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

# Sundry Print Report

05/21/2024

**Well Name:** MR POTATO HEAD 11-14 FED COM

**Well Location:** T24S / R29E / SEC 11 / NENE / 32.2388914 / -103.9491936

**County or Parish/State:** EDDY / NM

**Well Number:** 824H

**Type of Well:** OIL WELL

**Allottee or Tribe Name:**

**Lease Number:** NMNM88134

**Unit or CA Name:**

**Unit or CA Number:** NMNM143625

**US Well Number:**

**Operator:** DEVON ENERGY PRODUCTION COMPANY LP

## Notice of Intent

**Sundry ID:** 2791193

**Type of Submission:** Notice of Intent

**Type of Action:** APD Change

**Date Sundry Submitted:** 05/20/2024

**Time Sundry Submitted:** 06:49

**Date proposed operation will begin:** 05/20/2024

**Procedure Description:** Devon Energy Production Co., L.P. (Devon) respectfully requests to move the BHL on the subject well. Please see attached revised C102, drill plan (break test variance included), and directional plan. Permitted BHL: SWSE 20 FSL, 2310 FEL, 14-24S-29E Proposed BHL: SESE 20 FSL, 1030 FEL, 14-24S-29E No new leases have been added since approved APD. API ID: 10400086509

## NOI Attachments

**Procedure Description**

WA018532805_MR_POTATO_HEAD_11_14_F_C_824H_WL_R1_20240520064829.pdf

10.750_40.5lb_H40_20240520064816.pdf

5.5_17lb_P110_BTC_20240520064816.pdf

MR_POTATO_HEAD_11_14_FED_COM_824H_Directional_Plan_04_24_24_20240520064816.pdf

8.625_32lb_P110HSCY_TLW_20240520064818.PDF

break_test_variance_BOP_1_15_24_20240520064817.pdf

MR_POTATO_HEAD_11_14_FED_COM_824H_R1_20240520064817.pdf

**Well Name:** MR POTATO HEAD 11-14 FED COM

**Well Location:** T24S / R29E / SEC 11 / NENE / 32.2388914 / -103.9491936

**County or Parish/State:** EDDY / NM

**Well Number:** 824H

**Type of Well:** OIL WELL

**Allottee or Tribe Name:**

**Lease Number:** NMNM88134

**Unit or CA Name:**

**Unit or CA Number:** NMNM143625

**US Well Number:**

**Operator:** DEVON ENERGY PRODUCTION COMPANY LP

## Conditions of Approval

**Specialist Review**

Mr_Potato_Head_11_14_Fed_Com_824H_Sundry_ID_2791193_20240521103638.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:** SHAYDA OMOUMI

**Signed on:** MAY 20, 2024 06:49 AM

**Name:** DEVON ENERGY PRODUCTION COMPANY LP

**Title:** Regulatory Compliance Associate 3

**Street Address:** 333 W SHERIDAN AVE

**City:** OKLAHOMA CITY **State:** OK

**Phone:** (405) 235-3611

**Email address:** SHAYDA.OMOUMI@DVN.COM

## Field

**Representative Name:**

**Street Address:**

**City:** **State:** **Zip:**

**Phone:**

**Email address:**

## BLM Point of Contact

**BLM POC Name:** LONG VO

**BLM POC Title:** Petroleum Engineer

**BLM POC Phone:** 5759885402

**BLM POC Email Address:** LVO@BLM.GOV

**Disposition:** Approved

**Disposition Date:** 05/21/2024

**Signature:** Long Vo

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

**SUNDRY NOTICES AND REPORTS ON WELLS**

***Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.***

***SUBMIT IN TRIPLICATE*** *- Other instructions on page 2*

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.

2. Name of Operator

9. API Well No.

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool or Exploratory Area

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*

11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

| TYPE OF SUBMISSION | TYPE OF ACTION | | | |
|---|---|---|---|---|
| ☐ Notice of Intent | ☐ Acidize | ☐ Deepen | ☐ Production (Start/Resume) | ☐ Water Shut-Off |
| | ☐ Alter Casing | ☐ Hydraulic Fracturing | ☐ Reclamation | ☐ Well Integrity |
| ☐ Subsequent Report | ☐ Casing Repair | ☐ New Construction | ☐ Recomplete | ☐ Other |
| | ☐ Change Plans | ☐ Plug and Abandon | ☐ Temporarily Abandon | |
| ☐ Final Abandonment Notice | ☐ Convert to Injection | ☐ Plug Back | ☐ Water Disposal | |

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*

Title

Signature

Date

**THE SPACE FOR FEDERAL OR STATE OFICE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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.

(Instructions on page 2)

## GENERAL INSTRUCTIONS

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

## SPECIFIC INSTRUCTIONS

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

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

## NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.
PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.
ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.
EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.
Response to this request is mandatory.
The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

## Additional Information

### Location of Well

0. SHL: NENE / 200 FNL / 796 FEL / TWSP: 24S / RANGE: 29E / SECTION: 11 / LAT: 32.2388914 / LONG: -103.9491936 ( TVD: 0 feet, MD: 0 feet )

PPP: NWNE / 100 FNL / 2310 FEL / TWSP: 24S / RANGE: 29E / SECTION: 11 / LAT: 32.239154 / LONG: -103.9540898 ( TVD: 10221 feet, MD: 10413 feet )

BHL: SWSE / 20 FSL / 2310 FEL / TWSP: 24S / RANGE: 29E / SECTION: 14 / LAT: 32.2103131 / LONG: -103.9541108 ( TVD: 10915 feet, MD: 21410 feet )

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 & 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

| [1] API Number | [2] Pool Code | [3] Pool Name |
|---|---|---|
| | 98220 | Purple Sage; Wolfcamp (Gas) |

| [4] Property Code | [5] Property Name | [6] Well Number |
|---|---|---|
| 326251 | MR POTATO HEAD 11 14 FED COM | 824H |

| [7] OGRID No. | [8] Operator Name | [9] Elevation |
|---|---|---|
| 6137 | DEVON ENERGY PRODUCTION COMPANY, L.P. | 3077.4 |

## [10] Surface Location

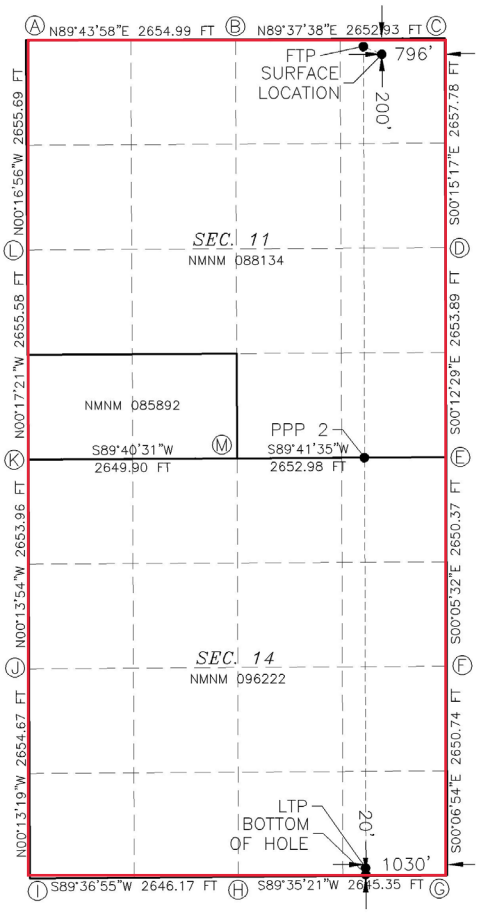
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| A | 11 | 24 S | 29 E | | 200 | NORTH | 796 | EAST | EDDY |

## [11] 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 |
|---|---|---|---|---|---|---|---|---|---|
| P | 14 | 24 S | 29 E | | 20 | SOUTH | 1030 | EAST | EDDY |

| [12] Dedicated Acres | [13] Joint or Infill | [14] Consolidation Code | [15] Order No. |
|---|---|---|---|
| 1280 | | | |

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.




*MR POTATO HEAD 11 14 FED COM 824H*
EL. = 3077.4

GEODETIC COORDINATES
NAD 83 NMSP EAST
SURFACE LOCATION
N.= 450854.62
E.= 660106.83
LAT. = 32.2388914°N
LONG. = 103.9491936°W

KICK OFF POINT
CALLS 51' FNL, 1030' FEL
N.= 451002
E.= 659872
LAT. = 32.23920409
LONG. = -103.95003451

FIRST TAKE POINT (PPP 1)
100' FNL, 1030' FEL
N.= 450953.10
E.= 659872.36
LAT. = 32.2391644°N
LONG. = 103.9499508°W

LAST TAKE POINT
100' FSL, 1030' FEL
N.= 440542.03
E.= 659902.74
LAT. = 32.2105457°N
LONG. = 103.9499727°W

BOTTOM OF HOLE
20' FSL, 1030' FEL
N.= 440462.05
E.= 659902.90
LAT. = 32.2103258°N
LONG. = 103.9499731°W

PPP 2
0' FSL, 1036' FEL
N.= 445743.80
E.= 659887.56
LAT. = 32.2248447°N
LONG. = 103.9499618°W

CORNER COORDINATES TABLE
NAD 83 NMSP EAST

| | | |
|---|---|---|
| A – | N.= 451030.14 | E.= 655595.01 |
| B – | N.= 451042.47 | E.= 658249.35 |
| C – | N.= 451059.78 | E.= 660901.66 |
| D – | N.= 448402.62 | E.= 660913.47 |
| E – | N.= 445749.34 | E.= 660923.11 |
| F – | N.= 443099.57 | E.= 660927.38 |
| G – | N.= 440449.43 | E.= 660932.70 |
| H – | N.= 440430.47 | E.= 658288.01 |
| I – | N.= 440412.71 | E.= 655642.49 |
| J – | N.= 443066.77 | E.= 655632.22 |
| K – | N.= 445720.12 | E.= 655621.49 |
| L – | N.= 448375.07 | E.= 655608.09 |
| M – | N.= 445735.13 | E.= 658270.76 |

LEGEND
SECTION LINE
QUARTER LINE
LEASE LINE
WELL PATH

## [17] 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.*

Shayda Omoumi 4/26/2024
Signature Date

Shayda Omoumi
Printed Name

shayda.omoumi@dvn.com
E-mail Address

## [18] 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.*

APRIL 22, 2024
Date of Survey

Signature and Seal of Professional Surveyor:
EDMOND F. JARAMILLO, NEW MEXICO, 12797, REGISTERED PROFESSIONAL SURVEYOR

Certificate Number: EDMOND F. JARAMILLO, PLS 12797
SURVEY NO. 9408A

Intent [X] As Drilled [ ]

| API # |
|---|
| |

| Operator Name: | Property Name: | Well Number |
|---|---|---|
| DEVON ENERGY PRODUCTION COMPANY, L.P. | MR POTATO HEAD 11 14 FED COM | 824H |

Kick Off Point (KOP)

| UL | Section | Township | Range | Lot | Feet | From N/S | Feet | From E/W | County |
|---|---|---|---|---|---|---|---|---|---|
| A | 11 | 24S | 29E | | 51 | NORTH | 1030 | EAST | EDDY |

| Latitude | Longitude | NAD |
|---|---|---|
| 32.23920409 | -103.95003451 | 83 |

First Take Point (FTP)

| UL | Section | Township | Range | Lot | Feet | From N/S | Feet | From E/W | County |
|---|---|---|---|---|---|---|---|---|---|
| A | 11 | 24S | 29E | | 100 | NORTH | 1030 | EAST | EDDY |

| Latitude | Longitude | NAD |
|---|---|---|
| 32.2391644 | 103.9499508 | 83 |

Last Take Point (LTP)

| UL | Section | Township | Range | Lot | Feet | From N/S | Feet | From E/W | County |
|---|---|---|---|---|---|---|---|---|---|
| P | 14 | 24S | 29E | | 100 | SOUTH | 1030 | EAST | EDDY |

| Latitude | Longitude | NAD |
|---|---|---|
| 32.2105457 | 103.9499727 | 83 |

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

Is this well an infill well? [Y]

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

| API # |
|---|
| 30-015-46722 |

| Operator Name: | Property Name: | Well Number |
|---|---|---|
| DEVON ENERGY PRODUCTION COMPANY, L.P. | MR POTATO HEAD 11-14 FED COM | 623H |

KZ 06/29/2018

# U. S. Steel Tubular Products

## 10.750" 40.50lb/ft (0.350" Wall) H40

11/4/2021 10:14:32 AM

| MECHANICAL PROPERTIES | Pipe | BTC | LTC | STC | | -- |
|---|---|---|---|---|---|---|
| Minimum Yield Strength | 40,000 | -- | -- | -- | psi | -- |
| Maximum Yield Strength | 80,000 | -- | -- | -- | psi | -- |
| Minimum Tensile Strength | 60,000 | -- | -- | -- | psi | -- |
| **DIMENSIONS** | **Pipe** | **BTC** | **LTC** | **STC** | | **--** |
| Outside Diameter | 10.750 | 0.000 | 0.000 | 11.750 | in. | -- |
| Wall Thickness | 0.350 | -- | -- | -- | in. | -- |
| Inside Diameter | 10.050 | -- | -- | 10.050 | in. | -- |
| Standard Drift | 9.894 | 9.894 | 9.894 | 9.894 | in. | -- |
| Alternate Drift | -- | -- | -- | -- | in. | -- |
| Nominal Linear Weight, T&C | 40.50 | -- | -- | -- | lb/ft | -- |
| Plain End Weight | 38.91 | -- | -- | -- | lb/ft | -- |
| **PERFORMANCE** | **Pipe** | **BTC** | **LTC** | **STC** | | **--** |
| Minimum Collapse Pressure | 1,390 | 1,390 | 1,390 | 1,390 | psi | -- |
| Minimum Internal Yield Pressure | 2,280 | 2,280 | 2,280 | 2,280 | psi | -- |
| Minimum Pipe Body Yield Strength | 457 | -- | -- | -- | 1,000 lbs | -- |
| Joint Strength | -- | -- | -- | 314 | 1,000 lbs | -- |
| Reference Length | -- | -- | -- | 5,164 | ft | -- |
| **MAKE-UP DATA** | **Pipe** | **BTC** | **LTC** | **STC** | | **--** |
| Make-Up Loss | -- | -- | -- | 3.50 | in. | -- |
| Minimum Make-Up Torque | -- | -- | -- | 2,360 | ft-lb | -- |
| Maximum Make-Up Torque | -- | -- | -- | 3,930 | ft-lb | -- |



## Notes



U. S. Steel Tubular Products
460 Wildwood Forest Drive, Suite 300S
Spring, Texas 77380

1-877-893-9461
connections@uss.com
www.usstubular.com

# U. S. Steel Tubular Products

## 5.500" 17.00lbs/ft (0.304" Wall) P110

2/21/2019 8:12:22 AM

| MECHANICAL PROPERTIES | Pipe | BTC | LTC | STC | |
|---|---|---|---|---|---|
| Minimum Yield Strength | 110,000 | -- | -- | -- | psi |
| Maximum Yield Strength | 140,000 | -- | -- | -- | psi |
| Minimum Tensile Strength | 125,000 | -- | -- | -- | psi |
| **DIMENSIONS** | **Pipe** | **BTC** | **LTC** | **STC** | |
| Outside Diameter | 5.500 | 6.050 | 6.050 | -- | in. |
| Wall Thickness | 0.304 | -- | -- | -- | in. |
| Inside Diameter | 4.892 | 4.892 | 4.892 | -- | in. |
| Standard Drift | 4.767 | 4.767 | 4.767 | -- | in. |
| Alternate Drift | -- | -- | -- | -- | in. |
| Nominal Linear Weight, T&C | 17.00 | -- | -- | -- | lbs/ft |
| Plain End Weight | 16.89 | -- | -- | -- | lbs/ft |
| **PERFORMANCE** | **Pipe** | **BTC** | **LTC** | **STC** | |
| Minimum Collapse Pressure | 7,480 | 7,480 | 7,480 | -- | psi |
| Minimum Internal Yield Pressure | 10,640 | 10,640 | 10,640 | -- | psi |
| Minimum Pipe Body Yield Strength | 546 | -- | -- | -- | 1,000 lbs |
| Joint Strength | -- | 568 | 445 | -- | 1,000 lbs |
| Reference Length | -- | 22,271 | 17,449 | -- | ft |
| **MAKE-UP DATA** | **Pipe** | **BTC** | **LTC** | **STC** | |
| Make-Up Loss | -- | 4.13 | 3.50 | -- | in. |
| Minimum Make-Up Torque | -- | -- | 3,470 | -- | ft-lbs |
| Maximum Make-Up Torque | -- | -- | 5,780 | -- | ft-lbs |



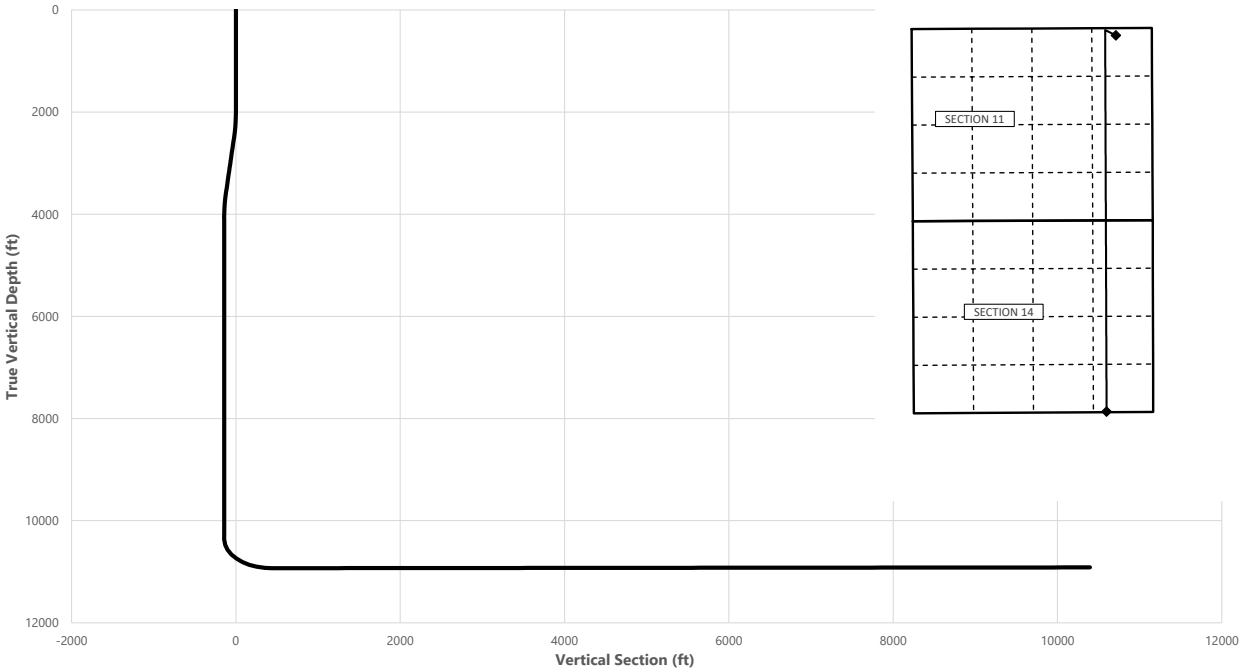
U. S. Steel Tubular Products
460 Wildwood Forest Drive, Suite 300S
Spring, Texas 77380

1-877-893-9461
connections@uss.com
www.usstubular.com

**Well:** MR POTATO HEAD 11-14 FED COM 824H
**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 |
| 2000.00 | 0.00 | 302.00 | 2000.00 | 0.00 | 0.00 | 0.00 | 0.00 | Start Tangent |
| 2500.00 | 10.00 | 302.00 | 2497.47 | 23.06 | -36.91 | -22.33 | 2.00 | Hold Tangent |
| 3595.90 | 10.00 | 302.00 | 3576.72 | 123.91 | -198.29 | -119.99 | 0.00 | Drop to Vertical |
| 4095.90 | 0.00 | 302.00 | 4074.18 | 146.97 | -235.20 | -142.33 | 2.00 | Hold Vertical |
| 10378.76 | 0.00 | 179.83 | 10357.04 | 146.97 | -235.20 | -142.33 | 0.00 | KOP |
| 11279.62 | 90.09 | 179.83 | 10930.00 | -426.85 | -233.50 | 431.35 | 10.00 | Landing Point |
| 21245.40 | 90.09 | 179.83 | 10915.00 | -10392.57 | -203.93 | 10394.57 | 0.00 | BHL |




| Key Depths | MD (ft) | TVD (ft) |
|---|---|---|
| Rustler | 234.00 | 234.00 |
| Salt | 523.00 | 523.00 |
| Base of Salt | 2963.58 | 2954.00 |
| Delaware | 3233.68 | 3220.00 |
| Cherry Canyon | 4066.72 | 4045.00 |
| Brushy Canyon | 5684.72 | 5663.00 |
| 1st Bone Spring Lime | 6937.72 | 6916.00 |
| Bone Spring 1st | 7968.72 | 7947.00 |
| Bone Spring 2nd | 8783.72 | 8762.00 |
| 3rd Bone Spring Lime | 9119.72 | 9098.00 |
| Bone Spring 3rd | 9916.72 | 9895.00 |
| Wolfcamp / Point of Penetration | 10242.72 | 10221.00 |
| exit | 21165.40 | 10915.13 |

| | MD (ft) | TVD (ft) | Lat (°) | Long (°) | Section Footages |
|---|---|---|---|---|---|
| **SHL** | 0.00 | 0.00 | 32.2388 | -103.9493 | 200' FNL, 796' FEL of Sec 11 in T24S, R29E |
| **KOP** | 10378.76 | 10357.04 | 32.2392 | -103.9500 | 51' FNL, 1030' FEL of Sec 11 in T24S, R29E |
| **Point of Penetration** | 10242.72 | 10221.00 | 32.2392 | -103.9500 | 100' FNL, 1030' FEL of Sec 11 in T24S, R29E |
| **Exit** | 21165.40 | 10915.13 | 32.2105 | -103.9997 | 100' FSL, 1030' FEL of Sec 14 in T24S, R29E |
| **BHL** | 21245.40 | 10915.00 | 32.2102 | -103.9501 | 20' FSL, 1030' FEL of Sec 14 in T24S, R29E |

| | Y | X | MD |
|---|---|---|---|
| **KOP** | **451002** | **659872** | 10378.76 |

devon

**Well:** MR POTATO HEAD 11-14 FED COM 824H
**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 | 302.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 200.00 | 0.00 | 302.00 | 200.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 234.00 | 0.00 | 302.00 | 234.00 | 0.00 | 0.00 | 0.00 | 0.00 | Rustler |
| 300.00 | 0.00 | 302.00 | 300.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 400.00 | 0.00 | 302.00 | 400.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 500.00 | 0.00 | 302.00 | 500.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 523.00 | 0.00 | 302.00 | 523.00 | 0.00 | 0.00 | 0.00 | 0.00 | Salt |
| 600.00 | 0.00 | 302.00 | 600.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 700.00 | 0.00 | 302.00 | 700.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 800.00 | 0.00 | 302.00 | 800.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 900.00 | 0.00 | 302.00 | 900.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1000.00 | 0.00 | 302.00 | 1000.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1100.00 | 0.00 | 302.00 | 1100.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1200.00 | 0.00 | 302.00 | 1200.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1300.00 | 0.00 | 302.00 | 1300.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1400.00 | 0.00 | 302.00 | 1400.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1500.00 | 0.00 | 302.00 | 1500.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1600.00 | 0.00 | 302.00 | 1600.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1700.00 | 0.00 | 302.00 | 1700.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1800.00 | 0.00 | 302.00 | 1800.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1900.00 | 0.00 | 302.00 | 1900.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2000.00 | 0.00 | 302.00 | 2000.00 | 0.00 | 0.00 | 0.00 | 0.00 | Start Tangent |
| 2100.00 | 2.00 | 302.00 | 2099.98 | 0.92 | -1.48 | -0.90 | 2.00 | |
| 2200.00 | 4.00 | 302.00 | 2199.84 | 3.70 | -5.92 | -3.58 | 2.00 | |
| 2300.00 | 6.00 | 302.00 | 2299.45 | 8.32 | -13.31 | -8.05 | 2.00 | |
| 2400.00 | 8.00 | 302.00 | 2398.70 | 14.77 | -23.64 | -14.31 | 2.00 | |
| 2500.00 | 10.00 | 302.00 | 2497.47 | 23.06 | -36.91 | -22.33 | 2.00 | Hold Tangent |
| 2600.00 | 10.00 | 302.00 | 2595.95 | 32.27 | -51.64 | -31.25 | 0.00 | |
| 2700.00 | 10.00 | 302.00 | 2694.43 | 41.47 | -66.36 | -40.16 | 0.00 | |
| 2800.00 | 10.00 | 302.00 | 2792.91 | 50.67 | -81.09 | -49.07 | 0.00 | |
| 2900.00 | 10.00 | 302.00 | 2891.39 | 59.87 | -95.81 | -57.98 | 0.00 | |
| 2963.58 | 10.00 | 302.00 | 2954.00 | 65.72 | -105.18 | -63.65 | 0.00 | Base of Salt |
| 3000.00 | 10.00 | 302.00 | 2989.87 | 69.07 | -110.54 | -66.89 | 0.00 | |
| 3100.00 | 10.00 | 302.00 | 3088.35 | 78.27 | -125.27 | -75.80 | 0.00 | |
| 3200.00 | 10.00 | 302.00 | 3186.83 | 87.48 | -139.99 | -84.71 | 0.00 | |
| 3233.68 | 10.00 | 302.00 | 3220.00 | 90.58 | -144.95 | -87.71 | 0.00 | Delaware |
| 3300.00 | 10.00 | 302.00 | 3285.31 | 96.68 | -154.72 | -93.62 | 0.00 | |
| 3400.00 | 10.00 | 302.00 | 3383.79 | 105.88 | -169.45 | -102.54 | 0.00 | |
| 3500.00 | 10.00 | 302.00 | 3482.27 | 115.08 | -184.17 | -111.45 | 0.00 | |
| 3595.90 | 10.00 | 302.00 | 3576.72 | 123.91 | -198.29 | -119.99 | 0.00 | Drop to Vertical |
| 3600.00 | 9.92 | 302.00 | 3580.75 | 124.28 | -198.90 | -120.36 | 2.00 | |
| 3700.00 | 7.92 | 302.00 | 3679.54 | 132.50 | -212.04 | -128.31 | 2.00 | |
| 3800.00 | 5.92 | 302.00 | 3778.81 | 138.88 | -222.26 | -134.49 | 2.00 | |
| 3900.00 | 3.92 | 302.00 | 3878.43 | 143.42 | -229.53 | -138.89 | 2.00 | |
| 4000.00 | 1.92 | 302.00 | 3978.30 | 146.12 | -233.84 | -141.50 | 2.00 | |
| 4066.72 | 0.58 | 302.00 | 4045.00 | 146.89 | -235.08 | -142.25 | 2.00 | Cherry Canyon |
| 4095.90 | 0.00 | 302.00 | 4074.18 | 146.97 | -235.20 | -142.33 | 2.00 | Hold Vertical |
| 4100.00 | 0.00 | 179.83 | 4078.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 4200.00 | 0.00 | 179.83 | 4178.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 4300.00 | 0.00 | 179.83 | 4278.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 4400.00 | 0.00 | 179.83 | 4378.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 4500.00 | 0.00 | 179.83 | 4478.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 4600.00 | 0.00 | 179.83 | 4578.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 4700.00 | 0.00 | 179.83 | 4678.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 4800.00 | 0.00 | 179.83 | 4778.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 4900.00 | 0.00 | 179.83 | 4878.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5000.00 | 0.00 | 179.83 | 4978.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5100.00 | 0.00 | 179.83 | 5078.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5200.00 | 0.00 | 179.83 | 5178.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5300.00 | 0.00 | 179.83 | 5278.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5400.00 | 0.00 | 179.83 | 5378.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5500.00 | 0.00 | 179.83 | 5478.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5600.00 | 0.00 | 179.83 | 5578.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5684.72 | 0.00 | 179.83 | 5663.00 | 146.97 | -235.20 | -142.33 | 0.00 | Brushy Canyon |
| 5700.00 | 0.00 | 179.83 | 5678.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5800.00 | 0.00 | 179.83 | 5778.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5900.00 | 0.00 | 179.83 | 5878.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6000.00 | 0.00 | 179.83 | 5978.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6100.00 | 0.00 | 179.83 | 6078.28 | 146.97 | -235.20 | -142.33 | 0.00 | |

devon

**Well:** MR POTATO HEAD 11-14 FED COM 824H
**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 |
|---|---|---|---|---|---|---|---|---|
| 6200.00 | 0.00 | 179.83 | 6178.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6300.00 | 0.00 | 179.83 | 6278.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6400.00 | 0.00 | 179.83 | 6378.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6500.00 | 0.00 | 179.83 | 6478.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6600.00 | 0.00 | 179.83 | 6578.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6700.00 | 0.00 | 179.83 | 6678.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6800.00 | 0.00 | 179.83 | 6778.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6900.00 | 0.00 | 179.83 | 6878.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6937.72 | 0.00 | 179.83 | 6916.00 | 146.97 | -235.20 | -142.33 | 0.00 | 1st Bone Spring Lime |
| 7000.00 | 0.00 | 179.83 | 6978.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7100.00 | 0.00 | 179.83 | 7078.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7200.00 | 0.00 | 179.83 | 7178.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7300.00 | 0.00 | 179.83 | 7278.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7400.00 | 0.00 | 179.83 | 7378.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7500.00 | 0.00 | 179.83 | 7478.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7600.00 | 0.00 | 179.83 | 7578.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7700.00 | 0.00 | 179.83 | 7678.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7800.00 | 0.00 | 179.83 | 7778.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7900.00 | 0.00 | 179.83 | 7878.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7968.72 | 0.00 | 179.83 | 7947.00 | 146.97 | -235.20 | -142.33 | 0.00 | Bone Spring 1st |
| 8000.00 | 0.00 | 179.83 | 7978.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 8100.00 | 0.00 | 179.83 | 8078.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 8200.00 | 0.00 | 179.83 | 8178.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 8300.00 | 0.00 | 179.83 | 8278.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 8400.00 | 0.00 | 179.83 | 8378.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 8500.00 | 0.00 | 179.83 | 8478.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 8600.00 | 0.00 | 179.83 | 8578.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 8700.00 | 0.00 | 179.83 | 8678.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 8783.72 | 0.00 | 179.83 | 8762.00 | 146.97 | -235.20 | -142.33 | 0.00 | Bone Spring 2nd |
| 8800.00 | 0.00 | 179.83 | 8778.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 8900.00 | 0.00 | 179.83 | 8878.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9000.00 | 0.00 | 179.83 | 8978.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9100.00 | 0.00 | 179.83 | 9078.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9119.72 | 0.00 | 179.83 | 9098.00 | 146.97 | -235.20 | -142.33 | 0.00 | 3rd Bone Spring Lime |
| 9200.00 | 0.00 | 179.83 | 9178.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9300.00 | 0.00 | 179.83 | 9278.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9400.00 | 0.00 | 179.83 | 9378.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9500.00 | 0.00 | 179.83 | 9478.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9600.00 | 0.00 | 179.83 | 9578.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9700.00 | 0.00 | 179.83 | 9678.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9800.00 | 0.00 | 179.83 | 9778.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9900.00 | 0.00 | 179.83 | 9878.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9916.72 | 0.00 | 179.83 | 9895.00 | 146.97 | -235.20 | -142.33 | 0.00 | Bone Spring 3rd |
| 10000.00 | 0.00 | 179.83 | 9978.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 10100.00 | 0.00 | 179.83 | 10078.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 10200.00 | 0.00 | 179.83 | 10178.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 10242.72 | 0.00 | 179.83 | 10221.00 | 146.97 | -235.20 | -142.33 | 0.00 | Wolfcamp / Point of Penetration |
| 10300.00 | 0.00 | 179.83 | 10278.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 10378.76 | 0.00 | 179.83 | 10357.04 | 146.97 | -235.20 | -142.33 | 0.00 | KOP |
| 10400.00 | 2.12 | 179.83 | 10378.28 | 146.58 | -235.20 | -141.93 | 10.00 | |
| 10500.00 | 12.12 | 179.83 | 10477.38 | 134.19 | -235.17 | -129.55 | 10.00 | |
| 10600.00 | 22.12 | 179.83 | 10572.82 | 104.79 | -235.08 | -100.15 | 10.00 | |
| 10700.00 | 32.12 | 179.83 | 10661.71 | 59.25 | -234.94 | -54.63 | 10.00 | |
| 10800.00 | 42.12 | 179.83 | 10741.35 | -1.03 | -234.76 | 5.63 | 10.00 | |
| 10900.00 | 52.12 | 179.83 | 10809.30 | -74.21 | -234.55 | 78.80 | 10.00 | |
| 11000.00 | 62.12 | 179.83 | 10863.52 | -158.09 | -234.30 | 162.66 | 10.00 | |
| 11100.00 | 72.12 | 179.83 | 10902.34 | -250.11 | -234.02 | 254.65 | 10.00 | |
| 11200.00 | 82.12 | 179.83 | 10924.60 | -347.47 | -233.73 | 351.99 | 10.00 | |
| 11279.62 | 90.09 | 179.83 | 10930.00 | -426.85 | -233.50 | 431.35 | 10.00 | Landing Point |
| 11300.00 | 90.09 | 179.83 | 10929.97 | -447.22 | -233.44 | 451.72 | 0.00 | |
| 11400.00 | 90.09 | 179.83 | 10929.82 | -547.22 | -233.14 | 551.69 | 0.00 | |
| 11500.00 | 90.09 | 179.83 | 10929.67 | -647.22 | -232.85 | 651.67 | 0.00 | |
| 11600.00 | 90.09 | 179.83 | 10929.52 | -747.22 | -232.55 | 751.64 | 0.00 | |
| 11700.00 | 90.09 | 179.83 | 10929.37 | -847.22 | -232.25 | 851.61 | 0.00 | |
| 11800.00 | 90.09 | 179.83 | 10929.22 | -947.22 | -231.96 | 951.59 | 0.00 | |
| 11900.00 | 90.09 | 179.83 | 10929.07 | -1047.22 | -231.66 | 1051.56 | 0.00 | |
| 12000.00 | 90.09 | 179.83 | 10928.92 | -1147.22 | -231.36 | 1151.54 | 0.00 | |
| 12100.00 | 90.09 | 179.83 | 10928.77 | -1247.22 | -231.06 | 1251.51 | 0.00 | |
| 12200.00 | 90.09 | 179.83 | 10928.62 | -1347.22 | -230.77 | 1351.49 | 0.00 | |
| 12300.00 | 90.09 | 179.83 | 10928.47 | -1447.22 | -230.47 | 1451.46 | 0.00 | |

devon

**Well:** MR POTATO HEAD 11-14 FED COM 824H
**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 |
|---|---|---|---|---|---|---|---|---|
| 12400.00 | 90.09 | 179.83 | 10928.32 | -1547.22 | -230.17 | 1551.44 | 0.00 | |
| 12500.00 | 90.09 | 179.83 | 10928.16 | -1647.22 | -229.88 | 1651.41 | 0.00 | |
| 12600.00 | 90.09 | 179.83 | 10928.01 | -1747.22 | -229.58 | 1751.38 | 0.00 | |
| 12700.00 | 90.09 | 179.83 | 10927.86 | -1847.22 | -229.28 | 1851.36 | 0.00 | |
| 12800.00 | 90.09 | 179.83 | 10927.71 | -1947.21 | -228.99 | 1951.33 | 0.00 | |
| 12900.00 | 90.09 | 179.83 | 10927.56 | -2047.21 | -228.69 | 2051.31 | 0.00 | |
| 13000.00 | 90.09 | 179.83 | 10927.41 | -2147.21 | -228.39 | 2151.28 | 0.00 | |
| 13100.00 | 90.09 | 179.83 | 10927.26 | -2247.21 | -228.09 | 2251.26 | 0.00 | |
| 13200.00 | 90.09 | 179.83 | 10927.11 | -2347.21 | -227.80 | 2351.23 | 0.00 | |
| 13300.00 | 90.09 | 179.83 | 10926.96 | -2447.21 | -227.50 | 2451.20 | 0.00 | |
| 13400.00 | 90.09 | 179.83 | 10926.81 | -2547.21 | -227.20 | 2551.18 | 0.00 | |
| 13500.00 | 90.09 | 179.83 | 10926.66 | -2647.21 | -226.91 | 2651.15 | 0.00 | |
| 13600.00 | 90.09 | 179.83 | 10926.51 | -2747.21 | -226.61 | 2751.13 | 0.00 | |
| 13700.00 | 90.09 | 179.83 | 10926.36 | -2847.21 | -226.31 | 2851.10 | 0.00 | |
| 13800.00 | 90.09 | 179.83 | 10926.21 | -2947.21 | -226.02 | 2951.08 | 0.00 | |
| 13900.00 | 90.09 | 179.83 | 10926.06 | -3047.21 | -225.72 | 3051.05 | 0.00 | |
| 14000.00 | 90.09 | 179.83 | 10925.91 | -3147.21 | -225.42 | 3151.03 | 0.00 | |
| 14100.00 | 90.09 | 179.83 | 10925.76 | -3247.21 | -225.12 | 3251.00 | 0.00 | |
| 14200.00 | 90.09 | 179.83 | 10925.61 | -3347.21 | -224.83 | 3350.97 | 0.00 | |
| 14300.00 | 90.09 | 179.83 | 10925.46 | -3447.21 | -224.53 | 3450.95 | 0.00 | |
| 14400.00 | 90.09 | 179.83 | 10925.31 | -3547.21 | -224.23 | 3550.92 | 0.00 | |
| 14500.00 | 90.09 | 179.83 | 10925.16 | -3647.21 | -223.94 | 3650.90 | 0.00 | |
| 14600.00 | 90.09 | 179.83 | 10925.01 | -3747.20 | -223.64 | 3750.87 | 0.00 | |
| 14700.00 | 90.09 | 179.83 | 10924.86 | -3847.20 | -223.34 | 3850.85 | 0.00 | |
| 14800.00 | 90.09 | 179.83 | 10924.71 | -3947.20 | -223.05 | 3950.82 | 0.00 | |
| 14900.00 | 90.09 | 179.83 | 10924.56 | -4047.20 | -222.75 | 4050.79 | 0.00 | |
| 15000.00 | 90.09 | 179.83 | 10924.41 | -4147.20 | -222.45 | 4150.77 | 0.00 | |
| 15100.00 | 90.09 | 179.83 | 10924.25 | -4247.20 | -222.16 | 4250.74 | 0.00 | |
| 15200.00 | 90.09 | 179.83 | 10924.10 | -4347.20 | -221.86 | 4350.72 | 0.00 | |
| 15300.00 | 90.09 | 179.83 | 10923.95 | -4447.20 | -221.56 | 4450.69 | 0.00 | |
| 15400.00 | 90.09 | 179.83 | 10923.80 | -4547.20 | -221.26 | 4550.67 | 0.00 | |
| 15500.00 | 90.09 | 179.83 | 10923.65 | -4647.20 | -220.97 | 4650.64 | 0.00 | |
| 15600.00 | 90.09 | 179.83 | 10923.50 | -4747.20 | -220.67 | 4750.62 | 0.00 | |
| 15700.00 | 90.09 | 179.83 | 10923.35 | -4847.20 | -220.37 | 4850.59 | 0.00 | |
| 15800.00 | 90.09 | 179.83 | 10923.20 | -4947.20 | -220.08 | 4950.56 | 0.00 | |
| 15900.00 | 90.09 | 179.83 | 10923.05 | -5047.20 | -219.78 | 5050.54 | 0.00 | |
| 16000.00 | 90.09 | 179.83 | 10922.90 | -5147.20 | -219.48 | 5150.51 | 0.00 | |
| 16100.00 | 90.09 | 179.83 | 10922.75 | -5247.20 | -219.19 | 5250.49 | 0.00 | |
| 16200.00 | 90.09 | 179.83 | 10922.60 | -5347.20 | -218.89 | 5350.46 | 0.00 | |
| 16300.00 | 90.09 | 179.83 | 10922.45 | -5447.20 | -218.59 | 5450.44 | 0.00 | |
| 16400.00 | 90.09 | 179.83 | 10922.30 | -5547.19 | -218.29 | 5550.41 | 0.00 | |
| 16500.00 | 90.09 | 179.83 | 10922.15 | -5647.19 | -218.00 | 5650.38 | 0.00 | |
| 16600.00 | 90.09 | 179.83 | 10922.00 | -5747.19 | -217.70 | 5750.36 | 0.00 | |
| 16700.00 | 90.09 | 179.83 | 10921.85 | -5847.19 | -217.40 | 5850.33 | 0.00 | |
| 16800.00 | 90.09 | 179.83 | 10921.70 | -5947.19 | -217.11 | 5950.31 | 0.00 | |
| 16900.00 | 90.09 | 179.83 | 10921.55 | -6047.19 | -216.81 | 6050.28 | 0.00 | |
| 17000.00 | 90.09 | 179.83 | 10921.40 | -6147.19 | -216.51 | 6150.26 | 0.00 | |
| 17100.00 | 90.09 | 179.83 | 10921.25 | -6247.19 | -216.22 | 6250.23 | 0.00 | |
| 17200.00 | 90.09 | 179.83 | 10921.10 | -6347.19 | -215.92 | 6350.20 | 0.00 | |
| 17300.00 | 90.09 | 179.83 | 10920.95 | -6447.19 | -215.62 | 6450.18 | 0.00 | |
| 17400.00 | 90.09 | 179.83 | 10920.80 | -6547.19 | -215.32 | 6550.15 | 0.00 | |
| 17500.00 | 90.09 | 179.83 | 10920.65 | -6647.19 | -215.03 | 6650.13 | 0.00 | |
| 17600.00 | 90.09 | 179.83 | 10920.50 | -6747.19 | -214.73 | 6750.10 | 0.00 | |
| 17700.00 | 90.09 | 179.83 | 10920.34 | -6847.19 | -214.43 | 6850.08 | 0.00 | |
| 17800.00 | 90.09 | 179.83 | 10920.19 | -6947.19 | -214.14 | 6950.05 | 0.00 | |
| 17900.00 | 90.09 | 179.83 | 10920.04 | -7047.19 | -213.84 | 7050.03 | 0.00 | |
| 18000.00 | 90.09 | 179.83 | 10919.89 | -7147.19 | -213.54 | 7150.00 | 0.00 | |
| 18100.00 | 90.09 | 179.83 | 10919.74 | -7247.19 | -213.25 | 7249.97 | 0.00 | |
| 18200.00 | 90.09 | 179.83 | 10919.59 | -7347.18 | -212.95 | 7349.95 | 0.00 | |
| 18300.00 | 90.09 | 179.83 | 10919.44 | -7447.18 | -212.65 | 7449.92 | 0.00 | |
| 18400.00 | 90.09 | 179.83 | 10919.29 | -7547.18 | -212.36 | 7549.90 | 0.00 | |
| 18500.00 | 90.09 | 179.83 | 10919.14 | -7647.18 | -212.06 | 7649.87 | 0.00 | |
| 18600.00 | 90.09 | 179.83 | 10918.99 | -7747.18 | -211.76 | 7749.85 | 0.00 | |
| 18700.00 | 90.09 | 179.83 | 10918.84 | -7847.18 | -211.46 | 7849.82 | 0.00 | |
| 18800.00 | 90.09 | 179.83 | 10918.69 | -7947.18 | -211.17 | 7949.79 | 0.00 | |
| 18900.00 | 90.09 | 179.83 | 10918.54 | -8047.18 | -210.87 | 8049.77 | 0.00 | |
| 19000.00 | 90.09 | 179.83 | 10918.39 | -8147.18 | -210.57 | 8149.74 | 0.00 | |
| 19100.00 | 90.09 | 179.83 | 10918.24 | -8247.18 | -210.28 | 8249.72 | 0.00 | |
| 19200.00 | 90.09 | 179.83 | 10918.09 | -8347.18 | -209.98 | 8349.69 | 0.00 | |
| 19300.00 | 90.09 | 179.83 | 10917.94 | -8447.18 | -209.68 | 8449.67 | 0.00 | |

devon

**Well:** MR POTATO HEAD 11-14 FED COM 824H
**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 | 90.09 | 179.83 | 10917.79 | -8547.18 | -209.39 | 8549.64 | 0.00 | |
| 19500.00 | 90.09 | 179.83 | 10917.64 | -8647.18 | -209.09 | 8649.62 | 0.00 | |
| 19600.00 | 90.09 | 179.83 | 10917.49 | -8747.18 | -208.79 | 8749.59 | 0.00 | |
| 19700.00 | 90.09 | 179.83 | 10917.34 | -8847.18 | -208.49 | 8849.56 | 0.00 | |
| 19800.00 | 90.09 | 179.83 | 10917.19 | -8947.18 | -208.20 | 8949.54 | 0.00 | |
| 19900.00 | 90.09 | 179.83 | 10917.04 | -9047.18 | -207.90 | 9049.51 | 0.00 | |
| 20000.00 | 90.09 | 179.83 | 10916.89 | -9147.17 | -207.60 | 9149.49 | 0.00 | |
| 20100.00 | 90.09 | 179.83 | 10916.74 | -9247.17 | -207.31 | 9249.46 | 0.00 | |
| 20200.00 | 90.09 | 179.83 | 10916.59 | -9347.17 | -207.01 | 9349.44 | 0.00 | |
| 20300.00 | 90.09 | 179.83 | 10916.43 | -9447.17 | -206.71 | 9449.41 | 0.00 | |
| 20400.00 | 90.09 | 179.83 | 10916.28 | -9547.17 | -206.42 | 9549.38 | 0.00 | |
| 20500.00 | 90.09 | 179.83 | 10916.13 | -9647.17 | -206.12 | 9649.36 | 0.00 | |
| 20600.00 | 90.09 | 179.83 | 10915.98 | -9747.17 | -205.82 | 9749.33 | 0.00 | |
| 20700.00 | 90.09 | 179.83 | 10915.83 | -9847.17 | -205.52 | 9849.31 | 0.00 | |
| 20800.00 | 90.09 | 179.83 | 10915.68 | -9947.17 | -205.23 | 9949.28 | 0.00 | |
| 20900.00 | 90.09 | 179.83 | 10915.53 | -10047.17 | -204.93 | 10049.26 | 0.00 | |
| 21000.00 | 90.09 | 179.83 | 10915.38 | -10147.17 | -204.63 | 10149.23 | 0.00 | |
| 21100.00 | 90.09 | 179.83 | 10915.23 | -10247.17 | -204.34 | 10249.21 | 0.00 | |
| 21165.40 | 90.09 | 179.83 | 10915.13 | -10312.57 | -204.14 | 10314.59 | 0.00 | exit |
| 21200.00 | 90.09 | 179.83 | 10915.08 | -10347.17 | -204.04 | 10349.18 | 0.00 | |
| 21245.40 | 90.09 | 179.83 | 10915.00 | -10392.57 | -203.93 | 10394.57 | 0.00 | BHL |

# TEC-LOCK WEDGE

**8.625" 32.00 LB/FT (.352" Wall)**
**BORUSAN MANNESMANNP110 HSCY**

## Pipe Body Data

| | | |
|---|---|---|
| Nominal OD: | 8.625 | in |
| Nominal Wall: | .352 | in |
| Nominal Weight: | 32.00 | lb/ft |
| Plain End Weight: | 31.13 | lb/ft |
| Material Grade: | P110 HSCY | |
| Mill/Specification: | BORUSAN MANNESMANN | |
| Yield Strength: | 125,000 | psi |
| Tensile Strength: | 125,000 | psi |
| Nominal ID: | 7.921 | in |
| API Drift Diameter: | 7.796 | in |
| Special Drift Diameter: | 7.875 | in |
| RBW: | 87.5 % | |
| Body Yield: | 1,144,000 | lbf |
| Burst: | 8,930 | psi |
| Collapse: | 4,230 | psi |

## Connection Data

| | | |
|---|---|---|
| Standard OD: | 9.000 | in |
| Pin Bored ID: | 7.921 | in |
| Critical Section Area: | 8.61433 | in² |
| Tensile Efficiency: | 94.2 % | |
| Compressive Efficiency: | 100.0 % | |
| Longitudinal Yield Strength: | 1,077,000 | lbf |
| Compressive Limit: | 1,144,000 | lbf |
| Internal Pressure Rating: | 8,930 | psi |
| External Pressure Rating: | 4,230 | psi |
| Maximum Bend: | 62.6 | °/100 |

## Operational Data

| | | |
|---|---|---|
| Minimum Makeup Torque: | 29,900 | ft*lbf |
| Optimum Makeup Torque: | 37,375 | ft*lbf |
| Maximum Makeup Torque: | 80,900 | ft*lbf |
| Minimum Yield: | 89,900 | ft*lbf |
| Makeup Loss: | 5.97 | in |

## Notes

Operational Torque is equivalent to the Maximum Make-Up Torque.

HUNTING

Generated on 9/18/2018 1:14:29 PM

Please visit http://www.huntingplc.com for the latest technical information.

## 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 43 CFR 3172, 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 43 CFR 3172 per the following: Devon Energy will perform a full BOP test per 43 CFR 3172 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:

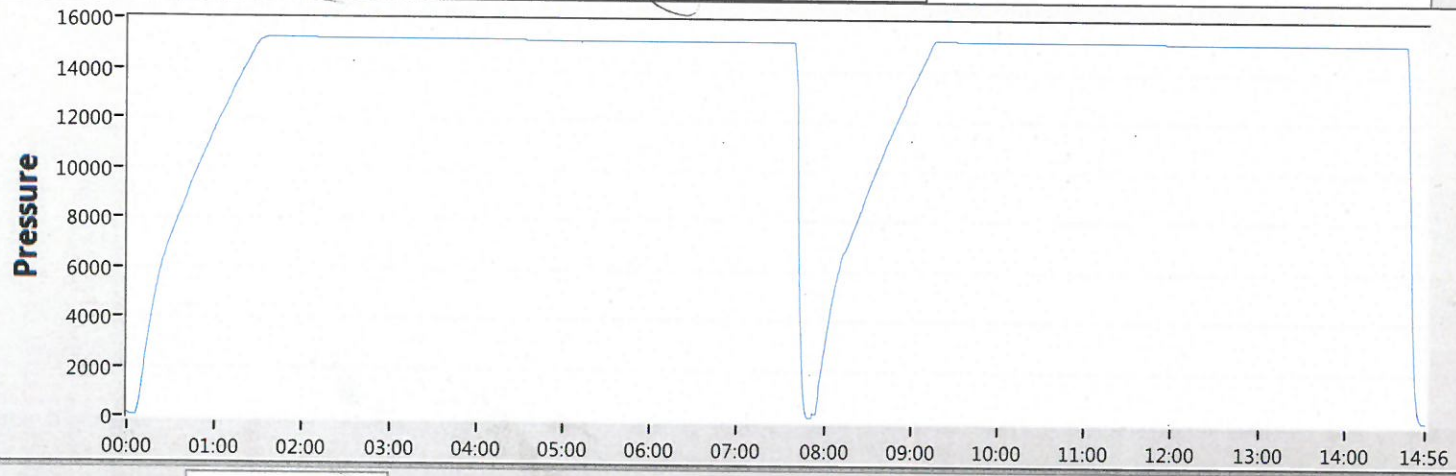
1. Primary barrier remains fluid
2. In the event of an influx due to being underbalanced and after a realized gain or flow, the order of closing BOPE is as follows:
   a) Annular first
   b) If annular were to not hold, Upper pipe rams second (which were tested on the skid BOP test)
   c) If the Upper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

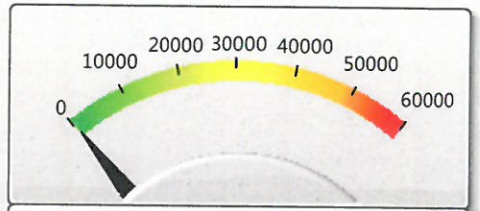
Cactus Wellhead

2-9-17 EBell

80.7 °F

15:49




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

MR POTATO HEAD 11-14 FED COM 824H

**1. Geologic Formations**

| | | | |
|---|---|---|---|
| TVD of target | 10915 | Pilot hole depth | N/A |
| MD at TD: | 21245 | Deepest expected fresh water | |

**Basin**

| Formation | Depth (TVD) from KB | Water/Mineral Bearing/Target Zone? | Hazards* |
|---|---|---|---|
| Rustler | 234 | | |
| Salt | 523 | | |
| Base of Salt | 2954 | | |
| Delaware | 3220 | | |
| Cherry Canyon | 4045 | | |
| Brushy Canyon | 5663 | | |
| 1st Bone Spring Lime | 6916 | | |
| Bone Spring 1st | 7947 | | |
| Bone Spring 2nd | 8762 | | |
| 3rd Bone Spring Lime | 9098 | | |
| Bone Spring 3rd | 9895 | | |
| Wolfcamp | 10221 | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

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

MR POTATO HEAD 11-14 FED COM 824H

**2. Casing Program (Primary Design)**

| Hole Size | Csg. Size | Wt (PPF) | Grade | Conn | Casing Interval | | Casing Interval | |
|---|---|---|---|---|---|---|---|---|
| | | | | | From (MD) | To (MD) | From (TVD) | To (TVD) |
| 14 3/4 | 10 3/4 | 40 1/2 | H40 | BTC | 0 | 259 | 0 | 259 |
| 9 7/8 | 8 5/8 | 32 | P110 | TLW | 0 | 10279 | 0 | 10279 |
| 7 7/8 | 5 1/2 | 17 | P110 | BTC | 0 | 21245 | 0 | 10915 |

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

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

Assuming no returns are established while drilling, Devon requests to pump a two stage cement job on the intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon and the second stage performed as a bradenhead squeeze with planned cement from the Brushy canyon to surface.
Devon will report to the BLM the volume of fluid (limited to 1 bbls) used to flush intermediate casing valves following backside cementing procedures.

| Casing | # Sks | TOC | Wt. ppg | Yld (ft3/sack) | Slurry Description |
|---|---|---|---|---|---|
| Surface | 176 | Surf | 13.2 | 1.44 | Lead: Class C Cement + additives |
| Int 1 | 409 | Surf | 13.0 | 2.3 | 2nd State: Bradenhead Squeeze - Lead: Class C Cement + additives |
| | 533 | 5684 | 13.2 | 1.44 | Tail: Class H / C + additives |
| Production | 117 | 8379 | 9 | 3.27 | Lead: Class H /C + additives |
| | 1438 | 10379 | 13.2 | 1.44 | Tail: Class H / C + additives |

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

MR POTATO HEAD 11-14 FED COM 824H

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

| BOP installed and tested before drilling which hole? | Size? | Min. Required WP | Type | ✓ | Tested to: |
|---|---|---|---|---|---|
| Int 1 | 13-5/8" | 5M | Annular | 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* | | |
| | | | Annular (5M) | | |
| | | | Blind Ram | | |
| | | | Pipe Ram | | |
| | | | Double Ram | | |
| | | | Other* | | |

| | |
|---|---|
| N | A variance is requested for the use of a diverter on the surface casing. See attached for schematic. |
| Y | A variance is requested to run a 5 M annular on a 10M system |

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

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

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

| | |
|---|---|
| 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 Rpeort and sbumitted to the BLM. |
| | No logs are planned based on well control or offset log information. |
| | Drill stem test? If yes, explain. |
| | Coring? If yes, explain. |

| 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 | 5960 |
| 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).
3 The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.
4 A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
5 Spudder rig operations is expected to take 4-5 days per well on a multi-well pa.
6 The NMOCD will be contacted and notified 24 hours prior to commencing spudder rig operations.
7 Drilling operations will be performed with drilling rig. A that time an approved BOP stack will be nippled up and tested on the wellhead before drilling operations commences on each well.
    a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

Attachments

X Directional Plan
_____ Other, describe

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

# Sundry Print Report

05/21/2024

**Well Name:** MR POTATO HEAD 11-14 FED COM

**Well Location:** T24S / R29E / SEC 11 / NENE / 32.2388914 / -103.9491936

**County or Parish/State:** EDDY / NM

**Well Number:** 824H

**Type of Well:** OIL WELL

**Allottee or Tribe Name:**

**Lease Number:** NMNM88134

**Unit or CA Name:**

**Unit or CA Number:** NMNM143625

**US Well Number:**

**Operator:** DEVON ENERGY PRODUCTION COMPANY LP

## Notice of Intent

**Sundry ID:** 2791193

**Type of Submission:** Notice of Intent

**Type of Action:** APD Change

**Date Sundry Submitted:** 05/20/2024

**Time Sundry Submitted:** 06:49

**Date proposed operation will begin:** 05/20/2024

**Procedure Description:** Devon Energy Production Co., L.P. (Devon) respectfully requests to move the BHL on the subject well. Please see attached revised C102, drill plan (break test variance included), and directional plan. Permitted BHL: SWSE 20 FSL, 2310 FEL, 14-24S-29E Proposed BHL: SESE 20 FSL, 1030 FEL, 14-24S-29E No new leases have been added since approved APD. API ID: 10400086509

## NOI Attachments

**Procedure Description**

WA018532805_MR_POTATO_HEAD_11_14_F_C_824H_WL_R1_20240520064829.pdf

10.750_40.5lb_H40_20240520064816.pdf

5.5_17lb_P110_BTC_20240520064816.pdf

MR_POTATO_HEAD_11_14_FED_COM_824H_Directional_Plan_04_24_24_20240520064816.pdf

8.625_32lb_P110HSCY_TLW_20240520064818.PDF

break_test_variance_BOP_1_15_24_20240520064817.pdf

MR_POTATO_HEAD_11_14_FED_COM_824H_R1_20240520064817.pdf

**Well Name:** MR POTATO HEAD 11-14 FED COM

**Well Location:** T24S / R29E / SEC 11 / NENE / 32.2388914 / -103.9491936

**County or Parish/State:** EDDY / NM

**Well Number:** 824H

**Type of Well:** OIL WELL

**Allottee or Tribe Name:**

**Lease Number:** NMNM88134

**Unit or CA Name:**

**Unit or CA Number:** NMNM143625

**US Well Number:**

**Operator:** DEVON ENERGY PRODUCTION COMPANY LP

## Operator

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

**Operator Electronic Signature:** SHAYDA OMOUMI

**Signed on:** MAY 20, 2024 06:49 AM

**Name:** DEVON ENERGY PRODUCTION COMPANY LP

**Title:** Regulatory Compliance Associate 3

**Street Address:** 333 W SHERIDAN AVE

**City:** OKLAHOMA CITY **State:** OK

**Phone:** (405) 235-3611

**Email address:** SHAYDA.OMOUMI@DVN.COM

## Field

**Representative Name:**

**Street Address:**

**City:** **State:** **Zip:**

**Phone:**

**Email address:**

# PECOS DISTRICT
# DRILLING CONDITIONS OF APPROVAL

| | |
|---|---|
| **OPERATOR'S NAME:** | **Devon Energy Production Company LP** |
| **LEASE NO.:** | **NMNM088134** |
| **LOCATION:** | Section 11, T.24 S., R.29 E., NMPM |
| **COUNTY:** | Eddy County, New Mexico |

| | |
|---|---|
| **WELL NAME & NO.:** | **Mr Potato Head 11-14 Fed Com 824H** |
| **SURFACE HOLE FOOTAGE:** | 200'/N & 796'/E |
| **BOTTOM HOLE FOOTAGE** | 20'/S & 1030'/E |
| **ATS/API ID:** | **ATS-22-1531** |
| **APD ID:** | **10400086509** |
| **Sundry ID:** | **2791193** |

COA

| | | | |
|---|---|---|---|
| H2S | No | | |
| Potash | None | | |
| Cave/Karst Potential | Medium | | |
| Cave/Karst Potential | ☐ Critical | | |
| Variance | ☐ None | ☑ Flex Hose | ☐ Other |
| Wellhead | Conventional and Multibowl | | |
| Other | ☐ 4 String | Capitan Reef: None | ☐ WIPP |
| Other | Pilot Hole: None | ☐ Open Annulus | |
| Cementing | Contingency Squeeze: None | Echo-Meter: None | Primary Cement Squeeze: Int 1 |
| Special Requirements | ☐ Water Disposal/Injection | ☑ COM | ☐ Unit |
| Special Requirements | ☐ Batch Sundry | | |
| Special Requirements Variance | ☑ Break Testing | ☑ Offline Cementing | ☐ Casing Clearance |

## A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet **43 CFR part 3170 Subpart 3176**, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

## B. CASING

1. The **10-3/4** inch surface casing shall be set at approximately **400 feet** (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt when present, and below usable fresh water) and cemented to the surface. The surface hole shall be **14 3/4** inch in diameter.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** 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.

**Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.**

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

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

    **Option 1 (Single Stage):**

    - Cement to surface. If cement does not circulate see B.1.a, c-d above. **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 at 5663' (533 sxs Class H/C+ additives)**.

b. Second stage:

- Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified. **(Squeeze 409 sxs Class C)**
  **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

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

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

❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

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

- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.
  **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

**C. PRESSURE CONTROL**

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

2.

**Option 1:**

a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi. **Annular which shall be tested to 3500 (70% Working Pressure) psi.**

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

**Option 2:**

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

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

## D. SPECIAL REQUIREMENT (S)

**Communitization Agreement**

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

- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

**BOPE Break Testing Variance (Approved)**

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted **(575-361-2822 Eddy County)** 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at **21**-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per **43 CFR part 3170 Subpart 3172**.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

**Offline Cementing**

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

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

Notify the BLM 4hrs prior to cementing offline at **Eddy County: 575-361-2822**.

# 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
**EMAIL** or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
**BLM_NM_CFO_DrillingNotifications@BLM.GOV**
(575) 361-2822

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

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

A. CASING

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

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 **43 CFR part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

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

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including

lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

e. The results of the test shall be reported to the appropriate BLM office.

f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR part 3170 Subpart 3172**.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

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

Long Vo (LVO) 5/21/2024

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

**SUNDRY NOTICES AND REPORTS ON WELLS**

***Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.***

***SUBMIT IN TRIPLICATE*** *- Other instructions on page 2*

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.

2. Name of Operator

9. API Well No.

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool or Exploratory Area

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*

11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

| TYPE OF SUBMISSION | TYPE OF ACTION | | | |
|---|---|---|---|---|
| ☐ Notice of Intent | ☐ Acidize | ☐ Deepen | ☐ Production (Start/Resume) | ☐ Water Shut-Off |
| | ☐ Alter Casing | ☐ Hydraulic Fracturing | ☐ Reclamation | ☐ Well Integrity |
| ☐ Subsequent Report | ☐ Casing Repair | ☐ New Construction | ☐ Recomplete | ☐ Other |
| | ☐ Change Plans | ☐ Plug and Abandon | ☐ Temporarily Abandon | |
| ☐ Final Abandonment Notice | ☐ Convert to Injection | ☐ Plug Back | ☐ Water Disposal | |

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*

Title

Signature

Date

**THE SPACE FOR FEDERAL OR STATE OFICE USE**

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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.

(Instructions on page 2)

## GENERAL INSTRUCTIONS

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

## SPECIFIC INSTRUCTIONS

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

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

## NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.
PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.
ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.
EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.
Response to this request is mandatory.
The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

## Additional Information

### Location of Well

0. SHL: NENE / 200 FNL / 796 FEL / TWSP: 24S / RANGE: 29E / SECTION: 11 / LAT: 32.2388914 / LONG: -103.9491936 ( TVD: 0 feet, MD: 0 feet )

PPP: NWNE / 100 FNL / 2310 FEL / TWSP: 24S / RANGE: 29E / SECTION: 11 / LAT: 32.239154 / LONG: -103.9540898 ( TVD: 10221 feet, MD: 10413 feet )

BHL: SWSE / 20 FSL / 2310 FEL / TWSP: 24S / RANGE: 29E / SECTION: 14 / LAT: 32.2103131 / LONG: -103.9541108 ( TVD: 10915 feet, MD: 21410 feet )

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 & 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

| [1] API Number | [2] Pool Code | [3] Pool Name |
|---|---|---|
| | 98220 | Purple Sage; Wolfcamp (Gas) |

| [4] Property Code | [5] Property Name | [6] Well Number |
|---|---|---|
| 326251 | MR POTATO HEAD 11 14 FED COM | 824H |

| [7] OGRID No. | [8] Operator Name | [9] Elevation |
|---|---|---|
| 6137 | DEVON ENERGY PRODUCTION COMPANY, L.P. | 3077.4 |

## [10] Surface Location

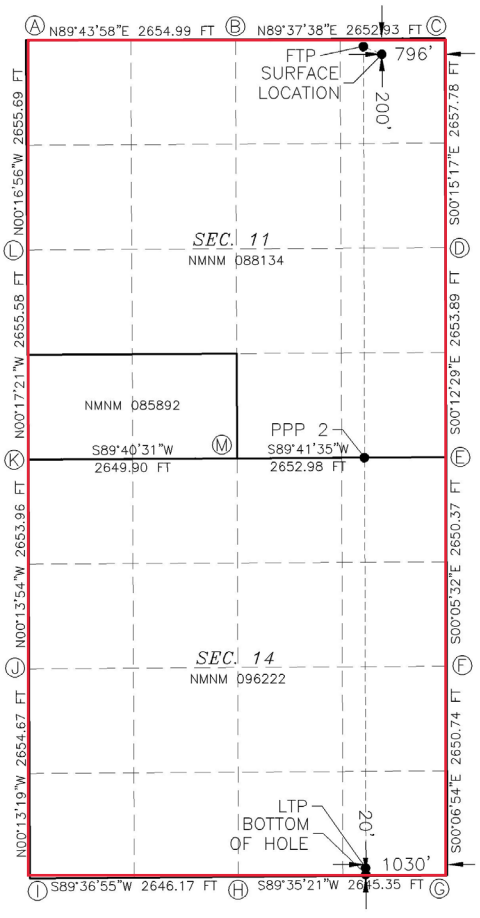
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| A | 11 | 24 S | 29 E | | 200 | NORTH | 796 | EAST | EDDY |

## [11] 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 |
|---|---|---|---|---|---|---|---|---|---|
| P | 14 | 24 S | 29 E | | 20 | SOUTH | 1030 | EAST | EDDY |

| [12] Dedicated Acres | [13] Joint or Infill | [14] Consolidation Code | [15] Order No. |
|---|---|---|---|
| 1280 | | | |

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.




*MR POTATO HEAD 11 14 FED COM 824H*
EL. = 3077.4

GEODETIC COORDINATES
NAD 83 NMSP EAST
SURFACE LOCATION
N.= 450854.62
E.= 660106.83
LAT. = 32.2388914°N
LONG. = 103.9491936°W

KICK OFF POINT
CALLS 51' FNL, 1030' FEL
N.= 451002
E.= 659872
LAT. = 32.23920409
LONG. = -103.95003451

FIRST TAKE POINT (PPP 1)
100' FNL, 1030' FEL
N.= 450953.10
E.= 659872.36
LAT. = 32.2391644°N
LONG. = 103.9499508°W

LAST TAKE POINT
100' FSL, 1030' FEL
N.= 440542.03
E.= 659902.74
LAT. = 32.2105457°N
LONG. = 103.9499727°W

BOTTOM OF HOLE
20' FSL, 1030' FEL
N.= 440462.05
E.= 659902.90
LAT. = 32.2103258°N
LONG. = 103.9499731°W

PPP 2
0' FSL, 1036' FEL
N.= 445743.80
E.= 659887.56
LAT. = 32.2248447°N
LONG. = 103.9499618°W

CORNER COORDINATES TABLE
NAD 83 NMSP EAST

| | | |
|---|---|---|
| A – | N.= 451030.14 | E.= 655595.01 |
| B – | N.= 451042.47 | E.= 658249.35 |
| C – | N.= 451059.78 | E.= 660901.66 |
| D – | N.= 448402.62 | E.= 660913.47 |
| E – | N.= 445749.34 | E.= 660923.11 |
| F – | N.= 443099.57 | E.= 660927.38 |
| G – | N.= 440449.43 | E.= 660932.70 |
| H – | N.= 440430.47 | E.= 658288.01 |
| I – | N.= 440412.71 | E.= 655642.49 |
| J – | N.= 443066.77 | E.= 655632.22 |
| K – | N.= 445720.12 | E.= 655621.49 |
| L – | N.= 448375.07 | E.= 655608.09 |
| M – | N.= 445735.13 | E.= 658270.76 |

LEGEND
SECTION LINE
QUARTER LINE
LEASE LINE
WELL PATH

## [17] 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.*

Shayda Omoumi 4/26/2024
Signature Date

Shayda Omoumi
Printed Name

shayda.omoumi@dvn.com
E-mail Address

## [18] 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.*

APRIL 22, 2024
Date of Survey

Signature and Seal of Professional Surveyor:
EDMOND F. JARAMILLO NEW MEXICO 12797 REGISTERED PROFESSIONAL SURVEYOR

Certificate Number: EDMOND F. JARAMILLO, PLS 12797
SURVEY NO. 9408A

Intent [X] As Drilled [ ]

| API # |
|---|
| |

| Operator Name: | Property Name: | Well Number |
|---|---|---|
| DEVON ENERGY PRODUCTION COMPANY, L.P. | MR POTATO HEAD 11 14 FED COM | 824H |

Kick Off Point (KOP)

| UL | Section | Township | Range | Lot | Feet | From N/S | Feet | From E/W | County |
|---|---|---|---|---|---|---|---|---|---|
| A | 11 | 24S | 29E | | 51 | NORTH | 1030 | EAST | EDDY |

| Latitude | Longitude | NAD |
|---|---|---|
| 32.23920409 | -103.95003451 | 83 |

First Take Point (FTP)

| UL | Section | Township | Range | Lot | Feet | From N/S | Feet | From E/W | County |
|---|---|---|---|---|---|---|---|---|---|
| A | 11 | 24S | 29E | | 100 | NORTH | 1030 | EAST | EDDY |

| Latitude | Longitude | NAD |
|---|---|---|
| 32.2391644 | 103.9499508 | 83 |

Last Take Point (LTP)

| UL | Section | Township | Range | Lot | Feet | From N/S | Feet | From E/W | County |
|---|---|---|---|---|---|---|---|---|---|
| P | 14 | 24S | 29E | | 100 | SOUTH | 1030 | EAST | EDDY |

| Latitude | Longitude | NAD |
|---|---|---|
| 32.2105457 | 103.9499727 | 83 |

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

Is this well an infill well? [Y]

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

| API # |
|---|
| 30-015-46722 |

| Operator Name: | Property Name: | Well Number |
|---|---|---|
| DEVON ENERGY PRODUCTION COMPANY, L.P. | MR POTATO HEAD 11-14 FED COM | 623H |

KZ 06/29/2018

# U. S. Steel Tubular Products

## 10.750" 40.50lb/ft (0.350" Wall) H40

11/4/2021 10:14:32 AM

| MECHANICAL PROPERTIES | Pipe | BTC | LTC | STC | | -- |
|---|---|---|---|---|---|---|
| Minimum Yield Strength | 40,000 | -- | -- | -- | psi | -- |
| Maximum Yield Strength | 80,000 | -- | -- | -- | psi | -- |
| Minimum Tensile Strength | 60,000 | -- | -- | -- | psi | -- |
| **DIMENSIONS** | **Pipe** | **BTC** | **LTC** | **STC** | | **--** |
| Outside Diameter | 10.750 | 0.000 | 0.000 | 11.750 | in. | -- |
| Wall Thickness | 0.350 | -- | -- | -- | in. | -- |
| Inside Diameter | 10.050 | -- | -- | 10.050 | in. | -- |
| Standard Drift | 9.894 | 9.894 | 9.894 | 9.894 | in. | -- |
| Alternate Drift | -- | -- | -- | -- | in. | -- |
| Nominal Linear Weight, T&C | 40.50 | -- | -- | -- | lb/ft | -- |
| Plain End Weight | 38.91 | -- | -- | -- | lb/ft | -- |
| **PERFORMANCE** | **Pipe** | **BTC** | **LTC** | **STC** | | **--** |
| Minimum Collapse Pressure | 1,390 | 1,390 | 1,390 | 1,390 | psi | -- |
| Minimum Internal Yield Pressure | 2,280 | 2,280 | 2,280 | 2,280 | psi | -- |
| Minimum Pipe Body Yield Strength | 457 | -- | -- | -- | 1,000 lbs | -- |
| Joint Strength | -- | -- | -- | 314 | 1,000 lbs | -- |
| Reference Length | -- | -- | -- | 5,164 | ft | -- |
| **MAKE-UP DATA** | **Pipe** | **BTC** | **LTC** | **STC** | | **--** |
| Make-Up Loss | -- | -- | -- | 3.50 | in. | -- |
| Minimum Make-Up Torque | -- | -- | -- | 2,360 | ft-lb | -- |
| Maximum Make-Up Torque | -- | -- | -- | 3,930 | ft-lb | -- |



## Notes



U. S. Steel Tubular Products
460 Wildwood Forest Drive, Suite 300S
Spring, Texas 77380

1-877-893-9461
connections@uss.com
www.usstubular.com

# U. S. Steel Tubular Products

## 5.500" 17.00lbs/ft (0.304" Wall) P110

2/21/2019 8:12:22 AM

| MECHANICAL PROPERTIES | Pipe | BTC | LTC | STC | |
|---|---|---|---|---|---|
| Minimum Yield Strength | 110,000 | -- | -- | -- | psi |
| Maximum Yield Strength | 140,000 | -- | -- | -- | psi |
| Minimum Tensile Strength | 125,000 | -- | -- | -- | psi |
| **DIMENSIONS** | **Pipe** | **BTC** | **LTC** | **STC** | |
| Outside Diameter | 5.500 | 6.050 | 6.050 | -- | in. |
| Wall Thickness | 0.304 | -- | -- | -- | in. |
| Inside Diameter | 4.892 | 4.892 | 4.892 | -- | in. |
| Standard Drift | 4.767 | 4.767 | 4.767 | -- | in. |
| Alternate Drift | -- | -- | -- | -- | in. |
| Nominal Linear Weight, T&C | 17.00 | -- | -- | -- | lbs/ft |
| Plain End Weight | 16.89 | -- | -- | -- | lbs/ft |
| **PERFORMANCE** | **Pipe** | **BTC** | **LTC** | **STC** | |
| Minimum Collapse Pressure | 7,480 | 7,480 | 7,480 | -- | psi |
| Minimum Internal Yield Pressure | 10,640 | 10,640 | 10,640 | -- | psi |
| Minimum Pipe Body Yield Strength | 546 | -- | -- | -- | 1,000 lbs |
| Joint Strength | -- | 568 | 445 | -- | 1,000 lbs |
| Reference Length | -- | 22,271 | 17,449 | -- | ft |
| **MAKE-UP DATA** | **Pipe** | **BTC** | **LTC** | **STC** | |
| Make-Up Loss | -- | 4.13 | 3.50 | -- | in. |
| Minimum Make-Up Torque | -- | -- | 3,470 | -- | ft-lbs |
| Maximum Make-Up Torque | -- | -- | 5,780 | -- | ft-lbs |



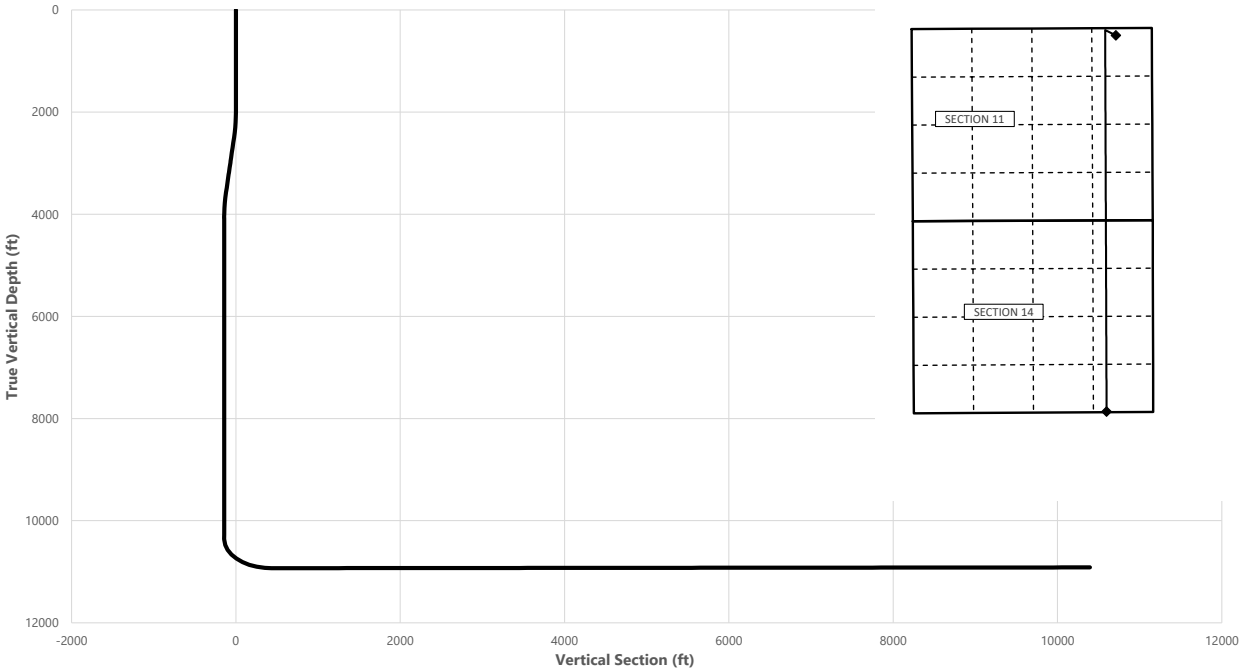
U. S. Steel Tubular Products
460 Wildwood Forest Drive, Suite 300S
Spring, Texas 77380

1-877-893-9461
connections@uss.com
www.usstubular.com

**Well:** MR POTATO HEAD 11-14 FED COM 824H
**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 |
| 2000.00 | 0.00 | 302.00 | 2000.00 | 0.00 | 0.00 | 0.00 | 0.00 | Start Tangent |
| 2500.00 | 10.00 | 302.00 | 2497.47 | 23.06 | -36.91 | -22.33 | 2.00 | Hold Tangent |
| 3595.90 | 10.00 | 302.00 | 3576.72 | 123.91 | -198.29 | -119.99 | 0.00 | Drop to Vertical |
| 4095.90 | 0.00 | 302.00 | 4074.18 | 146.97 | -235.20 | -142.33 | 2.00 | Hold Vertical |
| 10378.76 | 0.00 | 179.83 | 10357.04 | 146.97 | -235.20 | -142.33 | 0.00 | KOP |
| 11279.62 | 90.09 | 179.83 | 10930.00 | -426.85 | -233.50 | 431.35 | 10.00 | Landing Point |
| 21245.40 | 90.09 | 179.83 | 10915.00 | -10392.57 | -203.93 | 10394.57 | 0.00 | BHL |




| Key Depths | MD (ft) | TVD (ft) |
|---|---|---|
| Rustler | 234.00 | 234.00 |
| Salt | 523.00 | 523.00 |
| Base of Salt | 2963.58 | 2954.00 |
| Delaware | 3233.68 | 3220.00 |
| Cherry Canyon | 4066.72 | 4045.00 |
| Brushy Canyon | 5684.72 | 5663.00 |
| 1st Bone Spring Lime | 6937.72 | 6916.00 |
| Bone Spring 1st | 7968.72 | 7947.00 |
| Bone Spring 2nd | 8783.72 | 8762.00 |
| 3rd Bone Spring Lime | 9119.72 | 9098.00 |
| Bone Spring 3rd | 9916.72 | 9895.00 |
| Wolfcamp / Point of Penetration | 10242.72 | 10221.00 |
| exit | 21165.40 | 10915.13 |

| | MD (ft) | TVD (ft) | Lat (°) | Long (°) | Section Footages |
|---|---|---|---|---|---|
| **SHL** | 0.00 | 0.00 | 32.2388 | -103.9493 | 200' FNL, 796' FEL of Sec 11 in T24S, R29E |
| **KOP** | 10378.76 | 10357.04 | 32.2392 | -103.9500 | 51' FNL, 1030' FEL of Sec 11 in T24S, R29E |
| **Point of Penetration** | 10242.72 | 10221.00 | 32.2392 | -103.9500 | 100' FNL, 1030' FEL of Sec 11 in T24S, R29E |
| **Exit** | 21165.40 | 10915.13 | 32.2105 | -103.9997 | 100' FSL, 1030' FEL of Sec 14 in T24S, R29E |
| **BHL** | 21245.40 | 10915.00 | 32.2102 | -103.9501 | 20' FSL, 1030' FEL of Sec 14 in T24S, R29E |

| | Y | X | MD |
|---|---|---|---|
| **KOP** | **451002** | **659872** | 10378.76 |

devon

**Well:** MR POTATO HEAD 11-14 FED COM 824H
**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 | 302.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 200.00 | 0.00 | 302.00 | 200.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 234.00 | 0.00 | 302.00 | 234.00 | 0.00 | 0.00 | 0.00 | 0.00 | Rustler |
| 300.00 | 0.00 | 302.00 | 300.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 400.00 | 0.00 | 302.00 | 400.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 500.00 | 0.00 | 302.00 | 500.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 523.00 | 0.00 | 302.00 | 523.00 | 0.00 | 0.00 | 0.00 | 0.00 | Salt |
| 600.00 | 0.00 | 302.00 | 600.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 700.00 | 0.00 | 302.00 | 700.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 800.00 | 0.00 | 302.00 | 800.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 900.00 | 0.00 | 302.00 | 900.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1000.00 | 0.00 | 302.00 | 1000.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1100.00 | 0.00 | 302.00 | 1100.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1200.00 | 0.00 | 302.00 | 1200.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1300.00 | 0.00 | 302.00 | 1300.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1400.00 | 0.00 | 302.00 | 1400.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1500.00 | 0.00 | 302.00 | 1500.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1600.00 | 0.00 | 302.00 | 1600.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1700.00 | 0.00 | 302.00 | 1700.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1800.00 | 0.00 | 302.00 | 1800.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1900.00 | 0.00 | 302.00 | 1900.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 2000.00 | 0.00 | 302.00 | 2000.00 | 0.00 | 0.00 | 0.00 | 0.00 | Start Tangent |
| 2100.00 | 2.00 | 302.00 | 2099.98 | 0.92 | -1.48 | -0.90 | 2.00 | |
| 2200.00 | 4.00 | 302.00 | 2199.84 | 3.70 | -5.92 | -3.58 | 2.00 | |
| 2300.00 | 6.00 | 302.00 | 2299.45 | 8.32 | -13.31 | -8.05 | 2.00 | |
| 2400.00 | 8.00 | 302.00 | 2398.70 | 14.77 | -23.64 | -14.31 | 2.00 | |
| 2500.00 | 10.00 | 302.00 | 2497.47 | 23.06 | -36.91 | -22.33 | 2.00 | Hold Tangent |
| 2600.00 | 10.00 | 302.00 | 2595.95 | 32.27 | -51.64 | -31.25 | 0.00 | |
| 2700.00 | 10.00 | 302.00 | 2694.43 | 41.47 | -66.36 | -40.16 | 0.00 | |
| 2800.00 | 10.00 | 302.00 | 2792.91 | 50.67 | -81.09 | -49.07 | 0.00 | |
| 2900.00 | 10.00 | 302.00 | 2891.39 | 59.87 | -95.81 | -57.98 | 0.00 | |
| 2963.58 | 10.00 | 302.00 | 2954.00 | 65.72 | -105.18 | -63.65 | 0.00 | Base of Salt |
| 3000.00 | 10.00 | 302.00 | 2989.87 | 69.07 | -110.54 | -66.89 | 0.00 | |
| 3100.00 | 10.00 | 302.00 | 3088.35 | 78.27 | -125.27 | -75.80 | 0.00 | |
| 3200.00 | 10.00 | 302.00 | 3186.83 | 87.48 | -139.99 | -84.71 | 0.00 | |
| 3233.68 | 10.00 | 302.00 | 3220.00 | 90.58 | -144.95 | -87.71 | 0.00 | Delaware |
| 3300.00 | 10.00 | 302.00 | 3285.31 | 96.68 | -154.72 | -93.62 | 0.00 | |
| 3400.00 | 10.00 | 302.00 | 3383.79 | 105.88 | -169.45 | -102.54 | 0.00 | |
| 3500.00 | 10.00 | 302.00 | 3482.27 | 115.08 | -184.17 | -111.45 | 0.00 | |
| 3595.90 | 10.00 | 302.00 | 3576.72 | 123.91 | -198.29 | -119.99 | 0.00 | Drop to Vertical |
| 3600.00 | 9.92 | 302.00 | 3580.75 | 124.28 | -198.90 | -120.36 | 2.00 | |
| 3700.00 | 7.92 | 302.00 | 3679.54 | 132.50 | -212.04 | -128.31 | 2.00 | |
| 3800.00 | 5.92 | 302.00 | 3778.81 | 138.88 | -222.26 | -134.49 | 2.00 | |
| 3900.00 | 3.92 | 302.00 | 3878.43 | 143.42 | -229.53 | -138.89 | 2.00 | |
| 4000.00 | 1.92 | 302.00 | 3978.30 | 146.12 | -233.84 | -141.50 | 2.00 | |
| 4066.72 | 0.58 | 302.00 | 4045.00 | 146.89 | -235.08 | -142.25 | 2.00 | Cherry Canyon |
| 4095.90 | 0.00 | 302.00 | 4074.18 | 146.97 | -235.20 | -142.33 | 2.00 | Hold Vertical |
| 4100.00 | 0.00 | 179.83 | 4078.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 4200.00 | 0.00 | 179.83 | 4178.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 4300.00 | 0.00 | 179.83 | 4278.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 4400.00 | 0.00 | 179.83 | 4378.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 4500.00 | 0.00 | 179.83 | 4478.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 4600.00 | 0.00 | 179.83 | 4578.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 4700.00 | 0.00 | 179.83 | 4678.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 4800.00 | 0.00 | 179.83 | 4778.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 4900.00 | 0.00 | 179.83 | 4878.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5000.00 | 0.00 | 179.83 | 4978.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5100.00 | 0.00 | 179.83 | 5078.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5200.00 | 0.00 | 179.83 | 5178.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5300.00 | 0.00 | 179.83 | 5278.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5400.00 | 0.00 | 179.83 | 5378.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5500.00 | 0.00 | 179.83 | 5478.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5600.00 | 0.00 | 179.83 | 5578.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5684.72 | 0.00 | 179.83 | 5663.00 | 146.97 | -235.20 | -142.33 | 0.00 | Brushy Canyon |
| 5700.00 | 0.00 | 179.83 | 5678.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5800.00 | 0.00 | 179.83 | 5778.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 5900.00 | 0.00 | 179.83 | 5878.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6000.00 | 0.00 | 179.83 | 5978.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6100.00 | 0.00 | 179.83 | 6078.28 | 146.97 | -235.20 | -142.33 | 0.00 | |

devon

**Well:** MR POTATO HEAD 11-14 FED COM 824H
**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 |
|---|---|---|---|---|---|---|---|---|
| 6200.00 | 0.00 | 179.83 | 6178.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6300.00 | 0.00 | 179.83 | 6278.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6400.00 | 0.00 | 179.83 | 6378.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6500.00 | 0.00 | 179.83 | 6478.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6600.00 | 0.00 | 179.83 | 6578.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6700.00 | 0.00 | 179.83 | 6678.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6800.00 | 0.00 | 179.83 | 6778.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6900.00 | 0.00 | 179.83 | 6878.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 6937.72 | 0.00 | 179.83 | 6916.00 | 146.97 | -235.20 | -142.33 | 0.00 | 1st Bone Spring Lime |
| 7000.00 | 0.00 | 179.83 | 6978.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7100.00 | 0.00 | 179.83 | 7078.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7200.00 | 0.00 | 179.83 | 7178.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7300.00 | 0.00 | 179.83 | 7278.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7400.00 | 0.00 | 179.83 | 7378.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7500.00 | 0.00 | 179.83 | 7478.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7600.00 | 0.00 | 179.83 | 7578.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7700.00 | 0.00 | 179.83 | 7678.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7800.00 | 0.00 | 179.83 | 7778.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7900.00 | 0.00 | 179.83 | 7878.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 7968.72 | 0.00 | 179.83 | 7947.00 | 146.97 | -235.20 | -142.33 | 0.00 | Bone Spring 1st |
| 8000.00 | 0.00 | 179.83 | 7978.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 8100.00 | 0.00 | 179.83 | 8078.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 8200.00 | 0.00 | 179.83 | 8178.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 8300.00 | 0.00 | 179.83 | 8278.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 8400.00 | 0.00 | 179.83 | 8378.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 8500.00 | 0.00 | 179.83 | 8478.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 8600.00 | 0.00 | 179.83 | 8578.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 8700.00 | 0.00 | 179.83 | 8678.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 8783.72 | 0.00 | 179.83 | 8762.00 | 146.97 | -235.20 | -142.33 | 0.00 | Bone Spring 2nd |
| 8800.00 | 0.00 | 179.83 | 8778.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 8900.00 | 0.00 | 179.83 | 8878.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9000.00 | 0.00 | 179.83 | 8978.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9100.00 | 0.00 | 179.83 | 9078.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9119.72 | 0.00 | 179.83 | 9098.00 | 146.97 | -235.20 | -142.33 | 0.00 | 3rd Bone Spring Lime |
| 9200.00 | 0.00 | 179.83 | 9178.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9300.00 | 0.00 | 179.83 | 9278.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9400.00 | 0.00 | 179.83 | 9378.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9500.00 | 0.00 | 179.83 | 9478.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9600.00 | 0.00 | 179.83 | 9578.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9700.00 | 0.00 | 179.83 | 9678.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9800.00 | 0.00 | 179.83 | 9778.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9900.00 | 0.00 | 179.83 | 9878.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 9916.72 | 0.00 | 179.83 | 9895.00 | 146.97 | -235.20 | -142.33 | 0.00 | Bone Spring 3rd |
| 10000.00 | 0.00 | 179.83 | 9978.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 10100.00 | 0.00 | 179.83 | 10078.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 10200.00 | 0.00 | 179.83 | 10178.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 10242.72 | 0.00 | 179.83 | 10221.00 | 146.97 | -235.20 | -142.33 | 0.00 | Wolfcamp / Point of Penetration |
| 10300.00 | 0.00 | 179.83 | 10278.28 | 146.97 | -235.20 | -142.33 | 0.00 | |
| 10378.76 | 0.00 | 179.83 | 10357.04 | 146.97 | -235.20 | -142.33 | 0.00 | KOP |
| 10400.00 | 2.12 | 179.83 | 10378.28 | 146.58 | -235.20 | -141.93 | 10.00 | |
| 10500.00 | 12.12 | 179.83 | 10477.38 | 134.19 | -235.17 | -129.55 | 10.00 | |
| 10600.00 | 22.12 | 179.83 | 10572.82 | 104.79 | -235.08 | -100.15 | 10.00 | |
| 10700.00 | 32.12 | 179.83 | 10661.71 | 59.25 | -234.94 | -54.63 | 10.00 | |
| 10800.00 | 42.12 | 179.83 | 10741.35 | -1.03 | -234.76 | 5.63 | 10.00 | |
| 10900.00 | 52.12 | 179.83 | 10809.30 | -74.21 | -234.55 | 78.80 | 10.00 | |
| 11000.00 | 62.12 | 179.83 | 10863.52 | -158.09 | -234.30 | 162.66 | 10.00 | |
| 11100.00 | 72.12 | 179.83 | 10902.34 | -250.11 | -234.02 | 254.65 | 10.00 | |
| 11200.00 | 82.12 | 179.83 | 10924.60 | -347.47 | -233.73 | 351.99 | 10.00 | |
| 11279.62 | 90.09 | 179.83 | 10930.00 | -426.85 | -233.50 | 431.35 | 10.00 | Landing Point |
| 11300.00 | 90.09 | 179.83 | 10929.97 | -447.22 | -233.44 | 451.72 | 0.00 | |
| 11400.00 | 90.09 | 179.83 | 10929.82 | -547.22 | -233.14 | 551.69 | 0.00 | |
| 11500.00 | 90.09 | 179.83 | 10929.67 | -647.22 | -232.85 | 651.67 | 0.00 | |
| 11600.00 | 90.09 | 179.83 | 10929.52 | -747.22 | -232.55 | 751.64 | 0.00 | |
| 11700.00 | 90.09 | 179.83 | 10929.37 | -847.22 | -232.25 | 851.61 | 0.00 | |
| 11800.00 | 90.09 | 179.83 | 10929.22 | -947.22 | -231.96 | 951.59 | 0.00 | |
| 11900.00 | 90.09 | 179.83 | 10929.07 | -1047.22 | -231.66 | 1051.56 | 0.00 | |
| 12000.00 | 90.09 | 179.83 | 10928.92 | -1147.22 | -231.36 | 1151.54 | 0.00 | |
| 12100.00 | 90.09 | 179.83 | 10928.77 | -1247.22 | -231.06 | 1251.51 | 0.00 | |
| 12200.00 | 90.09 | 179.83 | 10928.62 | -1347.22 | -230.77 | 1351.49 | 0.00 | |
| 12300.00 | 90.09 | 179.83 | 10928.47 | -1447.22 | -230.47 | 1451.46 | 0.00 | |

devon

**Well:** MR POTATO HEAD 11-14 FED COM 824H
**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 |
|---|---|---|---|---|---|---|---|---|
| 12400.00 | 90.09 | 179.83 | 10928.32 | -1547.22 | -230.17 | 1551.44 | 0.00 | |
| 12500.00 | 90.09 | 179.83 | 10928.16 | -1647.22 | -229.88 | 1651.41 | 0.00 | |
| 12600.00 | 90.09 | 179.83 | 10928.01 | -1747.22 | -229.58 | 1751.38 | 0.00 | |
| 12700.00 | 90.09 | 179.83 | 10927.86 | -1847.22 | -229.28 | 1851.36 | 0.00 | |
| 12800.00 | 90.09 | 179.83 | 10927.71 | -1947.21 | -228.99 | 1951.33 | 0.00 | |
| 12900.00 | 90.09 | 179.83 | 10927.56 | -2047.21 | -228.69 | 2051.31 | 0.00 | |
| 13000.00 | 90.09 | 179.83 | 10927.41 | -2147.21 | -228.39 | 2151.28 | 0.00 | |
| 13100.00 | 90.09 | 179.83 | 10927.26 | -2247.21 | -228.09 | 2251.26 | 0.00 | |
| 13200.00 | 90.09 | 179.83 | 10927.11 | -2347.21 | -227.80 | 2351.23 | 0.00 | |
| 13300.00 | 90.09 | 179.83 | 10926.96 | -2447.21 | -227.50 | 2451.20 | 0.00 | |
| 13400.00 | 90.09 | 179.83 | 10926.81 | -2547.21 | -227.20 | 2551.18 | 0.00 | |
| 13500.00 | 90.09 | 179.83 | 10926.66 | -2647.21 | -226.91 | 2651.15 | 0.00 | |
| 13600.00 | 90.09 | 179.83 | 10926.51 | -2747.21 | -226.61 | 2751.13 | 0.00 | |
| 13700.00 | 90.09 | 179.83 | 10926.36 | -2847.21 | -226.31 | 2851.10 | 0.00 | |
| 13800.00 | 90.09 | 179.83 | 10926.21 | -2947.21 | -226.02 | 2951.08 | 0.00 | |
| 13900.00 | 90.09 | 179.83 | 10926.06 | -3047.21 | -225.72 | 3051.05 | 0.00 | |
| 14000.00 | 90.09 | 179.83 | 10925.91 | -3147.21 | -225.42 | 3151.03 | 0.00 | |
| 14100.00 | 90.09 | 179.83 | 10925.76 | -3247.21 | -225.12 | 3251.00 | 0.00 | |
| 14200.00 | 90.09 | 179.83 | 10925.61 | -3347.21 | -224.83 | 3350.97 | 0.00 | |
| 14300.00 | 90.09 | 179.83 | 10925.46 | -3447.21 | -224.53 | 3450.95 | 0.00 | |
| 14400.00 | 90.09 | 179.83 | 10925.31 | -3547.21 | -224.23 | 3550.92 | 0.00 | |
| 14500.00 | 90.09 | 179.83 | 10925.16 | -3647.21 | -223.94 | 3650.90 | 0.00 | |
| 14600.00 | 90.09 | 179.83 | 10925.01 | -3747.20 | -223.64 | 3750.87 | 0.00 | |
| 14700.00 | 90.09 | 179.83 | 10924.86 | -3847.20 | -223.34 | 3850.85 | 0.00 | |
| 14800.00 | 90.09 | 179.83 | 10924.71 | -3947.20 | -223.05 | 3950.82 | 0.00 | |
| 14900.00 | 90.09 | 179.83 | 10924.56 | -4047.20 | -222.75 | 4050.79 | 0.00 | |
| 15000.00 | 90.09 | 179.83 | 10924.41 | -4147.20 | -222.45 | 4150.77 | 0.00 | |
| 15100.00 | 90.09 | 179.83 | 10924.25 | -4247.20 | -222.16 | 4250.74 | 0.00 | |
| 15200.00 | 90.09 | 179.83 | 10924.10 | -4347.20 | -221.86 | 4350.72 | 0.00 | |
| 15300.00 | 90.09 | 179.83 | 10923.95 | -4447.20 | -221.56 | 4450.69 | 0.00 | |
| 15400.00 | 90.09 | 179.83 | 10923.80 | -4547.20 | -221.26 | 4550.67 | 0.00 | |
| 15500.00 | 90.09 | 179.83 | 10923.65 | -4647.20 | -220.97 | 4650.64 | 0.00 | |
| 15600.00 | 90.09 | 179.83 | 10923.50 | -4747.20 | -220.67 | 4750.62 | 0.00 | |
| 15700.00 | 90.09 | 179.83 | 10923.35 | -4847.20 | -220.37 | 4850.59 | 0.00 | |
| 15800.00 | 90.09 | 179.83 | 10923.20 | -4947.20 | -220.08 | 4950.56 | 0.00 | |
| 15900.00 | 90.09 | 179.83 | 10923.05 | -5047.20 | -219.78 | 5050.54 | 0.00 | |
| 16000.00 | 90.09 | 179.83 | 10922.90 | -5147.20 | -219.48 | 5150.51 | 0.00 | |
| 16100.00 | 90.09 | 179.83 | 10922.75 | -5247.20 | -219.19 | 5250.49 | 0.00 | |
| 16200.00 | 90.09 | 179.83 | 10922.60 | -5347.20 | -218.89 | 5350.46 | 0.00 | |
| 16300.00 | 90.09 | 179.83 | 10922.45 | -5447.20 | -218.59 | 5450.44 | 0.00 | |
| 16400.00 | 90.09 | 179.83 | 10922.30 | -5547.19 | -218.29 | 5550.41 | 0.00 | |
| 16500.00 | 90.09 | 179.83 | 10922.15 | -5647.19 | -218.00 | 5650.38 | 0.00 | |
| 16600.00 | 90.09 | 179.83 | 10922.00 | -5747.19 | -217.70 | 5750.36 | 0.00 | |
| 16700.00 | 90.09 | 179.83 | 10921.85 | -5847.19 | -217.40 | 5850.33 | 0.00 | |
| 16800.00 | 90.09 | 179.83 | 10921.70 | -5947.19 | -217.11 | 5950.31 | 0.00 | |
| 16900.00 | 90.09 | 179.83 | 10921.55 | -6047.19 | -216.81 | 6050.28 | 0.00 | |
| 17000.00 | 90.09 | 179.83 | 10921.40 | -6147.19 | -216.51 | 6150.26 | 0.00 | |
| 17100.00 | 90.09 | 179.83 | 10921.25 | -6247.19 | -216.22 | 6250.23 | 0.00 | |
| 17200.00 | 90.09 | 179.83 | 10921.10 | -6347.19 | -215.92 | 6350.20 | 0.00 | |
| 17300.00 | 90.09 | 179.83 | 10920.95 | -6447.19 | -215.62 | 6450.18 | 0.00 | |
| 17400.00 | 90.09 | 179.83 | 10920.80 | -6547.19 | -215.32 | 6550.15 | 0.00 | |
| 17500.00 | 90.09 | 179.83 | 10920.65 | -6647.19 | -215.03 | 6650.13 | 0.00 | |
| 17600.00 | 90.09 | 179.83 | 10920.50 | -6747.19 | -214.73 | 6750.10 | 0.00 | |
| 17700.00 | 90.09 | 179.83 | 10920.34 | -6847.19 | -214.43 | 6850.08 | 0.00 | |
| 17800.00 | 90.09 | 179.83 | 10920.19 | -6947.19 | -214.14 | 6950.05 | 0.00 | |
| 17900.00 | 90.09 | 179.83 | 10920.04 | -7047.19 | -213.84 | 7050.03 | 0.00 | |
| 18000.00 | 90.09 | 179.83 | 10919.89 | -7147.19 | -213.54 | 7150.00 | 0.00 | |
| 18100.00 | 90.09 | 179.83 | 10919.74 | -7247.19 | -213.25 | 7249.97 | 0.00 | |
| 18200.00 | 90.09 | 179.83 | 10919.59 | -7347.18 | -212.95 | 7349.95 | 0.00 | |
| 18300.00 | 90.09 | 179.83 | 10919.44 | -7447.18 | -212.65 | 7449.92 | 0.00 | |
| 18400.00 | 90.09 | 179.83 | 10919.29 | -7547.18 | -212.36 | 7549.90 | 0.00 | |
| 18500.00 | 90.09 | 179.83 | 10919.14 | -7647.18 | -212.06 | 7649.87 | 0.00 | |
| 18600.00 | 90.09 | 179.83 | 10918.99 | -7747.18 | -211.76 | 7749.85 | 0.00 | |
| 18700.00 | 90.09 | 179.83 | 10918.84 | -7847.18 | -211.46 | 7849.82 | 0.00 | |
| 18800.00 | 90.09 | 179.83 | 10918.69 | -7947.18 | -211.17 | 7949.79 | 0.00 | |
| 18900.00 | 90.09 | 179.83 | 10918.54 | -8047.18 | -210.87 | 8049.77 | 0.00 | |
| 19000.00 | 90.09 | 179.83 | 10918.39 | -8147.18 | -210.57 | 8149.74 | 0.00 | |
| 19100.00 | 90.09 | 179.83 | 10918.24 | -8247.18 | -210.28 | 8249.72 | 0.00 | |
| 19200.00 | 90.09 | 179.83 | 10918.09 | -8347.18 | -209.98 | 8349.69 | 0.00 | |
| 19300.00 | 90.09 | 179.83 | 10917.94 | -8447.18 | -209.68 | 8449.67 | 0.00 | |

devon

**Well:** MR POTATO HEAD 11-14 FED COM 824H
**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 | 90.09 | 179.83 | 10917.79 | -8547.18 | -209.39 | 8549.64 | 0.00 | |
| 19500.00 | 90.09 | 179.83 | 10917.64 | -8647.18 | -209.09 | 8649.62 | 0.00 | |
| 19600.00 | 90.09 | 179.83 | 10917.49 | -8747.18 | -208.79 | 8749.59 | 0.00 | |
| 19700.00 | 90.09 | 179.83 | 10917.34 | -8847.18 | -208.49 | 8849.56 | 0.00 | |
| 19800.00 | 90.09 | 179.83 | 10917.19 | -8947.18 | -208.20 | 8949.54 | 0.00 | |
| 19900.00 | 90.09 | 179.83 | 10917.04 | -9047.18 | -207.90 | 9049.51 | 0.00 | |
| 20000.00 | 90.09 | 179.83 | 10916.89 | -9147.17 | -207.60 | 9149.49 | 0.00 | |
| 20100.00 | 90.09 | 179.83 | 10916.74 | -9247.17 | -207.31 | 9249.46 | 0.00 | |
| 20200.00 | 90.09 | 179.83 | 10916.59 | -9347.17 | -207.01 | 9349.44 | 0.00 | |
| 20300.00 | 90.09 | 179.83 | 10916.43 | -9447.17 | -206.71 | 9449.41 | 0.00 | |
| 20400.00 | 90.09 | 179.83 | 10916.28 | -9547.17 | -206.42 | 9549.38 | 0.00 | |
| 20500.00 | 90.09 | 179.83 | 10916.13 | -9647.17 | -206.12 | 9649.36 | 0.00 | |
| 20600.00 | 90.09 | 179.83 | 10915.98 | -9747.17 | -205.82 | 9749.33 | 0.00 | |
| 20700.00 | 90.09 | 179.83 | 10915.83 | -9847.17 | -205.52 | 9849.31 | 0.00 | |
| 20800.00 | 90.09 | 179.83 | 10915.68 | -9947.17 | -205.23 | 9949.28 | 0.00 | |
| 20900.00 | 90.09 | 179.83 | 10915.53 | -10047.17 | -204.93 | 10049.26 | 0.00 | |
| 21000.00 | 90.09 | 179.83 | 10915.38 | -10147.17 | -204.63 | 10149.23 | 0.00 | |
| 21100.00 | 90.09 | 179.83 | 10915.23 | -10247.17 | -204.34 | 10249.21 | 0.00 | |
| 21165.40 | 90.09 | 179.83 | 10915.13 | -10312.57 | -204.14 | 10314.59 | 0.00 | exit |
| 21200.00 | 90.09 | 179.83 | 10915.08 | -10347.17 | -204.04 | 10349.18 | 0.00 | |
| 21245.40 | 90.09 | 179.83 | 10915.00 | -10392.57 | -203.93 | 10394.57 | 0.00 | BHL |

# TEC-LOCK WEDGE

**8.625" 32.00 LB/FT (.352" Wall)**
**BORUSAN MANNESMANNP110 HSCY**

## Pipe Body Data

| | | |
|---|---|---|
| Nominal OD: | 8.625 | in |
| Nominal Wall: | .352 | in |
| Nominal Weight: | 32.00 | lb/ft |
| Plain End Weight: | 31.13 | lb/ft |
| Material Grade: | P110 HSCY | |
| Mill/Specification: | BORUSAN MANNESMANN | |
| Yield Strength: | 125,000 | psi |
| Tensile Strength: | 125,000 | psi |
| Nominal ID: | 7.921 | in |
| API Drift Diameter: | 7.796 | in |
| Special Drift Diameter: | 7.875 | in |
| RBW: | 87.5 % | |
| Body Yield: | 1,144,000 | lbf |
| Burst: | 8,930 | psi |
| Collapse: | 4,230 | psi |

## Connection Data

| | | |
|---|---|---|
| Standard OD: | 9.000 | in |
| Pin Bored ID: | 7.921 | in |
| Critical Section Area: | 8.61433 | in² |
| Tensile Efficiency: | 94.2 % | |
| Compressive Efficiency: | 100.0 % | |
| Longitudinal Yield Strength: | 1,077,000 | lbf |
| Compressive Limit: | 1,144,000 | lbf |
| Internal Pressure Rating: | 8,930 | psi |
| External Pressure Rating: | 4,230 | psi |
| Maximum Bend: | 62.6 | °/100 |

## Operational Data

| | | |
|---|---|---|
| Minimum Makeup Torque: | 29,900 | ft*lbf |
| Optimum Makeup Torque: | 37,375 | ft*lbf |
| Maximum Makeup Torque: | 80,900 | ft*lbf |
| Minimum Yield: | 89,900 | ft*lbf |
| Makeup Loss: | 5.97 | in |

## Notes

Operational Torque is equivalent to the Maximum Make-Up Torque.

HUNTING

Generated on 9/18/2018 1:14:29 PM

Please visit http://www.huntingplc.com for the latest technical information.

## 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 43 CFR 3172, 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 43 CFR 3172 per the following: Devon Energy will perform a full BOP test per 43 CFR 3172 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:

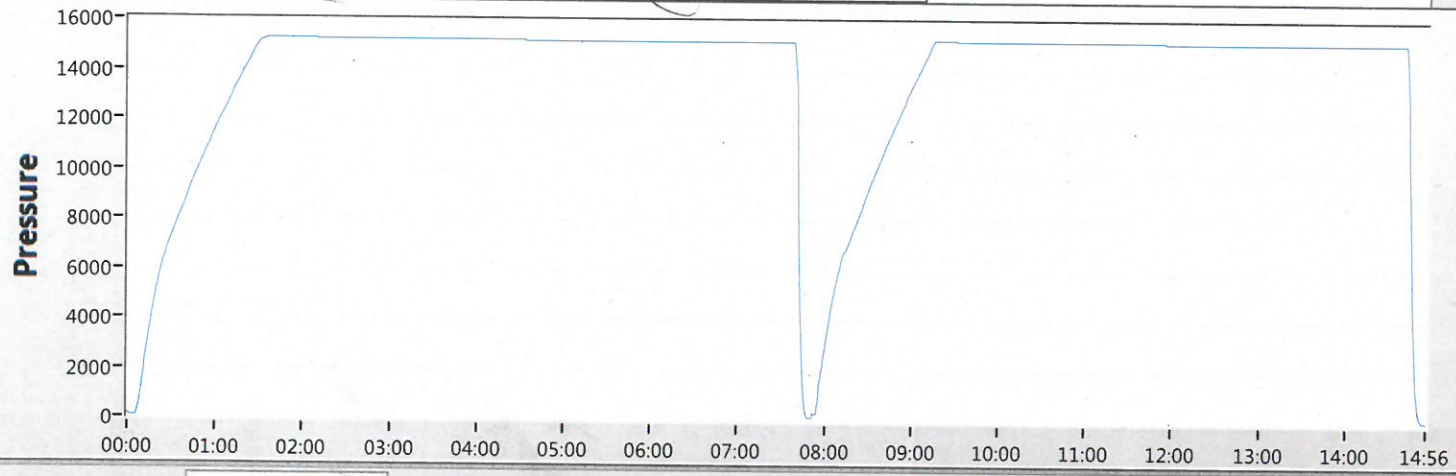
1. Primary barrier remains fluid
2. In the event of an influx due to being underbalanced and after a realized gain or flow, the order of closing BOPE is as follows:
   a) Annular first
   b) If annular were to not hold, Upper pipe rams second (which were tested on the skid BOP test)
   c) If the Upper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

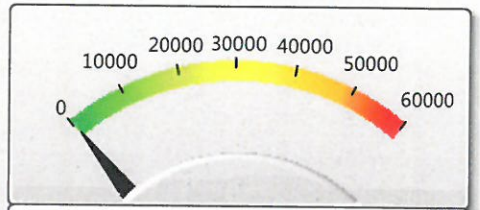
Cactus Wellhead

2-9-17 EBell

80.7 °F

15:49




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

MR POTATO HEAD 11-14 FED COM 824H

**1. Geologic Formations**

| | | | |
|---|---|---|---|
| TVD of target | 10915 | Pilot hole depth | N/A |
| MD at TD: | 21245 | Deepest expected fresh water | |

**Basin**

| Formation | Depth (TVD) from KB | Water/Mineral Bearing/Target Zone? | Hazards* |
|---|---|---|---|
| Rustler | 234 | | |
| Salt | 523 | | |
| Base of Salt | 2954 | | |
| Delaware | 3220 | | |
| Cherry Canyon | 4045 | | |
| Brushy Canyon | 5663 | | |
| 1st Bone Spring Lime | 6916 | | |
| Bone Spring 1st | 7947 | | |
| Bone Spring 2nd | 8762 | | |
| 3rd Bone Spring Lime | 9098 | | |
| Bone Spring 3rd | 9895 | | |
| Wolfcamp | 10221 | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

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

MR POTATO HEAD 11-14 FED COM 824H

**2. Casing Program (Primary Design)**

| Hole Size | Csg. Size | Wt (PPF) | Grade | Conn | Casing Interval | | Casing Interval | |
|---|---|---|---|---|---|---|---|---|
| | | | | | From (MD) | To (MD) | From (TVD) | To (TVD) |
| 14 3/4 | 10 3/4 | 40 1/2 | H40 | BTC | 0 | 259 | 0 | 259 |
| 9 7/8 | 8 5/8 | 32 | P110 | TLW | 0 | 10279 | 0 | 10279 |
| 7 7/8 | 5 1/2 | 17 | P110 | BTC | 0 | 21245 | 0 | 10915 |

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

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

Assuming no returns are established while drilling, Devon requests to pump a two stage cement job on the intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon and the second stage performed as a bradenhead squeeze with planned cement from the Brushy canyon to surface.
Devon will report to the BLM the volume of fluid (limited to 1 bbls) used to flush intermediate casing valves following backside cementing procedures.

| Casing | # Sks | TOC | Wt. ppg | Yld (ft3/sack) | Slurry Description |
|---|---|---|---|---|---|
| Surface | 176 | Surf | 13.2 | 1.44 | Lead: Class C Cement + additives |
| Int 1 | 409 | Surf | 13.0 | 2.3 | 2nd State: Bradenhead Squeeze - Lead: Class C Cement + additives |
| | 533 | 5684 | 13.2 | 1.44 | Tail: Class H / C + additives |
| Production | 117 | 8379 | 9 | 3.27 | Lead: Class H /C + additives |
| | 1438 | 10379 | 13.2 | 1.44 | Tail: Class H / C + additives |

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

MR POTATO HEAD 11-14 FED COM 824H

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

| BOP installed and tested before drilling which hole? | Size? | Min. Required WP | Type | ✓ | Tested to: |
|---|---|---|---|---|---|
| Int 1 | 13-5/8" | 5M | Annular | 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* | | |
| | | | Annular (5M) | | |
| | | | Blind Ram | | |
| | | | Pipe Ram | | |
| | | | Double Ram | | |
| | | | Other* | | |

| | |
|---|---|
| N | A variance is requested for the use of a diverter on the surface casing. See attached for schematic. |
| Y | A variance is requested to run a 5 M annular on a 10M system |

MR POTATO HEAD 11-14 FED COM 824H

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

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

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

| | |
|---|---|
| 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 Rpeort and sbumitted to the BLM. |
| | No logs are planned based on well control or offset log information. |
| | Drill stem test? If yes, explain. |
| | Coring? If yes, explain. |

| 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 | 5960 |
| 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. |

MR POTATO HEAD 11-14 FED COM 824H

**8. Other facets of operation**

Is this a walking operation? Potentially

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

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

Will be pre-setting casing? Potentially

1 Spudder rig will move in and batch drill surface hole.
    a. Rig will utilize fresh water based mud to drill surface hole to TD. Solids control will be handled entirely on a closed loop basis.,
2 After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
3 The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.
4 A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
5 Spudder rig operations is expected to take 4-5 days per well on a multi-well pa.
6 The NMOCD will be contacted and notified 24 hours prior to commencing spudder rig operations.
7 Drilling operations will be performed with drilling rig. A that time an approved BOP stack will be nippled up and tested on the wellhead before drilling operations commences on each well.
    a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

Attachments

X Directional Plan
_____ Other, describe

Mr Potato Head 11-14 Fed Com 824H

| 10 3/4 | surface csg in a | 14 3/4 | inch hole. | | Design Factors | | | Surface | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Segment | #/ft | Grade | | Coupling | Joint | Collapse | Burst | Length | B@s | a-B | a-C | Weight |
| "A" | 40.50 | | h 40 | btc | 28.21 | 7.43 | 0.41 | 400 | 13 | 0.68 | 14.04 | 16,200 |
| "B" | | | | btc | | | | 0 | | | | 0 |
| | w/8.4#/g mud, 30min Sfc Csg Test psig: | 1,421 | | Tail Cmt | does not | circ to sfc. | Totals: | 400 | | | | 16,200 |

Comparison of Proposed to Minimum Required Cement Volumes

| Hole Size | Annular Volume | 1 Stage Cmt Sx | 1 Stage CuFt Cmt | Min Cu Ft | 1 Stage % Excess | Drilling Mud Wt | Calc MASP | Req'd BOPE | Min Dist Hole-Cplg |
|---|---|---|---|---|---|---|---|---|---|
| 14 3/4 | 0.5563 | 176 | 253 | 223 | 14 | 9.00 | 3345 | 5M | 2.00 |

Burst Frac Gradient(s) for Segment(s) A, B = , b All > 0.70, OK.

Site plat (pipe racks S or E) as per O.O.1.III.D.4.i, not found.

| 8 5/8 | casing inside the | 10 3/4 | | Design Factors | | | Int 1 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Segment | #/ft | Grade | Coupling | Joint | Collapse | Burst | Length | B@s | a-B | a-C | Weight |
| "A" | 32.00 | p 110 | tlw | 3.27 | 0.75 | 1.5 | 10,279 | 2 | 2.51 | 1.26 | 328,928 |
| "B" | | | | | | | 0 | | | | 0 |
| | w/8.4#/g mud, 30min Sfc Csg Test psig: | 2,261 | | | | Totals: | 10,279 | | | | 328,928 |
| | The cement volume(s) are intended to achieve a top of | | | 0 | ft from | surface or a | 400 | | | | overlap. |

| Hole Size | Annular Volume | 1 Stage Cmt Sx | 1 Stage CuFt Cmt | Min Cu Ft | 1 Stage % Excess | Drilling Mud Wt | Calc MASP | Req'd BOPE | Min Dist Hole-Cplg |
|---|---|---|---|---|---|---|---|---|---|
| 9 7/8 | 0.1261 | 533 | 768 | 1304 | -41 | 10.50 | 3552 | 5M | 0.44 |
| D V Tool(s): | | | 5663 | | | | sum of sx | Σ CuFt | Σ%excess |
| t by stage % : | | 32 | 30 | | | | 942 | 1708 | 31 |

Class 'C' tail cmt yld > 1.35

Tail cmt

| 5 1/2 | casing inside the | 8 5/8 | | Design Factors | | | Prod 1 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Segment | #/ft | Grade | Coupling | Body | Collapse | Burst | Length | B@s | a-B | a-C | Weight |
| "A" | 17.00 | p 110 | btc | 2.94 | 1.26 | 1.79 | 21,245 | 2 | 3.00 | 2.11 | 361,165 |
| "B" | | | | | | | 0 | | | | 0 |
| | w/8.4#/g mud, 30min Sfc Csg Test psig: | 2,401 | | | | Totals: | 21,245 | | | | 361,165 |
| | The cement volume(s) are intended to achieve a top of | | | 10079 | ft from | surface or a | 200 | | | | overlap. |

| Hole Size | Annular Volume | 1 Stage Cmt Sx | 1 Stage CuFt Cmt | Min Cu Ft | 1 Stage % Excess | Drilling Mud Wt | Calc MASP | Req'd BOPE | Min Dist Hole-Cplg |
|---|---|---|---|---|---|---|---|---|---|
| 7 7/8 | 0.1733 | 1555 | 2453 | 1935 | 27 | 10.50 | | | 0.91 |

Class 'C' tail cmt yld > 1.35

#N/A

| 0 | | 5 1/2 | | Design Factors | | | <Choose Casing> | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Segment | #/ft | Grade | Coupling | #N/A | Collapse | Burst | Length | B@s | a-B | a-C | Weight |
| "A" | | | 0.00 | | | | 0 | | | | 0 |
| "B" | | | 0.00 | | | | 0 | | | | 0 |
| | w/8.4#/g mud, 30min Sfc Csg Test psig: | | | | | Totals: | 0 | | | | 0 |
| | Cmt vol calc below includes this csg, TOC intended | | | #N/A | ft from | surface or a | #N/A | | | | overlap. |

| Hole Size | Annular Volume | 1 Stage Cmt Sx | 1 Stage CuFt Cmt | Min Cu Ft | 1 Stage % Excess | Drilling Mud Wt | Calc MASP | Req'd BOPE | Min Dist Hole-Cplg |
|---|---|---|---|---|---|---|---|---|---|
| 0 | | #N/A | #N/A | 0 | #N/A | | | | |

#N/A Capitan Reef est top XXXX.

**District I**
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
**District II**
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
**District III**
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
**District IV**
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

# State of New Mexico
# Energy, Minerals and Natural Resources
# Oil Conservation Division
# 1220 S. St Francis Dr.
# Santa Fe, NM 87505



## CONDITIONS

| | |
|---|---|
| Operator:<br>DEVON ENERGY PRODUCTION COMPANY, LP<br>333 West Sheridan Ave.<br>Oklahoma City, OK 73102 | OGRID:<br>6137 |
| | Action Number:<br>346412 |
| | Action Type:<br>[C-103] NOI Change of Plans (C-103A) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| ward.rikala | All original COA's still apply. Additionally, if cement is not circulated to surface during cementing operations, then a CBL is required. | 6/10/2024 |