NM OIL CONSERVATION

ARTESIA DISTRICT

AUG 1 1 2015

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State of New Mexico Form C-102 Energy, Minerals & Natural Resources Depart RECEIVED Revised August 1, 2011 Submit one copy to appropriate OIL CONSERVATION DIVISION District Office 1220 South St. Francis Dr. Santa Fe, NM 87505

		١	WELL LO)CATI	ON AND AG	REAGE DEDI	CATION PL	AT	·	
20 API Number 2 Pool				² Pool C	lode	ode 'Pool Name				
30-01) - 4.	32 Ca	ර	9610)1		SWD; Dev	vonian		
¹ Property (ode				⁵ Proper	ty Name			⁶ Well Number	
					HARROUN T	HARROUN TRUST 6 SWD				
² OGRID N	lo.				* Operat	or Name			³ Elevation	
6137 DEVON EN				ON EN	ERGY PRODUCTION COMPANY, L.P.				2949.3	
					. Surface	e Location				
UL or lut no.	Section	Townshi	p Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West lin	ae County	
1	6	24 S	29 E		660	NORTH	350	EAST	EDDY	
			" B	ottom	Hole Locatio	n If Different Fr	om Surface			
UL or lot no.	Section	Townshi	p Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West lit	te Connty	
¹² Dedicated Acres	¹⁹ Joint	or Infill	¹⁴ Consolidatio	n Code			¹⁶ Order No.	L		
39.93										

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

	<u></u>	2641.66 FT \$89'35'48'E 2649.74 FT	" OPERATOR CERTIFICATION
	NW CORNER SEC. 6	N Q CORNER SEC. 6 NE CORNER SEC., 6	Uncerpt cartify that the information contained herein is true and complete in the
	LAT. = 32.2543216 N	LAT. = 32/2542498'N LAT. = 32/2541772'N	best of my browledge and bells, and thin this proposization either suchs a
	LONG. = 104.0323498'W	LONG. = 101-0238067W LENG. = 1013/15/23/5W	working interest or unleased mineral interest in the land including the proposed
	NMSP 6ASI (FI) N = 456385.89	NM5P LAST (F1) NM5P 2853 (F1) N = 456367.27 N = 456348.83 x50'	bottom hole leathon or has a right to drill this well at this bourleon parsmont re-
1.	E = 634380.54	E = 637021.56 $E = 639670.65$ g	a computer with on enumer of such a minural ty working interest, so to a
6.62			whattary popling agreement or a compulsory proding order hereadine surroad
395	.07 -1	en de la companya de	ing une division.
	······································		$A = (\partial (\partial f) f) = f = f$
8			- Kinal Bud 7/15/15
â		HARBOUN TRUST "6" SWD 1	spininge pris /
1 Se	107 S	ELEV. = 2949.3'	Trina C. Couch, Regulatory Analyst
		LAT. = 32.2523727'N (NADC3)	Printed Name
		NMSP FAST (FT)	trina.couch@dyn.com
	W 0 CORNER SEC. 8	N = 455691.13	F-mail Address
	LONG. = 104.0323287W	E = 639324.51	
	NMSP EAST (FT)	10 100 100 1000 1000 1000 1000 1000 10	
	N = 453719.89		*SURVEYOR CERTIFICATION
	C = 024394.33	LATITUDE AND LONGITUDE COORDINATES	I hereby certify that the well location shown on this plat was
		ARE SHOWN USING THE SIGRTH AMERICAN DATUM OF 1983 (HAD83).	plotted from field notes of actual surveys made by me or under
tr	10.00	USTED NEW MEXICO STATE, PLANE EAST	nu entreprision and that the same is true and exercise to the
-92	E? 0	OF BEARING AND DISTANCES USED ARE	my supercision, that one me sume is the out correct to me
666		COORDINATES MODIFIED TO THE	hest of my belief
C1	······································		MAY 14 1053
0.4	1	28	Date of Survey
18.2	LX 7	57.0	117. Nolta
<u>.</u>	SH CODATD OFF		1. M. (2707) 1/2 // //
شم	-5W CUMPER SEC. 6 1 LAT. = 32.2396647'N 1	S Q CORNER SEC. 6 SE CURINER SEC. 6 $I = 32.2395725'N$	Conster Allo della
	LONG. = 104.0323069W	LONG. = 104.0237671W LONG. = 104.0151888W	SHIJG SHUMPLO
	NMSP EAST (FT)	NMSP EAST (FT) NMSP EAST (FT)	Sucher Line Softwichter Billing
	N = 451053.97 E = 636408.74	N = 451034.84 $N = 451035.71$	Centificate Number - Fil Mien Le ARAMILLO, PLS 17797
1	L	t = 639701.43 $E = 639701.43$	CHIDATE VICE 1000
	N89'48'07'W	2040.98 H! N89'48'10"% 2652.89 FT	SURVET WU. 2980

AMENDED REPORT











DRILLING PROGRAM

Devon Energy Production Company, L.P. Harroun Trust 6 SWD 1

1. Geologic Name of Surface Formation: Quarternary

2. Estimated Tops of Geological Markers & Depths of Anticipated FW, Oil, or Gas:

FORMATION NAME	TVD	Water, Oil/Gas
Rustler	40	
Top Salt	600	
Castile	1200	
Base of Salt	2515	
Delaware	2775	
1BSLM	6540	
1BSSS	7500	
2BSSS	8250	
3BSSS	9370	
Wolfcamp	9745	
Penn Shale	11325	
Strawn	11560	
Atoka	11750	
Morrow	12600	
Barnett	13400	
Missippi Lime	14150	
Woodford	14325	
Devonian	14450	Injection zone
Fusselman	14700	Injection zone
Montoya	15550	Injection zone
Simpson	15875	Injection zone
Well TD	16075	
Ellenburger	16420	

Pressure Control Equipment:

The BOP system used to drill the 17-1/2" hole will consist of a 20" 2M Annular preventer. The BOP system will be tested as a 2M system per BLM Onshore Oil and Gas Order 2 prior to drilling out the casing shoe.

A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the first intermediate hole section. The BOP system will be tested as a 3M system per BLM Onshore Oil and Gas Order 2 prior to drilling out the casing shoe.

A 5M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the second intermediate hole section. The BOP system will be tested as a 5M system per BLM Onshore Oil and Gas Order 2 prior to drilling out the casing shoe.

A 10M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the third intermediate and open/injection hole sections. The BOP system will be tested as a 10M system per BLM Onshore Oil and Gas Order 2 prior to drilling out the 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 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); **if an H&P rig drills this well. Otherwise no flex line is needed**. The line will be kept as straight as possible with minimal turns.

Devon requests the option of utilizing a mulitbowl wellhead system.

Auxiliary Well Control and Monitoring Equipment:

- a. A Kelly cock will be in the drill string at all times.
- b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.

3. Casing Program:

Hole Size	Hole Interval	Casing OD	Casing Interval	Weight (lb/ft)	Collar	Grade	Collapse Design Factor	Burst Design Factor	Tension Design Factor
26"	0 - 450'	20"	0 - ~450'	94	втс	J-55	1.84	1.84	3.1
17-1/2"	450 - 2750'	13-3/8"	0 - ~2750'	68	BTC	J-55	1.24	2.16	1.83
12-1/4"	2750 - 10500'	9-5/8"	0 - ~10500′	40	BTC	P-110	1.44	1.58	2.38
8-1/2"	10500-14400'	7"	~10000- ~14400'	29	втс	P-110	1.10	2.38	3.8
6"	14400 - ~16075'	Open hole							

Casing Notes:

- All casing is new and API approved
- Casing will never be completely evacuated and safety factors for intermediate strings assumes 1/3 evacuation to deepest subsequent open hole section depth

Maximum TVD: 16175'

4. **Proposed mud Circulations System:**

Depth	Mud Weight	Viscosity	Fluid Loss	Type System
0 - 450'	8.3 - 8.5	30-34	N/C	FW
450-2750'	10.0 - 10.2	28-32	N/C	Brine
2750-10500'	8.6-9.5	28-32	N/C	FW/Brine
10500-14325'	10.0-13.0	35-45	<10	Brine or OBM
14325-16075'	8.3-8.6	28-32	N/C	FW

The necessary mud products for weight addition and fluid loss control will be on location at all times. Visual mud monitoring equipment will be in place to detect volume changes indicating loss or gain of circulating fluid volume. If abnormal pressures are encountered, electronic/mechanical mud monitoring equipment will be installed.

5.	Cementing Table:
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Casing	# Sks	Wt. Ib/	H₂O gal/sk	Yld ft3/	500# Comp.	Slurry Description			
		gal	i - Aline Anio, - Nor Aline - Aline Aline - Aline	sack	Strength (hours)	n an an Anna a Anna an Anna an Anna an Anna Anna			
20" Surface	1080	14.8	6.32	1.33	6	Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake			
13-3/8" Inter	1420	12.9	9.81	1.85	14	Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 Ibs/sack Poly-E-Flake			
	810	14.8	6.32	1.33	6	Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake			
9-5/8"	1270	11.9	12.89	2.31	n/a	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			
Inter	710	14.4	5.76	1.25	15	Tail: (50:50) Class H Cement: Poz (Fly Ash) + 0.4% Halad-9 + 0.1% HR-601			
	1370	11.9	12.89	2.31	n/a	1 st Stage 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			
9-5/8" Inter	400	14.4	5.76	1.25	15	1 st Stage Tail: (50:50) Class H Cement: Poz (Fly Ash) + 0.4% Halad-9 + 0.1% HR-601			
Two	DV Tool = 2800ft								
Stage Option	70	12.9	9.81	1.85	14	2 nd 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	2 nd Stage Tail: Class C Cement + 0.125 lbs/sack Poly-E- Flake			
7" Inter	640	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
20" Surface	0'	100%
13-3/8" Intermediate	0'	75%
9-5/8" Intermediate	2550'	50%
9-5/8" Intermediate Two Stage Option	1 st Stage = 2800' / 2 nd Stage = 2550'	50%
7" Intermediate	10,300'	25%

Notes:

- Cement volumes Surface 100%, 1st Intermediate 75%, 2nd Intermediate 50% and 3rd Intermediate based on at least 25% excess.
- Actual cement volumes will be adjusted based on fluid caliper and/or caliper log data