

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.5. Lease Serial No.
NMNM16131

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
SHIRE 22-15 FED COM 712H9. API Well No.
30-015-47327-00-X110. Field and Pool or Exploratory Area
JENNINGS-BONE SPRING, WEST11. County or Parish, State
EDDY COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

DEVON ENERGY PRODUCTION COMPANY

Contact: JENNY HARMS

E-Mail: jennifer.harms@dev.com

3a. Address

333 WEST SHERIDAN AVENUE
OKLAHOMA CITY, OK 73102

3b. Phone No. (include area code)

Ph: 405-552-6560

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

Sec 22 T25S R31E SESW 350FSL 1855FWL
32.109512 N Lat, 103.768486 W Lon

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

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

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

BHL/NAME CHANGE

Devon Energy Production Co., L.P. (Devon) respectfully requests to move the BHL and have a name change on the subject well. Please see attached revised C102, Drill plan, directional plan.

Permitted BHL: NENW, 330 FNL, 1650 FWL, 15-25S-31E

Proposed BHL: NENW, 20 FNL, 1657 FWL, 15-25S-31E

Permitted Well name: SHIRE 22-15 FED COM 712H

Proposed Well name: SHIRE 22-15 FED COM 616H

Entered - KMS NMOCD

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #537532 verified by the BLM Well Information System
For DEVON ENERGY PRODUCTION COMPANY, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 11/16/2020 (21PP0604SE)**

Name (Printed/Typed) JENNY HARMS

Title REGULATORY COMPLIANCE ANALYST

Signature (Electronic Submission)

Date 11/16/2020

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By LONG VO

Title PETROLEUM ENGINEER

Date 11/22/2020

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

Office Carlsbad

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Revisions to Operator-Submitted EC Data for Sundry Notice #537532

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	APDCH NOI	APDCH NOI
Lease:	NMNM16131	NMNM16131
Agreement:		
Operator:	DEVON ENERGY PRODUCTION CO LP 333 W SHERIDAN AVE OKLAHOMA CITY, OK 73102 Ph: 405-552-6560	DEVON ENERGY PRODUCTION COM LP 333 WEST SHERIDAN AVENUE OKLAHOMA CITY, OK 73102 Ph: 405 552 6571
Admin Contact:	JENNY HARMS REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvn.com Ph: 405-552-6560	JENNY HARMS REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvn.com Ph: 405-552-6560
Tech Contact:	JENNY HARMS REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvn.com Ph: 405-552-6560	JENNY HARMS REGULATORY COMPLIANCE ANALYST E-Mail: jennifer.harms@dvn.com Ph: 405-552-6560
Location:		
State:	NM	NM
County:	EDDY	EDDY
Field/Pool:	PURPLE SAGE; WOLFCAMP	JENNINGS-BONE SPRING, WEST
Well/Facility:	SHIRE 22-15 FED COM 712H Sec 22 T25S R31E SESW 350FSL 1855FWL	SHIRE 22-15 FED COM 712H Sec 22 T25S R31E SESW 350FSL 1855FWL 32.109512 N Lat, 103.768486 W Lon

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-47327	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP (GAS)
⁴ Property Code 328885	⁵ Property Name SHIRE 22-15 FED COM	⁶ Well Number 616H
⁷ OGRID No. 6137	⁸ Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	⁹ Elevation 3339.4

¹⁰ Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	22	25 S	31 E		350	SOUTH	1855	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	15	25 S	31 E		20	NORTH	1657	WEST	EDDY

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

NW CORNER SEC. 15 LAT. = 32.1376857°N LONG. = 103.7743767°W NMSP EAST (FT) N = 414274.67 E = 714349.16 W/4 CORNER SEC. 15 LAT. = 32.1303992°N LONG. = 103.7744266°W NMSP EAST (FT) N = 411623.90 E = 714347.47 SECTION CORNER LAT. = 32.1230977°N LONG. = 103.7744128°W NMSP EAST (FT) N = 408967.74 E = 714365.52 W/4 CORNER SEC. 22 LAT. = 32.1158227°N LONG. = 103.7744447°W NMSP EAST (FT) N = 406321.16 E = 714369.37 SW CORNER SEC. 22 LAT. = 32.1085472°N LONG. = 103.7744766°W NMSP EAST (FT) N = 403674.44 E = 714373.22		N89°42'57"E 2652.44 FT N89°37'34"E 2664.18 FT 1657' BOTTOM OF HOLE LTP 20' BOTTOM OF HOLE LAT. = 32.1376296°N LONG. = 103.7690250°W NMSP EAST (FT) N = 414262.90 E = 716005.79 LAST TAKE POINT 100' FNL, 1657' FWL LAT. = 32.1374097°N LONG. = 103.7690265°W NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE. ELEVATION VALUES ARE NAVD88. QUARTER CORNER LAT. = 32.1230874°N LONG. = 103.7659304°W NMSP EAST (FT) N = 408977.73 E = 714891.53 2626.60 FT 2664.80 FT SEC. 15 SEC. 22 SHIRE 22-15 FED COM 616H ELEV. = 3339.4' LAT. = 32.1095131°N (NAD83) LONG. = 103.7684825°W NMSP EAST (FT) N = 404035.50 E = 716227.32 FIRST TAKE POINT 100' FSL, 1657' FWL LAT. = 32.1088256°N LONG. = 103.7691250°W SURFACE LOCATION 1855' FTP S/4 CORNER SEC. 22 LAT. = 32.1085528°N LONG. = 103.7659126°W NMSP EAST (FT) N = 403690.32 E = 717024.86 S89°39'25"W 2652.26 FT S89°38'30"W 2653.78 FT		NE CORNER SEC. 15 LAT. = 32.1376926°N LONG. = 103.7572043°W NMSP EAST (FT) N = 414305.21 E = 719664.53 E/4 CORNER SEC. 15 LAT. = 32.1304013°N LONG. = 103.7572709°W NMSP EAST (FT) N = 411652.64 E = 719658.11 SECTION CORNER LAT. = 32.1231179°N LONG. = 103.7573247°W NMSP EAST (FT) N = 409002.97 E = 719655.83 E/4 CORNER SEC. 22 LAT. = 32.1158546°N LONG. = 103.7573421°W NMSP EAST (FT) N = 406360.67 E = 719664.36 SE CORNER SEC. 22 LAT. = 32.1085597°N LONG. = 103.7573438°W NMSP EAST (FT) N = 403706.91 E = 719678.01		¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Jenny Harms</i> 11-16-2020 Signature Date JENNY HARMS Printed Name JENNY.HARMS@DVN.COM E-mail Address ¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. SEPTEMBER 30, 2020 Date of Survey <i>[Signature]</i> Signature and Seal of Professional Surveyor Certificate Number: F. J. MONTE JARAMILLO, PLS 12797 SURVEY NO. 7569B	
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Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section 22	Township 25S	Range 31E	Lot	Feet 35 FSL	From N/S	Feet 1657 FWL	From E/W	County EDDY
Latitude 32.10853401					Longitude -103.76913099			NAD 83	

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)

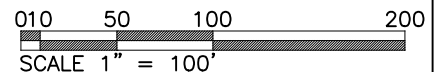
UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude			NAD	

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

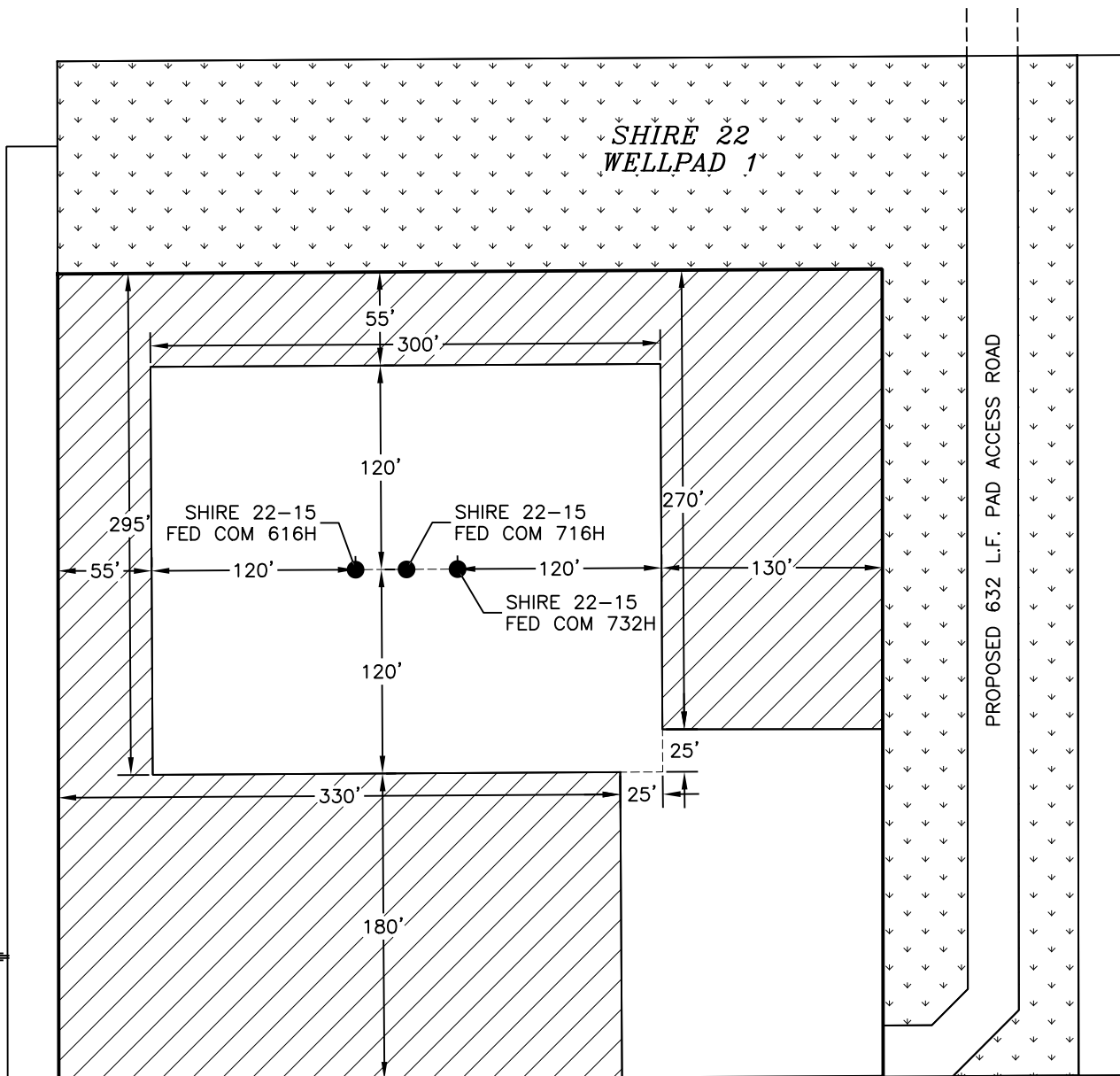
Is this well an infill well? ☐ no

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



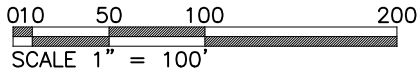
SECTION 22, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO
 INTERIM SITE BUILD PLAN



DENOTES INTERIM PAD RECLAMATION AREA



DENOTES GRADING SITE RECLAMATION AREA



2.926± ACRES INTERIM PAD RECLAMATION AREA
 2.540± ACRES GRADING SITE RECLAMATION AREA
 2.799± ACRES NON-RECLAIMED AREA
 8.265± ACRES SHIRE 22 WELLPAD 1

DEVON ENERGY PRODUCTION COMPANY, L.P.
SHIRE 22-15 FED COM 616H
 LOCATED 350 FT. FROM THE SOUTH LINE
 AND 1855 FT. FROM THE WEST LINE OF
 SECTION 22, TOWNSHIP 25 SOUTH,
 RANGE 31 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO

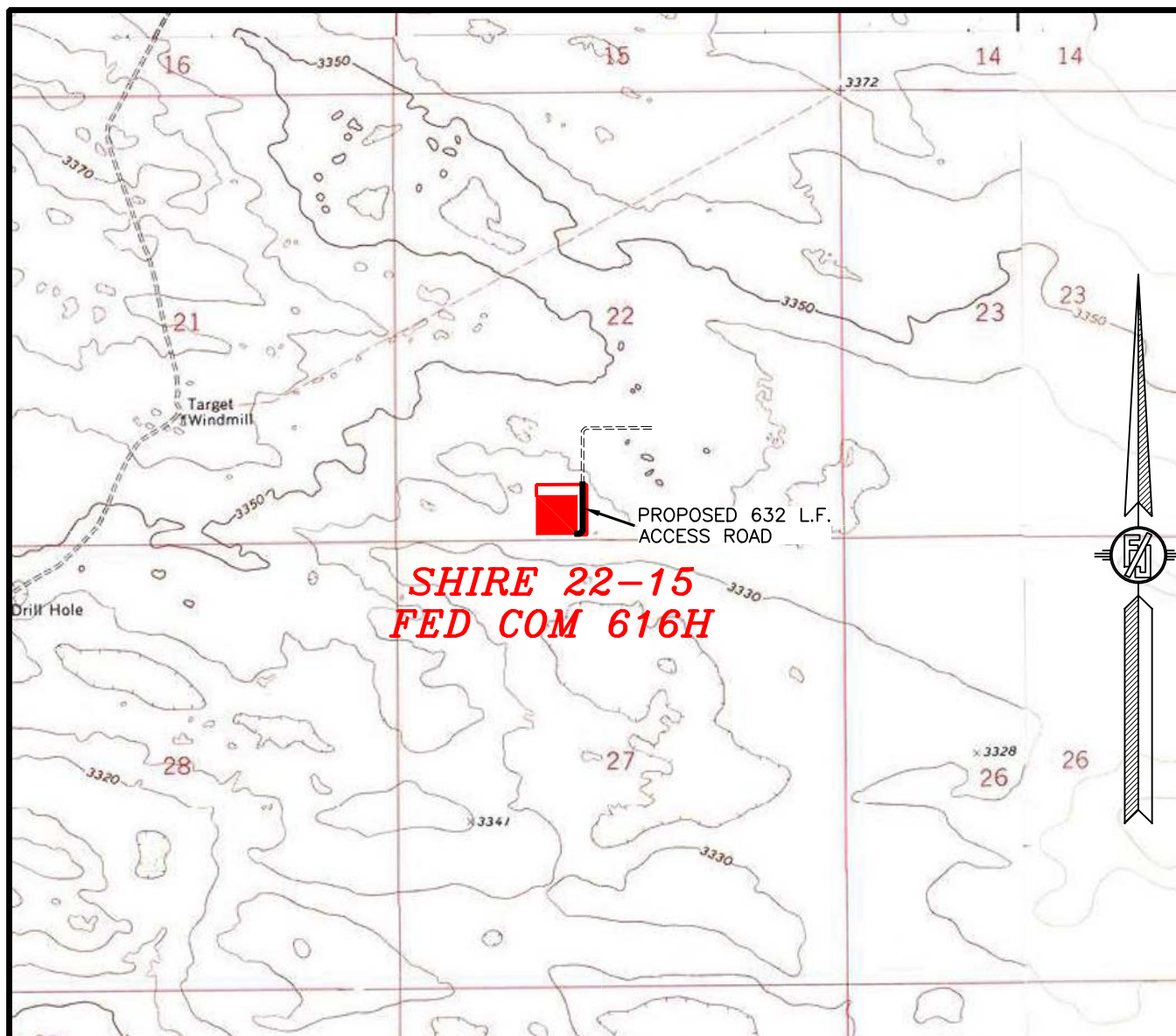
SEPTEMBER 30, 2020

SURVEY NO. 7569B

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

CARLSBAD, NEW MEXICO

SECTION 22, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
LOCATION VERIFICATION MAP



USGS QUAD MAP:
PHANTOM BANKS

NOT TO SCALE

DEVON ENERGY PRODUCTION COMPANY, L.P.
SHIRE 22-15 FED COM 616H
LOCATED 350 FT. FROM THE SOUTH LINE
AND 1855 FT. FROM THE WEST LINE OF
SECTION 22, TOWNSHIP 25 SOUTH,
RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

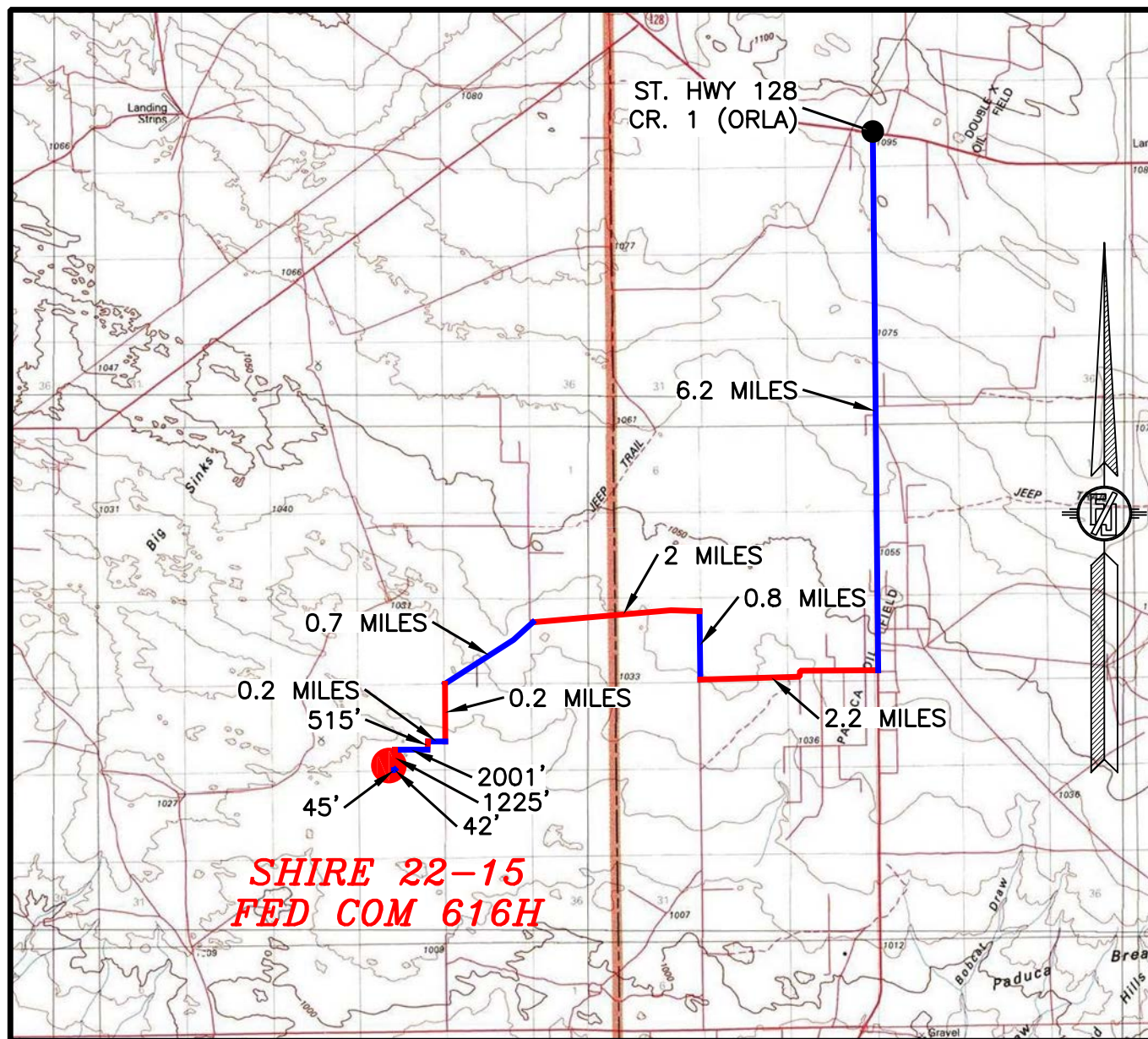
SEPTEMBER 30, 2020

MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3341

SURVEY NO. 7569B
CARLSBAD, NEW MEXICO

SECTION 22, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
VICINITY MAP



DISTANCES IN MILES

NOT TO SCALE

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. 128 & CR. 1 (ORLA)
GO SOUTH ON CR.1 APPROX 6.2 MILES, TURN RIGHT
(WEST) ON EXISTING CALICHE ROAD (MONSANTO) AND GO
APPROX 2.2 MILES, ROAD TURNS RIGHT (NORTH) AND GO
APPROX 0.8 MILES, ROAD TURNS LEFT (WEST) AND GO
APPROX. 2 MILES, TURN LEFT (SOUTHWEST) AND GO
APPROX. 0.7 MILES, ROAD TURNS LEFT (SOUTH) AND GO
APPROX. 0.2 MILES, TURN LEFT AND GO WEST APPROX. 0.2
MILES TO A PROPOSED ROAD LATH ON SOUTH SIDE OF
ROAD, FOLLOW ROAD LATHS 515' SOUTH, THEN WEST
2001', THEN SOUTH 1225', THEN SOUTHWEST 42', THEN
WEST 45' TO THE SOUTHEAST PAD CORNER FOR THIS
LOCATION.

DEVON ENERGY PRODUCTION COMPANY, L.P.

SHIRE 22-15 FED COM 616H

LOCATED 350 FT. FROM THE SOUTH LINE
AND 1855 FT. FROM THE WEST LINE OF
SECTION 22, TOWNSHIP 25 SOUTH,
RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

SEPTEMBER 30, 2020

SURVEY NO. 7569B

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

CARLSBAD, NEW MEXICO

SECTION 22, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
AERIAL PHOTO



NOT TO SCALE
AERIAL PHOTO:
GOOGLE EARTH
FEB. 2019

DEVON ENERGY PRODUCTION COMPANY, L.P.
SHIRE 22-15 FED COM 616H
LOCATED 350 FT. FROM THE SOUTH LINE
AND 1855 FT. FROM THE WEST LINE OF
SECTION 22, TOWNSHIP 25 SOUTH,
RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

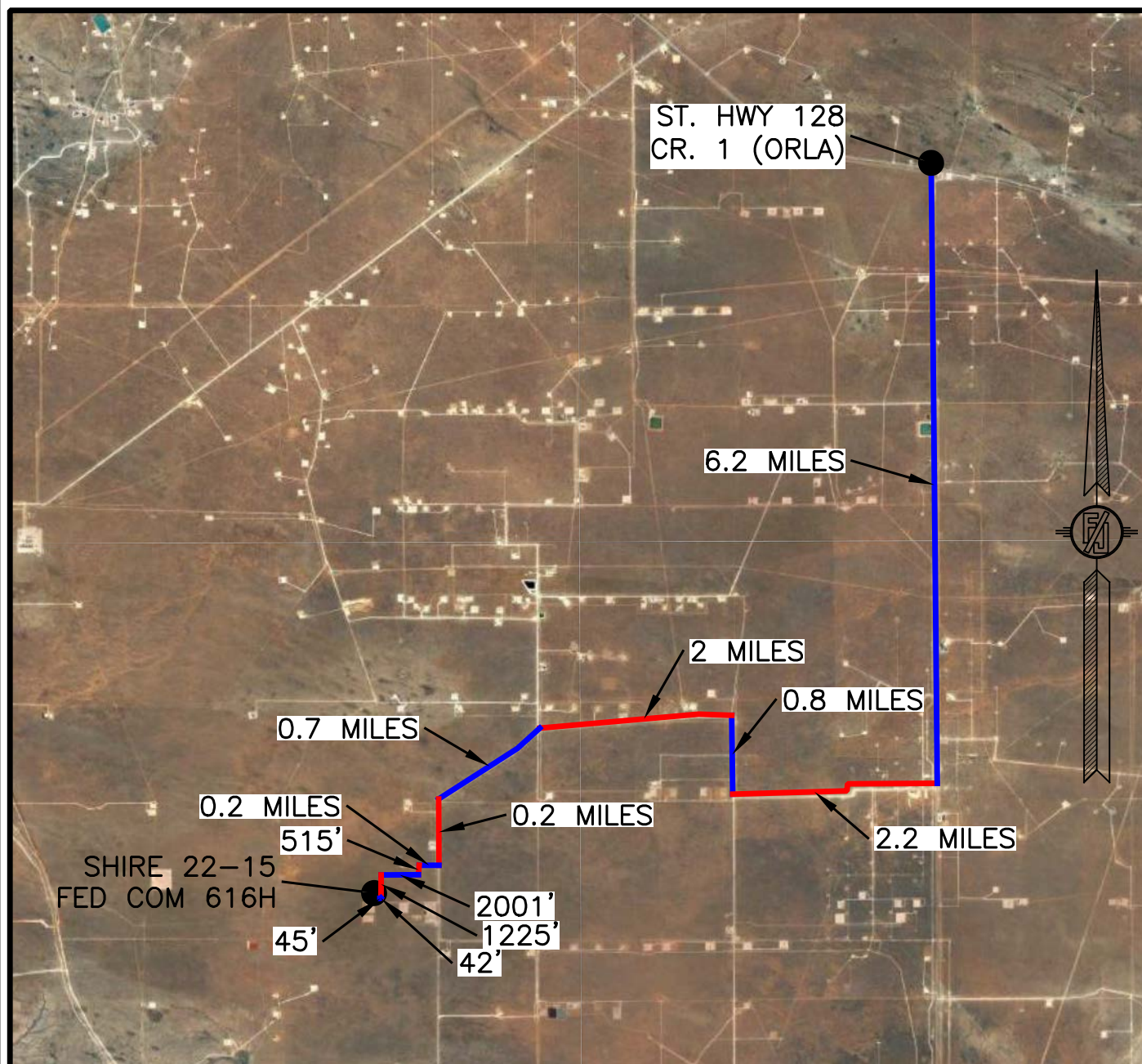
SEPTEMBER 30, 2020

MADRON SURVEYING, INC.

301 SOUTH CANAL
(575) 234-3341

SURVEY NO. 7569B
CARLSBAD, NEW MEXICO

SECTION 22, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO
 AERIAL ACCESS ROUTE MAP



NOT TO SCALE
 AERIAL PHOTO:
 GOOGLE EARTH
 FEB. 2019

DEVON ENERGY PRODUCTION COMPANY, L.P.
SHIRE 22-15 FED COM 616H
 LOCATED 350 FT. FROM THE SOUTH LINE
 AND 1855 FT. FROM THE WEST LINE OF
 SECTION 22, TOWNSHIP 25 SOUTH,
 RANGE 31 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO

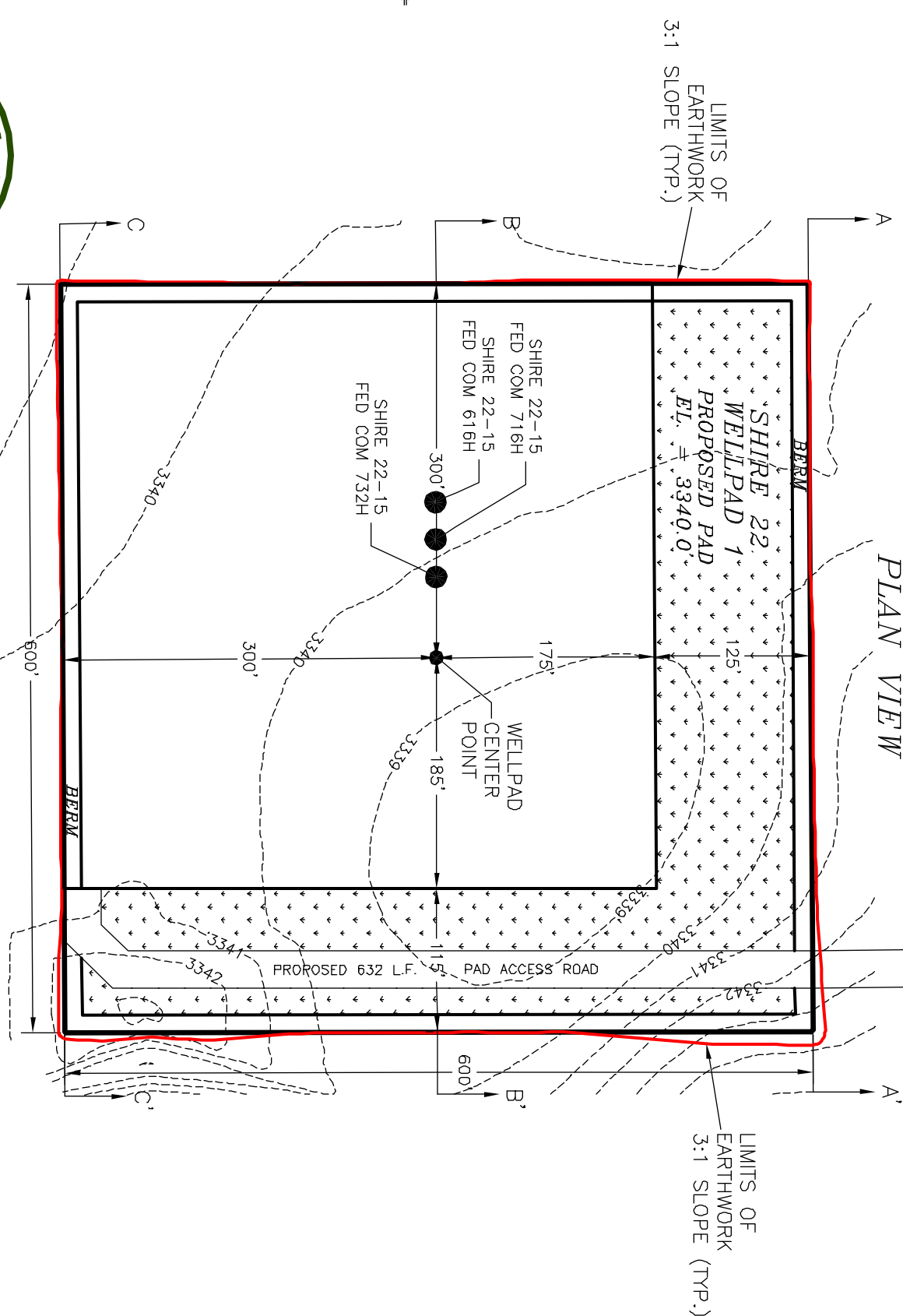
SEPTEMBER 30, 2020

MADRON SURVEYING, INC.

301 SOUTH CANAL
 (575) 234-3341

SURVEY NO. 7569B
 CARLSBAD, NEW MEXICO

PLAN VIEW

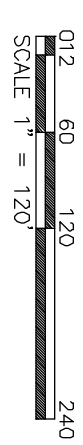


I, FILMON F. JARVIS, JR., A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFICATE NO. 12299, AM RESPONSIBLE FOR THIS SURVEY, THAT THE SURVEYED LINES AND POINTS ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THIS SURVEY AND PLAN MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

DEVON ENERGY PRODUCTION COMPANY, L.P.
PAD GRADING AND CROSS SECTIONS
FOR SHIRE 22-15 FED COM 616H
SECTION 22, TOWNSHIP 26 SOUTH,
RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO

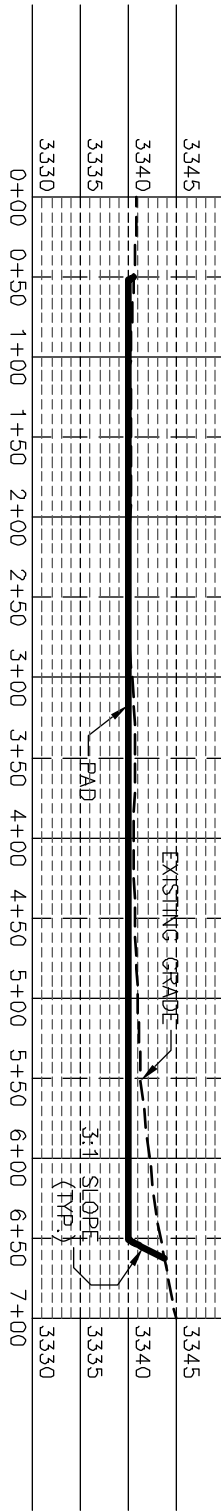
CUT	FILL	NET
3594 CU. YD	4724 CU. YD	1130 CU. YD (FILL)

EARTHWORK QUANTITIES ARE ESTIMATED

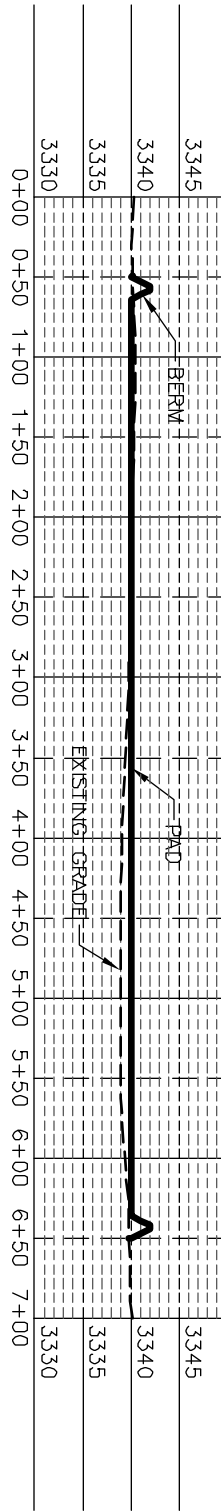


CROSS-SECTIONS

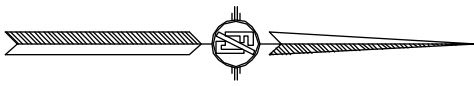
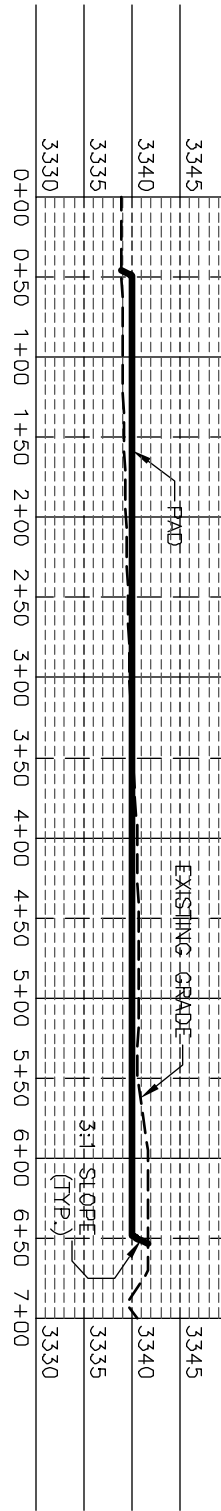
SECTION A-A'



SECTION B-B'

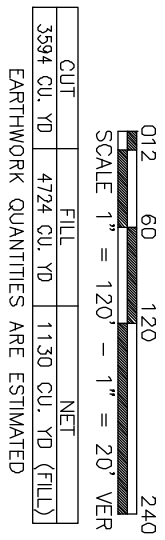


SECTION C-C'



I, FILMON F. JARVIS, A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFICATE NO. 10284, AM RESPONSIBLE FOR THIS SURVEY, THAT THE CONVEYED INTERESTS ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.

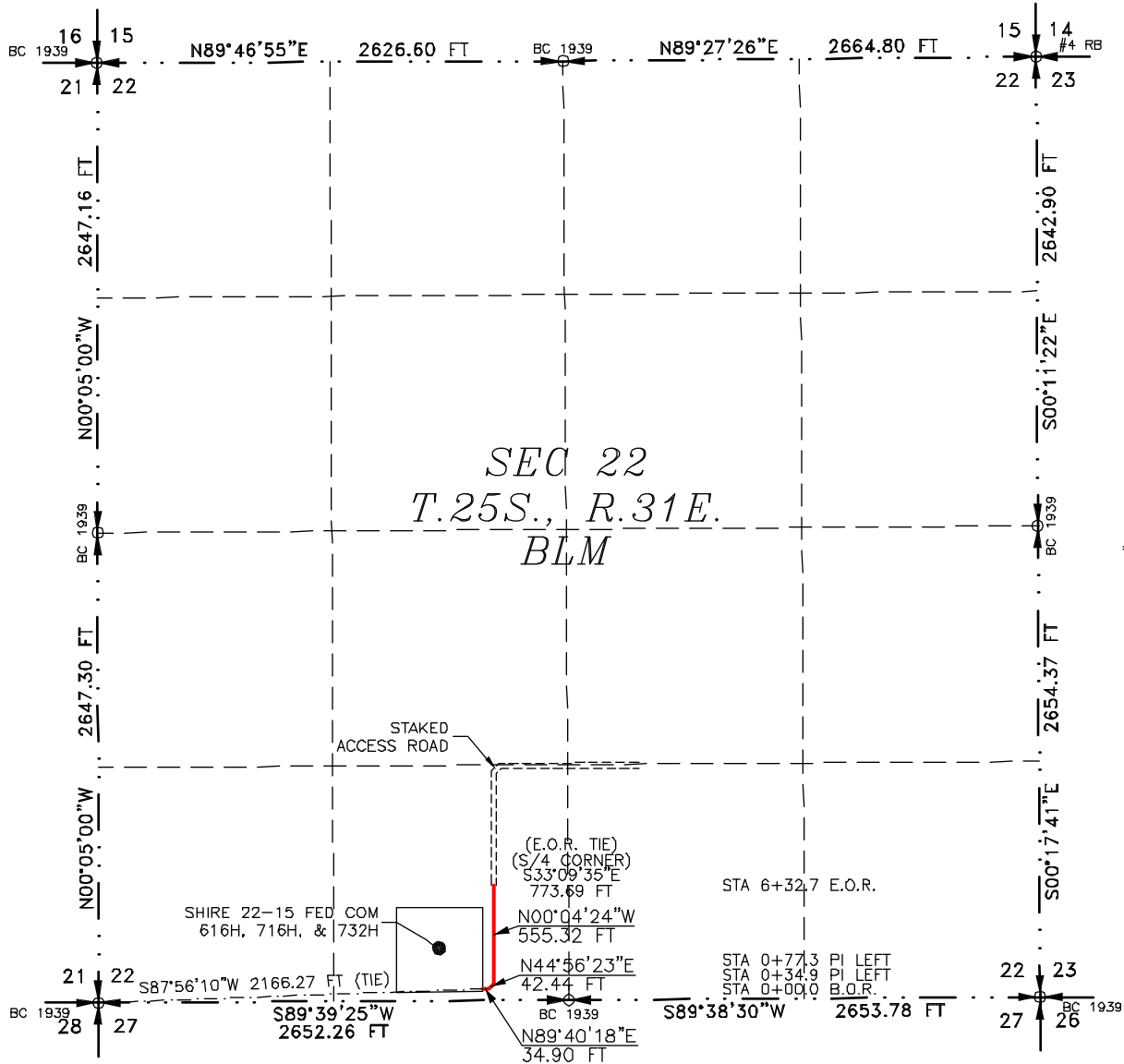
DEVON ENERGY PRODUCTION COMPANY, L.P.
 PAD GRADING AND CROSS SECTIONS
 FOR SHIRE 22-15 FED COM 616H
 SECTION 22, TOWNSHIP 26 SOUTH,
 RANGE 31 EAST, N.M.P.M.
 EDDY COUNTY, STATE OF NEW MEXICO



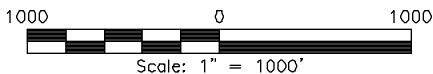
ACCESS ROAD PLAT

ACCESS ROAD FOR SHIRE 22-15 FED COM 616H, 716H, & 732H

DEVON ENERGY PRODUCTION COMPANY, L.P.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 22, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
SEPTEMBER 30, 2020



SEE NEXT SHEET (2-2) FOR DESCRIPTION



GENERAL NOTES

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

SHEET: 1-2

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

SURVEYOR CERTIFICATE

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

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 30th DAY OF SEPTEMBER 2020

FILMON F. JARAMILLO
12797
NEW MEXICO PROFESSIONAL SURVEYOR

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

SURVEY NO. 7569B

ACCESS ROAD PLAT

ACCESS ROAD FOR SHIRE 22-15 FED COM 616H, 716H, & 732H

DEVON ENERGY PRODUCTION COMPANY, L.P.
CENTERLINE SURVEY OF AN ACCESS ROAD CROSSING
SECTION 22, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M.
EDDY COUNTY, STATE OF NEW MEXICO
SEPTEMBER 30, 2020

DESCRIPTION

A STRIP OF LAND 30 FEET WIDE CROSSING BUREAU OF LAND MANAGEMENT LAND IN SECTION 22, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, STATE OF NEW MEXICO AND BEING 15 FEET EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY:

BEGINNING AT A POINT WITHIN THE SE/4 SW/4 OF SAID SECTION 22, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M., WHENCE THE SOUTHWEST CORNER OF SAID SECTION 22, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S87°56'10"W, A DISTANCE OF 2166.27 FEET;
THENCE N89°40'18"E A DISTANCE OF 34.90 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N44°56'23"E A DISTANCE OF 42.44 FEET TO AN ANGLE POINT OF THE LINE HEREIN DESCRIBED;
THENCE N00°04'24"W A DISTANCE OF 555.32 FEET THE TERMINUS OF THIS CENTERLINE SURVEY, WHENCE THE SOUTH QUARTER CORNER OF SAID SECTION 22, TOWNSHIP 25 SOUTH, RANGE 31 EAST, N.M.P.M. BEARS S33°09'35"E, A DISTANCE OF 773.69 FEET;

SAID STRIP OF LAND BEING 632.66 FEET OR 38.34 RODS IN LENGTH, CONTAINING 0.436 ACRES MORE OR LESS AND BEING ALLOCATED BY FORTIES AS FOLLOWS:

SE/4 SW/4 632.66 L.F. 38.34 RODS 0.436 ACRES

SURVEYOR CERTIFICATE

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

IN WITNESS WHEREOF THIS CERTIFICATE IS EXECUTED AT CARLSBAD, NEW MEXICO, THIS 30th DAY OF SEPTEMBER 2020

FILIMON F. JARAMILLO
12797
MADRON SURVEYING, INC.
301 SOUTH CANAL
CARLSBAD, NEW MEXICO 88220
Phone (575) 234-3341

GENERAL NOTES

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

SHEET: 2-2

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

SURVEY NO. 7569B

1. Geologic Formations

TVD of target	11625	Pilot hole depth	N/A
MD at TD:	21991	Deepest expected fresh water	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	1160		
Salt	1460		
Base of Salt	4330		
Cherry Canyon	5295		
Brushy Canyon	6650		
1st Bone Spring Lime	8250		
1st Bone Spring Sand	9330		
Bone Spring 2nd	9950		
3rd Bone Spring Lime	10440		
Bone Spring 3rd	11215		
Wolfcamp	11650		

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

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	1185	0	1185
9 7/8	8 5/8	32	P110	TLW	0	11215	0	11215
7 7/8	5 1/2	17	P110	BTC	0	21991	0	11625

• 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	896	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	475	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
	475	Surf	9	3.27	Lead: Class C Cement + additives
	465	4000' above	13.2	1.44	Tail: Class H / C + additives
Production	117	9118	9	3.27	Lead: Class H / C + additives
	1439	11118	13.2	1.44	Tail: Class H / C + additives

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

4. Pressure Control Equipment (Three String Design)

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

5. Mud Program (Three String Design)

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

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

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring
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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	6347
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

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

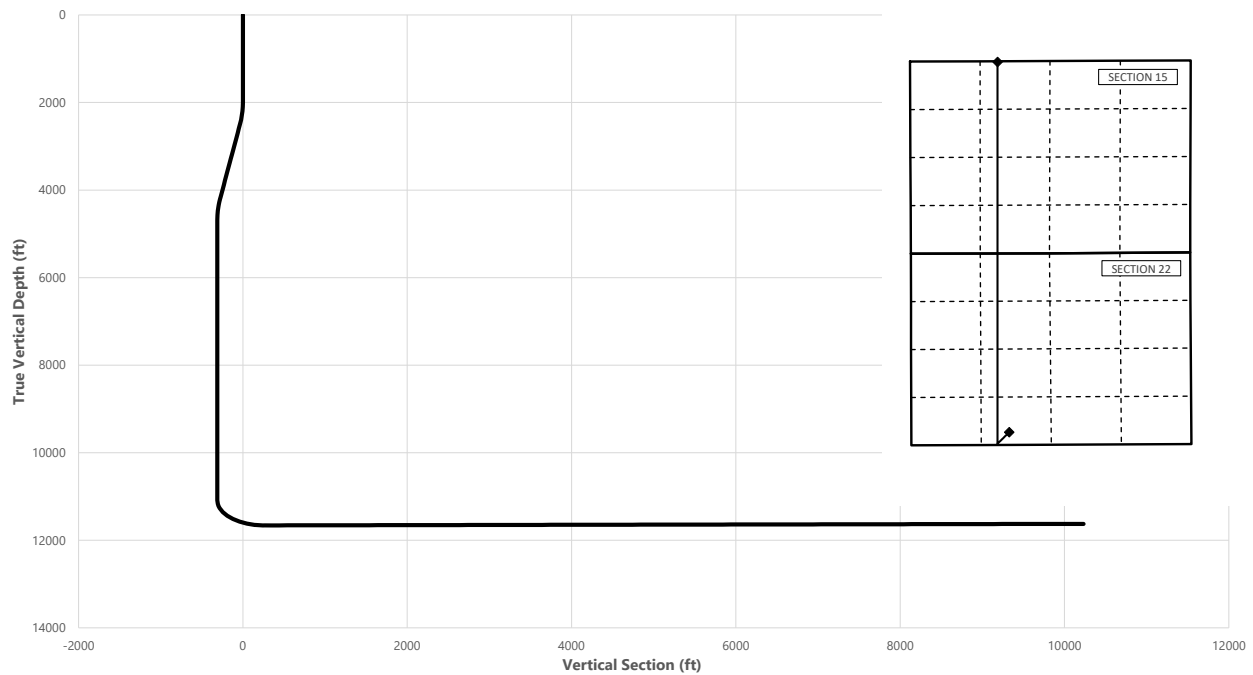
<u>X</u>	Directional Plan
<u> </u>	Other, describe



Well: Shire 22-15 Fed Com 616H
County: Eddy
Wellbore: Permit Plan
Design: Permit Plan #1

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

MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
2000.00	0.00	215.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2500.00	10.00	215.00	2497.47	-35.65	-24.96	-35.10	1.00	Hold Tangent
4223.45	10.00	215.00	4194.73	-280.80	-196.62	-276.48	0.00	Drop to Vertical
4723.45	0.00	215.00	4692.19	-316.45	-221.58	-311.58	2.00	Hold Vertical
11118.30	0.00	0.00	11087.05	-316.45	-221.58	-311.58	0.00	KOP
12020.31	90.20	0.00	11660.00	258.52	-221.58	263.25	10.00	Landing Point
21991.48	90.20	0.00	11625.00	10229.63	-221.58	10232.03	0.00	BHL



Key Depths	MD (ft)	TVD (ft)
Rustler	0.00	0.00
Salt	1460.00	1460.00
Base of Salt	4360.28	4330.00
Cherry Canyon	5326.25	5295.00
Brushy Canyon	6681.25	6650.00
1st Bone Spring Lime	8281.25	8250.00
1st Bone Spring Sand	9361.25	9330.00
Bone Spring 2nd	9981.25	9950.00
3rd Bone Spring Lime	10471.25	10440.00
Bone Spring 3rd	11247.34	11215.00
Wolfcamp / Point of Penetration	11911.08	11650.00
EXIT	21911.48	11625.29

SHL
KOP
Point of Penetration
Exit
BHL

MD (ft)	TVD (ft)	Lat (°)	Long (°)	Section Footages
0.00	0.00	32.1094	-103.7686	350' FSL, 1855' FWL of Sec 22 in T25S, R31E
11118.30	11087.05	32.1085	-103.7693	35' FSL, 1657' FWL of Sec 22 in T25S, R31E
11911.08	11650.00	32.1088	-103.7691	100' FSL, 1657' FWL of Sec 22 in T25S, R31E
21911.48	11625.29	32.1374	-103.7690	100' FNL, 1657' FWL of Sec 15 in T25S, R31E
21991.48	11625.00	32.1375	-103.7691	20' FNL, 1657' FWL of Sec 15 in T25S, R31E



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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	215.00	100.00	0.00	0.00	0.00	0.00	
200.00	0.00	215.00	200.00	0.00	0.00	0.00	0.00	
300.00	0.00	215.00	300.00	0.00	0.00	0.00	0.00	
400.00	0.00	215.00	400.00	0.00	0.00	0.00	0.00	
500.00	0.00	215.00	500.00	0.00	0.00	0.00	0.00	
600.00	0.00	215.00	600.00	0.00	0.00	0.00	0.00	
700.00	0.00	215.00	700.00	0.00	0.00	0.00	0.00	
800.00	0.00	215.00	800.00	0.00	0.00	0.00	0.00	
900.00	0.00	215.00	900.00	0.00	0.00	0.00	0.00	
1000.00	0.00	215.00	1000.00	0.00	0.00	0.00	0.00	
1100.00	0.00	215.00	1100.00	0.00	0.00	0.00	0.00	
1160.00	0.00	215.00	1160.00	0.00	0.00	0.00	0.00	Rustler
1200.00	0.00	215.00	1200.00	0.00	0.00	0.00	0.00	
1300.00	0.00	215.00	1300.00	0.00	0.00	0.00	0.00	
1400.00	0.00	215.00	1400.00	0.00	0.00	0.00	0.00	
1460.00	0.00	215.00	1460.00	0.00	0.00	0.00	0.00	Salt
1500.00	0.00	215.00	1500.00	0.00	0.00	0.00	0.00	
1600.00	0.00	215.00	1600.00	0.00	0.00	0.00	0.00	
1700.00	0.00	215.00	1700.00	0.00	0.00	0.00	0.00	
1800.00	0.00	215.00	1800.00	0.00	0.00	0.00	0.00	
1900.00	0.00	215.00	1900.00	0.00	0.00	0.00	0.00	
2000.00	0.00	215.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2100.00	2.00	215.00	2099.98	-1.43	-1.00	-1.41	2.00	
2200.00	4.00	215.00	2199.84	-5.72	-4.00	-5.63	2.00	
2300.00	6.00	215.00	2299.45	-12.86	-9.00	-12.66	2.00	
2400.00	8.00	215.00	2398.70	-22.84	-15.99	-22.49	2.00	
2500.00	10.00	215.00	2497.47	-35.65	-24.96	-35.10	1.00	Hold Tangent
2600.00	10.00	215.00	2595.95	-49.88	-34.92	-49.11	0.00	
2700.00	10.00	215.00	2694.43	-64.10	-44.88	-63.11	0.00	
2800.00	10.00	215.00	2792.91	-78.32	-54.84	-77.12	0.00	
2900.00	10.00	215.00	2891.39	-92.55	-64.80	-91.12	0.00	
3000.00	10.00	215.00	2989.87	-106.77	-74.76	-105.13	0.00	
3100.00	10.00	215.00	3088.35	-121.00	-84.72	-119.14	0.00	
3200.00	10.00	215.00	3186.83	-135.22	-94.68	-133.14	0.00	
3300.00	10.00	215.00	3285.31	-149.45	-104.64	-147.15	0.00	
3400.00	10.00	215.00	3383.79	-163.67	-114.60	-161.15	0.00	
3500.00	10.00	215.00	3482.27	-177.90	-124.56	-175.16	0.00	
3600.00	10.00	215.00	3580.75	-192.12	-134.52	-189.16	0.00	
3700.00	10.00	215.00	3679.23	-206.34	-144.48	-203.17	0.00	
3800.00	10.00	215.00	3777.72	-220.57	-154.44	-217.17	0.00	
3900.00	10.00	215.00	3876.20	-234.79	-164.40	-231.18	0.00	
4000.00	10.00	215.00	3974.68	-249.02	-174.36	-245.18	0.00	
4100.00	10.00	215.00	4073.16	-263.24	-184.32	-259.19	0.00	
4200.00	10.00	215.00	4171.64	-277.47	-194.28	-273.19	0.00	
4223.45	10.00	215.00	4194.73	-280.80	-196.62	-276.48	0.00	Drop to Vertical
4300.00	8.47	215.00	4270.29	-290.86	-203.67	-286.39	2.00	
4360.28	7.26	215.00	4330.00	-297.62	-208.40	-293.04	2.00	Base of Salt
4400.00	6.47	215.00	4369.43	-301.51	-211.12	-296.87	2.00	
4500.00	4.47	215.00	4468.97	-309.32	-216.59	-304.56	2.00	
4600.00	2.47	215.00	4568.79	-314.28	-220.06	-309.44	2.00	
4700.00	0.47	215.00	4668.75	-316.38	-221.53	-311.50	2.00	
4723.45	0.00	215.00	4692.19	-316.45	-221.58	-311.58	2.00	Hold Vertical
4800.00	0.00	0.00	4768.75	-316.45	-221.58	-311.58	0.00	
4900.00	0.00	0.00	4868.75	-316.45	-221.58	-311.58	0.00	
5000.00	0.00	0.00	4968.75	-316.45	-221.58	-311.58	0.00	
5100.00	0.00	0.00	5068.75	-316.45	-221.58	-311.58	0.00	
5200.00	0.00	0.00	5168.75	-316.45	-221.58	-311.58	0.00	
5300.00	0.00	0.00	5268.75	-316.45	-221.58	-311.58	0.00	
5326.25	0.00	0.00	5295.00	-316.45	-221.58	-311.58	0.00	Cherry Canyon
5400.00	0.00	0.00	5368.75	-316.45	-221.58	-311.58	0.00	
5500.00	0.00	0.00	5468.75	-316.45	-221.58	-311.58	0.00	
5600.00	0.00	0.00	5568.75	-316.45	-221.58	-311.58	0.00	
5700.00	0.00	0.00	5668.75	-316.45	-221.58	-311.58	0.00	
5800.00	0.00	0.00	5768.75	-316.45	-221.58	-311.58	0.00	
5900.00	0.00	0.00	5868.75	-316.45	-221.58	-311.58	0.00	
6000.00	0.00	0.00	5968.75	-316.45	-221.58	-311.58	0.00	
6100.00	0.00	0.00	6068.75	-316.45	-221.58	-311.58	0.00	
6200.00	0.00	0.00	6168.75	-316.45	-221.58	-311.58	0.00	
6300.00	0.00	0.00	6268.75	-316.45	-221.58	-311.58	0.00	



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MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
6400.00	0.00	0.00	6368.75	-316.45	-221.58	-311.58	0.00	
6500.00	0.00	0.00	6468.75	-316.45	-221.58	-311.58	0.00	
6600.00	0.00	0.00	6568.75	-316.45	-221.58	-311.58	0.00	
6681.25	0.00	0.00	6650.00	-316.45	-221.58	-311.58	0.00	Brushy Canyon
6700.00	0.00	0.00	6668.75	-316.45	-221.58	-311.58	0.00	
6800.00	0.00	0.00	6768.75	-316.45	-221.58	-311.58	0.00	
6900.00	0.00	0.00	6868.75	-316.45	-221.58	-311.58	0.00	
7000.00	0.00	0.00	6968.75	-316.45	-221.58	-311.58	0.00	
7100.00	0.00	0.00	7068.75	-316.45	-221.58	-311.58	0.00	
7200.00	0.00	0.00	7168.75	-316.45	-221.58	-311.58	0.00	
7300.00	0.00	0.00	7268.75	-316.45	-221.58	-311.58	0.00	
7400.00	0.00	0.00	7368.75	-316.45	-221.58	-311.58	0.00	
7500.00	0.00	0.00	7468.75	-316.45	-221.58	-311.58	0.00	
7600.00	0.00	0.00	7568.75	-316.45	-221.58	-311.58	0.00	
7700.00	0.00	0.00	7668.75	-316.45	-221.58	-311.58	0.00	
7800.00	0.00	0.00	7768.75	-316.45	-221.58	-311.58	0.00	
7900.00	0.00	0.00	7868.75	-316.45	-221.58	-311.58	0.00	
8000.00	0.00	0.00	7968.75	-316.45	-221.58	-311.58	0.00	
8100.00	0.00	0.00	8068.75	-316.45	-221.58	-311.58	0.00	
8200.00	0.00	0.00	8168.75	-316.45	-221.58	-311.58	0.00	
8281.25	0.00	0.00	8250.00	-316.45	-221.58	-311.58	0.00	1st Bone Spring Lime
8300.00	0.00	0.00	8268.75	-316.45	-221.58	-311.58	0.00	
8400.00	0.00	0.00	8368.75	-316.45	-221.58	-311.58	0.00	
8500.00	0.00	0.00	8468.75	-316.45	-221.58	-311.58	0.00	
8600.00	0.00	0.00	8568.75	-316.45	-221.58	-311.58	0.00	
8700.00	0.00	0.00	8668.75	-316.45	-221.58	-311.58	0.00	
8800.00	0.00	0.00	8768.75	-316.45	-221.58	-311.58	0.00	
8900.00	0.00	0.00	8868.75	-316.45	-221.58	-311.58	0.00	
9000.00	0.00	0.00	8968.75	-316.45	-221.58	-311.58	0.00	
9100.00	0.00	0.00	9068.75	-316.45	-221.58	-311.58	0.00	
9200.00	0.00	0.00	9168.75	-316.45	-221.58	-311.58	0.00	
9300.00	0.00	0.00	9268.75	-316.45	-221.58	-311.58	0.00	
9361.25	0.00	0.00	9330.00	-316.45	-221.58	-311.58	0.00	1st Bone Spring Sand
9400.00	0.00	0.00	9368.75	-316.45	-221.58	-311.58	0.00	
9500.00	0.00	0.00	9468.75	-316.45	-221.58	-311.58	0.00	
9600.00	0.00	0.00	9568.75	-316.45	-221.58	-311.58	0.00	
9700.00	0.00	0.00	9668.75	-316.45	-221.58	-311.58	0.00	
9800.00	0.00	0.00	9768.75	-316.45	-221.58	-311.58	0.00	
9900.00	0.00	0.00	9868.75	-316.45	-221.58	-311.58	0.00	
9981.25	0.00	0.00	9950.00	-316.45	-221.58	-311.58	0.00	Bone Spring 2nd
10000.00	0.00	0.00	9968.75	-316.45	-221.58	-311.58	0.00	
10100.00	0.00	0.00	10068.75	-316.45	-221.58	-311.58	0.00	
10200.00	0.00	0.00	10168.75	-316.45	-221.58	-311.58	0.00	
10300.00	0.00	0.00	10268.75	-316.45	-221.58	-311.58	0.00	
10400.00	0.00	0.00	10368.75	-316.45	-221.58	-311.58	0.00	
10471.25	0.00	0.00	10440.00	-316.45	-221.58	-311.58	0.00	3rd Bone Spring Lime
10500.00	0.00	0.00	10468.75	-316.45	-221.58	-311.58	0.00	
10600.00	0.00	0.00	10568.75	-316.45	-221.58	-311.58	0.00	
10700.00	0.00	0.00	10668.75	-316.45	-221.58	-311.58	0.00	
10800.00	0.00	0.00	10768.75	-316.45	-221.58	-311.58	0.00	
10900.00	0.00	0.00	10868.75	-316.45	-221.58	-311.58	0.00	
11000.00	0.00	0.00	10968.75	-316.45	-221.58	-311.58	0.00	
11100.00	0.00	0.00	11068.75	-316.45	-221.58	-311.58	0.00	
11118.30	0.00	0.00	11087.05	-316.45	-221.58	-311.58	0.00	KOP
11200.00	8.17	0.00	11168.47	-310.64	-221.58	-305.77	10.00	
11247.34	12.90	0.00	11215.00	-301.98	-221.58	-297.11	10.00	Bone Spring 3rd
11300.00	18.17	0.00	11265.72	-287.88	-221.58	-283.02	10.00	
11400.00	28.17	0.00	11357.53	-248.59	-221.58	-243.73	10.00	
11500.00	38.17	0.00	11441.13	-193.94	-221.58	-189.10	10.00	
11600.00	48.17	0.00	11513.97	-125.61	-221.58	-120.78	10.00	
11700.00	58.17	0.00	11573.84	-45.67	-221.58	-40.86	10.00	
11800.00	68.17	0.00	11618.92	43.45	-221.58	48.24	10.00	
11900.00	78.17	0.00	11647.83	139.04	-221.58	143.81	10.00	
11911.08	79.28	0.00	11650.00	149.91	-221.58	154.67	10.00	Wolfcamp / Point of Penetration
12000.00	88.17	0.00	11659.71	238.21	-221.58	242.95	10.00	
12020.31	90.20	0.00	11660.00	258.52	-221.58	263.25	10.00	Landing Point
12100.00	90.20	0.00	11659.72	338.21	-221.58	342.93	0.00	
12200.00	90.20	0.00	11659.37	438.21	-221.58	442.90	0.00	
12300.00	90.20	0.00	11659.02	538.20	-221.58	542.88	0.00	
12400.00	90.20	0.00	11658.67	638.20	-221.58	642.85	0.00	



Well: Shire 22-15 Fed Com 616H
County: Eddy
Wellbore: Permit Plan
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Zone: 3001 - NM East (NAD83)

MD	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
12500.00	90.20	0.00	11658.32	738.20	-221.58	742.83	0.00	
12600.00	90.20	0.00	11657.97	838.20	-221.58	842.81	0.00	
12700.00	90.20	0.00	11657.62	938.20	-221.58	942.78	0.00	
12800.00	90.20	0.00	11657.26	1038.20	-221.58	1042.76	0.00	
12900.00	90.20	0.00	11656.91	1138.20	-221.58	1142.73	0.00	
13000.00	90.20	0.00	11656.56	1238.20	-221.58	1242.71	0.00	
13100.00	90.20	0.00	11656.21	1338.20	-221.58	1342.68	0.00	
13200.00	90.20	0.00	11655.86	1438.20	-221.58	1442.66	0.00	
13300.00	90.20	0.00	11655.51	1538.20	-221.58	1542.64	0.00	
13400.00	90.20	0.00	11655.16	1638.20	-221.58	1642.61	0.00	
13500.00	90.20	0.00	11654.81	1738.20	-221.58	1742.59	0.00	
13600.00	90.20	0.00	11654.46	1838.20	-221.58	1842.56	0.00	
13700.00	90.20	0.00	11654.11	1938.20	-221.58	1942.54	0.00	
13800.00	90.20	0.00	11653.76	2038.20	-221.58	2042.52	0.00	
13900.00	90.20	0.00	11653.40	2138.20	-221.58	2142.49	0.00	
14000.00	90.20	0.00	11653.05	2238.19	-221.58	2242.47	0.00	
14100.00	90.20	0.00	11652.70	2338.19	-221.58	2342.44	0.00	
14200.00	90.20	0.00	11652.35	2438.19	-221.58	2442.42	0.00	
14300.00	90.20	0.00	11652.00	2538.19	-221.58	2542.40	0.00	
14400.00	90.20	0.00	11651.65	2638.19	-221.58	2642.37	0.00	
14500.00	90.20	0.00	11651.30	2738.19	-221.58	2742.35	0.00	
14600.00	90.20	0.00	11650.95	2838.19	-221.58	2842.32	0.00	
14700.00	90.20	0.00	11650.60	2938.19	-221.58	2942.30	0.00	
14800.00	90.20	0.00	11650.25	3038.19	-221.58	3042.28	0.00	
14900.00	90.20	0.00	11649.90	3138.19	-221.58	3142.25	0.00	
15000.00	90.20	0.00	11649.54	3238.19	-221.58	3242.23	0.00	
15100.00	90.20	0.00	11649.19	3338.19	-221.58	3342.20	0.00	
15200.00	90.20	0.00	11648.84	3438.19	-221.58	3442.18	0.00	
15300.00	90.20	0.00	11648.49	3538.19	-221.58	3542.16	0.00	
15400.00	90.20	0.00	11648.14	3638.19	-221.58	3642.13	0.00	
15500.00	90.20	0.00	11647.79	3738.19	-221.58	3742.11	0.00	
15600.00	90.20	0.00	11647.44	3838.18	-221.58	3842.08	0.00	
15700.00	90.20	0.00	11647.09	3938.18	-221.58	3942.06	0.00	
15800.00	90.20	0.00	11646.74	4038.18	-221.58	4042.04	0.00	
15900.00	90.20	0.00	11646.39	4138.18	-221.58	4142.01	0.00	
16000.00	90.20	0.00	11646.04	4238.18	-221.58	4241.99	0.00	
16100.00	90.20	0.00	11645.69	4338.18	-221.58	4341.96	0.00	
16200.00	90.20	0.00	11645.33	4438.18	-221.58	4441.94	0.00	
16300.00	90.20	0.00	11644.98	4538.18	-221.58	4541.91	0.00	
16400.00	90.20	0.00	11644.63	4638.18	-221.58	4641.89	0.00	
16500.00	90.20	0.00	11644.28	4738.18	-221.58	4741.87	0.00	
16600.00	90.20	0.00	11643.93	4838.18	-221.58	4841.84	0.00	
16700.00	90.20	0.00	11643.58	4938.18	-221.58	4941.82	0.00	
16800.00	90.20	0.00	11643.23	5038.18	-221.58	5041.79	0.00	
16900.00	90.20	0.00	11642.88	5138.18	-221.58	5141.77	0.00	
17000.00	90.20	0.00	11642.53	5238.18	-221.58	5241.75	0.00	
17100.00	90.20	0.00	11642.18	5338.18	-221.58	5341.72	0.00	
17200.00	90.20	0.00	11641.83	5438.17	-221.58	5441.70	0.00	
17300.00	90.20	0.00	11641.47	5538.17	-221.58	5541.67	0.00	
17400.00	90.20	0.00	11641.12	5638.17	-221.58	5641.65	0.00	
17500.00	90.20	0.00	11640.77	5738.17	-221.58	5741.63	0.00	
17600.00	90.20	0.00	11640.42	5838.17	-221.58	5841.60	0.00	
17700.00	90.20	0.00	11640.07	5938.17	-221.58	5941.58	0.00	
17800.00	90.20	0.00	11639.72	6038.17	-221.58	6041.55	0.00	
17900.00	90.20	0.00	11639.37	6138.17	-221.58	6141.53	0.00	
18000.00	90.20	0.00	11639.02	6238.17	-221.58	6241.51	0.00	
18100.00	90.20	0.00	11638.67	6338.17	-221.58	6341.48	0.00	
18200.00	90.20	0.00	11638.32	6438.17	-221.58	6441.46	0.00	
18300.00	90.20	0.00	11637.97	6538.17	-221.58	6541.43	0.00	
18400.00	90.20	0.00	11637.62	6638.17	-221.58	6641.41	0.00	
18500.00	90.20	0.00	11637.26	6738.17	-221.58	6741.39	0.00	
18600.00	90.20	0.00	11636.91	6838.17	-221.58	6841.36	0.00	
18700.00	90.20	0.00	11636.56	6938.17	-221.58	6941.34	0.00	
18800.00	90.20	0.00	11636.21	7038.16	-221.58	7041.31	0.00	
18900.00	90.20	0.00	11635.86	7138.16	-221.58	7141.29	0.00	
19000.00	90.20	0.00	11635.51	7238.16	-221.58	7241.26	0.00	
19100.00	90.20	0.00	11635.16	7338.16	-221.58	7341.24	0.00	
19200.00	90.20	0.00	11634.81	7438.16	-221.58	7441.22	0.00	
19300.00	90.20	0.00	11634.46	7538.16	-221.58	7541.19	0.00	
19400.00	90.20	0.00	11634.11	7638.16	-221.58	7641.17	0.00	



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(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
19500.00	90.20	0.00	11633.76	7738.16	-221.58	7741.14	0.00	
19600.00	90.20	0.00	11633.40	7838.16	-221.58	7841.12	0.00	
19700.00	90.20	0.00	11633.05	7938.16	-221.58	7941.10	0.00	
19800.00	90.20	0.00	11632.70	8038.16	-221.58	8041.07	0.00	
19900.00	90.20	0.00	11632.35	8138.16	-221.58	8141.05	0.00	
20000.00	90.20	0.00	11632.00	8238.16	-221.58	8241.02	0.00	
20100.00	90.20	0.00	11631.65	8338.16	-221.58	8341.00	0.00	
20200.00	90.20	0.00	11631.30	8438.16	-221.58	8440.98	0.00	
20300.00	90.20	0.00	11630.95	8538.16	-221.58	8540.95	0.00	
20400.00	90.20	0.00	11630.60	8638.16	-221.58	8640.93	0.00	
20500.00	90.20	0.00	11630.25	8738.15	-221.58	8740.90	0.00	
20600.00	90.20	0.00	11629.90	8838.15	-221.58	8840.88	0.00	
20700.00	90.20	0.00	11629.54	8938.15	-221.58	8940.86	0.00	
20800.00	90.20	0.00	11629.19	9038.15	-221.58	9040.83	0.00	
20900.00	90.20	0.00	11628.84	9138.15	-221.58	9140.81	0.00	
21000.00	90.20	0.00	11628.49	9238.15	-221.58	9240.78	0.00	
21100.00	90.20	0.00	11628.14	9338.15	-221.58	9340.76	0.00	
21200.00	90.20	0.00	11627.79	9438.15	-221.58	9440.74	0.00	
21300.00	90.20	0.00	11627.44	9538.15	-221.58	9540.71	0.00	
21400.00	90.20	0.00	11627.09	9638.15	-221.58	9640.69	0.00	
21500.00	90.20	0.00	11626.74	9738.15	-221.58	9740.66	0.00	
21600.00	90.20	0.00	11626.39	9838.15	-221.58	9840.64	0.00	
21700.00	90.20	0.00	11626.04	9938.15	-221.58	9940.61	0.00	
21800.00	90.20	0.00	11625.69	10038.15	-221.58	10040.59	0.00	
21900.00	90.20	0.00	11625.33	10138.15	-221.58	10140.57	0.00	
21911.48	90.20	0.00	11625.29	10149.63	-221.58	10152.05	0.00	EXIT
21991.48	90.20	0.00	11625.00	10229.63	-221.58	10232.03	0.00	BHL