Form 3160-5 (February 2005)

UNITED STATES OCD-ARTESIA

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

5 Lease Serial No

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6 If Indian, Allottee or Tribe Name

SUBMIT IN TRIBLICATE Other instructions on page 2
Do not use this form for proposals to drill or to re-enter an bandoned well. Use Form 3160-3 (APD) for such proposals
SUNDRY NOTICES AND REPORTS ON WELLS
BUREAU OF LAND MANAGEMENT

abandoned well. Use Form 3160-3 (APD) for such pro	pposals.
SUBMIT IN TRIPLICATE Other instructions on page 2	7 If Unit of CA/Agreement, Name and/or No
I Type of Well ☐ Oil Well ☐ Gas Well ☐ Other SEP	8 Well Name and No Coyote 14 Fed 1
2 Name of Operator Devon Energy Production Co , LP	PARTESIA 9 API Well No. 30-015-35071
3a Address 3b Phone No (include 20 North Broadway 0KC, OK 73102 (405)-552-7802	to area code) 10 Field and Pool of Exploratory Area Lusk, Morrow (Gas), West
4 Location of Well <i>(Footage, Sec., T.R.M., or Survey Description)</i> NWNE 810' FNL & 1905' FEL Sec 14-T19S-R31E	11 Country or Parish, State Eddy County, NM
12 CHECK THE APPROPRIATE BOX(ES) TO INDICATE 1	NATURE OF NOTICE, REPORT OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION
Notice of Intent Acidize Deepen Alter Casing Fracture Treat	
Subsequent Report Casing Repair New Construc	0.0001/
☐ Final Abandonment Notice ☐ Convert to Injection ☐ Plug Back	ndon
Devon Energy Production Company, LP respectfully submits the following changes Casing Program (see attached for revised cementing program & design parameter Hole Size Interval OD Csg Weight Collar Grade 17 ½" 0' – 665' 13 3/8" 48# ST&C H-40 12 ½" 0' - 4100' 9 5/8" 40# BT&C J-55 12 ½" 10' - 4100' - 4525' 9 5/8" 40# BT&C HCK-55 8 3/4" 0'-12725' 5 ½" 17# LT&C HCP-110 Proposed Mud Circulation System Depth Mud Wt Visc Fluid Loss Type System 0' - 665' 8 9-9 4 32-34 NC Fresh Water 665' - 4,525' 9 8-10 2 28-30 NC Brine Water 4525' - 8,500' 8 4-8 5 28 NC Fresh Water	
8500'-10,000' 9 3- 9 8 28 NC Cut Brine	SEP 5 - 2008
10,000'-12,725' 9 2 - 10 2 36-48 8-10cc Brine Water BOP Variance Devon Energy Production Co , LP respectfully request permission to test the BOPE	to 1000 psi MMOCO pyrien Nu on the spector surface casing
Name (Printed/Typed) [7]	Sr Staff Engineering Technician
Signature Date (08/28/2008 APPROVED
// THIS SPACE FOR FEDERAL (OR STATE OFFICE USE
	AUG 2 8 2008 Date
Conditions of approval, if any, are attached Approval of this notice does not warrant or certify hat the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon	Office WESLEY W INGRAM PETROLEUM ENGINEER

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)

Well name.

Coyote 14 Fed 1

Operator:

Devon Energy Corporation

String type: AFE No

Production 127804

Location

14-T19S-R31E

Design parameters.	Design	parameters:	
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Collapse

Mud weight: 10.200 ppg Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor 1.125 **Environment:**

H2S considered? Surface temperature Bottom hole temperature:

No 75 °F 183 °F

Temperature gradient Minimum section length:

0.85 °F/100ft

Burst:

Design factor

1.00

600 ft

Burst

Max anticipated surface

pressure: Internal gradient: Calculated BHP

6,742 psi 0.000 psi/ft 6,743 psi

No backup mud specified.

Tension:

8 Round STC 8 Round LTC: Buttress:

Premium: Body yield: 180 (J) 1 80 (J) 1 60 (J)

1.50 (J) 1.60 (B)

Tension is based on air weight Neutral point: 10,757 ft Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	12725	5.5	17.00	HCP-110	LT&C	12725	12725	4 767	213352
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	6743	 8580	1 27	6743	10640	1 58	216.3	` 445´	2.06 J

Prepared Don Jennings

Devon Energy

Date: August 20,2008 Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 12725 ft, a mud weight of 10 2 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name Coyote 14 Fed 1

Operator Devon Energy Corporation

String type: Intermediate
AFE No: 127804
Location: 14-T19S-R31E

Design parameters:		Minimum desig	n factors:	Environment:		
Collapse		Collapse:		H2S considered?	No	
Mud weight:	10.000 ppg	Design factor	1.100	Surface temperature:	75 °F	
Design is based on eva	cuated pipe.	· ·		Bottom hole temperature:	113 °F	
J	• •			Temperature gradient:	0.85 °F/100ft	
				Minimum section length:	400 ft	

Burst:

Design factor 1 20

Max anticipated surface pressure: 1,491 psi

Internal gradient 0.372 psi/ft Te Calculated BHP 0.373 psi 8 l

Annular backup: 8 30 ppg

 Tension:
 Nor

 8 Round STC:
 1.80 (J)

 8 Round LTC:
 1.80 (J)

Buttress: 1 60 (J)
Premium. 1.50 (J)
Body yield: 1.60 (B)

Tension is based on air weight.
Neutral point: 3,852 ft

Estimated cost: 116,730 (\$)

Non-directional string.

Re subsequent strings:

Next setting depth: 12,725 ft
Next mud weight: 10 300 ppg
Next setting BHP: 6,809 psi
Fracture mud wt: 13.500 ppg
Fracture depth: 4,525 ft

Injection pressure 4,525 ft 3,173 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
2	4100	9 625	40.00	J-55	Buttress	4100	4100	8.75	102493
1	425	9 625	40.00	HCK-55	Buttress	4525	4525	8.75	14237
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
2 1	2130 2351	2551 4230	1.20 1 80	1491 1248	3950 3950	2.65 3.17	181 17	630 630	3.48 B 37 06 B

Prepared Don Jennings by: Devon Energy

Date August 22,2008 Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 4525 ft, a mud weight of 10 ppg. The casing is considered to be evacuated for collapse purposes Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name.

Coyote 14 Fed 1

Operator:

Devon Energy Corporation

String type

Surface 127804

AFE No Location

14-T19S-R31E

Design parameters: <u>Collapse</u> Mud weight 9 500 ppg Design is based on evacuated pipe.				Minimum design factors: Collapse: Design factor 1.125			Environment: H2S considered? Surface temperature: Bottom hole temperature: Temperature gradient: Minimum section length: 500 ft			
Burst Max	anticipated :	surface		Burst: Design fact	or	1 25	Minimum Dr		2.250 in	
pressure: 333 psi Internal gradient: 0.200 psi/ft Calculated BHP 466 psi No backup mud specified.				Tension: 8 Round STC 1 80 (J) 8 Round LTC: 1 80 (J) Buttress: 1.60 (J) Premium: 1 50 (J)			Non-directional string			
			Body yield. 1.60 (B)			Re subsequent strings: Next setting depth: 4,525 ft				
			Tension is based on air weight. Neutral point· 573 ft			Next mud weight: 10 000 p Next setting BHP: 2,351 p Fracture mud wt: 13.500 p Fracture depth: 665 p Injection pressure 466 p				
Run Seq	Segment Length	Size	Nominal Weight	Grade	End Finish	True Vert Depth	Measured Depth	Drift Diameter	Est. Cost	
1	(ft) 665	(in) 13.375	(lbs/ft) 48 00	H-40	ST&C	(ft) 665	(ft) 665	(in) 12.59	(\$) 20992	
Run	Collapse	Collapse	e Collapse	Burst	Burst	Burst	Tension	Tension	Tension	

Strength

(psi)

1730

Design

Factor

3.71

Load

(kips)

31.9

Prepared Don Jennings by Devon Energy

Date: August 20,2008 Oklahoma City, Oklahoma

Strength

(kips)

322

Design

Factor

10.09 J

Remarks:

Seq

1

Load

(psi)

328

Strength

(psi)

740

Design

Factor

2 25

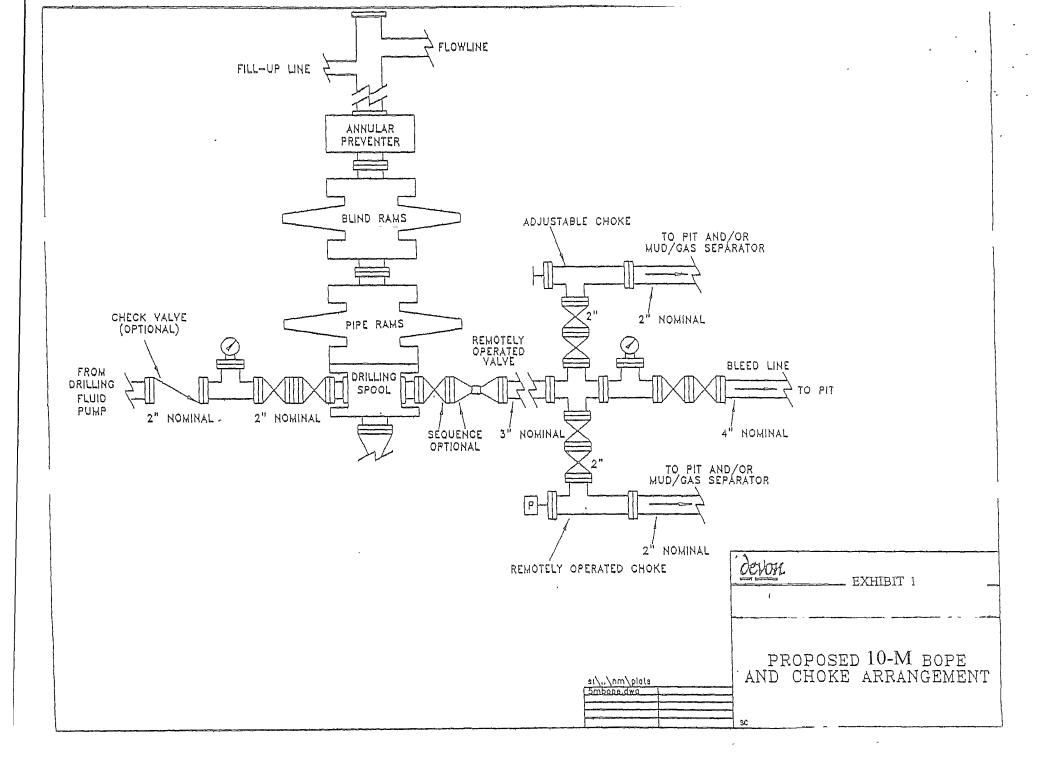
Load

(psi)

466

Collapse is based on a vertical depth of 665 ft, a mud weight of 9 5 ppg. The casing is considered to be evacuated for collapse purposes Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.



devon

SHL:

BHL:

COUNTY:

CATEGORY:

DRILLING PROGNOSIS AFE # 127804

STATE:

COYOTE 14 FED 1 WELL: FIELD:

HACKBERRY UNASSIGNED **DEVELOPMENT WELL - (GAS)**

810' FNL & 1905' FEL

810' FNL & 1905' FEL

Sec. 14-T19S-R31E

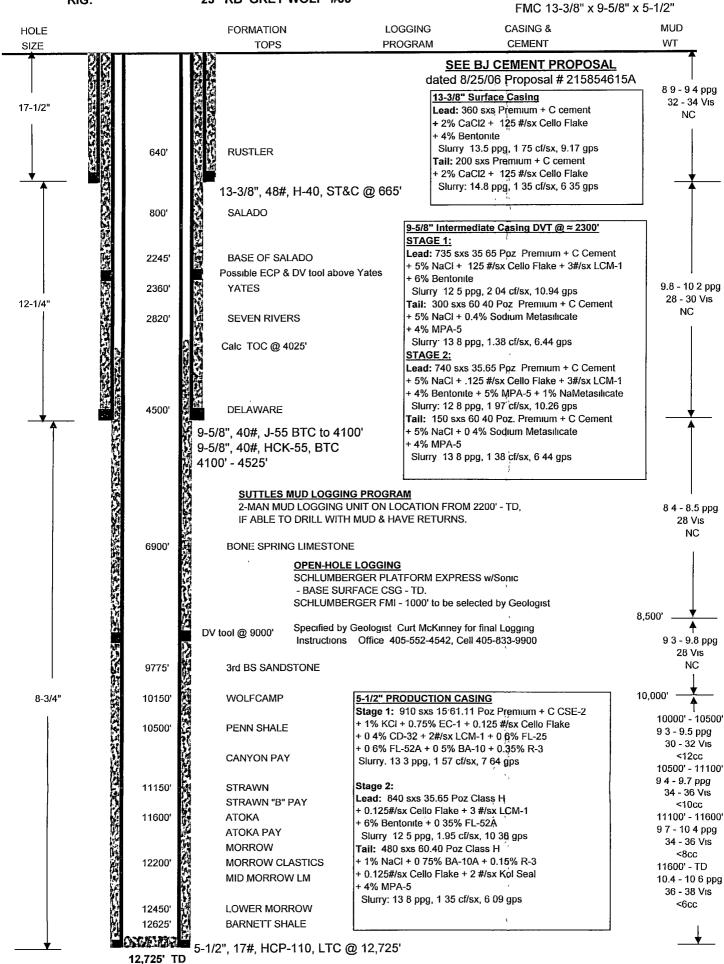
ELEVATION: 3557' GL

EDDY API NO .: **NEW MEXICO** 30-015-35071

BOP: 10000#

3580' KB

23' KB GREY WOLF #33 RIG:



Ysasaga, Stephanie

From:

Ysasaga, Stephanie

Sent:

Wednesday, August 27, 2008 4 22 PM

To:

'Wesley Ingram@blm gov'

Subject:

Coyote 14 Fed 1 NOI - APD Changes & BOP Variance

Attachments: Coyote 14 Fed 1_NOIAPDChgsBOP PDF

Wesley,

I am sure you are swamped, I'm not sure if you are the only person handling sundry notices for APD changes & BOP variances. Attached are the changes for the Coyote 14 Federal 1. The APD was approved almost 2 years ago, so we are changing from 8 5/8" casing to 9 5/8". Revised mud program, cementing report and design parameter factors are included.

Original + 5 copies will be in the mail Fed-Ex tomorrow coming to your attention Thanks \odot

Stephanie A. Ysasaga

Staff Engineering Technician (405)-552-7802 Phone (405)-721-7689 Cell (405)-552-8113 Fax Corporate Tower 03 056 Stephanie Ysasaga@dvn.com

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME: Devon Energy Production Co., LP

LEASE NO.: NMNM-99039 WELL NAME & NO.: Covote 14 Fed 1

SURFACE HOLE FOOTAGE: 0810' FNL & 1905' FEL

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

COUNTY: | Eddy County, New Mexico

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

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

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

⊠ Eddy County

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

- 1. A Hydrogen Sulfide (H2S) Drilling Plan should be activated 500 feet prior to drilling into the **Delaware** formation. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.
- 2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- 3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

B. CASING

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

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

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

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

- 1. The 13-3/8 inch surface casing shall be set at approximately 665 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 - b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.
 - 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:
 - a. First stage to DV tool, cement shall:
 - Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with second stage cement job.

- b. Second stage above DV tool, cement shall:
- Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with second stage cement job.

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.

- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - a. First stage to DV tool, cement shall:
 - Cement to circulate. If cement does not circulate, contact the appropriate BLM office, before proceeding with second stage cement job.
 - b. Second stage above DV tool, cement shall:
 - Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.
- 4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

- d. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
- e. 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. A variance to test the surface casing and BOP/BOPE (entire system) to the reduced pressure of 1000 psi with the rig pumps is approved.

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 easing is run and cemented.

E. DRILL STEM TEST

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

WWI 082808