Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

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 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
NMNM0560289

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
BURTON FLAT DEEP UNIT 57H

2. Name of Operator
DEVON ENERGY PRODUCTION CO.LP
Contact: TRINA C COUCH
E-Mail: trina.couch@dvn.com

9. API Well No.
30-015-40829

3a. Address
DEVON ENERGY PRODUCTION CO.LP 333 WEST SHERIDAN AVE
OKLAHOMA CITY, OK 73102-5015

3b. Phone No. (include area code)
Ph: 405-228-7203

10. Field and Pool, or Exploratory
WILDCAT;BONE SPRING,EAST

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 2 T21S R27E 1670FSL 50FWL

11. County or Parish, and State
EDDY COUNTY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original APD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations 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 requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Devon Energy Production Company, L.P. respectfully requests to add a pilot hole to the subject well.

Please see Attachment:
Drilling Plan

WDade 8/21/13
Accepted for record
NMOCD

Original Conds Still Stand.
Pilot hole may need additional cement as excess calculates to -5%. Tag and note Top on subsequent sundry.

RECEIVED
AUG 21 2013
NMOCD ARTESIA

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

Electronic Submission #216948 verified by the BLM Well Information System
For DEVON ENERGY PRODUCTION CO.LP, sent to the Carlsbad
Committed to AFMSS for processing by JOHNNY DICKERSON on 08/15/2013 ()

Name *(Printed/Typed)* TRINA C COUCH — Title REGULATORY ASSOCIATE

Signature (Electronic Submission) — Date 08/13/2013

APPROVED
AUG 20 2013
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____ Title _____ Date _____

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

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.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

Burton Flat Deep Unit 57H – 4 String APD DRILLING PLAN
Sec 03-27S-31E
06.19.12 KKS
Revised 10-9-2012 (added Pilot hole)

see original API

Casing Program

Hole Size	Hole Interval	OD Csg	Casing Interval	Weight	Collar	Grade
26"	0 – ~~200~~ 280'	20"	0 – ~~200~~	94#	BTC	J/K-55
17-1/2"	~~200~~ – 750	13-3/8"	0 – 750	48#	~~STC~~	H-40
12-1/4"	750 –2,700	9-5/8"	0 – 2,700	40#	LTC	J-55
8-3/4"	2,700 – 5,800	5-1/2"	0 – 5,800	17#	LTC	HCP-110
8-3/4"	5,800 – 11,369	5-1/2"	5,800 – 11,369	17#	~~BTC~~	HCP-110

Max TVD in lateral: 6,566-ft

An 8-3/4"pilot hole will be drilled to 6,882 ft, and plugged back to KOP with approx 300 sxs Class H, 15.6 ppg, 1.18 cf/sk cement. 5993' KOP

Casing Size	Collapse Design Factor	Burst Design Factor	Tension Design Factor
20" 94# J-55 BTC	5.55	22.5	7.46
13-3/8" 48# H-40 STC	1.97	4.44	8.94
9-5/8" 40# J-55 LTC	2.03	3.13	4.81
5-1/2" 17# HCP-110 LTC	2.43	3.46	2.30
5-1/2" 17# HCP-110 BTC	2.75	3.92	6.96

The maximum possible collapse load that the intermediate casing will experience will result from evacuated casing with the pore pressure exerting a collapse load at TD. There is no potential for the intermediate casing to be used as a production string.

Mud Program:

Depth	Mud Wt.	Visc.	Fluid Loss	Type System
0 – ~~200~~ 280'	8.4 – 9.0	30 – 34	N/C	FW
~~200~~ – 750	9.8 – 10.0	28 – 32	N/C	Brine
750 – 2,700	8.4 – 9.0	28 – 30	N/C	FW
2,700– 11,369	8.6 – 9.0	28 – 32	N/C-12	FW

Pressure Control Equipment:

The BOP system used to drill the **17-1/2"** hole will consist of a **20" 2M Annular preventer**. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a **2M system** prior to drilling out the casing shoe.

The BOP system used to drill the **12-1/4" and 8-3/4"** holes 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 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 **3,000 psi WP**.

Cementing Program (volumes based on at least 25% excess):

20" Surface

FLUID SPECIFICATIONS

Spacer — 20.0 bbls Fresh Water @ 8.34 ppg

FLUID	VOLUME CU-FT		VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Cement Slurry	682	/	1.35	= 510 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.3% Fresh Water

Displacement — 56.8 bbls Mud @ 9 ppg

CEMENT PROPERTIES

	SLURRY NO.1
Slurry Weight (ppg)	14.80
Slurry Yield (cf/sack)	1.35
Amount of Mix Water (gps)	6.35
Estimated Pumping Time - 70 BC (HH:MM)	2:30
COMPRESSIVE STRENGTH	
8 hrs @ 80 ° F (psi)	500
12 hrs @ 80 ° F (psi)	865
24 hrs @ 80 ° F (psi)	1475
72 hrs @ 80 ° F (psi)	2700

13-3/8" Intermediate

FLUID SPECIFICATIONS

Spacer — 20.0 bbls Fresh Water @ 8.34 ppg

FLUID	VOLUME CU-FT		VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Lead Slurry	725	/	1.75	= 415 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 4% bwoc Bentonite + 81.4% Fresh Water
Tail Slurry	450	/	1.35	= 335 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.3% Fresh Water

Displacement — 125.0 bbls Mud @ 9 ppg

CEMENT PROPERTIES

	SLURRY NO.1	SLURRY NO.2
Slurry Weight (ppg)	13.50	14.80
Slurry Yield (cf/sack)	1.75	1.35
Amount of Mix Water (gps)	9.17	6.35
Estimated Pumping Time - 70 BC (HH:MM)	3:30	2:30
COMPRESSIVE STRENGTH		
8 hrs @ 80 ° F (psi)		500
12 hrs @ 80 ° F (psi)	400	865
15 hrs @ 80 ° F (psi)	500	
24 hrs @ 80 ° F (psi)	700	1475
72 hrs @ 80 ° F (psi)		2700

9-5/8" Intermediate

FLUID SPECIFICATIONS

Spacer — 10.0 bbls Fresh Water @ 8.34 ppg

FLUID	VOLUME CU-FT		VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Lead Slurry	1212	/	1.73	= 700 sacks (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 3 lbs/sack LCM-1 + 1% bwoc Sodium Metasilicate + 89.7% Fresh Water
Tail Slurry	413	/	1.38	= 300 sacks (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.4% bwoc Sodium Metasilicate + 4% bwoc MPA-5 + 65.5% Fresh Water

Displacement — 201.7 bbls Mud @ 10 ppg

CEMENT PROPERTIES

	SLURRY NO.1	SLURRY NO.2
Slurry Weight (ppg)	12.60	13.80
Slurry Yield (cf/sack)	1.73	1.38
Amount of Mix Water (gps)	8.82	6.44
Estimated Pumping Time - 70 BC (HH:MM)	4:00	2:30
COMPRESSIVE STRENGTH		
12 hrs @ 90 ° F (psi)	270	
24 hrs @ 90 ° F (psi)	875	
72 hrs @ 90 ° F (psi)	1625	
7 hrs @ 112 ° F (psi)		500
24 hrs @ 112 ° F (psi)		1900
72 hrs @ 112 ° F (psi)		2700

FLUID SPECIFICATIONS

Spacer — 50.0 bbls Fresh Water @ 8.34 ppg

FLUID	VOLUME CU-FT		VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
1st Lead Slurry	1418	/	2.3	= 615 sacks (50:50) Poz (Fly Ash):Class H Cement + 0.5% bwoc FL-52 + 0.15% bwoc ASA-301 + 10% bwoc Bentonite + 0.3% bwoc R-21 + 130.5% Fresh Water
Lead Slurry	834	/	2	= 415 sacks (35:65) Poz (Fly Ash):Class H Cement + 3% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.7% bwoc FL-52 + 6% bwoc Bentonite + 105.4% Fresh Water
Tail Slurry	1827	/	1.28	= 1430 sacks (50:50) Poz (Fly Ash):Class H Cement + 5% bwow Sodium Chloride + 0.3% bwoc CD-32 + 0.5% bwoc FL-25 + 0.5% bwoc FL-52 + 0.5% bwoc Sodium Metasilicate + 57.3% Fresh Water

Displacement — 271.0 bbls Displacement Fluid

CEMENT PROPERTIES

	SLURRY NO.1	SLURRY NO.2	SLURRY NO.3
Slurry Weight (ppg)	11.80	12.50	14.20
Slurry Yield (cf/sack)	2.30	2.00	1.28
Amount of Mix Water (gps)	13.15	10.99	5.77
Estimated Pumping Time - 70 BC (HH:MM)	5:00	5:00	4:30
Free Water (mls) @ ° F @ 90 ° Angle			0.0
Fluid Loss (cc/30min) at 1000 psi and ° F			50.0
COMPRESSIVE STRENGTH			
12 hrs @ 130 ° F (psi)	150		
24 hrs @ 130 ° F (psi)	250		
72 hrs @ 130 ° F (psi)	350		
12 hrs @ 132 ° F (psi)		175	250
24 hrs @ 132 ° F (psi)		250	1500
72 hrs @ 132 ° F (psi)		700	2000

TOC for All Strings:

Surface:	0 ft
Intermediate 1:	0 ft
Intermediate 2:	0 ft
Production:	600' ft (approx 200 ft above reef top)

ACTUAL CEMENT VOLUMES WILL BE ADJUSTED BASED ON FLUID CALIPER AND CALIPER LOG DATA.