		OCD	Artesia					
Forin 3160-5 (August 2007) AAAPD B	AAPD UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT							
SUNDRY	SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.							
abandoned we								
SUBMIT IN TRI	7. If Unit or CA/Agre	ement, Name and/or No.						
1. Type of Well Ø Oil Well Gas Well Oth	8. Well Name and No ALDABRA 26 FE	DERAL COM 8H						
2. Name of Operator DEVON ENERGY PRODUCT	Contact: TF ION CO.E-Mail: trina.couch@	RINA C COUCH dvn.com		9. API Well No. 30-015-38624				
3a. Address DEVON ENERGY PRODUCT OKLAHOMA CITY, OK 7310	TON CO. LP 333 WEST SH 2-5015	3b. Phone No. (include area cod TRIDON 28078DAHOMA	^{le)} CITY, OK 73	10. Field and Pool, or 1021500119CAT; BOI	Exploratory NE SPRING			
4. Location of Well (Footage, Sec., 7 Sec 26 T23S R31E 350FSL 4	, R., M., or Survey Description) 45FEL	405-228-76	223	11. County or Parish, EDDY COUNT	and State Y COUNTY, NM			
12. CHECK APP	ROPRIATE BOX(ES) TO I	NDICATE NATURE OF	NOTICE, R	EPORT, OR OTHE	R DATA			
TYPE OF SUBMISSION		TYPE (OF ACTION					
Notice of Intent	Acidize Alter Casing	Deepen Fracture Treat	Produc	ction (Start/Resume) 🔲 Water Shut-Off				
Subsequent Report	Casing Repair	New Construction	Recom	plete	Other			
Final Abandonment Notice	Change Plans	Plug and Abandon	🗖 Tempo	rarily Abandon	Change to Original A PD			
	Convert to Injection	Plug Back	U Water	Disposal				
If the proposal is to deepen direction: Attach the Bond under which the wo following completion of the involved testing has been completed. Final Al determined that the site is ready for f Devon Energy Production Con Aldabra 26 Fed Com 8H from	illy or recomplete horizontally, gives rk will be performed or provide the operations. If the operation result andonment Notices shall be filed inal inspection.) mpany, L.P. respectfully req an Avalon Shale to a 3rd Be	ve subsurface locations and mea e Bond No. on file with BLM/B. ts in a multiple completion or re only after all requirements, inclu uests to change the targe one Spring well.	IA. Required and true v IA. Required st completion in a ading reclamatic	n the	ent markers and zones. Filed within 30 days 50-4 shall be filed once and the operator has COC A CTECOOL MOCD			
Thank you	JUL 31	/ED 2013	SEE ATTACHED FOR 8/1/2013 CONDITIONS OF APPROVAL					
Attachments:	NMOCD AR	TESIA		·				
14. I hereby certify that the foregoing is	true and correct. Electronic Submission #210 For DEVON ENERGY Committed to AFMSS for pro-	3408 verified by the BLM W PRODUCTION CO. LP, sen	ell Informatio t to the Carls	n System bad (18/2013 ()				
Name(Printed/Typed) TRINA C (COUCH	Title REGU	LATORY AS	SOCIATE				
Signature (Electronic S	Submission)	Date 07/12/	2013	4000				
	THIS SPACE FOR	FEDERAL OR STATE	OFFICE U	BE APPR	OVED			
Approved By	· ·	Title			0 2013/9			
Conditions of approval, if any, are attached ertify that the applicant holds legal or equivich would entitle the applicant to condu-	 Approval of this notice does no itable title to those rights in the su ict operations thereon. 	t warrant or bject lease Office		Amni	milliton			
itle 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent s	U.S.C. Section 1212, make it a cristatements or representations as to	me for any person knowingly an any matter within its jurisdiction	d willfully to m n.	ake to ARLASERD	ageney of the United			
** OPERAT	OR-SUBMITTED ** OPI	ERATOR-SUBMITTED	** OPERAT	FOR-SUBMITTED	** .			

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

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Additional data for EC transaction #213408 that would not fit on the form

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32. Additional remarks, continued

Drilling Plan Directional Survey

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ALDABRA 26 FED COM 8H– APD DRILLING PLAN SKS 6.28.12 REVISED 7.9.13

Casing Program

Hole Size	Hole Interval	OD Csg	Casing Interval	Weight	Collar	Grade
17-1/2"	0 - 880	13-3/8"	0 - 880	48#	STC	H-40
12-1/4"	880 - 4225	9-5/8"	0 - 4425	40#	LTC	J-55
8-3/4"	4425 - 10950	5-1/2"	0 - 10950	17#	LTC	P-110
8-3/4"	10950 - 16031	5-1/2"	10950 - 16031	17#	BTC	P-110

MAX TVD: 11,620 FT

Design Factors

Casing Size	Collapse Design Factor	Burst Design Factor	Tension Design Factor
17.5"-68# P-110-BTC	1.94	4.35	7.89
12.25" 40# HCK-55 BTC	1.24	1.72	2.94
8-1/2" 17# HCP-110 LTC	1.67	2.08	1.63
8-1/2" 17# HCP-110 BTC	1.58	1.96	5.15

Mud Program

Depth	Mud Wt.	Visc.	Fluid Loss	Type System
0 - 880	8.4 - 9.0	30-34	N/C	FW
880 - 4225	9.8 - 10.0	28-32	N/C	Brine
4225 - 16031	8.6 - 9.0	28-32	N/C	FW

Pressure Control Equipment

The BOP system used to drill the intermediate hole will consist of a 13-5/8" 3M Double Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order 2 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 Double Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order 2 as a **3M system** prior to drilling out the intermediate casing shoe.

The pipe rams will be operated and checked as per Onshore Order 2. 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.

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Devon

Aldabra 26 Fed 8H

Cementing Program (cement volumes based on at least Surface 150% excess, Intermediate 75% excess and Production is 25% excess)

13-3/8" Surface	Tail: 740 sacks Class C Cement + 1% bwoc Calcium Chloride + 0.125 lbs/sack Poly-E-Flake + 63.1% Fresh Water, 14.8 ppg						
	Yield: 1.34 cf/sk						
	TOC @ surface						
9-5/8" 2 nd Intermediate	Lead: 950 sacks (65:35) Class H Cement:Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 70.8 % Fresh Water, 12.9 ppg						
	Yield: 1.85 cf/sk						
	TOC @ surface						
	Tail: 430 sacks Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.9% Fresh Water, 14.8 ppg						
	Yield: 1.33 cf/sk						
5-1/2" Production	1 [#] Stage Lead: 950 sacks (65:35) Class H Cement:Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 73.6 % Fresh Water, 12.5 ppg						
	Yield: 2.04 cf/sk						
	TOC @ 5000						
	Tail: 1300 sacks (50:50) Class H Cement:Poz (Fly Ash) + 1 lb/sk Sodium Chloride + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.1% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water, 14.5 ppg						
	Vield: 1.22 cf/sk						
	DV Tool at 5000ft						
SCAR	2 nd Stage Lead: 470 sacks (50:50) Class H Cement:Poz (Fly Ash) + 10% BWOC Bentonite + 8 lb/sk Sodium Chloride + 0.15 lb/sk of FWCA + 0.125 lb/sk of Pol-E-Flake + 0.3% BWOC HR-601 + 0.25 lb/sk D-Air 5000 + 77.2% Fresh Water, 11.8 ppg						
	Yield: 2.52 cf/sk						
	TOC @ surface						
	Tail: 120 sacks Class C Cement + 63.5% Water, 14.8 ppg						
_	Yield: 1.33 cf/sk						
-							
<u>TOC for All Strings</u> : Surface: 800ft Intermediate: 4425ft Production: 16031ft	0ft (800ft of fill of Tail) 0ft (3425ft of fill of Lead & 1000 ft of fill of Tail) 5000ft (1 st Stage - 6082ft of fill of Lead & 4949ft of fill of Tail) 0ft (2 nd Stage - 4500ft of fill of Lead & 500 ft of fill of Tail						

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

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Drilling Services

Proposal



ALDABRA 26 FED COM 8H

EDDY COUNTY, NM

WELL FILE: PLAN 1

JULY 10, 2013

Weatherford International, Ltd. P.O. Box 61028 Midland, TX 79711 USA +1.432.561.8892 Main +1.432.561.8895 Fax www.weatherford.com



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Weatherford Wft Plan Report X Y's.



Company:	Devon Ene	ərgy		· · · · ·	Ď	ate: *7/10/	2013	Time: 12:51.04		Page: N.
Field: E	Eddy Co., Aldabra 26	NM (NAD 8 Fed Com	3) 8H	•	Č V	o-ordinate ertical (TV	(NE) Reference D) Reference	ce: Well: Aldabra SITE 3490.0	26 Fed Com t	3H, Grid North
Well: / Wellnath: 1	Aldabra 26	Fed Com	8H .		S	ection (VS) urvey Calc	Reference:	Well (0.00N,0	0.00E,357.03A	zi) Db Švhase
Plan:	Plan #1					Date Cor	nposed:	7/10/2013		
Principal:	Yes					Version: Tied-to:		1 From Surface		
Site:	Aldabra	26 Fed Cor	n 8H			· · · · · · · · · · · · · · · · · · ·				
Site Position	o n: Map		Nort East	hing: 462 ing: 724	2150.34 ft 4266.82 ft	Latitude: Longitud	: 32 le: 103	16 8.892 N 44 29.364 W		
Position Un Ground Le	ncertaint vel:	y: 0 3470	.00 ft .00 ft			North Re Grid Cor	eference: ivergence:	Grid 0.32 de	g	
Well:	Aldabra	26 Fed Cor	n 8H			Slot Nam	ie:	······································		
Well Positi	ion: +	N/-S 0	.00 ft Nori	hing: 462	2150.34 ft	Latitude	: 32	16 8.892 N		
Position U	+ ncertaint	E/-W 0 y: 0	.00 ft East .00 ft	ing: 724	1266.82 ft	Longitud	e: 103	44 29.364 W		
Wellpath:	1					Drilled F	rom:	Surface	······································	
Current Da	atum: S	ITE		Height	3490.00 ft	Tie-on Do Above Sy	epth: /stem Datum:	0.00 ft Mean Sea Leve :	I	
Magnetic D Field Stren)ata: igth:	10/30/20 484)13 113 nT			Declinati Mag Dip	ion: Angle:	7.38 de 60.14 de	g	
Vertical Se	ction: De	epth From ft	(TVD)	+N/- ft	S	+E/-W ft		Direction deg		
		0.00		0.00		0.00	- <u></u>	357.03		
Plan Sectio	on Inform	ation								
MD. ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-Ŵ	DLS deg/100	Búild)ft deg/100ft d	Furn TFO eg/100ft deg	, Target	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00 0.00	<u> </u>	<u> </u>
11082.62	0.00 15.50	0.00 60.00	11210.22	0.00 8.68	0.00 15.04	12.00	12.00	0.00 0.00 0.00		
11906.61 16031.49	90.00 90.00	355.56 355.56	11620.00 11620.00	489.48 4601.97	80.53 -238.85	12.00 0.00	10.72 0.00	-9.27 -65.26 0.00 0.00	PBHL	
Survey			·····							
MD	Incl	Azim	TŇD	N/S	E/W	vs	DLS	MapN	MapE	Commen
.ft	deg	deg	ft	<u>ft</u>	ft ,	ft	deg/100ft	<u>, , ft .</u>	ft	
11082.62	0.00	0.00	11082.62	0.00	0.00	0.00	0.00	462150.34 462150.34	724266.82 724266.82	КОР
11100.00	2.09 14.09	60.00 60.00	11100.00 11198.82	0.16 7.18	0.27 12 43	0.14 6.52	12.00 12.00	462150.50 462157 52	724267.09	
11211.79	15.50	60.00	11210.22	8.68	15.04	7.89	12.00	462159.02	724281.86	Build/Turn
11300.00	22.08	33.65	11293.83	28.43	34.49	26.61	12.00	462178.77	724301.31	
11400.00	32.14 43.13	19.03	11382.83	69.37 128.28	53.64 68.92	66.50 124.53	12.00	462219.71 462278.62	724320.46 724335.74	
11600.00	54.48	5.85	11527.73	202.58	79.66	198.18	12.00	462352.92	724346.48	
11700.00	66.00	1.96	11577.31	289.03	85.38	284.21	12.00	462439.37	724352.20	
11800.00	77.60 89.23	358.71 355.75	11608.50 11619.96	383.84 482 88	85.85 81.03	378.88 478.04	12.00	462534.18	724352.67	
11906.61	90.00	355.56	11620.00	489.48	80.53	484.65	12.00	462639.82	724347.85	LP
12000.00	90.00 90.00	355.56 355.56	11620.00 11620.00	582.58 682.28	73.30 65.56	578.00 677 97	0.00	462732.92	724340.12	
12200.00	90.00	355 56	11620.00	781.09	57.91	777 04	0.00	160000 20	704204 60	
12300.00	90.00	355.56	11620.00	881.68	50.07	877.90	0.00	463032.02	724324.63 724316.89	
12400.00	90.00	355.56	11620.00	981.38	42.33	977.87	0.00	463131.72	724309.15	
12500.00	90.00 90.00	355.56 355.56	11620.00 11620.00	1081.08	34.59 26.84	1077.84 1177.81	0.00 0.00	463231.42 463331.12	724301.41 724293.66	
12700.00 12800.00	90.00 90.00	355.56 355.56	11620.00 11620.00	1280.48 1380.18	19.10 11.36	1277.77 1377.74	0.00	463430.82 463530.52	724285.92 724278.18	

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Weatherford Wft Plan Report X Y's.



Company: D Field: Éé Site: Al Well: Al Wellpath: 1	evon Ene dy Co. I dabra 26 dabra 26	igy NM (NAD (Fed Com Fed Com	33) 8H 8H	2 - 200 M / M - 20 	D C V S S	ate: 7/10/ o-ordinate(ertical (TV ection (VS) urvey Calcu	2013 Tir NE) Reference: D) Reference: Reference: Ilation Method	ne: 12:51 Well: Alda SITE 3490 Well (0.00 Minimum	04 bia 26 Fed Com 8 00 N,0.00E 357.03Az Curvature	Page: 2 H; Grid North i) Db: Sybase
Survey										
MD	Incl	Azim	TVD	N/S	Ē/Ŵ	VS	DLS	MapN	MapE	Cômmen
fî.	deg	deg	ft	ft,	,ft	ft	deg/100ft	ff	ft,	
12900.00	90.00	355.56	11620.00	1479.88	3.61	1477.71	0.00	463630.22	724270.43	
13000.00	90.00	355.56	11620.00	1579.58	-4.13	1577.67	0.00	463729.92	724262.69	
13100.00	90.00	355.56	11620.00	1679.28	-11.87	1677.64	0.00	463829.62	724254.95	
13200.00	90.00	355.56	11620.00	1778.98	-19.61	1777.61	0.00	463929.32	724247.21	
13300.00	90.00	355.56	11620.00	1878.68	-27.36	1877.58	0.00	464029.02	724239.46	
13400.00	90.00	355.56	11620.00	1978.38	-35.10	1977.54	0.00	464128.72	724231.72	
13500.00	90.00	355.56	11620.00	2078.08	-42.84	2077.51	0.00	464228.42	724223.98	
13600.00	90.00	355.56	11620.00	2177.78	-50.59	2177.48	0.00	464328.12	724216.23	
13700.00	90.00	355.56	11620.00	2277.48	-58.33	2277.44	0.00	464427.82	724208 49	
13800.00	90.00	355.56	11620.00	2377.18	-66.07	2377.41	0.00	464527.52	724200.75	
13900.00	90.00	355.56	11620.00	2476.88	-73.81	2477.38	0.00	464627.22	724193.01	
14000.00	90.00	355.56	11620.00	2576.58	-81.56	2577.34	0.00	464726.92	724185.26	
14100.00	90.00	355.56	11620.00	2676.28	-89.30	2677.31	0.00	464826.62	724177.52	
14200.00	90.00	355 56	11620.00	2775 98	-97 04	2777 28	0.00	464026 32	724160 78	
14300.00	90.00	355.56	11620.00	2875.68	-104.78	2877.25	0.00	465026.02	724162.04	
14400.00	90.00	355.56	11620.00	2975.38	-112.53	2977.21	0.00	465125.72	724154.29	
14500.00	90.00	355.56	11620.00	3075.08	-120.27	3077.18	0.00	465225.42	724146.55	
14600.00	90.00	355.56	11620.00	3174.78	-128.01	3177.15	0.00	465325.12	724138.81	
14700.00	90.00	355.56	11620.00	3274.48	-135.76	3277.11	0.00	465424 82	724131.06	
14800.00	90.00	355.56	11620.00	3374.18	-143.50	3377.08	0.00	465524.52	724123.32	
14900.00	90.00	355.56	11620.00	3473.88	-151.24	3477.05	0.00	465624.22	724115.58	
15000.00	90.00	355.56	11620.00	3573.58	-158.98	3577.02	0.00	465723.92	724107.84	
15100.00	90.00	355.56	11620.00	3673.28	-166.73	3676.98	0.00	465823.62	724100.09	
15200.00	90.00	355 56	11620.00	3772 98	-174 47	3776.95	0.00	465023 32	72/002 35	
15300.00	90.00	355.56	11620.00	3872.68	-182.21	3876.92	0.00	466023.02	724084 61	1
15400.00	90.00	355.56	11620.00	3972.38	-189.96	3976.88	0.00	466122.72	724076.86	
15500.00	90.00	355.56	11620.00	4072.08	-197.70	4076.85	0.00	466222.42	724069.12	[
15600.00	90.00	355.56	11620.00	4171.78	-205.44	4176.82	0.00	466322.12	724061.38	
15700.00	90.00	355 56	11620.00	4271 48	-213 18	4276 78	0.00	166421 82	724053 64	
15800.00	90.00	355.56	11620.00	4371 18	-220.93	4376 75	0.00	166521 52	724035.04	ļ
15900.00	90.00	355.56	11620.00	4470.88	-228.67	4476.72	0.00	466621.22	724038.15	
16000.00	90.00	355.56	11620.00	4570.58	-236.41	4576.69	0.00	466720.92	724030.41	
16031.49	90.00	355.56	11620.00	4601.97	-238.85	4608.16	0.00	466752.31	724027.97	PBHL
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Targets					•					
1			and a constant of the second	an pin film an	1.07 P	Ma	n Man		atituda 200	Tomation do 24
Name	$- F_{\tau}$	Descripti	TVI) +N/-	Ś' - '+E/.	W Nort	hing Easting	Deg M	lin Sec Deg	Min Sec
		Dip.	Dir. ft.	f	ť í	ft	i fit i fit			
LP Tgt			11620.0	00 310.	10 93.4	46246	0.44 724360.23	32 16	11.956 N 103	44 28,256 W
Ű										
PBHL			11620.0	00 4601.9	97 -238.8	46675	2.31 724027.97	32 16	54.444 N 103	44 31.850 W
-Hectar	ngle (412	24x50)								
							·····			
Casing Poin	ts									
MD	ŤVĎ	Diame	ter Hole S	ize N	lame	े दिन्द	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		•	• • •
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						<u></u>			······································	<u> </u>
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Weatherford Wft Plan Report X Y's.



 Company: Devon Energy,
 Date: 7/10/2013
 Time: 12:51:04
 Page: 3

 Field:
 Eddy Co., NM (NAD 83)
 Co-ordinate(NE) Reference: Well: Aldabra 26 Fed Com 8H, Grid North

 Site:
 Aldabra 26 Fed Com 8H
 Vertical (TVD) Reference: SITE 3490.0

 Well:
 Aldabra 26 Fed Com 8H
 Section (VS); Reference: Well (0.00N, 0.00E; 357, 03Azi)

 Wellpath:
 1
 Section (VS); Reference: Well (0.00N, 0.00E; 357, 03Azi)

 Formations
 MD
 TVD

MD TVD Formations

Annotation							
MD. TVD ft ft.	ما معروف می در به می از می از می ماه می از می از می از می فروشی در از مه		· · · ·	 		. ,	
11082.62 11082.62 11211.79 11210.22 11906.61 11620.00 16031.49 0.00	E KOP Build/Turn LP PBHL						



Weatherford Drilling Services

GeoDec v5.03

Report Date:									
Job Number:									
Customer:	Devon								
Well Name:	Aldabra 26 Fed Com								
API Number:	Der:								
Rig Name:									
Location:	Eddy Co., NM								
Block:			<u> </u>						
Engineer:	RWJ								
US State Plane 19	83	Geodetic Latitude / Longitu	de						
System: New Mexi	co Eastern Zone	System: Latitude / Longitud	de						
Projection: Transv	erse Mercator/Gauss Kruger	Projection: Geodetic Latitue	de and Longitude						
Datum: North Ame	rican Datum 1983	Datum: North American Datum 1983							
Ellipsoid: GRS 198	80	Ellipsoid: GRS 1980							
North/South 4621	50.340 USFT	Latitude 32.2691393 DEG							
East/West 724266	5.820 USFT	Longitude -103.7414852 [DEG						
Grid Convergence	: .32°								
Total Correction: -	+7.17°		,						
Geodetic Location	WGS84 Elevation	= 0.0 Meters	<u> </u>						
Latitude = 3	2.26914° N 32° 1	6 min 8.902 sec							
Longitude = 10	3.74149° W 103° 4	4 min 29.347 sec							
Magnetic Declination	on = 7.49°	[True North Offset]							
Local Gravity =	.9988 g	CheckSum =	6580						
Local Field Strengt	h= 48398 nT	Magnetic Vector X =	23900 nT						
Magnetic Dip =	60.13°	Magnetic Vector Y =	3141 nT						
Magnetic Model =	baam2013	Magnetic Vector Z =	41967 pT						
Spud Date =	Oct 30, 2013	Magnetic Vector H =	24106 nT						
		<u> </u>							

Signed:_____

Date:____

-

Aldabra 26 Federal Com 8H 30-015-38624 Devon Energy Production Co. July 29, 2013 Conditions of Approval

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

- 1. A Hydrogen Sulfide (H2S) Drilling Plan shall be activated prior to drilling out the surface shoe. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.
- 2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. If the drilling rig is removed without approval an Incident of Non-Compliance will be written and will be a "Major" violation.
- 3. Option Setting surface casing with Ashton Rig NO LONGER APPROVED
- 4. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.

5. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. IF OPERATOR DOES NOT HAVE THE WELL SPECIFIC CEMENT DETAILS ONSITE PRIOR TO PUMPING THE CEMENT FOR EACH CASING STRING, THE WOC WILL BE 30 HOURS. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

R-111-P-Potash

Possible lost circulation in the Delaware and Bone Spring. Possible water and brine flows in the Salado, Castile, Delaware and Bone Spring.

- 1. The 13-3/8 inch surface casing shall be set at approximately 880 feet (below the Magenta Dolomite of the Rustler Anhydrite and above the salt) and cemented to the surface. Freshwater mud to be used to setting depth.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.

Intermediate casing shall be kept fluid filled while running into hole to meet BLM minimum collapse requirements.

2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to potash.

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

3. The minimum required fill of cement behind the 5-1/2 inch production casing is:

Operator has proposed DV tool at depth of 5000'. Operator is to submit sundry if DV tool depth varies by more than 100' from approved depth.

- a. First stage to DV tool:
- Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.
- b. Second stage above DV tool:

- 4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 5. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

Cement to surface. If cement does not circulate, contact the appropriate BLM office. Additional cement may be required as excess calculates to 3%.

C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).
- 3. 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.
 - a. For surface casing only: If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.
- 4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.
 - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
 - c. The results of the test shall be reported to the appropriate BLM office.

- d. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- e. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

D. DRILL STEM TEST

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If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

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