Submit 1 Copy To Appropriate District Office	State of New Mex	xico	Form C-103
<u>District I</u> – (575) 393-6161	Energy, Minerals and Natur	al Resources	Revised July 18, 2013
1625 N. French Dr., Hobbs, NM 88240 District II – (575) 748-1283		D.W. W. G. L.	WELL API NO. 30-025-42562
811 S. First St., Artesia, NM 88210	OIL CONSERVATION		5. Indicate Type of Lease
<u>District III</u> – (505) 334-6178 1000 Rio Brazos Rd., Aztec, NM 87410	1220 South St. France		STATE X FEE
<u>District IV</u> – (505) 476-3460 1220 S. St. Francis Dr., Santa Fe, NM	Santa Fe, NM 87	505	6. State Oil & Gas Lease No.
87505			
SUNDRY NOT (DO NOT USE THIS FORM FOR PROPO	7. Lease Name or Unit Agreement Name Edel-weisse 28 21 State Com		
PROPOSALS.)	CATION FOR PERMIT" (FORM C-101) FO	K SUCH	O. W. H.N.
1. Type of Well: Oil Well X	Gas Well Other		8. Well Number 1H
Name of Operator Devon Energy Production	Co., L.P.		9. OGRID Number 6137
3. Address of Operator			10. Pool name or Wildcat
333 West Sheridan Ave, Ok	ahoma City, OK 73102		Midway; Bone Spring
4. Well Location	2440 C 4 C 4 N	1. 1	400 feet from the W line
Unit Letter E :	2440 feet from the N	line and	itect from theinic
Section 28	Township 178 Ran 11. Elevation (Show whether DR,		NMPM County Lea
	3754		
12. Check	Appropriate Box to Indicate Na	ature of Notice,	Report or Other Data
NOTICE OF IN	NTENTION TO:	SUB	SEQUENT REPORT OF:
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WOR	
TEMPORARILY ABANDON	CHANGE PLANS 🗵	COMMENCE DRI	ILLING OPNS. P AND A
PULL OR ALTER CASING	MULTIPLE COMPL	CASING/CEMEN	T JOB
DOWNHOLE COMMINGLE CLOSED-LOOP SYSTEM			
OTHER:		OTHER:	
	ork). SEE RULE 19.15.7.14 NMAC		d give pertinent dates, including estimated date mpletions: Attach wellbore diagram of
		tion to the drilling plan.	. Safety factors and cement plans have been updated.
	•	:	
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	· ·		· · · · · · · · · · · · · · · · · · ·
Spud Date:	. Rig Release Dat	te:	
I hereby certify that the information	above is true and complete to the be	et of my knowledg	re and helief
h literary certify that the information	above is true and complete to the be	st of my knowledg	e and benef.
Min: 1	74110		A 1
SIGNATURE WWW	TITLE Regul	atory Compliar	
Type or print name Tami Lair	ed E-mail address:	tami.laird@dvn :	.com PHONE: _405-228-2816
For State Use Only			,
ADDD OVED BY	2 Pet	roleum Engine	er neldlie
APPROVED BY: Conditions of Approval (if any):	TITLE TOL		DATE 09/16/15

1. Geologic Formations

30-025-42562

TVD of target	9631	Pilot hole depth	9900
MD at TD:	16,843'	Deepest expected fresh water:	

Basin

Formation	Depth (TVD)	Water/Mineral Bearing/	Hazards*
	from KB	Target Zone?	
Rustler	2,218	Barren	
Top of Salt	2,344	Barren	
Base of Salt	5,400	Barren	
Grayburg	5,450	Oil	
Brushy Canyon	6,464	Oil	
1 st Bone Spring Lime	6,779	Oil	
1st Bone Spring Sand	7,901	Oil	
2 nd Bone Spring Sand	8,461	Oil	
3 rd Bone Spring Lime	9,311	Oil	
3 rd Bone Spring Sand	9,541	Oil	
Wolfcamp	9701	Oil	
<u> </u>			

^{*}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	То	Size	(lbs)	,		Collapse	Burst	Tension
17.5"	0	2,300'	13.375"	61	J-55	BTC	1.47	3.56	4.33
12.25"	0	3,000'	9.625"	36	J-55	BTC	1.27	1.18	2.06
12.25	3,000'	5,450'	9.625	40	HCK-55	BTC	1.33	1.99	3.46
8.75"	0	9,050'	7"	29	P-110	BTC	1.95	1.32	2.80
8.75	9,050'	16,843'	5.5"	17	P-110	BTC	1.61	1.29	2.56
				BLM Min	imum Safet	ty Factor	1.10	1.10	1.6 Dry
									1.8 Wet

5.5" long string option.

Hole	Casin	g Interval	Csg.	Weight	Grade	Conn.	SF	SF	SF
Size	From	To	Size	(lbs)			Collapse	Burst	Tension
17.5"	0	2,300'	13.375"	61	J-55	BTC	1.47	3.56	4.33
12.25"	0	3,000'	9.625"	36	J-55	BTC	1.27	1.18	2.06
12.25	3,000'	5,450'	9.625	40	HCK-55	BTC	1.33	1.99	3.46
8.75"	0	16,843'	5.5"	17	P-110	BTC	1.61	1.29	2.56
	<u></u>		1	BLM Min	imum Safet	ty Factor	1.10	1.10	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

	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.						
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?						
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 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.	H ₂ O	Yld	500#	Slurry Description
ļ		lb/	gal/sk	ft3/	Comp.	
		gal		sack	Strength	
				-	(hours)	
Surface	2425	14.8	6.34	1.35	Slurry	Premium Plus C Cement + 0.005 lbs/sack Static Free + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 0.005 gps FP-6L + 56.3% Fresh Water
Interme	1446	12.8	8.23	1.66	Lead	(60:40) Poz (Fly Ash):Premium Plus C Cement + 0.005 lbs/sack Static Free + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 3 lbs/sack LCM-1 + 0.25% bwoc FL-52 + 0.005 gps FP-6L + 1.5% bwoc Sodium Metasilicate + 83.7% Fresh Water
diate	450	13.8	6.42	1.38	Tail	(60:40) Poz (Fly Ash):Premium Plus C Cement + 0.005 lbs/sack Static Free + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.005 gps FP-6L + 0.5% bwoc Sodium Metasilicate + 0.5% bwoc BA-10A + 4% bwoc MPA-5 + 65.3% Fresh Water
7.5x5.5 Producti	260	12.5	11.01	2.01	Lead	(35:65) Poz (Fly Ash):Premium Plus H Cement + 3% bwow Sodium Chloride + 0.2% bwoc R-3 + 0.125 lbs/sack Cello Flake + 0.7% bwoc FL-52 + 0.3% bwoc ASA-301 + 6% bwoc Bentonite + 105.5% Fresh Water
on	2085	14.2	5.77	1.28	Tail	(50:50) Poz (Fly Ash):Class H Cement + 5% bwow Sodium Chloride + 0.3% bwoc CD-32 + 0.5% bwoc FL-25 + 0.4% bwoc FL-52 + 0.5% bwoc Sodium Metasilicate + 57.3% Fresh Water
	250	11.9	12.89	2.31	n/a	1 st Lead: (50:50) Class H Cement: Poz (Fly Ash) + 10% BWOC Bentonite + 1 lb/sk of Kol-Seal + 0.3% BWOC HR-601 + 0.5lb/sk D-Air 5000
5-1/2" Prod. Option	330	12.5	10.86	1.96	30	2 nd Lead: (65:35) Class H Cement: Poz (Fly Ash) + 6% BWOC Bentonite + 0.25% BWOC HR-601 + 0.125 lbs/sack Poly-E-Flake
	2050	14.5	5.31	1.2	25	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

DV tool 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
13-3/8" Surface	0'	100%
9-5/8" Intermediate	0'	75%
7 x 5-1/2" Production Casing	5,250′	25%
5-1/2" Production Casing	5250'	25%

4. Pressure Control Equipment

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

	Required WP		ype		Tested to:
		An	nular	x	50% of working pressure
		Bline	d Ram		
13-5/8"	3M	Pipe	Ram		3M
		Doub	le Ram	X	3101
		Other*			
		An	nular	X	50% testing pressure
		Bline	d Ram		
13 5/8"	3M	Pipe	Ram		
13-3/6	5141	Doub	le Ram	X	3M
		Other *			
		An	nular		50% testing pressure
		Blin	d Ram		
		Pipe Ram			
		Double Ram			
		Other			
	13-5/8"		Bline	Double Ram Other* Annular Blind Ram Pipe Ram Double Ram Other * Annular Blind Ram Pipe Ram Other Double Ram Other Annular Blind Ram Pipe Ram Double Ram Other	Blind Ram Pipe Ram Double Ram x Other* Annular x Blind Ram Pipe Ram Double Ram x Other Annular x Blind Ram Pipe Ram Double Ram x Other * Annular Blind Ram Pipe Ram Double Ram Other Other Annular Blind Ram Pipe Ram Double 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 Y 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 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 (FMC Uni-head). 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.

- Wellhead will be installed by FMC's representatives.
- If the welding is performed by a third party, the FMC's representative will monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- FMC representative will install the test plug for the initial BOP test.
- FMC will install a solid steel body pack-off to completely isolate the lower head after cementing intermediate casing. After installation of the pack-off, 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.
- Devon will test the casing to 0.22 psi/ft or 1500 psi, whichever is greater, as per 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 FMC Uni-head 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 FMC Uni-head.

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 requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line). The line will be kept as straight as possible with minimal turns.

See attached schematic.

5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From	To	,			
0	2,300'	FW Gel	8.6-8.8	28-34	N/C
2,300'	5,450'	Saturated Brine	10.0-10.2	28-34	N/C
5,450'	16,843'	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

Logging, Coring and Testing.				
х	Will run GR/CNL fromTD to surface (horizontal well – vertical portion of hole). Stated			
	logs run will be in the Completion Report and submitted to the BLM.			
X	A pilot will be drilled first and two runs of logs with a quad combo and then FMI and			
	Sonic on the second run before kicking off the lateral.			
	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	Intermediate shoe to TD
	PEX	

7. Drilling Conditions

Condition	i,	Specify what type and where?	10.00

BH Pressure at deepest TVD	4657 psi
Abnormal Temperature	No

Mitigation measure for abnormal conditions: 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.

values and formations will be provided to the BLM.				
N	H2S is present			
Y	H2S Plan attached			

8. Other facets of operation

Is this a walking operation? No. Will be pre-setting casing? No.

Attachments

- <u>x</u> Directional Plan
- ___ Other, describe