eceived by OCD: 3/21/2024 9:26:13 AM U.S. Department of the Interior BUREAU OF LAND MANAGEMENT		Sundry Print Report 05/21/2024
Well Name: ALLEY CAT 17-20 FED COM	Well Location: T23S / R32E / SEC 17 / NWNE / 32.311262 / -103.6962118	County or Parish/State: LEA / NM
Well Number: 713H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM62223	Unit or CA Name:	Unit or CA Number:
US Well Number:	Operator: DEVON ENERGY PRODUCTION COMPANY LP	

Notice of Intent

Sundry ID: 2789466

Type of Submission: Notice of Intent

Date Sundry Submitted: 05/10/2024

Date proposed operation will begin: 05/10/2024

Type of Action: APD Change Time Sundry Submitted: 06:56

Procedure Description: Devon Energy Production Co., L.P. (Devon) respectfully requests to change the well name, BHL, and update the casing/cement design on the subject well. Please see attached revised C102, drill plan (offline cement variance included), and directional plan. Permitted Well name: ALLEY CAT 17-20 FED COM 814H Proposed Well name: ALLEY CAT 17-20 FED COM 713H Permitted BHL: SWSE, 20 FSL, 1950 FEL, 20-23S-32E Proposed BHL: SWSE, 20 FSL, 2300 FEL, 20-23S-32E No new leases have been added since approved APD. APD ID: 10400085546

NOI Attachments

Procedure Description

WA018443686_ALLEY_CAT_17_20_FED_COM_713H_WL_R4_20240520133611.pdf

Alley_Cat_17_20_Fed_Com_713H_R4_20240520133609.pdf

Alley_Cat_17_20_Fed_Com_713H_Directional_Plan_05_20_24_20240520133609.pdf

5.5_20__P110HP_CDC_HTQ_20240510065307.pdf

10.750_45.5_J55_SEAH_20240510065307.pdf

8.625_32_P110HSCY_MO_FXL_with_95__RBW__20240510065307.pdf

eceived by OCD: 5/21/2024 9:26:13 AM Well Name: ALLEY CAT 17-20 FED COM	Well Location: T23S / R32E / SEC 17 / NWNE / 32.311262 / -103.6962118	County or Parish/State: LEA
Well Number: 713H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM62223	Unit or CA Name:	Unit or CA Number:
US Well Number:	Operator: DEVON ENERGY PRODUCTION COMPANY LP	
Conditions of Approv	/al	
Specialist Review		

Alley_Cat_17_20_Fed_Com_713H_Sundry_ID_2789466_20240521085801.pdf

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Name: DEVON ENERGY PRODUCTION COMPANY LP

Operator Electronic Signature: SHAYDA OMOUMI

Title: Regulatory Compliance Associate 3

Street Address: 333 W SHERIDAN AVE

City: OKLAHOMA CITY State: OK

Phone: (405) 235-3611

Email address: SHAYDA.OMOUMI@DVN.COM

Field

Representative Name: Street Address: City: Phone: Email address:

State:

BLM Point of Contact

BLM POC Name: LONG VO BLM POC Phone: 5759885402 Disposition: Approved Signature: Long Vo BLM POC Title: Petroleum Engineer BLM POC Email Address: LVO@BLM.GOV Disposition Date: 05/21/2024

Zip:

Signed on: MAY 20, 2024 01:36 PM

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505 Page 3 of 49

AMENDED REPORT

		W	ELL LO	DCATIO	N AND ACR	EAGE DEDIC	CATION PLA	Т		
¹ API Number ² Pool					de ³ Pool Name					
30	0255290)8		98248		WC-02	25 G-08 S243	217P; UPR W	VC	
⁴ Property C	Code				⁵ Property	Name		-	⁶ Well Number	
322230	5		ALLEY CAT 17 20 FED COM							
⁷ OGRID N	No.		⁸ Operator Name							
6137			DEVON ENERGY PRODUCTION COMPANY, L.P.							
					[™] Surfac	e Location		-		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
В	17	23 S	32 E		198	NORTH	2486	EAST	LEA	
			n F	Bottom H	ole Location	If Different Fr	om Surface			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
0	20	23 S	32 E		20	SOUTH	2300	EAST	LEA	
² Dedicated Acre	s ¹³ Joint	or Infill ¹⁴	Consolidatio	n Code	¹⁵ Order No.					
640										

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.

	ALLEY CAT 17 20 FED COM 713H	17 OPERATOR CERTIFICATION
AN89'25'44"E 2637.38 FT B N89'21'37"E 2632.81 FT C	EL. = 3621.5	I hereby certify that the information contained herein is true and complete
2486'	GEODETIC COORDINATES NAD 83 NMSP EAST	to the best of my knowledge and belief, and that this organization either
	SURFACE LOCATION N.= 477554.47	owns a working interest or unleased mineral interest in the land including
861	E.= 738169.20 LAT. = 32.3112620*N	the proposed bottom hole location or has a right to drill this well at this
[©] NMNM 018848 NMNM 062223W	LONG. = 103.6962118'W	location pursuant to a contract with an owner of such a mineral or working
	KICK OFF POINT FIRST TAKE POINT (PPP 1) calls $\underline{41' FNL}$, $\underline{2300' FEL}$ 100' FNL, 2300' FEL	interest, or to a voluntary pooling agreement or a compulsory pooling order
00.2	N = 477714 $N = 477654.53$	heretofore entered by the division.
	E.= 738353 E.= 738354.52 LAT. = 32.31160499 LAT. = 32.3115340 'N LONG. = -103.69569566 LONG. = 103.6956101 'W	Shauda Omourn 5/20/2024
E PPP 2-	LAST TAKE POINT BOTTOM OF HOLE	Signature Date
C0 C0 C0 C0 C0 C0 C0 C0 C0 C0	100' FEL 0300' FEL 00' FEL 0300' FEL	Shayda Omoumi
	LAT. = 32.2830556*N LAT. = 32.2828357*N	Printed Name
20'20" 750 54		shayda.omoumi@dvn.com
N89'29'46'E N89'23'14"E	N 4/5/14.4/ N 4/24/5.56	E-mail Address
N89'29'46"E N89123'14"E 2633.B3 FT M 2634.84 FT	E E.= 738370.70 E.= 738387.53 LAT. = 32.3045519'N LAT. = 32.2972920'N	
	LONG. = 103.6956066'W LONG. = 103.6956030'W	¹⁸SURVEYOR CERTIFICATION
2640.50	5 PPP 2 1321' FSL, 2300' FEL N.= 468515.23	I hereby certify that the well location shown on this plat
	E.= 738412.74 LAT. = 32.2864118'N	was plotted from field notes of actual surveys made by
> NMNM 0559539 NMNM 08615.3 # 0: -	LONG. = 103.6955976'W CORNER COORDINATES TABLE	me or under my supervision, and that the same is true
SEC 20	NAD 83 NMSP EAST A - N.= 477724.51 E.= 735384.50	and correct to the best of my belief.
\bigcirc	F) B - N.= 477750.79 E.= 738021.18 C - N.= 477780.18 E.= 740653.25	MAY 20, 2024
	D - N.= 475137.91 E.= 740670.42 E - N.= 472497.97 E.= 740686.53	Date of Survey
	F - N.= 469855.52 E.= 740704.48 G - N.= 467217.53 E.= 740720.53	MEXX
% ≥NMNM 116573 NMNM 077063	H - N.= 467190.86 E.= 738084.99 J I - N.= 467168.68 E.= 735450.43	A AN ARANTA
LTP -	J – N.= 469806.75 E.= 735434.10 K – N.= 472446.64 E.= 735419.26	127 52 127
οF HOLE	L – N.= 475084.23 E.= 735403.66 M – N.= 472469.80 E.= 738052.41	Signature and Seal of Protectional Surveyor:
2300	2 <u>LEGEND</u> — · · — · · — SECTION LINE	
\$89"31'03"₩ 2635.23 FT ⊕ \$89"25'13"₩ 2636.25 FT ©		Certificate Number: DECEMINE LARAMILLO, LS 12797
1	WELL PATH	PHOFSSRVE NO. 9364C

Received by OCD: 5/21/2024 9:26:13 AM

r	J	t	e	r	J	t

Х	As Drilled
~	A3 Difficu

API #

Operator Name:	Property Name:	Well Number
DEVON ENERGY PRODUCTION COMPANY, L.P.	ALLEY CAT 17 20 FED COM	713H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
В	17	235	32E		41	NORTH	2300	EAST	LEA
Latitude			Longitude		NAD				
32.31160499 -1			-103.6956956	-103.69569566			83		

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
B	17	23S	32E		100	NORTH	2300	EAST	LEA
Latitu 32.3	^{de} 11534	0			Longitude 103.6956	6101			NAD 83

Last Take Point (LTP)

UL O	Section 20	Township 23S	Range 32E	Lot	Feet 100	From N/S SOUTH	Feet 2300	From E/W EAST	County LEA
Latitude			Longitud	le		NAD			
32.2830556			103.6	103.6955959			83		

Is this well the defining well for the Horizontal Spacing Unit? N

Is this well an infill well?

V	
Y	
•	

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API # 30-025-52906		
Operator Name:	Property Name:	Well Number
DEVON ENERGY PRODUCTION COMPANY, L.P.	ALLEY CAT 17-20 FED COM	714H

KZ 06/29/2018



<u>10-3/4"</u> <u>45.50#</u> <u>0.400"</u> <u>J-55</u>

Dimensions (Nominal)

Outside Diameter Wall Inside Diameter Drift	10.750 0.400 9.950 9.875	in. in. in. in.
Weight, T&C Weight, PE	45.500 44.260	lbs/ft lbs/ft
Internal Yield Pressure at Minimum Yield		
Collapse	2090	psi
Internal Yields Pressure		
PE	3580	psi
STC	3580	psi
BTC	3580	psi
Yield Strength, Pipe Body	715	1000 lbs
Joint Strength, STC		
STC	493	1000 lbs
BTC	796	1000 lbs

Note: SeAH Steel has produced this specification sheet for general information only. SeAH does not assume liability or responsibility for any loss or injury resulting from the use of information or data contained herein. All applications for the material described are at the customer's own risk and responsibility.

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U. S. Steel Tubular Products 5.500" 20.00lb/ft (0.361" Wall) P110 HP USS-CDC HTQ[®]

MECHANICAL PROPERTIES	Pipe	USS-CDC HTQ [®]		
Minimum Yield Strength	125,000		psi	
Maximum Yield Strength	140,000		psi	
Minimum Tensile Strength	130,000		psi	
DIMENSIONS	Pipe	USS-CDC $HTQ^{\mathbb{R}}$		
Outside Diameter	5.500	6.300	in.	
Wall Thickness	0.361		in.	
Inside Diameter	4.778	4.778	in.	
Standard Drift	4.653	4.653	in.	
Alternate Drift			in.	
Nominal Linear Weight, T&C	20.00		lb/ft	
Plain End Weight	19.83		lb/ft	
SECTION AREA	Pipe	USS-CDC HTQ [®]		
Critical Area	5.828	5.828	sq. in.	
Joint Efficiency		97.0	%	
PERFORMANCE	Pipe	USS-CDC HTQ [®]		
Minimum Collapse Pressure	13,150	13,150	psi	
External Pressure Leak Resistance		10,520	psi	
Minimum Internal Yield Pressure	14,360	14,360	psi	
Minimum Pipe Body Yield Strength	729,000		lb	
Joint Strength		707,000	lb	
Compression Rating		424,000	lb	
Reference Length		23,567	ft	
Maximum Uniaxial Bend Rating		60.6	deg/100 ft	
MAKE-UP DATA	Pipe	USS-CDC HTQ [®]		
Make-Up Loss		4.63	in.	
Minimum Make-Up Torque		14,500	ft-lb	
Maximum Make-Up Torque		20,500	ft-lb	
Connection Yield Torque		25,300	ft-lb	

Notes

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness and Specified Minimum Yield Strength (SMYS).

2. Uniaxial bending rating shown is structural only, and equal to compression efficiency.

3. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).

4. Reference length is calculated by joint strength divided by nominal threaded and coupled weight with 1.5 safety factor.

5. Connection external pressure leak resistance has been verified to 80% API pipe body collapse pressure following the guidelines of API 5C5 Cal II.

Legal Notice

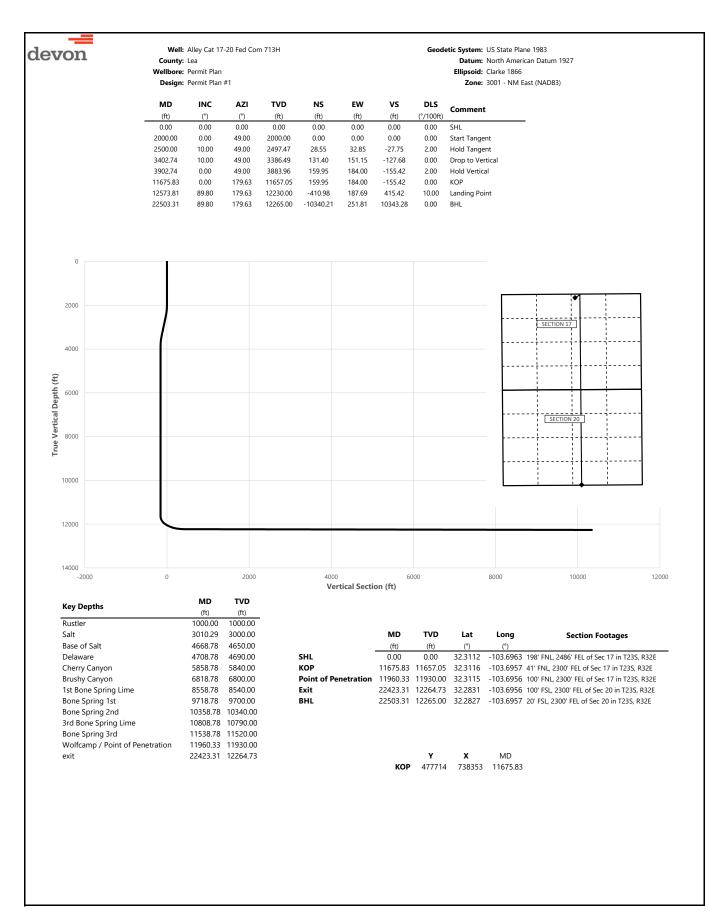
USS - CDC HTQ[®] (High Torque Casing Drilling Connection) is a trademark of U. S. Steel Corporation. This product is a modified API Buttress threaded and coupled connection designed for drilling with casing applications. All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U. S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application.

U. S. Steel Tubular Products 460 Wildwood Forest Drive, Suite 300S Spring, Texas 77380 1-877-893-9461 connections@uss.com www.usstubular.com

tal One Corp.				MO-FXL 8-	-5/8 32.0					
	MO-FXL	-		P110H						
Metal One	*1 Pipe Body: Borusan P110H	ISCV MinVS125kei	CDS#	MinYS125ksi 95%RBW SD7.875						
	95%RBW Special Dr									
	Connection Dat		Date	95%RBW 16-Jai						
	Connection Dat	a Sheet	Dale	10-Jai	1-24					
	Geometry	<u>Imperia</u>	<u>I</u>	<u>S.I.</u>						
	Pipe Body	DIANUON		D440U00V						
	Grade *1	P110HSCY		P110HSCY						
	MinYS *1	125	ksi	125	ksi					
	Pipe OD (D)	8 5/8	in	219.08	mm					
MO-FXL	Weight	32.00	lb/ft	47.68	kg/m					
	Actual weight	31.10		46.34	kg/m					
	Wall Thickness (t)	0.352	in	8.94	mm					
	Pipe ID (d)	7.921	in	201.19	mm					
	Pipe body cross section	9.149	in ²	5,902	mm ²					
$\uparrow \leftrightarrow$	Special Drift Dia. *1	7.875	in	200.03	mm					
The second secon	-	-	-	-	-					
Box	Commontion									
critical	Connection	0.005	1	040.00						
area	Box OD (W)	8.625	in	219.08	mm					
5	PIN ID	7.921	in	201.19	mm					
5	Make up Loss	3.847	in	97.71	mm					
ζ (d		5.853	in ²	3686	mm ²					
Make	Joint load efficiency	69	%	69	%					
ip	Thread Taper Number of Threads	1.		2" per ft) TPI						
critical	Performance Properties	for Pipe Body								
	S.M.Y.S. *1	1,144	kips	5,087	kN					
	M.I.Y.P. *1	9,690	psi	66.83	MPa					
\leftrightarrow	Collapse Strength *1	4,300	psi	29.66	MPa					
\downarrow	Note S.M.Y.S.= Specified Minimum YIELD Strength of Pipe body									
	M.I.Y.P. = Minin	num Internal Yield	Pressur	e of Pipe body						
	*1: Borusan: SOP-12-F05 R	ev.2, 10/17/2023								
	P110HSCY: MinYS125ksi, 9	5%RBW, SD7.87	5, Collap	se Strength 4,3	00psi					
	Performance Properties	for Connection	่า	-						
	Tensile Yield load	789 kips		of S.M.Y.S.)						
	Min. Compression Yield	789 kips (of S.M.Y.S.)						
			70%	of M.I.Y.P.)						
	Internal Pressure	6,780 psi (
	External Pressure	6,780 psi (rength					
		6,780 psi (of Collapse St	rength					
	External Pressure Max. DLS (deg. /100ft)	6,780 psi (100% c	of Collapse St	rength					
	External Pressure Max. DLS (deg. /100ft) Recommended Torque		100% c 2	of Collapse St 9						
	External Pressure Max. DLS (deg. /100ft) Recommended Torque Min.	13,600	100% c 2 ft-lb	of Collapse St 9 18,400	N-m					
	External Pressure Max. DLS (deg. /100ft) Recommended Torque Min. Opti.	13,600 14,900	100% c 2 ft-lb ft-lb	of Collapse St 9 18,400 20,200	N-m N-m					
	External Pressure Max. DLS (deg. /100ft) Recommended Torque Min. Opti. Max.	13,600 14,900 16,200	100% c 2 ft-lb ft-lb	of Collapse St 9 18,400 20,200 21,900	N-m N-m N-m					
	External Pressure Max. DLS (deg. /100ft) Recommended Torque Min. Opti. Max. Operational Max.	13,600 14,900 16,200 28,400	100% c 2 ft-lb ft-lb ft-lb	of Collapse St 9 18,400 20,200 21,900 38,500	N-m N-m N-m N-m					
	External Pressure Max. DLS (deg. /100ft) Recommended Torque Min. Opti. Max.	13,600 14,900 16,200 28,400	100% c 2 ft-lb ft-lb ft-lb	of Collapse St 9 18,400 20,200 21,900 38,500	N-m N-m N-m N-m					

Statements regarding the suitability of products for certain types of applications are based on Metal One's knowledge of typical requirements that are often placed on Metal One products in standard well configurations. Such statements are not binding statements about the suitability of products for a particular

precess on mean one products in standard wen configurations. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. The products described in this Connection Data Sheet are not recommended for use in deep water offshore applications. For more information, please refer to <u>http://www.mtlo.co.jp/mo-con/_images/top/WebsiteTerms_Active_20333287_1.pdf</u> the contents of which are incorporated by reference into this Connection Data Sheet.



on		County: Wellbore:	-		1713H				Geodetic System: US State Plane 1983 Datum: North American Datum 1927 Ellipsoid: Clarke 1866 Zone: 3001 - NM East (NAD83)
	MD	INC	AZI	TVD	NS	EW	vs	DLS	Comment
-	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
	100.00 200.00	0.00 0.00	49.00 49.00	100.00 200.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	
	300.00	0.00	49.00	300.00	0.00	0.00	0.00	0.00	
	400.00	0.00	49.00	400.00	0.00	0.00	0.00	0.00	
	500.00	0.00	49.00	500.00	0.00	0.00	0.00	0.00	
	600.00	0.00	49.00	600.00	0.00	0.00	0.00	0.00	
	700.00	0.00	49.00	700.00	0.00	0.00	0.00	0.00	
	800.00	0.00	49.00	800.00	0.00	0.00	0.00	0.00	
	900.00	0.00	49.00	900.00	0.00	0.00	0.00	0.00	
	1000.00	0.00	49.00	1000.00	0.00	0.00	0.00	0.00	Rustler,
	1100.00	0.00	49.00	1100.00	0.00	0.00	0.00	0.00	
	1200.00	0.00	49.00	1200.00	0.00	0.00	0.00	0.00	
	1300.00	0.00	49.00	1300.00	0.00	0.00	0.00	0.00	
	1400.00	0.00	49.00	1400.00	0.00	0.00	0.00	0.00	
	1500.00	0.00	49.00	1500.00	0.00	0.00	0.00	0.00	
	1600.00	0.00	49.00	1600.00	0.00	0.00	0.00	0.00	
	1700.00	0.00	49.00	1700.00	0.00	0.00	0.00	0.00	
	1800.00	0.00	49.00	1800.00	0.00	0.00	0.00	0.00	
	1900.00	0.00	49.00	1900.00	0.00	0.00	0.00	0.00	
	2000.00	0.00	49.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
	2100.00	2.00	49.00	2099.98	1.14	1.32	-1.11	2.00	
	2200.00	4.00	49.00	2199.84	4.58	5.27	-4.45	2.00	
	2300.00	6.00	49.00	2299.45	10.30	11.84	-10.00	2.00	
	2400.00	8.00	49.00	2398.70	18.29	21.04	-17.77	2.00	
	2500.00	10.00	49.00	2497.47	28.55	32.85	-27.75	2.00	Hold Tangent
	2600.00	10.00	49.00	2595.95	39.95	45.95	-38.82	0.00	
	2700.00	10.00	49.00	2694.43	51.34	59.06	-49.89	0.00	
	2800.00	10.00	49.00	2792.91	62.73	72.16	-60.95	0.00	
	2900.00	10.00	49.00	2891.39	74.12	85.27	-72.02	0.00	
	3000.00	10.00	49.00	2989.87	85.52	98.37	-83.09	0.00	Cale
	3010.29 3100.00	10.00 10.00	49.00 49.00	3000.00	86.69 96.91	99.72 111.48	-84.23 -94.16	0.00 0.00	Salt
	3100.00	10.00	49.00 49.00	3088.35 3186.83	96.91 108.30	111.48 124.58	-94.16 -105.23	0.00	
	3200.00 3300.00	10.00	49.00 49.00	3186.83	108.30	124.58	-105.23	0.00	
	3300.00 3400.00	10.00	49.00 49.00	3285.31 3383.79	131.08	150.80	-116.30	0.00	
	3400.00 3402.74	10.00	49.00 49.00	3386.49	131.40	150.80	-127.57	0.00	Drop to Vertical
	3402.74	8.05	49.00 49.00	3386.49 3482.54	131.40	162.67	-127.66	2.00	Drop to vertical
	3600.00	6.05	49.00 49.00	3482.54 3581.78	141.41	171.94	-145.24	2.00	
	3700.00	4.05	49.00	3681.39	155.25	178.59	-150.85	2.00	
	3800.00	2.05	49.00	3781.24	158.74	182.61	-154.25	2.00	
	3900.00	0.05	49.00	3881.22	159.95	184.00	-155.42	2.00	
	3902.74	0.00	49.00	3883.96	159.95	184.00	-155.42	2.00	Hold Vertical
	4000.00	0.00	179.63	3981.22	159.95	184.00	-155.42	0.00	
	4100.00	0.00	179.63	4081.22	159.95	184.00	-155.42	0.00	
	4200.00	0.00	179.63	4181.22	159.95	184.00	-155.42	0.00	
	4300.00	0.00	179.63	4281.22	159.95	184.00	-155.42	0.00	
	4400.00	0.00	179.63	4381.22	159.95	184.00	-155.42	0.00	
	4500.00	0.00	179.63	4481.22	159.95	184.00	-155.42	0.00	
	4600.00	0.00	179.63	4581.22	159.95	184.00	-155.42	0.00	
	4668.78	0.00	179.63	4650.00	159.95	184.00	-155.42	0.00	Base of Salt
	4700.00	0.00	179.63	4681.22	159.95	184.00	-155.42	0.00	
	4708.78	0.00	179.63	4690.00	159.95	184.00	-155.42	0.00	Delaware
	4800.00	0.00	179.63	4781.22	159.95	184.00	-155.42	0.00	
	4900.00	0.00	179.63	4881.22	159.95	184.00	-155.42	0.00	
	5000.00	0.00	179.63	4981.22	159.95	184.00	-155.42	0.00	
	5100.00	0.00	179.63	5081.22	159.95	184.00	-155.42	0.00	
	5200.00	0.00	179.63	5181.22	159.95	184.00	-155.42	0.00	
	5300.00	0.00	179.63	5281.22	159.95	184.00	-155.42	0.00	
	5400.00	0.00	179.63	5381.22	159.95	184.00	-155.42	0.00	
	5500.00	0.00	179.63	5481.22	159.95	184.00	-155.42	0.00	
	5600.00	0.00	179.63	5581.22	159.95	184.00	-155.42	0.00	
	5700.00	0.00	179.63	5681.22	159.95	184.00	-155.42	0.00	
	5800.00	0.00	179.63	5781.22	159.95	184.00	-155.42	0.00	
	5858.78	0.00	179.63	5840.00	159.95	184.00	-155.42	0.00	Cherry Canyon
	5900.00	0.00	179.63	5881.22	159.95	184.00	-155.42	0.00	
	6000.00	0.00	179.63	5981.22	159.95	184.00	-155.42	0.00	
	6100.00	0.00	179.63	6081.22	159.95	184.00	-155.42	0.00	
	6200.00	0.00	179.63	6181.22	159.95	184.00	-155.42	0.00	
	6300.00	0.00	179.63	6281.22	159.95	184.00	-155.42	0.00	

devon			-	7-20 Fed Com	713H				Geodetic System: US State Plane 1983
acvon		County:	Lea Permit Plar						Datum: North American Datum 1927 Ellipsoid: Clarke 1866
			Permit Plar						Zone: 3001 - NM East (NAD83)
	MD	INC	AZI	TVD	NS	EW	vs	DLS	Comment
-	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
	6400.00 6500.00	0.00 0.00	179.63 179.63	6381.22 6481.22	159.95 159.95	184.00 184.00	-155.42 -155.42	0.00 0.00	
	6600.00	0.00	179.63	6581.22	159.95	184.00	-155.42	0.00	
	6700.00	0.00	179.63	6681.22	159.95	184.00	-155.42	0.00	
	6800.00	0.00	179.63	6781.22	159.95	184.00	-155.42	0.00	
	6818.78	0.00	179.63	6800.00	159.95	184.00	-155.42	0.00	Brushy Canyon
	6900.00	0.00	179.63	6881.22	159.95	184.00	-155.42	0.00	
	7000.00	0.00	179.63	6981.22	159.95	184.00	-155.42	0.00	
	7100.00	0.00	179.63	7081.22	159.95	184.00	-155.42	0.00	
	7200.00 7300.00	0.00 0.00	179.63 179.63	7181.22 7281.22	159.95 159.95	184.00 184.00	-155.42 -155.42	0.00 0.00	
	7400.00	0.00	179.63	7381.22	159.95	184.00	-155.42	0.00	
	7500.00	0.00	179.63	7481.22	159.95	184.00	-155.42	0.00	
	7600.00	0.00	179.63	7581.22	159.95	184.00	-155.42	0.00	
	7700.00	0.00	179.63	7681.22	159.95	184.00	-155.42	0.00	
	7800.00	0.00	179.63	7781.22	159.95	184.00	-155.42	0.00	
	7900.00	0.00	179.63	7881.22	159.95	184.00	-155.42	0.00	
	8000.00	0.00	179.63	7981.22	159.95	184.00	-155.42	0.00	
	8100.00	0.00	179.63	8081.22	159.95	184.00	-155.42	0.00	
	8200.00 8300.00	0.00 0.00	179.63 179.63	8181.22 8281.22	159.95 159.95	184.00 184.00	-155.42 -155.42	0.00 0.00	
	8400.00	0.00	179.63	8381.22	159.95	184.00	-155.42	0.00	
	8500.00	0.00	179.63	8481.22	159.95	184.00	-155.42	0.00	
	8558.78	0.00	179.63	8540.00	159.95	184.00	-155.42	0.00	1st Bone Spring Lime
	8600.00	0.00	179.63	8581.22	159.95	184.00	-155.42	0.00	
	8700.00	0.00	179.63	8681.22	159.95	184.00	-155.42	0.00	
	8800.00	0.00	179.63	8781.22	159.95	184.00	-155.42	0.00	
	8900.00	0.00	179.63	8881.22	159.95	184.00	-155.42	0.00	
	9000.00	0.00	179.63	8981.22	159.95	184.00	-155.42	0.00	
	9100.00 9200.00	0.00 0.00	179.63 179.63	9081.22 9181.22	159.95 159.95	184.00 184.00	-155.42 -155.42	0.00 0.00	
	9300.00	0.00	179.63	9281.22	159.95	184.00	-155.42	0.00	
	9400.00	0.00	179.63	9381.22	159.95	184.00	-155.42	0.00	
	9500.00	0.00	179.63	9481.22	159.95	184.00	-155.42	0.00	
	9600.00	0.00	179.63	9581.22	159.95	184.00	-155.42	0.00	
	9700.00	0.00	179.63	9681.22	159.95	184.00	-155.42	0.00	
	9718.78	0.00	179.63	9700.00	159.95	184.00	-155.42	0.00	Bone Spring 1st
	9800.00	0.00	179.63	9781.22	159.95	184.00	-155.42	0.00	
	9900.00	0.00	179.63	9881.22 9981.22	159.95	184.00	-155.42 -155.42	0.00 0.00	
	10000.00 10100.00	0.00 0.00	179.63 179.63	10081.22	159.95 159.95	184.00 184.00	-155.42	0.00	
	10200.00	0.00	179.63	10181.22	159.95	184.00	-155.42	0.00	
	10300.00	0.00	179.63	10281.22	159.95	184.00	-155.42	0.00	
	10358.78	0.00	179.63	10340.00	159.95	184.00	-155.42	0.00	Bone Spring 2nd
	10400.00	0.00	179.63	10381.22	159.95	184.00	-155.42	0.00	
	10500.00	0.00	179.63	10481.22	159.95	184.00	-155.42	0.00	
	10600.00	0.00	179.63	10581.22	159.95	184.00	-155.42	0.00	
	10700.00	0.00	179.63	10681.22	159.95	184.00	-155.42	0.00	
	10800.00 10808.78	0.00 0.00	179.63 179.63	10781.22 10790.00	159.95 159.95	184.00 184.00	-155.42 -155.42	0.00 0.00	3rd Bone Spring Lime
	10808.78	0.00	179.63 179.63	10790.00	159.95	184.00 184.00	-155.42 -155.42	0.00	3rd Bone Spring Lime
	11000.00	0.00	179.63	10981.22	159.95	184.00	-155.42	0.00	
	11100.00	0.00	179.63	11081.22	159.95	184.00	-155.42	0.00	
	11200.00	0.00	179.63	11181.22	159.95	184.00	-155.42	0.00	
	11300.00	0.00	179.63	11281.22	159.95	184.00	-155.42	0.00	
	11400.00	0.00	179.63	11381.22	159.95	184.00	-155.42	0.00	
	11500.00	0.00	179.63	11481.22	159.95	184.00	-155.42	0.00	
	11538.78	0.00	179.63	11520.00	159.95	184.00	-155.42	0.00	Bone Spring 3rd
	11600.00	0.00	179.63	11581.22	159.95	184.00	-155.42	0.00	
	11675.83	0.00	179.63	11657.05	159.95	184.00 184.01	-155.42	0.00	КОР
	11700.00 11800.00	2.42 12.42	179.63 179.63	11681.21 11780.25	159.44 146.55	184.01 184.09	-154.91 -142.02	10.00 10.00	
	11900.00	22.42	179.63	11780.25	146.55	184.09	-142.02	10.00	
	11960.33	28.45	179.63	11930.00	90.76	184.45	-86.24	10.00	Wolfcamp / Point of Penetration
	12000.00	32.42	179.63	11964.20	70.67	184.58	-66.15	10.00	
	12100.00	42.42	179.63	12043.52	9.98	184.97	-5.48	10.00	
	12200.00	52.42	179.63	12111.10	-63.55	185.45	68.05	10.00	
	12300.00	62.42	179.63	12164.88	-147.70	185.99	152.19	10.00	
	12400.00	72.42	179.63	12203.24	-239.92	186.59	244.39	10.00	
	12500.00	82.42	179.63	12224.99	-337.39	187.21	341.85	10.00	

devon		Well:	Alley Cat 1	7-20 Fed Com	n 713H				Geodetic System:	US State Plane 1983
devon		County:								North American Datum 1927
			Permit Plar Permit Plar						•	: Clarke 1866 : 3001 - NM East (NAD83)
	MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment	
-	12573.81	89.80	179.63	12230.00	-410.98	187.69	415.42	10.00	Landing Point	
	12600.00 12700.00	89.80 89.80	179.63 179.63	12230.09 12230.44	-437.17 -537.16	187.86 188.50	441.61 541.59	0.00 0.00		
	12800.00	89.80	179.63	12230.44	-637.16	189.15	641.58	0.00		
	12900.00	89.80	179.63	12231.15	-737.16	189.80	741.56	0.00		
	13000.00 13100.00	89.80 89.80	179.63 179.63	12231.50 12231.86	-837.15 -937.15	190.44 191.09	841.54 941.53	0.00 0.00		
	13200.00	89.80	179.63	12232.21	-1037.15	191.73	1041.51	0.00		
	13300.00	89.80	179.63	12232.56	-1137.15	192.38	1141.49	0.00		
	13400.00 13500.00	89.80 89.80	179.63 179.63	12232.91 12233.27	-1237.14 -1337 14	193.03 193.67	1241.48 1341.46	0.00 0.00		
	13600.00	89.80	179.63		-1437.14	194.32	1441.44	0.00		
	13700.00	89.80	179.63	12233.97	-1537.14	194.96	1541.43	0.00		
	13800.00 13900.00	89.80 89.80	179.63 179.63	12234.32 12234.68	-1637.13 -1737.13	195.61 196.26	1641.41 1741.39	0.00 0.00		
	14000.00	89.80	179.63	12235.03	-1837.13	196.90	1841.38	0.00		
	14100.00	89.80	179.63	12235.38	-1937.12	197.55	1941.36	0.00		
	14200.00 14300.00	89.80 89.80	179.63 179.63	12235.73 12236.09	-2037.12 -2137.12	198.19 198.84	2041.34 2141.33	0.00 0.00		
	14400.00	89.80	179.63	12236.44	-2237.12	199.49	2241.31	0.00		
	14500.00	89.80	179.63	12236.79	-2337.11	200.13	2341.29	0.00		
	14600.00 14700.00	89.80 89.80	179.63 179.63	12237.14 12237.50	-2437.11 -2537.11	200.78 201.42	2441.28 2541.26	0.00 0.00		
	14800.00	89.80	179.63	12237.85	-2637.11	202.07	2641.24	0.00		
	14900.00	89.80	179.63	12238.20	-2737.10	202.72	2741.23	0.00		
	15000.00 15100.00	89.80 89.80	179.63 179.63	12238.56 12238.91	-2837.10 -2937.10	203.36 204.01	2841.21 2941.19	0.00 0.00		
	15200.00	89.80	179.63	12239.26	-3037.10	204.65	3041.18	0.00		
	15300.00	89.80	179.63	12239.61	-3137.09	205.30	3141.16	0.00		
	15400.00 15500.00	89.80 89.80	179.63 179.63	12239.97 12240.32	-3237.09 -3337.09	205.95 206.59	3241.14 3341.13	0.00 0.00		
	15600.00	89.80	179.63	12240.67	-3437.08	207.24	3441.11	0.00		
	15700.00	89.80	179.63	12241.02	-3537.08	207.88	3541.09	0.00		
	15800.00 15900.00	89.80 89.80	179.63 179.63	12241.38 12241.73	-3637.08 -3737.08	208.53 209.18	3641.08 3741.06	0.00 0.00		
	16000.00	89.80	179.63	12242.08	-3837.07	209.82	3841.04	0.00		
	16100.00	89.80	179.63	12242.43	-3937.07	210.47	3941.03	0.00		
	16200.00 16300.00	89.80 89.80	179.63 179.63	12242.79 12243.14	-4037.07 -4137.07	211.12 211.76	4041.01 4140.99	0.00 0.00		
	16400.00	89.80	179.63	12243.49	-4237.06	212.41	4240.98	0.00		
	16500.00	89.80	179.63	12243.84	-4337.06	213.05	4340.96	0.00		
	16600.00 16700.00	89.80 89.80	179.63 179.63	12244.20 12244.55	-4437.06 -4537.05	213.70 214.35	4440.94 4540.93	0.00 0.00		
	16800.00	89.80	179.63	12244.90	-4637.05	214.99	4640.91	0.00		
	16900.00	89.80	179.63	12245.25	-4737.05	215.64	4740.89	0.00		
	17000.00 17100.00	89.80 89.80	179.63 179.63	12245.61 12245.96	-4837.05 -4937.04	216.28 216.93	4840.88 4940.86	0.00 0.00		
	17200.00	89.80	179.63	12246.31	-5037.04	217.58	5040.85	0.00		
	17300.00	89.80	179.63	12246.67	-5137.04	218.22	5140.83	0.00		
	17400.00 17500.00	89.80 89.80	179.63 179.63	12247.02 12247.37	-5237.04 -5337.03	218.87 219.51	5240.81 5340.80	0.00 0.00		
	17600.00	89.80	179.63	12247.72	-5437.03	220.16	5440.78	0.00		
	17700.00	89.80	179.63	12248.08	-5537.03	220.81	5540.76	0.00		
	17800.00 17900.00	89.80 89.80	179.63 179.63	12248.43 12248.78	-5637.02 -5737.02	221.45 222.10	5640.75 5740.73	0.00 0.00		
	18000.00	89.80	179.63	12249.13	-5837.02	222.74	5840.71	0.00		
	18100.00	89.80	179.63	12249.49	-5937.02	223.39	5940.70	0.00		
	18200.00 18300.00	89.80 89.80	179.63 179.63	12249.84 12250.19	-6037.01 -6137.01	224.04 224.68	6040.68 6140.66	0.00 0.00		
	18400.00	89.80	179.63	12250.54	-6237.01	225.33	6240.65	0.00		
	18500.00	89.80	179.63	12250.90	-6337.01	225.97	6340.63	0.00		
	18600.00 18700.00	89.80 89.80	179.63 179.63	12251.25 12251.60	-6437.00 -6537.00	226.62 227.27	6440.61 6540.60	0.00 0.00		
	18800.00	89.80	179.63	12251.00	-6637.00	227.91	6640.58	0.00		
	18900.00	89.80	179.63	12252.31	-6736.99	228.56	6740.56	0.00		
	19000.00 19100.00	89.80 89.80	179.63 179.63	12252.66 12253.01	-6836.99 -6936.99	229.20 229.85	6840.55 6940.53	0.00 0.00		
	19200.00	89.80 89.80	179.63	12253.01	-7036.99	230.50	7040.55	0.00		
	19300.00	89.80	179.63	12253.72	-7136.98	231.14	7140.50	0.00		
	19400.00	89.80	179.63	12254.07	-7236.98	231.79	7240.48	0.00		
I										

) 179.63 12255.13) 179.63 12255.48	NS EW (ft) (ft) -7336.98 232.43 -7436.98 233.08 -7536.97 233.73 -7636.97 234.37 -7736.97 235.02 -7836.97 235.02 -7836.97 235.02 -8036.96 236.31 -8036.96 236.96 -8136.96 237.60 -8236.95 238.25	(ft) (*/1 7340.46 0 7440.45 0 7540.43 0 7640.41 0 7740.40 0 7840.38 0 7940.36 0 8040.35 0 8140.33 0	Ellipsoid:	US State Plane 1983 North American Datum 1927 Clarke 1866 3001 - NM East (NAD83)
re: Permit Plan #1 pr: Permit Plan #1 (°) (ft) 179.63 12254.42 179.63 12255.13 179.63 12255.13 179.63 12255.48 179.63 12255.83 179.63 12256.54 179.63 12256.54 179.63 12256.54 179.63 12256.54 179.63 12256.54 179.63 12256.54	(ft) (ft) -7336.98 232.43 -7436.98 233.08 -7536.97 233.73 -7636.97 234.37 -7736.97 235.06 -7836.97 235.66 -7936.96 236.31 -8036.96 236.96 -8136.96 237.60	(ft) (*/1 7340.46 0 7440.45 0 7540.43 0 7640.41 0 7740.40 0 7840.38 0 7940.36 0 8040.35 0 8140.33 0	Ellipsoid: Zone: 2006 2000 200 2000 2	Clarke 1866
AZI TVD (*) (ft) 0 179.63 12254.42 1 179.63 12254.78 1 179.63 12255.13 1 179.63 12255.48 1 179.63 12255.83 1 179.63 12256.19 0 179.63 12256.54 0 179.63 12256.54 0 179.63 12256.54 0 179.63 12256.89 0 179.63 12257.24	(ft) (ft) -7336.98 232.43 -7436.98 233.08 -7536.97 233.73 -7636.97 234.37 -7736.97 235.06 -7836.97 235.66 -7936.96 236.31 -8036.96 236.96 -8136.96 237.60	(ft) (*/1 7340.46 0 7440.45 0 7540.43 0 7640.41 0 7740.40 0 7840.38 0 7940.36 0 8040.35 0 8140.33 0	Zone: 100ft) Comment 0.00	
AZI TVD (°) (ft) 0 179.63 12254.42 0 179.63 12255.13 0 179.63 12255.43 0 179.63 12255.43 0 179.63 12255.83 0 179.63 12256.19 0 179.63 12256.54 0 179.63 12256.54 0 179.63 12256.54 0 179.63 12256.49 0 179.63 12256.49 0 179.63 12256.49 0 179.63 12256.24	(ft) (ft) -7336.98 232.43 -7436.98 233.08 -7536.97 233.73 -7636.97 234.37 -7736.97 235.06 -7836.97 235.66 -7936.96 236.31 -8036.96 236.96 -8136.96 237.60	(ft) (*/1 7340.46 0 7440.45 0 7540.43 0 7640.41 0 7740.40 0 7840.38 0 7940.36 0 8040.35 0 8140.33 0	DLS Comment 100ft) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	3001 - NM East (NAD83)
(*) (ft) 179.63 12254.42 179.63 12254.78 179.63 12255.13 179.63 12255.83 179.63 12255.83 179.63 12255.64 179.63 12256.19 179.63 12256.54 179.63 12256.54 179.63 12256.54 179.63 12256.54 179.63 12256.54 179.63 12256.54 179.63 12256.24 179.63 12257.24	(ft) (ft) -7336.98 232.43 -7436.98 233.08 -7536.97 233.73 -7636.97 234.37 -7736.97 235.06 -7836.97 235.66 -7936.96 236.31 -8036.96 236.96 -8136.96 237.60	(ft) (*/1 7340.46 0 7440.45 0 7540.43 0 7640.41 0 7740.40 0 7840.38 0 7940.36 0 8040.35 0 8140.33 0	Comment 100ft) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	
179.63 12254.42 179.63 12254.78 179.63 12255.13 179.63 12255.83 179.63 12255.83 179.63 12255.64 179.63 12255.83 179.63 12256.19 179.63 12256.54 179.63 12256.54 179.63 12256.54 179.63 12256.54 179.63 12256.54 179.63 12256.54 179.63 12256.24	-7336.98 232.43 -7436.98 233.08 -7536.97 233.73 -7636.97 234.37 -7736.97 235.02 -7836.97 235.06 -7936.96 236.31 -8036.96 236.96 -8136.96 237.60	7340.46 0 7440.45 0 7540.43 0 7640.41 0 7740.40 0 7840.38 0 7940.36 0 8040.35 0 8140.33 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	
179.63 12254.78 179.63 12255.13 179.63 12255.48 179.63 12255.49 179.63 12256.54 179.63 12256.54 179.63 12256.54 179.63 12256.54 179.63 12256.54 179.63 12256.54 179.63 12256.54 179.63 12256.54 179.63 12256.39 179.63 12257.24	-7436.98 233.08 -7536.97 233.73 -7636.97 234.37 -7736.97 235.02 -7836.97 235.66 -7936.96 236.31 -8036.96 236.91 -8136.96 237.60	7440.45 0 7540.43 0 7640.41 0 7740.40 0 7840.38 0 7940.36 0 8040.35 0 8140.33 0	0.00 0.00 0.00 0.00 0.00 0.00 0.00	
) 179.63 12255.13) 179.63 12255.48) 179.63 12255.83) 179.63 12256.19) 179.63 12256.54) 179.63 12256.54) 179.63 12256.89) 179.63 12256.24) 179.63 12257.24	-7536.97 233.73 -7636.97 234.37 -7736.97 235.02 -7836.97 235.66 -7936.96 236.31 -8036.96 236.96 -8136.96 237.60	7540.43 0 7640.41 0 7740.40 0 7840.38 0 7940.36 0 8040.35 0 8140.33 0	0.00 0.00 0.00 0.00 0.00 0.00	
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1. Geologic Formations

TVD of target	12265	Pilot hole depth	N/A
MD at TD:	22503	Deepest expected fresh water	

Basin

Formation	Depth (TVD)	Water/Mineral Bearing/Target	Hazards*
	from KB	Zone?	
Rustler	1000		
Salt	3000		
Base of Salt	4650		
Delaware	4690		
Cherry Canyon	5840		
Brushy Canyon	6800		
1st Bone Spring Lime	8540		
Bone Spring 1st	9700		
Bone Spring 2nd	10340		
3rd Bone Spring Lime	10790		
Bone Spring 3rd	11520		
Wolfcamp	11930		

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

		Wt			Casing	Interval	Casing	Interval
Hole Size	Csg. Size	(PPF)	Grade	Grade Conn		To (MD)	From (TVD)	To (TVD)
14 3/4	10 3/4	45 1/2	J-55	BTC	0	1025	0	1025
9 7/8	8 5/8	32	P110HSCY	MOFXL	0	11576	0	11576
7 7/8	5 1/2	20	P110HP	CDC-HTQ	0	22503	0	12265

2. Casing Program (Primary Design)

• All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 IILB.1.h Must have table for contingency casing.

3. Cementing Program (Primary Design)

Assuming no returns are established while drilling, Devon requests to pump a two stage cement job on the intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon and the second stage performed as a bradenhead squeeze with planned cement from the Brushy canyon to surface.

Devon will report to the BLM the volume of fluid (limited to 1 bbls) used to flush intermediate casing valves following backside cementing procedures.

Casing	# Sks	тос	Wt. ppg	Yld (ft3/sack)	Slurry Description
Surface	618	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	473	Surf	13.0	2.3	2nd State: Bradenhead Squeeze - Lead: Class C Cement + additives
Int I	552	6818	13.2	1.44	Tail: Class H / C + additives
Production	117	9676	9	3.27	Lead: Class H /C + additives
Froduction	1433	11676	13.2	1.44	Tail: Class H / C + additives

Devon Energy requests to offline cement on intermediate strings that are set in formations shallower than the Wolfcamp. Prior to commencing offline cementing operations, the well will be monitored for any abnormal pressures and confirmed to be static. A dual manifold system (equipped with chokes) for the returns will also be utilized as a redundancy. All equipment used for offline cementing will have a minimum 5M rating to match intermediate sections' 5M BOPE requirements

Casing String	% Excess
Surface	50%
Intermediate 1	30%
Prod	10%

.

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Ţ	уре	*	Tested to:												
				nular	Х	50% of rated working pressure												
Int 1	13-5/8"	5M	Bline	d Ram	Х													
Int I	13-5/8	5101	Pipe Ram		5M													
			Double Ram			Х												
			Other*]												
			Annul	ar (5M)	X	100% of rated working pressure												
Production	13-5/8"	10M	Blind	d Ram	Х													
		13-5/8 10101	13-5/8	13-3/0	13-3/0	13-5/6 1000	13-3/8 10101	13-3/8 10M	13-3/8	13-3/8	13-3/8	5-5/6 10M	TOM	10101	10101	10111	Pipe	e Ram
			Doub	le Ram	Х	10111												
			Other*															
			Annul	ar (5M)														
			Bline	d Ram														
			Pipe	e Ram														
			Doub	le Ram														
			Other*															
N A variance is requested for	for the use of a diverter on the surface casing. See attached for schematic.																	
Y A variance is requested to	A variance is requested to run a 5 M annular on a 10M system																	

4. Pressure Control Equipment (Three String Design)

5. Mud Program (Three String Design)

Section	Туре	Weight (ppg)
Surface	FW Gel	8.5-9
Intermediate	DBE / Cut Brine	10-10.5
Production	OBM	10-10.5

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

6. Logging and Testing Procedures

Logging, C	oring and Testing
	Will run GR/CNL from TD to surface (horizontal well - vertical portion of hole). Stated logs run will be in the
Х	Completion Rpeort and sbumitted to the BLM.
	No logs are planned based on well control or offset log information.
	Drill stem test? If yes, explain.
	Coring? If yes, explain.

Addition	al logs planned	Interval
	Resistivity	Int. shoe to KOP
	Density	Int. shoe to KOP
Х	CBL	Production casing
Х	Mud log	Intermediate shoe to TD
	PEX	

7. Drilling Conditions

Condition	Specfiy what type and where?
BH pressure at deepest TVD	6697
Abnormal temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers.

Hydrogren S	Hydrogren Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations				
greater than	greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is				
encountered	encountered measured values and formations will be provided to the BLM.				
Ν	H2S is present				
Y	H2S plan attached.				

8. Other facets of operation

Is this a walking operation? Potentially

- 1 If operator elects, drilling rig will batch drill the surface holes and run/cement surface casing; walking the rig to next wells on the pad.
- 2 The drilling rig will then batch drill the intermediate sections and run/cement intermediate casing; the wellbore will be isolated with a blind flange and pressure gauge installed for monitoring the well before walking to the next well.
- 3 The drilling rig will then batch drill the production hole sections on the wells with OBM, run/cement production casing, and install TA caps or tubing heads for completions.

NOTE: During batch operations the drilling rig will be moved from well to well however, it will not be removed from the pad until all wells have production casing run/cemented.

Will be pre-setting casing? Potentially

- 1 Spudder rig will move in and batch drill surface hole.
 - a. Rig will utilize fresh water based mud to drill surface hole to TD. Solids control will be handled entirely on a closed loop basis.,
- 2 After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).

³ The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.

- 4 A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
- 5 Spudder rig operations is expected to take 4-5 days per well on a multi-well pa.
- 6 The NMOCD will be contacted and notified 24 hours prior to commencing spudder rig operations.
- 7 Drilling operations will be performed with drilling rig. A that time an approved BOP stack will be nippled up and tested on the wellhead before drilling operations commences on each well.
 - a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

Attachments

X Directional Plan Other, describe

eceived by UCD: 3/21/2024 9:26:13 AM U.S. Department of the Interior BUREAU OF LAND MANAGEMENT		Sundry Print Report 05/21/2024
Well Name: ALLEY CAT 17-20 FED COM	Well Location: T23S / R32E / SEC 17 / NWNE / 32.311262 / -103.6962118	County or Parish/State: LEA / NM
Well Number: 713H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM62223	Unit or CA Name:	Unit or CA Number:
US Well Number:	Operator: DEVON ENERGY PRODUCTION COMPANY LP	

Notice of Intent

Sundry ID: 2789466

Type of Submission: Notice of Intent

Date Sundry Submitted: 05/10/2024

Date proposed operation will begin: 05/10/2024

Type of Action: APD Change Time Sundry Submitted: 06:56

Procedure Description: Devon Energy Production Co., L.P. (Devon) respectfully requests to change the well name, BHL, and update the casing/cement design on the subject well. Please see attached revised C102, drill plan (offline cement variance included), and directional plan. Permitted Well name: ALLEY CAT 17-20 FED COM 814H Proposed Well name: ALLEY CAT 17-20 FED COM 713H Permitted BHL: SWSE, 20 FSL, 1950 FEL, 20-23S-32E Proposed BHL: SWSE, 20 FSL, 2300 FEL, 20-23S-32E No new leases have been added since approved APD. APD ID: 10400085546

NOI Attachments

Procedure Description

WA018443686_ALLEY_CAT_17_20_FED_COM_713H_WL_R4_20240520133611.pdf

Alley_Cat_17_20_Fed_Com_713H_R4_20240520133609.pdf

Alley_Cat_17_20_Fed_Com_713H_Directional_Plan_05_20_24_20240520133609.pdf

5.5_20__P110HP_CDC_HTQ_20240510065307.pdf

10.750_45.5_J55_SEAH_20240510065307.pdf

8.625_32_P110HSCY_MO_FXL_with_95__RBW__20240510065307.pdf

Well Location: T23S / R32E / SEC 17 / NWNE / 32.311262 / -103.6962118	County or Parish/State: LEA 19 of A
Type of Well: OIL WELL	Allottee or Tribe Name:
Unit or CA Name:	Unit or CA Number:
Operator: DEVON ENERGY PRODUCTION COMPANY LP	
	NWNE / 32.311262 / -103.6962118 Type of Well: OIL WELL Unit or CA Name: Operator: DEVON ENERGY

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: SHAYDA OMOUMI Name: DEVON ENERGY PRODUCTION COMPANY LP Title: Regulatory Compliance Associate 3 Street Address: 333 W SHERIDAN AVE City: OKLAHOMA CITY State: OK

Phone: (405) 235-3611

Email address: SHAYDA.OMOUMI@DVN.COM

Field

Representative Name: Street Address: City: State: Phone: Email address:

Zip:

Signed on: MAY 20, 2024 01:36 PM

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

	Devon Energy Production Company LP NMNM62223
LOCATION:	Section 17, T.23 S., R.32 E., NMPM
COUNTY:	Lea County, New Mexico 📃

WELL NAME & NO.:	Alley Cat 17-20 Fed Com 713H
SURFACE HOLE FOOTAGE:	198'/N & 2486'/E
BOTTOM HOLE FOOTAGE	20'/S & 2300'/E
ATS/API ID:	ATS-20-1286
APD ID:	10400085546
Sundry ID:	2789466

COA

H2S	Yes 🔽		
Potash	None 🔽		
Cave/Karst Potential	Low		
Cave/Karst Potential	Critical		
Variance	C None	🖸 Flex Hose	C Other
Wellhead	Conventional and Multibow	/ 👤	
Other	□ 4 String	Capitan Reef None	□WIPP
Other	Pilot Hole None	Open Annulus	
Cementing	Contingency Squeeze	Echo-Meter None	Primary Cement Squeeze Int 1
Special Requirements	□ Water Disposal/Injection	COM	🗖 Unit
Special Requirements	□ Batch Sundry		
Special Requirements Variance	Break Testing	✓ Offline Cementing	Clearance

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware** formation. As a result, the Hydrogen Sulfide area must meet **43 CFR part 3170 Subpart 3176** requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

- The 10-3/4 inch surface casing shall be set at approximately 1215 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt when present, and below usable fresh water) and cemented to the surface. The surface hole shall be 14 3/4 inch in diameter.
 - 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 will be a minimum of <u>8</u> <u>hours</u> or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - 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 must be kept fluid filled to meet BLM minimum collapse requirement.

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

Option 1 (Single Stage):

• Cement to surface. If cement does not circulate see B.1.a, c-d above.

Option 2:

Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.

- a. First stage: Operator will cement with intent to reach the top of the Brushy Canyon at 552' (6800 sxs Class H/C+ additives).
- b. Second stage:
 - Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified. (Squeeze 473 sxs Class C)

Operator has proposed to pump down 10-3/4" X 8-5/8" annulus after primary cementing stage. <u>Operator must run a CBL from TD of the 8-5/8" casing to surface.</u> <u>Submit results to the BLM.</u> Operator may conduct a negative and positive pressure test during completion to remediate sustained casing pressure.

If cement does not tie-back into the previous casing shoe, a third stage remediation BH may be performed. The appropriate BLM office shall be notified.

- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2.

Option 1:

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi. Annular which shall be tested to **5000 (5M)** psi.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **8-5/8** inch intermediate casing shoe shall be **5000 (5M)** psi.

Option 2:

Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the **10-3/4** inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

- a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR part 3170 Subpart 3171
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. <u>When the Communitization Agreement number is known, it shall also be on the sign.</u>

BOPE Break Testing Variance (Approved)

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.

- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-689-5981 Lea County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at **21**-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 43 CFR part 3170 Subpart 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

Operator has been (Approved) to pump the proposed cement program offline in the Intermediate(s) interval.

Offline cementing should commence within 24 hours of landing the casing for the interval.

Notify the BLM 4hrs prior to cementing offline at Lea County: 575-689-5981.

GENERAL REQUIREMENTS

The BLM is to be notified 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)
 - Lea County Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981
- 1. 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.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per **43** CFR part **3170** Subpart **3172** as soon as 2nd Rig is rigged up on well.
- 2. 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 are located, this does not include the dog house or stairway area.
- 3. 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 when present.
- A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. 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.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- <u>Wait on cement (WOC) for Potash Areas:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least <u>24 hours</u>. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. <u>Wait on cement (WOC) for Water Basin:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least <u>8 hours</u>. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. 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. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. 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.
- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.
- B. PRESSURE CONTROL

- All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR part 3170 Subpart 3172 and API STD 53 Sec. 5.3.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. 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. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, 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. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-

off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- b. 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 cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to 43 CFR part 3170 Subpart 3172 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 (8 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).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. 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.
- g. 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. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per 43 CFR part 3170 Subpart 3172.
- C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. 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.

Long Vo (LVO) 5/21/2024

Received by OCD: 5/21/2024 9:26:13 AM

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Page	30	of	49
		~ <i>J</i>	

	UNITED STATES DEPARTMENT OF THE INT JREAU OF LAND MANAG		FORM APPROVED OMB No. 1004-0137 Expires: October 31, 2021 5. Lease Serial No.			
Do not use th	Y NOTICES AND REPORT is form for proposals to c II. Use Form 3160-3 (APD		6. If Indian, Allottee or Tribe Name			
SUBMIT	IN TRIPLICATE - Other instruction	ons on page 2		7. If Unit of CA/Agreen	ment, Name and/or No.	
1. Type of Well	as Well Other			8. Well Name and No.		
2. Name of Operator				9. API Well No.		
3a. Address	3b.	Phone No. (include area code)	10. Field and Pool or E	xploratory Area	
4. Location of Well (Footage, Sec.,	T.,R.,M., or Survey Description)			11. Country or Parish, State		
12. 0	CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE	OF NOTI	CE, REPORT OR OTHI	ER DATA	
TYPE OF SUBMISSION		TY	PE OF ACT	TION		
Notice of Intent	Acidize	Deepen Hydraulic Fracturing		action (Start/Resume)	Water Shut-Off Well Integrity	
Subsequent Report	Casing Repair Change Plans	New Construction Plug and Abandon	_	mplete oorarily Abandon	Other	
Final Abandonment Notice	Convert to Injection	r Disposal				
the proposal is to deepen direct the Bond under which the work completion of the involved ope	ionally or recomplete horizontally, gi will be perfonned or provide the Bo rations. If the operation results in a n	ive subsurface locations and n nd No. on file with BLM/BIA nultiple completion or recomp	leasured an . Required letion in a r	d true vertical depths of subsequent reports must new interval, a Form 310	k and approximate duration thereof. If Fall pertinent markers and zones. Attach t be filed within 30 days following 60-4 must be filed once testing has been e operator has detennined that the site	

14. I hereby certify that the foregoing is true and correct. Name (<i>Printed/Typed</i>)			
1	Fitle		
Signature	Date		
THE SPACE FOR FEDE	RAL OR STATE C	OFICE USE	
Approved by			
	Title	Date	
Conditions of approval, if any, are attached. Approval of this notice does not warrant of certify that the applicant holds legal or equitable title to those rights in the subject leas which would entitle the applicant to conduct operations thereon.			
Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any any false, fictitious or fraudulent statements or representations as to any matter within		villfully to make to any department or agency	of the United States

(Instructions on page 2)

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: NWNE / 198 FNL / 2486 FEL / TWSP: 23S / RANGE: 32E / SECTION: 17 / LAT: 32.311262 / LONG: -103.6962118 (TVD: 0 feet, MD: 0 feet) PPP: NWNE / 100 FNL / 1950 FEL / TWSP: 23S / RANGE: 32E / SECTION: 17 / LAT: 32.311539 / LONG: -103.6944775 (TVD: 11930 feet, MD: 11976 feet) PPP: NWSE / 2525 FSL / 1949 FEL / TWSP: 23S / RANGE: 32E / SECTION: 17 / LAT: 32.3042408 / LONG: -103.6944746 (TVD: 12507 feet, MD: 15000 feet) PPP: NWNE / 175 FNL / 1948 FEL / TWSP: 23S / RANGE: 32E / SECTION: 20 / LAT: 32.2968193 / LONG: -103.6944687 (TVD: 12524 feet, MD: 17700 feet) BHL: SWSE / 20 FSL / 1950 FEL / TWSP: 23S / RANGE: 32E / SECTION: 20 / LAT: 32.2828397 / LONG: -103.6944636 (TVD: 12555 feet, MD: 22782 feet) State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

AMENDED REPORT

		W	ELL LO	DCATIO	N AND ACR	EAGE DEDIC	CATION PLA	Т		
	PI Number			² Pool Code	me					
300	0255290)8		98248	WC-025 G-08 S243217P; UPR WC					
⁴ Property C	ode				⁵ Property	Name			⁶ Well Number	
322236				AL	LEY CAT 17 2	20 FED COM			713H	
⁷ OGRID N	0.				⁸ Operator	Name			⁹ Elevation	
6137			DEV	ON ENEF	RGY PRODUC	CTION COMPA	NY, L.P.		3621.5	
					[™] Surfac	e Location				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
В	17	23 S	32 E		198	NORTH	2486	EAST	LEA	
			пŀ	Bottom H	lole Location	If Different Fr	om Surface		÷	
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	
0	20	23 S	32 E		20	SOUTH	2300	EAST LEA		
¹² Dedicated Acres	¹³ Joint	or Infill ¹⁴ (Consolidatio	n Code	¹⁵ Order No.					
640										

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.

	ALLEY CAT 17 20 FED COM 713H	17 OPERATOR CERTIFICATION
(A)N89°25'44"E 2637.38 FT (B) N89'21'37"E 2632.81 FT (C)	EL. = 3621.5	I hereby certify that the information contained herein is true and complete
2486'	GEODETIC COORDINATES NAD 83 NMSP EAST	to the best of my knowledge and belief, and that this organization either
	SURFACE LOCATION N.= 477554.47	owns a working interest or unleased mineral interest in the land including
861	E.= 738169.20 LAT. = 32.3112620*N	the proposed bottom hole location or has a right to drill this well at this
⁸⁰	LONG. = 103.6962118'W	location pursuant to a contract with an owner of such a mineral or working
	KICK OFF POINT FIRST TAKE POINT (PPP 1) calls $41'$ FNL, $2300'$ FEL 100' FNL, 2300' FEL	interest, or to a voluntary pooling agreement or a compulsory pooling order
0.21	N = 477714 $N = 47765453$	heretofore entered by the division.
⁹ SEC. 17 □	LAT. = 32.31160499 LAT. = $32.3115340^{\circ}N$	Shanda Omorum 5/20/2024
E PPP 2-	LAST TAKE POINT BOTTOM OF HOLE	Signature Date
	Dist TARE FOIL BOTTOM OF HOLE 100' FSL, 2300' FEL 20' FSL, 2300' FEL N.= 467294.24 N.= 467214.26 E.= 738420.52 E.= 738421.01	Shayda Omoumi
≥ +	LAT. = 32.2830556°N LAT. = 32.2828357°N	Printed Name
000.20.20	LONG. = 103.6955959'W LONG. = 103.6955958'W PPP 2 . PPP 3	shayda.omoumi@dvn.com
Z PPP 3	N.= 4/3114.4/ N.= 4/24/3.36	E-mail Address
N89'29'46"E N89'23'14"E 2633.B3 FT M	E.= 738370.70 E.= 738387.53 LAT. = 32.3045519'N LAT. = 32.2972920'N	
	LONG. = 103.6956066'W LONG. = 103.6956030'W	¹⁸SURVEYOR CERTIFICATION
2643.09 2643.09	PPP 2 1321' FSL, 2300' FEL N.= 468515.23	I hereby certify that the well location shown on this plat
	E.= 738412.74 LAT. = 32.2864118'N	was plotted from field notes of actual surveys made by
▶ NMNM 0559539 NMNM 086153 # ↓	LONG. = 103.6955976'W CORNER COORDINATES TABLE	me or under my supervision, and that the same is true
	NAD 83 NMSP EAST A - N.= 477724.51 E.= 735384.50	and correct to the best of my belief.
\bigcirc	B - N.= 477750.79 E.= 738021.18 C - N.= 477780.18 E.= 740653.25	MAY 20, 2024
	D - N.= 475137.91 E.= 740670.42 E - N.= 472497.97 E.= 740686.53	Date of Survey
02 29 29 29 29 29 29 29 29 29 2	F - N.= 469855.52 E.= 740704.48 G - N.= 467217.53 E.= 740720.53	ME ME
	H - N.= 467190.86 E.= 738084.99 I - N.= 467168.68 E.= 735450.43	
אַ גער און	J – N.= 469806.75 E.= 735434.10 K – N.= 472446.64 E.= 735419.26	1 THE AVENUE
OF HOLE	L - N.= 475084.23 E.= 735403.66 M - N.= 472469.80 E.= 738052.41	
	LEGEND	Signature and Seal of Professional Surveyor:
		Certificate Number: (PXTAD) S LAR 44 (LLO, LS 12797
~ ~ ~ ~ ~ ~ ~ ~	LEASE LINE	PHOFESSIVE NO. 9364C

Received by OCD: 5/21/2024 9:26:13 AM

Intent	
API #	

Х	As Drilled

Operator Name:	Property Name:	Well Number
DEVON ENERGY PRODUCTION COMPANY, L.P.	ALLEY CAT 17 20 FED COM	713H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
В	17	235	32E		41	NORTH	2300	EAST	LEA
Latitu	Latitude Longitude						NAD		
32.311	60499			-103.69569566					83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
B	17	23S	32E		100	NORTH	2300	EAST	LEA
					Longitude 103.6956	6101			NAD 83

Last Take Point (LTP)

UL O	Section 20	Township 23S	Range 32E	Lot	Feet 100	From N/S SOUTH	Feet 2300	From E/W EAST	County LEA
Latitude					Longitud	le		NAD	
32.2830556				103.6	955959		83		

Is this well the defining well for the Horizontal Spacing Unit? Ν

Is this well an infill well?

	_
V	

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API # 30-025-52906		
Operator Name:	Property Name:	Well Number
DEVON ENERGY PRODUCTION COMPANY, L.P.	ALLEY CAT 17-20 FED COM	714H

KZ 06/29/2018

1. Geologic Formations

TVD of target	12265	Pilot hole depth	N/A
MD at TD:	22503	Deepest expected fresh water	

Basin

Formation	Depth (TVD)	Water/Mineral Bearing/Target	Hazards*	
D d	from KB	Zone?		
Rustler	1000			
Salt	3000			
Base of Salt	4650			
Delaware	4690			
Cherry Canyon	5840			
Brushy Canyon	6800			
1st Bone Spring Lime	8540			
Bone Spring 1st	9700			
Bone Spring 2nd	10340			
3rd Bone Spring Lime	10790			
Bone Spring 3rd	11520			
Wolfcamp	11930			

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

			Wt		rade Conn	Casing Interval		Casing Interval	
H	ole Size	Csg. Size	(PPF)	Grade		From (MD)	To (MD)	From (TVD)	To (TVD)
	14 3/4	10 3/4	45 1/2	J-55	BTC	0	1025	0	1025
	9 7/8	8 5/8	32	P110HSCY	MOFXL	0	11576	0	11576
	7 7/8	5 1/2	20	P110HP	CDC-HTQ	0	22503	0	12265

2. Casing Program (Primary Design)

• All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 IILB.1.h Must have table for contingency casing.

3. Cementing Program (Primary Design)

Assuming no returns are established while drilling, Devon requests to pump a two stage cement job on the intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon and the second stage performed as a bradenhead squeeze with planned cement from the Brushy canyon to surface.

Devon will report to the BLM the volume of fluid (limited to 1 bbls) used to flush intermediate casing valves following backside cementing procedures.

Casing	# Sks	тос	Wt. ppg	Yld (ft3/sack)	Slurry Description
Surface	618	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	473	Surf	13.0	2.3	2nd State: Bradenhead Squeeze - Lead: Class C Cement + additives
Int I	552	6818	13.2	1.44	Tail: Class H / C + additives
Production	117	9676	9	3.27	Lead: Class H /C + additives
Production	1433	11676	13.2	1.44	Tail: Class H / C + additives

Devon Energy requests to offline cement on intermediate strings that are set in formations shallower than the Wolfcamp. Prior to commencing offline cementing operations, the well will be monitored for any abnormal pressures and confirmed to be static. A dual manifold system (equipped with chokes) for the returns will also be utilized as a redundancy. All equipment used for offline cementing will have a minimum 5M rating to match intermediate sections' 5M BOPE requirements

Casing String	% Excess
Surface	50%
Intermediate 1	30%
Prod	10%

.

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Туре		*	Tested to:
					Х	50% of rated working pressure
Int 1	13-5/8"	5M	Bline	l Ram	Х	
Int I	15-5/8	5101	Pipe	Ram		5M
			Doub	le Ram	Х	JIVI
			Other*			
	13-5/8"	10M	Annul	ar (5M)	Х	100% of rated working pressure
Production			Blind	d Ram	Х	
Toduction	15-5/8	10101	Pipe Ram			10M
			Doub	le Ram	Х	10101
			Annular 5M Annular Blind Ram Double Ram Double Ram Other* 10M Blind Ram 10M Double Ram			
			Annul	ar (5M)		
			Blind	1 Ram		
			Pipe	Ram		
			Doub	le Ram		
			Other*			
N A variance is requested for	the use of	a diverter o	n the surface	e casing. See	attached for	schematic.
Y A variance is requested to	run a 5 M a	nnular on a	10M system	1		

4. Pressure Control Equipment (Three String Design)

5. Mud Program (Three String Design)

Section	Туре	Weight (ppg)
Surface	FW Gel	8.5-9
Intermediate	DBE / Cut Brine	10-10.5
Production	OBM	10-10.5

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

6. Logging and Testing Procedures

Logging, C	oring and Testing
	Will run GR/CNL from TD to surface (horizontal well - vertical portion of hole). Stated logs run will be in the
Х	Completion Rpeort and sbumitted to the BLM.
	No logs are planned based on well control or offset log information.
	Drill stem test? If yes, explain.
	Coring? If yes, explain.

Addition	al logs planned	Interval
	Resistivity	Int. shoe to KOP
	Density	Int. shoe to KOP
Х	CBL	Production casing
Х	Mud log	Intermediate shoe to TD
	PEX	

7. Drilling Conditions

Condition	Specfiy what type and where?
BH pressure at deepest TVD	6697
Abnormal temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers.

Hydrogren S	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? Potentially

- 1 If operator elects, drilling rig will batch drill the surface holes and run/cement surface casing; walking the rig to next wells on the pad.
- 2 The drilling rig will then batch drill the intermediate sections and run/cement intermediate casing; the wellbore will be isolated with a blind flange and pressure gauge installed for monitoring the well before walking to the next well.
- 3 The drilling rig will then batch drill the production hole sections on the wells with OBM, run/cement production casing, and install TA caps or tubing heads for completions.

NOTE: During batch operations the drilling rig will be moved from well to well however, it will not be removed from the pad until all wells have production casing run/cemented.

Will be pre-setting casing? Potentially

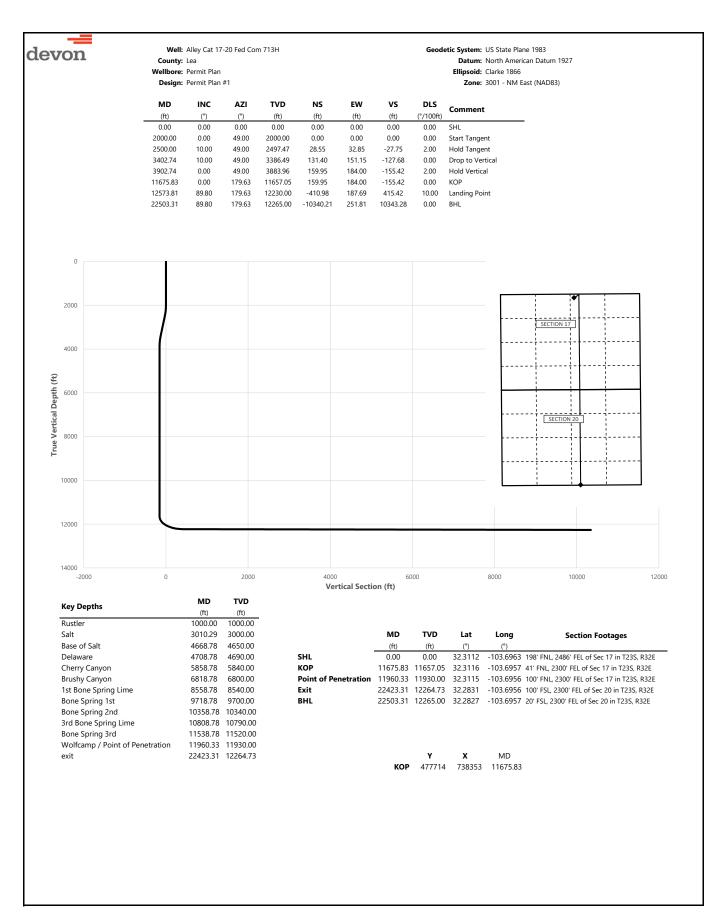
- 1 Spudder rig will move in and batch drill surface hole.
 - a. Rig will utilize fresh water based mud to drill surface hole to TD. Solids control will be handled entirely on a closed loop basis.,
- 2 After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).

³ The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.

- 4 A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
- 5 Spudder rig operations is expected to take 4-5 days per well on a multi-well pa.
- 6 The NMOCD will be contacted and notified 24 hours prior to commencing spudder rig operations.
- 7 Drilling operations will be performed with drilling rig. A that time an approved BOP stack will be nippled up and tested on the wellhead before drilling operations commences on each well.
 - a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

Attachments

X Directional Plan Other, describe



darrar		Well	Alley Cat 1	7-20 Fed Com	713H				Geodetic System: US State Plane 1983
devon		County:	-	0100.000					Datum: North American Datum 1927
		-	Permit Plar	ı					Ellipsoid: Clarke 1866
		Design:	Permit Plar	n #1					Zone: 3001 - NM East (NAD83)
	MD	INC	AZI	TVD	NS	EW	vs	DLS	Comment
_	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
	100.00 200.00	0.00 0.00	49.00 49.00	100.00 200.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	
	300.00	0.00	49.00	300.00	0.00	0.00	0.00	0.00	
	400.00	0.00	49.00	400.00	0.00	0.00	0.00	0.00	
	500.00	0.00	49.00	500.00	0.00	0.00	0.00	0.00	
	600.00	0.00	49.00	600.00	0.00	0.00	0.00	0.00	
	700.00	0.00	49.00	700.00	0.00 0.00	0.00	0.00	0.00	
	800.00 900.00	0.00 0.00	49.00 49.00	800.00 900.00	0.00	0.00 0.00	0.00 0.00	0.00 0.00	
	1000.00	0.00	49.00	1000.00	0.00	0.00	0.00	0.00	Rustler,
	1100.00	0.00	49.00	1100.00	0.00	0.00	0.00	0.00	
	1200.00	0.00	49.00	1200.00	0.00	0.00	0.00	0.00	
	1300.00	0.00	49.00	1300.00	0.00	0.00	0.00	0.00	
	1400.00 1500.00	0.00 0.00	49.00 49.00	1400.00 1500.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	
	1600.00	0.00	49.00	1600.00	0.00	0.00	0.00	0.00	
	1700.00	0.00	49.00	1700.00	0.00	0.00	0.00	0.00	
	1800.00	0.00	49.00	1800.00	0.00	0.00	0.00	0.00	
	1900.00	0.00	49.00	1900.00	0.00	0.00	0.00	0.00	
	2000.00 2100.00	0.00 2.00	49.00 49.00	2000.00 2099.98	0.00 1.14	0.00 1.32	0.00 -1.11	0.00 2.00	Start Tangent
	2200.00	4.00	49.00	2199.84	4.58	5.27	-4.45	2.00	
	2300.00	6.00	49.00	2299.45	10.30	11.84	-10.00	2.00	
	2400.00	8.00	49.00	2398.70	18.29	21.04	-17.77	2.00	
	2500.00	10.00	49.00	2497.47	28.55	32.85	-27.75	2.00	Hold Tangent
	2600.00	10.00	49.00	2595.95	39.95	45.95	-38.82	0.00	
	2700.00 2800.00	10.00 10.00	49.00 49.00	2694.43 2792.91	51.34 62.73	59.06 72.16	-49.89 -60.95	0.00 0.00	
	2900.00	10.00	49.00	2891.39	74.12	85.27	-72.02	0.00	
	3000.00	10.00	49.00	2989.87	85.52	98.37	-83.09	0.00	
	3010.29	10.00	49.00	3000.00	86.69	99.72	-84.23	0.00	Salt
	3100.00	10.00	49.00	3088.35	96.91	111.48	-94.16	0.00	
	3200.00 3300.00	10.00 10.00	49.00 49.00	3186.83 3285.31	108.30 119.69	124.58 137.69	-105.23 -116.30	0.00 0.00	
	3400.00	10.00	49.00	3383.79	131.08	150.80	-127.37	0.00	
	3402.74	10.00	49.00	3386.49	131.40	151.15	-127.68	0.00	Drop to Vertical
	3500.00	8.05	49.00	3482.54	141.41	162.67	-137.41	2.00	
	3600.00	6.05	49.00	3581.78	149.47	171.94	-145.24	2.00	
	3700.00	4.05 2.05	49.00	3681.39 3781.24	155.25	178.59	-150.85	2.00 2.00	
	3800.00 3900.00	0.05	49.00 49.00	3781.24	158.74 159.95	182.61 184.00	-154.25 -155.42	2.00	
	3902.74	0.00	49.00	3883.96	159.95	184.00	-155.42	2.00	Hold Vertical
	4000.00	0.00	179.63	3981.22	159.95	184.00	-155.42	0.00	
	4100.00	0.00	179.63	4081.22	159.95	184.00	-155.42	0.00	
	4200.00	0.00	179.63	4181.22	159.95	184.00	-155.42	0.00	
	4300.00 4400.00	0.00 0.00	179.63 179.63	4281.22 4381.22	159.95 159.95	184.00 184.00	-155.42 -155.42	0.00 0.00	
	4400.00	0.00	179.63	4481.22	159.95	184.00	-155.42	0.00	
	4600.00	0.00	179.63	4581.22	159.95	184.00	-155.42	0.00	
	4668.78	0.00	179.63	4650.00	159.95	184.00	-155.42	0.00	Base of Salt
	4700.00	0.00	179.63	4681.22	159.95	184.00	-155.42	0.00	Delaura
	4708.78 4800.00	0.00 0.00	179.63 179.63	4690.00 4781.22	159.95 159.95	184.00 184.00	-155.42 -155.42	0.00 0.00	Delaware
	4800.00 4900.00	0.00	179.63	4781.22	159.95	184.00	-155.42	0.00	
	5000.00	0.00	179.63	4981.22	159.95	184.00	-155.42	0.00	
	5100.00	0.00	179.63	5081.22	159.95	184.00	-155.42	0.00	
	5200.00	0.00	179.63	5181.22	159.95	184.00	-155.42	0.00	
	5300.00	0.00	179.63	5281.22	159.95	184.00	-155.42	0.00	
	5400.00 5500.00	0.00 0.00	179.63 179.63	5381.22 5481.22	159.95 159.95	184.00 184.00	-155.42 -155.42	0.00 0.00	
	5600.00	0.00	179.63	5461.22 5581.22	159.95	184.00	-155.42	0.00	
	5700.00	0.00	179.63	5681.22	159.95	184.00	-155.42	0.00	
	5800.00	0.00	179.63	5781.22	159.95	184.00	-155.42	0.00	
	5858.78	0.00	179.63	5840.00	159.95	184.00	-155.42	0.00	Cherry Canyon
	5900.00 6000.00	0.00 0.00	179.63 179.63	5881.22 5981.22	159.95 159.95	184.00 184.00	-155.42 -155.42	0.00 0.00	
	6100.00	0.00	179.63 179.63	6081.22	159.95	184.00	-155.42	0.00	
	6200.00	0.00	179.63	6181.22	159.95	184.00	-155.42	0.00	
	6300.00	0.00	179.63	6281.22	159.95	184.00	-155.42	0.00	

		Wall-	Allev Cat 1	7-20 Fed Com	713H				Geodetic System: US State Plane 1983
devon		County:	-	1-20 Fed Coll	17130				Datum: North American Datum 1927
		-	Permit Plar	ı					Ellipsoid: Clarke 1866
		Design:	Permit Plar	n #1					Zone: 3001 - NM East (NAD83)
	MD	INC	AZI	TVD	NS	EW	vs	DLS	Command
_	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
	6400.00 6500.00	0.00 0.00	179.63 179.63	6381.22 6481.22	159.95 159.95	184.00 184.00	-155.42 -155.42	0.00 0.00	
	6600.00	0.00	179.63	6581.22	159.95	184.00	-155.42	0.00	
	6700.00	0.00	179.63	6681.22	159.95	184.00	-155.42	0.00	
	6800.00	0.00	179.63	6781.22	159.95	184.00	-155.42	0.00	
	6818.78	0.00	179.63	6800.00	159.95	184.00	-155.42	0.00	Brushy Canyon
	6900.00 7000.00	0.00 0.00	179.63 179.63	6881.22 6981.22	159.95 159.95	184.00 184.00	-155.42 -155.42	0.00 0.00	
	7100.00	0.00	179.63	7081.22	159.95	184.00	-155.42	0.00	
	7200.00	0.00	179.63	7181.22	159.95	184.00	-155.42	0.00	
	7300.00	0.00	179.63	7281.22	159.95	184.00	-155.42	0.00	
	7400.00	0.00	179.63	7381.22	159.95	184.00	-155.42	0.00	
	7500.00 7600.00	0.00 0.00	179.63 179.63	7481.22 7581.22	159.95 159.95	184.00 184.00	-155.42 -155.42	0.00 0.00	
	7700.00	0.00	179.63	7681.22	159.95	184.00	-155.42	0.00	
	7800.00	0.00	179.63	7781.22	159.95	184.00	-155.42	0.00	
	7900.00	0.00	179.63	7881.22	159.95	184.00	-155.42	0.00	
	8000.00	0.00	179.63	7981.22	159.95	184.00	-155.42	0.00	
	8100.00 8200.00	0.00 0.00	179.63 179.63	8081.22 8181.22	159.95 159.95	184.00 184.00	-155.42 -155.42	0.00 0.00	
	8200.00	0.00	179.63	8281.22	159.95	184.00	-155.42	0.00	
	8400.00	0.00	179.63	8381.22	159.95	184.00	-155.42	0.00	
	8500.00	0.00	179.63	8481.22	159.95	184.00	-155.42	0.00	
	8558.78	0.00	179.63	8540.00	159.95	184.00	-155.42	0.00	1st Bone Spring Lime
	8600.00 8700.00	0.00 0.00	179.63	8581.22 8681.22	159.95 159.95	184.00	-155.42 -155.42	0.00 0.00	
	8700.00	0.00	179.63 179.63	8781.22	159.95	184.00 184.00	-155.42	0.00	
	8900.00	0.00	179.63	8881.22	159.95	184.00	-155.42	0.00	
	9000.00	0.00	179.63	8981.22	159.95	184.00	-155.42	0.00	
	9100.00	0.00	179.63	9081.22	159.95	184.00	-155.42	0.00	
	9200.00 9300.00	0.00	179.63	9181.22 9281.22	159.95 159.95	184.00	-155.42 -155.42	0.00	
	9300.00 9400.00	0.00 0.00	179.63 179.63	9381.22	159.95	184.00 184.00	-155.42	0.00 0.00	
	9500.00	0.00	179.63	9481.22	159.95	184.00	-155.42	0.00	
	9600.00	0.00	179.63	9581.22	159.95	184.00	-155.42	0.00	
	9700.00	0.00	179.63	9681.22	159.95	184.00	-155.42	0.00	
	9718.78 9800.00	0.00 0.00	179.63 179.63	9700.00 9781.22	159.95 159.95	184.00 184.00	-155.42 -155.42	0.00 0.00	Bone Spring 1st
	9800.00 9900.00	0.00	179.63	9881.22	159.95	184.00	-155.42	0.00	
	10000.00	0.00	179.63	9981.22	159.95	184.00	-155.42	0.00	
	10100.00	0.00	179.63	10081.22	159.95	184.00	-155.42	0.00	
	10200.00	0.00	179.63	10181.22	159.95	184.00	-155.42	0.00	
	10300.00 10358.78	0.00 0.00	179.63 179.63	10281.22 10340.00	159.95 159.95	184.00 184.00	-155.42 -155.42	0.00 0.00	Bone Spring 2nd
	10400.00	0.00	179.63	10340.00	159.95	184.00	-155.42	0.00	bone spring zha
	10500.00	0.00	179.63	10481.22	159.95	184.00	-155.42	0.00	
	10600.00	0.00	179.63	10581.22	159.95	184.00	-155.42	0.00	
	10700.00	0.00	179.63	10681.22	159.95	184.00	-155.42	0.00	
	10800.00 10808.78	0.00 0.00	179.63 179.63	10781.22 10790.00	159.95 159.95	184.00 184.00	-155.42 -155.42	0.00 0.00	3rd Bone Spring Lime
	10900.00	0.00	179.63	10881.22	159.95	184.00	-155.42	0.00	· · · · · · · · · · · · · · · ·
	11000.00	0.00	179.63	10981.22	159.95	184.00	-155.42	0.00	
	11100.00	0.00	179.63	11081.22	159.95	184.00	-155.42	0.00	
	11200.00	0.00	179.63	11181.22	159.95	184.00	-155.42	0.00	
	11300.00 11400.00	0.00 0.00	179.63 179.63	11281.22 11381.22	159.95 159.95	184.00 184.00	-155.42 -155.42	0.00 0.00	
	11500.00	0.00	179.63	11481.22	159.95	184.00	-155.42	0.00	
	11538.78	0.00	179.63	11520.00	159.95	184.00	-155.42	0.00	Bone Spring 3rd
	11600.00	0.00	179.63	11581.22	159.95	184.00	-155.42	0.00	
	11675.83	0.00	179.63	11657.05	159.95	184.00	-155.42	0.00	КОР
	11700.00 11800.00	2.42 12.42	179.63 179.63	11681.21 11780.25	159.44 146.55	184.01 184.09	-154.91 -142.02	10.00 10.00	
	11900.00	22.42	179.63	11780.23	146.55	184.09	-142.02	10.00	
	11960.33	28.45	179.63	11930.00	90.76	184.45	-86.24	10.00	Wolfcamp / Point of Penetration
	12000.00	32.42	179.63	11964.20	70.67	184.58	-66.15	10.00	
	12100.00	42.42	179.63	12043.52	9.98	184.97	-5.48	10.00	
	12200.00	52.42 62.42	179.63 179.63	12111.10 12164.88	-63.55 -147.70	185.45 185.99	68.05 152 19	10.00	
	12300.00 12400.00	62.42 72.42	179.63 179.63	12164.88 12203.24	-147.70 -239.92	185.99 186.59	152.19 244.39	10.00 10.00	
	12500.00	82.42	179.63	12224.99	-337.39	187.21	341.85	10.00	

Control: Lease France F			Well:	Alley Cat 1	7-20 Fed Com	713H				Geodetic System:	US State Plane 1983	
Designe Permittalma Toto No. Control Control Control Control 1257361 9830 17963 122000 4103 12706 1267061 Parale 1257361 9830 17963 122004 4571 1670 41161 0.00 1 120000 9830 17963 122044 557.0 1830 54155 0.00 1 120000 9830 17963 122204 557.16 1830 74155 0.00 1 1 1 1 1 1 0.00 1 1 1 1 1 0.00 1 1 1 1 1 0.00 1	evon			-						-		
Mb IV AZ TVD IS IV VS DLS Comment 120000 19380 17530 122300 44374 100 Ianding Point 120000 19380 17936 122300 43747 18736 41542 0.00 120000 19380 17936 12210.00 43747 18736 41416 0.00 120000 8830 17936 12210.00 43717 19176 41416 0.00 1300000 8830 17936 12211.01 43715 19173 191414 0.00 1300000 8930 17936 12221.21 103715 19173 114149 0.00 1300000 8930 17936 12233.27 13714 14446 0.00 1300000 8930 17936 12233.27 13714 14436 100 14138 0.00 1300000 8930 17936 12233.23 13713 10456 141414 0.00												
(b) (c) (c) <th></th> <th></th> <th>Design:</th> <th>Permit Plan</th> <th>#1</th> <th></th> <th></th> <th></th> <th></th> <th>Zone:</th> <th>: 3001 - NM East (NAD83)</th> <th></th>			Design:	Permit Plan	#1					Zone:	: 3001 - NM East (NAD83)	
min r) r) r) r) r) r) r) 126000 8880 17968 122000 41098 17978 122000 41061 1000 Landing Point 126000 8880 17968 122000 4301 1878 122000 4301 1978 122000 4301 1000 Landing Point 128000 8880 17968 122318 3715 19199 44153 000 1310000 8880 17963 122318 3715 19199 44153 000 1330000 8880 17963 12232 13717 1933 14148 000 1350000 8800 17963 122324 143714 13947 14150 000 1360000 8800 17963 122324 163713 19452 144144 000 1370000 8800 17963 12235 18371 1936 12438 000 1370000 8800 1		MD	INC	AZI	TVD	NS	EW	vs	DLS	Comment		
126000 8880 17963 12200 -43717 18786 44161 0.00 1280000 8880 17963 122040 -33716 18815 41155 0.00 130000 880 17963 122150 -83715 1904 41154 0.00 130000 880 17963 122150 -83715 19139 41153 0.00 132000 880 17963 122221 -13715 19133 1414 0.00 134000 880 17963 122221 -13714 19333 1414.40 0.00 136000 880 17963 122323 153714 19435 1441.44 0.00 136000 880 17963 122353 193712 19435 0.00 140000 880 17963 122353 193712 19431 0.00 140000 880 17963 122357 23371 10374 19431 0.00 1400000 880	_											
12700.00 880 1796 12206 8776 188.00 97496 12001 12900.00 880 17968 122315 7375 18930 41456 0.00 13100.00 880 17968 122315 7375 19109 41451 0.00 13100.00 880 17963 122316 93715 19109 41453 0.00 13300.00 880 17963 122324 133715 1933 12414 0.00 13500.00 880 17963 122324 133714 14357 1444 0.00 13700.00 880 17963 122324 153713 15451 164141 0.00 13700.00 880 17963 122342 163713 1551 164141 0.00 13700.00 880 17963 122358 183713 19451 144140 0.00 1400.00 880 17963 122358 18371 1975 194136 0.00 1400.00 880 17963 122357 237171 1272 127413<										Landing Point		
120000 88.0 176.6 123115 377.16 189.04 741.56 0.00 1310000 89.00 176.6 12316 977.15 191.04 941.53 0.00 1330000 89.80 176.6 12232.21 197.15 191.33 1041.44 0.00 1330000 89.80 176.6 12232.21 127.15 193.33 141.44 0.00 1300000 89.80 176.6 1223.227 137.14 193.35 141.44 0.00 1300000 89.80 176.6 1223.227 137.14 194.52 141.41 0.00 1300000 89.80 176.6 1223.53 197.13 195.61 161.14 0.00 1300000 89.80 176.6 1223.53 197.12 197.55 191.16 0.00 1400000 89.80 176.6 1223.69 127.12 198.15 141.44 0.00 1400000 89.80 176.6 1223.64 227.12 198.15 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>												
130000 88.0 176.6 1223150 837.15 191.99 41.53 0.00 130000 89.00 176.6 12232.21 1037.15 191.39 1041.51 0.00 130000 89.80 176.6 12232.21 1237.14 193.63 1241.48 0.00 130000 89.80 176.6 1223.22 1337.14 194.25 1441.44 0.00 130000 89.80 176.63 1223.82 1437.14 194.26 144.44 0.00 1300000 89.80 176.63 1223.82 157.13 195.65 174.13 0.00 1400000 89.80 176.63 1223.83 197.17 198.84 241.31 0.00 1400000 89.80 176.63 1223.64 237.12 198.84 241.31 0.00 1400000 89.80 176.63 1223.67 237.11 20.03 241.28 0.00 1400000 89.80 176.63 1223.67 237.11 20.03	1	12800.00	89.80	179.63		-637.16	189.15	641.58	0.00			
13100.00 89.80 179.63 12232 60 937.15 191.73 104.13 0.00 13300.00 89.80 179.63 12232.22 1037.15 192.38 1141.49 0.00 13500.00 89.80 179.63 12232.27 137.14 193.03 1244.40 0.00 13500.00 89.80 179.63 12232.27 137.14 194.62 1444.44 0.00 13700.00 89.80 179.63 1223.52 137.14 194.62 154.14 0.00 13900.00 89.80 179.63 1223.63 -137.13 195.61 164.14 0.00 14000.00 89.80 179.63 1223.53 -137.12 194.93 241.33 0.00 14000.00 89.80 179.63 1223.64 -237.12 194.93 241.33 0.00 14000.00 89.80 179.63 1223.64 -237.12 194.94 241.33 0.00 14000.00 89.80 179.63 1223.64 -237.12 194.19 20.01 1440.000 196.01 176.63 1223.16 1												
120000 98.00 176.63 1223.221 0187.15 91.23 014.14 0.00 130000 98.00 176.63 1223.23 1237.14 193.67 134.14 0.00 130000 98.00 176.63 1223.23 1337.14 193.67 134.14 0.00 130000 98.00 176.63 1223.82 1337.14 194.26 144.14 0.00 1300000 98.00 176.63 1223.42 1637.13 195.65 141.14 0.00 1400000 98.00 176.63 1223.63 1937.12 184.13 0.00 1400000 98.00 176.63 1225.73 2937.12 198.44 241.13 0.00 1400000 98.00 176.63 1225.74 2337.11 200.13 241.28 0.00 1400000 98.00 176.63 1223.76 2337.11 200.13 241.28 0.00 1400000 98.00 176.63 1223.76 2337.11 200.12 277.13												
130000 89.00 179.63 1223.27 133.41 4 0.00 130000 89.00 179.63 1223.27 133.41 4 136.01 130000 89.80 179.63 1223.32 137.13 195.61 1641.41 0.00 1380000 89.80 179.63 1223.53 -157.13 195.61 1641.41 0.00 1400000 89.80 179.63 1223.53 -137.13 196.26 174.13 0.00 1410000 89.80 179.63 1223.53 -137.11 198.19 0.00 1400000 89.80 179.63 1223.64 -221.71 198.41 2.11.31 0.00 1400000 89.80 179.63 1223.64 -227.11 2.01.7 2.01.24 2.00 1400000 89.80 179.63 1223.74 -237.11 2.02.7 2.41.28 0.00 1400000 89.80 179.63 1223.46 -237.10 2.02.7 2.741.23 0.00												
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evon		County: Wellbore:	,		n 713H				Geodetic System: US State Plane 1983 Datum: North American Datum 1927 Ellipsoid: Clarke 1866 Zone: 3001 - NM East (NAD83)
	MD	INC	AZI	TVD	NS	EW	vs	DLS	Comment
	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
	19500.00	89.80	179.63	12254.42	-7336.98	232.43	7340.46	0.00	
	19600.00	89.80	179.63	12254.78	-7436.98	233.08	7440.45	0.00	
	19700.00	89.80	179.63	12255.13	-7536.97	233.73	7540.43	0.00	
	19800.00	89.80	179.63	12255.48	-7636.97	234.37	7640.41	0.00	
	19900.00	89.80	179.63	12255.83	-7736.97	235.02	7740.40	0.00	
	20000.00	89.80	179.63	12256.19	-7836.97	235.66	7840.38	0.00	
	20100.00	89.80	179.63	12256.54	-7936.96	236.31	7940.36	0.00	
	20200.00	89.80	179.63	12256.89	-8036.96	236.96	8040.35	0.00	
	20300.00	89.80	179.63	12257.24	-8136.96	237.60	8140.33	0.00	
	20400.00	89.80	179.63	12257.60	-8236.95	238.25	8240.31	0.00	
	20500.00	89.80	179.63	12257.95	-8336.95	238.89	8340.30	0.00	
	20600.00	89.80	179.63	12258.30	-8436.95	239.54	8440.28	0.00	
	20700.00	89.80	179.63	12258.65	-8536.95	240.19	8540.26	0.00	
	20800.00	89.80	179.63	12259.01	-8636.94	240.83	8640.25	0.00	
	20900.00	89.80	179.63	12259.36	-8736.94	241.48	8740.23	0.00	
	21000.00	89.80	179.63	12259.71	-8836.94	242.12	8840.21	0.00	
	21100.00	89.80	179.63	12260.06	-8936.94	242.77	8940.20	0.00	
	21200.00	89.80	179.63	12260.42	-9036.93	243.42	9040.18	0.00	
	21300.00	89.80	179.63	12260.77	-9136.93	244.06	9140.16	0.00	
	21400.00	89.80	179.63	12261.12	-9236.93	244.71	9240.15	0.00	
	21500.00	89.80	179.63	12261.48	-9336.92	245.35	9340.13	0.00	
	21600.00	89.80	179.63	12261.83	-9436.92	246.00	9440.11	0.00	
	21700.00	89.80	179.63	12262.18	-9536.92	246.65	9540.10	0.00	
	21800.00	89.80	179.63	12262.53	-9636.92	247.29	9640.08	0.00	
	21900.00	89.80	179.63	12262.89	-9736.91	247.94	9740.06	0.00	
	22000.00	89.80	179.63	12263.24	-9836.91	248.58	9840.05	0.00	
	22100.00	89.80	179.63	12263.59	-9936.91	249.23	9940.03	0.00	
	22200.00	89.80	179.63	12263.94	-10036.91	249.88	10040.01	0.00	
	22300.00	89.80	179.63		-10136.90	250.52	10140.00	0.00	
	22400.00	89.80	179.63		-10236.90	251.17	10239.98	0.00	
	22423.31	89.80	179.63		-10260.21	251.32	10263.29	0.00	exit
	22500.00	89.80	179.63		-10336.90	251.81	10339.96	0.00	
	22503.31	89.80	179.63	12265.00		251.81	10343.28	0.00	BHL

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U. S. Steel Tubular Products 5.500" 20.00lb/ft (0.361" Wall) P110 HP USS-CDC HTQ[®]

MECHANICAL PROPERTIES	Pipe	USS-CDC HTQ [®]		
Minimum Yield Strength	125,000		psi	
Maximum Yield Strength	140,000		psi	
Minimum Tensile Strength	130,000		psi	
DIMENSIONS	Pipe	USS-CDC HTQ [®]		
Outside Diameter	5.500	6.300	in.	
Wall Thickness	0.361		in.	
Inside Diameter	4.778	4.778	in.	
Standard Drift	4.653	4.653	in.	
Alternate Drift			in.	
Nominal Linear Weight, T&C	20.00		lb/ft	
Plain End Weight	19.83		lb/ft	
ECTION AREA	Pipe	USS-CDC HTQ [®]		
Critical Area	5.828	5.828	sq. in.	
Joint Efficiency		97.0	%	
ERFORMANCE	Pipe	USS-CDC HTQ [®]		
Minimum Collapse Pressure	13,150	13,150	psi	
External Pressure Leak Resistance		10,520	psi	
Minimum Internal Yield Pressure	14,360	14,360	psi	
Minimum Pipe Body Yield Strength	729,000		lb	
Joint Strength		707,000	lb	
Compression Rating		424,000	lb	
Reference Length		23,567	ft	
Maximum Uniaxial Bend Rating		60.6	deg/100 ft	
IAKE-UP DATA	Pipe	USS-CDC HTQ [®]		
Make-Up Loss		4.63	in.	
Minimum Make-Up Torque		14,500	ft-lb	
Maximum Make-Up Torque		20,500	ft-lb	
Connection Yield Torque		25,300	ft-lb	

Notes

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness and Specified Minimum Yield Strength (SMYS).

2. Uniaxial bending rating shown is structural only, and equal to compression efficiency.

3. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).

4. Reference length is calculated by joint strength divided by nominal threaded and coupled weight with 1.5 safety factor.

5. Connection external pressure leak resistance has been verified to 80% API pipe body collapse pressure following the guidelines of API 5C5 Cal II.

Legal Notice

USS - CDC HTQ[®] (High Torque Casing Drilling Connection) is a trademark of U. S. Steel Corporation. This product is a modified API Buttress threaded and coupled connection designed for drilling with casing applications. All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U. S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application.

U. S. Steel Tubular Products 460 Wildwood Forest Drive, Suite 300S Spring, Texas 77380 1-877-893-9461 connections@uss.com www.usstubular.com



<u>10-3/4"</u> <u>45.50#</u> <u>0.400"</u> <u>J-55</u>

Dimensions (Nominal)

Outside Diameter Wall Inside Diameter Drift	10.750 0.400 9.950 9.875	in. in. in. in.
Weight, T&C Weight, PE	45.500 44.260	lbs/ft lbs/ft
Internal Yield Pressure at Minimum Yield		
Collapse	2090	psi
Internal Yields Pressure		
PE	3580	psi
STC	3580	psi
BTC	3580	psi
Yield Strength, Pipe Body	715	1000 lbs
Joint Strength, STC		
STC	493	1000 lbs
ВТС	796	1000 lbs

Note: SeAH Steel has produced this specification sheet for general information only. SeAH does not assume liability or responsibility for any loss or injury resulting from the use of information or data contained herein. All applications for the material described are at the customer's own risk and responsibility.

etal One Corp.				MO-FXL 8-	-5/8 32.0		
	MO-FXL	MO-FXL			P110HSCY		
Metal <mark>O</mark> ne	*1 Pine Body: Borusan P110H	*1 Pipe Body: Borusan P110HSCY MinYS125ksi			MinYS125ksi		
Metal One	95%RBW Special Dri			95%RBW			
	Connection Data		Date	16-Jar			
	Connection Data	i Sheet	Dale	10-041	1-2-7		
	Geometry	Imperia	<u>I</u>	<u>S.I.</u>			
	Pipe Body	DATANGON		D440U00V			
	Grade *1	P110HSCY		P110HSCY			
	MinYS *1	125	ksi	125	ksi		
	Pipe OD (D)	8 5/8	in	219.08	mm		
MO-FXL	Weight	32.00	lb/ft	47.68	kg/m		
	Actual weight	31.10		46.34	kg/m		
	Wall Thickness (t)	0.352	in	8.94	mm		
	Pipe ID (d)	7.921	in 2	201.19	mm 2		
	Pipe body cross section	9.149	in ²	5,902	mm ²		
$\uparrow \leftrightarrow$	Special Drift Dia. *1	7.875	in	200.03	mm		
	-	-	-	-	-		
Box	Connection						
critica	Box OD (W)	8.625	in	219.08	mm		
area	PIN ID	7.921	in	201.19	mm		
2	Make up Loss	3.847	in	97.71	mm		
	d Box Critical Area	5.853	in ²	3686	mm ²		
	Joint load efficiency	69	%	69	%		
/lake	Thread Taper			2" per ft)	70		
poss	D Number of Threads	1,		TPI			
critica area	Performance Properties			E 007			
	<mark>S.M.Y.S. *1</mark> M.I.Y.P. *1	1,144	kips	5,087	kN MD		
\checkmark		9,690	psi	66.83 29.66	MPa		
	Collapse Strength *1 Note S.M.Y.S.= Speci	4,300	psi		MPa		
<u>¥</u>		ned Millimum Tie		•	У		
	*1: Borusan: SOP-12-F05 Re		Flessu	e of Fipe body			
	P110HSCY: MinYS125ksi, 9		5 Collar	se Strength 4.3	00nsi		
	Performance Properties		10 C 1	se oli engli 4,0	oopsi		
	Tensile Yield load			of S.M.Y.S.)			
	Min. Compression Yield	789 kips (of S.M.Y.S.)			
	Internal Pressure	6,780 psi (70%	of M.I.Y.P.)			
	External Pressure	100% of Collapse Strengt					
	Max. DLS (deg. /100ft)		2		Ű		
	Recommended Torque						
	Recommended Forque	13,600	ft-lb	18,400	N-m		
	Min						
	Min. Opti.		ft-lb	20.200	111-111		
	Opti.	14,900	ft-lb ft-lb	20,200 21,900	N-m N-m		
	Opti. Max.	14,900 16,200	ft-lb	21,900	N-m		
	Opti.	14,900 16,200 28,400	<mark>ft-lb</mark> ft-lb	21,900 38,500	<mark>N-m</mark> N-m		
	Opti. Max. Operational Max.	14,900 16,200 28,400 orque can be applied	ft-lb ft-lb d for high ne Corporati	21,900 38,500 torque application on or its parents, subsi	N-m N-m diaries or af		

Statements regarding the suitability of products for certain types of applications are based on Metal One's knowledge of typical requirements that are often placed on Metal One products in standard well configurations. Such statements are not binding statements about the suitability of products for a particular placed of Metal One products in standard weil comparations. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application The products described in this Connection Data Sheet are not recommended for use in deep water offshore applications. For more information, please refer to <u>http://www.mtlo.co.jp/mo-con/_images/top/WebsiteTerms_Active_20333287_1.pdf</u> the contents of which are incorporated by reference into this Connection

Data Sheet.

Alley Cat 17-20 Fed Com 713H

	Grade ud, 30min Sfc Csg Test num Required Cemu 1 Stage	i 55	Coupling	Body	0	_			-		147.1.1.
w/8.4#/g m pposed to Minin nnular olume	num Required Cem	i 55			Collapse	Burst	Length	B@s	a-B	a-C	Weight
w/8.4#/g m pposed to Minin nnular olume	num Required Cem		btc	12.94	3.68	0.57	1,215	7	0.95	6.95	55,283
oposed to Minin nnular olume	num Required Cem] 00	btc		0.00	0.01	0	- i - i	0.00	0.00	0
oposed to Minin nnular olume	num Required Cem	nsig: 1 500	Tail Cmt	does not	circ to sfc.	Totals:	1,215				55,283
nnular olume						rotais.	1,210				00,200
olume		1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min Dis
	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cpl
.5563	618	890	676	32	9.00	3767	5M				1.50
	010	890	070	52	9.00	3707					1.50
(s) for Segment	(s) A, B = , b All > 0).70, OK.		Site plat (pip	e racks S or E)	as per 0.0.1.	.III.D.4.i. not	found.			
casing	inside the	10 3/4			Design	Factors		a	Int 1		
#/ft	Grade		Coupling	Joint			Lenath	B@s	a-B	a-C	Weigh
32.00		p 110					-	U			
2.00		pillo	III0-IXI	2.10	0.00	0.00	,	- ¹ -	1.57	1.14	010,40
w/8.4#/g m	ud 30min Sfc Csg Test	nsig: -676				Totals					370,43
w/0.4#/g iii			ded to achieve a top of	0	ft from su						overlap.
nnular											Min Dis
	-	-		-	5						Hole-Cpl
.1261	552		1470	-46	10.50						0.63
											Σ%exces
	32	25				1025	1883				28
(s) for Segment	(s): A, B, C, D = 0.54,	b, c, d <0.70 a Pro	blem!!								
			blem!!		Design Fa	ctore		-	Brod		
casing	inside the	b, c, d <0.70 a Pro 8 5/8		loint	Design Fa		Longth	Pea	Prod	1	
casing #/ft		8 5/8	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	1 a-C	Weight
casing	inside the			Joint 2.61			22,503	B@s 2		1 a-C	Weigh 450,06
casing #/ft 20.00	inside the Grade	8 5/8 p 110	Coupling		Collapse	Burst 1.89	22,503 0	-	a-B	1 a-C	Weigh 450,06
casing #/ft 20.00	inside the Grade ud, 30min Sfc Csg Test	8 5/8 p 110 psig: 2,698	Coupling cdc-htq	2.61	Collapse 1.82	Burst 1.89 Totals:	22,503 0 22,503	-	a-B	1 a-C 3.06	Weigh 450,060 0 450,060
casing #/ft 20.00 w/8.4#/g m	inside the Grade ud, 30min Sfc Csg Test The cement	8 5/8 p 110 psig: 2,698 volume(s) are inter	Coupling cdc-htq nded to achieve a top of	2.61 11376	Collapse 1.82 ft from su	Burst 1.89 Totals: rface or a	22,503 0 22,503 200	-	a-B	1 a-C 3.06	Weight 450,060 0 450,060 overlap.
casing #/ft 20.00 w/8.4#/g m nnular	inside the Grade ud, 30min Sfc Csg Test The cement 1 Stage	8 5/8 p 110 psig: 2,698 volume(s) are inter 1 Stage	Coupling cdc-htq nded to achieve a top of Min	2.61 11376 1 Stage	Collapse 1.82 ft from su Drilling	Burst 1.89 Totals: Inface or a Calc	22,503 0 22,503 200 Req'd	-	a-B	1 a-C 3.06	Weigh 450,060 0 450,060 overlap. Min Dis
casing #/ft 20.00 w/8.4#/g m	inside the Grade ud, 30min Sfc Csg Test The cement	8 5/8 p 110 psig: 2,698 volume(s) are inter	Coupling cdc-htq nded to achieve a top of	2.61 11376	Collapse 1.82 ft from su	Burst 1.89 Totals: rface or a	22,503 0 22,503 200	-	a-B	1 a-C 3.06	Weigh 450,060 0 450,060 overlap. Min Dis
casing #/ft 20.00 w/8.4#/g m nnular	inside the Grade ud, 30min Sfc Csg Test The cement 1 Stage	8 5/8 p 110 psig: 2,698 volume(s) are inter 1 Stage	Coupling cdc-htq nded to achieve a top of Min	2.61 11376 1 Stage	Collapse 1.82 ft from su Drilling	Burst 1.89 Totals: Inface or a Calc	22,503 0 22,503 200 Req'd	-	a-B	1 a-C 3.06	Weigh 450,060 0 450,060 overlap. Min Dis
casing #/ft 20.00 w/8.4#/g m nnular olume	inside the Grade ud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx	8 5/8 p 110 psig: 2,698 volume(s) are inter 1 Stage CuFt Cmt	Coupling cdc-htq nded to achieve a top of Min Cu Ft	2.61 11376 1 Stage % Excess	Collapse 1.82 ft from su Drilling Mud Wt	Burst 1.89 Totals: Inface or a Calc	22,503 0 22,503 200 Req'd	-	a-B	1 a-C 3.06	0 450,060 overlap. Min Dist Hole-Cpl
casing #/ft 20.00 w/8.4#/g m nnular olume .1733	inside the Grade ud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx	8 5/8 p 110 psig: 2,698 volume(s) are inter 1 Stage CuFt Cmt 2446	Coupling cdc-htq nded to achieve a top of Min Cu Ft	2.61 11376 1 Stage % Excess	Collapse 1.82 ft from su Drilling Mud Wt 10.50	Burst 1.89 Totals: rface or a Calc MASP	22,503 0 22,503 200 Req'd	2	a-B 3.17	1 a-C 3.06	Weight 450,060 0 450,060 overlap. Min Dist Hole-Cpl
casing #/ft 20.00 w/8.4#/g m nnular olume .1733 > 1.35	inside the Grade ud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx 1550	8 5/8 p 110 psig: 2,698 volume(s) are inter 1 Stage CuFt Cmt	Coupling cdc-htq Ided to achieve a top of Min Cu Ft 1929	2.61 11376 1 Stage % Excess 27	Collapse 1.82 ft from su Drilling Mud Wt 10.50 Design I	Burst 1.89 Totals: rface or a Calc MASP Factors	22,503 0 22,503 200 Req'd BOPE	2	a-B 3.17 Choose C	1 a-C 3.06	Weight 450,060 0 450,060 overlap. Min Dist Hole-Cpl 0.79
casing #/ft 20.00 w/8.4#/g m nnular olume .1733	inside the Grade ud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx	8 5/8 p 110 psig: 2,698 volume(s) are inter 1 Stage CuFt Cmt 2446	Coupling cdc-htq nded to achieve a top of Min Cu Ft 1929 Coupling	2.61 11376 1 Stage % Excess	Collapse 1.82 ft from su Drilling Mud Wt 10.50	Burst 1.89 Totals: rface or a Calc MASP	22,503 0 22,503 200 Req'd BOPE	2	a-B 3.17 Choose C	1 a-C 3.06	Weight 450,060 0 450,060 overlap. Min Dist Hole-Cpl 0.79 Weight
casing #/ft 20.00 w/8.4#/g m nnular olume .1733 > 1.35	inside the Grade ud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx 1550	8 5/8 p 110 psig: 2,698 volume(s) are inter 1 Stage CuFt Cmt 2446	Coupling cdc-htq aded to achieve a top of Min Cu Ft 1929 Coupling 0.00	2.61 11376 1 Stage % Excess 27	Collapse 1.82 ft from su Drilling Mud Wt 10.50 Design I	Burst 1.89 Totals: rface or a Calc MASP Factors	22,503 0 22,503 200 Req'd BOPE	2	a-B 3.17 Choose C	1 a-C 3.06	Weight 450,060 0 450,060 overlap. Min Dist Hole-Cpl 0.79 Weight 0
casing #/ft 20.00 w/8.4#/g m nnular olume .1733 > 1.35	inside the Grade ud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx 1550	8 5/8 p 110 psig: 2,698 volume(s) are inter 1 Stage CuFt Cmt 2446	Coupling cdc-htq nded to achieve a top of Min Cu Ft 1929 Coupling	2.61 11376 1 Stage % Excess 27	Collapse 1.82 ft from su Drilling Mud Wt 10.50 Design I	Burst 1.89 Totals: rface or a Calc MASP Factors	22,503 0 22,503 200 Req'd BOPE	2	a-B 3.17 Choose C	1 a-C 3.06	Weigh 450,060 overlap. Min Dis Hole-Cpl 0.79 Weigh 0 0
casing #/ft 20.00 w/8.4#/g m nnular olume .1733 > 1.35	inside the Grade ud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx 1550	8 5/8 p 110 psig: 2,698 volume(s) are inter 1 Stage CuFt Cmt 2446 5 1/2	Coupling cdc-htq aded to achieve a top of Min Cu Ft 1929 Coupling 0.00	2.61 11376 1 Stage % Excess 27	Collapse 1.82 ft from su Drilling Mud Wt 10.50 Design I	Burst 1.89 Totals: rface or a Calc MASP Factors	22,503 0 22,503 200 Req'd BOPE	2	a-B 3.17 Choose C	1 a-C 3.06	Weigh 450,06 0 450,06 overlap. Min Dis Hole-Cpl 0.79 Weigh 0
casing #/ft 20.00 w/8.4#/g m nnular olume .1733 > 1.35	inside the Grade ud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx 1550 Grade ud, 30min Sfc Csg Test	8 5/8 p 110 psig: 2,698 volume(s) are inter 1 Stage CuFt Cmt 2446 5 1/2 psig:	Coupling cdc-htq aded to achieve a top of Min Cu Ft 1929 Coupling 0.00	2.61 11376 1 Stage % Excess 27	Collapse 1.82 ft from su Drilling Mud Wt 10.50 Design I	Burst 1.89 Totals: rface or a Calc MASP Factors Burst Totals:	22,503 0 22,503 200 Req'd BOPE	2	a-B 3.17 Choose C	1 a-C 3.06 asing> a-C	Weigh 450,06 overlap. Min Dis Hole-Cp 0.79 Weigh 0
casing #/ft 20.00 w/8.4#/g m nnular olume .1733 > 1.35	inside the Grade ud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx 1550 Grade ud, 30min Sfc Csg Test Cmt vol c	8 5/8 p 110 psig: 2,698 volume(s) are inter 1 Stage CuFt Cmt 2446 5 1/2 psig: alc below includes	Coupling cdc-htq ded to achieve a top of Min Cu Ft 1929 Coupling 0.00 0.00	2.61 11376 1 Stage % Excess 27 #N/A	Collapse 1.82 ft from su Drilling Mud Wt 10.50 <u>Design I</u> Collapse	Burst 1.89 Totals: rface or a Calc MASP Factors Burst Totals:	22,503 0 22,503 200 Req'd BOPE	2	a-B 3.17 Choose C	1 a-C 3.06 asing> a-C	Weigh 450,06 0 450,06 overlap. Min Dis Hole-Cp 0.79 0.79 Weigh 0 0 0 overlap.
casing #/ft 20.00 w/8.4#/g m nuular 0lume .1733 1> 1.35 #/ft w/8.4#/g m	inside the Grade ud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx 1550 Grade ud, 30min Sfc Csg Test Cmt vol c 1 Stage	8 5/8 p 110 psig: 2,698 volume(s) are inter 1 Stage CuFt Cmt 2446 5 1/2 psig: alc below includes 1 Stage	Coupling cdc-htq ded to achieve a top of Min Cu Ft 1929 Coupling 0.00 0.00 0.00 this csg, TOC intended Min	2.61 11376 1 Stage % Excess 27 #N/A 1 Stage	Collapse 1.82 ft from su Drilling Mud Wt 10.50 <u>Design I</u> Collapse ft from su Drilling	Burst 1.89 Totals: rface or a Calc MASP Factors Burst Totals: rface or a	22,503 0 22,503 200 Req'd BOPE	2	a-B 3.17 Choose C	1 a-C 3.06 asing> a-C	Weigh 450,06 0 450,06 overlap. Min Dis Hole-Cp 0.79 Weigh 0 0 0 0 overlap. Min Dis
casing #/ft 20.00 w/8.4#/g m nular 1733 1.135	inside the Grade ud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx 1550 Grade ud, 30min Sfc Csg Test Cmt vol c	8 5/8 p 110 psig: 2,698 volume(s) are inter 1 Stage CuFt Cmt 2446 5 1/2 psig: alc below includes	Coupling cdc-htq ded to achieve a top of Min Cu Ft 1929 Coupling 0.00 0.00 this csg, TOC intended	2.61 11376 1 Stage % Excess 27 #N/A #N/A	Collapse 1.82 ft from su Drilling Mud Wt 10.50 <u>Design I</u> Collapse ft from su	Burst 1.89 Totals: rface or a Calc MASP Factors Burst Totals: rface or a Calc	22,503 0 22,503 200 Req'd BOPE	2	a-B 3.17 Choose C	1 a-C 3.06 asing> a-C	Weigh 450,06 0 450,06 overlap. Min Dis Hole-Cp 0.79 0.79 Weigh 0 0 0 overlap.
#32	casing #/ft 2.00	casing inside the #/ft Grade 2.00 w/8.4#/g mud, 30min Sfc Csg Test The cement nular 1 Stage lume Cmt Sx 1261 552 32	#/ft Grade 2.00 p 110 w/8.4#/g mud, 30min Sfc Csg Test psig: -676 The cement volume(s) are inter nular 1 Stage 1 Stage lume Cmt Sx CuFt Cmt 1261 552 795 6800 32 25	casing inside the 10 3/4 #/ft Grade Coupling 2.00 p 110 mo-fxl w/8.4#/g mud, 30min Sfc Csg Test psig: -676 The cement volume(s) are intended to achieve a top of nular 1 Stage 1 Stage lume Cmt Sx CuFt Cmt Cu Ft 1261 552 6800 32 25	casing inside the 10 3/4 #/ft Grade Coupling 2.00 p 110 mo-fxl 2.13 w/8.4#/g mud, 30min Sfc Csg Test psig: -676 The cement volume(s) are intended to achieve a top of 0 nular 1 Stage 1 Stage 1 Stage lume Cmt Sx 1261 552 32 25	casing inside the 10 3/4 Design 1 #/ft Grade Coupling Joint Collapse 2.00 p 110 mo-fxl 2.13 0.68 w/8.4#/g mud, 30min Sfc Csg Test psig: -676	casing inside the 10 3/4	casing inside the 10 3/4 Design Factors #/ft Grade Coupling Joint Collapse Burst Length 2.00 p 110 mo-fxl 2.13 0.68 0.93 11,576 0 w/8.4#/g mud, 30min Sfc Csg Test psig: -676 Totals: 11,576 nular 1 Stage 1 Stage 0 ft from surface or a 1215 nular 1 Stage 1 Stage Min 1 Stage Drilling Calc Req'd lume Cmt Sx CuFt Cmt Cu Ft % Excess Mud Wt 3992 5M 1261 552 795 1470 -46 10.50 3992 5M 32 25 1025 1883	Casing inside the 10 3/4 Design Factors #/ft Grade Coupling Joint Collapse Burst Length B@s 2.00 p 110 mo-fxl 2.13 0.68 0.93 11,576 1 w/8.4#/g mud, 30min Sfc Csg Test psig: -676 Totals: 11,576 1 nular 1 Stage 1 Stage Min 1 Stage Drilling Calc Req'd lume Cmt Sx CuFt Cmt Cu Ft % Excess Mud Wt 3992 5M 1261 552 795 1470 -46 10.50 3992 5M 32 25 1025 1883	casing inside the 10 3/4 Design Factors Int 1 #/ft Grade Coupling Joint Collapse Burst Length B@s a-B 2.00 p 110 mo-fxl 2.13 0.68 0.93 11,576 1 1.57 w/8.4#/g mud, 30min Sfc Csg Test psig: -676 Totals: 11,576 Totals: 11,576 nular 1 Stage 1 Stage Min 1 Stage Drilling MASP BOPE Feeddate 1261 552 795 1470 -46 10.50 3992 5M 32 25 1025 1883 1883 1883	Casing inside the 10 3/4 Design Factors Int 1 #/ft Grade Coupling Joint Collapse Burst Length B@s a-B a-C 2.00 p 110 mo-fxl 2.13 0.68 0.93 11,576 1 1.57 1.14 w/8.4#/g mud, 30min Sfc Csg Test psig: -676 Totals: 11,576 1 1.57 1.14 nular 1 Stage 1 Stage Min 1 Stage Drilling MASP BOPE Image: Curst of the colspan="2">Sime for the colspan="2">Image: Sime for the colspan="2">Image: Sime for the colspan="2">Sime for the colspan="2">Image: Sime for the colspan="2" 1261 552 795 1470

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District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410

Phone: (505) 334-6178 Fax: (505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462 State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

CONDITIONS

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	346191
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By		Condition Date
pkautz	ALL PREVIOUS COA'S APPLY	5/22/2024

Action 346191