

Well Name: ALEUTIAN 10-3 FED COM	Well Location: T23S / R31E / SEC 10 / SESE / 32.3121989 / -103.7571257	County or Parish/State: EDDY / NM
Well Number: 814H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM0405444	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001547558	Well Status: Approved Application for Permit to Drill	Operator: DEVON ENERGY PRODUCTION COMPANY LP

Notice of Intent

Sundry ID: 2668708

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 04/26/2022	Time Sundry Submitted: 03:57
Date proposed operation will begin: 04/26/2022	

**Procedure Description:** SHL/BHL/NAME CHANGE Devon Energy Production Co., L.P. (Devon) respectfully requests to move the SHL(no new disturbance)/BHL and have a name change on the subject well. Please see attached revised C102, Drill plan, directional plan. Drilling changes include: 4 string plan, cement loss plan, and break test Permitted SHL: SESE, 315 FSL, 460 FEL, 10-23S-31E Proposed SHL: SESE, 165 FSL, 440 FEL, 10- 23S-31E Permitted BHL: LOT 1, 20 FNL, 430 FEL, 3-23S-31E Proposed BHL: LOT 1, 20 FNL, 660 FEL, 3-23S-31E Permitted Well name: ALEUTIAN 10 3 FEDERAL COM 714H Proposed Well name: ALEUTIAN 10 3 FEDERAL COM 814H

NOI Attachments

Procedure Description

- WA017989750\_ALEUTIAN\_10\_3\_FED\_COM\_814H\_WL\_R2\_20220426132522.pdf
- MB\_Wellhd\_WC\_4\_STRING\_13.375\_10.75\_8.625\_5.5\_20220426132521.pdf
- Aleutian\_10\_3\_Fed\_Com\_814H\_\_aka\_714H\_\_\_\_Updated\_Int\_1\_depth\_rev1\_20220426132520.pdf
- 8.625\_32\_\_P110EC\_SPRINT\_FJ\_VST\_\_4\_\_20220426132519.pdf
- Aleutian\_10\_3\_Fed\_Com\_814H\_Directional\_Plan\_01\_10\_22\_20220426132519.pdf
- 5.50\_20\_\_P110EC\_DWC\_C\_IS\_PLUS\_VST\_\_2\_\_20220426132519.pdf
- 1075\_4550\_J55\_BTC\_SC\_BLP\_Devon\_20220426132519.pdf
- 13.375\_48lb\_H40\_20220426132519.pdf

Received by OCD: 5/6/2022 4:27:11 PM

Page 2 of 40

Well Name: ALEUTIAN 10-3 FED COM	Well Location: T23S / R31E / SEC 10 / SESE / 32.3121989 / -103.7571257	County or Parish/State: EDDY / NM
Well Number: 814H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM0405444	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001547558	Well Status: Approved Application for Permit to Drill	Operator: DEVON ENERGY PRODUCTION COMPANY LP

Conditions of Approval

Additional

10\_23\_31\_P\_Sundry\_ID\_2668708\_Aleutian\_10\_3\_Fed\_Com\_814H\_Eddy\_NM0405444\_13\_22d\_5\_4\_2022\_LV\_20220504141306.pdf  
Aleutian\_10\_3\_Federal\_Com\_814H\_Dr\_COA\_20220504141229.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 03:57 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	

## 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 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 &amp; 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

## WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-015-47558</b>	<sup>2</sup> Pool Code <b>98123</b>	<sup>3</sup> Pool Name <b>WC-015 G-08 S233102C; WOLFCAMP</b>
<sup>4</sup> Property Code <b>323063</b>	<sup>5</sup> Property Name <b>ALEUTIAN 10-3 FED COM</b>	<sup>6</sup> Well Number <b>814H</b>
<sup>7</sup> OGRID No. <b>6137</b>	<sup>8</sup> Operator Name <b>DEVON ENERGY PRODUCTION COMPANY, L.P.</b>	<sup>9</sup> Elevation <b>3421.1</b>

<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
<b>P</b>	<b>10</b>	<b>23 S</b>	<b>31 E</b>		<b>165</b>	<b>SOUTH</b>	<b>440</b>	<b>EAST</b>	<b>EDDY</b>

<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
<b>1</b>	<b>3</b>	<b>23 S</b>	<b>31 E</b>		<b>20</b>	<b>NORTH</b>	<b>660</b>	<b>EAST</b>	<b>EDDY</b>

<sup>12</sup> Dedicated Acres <b>319.45</b>	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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.

<p>NW CORNER SEC. 3 LAT. = 32.3407440°N LONG. = 103.7742605°W NMSP EAST (FT) N = 488145.31 E = 714000.60</p> <p>W/4 CORNER SEC. 3 LAT. = 32.3335111°N LONG. = 103.7742496°W NMSP EAST (FT) N = 485514.03 E = 714017.69</p> <p>NW CORNER SEC. 10 LAT. = 32.3262527°N LONG. = 103.7742368°W NMSP EAST (FT) N = 482873.50 E = 714035.43</p> <p>W/4 CORNER SEC. 10 LAT. = 32.3189960°N LONG. = 103.7742333°W NMSP EAST (FT) N = 480233.55 E = 714050.30</p> <p>SW CORNER SEC. 10 LAT. = 32.3117375°N LONG. = 103.7742310°W NMSP EAST (FT) N = 477592.96 E = 714064.76</p>		<p>N89°43'46"E 2641.24 FT DNF</p> <p>LOT 4 LOT 3 LOT 2 LOT 1</p> <p>LAST TAKE POINT 100' FNL, 660' FEL LAT. = 32.3404621°N LONG. = 103.7592962°W NMSP EAST (FT) N = 488067.20 E = 718622.77</p> <p>NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE. VERTICAL DATUM NAVD88.</p> <p>N89°39'53"E 2641.27 FT N89°38'12"E 2644.80 FT</p> <p>N/4 CORNER SEC. 10 LAT. = 32.3262570°N LONG. = 103.7656880°W NMSP EAST (FT) N = 482888.95 E = 716676.08</p> <p>ALEUTIAN 10-3 FED COM 814H ELEV. = 3421.1' LAT. = 32.3121991°N (NAD83) LONG. = 103.7585477°W NMSP EAST (FT) N = 47786.50 E = 718909.09</p> <p>FIRST TAKE POINT 100' FSL, 660' FEL LAT. = 32.3120201°N LONG. = 103.7592596°W NMSP EAST (FT) N = 47720.22 E = 718689.51</p> <p>S/4 CORNER SEC. 10 LAT. = 32.3117422°N LONG. = 103.7656802°W NMSP EAST (FT) N = 477608.56 E = 716706.45</p> <p>S89°39'42"W 2642.31 FT S89°39'45"W 2644.09 FT</p>		<p>NE CORNER SEC. 3 LAT. = 32.3407356°N LONG. = 103.7571603°W NMSP EAST (FT) N = 488170.26 E = 719281.88</p> <p>E/4 CORNER SEC. 3 LAT. = 32.3335234°N LONG. = 103.7571441°W NMSP EAST (FT) N = 485546.51 E = 719301.00</p> <p>NE CORNER SEC. 10 LAT. = 32.3262643°N LONG. = 103.7571278°W NMSP EAST (FT) N = 482905.72 E = 719320.25</p> <p>E/4 CORNER SEC. 10 LAT. = 32.3190067°N LONG. = 103.7571257°W NMSP EAST (FT) N = 480265.44 E = 719335.09</p> <p>SE CORNER SEC. 10 LAT. = 32.3117463°N LONG. = 103.7571237°W NMSP EAST (FT) N = 477624.13 E = 719349.92</p>	
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**<sup>17</sup> OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

*Jenny Harms* 1-11-2022

Signature \_\_\_\_\_ Date \_\_\_\_\_

**JENNY HARMS**

Printed Name \_\_\_\_\_

**JENNY.HARMS@DVN.COM**

E-mail Address \_\_\_\_\_


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**<sup>18</sup> SURVEYOR CERTIFICATION**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

DECEMBER 20, 2021

Date of Survey \_\_\_\_\_



Signature and Seal of Professional Surveyor: \_\_\_\_\_

Certificate Number: WILLIAM F. JARAMILLO PLS 12797

SURVEY NO. 8170B

Intent ☒ As Drilled ☐

API #

Operator Name:	Property Name:	Well Number
<b>DEVON ENERGY PRODUCTION CO., L.P.</b>	<b>ALEUTIAN 10-3 FED COM</b>	<b>814H</b>

## Kick Off Point (KOP)

UL	Section <b>10</b>	Township <b>23S</b>	Range <b>31E</b>	Lot	Feet <b>64 FSL</b>	From N/S	Feet <b>659 FEL</b>	From E/W	County <b>EDDY</b>
Latitude <b>32.31182750</b>					Longitude <b>-103.75934177</b>			NAD <b>83</b>	

## First Take Point (FTP)

UL <b>P</b>	Section <b>10</b>	Township <b>23S</b>	Range <b>31E</b>	Lot	Feet <b>100</b>	From N/S <b>SOUTH</b>	Feet <b>660</b>	From E/W <b>EAST</b>	County <b>EDDY</b>
Latitude <b>32.3120201</b>					Longitude <b>103.7592596</b>			NAD <b>83</b>	

## Last Take Point (LTP)

UL	Section <b>3</b>	Township <b>23S</b>	Range <b>31E</b>	Lot <b>1</b>	Feet <b>100</b>	From N/S <b>NORTH</b>	Feet <b>660</b>	From E/W <b>EAST</b>	County <b>EDDY</b>
Latitude <b>32.3404621</b>					Longitude <b>103.7592962</b>			NAD <b>83</b>	

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

☒

Is this well an infill well?

☐

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

API #

Operator Name:	Property Name:	Well Number

KZ 06/29/2018

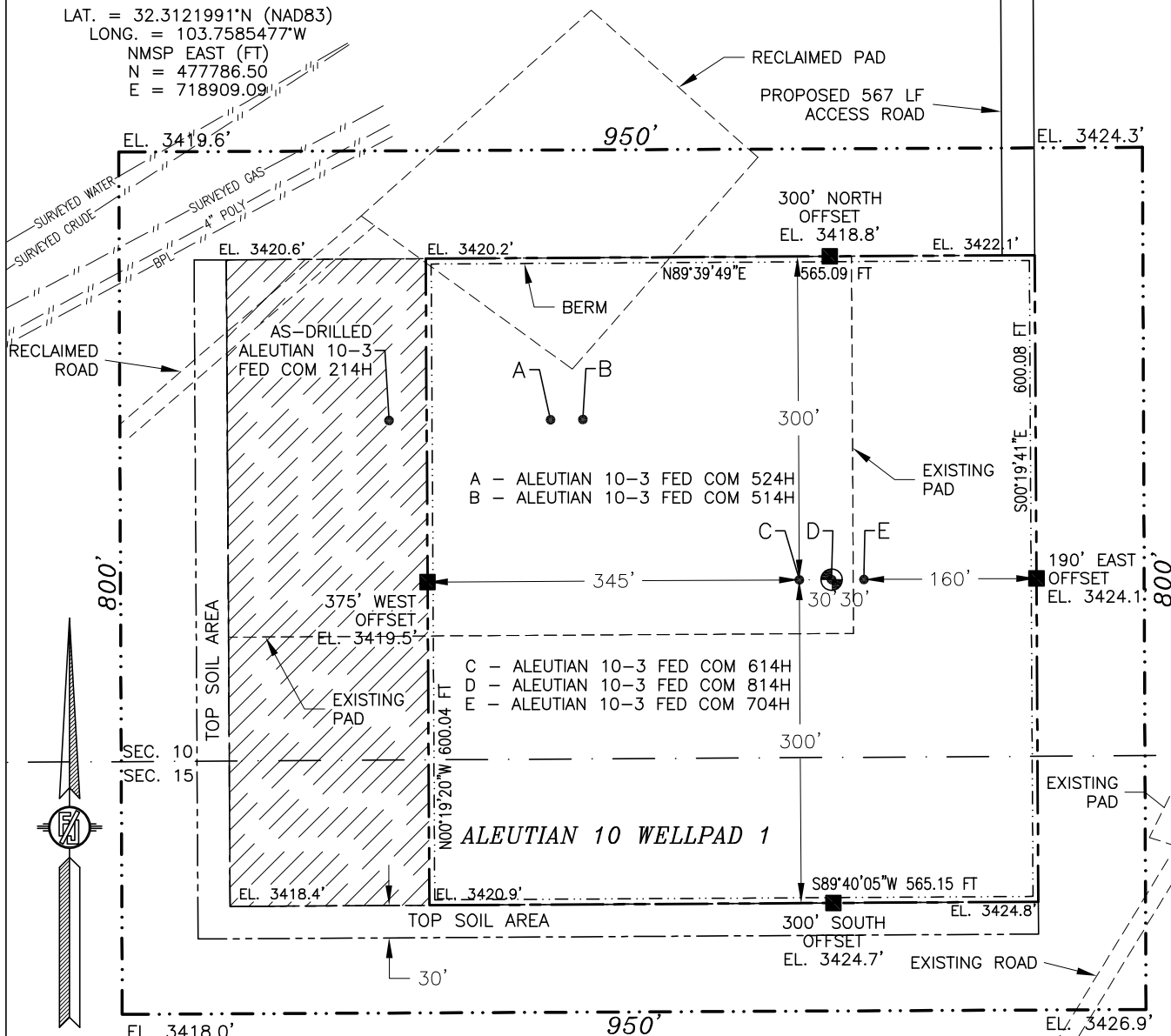
# SECTION 10, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, STATE OF NEW MEXICO SITE MAP

**ALEUTIAN 10-3  
FED COM 814H**

ELEV. = 3421.1'  
7.785± ACRES

LAT. = 32.3121991°N (NAD83)  
LONG. = 103.7585477°W  
NMSP EAST (FT)  
N = 477786.50  
E = 718909.09

NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83) LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE. VERTICAL DATUM NAVD88.



015 75 150 300  
SCALE 1" = 150'

## 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.

I, FILMON F. JARAMILLO, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY WAS MADE AND CARRIED OUT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THIS SURVEY MAY BE USED TO MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

FILMON F. JARAMILLO, S.L. 12793

**MADISON SURVEYING, INC.**

301 SOUTH CANAL  
(575) 234-3341

CARLSBAD, NEW MEXICO

**DEVON ENERGY PRODUCTION COMPANY, L.P.**  
**ALEUTIAN 10-3 FED COM 814H**  
LOCATED 165 FT. FROM THE SOUTH LINE  
AND 440 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

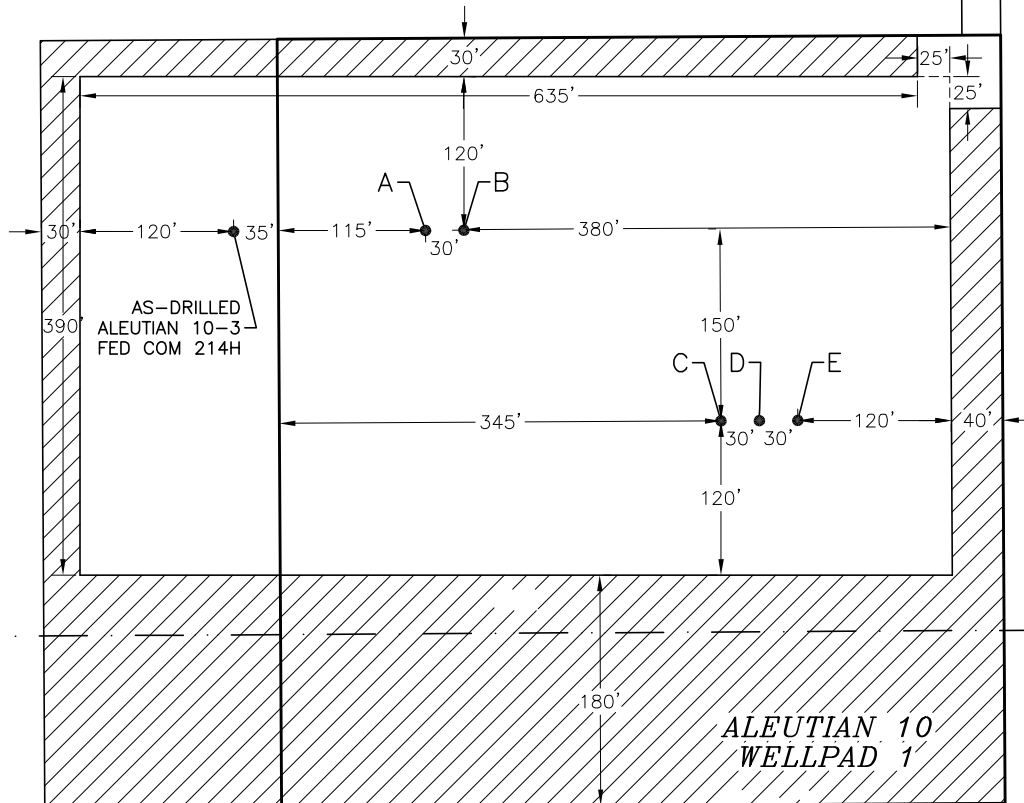
DECEMBER 20, 2021

SURVEY NO. 8170B

SECTION 10, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.  
 EDDY COUNTY, STATE OF NEW MEXICO  
 INTERIM SITE BUILD PLAN

- A - ALEUTIAN 10-3 FED COM 524H  
 B - ALEUTIAN 10-3 FED COM 514H  
 C - ALEUTIAN 10-3 FED COM 614H  
 D - ALEUTIAN 10-3 FED COM 814H  
 E - ALEUTIAN 10-3 FED COM 704H

PROPOSED 567 LF  
 ACCESS ROAD



SEC. 10  
 SEC. 15

DENOTES INTERIM PAD  
 RECLAMATION AREA  
 4.180± ACRES

015 75 150 300  
 SCALE 1" = 150'

DEVON ENERGY PRODUCTION COMPANY, L.P.  
**ALEUTIAN 10-3 FED COM 814H**  
 LOCATED 165 FT. FROM THE SOUTH LINE  
 AND 440 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

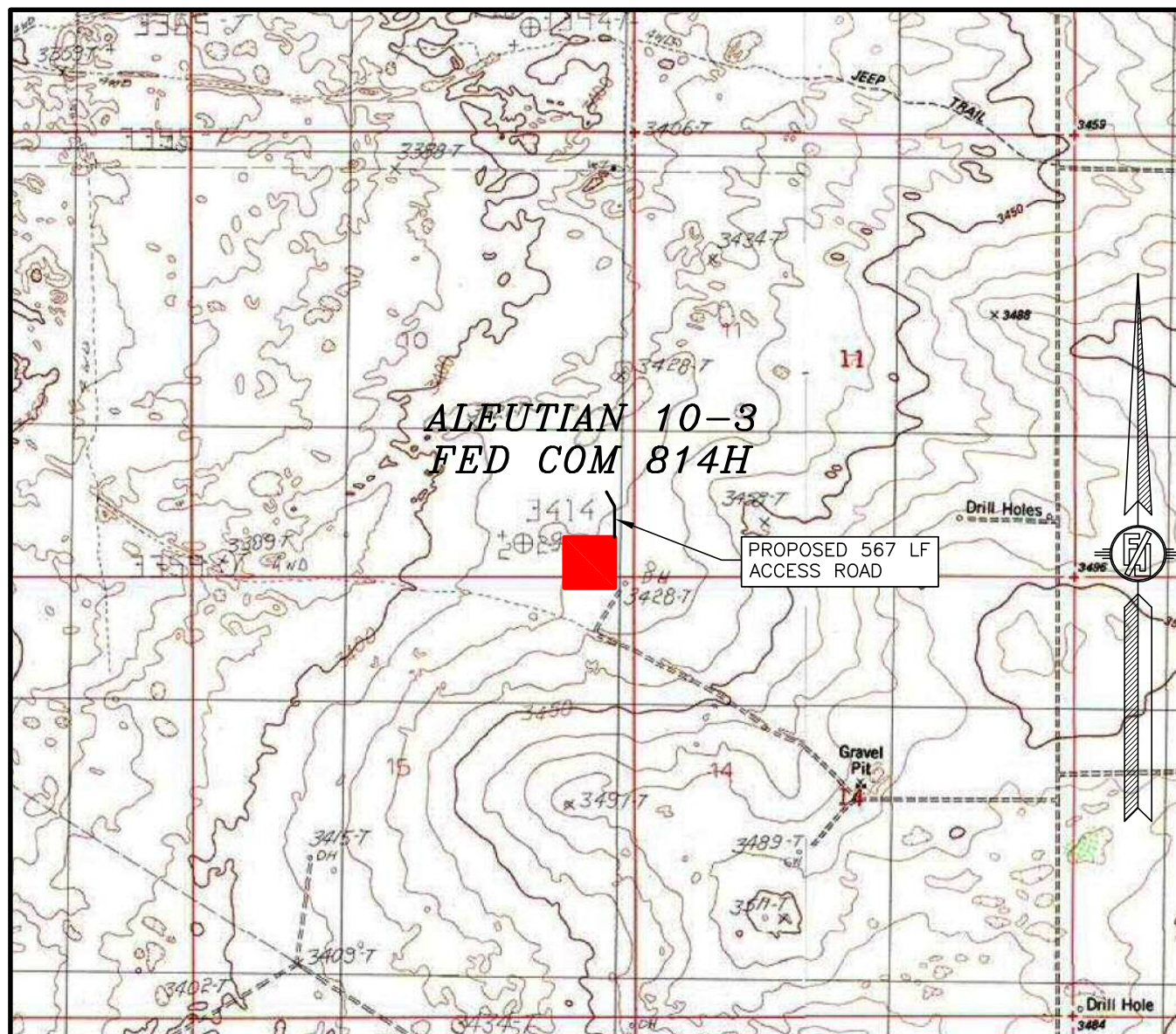
SURVEY NO. 8170B

MADRON SURVEYING, INC. 301 SOUTH CANAL  
 (575) 234-3341

CARLSBAD, NEW MEXICO



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



USGS QUAD MAP:  
 LOS MEDANOS

NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.  
**ALEUTIAN 10-3 FED COM 814H**  
 LOCATED 165 FT. FROM THE SOUTH LINE  
 AND 440 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

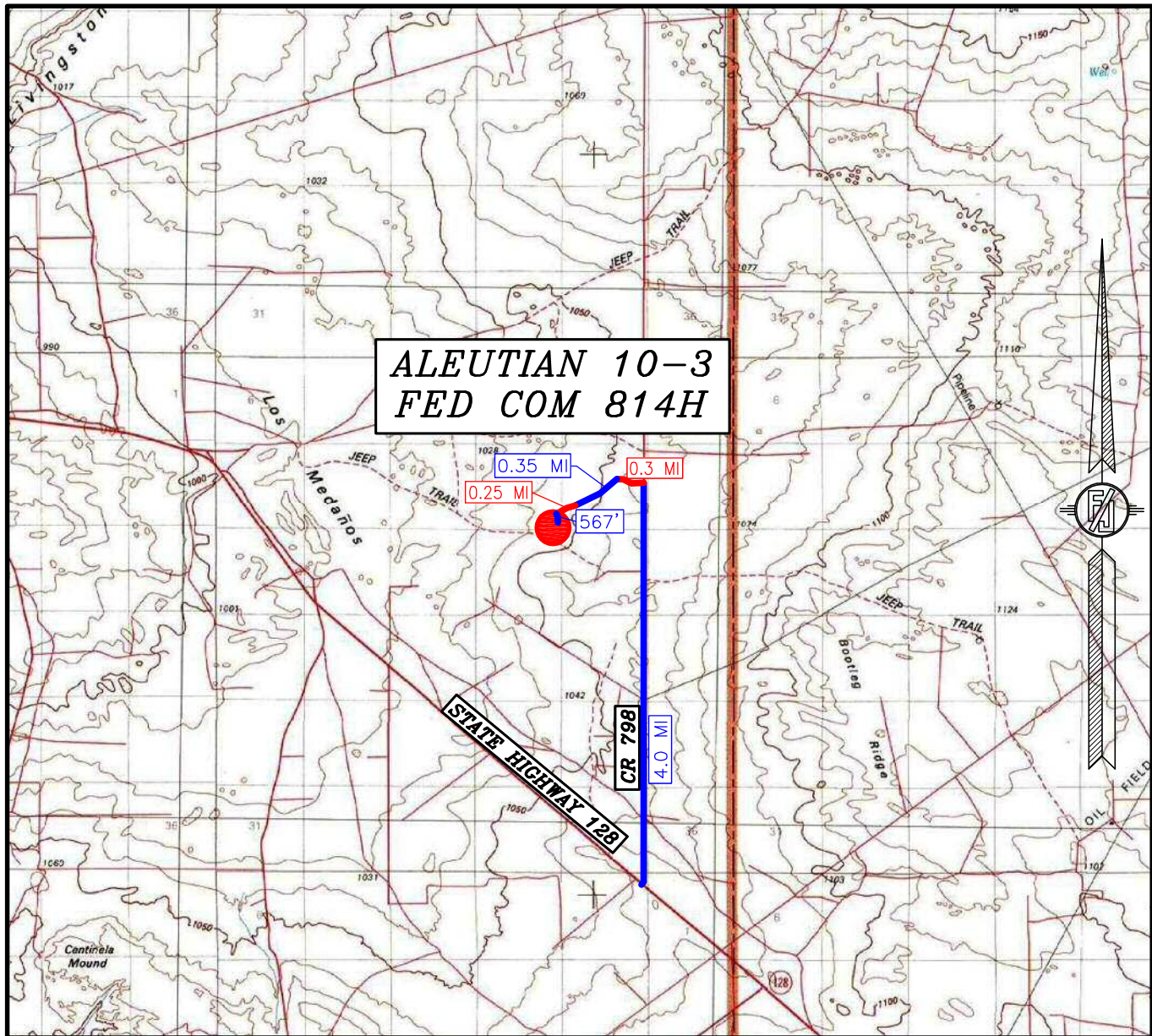
DECEMBER 20, 2021

MADRON SURVEYING, INC. 301 SOUTH CANAL  
 (575) 234-3341

SURVEY NO. 8170B  
 CARLSBAD, NEW MEXICO



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



DISTANCES IN MILES

NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.

**ALEUTIAN 10-3 FED COM 814H**

LOCATED 165 FT. FROM THE SOUTH LINE

AND 440 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

**DIRECTIONS TO LOCATION**

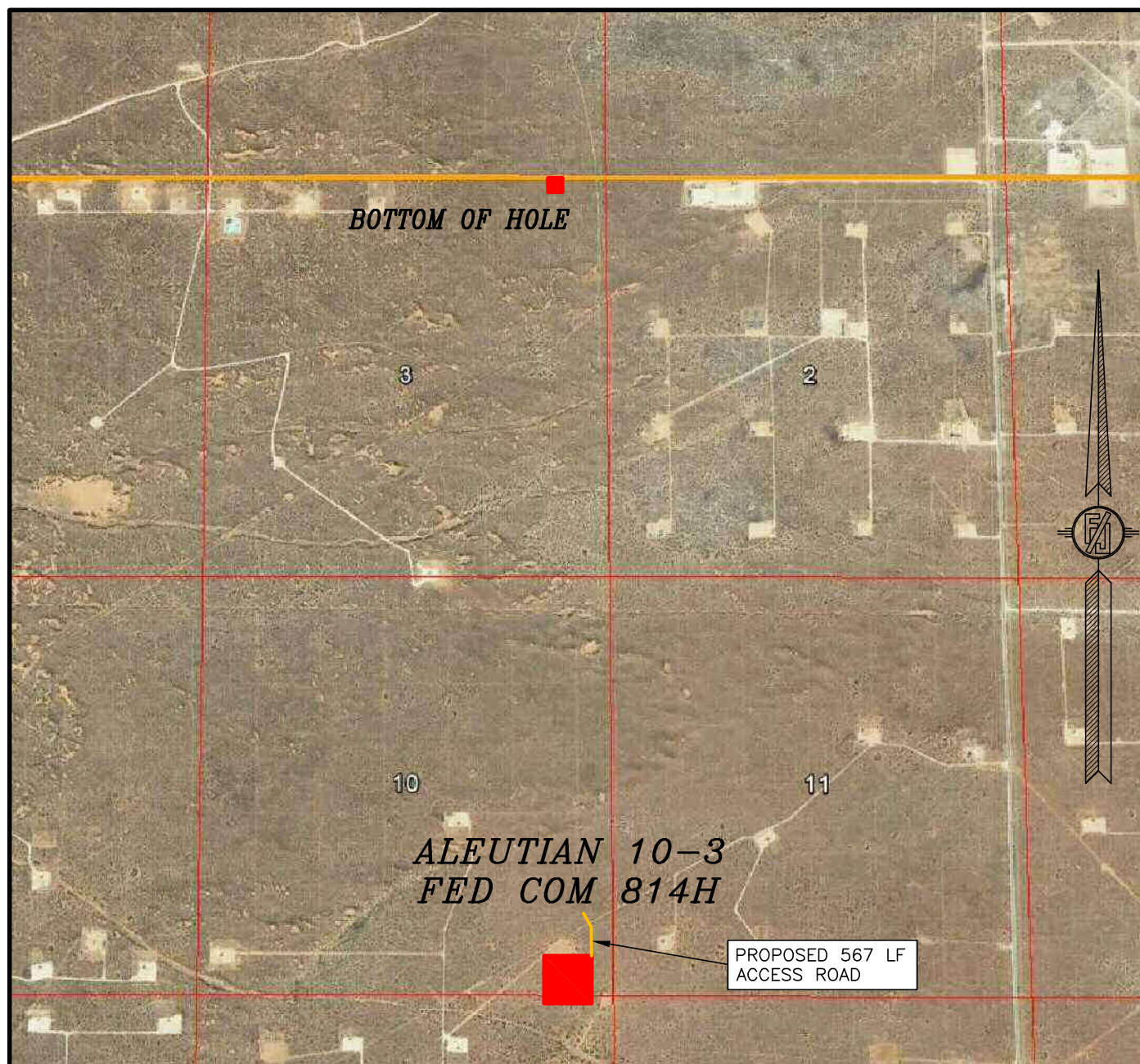
FROM THE INTERSECTION OF STATE HIGHWAY 128 & CR 798 (RED ROAD) GO NORTH ON CR 798 APPROX. 4.0 MILES TO CALICHE LEASE ROAD ON LEFT, CONTINUE WEST ON CALICHE LEASE ROAD FOR APPROX. 0.3 OF A MILE, GO SOUTHWEST APPROX. 0.35 OF A MILE, FOLLOW HORIZON ROAD SURVEY APPROX. 0.25 OF A MILE TO ROAD SURVEY, FOLLOW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

MADRON SURVEYING, INC. 301 SOUTH CANAL (575) 234-3341

SURVEY NO. 8170B  
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 814H**

LOCATED 165 FT. FROM THE SOUTH LINE  
 AND 440 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

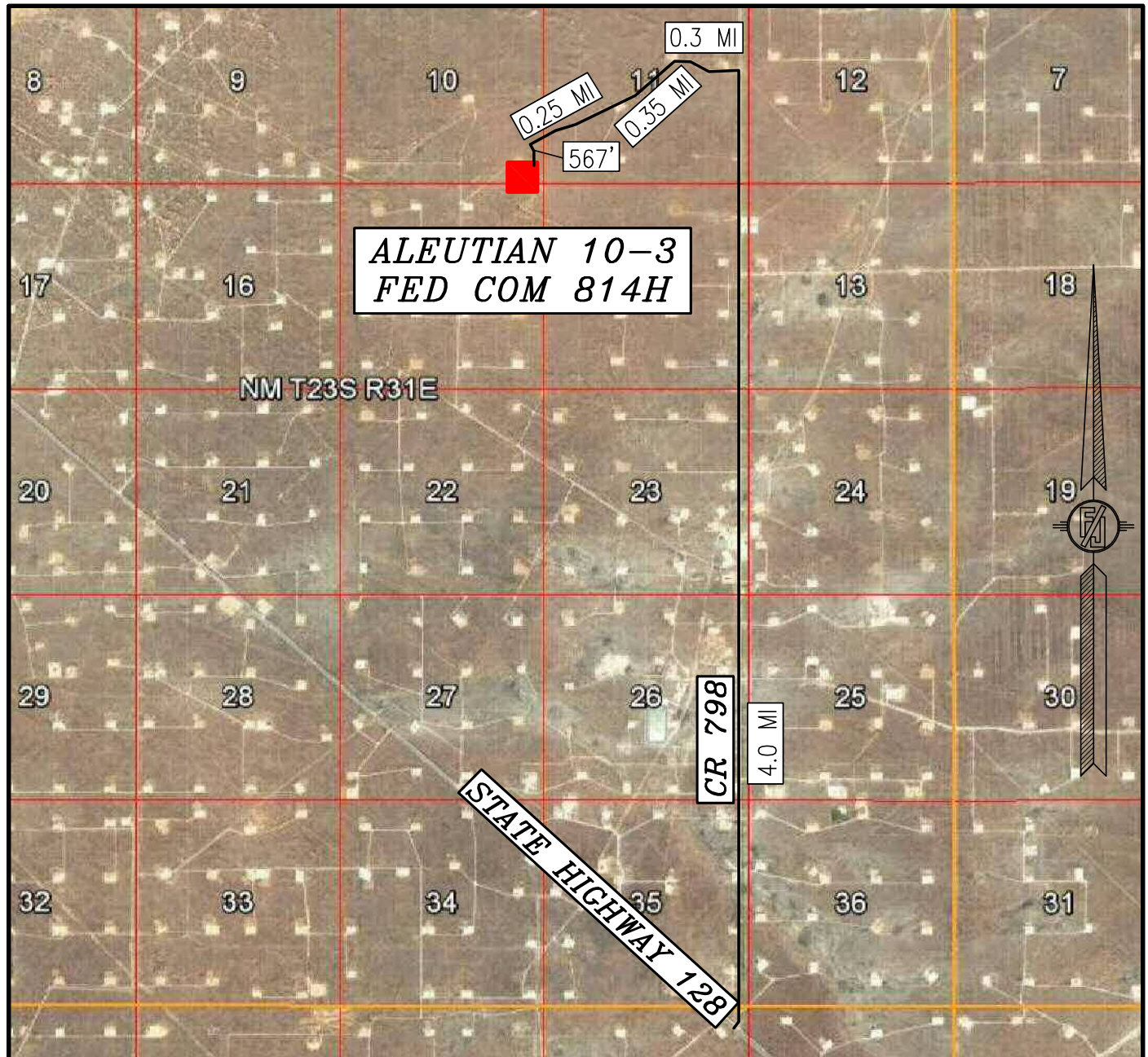
SURVEY NO. 8170B

MADRON SURVEYING, INC. 301 SOUTH CANAL  
 (575) 234-3341

CARLSBAD, NEW MEXICO



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



NOT TO SCALE  
 AERIAL PHOTO:  
 GOOGLE EARTH  
 NOVEMBER 2017

DEVON ENERGY PRODUCTION COMPANY, L.P.

**ALEUTIAN 10-3 FED COM 814H**

LOCATED 165 FT. FROM THE SOUTH LINE  
 AND 440 FT. FROM THE EAST LINE OF  
 SECTION 10, TOWNSHIP 23 SOUTH,  
 RANGE 31 EAST, N.M.P.M.

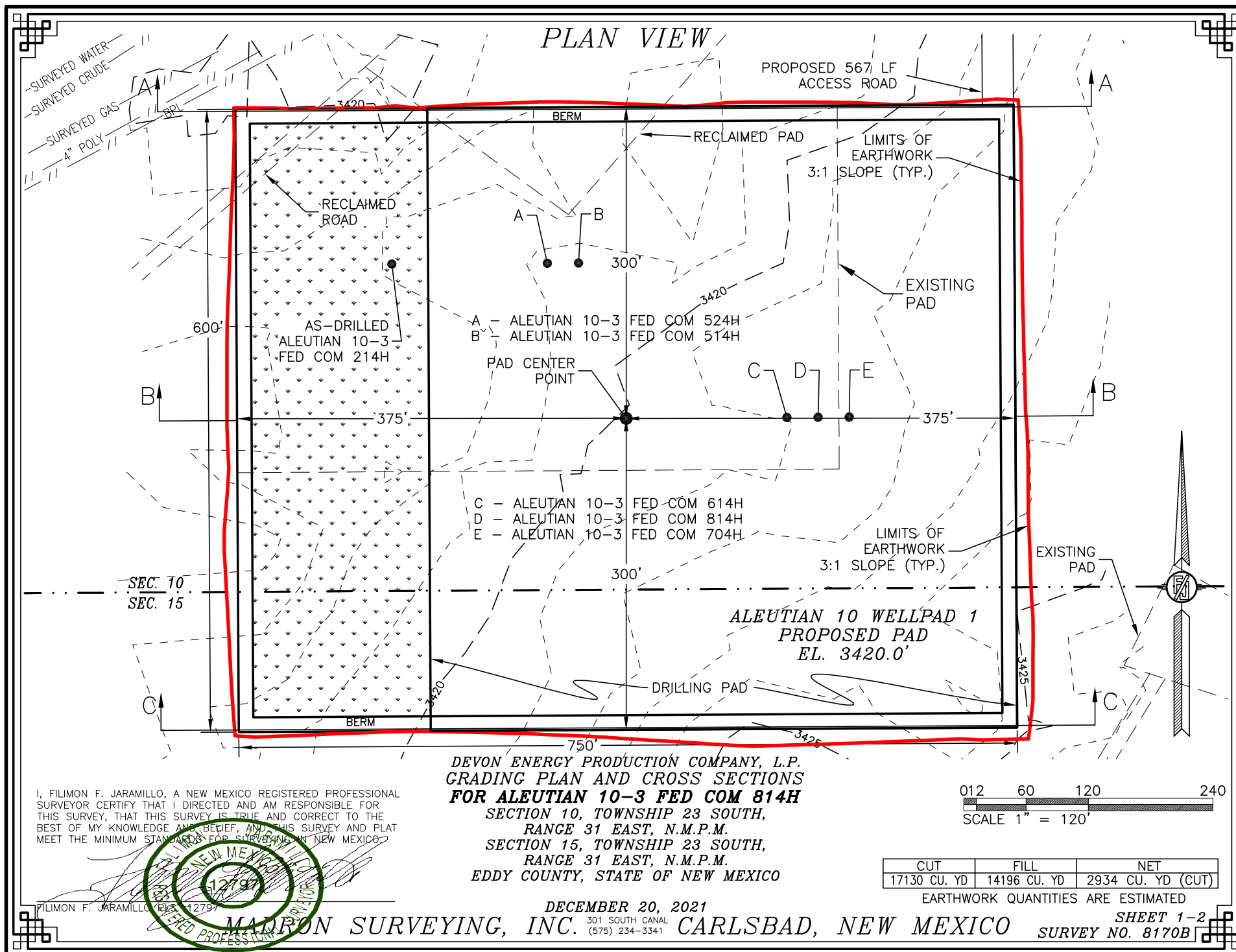
EDDY COUNTY, STATE OF NEW MEXICO  
 LAND STATUS: BLM

DECEMBER 20, 2021

SURVEY NO. 8170B

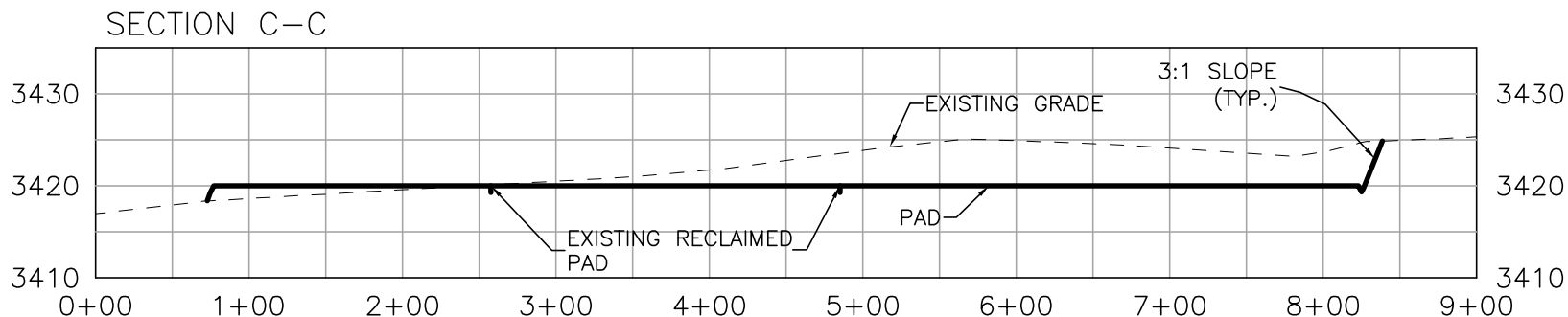
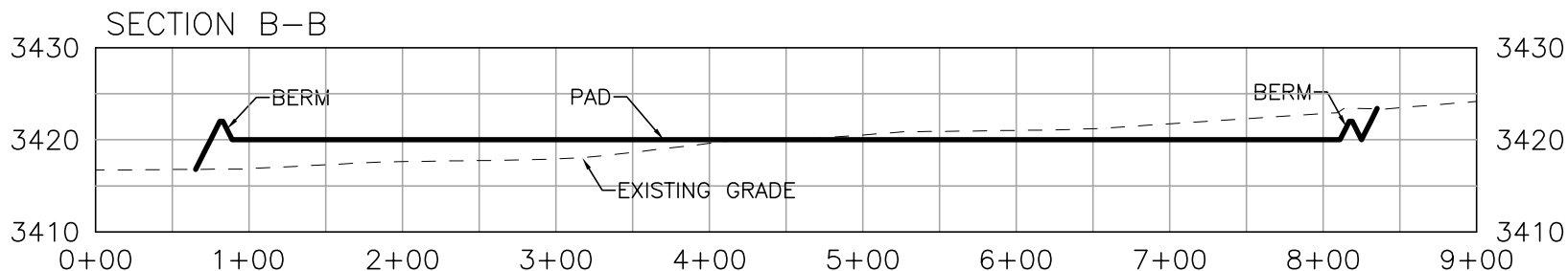
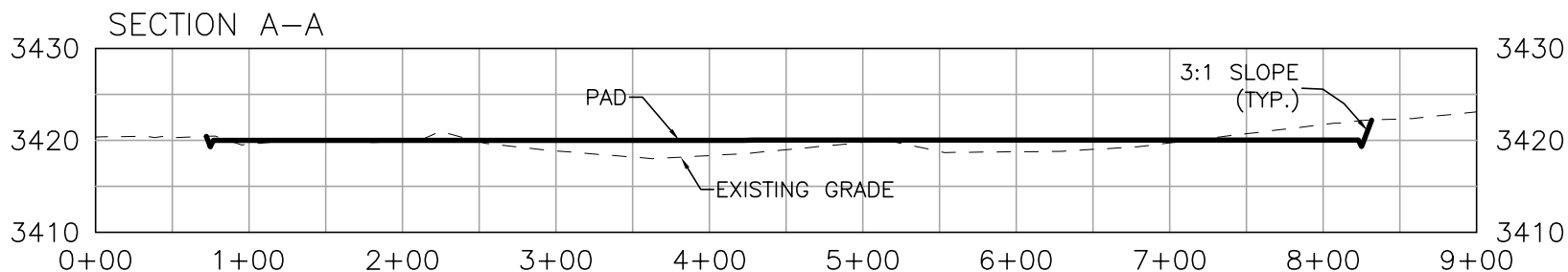
MADRON SURVEYING, INC. 301 SOUTH CANAL  
 (575) 234-3341

CARLSBAD, NEW MEXICO





# CROSS SECTIONS



I, FILIMON F. JARAMILLO, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I DIRECTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

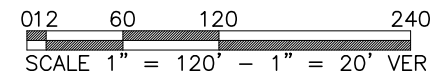


DEVON ENERGY PRODUCTION COMPANY, L.P.  
GRADING PLAN AND CROSS SECTIONS  
FOR ALEUTIAN 10-3 FED COM 814H  
SECTION 10, TOWNSHIP 23 SOUTH,  
RANGE 31 EAST, N.M.P.M.  
SECTION 15, TOWNSHIP 23 SOUTH,  
RANGE 31 EAST, N.M.P.M.  
EDDY COUNTY, STATE OF NEW MEXICO

DECEMBER 20, 2021

FILIMON F. JARAMILLO, S. 12797

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



CUT	FILL	NET
17130 CU. YD	14196 CU. YD	2934 CU. YD (CUT)

EARTHWORK QUANTITIES ARE ESTIMATED

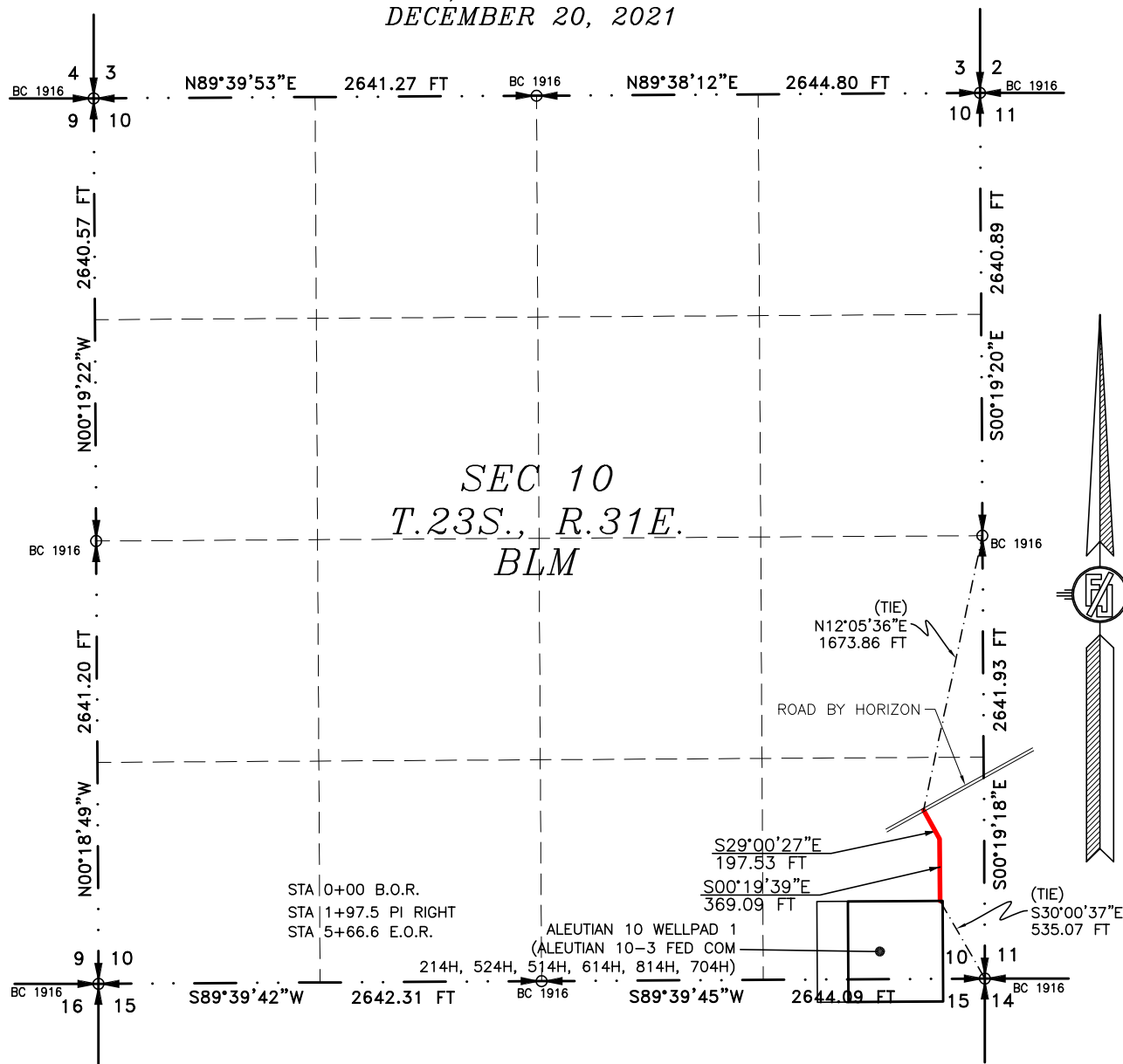
SHEET 2-2  
SURVEY NO. 8170B

**ACCESS ROAD PLAT (AA000176582)**

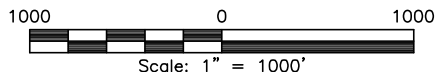
ACCESS ROAD TO THE ALEUTIAN 10 WELLPAD 1

(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



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.

**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,

NEW MEXICO, THIS 20 DAY OF DECEMBER 2021

FILIMON F. JARAMILLO PLS. 12797  
 NEW MEXICO SURVEYOR

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

SURVEY NO. 8170B

CARLSBAD, 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 SURVEY:

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 S29°00'27"E A DISTANCE OF 197.53 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;  
 THENCE S00°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

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IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED AT CARLSBAD,

NEW MEXICO, THIS 20<sup>TH</sup> DAY OF DECEMBER 2021

*FILIMON F. JARAMILLO*  
 FILIMON F. JARAMILLO PLS. 12797  
 NEW MEXICO PROFESSIONAL SURVEYOR

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**SURVEY NO. 8170B**

**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: 2-2**

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



## Aleutian 10-3 Fed Com 814H

**1. Geologic Formations**

TVD of target	12020	Pilot hole depth	N/A
MD at TD:	22306	Deepest expected fresh water	

**Basin**

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	545		
Salt	885		
Base of Salt	4060		
Delaware	4285		
Bone Spring 1st	9235		
Bone Spring 2nd	9735		
Bone Spring 3rd	10985		
Wolfcamp	11455		

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

## Aleutian 10-3 Fed Com 814H

**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	570 MD	0	570 TVD
12 1/4	10 3/4	45.5	J-55	BTC SC	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	22306 MD	0	12020 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.

## Aleutian 10-3 Fed Com 814H

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

Casing	# Sks	TOC	Wt. (lb/gal)	Yld (ft <sup>3</sup> /sack)	Slurry Description
Surface	451	Surf	13.2	1.44	Lead: Class C Cement + additives
Int	269	Surf	9	3.27	Lead: Class C Cement + additives
	150	500' above shoe	13.2	1.44	Tail: Class H / C + additives
Int 1	294	Surf	9	3.27	Lead: Class C Cement + additives
	465	4000' above shoe	13.2	1.44	Tail: Class H / C + additives
Int 1 Intermediate Squeeze	As Needed	Surf	9	1.44	Squeeze Lead: Class C Cement + additives
	294	Surf	9	3.27	Lead: Class C Cement + additives
	465	4000' above shoe	13.2	1.44	Tail: Class H / C + additives
Production	87	10162	9	3.27	Lead: Class H / C + additives
	1475	11162	13.2	1.4	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 following backside cementing procedures.



## Aleutian 10-3 Fed Com 814H

**4. Pressure Control Equipment (Four String Design)**

Well Pressure Control Equipment (Four String Design)						
BOP installed and tested before drilling which hole?		Size?	Min. Required WP	Type	✓	Tested to:
Int	13-5/8"	5M	Annular		X	50% of rated working pressure
			Blind Ram		X	5M
			Pipe Ram			
			Double Ram		X	
			Other*			
Int 1	13-5/8"	5M	Annular (5M)		X	50% of rated working pressure
			Blind Ram		X	5M
			Pipe Ram			
			Double Ram		X	
			Other*			
Production	13-5/8"	5M	Annular (5M)		X	50% of rated working pressure
			Blind Ram		X	5M
			Pipe Ram			
			Double Ram		X	
			Other*			
N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.					
N	A variance is requested to run a 5 M annular on a 10M system					

## Aleutian 10-3 Fed Com 814H

**5. Mud Program (Four String Design)**

Section	Type	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	
X	Will run GR/CNL from TD to surface (horizontal well - vertical portion of hole). Stated logs run will be in the Completion Report and submitted 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	Specify what type and where?
BH pressure at deepest TVD	5153
Abnormal temperature	No

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

Hydrogen Sulfide (H<sub>2</sub>S) monitors will be installed prior to drilling out the surface shoe. If H<sub>2</sub>S 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	H <sub>2</sub> S is present
Y	H <sub>2</sub> S plan attached.

## Aleutian 10-3 Fed Com 814H

**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. At that time an approved BOP stack will be nipped 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

## 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.

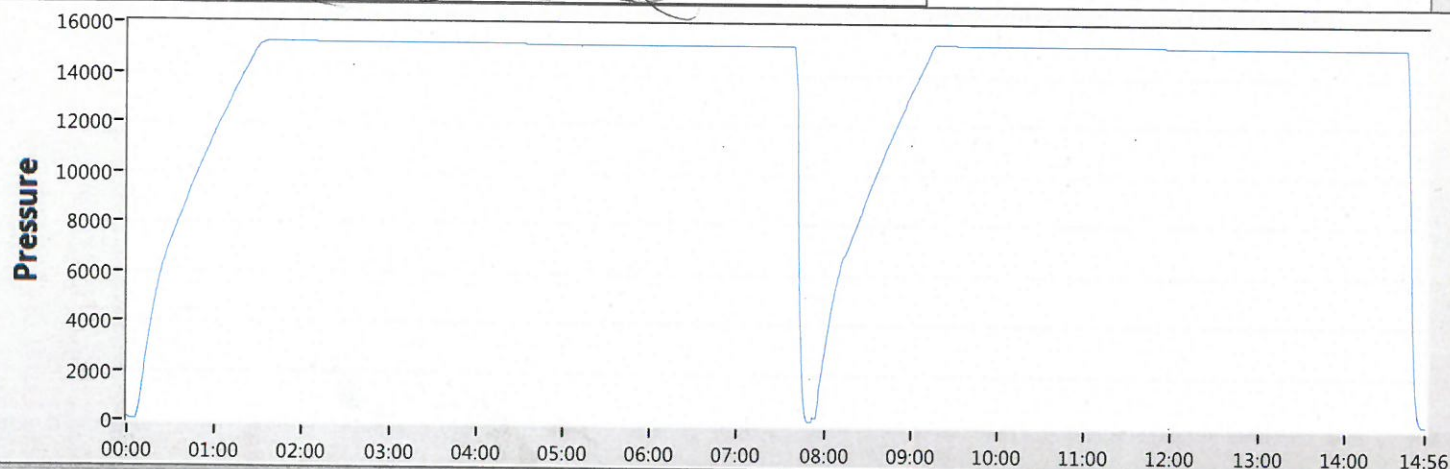
1. Well Control Response:
  1. Primary barrier remains fluid
  2. In the event of an influx due to being underbalanced and after a realized gain or flow, the order of closing BOPE is as follows:
    - a) Annular first
    - b) If annular were to not hold, Upper pipe rams second (which were tested on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

**Cactus**  
Wellhead

2-9-17  
E Bell

80.7 °F

15:49



10000 20000 30000 40000 50000 60000

50

Date 02-09-17

Tested By E.BELL

Transducer bay2

Transducer Serial 181504

Calibration Date 9/6/15

Job#	Part#	Serial#	Description	Test Pressure
1	TRJ0006341-0007	116966	TRJ6341-7-1 ADPT,DRLG,CW,MBU-3T,13-5/8 10M	15000
2				
3				
4				
5			TRANSDUCER CALIBRATION DUE 03/13/2017	
6				
7				
8				



Start



Stop



Zero



Config



Save



Print

EXIT



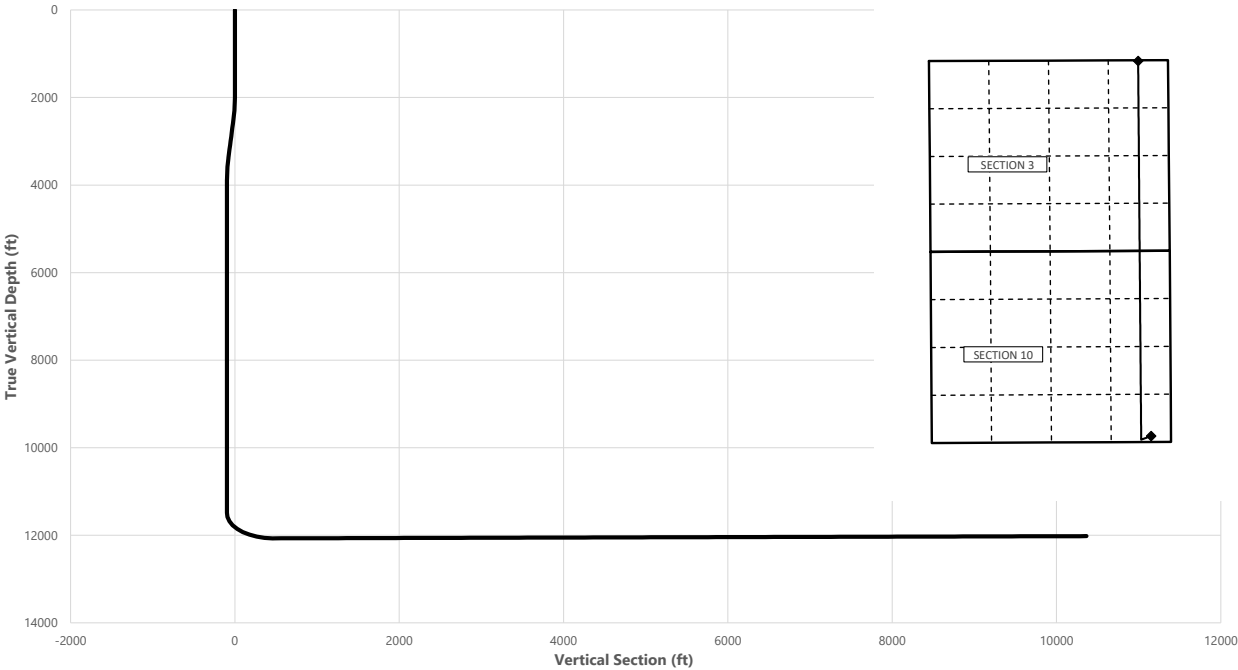
Aleutian 10-3 Fed Com 814H



Well: Aleutian 10-3 Fed Com 814H  
County: Eddy  
Wellbore: Permit Plan  
Design: Permit Plan #1

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
2000.00	0.00	245.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2500.00	10.00	245.00	2497.47	-18.39	-39.44	-17.29	2.00	Hold Tangent
3392.45	10.00	245.00	3376.35	-83.89	-179.90	-78.88	0.00	Drop to Vertical
3892.45	0.00	245.00	3873.82	-102.28	-219.34	-96.17	2.00	Hold Vertical
11515.68	0.00	359.63	11497.05	-102.28	-219.34	-96.17	0.00	KOP
12418.57	90.29	359.63	12070.00	473.56	-223.06	479.56	10.00	Landing Point
22306.02	90.29	359.63	12020.00	10360.68	-286.91	10364.65	0.00	BHL



Key Depths	MD	TVD
	(ft)	(ft)
Rustler	545.00	545.00
Salt	885.00	885.00
Base of Salt	4078.63	4060.00
Delaware	4303.63	4285.00
Cherry Canyon	5203.63	5185.00
Brushy Canyon	6503.63	6485.00
1st Bone Spring Lime	8153.63	8135.00
Bone Spring 1st	9253.63	9235.00
Bone Spring 2nd	9753.63	9735.00
3rd Bone Spring Lime	10303.63	10285.00
Bone Spring 3rd	11003.63	10985.00
Wolfcamp / Point of Penetration	11473.63	11455.00
exit	22226.02	12020.42

SHL  
KOP  
Point of Penetration  
Exit  
BHL

MD	TVD	Lat	Long	Section Footages
(ft)	(ft)	(°)	(°)	
0.00	0.00	32.3121	-103.7586	165' FSL, 440' FEL of Sec 10 in T23S, R31E
11515.68	11497.05	32.3118	-103.7593	64' FSL, 659' FEL of Sec 10 in T23S, R31E
11473.63	11455.00	32.3120	-103.7593	100' FSL, 660' FSL of Sec 10 in T23S, R31E
22226.02	12020.42	32.3405	-103.7593	100' FNL, 660' FNL of Sec 3 in T23S, R31E
22306.02	12020.00	32.3406	-103.7594	20' FNL, 660' FEL of Sec 3 in T23S, R31E

Aleutian 10-3 Fed Com 814H



**Well:** Aleutian 10-3 Fed Com 814H  
**County:** Eddy  
**Wellbore:** Permit Plan  
**Design:** Permit Plan #1

**Geodetic System:** US State Plane 1983  
**Datum:** North American Datum 1927  
**Ellipsoid:** Clarke 1866  
**Zone:** 3001 - NM East (NAD83)

MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
100.00	0.00	245.00	100.00	0.00	0.00	0.00	0.00	
200.00	0.00	245.00	200.00	0.00	0.00	0.00	0.00	
300.00	0.00	245.00	300.00	0.00	0.00	0.00	0.00	
400.00	0.00	245.00	400.00	0.00	0.00	0.00	0.00	
500.00	0.00	245.00	500.00	0.00	0.00	0.00	0.00	
545.00	0.00	245.00	545.00	0.00	0.00	0.00	0.00	Rustler
600.00	0.00	245.00	600.00	0.00	0.00	0.00	0.00	
700.00	0.00	245.00	700.00	0.00	0.00	0.00	0.00	
800.00	0.00	245.00	800.00	0.00	0.00	0.00	0.00	
885.00	0.00	245.00	885.00	0.00	0.00	0.00	0.00	Salt
900.00	0.00	245.00	900.00	0.00	0.00	0.00	0.00	
1000.00	0.00	245.00	1000.00	0.00	0.00	0.00	0.00	
1100.00	0.00	245.00	1100.00	0.00	0.00	0.00	0.00	
1200.00	0.00	245.00	1200.00	0.00	0.00	0.00	0.00	
1300.00	0.00	245.00	1300.00	0.00	0.00	0.00	0.00	
1400.00	0.00	245.00	1400.00	0.00	0.00	0.00	0.00	
1500.00	0.00	245.00	1500.00	0.00	0.00	0.00	0.00	
1600.00	0.00	245.00	1600.00	0.00	0.00	0.00	0.00	
1700.00	0.00	245.00	1700.00	0.00	0.00	0.00	0.00	
1800.00	0.00	245.00	1800.00	0.00	0.00	0.00	0.00	
1900.00	0.00	245.00	1900.00	0.00	0.00	0.00	0.00	
2000.00	0.00	245.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2100.00	2.00	245.00	2099.98	-0.74	-1.58	-0.69	2.00	
2200.00	4.00	245.00	2199.84	-2.95	-6.32	-2.77	2.00	
2300.00	6.00	245.00	2299.45	-6.63	-14.22	-6.24	2.00	
2400.00	8.00	245.00	2398.70	-11.78	-25.27	-11.08	2.00	
2500.00	10.00	245.00	2497.47	-18.39	-39.44	-17.29	2.00	Hold Tangent
2600.00	10.00	245.00	2595.95	-25.73	-55.18	-24.19	0.00	
2700.00	10.00	245.00	2694.43	-33.07	-70.92	-31.09	0.00	
2800.00	10.00	245.00	2792.91	-40.41	-86.66	-38.00	0.00	
2900.00	10.00	245.00	2891.39	-47.75	-102.40	-44.90	0.00	
3000.00	10.00	245.00	2989.87	-55.09	-118.13	-51.80	0.00	
3100.00	10.00	245.00	3088.35	-62.43	-133.87	-58.70	0.00	
3200.00	10.00	245.00	3186.83	-69.76	-149.61	-65.60	0.00	
3300.00	10.00	245.00	3285.31	-77.10	-165.35	-72.50	0.00	
3392.45	10.00	245.00	3376.35	-83.89	-179.90	-78.88	0.00	Drop to Vertical
3400.00	9.85	245.00	3383.79	-84.44	-181.08	-79.39	2.00	
3500.00	7.85	245.00	3482.60	-90.94	-195.02	-85.50	2.00	
3600.00	5.85	245.00	3581.88	-95.98	-205.83	-90.24	2.00	
3700.00	3.85	245.00	3681.52	-99.55	-213.49	-93.60	2.00	
3800.00	1.85	245.00	3781.39	-101.65	-217.99	-95.58	2.00	
3892.45	0.00	245.00	3873.82	-102.28	-219.34	-96.17	2.00	Hold Vertical
3900.00	0.00	359.63	3881.37	-102.28	-219.34	-96.17	0.00	
4000.00	0.00	359.63	3981.37	-102.28	-219.34	-96.17	0.00	
4078.63	0.00	359.63	4060.00	-102.28	-219.34	-96.17	0.00	Base of Salt
4100.00	0.00	359.63	4081.37	-102.28	-219.34	-96.17	0.00	
4200.00	0.00	359.63	4181.37	-102.28	-219.34	-96.17	0.00	
4300.00	0.00	359.63	4281.37	-102.28	-219.34	-96.17	0.00	
4303.63	0.00	359.63	4285.00	-102.28	-219.34	-96.17	0.00	Delaware
4400.00	0.00	359.63	4381.37	-102.28	-219.34	-96.17	0.00	
4500.00	0.00	359.63	4481.37	-102.28	-219.34	-96.17	0.00	
4600.00	0.00	359.63	4581.37	-102.28	-219.34	-96.17	0.00	
4700.00	0.00	359.63	4681.37	-102.28	-219.34	-96.17	0.00	
4800.00	0.00	359.63	4781.37	-102.28	-219.34	-96.17	0.00	
4900.00	0.00	359.63	4881.37	-102.28	-219.34	-96.17	0.00	
5000.00	0.00	359.63	4981.37	-102.28	-219.34	-96.17	0.00	
5100.00	0.00	359.63	5081.37	-102.28	-219.34	-96.17	0.00	
5200.00	0.00	359.63	5181.37	-102.28	-219.34	-96.17	0.00	
5203.63	0.00	359.63	5185.00	-102.28	-219.34	-96.17	0.00	Cherry Canyon
5300.00	0.00	359.63	5281.37	-102.28	-219.34	-96.17	0.00	
5400.00	0.00	359.63	5381.37	-102.28	-219.34	-96.17	0.00	
5500.00	0.00	359.63	5481.37	-102.28	-219.34	-96.17	0.00	
5600.00	0.00	359.63	5581.37	-102.28	-219.34	-96.17	0.00	
5700.00	0.00	359.63	5681.37	-102.28	-219.34	-96.17	0.00	
5800.00	0.00	359.63	5781.37	-102.28	-219.34	-96.17	0.00	
5900.00	0.00	359.63	5881.37	-102.28	-219.34	-96.17	0.00	
6000.00	0.00	359.63	5981.37	-102.28	-219.34	-96.17	0.00	
6100.00	0.00	359.63	6081.37	-102.28	-219.34	-96.17	0.00	
6200.00	0.00	359.63	6181.37	-102.28	-219.34	-96.17	0.00	

Aleutian 10-3 Fed Com 814H



**Well:** Aleutian 10-3 Fed Com 814H  
**County:** Eddy  
**Wellbore:** Permit Plan  
**Design:** Permit Plan #1

**Geodetic System:** US State Plane 1983  
**Datum:** North American Datum 1927  
**Ellipsoid:** Clarke 1866  
**Zone:** 3001 - NM East (NAD83)

MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
6300.00	0.00	359.63	6281.37	-102.28	-219.34	-96.17	0.00	
6400.00	0.00	359.63	6381.37	-102.28	-219.34	-96.17	0.00	
6500.00	0.00	359.63	6481.37	-102.28	-219.34	-96.17	0.00	
6503.63	0.00	359.63	6485.00	-102.28	-219.34	-96.17	0.00	Brushy Canyon
6600.00	0.00	359.63	6581.37	-102.28	-219.34	-96.17	0.00	
6700.00	0.00	359.63	6681.37	-102.28	-219.34	-96.17	0.00	
6800.00	0.00	359.63	6781.37	-102.28	-219.34	-96.17	0.00	
6900.00	0.00	359.63	6881.37	-102.28	-219.34	-96.17	0.00	
7000.00	0.00	359.63	6981.37	-102.28	-219.34	-96.17	0.00	
7100.00	0.00	359.63	7081.37	-102.28	-219.34	-96.17	0.00	
7200.00	0.00	359.63	7181.37	-102.28	-219.34	-96.17	0.00	
7300.00	0.00	359.63	7281.37	-102.28	-219.34	-96.17	0.00	
7400.00	0.00	359.63	7381.37	-102.28	-219.34	-96.17	0.00	
7500.00	0.00	359.63	7481.37	-102.28	-219.34	-96.17	0.00	
7600.00	0.00	359.63	7581.37	-102.28	-219.34	-96.17	0.00	
7700.00	0.00	359.63	7681.37	-102.28	-219.34	-96.17	0.00	
7800.00	0.00	359.63	7781.37	-102.28	-219.34	-96.17	0.00	
7900.00	0.00	359.63	7881.37	-102.28	-219.34	-96.17	0.00	
8000.00	0.00	359.63	7981.37	-102.28	-219.34	-96.17	0.00	
8100.00	0.00	359.63	8081.37	-102.28	-219.34	-96.17	0.00	
8153.63	0.00	359.63	8135.00	-102.28	-219.34	-96.17	0.00	1st Bone Spring Lime
8200.00	0.00	359.63	8181.37	-102.28	-219.34	-96.17	0.00	
8300.00	0.00	359.63	8281.37	-102.28	-219.34	-96.17	0.00	
8400.00	0.00	359.63	8381.37	-102.28	-219.34	-96.17	0.00	
8500.00	0.00	359.63	8481.37	-102.28	-219.34	-96.17	0.00	
8600.00	0.00	359.63	8581.37	-102.28	-219.34	-96.17	0.00	
8700.00	0.00	359.63	8681.37	-102.28	-219.34	-96.17	0.00	
8800.00	0.00	359.63	8781.37	-102.28	-219.34	-96.17	0.00	
8900.00	0.00	359.63	8881.37	-102.28	-219.34	-96.17	0.00	
9000.00	0.00	359.63	8981.37	-102.28	-219.34	-96.17	0.00	
9100.00	0.00	359.63	9081.37	-102.28	-219.34	-96.17	0.00	
9200.00	0.00	359.63	9181.37	-102.28	-219.34	-96.17	0.00	
9253.63	0.00	359.63	9235.00	-102.28	-219.34	-96.17	0.00	Bone Spring 1st
9300.00	0.00	359.63	9281.37	-102.28	-219.34	-96.17	0.00	
9400.00	0.00	359.63	9381.37	-102.28	-219.34	-96.17	0.00	
9500.00	0.00	359.63	9481.37	-102.28	-219.34	-96.17	0.00	
9600.00	0.00	359.63	9581.37	-102.28	-219.34	-96.17	0.00	
9700.00	0.00	359.63	9681.37	-102.28	-219.34	-96.17	0.00	
9753.63	0.00	359.63	9735.00	-102.28	-219.34	-96.17	0.00	Bone Spring 2nd
9800.00	0.00	359.63	9781.37	-102.28	-219.34	-96.17	0.00	
9900.00	0.00	359.63	9881.37	-102.28	-219.34	-96.17	0.00	
10000.00	0.00	359.63	9981.37	-102.28	-219.34	-96.17	0.00	
10100.00	0.00	359.63	10081.37	-102.28	-219.34	-96.17	0.00	
10200.00	0.00	359.63	10181.37	-102.28	-219.34	-96.17	0.00	
10300.00	0.00	359.63	10281.37	-102.28	-219.34	-96.17	0.00	
10303.63	0.00	359.63	10285.00	-102.28	-219.34	-96.17	0.00	3rd Bone Spring Lime
10400.00	0.00	359.63	10381.37	-102.28	-219.34	-96.17	0.00	
10500.00	0.00	359.63	10481.37	-102.28	-219.34	-96.17	0.00	
10600.00	0.00	359.63	10581.37	-102.28	-219.34	-96.17	0.00	
10700.00	0.00	359.63	10681.37	-102.28	-219.34	-96.17	0.00	
10800.00	0.00	359.63	10781.37	-102.28	-219.34	-96.17	0.00	
10900.00	0.00	359.63	10881.37	-102.28	-219.34	-96.17	0.00	
11000.00	0.00	359.63	10981.37	-102.28	-219.34	-96.17	0.00	
11003.63	0.00	359.63	10985.00	-102.28	-219.34	-96.17	0.00	Bone Spring 3rd
11100.00	0.00	359.63	11081.37	-102.28	-219.34	-96.17	0.00	
11200.00	0.00	359.63	11181.37	-102.28	-219.34	-96.17	0.00	
11300.00	0.00	359.63	11281.37	-102.28	-219.34	-96.17	0.00	
11400.00	0.00	359.63	11381.37	-102.28	-219.34	-96.17	0.00	
11473.63	0.00	359.63	11455.00	-102.28	-219.34	-96.17	0.00	Wolfcamp / Point of Penetration
11500.00	0.00	359.63	11481.37	-102.28	-219.34	-96.17	0.00	
11515.68	0.00	359.63	11497.05	-102.28	-219.34	-96.17	0.00	KOP
11600.00	8.43	359.63	11581.07	-96.09	-219.38	-89.98	10.00	
11700.00	18.43	359.63	11678.21	-72.89	-219.53	-66.78	10.00	
11800.00	28.43	359.63	11769.85	-33.17	-219.79	-27.08	10.00	
11900.00	38.43	359.63	11853.19	21.85	-220.14	27.94	10.00	
12000.00	48.43	359.63	11925.72	90.51	-220.59	96.58	10.00	
12100.00	58.43	359.63	11985.22	170.72	-221.11	176.78	10.00	
12200.00	68.43	359.63	12029.89	260.05	-221.68	266.09	10.00	
12300.00	78.43	359.63	12058.37	355.77	-222.30	361.79	10.00	
12400.00	88.43	359.63	12069.79	454.99	-222.94	460.99	10.00	

Aleutian 10-3 Fed Com 814H



**Well:** Aleutian 10-3 Fed Com 814H  
**County:** Eddy  
**Wellbore:** Permit Plan  
**Design:** Permit Plan #1

**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)	
12418.57	90.29	359.63	12070.00	473.56	-223.06	479.56	10.00	Landing Point
12500.00	90.29	359.63	12069.59	554.99	-223.59	560.96	0.00	
12600.00	90.29	359.63	12069.08	654.98	-224.23	660.94	0.00	
12700.00	90.29	359.63	12068.58	754.98	-224.88	760.91	0.00	
12800.00	90.29	359.63	12068.07	854.98	-225.53	860.89	0.00	
12900.00	90.29	359.63	12067.57	954.97	-226.17	960.87	0.00	
13000.00	90.29	359.63	12067.06	1054.97	-226.82	1060.84	0.00	
13100.00	90.29	359.63	12066.56	1154.97	-227.46	1160.82	0.00	
13200.00	90.29	359.63	12066.05	1254.96	-228.11	1260.80	0.00	
13300.00	90.29	359.63	12065.54	1354.96	-228.76	1360.77	0.00	
13400.00	90.29	359.63	12065.04	1454.96	-229.40	1460.75	0.00	
13500.00	90.29	359.63	12064.53	1554.95	-230.05	1560.72	0.00	
13600.00	90.29	359.63	12064.03	1654.95	-230.70	1660.70	0.00	
13700.00	90.29	359.63	12063.52	1754.95	-231.34	1760.68	0.00	
13800.00	90.29	359.63	12063.02	1854.94	-231.99	1860.65	0.00	
13900.00	90.29	359.63	12062.51	1954.94	-232.63	1960.63	0.00	
14000.00	90.29	359.63	12062.00	2054.94	-233.28	2060.61	0.00	
14100.00	90.29	359.63	12061.50	2154.93	-233.93	2160.58	0.00	
14200.00	90.29	359.63	12060.99	2254.93	-234.57	2260.56	0.00	
14300.00	90.29	359.63	12060.49	2354.93	-235.22	2360.53	0.00	
14400.00	90.29	359.63	12059.98	2454.92	-235.87	2460.51	0.00	
14500.00	90.29	359.63	12059.48	2554.92	-236.51	2560.49	0.00	
14600.00	90.29	359.63	12058.97	2654.91	-237.16	2660.46	0.00	
14700.00	90.29	359.63	12058.47	2754.91	-237.81	2760.44	0.00	
14800.00	90.29	359.63	12057.96	2854.91	-238.45	2860.42	0.00	
14900.00	90.29	359.63	12057.45	2954.90	-239.10	2960.39	0.00	
15000.00	90.29	359.63	12056.95	3054.90	-239.74	3060.37	0.00	
15100.00	90.29	359.63	12056.44	3154.90	-240.39	3160.34	0.00	
15200.00	90.29	359.63	12055.94	3254.89	-241.04	3260.32	0.00	
15300.00	90.29	359.63	12055.43	3354.89	-241.68	3360.30	0.00	
15400.00	90.29	359.63	12054.93	3454.89	-242.33	3460.27	0.00	
15500.00	90.29	359.63	12054.42	3554.88	-242.98	3560.25	0.00	
15600.00	90.29	359.63	12053.92	3654.88	-243.62	3660.22	0.00	
15700.00	90.29	359.63	12053.41	3754.88	-244.27	3760.20	0.00	
15800.00	90.29	359.63	12052.90	3854.87	-244.91	3860.18	0.00	
15900.00	90.29	359.63	12052.40	3954.87	-245.56	3960.15	0.00	
16000.00	90.29	359.63	12051.89	4054.87	-246.21	4060.13	0.00	
16100.00	90.29	359.63	12051.39	4154.86	-246.85	4160.11	0.00	
16200.00	90.29	359.63	12050.88	4254.86	-247.50	4260.08	0.00	
16300.00	90.29	359.63	12050.38	4354.86	-248.15	4360.06	0.00	
16400.00	90.29	359.63	12049.87	4454.85	-248.79	4460.03	0.00	
16500.00	90.29	359.63	12049.37	4554.85	-249.44	4560.01	0.00	
16600.00	90.29	359.63	12048.86	4654.85	-250.08	4659.99	0.00	
16700.00	90.29	359.63	12048.35	4754.84	-250.73	4759.96	0.00	
16800.00	90.29	359.63	12047.85	4854.84	-251.38	4859.94	0.00	
16900.00	90.29	359.63	12047.34	4954.84	-252.02	4959.92	0.00	
17000.00	90.29	359.63	12046.84	5054.83	-252.67	5059.89	0.00	
17100.00	90.29	359.63	12046.33	5154.83	-253.32	5159.87	0.00	
17200.00	90.29	359.63	12045.83	5254.83	-253.96	5259.84	0.00	
17300.00	90.29	359.63	12045.32	5354.82	-254.61	5359.82	0.00	
17400.00	90.29	359.63	12044.82	5454.82	-255.26	5459.80	0.00	
17500.00	90.29	359.63	12044.31	5554.82	-255.90	5559.77	0.00	
17600.00	90.29	359.63	12043.80	5654.81	-256.55	5659.75	0.00	
17700.00	90.29	359.63	12043.30	5754.81	-257.19	5759.72	0.00	
17800.00	90.29	359.63	12042.79	5854.81	-257.84	5859.70	0.00	
17900.00	90.29	359.63	12042.29	5954.80	-258.49	5959.68	0.00	
18000.00	90.29	359.63	12041.78	6054.80	-259.13	6059.65	0.00	
18100.00	90.29	359.63	12041.28	6154.80	-259.78	6159.63	0.00	
18200.00	90.29	359.63	12040.77	6254.79	-260.43	6259.61	0.00	
18300.00	90.29	359.63	12040.27	6354.79	-261.07	6359.58	0.00	
18400.00	90.29	359.63	12039.76	6454.79	-261.72	6459.56	0.00	
18500.00	90.29	359.63	12039.25	6554.78	-262.36	6559.53	0.00	
18600.00	90.29	359.63	12038.75	6654.78	-263.01	6659.51	0.00	
18700.00	90.29	359.63	12038.24	6754.78	-263.66	6759.49	0.00	
18800.00	90.29	359.63	12037.74	6854.77	-264.30	6859.46	0.00	
18900.00	90.29	359.63	12037.23	6954.77	-264.95	6959.44	0.00	
19000.00	90.29	359.63	12036.73	7054.77	-265.60	7059.42	0.00	
19100.00	90.29	359.63	12036.22	7154.76	-266.24	7159.39	0.00	
19200.00	90.29	359.63	12035.72	7254.76	-266.89	7259.37	0.00	
19300.00	90.29	359.63	12035.21	7354.76	-267.53	7359.34	0.00	

Aleutian 10-3 Fed Com 814H



**Well:** Aleutian 10-3 Fed Com 814H  
**County:** Eddy  
**Wellbore:** Permit Plan  
**Design:** Permit Plan #1

**Geodetic System:** US State Plane 1983  
**Datum:** North American Datum 1927  
**Ellipsoid:** Clarke 1866  
**Zone:** 3001 - NM East (NAD83)

MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
19400.00	90.29	359.63	12034.70	7454.75	-268.18	7459.32	0.00	
19500.00	90.29	359.63	12034.20	7554.75	-268.83	7559.30	0.00	
19600.00	90.29	359.63	12033.69	7654.75	-269.47	7659.27	0.00	
19700.00	90.29	359.63	12033.19	7754.74	-270.12	7759.25	0.00	
19800.00	90.29	359.63	12032.68	7854.74	-270.77	7859.23	0.00	
19900.00	90.29	359.63	12032.18	7954.74	-271.41	7959.20	0.00	
20000.00	90.29	359.63	12031.67	8054.73	-272.06	8059.18	0.00	
20100.00	90.29	359.63	12031.17	8154.73	-272.70	8159.15	0.00	
20200.00	90.29	359.63	12030.66	8254.73	-273.35	8259.13	0.00	
20300.00	90.29	359.63	12030.15	8354.72	-274.00	8359.11	0.00	
20400.00	90.29	359.63	12029.65	8454.72	-274.64	8459.08	0.00	
20500.00	90.29	359.63	12029.14	8554.72	-275.29	8559.06	0.00	
20600.00	90.29	359.63	12028.64	8654.71	-275.94	8659.03	0.00	
20700.00	90.29	359.63	12028.13	8754.71	-276.58	8759.01	0.00	
20800.00	90.29	359.63	12027.63	8854.71	-277.23	8858.99	0.00	
20900.00	90.29	359.63	12027.12	8954.70	-277.88	8958.96	0.00	
21000.00	90.29	359.63	12026.62	9054.70	-278.52	9058.94	0.00	
21100.00	90.29	359.63	12026.11	9154.70	-279.17	9158.92	0.00	
21200.00	90.29	359.63	12025.60	9254.69	-279.81	9258.89	0.00	
21300.00	90.29	359.63	12025.10	9354.69	-280.46	9358.87	0.00	
21400.00	90.29	359.63	12024.59	9454.69	-281.11	9458.84	0.00	
21500.00	90.29	359.63	12024.09	9554.68	-281.75	9558.82	0.00	
21600.00	90.29	359.63	12023.58	9654.68	-282.40	9658.80	0.00	
21700.00	90.29	359.63	12023.08	9754.68	-283.05	9758.77	0.00	
21800.00	90.29	359.63	12022.57	9854.67	-283.69	9858.75	0.00	
21900.00	90.29	359.63	12022.07	9954.67	-284.34	9958.73	0.00	
22000.00	90.29	359.63	12021.56	10054.67	-284.98	10058.70	0.00	
22100.00	90.29	359.63	12021.05	10154.66	-285.63	10158.68	0.00	
22200.00	90.29	359.63	12020.55	10254.66	-286.28	10258.65	0.00	
22226.02	90.29	359.63	12020.42	10280.68	-286.45	10284.67	0.00	exit
22300.00	90.29	359.63	12020.04	10354.66	-286.92	10358.63	0.00	
22306.02	90.29	359.63	12020.00	10360.68	-286.91	10364.65	0.00	BHL



Aleutian 10-3 Fed Com 814H

**Well:** Aleutian 10-3 Fed Com 814H

**County:** Eddy

**Wellbore:** Permit Plan

**Design:** Permit Plan #1

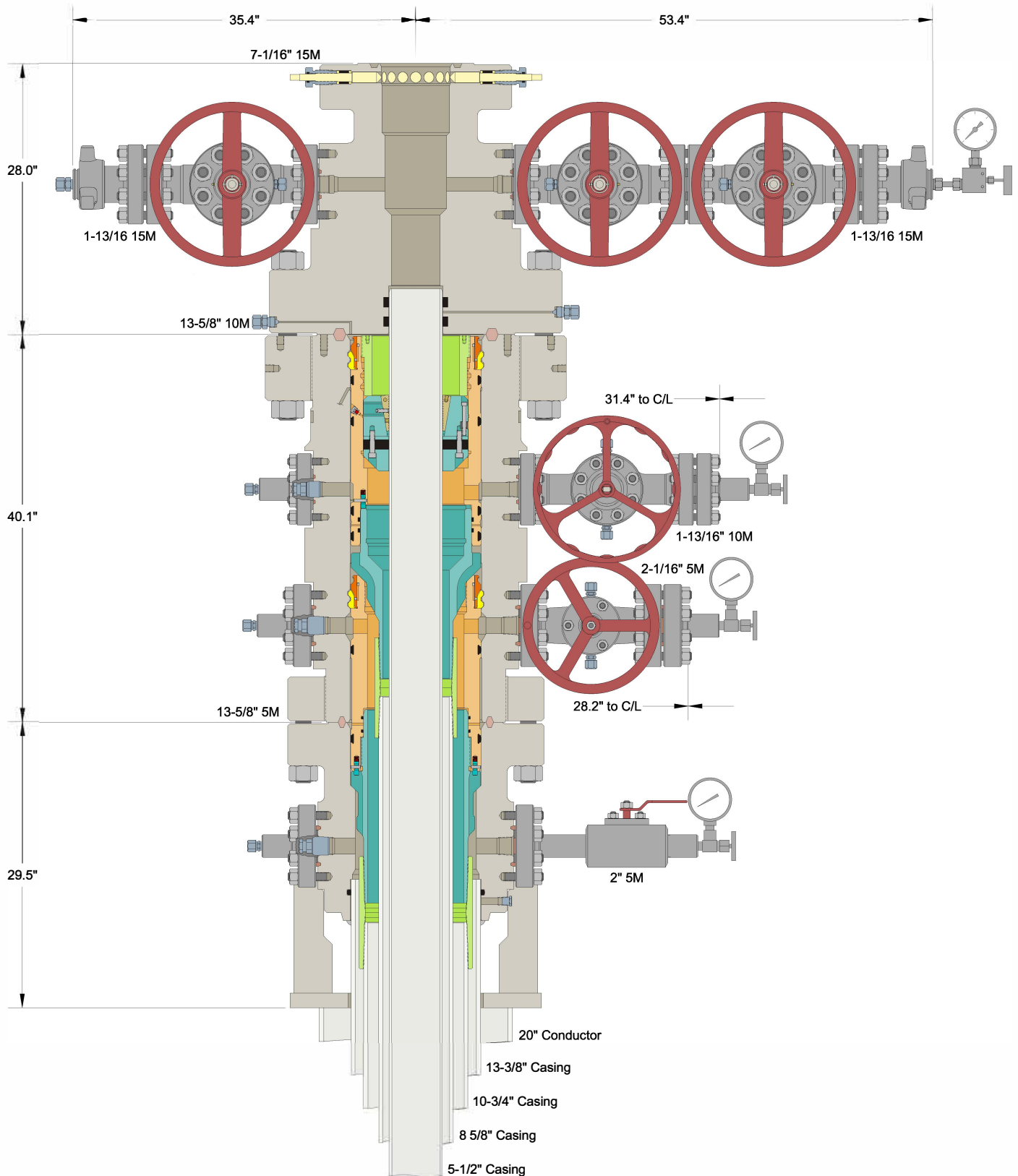
**Geodetic System:** US State Plane 1983

**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)	



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ALL DIMENSIONS APPROXIMATE

## CACTUS WELLHEAD LLC

MATADOR RESOURCES  
WOLFCAMP A WELLS (TEXAS)

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

DRAWN	DLE	09AUG19
APPRV		
DRAWING NO.	HBE0000156	

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	<b>Devon Energy Production Company LP</b>
<b>LEASE NO.:</b>	<b>NMNM0405444</b>
<b>LOCATION:</b>	Section 10, T.23 S., R.31 E., NMPM
<b>COUNTY:</b>	Eddy County, New Mexico
<b>Sundry ID:</b>	<b>2668708</b>

<b>WELL NAME &amp; NO.:</b>	<b>Aleutian 10-3 Fed Com 814H</b>
<b>SURFACE HOLE FOOTAGE:</b>	165'S & 440'E
<b>BOTTOM HOLE FOOTAGE:</b>	20'N & 660'E

COA

H2S	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Potash	<input type="checkbox"/> None	<input type="checkbox"/> Secretary	<input checked="" type="checkbox"/> R-111-P
Cave/Karst Potential	<input checked="" type="checkbox"/> Low	<input type="checkbox"/> Medium	<input type="checkbox"/> High
Cave/Karst Potential	<input type="checkbox"/> Critical		
Variance	<input type="checkbox"/> None	<input checked="" type="checkbox"/> Flex Hose	<input type="checkbox"/> Other
Wellhead	<input type="checkbox"/> Conventional	<input type="checkbox"/> Multibowl	<input checked="" type="checkbox"/> Both
Wellhead Variance	<input type="checkbox"/> Diverter		
Other	<input checked="" type="checkbox"/> 4 String	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input checked="" type="checkbox"/> Fluid Filled	<input type="checkbox"/> Pilot Hole	<input type="checkbox"/> Open Annulus
Cementing	<input checked="" type="checkbox"/> Cement Squeeze	<input checked="" type="checkbox"/> EchoMeter	
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit
Special Requirements Variance	<input checked="" type="checkbox"/> Break Testing	<input type="checkbox"/> Offline 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.**  
**Cement excess is less than 25%, more cement might be required.**

**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 R111 Potash Areas 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** inch 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)

☒ Eddy County

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

☒ 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 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 integrity 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 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



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.

**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  
  
Action 105028

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 105028
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Adhere to previous NMOCD Conditions of Approval	5/10/2022