# Sundry Print Report

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Well Number: 704H

Well Name: ALEUTIAN 10-3 FED COM Well Location: T23S / R31E / SEC 10 / County or Parish/State: EDDY /

SESE / 32.3126113 / -103.7585154

Type of Well: OIL WELL Allottee or Tribe Name:

Lease Number: NMNM0405444 **Unit or CA Name: Unit or CA Number:** 

**US Well Number: 3001547556** Well Status: Approved Application for **Operator: DEVON ENERGY** PRODUCTION COMPANY LP

Permit to Drill

## **Notice of Intent**

Sundry ID: 2668664

Type of Submission: Notice of Intent Type of Action: APD Change

Date Sundry Submitted: 04/26/2022 Time Sundry Submitted: 12:33

Date proposed operation will begin: 04/26/2022

Procedure Description: SHL/NAME CHANGE/FORMATION Devon Energy Production Co., L.P. (Devon) respectfully requests to move the SHL(no new pad disturbance), change formation and have a name change on the subject well. Please see attached revised C102, Drill plan, directional plan. (Drilling change includes: surface casing changes, cement loss plan, and break test.) Permitted SHL: SESE, 315 FSL, 430 FEL, 10-23S-31E Proposed SHL: SESE, 165 FSL, 410 FEL, 10-23S-31E Permitted Well name: ALEUTIAN 10 3 FEDERAL COM 334H Proposed Well name: ALEUTIAN 10 3 FEDERAL COM 704H Permitted Formation: 39350 LIVINGSTON RIDGE; BONE SPRING Proposed Formation: 98123 WC-015 G-08 S233102C; WOLFCAMP

### **NOI Attachments**

# **Procedure Description**

WA017989768\_ALEUTIAN\_10\_3\_FED\_COM\_704H\_WL\_R2\_20220426122806.pdf

MB\_Wellhd\_WC\_4\_STRING\_13.375\_10.75\_8.625\_5.5\_20220426122630.pdf

8.625\_32\_\_P110EC\_SPRINT\_FJ\_VST\_\_4\_\_20220426122630.pdf

break\_test\_variance\_BOP\_20220426122630.pdf

ALEUTIAN\_10\_3\_FED\_COM\_704H\_\_\_4\_string\_and\_rem\_cement\_20220426122630.pdf

5.50\_20\_\_P110EC\_DWC\_C\_IS\_PLUS\_VST\_\_2\_\_20220426122630.pdf

1075\_4550\_J55\_BTC\_SC\_BLP\_Devon\_20220426122630.pdf

well Name: ALEUTIAN 10-3 FED COM Well Location: T23S / R31E / SEC 10 / County or Parish/State: EDBY 7 of

SESE / 32.3126113 / -103.7585154

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Permit to Drill

PRODUCTION COMPANY LP

NM

# **Conditions of Approval**

## Additional

Aleutian 10 3 Fed Com 704H Dr COA Sundry ID 2668664 20220506073819.pdf

10\_23\_31\_P\_Sundry\_ID\_2668664\_Aleutian\_10\_3\_Fed\_Com\_334H\_Eddy\_NM0405444\_13\_22d\_5\_6\_2022\_LV\_20220 506073816.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

Operator Electronic Signature: JENNY HARMS Signed on: APR 26, 2022 12:33 PM

Name: DEVON ENERGY PRODUCTION COMPANY LP

**Title:** Regulatory Compliance Professional **Street Address:** 333 West Sheridan Avenue

City: Oklahoma City State: OK

Phone: (405) 552-6560

Email address: jennifer.harms@dvn.com

## **Field**

Representative Name:

**Street Address:** 

City: State: Zip:

Phone:

**Email address:** 

# **BLM Point of Contact**

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

**BLM POC Phone:** 5752342234 **BLM POC Email Address:** cwalls@blm.gov

**Disposition:** Approved **Disposition Date:** 05/06/2022

Signature: Chris Walls

Page 2 of 2

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240

Phone: (575) 393-6161 Fax: (575) 393-0720 <u>District II</u> 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

<u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462 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

X AMENDED REPORT

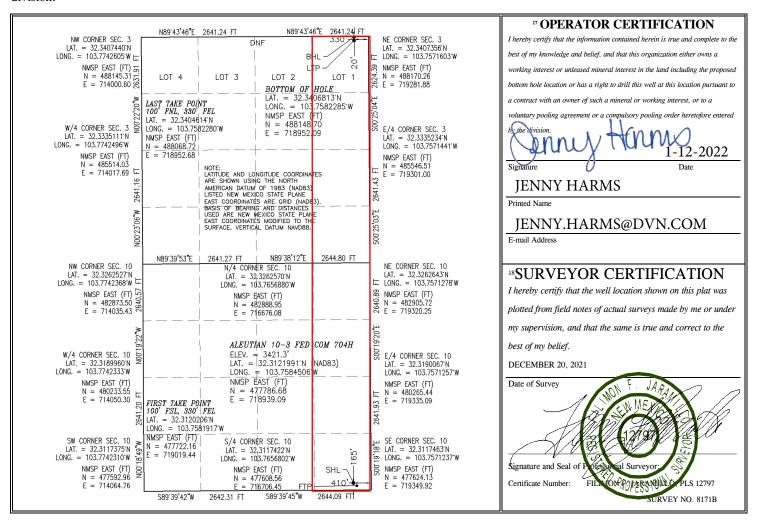
#### WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number		<sup>2</sup> Pool Code			
30-015-47556		98123	WC-015 G-08 S233102C; WOL	FCAMP	
<sup>4</sup> Property Code		<sup>5</sup> Pr	operty Name	<sup>6</sup> Well Number	
	ALEUTIAN 10-3 FED COM 70				
<sup>7</sup> OGRID No.		8 O <sub>l</sub>	<sup>9</sup> Elevation		
6137		DEVON ENERGY PRODUCTION COMPANY, L.P. 3421.			

#### <sup>10</sup> Surface Location

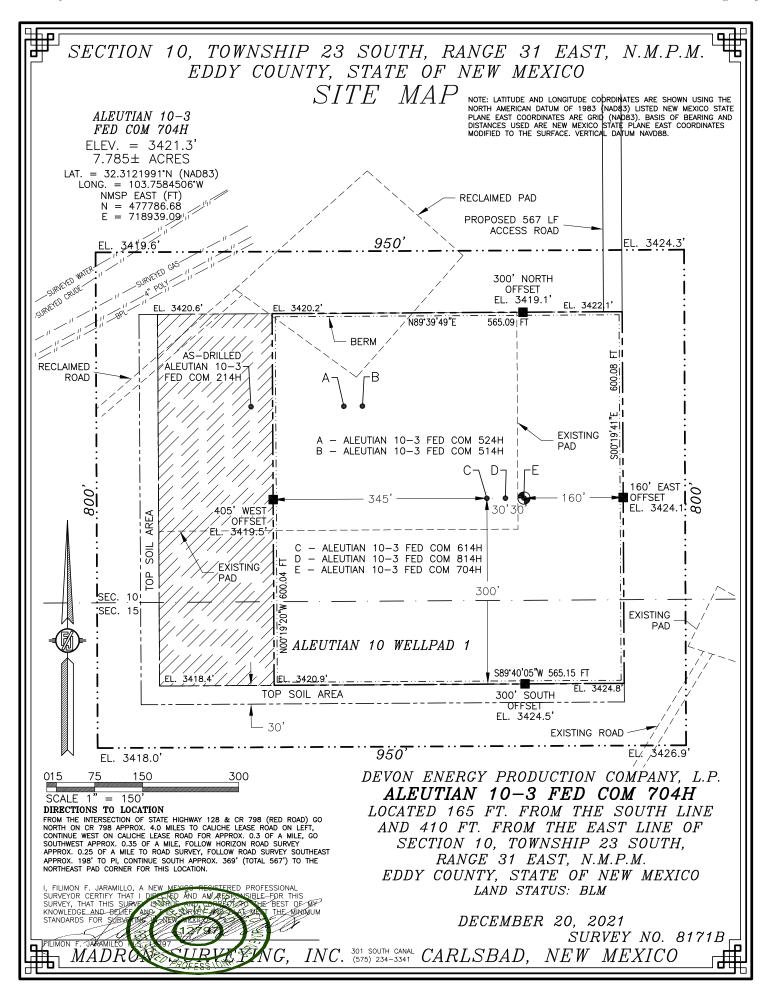
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	10	23 S	31 E		165	SOUTH	410	EAST	EDDY
<sup>11</sup> Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	3	23 S	31 E		20	NORTH	330	EAST	EDDY
12 Dedicated Acre	s <sup>13</sup> Joint	or Infill 14	Consolidation	1 Code			15 Order No.		
319.35									

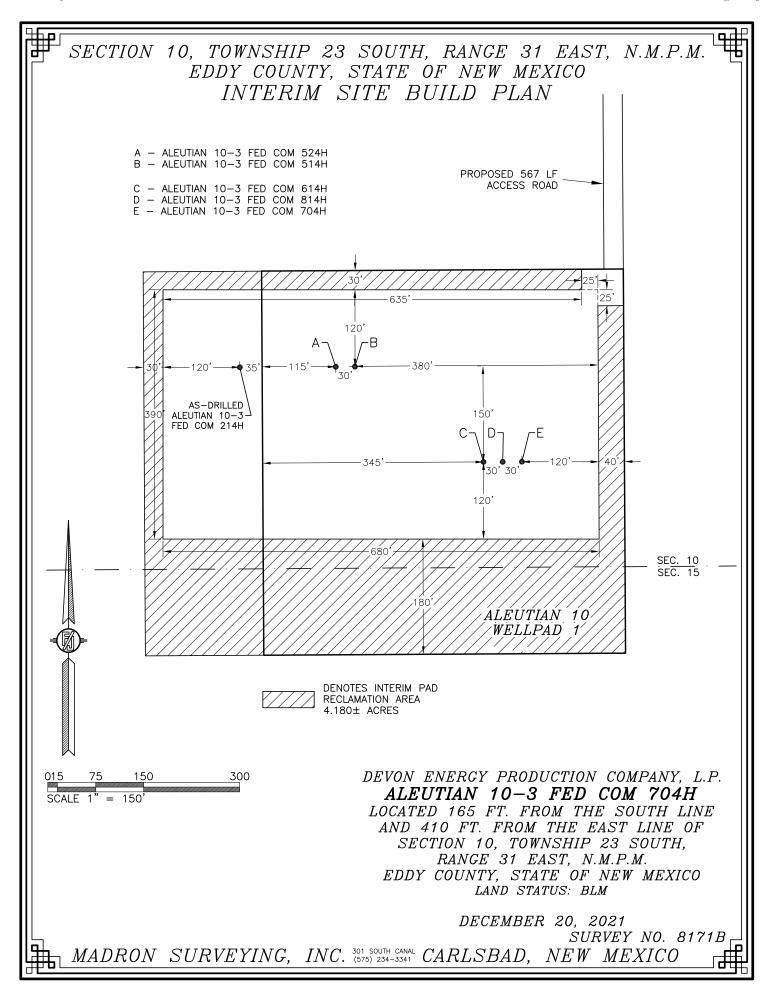
No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



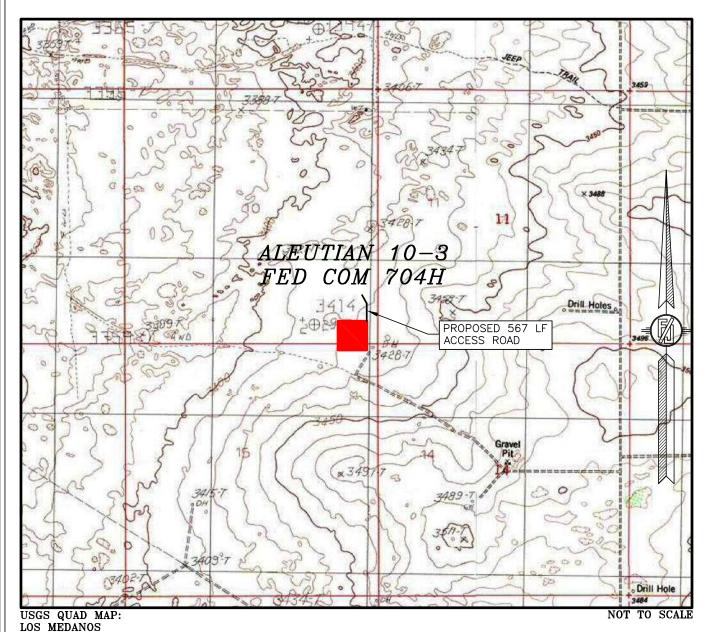
ntent	X	As Drill	ed										
API#			]										
Ope	rator Nan	ne:	<u> </u>			Propert	ty Name:						Well Numbe
DEV	ON ENE	RGY PROI	DUCTION	ı co.,	L.P.		ALEUTIA	N 10-	3 FED	CON	1		704H
Kick C	Off Point (	кор)											
UL	Section 10	Township 23S	Range 31E	Lot	Feet 69 FSL		om N/S	Feet 329	FEL	From	E/W	County	
Latitu		l		<u> </u>	Longitu		392	10-0	1			NAD 83	
First T	ake Poin	t (FTP)	Range	Lot	Feet	Fro	om N/S	Feet		From	E/W	County	
Р	10	235	31E		100	SC	DUTH	330		EAST		<b>EDDY</b> NAD	
Latitu	32.312	0206			Longitu		581917	,				<b>83</b>	
Last T	Section	Township 23S	Range <b>31E</b>	Lot <b>1</b>	Feet <b>100</b>	From N,	/S Feet <b>'H 33(</b>		From E	<u>-</u> /W	Count <b>EDD</b>	·	
Latitu	ıde	404614	JIL	-	Longitu	ıde	758228		LASI		NAD	83	
		defining w	ell for the		ontal Spa	icing Unit	t? [	N	]				
f infil		nfill well? olease prov	ide API if	Y availa	able, Ope	erator N	ame and	well	numbe	er for	Defi	ning well	for Horizonta
API#			]										
Ope	rator Nan	ne:	<u>l</u>			Propert	ty Name:						Well Numbe

KZ 06/29/2018





# SECTION 10, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO LOCATION VERIFICATION MAP



DEVON ENERGY PRODUCTION COMPANY, L.P.

ALEUTIAN 10-3 FED COM 704H

LOCATED 165 FT. FROM THE SOUTH LINE

AND 410 FT. FROM THE EAST LINE OF

SECTION 10, TOWNSHIP 23 SOUTH,

RANGE 31 EAST, N.M.P.M.

EDDY COUNTY, STATE OF NEW MEXICO

LAND STATUS: BLM

DECEMBER 20, 2021

SURVEY NO. 8171B

 $MADRON \quad SURVEYING, \quad INC. \quad {\tiny 5075} \quad {\tiny 234-3341} \quad CARLSBAD, \quad NEW \quad MEXICO$ 

# SECTION 10, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO VICINITY MAP ALEUTIAN 10-3 FED COM 704H 0.35 MI 567 DISTANCES IN MILES NOT TO SCALE

DIRECTIONS TO LOCATION
FROM THE INTERSECTION OF STATE HIGHWAY 128 & CR 798 (RED ROAD) GO
NORTH ON CR 798 APPROX. 4.0 MILES TO CALICHE LEASE ROAD ON LEFT,
CONTINUE WEST ON CALICHE LEASE ROAD FOR APPROX. 0.3 OF A MILE, GO
SOUTHWEST APPROX. 0.35 OF A MILE, FOLLOW HORIZON ROAD SURVEY
APPROX. 0.25 OF A MILE TO ROAD SURVEY, FOLLOW ROAD SURVEY SOUTHEAST
APPROX. 198' TO PI, CONTINUE SOUTH APPROX. 369' (TOTAL 567') TO THE
NORTHEAST PAD CORNER FOR THIS LOCATION.

DIRECTIONS TO LOCATION

DEVON ENERGY PRODUCTION COMPANY, L.P.

# ALEUTIAN 10-3 FED COM 704H

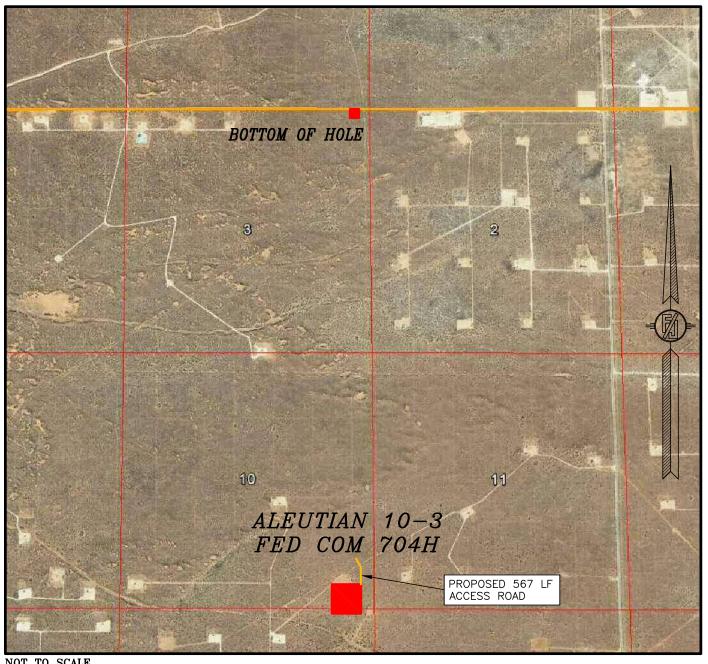
LOCATED 165 FT. FROM THE SOUTH LINE AND 410 FT. FROM THE EAST LINE OF SECTION 10, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO LAND STATUS: BLM

DECEMBER 20, 2021

SURVEY NO. 8171B

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO

# SECTION 10, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO AERIAL PHOTO



NOT TO SCALE AERIAL PHOTO: GOOGLE EARTH NOVEMBER 2017

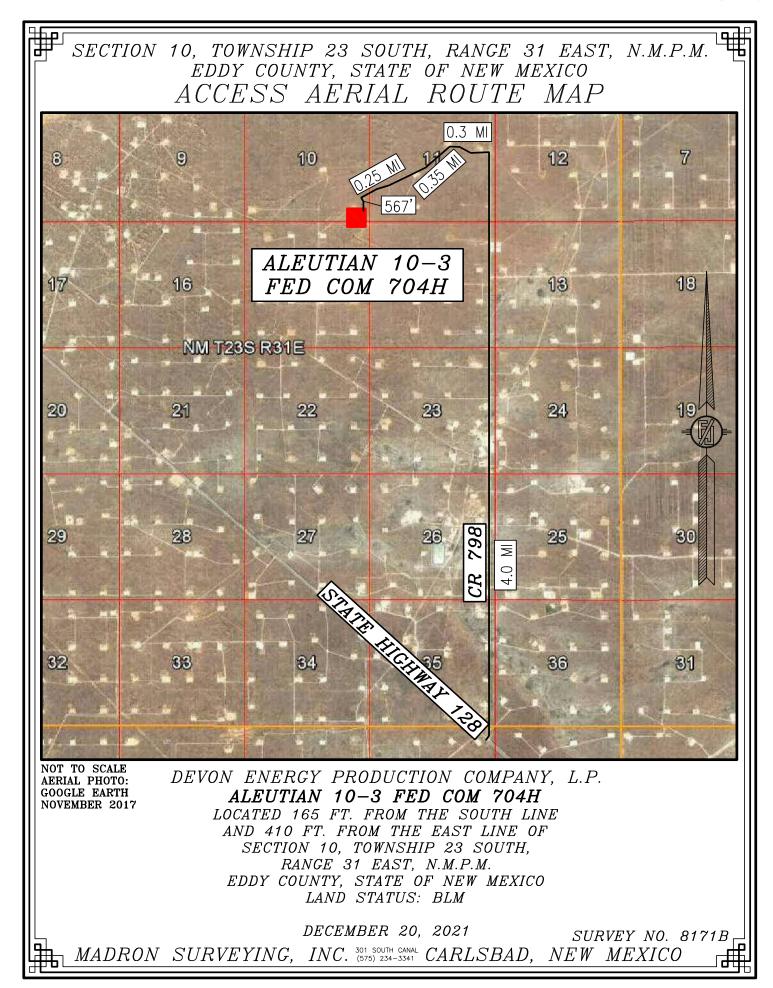
DEVON ENERGY PRODUCTION COMPANY, L.P. ALEUTIAN 10-3 FED COM 704H

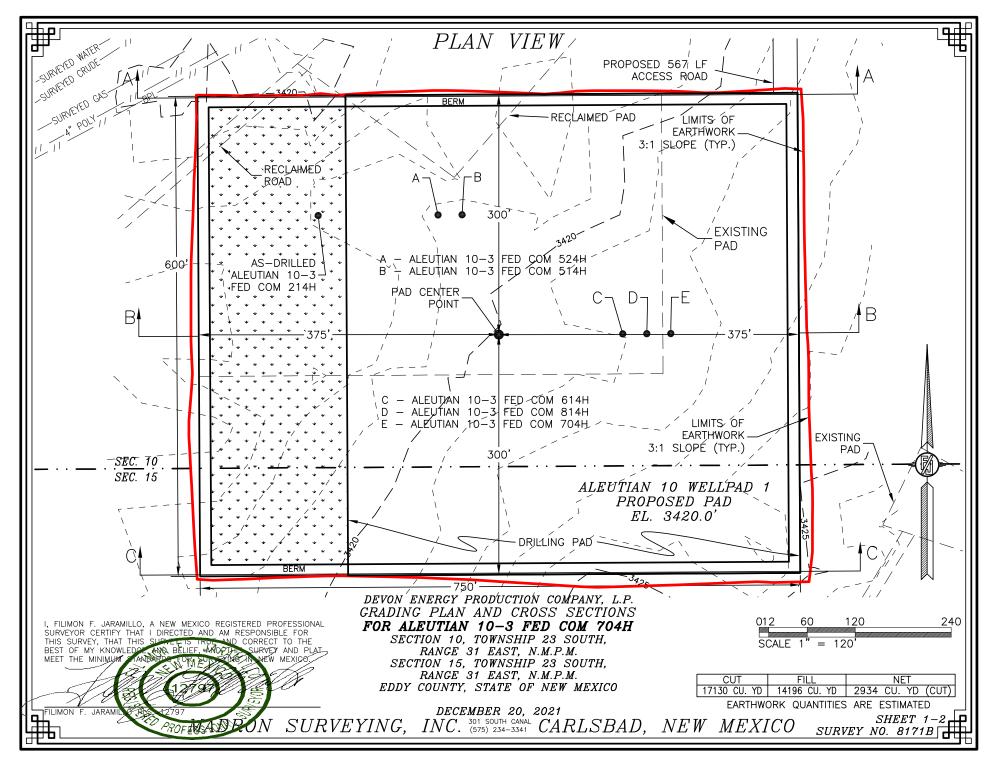
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DECEMBER 20, 2021

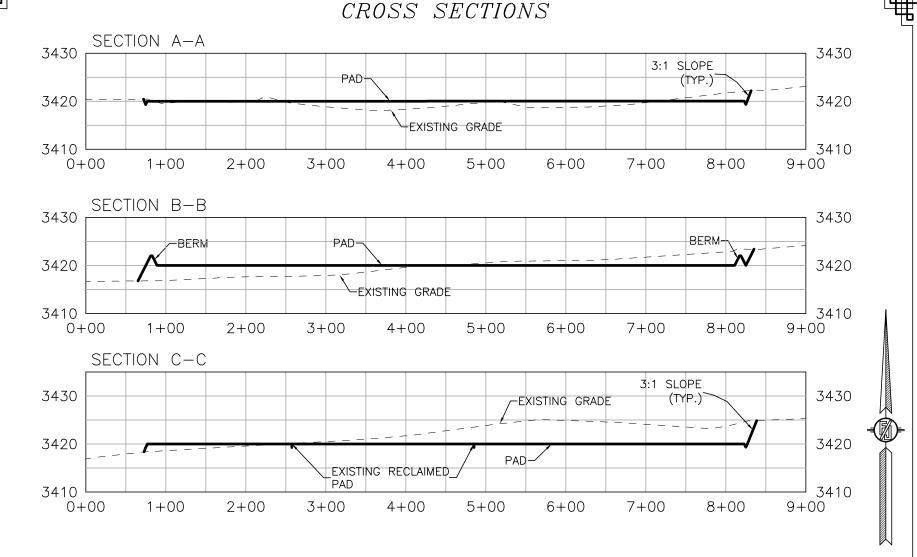
SURVEY NO. 8171B

MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO





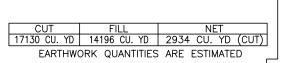
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DEVON ENERGY PRODUCTION COMPANY, L.P. GRADING PLAN AND CROSS SECTIONS FOR ALEUTIAN 10-3 FED COM 704H SECTION 10, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. SECTION 15, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO

DECEMBER 20, 2021



120

SCALE 1" = 120' - 1" = 20' VER

60

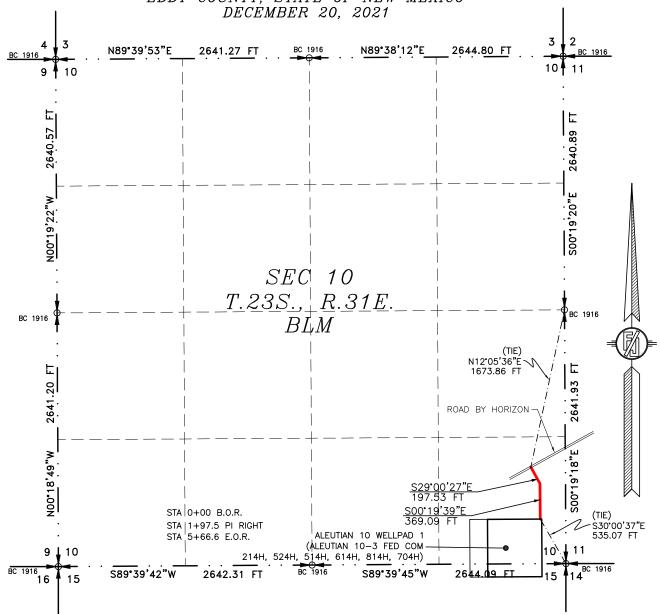
012

SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO SURVEY NO. 8171B

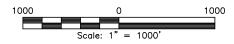
# ACCESS ROAD PLAT (AA000176582)

ACCESS ROAD TO THE ALEUTIAN 10 WELLPAD 1
(ALEUTIAN 10-3 FED COM 214H, 524H, 514H, 614H, 814H, 704H)

DEVON ENERGY PRODUCTION COMPANY, L.P. CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING SECTION 10, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO



SEE NEXT SHEET (2-2) FOR DESCRIPTION



#### GENERAL NOTES

- 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.
- 2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVEY.

SHEET: 1-2

MADRON SURVEYING, INC. 301 SOUTH A. (575) 234-33

#### SURVEYOR CERTIFICATE

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD,



MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO 88220 Phone (575) 234-3341

SURVEY NO. 8171B NEW MEXICO ⊢

### *ACCESS ROAD PLAT (AA000176582)*

ACCESS ROAD TO THE ALEUTIAN 10 WELLPAD 1 (ALEUTIAN 10-3 FED COM 214H, 524H, 514H, 614H, 814H, 704H)

DEVON ENERGY PRODUCTION COMPANY, L.P. CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING SECTION 10, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO DECEMBER 20, 2021

#### DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 10, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE

BEGINNING AT A POINT WITHIN THE SE/4 SE/4 OF SAID SECTION 10, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., WHENCE THE EAST QUARTER CORNER OF SAID SECTION 10, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS N12'05'36"E, A DISTANCE OF 1673.86 FEET;

THENCE \$29'00'27"E A DISTANCE OF 197.53 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED; THENCE SOO 19'39"E A DISTANCE OF 369.09 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTHEAST CORNER OF SAID SECTION 10, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S30°00'37"E, A DISTANCE OF 535.07 FEET;

SAID STRIP OF LAND BEING 566.62 FEET OR 34.34 RODS IN LENGTH, CONTAINING 0.390 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SE/4 SE/4 566.62 L.F. 34.34 RODS 0.390 ACRES

#### SURVEYOR CERTIFICATE

GENERAL NOTES 1.) THE INTENT OF THIS ROUTE SURVEY IS TO ACQUIRE AN EASEMENT.

2.) BASIS OF BEARING AND DISTANCE IS NMSP EAST (NAD83) MODIFIED TO SURFACE COORDINATES. NAD 83 (FEET) AND NAVD 88 (FEET) COORDINATE SYSTEMS USED IN THE SURVÉY.

SHEET: 2-2

MADRON SURVEYING, INC. 301 SOUTH

I, FILIMON F. JARAMILLO, A NEW MEXICO PROFESSIONAL SURVEYOR NO. 12797, HEREBY CERTIFY THAT I HAVE CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR LAND SURVEYING IN THE STATE OF NEW MEXICO.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD,

NEW MEXICO DECEMBER 2021 MADRON SURVEYING, INC. 301 SOUTH CANAL CARLSBAD, NEW MEXICO 88220 Phone (575) 234-3341 FILMON

SURVEY NO. 8171B

*NEW MEXICO* 

# 1. Geologic Formations

TVD of target	11800	Pilot hole depth	N/A
MD at TD:	22071	Deepest expected fresh water	

#### Basin

Dasin	Donth	Water/Mineral	
77	Depth		
Formation	(TVD)	Bearing/Target	Hazards*
	from KB	Zone?	
Rustler	545		
Salt	885		
Base of Salt	4060		
Delaware	4285		
Cherry Canyon	5185		
Brushy Canyon	6485		
1st Bone Spring Lime	8135		
Bone Spring 1st	9235		
Bone Spring 2nd	9735		
3rd Bone Spring Lime	10285		
Bone Spring 3rd	10985		
Wolfcamp	11455		

<sup>\*</sup>H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program (Primary Design)

Hole Size	Csg. Size	Wt (PPF)	Grade	Conn	Top (MD)	Bottom (MD)	Top (TVD)	Bottom (TVD)
17 1/2	13 3/8	48.0	H40	STC	0.0	570 MD	0	570 TVD
12 1/4	10 3/4	45.5	J-55	BTC SC	0.0	4285 MD	0	4285 TVD
9 7/8	8 5/8	32.0	P110	Sprint FJ	0	11010 MD	0	11010 TVD
7 7/8	5 1/2	20.0	P110	DWC/C IS+	0	22071 MD	0	11800 TVD

- All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 IILB.1.h Must have table for contingency casing.
- The Rustler top will be validated via drilling parameters (i.e. reduction in ROP), and the surface casing setting depth will be revised accordingly. In addition, surface casing will be set a minimum of 25' above the top of the salt.

3. Cementing Program (Primary Design)

Casing	# Sks	TOC	Wt. (lb/gal)	Yld (ft3/sack)	Slurry Description
Surface	451	Surf	13.2	1.44	Lead: Class C Cement + additives
T4	284	Surf	9	3.27	Lead: Class C Cement + additives
Int	150	500' above shoe	13.2	1.44	Tail: Class H / C + additives
Int 1	292	Surf	9	3.27	Lead: Class C Cement + additives
Int 1	465	4000' above shoe	13.2	1.44	Tail: Class H / C + additives
Int 1	As Needed	Surf	9	1.44	Squeeze Lead: Class C Cement + additives
Intermediate	284	Surf	9	3.27	Lead: Class C Cement + additives
Squeeze	465	4000' above shoe	13.2	1.44	Tail: Class H / C + additives
Production	58	10285	9	3.27	Lead: Class H /C + additives
Froduction	1427	11285	13.2	1.44	Tail: Class H / C + additives

If a DV tool is ran the depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. Slurry weights will be adjusted based on estimated fracture gradient of the formation. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. If cement is not returned to surface during the primary cement job on the surface casing string, a planned top job will be conducted immediately after completion of the primary job.

Casing String	% Excess
Surface	50%
Intermediate and Intermediate 1	30%
Intermediate 1 (Two Stage)	25%
Prod	10%

#### 3. Cementing Program (Primary Design)

Assuming no returns are established while drilling, Devon requests to pump a two stage cement job on the 8-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon (6,485") and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If necessary, a top out consisting of 477 sacks of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. The final cement top will be verified by Echo-meter.

Devon will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drillsundries on wells utilizing this cement program.

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

4. Pressure Control Equipment (Four String Design)

BOP installed and tested before drilling which hole?	Size?	Min. Require d WP	Туре		<b>✓</b>	Tested to:	
			Annular		X	50% of rated working pressure	
Int	13-5/8"	5M	Blind	l Ram	X		
IIIt	13-3/6	JIVI	Pipe	Ram		5M	
			Doub	le Ram	X	3101	
			Other*			1	
			Annula	Annular (5M)		100% of rated working pressure	
T.,,, 1	13-5/8"	5M	Blind Ram		X		
Int 1			Pipe Ram			514	
			Double Ram		X	5M	
			Other*				
			Annula	ar (5M)	X	100% of rated working pressure	
Production	13-5/8"	5M	Blind	l Ram	X		
Troduction	13-3/6	J1 <b>V1</b>	Pipe Ram			5M	
			Double Ram		X	] JIVI	
			Other*				
N A variance is requested for	r the use of a	diverter or	the surface	casing. See	attached for s	chematic.	
N A variance is requested to	run a 5 M an	nular on a	10M system				

5. Mud Program (Four String Design)

Section	Туре	Weight (ppg)		
Surface	WBM	8.5-9		
Intermediate	DBE / Cut Brine	10-10.5		
Intermediate 1	WBM	8.5-9		
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.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring
---	-----------------------------

#### 6. Logging and Testing Procedures

Logging, (	Coring and Testing
	Will run GR/CNL from TD to surface (horizontal well - vertical portion of hole). Stated logs run will be in the
X	Completion Report and shumitted 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.

Additional logs planned		Interval
	Resistivity	Int. shoe to KOP
	Density	Int. shoe to KOP
X	CBL	Production casing
X	Mud log	Intermediate shoe to TD
	PEX	

#### 7. Drilling Conditions

Condition	Specfiy what type and where?	
BH pressure at deepest TVD	6443	
Abnormal temperature	No	

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

Hydrogren 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).
- 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

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: Devon Energy Production Company LP
LEASE NO.: NMNM0405444
LOCATION: Section 10, T.23 S., R.31 E., NMPM
COUNTY: Eddy County, New Mexico

**Sundry ID:** | 2668664

WELL NAME & NO.: Aleutian 10-3 Fed Com 334H

**SURFACE HOLE FOOTAGE:** 165'/S & 410'/E **BOTTOM HOLE FOOTAGE** 20'/N & 330'/E

COA

H2S	<b>©</b> Yes	□ No	
Potash	None	☐ Secretary	<b>©</b> R-111-P
Cave/Karst Potential	<b>©</b> Low	☐ Medium	☐ High
Cave/Karst Potential	Critical		
Variance	None	Flex Hose	C Other
Wellhead	Conventional	Multibowl	<b>⊡</b> Both
Wellhead Variance	☐ Diverter		
Other	✓ 4 String	☐ Capitan Reef	□WIPP
Other	Fluid Filled	☐ Pilot Hole	☐ Open Annulus
Cementing	▼ Cement Squeeze	▼ EchoMeter	
Special Requirements	☐ Water Disposal	<b>▼</b> COM	□ Unit
Special Requirements	✓ Break Testing	□ Offline	
Variance		Cementing	

#### A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Salado** formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

#### **B. CASING**

- 1. The 13-3/8 inch surface casing shall be set at approximately 725 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - 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 **24 hours in the Potash Area** 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 10-3/4 inch intermediate casing shall be set at approximately 4285 feet is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

3. 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. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

#### **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.
- 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.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

❖ In <u>R111 Potash Areas</u> if cement does not circulate to surface on the first two salt protection casing strings, the cement on the 3rd casing salt string must come to surface.

Operator has proposed to pump down 10-3/4" X 8-5/8" annulus after primary cementing stage. Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus Or operator shall run a CBL from TD of the 8-5/8" casing to surface after the second stage BH to verify TOC.

Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out. Operator must run one CBL per Well Pad.

If cement does not reach surface, the next casing string must come to surface.

Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

- 4. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - Cement should tie-back at least 500 feet into previous casing string.
     Operator shall provide method of verification.
     Cement excess is less than 25%, more cement might be required.

#### 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 3000 (3M) psi. Annular which shall be tested to 2100 (70% Working Pressure) psi.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 10-3/4 intermediate

- casing shoe shall be 5000 (5M) psi. Annular which shall be tested to 3500 (70% Working Pressure) psi.
- a. 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:**

- a. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the 13-3/8 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 OOGO2.III.A.2.i 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.
- 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. When the Communitization Agreement number is known, it shall also be on the sign.

#### **BOPE Break Testing Variance**

- 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 (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 14-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

# **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 CountyCall 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 2<sup>nd</sup> 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 Onshore Oil and Gas Order No. 2 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.

#### 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.
- 2. Wait on cement (WOC) for Potash Areas: 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 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: 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 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity 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

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. 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 OOGO2.III.A.2.i 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 when specified), 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 plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (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 Onshore Order No. 2.

#### 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.

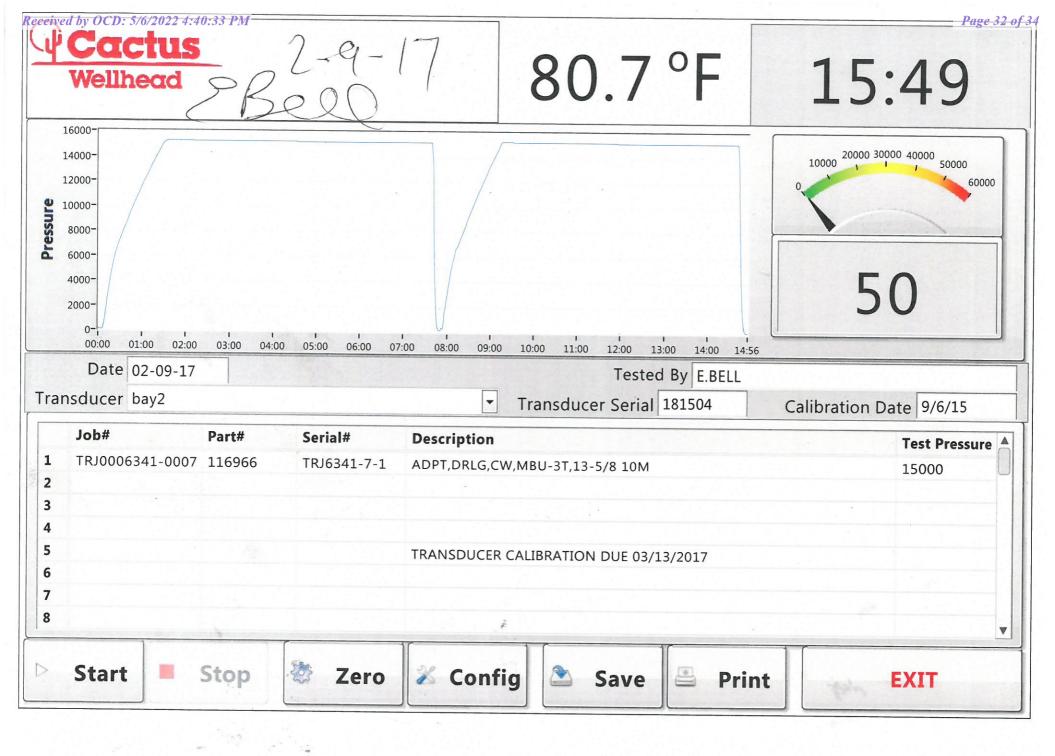
Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

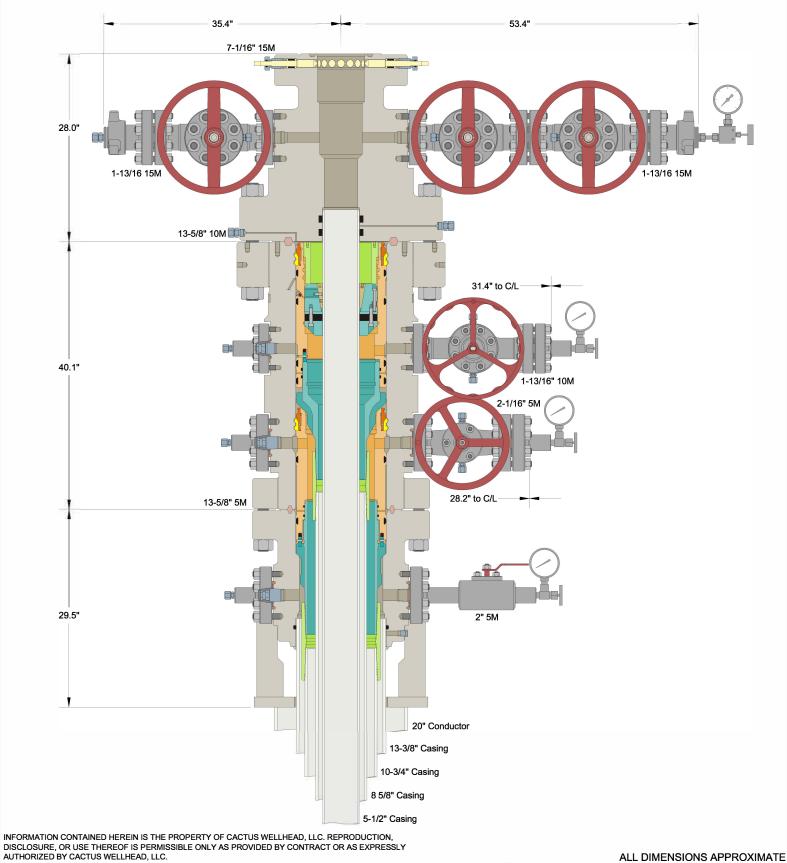
#### **Section 2 - Blowout Preventer Testing Procedure**

Variance Request

Devon Energy requests to only test BOP connection breaks after drilling out of surface casing and while skidding between wells which conforms to API Standard 53 and industry standards. This test will include the Top Pipe Rams, HCR, Kill Line Check Valve, QDC (quick disconnect to wellhead) and Shell of the 10M BOPE to 5M for 10 minutes. If a break to the flex hose that runs to the choke manifold is required due to repositioning from a skid, the HCR will remain open during the shell test to include that additional break. The variance only pertains to intermediate hole-sections and no deeper than the Bone Springs Formation where 5M BOP tests are required. The initial BOP test will follow OOGO2.III.A.2.i, and subsequent tests following a skid will only test connections that are broken. The annular preventer will be tested to 100% working pressure. This variance will meet or exceed OOGO2.III.A.2.i per the following: Devon Energy will perform a full BOP test per OOGO2.III.A.2.i before drilling out of the intermediate casing string(s) and starting the production hole, before starting any hole section that requires a 10M test, before the expiration of the allotted 14-days for 5M intermediate batch drilling or when the drilling rig is fully mobilized to a new well pad, whichever is sooner. We will utilize a 200' TVD tolerance between intermediate shoes as the cutoff for a full BOP test. The BLM will be contacted 4hrs prior to a BOPE test. The BLM will be notified if and when a well control event is encountered. Break test will be a 14 day interval and not a 30 day full BOPE test interval. If in the event break testing is not utilized, then a full BOPE test would be conducted.

- 1. Well Control Response:
- 1. Primary barrier remains fluid
- 2. In the event of an influx due to being underbalanced and after a realized gain or flow, the order of closing BOPE is as follows:
  - a) Annular first
  - b) If annular were to not hold, Upper pipe rams second (which were tested on the skid BOP test)
  - c) If the Upper Pipe Rams were to not hold, Lower Pipe Rams would be third





CACTUS WELLHEAD LLC

20" x 13-3/8" x 10-3/4" x 8-5/8" x 5-1/2" MBU-4T-SOW Wellhead With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head, 10-3/4" & 8-5/8" Mandrel Hangers And 5-1/2" Slip Casing Hanger

MATADOR RESOURCES WOLFCAMP A WELLS (TEXAS)

DRAWN DLE 09AUG19
APPRV

DRAWING NO. HBE0000156

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

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

Action 105029

#### **CONDITIONS**

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	105029
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

#### CONDITIONS

Created By	Condition	Condition Date
kpickford	Adhere to previous NMOCD Conditions of Approval	5/9/2022