

OCD-ARTESIA

ATS-11-767

Form 3160-3
(February 2005)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RESUBMITTAL

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

EA 11-994

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-064986
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 Co., LP		7. If Unit or CA Agreement, Name and No
3a. Address: 20 North Broadway OKC, OK 73102		8. Lease Name and Well No. Pacheco 31 Fed Com 9
3b. Phone No. (include area code): (405)-552-7802		9. API Well No. 30-015-39447
4. Location of Well (Report location clearly and in accordance with any State requirements.): At surface: NENW 660' FNL & 1650' FWL At proposed prod zone: NENW 660' FNL & 1650' FWL		10. Field and Pool, or Exploratory: Angel Ranch; Atoka - Morrow
14. Distance in miles and direction from nearest town or post office*: Approximately 15 miles north of Carlsbad, NM.		11. Sec., T R M or Blk and Survey or Area: Sec 31 T19S-R28E
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig unit line, if any): 660'	16. No of acres in lease: 331.60	12. County or Parish: Eddy
17. Spacing Unit dedicated to this well: 331.60	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft: 661'	13. State: NM
19. Proposed Depth: 11,100'	20. BLM/BIA Bond No. on file: CO-1104	
21. Elevations (Show whether DF, KDB, RT, GL, etc): 3409' GL	22. Approximate date work will start*: 08/15/2011	23. Estimated duration: 45 days

24. Attachments

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

- Well plat certified by a registered surveyor
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office)
- Bond to cover the operations unless covered by an existing bond on file (see item 20 above).
- Operator certification
- Such other site specific information and/or plans as may be required by the BLM.

25. Signature: [Signature]	Name (Printed/Typed): Stephanie A. Ysasaga	Date: 06/02/2011
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Title: Sr. Staff Engineering Technician

Approved by (Signature): /s/ Don Peterson

Name (Printed/Typed):

Date:

AUG 29 2011

Title: FIELD MANAGER

Office: CARLSBAD FIELD OFFICE

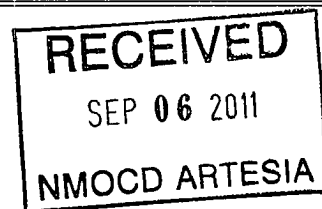
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 USC 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)

K2 09/23/11



Capitan Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVALApproval Subject to General Requirements
& Special Stipulations Attached

DRILLING PROGRAM

Devon Energy Production Company, LP

Pacheco 31 Fed Com 9

Surface Location: 660' FNL & 1650' FWL, Unit C, Sec 31 T19S R28E, Eddy, NM

Bottom hole Location: 660' FNL & 1650' FWL, Unit C, Sec 31 T19S R28E, Eddy, NM

1. Geologic Name of Surface Formation

a. Quaternary

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

a. Alluvium	Surface	
b. Depth to Freshwater	200'	
c. Rustler	80'	
d. Salado	275'	
e. Tansil	410'	
f. Yates	630'	
g. Seven Rivers	960'	
h. Yates/Seven Rivers	1050'	Oil
i. Queen	1550'	
j. San Andres	1650'	
k. Delaware	2725'	Oil
l. Bone Spring Lime	3880'	Oil
m. 3 rd Bone Spring Lime	7100'	Oil
n. 3 rd Bone Spring Ss	8050'	Oil
o. Wolfcamp	8540'	Oil
p. Upper Penn	9050'	Oil
q. Canyon	9250'	Gas/Oil
r. Strawn	9775'	Gas/Oil
s. Atoka	10200'	Gas
t. Morrow	10525'	Gas
u. Middle Morrow Lime	10650'	Gas
v. Lower Morrow	10800'	Gas
w. Barnett Shale	10980'	
x. Total Depth	11100'	

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 400' and circulating cement back to surface. Fresh water sands will be protected by setting 9 5/8" casing at 2850' and circulating cement to surface. The Morrow intervals will be isolated by setting 5 1/2" casing to total depth and circulating cement above the base of the 9 5/8" casing.

3. Casing Program:

<u>Hole Size</u>	<u>Hole Interval</u>	<u>OD Csg</u>	<u>Casing Interval</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
17 1/2"	0' - 400'	13 3/8"	0'-400'	48#/ft	ST&C	H-40
12 1/4"	400'-2850'	9 5/8"	0-2850'	40#/ft	LT&C	J-55
8 3/4"	2850'- 11100'	5 1/2"	0'-11100'	17#/ft	LT&C	HCP-110

Design Parameter Factors:

<u>Casing Size</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
13 3/8"	3.56	4.33	16.78
9 5/8"	1.74	1.39	4.56
5 1/2"	1.35	1.68	2.36

4. Cement Program: (Note: All cement volumes are calculated with 25% excesses.)

- a. 13 3/8" Surface Cement **Lead Slurry:** 345 sacks Premium Plus C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 4% bwoc Bentonite + 81.4% Fresh Water; **Yield:** 1.75 cf/sack. **Tail Slurry:** 200 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.3% Fresh Water; **Yield:** 1.35 cf/sack. **Displacement:** 56.9 bbls Mud @ 9.0 ppg. TOC to surface.
- b. 9 5/8" Intermediate Cement **Lead Slurry:** 700 sacks (35:65) Poz (Fly Ash): Premium Plus C Cement + 5% bwow Sodium chloride + 0.125 lbs/sack Cello Flake + 5 lbs/sack LCM-1 + 6% bwoc bentonite + 95.8% Fresh Water; **Yield:** 1.95 cf/sack. **Tail Slurry:** 250 sacks (60:40) Poz (Fly Ash): Premium Plus C Cement + 5% bwow Sodium chloride + 0.5% bwoc sodium Metasilicate + 4% bwoc MPA-5 + 64.8% Fresh Water; **Yield:** 1.37 cf/sack. **Displacement:** 204.04 bbls Mud @ 9.5 ppg. TOC to surface.
- c. 5 1/2" Production Cement with **Stage 1:**
Cement Slurry: 1000 sacks (15:61:11) Poz (Fly Ash): Premium Plus C Cement: CSE-2 + 0.3% bwoc R-3 + 1% bwow Potassium Chloride + 0.75% bwoc EC-1 + 0.125 lbs/sack Cello Flake + 0.4% bwoc CD-32 + 3 lbs/sack LCM-1 + 0.6% bwoc FL-25 + 0.6 bwoc FL-52A + 72.3% Fresh Water; **Yield:** 1.57 cf/sack.
Displacement: 256.2 bbls Displacement Fluid.
- Stage 2**
Lead Slurry: 715 sacks (35:65) Poz (Fly Ash): Class H Cement + 0.125 lbs/sack Cello Flake + 3 lbs/sack LCM-1 + 6% bwoc bentonite + 0.4% bwoc FL-52A + 99.3% Fresh water; **Yield:** 1.95 cf/sack. **Tail Slurry:** 515 sacks (60:40) Poz (Fly Ash): Class H

Cement + 1% bwow Sodium Chloride + 0.75% bwoc BA-10 + 0.1% woc R-3 + 2 lbs/sack Kol Seal + 4% bwoc MPA-1 + 0.125 lbs/sack Cello Flake + 61.3% Fresh Water; **Yield:** 1.34 cf/sack. **Displacement:** 197.6 bbls Displacement Fluid . DV tool @ 8000'. TOC @ 2350'.

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach approximately 500' above the 9 5/8" casing shoe. All casing is new and API approved.

5. Pressure Control Equipment:

The BOP system used to drill the intermediate hole will consist of a 13-5/8" 3M Triple Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 3M system prior to drilling out the surface casing shoe.

The BOP system used to drill the production hole will consist of a 13-5/8" 5M Triple Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 5M system prior to drilling out the intermediate casing shoe.

The pipe rams will be operated and checked as per Onshore Order No 2. 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 annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 5,000 psi WP.

6. Proposed Mud Circulation System

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>
0' - 400'	8.6-9.4	32-34	NC	Fresh Water-Gel/Lime
400' - 2850'	10	28	NC	Fresh Water
2850' - 9600'	8.6-10	28	NC	Cut Brine
9600' - 11100'	9.4-10.8	32-40	6-10cc	Brine/Brine/Polymer

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 Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- 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.

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

- Drill stem tests will be based on geological sample shows.
- If a drill stem test is anticipated; a procedure, equipment to be used and safety measures will be provided via sundry notice to the BLM.

- c. The open hole electrical logging program will be:
- i. Total Depth to Intermediate Casing: Dual Laterolog-Micro Laterolog with SP and Gamma Ray. Compensated Neutron – Z Density log with Gamma Ray and Caliper.
 - ii. Total Depth to Surface: Compensated Neutron with Gamma Ray
 - iii. No coring program is planned
 - iv. Additional testing will be initiated subsequent to setting the 5 1/2" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

9. Potential Hazards:

- a. No abnormal pressures or temperatures are expected. There is no known presence of H₂S in this area. If H₂S 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 4700 psi and Estimated BHT 180°. No H₂S is anticipated to be encountered.

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 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.

Well name:	Pacheco Fed Com #9
Operator:	Devon Energy
String type:	Surface
Location:	Section 31-19S-28E Eddy Co., NM

Design parameters:
Collapse

Mud weight: 10.000 ppg
Design is based on evacuated pipe.

Minimum design factors:
Collapse:

Design factor 1.100

Burst:

Design factor 1.25

Environment:

H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 79 °F
Temperature gradient: 0.90 °F/100ft
Minimum section length: 350 ft
Minimum Drift: 1.000 in

Burst

Max anticipated surface pressure: 352 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 400 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)
Body yield: 1.60 (B)

Tension is based on air weight.
Neutral point: 341 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 2,850 ft
Next mud weight: 10.000 ppg
Next setting BHP: 1,481 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 400 ft
Injection pressure 400 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 (\$)
1	400	13.375	48.00	H-40	ST&C	400	400	12.59	13071

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	208	740	3.56	400	1730	4.33	19.2	322	16.78 J

Prepared Don Jennings
by: Devon Energy

Date: July 29, 2008
Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 400 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.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	Pacheco Fed Com #9
Operator:	Devon Energy
String type:	Intermediate
Location:	Section 31-19S-28E Eddy Co., NM

Design parameters:
Collapse

Mud weight: 10.000 ppg
Design is based on evacuated pipe.

Minimum design factors:
Collapse:

Design factor 1.100

Burst:

Design factor 1.25

Environment:

H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 101 °F
Temperature gradient: 0.90 °F/100ft
Minimum section length: 350 ft
Minimum Drift: 7.875 in

Burst

Max anticipated surface pressure: 2,508 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,850 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)
Body yield: 1.60 (B)

Tension is based on air weight.
Neutral point: 2,426 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 11,100 ft
Next mud weight: 11.000 ppg
Next setting BHP: 6,343 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,850 ft
Injection pressure 2,850 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 (\$)
1	2850	9.625	40.00	J-55	LT&C	2850	2850	8.75	68186

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	1481	2570	1.74	2850	3950	1.39	114	520	4.56 J

Prepared Don Jennings
by: Devon Energy

Date: July 29, 2008
Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 2850 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.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	Pacheco Fed Com #9
Operator:	Devon Energy
String type:	Production
Location:	Section 31-19S-28E Eddy Co., NM

Design parameters:
Collapse

Mud weight: 11.000 ppg
Design is based on evacuated pipe.

Minimum design factors:
Collapse:

Design factor 1.125

Environment:

H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 180 °F
Temperature gradient: 0.95 °F/100ft
Minimum section length: 350 ft

Burst:

Design factor 1.00

Burst

Max anticipated surface pressure: 5,011 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 6,343 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)
Body yield: 1.60 (B)

Non-directional string.

Tension is based on air weight.
Neutral point: 9,248 ft

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	11100	5.5	17.00	HCP-110	LT&C	11100	11100	4.767	192747

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	6343	8580	1.35	6343	10640	1.68	188.7	445	2.36 J

Prepared Don Jennings
by: Devon Energy

Date: July 29, 2008
Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 11100 ft, a mud weight of 11 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.

Engineering responsibility for use of this design will be that of the purchaser.

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

Pacheco 31 Fed Com 9

Surface Location: 660' FNL & 1650' FWL, Unit C, Sec 31 T19S R28E, Eddy, NM
Bottom hole Location: 660' FNL & 1650' FWL, Unit C, Sec 31 T19S R28E, 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.

DISTRICT I --- CHECKLIST FOR INTENTS TO DRILL

Operator DEVON ENERGY PRODUCTION CO LP OGRID # 6137
 Well Name & # PACHECO 31 FEDERAL COM # 9 Surface Type (F) (S) (P)
 Location: UL C Sect 31, Twnship 19 s, RNG 28 e, Sub-surface Type (F) (S) (P)

A. Date C101 rec'd / / C101 reviewed / /

B. 1. Check mark, Information is OK on Forms:

OGRID X BONDING FED PROP CODE X, WELL # , SIGNATURE

2. Inactive Well list as of: 9 / 23 / 11 # wells 1606 # Inactive wells 4

a. District Grant APD but see number of inactive wells:

No letter required X; Sent Letter to Operator , to Santa Fe

3. Additional Bonding as of: 923 / 11

a. District Denial because operator needs addition bonding:

No Letter required X; Sent Letter to Operator , To Santa Fe

b. District Denial because of Inactive well list and Financial Assurance:

No Letter required X; Sent Letter to Operator , To Santa Fe

C. C102 YES , NO , Signature

1. Pool ANGEL RANCH; A-T-MOR (G), Code 70310

a. Dedicated acreage 320, What Units CDEFKLMN

b. SUR. Location Standard X; Non-Standard Location

c. Well shares acres: Yes , No , # of wells plus this well #

2. 2nd. Operator in same acreage, Yes , No X

Agreement Letter , Disagreement letter

3. Intent to Directional Drill Yes , No X

a. Dedicated acreage , What Units

b. Bottomhole Location Standard , Non-Standard Bottomhole

4. Downhole Commingle: Yes , No X

a. Pool #2 , Code , Acres

Pool #3 , Code , Acres

Pool #4 , Code , Acres

5. POTASH Area Yes , No FED

D. Blowout Preventer Yes X, No

E. H2S Yes X, No

F. C144 Pit Registration Yes , No

G. Does APD require Santa Fe Approval:

1. Non-Standard Location: Yes , No X, NSL #

2. Non-Standard Proration: Yes , No X, NSP #

3. Simultaneous Dedication: Yes , No X, SD #

Number of wells Plus #

4. Injection order Yes , No X; PMX # or WFX #

5. SWD order Yes , NO X; SWD #

6. DHC from SF ; DHC-HOB ; Holding

7. OCD Approval Date / /

API #30-0 15-39447

8. Reviewers