Form	3160-5
(Ji ne	3160-5 2015)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

BUREAU OF LAND MANAGEMENT
NDRY NOTICES AND REPORTS ON WELLS

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

5. Lease Serial No.

	NOTICES AND REPO					NMNM040444	41	
Do not use thi	s form for proposals to ll. Use form 3160-3 (API	drill or to re-ei D) for such pro <u>ନିଧାରି</u>	nter an posals	VI	ED	6. If Indian, Allotte	e or Tribe	Name
SUBMIT IN T	TRIPLICATE - Other inst	tructions on pa	ige 2	2019		7. If Unit or CA/Ag	reement,	Name and/or No.
Type of Well Gas Well ☐ Oth	ner		n nepa			8. Well Name and N BORA BORA 1		COM 216H
 Name of Operator DEVON ENERGY PRODUCT 	Contact: ION COM -Mail: jennifer.ha		RMS			9. API Well No. 30-015-46118	3-00 - X1	
3a. Address 333 WEST SHERIDAN AVEN OKLAHOMA, OK 73102	UE	3b. Phone No. (i Ph: 405-552-		ode)		10. Field and Pool of LIVINGSTON		
4. Location of Well (Footage, Sec., T.	, R., M., or Survey Description)			· · · · · · · · · · · · · · · · · · ·	11. County or Paris	h, State	
Sec 13 T23S R31E NENE 100 32.311420 N Lat, 103.726685						EDDY COUN	TY, NM	J
12. CHECK THE AF	PROPRIATE BOX(ES)	TO INDICATE	E NATUR	E OF	NOTICE,	REPORT, OR O	THER I	DATA
TYPE OF SUBMISSION			TYP	E OF A	ACTION			
Notice of Intent	☐ Acidize	☐ Deepe	n		□ Producti	on (Start/Resume)	- - '	Water Shut-Off
_	☐ Alter Casing	☐ Hydra	ulic Fractur	ing	🗖 Reclama	tion	"	Well Integrity
☐ Subsequent Report	Casing Repair	□ New C	Construction	1	Recomp	lete		Other
☐ Final Abandonment Notice	☐ Change Plans	Plug a	nd Abando	n	☐ Tempora	rily Abandon	Cha PD	ange to Original A
٨	☐ Convert to Injection	Plug B	ack		Water D	isposal	• •	
testing has been completed. Final Abdetermined that the site is ready for fit Devon Energy Production Co. intermediate casing down to 8 Delaware producers. The offse intermediate string deeper will to increase mud weight as nec better handle any well control contingency plan based on fin- Please see attachments.	nal inspection. L.P. (Devon) respectfully,500' due to the close proet wells have perforations allow for us to case off pessary for well conditions issues that may arise whi	y requests to ha eximity of deplet ovarying from 6 otential loss zon in the producti le drilling the la	ave the option from m ,500' to 8, nes. This vion hole, a teral. This	tion to nultiple 400'. S will allo llowing is a	move active Setting our ow us g us to	EMNI	REC JAN RD-C	EIVED 1 0 2020 PCD ARTES
•			Carl	sba	id Fig	eld Offic	ce	
			O	pe	ratoi	· Copy		
14. I hereby certify that the foregoing is	true and correct. Electronic Submission # For DEVON ENERG mitted to AFMSS for proce	Y PRODUCTIÓN	COM LP.	sent to	the Carlst	aď		
Name (Printed/Typed) JENNIFEF	RHARMS	1	itle RE	GULA	TORY CO	MPLIANCE ANAL	YST	
Signature (Electronic S	ubmission)	ı	Date 11/,	12/201	9			
	THIS SPACE FO	OR FEDERAL	OR STA	TE O	FFICE US	SE		
Approved By YOLANDA JIMENEZ	7		TitlePETR	OLEU	M ENGINE	ER		Date 12/06/2019
Conditions of approval, if any, are attached ertify that the applicant holds legal or equivalent would entitle the applicant to conduct the conduction of th	1. Approval of this notice does titable title to those rights in the	not warrant or subject lease	Office Carl					
Fitle 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent s					illfully to ma	ke to any department	or agency	of the United
Instructions on page 2) ** BLM REV	SED ** BLM REVISE	O ** BLM REV	ISED **	BLM I	REVISED	** BLM REVIS	ED **	

1=21-2020 RW

Revisions to Operator-Submitted EC Data for Sundry Notice #492038

Operator Submitted

BLM Revised (AFMSS)

Sundry Type:

APDCH

NOI

Lease:

NMNM404441

APDCH NOI

NMNM0404441

Agreement:

Operator:

DEVON ENERGY PRODUCTION CO. L. 333 W SHERDIAN AVE OKLAHOMA CITY, OK 73170 Ph: 405-552-6560

Admin Contact:

JENNIFER HARMS REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvn.com

Ph: 405-552-6560

Tech Contact:

JENNIFER HARMS

REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvn.com

Ph: 405-552-6560

Location:

State: County: NM **EDDY**

Field/Pool:

LIVINGSTON RIDGE; BS

Well/Facility:

BORA BORA 13-24 FED COM 216H Sec 13 T23S R31E NENE 100FNL 1150FEL

DEVON ENERGY PRODUCTION COM LP 333 WEST SHERIDAN AVENUE OKLAHOMA, OK 73102 Ph: 405 552:6571

JENNIFER HARMS REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvn.com

Ph: 405-552-6560

JENNIFER HARMS REGULATORY COMPLIANCE ANALYST

E-Mail: jennifer.harms@dvn.com

Ph: 405-552-6560

NM EDDY

LIVINGSTON RIDGE

BORA BORA 13-24 FED COM-216H Sec 13 T23S R31E NENE 100FNL 1150FEL 32.311420 N Lat, 103.726685 W Lon

1. Geologic Formations

TVD of target	10270	Pilot hole depth	N/A
MD at TD:	20556	Deepest expected fresh water:	

Basin

Formation `	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Rustler	825		
Salado	1200		
Base of Salt	4500		
Delaware.	4530		
L Brushy Canyon	8110		
Bone Spring	8440		
Leonard 'A'	8540		
Leonard 'B'	9050	-/	
Leonard 'C'	9260		
1st BSPG Sand	9475		
2nd BSPG Sand	10070		
L 2nd BSPG Sand	10270		
Landing Point	10240		

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

2. Casing Program

Hole Size	Casing	Interval	Care a	Weight	63.4	0
Hole Size	From	To	Csg. Size	(PPF)	Grade	Conn.
17.5"	0	850 921	13.375"	48	H-40	STC
12.25"	0	8500	9.625"	40	J-55	BTC
8.75"	0	TD	5.5"	17	P-110	BTC
В	BLM Minimur	n Safety Fact	or	Collapse: 1.125	Burst: 1.00	Tension: 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 Must have table for contingency casing
- Rustler top will be validated via drilling parameters (i.e. reduction in ROP) and surface casing setting depth revised accordingly if needed.
- Variance is requested for collapse rating on intermediate casing. Operator will keep pipe full while running casing. No losses are expected in subsequent hole section.
- Int casing shoe will be selected based on drilling data, gamma, and flows experienced while drilling. Setting depth with be revised accordingly if needed.
- A variance is requested to wave the centralizer requirement for the intermediate and production casing strings if drilling conditions dictate

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification shee	et. Y
Is premium or uncommon casing planned? If yes attach casing specification	
Does the above casing design meet or exceed BLM's minimum standards? I justification (loading assumptions, casing design criteria).	f not provide Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid the collapse pressure rating of the casing?	approaching Y
Is well located within Capitan Reef?	.N
If yes, does production casing cement tie back a minimum of 50' above t	he Reef?
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 rd string cement tie 500' into previous casing?	d back
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation	1 occurs?
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program (3-String Primary Design)

Casing	#Sks	TOC	Wt. (lb/gal)	H ₂ 0 (gal/sk)	Yld (ft3/sack)	Slurry Description.
Surface	942	Surf	13.2	6.33	1.33	Lead: Class C Cement + additives
	1937	Surf	9	20,6	1.94	Lead: Class C Cement + additives
Int	196	500' above shoe	13.2	6.42	1.33	Tail: Class H / C + additives
Production	253	500' tieback	9	20.6	1.94	Lead: Class H / C + additives
Froduction	1724	КОР	13.2	5.31	1.6	Tail: Class H / C + additives

If a DV tool is ran the depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. Slurry weights will be adjusted based on estimated fracture gradient of the formation. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. If cement is not returned to surface during the primary cement job on the surface casing string, a planned top job will be conducted immediately after completion of the primary job.

Casing String		% Excess
Surface	3	100%
Intermediate		50%
Production		10%

4. Pressure Control Equipment

4. Pressure Conf	roi Equipr	nent			,		
BOP installed and tested before drilling which hole?	Size?	Min. Required WP		ype	~	Tested to:	
			An	nular	X	50% of rated working pressure	
Int 1	13-5/8"	3M	Blin	d Ram			
1111 1	13:-3/6	31/1	Pipe	e Ram		214	
			Doub	le Ram	X	3M	
			Other*				
			An	nular	X	50% of rated working pressure	
			Blin	d Ram			
Production	13-5/8"	5M	5M	Pipe Ram			
			Double Ram		X	5M	
			Other				
			An	nular			
			Blin	d Ram			
			Pip	e Ram].	
			Doub	ole Ram			
			Other			- E	
			*				

5. Mud Program

6. D	epth	The second secon	Weight	X72.	THE TABLE
From	To	Type	(ppg)	Vis	Water Loss
0	850.921	FW	8.5 - 9.0	28-34	N/C
850 921	8500	Brine	10 - 10.5	28-34	N/C
8500	TD	WBM	8.5 − 9.0	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	n of fluid?		PVT/Pason/Visual	Monitoring
			-		

6. Logging and Testing Procedures

Logg	ing, Coring and Testing.
X	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
	Coring? If yes, explain

Additional logs planned		Interval	
	Resistivity		
	Density		
X	CBL	Production casing	
X	Mud log	KOP to TD	

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	5017 psi
Abnormal Temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

provided to the BLM.		·
N	H2S is present	
Y	H2S Plan attached	

8. Other facets of operation

Is this a walking operation? Potentially

- 1. If operator elects, 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 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? Potentially

- 1. Spudder rig will move in and drill surface hole.
 - a. Rig will utilize fresh water based mud to drill 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 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.

Attachments			
<u>x</u>	Directional Plan		
	Other, describe		