52918Vd

# OCD-ARTESIA

0714

ATS-09-410 RM

Form 3160 -3 (April 2004)

UNITED STATES AUG 18 2009

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

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

5 Lease Serial No NMNM-54856

APPLICATION FOR PERMIT TO		6. If Indian, Allotee	or Tribe N	lame		
la. Type of work DRILL REENTE	ER	=		7. If Unit or CA Agree	ement, Nar	ne and No
Ib. Type of Well: Onl Well Gas Well Other	<b>✓</b> Sin	gle ZoneMultip	ple Zone	8 Lease Name and V Dickens 29 Fed		
Name of Operator     Devon Energy Production Company, L	P			9 API Well No.	5-3	7220
3a. Address 20 North Broadway Oklahoma City, Oklahoma City 73102-8260	3b. Phone No. 405-552	(include area code) 2-8198		10. Field and Pool, or E Wolfcamp	Exploratory	470 /
At surface  At proposed prod. zone  2310 FNL & 330 FEL, Unit H  2310 FNL & 330 FWL, Unit E	ny State requireme	mts.*)		11. Sec., T. R M or Bl Sec 29, T16S R		•
14. Distance in miles and direction from nearest town or post office*  Approximately 11 miles northeast of Artesia, NM				12. County or Parish <b>Eddy County</b>		13. State NM
15 Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig unit line, if any)	16 No of ac		17. Spacin	g Unit dedicated to this w	vell	
to nearest well, drilling, completed.			20. BLM/F	BIA Bond No on file		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3595' GL	22 Approxim	nate date work will state 08/01/2009	rt*	23. Estimated duration 30 days	1	,
	24. Attac					
<ol> <li>The following, completed in accordance with the requirements of Onshorm.</li> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>		4. Bond to cover to Item 20 above). 5. Operator certification.	he operation	is form:  ns unless covered by an  ormation and/or plans as	Ü	·
25 Signature		(Printed/Typed)			Date	5/2000

Approved by (Signature)

Isl Don Peterson

Name (Printed/Typed)

Date AUG 1 4 2009

Title

IFID MANAGED

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.

Sr. Staff Eng. Tech

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

& Special Stipulations Attached

DISTRICT I 1625 N. French Dr., Hobbs, NM 88240 DISTRICT II 1301 W. Grand Avenue, Artesia, NM 88210

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised October 12, 2005

Submit to Appropriate District Office

Pool Name

State Lease - 4 Copies Fee Lease - 3 Copies

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

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

API Number

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, New Mexico 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

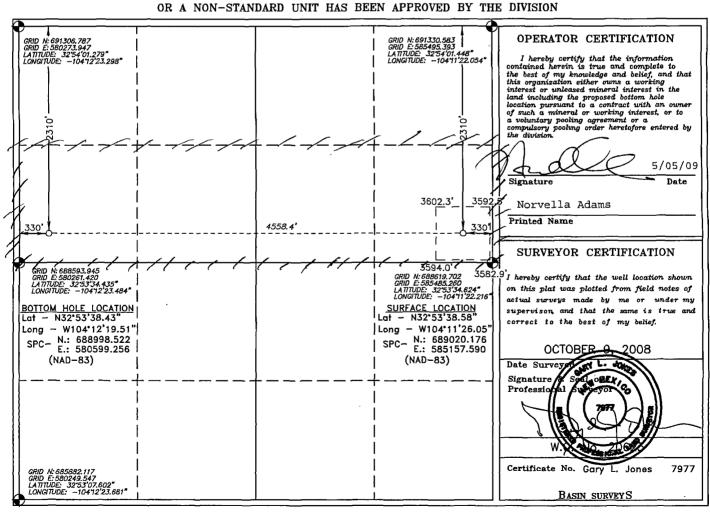
Pool Code

☐ AMENDED REPORT

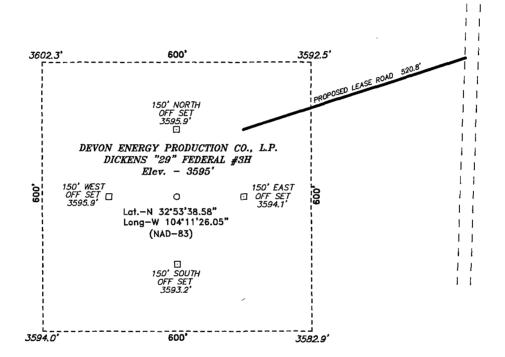
30	-015-3	7230	170	170	Dog	Canyon; Wol	lfcamp		
Property	erty Code Property Name Well Number								
5778	37			DICK	KENS "29" F	EDERAL		3H	
OGRID N 6137	٥.	Operator Name Elevation DEVON ENERGY PRODUCTION COMPANY LP 3595'							
Surface Location									
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Н	29	16 S	28 E		2310	NORTH	330	EAST	EDDY
			Bottom	Hole Lo	cation If Diffe	erent From Sur	face		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	29	16 S	28 E		2310	NORTH	330	WEST	EDDY
Dedicated Acre	s Joint o	r Infill C	nsolidation	Code Or	der No.				
160	1								

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



SECTION 29, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM MILE MARKER 117 OF STATE HWY 82, GO WEST 0.4 MILES TO CO. RD. SOUTHERN UNION (202), GO NORTH 4.2 MILE JUST PAST BOOSTER SITE THENCE 1.0 MILES NORTHEAST; THENCE 1.0 MILES EAST; THENCE NORTHEAST 1.09 MILES TO PROPOSED LEASE ROAD.

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

W.O. Number: 20623 Drawn By: J. M. SMALL
Date: 10-15-2008 Disk: 20623 JMS

200 0 200 400 FEET

SCALE: 1" = 200'

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

THE DICKENS "29" FEDERAL #3H / WELL PAD TOPO

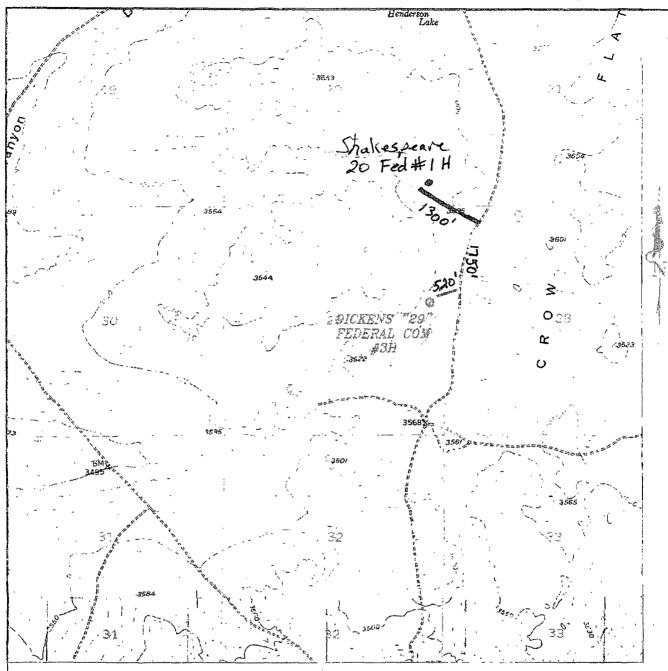
THE DICKENS "29" FEDERAL #3H LOCATED 2310' FROM

THE NORTH LINE AND 330' FROM THE EAST LINE OF

SECTION 29, TOWNSHIP 16 SOUTH, RANGE 28 EAST,

N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 10-09-2008 | Sheet 1 of 1 Sheets



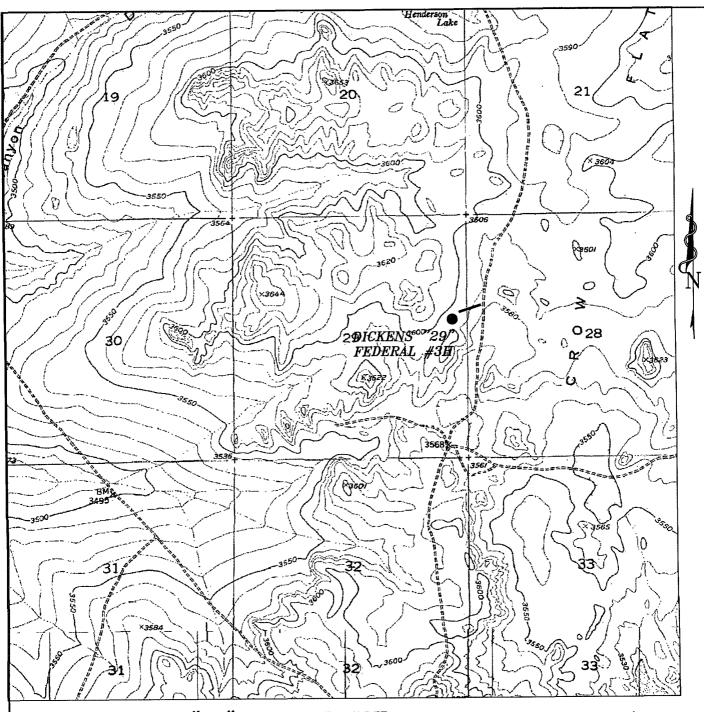
DICKENS "29" FEDERAL COM #3H Located at 2310' FNL AND 330' FEL Section 29, Township 16 South, Range 29 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 - Office (575) 392-2206 - Fax basinsurveys.com

1	WO Numbe	r JMS	20623	
	Survey Date	. 10-	09-2008	3
	Scale. 1" =	2000'		
ĺ		15 0000		

DEVON ENERGY PROD. CO., L.P.



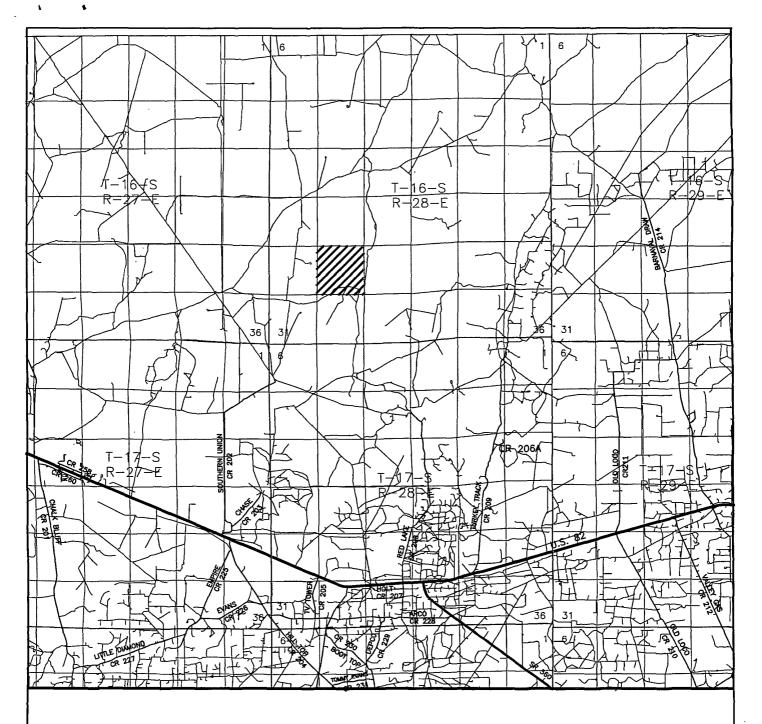
DICKENS "29" FEDERAL #3H
Located at 2310' FNL AND 330' FEL
Section 29, Township 16 South, Range 28 East,
N.M.P.M., Eddy County, New Mexico.



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W.O. Number: JMS 20623
Survey Date: 10-09-2008
Scale: 1" = 2000'
Date: 10—15—2008

DEVON ENERGY PROD. CO., L.P.



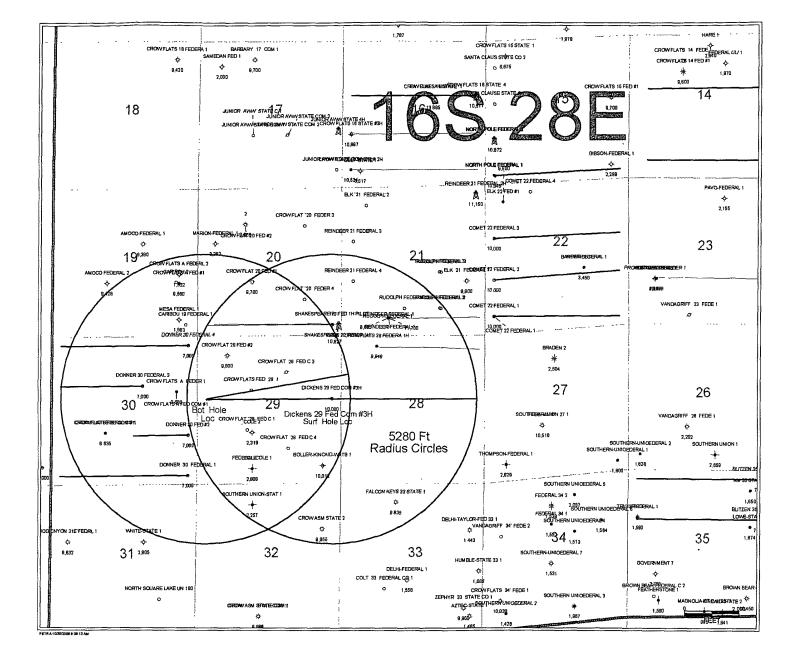
DICKENS "29" FEDERAL #3H Located at 2310' FNL AND 330' FEL Section 29, Township 16 South, Range 28 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (575) 393-7316 — Office (575) 392-2206 — Fax basinsurveys.com

W.O. Number:	JMS 20623
Survey Date:	10-09-2008
Scale: 1" = 2	MILES
Date: 10-15-	-2008

DEVON ENERGY PROD. CO., L.P.



#### **DRILLING PROGRAM**

# Devon Energy Production Company, LP

#### Dickens 29 Federal 3H

Surface Location: 2310' FNL & 330' FEL, Unit H, Sec 29 T16S R28E, Eddy, NM Bottom Hole Location: 2310' FNL & 330' FWL, Unit E, Sec 29 T16S R28E, 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.	Seven Rivers	560' ₹) 355' €)	
b.	Yates	355' € /	
c.	Queen	1089'	
d.	San Andres	1899'	
e.	Glorieta	3334'	
f.	Abo	5364'	
g.	Wolfcamp	6575'	Oil & Gas

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 9 5/8" casing at 1950' and circulating cement back to surface. The Wolfcamp intervals will be isolated by setting 4 ½" casing to total depth which will overlap 100' into the 7" casing but will not be cemented. A 7 stage open hole isolation tool (Peak) will be used. A pilot hole will be drilled from 1950' TVD to 6,750' TVD. Once logged, the hole will be plugged back with a kick off plug and directional drilling will commence.

#### 3. Casing Program:

	<u>Hole</u>	<u>Hole</u>	OD Csg	<b>Casing</b>	Weight	<u>Collar</u>	<u>Grade</u>
	<u>Size</u>	<u>Interval</u>		<u>Interval</u>			
	30"	0'-40'	20"	0'-40' 590 0'- 450" 590	N/A	N/A	Conductor
Spe -	17 1/2"	40- 450'	13 3/8"	0'-450"	48#	ST&C	H-40
COA	12 1/4"	450-1950'	9 5/8"	0-1950'	36#	LT&C	J-55
CUA	8 3/4"	1950-7000'	7"	0-7000'	26#	BT&C	P-110
		MD					
	6 1/8"	7000' –	4 1/2"	6900' - TD	11.6#	BT&C	P-110
		10,890 MD					

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

Casing Size	Collapse Design	<b>Burst Design</b>	<b>Tension Design</b>
	<b>Factor</b>	<u>Factor</u>	<b>Factor</b>
13 3/8"	6.07	1.65	2.47
9 5/8"	2.38	2.97	2.83
7"	2.06	1.87	2.39
4 ½"	2.49	2.07	2.50

#### **Kick Off Point:**

Spe — 8 3/4" Pilot Hole

COA

A two stage cement plug will be used in the pilot hole. Stage 1 will provide a base for the kick off plug and will be set from 6,750' up to 6,250'. Stage 2 is a 500' open hole cement kick off plug to be set from +/- 6,250' to +/- 5,750'.

The well will be directionally drilled in 8 3/4" hole to 7" casing point at +/- 7,000' (90 degrees at +/-10/100) (expected to be in the Wolfcamp marker). The 7", 26#, P-110, BT&C casing will be set with cement 500' above the 1900' casing shoe. The lateral will be finished in a 6 1/8" open hole to a TD at 10,890' (6575' TVD).

See - 4. COA	Cement Program: (Note yie a. 13 3/8" Surface	lds; and dv tool depths if multiple stages)  Lead with 200 sx (35:65) Poz Premium Plus C cement + 5%  NaCl + ½ lbs/sx Celloflake + 4% Bentonite + 1% Sodium  Metasilicate + 5% MPA-5; Yields 1.97 cf/sx. Tail with 200 sx  Premium Plus C cement + 2% CaCl <sub>2</sub> + ½ lbs/sx Celloflake;  Yields 1.35 cf/sx. TOC = 0.
	b. 9 5/8" Intermediate I	Lead with 405 sx (35:65) Poz Premium Plus C + 5% NaCl + ¼ lbs/sx Cello Flake + 3 lbs/sx LCM-1 + 4% Bentonite; + 1% Sodium Metasilicate + 5% MPA-5; Yields 1.97 cf/sx. Tail with 250 sx Premium Plus C + 2% CaCl <sub>2</sub> : Yields 1.34 cf/sx. TOC =

0. Plug from 6750'- 6250'; 220 sx Class H cement. Yields 1.18 cf/sx. Kick off plug 5750'-6250'; 280 sx Class H cement + 5% NaCl + 1.2% CD-31; Yields 0.9 cf/sx. Top of plug at KOP, ~ 6000'.

c. 7" Intermediate II Lead with 580 sx (35:65) Poz Premium Plus C cement + 1% NaCl + 1/4 lbs/sx Celloflake + 6% Bentonite + 0.4% FL-52A; Yields 1.96 cf/sx. Tail with 200 sx (60:40) Poz Premium Plus C cement + 1% NaCl + ¼ lbs/sx Celloflake + 0.75% BA-10A + 0.2% FL-52A + 4% MPA-5; Yields 1.34 cf/sx. TOC = 1450'.

d. 4 1/2" Production No cement. An open hole 7 stage isolation tool (Peak) will be used

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.

See COA

# 5. Pressure Control Equipment:

The blow out prevention system will consist of a bag type (hydril) preventer, a double ram preventer stack, and a rotating head. A 3k hydril and rotating head will be rigged up on the 13 3/8" surface casing. The annular will be tested to 1000 psi with the rig pumps. The 3k hydril and rotating head will be utilized to setting depth of 9 5/8" intermediate casing. Before drilling out the 9 5/8" intermediate shoe, the 5k hydril and ram stack will be nippled up with 4.5" pipe rams installed and used continuously until TD. Once the 7" casing is set, 3.5" pipe rams will be used in the BOPE. Prior to drilling out the 9 5/8" and 7" casing shoes the 5k BOPE will be tested to the standards set in the BLM Drilling Operations Order #2.

The ram system will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and hydril, other BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 5000 psi WP.

## 6. Proposed Mud Circulation System

<u>Depth</u>	<u>Mud</u>	<u>Visc</u>	Fluid Loss	Type System
	$\underline{\mathbf{W}t}$ .			
0' - 450'	8.5 - 8.9	32-34	NC	Fresh Water
<i>48</i> 0'– 1950'	10.0	28	NC	Brine
<sup>~</sup> 1950'- 6750'	8.5-8.8	28	NC	Fresh Water
TVD, Pilot Hole				
6000'- 7000'	8.5-8.8	28	NC	Cut Brine
MD, Curve				
6900' – 10,949'	8.7 - 8.9	29-34	NC - 12cc	Cut Brine
MD				
	0' – 450' 450' – 1950' 1950' - 6750' TVD, Pilot Hole 6000' - 7000' MD, Curve 6900' – 10,949'	Wt. 0' - 450' 8.5 - 8.9 450' - 1950' 10.0 1950' - 6750' 8.5 - 8.8 TVD, Pilot Hole 6000' - 7000' 8.5 - 8.8 MD, Curve 6900' - 10,949' 8.7 - 8.9	Wt. 0' - 450' 8.5 - 8.9 32-34 450' - 1950' 10.0 28 1950' - 6750' 8.5-8.8 28 TVD, Pilot Hole 6000' - 7000' 8.5-8.8 28 MD, Curve 6900' - 10,949' 8.7 - 8.9 29-34	Wt.         0' - 450'       8.5 - 8.9       32-34       NC         450' - 1950'       10.0       28       NC         1950' - 6750'       8.5-8.8       28       NC         TVD, Pilot Hole       6000' - 7000'       8.5-8.8       28       NC         MD, Curve       6900' - 10,949'       8.7 - 8.9       29-34       NC - 12cc

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 7" casing shoe until the 4 1/2" casing is set. Breathing equipment will be on location upon drilling the 7" 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 ½" 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 1000 psi and Estimated BHT 90°.

2923 per operator

## 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.



Sec

MD

Inc

Azi

## **Devon Energy**

Project: Eddy County (NM83E) Site: Sec 29-T18S-R28E Well: Dickens 29 Fed Com 3H Wellbore: Wellbore #1 Design: Plan #1 Plan Version

#### *REFERENCE INFORMATION*

Co-ordinate (N/E) Reference: Well Dickens 29 Fed Com 3H, Grid North Vertical (TVD) Reference: WELL @ 0.0ft (Original Well Elev)

2250

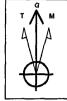
1500-

Section (VS) Reference: Slot - (0.0N, 0.0E)

Measured Depth Reference: WELL @ 0.0ft (Original Well Elev)

Calculation Method: Minimum Curvature





Azimuths to Grid North True North: -0.08° Magnetic North: 8.12°

Magnetic Field Strength: 49239.7snT Dip Angle: 60.77\* Date: 2009/02/03 Model: IGRF200510

		ECTION	DEIA	AILS			 
TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target	

0.0 0.00 0.00 0.0 0.0 0.0 0.00 0.0 0.0 0.00 0.00 0.0 2 6002.0 0.00 0.00 6002.0 0.0

3 6902.0 90.00 269.73 6575.0 -2.7 -572.9 10.00 269.73 573.0

0.00 4558.4 Dickens 29 Fed Com 3H PBHL 4 10887.4 90.00 269.73 6575.0 -21.7 -4558.3 0.00

OF OTION DETAILS

#### WELL DETAILS: Dickens 29 Fed Com 3H

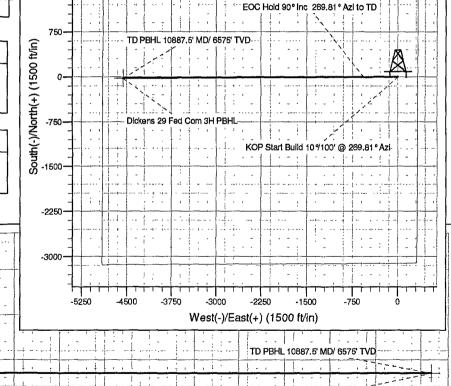
Ground Level: 0.0

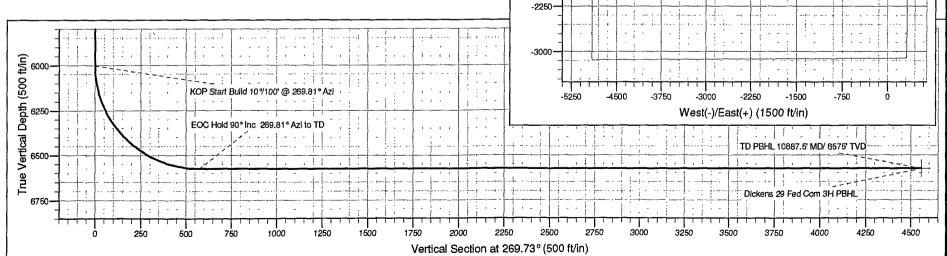
+N/-S +E/-W Easting Northing 585157.59 32°53' 38.591 N 0.0 0.0 689020.18

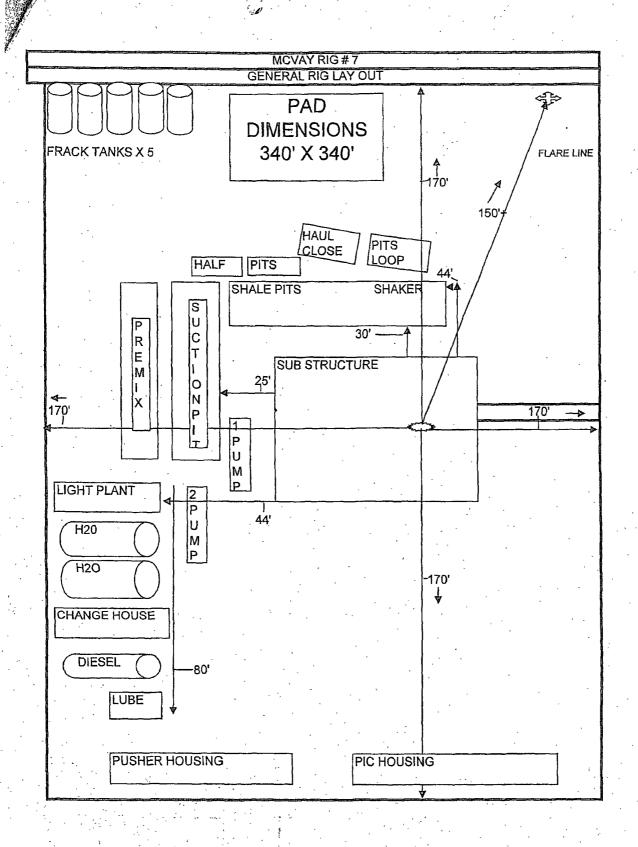
Latittude Longitude 104° 11' 26.053 W

#### WELLBORE TARGET DETAILS

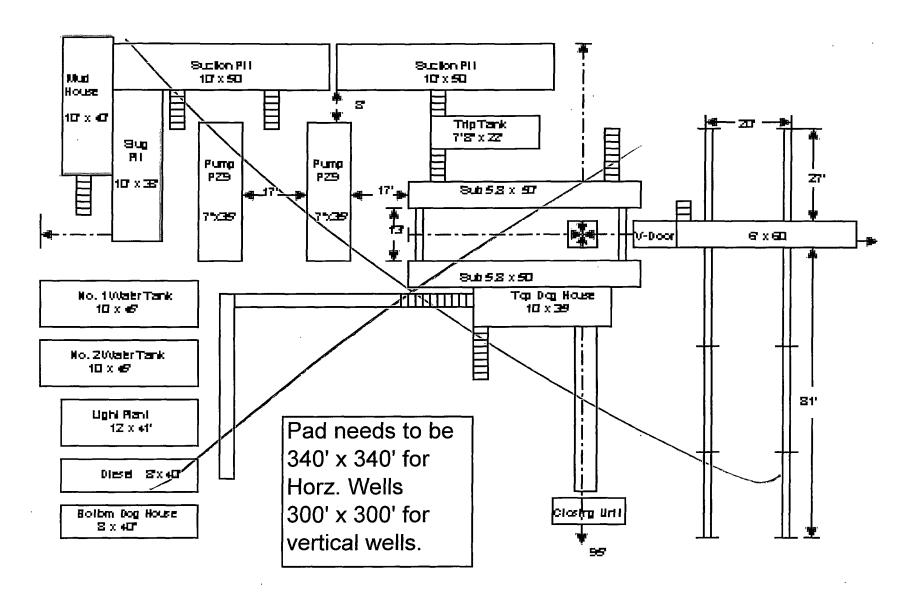
Name TVD +N/-S +E/-W Northing Easting Shape Dickens 29 Fed Com 3H PBHL 6575.0 580599.26 -21.7 -4558.3 688998.52 Point



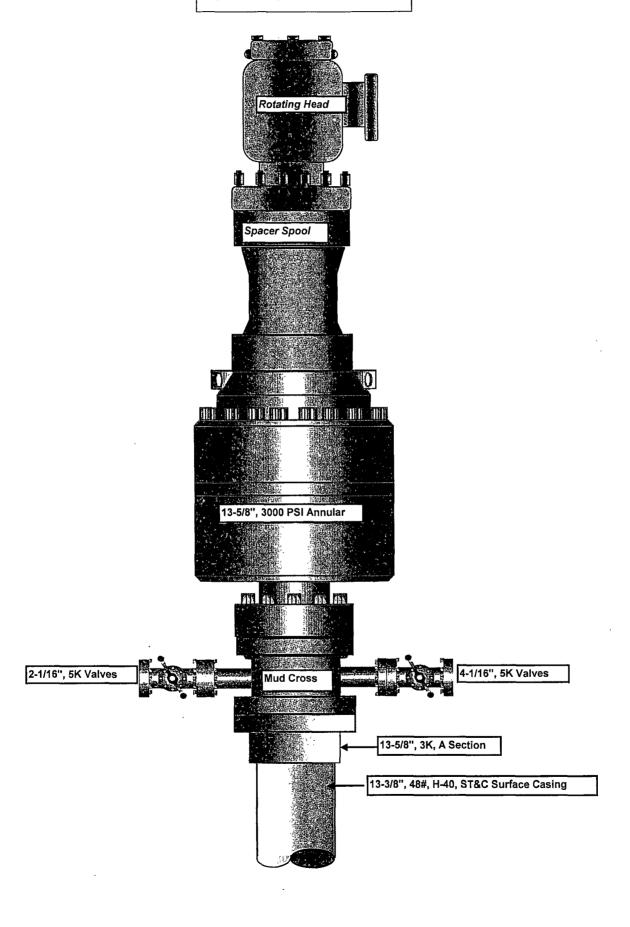




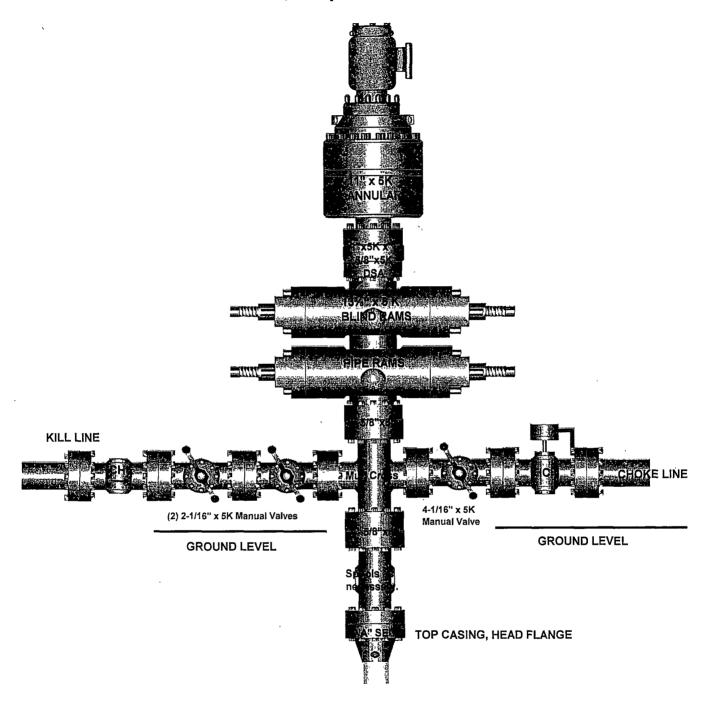
C:\Documents and Settings\adamsn\Local Settings\Temporary Internet Files\OLK4A\PBNM Rig layouts Rage 1



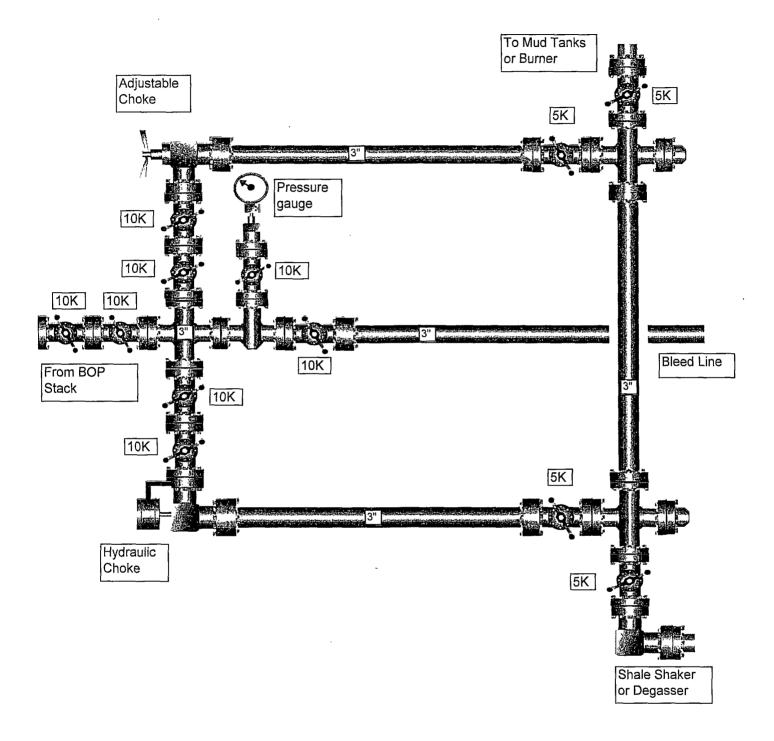
# 13-5/8" 3K Annular

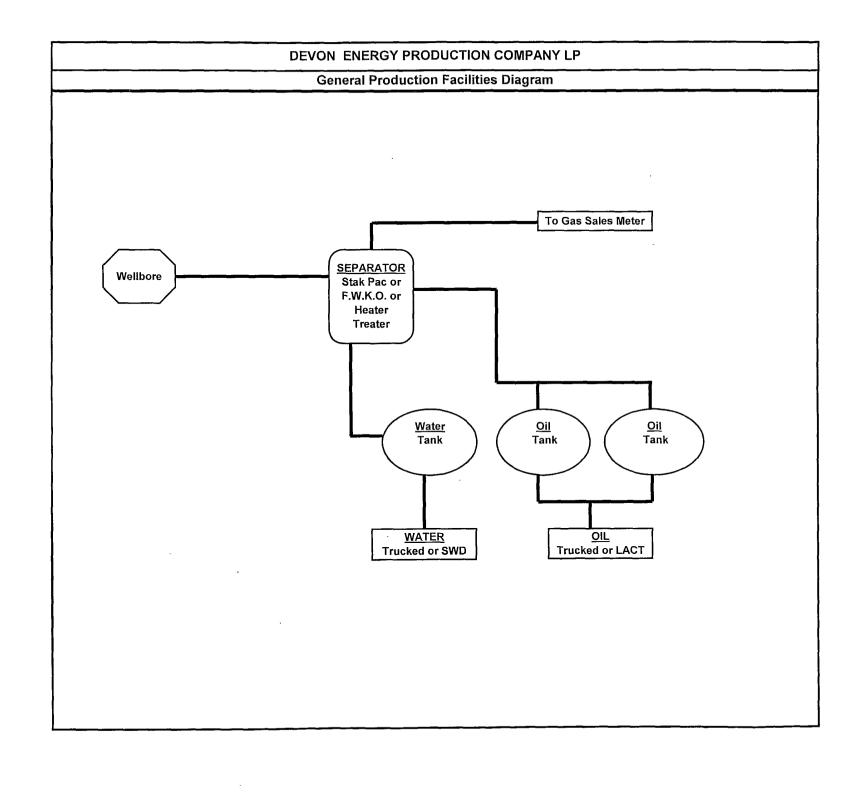


# 11" x 5,000 psi BOP Stack



# 10,000 PSI CHOKE MANIFOLD





#### SURFACE USE PLAN

Devon Energy Production Company, LP

#### Dickens 29 Federal 3H

Surface Location: 2310' FNL & 330' FEL, Unit H, Sec 29 T16S R28E, Eddy, NM Bottom Hole Location: 2310' FNL & 330' FWL, Unit E, Sec 29 T16S R28E, 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 mile marker 117 of State Hwy 82, go west 0.4 miles to Co. Rd. Southern Union (202), go north 4.2 mile just past Booster site then 1.0 miles northeast; then 1.0 mile east; then northeast 1.09 miles to proposed lease road.

#### 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 Dickens 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 Dickens 29 Federal 3H to the Dickens tank battery. All flow lines will adhere to API standards.
- d. If the well is productive, rehabilitation plans are as follows:
  - i. A closed loop system will be utilized.
  - 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 a 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 sent to a closed loop system. Water produced during completion will be put in 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. A closed loop system will be used.

#### 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. We will use a closed loop system.
- b. The location and road will be rehabilitated as recommended by the BLM.
- c. 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 the US Government and is administered by the Bureau of Land Management. 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

# **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.

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 \_5th \_ day of \_ May\_\_, 2009.

Printed Name: Norvella Adams

Position Title: Sr. Staff Engineering Technician Address: 20 North Broadway, OKC OK 73102

Telephone: (405) 552-8198

Field Representative (if not above signatory):

Address (if different from above): Telephone (if different from above):

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

# PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Devon Energy Production Company, LP
LEASE NO.:	NM-54856
WELL NAME & NO.:	Dickens 29 Federal #3H
SURFACE HOLE FOOTAGE:	2310' FNL & 330' FEL
BOTTOM HOLE FOOTAGE	2310' FNL & 330' FWL
LOCATION:	Section 29, T. 16 S., R 28 E., NMPM
COUNTY:	Eddy County, New Mexico

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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.

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## 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)

#### Cave and Karst

\*\* Depending on location, additional Drilling, Casing, and Cementing procedures may be required by engineering to protect critical karst groundwater recharge areas.

# Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production.

#### Construction:

In the advent that any underground voids are opened up during construction activities, construction activities will be halted and the BLM will be notified immediately.

#### No Blasting:

No blasting will be utilized for pad construction. The pad will be constructed and leveled by adding the necessary fill and caliche.

#### **Pad Berming:**

The pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the pad. All sides will be bermed.

#### Tank Battery Liners and Berms:

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1 ½ times the content of the largest tank.

#### **Leak Detection System:**

A method of detecting leaks is required. The method could incorporate gauges to measure loss, situating values and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present. Leak detection plan will be submitted to BLM for approval.

#### **Automatic Shut-off Systems:**

Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

# Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

# Rotary Drilling with Fresh Water:

Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

#### **Directional Drilling:**

Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

#### **Lost Circulation:**

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cavebearing zone, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

#### **Abandonment Cementing:**

Upon well abandonment in high cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

#### Pressure Testing:

Annual pressure monitoring will be performed by the operator on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

#### VI. CONSTRUCTION

#### V-DOOR NORTH

#### 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.

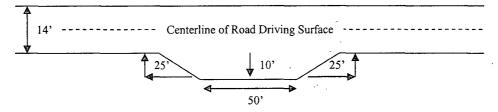
#### Ditching.

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:

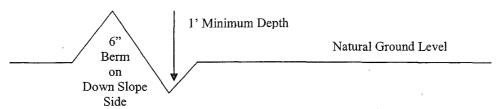
#### Standard Turnout - Plan View



Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping 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 foot road with 4% road slope: 
$$\frac{400'}{4\%}$$
 + 100' = 200' 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

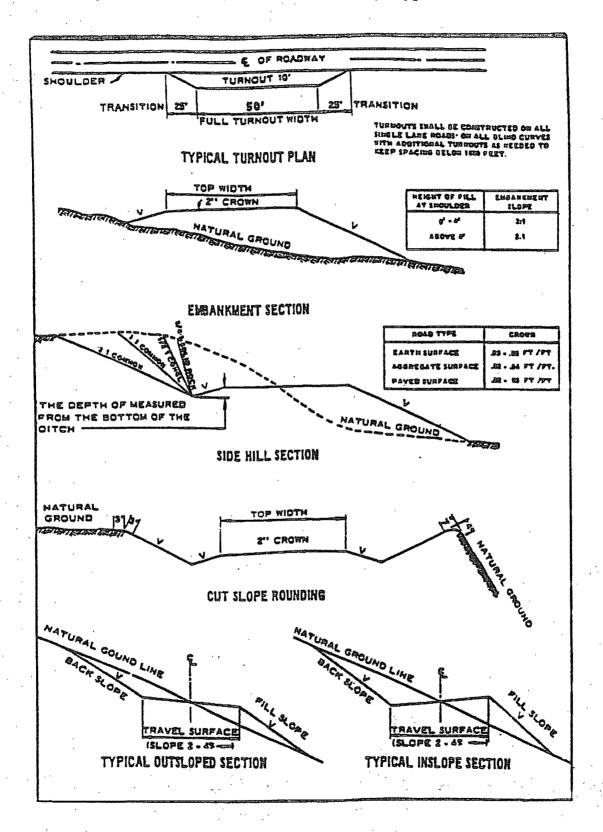
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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. Although there are no measured amounts of Hydrogen Sulfide reported, it is always a potential hazard. 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.

High cave/karst

Possible lost circulation in the Slaughter zone of the San Andres formation. Possible high pressure gas bursts in the Wolfcamp.

- 1. The 13-3/8 inch surface casing shall be set at approximately 590 feet in the Seven Rivers formation and cemented to the surface. Fresh water mud is to be used to setting depth.
  - 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 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.
  - 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 9-5/8 inch intermediate casing is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above.

    Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst concerns.

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

The Pilot hole plug method is approved with a note that the first plug is to be tagged prior to setting second plug. Report the tag depth on the subsequent report.

If 75% or greater lost circulation occurs while drilling the second intermediate casing hole, the cement on the second intermediate casing must come to surface. If this is required, the wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst concerns.

The minimum required fill of cement behind the 7 inch second intermediate casing is:
 Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

Formation below the 7" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe and the mud weight for the bottom of the hole. Report results to BLM office.

- 4. The minimum required fill of cement behind the 4-1/2 inch production liner is:
  - Cement not required operator is using the Peak System Iso-pack liner. The liner should tie-back at least 100 feet into previous casing string.
- 5. 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

- 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 9-5/8 inch intermediate casing shoe shall be 5000 (5M) psi. 5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 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. Operator to submit copies of test done for each casing string with the subsequent sundry detailing the casing/cementing details.
  - 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. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.
- f. 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. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

#### E. DRILL STEM TEST

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

**RGH 072009** 

# 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

#### B. PIPELINES

#### STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- 2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

- 3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
- 4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:
- a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.
- b. Activities of other parties including, but not limited to:
  - (1) Land clearing.
  - (2) Earth-disturbing and earth-moving work.
  - (3) Blasting.
  - (4) Vandalism and sabotage.

#### Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder

of any responsibility as provided herein. 6. All construction and maintenance activity will be confined to the authorized right-ofway width of feet. 7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer. 8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline will be "snaked" around hummocks and dunes rather then suspended across these features. 9. The pipeline shall be buried with a minimum of 24 inches under all roads. "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface. 10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer. 11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices. 12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" - Shale Green, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee. 13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline. 14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the

holder. The holder will take whatever steps are necessary to ensure that the pipeline

route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder 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 will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

## 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 3, for Shallow 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 <u>no</u> 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:

Species	<u>lb/acre</u>
Plains Bristlegrass (Setaria magrostachya)	1.0
Green Spangletop (Leptochloa dubia)	2.0
Side oats Grama (Bouteloua curtipendula)	5.0

<sup>\*</sup>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.



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

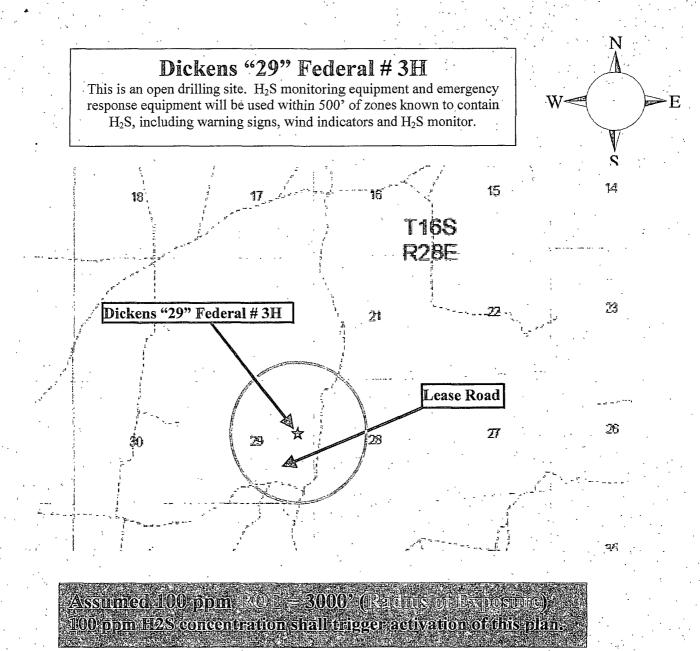
# Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan

For

Dickens 6299 Federal #3H

2310'FNL & 330' FEL, Sec-29, T-16S R-28E

**Eddy County NM** 



## Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated South down lease road to main Southern Union Road (CR 202). Crews should then block entrance to the location from the lease road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE There are no homes or buildings in or near the ROE.

#### **Emergency Procedures**

In the case of a release of gas containing  $H_2S$ , 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  $H_2S$ , measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with  $H_2S$  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 Concentr- ation
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

	Artesi	a (575)	Cellular	Office	Home	
,	Forem	an – Robert Bell	748-7448	748-0178	746-2991	
		oreman —Tommy Po				
,	Don M	ayberry	748-5235	748-0164	746-4945	
•	Montra	ıl Walker	390-5182	748-0193	936-414 <b>-</b> 6	5246
, , ,	Engine	er – Marcos Ortiz	(405) 317-0666	(405) 552-8152	2(405) 381-4	1350
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Ag	gency	Call List			,	٠ - 4
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Coun	ty	State Police				
<u>(575)</u>		City Police				
		Sheriff's Office				
		Ambulance				
		Fire Department				
		LEPC (Local Eme				
		NMOCD				
		US Bureau of Land	d Management	•••••		. 393-3612
Eddy		Carlsbad				,
Coun	•					985 2127
$\frac{com}{(575)}$		City Police		• • • • • • • • • • • • • • • • • • • •	•••••	885-2111
(5/5)		Sheriff's Office	······································	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	******************************	887-7551
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• • •	*	Halliburton				
		B. J. Services		•	•	•
		• •				(006) 746,0045
Give	, ,	Flight For Life - Lu				(806) 743-9911
GPS positi	iom.	Aerocare - Lubbook				(806) 747-8923
positi	on.	Med Flight Air Am	• •	4		, ,
		Lifeguard Air Me	a svc. Albuquero	Inc. MM		(3/3) 2/2-3113

Prepared in conjunction with Wade Rohloff of;

