Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

NM OIL CONSERVATION
ARTESIA DISTRICT
FEB 25 2015
RECEIVED

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO.
30-015-42082

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
Snapping 2 State

1. Type of Well: Oil Well ☒ Gas Well ☐ Other

8. Well Number
14H

2. Name of Operator
Devon Energy Production Company, LP 405-228-7203

9. OGRID Number
6137

3. Address of Operator
333 West. Sheridan Avenue
Oklahoma City, OK 73102-5015 405-228-7203

10. Pool name or Wildcat
Ross Ranch; Wolfcamp (Gas)

4. Well Location
Lot Number __P__ : __250__ feet from the _SOUTH___ line and _330____feet from the _EAST___line
Section 2 Township 26S Range 31E NMPM Eddy County

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
3282' GL

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
DOWNHOLE COMMINGLE	☐						
CLOSED-LOOP SYSTEM	☐						
OTHER: Final Casing Change	☒			OTHER:	☐		

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

In order to drill the Snapping 2 State 14H pilot hole section with the required mud weight window, Devon Energy Production Company, L.P. respectfully requests to change the casing design to deepen the 9-5/8" setting point. This will minimize the risk during our logging operations for the pilot hole section.

Attached is the revised drilling plan

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Trina C. Couch TITLE: Regulatory Analyst DATE 2/24/2015

Type or print name: Trina C. Couch E-mail address: trina.couch@dvn.com PHONE: 405-228-7203

For State Use Only

APPROVED BY: RR Dade TITLE Dist II Supervisor DATE 2/26/2015

Conditions of Approval (if any):

Devon Energy, Snapping 2 State 14H

1. Geologic Formations

TVD of target	11948	Pilot hole depth	13500
MD at TD:	16489	Deepest expected fresh water:	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/ Target Zone?	Hazards*
Rustler	923		
Salado	1273		
Base of Salt	4003		
Delaware	4213		
Bell Canyon	4238		
Cherry Canyon	5143		
Brushy Canyon	6568		
1st BSPG Lime	8288		
1st BSPG Sand	9205		
2nd BSPG Lime	9515		
2nd BSPG Sand	9868		
3rd BSPG Lime	10410		
3rd BSPG Sand	11160		
Wolfcamp	11575		
Target Zone Top	11915		
Wolfcamp B Shale	11995		
Top Mid Sh MKR	13015		
Base Mid Sh Mkr	13125		
PILOT HOLE TD	13500		

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

2. Casing Program

Hole Size	Casing Interval From	Casing Interval To	Csg. Size	Weight (lbs)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
26"	0	1000	20"	106.5	J55	BTC	1.10	1.46	6.29
17.5"	0	4100	13-3/8"	72	P-110	BTC	1.12	1.13	4.24
12.25"	0	10600	9-5/8"	40	P-110	BTC	1.37	1.75	2.34
8-3/4"	0	11400	7"	32	P-110	BTC	1.21	1.21	2.37
	11400	16489	5.5"	20	P-110	BTC	1.19	1.32	3.21
				BLM Minimum Safety 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

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?	
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 3rd 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 2nd 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	H_20 gal/sk	Yld ft3/ sack	500# Comp. Strength (hours)	Slurry Description
20" Surf.	880	13.5	9.07	1.72	12	Lead: Class C Cement + 4% Bentonite Gel + 0.125 lbs/sack Poly-E-Flake
	1190	14.8	6.32	1.33	7	Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
13-3/8" Inter.	1930	12.9	9.81	1.85	17	Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake
	940	14.8	6.32	1.33	6	Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
9-5/8" Inter.	820	11	14.81	2.55	14	2nd stage Lead: Tuned Light® Cement + 0.125 lb/sk Pol-E-Flake
	770	14.4	5.8	1.24	22	(50:50)Premium H: PozMix + 0.3% BWOC Halad-9 + 0.15% BWOC HR-601 + 0.1% BWOC FWCA
	DV Tool = 4150ft					
	70	12.9	9.81	1.85	17	2nd Stage Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake
	60	14.8	6.32	1.33	6	2nd Stage Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
7 x 5-1/2" Prod	80	10.4	16.9	3.17	16	Lead: Tuned Light ® + 0.125 lb/sk Pol-E-Flake
	1350	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
9-5/8" Inter.	820	11	14.81	2.55	14	2nd stage Lead: Tuned Light® Cement + 0.125 lb/sk Pol-E-Flake

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
20" Surface	0'	100%
13-3/8" Intermediate	0'	75%
9-5/8" Intermediate	1st Stage = 4150' / 2nd Stage = 3600'	50%
Production	10100'	25%

Include Pilot Hole Cementing specs:
Pilot hole depth 13500ft
KOP 11470ft

Plug top	Plug Bottom	% Excess	No. Sacks	Wt. lb/gal	Yld ft3/sack	Water gal/sk	Slurry Description and Cement Type
11270	13500	10	865	15.6	1.19	5.42	Class H + 0.3% Halad-9 + 0.5% HR-601

4. Pressure Control Equipment

	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	Type	✓	Tested to:
17.5"	13-5/8"	3M	Annular	x	50% of working pressure
			Blind Ram		3M
			Pipe Ram		
			Double Ram	x	
			Other*		
12.25"	13-5/8"	3M	Annular	x	50% testing pressure
			Blind Ram		3M
			Pipe Ram		
			Double Ram	x	
			Other *		
8.75"	13-5/8"	10M	Annular	X	5M
			Blind Ram		7.5M
			Pipe Ram		
			Double Ram	x	
			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.
Y	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.
	N — Are anchors required by manufacturer?
Y	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 10,000 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	1000'	FW Gel	8.6-8.8	28-34	N/C
1000'	4100'	Saturated Brine	10.0-10.2	28-34	N/C
4100'	9600'	Cut Brine	8.5-9.2	28-34	N/C
9600'	13500'(PH)	Cut Brine	9-10	28-34	N/C
KOP	11900'	Cut Brine	9-10	28-34	N/C
11900'	16490'	OBM	12.5-15	40-60	10

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 of fluid?	PVT/Pason/Visual Monitoring

6. Logging and Testing Procedures

Logging, 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
x	Will be taking side wall cores from the 3rd BSSS & Wolfcamp PH along with a GC Tracer.

Additional logs planned		Interval
X	Resistivity	Int. shoe to PH
x	Density	Int. shoe to PH
X	CBL	Int. shoe to PH
X	Mud log	Intermediate shoe to TD
x	PEX	Int. shoe to PH

7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	4732 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 this a walking operation? No.
Will be pre-setting casing? No.

Attachments
_x_ Directional Plan
___ Other, describe