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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	State of New Mex Energy, Minerals and Natur OIL CONSERVATION 1220 South St. Fran Santa Fe, NM 87	al Resources DIVISION cis Dr.	Form C-103 Revised August 1, 2011 WELL API NO. 30-015-40522 5. Indicate Type of Lease STATE FEE 6. State Oil & Gas Lease No. 7. Lease Name or Unit Agreement Name
(DO NOT USE THIS FORM FOR PROPU DIFFERENT RESERVOIR. USE "APPL PROPOSALS.) 1. Type of Well: Oil Well	SALS TO DRILL OR TO DEEPEN OR PLU ICATION FOR PERMIT" (FORM C-101) FO Gas Well  Other		Lone Tree Draw 13 State Com 8. Well Number 4H
<ol> <li>Name of Operator Devon Energy Production Compa</li> <li>Address of Operator</li> <li>333 W. Sheridan, Oklahoma City</li> <li>Well Location</li> </ol>		52-7970	9. OGRID Number 6137 10. Pool name or Wildcat Carlsbad, Delaware
	<u>: 150</u> feet from the <u>North</u> line <u>Township</u> 21S 11. Elevation <i>(Show whether DR,</i>	Range 27E	NMPM Eddy, County
NOTICE OF I PERFORM REMEDIAL WORK TEMPORARILY ABANDON PULL OR ALTER CASING DOWNHOLE COMMINGLE OTHER: Change to original A 13. Describe proposed or com of starting any proposed v proposed completion or re	CHANGE PLANS	SUB REMEDIAL WOR COMMENCE DRI CASING/CEMEN OTHER: DOTH	SEQUENT REPORT OF: K
· · ·			RECEIVED NOV 3 0 2012 NMOCD ARTESIA
SIGNATURE:	n above is true and complete to the be <u>by Man</u> TITLE: Regulatory address: <u>Erin.workman@dvn.com</u> <u>MMMM</u> TITLE	Compliance Asso	the and belief. ciate DATE: <u>11/28/12</u> NE: <u>405-552-7970</u> DATE $11/30/2012$

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# Lone Tree Draw 13 State 4H– APD DRILLING PLAN JSL 11-28-12

#### Casing Program

<u>Hole</u> <u>Size</u>	<u>Hole</u> Interval	OD Csg	<u>Casing</u> Interval	<u>Weight</u>	<u>Collar</u>	Grade
17-1/2"	0-350	13-3/8"	0 - 300	48#	STC	H-40
12-1/4"	350 - 2,600	9-5/8"	0-2,600	40#	LTC	J-55
8-3/4"	2,600-4,200	5-1/2"	0-4,200	17#	LTC	HCP-110
8-3/4"	4,200-9,568	5-1/2"	4,200 - 9,568	17#	BTC	HCP-110

Pilot hole TD: 7,950' Max TVD in lateral: 5,002'

Mud Program:

<u>Depth</u>	Mud Wt.	Visc.	Fluid Loss	Type System	
0-350	8.4 - 9.0	30-34	N/C	FW	
350 - 2,600	9.6 - 10.0	28 - 32	N/C	Brine	
2,600 - 9,568	8.6 - 9.0	28 - 32	N/C-12	FW	

Pressure Control Equipment:

The BOP system used to drill the intermediate hole will consist of a 13-5/8" 3M Triple Ram and Annular preventer. The BOP system will be tested as a 3M system prior to drilling out the surface casing shoe.

The BOP system used to drill the production hole will consist of a 13-5/8" 3M Triple Ram and Annular preventer. The BOP system will be tested as a 3M system prior to drilling out the intermediate casing shoe.

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.

# **Cementing Program**

13-3/8" Surface Casing

### FLUID SPECIFICATIONS

Spacer

20.0 bbls Fresh Water @ 8.34 ppg

FLUID	VOLUME CU-FT		OLUME		AND TYPE OF CEMENT		
Lead Slurry	2036	ł	1.97	+ 5% bwo Cello Flal	ks (35:65) Poz (Fly Ash):Class C Cement ow Sodium Chloride + 0.125 lbs/sack ke + 4% bwoc Bentonite + 1% bwoc Metasilicate + 5% bwoc MPA-5 + 101.3% ater		
Tail Slurry	534	ł	1.34	<ul> <li>400 sacks Class C Cement + 1% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.2% Fresh Water</li> </ul>			
Displacement				280.3 bb	ls Mud @ 9 ppg		
CEMENT PROPERT	IES						
				SLURRY NO.1	SLURRY NO.2		
Slurry Weight (ppg)				12.80	14.80		
Slurry Yield (cf/sacl	•			1.97	1.34		
Amount of Mix Wate			R J%	10.56	6.34		
Estimated Pumping	•	1H:M	M)	3:30	2:30		
COMPRESSIVE ST							
72 hrs @ 80 ° F					2700		
7 hrs @ 93 ° F () 12 hrs @ 93 ° F				250	500		
17 hrs @ 93 ° F				350 500	1000		
24 hrs 🧕 93 ° F				750	. 1600		

ACTUAL CEMENT VOLUMES MAY VARY BASED ON FLUID CALIPER.

## FLUID SPECIFICATIONS

Spacer				20.0 bbls	Fresh Water @ 8.34 ppg		
FLUID	VOLUME CU-FT		OLUME	AMOUNT	AND TYPE OF CEMENT		
Lead Slurry	1239	I	1.73	5% bwow Flake + 3	s (60:40) Poz (Fly Ash):Class C Cement + / Sodium Chloride + 0.125 lbs/sack Cello lbs/sack LCM-1 + 1% bwoc Sodium ate + 89.7% Fresh Water		
Tail Slurry	413	1	1.38	5% bwow Flake + 0	s (60:40) Poz (Fly Ash):Class C Cement * / Sodium Chloride + 0.125 lbs/sack Cello I.4% bwoc Sodium Metasilicate + 4% A-5 + 65.5% Fresh Water		
Displacement				239.6 bbls Mud @ 10 ppg			
CEMENT PROPERT	TIES						
				SLURRY NO.1	SLURRY NO.2		
Slurry Weight (ppg	)			12.60	13.80		
Slurry Yield (cf/sac	•			1.73	138		
Amount of Mix Wate				8.82	6.44		
Estimated Pumping		IH:M	M)	3:30	2:30		
COMPRESSIVE ST	RENGTH						
12 hrs @ 90 ° F				275			
24 hrs @ 90 ° F				875			
72 hrs @ 90 ° F 8 hrs @ 112 ° F				1600	500		
12 hrs @ 112 *					500 ' 1400		
24 hrs @ 112 °					2400		
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ACTUAL CEMENT VOLUMES MAY VARY BASED ON CALIPER.

FLUID	SPEC	IFICA	TIONS

Spacer				50.0 bbls	Fresh Water	@ 8.34 ppg	
Spacer				1,500.0 gals Mud Clean II @ 8.45 ppg			
Spacer				10.0 bbls	Fresh Water	@ 8.34 ppg	
Spacer				40.0 bbls	s SealBond @	) 8.75 ppg	
FLUID	VOLUME CU-FT		OLUME	AMOUNT	AND TYPE	OF CEMENT	······
1st Lead Slurry	1798	ł	2.3	0.5% bw	oc FL-52 + 0.	z (Fly Ash): Class 3% bwoc ASA-30 6 bwoc R-21 + 13	11 + 10%
Lead Slurry	1377	1	2	3% bwov Flake + (	w Sodium Chl	z (Fly Ash):Class oride + 0.125 lbs. 52 + 6% bwoc E	/sack Cello
Tail Slurry	1674	ł	1.28	5% bwor 0.5% bw	w Sodium Chl oc FL-25 + 0.	oz (Fly Ash):Class Ioride + 0.3% bwc 5% bwoc FL-52 + - 57.2% Fresh Wa	bc CD-32 + ⊧0.4% bwoc
Displacement				331.7 bb	ls Displacem	ent Fluid	
CEMENT PROPER	TIES			•			
		•		SLURRY NO.1	SLURRY	SLURRY NO.3	
Slurry Weight (ppg) Slurry Yield (cf/sack) Amount of Mix Water (gps) Estimated Pumping Time - 70 BC (HH:MM) Free Water (mls) @ ° F @ 90 ° Angle Fluid Loss (cc/30min)			11.80 2.30 13.16 4:00	12.50 2.00 10.99 5:00	14.20 1.28 5.76 3:30 0.0		
COMPRESSIVE S	psi and °F				1	50.0	
12 hrs @ 130 ° 24 hrs @ 130 ° 72 hrs @ 130 ° 12 hrs @ 140 ° 24 hrs @ 140 ° 72 hrs @ 140 ° 12 hrs @ 150 ° 24 hrs @ 150 °	F (psi) F (psi) F (psi) F (psi) F (psi) F (psi) F (psi) F (psi) F (psi)			150 250 350	175 250 700	250 1500 2000	
<u>TOC for All Stri</u> Surface: Intermedia Production	te:		0' 0' 2,100'		:		

ACTUAL CEMENT VOLUMES WILL BE ADJUSTED BASED ON FLUID CALIPER AND CALIPER LOG DATA