Submit 1 Copy To Appropriate District Office	State of New Me	exico	Form C-103	3
<u>District I</u> – (575) 393-6161	Energy, Minerals and Natu	ral Resources	Revised July 18, 201	3
1625 N. French Dr., Hobbs, NM 88240 <u>District II</u> – (575) 748-1283			WELL API NO. 30-025-45350	
811 S. First St., Artesia, NM 88210	OIL CONSERVATION	1.5	5. Indicate Type of Lease	\dashv
<u>District III</u> – (505) 334-6178 1000 Rio Brazos Rd., Aztec, NM 87410	1220 South St. Fran	icis Dr.	STATE 🔀 FEE 🗌	
<u>District IV</u> – (505) 476-3460 1220 S. St. Francis Dr., Santa Fe, NM 87505	Santa Fe, NM 87	/505	6. State Oil & Gas Lease No.	
	TICES AND REPORTS ON WELLS		7. Lease Name or Unit Agreement Name	ㅓ
	OSALS TO DRILL OR TO DEEPEN OR PLU ICATION FOR PERMIT" (FORM C-101) FO	JG BACK TO A	•	
PROPOSALS.)		- AY	Chiles 28-21 State Com B. Well Number 1H	4
1. Type of Well: Oil Well	Gas Well Other			_
	ergy Production Co. LP	110.	O. OGRID Number 6137	
3. Address of Operator			0. Pool name or Wildcat	
	heridan Ave OKC, OK 73102	Property 1	BERRY;BONE SPRING, SOUTH (96660)	Ц
4. Well Location Unit Letter ():	280 feet from the South	line and 2310	feet from the East line	
		· · · · · · · · · · · · · · · · · · ·	NMPM Lea County	
Section 28	11. Elevation (Show whether DR,		With M Bea County	
C	3712'			
	Appropriate Box to Indicate N		eport or Other Data EQUENT REPORT OF:	
PERFORM REMEDIAL WORK		REMEDIAL WORK	☐ ALTERING CASING ☐	
TEMPORARILY ABANDON BUILLOR ALTER CASING	CHANGE PLANS ☑ MULTIPLE COMPL ☐	COMMENCE DRILL	<u> </u>	
PULL OR ALTER CASING DOWNHOLE COMMINGLE	· · · · · · · · · · · · · · · · · · ·	CASING/CEMENT J	OB	
CLOSED-LOOP SYSTEM				
OTHER:		OTHER:		_
of starting any proposed w	ork). SEE RULE 19.15.7.14 NMAC	Dertinent details, and good. For Multiple Comp	ive pertinent dates, including estimated da letions: Attach wellbore diagram of	te
proposed completion or re	·			
Devon Energy resp	ectfully requests the following	changes to the orig	ginal APD:	
CC	and activities the Decidence	<i>C</i> (* 1		
	ge to 25' below the Rustler top.	•		
casing adjusted to e	nsure cement gets back to surf	ace with deeper ca	sing string	
Please see attached	revised Drilling Plan			
rease see attached	revised Diming Han			
[
Spud Date:	Rig Release Da	te:		
<u> </u>	. 			
I house, contify that the information	ahous is two and samulate to the he	at af mu lenaviladas a	nd haliak	
i nereby certify that the information	above is true and complete to the be	est of my knowledge a	nd belier.	
Delayer	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			
SIGNATURE REBUCIA!	TITLE Regul	atory Analyst	DATE_11/15/2018	_
Type or print name Rebecca Dea	1 F-mail address	: rebecca.deal@dv	n.com PHONE: 405-228-8429	
For State Use Only	L-man address	· ICUCCCA.ucaiwuv	11.COIII 111014L. 103 220 0427	-
			DATE 11/16/18	_
APPROVED BY: Conditions of Approval (if any):	TITLE	Fingineer	DATE // //6 //8	_
Conditions of Approval (II any):	Pe	troleum Engineer		

1. Geologic Formations

TVD of target	11,640	Pilot hole depth	N/A
MD at TD:	22,208	Deepest expected fresh water:	

Basin

1817		
2262		
8379		
8542		
9782		
10432		
11312		
11542		
	8379 8542 9782 10432 11312	8379 8542 9782 10432 11312

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

2. Casing Program

Hole	Casin	g Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF
Size	From	To	Size	(lbs)			Collapse	Burst	Tension
17.5"	0	1850'	13.375"	48	H40	STC	1.125	1	1.6
12.25"	0	4500'	9.625"	40	J55	LTC	1.125	1	1.6
12.25"	4,500'	5,500	9.625"	40	HCK-55	LTC	1.125	1	1.6
8.75"	0	22,208	5.5"	17	P110	BTC	1.125	1	1.6
				BLM Min	imum Safet	y Factor	1.125	1	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

	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 sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	111
Is well within the designated 4 string boundary.	+
is wen 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 tied back 500' into previous casing?	
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 occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

3. Cementing Program

Casing	# Sks	Wt. .lb/ gal	Yld ft3/ sack	H ₂ 0 gal/sk	500# Comp. Strength (hours)	Slurry Description
Surf.	1500	14.8	1.33	6.32	6	Lead: Class C Cement + 0.125 lbs/sack Poly-F-Flake
Inter.	742	10.3	3.65	22.06	24	Lead: (50:50) Poz (Silica) 3 lbm/sk Kol-Seal, .125 lbm/sk Poly-E-Flake
	153	14.8	1.33	6.32	6	Tail: Class C Cement + 0.125 lbs/sack Poly-F-Flake
Prod.	801	9	3.27	13.5	21	Lead: Tuned Light Cement
	2001	14.5	1.2	5.31	25	Tail: (50:50) Clas H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bentonite

Casing String	TOC	% Excess
13-3/8" Surface	0'	50%
9-5/8" Intermediate	0,	30%
5-1/2" Production	5000'	25%

4. Pressure Control Equipment

N A variance is requested for the use of a diverter on the surface casing. See attached for schematic.

BOP installed and tested before drilling which hole?	Size?	Min. Required WP		ype		Tested to:
			An	nular	X	50% of working pressure
			Blin	d Ram		
12-1/4"	13-5/8"	3M	Pipe Ram			3M
			Double Ram x		Х	3101
			Other*			
			An	nular	X	50% of working pressure
			Blin	d Ram		
8-3/4"	13-5/8"	234	Pipe	e Ram	lam	
8-3/4	13-5/8	3M	Double Ram		х	3M
			Other *			
			Annular			
			Blin	d Ram		

	Pip	e Ram		
	Doul	ole Ram		
	Other			
	*			

^{*}Specify if additional ram is utilized.

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

- Y Formation integrity test will be performed per Onshore Order #2.
 On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.

 A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.

 Y Are anchors required by manufacturer?

 Y A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after
- Y A multibowl wellhead is being used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.

Devon proposes using a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 (3M) psi.

- o Wellhead will be installed by wellhead representatives.
- o If the welding is performed by a third party, the wellhead representative will monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- Wellhead representative will install the test plug for the initial BOP test.
- Wellhead company will install a solid steel body pack-off to completely isolate the lower head after cementing intermediate casing. After installation of the packoff, the pack-off and the lower flange will be tested to 3M, as shown on the attached schematic. Everything above the pack-off will not have been altered whatsoever from the initial nipple up. Therefore the BOP components will not be retested at that time.

- If the cement does not circulate and one inch operations would have been possible
 with a standard wellhead, the well head will be cut and top out operations will be
 conducted.
- Devon will pressure test all seals above and below the mandrel (but still above the casing) to full working pressure rating.
- Onshore Order #2.

After running the 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum rating of 3M will be installed on the wellhead system and will undergo a 250 psi low pressure test followed by a 3,000 psi high pressure test. The 3,000 psi high and 250 psi. Low test will cover testing requirements a maximum of 30 days, as per Onshore Order #2. If the well is not complete within 30 days of this BOP test, another full BOP test will be conducted, as per Onshore Order #2.

After running the 9-5/8' intermediate casing with a mandrel hanger, the 13-5/8" BOP/BOPE system with a minimum rating of 3M will already be installed on the wellhead.

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.

Devon's proposed wellhead manufactures will be EMC Technologies, Cactus Wellhead, or Cameron.

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.

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss	
From	To					
0	815	FW Gel	8.5-9.0	28-34	N/C	
815	5,500	Saturated Brine	10.0-11.0	28-34	N/C	
4,250	22,208	Cut Brine	8.5-9.3	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?	

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	Int. shoe to KOP	
	Density	Int. shoe to KOP	
X	CBL	Production casing	
X	Mud log	KOP to TD	
	PEX		

7. Drilling Conditions

Condition	Specify what type and where?		
BH Pressure at deepest TVD	4942 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.

N H2S is present

Y H2S Plan attached

8. Other facets of operation

Is thi	is a	walking	operation	? No.
Will	be	pre-settin	g casing?	No.

Attachments

x Directional Plan __ Other, describe