

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

09/23/2021

Well Name: MUSKIE 23-11 FED COM	Well Location: T26S / R34E / SEC 23 / SWNE / 32.029921 / -103.43763	County or Parish/State: LEA / NM
Well Number: 10H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM100568	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002547420	Well Status: Approved Application for Permit to Drill	Operator: DEVON ENERGY PRODUCTION COMPANY LP

Notice of Intent

Sundry ID: 2509239

Type of Submission: Notice of Intent

Type of Action: Other

Date Sundry Submitted: 07/22/2021

Time Sundry Submitted: 12:13

Date proposed operation will begin: 07/22/2021

Procedure Description: Devon Energy Production Company, L.P. respectfully requests a BHL move: Name change from Muskies 23-14 Fed Com 10H to Muskies 23-11 Fed Com 10H BHL move from 20 FNL to 1200 FEL, 14-26S-34E to 20 FNL & 1520 FEL, 11-26S-34E TVD/MD change from 12,680'/20,282' to 12,635'/25,719' Please see revised C-102, Drilling and Directional plans

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

MUSKIE_23_11_FED_COM_10H_C_102_BHL_NOI_20210722121259.pdf

Muskies_23_11_Fed_Com_10H_Directional_Plan_07_21_21_20210722121258.pdf

Muskies_23_11_Fed_Com_10H_20210722121257.pdf

Well Name: MUSKIE 23-11 FED COM**Well Location:** T26S / R34E / SEC 23 /
SWNE / 32.029921 / -103.43763**County or Parish/State:** LEA /
NM**Well Number:** 10H**Type of Well:** OIL WELL**Allottee or Tribe Name:****Lease Number:** NMNM100568**Unit or CA Name:****Unit or CA Number:****US Well Number:** 3002547420**Well Status:** Approved Application for
Permit to Drill**Operator:** DEVON ENERGY
PRODUCTION COMPANY LP

Operator Certification

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 submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: REBECCA DEAL**Signed on:** JUL 22, 2021 12:13 PM**Name:** DEVON ENERGY PRODUCTION COMPANY LP**Title:** Regulatory Compliance Professional**Street Address:** 333 West Sheridan Avenue**City:** Oklahoma City**State:** OK**Phone:** (405) 228-8429**Email address:** Rebecca.Deal@dvn.com

Field Representative

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

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS**BLM POC Title:** Petroleum Engineer**BLM POC Phone:** 5752342234**BLM POC Email Address:** cwalls@blm.gov**Disposition:** Approved**Disposition Date:** 09/22/2021**Signature:** Chris Walls

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 RIO BRAZOS 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 30-025-47420	Pool Code 96776	Pool Name JABALINA;WOLFCAMP, SOUTHWEST
Property Code 328845	Property Name MUSKIE 23-11 FED COM	Well Number 10H
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	Elevation 3199.2'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	23	26-S	34-E		2264	NORTH	1696	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
B	11	26-S	34-E		20	NORTH	1520	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
800			

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

MUSKIE 23-11 FED COM 10H

EL: 3199.2'
LAT:32.029921
LON:103.437630
N:375774.54
E:818909.66

FIRST TAKE POINT

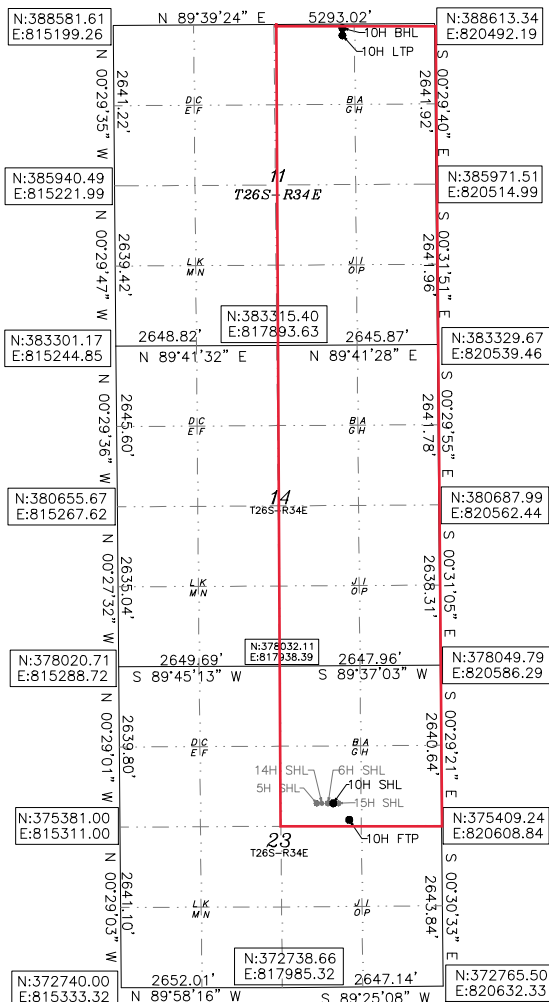
2539' FNL 1520' FEL SEC. 23
LAT:32.029165
LON:103.437062
N:375501.14
E:819088.00

LAST TAKE POINT

100' FNL 1520' FEL SEC. 11
LAT:32.064909
LON:103.437084
N:388504.23
E:818973.07

BOTTOM OF HOLE

LAT:32.065129
LON:103.437084
N:388584.23
E:818972.38



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.

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.

Rebecca Deal 7/20/2021
Signature Date

Rebecca Deal, Regulatory Specialist
Printed Name

rebecca.deal@dmv.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.

01/27/2020

Date of Survey

Signature & Seal of Professional Surveyor

B.L. LAMAN
NEW MEXICO
22404
PROFESSIONAL SURVEYOR
REV: 7/14/21
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? ☐Is this well an infill well? ☐

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

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

Muskie 23-11 Fed Com 10H



Well: Muskie 23-11 Fed Com 10H
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	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
100.00	0.00	151.00	100.00	0.00	0.00	0.00	0.00	
200.00	0.00	151.00	200.00	0.00	0.00	0.00	0.00	
300.00	0.00	151.00	300.00	0.00	0.00	0.00	0.00	
400.00	0.00	151.00	400.00	0.00	0.00	0.00	0.00	
500.00	0.00	151.00	500.00	0.00	0.00	0.00	0.00	
600.00	0.00	151.00	600.00	0.00	0.00	0.00	0.00	
700.00	0.00	151.00	700.00	0.00	0.00	0.00	0.00	
800.00	0.00	151.00	800.00	0.00	0.00	0.00	0.00	
890.00	0.00	151.00	890.00	0.00	0.00	0.00	0.00	Rustler
900.00	0.00	151.00	900.00	0.00	0.00	0.00	0.00	
1000.00	0.00	151.00	1000.00	0.00	0.00	0.00	0.00	
1100.00	0.00	151.00	1100.00	0.00	0.00	0.00	0.00	
1200.00	0.00	151.00	1200.00	0.00	0.00	0.00	0.00	
1250.00	0.00	151.00	1250.00	0.00	0.00	0.00	0.00	Salt
1300.00	0.00	151.00	1300.00	0.00	0.00	0.00	0.00	
1400.00	0.00	151.00	1400.00	0.00	0.00	0.00	0.00	
1500.00	0.00	151.00	1500.00	0.00	0.00	0.00	0.00	
1600.00	0.00	151.00	1600.00	0.00	0.00	0.00	0.00	
1700.00	0.00	151.00	1700.00	0.00	0.00	0.00	0.00	
1800.00	0.00	151.00	1800.00	0.00	0.00	0.00	0.00	
1900.00	0.00	151.00	1900.00	0.00	0.00	0.00	0.00	
2000.00	0.00	151.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2100.00	2.00	151.00	2099.98	-1.53	0.85	-1.52	2.00	
2200.00	4.00	151.00	2199.84	-6.10	3.38	-6.09	2.00	
2300.00	6.00	151.00	2299.45	-13.73	7.61	-13.69	2.00	
2400.00	8.00	151.00	2398.70	-24.38	13.52	-24.32	2.00	
2500.00	10.00	151.00	2497.47	-38.07	21.10	-37.96	2.00	Hold Tangent
2600.00	10.00	151.00	2595.95	-53.25	29.52	-53.11	0.00	
2700.00	10.00	151.00	2694.43	-68.44	37.94	-68.25	0.00	
2800.00	10.00	151.00	2792.91	-83.63	46.36	-83.40	0.00	
2900.00	10.00	151.00	2891.39	-98.82	54.77	-98.55	0.00	
3000.00	10.00	151.00	2989.87	-114.00	63.19	-113.69	0.00	
3100.00	10.00	151.00	3088.35	-129.19	71.61	-128.84	0.00	
3200.00	10.00	151.00	3186.83	-144.38	80.03	-143.99	0.00	
3300.00	10.00	151.00	3285.31	-159.57	88.45	-159.13	0.00	
3400.00	10.00	151.00	3383.79	-174.75	96.87	-174.28	0.00	
3500.00	10.00	151.00	3482.27	-189.94	105.29	-189.42	0.00	
3600.00	10.00	151.00	3580.75	-205.13	113.71	-204.57	0.00	
3700.00	10.00	151.00	3679.23	-220.32	122.12	-219.72	0.00	
3800.00	10.00	151.00	3777.72	-235.50	130.54	-234.86	0.00	
3900.00	10.00	151.00	3876.20	-250.69	138.96	-250.01	0.00	
4000.00	10.00	151.00	3974.68	-265.88	147.38	-265.15	0.00	
4100.00	10.00	151.00	4073.16	-281.07	155.80	-280.30	0.00	
4132.48	10.00	151.00	4105.15	-286.00	158.53	-285.22	0.00	Drop to Vertical
4200.00	8.65	151.00	4171.77	-295.57	163.84	-294.76	2.00	
4300.00	6.65	151.00	4270.88	-307.21	170.29	-306.37	2.00	
4400.00	4.65	151.00	4370.38	-315.82	175.06	-314.96	2.00	
4500.00	2.65	151.00	4470.18	-321.39	178.15	-320.51	2.00	
4600.00	0.65	151.00	4570.13	-323.91	179.54	-323.02	2.00	
4632.48	0.00	151.00	4602.61	-324.07	179.63	-323.18	2.00	Hold Vertical
4700.00	0.00	359.49	4670.13	-324.07	179.63	-323.18	0.00	
4800.00	0.00	359.49	4770.13	-324.07	179.63	-323.18	0.00	
4900.00	0.00	359.49	4870.13	-324.07	179.63	-323.18	0.00	
5000.00	0.00	359.49	4970.13	-324.07	179.63	-323.18	0.00	
5029.87	0.00	359.49	5000.00	-324.07	179.63	-323.18	0.00	Base of Salt
5100.00	0.00	359.49	5070.13	-324.07	179.63	-323.18	0.00	
5200.00	0.00	359.49	5170.13	-324.07	179.63	-323.18	0.00	
5300.00	0.00	359.49	5270.13	-324.07	179.63	-323.18	0.00	
5329.87	0.00	359.49	5300.00	-324.07	179.63	-323.18	0.00	Delaware
5400.00	0.00	359.49	5370.13	-324.07	179.63	-323.18	0.00	
5500.00	0.00	359.49	5470.13	-324.07	179.63	-323.18	0.00	
5600.00	0.00	359.49	5570.13	-324.07	179.63	-323.18	0.00	
5700.00	0.00	359.49	5670.13	-324.07	179.63	-323.18	0.00	
5800.00	0.00	359.49	5770.13	-324.07	179.63	-323.18	0.00	
5900.00	0.00	359.49	5870.13	-324.07	179.63	-323.18	0.00	
6000.00	0.00	359.49	5970.13	-324.07	179.63	-323.18	0.00	
6100.00	0.00	359.49	6070.13	-324.07	179.63	-323.18	0.00	
6200.00	0.00	359.49	6170.13	-324.07	179.63	-323.18	0.00	
6300.00	0.00	359.49	6270.13	-324.07	179.63	-323.18	0.00	

Muskie 23-11 Fed Com 10H



Well: Muskie 23-11 Fed Com 10H
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	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
6364.87	0.00	359.49	6335.00	-324.07	179.63	-323.18	0.00	Cherry Canyon
6400.00	0.00	359.49	6370.13	-324.07	179.63	-323.18	0.00	
6500.00	0.00	359.49	6470.13	-324.07	179.63	-323.18	0.00	
6600.00	0.00	359.49	6570.13	-324.07	179.63	-323.18	0.00	
6700.00	0.00	359.49	6670.13	-324.07	179.63	-323.18	0.00	
6800.00	0.00	359.49	6770.13	-324.07	179.63	-323.18	0.00	
6900.00	0.00	359.49	6870.13	-324.07	179.63	-323.18	0.00	
7000.00	0.00	359.49	6970.13	-324.07	179.63	-323.18	0.00	
7100.00	0.00	359.49	7070.13	-324.07	179.63	-323.18	0.00	
7200.00	0.00	359.49	7170.13	-324.07	179.63	-323.18	0.00	
7300.00	0.00	359.49	7270.13	-324.07	179.63	-323.18	0.00	
7400.00	0.00	359.49	7370.13	-324.07	179.63	-323.18	0.00	
7500.00	0.00	359.49	7470.13	-324.07	179.63	-323.18	0.00	
7600.00	0.00	359.49	7570.13	-324.07	179.63	-323.18	0.00	
7700.00	0.00	359.49	7670.13	-324.07	179.63	-323.18	0.00	
7800.00	0.00	359.49	7770.13	-324.07	179.63	-323.18	0.00	
7900.00	0.00	359.49	7870.13	-324.07	179.63	-323.18	0.00	
8000.00	0.00	359.49	7970.13	-324.07	179.63	-323.18	0.00	
8004.87	0.00	359.49	7975.00	-324.07	179.63	-323.18	0.00	Brushy Canyon
8100.00	0.00	359.49	8070.13	-324.07	179.63	-323.18	0.00	
8200.00	0.00	359.49	8170.13	-324.07	179.63	-323.18	0.00	
8300.00	0.00	359.49	8270.13	-324.07	179.63	-323.18	0.00	
8400.00	0.00	359.49	8370.13	-324.07	179.63	-323.18	0.00	
8500.00	0.00	359.49	8470.13	-324.07	179.63	-323.18	0.00	
8600.00	0.00	359.49	8570.13	-324.07	179.63	-323.18	0.00	
8700.00	0.00	359.49	8670.13	-324.07	179.63	-323.18	0.00	
8800.00	0.00	359.49	8770.13	-324.07	179.63	-323.18	0.00	
8900.00	0.00	359.49	8870.13	-324.07	179.63	-323.18	0.00	
9000.00	0.00	359.49	8970.13	-324.07	179.63	-323.18	0.00	
9100.00	0.00	359.49	9070.13	-324.07	179.63	-323.18	0.00	
9200.00	0.00	359.49	9170.13	-324.07	179.63	-323.18	0.00	
9300.00	0.00	359.49	9270.13	-324.07	179.63	-323.18	0.00	
9400.00	0.00	359.49	9370.13	-324.07	179.63	-323.18	0.00	
9434.87	0.00	359.49	9405.00	-324.07	179.63	-323.18	0.00	1st Bone Spring Lime
9500.00	0.00	359.49	9470.13	-324.07	179.63	-323.18	0.00	
9600.00	0.00	359.49	9570.13	-324.07	179.63	-323.18	0.00	
9700.00	0.00	359.49	9670.13	-324.07	179.63	-323.18	0.00	
9800.00	0.00	359.49	9770.13	-324.07	179.63	-323.18	0.00	
9900.00	0.00	359.49	9870.13	-324.07	179.63	-323.18	0.00	
10000.00	0.00	359.49	9970.13	-324.07	179.63	-323.18	0.00	
10100.00	0.00	359.49	10070.13	-324.07	179.63	-323.18	0.00	
10200.00	0.00	359.49	10170.13	-324.07	179.63	-323.18	0.00	
10300.00	0.00	359.49	10270.13	-324.07	179.63	-323.18	0.00	
10400.00	0.00	359.49	10370.13	-324.07	179.63	-323.18	0.00	
10500.00	0.00	359.49	10470.13	-324.07	179.63	-323.18	0.00	
10599.87	0.00	359.49	10570.00	-324.07	179.63	-323.18	0.00	Bone Spring 1st
10600.00	0.00	359.49	10570.13	-324.07	179.63	-323.18	0.00	
10700.00	0.00	359.49	10670.13	-324.07	179.63	-323.18	0.00	
10800.00	0.00	359.49	10770.13	-324.07	179.63	-323.18	0.00	
10900.00	0.00	359.49	10870.13	-324.07	179.63	-323.18	0.00	
11000.00	0.00	359.49	10970.13	-324.07	179.63	-323.18	0.00	
11100.00	0.00	359.49	11070.13	-324.07	179.63	-323.18	0.00	
11149.87	0.00	359.49	11120.00	-324.07	179.63	-323.18	0.00	Bone Spring 2nd
11200.00	0.00	359.49	11170.13	-324.07	179.63	-323.18	0.00	
11300.00	0.00	359.49	11270.13	-324.07	179.63	-323.18	0.00	
11400.00	0.00	359.49	11370.13	-324.07	179.63	-323.18	0.00	
11500.00	0.00	359.49	11470.13	-324.07	179.63	-323.18	0.00	
11600.00	0.00	359.49	11570.13	-324.07	179.63	-323.18	0.00	
11604.87	0.00	359.49	11575.00	-324.07	179.63	-323.18	0.00	3rd Bone Spring Lime
11700.00	0.00	359.49	11670.13	-324.07	179.63	-323.18	0.00	
11800.00	0.00	359.49	11770.13	-324.07	179.63	-323.18	0.00	
11900.00	0.00	359.49	11870.13	-324.07	179.63	-323.18	0.00	
12000.00	0.00	359.49	11970.13	-324.07	179.63	-323.18	0.00	
12100.00	0.00	359.49	12070.13	-324.07	179.63	-323.18	0.00	
12200.00	0.00	359.49	12170.13	-324.07	179.63	-323.18	0.00	
12204.87	0.00	359.49	12175.00	-324.07	179.63	-323.18	0.00	Bone Spring 3rd
12256.96	0.00	359.49	12227.09	-324.07	179.63	-323.18	0.00	KOP
12300.00	4.30	359.49	12270.09	-322.45	179.62	-321.57	10.00	
12400.00	14.30	359.49	12368.65	-306.31	179.47	-305.42	10.00	
12500.00	24.30	359.49	12462.91	-273.29	179.18	-272.41	10.00	

Muskie 23-11 Fed Com 10H



Well: Muskie 23-11 Fed Com 10H
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	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
12600.00	34.30	359.49	12550.00	-224.41	178.75	-223.53	10.00	
12656.46	39.95	359.49	12595.00	-190.35	178.44	-189.47	10.00	Wolfcamp / Point of Penetration
12700.00	44.30	359.49	12627.28	-161.15	178.18	-160.28	10.00	
12800.00	54.30	359.49	12692.40	-85.43	177.51	-84.56	10.00	
12900.00	64.30	359.49	12743.39	0.44	176.74	1.31	10.00	
13000.00	74.30	359.49	12778.68	93.87	175.91	94.73	10.00	
13100.00	84.30	359.49	12797.22	192.00	175.04	192.86	10.00	
13164.49	90.75	359.49	12800.00	256.40	174.47	257.25	10.00	Landing Point
13200.00	90.75	359.49	12799.53	291.90	174.15	292.75	0.00	
13300.00	90.75	359.49	12798.22	391.89	173.26	392.73	0.00	
13400.00	90.75	359.49	12796.90	491.88	172.37	492.72	0.00	
13500.00	90.75	359.49	12795.59	591.86	171.48	592.70	0.00	
13600.00	90.75	359.49	12794.28	691.85	170.59	692.68	0.00	
13700.00	90.75	359.49	12792.96	791.84	169.70	792.66	0.00	
13800.00	90.75	359.49	12791.65	891.83	168.81	892.64	0.00	
13900.00	90.75	359.49	12790.33	991.81	167.92	992.62	0.00	
14000.00	90.75	359.49	12789.02	1091.80	167.03	1092.61	0.00	
14100.00	90.75	359.49	12787.71	1191.79	166.13	1192.59	0.00	
14200.00	90.75	359.49	12786.39	1291.78	165.24	1292.57	0.00	
14300.00	90.75	359.49	12785.08	1391.76	164.35	1392.55	0.00	
14400.00	90.75	359.49	12783.76	1491.75	163.46	1492.53	0.00	
14500.00	90.75	359.49	12782.45	1591.74	162.57	1592.52	0.00	
14600.00	90.75	359.49	12781.14	1691.73	161.68	1692.50	0.00	
14700.00	90.75	359.49	12779.82	1791.71	160.79	1792.48	0.00	
14800.00	90.75	359.49	12778.51	1891.70	159.90	1892.46	0.00	
14900.00	90.75	359.49	12777.19	1991.69	159.01	1992.44	0.00	
15000.00	90.75	359.49	12775.88	2091.68	158.12	2092.42	0.00	
15100.00	90.75	359.49	12774.57	2191.66	157.23	2192.41	0.00	
15200.00	90.75	359.49	12773.25	2291.65	156.34	2292.39	0.00	
15300.00	90.75	359.49	12771.94	2391.64	155.45	2392.37	0.00	
15400.00	90.75	359.49	12770.62	2491.62	154.56	2492.35	0.00	
15500.00	90.75	359.49	12769.31	2591.61	153.67	2592.33	0.00	
15600.00	90.75	359.49	12767.99	2691.60	152.78	2692.32	0.00	
15700.00	90.75	359.49	12766.68	2791.59	151.89	2792.30	0.00	
15800.00	90.75	359.49	12765.37	2891.57	151.00	2892.28	0.00	
15900.00	90.75	359.49	12764.05	2991.56	150.10	2992.26	0.00	
16000.00	90.75	359.49	12762.74	3091.55	149.21	3092.24	0.00	
16100.00	90.75	359.49	12761.42	3191.54	148.32	3192.22	0.00	
16200.00	90.75	359.49	12760.11	3291.52	147.43	3292.21	0.00	
16300.00	90.75	359.49	12758.80	3391.51	146.54	3392.19	0.00	
16400.00	90.75	359.49	12757.48	3491.50	145.65	3492.17	0.00	
16500.00	90.75	359.49	12756.17	3591.49	144.76	3592.15	0.00	
16600.00	90.75	359.49	12754.85	3691.47	143.87	3692.13	0.00	
16700.00	90.75	359.49	12753.54	3791.46	142.98	3792.12	0.00	
16800.00	90.75	359.49	12752.23	3891.45	142.09	3892.10	0.00	
16900.00	90.75	359.49	12750.91	3991.44	141.20	3992.08	0.00	
17000.00	90.75	359.49	12749.60	4091.42	140.31	4092.06	0.00	
17100.00	90.75	359.49	12748.28	4191.41	139.42	4192.04	0.00	
17200.00	90.75	359.49	12746.97	4291.40	138.53	4292.03	0.00	
17300.00	90.75	359.49	12745.66	4391.39	137.64	4392.01	0.00	
17400.00	90.75	359.49	12744.34	4491.37	136.75	4491.99	0.00	
17500.00	90.75	359.49	12743.03	4591.36	135.86	4591.97	0.00	
17600.00	90.75	359.49	12741.71	4691.35	134.97	4691.95	0.00	
17700.00	90.75	359.49	12740.40	4791.34	134.07	4791.93	0.00	
17800.00	90.75	359.49	12739.08	4891.32	133.18	4891.92	0.00	
17900.00	90.75	359.49	12737.77	4991.31	132.29	4991.90	0.00	
18000.00	90.75	359.49	12736.46	5091.30	131.40	5091.88	0.00	
18100.00	90.75	359.49	12735.14	5191.28	130.51	5191.86	0.00	
18200.00	90.75	359.49	12733.83	5291.27	129.62	5291.84	0.00	
18300.00	90.75	359.49	12732.51	5391.26	128.73	5391.83	0.00	
18400.00	90.75	359.49	12731.20	5491.25	127.84	5491.81	0.00	
18500.00	90.75	359.49	12729.89	5591.23	126.95	5591.79	0.00	
18600.00	90.75	359.49	12728.57	5691.22	126.06	5691.77	0.00	
18700.00	90.75	359.49	12727.26	5791.21	125.17	5791.75	0.00	
18800.00	90.75	359.49	12725.94	5891.20	124.28	5891.73	0.00	
18900.00	90.75	359.49	12724.63	5991.18	123.39	5991.72	0.00	
19000.00	90.75	359.49	12723.32	6091.17	122.50	6091.70	0.00	
19100.00	90.75	359.49	12722.00	6191.16	121.61	6191.68	0.00	
19200.00	90.75	359.49	12720.69	6291.15	120.72	6291.66	0.00	
19300.00	90.75	359.49	12719.37	6391.13	119.83	6391.64	0.00	

Muskie 23-11 Fed Com 10H



Well: Muskie 23-11 Fed Com 10H
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	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
19400.00	90.75	359.49	12718.06	6491.12	118.94	6491.63	0.00	
19500.00	90.75	359.49	12716.74	6591.11	118.04	6591.61	0.00	
19600.00	90.75	359.49	12715.43	6691.10	117.15	6691.59	0.00	
19700.00	90.75	359.49	12714.12	6791.08	116.26	6791.57	0.00	
19800.00	90.75	359.49	12712.80	6891.07	115.37	6891.55	0.00	
19900.00	90.75	359.49	12711.49	6991.06	114.48	6991.53	0.00	
20000.00	90.75	359.49	12710.17	7091.05	113.59	7091.52	0.00	
20100.00	90.75	359.49	12708.86	7191.03	112.70	7191.50	0.00	
20200.00	90.75	359.49	12707.55	7291.02	111.81	7291.48	0.00	
20300.00	90.75	359.49	12706.23	7391.01	110.92	7391.46	0.00	
20400.00	90.75	359.49	12704.92	7490.99	110.03	7491.44	0.00	
20500.00	90.75	359.49	12703.60	7590.98	109.14	7591.43	0.00	
20600.00	90.75	359.49	12702.29	7690.97	108.25	7691.41	0.00	
20700.00	90.75	359.49	12700.98	7790.96	107.36	7791.39	0.00	
20800.00	90.75	359.49	12699.66	7890.94	106.47	7891.37	0.00	
20900.00	90.75	359.49	12698.35	7990.93	105.58	7991.35	0.00	
21000.00	90.75	359.49	12697.03	8090.92	104.69	8091.33	0.00	
21100.00	90.75	359.49	12695.72	8190.91	103.80	8191.32	0.00	
21200.00	90.75	359.49	12694.41	8290.89	102.91	8291.30	0.00	
21300.00	90.75	359.49	12693.09	8390.88	102.01	8391.28	0.00	
21400.00	90.75	359.49	12691.78	8490.87	101.12	8491.26	0.00	
21500.00	90.75	359.49	12690.46	8590.86	100.23	8591.24	0.00	
21600.00	90.75	359.49	12689.15	8690.84	99.34	8691.23	0.00	
21700.00	90.75	359.49	12687.83	8790.83	98.45	8791.21	0.00	
21800.00	90.75	359.49	12686.52	8890.82	97.56	8891.19	0.00	
21900.00	90.75	359.49	12685.21	8990.81	96.67	8991.17	0.00	
22000.00	90.75	359.49	12683.89	9090.79	95.78	9091.15	0.00	
22100.00	90.75	359.49	12682.58	9190.78	94.89	9191.14	0.00	
22200.00	90.75	359.49	12681.26	9290.77	94.00	9291.12	0.00	
22300.00	90.75	359.49	12679.95	9390.76	93.11	9391.10	0.00	
22400.00	90.75	359.49	12678.64	9490.74	92.22	9491.08	0.00	
22500.00	90.75	359.49	12677.32	9590.73	91.33	9591.06	0.00	
22600.00	90.75	359.49	12676.01	9690.72	90.44	9691.04	0.00	
22700.00	90.75	359.49	12674.69	9790.71	89.55	9791.03	0.00	
22800.00	90.75	359.49	12673.38	9890.69	88.66	9891.01	0.00	
22900.00	90.75	359.49	12672.07	9990.68	87.77	9990.99	0.00	
23000.00	90.75	359.49	12670.75	10090.67	86.88	10090.97	0.00	
23100.00	90.75	359.49	12669.44	10190.65	85.98	10190.95	0.00	
23200.00	90.75	359.49	12668.12	10290.64	85.09	10290.94	0.00	
23300.00	90.75	359.49	12666.81	10390.63	84.20	10390.92	0.00	
23400.00	90.75	359.49	12665.50	10490.62	83.31	10490.90	0.00	
23500.00	90.75	359.49	12664.18	10590.60	82.42	10590.88	0.00	
23600.00	90.75	359.49	12662.87	10690.59	81.53	10690.86	0.00	
23700.00	90.75	359.49	12661.55	10790.58	80.64	10790.84	0.00	
23800.00	90.75	359.49	12660.24	10890.57	79.75	10890.83	0.00	
23900.00	90.75	359.49	12658.92	10990.55	78.86	10990.81	0.00	
24000.00	90.75	359.49	12657.61	11090.54	77.97	11090.79	0.00	
24100.00	90.75	359.49	12656.30	11190.53	77.08	11190.77	0.00	
24200.00	90.75	359.49	12654.98	11290.52	76.19	11290.75	0.00	
24300.00	90.75	359.49	12653.67	11390.50	75.30	11390.74	0.00	
24400.00	90.75	359.49	12652.35	11490.49	74.41	11490.72	0.00	
24500.00	90.75	359.49	12651.04	11590.48	73.52	11590.70	0.00	
24600.00	90.75	359.49	12649.73	11690.47	72.63	11690.68	0.00	
24700.00	90.75	359.49	12648.41	11790.45	71.74	11790.66	0.00	
24800.00	90.75	359.49	12647.10	11890.44	70.85	11890.64	0.00	
24900.00	90.75	359.49	12645.78	11990.43	69.95	11990.63	0.00	
25000.00	90.75	359.49	12644.47	12090.42	69.06	12090.61	0.00	
25100.00	90.75	359.49	12643.16	12190.40	68.17	12190.59	0.00	
25200.00	90.75	359.49	12641.84	12290.39	67.28	12290.57	0.00	
25300.00	90.75	359.49	12640.53	12390.38	66.39	12390.55	0.00	
25400.00	90.75	359.49	12639.21	12490.36	65.50	12490.54	0.00	
25500.00	90.75	359.49	12637.90	12590.35	64.61	12590.52	0.00	
25600.00	90.75	359.49	12636.58	12690.34	63.72	12690.50	0.00	
25639.36	90.75	359.49	12636.07	12729.70	63.37	12729.85	0.00	EXIT
25700.00	90.75	359.49	12635.27	12790.33	62.83	12790.48	0.00	
25719.36	90.75	359.49	12635.00	12809.69	62.72	12809.84	0.00	BHL

Well: Muskie 23-11 Fed Com 10H
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	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	

Muskie 23-11 Fed Com 10H

1. Geologic Formations

TVD of target	12636	Pilot hole depth	N/A
MD at TD:	25719	Deepest expected fresh water	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	890		
Salt	1250		
Base of Salt	5000		
Delaware	5300		
Cherry Canyon	6335		
Brushy Canyon	7975		
1st Bone Spring Lime	9405		
Bone Spring 1st	10570		
Bone Spring 2nd	11120		
3rd Bone Spring Lime	11575		
Bone Spring 3rd	12175		
Wolfcamp	12595		

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

Muskie 23-11 Fed Com 10H

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)
17 1/2	13 3/8	48	H40	STC	0	915	0	915
9 7/8	8 5/8	32	P110	TLW	0	12175	0	12175
7 7/8	5 1/2	17	P110	BTC	0	25719	0	12636

• 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	# Skis	TOC	Wt. ppg	Yld (ft3/sack)	Slurry Description
Surface	701	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	497	Surf	9	3.27	Lead: Class C Cement + additives
	465	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
	497	Surf	9	3.27	Lead: Class C Cement + additives
	465	4000' above	13.2	1.44	Tail: Class H / C + additives
Production	117	10257	9	3.27	Lead: Class H / C + additives
	1782	12257	13.2	1.44	Tail: Class H / C + additives

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

Muskie 23-11 Fed Com 10H

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"	10M	Annular (5M)		X	100% of rated working pressure
				Blind Ram		X	10M
				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						

Muskie 23-11 Fed Com 10H

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

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

7. Drilling Conditions

Condition	Specify what type and where?
BH pressure at deepest TVD	6899
Abnormal temperature	No

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

Hydrogen 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	H ₂ S is present
Y	H ₂ S 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

Muskie 23-11 Fed Com 10H

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 nipped up and tested on the wellhead before drilling operations commences on each well.
 - a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

Attachments

X Directional Plan
 Other, describe

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (505) 748-1283 Fax: (505) 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 30-025-47420	Pool Code 96776	Pool Name JABALINA;WOLFCAMP, SOUTHWEST
Property Code 328845	Property Name MUSKIE 23-11 FED COM	Well Number 10H
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	Elevation 3199.2'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	23	26-S	34-E		2264	NORTH	1696	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
B	11	26-S	34-E		20	NORTH	1520	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
800			

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

MUSKIE 23-11 FED COM 10H

EL: 3199.2'
LAT:32.029921
LON:103.437630
N:375774.54
E:818909.66

FIRST TAKE POINT

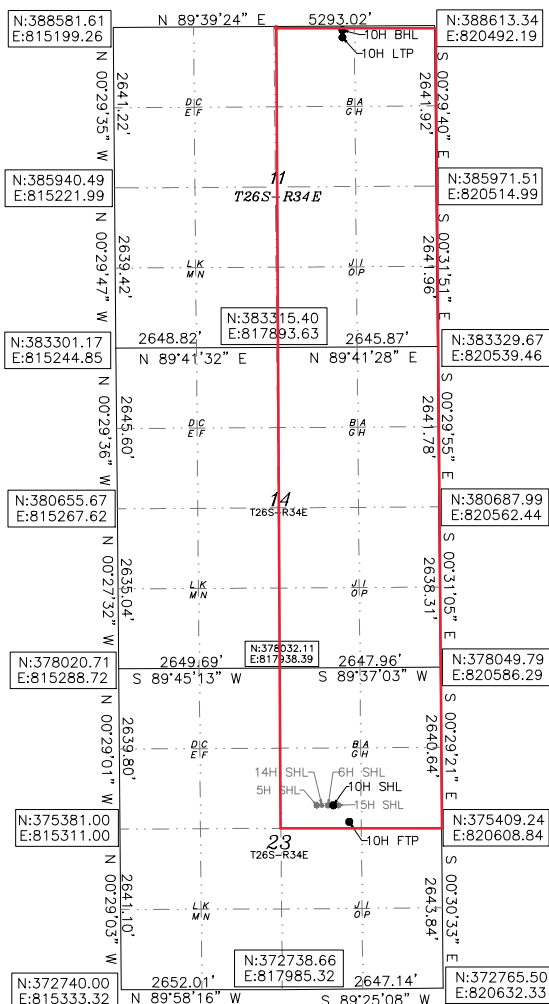
2539' FNL 1520' FEL SEC. 23
LAT:32.029165
LON:103.437062
N:375501.14
E:819088.00

LAST TAKE POINT

100' FNL 1520' FEL SEC. 11
LAT:32.064909
LON:103.437084
N:388504.23
E:818973.07

BOTTOM OF HOLE

LAT:32.065129
LON:103.437084
N:388584.23
E:818972.38



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.

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.

Signature: Rebecca Deal Date: 7/20/2021

Printed Name: Rebecca Deal, Regulatory Specialist

E-mail Address: rebecca.deal@dvn.com

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.

01/27/2020

Date of Survey

Signature & Seal of Professional Surveyor

REV: 7/14/21

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

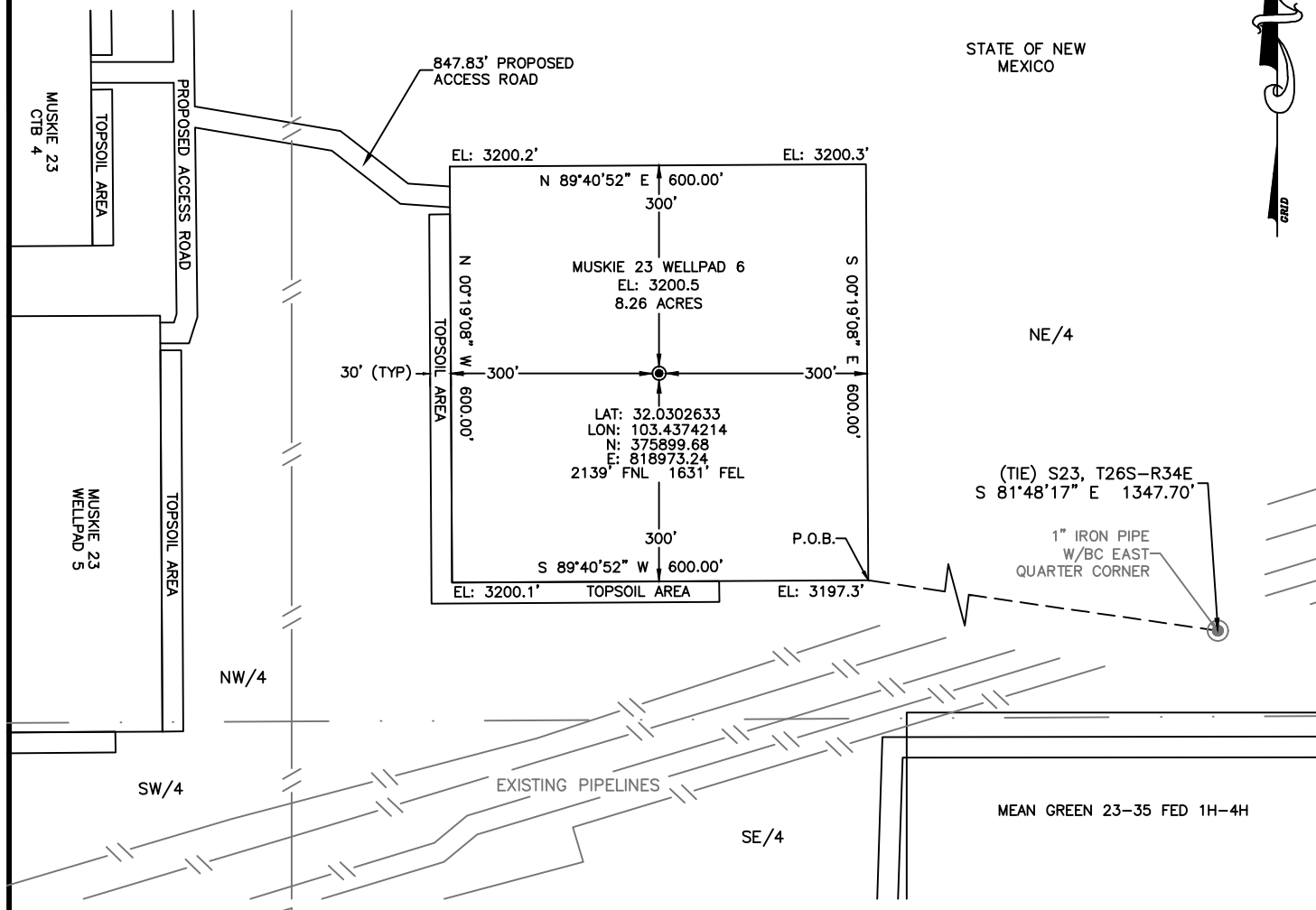
Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

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

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

MUSKIE 23 WELLPAD 6
DEVON ENERGY PRODUCTION COMPANY, L.P.
IN THE NORTHEAST QUARTER (NE/4)
SECTION 23, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, NEW MEXICO



DESCRIPTION

BEING A SURFACE SITE EASEMENT LYING IN THE NORTHEAST QUARTER (NE/4) OF SECTION 23, TOWNSHIP 26 SOUTH, RANGE 34 EAST N.M.P.M., LEA COUNTY, NEW MEXICO.

BEGINNING AT THE SOUTHEAST CORNER OF SAID SITE EASEMENT, WHERE A 1" IRON PIPE W/BC FOR THE EAST QUARTER CORNER OF SECTION 23, TOWNSHIP 26 SOUTH, RANGE 34 EAST N.M.P.M. BEARS S 81°48'17" E, A DISTANCE 1347.70';

THENCE S 89°40'52" W, A DISTANCE 600.00 FEET TO THE SOUTHWEST CORNER OF THIS EASEMENT;
THENCE N 00°19'08" W, A DISTANCE 600.00 FEET TO THE NORTHWEST CORNER OF THIS EASEMENT;
THENCE N 89°40'52" E, A DISTANCE 600.00 FEET TO THE NORTHEAST CORNER OF THIS EASEMENT;
THENCE S 00°19'08" E, A DISTANCE 600.00 FEET TO THE SOUTHEAST CORNER OF THIS EASEMENT,
TO THE POINT OF BEGINNING; CONTAINING 8.26 ACRES.

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF J-3 (FRYING PAN ROAD) AND BECKHAM ROAD HEAD WEST FOR 5.37 MILES. TURN RIGHT AND CONTINUE NORTH ON AN EXISTING LEASE ROAD FOR 4.43 MILES. TURN RIGHT ONTO AN EXISTING ACCESS ROAD AND HEAD NORTH FOR 0.67 MILES THROUGH AN EXISTING WELLPAD AND THEN TURN LEFT AND HEAD WEST ON THE SAME ACCESS ROAD FOR 0.91 MILES TO THE POINT OF BEGINNING OF A PROPOSED ACCESS ROAD. FOLLOW THE PROPOSED ACCESS ROAD SOUTH AND THEN WEST FOR 0.70 MILES TO THE POINT OF BEGINNING OF A PROPOSED ACCESS ROAD. TURN LEFT AND FOLLOW THE PROPOSED ACCESS ROAD FOR 848' TO THE NORTHWEST CORNER OF THE PROPOSED MUSKIE 23 WELLPAD 6.

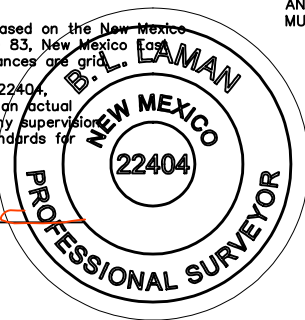
GENERAL NOTES:

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 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
Horizonrow, LLC
Date Signed: 02-08-2020
P.O. Box 548, Dry Creek, La.
(903) 388-3045 70637
Employee of Horizonrow, LLC



HORIZON ROW LLC

Drawn for:

Drawn by:
DANIEL SHOOK

Date: 02/05/2020

DEVON ENERGY PRODUCTION COMPANY, L.P.

MUSKIE 23 WELLPAD 6

SURVEY PLAT SHOWING
A WELLPAD
ON THE PROPERTY OF THE
BUREAU OF LAND MANAGEMENT

SITE NUMBER:
AA000342612

WBS NUMBER:
XX-135232.01.SLC

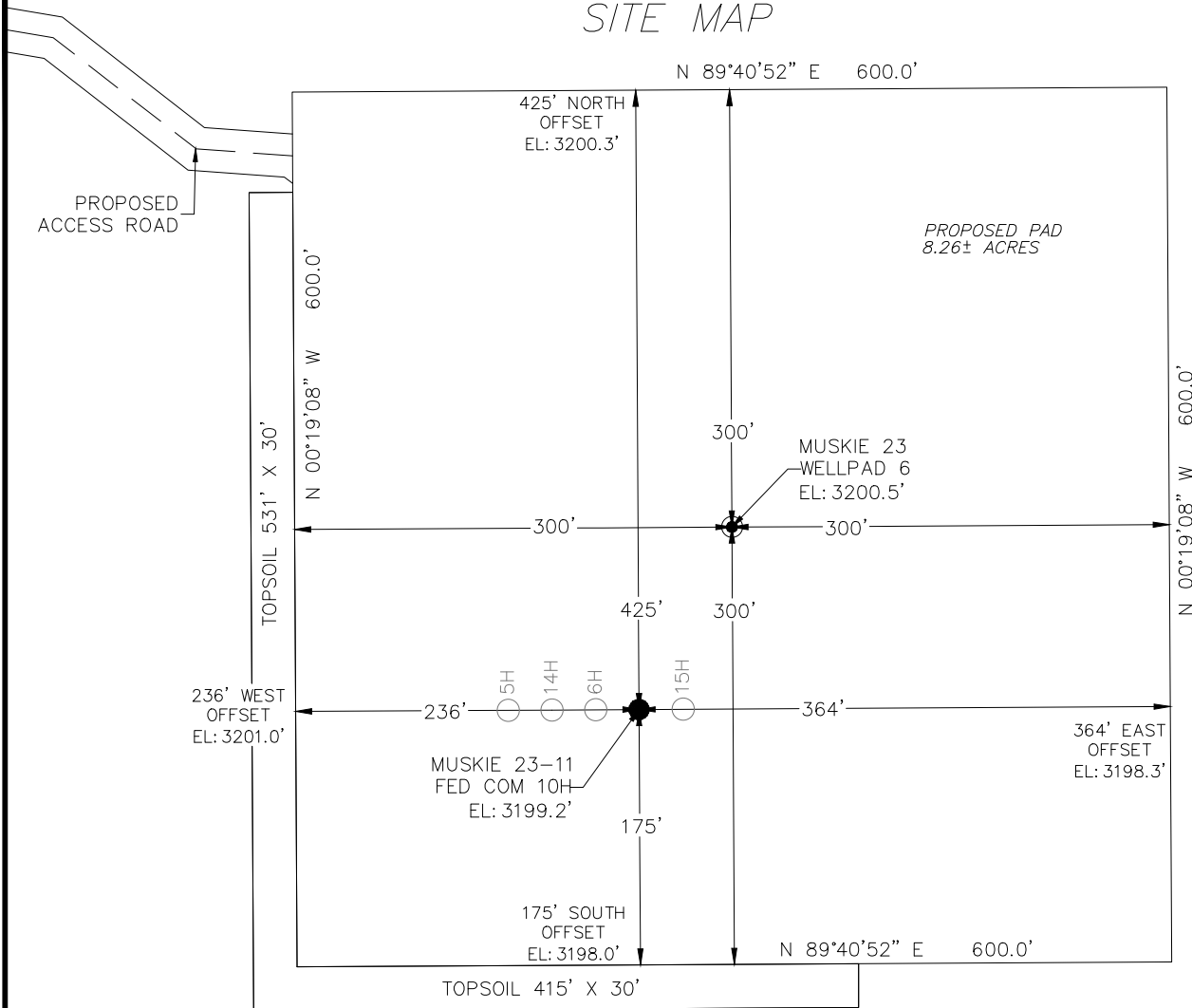
SCALE:
1" = 250'

REVISIONS:

DATE OF SURVEY:
7/3/18



SECTION 23, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M. LEA COUNTY, STATE OF NEW MEXICO SITE MAP

MUSKIE 23-11 FED COM 5H

2264' FNL 1786' FEL SEC. 23
EL: 3200.0'
N: 375773.94
E: 818819.66

MUSKIE 23-11 FED COM 14H

2264' FNL 1756' FEL SEC. 23
EL: 3201.0'
N: 375774.14
E: 818849.66

MUSKIE 23-11 FED COM 6H

2264' FNL 1726' FEL SEC. 23
EL: 3199.9'
N: 375774.34
E: 818879.66

MUSKIE 23-11 FED COM 10H

2264' FNL 1696' FEL SEC. 23
EL: 3199.2'
N: 375774.54
E: 818909.66

MUSKIE 23-11 FED COM 15H

2264' FNL 1666' FEL SEC. 23
EL: 3198.6'
N: 375774.74
E: 818939.66

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.

MUSKIE 23-11 FED COM 10H
LOCATED 2264 FT. FROM THE NORTH LINE
AND 1696 FT. FROM THE EAST LINE OF
SECTION 23, TOWNSHIP 26 SOUTH,
RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF J-3 (FRYING PAN ROAD) AND BECKHAM ROAD HEAD WEST FOR 5.37 MILES. TURN RIGHT AND CONTINUE NORTH ON AN EXISTING LEASE ROAD FOR 4.43 MILES. TURN RIGHT ONTO AN EXISTING ACCESS ROAD AND HEAD NORTH FOR 0.67 MILES THROUGH AN EXISTING WELLPAD AND THEN TURN LEFT AND HEAD WEST ON THE SAME ACCESS ROAD FOR 0.91 MILES TO THE POINT OF BEGINNING OF A PROPOSED ACCESS ROAD. FOLLOW THE PROPOSED ACCESS ROAD SOUTH AND THEN WEST FOR 0.70 MILES TO THE POINT OF BEGINNING OF A PROPOSED ACCESS ROAD. TURN LEFT AND FOLLOW THE PROPOSED ACCESS ROAD FOR 848' TO THE NORTHWEST CORNER OF THE PROPOSED MUSKIE 23 WELLPAD 6.

HORIZON ROW LLC

DEVON ENERGY PRODUCTION CO., L.P.

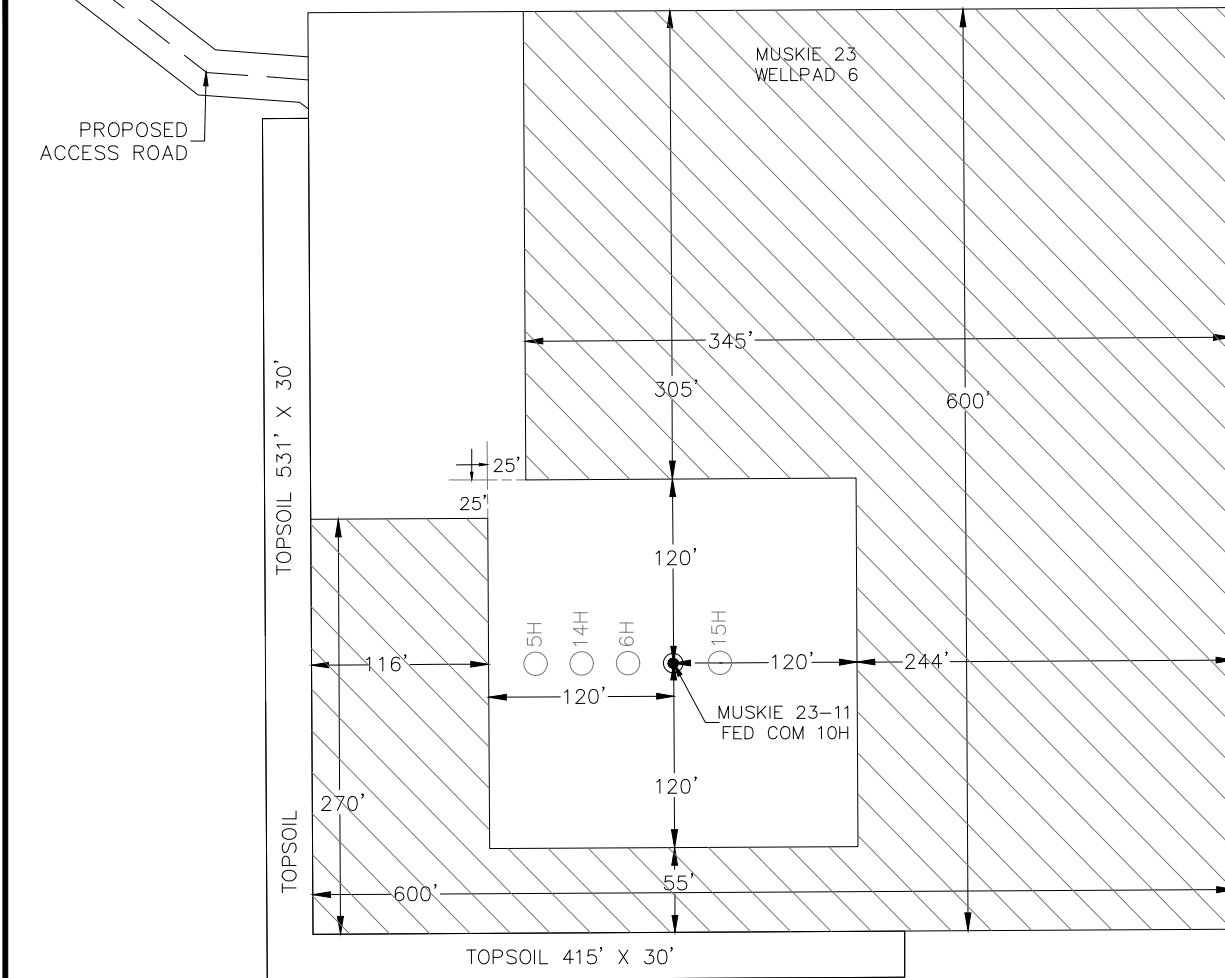
Drawn by:
CHRIS MAAS

Date: 02/03/2020
REV: 7/12/21

Drawn for:



SECTION 23, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M. LEA COUNTY, STATE OF NEW MEXICO INTERIM SITE BUILD PLAN



MUSKIE 23-11 FED COM 5H
2264' FNL 1786' FEL SEC. 23
EL: 3200.0'
N: 375773.94
E: 818819.66

MUSKIE 23-11 FED COM 14H
2264' FNL 1756' FEL SEC. 23
EL: 3201.0'
N: 375774.14
E: 818849.66

MUSKIE 23-11 FED COM 6H
2264' FNL 1726' FEL SEC. 23
EL: 3199.9'
N: 375774.34
E: 818879.66

MUSKIE 23-11 FED COM 10H
2264' FNL 1696' FEL SEC. 23
EL: 3199.2'
N: 375774.54
E: 818909.66

MUSKIE 23-11 FED COM 15H
2264' FNL 1666' FEL SEC. 23
EL: 3198.6'
N: 375774.74
E: 818939.66

 DENOTES INTERIM PAD RECLAMATION AREA
5.89 ± ACRES INTERIM PAD RECLAMATION AREA
2.37 ± ACRES NON-RECLAIMED AREA
8.26 ± ACRES GRADING SITE RECLAMATION AREA



DEVON ENERGY PRODUCTION COMPANY, L.P.
MUSKIE 23-11 FED COM 10H
LOCATED 2264 FT. FROM THE NORTH LINE
AND 1696 FT. FROM THE EAST LINE OF
SECTION 23, TOWNSHIP 26 SOUTH,
RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

HORIZON ROW LLC

DEVON ENERGY PRODUCTION CO., L.P.

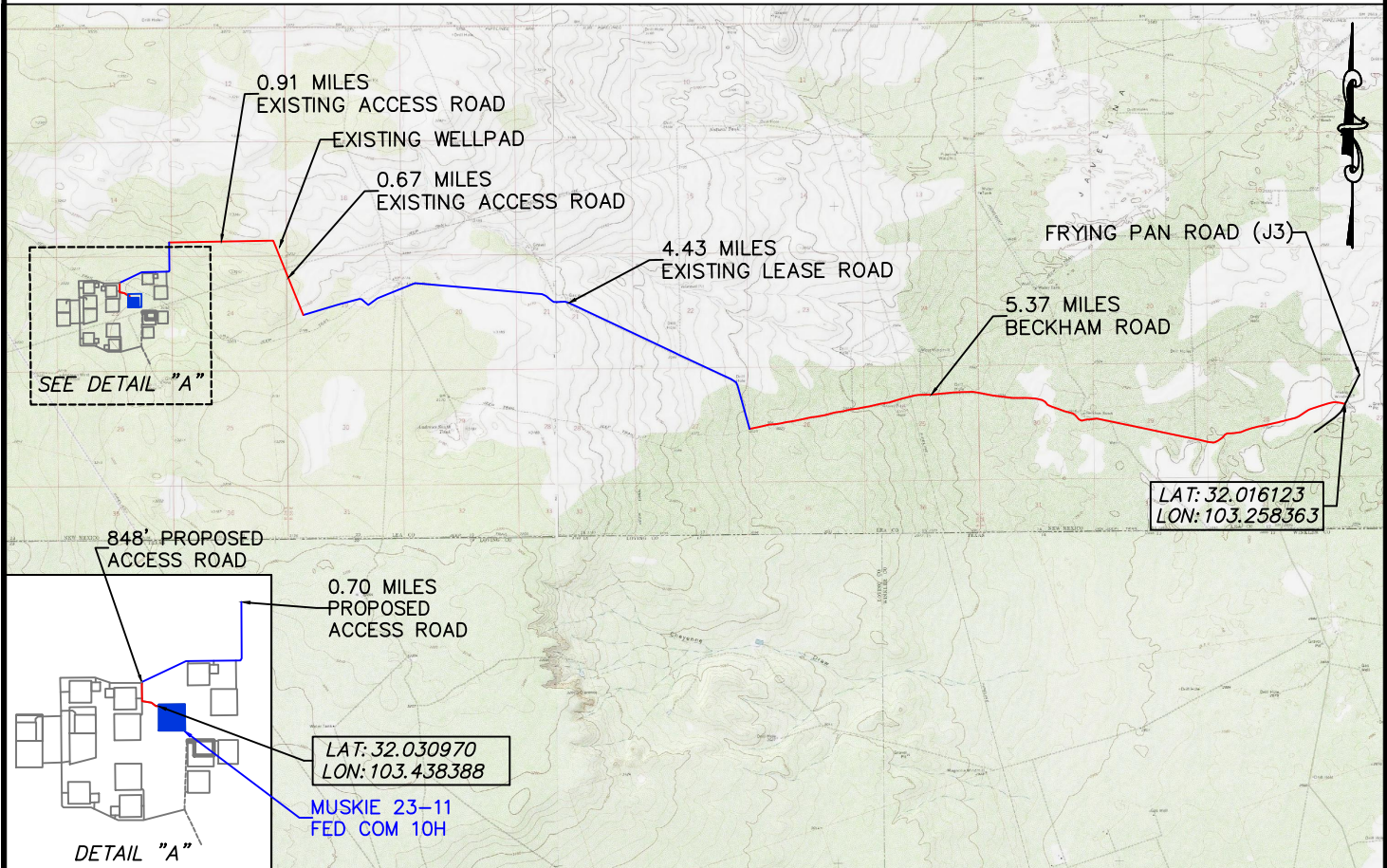
Drawn by:
CHRIS MAAS

Date: 02/03/2020
REV: 7/12/21

Drawn for:


devon

SECTION 23, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
VICINITY MAP



DEVON ENERGY PRODUCTION COMPANY, L.P.
MUSKIE 23-11 FED COM 10H
LOCATED 2264 FT. FROM THE NORTH LINE
AND 1696 FT. FROM THE EAST LINE OF
SECTION 23, TOWNSHIP 26 SOUTH,
RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

NOT TO SCALE

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF J-3 (FRYING PAN ROAD) AND BECKHAM ROAD HEAD WEST FOR 5.37 MILES. TURN RIGHT AND CONTINUE NORTH ON AN EXISTING LEASE ROAD FOR 4.43 MILES. TURN RIGHT ONTO AN EXISTING ACCESS ROAD AND HEAD NORTH FOR 0.67 MILES THROUGH AN EXISTING WELLPAD AND THEN TURN LEFT AND HEAD WEST ON THE SAME ACCESS ROAD FOR 0.91 MILES TO THE POINT OF BEGINNING OF A PROPOSED ACCESS ROAD. FOLLOW THE PROPOSED ACCESS ROAD SOUTH AND THEN WEST FOR 0.70 MILES TO THE POINT OF BEGINNING OF A PROPOSED ACCESS ROAD. TURN LEFT AND FOLLOW THE PROPOSED ACCESS ROAD FOR 848' TO THE NORTHWEST CORNER OF THE PROPOSED MUSKIE 23 WELLPAD 6.

HORIZON ROW LLC

DEVON ENERGY PRODUCTION CO., L.P.

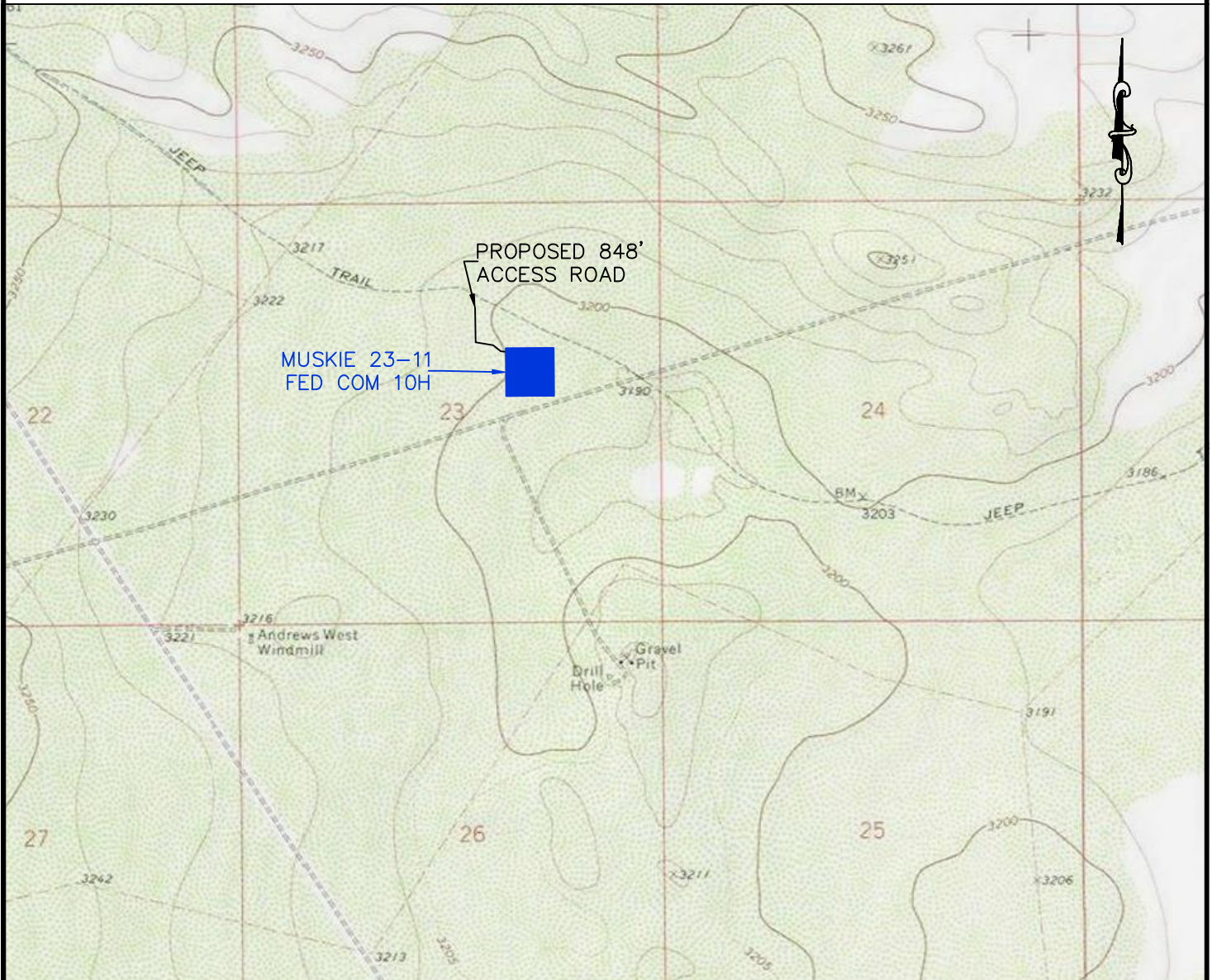
Drawn by:
CHRIS MAAS

Date: 02/03/2020
REV: 7/8/21

Drawn for:

devon

SECTION 23, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



USGS QUAD MAP

DEVON ENERGY PRODUCTION COMPANY, L.P.
MUSKIE 23-11 FED COM 10H
LOCATED 2264 FT. FROM THE NORTH LINE
AND 1696 FT. FROM THE EAST LINE OF
SECTION 23, TOWNSHIP 26 SOUTH,
RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

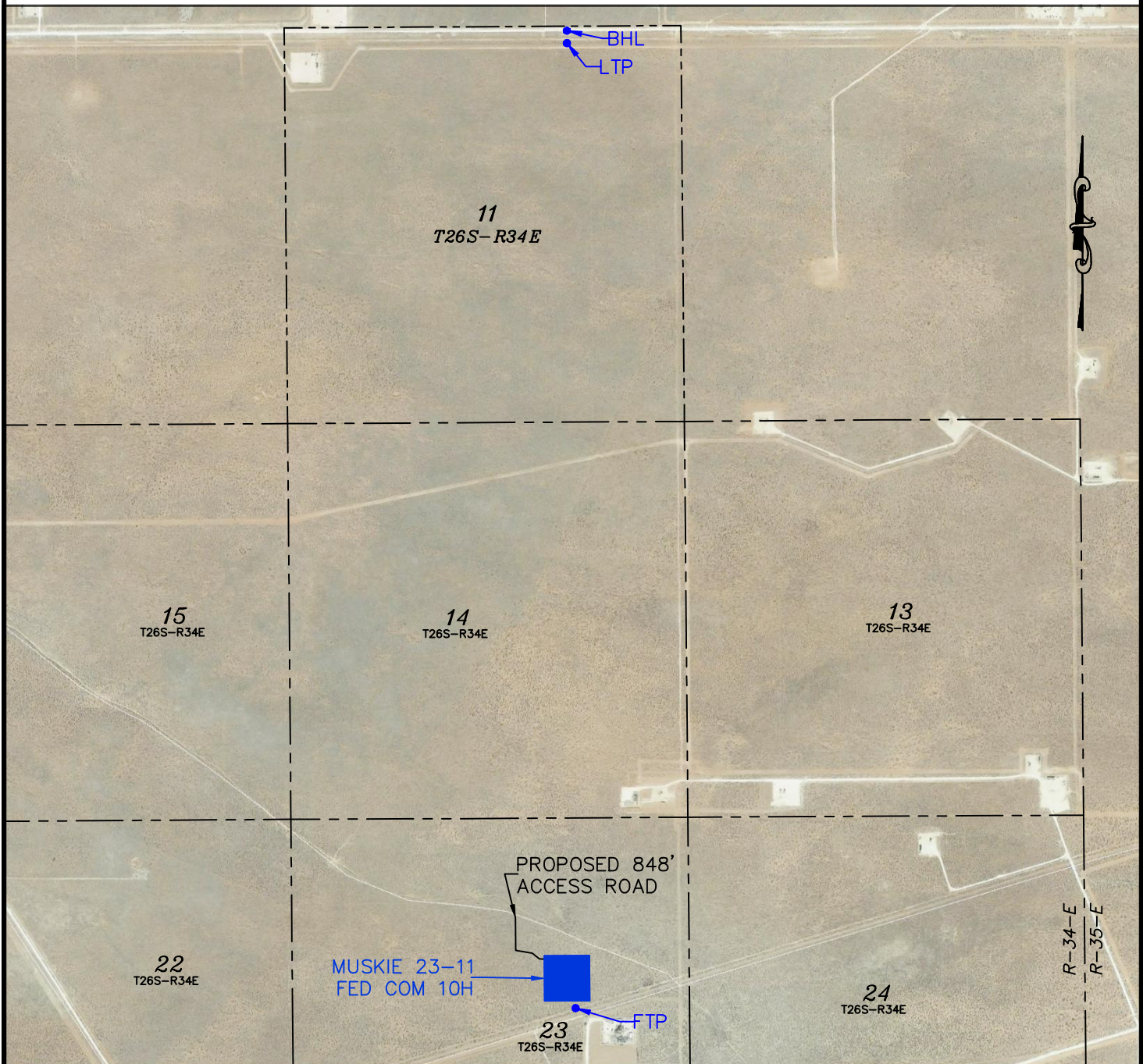
**HORIZON ROW LLC**

Drawn for:

DEVON ENERGY PRODUCTION CO., L.P.

Drawn by:
CHRIS MAASDate: 02/03/2020
REV: 7/8/21

SECTION 23, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.
MUSKIE 23-11 FED COM 10H
LOCATED 2264 FT. FROM THE NORTH LINE
AND 1696 FT. FROM THE EAST LINE OF
SECTION 23, TOWNSHIP 26 SOUTH,
RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

HORIZON ROW LLC

DEVON ENERGY PRODUCTION CO., L.P.

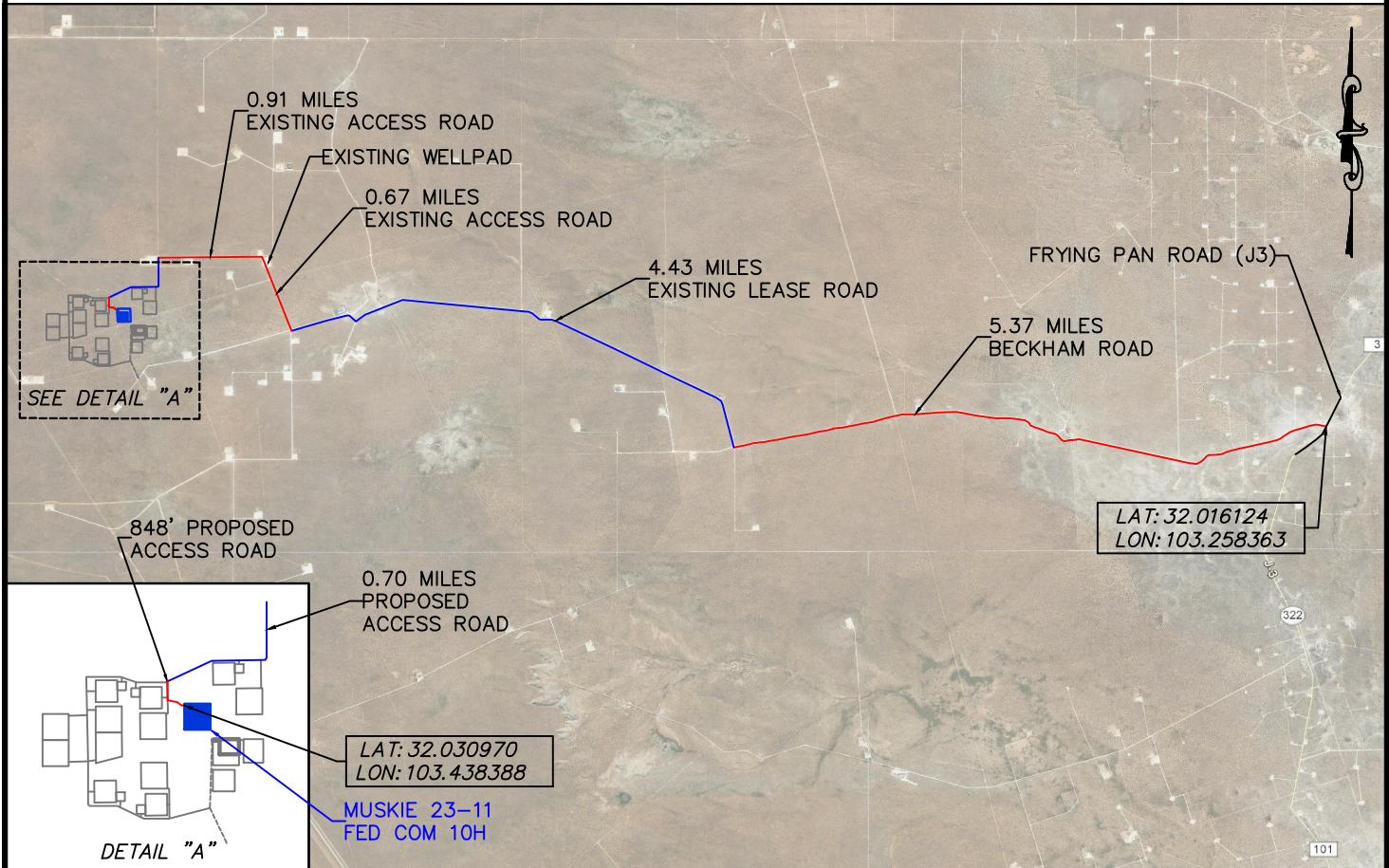
Drawn by:
CHRIS MAAS

Date: 02/02/2020
REV: 7/8/21

Drawn for:

devon

SECTION 23, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
AERIAL ACCESS ROUTE MAP



DEVON ENERGY PRODUCTION COMPANY, L.P.
MUSKIE 23-11 FED COM 10H
LOCATED 2264 FT. FROM THE NORTH LINE
AND 1696 FT. FROM THE EAST LINE OF
SECTION 23, TOWNSHIP 26 SOUTH,
RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

NOT TO SCALE

HORIZON ROW LLC

DEVON ENERGY PRODUCTION CO., L.P.

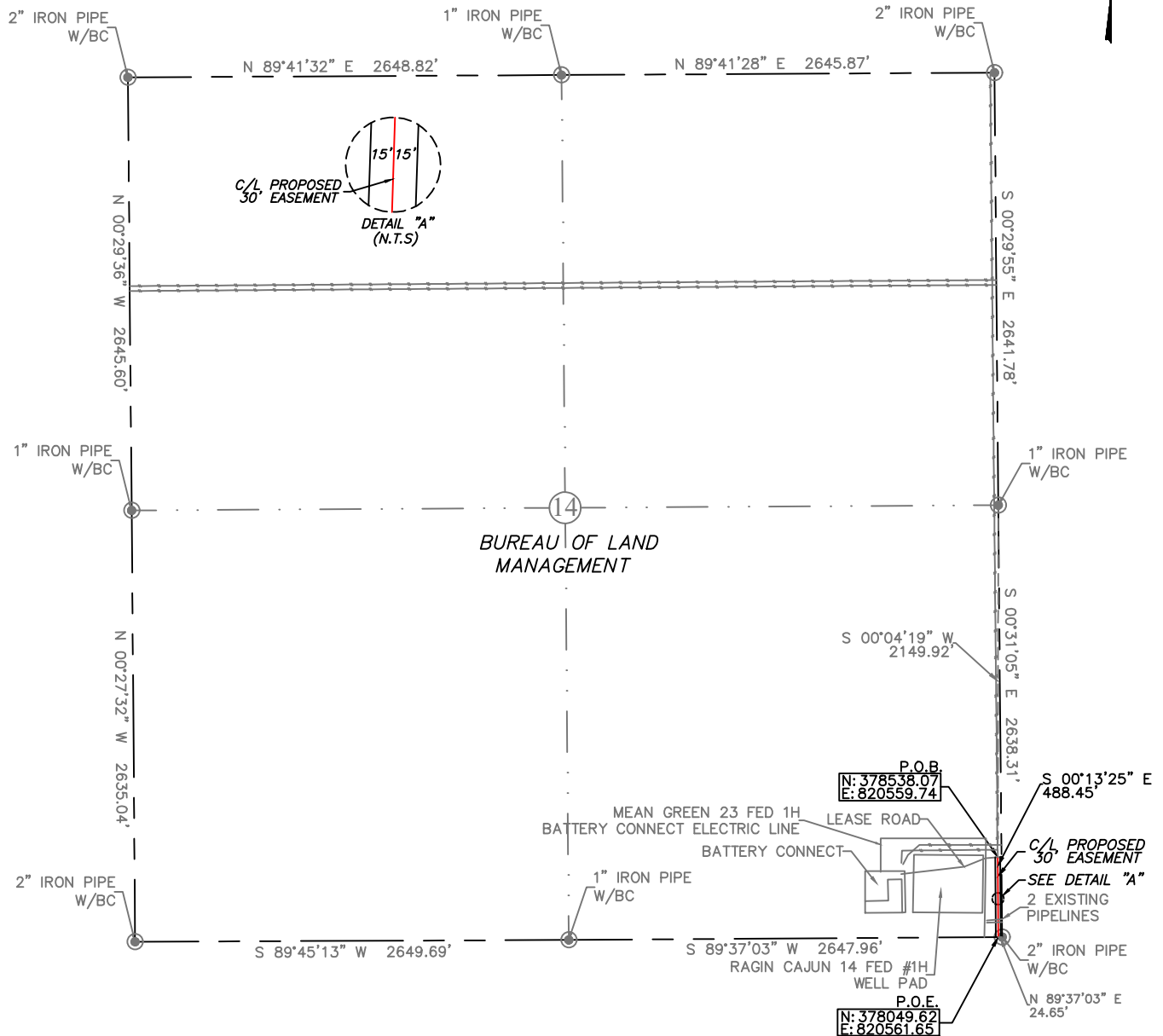
Drawn by:
CHRIS MAAS

Date: 02/03/2020
REV: 7/8/21

Drawn for:

devon

EXHIBIT "A"
PAGE 1 of 7
ACCESS ROAD PLAT
SECTION 14, T26S-R34E, N.M.P.M.
LEA COUNTY, NEW MEXICO



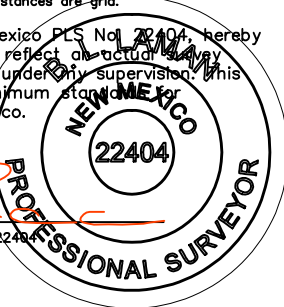
30' EASEMENT AREA = 0.336 ACRE(S)
488.45 FEET OR 29.60 RODS

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: 09-06-2019
P.P.Box 548, Dry Creek, La.
(903) 388-3045 70637
Employee of Horizonrow, LLC



0+00 P.O.B./LEASE ROAD
3+81.4 EXISTING PIPELINE
3+97.5 EXISTING PIPELINE
4+88.4 SECTION LINE

0 1000 2000



HORIZON ROW LLC

Drawn for:

devon

Drawn by:
STEVE LONDON

Date: 10/22/2018

DEVON ENERGY PRODUCTION COMPANY, L.P.

MEAN GREEN 23 PRIMARY
ACCESS ROAD

PROPOSED 30' EASEMENT
ON THE PROPERTY OF
BUREAU OF LAND MANAGEMENT
SECTION 23, T26S-R34E, N.M.P.M.

LINE NUMBER:
7640235R

WBS NUMBER:
XX-129900.01.SLC

SCALE:
1" = 1000'

REVISIONS:

DATE OF SURVEY:
10/07/2018

SECTION 14, T26S-R34E, N.M.P.M.,
LEA COUNTY, NEW MEXICO

ACCESS ROAD PLAT

LEGAL DESCRIPTION

FOR

DEVON ENERGY PRODUCTION COMPANY, L.P.

BUREAU OF LAND MANAGEMENT

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 (SE ¼) of Section 14, Township 26 South, Range 34 East, N.M.P.M., Lea County, New Mexico, and being out of a parcel of land owned by the Bureau of Land Management. Said centerline of easement being more particularly described as follows:

Commencing from a 1" iron pipe w/ BC found for the east quarter corner of Section 14, T26S-R34E, N.M.P.M., Lea County, New Mexico;

Thence S 00°04'19" W a distance of 2149.92' to the **Point of Beginning** of this easement having coordinates of Northing=378538.07, Easting=820559.74 feet and continuing the following course;

Thence S 00°13'25" E a distance of 488.45' to the **Point of Ending** having coordinates of Northing= 378049.62, Easting= 820561.65 feet in the south line of Section 14, T26S-R34E, N.M.P.M., Lea County, New Mexico, from said point a 2" iron pipe w/BC for the southeast corner of Section 14, T26S-R34E, bears N 89°37'03" E a distance of 24.65', covering **488.45' or 29.60 rods** and having an area of **0.336 acre**.

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.

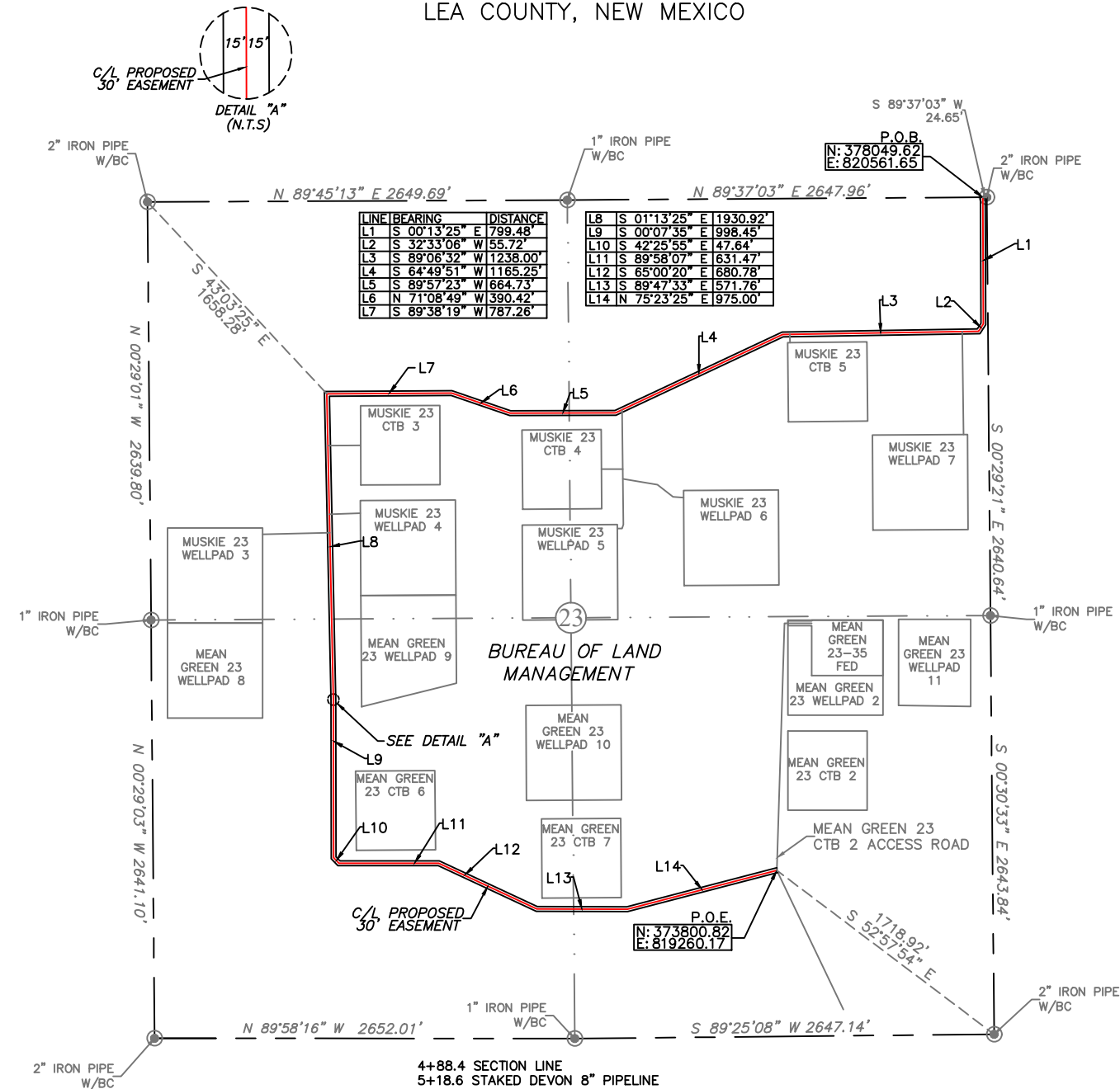
I, B.L. Laman, New Mexico PLS No. 22404, hereby certify this survey to reflect an actual survey made on the ground under my supervision. This survey meets the minimum standards for surveying in New Mexico.



B.L. Laman PLS# 22404
Date Signed: 09-06-2019
Horizon Row, LLC
P.O. Box 548, Dry Creek, La.
(903) 388-3045 70637
Employee of Horizon Row, LLC



EXHIBIT "A"
PAGE 3 of 7
ACCESS ROAD PLAT
SECTION 23, T26S-R34E, N.M.P.M.
LEA COUNTY, NEW MEXICO



30' EASEMENT AREA = 7.534 ACRE(S)
10,936.88 FEET OR 662.84 RODS

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.

4+88.4 SECTION LINE
5+18.6 STAKED DEVON 8" PIPELINE
5+36.3 XCEL TO BLONDIE 15-10 LATERAL ELECTRIC
6+58.9 RATTLESNAKE TREATED WATER FRAC POND TO COPPERHEAD TREATED WATER FRAC POND INTERCONNECT
12+91.2 STAKED 8" SWD PIPELINE
13+55.6 MEAN GREEN 23 FED 1H BATTERY CONNECT ELECTRIC LINE
35+19.9 EXISTING FLOWLINE
76+95.5 EXISTING FLOWLINE
77+16.5 EXISTING FLOWLINE
77+58.2 EXISTING FLOWLINE
77+61.3 EDGE OF ROAD
77+66.2 CENTERLINE OF ROAD
77+71.6 EDGE OF ROAD
78+09.5 DEVON 4" STAKED GAS PIPELINE
78+41.1 RAGIN CAJUN LATERAL (GAS AND WATER)
78+72.3 RAGIN CAJUN LATERAL (CRUDE)

79+00.4 OVERHEAD POWER LINES
112+43.1 PROPOSED PIPELINE
114+25.3 P.O.E./MEAN GREEN 23 CTB 2 ACCESS ROAD

0 1000 2000

HORIZON ROW LLC

Drawn for:

devon

Drawn by:
STEVE LONDON

Date: 10/22/2018

DEVON ENERGY PRODUCTION COMPANY, L.P.

MEAN GREEN 23 PRIMARY
ACCESS ROAD

PROPOSED 30' EASEMENT
ON THE PROPERTY OF

BUREAU OF LAND MANAGEMENT
SECTION 23, T26S-R34E, N.M.P.M.

LINE NUMBER:
7640235R

WBS NUMBER:
XX-129900.01.SLC

SCALE:
1" = 1000'

REVISIONS:
8/1/2019

DATE OF SURVEY:
10/07/2018

B.L. Laman PLS #22404
Date Signed: 09-06-2019
P.P.Box 548, Dry Creek, La.
(903) 388-3045 70637
Employee of Horizonrow, LLC

**SECTION 23, T26S-R34E, N.M.P.M.,
LEA COUNTY, NEW MEXICO**

ACCESS ROAD PLAT

LEGAL DESCRIPTION

FOR

DEVON ENERGY PRODUCTION COMPANY, L.P.

BUREAU OF LAND MANAGEMENT

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 northeast quarter (NE $\frac{1}{4}$), northwest quarter (NW $\frac{1}{4}$), southwest quarter (SW $\frac{1}{4}$) and southeast quarter (SE $\frac{1}{4}$) of Section 23, Township 26 South, Range 34 East, N.M.P.M., Lea County, New Mexico, and being out of a parcel of land owned by the Bureau of Land Management. Said centerline of easement being more particularly described as follows:

Commencing from a 2" iron pipe w/ BC found for the northeast corner of Section 23, T26S-R34E, N.M.P.M., Lea County, New Mexico;

Thence S 89°37'03" W a distance of 24.65' to the **Point of Beginning** of this easement having coordinates of Northing=378049.62, Easting=820561.65 feet and continuing the following courses;

Thence S 00°13'25" E a distance of 799.48' to an angle point;

Thence S 32°33'06" W a distance of 55.72' to an angle point;

Thence S 89°06'32" W a distance of 1238.00' to an angle point;

Thence S 64°49'51" W a distance of 1165.25' to an angle point;

Thence S 89°57'23" W a distance of 664.73' to an angle point;

Thence N 71°08'49" W a distance of 390.42' to an angle point;

Thence S 89°38'19" W a distance of 787.26' to an angle point;

Thence S 01°13'25" E a distance of 1930.92' to an angle point;

Thence S 00°07'35" E a distance of 998.45' to an angle point;

Thence S 42°25'55" E a distance of 47.64' to an angle point;

Thence S 89°58'07" E a distance of 631.47' to an angle point;

Thence S 65°00'20" E a distance of 680.78' to an angle point;

Thence S 89°47'33" E a distance of 571.76' to an angle point;

Thence N 75°23'25" E a distance of 975.00' to the **Point of Ending** having coordinates of Northing= 373800.82, Easting= 819260.17 feet in the southeast quarter of Section 23, T26S-R34E, N.M.P.M., Lea County, New Mexico, from said point a 2" iron pipe w/BC for the southeast corner of Section 23, T26S-R34E, bears S 52°57'54" E a distance of 1718.92', covering **10,936.88' or 662.84 rods** and having an area of **7.534 acre**.

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.

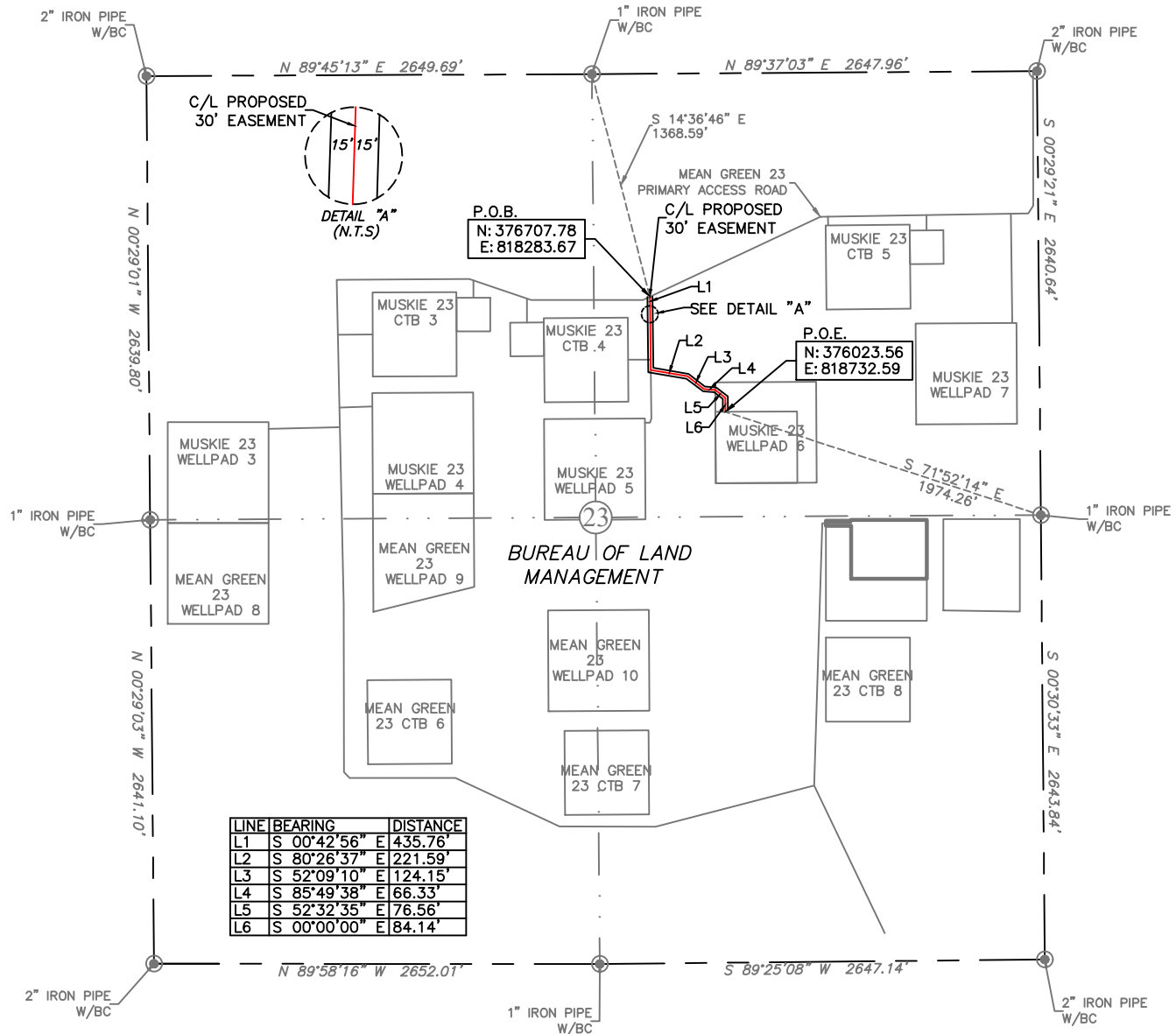
I, B.L. Laman, New Mexico PLS No. 22404, hereby certify this survey to reflect an actual survey made on the ground under my supervision. This survey meets the minimum standards for surveying in New Mexico.



B.L. Laman PLS# 22404
Date Signed: 09-06-2019
Horizon Row, LLC
P.O. Box 548, Dry Creek, La.
(903) 388-3045 70637
Employee of Horizon Row, LLC



EXHIBIT "A"
ACCESS ROAD PLAT
SECTION 23, T26S-R34E, N.M.P.M.
LEA COUNTY, NEW MEXICO



30' EASEMENT AREA = 0.695 ACRE(S)
 1008.53 FEET OR 61.12 RODS

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.

PRELIMINARY DOCUMENT
 This document is not to be recorded for any purpose.

B.L. Laman PLS #22404
 Date Signed: XX-XX-2020
 P.O.Box 548, Dry Creek, La.
 (903) 388-3045 70637
 Employee of Horizonrow, LLC

0+00.0 P.O.B./MEAN GREEN 23 PRIMARY ACCESS ROAD
 4+35.8 MUSKIE 23 WELLPAD 5 ACCESS ROAD
 5+92.5 STAKED PIPELINE
 8+47.8 ENTER MUSKIE 23 WELLPAD 6
 10+08.5 P.O.E./NORTHWEST CORNER OF SUBPAD

0 1000 2000



HORIZON ROW LLC

Drawn for:

devon

Drawn by:
CHRIS MAAS

Date: 02/02/2020

DEVON ENERGY PRODUCTION COMPANY, L.P.

MUSKIE 23 WELLPAD 6
 ACCESS ROAD

PROPOSED 30' EASEMENT
 ON THE PROPERTY OF
 BUREAU OF LAND MANAGEMENT
 SECTION 23, T26S-R34E, N.M.P.M.

LINE NUMBER:
AA000342612

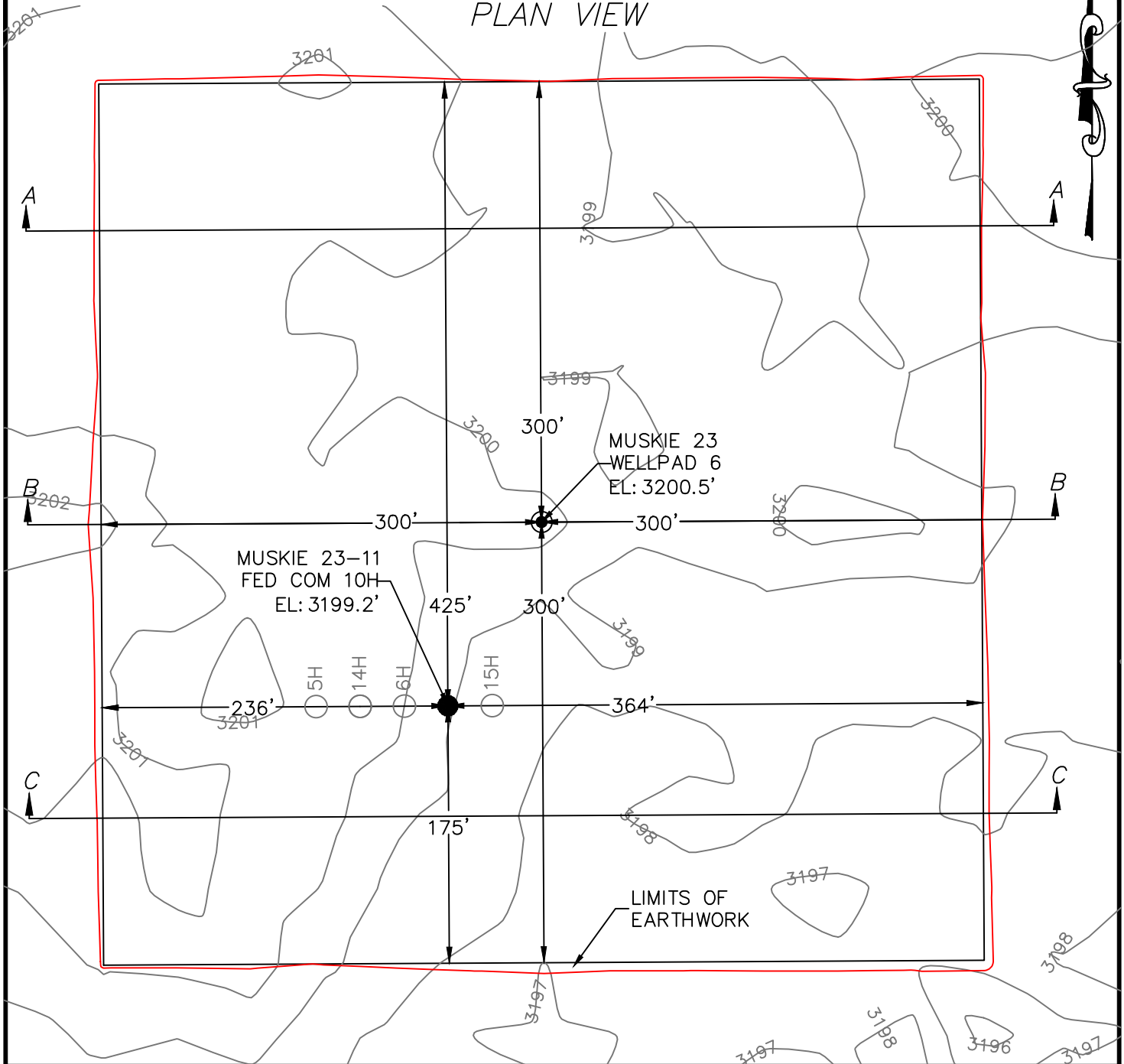
WBS NUMBER:
XX-135232.01.SLC

SCALE:
1" = 1000'

REVISIONS:

DATE OF SURVEY:
10/07/2018

SECTION 23, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
PLAN VIEW



DEVON ENERGY PRODUCTION COMPANY, L.P.
MUSKIE 23-11 FED COM 10H
LOCATED 2264 FT. FROM THE NORTH LINE
AND 1696 FT. FROM THE EAST LINE OF
SECTION 23, TOWNSHIP 26 SOUTH,
RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO



EARTHWORK QUANTITIES FOR
MUSKIE 23 WELLPAD 6

CUT	FILL	NET
5,996 CY	5,996 CY	0 CY

EARTHWORK QUANTITIES ARE ESTIMATED

HORIZON ROW LLC

DEVON ENERGY PRODUCTION CO., L.P.

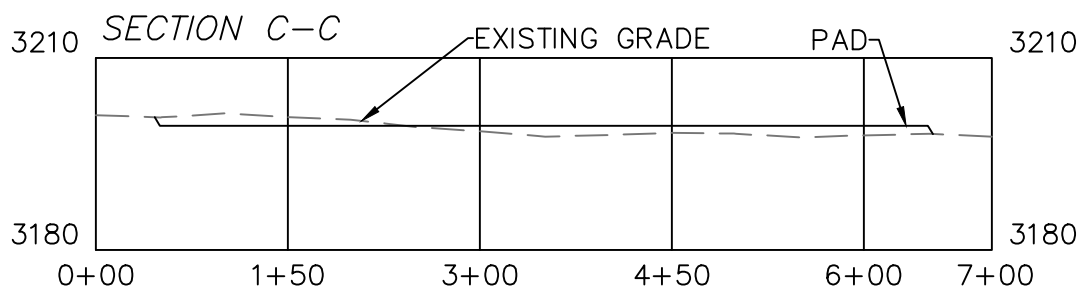
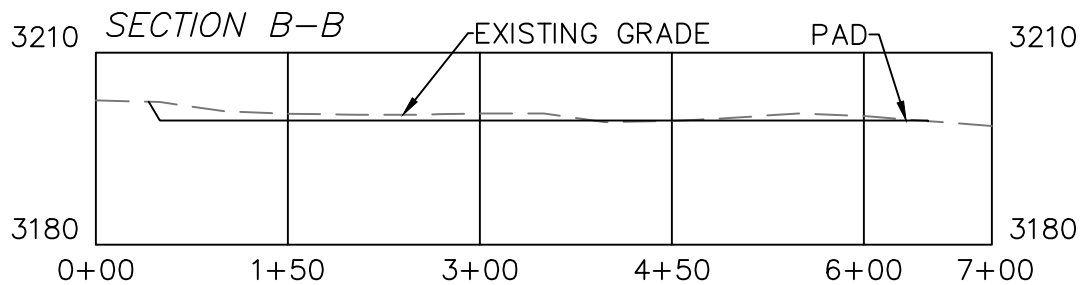
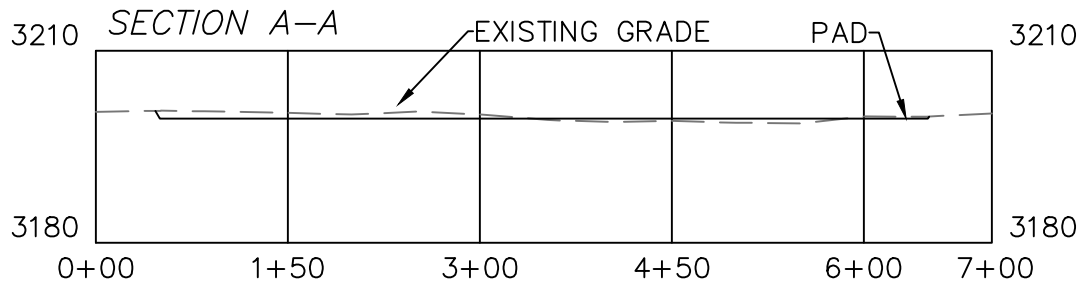
Drawn by:
CHRIS MAAS

Date: 02/03/2020
REV: 7/12/21

Drawn for:



SECTION 23, TOWNSHIP 26 SOUTH, RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
CROSS SECTIONS



DEVON ENERGY PRODUCTION COMPANY, L.P.
MUSKIE 23-11 FED COM 10H
LOCATED 2264 FT. FROM THE NORTH LINE
AND 1696 FT. FROM THE EAST LINE OF
SECTION 23, TOWNSHIP 26 SOUTH,
RANGE 34 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO

SCALE 1" = 150' HORIZONTAL
SCALE 1" = 30' VERTICAL

EARTHWORK QUANTITIES FOR
MUSKIE 23 WELLPAD 6

CUT	FILL	NET
5,996 CY	5,996 CY	0 CY

EARTHWORK QUANTITIES ARE ESTIMATED

HORIZON ROW LLC

DEVON ENERGY PRODUCTION CO., L.P.

Drawn by:
CHRIS MAAS

Date: 02/03/2020
REV: 7/8/21

Drawn for:



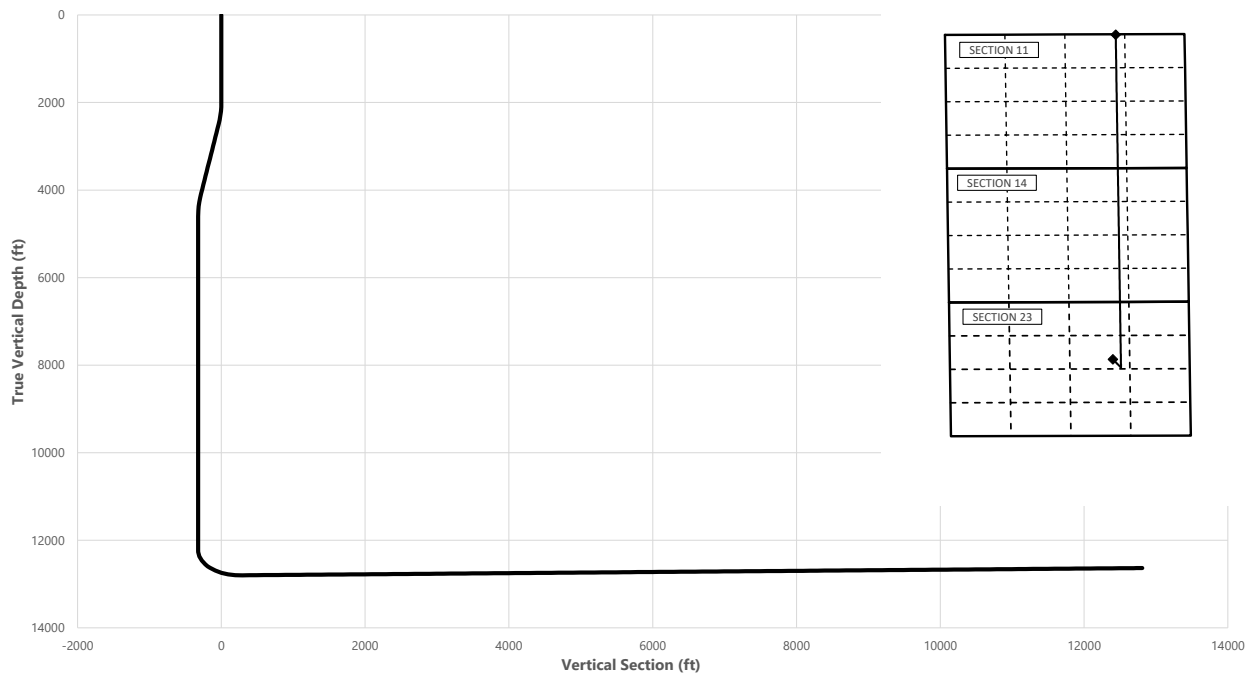
Muskie 23-11 Fed Com 10H



Well: Muskie 23-11 Fed Com 10H
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	151.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2500.00	10.00	151.00	2497.47	-38.07	21.10	-37.96	2.00	Hold Tangent
4132.48	10.00	151.00	4105.15	-286.00	158.53	-285.22	0.00	Drop to Vertical
4632.48	0.00	151.00	4602.61	-324.07	179.63	-323.18	2.00	Hold Vertical
12256.96	0.00	359.49	12227.09	-324.07	179.63	-323.18	0.00	KOP
13164.49	90.75	359.49	12800.00	256.40	174.47	257.25	10.00	Landing Point
25719.36	90.75	359.49	12635.00	12809.69	62.72	12809.84	0.00	BHL



Key Depths	MD (ft)	TVD (ft)
Rustler	890.00	890.00
Salt	1250.00	1250.00
Base of Salt	5029.87	5000.00
Delaware	5329.87	5300.00
Cherry Canyon	6364.87	6335.00
Brushy Canyon	8004.87	7975.00
1st Bone Spring Lime	9434.87	9405.00
Bone Spring 1st	10599.87	10570.00
Bone Spring 2nd	11149.87	11120.00
3rd Bone Spring Lime	11604.87	11575.00
Bone Spring 3rd	12204.87	12175.00
Wolfcamp / Point of Penetration	12656.46	12595.00
EXIT	25639.36	12636.07

SHL
KOP
Point of Penetration
Exit
BHL

MD (ft)	TVD (ft)	Lat (°)	Long (°)	Section Footages
0.00	0.00	32.0298	-103.4377	2264' FNL, 1696' FEL of Sec 23 in T26S, R34E
12256.96	12227.09	32.0289	-103.4371	2591' FNL, 1520' FEL of Sec 23 in T26S, R34E
12656.46	12595.00	32.0292	-103.4371	2539' FNL, 1520' FEL of Sec 23 in T26S, R34E
25639.36	12636.07	32.0649	-103.4371	100' FNL, 1520' FEL of Sec 11 in T26S, R34E
25719.36	12635.00	32.0650	-103.4372	20' FNL, 1520' FEL of Sec 11 in T26S, R34E

Muskie 23-11 Fed Com 10H



Well: Muskie 23-11 Fed Com 10H
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	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
100.00	0.00	151.00	100.00	0.00	0.00	0.00	0.00	
200.00	0.00	151.00	200.00	0.00	0.00	0.00	0.00	
300.00	0.00	151.00	300.00	0.00	0.00	0.00	0.00	
400.00	0.00	151.00	400.00	0.00	0.00	0.00	0.00	
500.00	0.00	151.00	500.00	0.00	0.00	0.00	0.00	
600.00	0.00	151.00	600.00	0.00	0.00	0.00	0.00	
700.00	0.00	151.00	700.00	0.00	0.00	0.00	0.00	
800.00	0.00	151.00	800.00	0.00	0.00	0.00	0.00	
890.00	0.00	151.00	890.00	0.00	0.00	0.00	0.00	Rustler
900.00	0.00	151.00	900.00	0.00	0.00	0.00	0.00	
1000.00	0.00	151.00	1000.00	0.00	0.00	0.00	0.00	
1100.00	0.00	151.00	1100.00	0.00	0.00	0.00	0.00	
1200.00	0.00	151.00	1200.00	0.00	0.00	0.00	0.00	
1250.00	0.00	151.00	1250.00	0.00	0.00	0.00	0.00	Salt
1300.00	0.00	151.00	1300.00	0.00	0.00	0.00	0.00	
1400.00	0.00	151.00	1400.00	0.00	0.00	0.00	0.00	
1500.00	0.00	151.00	1500.00	0.00	0.00	0.00	0.00	
1600.00	0.00	151.00	1600.00	0.00	0.00	0.00	0.00	
1700.00	0.00	151.00	1700.00	0.00	0.00	0.00	0.00	
1800.00	0.00	151.00	1800.00	0.00	0.00	0.00	0.00	
1900.00	0.00	151.00	1900.00	0.00	0.00	0.00	0.00	
2000.00	0.00	151.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2100.00	2.00	151.00	2099.98	-1.53	0.85	-1.52	2.00	
2200.00	4.00	151.00	2199.84	-6.10	3.38	-6.09	2.00	
2300.00	6.00	151.00	2299.45	-13.73	7.61	-13.69	2.00	
2400.00	8.00	151.00	2398.70	-24.38	13.52	-24.32	2.00	
2500.00	10.00	151.00	2497.47	-38.07	21.10	-37.96	2.00	Hold Tangent
2600.00	10.00	151.00	2595.95	-53.25	29.52	-53.11	0.00	
2700.00	10.00	151.00	2694.43	-68.44	37.94	-68.25	0.00	
2800.00	10.00	151.00	2792.91	-83.63	46.36	-83.40	0.00	
2900.00	10.00	151.00	2891.39	-98.82	54.77	-98.55	0.00	
3000.00	10.00	151.00	2989.87	-114.00	63.19	-113.69	0.00	
3100.00	10.00	151.00	3088.35	-129.19	71.61	-128.84	0.00	
3200.00	10.00	151.00	3186.83	-144.38	80.03	-143.99	0.00	
3300.00	10.00	151.00	3285.31	-159.57	88.45	-159.13	0.00	
3400.00	10.00	151.00	3383.79	-174.75	96.87	-174.28	0.00	
3500.00	10.00	151.00	3482.27	-189.94	105.29	-189.42	0.00	
3600.00	10.00	151.00	3580.75	-205.13	113.71	-204.57	0.00	
3700.00	10.00	151.00	3679.23	-220.32	122.12	-219.72	0.00	
3800.00	10.00	151.00	3777.72	-235.50	130.54	-234.86	0.00	
3900.00	10.00	151.00	3876.20	-250.69	138.96	-250.01	0.00	
4000.00	10.00	151.00	3974.68	-265.88	147.38	-265.15	0.00	
4100.00	10.00	151.00	4073.16	-281.07	155.80	-280.30	0.00	
4132.48	10.00	151.00	4105.15	-286.00	158.53	-285.22	0.00	Drop to Vertical
4200.00	8.65	151.00	4171.77	-295.57	163.84	-294.76	2.00	
4300.00	6.65	151.00	4270.88	-307.21	170.29	-306.37	2.00	
4400.00	4.65	151.00	4370.38	-315.82	175.06	-314.96	2.00	
4500.00	2.65	151.00	4470.18	-321.39	178.15	-320.51	2.00	
4600.00	0.65	151.00	4570.13	-323.91	179.54	-323.02	2.00	
4632.48	0.00	151.00	4602.61	-324.07	179.63	-323.18	2.00	Hold Vertical
4700.00	0.00	359.49	4670.13	-324.07	179.63	-323.18	0.00	
4800.00	0.00	359.49	4770.13	-324.07	179.63	-323.18	0.00	
4900.00	0.00	359.49	4870.13	-324.07	179.63	-323.18	0.00	
5000.00	0.00	359.49	4970.13	-324.07	179.63	-323.18	0.00	
5029.87	0.00	359.49	5000.00	-324.07	179.63	-323.18	0.00	Base of Salt
5100.00	0.00	359.49	5070.13	-324.07	179.63	-323.18	0.00	
5200.00	0.00	359.49	5170.13	-324.07	179.63	-323.18	0.00	
5300.00	0.00	359.49	5270.13	-324.07	179.63	-323.18	0.00	
5329.87	0.00	359.49	5300.00	-324.07	179.63	-323.18	0.00	Delaware
5400.00	0.00	359.49	5370.13	-324.07	179.63	-323.18	0.00	
5500.00	0.00	359.49	5470.13	-324.07	179.63	-323.18	0.00	
5600.00	0.00	359.49	5570.13	-324.07	179.63	-323.18	0.00	
5700.00	0.00	359.49	5670.13	-324.07	179.63	-323.18	0.00	
5800.00	0.00	359.49	5770.13	-324.07	179.63	-323.18	0.00	
5900.00	0.00	359.49	5870.13	-324.07	179.63	-323.18	0.00	
6000.00	0.00	359.49	5970.13	-324.07	179.63	-323.18	0.00	
6100.00	0.00	359.49	6070.13	-324.07	179.63	-323.18	0.00	
6200.00	0.00	359.49	6170.13	-324.07	179.63	-323.18	0.00	
6300.00	0.00	359.49	6270.13	-324.07	179.63	-323.18	0.00	

Muskie 23-11 Fed Com 10H



Well: Muskie 23-11 Fed Com 10H

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	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
6364.87	0.00	359.49	6335.00	-324.07	179.63	-323.18	0.00	Cherry Canyon
6400.00	0.00	359.49	6370.13	-324.07	179.63	-323.18	0.00	
6500.00	0.00	359.49	6470.13	-324.07	179.63	-323.18	0.00	
6600.00	0.00	359.49	6570.13	-324.07	179.63	-323.18	0.00	
6700.00	0.00	359.49	6670.13	-324.07	179.63	-323.18	0.00	
6800.00	0.00	359.49	6770.13	-324.07	179.63	-323.18	0.00	
6900.00	0.00	359.49	6870.13	-324.07	179.63	-323.18	0.00	
7000.00	0.00	359.49	6970.13	-324.07	179.63	-323.18	0.00	
7100.00	0.00	359.49	7070.13	-324.07	179.63	-323.18	0.00	
7200.00	0.00	359.49	7170.13	-324.07	179.63	-323.18	0.00	
7300.00	0.00	359.49	7270.13	-324.07	179.63	-323.18	0.00	
7400.00	0.00	359.49	7370.13	-324.07	179.63	-323.18	0.00	
7500.00	0.00	359.49	7470.13	-324.07	179.63	-323.18	0.00	
7600.00	0.00	359.49	7570.13	-324.07	179.63	-323.18	0.00	
7700.00	0.00	359.49	7670.13	-324.07	179.63	-323.18	0.00	
7800.00	0.00	359.49	7770.13	-324.07	179.63	-323.18	0.00	
7900.00	0.00	359.49	7870.13	-324.07	179.63	-323.18	0.00	
8000.00	0.00	359.49	7970.13	-324.07	179.63	-323.18	0.00	
8004.87	0.00	359.49	7975.00	-324.07	179.63	-323.18	0.00	Brushy Canyon
8100.00	0.00	359.49	8070.13	-324.07	179.63	-323.18	0.00	
8200.00	0.00	359.49	8170.13	-324.07	179.63	-323.18	0.00	
8300.00	0.00	359.49	8270.13	-324.07	179.63	-323.18	0.00	
8400.00	0.00	359.49	8370.13	-324.07	179.63	-323.18	0.00	
8500.00	0.00	359.49	8470.13	-324.07	179.63	-323.18	0.00	
8600.00	0.00	359.49	8570.13	-324.07	179.63	-323.18	0.00	
8700.00	0.00	359.49	8670.13	-324.07	179.63	-323.18	0.00	
8800.00	0.00	359.49	8770.13	-324.07	179.63	-323.18	0.00	
8900.00	0.00	359.49	8870.13	-324.07	179.63	-323.18	0.00	
9000.00	0.00	359.49	8970.13	-324.07	179.63	-323.18	0.00	
9100.00	0.00	359.49	9070.13	-324.07	179.63	-323.18	0.00	
9200.00	0.00	359.49	9170.13	-324.07	179.63	-323.18	0.00	
9300.00	0.00	359.49	9270.13	-324.07	179.63	-323.18	0.00	
9400.00	0.00	359.49	9370.13	-324.07	179.63	-323.18	0.00	
9434.87	0.00	359.49	9405.00	-324.07	179.63	-323.18	0.00	1st Bone Spring Lime
9500.00	0.00	359.49	9470.13	-324.07	179.63	-323.18	0.00	
9600.00	0.00	359.49	9570.13	-324.07	179.63	-323.18	0.00	
9700.00	0.00	359.49	9670.13	-324.07	179.63	-323.18	0.00	
9800.00	0.00	359.49	9770.13	-324.07	179.63	-323.18	0.00	
9900.00	0.00	359.49	9870.13	-324.07	179.63	-323.18	0.00	
10000.00	0.00	359.49	9970.13	-324.07	179.63	-323.18	0.00	
10100.00	0.00	359.49	10070.13	-324.07	179.63	-323.18	0.00	
10200.00	0.00	359.49	10170.13	-324.07	179.63	-323.18	0.00	
10300.00	0.00	359.49	10270.13	-324.07	179.63	-323.18	0.00	
10400.00	0.00	359.49	10370.13	-324.07	179.63	-323.18	0.00	
10500.00	0.00	359.49	10470.13	-324.07	179.63	-323.18	0.00	
10599.87	0.00	359.49	10570.00	-324.07	179.63	-323.18	0.00	Bone Spring 1st
10600.00	0.00	359.49	10570.13	-324.07	179.63	-323.18	0.00	
10700.00	0.00	359.49	10670.13	-324.07	179.63	-323.18	0.00	
10800.00	0.00	359.49	10770.13	-324.07	179.63	-323.18	0.00	
10900.00	0.00	359.49	10870.13	-324.07	179.63	-323.18	0.00	
11000.00	0.00	359.49	10970.13	-324.07	179.63	-323.18	0.00	
11100.00	0.00	359.49	11070.13	-324.07	179.63	-323.18	0.00	
11149.87	0.00	359.49	11120.00	-324.07	179.63	-323.18	0.00	Bone Spring 2nd
11200.00	0.00	359.49	11170.13	-324.07	179.63	-323.18	0.00	
11300.00	0.00	359.49	11270.13	-324.07	179.63	-323.18	0.00	
11400.00	0.00	359.49	11370.13	-324.07	179.63	-323.18	0.00	
11500.00	0.00	359.49	11470.13	-324.07	179.63	-323.18	0.00	
11600.00	0.00	359.49	11570.13	-324.07	179.63	-323.18	0.00	
11604.87	0.00	359.49	11575.00	-324.07	179.63	-323.18	0.00	3rd Bone Spring Lime
11700.00	0.00	359.49	11670.13	-324.07	179.63	-323.18	0.00	
11800.00	0.00	359.49	11770.13	-324.07	179.63	-323.18	0.00	
11900.00	0.00	359.49	11870.13	-324.07	179.63	-323.18	0.00	
12000.00	0.00	359.49	11970.13	-324.07	179.63	-323.18	0.00	
12100.00	0.00	359.49	12070.13	-324.07	179.63	-323.18	0.00	
12200.00	0.00	359.49	12170.13	-324.07	179.63	-323.18	0.00	
12204.87	0.00	359.49	12175.00	-324.07	179.63	-323.18	0.00	Bone Spring 3rd
12256.96	0.00	359.49	12227.09	-324.07	179.63	-323.18	0.00	KOP
12300.00	4.30	359.49	12270.09	-322.45	179.62	-321.57	10.00	
12400.00	14.30	359.49	12368.65	-306.31	179.47	-305.42	10.00	
12500.00	24.30	359.49	12462.91	-273.29	179.18	-272.41	10.00	

Muskie 23-11 Fed Com 10H



Well: Muskie 23-11 Fed Com 10H
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	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
12600.00	34.30	359.49	12550.00	-224.41	178.75	-223.53	10.00	
12656.46	39.95	359.49	12595.00	-190.35	178.44	-189.47	10.00	Wolfcamp / Point of Penetration
12700.00	44.30	359.49	12627.28	-161.15	178.18	-160.28	10.00	
12800.00	54.30	359.49	12692.40	-85.43	177.51	-84.56	10.00	
12900.00	64.30	359.49	12743.39	0.44	176.74	1.31	10.00	
13000.00	74.30	359.49	12778.68	93.87	175.91	94.73	10.00	
13100.00	84.30	359.49	12797.22	192.00	175.04	192.86	10.00	
13164.49	90.75	359.49	12800.00	256.40	174.47	257.25	10.00	Landing Point
13200.00	90.75	359.49	12799.53	291.90	174.15	292.75	0.00	
13300.00	90.75	359.49	12798.22	391.89	173.26	392.73	0.00	
13400.00	90.75	359.49	12796.90	491.88	172.37	492.72	0.00	
13500.00	90.75	359.49	12795.59	591.86	171.48	592.70	0.00	
13600.00	90.75	359.49	12794.28	691.85	170.59	692.68	0.00	
13700.00	90.75	359.49	12792.96	791.84	169.70	792.66	0.00	
13800.00	90.75	359.49	12791.65	891.83	168.81	892.64	0.00	
13900.00	90.75	359.49	12790.33	991.81	167.92	992.62	0.00	
14000.00	90.75	359.49	12789.02	1091.80	167.03	1092.61	0.00	
14100.00	90.75	359.49	12787.71	1191.79	166.13	1192.59	0.00	
14200.00	90.75	359.49	12786.39	1291.78	165.24	1292.57	0.00	
14300.00	90.75	359.49	12785.08	1391.76	164.35	1392.55	0.00	
14400.00	90.75	359.49	12783.76	1491.75	163.46	1492.53	0.00	
14500.00	90.75	359.49	12782.45	1591.74	162.57	1592.52	0.00	
14600.00	90.75	359.49	12781.14	1691.73	161.68	1692.50	0.00	
14700.00	90.75	359.49	12779.82	1791.71	160.79	1792.48	0.00	
14800.00	90.75	359.49	12778.51	1891.70	159.90	1892.46	0.00	
14900.00	90.75	359.49	12777.19	1991.69	159.01	1992.44	0.00	
15000.00	90.75	359.49	12775.88	2091.68	158.12	2092.42	0.00	
15100.00	90.75	359.49	12774.57	2191.66	157.23	2192.41	0.00	
15200.00	90.75	359.49	12773.25	2291.65	156.34	2292.39	0.00	
15300.00	90.75	359.49	12771.94	2391.64	155.45	2392.37	0.00	
15400.00	90.75	359.49	12770.62	2491.62	154.56	2492.35	0.00	
15500.00	90.75	359.49	12769.31	2591.61	153.67	2592.33	0.00	
15600.00	90.75	359.49	12767.99	2691.60	152.78	2692.32	0.00	
15700.00	90.75	359.49	12766.68	2791.59	151.89	2792.30	0.00	
15800.00	90.75	359.49	12765.37	2891.57	151.00	2892.28	0.00	
15900.00	90.75	359.49	12764.05	2991.56	150.10	2992.26	0.00	
16000.00	90.75	359.49	12762.74	3091.55	149.21	3092.24	0.00	
16100.00	90.75	359.49	12761.42	3191.54	148.32	3192.22	0.00	
16200.00	90.75	359.49	12760.11	3291.52	147.43	3292.21	0.00	
16300.00	90.75	359.49	12758.80	3391.51	146.54	3392.19	0.00	
16400.00	90.75	359.49	12757.48	3491.50	145.65	3492.17	0.00	
16500.00	90.75	359.49	12756.17	3591.49	144.76	3592.15	0.00	
16600.00	90.75	359.49	12754.85	3691.47	143.87	3692.13	0.00	
16700.00	90.75	359.49	12753.54	3791.46	142.98	3792.12	0.00	
16800.00	90.75	359.49	12752.23	3891.45	142.09	3892.10	0.00	
16900.00	90.75	359.49	12750.91	3991.44	141.20	3992.08	0.00	
17000.00	90.75	359.49	12749.60	4091.42	140.31	4092.06	0.00	
17100.00	90.75	359.49	12748.28	4191.41	139.42	4192.04	0.00	
17200.00	90.75	359.49	12746.97	4291.40	138.53	4292.03	0.00	
17300.00	90.75	359.49	12745.66	4391.39	137.64	4392.01	0.00	
17400.00	90.75	359.49	12744.34	4491.37	136.75	4491.99	0.00	
17500.00	90.75	359.49	12743.03	4591.36	135.86	4591.97	0.00	
17600.00	90.75	359.49	12741.71	4691.35	134.97	4691.95	0.00	
17700.00	90.75	359.49	12740.40	4791.34	134.07	4791.93	0.00	
17800.00	90.75	359.49	12739.08	4891.32	133.18	4891.92	0.00	
17900.00	90.75	359.49	12737.77	4991.31	132.29	4991.90	0.00	
18000.00	90.75	359.49	12736.46	5091.30	131.40	5091.88	0.00	
18100.00	90.75	359.49	12735.14	5191.28	130.51	5191.86	0.00	
18200.00	90.75	359.49	12733.83	5291.27	129.62	5291.84	0.00	
18300.00	90.75	359.49	12732.51	5391.26	128.73	5391.83	0.00	
18400.00	90.75	359.49	12731.20	5491.25	127.84	5491.81	0.00	
18500.00	90.75	359.49	12729.89	5591.23	126.95	5591.79	0.00	
18600.00	90.75	359.49	12728.57	5691.22	126.06	5691.77	0.00	
18700.00	90.75	359.49	12727.26	5791.21	125.17	5791.75	0.00	
18800.00	90.75	359.49	12725.94	5891.20	124.28	5891.73	0.00	
18900.00	90.75	359.49	12724.63	5991.18	123.39	5991.72	0.00	
19000.00	90.75	359.49	12723.32	6091.17	122.50	6091.70	0.00	
19100.00	90.75	359.49	12722.00	6191.16	121.61	6191.68	0.00	
19200.00	90.75	359.49	12720.69	6291.15	120.72	6291.66	0.00	
19300.00	90.75	359.49	12719.37	6391.13	119.83	6391.64	0.00	

Muskie 23-11 Fed Com 10H



Well: Muskie 23-11 Fed Com 10H
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	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
19400.00	90.75	359.49	12718.06	6491.12	118.94	6491.63	0.00	
19500.00	90.75	359.49	12716.74	6591.11	118.04	6591.61	0.00	
19600.00	90.75	359.49	12715.43	6691.10	117.15	6691.59	0.00	
19700.00	90.75	359.49	12714.12	6791.08	116.26	6791.57	0.00	
19800.00	90.75	359.49	12712.80	6891.07	115.37	6891.55	0.00	
19900.00	90.75	359.49	12711.49	6991.06	114.48	6991.53	0.00	
20000.00	90.75	359.49	12710.17	7091.05	113.59	7091.52	0.00	
20100.00	90.75	359.49	12708.86	7191.03	112.70	7191.50	0.00	
20200.00	90.75	359.49	12707.55	7291.02	111.81	7291.48	0.00	
20300.00	90.75	359.49	12706.23	7391.01	110.92	7391.46	0.00	
20400.00	90.75	359.49	12704.92	7490.99	110.03	7491.44	0.00	
20500.00	90.75	359.49	12703.60	7590.98	109.14	7591.43	0.00	
20600.00	90.75	359.49	12702.29	7690.97	108.25	7691.41	0.00	
20700.00	90.75	359.49	12700.98	7790.96	107.36	7791.39	0.00	
20800.00	90.75	359.49	12699.66	7890.94	106.47	7891.37	0.00	
20900.00	90.75	359.49	12698.35	7990.93	105.58	7991.35	0.00	
21000.00	90.75	359.49	12697.03	8090.92	104.69	8091.33	0.00	
21100.00	90.75	359.49	12695.72	8190.91	103.80	8191.32	0.00	
21200.00	90.75	359.49	12694.41	8290.89	102.91	8291.30	0.00	
21300.00	90.75	359.49	12693.09	8390.88	102.01	8391.28	0.00	
21400.00	90.75	359.49	12691.78	8490.87	101.12	8491.26	0.00	
21500.00	90.75	359.49	12690.46	8590.86	100.23	8591.24	0.00	
21600.00	90.75	359.49	12689.15	8690.84	99.34	8691.23	0.00	
21700.00	90.75	359.49	12687.83	8790.83	98.45	8791.21	0.00	
21800.00	90.75	359.49	12686.52	8890.82	97.56	8891.19	0.00	
21900.00	90.75	359.49	12685.21	8990.81	96.67	8991.17	0.00	
22000.00	90.75	359.49	12683.89	9090.79	95.78	9091.15	0.00	
22100.00	90.75	359.49	12682.58	9190.78	94.89	9191.14	0.00	
22200.00	90.75	359.49	12681.26	9290.77	94.00	9291.12	0.00	
22300.00	90.75	359.49	12679.95	9390.76	93.11	9391.10	0.00	
22400.00	90.75	359.49	12678.64	9490.74	92.22	9491.08	0.00	
22500.00	90.75	359.49	12677.32	9590.73	91.33	9591.06	0.00	
22600.00	90.75	359.49	12676.01	9690.72	90.44	9691.04	0.00	
22700.00	90.75	359.49	12674.69	9790.71	89.55	9791.03	0.00	
22800.00	90.75	359.49	12673.38	9890.69	88.66	9891.01	0.00	
22900.00	90.75	359.49	12672.07	9990.68	87.77	9990.99	0.00	
23000.00	90.75	359.49	12670.75	10090.67	86.88	10090.97	0.00	
23100.00	90.75	359.49	12669.44	10190.65	85.98	10190.95	0.00	
23200.00	90.75	359.49	12668.12	10290.64	85.09	10290.94	0.00	
23300.00	90.75	359.49	12666.81	10390.63	84.20	10390.92	0.00	
23400.00	90.75	359.49	12665.50	10490.62	83.31	10490.90	0.00	
23500.00	90.75	359.49	12664.18	10590.60	82.42	10590.88	0.00	
23600.00	90.75	359.49	12662.87	10690.59	81.53	10690.86	0.00	
23700.00	90.75	359.49	12661.55	10790.58	80.64	10790.84	0.00	
23800.00	90.75	359.49	12660.24	10890.57	79.75	10890.83	0.00	
23900.00	90.75	359.49	12658.92	10990.55	78.86	10990.81	0.00	
24000.00	90.75	359.49	12657.61	11090.54	77.97	11090.79	0.00	
24100.00	90.75	359.49	12656.30	11190.53	77.08	11190.77	0.00	
24200.00	90.75	359.49	12654.98	11290.52	76.19	11290.75	0.00	
24300.00	90.75	359.49	12653.67	11390.50	75.30	11390.74	0.00	
24400.00	90.75	359.49	12652.35	11490.49	74.41	11490.72	0.00	
24500.00	90.75	359.49	12651.04	11590.48	73.52	11590.70	0.00	
24600.00	90.75	359.49	12649.73	11690.47	72.63	11690.68	0.00	
24700.00	90.75	359.49	12648.41	11790.45	71.74	11790.66	0.00	
24800.00	90.75	359.49	12647.10	11890.44	70.85	11890.64	0.00	
24900.00	90.75	359.49	12645.78	11990.43	69.95	11990.63	0.00	
25000.00	90.75	359.49	12644.47	12090.42	69.06	12090.61	0.00	
25100.00	90.75	359.49	12643.16	12190.40	68.17	12190.59	0.00	
25200.00	90.75	359.49	12641.84	12290.39	67.28	12290.57	0.00	
25300.00	90.75	359.49	12640.53	12390.38	66.39	12390.55	0.00	
25400.00	90.75	359.49	12639.21	12490.36	65.50	12490.54	0.00	
25500.00	90.75	359.49	12637.90	12590.35	64.61	12590.52	0.00	
25600.00	90.75	359.49	12636.58	12690.34	63.72	12690.50	0.00	
25639.36	90.75	359.49	12636.07	12729.70	63.37	12729.85	0.00	EXIT
25700.00	90.75	359.49	12635.27	12790.33	62.83	12790.48	0.00	
25719.36	90.75	359.49	12635.00	12809.69	62.72	12809.84	0.00	BHL

Muskie 23-11 Fed Com 10H

Well: Muskie 23-11 Fed Com 10H
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	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	

Muskie 23-11 Fed Com 10H

1. Geologic Formations

TVD of target	12636	Pilot hole depth	N/A
MD at TD:	25719	Deepest expected fresh water	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	890		
Salt	1250		
Base of Salt	5000		
Delaware	5300		
Cherry Canyon	6335		
Brushy Canyon	7975		
1st Bone Spring Lime	9405		
Bone Spring 1st	10570		
Bone Spring 2nd	11120		
3rd Bone Spring Lime	11575		
Bone Spring 3rd	12175		
Wolfcamp	12595		

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

Muskie 23-11 Fed Com 10H

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)
17 1/2	13 3/8	48	H40	STC	0	915	0	915
9 7/8	8 5/8	32	P110	TLW	0	12175	0	12175
7 7/8	5 1/2	17	P110	BTC	0	25719	0	12636

• 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	# Skis	TOC	Wt. ppg	Yld (ft3/sack)	Slurry Description
Surface	701	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	497	Surf	9	3.27	Lead: Class C Cement + additives
	465	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
	497	Surf	9	3.27	Lead: Class C Cement + additives
	465	4000' above	13.2	1.44	Tail: Class H / C + additives
Production	117	10257	9	3.27	Lead: Class H / C + additives
	1782	12257	13.2	1.44	Tail: Class H / C + additives

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

Muskie 23-11 Fed Com 10H

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"	10M	Annular (5M)		X	100% of rated working pressure
				Blind Ram		X	10M
				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						

Muskie 23-11 Fed Com 10H

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

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

7. Drilling Conditions

Condition	Specify what type and where?
BH pressure at deepest TVD	6899
Abnormal temperature	No

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

Hydrogen 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	H ₂ S is present
Y	H ₂ S 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

Muskie 23-11 Fed Com 10H

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 nipped up and tested on the wellhead before drilling operations commences on each well.
 - a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

Attachments

X Directional Plan
 Other, describe

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 56176

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 56176
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	10/22/2021