Form 3160-5 (August 2007)

# UNITED STATES

OCD Artesia | FORM APPROVED

D	OMB NO. 1004-0135 Expires: July 31, 2010						
BUREAU OF LAND MANAGEMENT  SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill or to re-enter an					5. Lease Serial No. NMNM97120		
Do not use the abandoned we	6. If Indian, Allottee or Tribe Name						
SUBMIT IN TR		7. If Unit or CA/Agreement, Name and/or No.					
Type of Well	her	,		8. Well Name and No BO DUKE FED 5		<del></del>	
Name of Operator     DEVON ENERGY PRODUCT	Contact:	LINDA GOC	<sup>'</sup> D		9. API Well No. 30-015-42693-	00-X1	
3a. Address 333 WEST SHERIDAN AVE OKLAHOMA CITY, OK 7310	2	3b. Phone No Ph: 405.5	No. (include area code) 10. Field and Pool, WILDCAT			r Exploratory	
4. Location of Well (Footage, Sec.,	T., R., M., or Survey Description	1)			11. County or Parish, and State		
Sec 5 T23S R26E SWSE 175 32.326813 N Lat, 104.313473			•		EDDY COUNTY, NM		
12. CHECK APP	ROPRIATE BOX(ES) TO	O INDICATI	E NATURE OF	NOTICE, R	EPORT, OR OTHE	ER DATA	
TYPE OF SUBMISSION	·		ТҮРЕ О	F ACTION			
<ul><li>☑ Notice of Intent</li><li>☐ Subsequent Report</li><li>☐ Final Abandonment Notice</li></ul>	☐ Fracture Treat ☐ F ☐ New Construction ☐ F ☐ Plug and Abandon ☐ T		☐ Reclam ☐ Recomp ☐ Tempor	Reclamation Well Recomplete St Other		Shut-Off ntegrity Original A	
13. Describe Proposed or Completed Op If the proposal is to deepen direction Attach the Bond under which the wo following completion of the involver testing has been completed. Final Addetermined that the site is ready for for ATTENTION: JENNIFER MASSIMENT OF THE PROPUCT	ally or recomplete horizontally, rk will be performed or provide to operations. If the operation rebandonment Notices shall be file inal inspection.)  SON  TON CO., L.P. RESPECT	give subsurface the Bond No. o sults in a multip ed only after all	locations and meast in file with BLM/BI/ le completion or recor- requirements, included UESTS PERMIS	ired and true ve A. Required sul impletion in a reling reclamation	ortical depths of all perti- psequent reports shall be new interval, a Form 310 n, have been completed,	nent markers are filed within 360-4 shall be fil and the operate	nd zones. O days led once or has
BO DUKE FED 5 3H WELL. 9100'. WE WILL CEMENT TH SLURRY YIELD OF 1.198FT3	IT WAS ORIGINALLY PE HE PILOT HOLE BACK TO	RMITTED AT	6650' AND WE 48' WITH 1208 S	WOULD LIF SXS OF 15.6	(E TO CHANGE IT S LBM/GAL CEMEN	TO IT.	
revised drilling plan a Original COA	s Still Sta	nd.	Accer	oted for NMOC	rece <b>nim oil</b> 10 ART 11-14. NO	CONSER ESIA DISTRI V 07 201	CT
,					RI	ECFIVED	· ·
14. I hereby certify that the foregoing is  Com  Name(Printed/Typed) LINDA GO	#2 Electronic Submission For DEVON ENERG mitted to AFMSS for proces	Y PRODUCTI	ON CO LP, sent to NIFER MASON on	to the Carlsb	ad 15JAM0059SE)	· ·	
Signature (Electronic S	Date 11/05/2	A	PPROVED				
,	THIS SPACE FO	R FEDERA	L OR STATE	FFICE US	Land C Start	M	$\overline{\chi}$
Approved By			Title	1	MUV JEGIL	/ Balan	
Conditions of approval, if any, are attached certify that the applicant holds legal or equivalent would entitle the applicant to conduct the applicant the appl	itable title to those rights in the	Office	BUREA CAI	U OF LAND MANAGE RLSBAD, FIELD OFFI	MENT CE	- 1	

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfally 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.

# Devon Energy Production Company, L.P./Bo Duke Fed 5/3H

# 1. Geologic Name of Surface Formation: Rustler

# 2. Estimated Tops of Geological Markers & Depths of Anticipated FW, Oil, or Gas:

a.	Fresh Water	300′			
b.	Salado	500′		Barrei	า
c.	Salado Base	1159'		Barrei	า
d.	Lamar	1580′		Oil	
e.	Delaware	1777'		Oil	
f.	Cherry Canyon	2599′	•	Oil	
g.	Brushy Canyon	3491′		Oil	
h.	Bone Spring Lm	4978'		Oil	
i.	1 <sup>st</sup> Bone Spring SS	5782′		Oil ·	
j.	2 <sup>nd</sup> Bone Spring Lime	5999′		Oil	
k.	2 <sup>nd</sup> Bone Spring SS	6282'		Oil	
i. <	3 <sup>rd</sup> Bone Spring Lime	6488′		Oil	
m.	3 <sup>rd</sup> Bone Spring SS	8077'		Oil	
n.	Wolfcamp	8630'		Qil	٠
	Total Depth	6464' TVD	11163′	MD	9100' PH

Drilling Plan

### 3. Pressure Control Equipment:

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the surface casing shoe. The BOP system used to drill the intermediate hole will be tested per BLM Onshore Oil and Gas Order 2.

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the intermediate casing shoe. The BOP system used to drill the production hole will be tested per BLM Onshore Oil and Gas Order 2.

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.

See COPT 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. 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.

#### 4. Casing Program:

Hole Size	Hole Interval	Casing OD	Casing Interval	Weight (lb/ft)	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
17-1/2"	0 - 450'	13-3/8"	0 - 450′	48	STC	H-40	3.66	8.21	14.91
12-1/4"	450-1780'	9-5/8"	0-1780′	40	LTC	J-55	2.78	4.27	7.30
8-3/4"	1780-5290′	5-1/2"	0-5290′	17	LTC	P-110	3.10	3.84	4.42
8-3/4"	5290-111,63′	5-1/2"	5290-11163'	17	ВТС	P-110	2.82	3.49	6.37

#### **Casing Notes:**

- An 8-3/4" pilot hole will be drilled to 9100' and plugged back to KOP (for volumes and TOC see cement table)
- All casing is new and API approved

Maximum Lateral TVD: 6505'

### 5. Proposed mud Circulations System:

Depth	Mud Weight	Viscosity	Fluid Loss	Type System	
0-450′	8.4-9.0	30-34	. N/C	FW	
450-1780'	10.0	28-32	N/C	Brine	
1780-11163′	8.6-9.0	28-32	N/C	FW .	

The necessary mud products for weight addition and fluid loss control will be on location at all times. Visual mud monitoring equipment will be in place to detect volume changes indicating loss or gain of circulating fluid volume. If abnormal pressures are encountered, electronic/mechanical mud monitoring equipment will be installed.

## **Cementing Table:**

String	Number of sx	Weight lbs/gal	Water Volume g/sx	Yield cf/sx	Stage; Lead/Tail	Slurry Description
13-3/8" Surface	500	14.8	6.32	1.33	Tail	Class C Cement + 63.5% Fresh Water
9-5/8" Intermediate Single Stage	430	12.9	9.81	1.85	Lead	(65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 70.9 % Fresh Water
	220	14.8	6.32	1.33	Tail	Class C Cement + 63.5% Fresh Water
	160	12.9	9.81	1.85	Lead	(65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 70.9 % Fresh Water
9-5/8" Intermediate 2-Stage	220	14.8	6.32	1.33	Tail	Class C Cement + 63.5% Fresh Water
2-3tage Option	$O(17-1) \odot 3700$					
	260	14.8	6.32	1.33	Tail	Class C Cement + 63.5% Fresh Water
Pilot Hole Plug Back	1300	15.6	5.39	1.19	Plug Cement	Class H Cement + 0.2% Halad-9 + 0.2% HR-601 + 60.5 % Fresh Water
5-1/2" Production	560	11.0	15.23	2.71	Lead	Tuned Light Blend + 0.125 lb/sk Pol-E-Flake + 76.3% Fresh Water
Casing Single Stage	1350	14.5	5.38	1.22	Tail	(50:50) Class H Cement: Poz (Fly Ash) + 1 lb/sk Sodium Chloride + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water
	250	12.5	10.86	1.96	Lead	(65:35) Class H Cement: Poz (Fly Ash) + 6% BWOC Bentonite + 0.25% BWOC HR-601 + 0.125 lbs/sack Poly- E-Flake + 74.1 % Fresh Water
5-1/2" Production Casing	1350	14.5	5.38	1.22	Tail	(50:50) Class H Cement: Poz (Fly Ash) + 1 lb/sk Sodium Chloride + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water
2-Stage	DV Tool @ 4500ft					
Option	170	11.9	12.89	2.26	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 + 76.4% Fresh Water
	120	14.8	6.32	1.33	Tail	Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water



## **TOC for all Strings:**

Surface

Intermediate

Production

0'

0' .

1280'

Drilling Plan

#### Notes:

- Cement volumes Surface 100%, Intermediate 75%, Pilot 10% and Production based on at least 25% excess
- Actual cement volumes will be adjusted based on fluid caliper and caliper log data
- If lost circulation is encountered while drilling the production and/or the intermediate wellbores, a DV tool will be installed a minimum of 50' below the previous casing shoe and of 200' above the current shoe. If the DV tool has to be moved, the cement volumes will be adjusted proportionately..

#### 7. Logging, Coring, and Testing Program:

- a. Drill stem tests will be based on geological sample shows.
- b. If a drill stem test is anticipated, a procedure, equipment to be used, and safety measures will be provided via sundry notice to the BLM.
- c. Resistivity and porosity logs are planned below the intermediate casing point. Stated logs run will be named in the Completion Report and submitted to the BLM.
- d. No coring program is planned
- e. Additional Testing will be initiated subsequent to setting the production casing. Specific intervals will be targeted based on log evaluation, geological sample shows, and drill stem tests.

#### 8. Potential Hazards:

- a. No abnormal pressures or temperatures are expected. There is no known presence of H2S in this area, and none is anticipated to be encountered. 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 being used to drill this well. Estimated BHP: 2257 psi, and estimated BHT: 140 degrees.
- b. Hydrogen Sulfide detection equipment will be in operation after drilling out the surface casing shoe until the production casing is cemented. Breathing equipment will be on location upon drilling the surface casing shoe until total depth is reached.

#### 9. 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.