Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

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 page 2

5. Lease Serial No.
NMNM114988

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.
SEAWOLF 1-12 FED 102H

2. Name of Operator
DEVON ENERGY PRODUCTION COMPAN

Contact: REBECCA DEAL
Mail: Rebecca.Deal@dvn.com

9. API Well No.
30-025-43791

3a. Address
333 WEST SHERIDAN AVENUE
OKLAHOMA CITY, OK 73102

3b. Phone No. (include area code)
Ph: 405-228-8429

HOBBS OCD

10. Field and Pool or Exploratory Area
WC-025 G-09 S253336D;U WC

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 1 T26S R33E NWNW 200FNL 420FWL

JUL 24 2017

RECEIVED

11. County or Parish, State
LEA COUNTY, NM

12. CHECK THE 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	☐ Hydraulic Fracturing	☐ 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 must 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 must be filed once testing has been completed. Final Abandonment Notices must 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 respectfully requests the following changes to the original APD:

? Casing change from a 17.5? hole with 13 3/8? casing to a 14.75? hole with 10.75? casing.

? Utilize a spudder rig to pre-set surface casing.

Please see attached drilling plan and description of spudder rig operations.

APPROVED
JUL 11 2017
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

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

Electronic Submission #379557 verified by the BLM Well Information System
For DEVON ENERGY PRODUCTION COMPAN, sent to the Hobbs
Committed to AFMSS for processing by DEBORAH MCKINNEY on 06/30/2017 ()

Name *(Printed/Typed)* REBECCA DEAL — Title REGULATORY COMPLIANCE PROFESSI

Signature (Electronic Submission) — Date 06/22/2017

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By Teungku Muchlis Krueng — Title PETROLEUM ENGINEER — Date JUL 13 2017

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

ACCEPTED FOR RECORD
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD 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.

(Instructions on page 2)

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

2. Casing Program

Hole Size	Casing Interval		Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
	From	To							
14.75"	0	1,000'	10.75"	40.5	J-55	STC	1.125	1.25	1.6
8.75"	0	12,433'	7.625"	29.7	P110	Flushmax III	1.125	1.25	1.6
6.75"	0	23,182'	5.5"	20	P110	SF/Flush	1.125	1.25	1.6

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed.

A variance is requested to wave the centralizer requirement for the 7-5/8" flush casing in the 8-3/4" hole and the 5-1/2" SF/Flush casing in the 6-3/4" hole.

1. Cementing Program

Casing	# Sks	Wt. lb/ gal	H_2O gal/sk	Yld ft3/ sack	Slurry Description
10-3/4" Surface	623	14.8	6.34	1.34	Tail: Class C Cement + 1% Calcium Chloride
7-5/8" Int	368	9	13.5	3.27	Lead: Tuned Light® Cement
	483	14.5	5.31	1.2	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
7-5/8" Int Two Stage	122	10.9	20.6	3.31	1st Stage Lead: (50:40:10) Class C: Silicalite: Enhancer 923 + 10% BWOC Bentonite + 0.05% BWOC SA-1015 + 0.3% BWOC HR-800 + 0.2% BWOC FE-2 + 0.125 lb/sk Pol-E-Flake + 0.5 lb/sk D-Air 5000
	483	14.5	5.31	1.2	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
	225	10.9	20.6	3.31	2nd Stage Lead: (50:40:10) Class C: Silicalite: Enhancer 923 + 10% BWOC Bentonite + 0.05% BWOC SA-1015 + 0.3% BWOC HR-800 + 0.2% BWOC FE-2 + 0.125 lb/sk Pol-E-Flake + 0.5 lb/sk D-Air 5000
	30	14.8	6.32	1.33	2nd Stage Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
5-1/2" Inter.	846	14.8	6.32	1.33	Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake

If a DV tool is used, 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
10-3/4" Surface	0'	50%
7-5/8" Intermediate	0'	30%
7-5/8" Intermediate Two Stage Option	1St Stage = 4900' / 2nd Stage = 0'	30%
5-1/2" Production Casing	12,233'	25%

8. Other facets of operation

Is this a walking operation? Yes

1. In the event the spudder rig is unable to drill the surface holes the drilling rig will batch drill the surface holes and run/cement surface casing; walking the rig to next wells on the pad.
2. The drilling rig will then batch drill the intermediate sections with either OBM or cut brine and run/cement intermediate casing; the wellbore will be isolated with a blind flange and pressure gauge installed for monitoring the well before walking to the next well.
3. The drilling rig will then batch drill the production hole sections on the wells with OBM, run/cement production casing, and install TA caps or tubing heads for completions.

NOTE: During batch operations the drilling rig will be moved from well to well however, it will not be removed from the pad until all wells have production casing run/cemented.

Will be pre-setting casing? Yes

1. Spudder rig will move in and drill surface hole.
    a. Rig will utilize fresh water based mud to drill 14 ¾" surface hole to TD. Solids control will be handled entirely on a closed loop basis.
2. After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
3. The wellhead will be installed and tested once the 10 ¾" surface casing is cut off and the WOC time has been reached.
4. A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
5. Spudder rig operations is expected to take 4-5 days per well on a multi well pad.
6. The NMOCD will be contacted and notified 24 hours prior to commencing spudder rig operations.
7. Drilling operations will be performed with the drilling rig. At that time an approved BOP stack will be nippled up and tested on the wellhead before drilling operations commences on each well.
    a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

All previous COA still apply except the following:

The **10 3/4** inch surface casing shall be set at approximately **1000** feet **(in a competent bed below the Magenta Dolomite, which is a Member of the Rustler, and if salt is encountered, set casing at least 25 feet 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 surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

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.

10 3/4	surface csg in a		14 3/4	inch hole.		Design Factors		SURFACE	
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	Weight
"A"	40.50		J 55	ST&C	10.37	3.58	0.59	1,000	40,500
"B"								0	0
w/8.4#/g mud, 30min Sfc Csg Test psig:	1,500			Tail Cmt	does	circ to sfc.		Totals:	1,000	40,500

Comparison of Proposed to Minimum Required Cement Volumes

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
14 3/4	0.5563	623	835	582	43	8.50	2797	3M	1.50

Burst Frac Gradient(s) for Segment(s) A, B = 3.13, b All > 0.70,
#N/A

9 5/8	casing inside the		10 3/4			Design Factors		INTERMEDIATE	
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	Weight
"A"	40.00		P 110	BUTT	2.80	1.2	1.19	11,300	452,000
"B"								0	0
w/8.4#/g mud, 30min Sfc Csg Test psig:							Totals:	11,300	452,000

The cement volume(s) are intended to achieve a top of 0 ft from surface or a 1000 overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
12 1/4	0.3132	2170	4435	#N/A	#N/A	9.00	4623	5M	1.31

Class 'H' tail cmt yld > 1.20 MASP is within 10% of 5000psig, need
*Assumed 1/3 fluid filled for collapse calculation

Tail cmt

5 1/2	casing inside the		9 5/8			Design Factors		PRODUCTION	
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	Weight
"A"	20.00		P 110	BUTT	2.44	1.53	1.68	12,634	252,680
"B"	20.00		P 110	BUTT	8.04	1.37	1.68	10,548	210,960
w/8.4#/g mud, 30min Sfc Csg Test psig:	2,779						Totals:	23,182	463,640
B would be:					61.53	1.47	if it were a vertical wellbore.		

No Pilot Hole Planned

MTD	Max VTD	Csg VD	Curve KOP	Dogleg°	Severity°	MEOC
23182	13155	13155	12634	90	10	13534

The cement volume(s) are intended to achieve a top of 11100 ft from surface or a 200 overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
8 3/4	0.2526	2664	3357	3059	10	11.00			1.35