sub>2</sub> + ¼ lbs/sx Celloflake, 14.8 ppg, 1.35 cf/sx, 6.35 gps. TOC = 0.
- b. 7" Intermediate Lead with 200 sx (35:65) Premium Plus C + 5% NaCl + ¼ lbs/sx Cello Flake + 6% Bentonite; 12.7 ppg, 1.94 cf/sx, 10.51 gps. Tail with 360 sx (60:40) Premium Plus C + 5% NaCl + ¼ lbs/sx Cello Flake + 0.4% Sodium Metasilicate + 0.75% BA-10A + 4% MPA-5; 13.8 ppg, 1.38 cf/sx, 6.41 gps. TOC = 0.
- c. 4 1/2" Liner

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

5. **Pressure Control Equipment:**

*see COA*  
The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of a (3/5 K system) double ram type (3000/5000 psi WP) preventor and a bag-type (Hydril) preventor (3000/5000 psi WP) and rotating head. Both units will be hydraulically operated and the ram type preventor will be equipped with blind rams on top and 4 ½" drill pipe rams on bottom. **The 3K annular BOP will be nipped up on the 9 5/8" casing and tested to 1000 psi high and 250 low with rig pump. The 5K double BOP will be nipped up on the 9 5/8" and tested as per Onshore Order #2.**

Pipe rams will be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily 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 3000/5000 psi WP rating.

6. **Proposed Mud Circulation System**

| <u>Depth</u>         | <u>Mud Wt.</u> | <u>Visc</u> | <u>Fluid Loss</u> | <u>Type System</u> |
|----------------------|----------------|-------------|-------------------|--------------------|
| 0' - 450' <i>410</i> | 8.4 - 9.4      | 32-34       | NC                | Fresh Water        |
| 450' - 3120'         | 10.0           | 28          | NC                | Brine              |
| 3120' - 5231'        | 10.0           | 28          | NC                | Brine              |

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 will be in operation after drilling out the 9 5/8" casing shoe until the 4 1/2" liner is set. Breathing equipment will be on location upon drilling the 9 5/8" shoe until total depth is reached.

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

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

**9. Potential Hazards:**

- a. No abnormal pressures or temperatures are expected. A H2S contingency plan will be provided. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 800 psi and Estimated BHT 90°.

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

- a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 30 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.



# Devon Energy

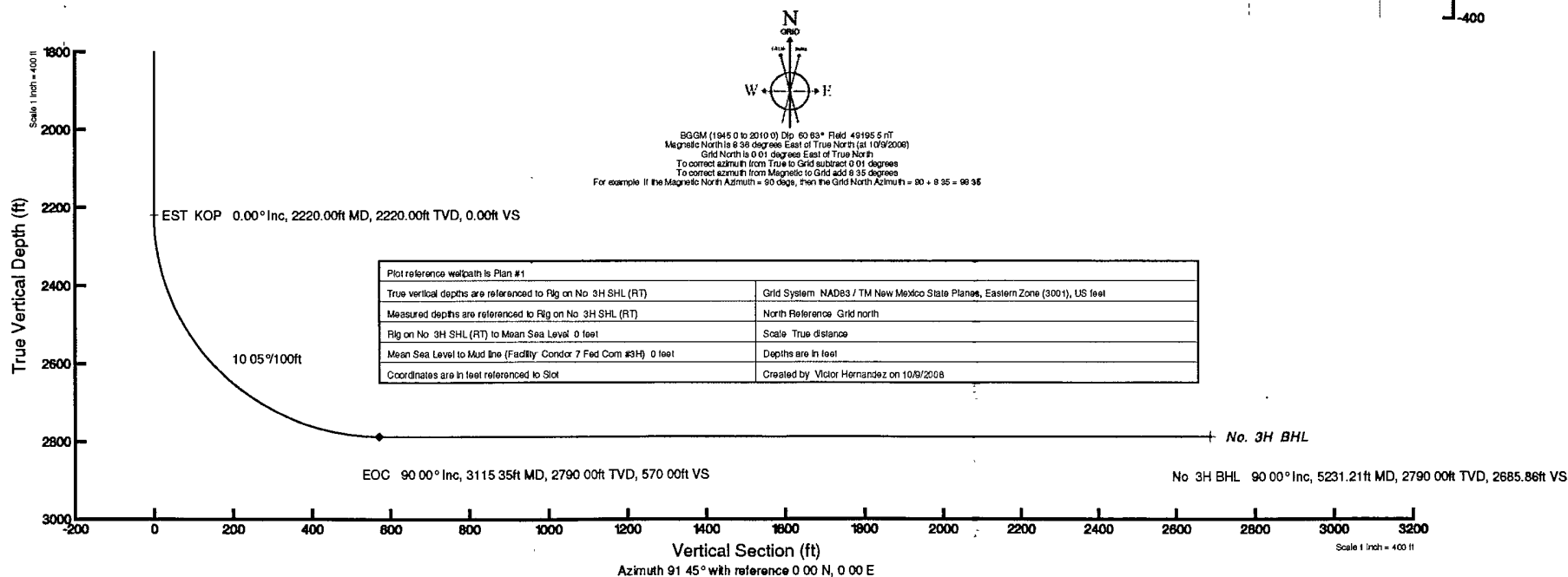
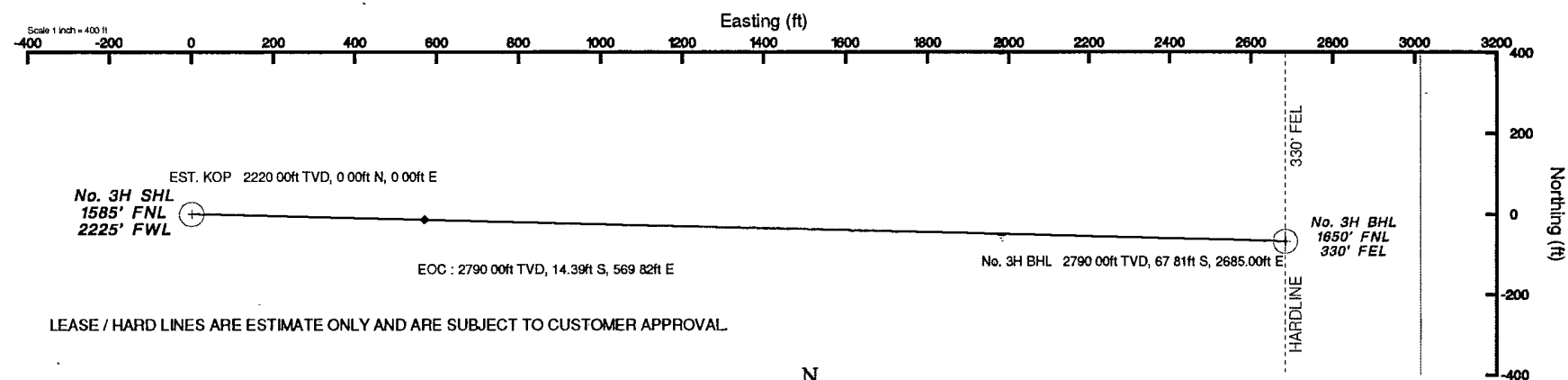
Location: Eddy County, NM  
Field: (Condor) Sec 7, T18S, R27E  
Facility: Condor 7 Fed Com #3H

Slot: No. 3H SHL  
Well: No. 3H  
Wellbore: No. 3H PWB



## Well Profile Data

| Design Comment | MD (ft) | Inc (°) | Az (°) | TVD (ft) | Local N (ft) | Local E (ft) | DLS (°/100ft) | VS (ft) |
|----------------|---------|---------|--------|----------|--------------|--------------|---------------|---------|
| Tie On         | 0.00    | 0.000   | 91.447 | 0.00     | 0.00         | 0.00         | 0.00          | 0.00    |
| EST. KOP       | 2220.00 | 0.000   | 91.447 | 2220.00  | 0.00         | 0.00         | 0.00          | 0.00    |
| EOC            | 3115.35 | 90.000  | 91.447 | 2790.00  | -14.39       | 569.82       | 10.05         | 570.00  |
| No. 3H BHL     | 5231.21 | 90.000  | 91.447 | 2790.00  | -67.81       | 2685.00      | 0.00          | 2685.86 |





# Planned Wellpath Report

Plan #1  
Page 1 of 3



INTEQ

## REFERENCE WELLPATH IDENTIFICATION

|          |                            |          |            |
|----------|----------------------------|----------|------------|
| Operator | Devon Energy               | Slot     | No. 3H SHL |
| Area     | Eddy County, NM            | Well     | No. 3H     |
| Field    | (Condor) Sec 7, T18S, R27E | Wellbore | No. 3H PWB |
| Facility | Condor 7 Fed Com #3H       |          |            |

## REPORT SETUP INFORMATION

|                     |  |                      |                           |
|---------------------|--|----------------------|---------------------------|
| Projection System   | NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet | Software System      | WellArchitect® 2.0        |
| North Reference     | Grid   | User                 | Victor Hernandez          |
| Scale               | 0.999909   | Report Generated     | 10/9/2008 at 10:53:56 AM  |
| Convergence at slot | 0.01° East   | Database/Source file | WA_Midland/No. 3H_PWB.xml |

## WELLPATH LOCATION

|                       | Local coordinates |          | Grid coordinates |                | Geographic coordinates |                 |
|-----------------------|-------------------|----------|------------------|----------------|------------------------|-----------------|
|                       | North[ft]         | East[ft] | Easting[USft]    | Northing[USft] | Latitude               | Longitude       |
| Slot Location         | 0.00              | 0.00     | 545759.94        | 642113.87      | 32°45'54.738"N         | 104°19'08.206"W |
| Facility Reference Pt |                   |          | 545759.94        | 642113.87      | 32°45'54.738"N         | 104°19'08.206"W |
| Field Reference Pt    |                   |          | 545759.94        | 642113.87      | 32°45'54.738"N         | 104°19'08.206"W |

## WELLPATH DATUM

|                          |                        |   |                   |
|--------------------------|------------------------|---|-------------------|
| Calculation method       | Minimum curvature      | Rig on No. 3H SHL (RT) to Facility Vertical Datum | 0.00ft            |
| Horizontal Reference Pt  | Slot                   | Rig on No. 3H SHL (RT) to Mean Sea Level          | 0.00ft            |
| Vertical Reference Pt    | Rig on No. 3H SHL (RT) | Facility Vertical Datum to Mud Line (Facility)    | 0.00ft            |
| MD Reference Pt          | Rig on No. 3H SHL (RT) | Section Origin                                    | N 0.00, E 0.00 ft |
| Field Vertical Reference | Mean Sea Level         | Section Azimuth                                   | 91.45°            |



# Planned Wellpath Report

Plan #1  
Page 2 of 3



| REFERENCE WELLPATH IDENTIFICATION |                            |          |            |
|-----------------------------------|----------------------------|----------|------------|
| Operator                          | Devon Energy               | Slot     | No. 3H SHL |
| Area                              | Eddy County, NM            | Well     | No. 3H     |
| Field                             | (Condor) Sec 7, T18S, R27E | Wellbore | No. 3H PWB |
| Facility                          | Condor 7 Fed Com #3H       |          |            |

| WELLPATH DATA (34 stations) † = interpolated/extrapolated station |                    |                |             |                   |               |              |                  |          |
|---|--------------------|----------------|-------------|-------------------|---------------|--------------|------------------|----------|
| MD<br>[ft]  | Inclination<br>[°] | Azimuth<br>[°] | TVD<br>[ft] | Vert Sect<br>[ft] | North<br>[ft] | East<br>[ft] | DLS<br>[°/100ft] | Comments |
| 0.00  | 0.000              | 91.447         | 0.00        | 0.00              | 0.00          | 0.00         | 0.00             | Tie On   |
| 2220.00   | 0.000              | 91.447         | 2220.00     | 0.00              | 0.00          | 0.00         | 0.00             | EST. KOP |
| 2320.00†  | 10.052             | 91.447         | 2319.49     | 8.75              | -0.22         | 8.75         | 10.05            |          |
| 2420.00†  | 20.104             | 91.447         | 2415.92     | 34.73             | -0.88         | 34.72        | 10.05            |          |
| 2520.00†  | 30.156             | 91.447         | 2506.34     | 77.14             | -1.95         | 77.12        | 10.05            |          |
| 2620.00†  | 40.208             | 91.447         | 2587.97     | 134.68            | -3.40         | 134.64       | 10.05            |          |
| 2720.00†  | 50.259             | 91.447         | 2658.30     | 205.59            | -5.19         | 205.53       | 10.05            |          |
| 2820.00†  | 60.311             | 91.447         | 2715.18     | 287.69            | -7.26         | 287.59       | 10.05            |          |
| 2920.00†  | 70.363             | 91.447         | 2756.85     | 378.45            | -9.56         | 378.33       | 10.05            |          |
| 3020.00†  | 80.415             | 91.447         | 2782.04     | 475.09            | -12.00        | 474.94       | 10.05            |          |
| 3115.35   | 90.000             | 91.447         | 2790.00     | 570.00            | -14.39        | 569.82       | 10.05            | EOC      |
| 3120.00†  | 90.000             | 91.447         | 2790.00     | 574.65            | -14.51        | 574.46       | 0.00             |          |
| 3220.00†  | 90.000             | 91.447         | 2790.00     | 674.65            | -17.03        | 674.43       | 0.00             |          |
| 3320.00†  | 90.000             | 91.447         | 2790.00     | 774.65            | -19.56        | 774.40       | 0.00             |          |
| 3420.00†  | 90.000             | 91.447         | 2790.00     | 874.65            | -22.08        | 874.37       | 0.00             |          |
| 3520.00†  | 90.000             | 91.447         | 2790.00     | 974.65            | -24.61        | 974.34       | 0.00             |          |
| 3620.00†  | 90.000             | 91.447         | 2790.00     | 1074.65           | -27.13        | 1074.30      | 0.00             |          |
| 3720.00†  | 90.000             | 91.447         | 2790.00     | 1174.65           | -29.66        | 1174.27      | 0.00             |          |
| 3820.00†  | 90.000             | 91.447         | 2790.00     | 1274.65           | -32.18        | 1274.24      | 0.00             |          |
| 3920.00†  | 90.000             | 91.447         | 2790.00     | 1374.65           | -34.71        | 1374.21      | 0.00             |          |
| 4020.00†  | 90.000             | 91.447         | 2790.00     | 1474.65           | -37.23        | 1474.18      | 0.00             |          |
| 4120.00†  | 90.000             | 91.447         | 2790.00     | 1574.65           | -39.76        | 1574.14      | 0.00             |          |
| 4220.00†  | 90.000             | 91.447         | 2790.00     | 1674.65           | -42.28        | 1674.11      | 0.00             |          |
| 4320.00†  | 90.000             | 91.447         | 2790.00     | 1774.65           | -44.81        | 1774.08      | 0.00             |          |
| 4420.00†  | 90.000             | 91.447         | 2790.00     | 1874.65           | -47.33        | 1874.05      | 0.00             |          |
| 4520.00†  | 90.000             | 91.447         | 2790.00     | 1974.65           | -49.86        | 1974.02      | 0.00             |          |
| 4620.00†  | 90.000             | 91.447         | 2790.00     | 2074.65           | -52.38        | 2073.98      | 0.00             |          |
| 4720.00†  | 90.000             | 91.447         | 2790.00     | 2174.65           | -54.91        | 2173.95      | 0.00             |          |
| 4820.00†  | 90.000             | 91.447         | 2790.00     | 2274.65           | -57.43        | 2273.92      | 0.00             |          |
| 4920.00†  | 90.000             | 91.447         | 2790.00     | 2374.65           | -59.96        | 2373.89      | 0.00             |          |



# Planned Wellpath Report

Plan #1  
Page 3 of 3



## REFERENCE WELLPATH IDENTIFICATION

|          |                            |          |            |
|----------|----------------------------|----------|------------|
| Operator | Devon Energy               | Slot     | No. 3H SHL |
| Area     | Eddy County, NM            | Well     | No. 3H     |
| Field    | (Condor) Sec 7, T18S, R27E | Wellbore | No. 3H PWB |
| Facility | Condor 7 Fed Com #3H       |          |            |

## WELLPATH DATA (34 stations) † = interpolated/extrapolated station

| MD<br>[ft] | Inclination<br>[°] | Azimuth<br>[°] | TVD<br>[ft] | Vert Sect<br>[ft] | North<br>[ft] | East<br>[ft] | DLS<br>[°/100ft] | Comments   |
|------------|--------------------|----------------|-------------|-------------------|---------------|--------------|------------------|------------|
| 5020.00†   | 90.000             | 91.447         | 2790.00     | 2474.65           | -62.48        | 2473.86      | 0.00             |            |
| 5120.00†   | 90.000             | 91.447         | 2790.00     | 2574.65           | -65.00        | 2573.83      | 0.00             |            |
| 5220.00†   | 90.000             | 91.447         | 2790.00     | 2674.65           | -67.53        | 2673.79      | 0.00             |            |
| 5231.21    | 90.000             | 91.447         | 2790.00†    | 2685.86           | -67.81        | 2685.00      | 0.00             | No. 3H BHL |

## HOLE & CASING SECTIONS Ref Wellbore: No. 3H PWB Ref Wellpath: Plan #1

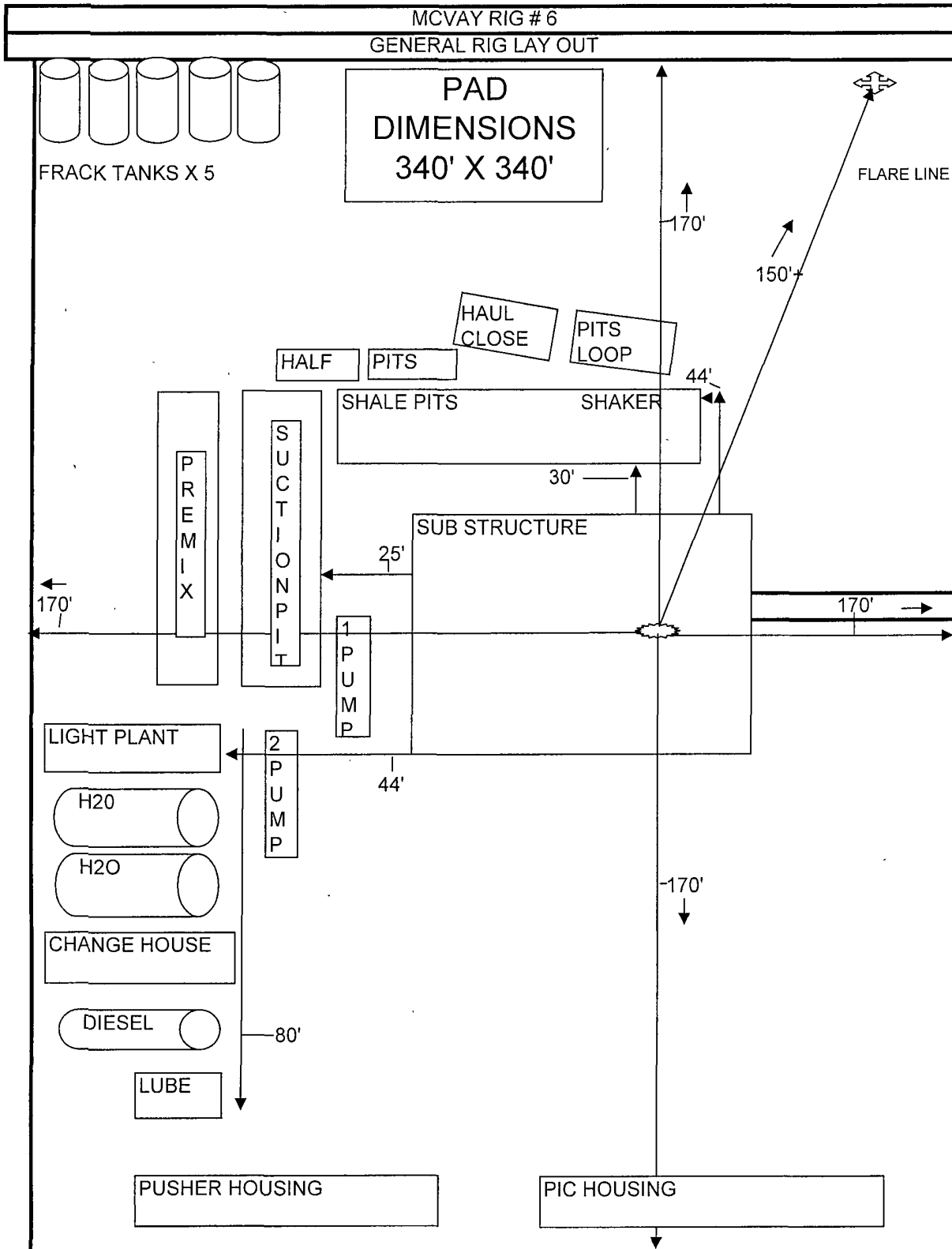
| String/Diameter   | Start MD<br>[ft] | End MD<br>[ft] | Interval<br>[ft] | Start TVD<br>[ft] | End TVD<br>[ft] | Start N/S<br>[ft] | Start E/W<br>[ft] | End N/S<br>[ft] | End E/W<br>[ft] |
|-------------------|------------------|----------------|------------------|-------------------|-----------------|-------------------|-------------------|-----------------|-----------------|
| 8.75in Open Hole  | 2220.00          | 3115.35        | 895.35           | 2220.00           | 2790.00         | 0.00              | 0.00              | -14.39          | 569.81          |
| 6.125in Open Hole | 3115.35          | 5231.21        | 2115.86          | 2790.00           | 2790.00         | -14.39            | 569.81            | -67.81          | 2685.00         |

## TARGETS

| Name          | MD<br>[ft] | TVD<br>[ft] | North<br>[ft] | East<br>[ft] | Grid East<br>[srv ft] | Grid North<br>[srv ft] | Latitude       | Longitude       | Shape |
|---------------|------------|-------------|---------------|--------------|-----------------------|------------------------|----------------|-----------------|-------|
| 1) No. 3H BHL | 5231.21    | 2790.00     | -67.81        | 2685.00      | 548444.69             | 642046.06              | 32°45'54.062"N | 104°18'36.763"W | point |

## SURVEY PROGRAM Ref Wellbore: No. 3H PWB Ref Wellpath: Plan #1

| Start MD<br>[ft] | End MD<br>[ft] | Positional Uncertainty Model | Log Name/Comment | Wellbore   |
|------------------|----------------|------------------------------|------------------|------------|
| 0.00             | 5231.21        | NaviTrak (Standard)          |                  | No. 3H PWB |



# MINIMUM BLOWOUT PREVENTER REQUIREMENTS

1,000 psi Working Pressure

3 MWP

EXHIBIT # 1

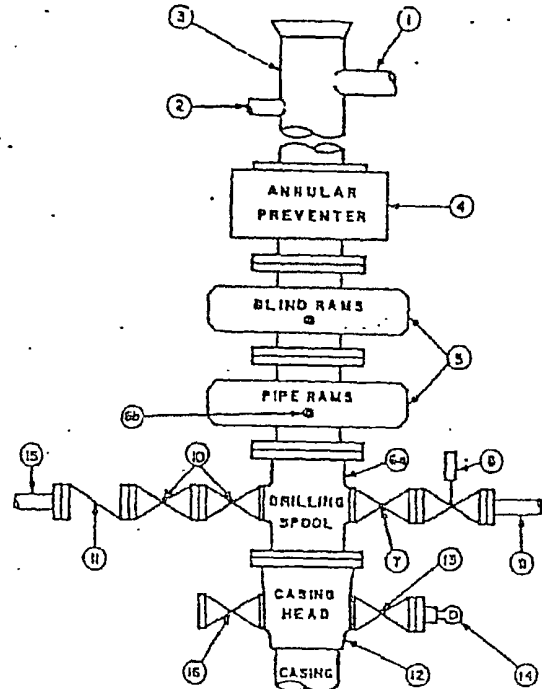
## STACK REQUIREMENTS

| 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<br>Gate <input type="checkbox"/><br>Plug <input type="checkbox"/>           | 3-1/8"    |              |
| 8   | Gate valve—power operated   | 3-1/8"    |              |
| 9   | Line to choke manifold  |           | 3"           |
| 10  | Valves<br>Gate <input type="checkbox"/><br>Plug <input type="checkbox"/>          | 2-1/16"   |              |
| 11  | Check valve   | 2-1/16"   |              |
| 12  | Casing head   |           |              |
| 13  | Valve<br>Gate <input type="checkbox"/><br>Plug <input type="checkbox"/>           | 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" |  |
|----|---------------|----------|--|

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:

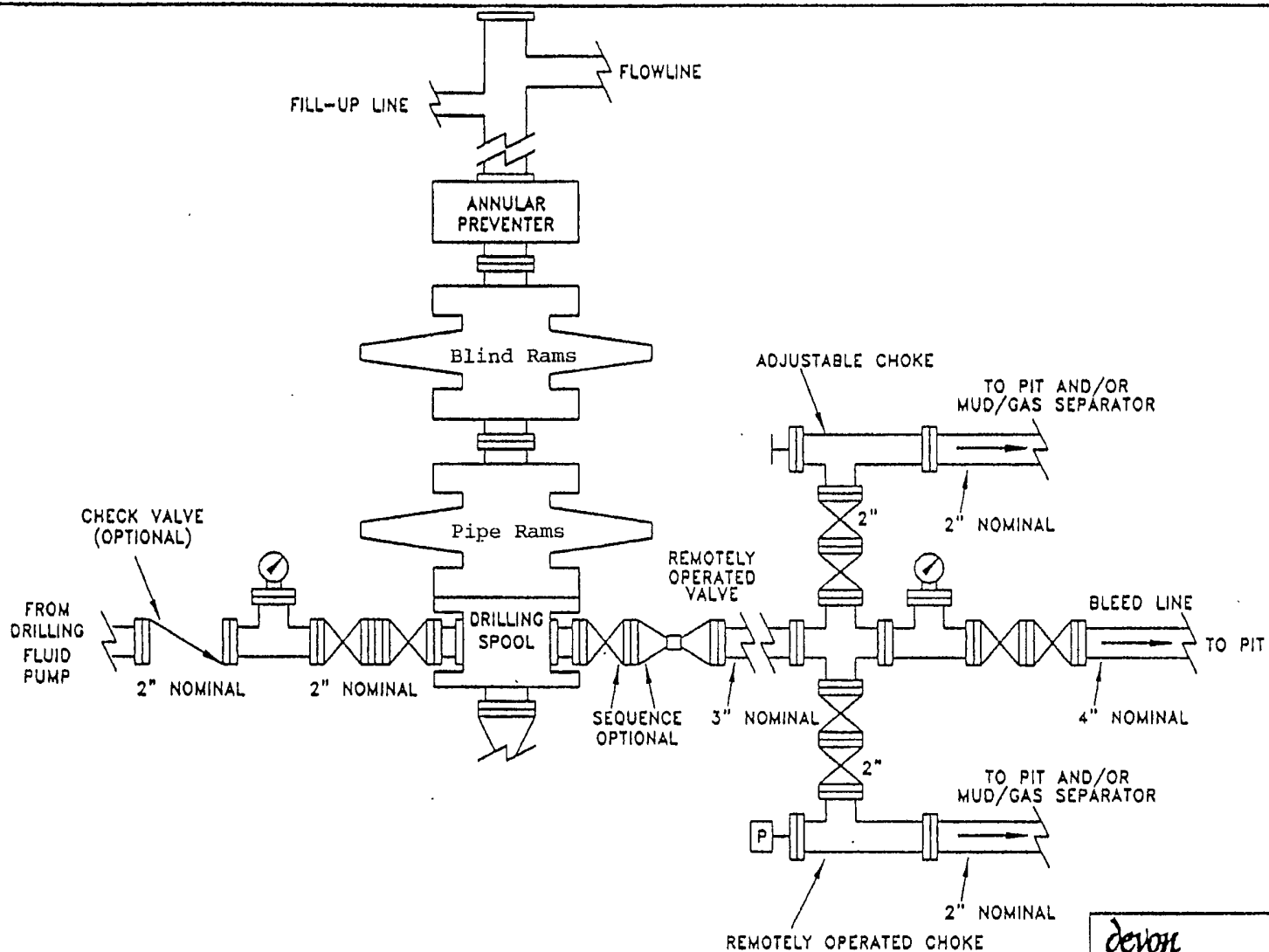
1. Bradenhead or casinghead and side valves.
2. Wear bushing, if required.

## 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.





devon

AREA NAME

COUNTY, STATE

SCHEMATIC

PROPOSED 5-M BOPE  
AND CHOKE ARRANGEMENT

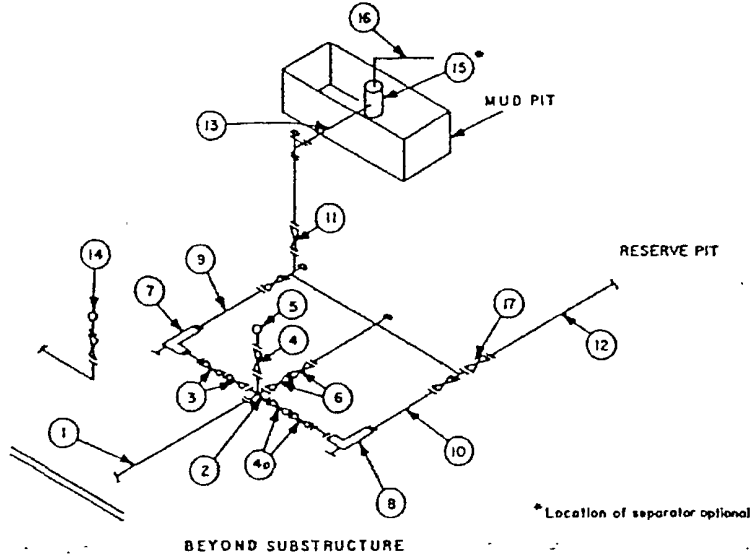
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10/00

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

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



| 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"/><br>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"/><br>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"/><br>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"/><br>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<br>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"/><br>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

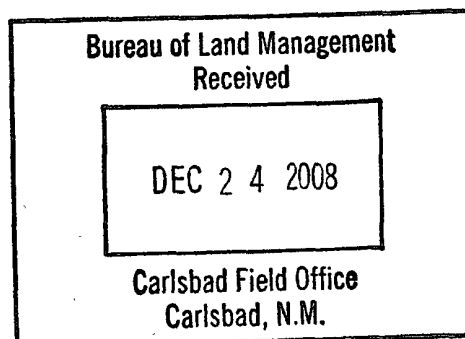
# Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan

For

Condor "7" Federal" Com Well # 3H

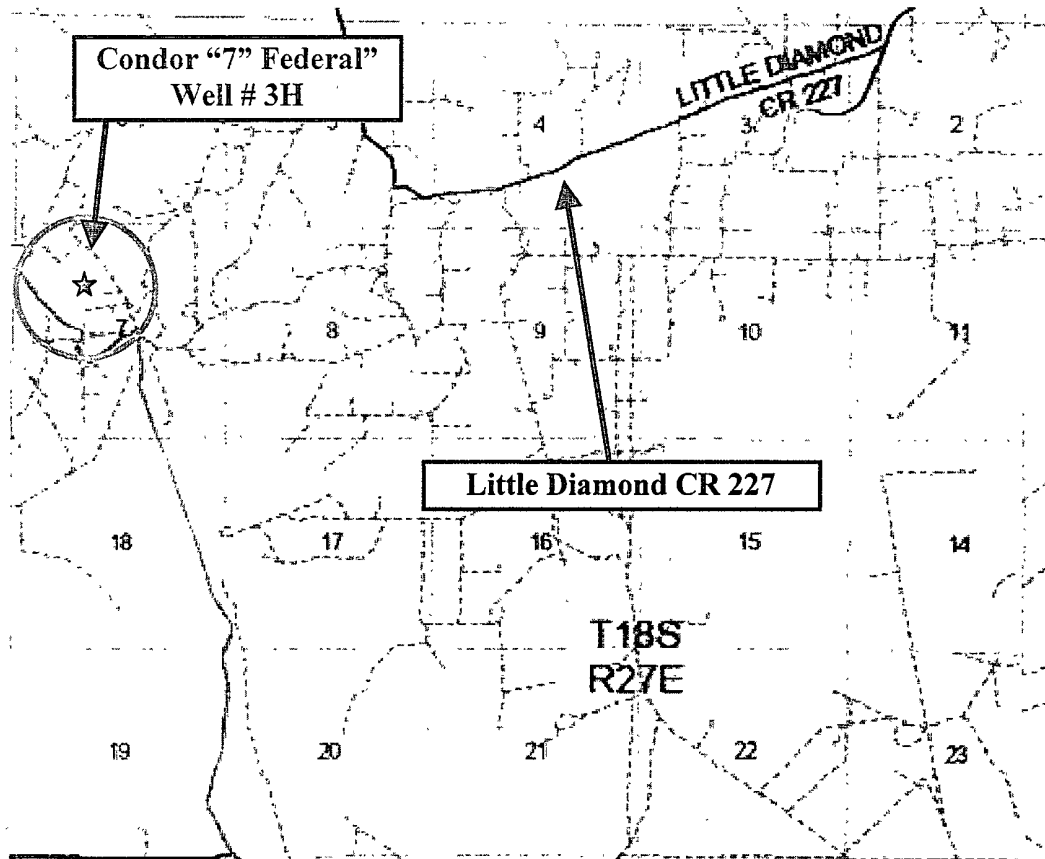
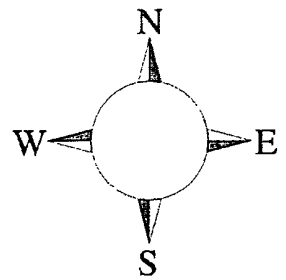
1585' FNL & 2225' FWL,  
Sec-7, T-18S R-27E

Eddy County NM



## Condor "7" Federal" Com Well # 3H

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 discharging gas in the event of an emergency release. Escape can be facilitated on lease road to CR 227. Crews should then move to block access to 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 within or near the ROE. **Immediate response** should include the evacuation of any person(s) potentially affected by toxic or flammable gasses. Evacuation of the downwind areas should occur first. Perimeter monitoring should then be established to ensure safe areas.

## 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<br>Air = 1 | 10 ppm          | 100 ppm/hr      | 600 ppm              |
| Sulfur Dioxide   | SO <sub>2</sub>  | 2.21<br>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 – Robert Bell.....      | 748-7448 .....     | 748-0178.....      | 746-2991       |
| Asst. Foreman –Tommy Polly..... | 748-5290.....      | 748-0165.....      | 748-2846       |
| Don Mayberry.....               | 748-5235 .....     | 748-0164.....      | 746-4945       |
| Montral Walker.....             | 390-5182 .....     | 748-0193.....      | 936-414-6246   |
| Engineer – Marcos Ortiz.....    | (405) 317-0666.... | (405) 552-8152.... | (405) 381-4350 |

## Agency Call List

### Eddy      Artesia

|               |   |          |
|---------------|---|----------|
| <u>County</u> | State Police .....                              | 746-2703 |
| <u>(505)</u>  | 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 |

### Emergency Services

|                            |                                  |
|----------------------------|----------------------------------|
| 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                   |

|                  |   |                |
|------------------|---|----------------|
| <i>Give</i>      | Flight For Life - Lubbock, TX .....         | (806) 743-9911 |
| <i>GPS</i>       | Aerocare - Lubbock, TX .....                | (806) 747-8923 |
| <i>position:</i> | Med Flight Air Amb - Albuquerque, NM .....  | (505) 842-4433 |
|                  | Lifeguard Air Med Svc. Albuquerque, NM .... | (505) 272-3115 |

Prepared in conjunction with  
Wade Rohloff of;



## **SURFACE USE PLAN**

Devon Energy Production Company, LP

### **Condor 7 Federal Com 3H**

Surface Location: 1585' FNL & 2225' FWL, Unit F, Sec 7 T18S R27E, Eddy, NM

Bottom Hole Location: 1650' FNL & 330' FEL, Unit H, Sec 7 T18S R27E, Eddy, NM

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

- a. The well site and elevation plat for the proposed well are reflected on the well site layout; Form C-102. The well was staked by Basin Surveys.
- b. All roads into the location are depicted on Exhibit 3.
- c. Directions to Location: From the junction of Hwy 82 and Hilltop, go south on Hilltop 0.1 miles to Empire, on Empire go southwesterly 2.1 miles to Little Diamond, on Little Diamond go westerly 2.3 miles to Chalk Bluff go north 0.6 miles to lease road, on lease road go west 1.2 miles to lease road, go south 1.0 miles to lease road, on lease road go west to proposed location.

#### **2. New or Reconstructed Access Roads:**

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

#### **3. Location of Existing Wells:**

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

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

- a. In the event the well is found productive, the Stirling tank battery would be utilized and the necessary production equipment will be installed at the well site. See Production Facilities Layout diagram.
- b. If necessary, the well will be operated by means of an electric prime mover. Electric power poles will be set along side of the access road.
- c. We intend to lay flowlines from the Condor 7 Federal Com 3H to the Stirling tank battery. All flow lines will adhere to API standards.
- d. If the well is productive, rehabilitation plans are as follows:
  - i. We will be using a closed loop system.
  - ii. The original topsoil from the well site will be returned to the location. The drill site will then be contoured as close as possible to the original state.

#### **5. Location and Types of Water Supply:**

This location will be drilled using a combination of water mud systems (outlined in the Drilling Program). The water will be obtained from commercial water stations in the area and hauled to location by transport truck using the existing and proposed roads shown in the C-102. On occasion, water will be obtained from a pre-existing water well, running a pump directly to the drill rig. In

these cases where a poly pipeline is used to transport water for drilling purposes, proper authorizations will be secured. If a poly pipeline is used, the size, distance, and map showing route will be provided to the BLM via sundry notice.

**6. Construction Materials:**

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

**7. Methods of Handling Waste Material:**

- a. Drill cuttings will be disposed of in the closed loop system.
- b. All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary landfill.
- c. The supplier, including broken sacks, will pick up salts remaining after completion of well.
- d. A Porto-john will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- e. Remaining drilling fluids will be sent to a closed loop system. Water produced during completion will be put into a closed loop system. Oil and condensate produced will be put in a storage tank and sold.
- f. Disposal of fluids to be transported by the following companies:
  - i. American Production Service Inc, Odessa TX
  - ii. Gandy Corporation, Lovington NM
  - iii. I & W Inc, Loco Hill NM
  - iv. Jims Water Service of Co Inc, Denver CO

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

**9. Well Site Layout**

- a. Exhibit D shows the proposed well site layout with dimensions of the pad layout.
- b. This exhibit indicated proposed location of a closed loop system and living facilities.
- c. Mud pits in the active circulating system will be steel pits & the pit will be a closed loop system.

**10. Plans for Surface Reclamation:**

- a. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The original top soil will again be returned to the pad and contoured, as close as possible, to the original topography.
- b. The location and road will be rehabilitated as recommended by the BLM.
- c. If the well is a producer, those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.
- d. If the well is deemed commercially productive, caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not



necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography.

**11. Surface Ownership (Use the appropriate A-C option; delete other two)**

- a. The surface is owned by Kenneth Benally, 198 County Road 6700, Waterflow, New Mexico 87421. The surface is multiple use with the primary uses of the region for, the grazing of livestock and the production of oil and gas.
- b. The proposed road routes and the surface location will be restored as directed by the BLM.

**12. Other Information:**

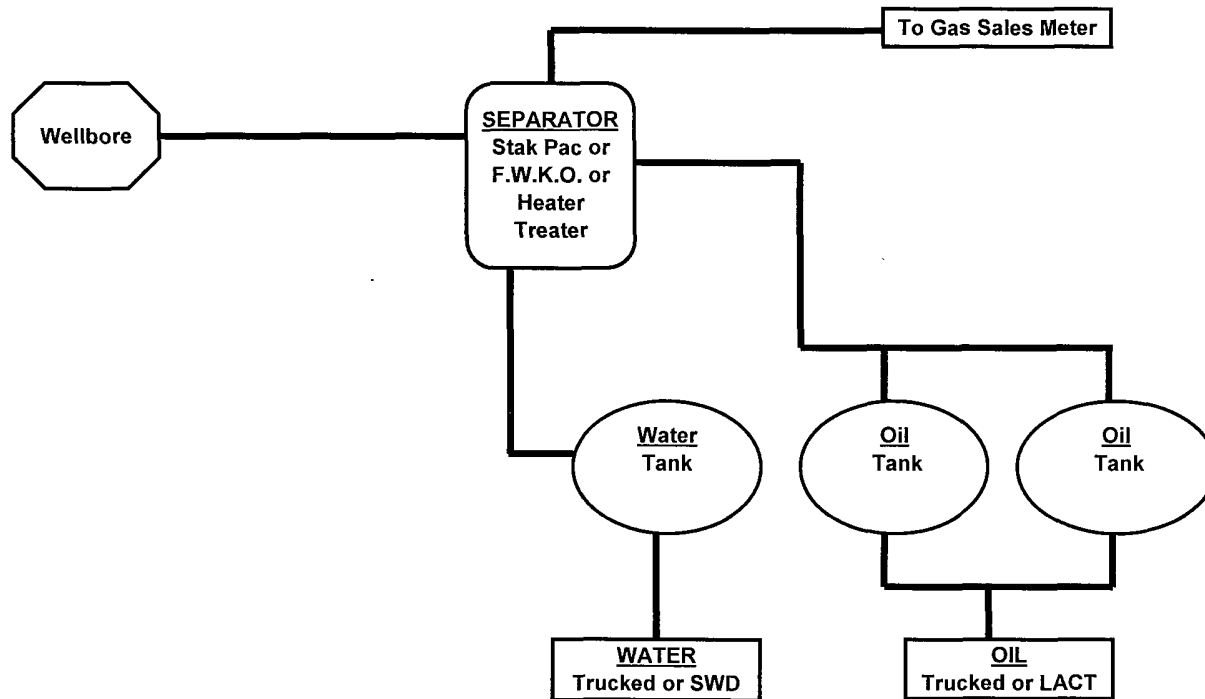
- a. The area surrounding the well site is grassland. The topsoil is very sandy in nature. The vegetation is moderately sparse, with native prairie grass, sagebrush, yucca and miscellaneous weeds. No wildlife was observed but it is likely that deer, rabbits, coyotes, and rodents traverse the area.
-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

**13. Bond Coverage:**

Bond Coverage is Nationwide; Bond # is CO-1104

DEVON ENERGY PRODUCTION COMPANY LP

General Production Facilities Diagram



**Operators Representative:**

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

Marcos Ortiz  
Operations Engineer

Don Mayberry  
Superintendent

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

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

(405) 552-8152 (office)  
(405) 317-0666 (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 proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or Devon Energy Production Company, L.P. am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

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I hereby also certify that I, or Devon Energy Production Company, L.P. have made a good faith effort to provide the surface owner with a copy of the Surface Use Plan of Operations and any Conditions of Approval that are attached to the APD.

Executed this 27th day of October, 2008.

Printed Name: ~~Norvella Adams~~

Signed Name:

Position Title: Sr. Staff Engineering Technician

Address: 20 North Broadway, OKC OK 73102

Telephone: (405) 552-8198

Field Representative (if not above signatory): Robert Bell

Address (if different from above): 6478 Seven Rivers Hwy, Artesia, NM

Telephone (if different from above): 575-748-0178

E-mail (optional): norvella.adams@dvn.com

# PECOS DISTRICT CONDITIONS OF APPROVAL

|                       |                                    |
|-----------------------|------------------------------------|
| OPERATOR'S NAME:      | Devon Energy Prod                  |
| LEASE NO.:            | NM118703                           |
| WELL NAME & NO.:      | 3H-Condor 7 Fed Com                |
| SURFACE HOLE FOOTAGE: | 1585' FNL & 2225' FWL              |
| BOTTOM HOLE FOOTAGE:  | 1650' FNL & 330' FEL               |
| LOCATION:             | Section 7, T. 18 S., R 27 E., NMPM |
| COUNTY:               | Eddy County, New Mexico            |

## TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
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  - Well Structures & Facilities
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- ☐ **Final Abandonment/Reclamation**

## **I. GENERAL PROVISIONS**

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

## **II. PERMIT EXPIRATION**

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

## **III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES**

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

## **IV. NOXIOUS WEEDS**

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

## **V. SPECIAL REQUIREMENT(S)**

### **Communitization Agreement**

A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

### **Berming**

The well pad and any collection facilities that are needed will be bermed to contain/control any spills or leaks on the pad that may occur.

## **VI. CONSTRUCTION**

### **A. NOTIFICATION**

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5972 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

### **B. TOPSOIL**

The operator shall stockpile the topsoil of the well pad. The topsoil to be stripped is approximately 6 inches in depth. The topsoil shall not be used to backfill the reserve pit and will be used for interim and final reclamation.

### **C. RESERVE PITS**

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

### **D. FEDERAL MINERAL MATERIALS PIT**

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

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (575) 234-5972.

### **E. WELL PAD SURFACING**

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

## F. ON LEASE ACCESS ROADS

### Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed thirty (30) feet.

### Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

### Crowning

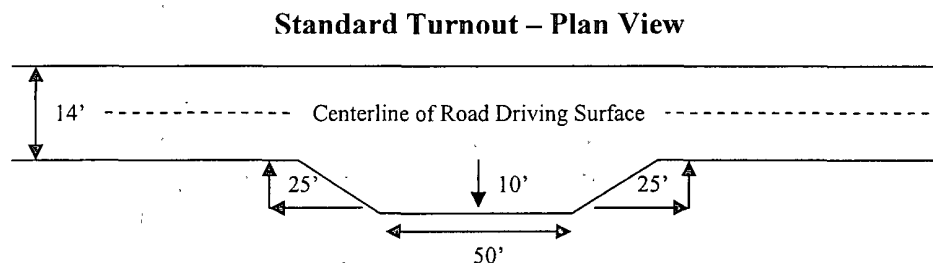
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

### Ditching

Ditching shall be required on both sides of the road.

### Turnouts

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



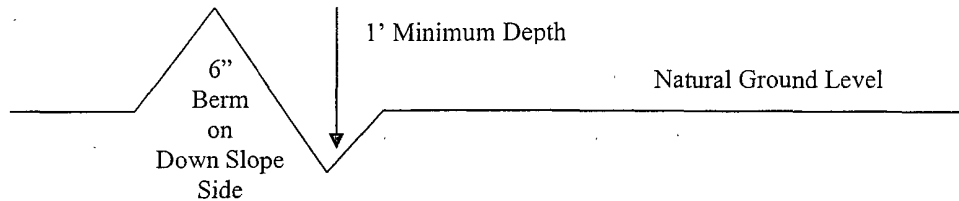


### **Drainage**

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outslowing and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

#### **Cross Section of a Typical Lead-off Ditch**



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

#### **Formula for Spacing Interval of Lead-off Ditches**

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

### **Culvert Installations**

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

### **Cattleguards**

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

**Fence Requirement**

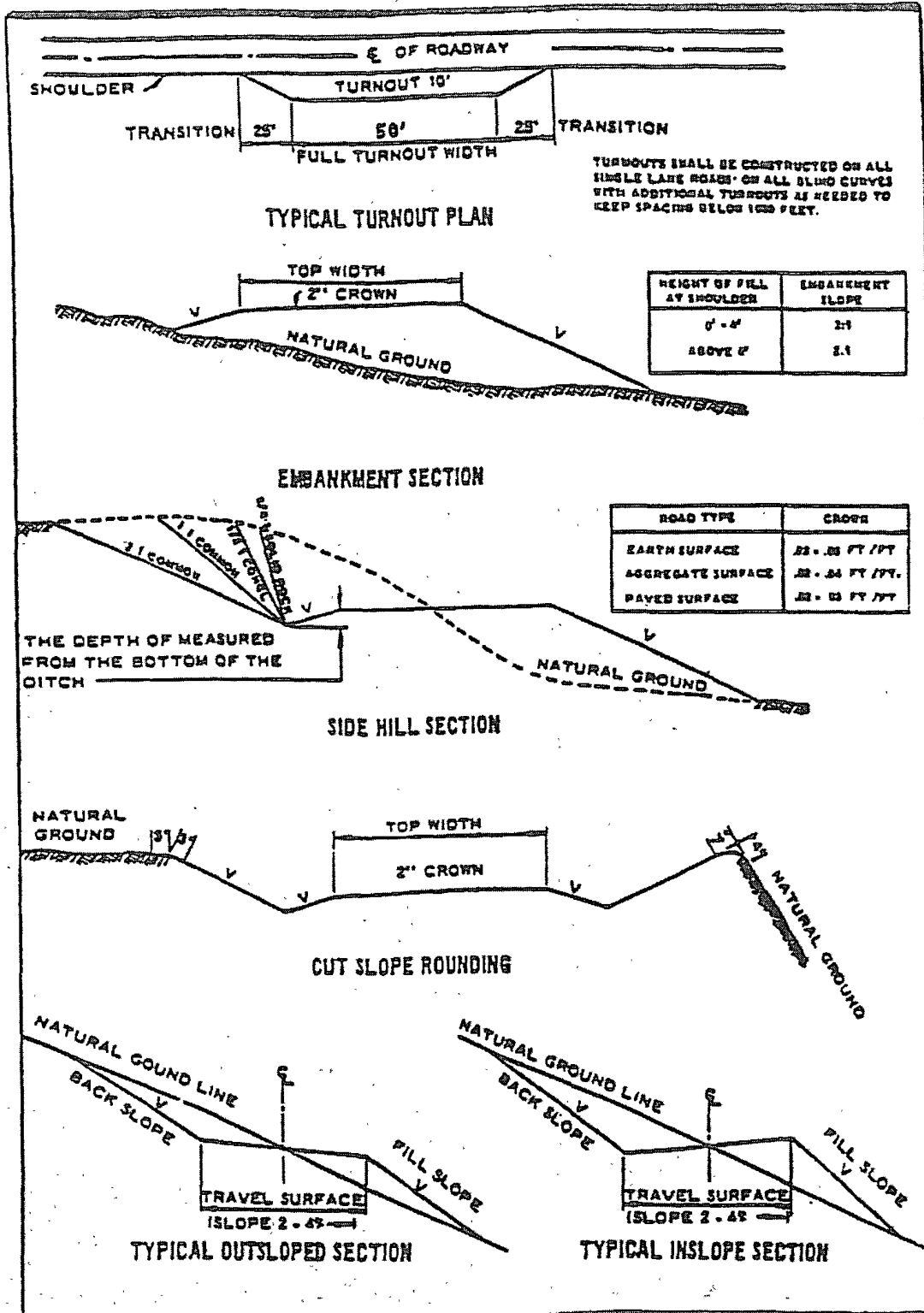
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

**Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



## VII. DRILLING

### A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,  
(575) 361-2822

1. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan should be activated 500 feet prior to drilling into the **Grayburg** formation. **If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

### B. CASING

**Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.**

**Centralizers required on surface casing per Onshore Order 2.III.B.1.f.**

**Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.**

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

**Possible lost circulation in the Grayburg and San Andres formations.**

1. The 9-5/8 inch surface casing shall be set at approximately 410 feet in the Queen formation and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
  - b. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry. Not applicable if proposed cement program is used.**
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the 7 inch intermediate casing is:  
☒ Cement to surface. If cement does not circulate see B.1.a, c-d above.
3. The minimum required fill of cement behind the 4-1/2 inch production liner is:  
☒ No cement required – operator using Peak system liner. **Liner required to tie-back a minimum of 100 feet.**
4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

**C. PRESSURE CONTROL**

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M) psi**.

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 7" **production** casing shoe shall be **5000 (5M) psi. A 5M system is required to have a 5M annular.**
4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. The tests shall be done by an independent service company.
  - b. The results of the test shall be reported to the appropriate BLM office.
  - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
  - d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
  - e. **Effective November 1, 2008, no variances will be granted on reduced pressure tests on the surface casing and BOP/BOPE. Onshore Order 2 requirements will be in effect.**

#### **D. DRILL STEM TEST**

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

**WWI 011309**

## **VIII. PRODUCTION (POST DRILLING)**

### **A. WELL STRUCTURES & FACILITIES**

#### **Placement of Production Facilities**

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

#### **Containment Structures**

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

#### **Painting Requirement**

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color  
Shale Green, Munsell Soil Color Chart # 5Y 4/2

#### **VRM Facility Requirement**

Low-profile tanks not greater than eight-feet-high shall be used.

## **IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE**

### **A. INTERIM RECLAMATION**

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

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

The operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.



#### Seed Mixture 4, for Gypsum Sites

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

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

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

| <u>Species</u>                                       | <u>lb/acre</u> |
|--|----------------|
| Alkali Sacaton ( <i>Sporobolus airoides</i> )        | 1.0            |
| DWS Four-wing saltbush ( <i>Atriplex canescens</i> ) | 5.0            |

DWS: DeWinged Seed

\*Pounds of pure live seed:

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

## **X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS**

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

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