Form 3160-5 (June 2015)

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

BSR Artesia

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

Lease Serial No

NMNM22080

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 L CONSERVAGIL Hidian, Allottee or Tribe Name <u>ARTESIA DISTRI</u>QT 7. If Unit or CA/Agreement, Name and/or No. SUBMIT IN TRIPLICATE - Other instructions on page 2 AN 31 1. Type of Well 8. Well Name and No. TOMB RAIDER 12-1 FED 516H ☑ Oil Well ☐ Gas Well ☐ Other SECEIVED 2. Name of Operator Contact: JENNIFER HARMS 9. API Well No. DEVON ENERGY PRODUCTION CON ... jennifer.harms@dvn.com 30-015-45486-00-X1 3b. Phone No. (include area code) Ph: 405-552-6560 3a. Address 10. Field and Pool or Exploratory Area 333 WEST SHERIDAN AVENUE LIVINGSTON RIDGE OKLAHOMA, OK 73102 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 11. County or Parish, State Sec 12 T23S R31E SWSE 50FSL 1420FEL EDDY COUNTY, NM 32.311699 N Lat, 103.731499 W Lon 12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION □ Acidize □ Deepen □ Production (Start/Resume) ■ Water Shut-Off ■ Notice of Intent ☐ Alter Casing ☐ Hydraulic Fracturing ☐ Reclamation ■ Well Integrity ■ Subsequent Report Casing Repair ☐ New Construction Other ☐ Recomplete Change to Original A ☐ Final Abandonment Notice 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. As per the phone conversation with Christopher Walls 1/23/2019 Devon Energy Production Co., L.P. (Devon) respectfully requests that a DV tool will be ran in order to isolate all hydrocarbon bearing formations and loss zones from the Potash portion of this well. Slurry weights will be adjusted based on estimated fracture gradient of the formation. DV tool and Packer combo will be set a minimum of 50 feet below base of salts. If cement is not returned to surface during the 2nd stage of cement job on the intermediate casing string, a planned squeeze job will be conducted immediately after completion of the job. Please see attachments Electronic Submission #451607 verified by the BLM Well Information System For DEVON ENERGY PRODUCTION COM LP, sent to the Carlsbad Committed to AFMSS for processing by CHRISTOPHER WALLS on 01/23/2019 (19CRW0007SE) Name (Printed/Typed) JENNIFER HARMS Title REGULATORY COMPLIANCE ANALYST (Electronic Submission) Signature 01/23/2019 THIS SPACE FOR FEDERAL OR STATE OFFICE USE TitlePETROLEUM ENGINEER Date 01/23/2019 Approved By CHRISTOPHER WALLS 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

(Instructions on page 2)
** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

Office Carlsbad

which would entitle the applicant to conduct operations thereon.

RUP 7-4-19

Devon Energy, Tomb Raider 12-1 Fed 516H

1. Geologic Formations

TVD of target	8,945'	Pilot hole depth	N/A
MD at TD:	18,883'	Deepest expected fresh water:	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	818		
Salado	1196		
Base of Salt	4286		
Delaware	4513		
Bell Canyon	4558		
Cherry Canyon	5443		
Brushy Canyon	6706		
Madera	8103		
Lower Brushy	8413		
1BSLM			
1BSSS	9508		
2BSLM	9730		
2BSSS	10048		
2BSSS UPR	10173		

^{*}H2S, water flows, loss of circulation, abnormal pressures, etc.

Devon Energy, Tomb Raider 12-1 Fed 516H

2. Casing Program

Hole Size Casing Interval		Interval	Csg.	Weight	Grade	Conn	SF	SF Burst	SF
	From	To	Size	(lbs)			Collapse		Tension
	0	4,500'	9.625"	40	J-55	BTC	1.15	1.77	4.10
12.25"	4,500	8,400'	9.625"	40	HCK-55	BTC	1.18	1.32	3.75
	J			BLM Min	imum Safet	y Factor	1.125	1.00	1.6 Dry 1.8 Wet

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

3. Cementing Program

Casing	# Sks	тос	Wt. (lb/gal)	Yld (ft3/sack)	Slurry Description
	737	500' above DV	12.9	1.874	1st stage Lead: Class H/C + additives
Int 1 Two Stage	165	500' above shoe	13.2	1.33	1 st stage Tail: Class H / C + additives
w DV @ ~4500 Int I Intermediate Squeeze	886	Surf	12.9	1.874	2st stage Lead: Class C Cement + additives
	165	500' above DV	13.2	1.33	2 st stage Tail: Class H / C + additives
	As Needed	Surf	13.2	1.33	Squeeze Lead: Class C Cement + additives

A DV tool will be ran in order to isolate all Hydrocarbon bearing formations and loss zones from the Potash portion of this well. Slurry weights will be adjusted based on estimated fracture gradient of the formation. DV tool and Packer combo will be set a minimum of 50 feet below base of salts. If cement is not returned to surface during the primary cement job on the intermediate casing string, a planned squeeze job will be conducted immediately after completion of the primary job.

Casing String	% Excess
Intermediate 1	30%
Intermediate 1 (Second Stage)	30%

4. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To				
843'	8,400'	Cut/Saturated Brine	9.4 -10.2	28-34	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain	PVT/Pason/Visual Monitoring
of fluid?	

Devon Energy, Tomb Raider 12-1 Fed 516H

6. Logging and Testing Procedures

Logg	Logging, Coring and Testing.				
х	Will run GR/CNL from TD to surface (horizontal well – vertical portion of hole).				
	Stated logs run will be in the Completion Report and submitted to the BLM.				
	No Logs are planned based on well control or offset log information.				
	Drill stem test? If yes, explain				
X	Coring? If yes, explain				
	We plan to conduct whole cores through the Leonard Formation (~8,600' to ~9,333')				

Add	litional logs planned	Interval
	Resistivity	Int. shoe to KOP
	Density	Int. shoe to KOP
X	CBL	Production casing
X	Mud log	Intermediate shoe to TD
	PEX	