

OCD-ARTESIA

Month-Year  
FEB - 1 2007  
OCD-ARTESIA, NM

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM-99039
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Devon Energy Production Company, LP 6137		7. If Unit or CA Agreement, Name and No.
3a. Address 20 North Broadway Oklahoma City, Oklahoma City 73102-8260	3b. Phone No. (include area code) 405-552-7802	8. Lease Name and Well No. Coyote 14 Fed 2Y 35919
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface SWNW 1980' FNL & 760' FWL At proposed prod. zone SWNW 1980' FNL & 760' FWL WE		9. API Well No. 30-015-35423
14. Distance in miles and direction from nearest town or post office* Approximately 35 miles northeast of Carlsbad, NM		10. Field and Pool, or Exploratory Lusk; Morrow (Gas)
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)		11. Sec., T. R. M. or Blk and Survey or Area Lot E Sec 14 T19S R31E
16. No. of acres in lease 480	17. Spacing Unit dedicated to this well 320	12. County or Parish Eddy County
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 13,000'	13. State NM
20. BLM/BIA Bond No. on file CO-1104	21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3565'	22. Approximate date work will start* 01/30/2007
23. Estimated duration 45 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.  | 4. Bond to cover the operations unless covered by an existing bond on file (see item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification  |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be required by the authorized officer. |

25. Signature	Name (Printed/Typed) Stephanie A. Ysasaga	Date 01/30/2007
Title Sr. Staff Engineering Technician		
Approved by	Name (Printed/Typed) A. M.	Date 1/30/07
Title 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.

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)

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

## DISTRICT I

1625 N. French Dr., Hobbs, NM 88240

## DISTRICT II

811 South First, Artesia, NM 88210

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

## DISTRICT IV

2040 South Pacheco, Santa Fe, NM 87505

## State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised March 17, 1989

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 5 Copies

## OIL CONSERVATION DIVISION

2040 South Pacheco

Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 80759	Pool Name Lusk; Morrow (Gas)
Property Code	Property Name COYOTE "14" FED	Well Number 2Y
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY LP	Elevation 3565'

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	14	19 S	31 E		1980	NORTH	760'	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

Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.
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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

	<b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature: <i>[Signature]</i> Printed Name: Stephanie A. Ysasaga Title: Sr. Staff Engineering Tech Date: 06/12/06	
	<b>SURVEYOR CERTIFICATION</b> 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. Date Surveyed: JUNE 5, 2006 Signature: <i>[Signature]</i> Professional Surveyor NEW MEXICO W.O. No. 67 Certified No. Gary Jones 7977 EASY SURVEYS	
	Lat.: N32°39'44.4" Long.: W103°50'47.2" (NAD-83)	

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APL) for such proposals

FORM APPROVED  
OMB NO. 1004-0135  
EXPIRES: NOVEMBER 30, 2000

SUBMIT IN TRIPLICATE

1a. Type of Well	<input type="checkbox"/> Oil Well	<input checked="" type="checkbox"/> Gas Well	<input type="checkbox"/> Other _____
2. Name of Operator	DEVON ENERGY PRODUCTION COMPANY, LP		
3. Address and Telephone No.	20 North Broadway, Ste 1500, Oklahoma City, OK 73102 405-552-7802		
4. Location of Well (Report location clearly and in accordance with Federal requirements)*	SWNW 1980' FNL & 660' FWL Lot E Sec 14 T19S R31E		

5. Lease Serial No.	NMNM-99039
6. If Indian, Allottee or Tribe Name	
7. Unit or CA Agreement Name and No.	
8. Well Name and No.	Coyote 14 Fed 2
9. API Well No.	30-015-35072
10. Field and Pool, or Exploratory	Lusk; Morrow (Gas)
12. County or Parish	Eddy
13. State	NM

CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

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

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

The original Application for Permit to Drill, Form 3160-3, was filed by Devon Energy Production Co., LP on 11/06/06; approved 11/27/06. Devon Energy Production Co., LP is requesting permission to skid the rig due to problems with the initial location. BLM has given approval to plug and abandon the well January 25th, 2007. New location is as follows:

Initial location: Lot E Sec 14-T19S-R31E 1980' FNL & 660' FWL  
Skidded location: Lot E Sec 14-T19S-R31E 1980' FNL & 760' FWL

Changes to our drilling program are as follows on 12 1/4" hole:  
From 8 5/8" 32# LT&C J-55 to 9 5/8" 40# BT&C J-55

Changes to cementing program: 9 5/8" to 2 stage job: (See cementing report)

Stage 1: Lead w/525 sx Poz C, tail w/300 sx Poz C. Stage 2: 1st Lead w/250 sx Poz C, 2nd Lead w/865 sx Poz C, tail w/100 sx Poz C.

The revised Form 3160-3 & C-102 is attached. The location change is 100' west of original location.  
See Rig 74 Layout attachment for 600' x 600' perimeter.  
Copies of BLM approval to be forwarded to OCD. C-102 & C-103 filed with OCD for skidded rig and new API#.

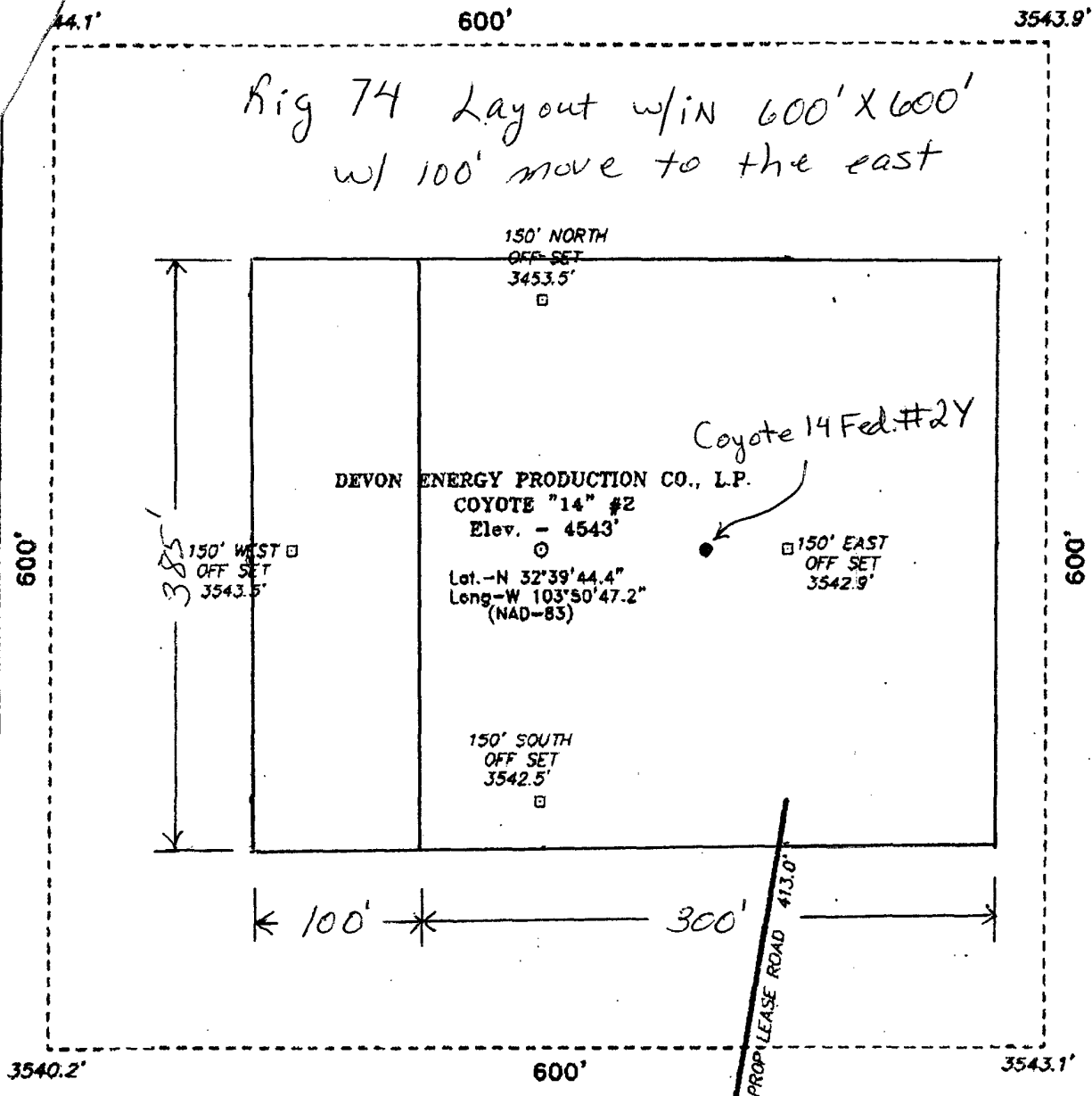
14. I hereby certify that the foregoing is true and correct

Signed \_\_\_\_\_ Name Stephanie A. Ysasaga  
Title Sr. Staff Engineering Technician Date 1/30/2007

(This space for Federal or State Office Use)

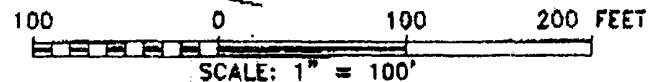
Approved by \_\_\_\_\_ Title Adm. AFM Date 1/30/2007  
Conditions of approval, if any:

SECTION 14, TOWNSHIP 19 SOUTH, RANGE 31 EAST, N.M.P.M.,  
 EDDY COUNTY, NEW MEXICO.



SNMAS-06NM-2321

ORIGINAL



Directions to Location:

FROM THE JUNCTION OF CO. RD. 248 (LUSK PLANT)  
 AND CO. RD. 222 (SHUGART), GO EAST ON CO. RD.  
 248 FOR 0.8 TO PROPOSED LEASE ROAD.

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

W.O. Number: 6751

Drawn By: J. M. SMALL

Date: 06-07-2006 Disk: JMS 6751W

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

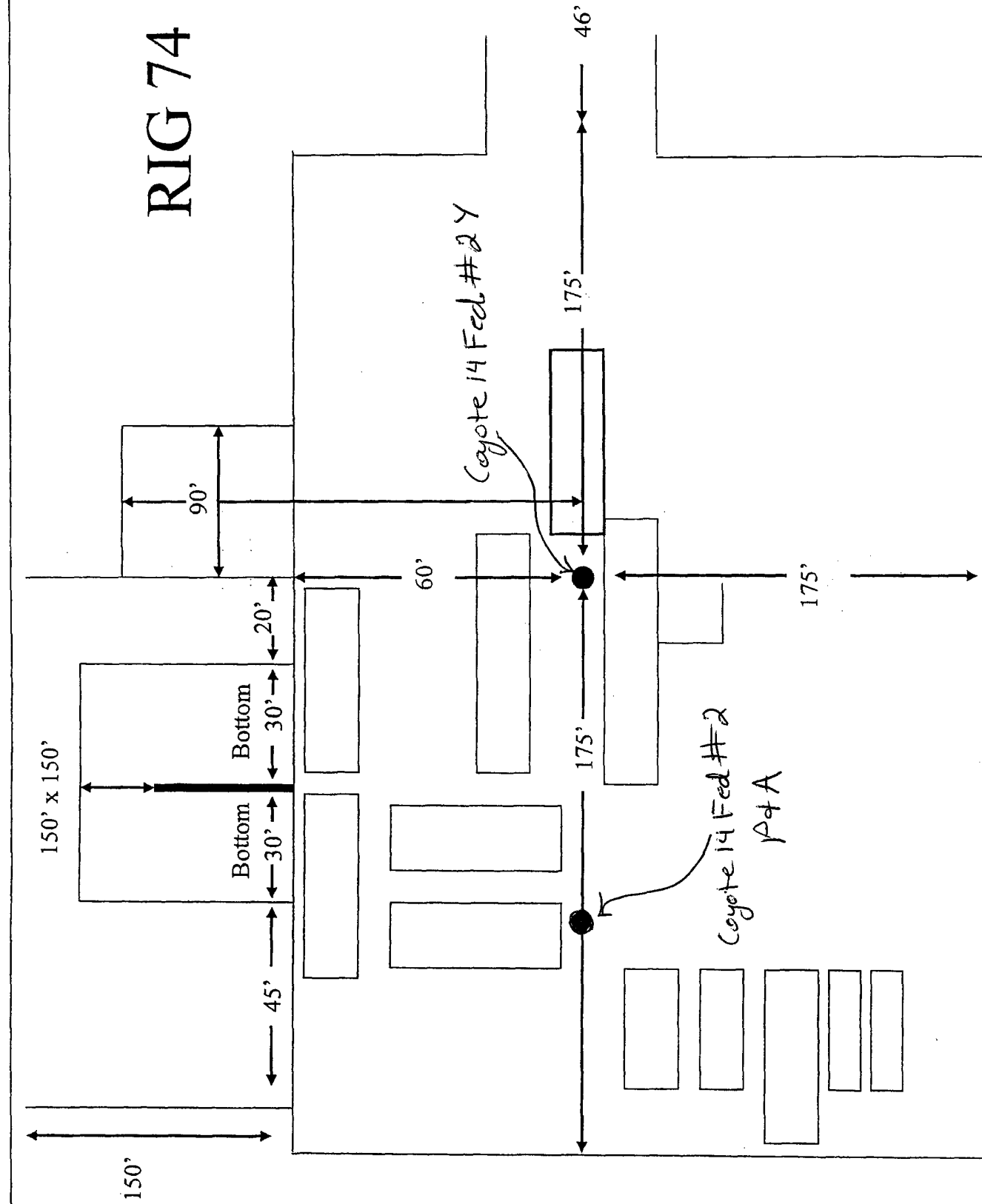
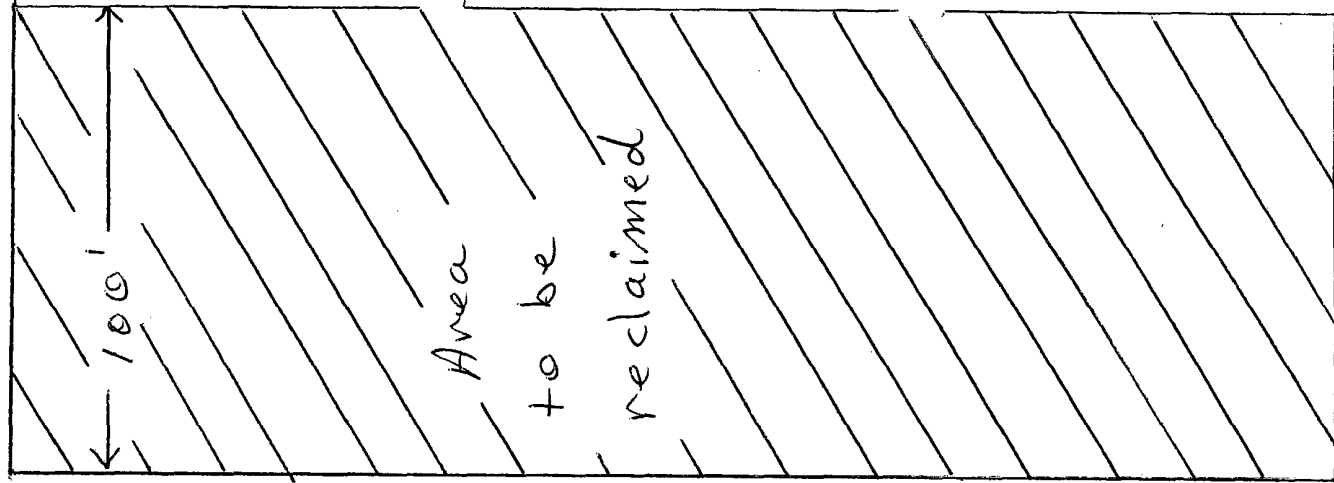
REF: COYOTE "14" #2 / WELL PAD TOPO

THE COYOTE "14" #2 LOCATED 1980' FROM  
 THE NORTH LINE AND 660' FROM THE WEST LINE OF  
 SECTION 14, TOWNSHIP 19 SOUTH, RANGE 31 EAST,

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

Survey Date: 06-05-2006

Sheet 1 of 1 Sheets



RIG 74

**Additional Operator Remarks:**

Devon Energy Production Company, LP proposes to drill a Morrow well to 13,000' for commercial quantities of oil and gas. If the well is deemed noncommercial, the wellbore will be plugged and abandoned per Federal regulations. Devon Energy Production Co., LP plans to drill the well per the attached Drilling and Surface Use Plan.

**Directions To Location:**

From the Junction of Co. Rd 248 (Lusk Plant) and Co. Rd 222 (Shugart), go east on Co. Rd 248 for 0.8 to proposed lease road.

**Access Road:**

Approximately 413' of access road will be required. Archeological survey's will be requested for the pad and access road.

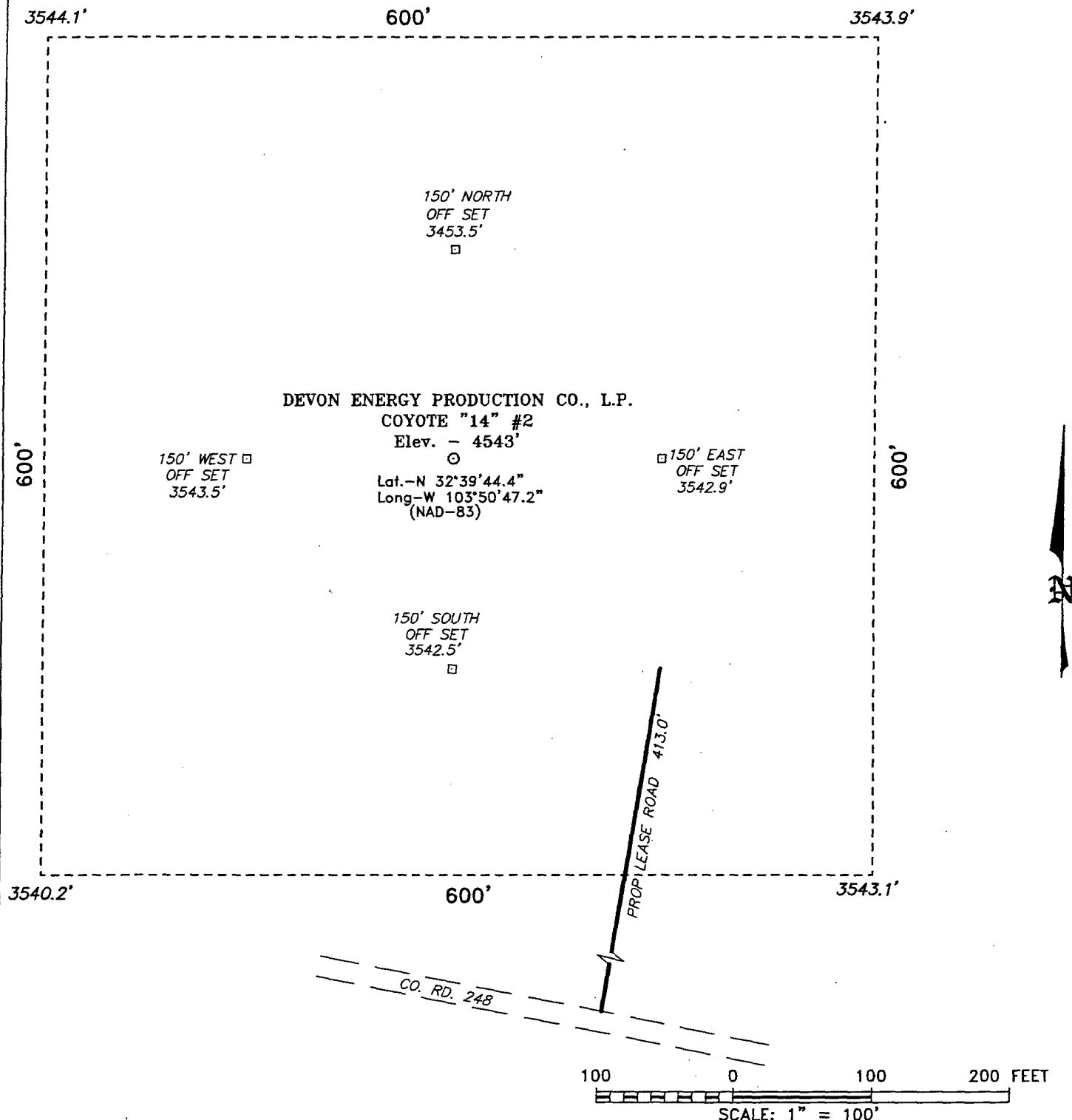
**H2S:**

No H2S is anticipated to be encountered.

**Additional Comments:**

The well is located on Devon lease NMNM-99039.

SECTION 14, TOWNSHIP 19 SOUTH, RANGE 31 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM THE JUNCTION OF CO. RD. 248 (LUSK PLANT)  
AND CO. RD. 222 (SHUGART), GO EAST ON CO. RD.  
248 FOR 0.8 TO PROPOSED LEASE ROAD.

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

W.O. Number: 6751

Drawn By: J. M. SMALL

Date: 06-07-2006

Disk: JMS 6751W

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

REF: COYOTE "14" #2 / WELL PAD TOPO

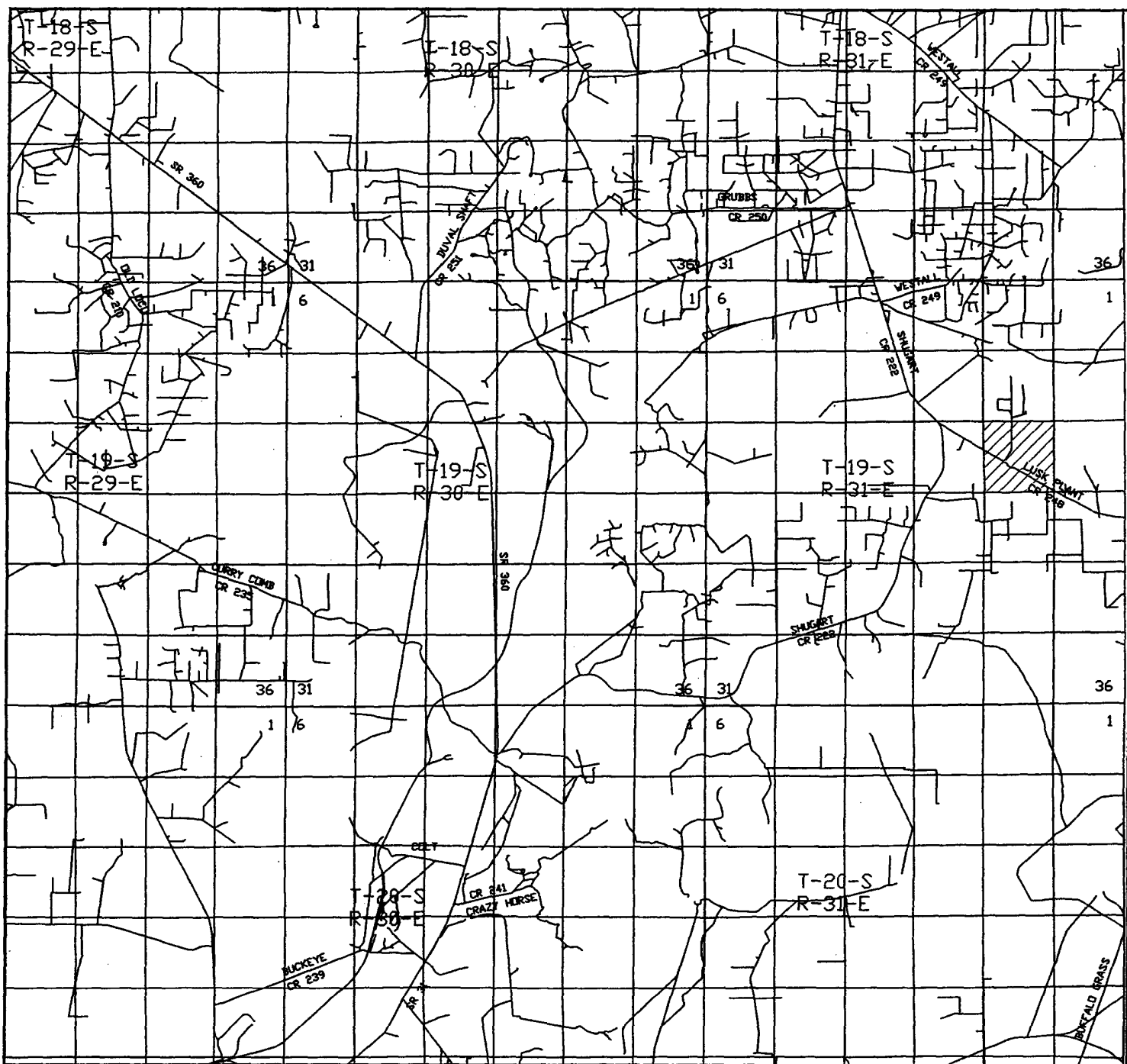
THE COYOTE "14" #2 LOCATED 1980' FROM  
THE NORTH LINE AND 660' FROM THE WEST LINE OF  
SECTION 14, TOWNSHIP 19 SOUTH, RANGE 31 EAST,  
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 06-05-2006

Sheet 1 of 1 Sheets







# COYOTE "14" #2

Located at 1980' FNL AND 660' FWL  
Section 14, Township 19 South, Range 31 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  
basinsurveys.com

W.O. Number: 6751 JMS

Survey Date: 06-05-2006

Scale: 1" = 2000'

Date: 06-07-2006

DEVON ENERGY  
PROD. CO., L.P.

## DRILLING PROGRAM

Devon Energy Production Company, LP

### **Coyote 14 Fed 2**

Surface Location: 1980' FNL & 660' FWL, Unit E, Sec 14 T19S R31E, Eddy, NM

Bottom hole Location: 1980' FNL & 660' FWL, Unit E, Sec 14 T19S R31E, Eddy, NM

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

- a. Quaternary Eolian and Piedmont Sandstone.

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

a. Rustler	500'
b. Salado	650'
c. Base of Salado	1990'
d. Yates	2220'
e. San Andres	4160'
f. Delaware	4650'
g. Bone Spring	6900'
h. 3 <sup>rd</sup> Bone Spring SS	9775'
i. Wolfcamp	10150'
j. Penn Shale	10500'
k. Strawn	11150'
l. Atoka	11600'
m. Morrow Clastics	12200'
n. Lower Morrow	12450'
o. Barnett	12625'
p. Total Depth	13000'

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

a. Rustler	500'	Water
b. Salado	650'	Barren
c. Base of Salado	1990'	Barren
d. Yates	2220'	Oil
e. San Andres	4160'	Oil
f. Delaware	4650'	Oil
g. Bone Spring	6900'	Oil
h. 3 <sup>rd</sup> Bone Spring	9775'	Oil
i. Wolfcamp	10150'	Gas
j. Strawn	11150'	Gas
k. Atoka	11600'	Gas
l. Morrow Clastics	12200'	Gas
m. Lower Morrow	12450'	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 13 3/8" casing at 600' and circulating cement back to surface. Fresh water will be protected by setting 8 5/8" casing at 4650' and circulating cement to surface. The Morrow intervals will be isolated by setting 5 1/2" casing to total depth and circulating to surface.

4. **Casing Program:**

<u>Hole Size</u>	<u>Interval</u>	<u>OD Csg</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
17 1/2"	0' - 600'	13 3/8"	48#	ST&C	H-40
12 1/4"	0' - 3900'	8 5/8"	32#	LT&C	J-55
12 1/4"	3900' - 4650'	8 5/8"	32#	LT&C	HCK-55
7 7/8"	0' - 12725'	5 1/2"	17#	LT&C	HP-110

5. **Cement Program:**

a. 13 3/8" Surface

**WITNESS**

**Cement Lead Slurry:** 293 sacks (36:65) Poz (Fly Ash): Class C Cement + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake + 6% bwoc Bentonite. **Tail Slurry:** 250 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.25 lbs/sack Cello Flake to surface.

b. 8 5/8" Intermediate

**Cement Lead Slurry:** 1177 sacks (35:65) Poz (Fly Ash): Class C Cement + 3% bwow Sodium Chloride + 0.25 lbs/sack Cello Flake + 5 lbs/sack LCM-1 + 6% bwoc Bentonite + 0.005 gps FP-13L. **Tail Slurry:** 300 sacks (60:40) Poz (Fly Ash): Class C Cement + 4% bwoc MPA-1 + 5% bwow Sodium Chloride + 0.4% bwoc Sodium Metasilicate to surface.

c. 5 1/2" Production

3 Stage Long String Circulated to Surface

**STAGE 1**

**Cement Slurry:** 897 sacks (15:61:11) Poz (Fly Ash): Class C Cement: CSE-2 + 0.5% bwoc BA-10 + 0.15% bwoc R-3 + 2% bwow Potassium Chloride + 0.75% bwoc EC-1 + 0.25 lbs/sack Cello Flake + 0.7% bwoc CD-32 + 5 lbs/sack LCM-1 + 0.6% bwoc FL-25 + 0.6% bwoc FL-52A

**STAGE 2**

**Cement Slurry:** 1277 sacks (60:40) Poz (Fly Ash): Premium Plus H Cement + 1% bwow Sodium Chloride + 0.75% bwoc BA-10 + 0.1% bwoc R-3 + 0.25 lbs/sack Cello Flake + 2 lbs/sack Kol Seal + 4% bwoc MPA-1

**STAGE 3**

**Lead Slurry:** 592 sacks (35:65) Poz (Fly Ash): Class C Cement + 3% bwow Sodium Chloride + 0.25 lbs/sack Cello Flake + 0.005 gps FP-13L + 6% bwoc Bentonite. **Tail Slurry:** 150 sacks (60:40) Poz (Fly Ash): Class C Cement + 5% bwow Sodium Chloride + 0.4% bwoc Sodium Metasilicate + 4% bwoc MAP-1

**6. Pressure Control Equipment:**

The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (5000 psi WP) preventor and a bag-type (Hydril) preventor (5000 psi WP). Both units will be hydraulically operated and the ram type preventor will be equipped with blind rams on top and 4 1/2" drill pipe rams on bottom. The drilling head will be installed on the 13 3/8" surface casing and utilized continuously until total depth is reached. All BOP's and associated equipment will be tested to **1200 psi with the rig pump before drilling out the 13 3/8" casing shoe (70% of 48#, H-40 casing)**. Prior to drilling out the 8 5/8" casing shoe, the BOP's and Hydril will be tested as per BLM Drilling Operations 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 drillers 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 5000 psi WP rating.

**7. Proposed Mud Circulation System**

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>
0' - 600'	8.5-9.2	35-45	NC	Fresh Water
600' - 4,650'	10	28-32	NC	Brine Water
4650' - 10,300'	8.8 - 9.2	28-30	NC	Cut Brine
10,300'-12,725'	9.2 - 10.2	36-48	8-10cc's	Brine Water

The necessary mud products for weight addition and fluid loss control will be on location at all times.

**8. 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 13 3/8" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 13 3/8" shoe until total depth is reached.

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

- a. Drill stem tests will be based on geological sample shows.
- b. 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.

**10. Potential Hazards:**

- a. No abnormal pressures or temperatures are expected. There is no known presence of H<sub>2</sub>S in this area. If H<sub>2</sub>S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 5000 psi and Estimated BHT 180°. No H<sub>2</sub>S is expected to be encountered.

**11. 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 32 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.

**SURFACE USE PLAN**  
Devon Energy Production Company, LP  
**Coyote 14 Fed 2**

Surface Location: 1980' FNL & 660' FWL, Unit E, Sec 14 T19S R31E, Eddy, NM  
Bottom hole Location: 1980' FNL & 660' FWL, Unit E, Sec 14 T19S R31E, Eddy, NM

**1. Existing Roads:**

- a. The well site and elevation plat for the proposed well are reflected on Exhibit 2. 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 Co. Rd 248 (Lusk Plant) and Co. Rd 222 (Shugart), go east on Co. Rd 248 for 0.8 to proposed lease road.

**2. Access Road**

- a. Exhibit #3 shows the existing lease road. Approximately 413' of new access road will be constructed as follows:
- 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. Proposed Facilities**

- a. In the event the well is found productive, the Coyote 14 Fed 2 tank battery would be utilized and the necessary production equipment will be installed at the well site.
- 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. All flow lines will adhere to API standards.
- d. If the well is productive, rehabilitation plans are as follows:
  - i. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after completion, weather permitting).
  - 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.

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

- a. Drill cuttings will be disposed of in the reserve pits.
- 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. Wastewater from living quarters will be drained into hole with a minimum of 10'. These holes will be covered during drilling and will be back filled when the well is completed. A Porto-john will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.

- e. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for further drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approved disposal site. Later pits will be broken out to speed dry. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in a storage tank and sold.

**5. Well Site Layout**

- a. Exhibit D Shows the proposed well site layout.
- b. This exhibit indicated proposed location of reserve and sump pits and living facilities.
- c. Mud pits in the active circulating system will be steel pits & the reserve pit is proposed to be unlined unless subsurface conditions encountered during pit construction indicate that lining is needed for lateral containment of fluids.
- d. If needed, the reserve pit is to be lined with polyethylene. The pit liner will be 6 mils thick. Pit liner will extend a minimum 2'00" over the reserve pits dikes where the liner will be anchored down.
- e. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

**6. Other Information:**

- a. The area surrounding the well site is grassland. The topsoil is very sandy in nature. The vegetation is moderately sparse with native prairie grass, some mesquite bushes and shinnery oak. No wildlife was observed but it is likely that deer, rabbits, coyotes, and rodents traverse the area.
- b. The surface is owned by the US Government and is administered by the Bureau of Land Management. The surface is of limited use except for the grazing of livestock and the production of oil and gas.
- c. A Cultural Resources Examination will be completed by Southern New Mexico Archaeological Services, Inc. and forwarded to the BLM office in Carlsbad, New Mexico.
- d. There are no dwellings within 2 miles of location.

**Operators Representative:**

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

Wyatt Abbitt  
Operations Engineer Advisor

Don Mayberry  
Superintendent

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

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

(405) 552-8137 (office)  
(405) 245-3471 (Cellular)

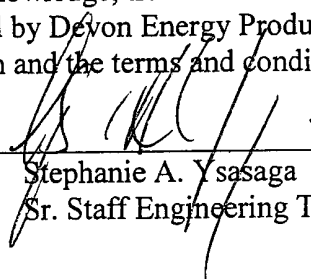
(505) 748-3371 (office)  
(505) 746-4945 (home)

## Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road; that I am familiar with the conditions that presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Devon Energy Production Company, L.P. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Signed: \_\_\_\_\_

Date: June 19<sup>th</sup>, 2006

  
Stephanie A. Ysasaga  
Sr. Staff Engineering Technician



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

**Coyote 14 Fed 2**

Surface Location: 1980' FNL & 660' FWL, Unit E, Sec 14 T19S R31E, Eddy, NM

Bottom hole Location: 1980' FNL & 660' FWL, Unit E, Sec 14 T19S R31E, Eddy, NM

1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
2. Wear ring will be properly installed in head.
3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 5000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum 5000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
6. All choke lines will be anchored to prevent movement.
7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
8. Will maintain a kelly cock attached to the kelly.
9. Hand wheels and wrenches will be properly installed and tested for safe operation.
10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.
11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

UNITED STATES DEPARTMENT OF THE INTERIOR  
Bureau of Land Management  
Roswell Field Office  
2909 West Second Street  
Roswell, New Mexico 88201-1287

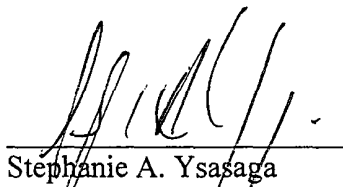
Statement Accepting Responsibility for Operations

**Operator Name:** Devon Energy Production Company, LP  
**Street or Box:** 20 North Broadway, Suite 1500  
**City, State:** Oklahoma City, Oklahoma  
**Zip Code:** 73102-8260

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portion thereof, as described below.

**Lease Name:** Coyote 14 Fed 2  
**Lease No.:** NMNM-99039  
**Legal Description of Land:** SWNW 320 acres 14-T19S-R31E  
1980' FNL & 660' FWL  
**Formation(s):** Lusk; Morrow (Gas)  
**Bond Coverage:** Nationwide  
**BLM Bond File No.:** CO-1104

**Authorized Signature:**

  
Stephanie A. Ysasaga

**Title:** Sr. Staff Engineering Technician

**Date:** 06/19/06

## **HYDROGEN SULFIDE DRILLING OPERATIONS PLAN**

1. All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:
  - a. Characteristics of H2S
  - b. Physical effects and hazards
  - c. Proper use of safety equipment and life support systems.
  - d. Principle and operation of H2S detectors, warning system and briefing areas
  - e. Evacuation procedures, routes and first aid.
  - f. Proper use of 30-minute pressure demand air pack.
2. H2S Detection and Alarm System
  - a. H2S detectors and audio alarm system to be located at bell nipple, end of bloop line (mud pit) and on derrick floor or doghouse.
3. Windsock and/or wind streamers
  - a. Windsock at mud pit area should be high enough to be visible
  - b. Windsock at briefing area should be high enough to be visible
  - c. There should be a windsock at entrance to location
4. Condition Flags and Signs
  - a. Warning Sign on access road to location
  - b. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H2S present in dangerous concentration. Only emergency personnel admitted to location.
5. Well Control Equipment
  - a. See Exhibit "E" & "E-1"
6. Communication
  - a. While working under masks chalkboards will be used for communication.
  - b. Hand signals will be used where chalk board is inappropriate
  - c. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.
7. Drill stem Testing
  - a. Exhausts will be watered
  - b. Flare line will be equipped with an electric igniter or a propane pilot light in case gas reaches the surface.
  - c. If the location is near to a dwelling a closed DST will be performed.
8. Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubular goods and other mechanical equipment.

If H2S is encountered, mud system will be altered if necessary to maintain control or formation. A mud gas separator will be brought into service along with H2S scavengers if necessary.

N

150'

150' x 150'

45'

Bottom

30'

Bottom

20'

New Pits

90'

RIG 74

60'

175'

#2

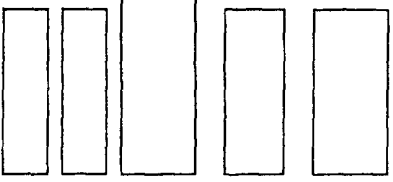
175'

#2Y

46'

100'

175'



175'

46'

Cleared w/ARC  
All Logs

100 East

Road Bridge

1-30-07

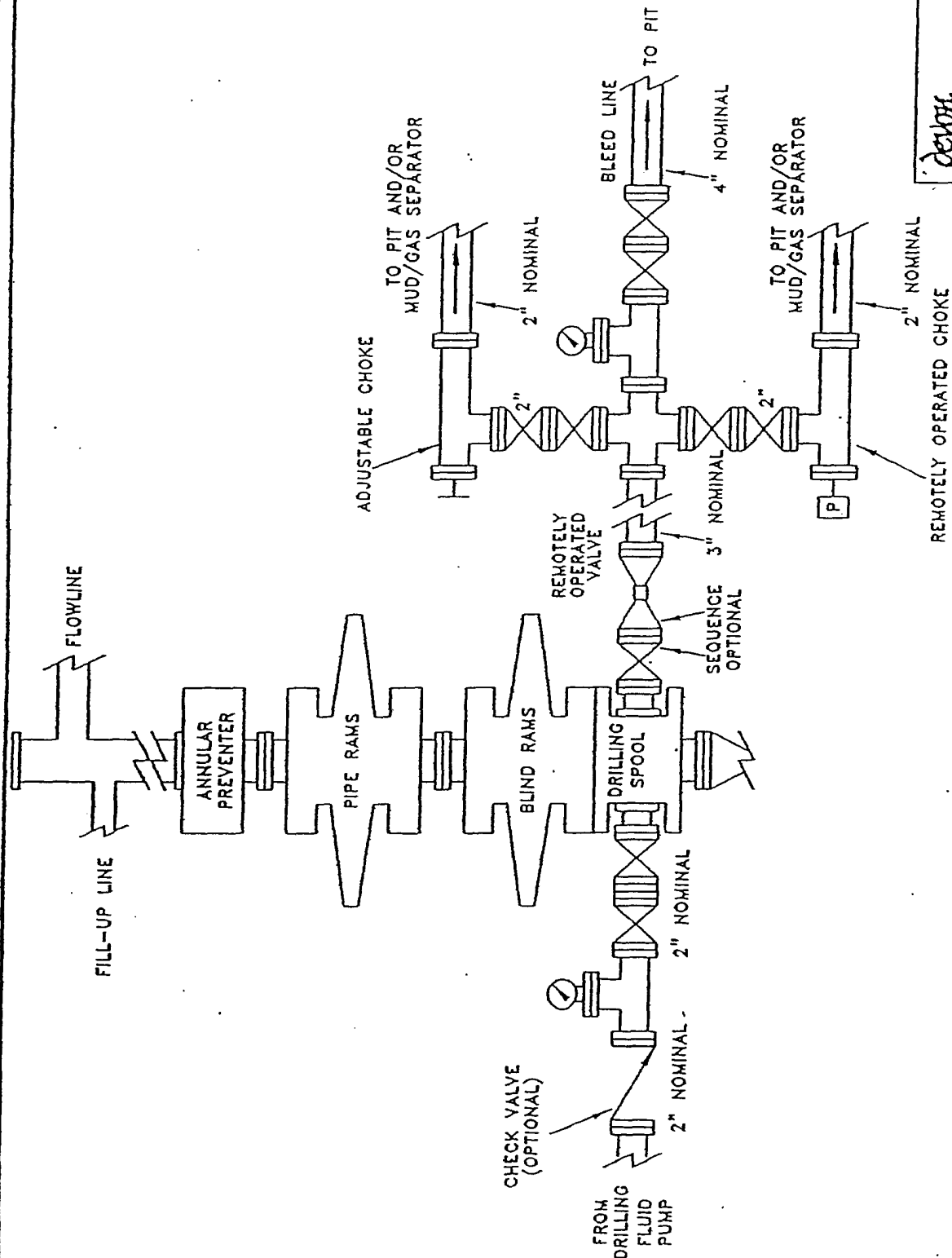


EXHIBIT 1

devon

PROPOSED 5-M BOPE  
AND CHOKE ARRANGEMENT

s:\u\m\plots  
5mbopa.dwg

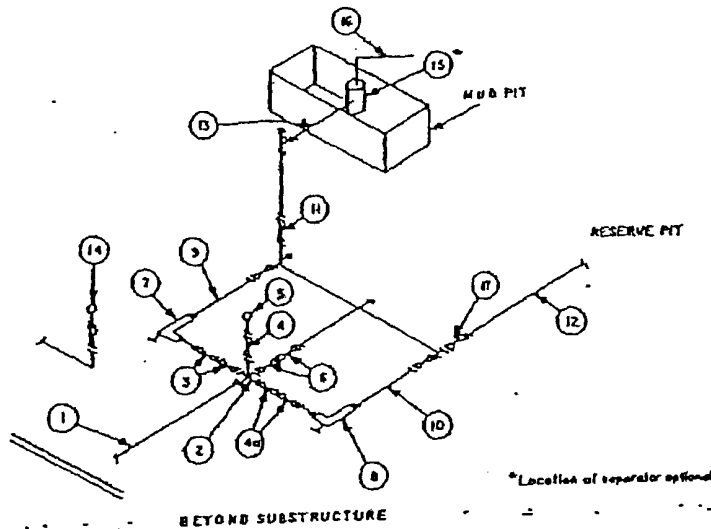
SC

1/10/00

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

3 MWP - 5 MWP - 10 MWP

Exhibit E



No.		MINIMUM REQUIREMENTS								
		3,000 MWP			5,000 MWP			10,000 MWP		
		LD.	NOMINAL	RATING	LD.	NOMINAL	RATING	LD.	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			10,000
3	Valves (1) Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
4	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	1-13/16"		3,000	1-13/16"		5,000	1-13/16"		10,000
4a	Valves (1)	2-1/16"		3,000	2-1/16"		5,000			10,000
5	Pressure Gauge			3,000			5,000			10,000
6	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
7	Adjustable Choke (3)	2"		3,000	2"		5,000	2"		10,000
8	Adjustable Choke	1"		3,000	1"		5,000	3"		10,000
9	Line		3"	3,000		3"	5,000		3"	10,000
10	Line		2"	3,000		2"	5,000		3"	10,000
11	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
12	Lines		3"	1,000		3"	1,000		3"	2,000
13	Lines		3"	1,000		3"	1,000		3"	2,000
14	Remote reading compound standpipe pressure gauge			3,000			5,000			10,000
15	Gas Separator		2"x5"			2"x5"			2"x5"	
16	Line		4"	1,000		4"	1,000		4"	2,000
17	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000

(1) Only one required in Class 3M.

(2) Gate valves only shall be used for Class 10M.

(3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

- All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
- All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
- All lines shall be securely anchored.
- Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
- Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged tees.
- Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.

SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name: Devon Energy Production Company, L.P. Well Name & #: Coyote 14 Fed. #2  
Location 1980 F N L & 660 F W L; Sec. 14, T. 19 S., R. 31 E.  
Lease #: NM-99039 County: Eddy State: New Mexico

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CRF 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

I. SPECIAL ENVIRONMENT REQUIREMENTS

- ( ) Lesser Prairie Chicken (stips attached) ( ) Flood plain (stips attached)  
( ) San Simon Swale (stips attached) ( ) Other

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

( x ) The BLM will monitor construction of this drill site. Notify the ( x ) Carlsbad Field Office at (505) 234-5972 ( ) Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

( x ) Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche upon completion of well and it is determined to be a producer.

( ) All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately \_\_\_\_\_ inches in depth. Approximately \_\_\_\_\_ cubic yards of topsoil material will be stockpiled for reclamation.

( ) Other.

III. WELL COMPLETION REQUIREMENTS

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

( x ) Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of 1/2 inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

- |   |   |
|---|---|
| ( x ) A. Seed Mixture 1 (Loamy Sites)                 | ( ) B. Seed Mixture 2 (Sandy Sites)                     |
| Side Oats Grama ( <i>Bouteloua curtipendula</i> ) 5.0 | Sand Dropseed ( <i>Sporobolus cryptandrus</i> ) 1.0     |
| Sand Dropseed ( <i>Sporobolus cryptandrus</i> ) 1.0   | Sand Lovegrass ( <i>Eragrostis trichodes</i> ) 1.0      |
|   | Plains Bristlegrass ( <i>Setaria magrostachya</i> ) 2.0 |
| ( ) C. Seed Mixture 3 (Shallow Sites)                 | ( ) D. Seed Mixture 4 (Gypsum Sites)                    |
| Side oats Grama ( <i>Boute curtipendula</i> ) 1.0     | Alkali Sacaton ( <i>Sporobolus airoides</i> ) 1.0       |
|   | Four-Wing Saltbush ( <i>Atriplex canescens</i> ) 5.0    |

( ) OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

( ) Other

## RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6-mil plastic. Mineral material extracted from within the boundary of the APD during construction of the well pad and reserve pits and be used for the construction of this well pad and its immediate access road only, as long as that portion of the access road it is use on remains on-lease. Removal of any additional material from this location for construction or improvement of other well pads and other access or lease roads must first be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

## OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

- (1) Lined as specified above and
- (2) A temporary or emergency pit may be constructed immediately adjacent to the reserve pit as long as the pit remains within the APD boundary. Mineral material removed from this pit may be used for the construction of this well pad only and its immediate access road, as long as that portion of the access road the material is used on remains on-lease. Removal of any material from the APD boundary for use on other well locations or roads must first be purchased from BLM.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be re-contoured, all trash removed, and reseeded as specified in this permit.

## CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to process by BLM.

## TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.



## CONDITIONS OF APPROVAL - DRILLING

Well Name & No. 2-Coyote 14 Federal  
Operator's Name: Devon Energy Production Company, LP  
Location: 1980FNL, 0760FWL, Section 14, T-19-S, R-31-E  
Lease: NMNM-99039

### I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 - for wells in Eddy County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: 13-3/8 inch 9-5/8 inch 5-1/2 inch

C. BOP tests

2. **Although Hydrogen Sulfide is not reported in Section 14, it is always a potential hazard. Reported in adjacent sections measuring 200-2000 ppm in gas streams and 200 ppm in STVs.**

3 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.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

### II. CASING:

1. The 13-3/8 inch surface casing shall be set **a minimum of 25 feet into the Rustler Anhydrite approximately 600 feet and above the salt**, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

**Possible lost circulation in the Artesia Group and Capitan Reef.**

**Possible water flows in Artesia and Salado groups.**

2. The minimum required fill of cement behind the 9-5/8 inch salt protection casing is **circulate cement to the surface.**

3. The minimum required fill of cement behind the 5-1/2 inch production casing is **cement shall extend a minimum of 200 feet into the 8-5/8 inch casing.**

*9 5/8 inch JONZ*

### **III. PRESSURE CONTROL:**

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13-3/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the 13-3/8 inch casing shall be 5M psi.
3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
  - The tests shall be done by an independent service company.
  - The results of the test shall be reported to the appropriate BLM office.
  - Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
  - Testing must be done in a safe workman-like manner. Hard line connections shall be required.

### **IV. 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. Monitoring equipment shall consist of the following:

1. Recording pit level indicator to indicate volume gains and losses.
2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
3. Flow-sensor on the flow line to warn of abnormal mud returns from the well.

**Engineer on call phone: 505-706-2779**

**WWI 013007**

STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS  
CARLSBAD FIELD OFFICE

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.

The holder/grantee/permittee shall hereafter be identified as the holder in these stipulations. The Authorized Officer is the person who approves the Application for Permit to Drill (APD) and/or Right-of-Way (ROW).

GENERAL REQUIREMENTS

A. 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.

B. 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 U.S.C. 2601, *et. seq.*) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized by this 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.

C. 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 the right-of-way holder's activity 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.

D. If, during any phase of the construction, operation, maintenance, or termination of the road, any oil or other pollutant should be discharged, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil 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 to Federal lands resulting there from the Authorized Officer may take such measures as deemed necessary to control and cleanup 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 liability or responsibility.

E. The holder shall minimize disturbance to existing fences and other improvements on public domain surface. 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 make a documented good-faith effort to 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.

F. The Holder shall ensure that the entire right-of-way, including the driving surface, ditching and drainage control structures, road verges and any construction sites or zones, will be kept free of the following plant species: Malta starthistle, African rue, Scotch thistle and salt cedar. The Holder agrees to comply with the following stipulations:

1. ROAD WIDTH AND GRADE

The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10 percent unless the box below is checked. Maximum width of surface disturbance from construction will be 30 feet.

Those segments of road where grade is in excess of 10% for more than 300 feet shall be designed by a professional engineer.

2. CROWNING AND DITCHING

Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in Figure 1. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1" crown on a 12' wide road).

Ditching will be required on both sides of the roadway as shown on the attached map or as staked in the field.

3. DRAINAGE

Drainage control shall be ensured over the entire road through the use of borrow ditches,

out-sloping, in-sloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips.

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

SPACING INTERVAL FOR TURNOUT DITCHES

Percent slope	Spacing interval
0% - 4%	400' - 150'
4% - 6%	250' - 125'
6% - 8%	200' - 100'
8% - 10%	150' - 75'

A typical lead-off ditch has a minimum depth of 1 foot below and a berm 6 inches above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible.

For this road the spacing interval for lead-off ditches shall be at 400 foot intervals.

B. Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. Culvert location and required diameter are shown on the attached map (Further details can be obtained from the Roswell District Office or the appropriate Resource Area Office).

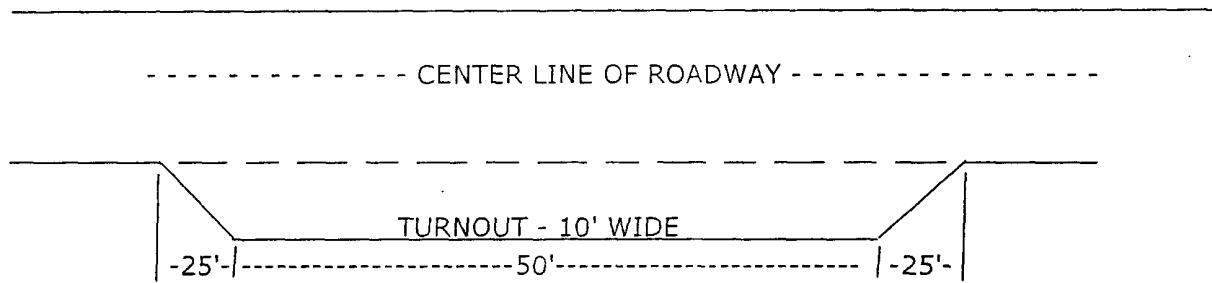
C. On road slopes exceeding 2%, drainage dips shall drain water into an adjacent lead-off ditch. Drainage dip location and spacing shall be determined by the formula:

$$\text{spacing interval} = \frac{400'}{\text{road slope in \%}} + 100'$$

$$\text{Example: 4\% slope: spacing interval} = \frac{400}{4} + 100 = 200 \text{ feet}$$

#### 4. TURNOUTS

Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 2000-foot intervals, or the turnouts will be intervisible, whichever is less. Turnouts will conform to the following diagram:



STANDARD TURNOUT - PLAN VIEW

## 5. SURFACING

Surfacing of the road or those portions identified on the attached map may, at the direction of the Authorized Officer, be required, if necessary, to maintain traffic within the right-of-way with caliche, gravel, or other surfacing material which shall be approved by the Authorized Officer. When surfacing is required, surfacing materials will be compacted to a minimum thickness of six inches with caliche material. The width of surfacing shall be no less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.

A sales contract for the removal of mineral materials (caliche, sand, gravel, fill dirt, etc.) from an authorized pit, site, or on location must be obtained from the BLM prior to using any such mineral material from public lands. Contact the BLM solid minerals staff for the various options to purchase mineral material.

## 6. CATTLEGUARDS

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads (exceeding H-20 loading), are anticipated (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

7. MAINTENANCE

The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

8. PUBLIC ACCESS

Public access along this road will not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

9. CULTURAL RESOURCES

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

10. SPECIAL STIPULATIONS:

United States Department of the Interior  
Bureau of Land Management  
Roswell Field Office

Refer To: 3160-3

June 26, 2006

To: AFM, Lands and Minerals, RFO

From: Geologist, RFO

Subject: Geologic Review of Application for Permit to Drill

Operator: Devon Energy Production Company, L.P.

Well Name and Number: Coyote 14 Federal No. 2

Location: 1980' FNL & 660' FWL

Section: 14, T. 19 S., R. 31 E., NMPM

County: Eddy

State: NM

Lease No.: NM-99039

Date APD Rec'd: 6/20/06

1. Surface Elevation **X**      Surface Geology **X**
2. Geologic Marker Tops (from reports on surrounding wells):

<u>Geologic Marker</u>	<u>Depth</u>
Anhydrite	450'
T/Salt	600'
B/Salt	2020'
Yates	2280'
7 Rvrs,	2486'
Queen	3400'
Grayburg	3592'

Marker tops taken from B. B. State No. 1 well located in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ , Sec. 16, T. 19 S., R. 31 E., NMPM

<u>Geologic Marker</u>	<u>Depth</u>
Yates	2314'
Bone Spring	6788'
Wolfcamp	10,182'
Cisco	10,492'



<u>Geologic Marker</u>	<u>Depth</u>
Strawn	11,100'
Atoka	11,340'
Morrow	11,660'

Marker tops taken from the Hannifin State Com. No. 1 well located in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ , sec. 18, T. 19 S., R. 31 E., NMPM

3. Fresh Water Information: Fresh water for stock use is obtained from the Santa Rosa Formation. Scrutiny of the State Engineers data as well as the Oil and Gas plugged and abandoned well files reveals many citations of useable water in these formations. Additionally, it has been found that some of the water encountered and listed as Santa Rosa is actually obtained from the Dewey Lake Formation in that these water bearing zones are only tens of feet above the top of the Rustler. This apparent ambiguity is due to the similar lithologies of the Dewey Lake and Santa Rosa Formations which in a lot of areas are indistinguishable from each other. Regardless of the ambiguity and in keeping with statements made by Nicholson and Clebsch (1961), the top of the Rustler Formation is regarded as the effective lower limit of useable ground water for most of Lea County. The exception being the extreme west edge and the southern most portion of the county where useable water occurs in the top of the Rustler Formation. Therefore, surface casing should be set in the top of the Rustler Formation. This protective measure will adequately protect the potential for all useable waters in the redbeds. The top of the Rustler should be at an approximate depth of 620' by log of the Simon A No. 2 well located in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ , sec. 14, T. 19 S., R. 31 E., NMPM

Deepest Expected Fresh Water: above 620 ft.

Does Surface Casing cover all anticipated usable fresh water zones? Yes, It's close enough not to quibble But add to the COA, set surface at 600 ft, 25 ft into the Rustler Anhydrite.

If no, set surface casing to feet.

Controlled Water Basin: Yes

Capitan X    Carlsbad    Roswell    Lea    No basin

Remarks: ~~Surface casing in place.~~ *no/acc*

4. Geologic Hazards? Yes

H2S X    Karst X    Abnormal Pressures    Other X

Remarks: H<sub>2</sub>S has been reported twice in a Big Circle lease well completed in the South Tonto Yates, located in the SE1/4SE1/4 of Sec. 24, T. 19 S., R. 32 E., NMPM., Lea County; measuring 3,000 ppm. in the Gas Streams and 3,000 ppm. in STVs. H<sub>2</sub>S has been reported in a Mack Energy Corporation, Miller Federal lease well in the Lusk Yates, located in the SW1/4NW1/4 of Sec. 19, T. 19 S., R. 32 E., NMPM, Lea County; measuring 2,000 ppm. in the Gas Stream and 200 ppm. in STVs. H<sub>2</sub>S has also been reported twice in a Shackelford Oil Company, Amoco Federal lease well in the W. Lusk Delaware, located in the NW1/4NW1/4 of Sec. 21, T. 19 S., R. 32 E., NMPM; measuring 200 ppm. in the Gas Streams and 200 ppm. in STVs. Possible lost circulation in the Artesia Group. Possible lost circulation in the Capitan Reef. Possible water flows in the Artesia and Salado Groups. There is a low potential for the occurrence of Karst type features in the area.

5. Other Mineral Deposits: Possible Halite and other associated salts in the Rustler Formation and the Salado and Castile Groups. Possible potash in the Salado Group.

6. Potash:

Secretary's

Oil-Potash Area      R-111-P Area      Not Applicable X

7. References:

New Mexico State Engineer's Water Well Listings;

Lea County H<sub>2</sub>S List;

Nicholson, A., Jr., and Clebsch, A., Jr., 1961, Geology and Ground-Water Conditions of Southern Lea County, New Mexico; Ground-Water Report No. 6, New Mexico Bureau of Mines and Mineral Resources, Campus Station, Socorro, New Mexico.

Hendrikson, G. E., and Jones, R. S., 1952, Geology and Ground-Water Resources of Eddy County, New Mexico; Ground-Water Report No. 3, New Mexico Bureau of Mines and Minerals Resources, Campus Station, Socorro, New Mexico.

8. No active mining claims are located in this vicinity.

Geologist Signature: /s/ J. S. Simitz

Date: 6/26/06