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

Sundry Print Report

07/22/2022

Well Name: SERPENTINE 2-35 STATE FED COM

Well Location: T23S / R33E / SEC 2 / SWSE /

County or Parish/State:

Well Number: 26H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM113969

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002550070

Well Status: Approved Application for Permit to Drill

Operator: DEVON ENERGY PRODUCTION COMPANY LP

Notice of Intent

Sundry ID: 2672233

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 05/27/2022

Time Sundry Submitted: 08:38

Date proposed operation will begin: 05/18/2022

Procedure Description: Devon Energy Production Co., L.P. (Devon) respectfully requests to change the depth on the subject well. Please see attached revised drill plan and directional plan. Permitted TVD/MD: 12275/22541- Bell Lake; Wolfcamp, North (5170) Proposed TVD/MD: 12050/22360- Brinninstool; Bone Spring (7320)

NOI Attachments

Procedure Description

10.750_40.5lb_H40_20220518105906.pdf

8.625_32lb_P110HSCY_TLW_20220518105907.PDF

5.5_17lb_P110_BTC_1__20220518105702.pdf

SERPENTINE_2_35_St_Fed_Com_26H_20220518105413.pdf

SERPENTINE_2_35_St_Fed_Com_26H_Directional_Plan_05_10_22_20220518105403.pdf

Well Name: SERPENTINE 2-35 STATE FED COM

Well Location: T23S / R33E / SEC 2 / SWSE /

County or Parish/State:

Well Number: 26H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM113969

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002550070

Well Status: Approved Application for Permit to Drill

Operator: DEVON ENERGY PRODUCTION COMPANY LP

Conditions of Approval

Additional

2_23_33_O_Sundry_ID_2672233_Serpentine_2_35_State_Fed_Com_26H_Lea_NM113969_13_22d_1_13_22_LV_20220707085105.pdf

Serpentine_2_35_State_Fed_Com_26H_Dr_COA_Sundry_ID_2672233_20220707085105.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: CHELSEY GREEN

Signed on: MAY 18, 2022 07:13 AM

Name: DEVON ENERGY PRODUCTION COMPANY LP

Title: Regulatory Compliance Professional

Street Address: 333 West Sheridan Avenue

City: Oklahoma City **State:** OK

Phone: (405) 228-8595

Email address: Chelsey.Green@dvn.com

Field

Representative Name:

Street Address:

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

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CODY LAYTON

BLM POC Title: Assistant Field Manager Lands & Minerals

BLM POC Phone: 5752345959

BLM POC Email Address: clayton@blm.gov

Disposition: Approved

Disposition Date: 07/20/2022

Signature: Cody R. Layton

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) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
30-025-50070	7320	Brinninstool; Bone Spring

Property Code	Property Name	Well Number
332770	SERPENTINE 2-35 STATE FED COM	26H

OGRID No.	Operator Name	Elevation
6137	DEVON ENERGY PRODUCTION COMPANY, L.P.	3551.8'

Surface Location

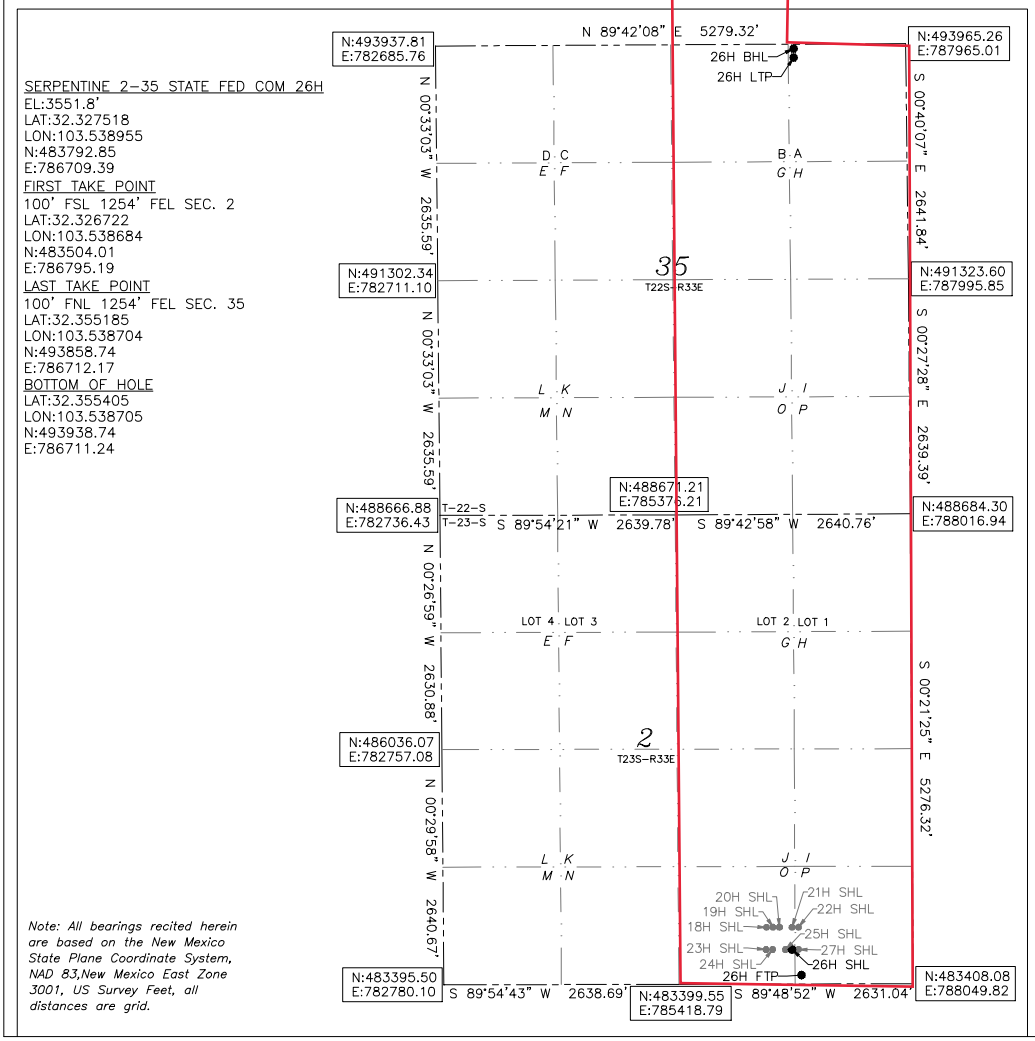
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	2	23-S	33-E		389	SOUTH	1338	EAST	LEA

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
A	35	22-S	33-E		20	NORTH	1254	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
680			

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



OPERATOR CERTIFICATION

I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Chelsey Green 5/18/22
Signature Date

Chelsey Green
Printed Name

chelsey.green@dvn.com
E-mail Address

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.

10/8/2021
Date of Survey

Signature & Seal of Professional Surveyor

B. L. LAMAN NEW MEXICO 22404 PROFESSIONAL SURVEYOR

10/21/21

Certificate No. 22404 B.L. LAMAN

DRAWN BY: CM

Intent [ ] As Drilled [ ]

API #

Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County

Latitude	Longitude	NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County

Latitude	Longitude	NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County

Latitude	Longitude	NAD

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.

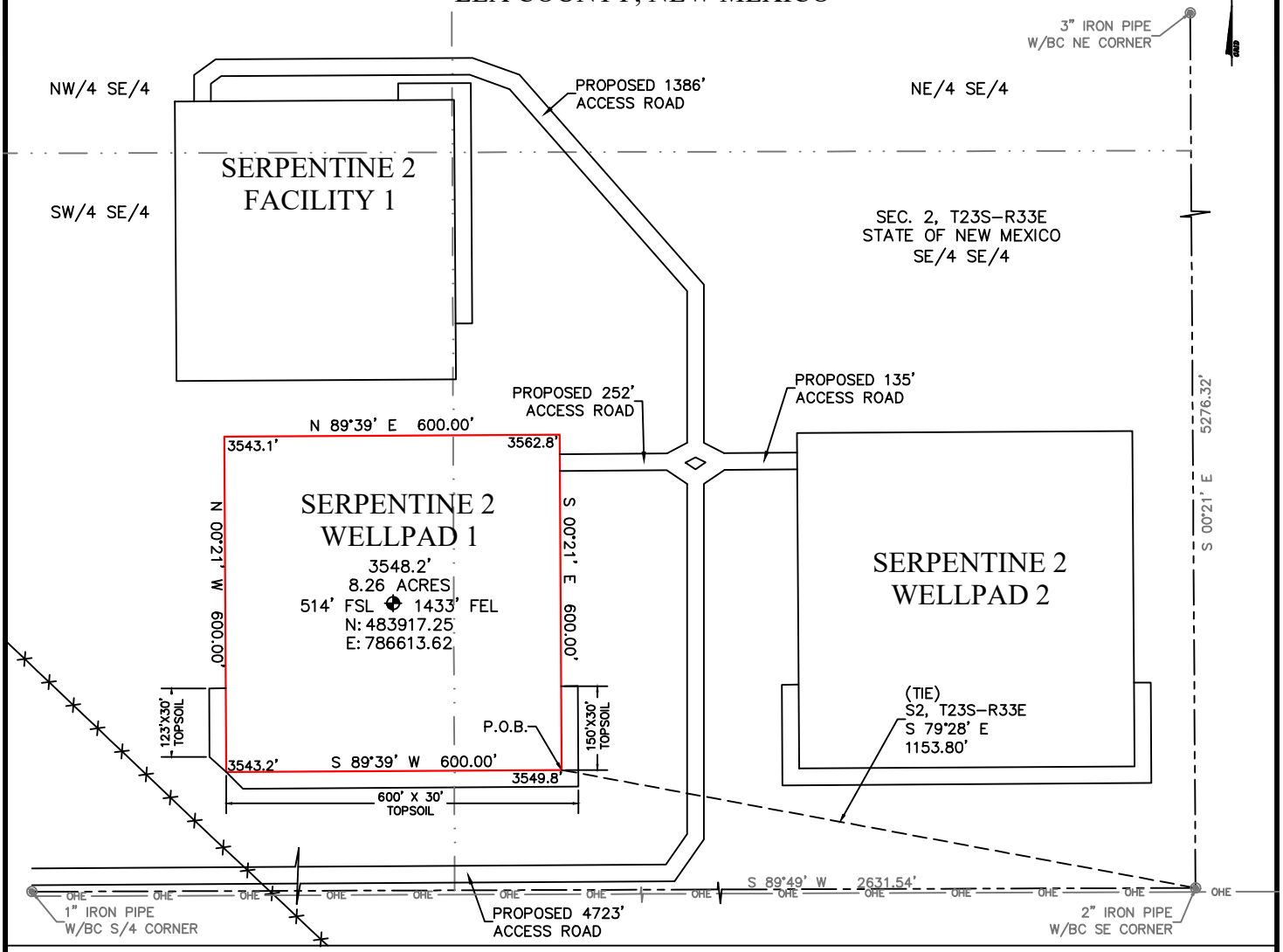
API #
30-025-50074

Operator Name:	Property Name:	Well Number
DEVON ENERGY PRODUCTION COMPANY, LP	SERPENTINE 2-26 STATE FED COM	30H

KZ 06/29/2018

SERPENTINE 2 WELLPAD 1

DEVON ENERGY PRODUCTION COMPANY, L.P.
IN THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER (SW/4 SE/4)
AND THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER (SE/4 SE/4)
SECTION 2, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, NEW MEXICO



DESCRIPTION

BEING A SURFACE SITE EASEMENT LYING IN SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER (SW/4 SE/4) AND THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER (SE/4 SE/4) OF SECTION 2, TOWNSHIP 23 SOUTH, RANGE 33 EAST N.M.P.M., LEA COUNTY, NEW MEXICO.

BEGINNING AT THE SOUTHEAST CORNER OF SAID SITE EASEMENT, WHERE A 2" IRON PIPE W/BC FOR THE SOUTHEAST CORNER OF SECTION 2, TOWNSHIP 23 SOUTH, RANGE 33 EAST N.M.P.M. BEARS S 79°28' E , A DISTANCE 1153.80';

THENCE S 89°39' W, A DISTANCE 600.00 FEET TO THE SOUTHWEST CORNER OF THIS EASEMENT;
THENCE N 00°21' W, A DISTANCE 600.00 FEET TO THE NORTHWEST CORNER OF THIS EASEMENT;
THENCE N 89°39' E, A DISTANCE 600.00 FEET TO THE NORTHEAST CORNER OF THIS EASEMENT;
THENCE S 00°21' E, A DISTANCE 600.00 FEET TO THE SOUTHEAST CORNER OF THIS EASEMENT,
TO THE POINT OF BEGINNING; CONTAINING 8.26 ACRES.

GENERAL NOTES:

1.) THE INTENT OF THIS SURVEY IS TO ACQUIRE A BUSINESS LEASE FOR THE PURPOSE OF BUILDING A WELLPAD.
2.) All bearings recited herein are based on the New Mexico State Plane Coordinate System, NAD 83, New Mexico East Zone 3001, US Survey Feet, all distances are grid.

I, B.L. Laman, New Mexico PLS No. 22404, hereby certify this survey to reflect an actual survey made on the ground under my supervision. This survey meets the minimum standards for surveying in New Mexico.

B.L. Laman PLS #22404
Horizonrow, LLC
Date Signed: 10-15-2021
P.O. Box 548, Dry Creek, La.
(903) 388-3045 70637
Employee of Horizonrow, LLC

B. L. LAMAN
NEW MEXICO
22404
PROFESSIONAL SURVEYOR

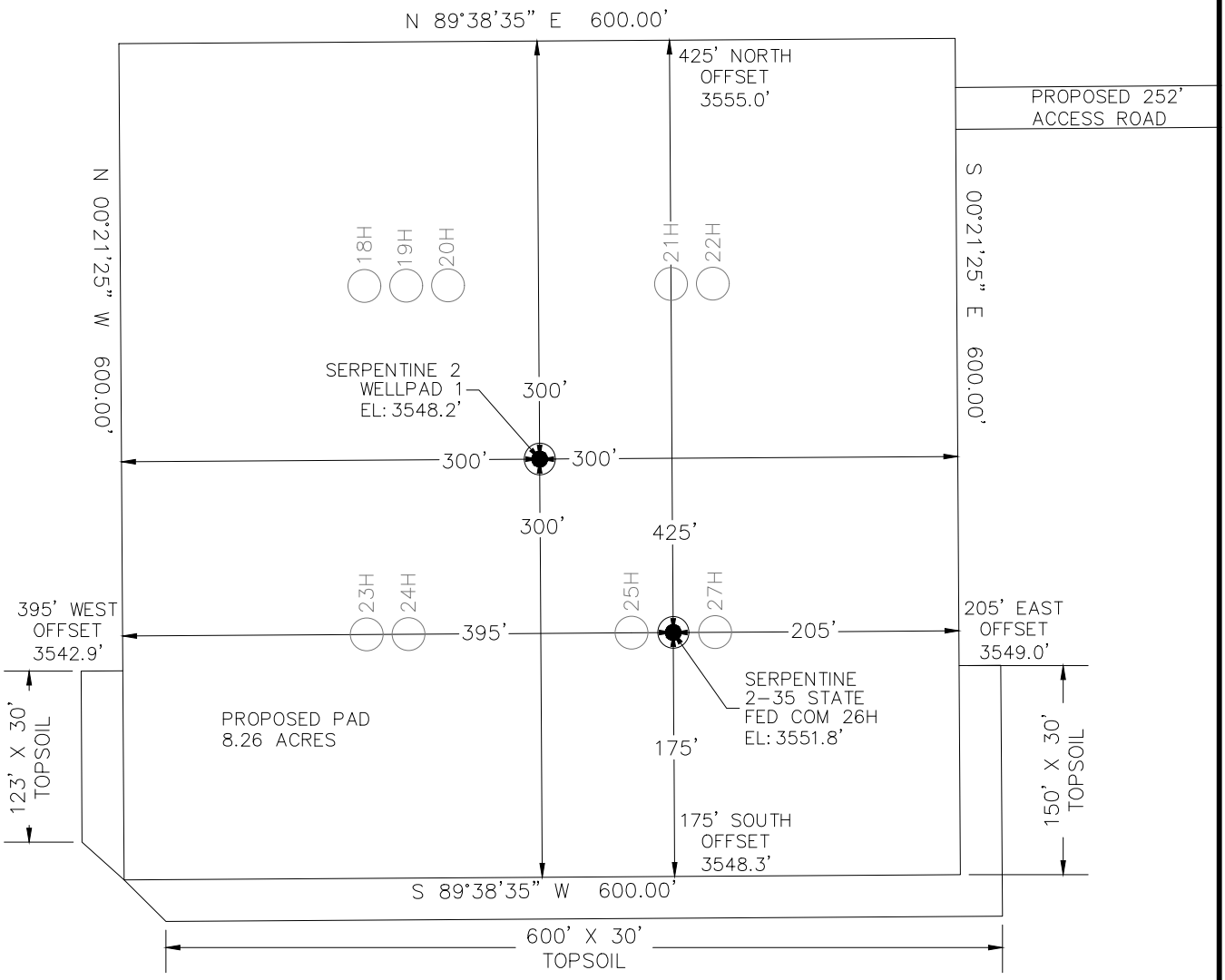
DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF NM 128 AND DELAWARE BASIN ROAD, HEAD NORTH ON DELAWARE BASIN ROAD FOR 6.0 MILES. TURN LEFT AND HEAD WEST ONTO AN ACCESS ROAD FOR 2.4 MILES. TURN RIGHT AND HEAD NORTH ONTO AN ACCESS ROAD FOR 2.0 MILES. TURN RIGHT ONTO AN ACCESS ROAD AND EXIT THE SOUTHEAST CORNER OF A WELLPAD AND CONTINUE ONTO THE PROPOSED SERPENTINE 2 PRIMARY ACCESS ROAD FOR 0.9 OF A MILE TO THE BEGINNING OF THE PROPOSED SERPENTINE 2 WELLPAD 1 ACCESS ROAD. HEAD WEST FOR 252' TO THE NORTHEAST CORNER OF THE SERPENTINE 2 WELLPAD 1.

0 300 600

HORIZON ROW LLC Drawn for: devon		DEVON ENERGY PRODUCTION COMPANY, L.P. SERPENTINE 2 WELLPAD 1 SURVEY PLAT SHOWING A WELLPAD ON THE PROPERTY OF THE STATE OF NEW MEXICO	SITE NUMBER: AA000504612 WBS NUMBER: SCALE: 1" = 300' REVISIONS: DATE OF SURVEY: 06/25/21
Drawn by: CHRIS MAAS	Date: 10/12/2021		

SECTION 2, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
SITE MAP



SERPENTINE 2-35 STATE FED COM 18H
638' FSL 1558' FEL SEC. 2
EL: 3546.9'
N: 484041.47
E: 786487.84

SERPENTINE 2-35 STATE FED COM 19H
638' FSL 1528' FEL SEC. 2
EL: 3547.8'
N: 484041.66
E: 786517.84

SERPENTINE 2-35 STATE FED COM 20H
638' FSL 1498' FEL SEC. 2
EL: 3548.7'
N: 484041.84
E: 786547.84

SERPENTINE 2-35 STATE FED COM 21H
639' FSL 1338' FEL SEC. 2
EL: 3554.1'
N: 484042.84
E: 786707.83

SERPENTINE 2-35 STATE FED COM 22H
639' FSL 1308' FEL SEC. 2
EL: 3555.5'
N: 484043.03
E: 786737.83

SERPENTINE 2-35 STATE FED COM 23H
388' FSL 1558' FEL SEC. 2
EL: 3544.3'
N: 483791.48
E: 786489.40

SERPENTINE 2-35 STATE FED COM 24H
388' FSL 1528' FEL SEC. 2
EL: 3545.4'
N: 483791.66
E: 786519.40

SERPENTINE 2-35 STATE FED COM 25H
389' FSL 1368' FEL SEC. 2
EL: 3550.8'
N: 483792.66
E: 786679.39

SERPENTINE 2-35 STATE FED COM 26H
389' FSL 1338' FEL SEC. 2
EL: 3551.8'
N: 483792.85
E: 786709.39

SERPENTINE 2-35 STATE FED COM 27H
389' FSL 1308' FEL SEC. 2
EL: 3553.1'
N: 483793.03
E: 786739.39

Note: All bearings recited herein are based on the New Mexico State Plane Coordinate System, NAD 83, New Mexico East Zone 3001, US Survey Feet, all distances are grid.

DEVON ENERGY PRODUCTION COMPANY, L.P.
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LOCATED 389 FT. FROM THE SOUTH LINE
AND 1338 FT. FROM THE EAST LINE OF
SECTION 2, TOWNSHIP 23 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

0 125 250

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HORIZON ROW LLC

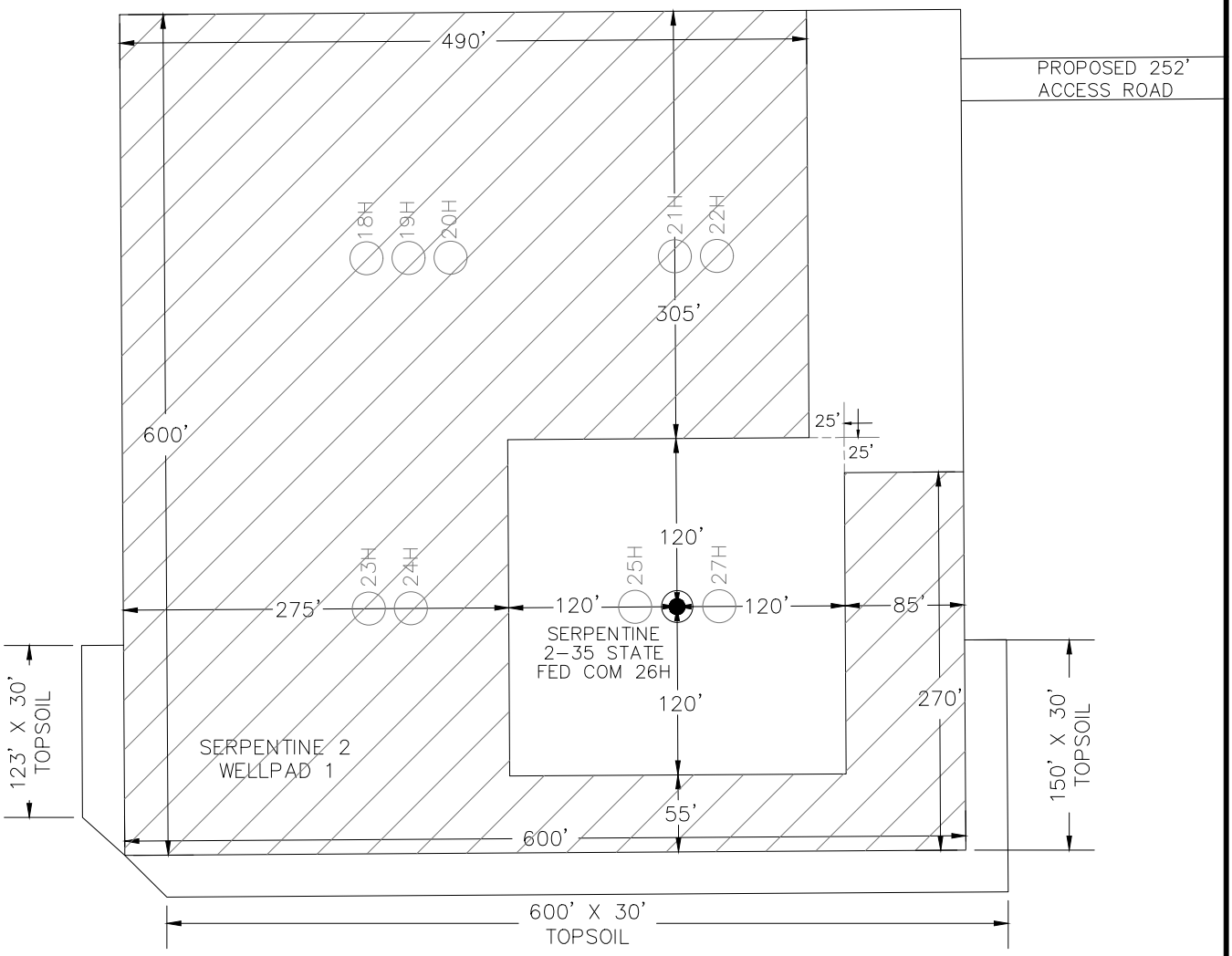
DEVON ENERGY PRODUCTION CO., L.P.

Drawn by: CHRIS MAAS

Date: 10/19/2021

Drawn for: devon

SECTION 2, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
INTERIM SITE BUILD PLAN



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389' FSL 1308' FEL SEC. 2
EL: 3553.1'
N: 483793.03
E: 786739.39

DENOTES INTERIM PAD RECLAMATION AREA

6.12 ± ACRES INTERIM PAD RECLAMATION AREA
2.14 ± ACRES NON-RECLAIMED AREA

8.26 ± ACRES GRADING SITE RECLAMATION AREA

0 125 250

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LEA COUNTY, STATE OF NEW MEXICO

HORIZON ROW LLC

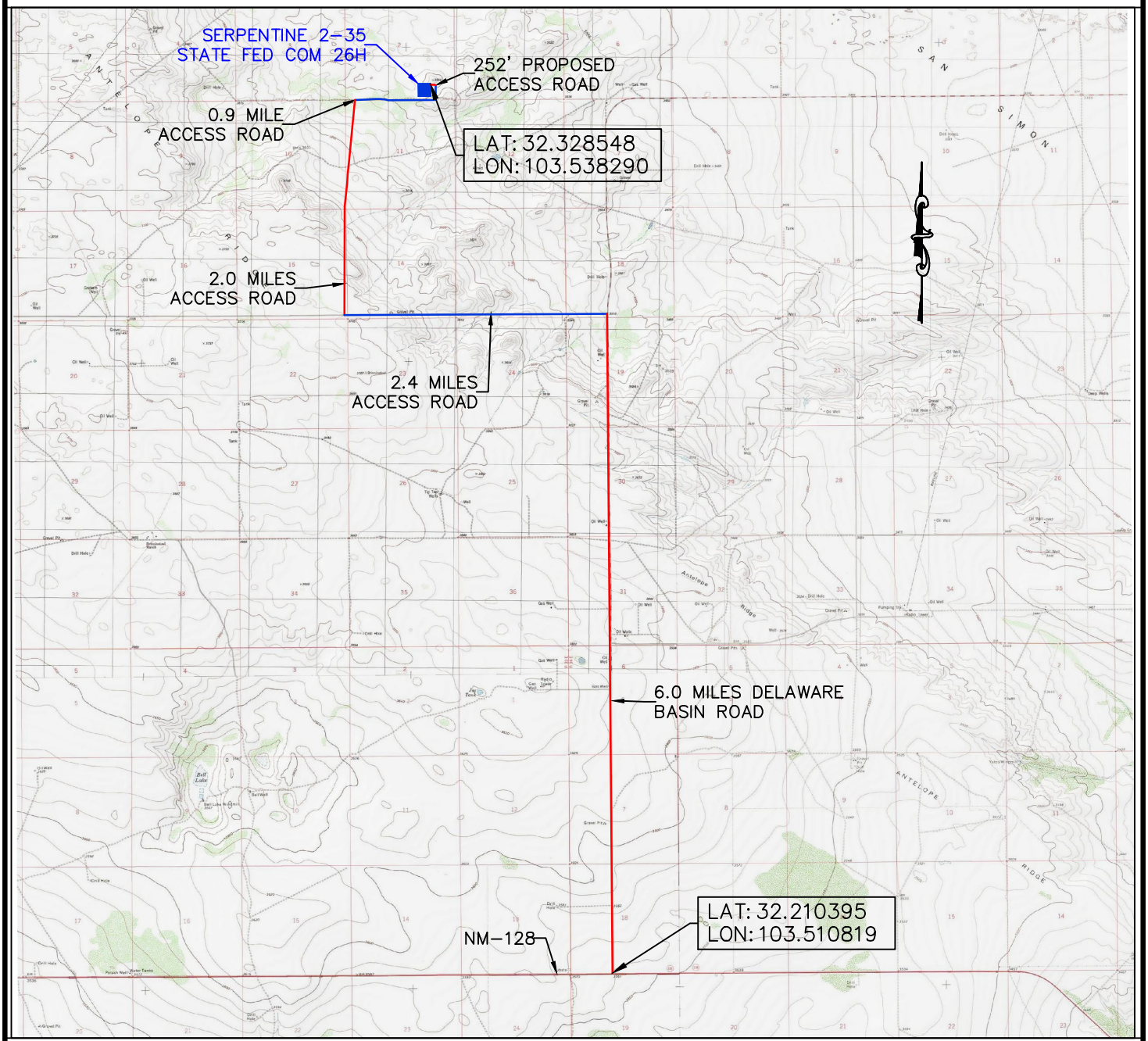
DEVON ENERGY PRODUCTION CO., L.P.

Drawn by: CHRIS MAAS

Date: 10/19/2021

Drawn for: devon

SECTION 2 TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
VICINITY MAP



NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.
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LEA COUNTY, STATE OF NEW MEXICO

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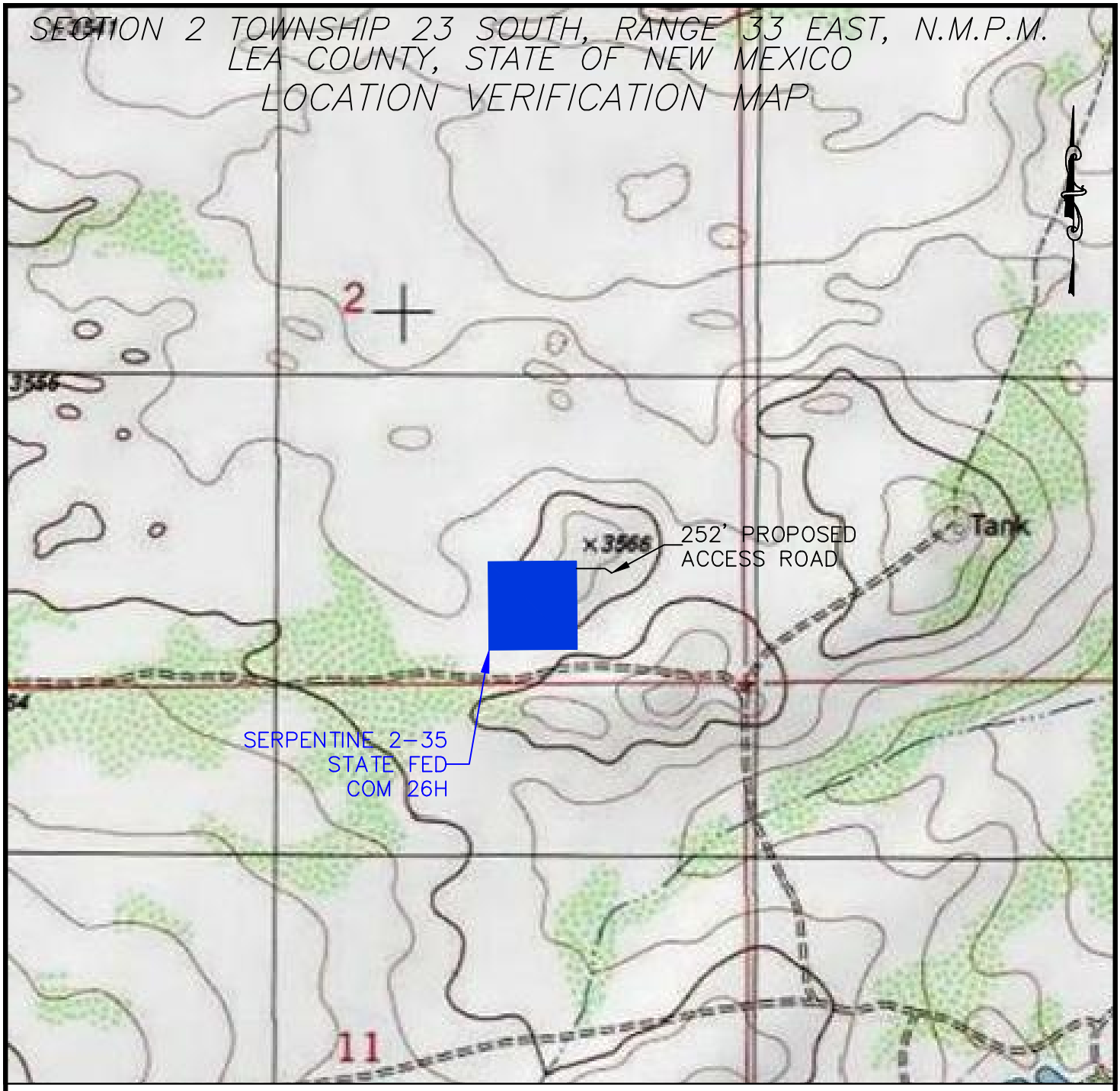
HORIZON ROW LLC		Drawn for: devon
DEVON ENERGY PRODUCTION CO., L.P.		
Drawn by: CHRIS MAAS	Date: 10/19/2021	

SECTION 2 TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



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LEA COUNTY, STATE OF NEW MEXICO

0 1000 2000

HORIZON ROW LLC

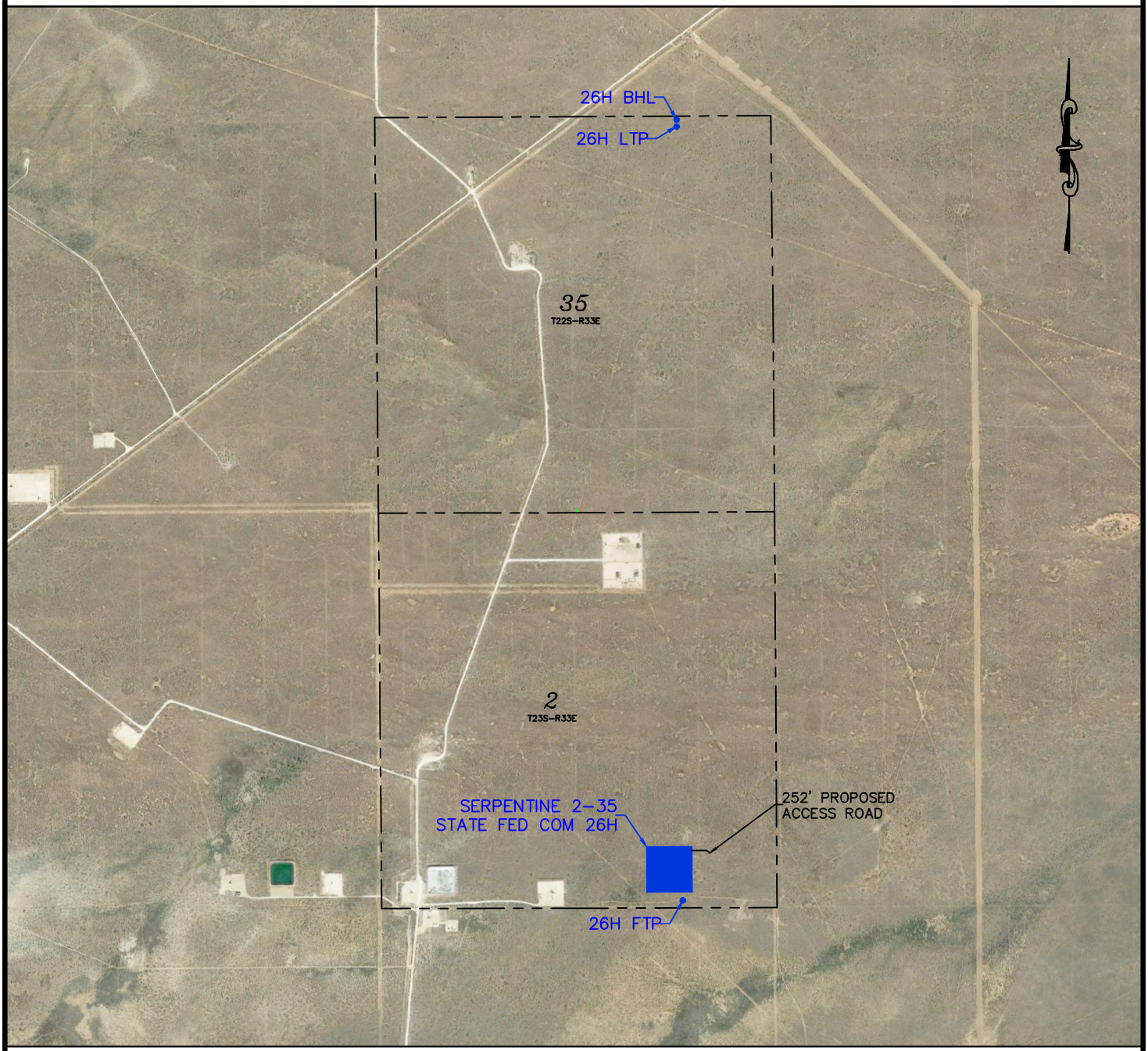
DEVON ENERGY PRODUCTION CO., L.P.

Drawn by: CHRIS MAAS

Date: 10/19/2021

Drawn for: devon

SECTION 2 TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



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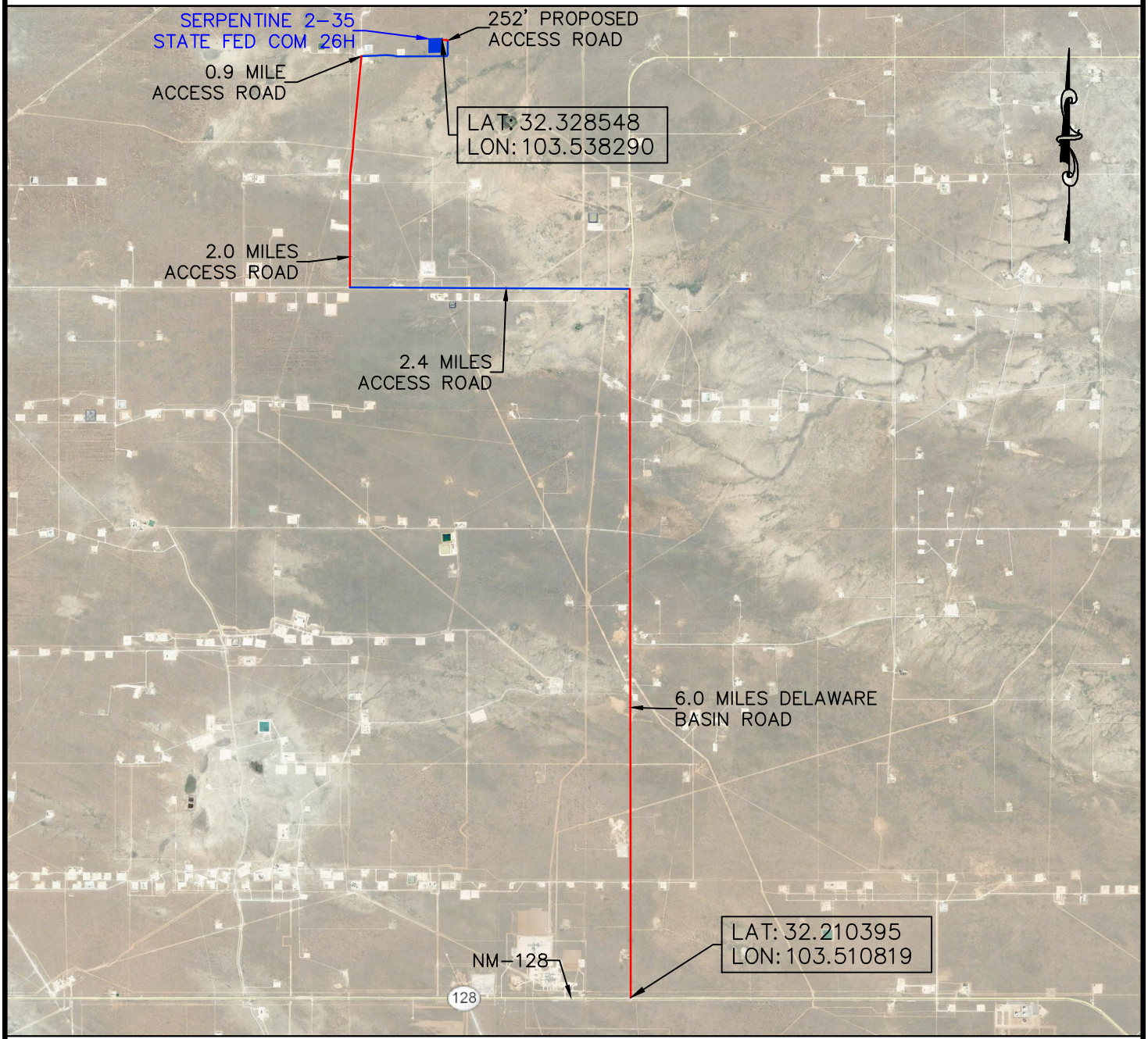
LEA COUNTY, STATE OF NEW MEXICO

0 2000 4000

HORIZON ROW LLC	Drawn for: devon
DEVON ENERGY PRODUCTION CO., L.P.	
Drawn by: CHRIS MAAS	Date: 10/19/2021

SECTION 2 TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
AERIAL ACCESS ROUTE MAP



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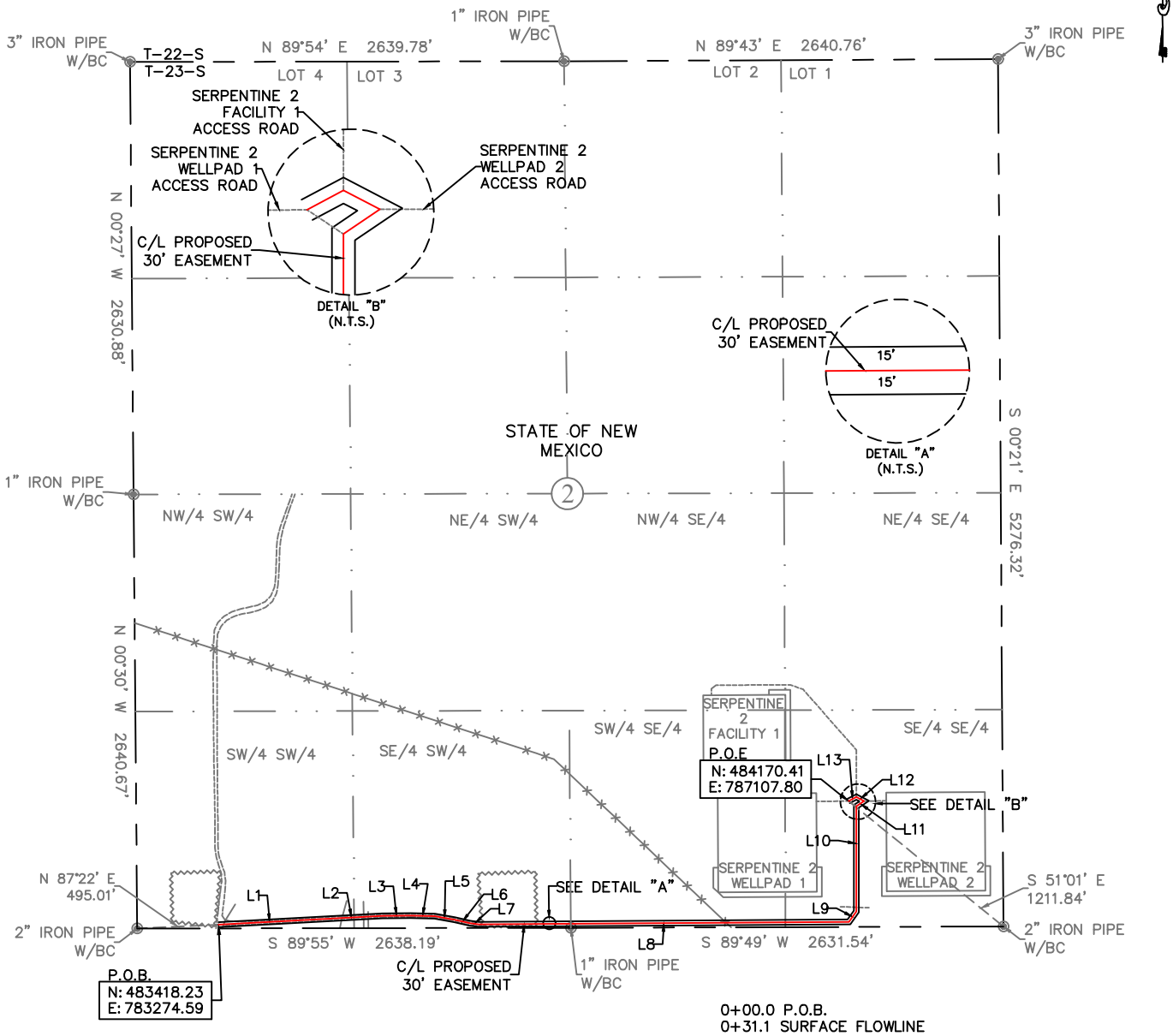
LEA COUNTY, STATE OF NEW MEXICO

HORIZON ROW LLC		Drawn for: devon
DEVON ENERGY PRODUCTION CO., L.P.		
Drawn by: CHRIS MAAS	Date: 10/19/2021	

EXHIBIT "A"
SECTION 2, T23S–R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO



QUARTER/QUARTER	30' EASEMENT AREA	FEET	RODS
SW/4 SW/4	0.57 ACRES	825.56	50.03
SE/4 SW/4	0.91 ACRES	1324.68	80.28
SW/4 SE/4	0.90 ACRES	1305.31	79.11
SE/4 SE/4	0.87 ACRES	1267.69	76.83
TOTAL	3.25 ACRES	4723.24	286.25

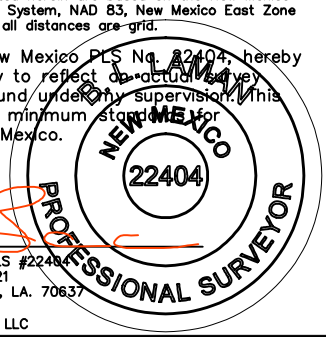
LINE	BEARING	DISTANCE
L1	N 86°52' E	621.85'
L2	N 86°50' E	375.38'
L3	N 89°29' E	174.22'
L4	S 88°16' E	144.82'
L5	S 80°04' E	123.00'
L6	S 77°03' E	97.59'
L7	S 83°36' E	52.40'
L8	N 89°39' E	2252.16'
L9	N 35°06' E	78.82'
L10	N 00°00' W	639.47'
L11	N 55°50' E	56.92'
L12	N 62°29' W	53.10'
L13	S 62°02' W	53.51'

0+00.0 P.O.B.
0+31.1 SURFACE FLOWLINE
7+50.7 BURIED PIPELINE
8+84.8 BURIED PIPELINE
9+13.2 POWER LINE
16+08.6 ENTER WELLPAD
19+40.6 EXIT WELLPAD
20+28.6 C/L 2-TRACK
30+93.9 FENCE
39+44.3 C/L 2-TRACK
45+59.7 SERPENTINE 2 WELLPAD 1 ACCESS ROAD
46+16.6 SERPENTINE 2 WELLPAD 2 ACCESS ROAD
46+69.7 SERPENTINE 2 FACILITY 1 ACCESS ROAD
47+23.2 P.O.E./SERPENTINE 2 WELLPAD 1 ACCESS ROAD

SEE THE ATTACHED LEGAL DESCRIPTION

Note: All bearings recited herein are based on the New Mexico State Plane Coordinate System, NAD 83, New Mexico East Zone 3001, US Survey Feet, all distances are grid.

I, B.L. Laman, New Mexico PLS No. 22404, hereby certify this survey to reflect an actual survey made on the ground under my supervision. This survey meets the minimum standards for surveying in New Mexico.



B.L. Laman PLS #22404
Date Signed: 10-15-2021
P.O. Box 548, Dry Creek, LA. 70637
(903) 388-3045
Employee of Horizonrow, LLC

0 1000 2000

HORIZON ROW LLC
Drawn for: devon
Drawn by: CHRIS MAAS
Date: 10/12/2021

DEVON ENERGY PRODUCTION COMPANY, L.P.
SERPENTINE 2 PRIMARY ACCESS ROAD
PROPOSED 30' EASEMENT ON THE PROPERTY OF STATE OF NEW MEXICO
SECTION 2, T23S–R33E, N.M.P.M.

LINE NUMBER:
WBS NUMBER:
SCALE: 1" = 1000'
REVISIONS:
SURVEY DATE: 10/11/2021

SECTION 2, T23S-R33E, N.M.P.M.,
LEA COUNTY, NEW MEXICO

LEGAL DESCRIPTION

FOR

DEVON ENERGY PRODUCTION COMPANY, L.P.

STATE OF NEW MEXICO

30' EASEMENT DESCRIPTION:

BEING an easement thirty (30) feet in width lying fifteen (15) feet on the right side and fifteen (15) feet on the left side of the survey centerline described below, being out of the southwest quarter of the southwest quarter (SW/4 SW/4) and the southeast quarter of the southwest quarter (SE/4 SW/4) and the southwest quarter of the southeast quarter (SW/4 SE/4) and the southeast quarter of the southeast quarter (SE/4 SE/4) of Section 2, Township 23 South, Range 33 East, N.M.P.M., Lea County, New Mexico, and being out of a parcel of land owned by the State of New Mexico. Said centerline of easement being more particularly described as follows:

Commencing from a 2" iron pipe w/BC found for the southwest corner of Section 2;

Thence N 87°22' E, a distance of 495.01' to the **Point of Beginning** of this easement, having coordinates of Northing=483418.23 feet, Easting=783274.59 feet, and continuing the following courses;

Thence N 86°52' E a distance of 621.85' to an angle point;
Thence N 86°50' E a distance of 375.38' to an angle point;
Thence N 89°29' E a distance of 174.22' to an angle point;
Thence S 88°16' E a distance of 144.82' to an angle point;
Thence S 80°04' E a distance of 123.00' to an angle point;
Thence S 77°03' E a distance of 97.59' to an angle point;
Thence S 83°36' E a distance of 52.40' to an angle point;
Thence N 89°39' E a distance of 2252.16' to an angle point;
Thence N 35°06' E a distance of 78.82' to an angle point;
Thence N 00°00' W a distance of 639.47' to an angle point;
Thence N 55°50' E a distance of 56.92' to an angle point;
Thence N 62°29' W a distance of 53.10' to an angle point;

Thence S 62°02' W a distance of 53.51' to the **Point of Ending** having coordinates of Northing=484170.41 feet, Easting=787107.80 feet from said point a 2" iron pipe w/BC found for the southeast corner of Section 2, T23S-R33E, N.M.P.M., Lea County, New Mexico bears S 51°01' E a distance of 1211.84', covering **4723.24' or 286.25 rods** and having an area of **3.25 acres**.

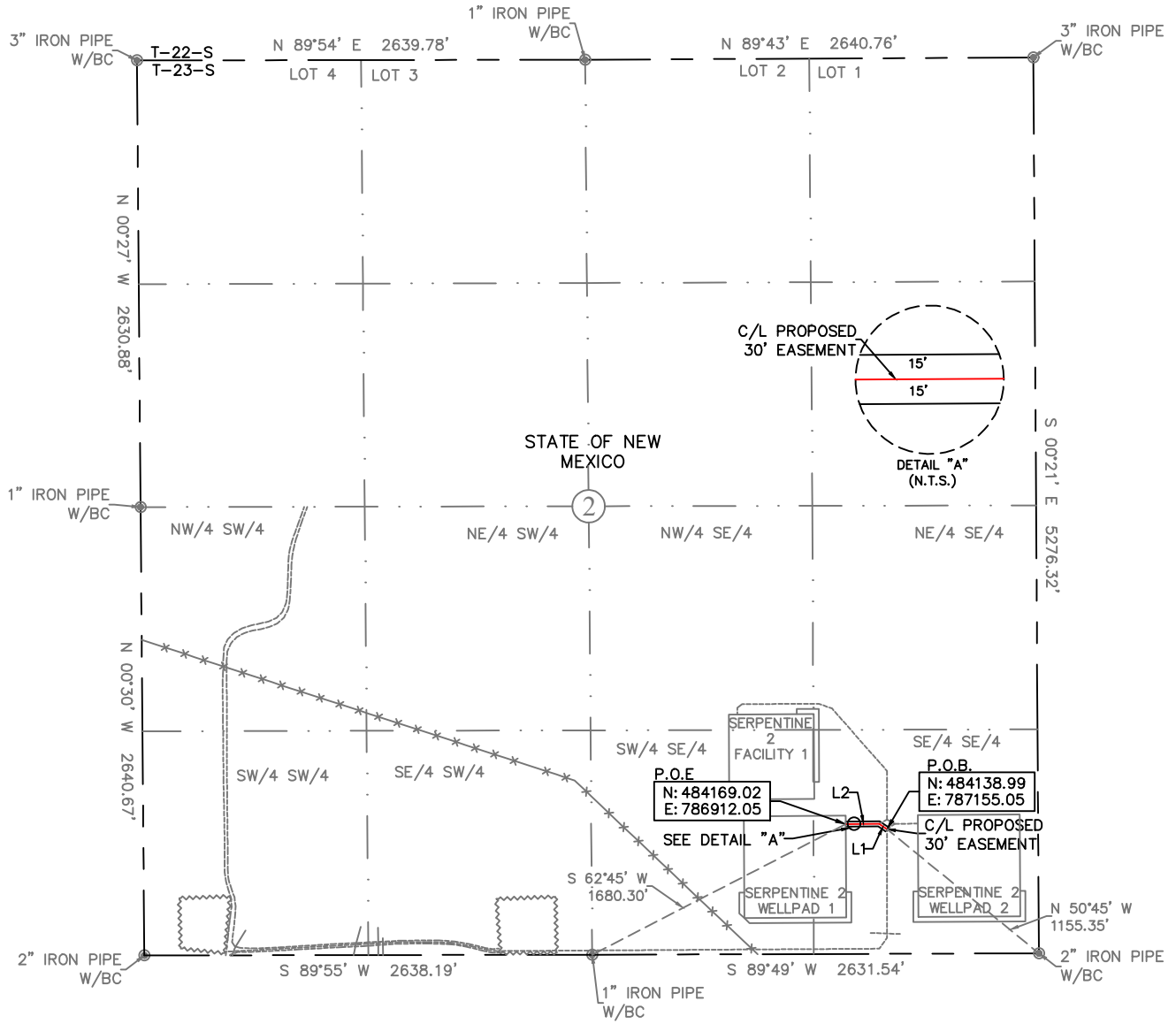
NOTES:

Bearings, distances and coordinates shown herein are based on New Mexico State Plane Coordinate System, NAD 83, East Zone 3001, US Survey Feet, all distances are grid.

I, B.L. Laman, New Mexico PLS No. 22404, hereby certify this survey to reflect an actual survey made on the ground under my supervision. This survey meets the minimum standards for surveying in New Mexico.

B.L. Laman PLS 22404
Date Signed: 10/15/2021
Horizon Row, LLC
P.O. Box 548, Dry Creek, LA
(903) 388-3045 70637
Employee of Horizon Row, LLC

EXHIBIT "A"
SECTION 2, T23S–R33E, N.M.P.M.
LEA COUNTY, NEW MEXICO



LINE	BEARING	DISTANCE
L1	N 56°23' W	56.75'
L2	S 89°36' W	195.75'

0+00.0 P.O.B./SERPENTINE 2 PRIMARY ACCESS ROAD
0+56.7 INTERSECT SERPENTINE 2 PRIMARY ACCESS ROAD
2+52.5 P.O.E./SERPENTINE 2 WELLPAD 1

QUARTER/QUARTER	30' EASEMENT AREA	FEET	RODS
SE/4 SE/4	0.17 ACRES	252.50	15.30

SEE THE ATTACHED LEGAL DESCRIPTION

Note: All bearings recited herein are based on the New Mexico State Plane Coordinate System, NAD 83, New Mexico East Zone 3001, US Survey Feet, all distances are grid.

I, B.L. Laman, New Mexico PLS No. 22404, hereby certify this survey to reflect an actual survey made on the ground under my supervision; this survey meets the minimum standards for surveying in New Mexico.

B.L. LAMAN NEW MEXICO 22404 PROFESSIONAL SURVEYOR

B.L. Laman PLS #22404
Date Signed: 10-15-2021
P.O. Box 548, Dry Creek, LA. 70637
(903) 388-3045
Employee of Horizonrow, LLC

0 1000 2000

HORIZON ROW LLC

Drawn for: devon

Drawn by: CHRIS MAAS

Date: 10/12/2021

DEVON ENERGY PRODUCTION COMPANY, L.P.
SERPENTINE 2 WELLPAD 1
ACCESS ROAD

PROPOSED 30' EASEMENT
ON THE PROPERTY OF
STATE OF NEW MEXICO
SECTION 2, T23S–R33E, N.M.P.M.

LINE NUMBER: 7610323R
WBS NUMBER:
SCALE: 1" = 1000'
REVISIONS:
SURVEY DATE: 10/11/2021

SECTION 2, T23S-R33E, N.M.P.M.,
LEA COUNTY, NEW MEXICO

LEGAL DESCRIPTION

FOR

DEVON ENERGY PRODUCTION COMPANY, L.P.

STATE OF NEW MEXICO

30' EASEMENT DESCRIPTION:

BEING an easement thirty (30) feet in width lying fifteen (15) feet on the right side and fifteen (15) feet on the left side of the survey centerline described below, being out of the southeast quarter of the southeast quarter (SE/4 SE/4) of Section 2, Township 23 South, Range 33 East, N.M.P.M., Lea County, New Mexico, and being out of a parcel of land owned by the State of New Mexico. Said centerline of easement being more particularly described as follows:

Commencing from a 2" iron pipe w/BC found for the southeast corner of Section 2;

Thence N 50°45' W, a distance of 1155.35' to the **Point of Beginning** of this easement, having coordinates of Northing=484138.99 feet, Easting=787155.05 feet, and continuing the following courses;

Thence N 56°23' W a distance of 56.75' to an angle point;

Thence S 89°36' W a distance of 195.75' to the **Point of Ending** having coordinates of Northing=484169.02 feet, Easting=786912.05 feet from said point a 1" iron pipe w/BC found for the south quarter corner of Section 2, T23S-R33E, N.M.P.M., Lea County, New Mexico bears S 62°45' W a distance of 1680.30', covering **252.50' or 15.30 rods** and having an area of **0.17 acres**.

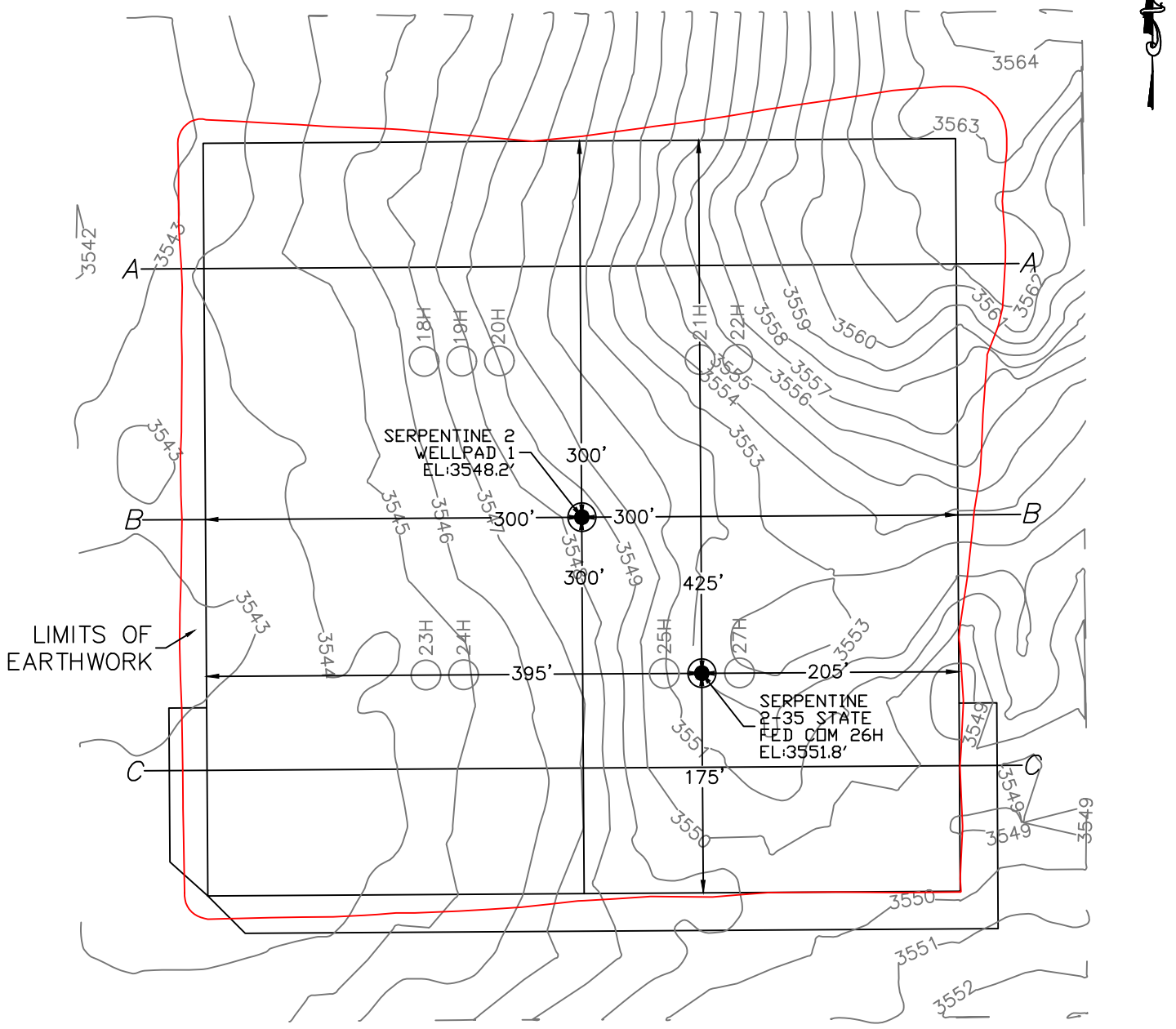
NOTES:

Bearings, distances and coordinates shown herein are based on New Mexico State Plane Coordinate System, NAD 83, East Zone 3001, US Survey Feet, all distances are grid.

I, B.L. Laman, New Mexico PLS No. 22404, hereby certify this survey to reflect an actual survey made on the ground under my supervision. This survey meets the minimum standards for surveying in New Mexico.

B.L. Laman PLS 22404
Date Signed: 10/15/2021
Horizon Row, LLC
P.O. Box 548, Dry Creek, LA
(903) 388-3045 70637
Employee of Horizon Row, LLC

SECTION 2, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
PLAN VIEW



DEVON ENERGY PRODUCTION COMPANY, L.P.
SERPENTINE 2-35 STATE FED COM 26H
LOCATED 389 FT. FROM THE SOUTH LINE
AND 1338 FT. FROM THE EAST LINE OF
SECTION 2, TOWNSHIP 23 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

0 125 250

EARTHWORK QUANTITIES FOR SERPENTINE 2 WELLPAD 1

CUT	FILL	NET
29,880 CY	29,890 CY	10 CY

EARTHWORK QUANTITIES ARE ESTIMATED

HORIZON ROW LLC

DEVON ENERGY PRODUCTION CO., L.P.

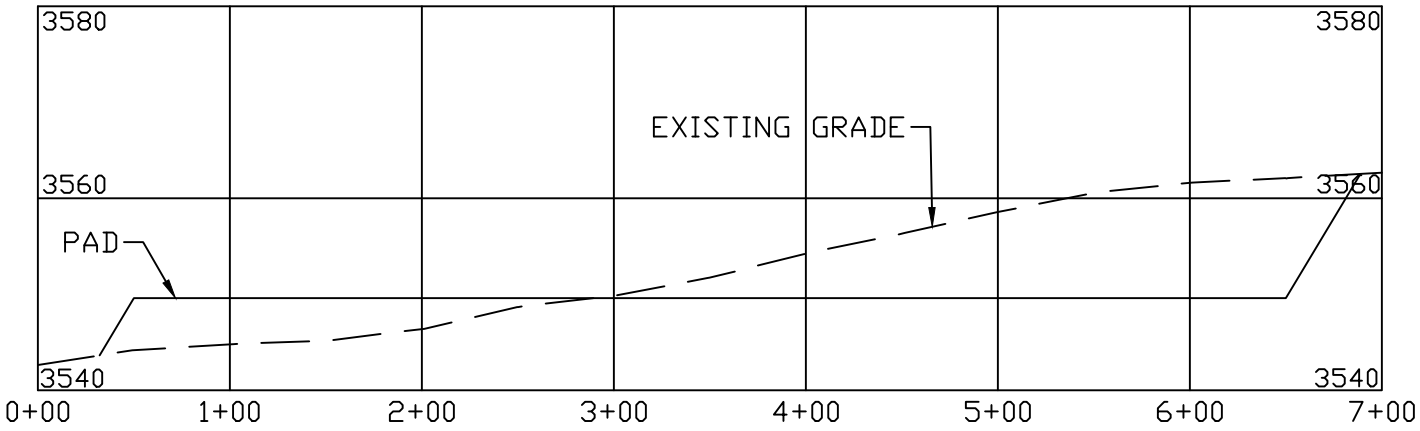
Drawn by: CHRIS MAAS

Date: 10/19/2021

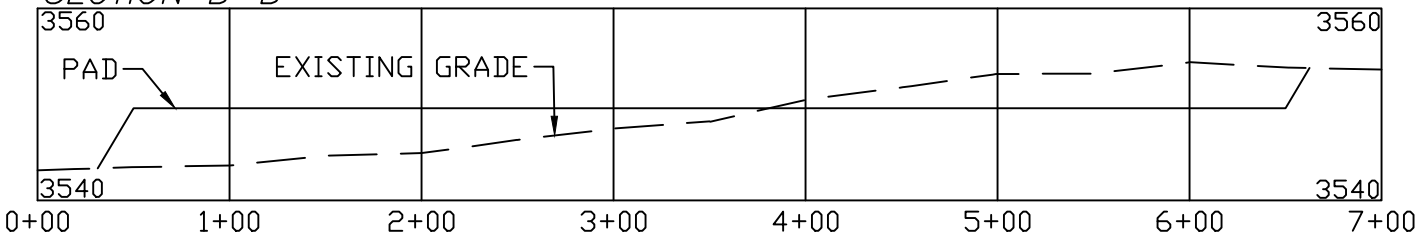
Drawn for: devon

SECTION 2, TOWNSHIP 23 SOUTH, RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
CROSS SECTIONS

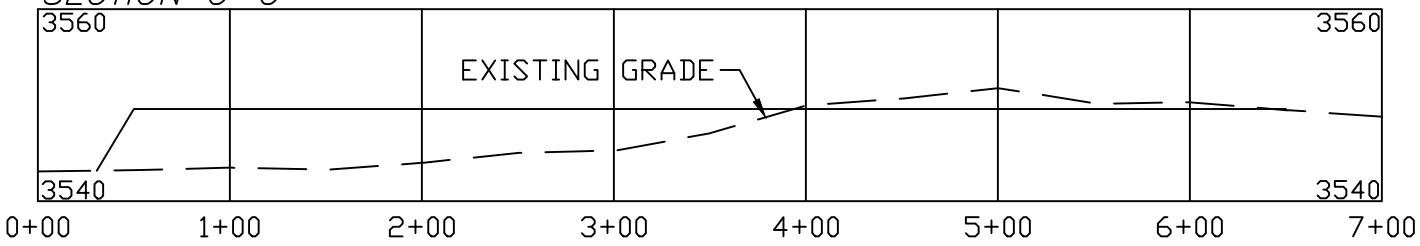
SECTION A–A



SECTION B–B



SECTION C–C



DEVON ENERGY PRODUCTION COMPANY, L.P.
SERPENTINE 2–35 STATE FED COM 26H
LOCATED 389 FT. FROM THE SOUTH LINE
AND 1338 FT. FROM THE EAST LINE OF
SECTION 2, TOWNSHIP 23 SOUTH,
RANGE 33 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

SCALE 1" = 100' HORIZONTAL
SCALE 1" = 20' VERTICAL

EARTHWORK QUANTITIES FOR
SERPENTINE 2 WELLPAD 1

CUT	FILL	NET
29,880 CY	29,890 CY	10 CY

EARTHWORK QUANTITIES ARE ESTIMATED

HORIZON ROW LLC

DEVON ENERGY PRODUCTION CO., L.P.

Drawn by: CHRIS MAAS

Date: 10/19/2021

Drawn for: devon

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

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	in^2
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

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

SERPENTINE 2-35 St Fed Com 26H

1. Geologic Formations

TVD of target	12050	Pilot hole depth	N/A
MD at TD:	22360	Deepest expected fresh water	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	952		
Salt	1233		
Base of Salt	5068		
Delaware	5068		
Cherry Canyon	5918		
Brushy Canyon	7319		
1st Bone Spring Lime	8981		
Bone Spring 1st	10018		
Bone Spring 2nd	10590		
3rd Bone Spring Lime	11087		
Bone Spring 3rd	11755		

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

SERPENTINE 2-35 St Fed Com 26H

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)
13 1/2	10 3/4	40 1/2	H40	BTC	0	977	0	977
9 7/8	8 5/8	32	P110	TLW	0	10615	0	10615
7 7/8	5 1/2	17	P110	BTC	0	22360	0	12050

• 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)

Casing	# Sks	TOC	Wt. ppg	Yld (ft3/sack)	Slurry Description
Surface	394	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	502	Surf	9	3.27	Lead: Class C Cement + additives
	67	4000' above	13.2	1.44	Tail: Class H / C + additives
Int 1 Intermediate Squeeze	As Needed	Surf	13.2	1.44	Squeeze Lead: Class C Cement + additives
	502	Surf	9	3.27	Lead: Class C Cement + additives
	67	4000' above	13.2	1.44	Tail: Class H / C + additives
Production	81	10115	9	3.27	Lead: Class H /C + additives
	1436	11513	13.2	1.44	Tail: Class H / C + additives

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

SERPENTINE 2-35 St Fed Com 26H

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

SERPENTINE 2-35 St Fed Com 26H

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	8.5-9

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	5639
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

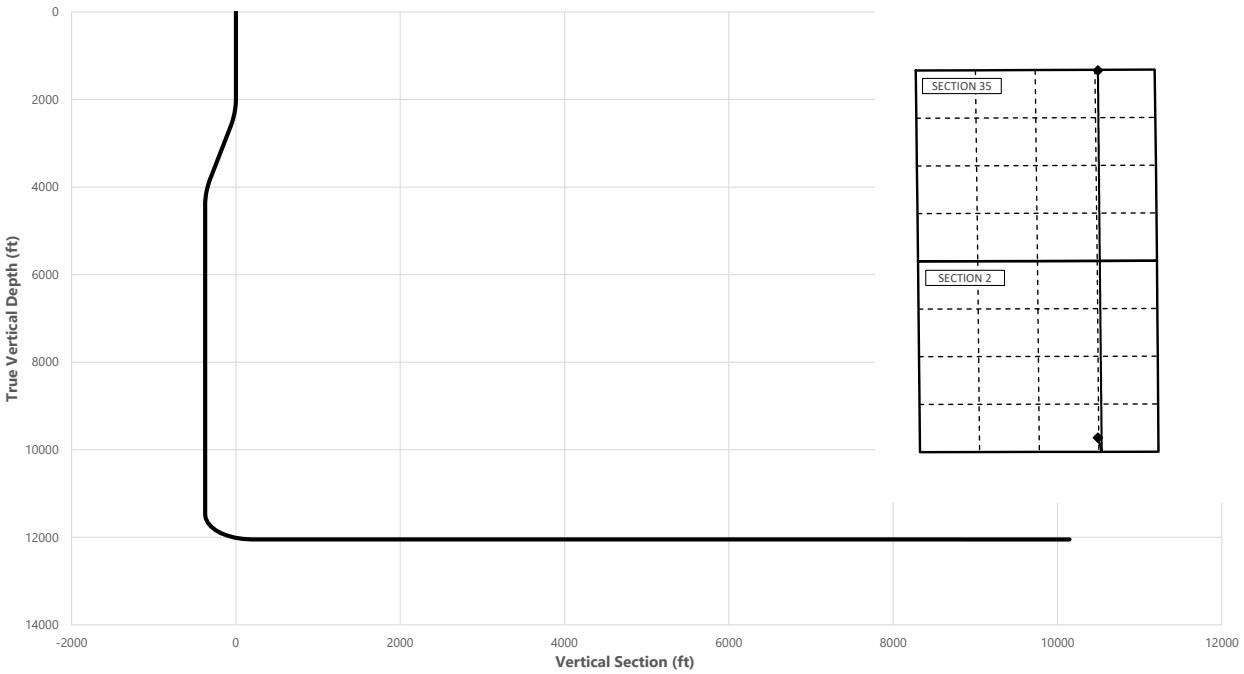
_____ Other, describe

devon

Well: SERPENTINE 2-35 St Fed Com 26H
County: Lea
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	167.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2600.00	12.00	167.00	2595.62	-61.00	14.08	-61.00	2.00	Hold Tangent
3843.11	12.00	167.00	3811.56	-312.83	72.22	-312.82	0.00	Drop to Vertical
4443.11	0.00	167.00	4407.19	-373.83	86.31	-373.81	2.00	Hold Vertical
11512.96	0.00	359.54	11477.04	-373.83	86.31	-373.81	0.00	KOP
12412.96	90.00	359.54	12050.00	199.11	81.71	199.13	10.00	Landing Point
22360.06	90.00	359.54	12050.00	10145.89	1.85	10145.89	0.00	BHL



Key Depths	MD (ft)	TVD (ft)
Rustler	952.00	952.00
Salt	1233.00	1233.00
Base of Salt	5103.92	5068.00
Delaware	5103.92	5068.00
Cherry Canyon	5953.92	5918.00
Brushy Canyon	7354.92	7319.00
1st Bone Spring Lime	9016.92	8981.00
Bone Spring 1st	10053.92	10018.00
Bone Spring 2nd	10625.92	10590.00
3rd Bone Spring Lime	11122.92	11087.00
Bone Spring 3rd / Point of Penetratic	11803.17	11755.00
Exit	22280.06	12050.01

	MD (ft)	TVD (ft)	Lat (°)	Long (°)	Section Footages
SHL	0.00	0.00	32.3274	-103.5390	389' FSL, 1338' FEL of Sec 2 in T23S, R33E
KOP	11512.96	11477.04	32.3264	-103.5388	14' FSL, 1254' FEL of Sec 2 in T23S, R33E
Point of Penetration	11803.17	11755.00	32.3267	-103.5387	100' FSL, 1254' FEL of Sec 2 in T23S, R33E
Exit	22280.06	12050.01	32.3552	-103.5387	100' FNL, 1254' FEL of Sec 35 in T22S, R33E
BHL	22360.06	12050.00	32.3553	-103.5388	20' FNL, 1254' FEL of Sec 35 in T22S, R33E

devon

Well: SERPENTINE 2-35 St Fed Com 26H
County: Lea
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	167.00	100.00	0.00	0.00	0.00	0.00	
200.00	0.00	167.00	200.00	0.00	0.00	0.00	0.00	
300.00	0.00	167.00	300.00	0.00	0.00	0.00	0.00	
400.00	0.00	167.00	400.00	0.00	0.00	0.00	0.00	
500.00	0.00	167.00	500.00	0.00	0.00	0.00	0.00	
600.00	0.00	167.00	600.00	0.00	0.00	0.00	0.00	
700.00	0.00	167.00	700.00	0.00	0.00	0.00	0.00	
800.00	0.00	167.00	800.00	0.00	0.00	0.00	0.00	
900.00	0.00	167.00	900.00	0.00	0.00	0.00	0.00	
952.00	0.00	167.00	952.00	0.00	0.00	0.00	0.00	Rustler
1000.00	0.00	167.00	1000.00	0.00	0.00	0.00	0.00	
1100.00	0.00	167.00	1100.00	0.00	0.00	0.00	0.00	
1200.00	0.00	167.00	1200.00	0.00	0.00	0.00	0.00	
1233.00	0.00	167.00	1233.00	0.00	0.00	0.00	0.00	Salt
1300.00	0.00	167.00	1300.00	0.00	0.00	0.00	0.00	
1400.00	0.00	167.00	1400.00	0.00	0.00	0.00	0.00	
1500.00	0.00	167.00	1500.00	0.00	0.00	0.00	0.00	
1600.00	0.00	167.00	1600.00	0.00	0.00	0.00	0.00	
1700.00	0.00	167.00	1700.00	0.00	0.00	0.00	0.00	
1800.00	0.00	167.00	1800.00	0.00	0.00	0.00	0.00	
1900.00	0.00	167.00	1900.00	0.00	0.00	0.00	0.00	
2000.00	0.00	167.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2100.00	2.00	167.00	2099.98	-1.70	0.39	-1.70	2.00	
2200.00	4.00	167.00	2199.84	-6.80	1.57	-6.80	2.00	
2300.00	6.00	167.00	2299.45	-15.29	3.53	-15.29	2.00	
2400.00	8.00	167.00	2398.70	-27.17	6.27	-27.16	2.00	
2500.00	10.00	167.00	2497.47	-42.41	9.79	-42.41	2.00	
2600.00	12.00	167.00	2595.62	-61.00	14.08	-61.00	2.00	Hold Tangent
2700.00	12.00	167.00	2693.44	-81.26	18.76	-81.25	0.00	
2800.00	12.00	167.00	2791.25	-101.51	23.44	-101.51	0.00	
2900.00	12.00	167.00	2889.07	-121.77	28.11	-121.77	0.00	
3000.00	12.00	167.00	2986.88	-142.03	32.79	-142.03	0.00	
3100.00	12.00	167.00	3084.70	-162.29	37.47	-162.28	0.00	
3200.00	12.00	167.00	3182.51	-182.55	42.14	-182.54	0.00	
3300.00	12.00	167.00	3280.33	-202.81	46.82	-202.80	0.00	
3400.00	12.00	167.00	3378.14	-223.06	51.50	-223.05	0.00	
3500.00	12.00	167.00	3475.96	-243.32	56.18	-243.31	0.00	
3600.00	12.00	167.00	3573.77	-263.58	60.85	-263.57	0.00	
3700.00	12.00	167.00	3671.59	-283.84	65.53	-283.83	0.00	
3800.00	12.00	167.00	3769.40	-304.10	70.21	-304.08	0.00	
3843.11	12.00	167.00	3811.56	-312.83	72.22	-312.82	0.00	Drop to Vertical
3900.00	10.86	167.00	3867.33	-323.82	74.76	-323.80	2.00	
4000.00	8.86	167.00	3965.85	-340.50	78.61	-340.49	2.00	
4100.00	6.86	167.00	4064.90	-353.83	81.69	-353.82	2.00	
4200.00	4.86	167.00	4164.37	-363.78	83.99	-363.77	2.00	
4300.00	2.86	167.00	4264.14	-370.35	85.50	-370.33	2.00	
4400.00	0.86	167.00	4364.08	-373.51	86.23	-373.50	2.00	
4443.11	0.00	167.00	4407.19	-373.83	86.31	-373.81	2.00	Hold Vertical
4500.00	0.00	359.54	4464.08	-373.83	86.31	-373.81	0.00	
4600.00	0.00	359.54	4564.08	-373.83	86.31	-373.81	0.00	
4700.00	0.00	359.54	4664.08	-373.83	86.31	-373.81	0.00	
4800.00	0.00	359.54	4764.08	-373.83	86.31	-373.81	0.00	
4900.00	0.00	359.54	4864.08	-373.83	86.31	-373.81	0.00	
5000.00	0.00	359.54	4964.08	-373.83	86.31	-373.81	0.00	
5100.00	0.00	359.54	5064.08	-373.83	86.31	-373.81	0.00	
5103.92	0.00	359.54	5068.00	-373.83	86.31	-373.81	0.00	Base of Salt, Delaware
5200.00	0.00	359.54	5164.08	-373.83	86.31	-373.81	0.00	
5300.00	0.00	359.54	5264.08	-373.83	86.31	-373.81	0.00	
5400.00	0.00	359.54	5364.08	-373.83	86.31	-373.81	0.00	
5500.00	0.00	359.54	5464.08	-373.83	86.31	-373.81	0.00	
5600.00	0.00	359.54	5564.08	-373.83	86.31	-373.81	0.00	
5700.00	0.00	359.54	5664.08	-373.83	86.31	-373.81	0.00	
5800.00	0.00	359.54	5764.08	-373.83	86.31	-373.81	0.00	
5900.00	0.00	359.54	5864.08	-373.83	86.31	-373.81	0.00	
5953.92	0.00	359.54	5918.00	-373.83	86.31	-373.81	0.00	Cherry Canyon
6000.00	0.00	359.54	5964.08	-373.83	86.31	-373.81	0.00	
6100.00	0.00	359.54	6064.08	-373.83	86.31	-373.81	0.00	
6200.00	0.00	359.54	6164.08	-373.83	86.31	-373.81	0.00	
6300.00	0.00	359.54	6264.08	-373.83	86.31	-373.81	0.00	

devon

Well: SERPENTINE 2-35 St Fed Com 26H
County: Lea
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
6400.00	0.00	359.54	6364.08	-373.83	86.31	-373.81	0.00	
6500.00	0.00	359.54	6464.08	-373.83	86.31	-373.81	0.00	
6600.00	0.00	359.54	6564.08	-373.83	86.31	-373.81	0.00	
6700.00	0.00	359.54	6664.08	-373.83	86.31	-373.81	0.00	
6800.00	0.00	359.54	6764.08	-373.83	86.31	-373.81	0.00	
6900.00	0.00	359.54	6864.08	-373.83	86.31	-373.81	0.00	
7000.00	0.00	359.54	6964.08	-373.83	86.31	-373.81	0.00	
7100.00	0.00	359.54	7064.08	-373.83	86.31	-373.81	0.00	
7200.00	0.00	359.54	7164.08	-373.83	86.31	-373.81	0.00	
7300.00	0.00	359.54	7264.08	-373.83	86.31	-373.81	0.00	
7354.92	0.00	359.54	7319.00	-373.83	86.31	-373.81	0.00	Brushy Canyon
7400.00	0.00	359.54	7364.08	-373.83	86.31	-373.81	0.00	
7500.00	0.00	359.54	7464.08	-373.83	86.31	-373.81	0.00	
7600.00	0.00	359.54	7564.08	-373.83	86.31	-373.81	0.00	
7700.00	0.00	359.54	7664.08	-373.83	86.31	-373.81	0.00	
7800.00	0.00	359.54	7764.08	-373.83	86.31	-373.81	0.00	
7900.00	0.00	359.54	7864.08	-373.83	86.31	-373.81	0.00	
8000.00	0.00	359.54	7964.08	-373.83	86.31	-373.81	0.00	
8100.00	0.00	359.54	8064.08	-373.83	86.31	-373.81	0.00	
8200.00	0.00	359.54	8164.08	-373.83	86.31	-373.81	0.00	
8300.00	0.00	359.54	8264.08	-373.83	86.31	-373.81	0.00	
8400.00	0.00	359.54	8364.08	-373.83	86.31	-373.81	0.00	
8500.00	0.00	359.54	8464.08	-373.83	86.31	-373.81	0.00	
8600.00	0.00	359.54	8564.08	-373.83	86.31	-373.81	0.00	
8700.00	0.00	359.54	8664.08	-373.83	86.31	-373.81	0.00	
8800.00	0.00	359.54	8764.08	-373.83	86.31	-373.81	0.00	
8900.00	0.00	359.54	8864.08	-373.83	86.31	-373.81	0.00	
9000.00	0.00	359.54	8964.08	-373.83	86.31	-373.81	0.00	
9016.92	0.00	359.54	8981.00	-373.83	86.31	-373.81	0.00	1st Bone Spring Lime
9100.00	0.00	359.54	9064.08	-373.83	86.31	-373.81	0.00	
9200.00	0.00	359.54	9164.08	-373.83	86.31	-373.81	0.00	
9300.00	0.00	359.54	9264.08	-373.83	86.31	-373.81	0.00	
9400.00	0.00	359.54	9364.08	-373.83	86.31	-373.81	0.00	
9500.00	0.00	359.54	9464.08	-373.83	86.31	-373.81	0.00	
9600.00	0.00	359.54	9564.08	-373.83	86.31	-373.81	0.00	
9700.00	0.00	359.54	9664.08	-373.83	86.31	-373.81	0.00	
9800.00	0.00	359.54	9764.08	-373.83	86.31	-373.81	0.00	
9900.00	0.00	359.54	9864.08	-373.83	86.31	-373.81	0.00	
10000.00	0.00	359.54	9964.08	-373.83	86.31	-373.81	0.00	
10053.92	0.00	359.54	10018.00	-373.83	86.31	-373.81	0.00	Bone Spring 1st
10100.00	0.00	359.54	10064.08	-373.83	86.31	-373.81	0.00	
10200.00	0.00	359.54	10164.08	-373.83	86.31	-373.81	0.00	
10300.00	0.00	359.54	10264.08	-373.83	86.31	-373.81	0.00	
10400.00	0.00	359.54	10364.08	-373.83	86.31	-373.81	0.00	
10500.00	0.00	359.54	10464.08	-373.83	86.31	-373.81	0.00	
10600.00	0.00	359.54	10564.08	-373.83	86.31	-373.81	0.00	
10625.92	0.00	359.54	10590.00	-373.83	86.31	-373.81	0.00	Bone Spring 2nd
10700.00	0.00	359.54	10664.08	-373.83	86.31	-373.81	0.00	
10800.00	0.00	359.54	10764.08	-373.83	86.31	-373.81	0.00	
10900.00	0.00	359.54	10864.08	-373.83	86.31	-373.81	0.00	
11000.00	0.00	359.54	10964.08	-373.83	86.31	-373.81	0.00	
11100.00	0.00	359.54	11064.08	-373.83	86.31	-373.81	0.00	
11122.92	0.00	359.54	11087.00	-373.83	86.31	-373.81	0.00	3rd Bone Spring Lime
11200.00	0.00	359.54	11164.08	-373.83	86.31	-373.81	0.00	
11300.00	0.00	359.54	11264.08	-373.83	86.31	-373.81	0.00	
11400.00	0.00	359.54	11364.08	-373.83	86.31	-373.81	0.00	
11500.00	0.00	359.54	11464.08	-373.83	86.31	-373.81	0.00	
11512.96	0.00	359.54	11477.04	-373.83	86.31	-373.81	0.00	KOP
11600.00	8.70	359.54	11563.75	-367.23	86.25	-367.21	10.00	
11700.00	18.70	359.54	11660.78	-343.57	86.06	-343.55	10.00	
11800.00	28.70	359.54	11752.22	-303.42	85.74	-303.41	10.00	
11803.17	29.02	359.54	11755.00	-301.89	85.73	-301.88	10.00	Bone Spring 3rd / Point of Penetration
11900.00	38.70	359.54	11835.31	-248.00	85.29	-247.99	10.00	
12000.00	48.70	359.54	11907.51	-179.00	84.74	-178.98	10.00	
12100.00	58.70	359.54	11966.63	-98.51	84.09	-98.49	10.00	
12200.00	68.70	359.54	12010.88	-8.97	83.37	-8.96	10.00	
12300.00	78.70	359.54	12038.90	86.88	82.60	86.90	10.00	
12400.00	88.70	359.54	12049.85	186.15	81.81	186.17	10.00	
12412.96	90.00	359.54	12050.00	199.11	81.71	199.13	10.00	Landing Point
12500.00	90.00	359.54	12050.00	286.15	81.01	286.16	0.00	

devon

Well: SERPENTINE 2-35 St Fed Com 26H
County: Lea
Wellbore: Permit Plan
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Geodetic System: US State Plane 1983
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Ellipsoid: Clarke 1866
Zone: 3001 - NM East (NAD83)

MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
12600.00	90.00	359.54	12050.00	386.14	80.20	386.16	0.00	
12700.00	90.00	359.54	12050.00	486.14	79.40	486.16	0.00	
12800.00	90.00	359.54	12050.00	586.14	78.60	586.15	0.00	
12900.00	90.00	359.54	12050.00	686.14	77.79	686.15	0.00	
13000.00	90.00	359.54	12050.00	786.13	76.99	786.15	0.00	
13100.00	90.00	359.54	12050.00	886.13	76.19	886.14	0.00	
13200.00	90.00	359.54	12050.00	986.13	75.38	986.14	0.00	
13300.00	90.00	359.54	12050.00	1086.12	74.58	1086.14	0.00	
13400.00	90.00	359.54	12050.00	1186.12	73.78	1186.13	0.00	
13500.00	90.00	359.54	12050.00	1286.12	72.97	1286.13	0.00	
13600.00	90.00	359.54	12050.00	1386.11	72.17	1386.13	0.00	
13700.00	90.00	359.54	12050.00	1486.11	71.37	1486.12	0.00	
13800.00	90.00	359.54	12050.00	1586.11	70.56	1586.12	0.00	
13900.00	90.00	359.54	12050.00	1686.10	69.76	1686.12	0.00	
14000.00	90.00	359.54	12050.00	1786.10	68.96	1786.11	0.00	
14100.00	90.00	359.54	12050.00	1886.10	68.15	1886.11	0.00	
14200.00	90.00	359.54	12050.00	1986.09	67.35	1986.11	0.00	
14300.00	90.00	359.54	12050.00	2086.09	66.55	2086.10	0.00	
14400.00	90.00	359.54	12050.00	2186.09	65.74	2186.10	0.00	
14500.00	90.00	359.54	12050.00	2286.08	64.94	2286.10	0.00	
14600.00	90.00	359.54	12050.00	2386.08	64.13	2386.09	0.00	
14700.00	90.00	359.54	12050.00	2486.08	63.33	2486.09	0.00	
14800.00	90.00	359.54	12050.00	2586.07	62.53	2586.09	0.00	
14900.00	90.00	359.54	12050.00	2686.07	61.72	2686.08	0.00	
15000.00	90.00	359.54	12050.00	2786.07	60.92	2786.08	0.00	
15100.00	90.00	359.54	12050.00	2886.06	60.12	2886.08	0.00	
15200.00	90.00	359.54	12050.00	2986.06	59.31	2986.07	0.00	
15300.00	90.00	359.54	12050.00	3086.06	58.51	3086.07	0.00	
15400.00	90.00	359.54	12050.00	3186.05	57.71	3186.07	0.00	
15500.00	90.00	359.54	12050.00	3286.05	56.90	3286.06	0.00	
15600.00	90.00	359.54	12050.00	3386.05	56.10	3386.06	0.00	
15700.00	90.00	359.54	12050.00	3486.04	55.30	3486.05	0.00	
15800.00	90.00	359.54	12050.00	3586.04	54.49	3586.05	0.00	
15900.00	90.00	359.54	12050.00	3686.04	53.69	3686.05	0.00	
16000.00	90.00	359.54	12050.00	3786.04	52.89	3786.04	0.00	
16100.00	90.00	359.54	12050.00	3886.03	52.08	3886.04	0.00	
16200.00	90.00	359.54	12050.00	3986.03	51.28	3986.04	0.00	
16300.00	90.00	359.54	12050.00	4086.03	50.48	4086.03	0.00	
16400.00	90.00	359.54	12050.00	4186.02	49.67	4186.03	0.00	
16500.00	90.00	359.54	12050.01	4286.02	48.87	4286.03	0.00	
16600.00	90.00	359.54	12050.01	4386.02	48.07	4386.02	0.00	
16700.00	90.00	359.54	12050.01	4486.01	47.26	4486.02	0.00	
16800.00	90.00	359.54	12050.01	4586.01	46.46	4586.02	0.00	
16900.00	90.00	359.54	12050.01	4686.01	45.66	4686.01	0.00	
17000.00	90.00	359.54	12050.01	4786.00	44.85	4786.01	0.00	
17100.00	90.00	359.54	12050.01	4886.00	44.05	4886.01	0.00	
17200.00	90.00	359.54	12050.01	4986.00	43.25	4986.00	0.00	
17300.00	90.00	359.54	12050.01	5085.99	42.44	5086.00	0.00	
17400.00	90.00	359.54	12050.01	5185.99	41.64	5186.00	0.00	
17500.00	90.00	359.54	12050.01	5285.99	40.84	5285.99	0.00	
17600.00	90.00	359.54	12050.01	5385.98	40.03	5385.99	0.00	
17700.00	90.00	359.54	12050.01	5485.98	39.23	5485.99	0.00	
17800.00	90.00	359.54	12050.01	5585.98	38.43	5585.98	0.00	
17900.00	90.00	359.54	12050.01	5685.97	37.62	5685.98	0.00	
18000.00	90.00	359.54	12050.01	5785.97	36.82	5785.98	0.00	
18100.00	90.00	359.54	12050.01	5885.97	36.02	5885.97	0.00	
18200.00	90.00	359.54	12050.01	5985.96	35.21	5985.97	0.00	
18300.00	90.00	359.54	12050.01	6085.96	34.41	6085.97	0.00	
18400.00	90.00	359.54	12050.01	6185.96	33.61	6185.96	0.00	
18500.00	90.00	359.54	12050.01	6285.95	32.80	6285.96	0.00	
18600.00	90.00	359.54	12050.01	6385.95	32.00	6385.96	0.00	
18700.00	90.00	359.54	12050.01	6485.95	31.20	6485.95	0.00	
18800.00	90.00	359.54	12050.01	6585.94	30.39	6585.95	0.00	
18900.00	90.00	359.54	12050.01	6685.94	29.59	6685.95	0.00	
19000.00	90.00	359.54	12050.01	6785.94	28.79	6785.94	0.00	
19100.00	90.00	359.54	12050.01	6885.94	27.98	6885.94	0.00	
19200.00	90.00	359.54	12050.01	6985.93	27.18	6985.94	0.00	
19300.00	90.00	359.54	12050.01	7085.93	26.38	7085.93	0.00	
19400.00	90.00	359.54	12050.01	7185.93	25.57	7185.93	0.00	
19500.00	90.00	359.54	12050.01	7285.92	24.77	7285.93	0.00	

devon

Well: SERPENTINE 2-35 St Fed Com 26H
County: Lea
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
19600.00	90.00	359.54	12050.01	7385.92	23.97	7385.92	0.00	
19700.00	90.00	359.54	12050.01	7485.92	23.16	7485.92	0.00	
19800.00	90.00	359.54	12050.01	7585.91	22.36	7585.92	0.00	
19900.00	90.00	359.54	12050.01	7685.91	21.56	7685.91	0.00	
20000.00	90.00	359.54	12050.01	7785.91	20.75	7785.91	0.00	
20100.00	90.00	359.54	12050.01	7885.90	19.95	7885.91	0.00	
20200.00	90.00	359.54	12050.01	7985.90	19.15	7985.90	0.00	
20300.00	90.00	359.54	12050.01	8085.90	18.34	8085.90	0.00	
20400.00	90.00	359.54	12050.01	8185.89	17.54	8185.90	0.00	
20500.00	90.00	359.54	12050.01	8285.89	16.74	8285.89	0.00	
20600.00	90.00	359.54	12050.01	8385.89	15.93	8385.89	0.00	
20700.00	90.00	359.54	12050.01	8485.88	15.13	8485.89	0.00	
20800.00	90.00	359.54	12050.01	8585.88	14.33	8585.88	0.00	
20900.00	90.00	359.54	12050.01	8685.88	13.52	8685.88	0.00	
21000.00	90.00	359.54	12050.01	8785.87	12.72	8785.88	0.00	
21100.00	90.00	359.54	12050.01	8885.87	11.92	8885.87	0.00	
21200.00	90.00	359.54	12050.01	8985.87	11.11	8985.87	0.00	
21300.00	90.00	359.54	12050.01	9085.86	10.31	9085.87	0.00	
21400.00	90.00	359.54	12050.01	9185.86	9.51	9185.86	0.00	
21500.00	90.00	359.54	12050.01	9285.86	8.70	9285.86	0.00	
21600.00	90.00	359.54	12050.01	9385.85	7.90	9385.86	0.00	
21700.00	90.00	359.54	12050.01	9485.85	7.10	9485.85	0.00	
21800.00	90.00	359.54	12050.01	9585.85	6.29	9585.85	0.00	
21900.00	90.00	359.54	12050.01	9685.84	5.49	9685.85	0.00	
22000.00	90.00	359.54	12050.01	9785.84	4.69	9785.84	0.00	
22100.00	90.00	359.54	12050.01	9885.84	3.88	9885.84	0.00	
22200.00	90.00	359.54	12050.01	9985.84	3.08	9985.84	0.00	
22280.06	90.00	359.54	12050.01	10065.89	2.44	10065.89	0.00	Exit
22300.00	90.00	359.54	12050.01	10085.83	2.28	10085.83	0.00	
22360.06	90.00	359.54	12050.00	10145.89	1.85	10145.89	0.00	BHL

Well: SERPENTINE 2-35 St Fed Com 26H
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Zone: 3001 - NM East (NAD83)

MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment

Serpentine 2-35 State Fed Com 26H

10 3/4	surface csg in a	13 1/2	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	9.81	2.59	0.39	1,150	4	0.66	4.88	46,575
"B"				btc				0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig:	1,094		Tail Cmt	does not	circ to sfc.	Totals:	1,150				46,575

Comparison of Proposed to Minimum Required Cement Volumes

Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd			Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE			Hole-Cplg
13 1/2	0.3637	394	567	418	36	9.00	3455	5M			1.38

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	3.17	0.73	1.59	10,615	2	2.99	1.22	339,680
"B"								0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig:						Totals:	10,615				339,680
	The cement volume(s) are intended to achieve a top of				0	ft from	surface or a	1150				overlap.

Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd			Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE			Hole-Cplg
9 7/8	0.1261	569	1738	1361	28	10.50	2983	5M			0.44

Class 'H' tail cmt yld > 1.20

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	2.66	1.33	1.89	22,360	2	3.57	2.51	380,120
"B"								0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig:	2,651					Totals:	22,360				380,120
	The cement volume(s) are intended to achieve a top of				10415	ft from	surface or a	200				overlap.

Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd			Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE			Hole-Cplg
7 7/8	0.1733	1517	2333	2070	13	9.00					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	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd			Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE			Hole-Cplg
0		#N/A	#N/A	0	#N/A						

#N/A Capitan Reef est top XXXX.

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Devon Energy Production Company LP**
LEASE NO.:	**NMNM113969**
LOCATION:	Section 2, T.23 S., R.33 E., NMPM
COUNTY:	Lea County, New Mexico
Sundry ID:	**2672233**

WELL NAME & NO.:	**Serpentine 2-35 State Fed Com 26H**
SURFACE HOLE FOOTAGE:	389'/S & 1338'/E
BOTTOM HOLE FOOTAGE	20'/N & 1254'/E

COA

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

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 Onshore Order 6 requirements, 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 **1150 feet** (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall

be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

b. Wait on cement (WOC) time for a primary cement job will be a minimum of **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.

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:

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

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 5-1/2" casing to surface. Submit results to the BLM.

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

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

- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.
  Cement excess is less than 25%, more cement might be required.

C. PRESSURE CONTROL

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

2.

Option 1:

a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

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

Option 2:

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

a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
c. Manufacturer representative shall install the test plug for the initial BOP test.
d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

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

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

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

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

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

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

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 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 Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

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

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

A. CASING

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

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

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

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

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

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

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

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

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

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

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

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

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

b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

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

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

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

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

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

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

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

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

CONDITIONS

Action 131861

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 131861
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	REQUIRES NSP	8/5/2022