Form 3160-3
(March 2012)

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
SH: NMNM69596; BH: NMNM98247

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.
NMNM94480X

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

8. Lease Name and Well No.
GAUCHO UNIT 20Y (30863)

2. Name of Operator Devon Energy Production Company, L.P. 6137

9. API Well No.
30-025-42778

3a. Address 333 W. Sheridan Ave.
Oklahoma City, OK 73102

3b. Phone No. *(include area code)*
405-552-7848

10. Field and Pool, or Exploratory
WC025-G06-S223421L; Bone Spring 97922

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface 200 FSL & 1475 FWL Unit N PP: 200 FSL & 1500 FWL
At proposed prod. zone 2310 FSL & 1335 FWL Unit K, 20-22S-34E

11. Sec., T. R. M. or Blk. and Survey or Area
29-22S-34E

14. Distance in miles and direction from nearest town or post office*
Approximately 19 miles SW of Eunice, NM

12. County or Parish
Lea County

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. unit line, if any) 200'

16. No. of acres in lease
NMNM96596; 830.64 acres
NMNM98247; 320 acres

17. Spacing Unit dedicated to this well
240 acres

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. See attached map

19. Proposed Depth
MD: 17,499' TVD: 10,313'

20. BLM/BIA Bond No. on file
CO-1104 & NMB-000801

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3,430.4' GL

22. Approximate date work will start*
07/01/2014

23. Estimated duration
25 days

24. Attachments To Be Pad Drilled w/ Gaucho Unit 21H

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

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

25. Signature Trina C. Couch
Name *(Printed/Typed)* Trina C. Couch
Date 09/08/2015

Title Regulatory Analyst

Approved by *(Signature)* for Stephen Caffey
Name *(Printed/Typed)* Edward Fernandez
Date 9/9/2015

Title Petroleum Eng.
Office CFO

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.

(Continued on page 2)

*(Instructions on page 2)

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

KZ 09/09/15

SEE ATTACHED FOR CONDITIONS OF APPROVAL

E-Perm KZ

SEP 09 2015

Gaucho Unit 20Y – APD DRILLING PLAN

Casing and Cementing Plan Summary

The surface fresh water sands will be protected by setting 13 3/8" casing and circulating cement back to surface. The fresh water sands will be protected by setting 9 5/8" casing and circulating cement to surface. The Delaware intervals will be isolated by setting 5 ½" casing to total depth and circulating cement above the base of the 9 5/8" casing. All casing is new and API approved.

Casing program:

Hole Size	Hole Interval	Casing OD	Casing interval	Casing Wt (ppf)	Connection	Casing Grade
17-1/2"	0 – 2,225'	13-3/8"	0 – 2,225'	54.5	BTC	J-55
12-1/4"	0-4,300'	9-5/8"	0-5,225'	40	BTC	J-55
12-1/4"	4,300'-5,225'	9-5/8"	0 – 5,225'	40	BTC	HCK-55
8-3/4"	5,225' - 17,499'	5-1/2"	0 - 17,901'	17	BTC	P-110

Design factors:

Casing	Collapse	Burst	Tension
13-3/8" J-55 BTC	1.49	3.71	5.55
9-5/8" J-55 BTC	1.15	3.43	4.69
9-5/8" HCK-55 BTC	1.43	2.03	5.76
5-1/2" P-110 BTC	1.74	2.38	1.87

Mud program:

Depth	Mud Wt. (ppg)	Visc. (cp)	Fluid loss	Type System
0 – 2,225'	8.4 - 8.6	1 - 3	NC	Fresh water
2,225' – 5,225'	9.8 - 10.0	1 - 3	NC	Brine
5,225' - 17,499'	8.8 - 9.2	1 - 3	NC-12	Fresh water/cut brine

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

Pressure control equipment:

- The BOP system used to drill the intermediate hole will consist of a 13-5/8" 3M Double 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" 3M Double 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 intermediate casing shoe.
- The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 3,000 psi WP.
- Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line). The line will be kept as straight as possible with minimal turns.

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.

Anticipated Starting Date and Duration of Operations:

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon as a rig becomes available following BLM approval. Move in operations and drilling is expected to take 32 days.

Location and Types of Water Supply:

This location will be drilled using a combination of water mud systems (outlined in the Drilling Program). The water will be obtained from commercial water stations in the area and hauled to location by transport truck using the existing and proposed roads shown in the C-102. On occasion, water will be obtained from a pre-existing water well, running a pump directly to the drill rig. In these cases where a poly pipeline is used to transport water for drilling purposes, proper authorizations will be secured. If a poly pipeline is used, the size, distance, and map showing route will be provided to the BLM via sundry notice.

Methods of Handling Waste Material:

- Drill cuttings will be disposed of in a closed loop system.
- 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.
- The supplier will pick up salts remaining, including broken sacks, after completion of well.
- 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.
- Remaining drilling fluids will be sent to a closed loop system.
- Disposal of fluids to be transported by the following companies:
- American Production Service Inc, Odessa TX
- Gandy Corporation, Lovington NM
- I & W Inc, Loco Hill NM
- Jims Water Service of Co Inc, Denver CO

Casing	# Sks	Wt. lb/ gal	H2O gal/sk	Yld ft3/ sack	500# Comp. Strength (hours)	Slurry Description
13-3/8" Surface	1300	12.9	9.81	1.85	14	Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake
	550	14.8	6.32	1.33	6	Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
13-3/8" Surface Two Stage Option	700	12.9	9.81	1.85	14	1st Stage Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake
	550	14.8	6.32	1.33	6	1st Stage Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
9-5/8" Inter.	1040	12.9	9.81	1.85	14	Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake
	430	14.8	6.32	1.33	6	Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
9-5/8" Inter. Two Stage	280	12.9	9.81	1.85	14	1st Stage Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake
	220	14.8	6.32	1.33	6	1st Stage Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
	DV Tool = 3800ft					
	760	12.9	9.81	1.85	14	2nd Stage Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake
	210	14.8	6.32	1.33	6	2nd Stage Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
5-1/2" Prod Single Stage	660	11.9	12.89	2.31	n/a	Lead: (50:50) Class H Cement: Poz (Fly Ash) + 10% BWOC Bentonite + 1 lb/sk of Kol-Seal + 0.3% BWOC HR-601 + 0.5lb/sk D-Air 5000
	2010	14.5	5.31	1.2	25	Tail: (50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite
5-1/2" Prod Two Stage	630	11.9	12.89	2.31	n/a	1st Stage Lead: (50:50) Class H Cement: Poz (Fly Ash) + 10% BWOC Bentonite + 1 lb/sk of Kol-Seal + 0.3% BWOC HR-601 + 0.5lb/sk D-Air 5000
	2010	14.5	5.31	1.2	25	1st Stage Tail: (50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite
	DV Tool = 5275ft					
	20	11	14.81	2.55	22	2nd Stage Lead: Tuned Light® Cement + 0.125 lb/sk Pol-E-Flake
	30	14.8	6.32	1.33	6	2nd Stage Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake

DV tool depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

Casing String	TOC	% Excess
13-3/8" Surface	0'	100%
13-3/8" Surface – Two Stage Option	1st Stage = 800' / 2nd Stage = 0'	100%
9-5/8" Intermediate	0'	75%
9-5/8" Intermediate Two Stage Option	0'	75%
5-1/2" Production Casing Single Stage Option	5025'	25%
5-1/2" Production Casing Two Stage Option	1st Stage = 5275ft / 2nd Stage = 5025'	25%

Notes:

- Cement volumes Surface 100%, Intermediate 75% and Production based on at least 25% excess
- Actual cement volumes will be adjusted based on fluid caliper or caliper log data