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

Sundry Print Report

01/27/2023

Well Name: ARENA ROJA 28-33 FED COM

Well Location: T26S / R35E / SEC 28 / NWNW /

County or Parish/State:

Well Number: 801H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM125400

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002550858

Well Status: Approved Application for Permit to Drill

Operator: DEVON ENERGY PRODUCTION COMPANY LP

Notice of Intent

Sundry ID: 2706227

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 12/12/2022

Time Sundry Submitted: 07:48

Date proposed operation will begin: 12/07/2022

Procedure Description: Devon Energy Production Co., L.P. (Devon) respectfully requests to move the SHL/BHL on the subject well. Please see attached revised C102, Drill plan, directional plan. Permitted SHL: NWNW, 250 FNL, 318 FWL, 28-26S-35E Proposed SHL: NWNW, 250 FNL, 288 FWL, 28-26S-35E Permitted BHL: LOT 4, 20 FSL, 990 FWL, 33-26S-35E Proposed BHL: LOT 4, 20 FSL, 380 FWL, 33-26S-35E

NOI Attachments

Procedure Description

Arena_Roja_28_33_Fed_Com_801H_20230117121522.pdf

Arena_Roja_28_33_Fed_Com_801H_pad_plat_updated_20221212074634.pdf

Arena_Roja_28_33_Fed_Com_801H_Directional_Plan_11_22_22_20221207073743.pdf

WA018456297_ARENA_ROJA_28_33_FED_COM_801H_WL_R2_SIGNED_20221207073724.pdf

Well Name: ARENA ROJA 28-33 FED COM	**Well Location:** T26S / R35E / SEC 28 / NWNW /	**County or Parish/State:**
Well Number: 801H	**Type of Well:** OIL WELL	**Allottee or Tribe Name:**
Lease Number: NMNM125400	**Unit or CA Name:**	**Unit or CA Number:**
US Well Number: 3002550858	**Well Status:** Approved Application for Permit to Drill	**Operator:** DEVON ENERGY PRODUCTION COMPANY LP

Conditions of Approval

Additional

Arena_Roja_28_33_fed_Com_801H_Sundry_ID_2705759_20230118140214.pdf

28_26_35_D_Sundry_ID_2706227_Arena_Roja_28_33_Fed_Com_801H_Lea_NM125400_DEVON_ENERGY_PRODUCTION_COMPANY_LP_13_22d_8_29_2022_LV_20230118140205.pdf

Operator

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

Operator Electronic Signature: CHELSEY GREEN **Signed on:** JAN 17, 2023 12:15 PM

Name: DEVON ENERGY PRODUCTION COMPANY LP

Title: Regulatory Compliance Professional

Street Address: 333 West Sheridan Avenue

City: Oklahoma City **State:** OK

Phone: (405) 228-8595

Email address: Chelsey.Green@dvn.com

Field

Representative Name:

Street Address:

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

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS **BLM POC Title:** Petroleum Engineer

BLM POC Phone: 5752342234 **BLM POC Email Address:** cwalls@blm.gov

Disposition: Approved **Disposition Date:** 01/24/2023

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	Pool Code	Pool Name
	96776	JABALINA; WOLFCAMP, SOUTHWEST

Property Code	Property Name	Well Number
	ARENA ROJA 28-33 FED COM	801H

OGRID No.	Operator Name	Elevation
6137	DEVON ENERGY PRODUCTION COMPANY, L.P.	3168.7'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	28	26-S	35-E		250	NORTH	288	WEST	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
4	33	26-S	35-E		20	SOUTH	380	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
233.58			

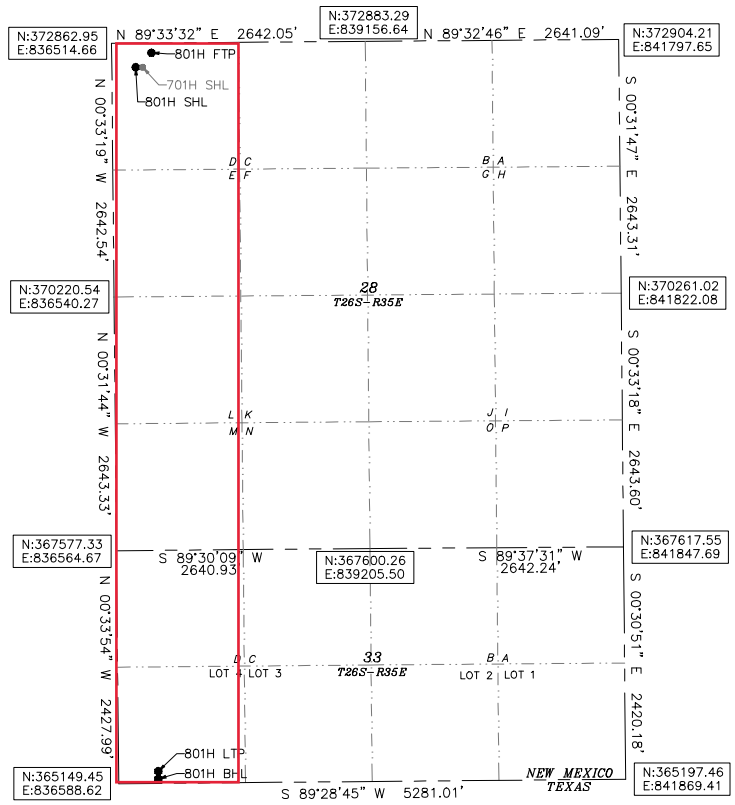
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

ARENA ROJA 28-33 FED COM 801H
LAT:32.020816
LON:103.379981
N:372615.18
E:836804.73

FIRST TAKE POINT
100' FNL 380' FWL SEC. 28
LAT:32.021228
LON:103.379683
N:372765.88
E:836895.62

LAST TAKE POINT
100' FSL 380' FWL SEC. 33
LAT:32.000576
LON:103.379665
N:365252.90
E:836967.62

BOTTOM OF HOLE
LAT:32.000356
LON:103.379664
N:365172.91
E:836968.40



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.

Chelsey Green 12/3/22
Signature Date

Chelsey Green
Printed Name

chelsey.green@dvn.com
E-mail Address

SURVEYOR CERTIFICATION

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

11/12/2022
Date of Survey

Signature & Seal of Professional Surveyor

B. L. LAMAN
NEW MEXICO
22404
PROFESSIONAL SURVEYOR

11/14/22
Certificate No. 22404 B.L. LAMAN
DRAWN BY: CM

Intent [X] As Drilled [ ]

API #

Operator Name:	Property Name:	Well Number
DEVON ENERGY PRODUCTION COMPANY, LP.	ARENA ROJA 28-33 FED COM	801H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
D	28	26S	35E		49	NORTH	379	WEST	LEA

Latitude	Longitude	NAD
32.0213	-103.3798	83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
D	28	26-S	35-E		100	NORTH	380	WEST	LEA

Latitude	Longitude	NAD
32.021228	103.379683	83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
	33	26-S	35-E	4	100	SOUTH	380	WEST	LEA

Latitude	Longitude	NAD
32.000576	103.379665	83

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

Is this well an infill well? [Y]

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

API #

Operator Name:	Property Name:	Well Number
DEVON ENERGY PRODUCTION CO, LP	ARENA ROJA 28-33 FED COM	701H

KZ 06/29/2018

1. Geologic Formations

TVD of target	12900	Pilot hole depth	N/A
MD at TD:	20315	Deepest expected fresh water	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	1035		
Salt	1615		
Base of Salt	4950		
Delaware	5280		
Cherry Canyon	6325		
Brushy Canyon	7930		
1st Bone Spring Lime	9170		
Bone Spring 1st	10430		
Bone Spring 2nd	10960		
3rd Bone Spring Lime	11395		
Bone Spring 3rd	12060		
Wolfcamp	12380		

*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)
13 1/2	10 3/4	40 1/2	H40	BTC	0	1060	0	1060
9 7/8	8 5/8	32	P110	Sprint FJ	0	12243	0	12243
7 7/8	5 1/2	17	P110	BTC	0	20315	0	12900

• 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	426	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	392	Surf	9	3.27	Lead: Class C Cement + additives
	501	7930	13.2	1.44	Tail: Class H / C + additives
Int 1 Intermediate Squeeze	855	Surf	13.2	1.44	Squeeze Lead: Class C Cement + additives
	392	Surf	9	3.27	Lead: Class C Cement + additives
	501	7930	13.2	1.44	Tail: Class H / C + additives
Production	117	10344	9	3.27	Lead: Class H /C + additives
	1055	12344	13.2	1.44	Tail: Class H / C + additives

Cementing Program (Primary Design)Assuming no returns are established while drilling, Devon requests to pump a two stage cement job on the 8-5/8’’intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface.. The final cement top will be verified by Echo-meter. Devon will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program. Devon will report to the BLM the volume of fluid (limited to 1 bbls) used to flush intermediate casing valves following backside cementing procedures.

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"	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

5. Mud Program (Three String Design)

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

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

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

6. Logging and Testing Procedures

Logging, Coring and Testing	
X	Will run GR/CNL from TD to surface (horizontal well - vertical portion of hole). Stated logs run will be in the Completion Rpeort and sbumitted to the BLM.
	No logs are planned based on well control or offset log information.
	Drill stem test? If yes, explain.
	Coring? If yes, explain.

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

7. Drilling Conditions

Condition	Specfiy what type and where?
BH pressure at deepest TVD	7043
Abnormal temperature	No

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

Hydrogren Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered measured values and formations will be provided to the BLM.	
N	H2S is present
Y	H2S plan attached.

8. Other facets of operation

Is this a walking operation? Potentially

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

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

Will be pre-setting casing? Potentially

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

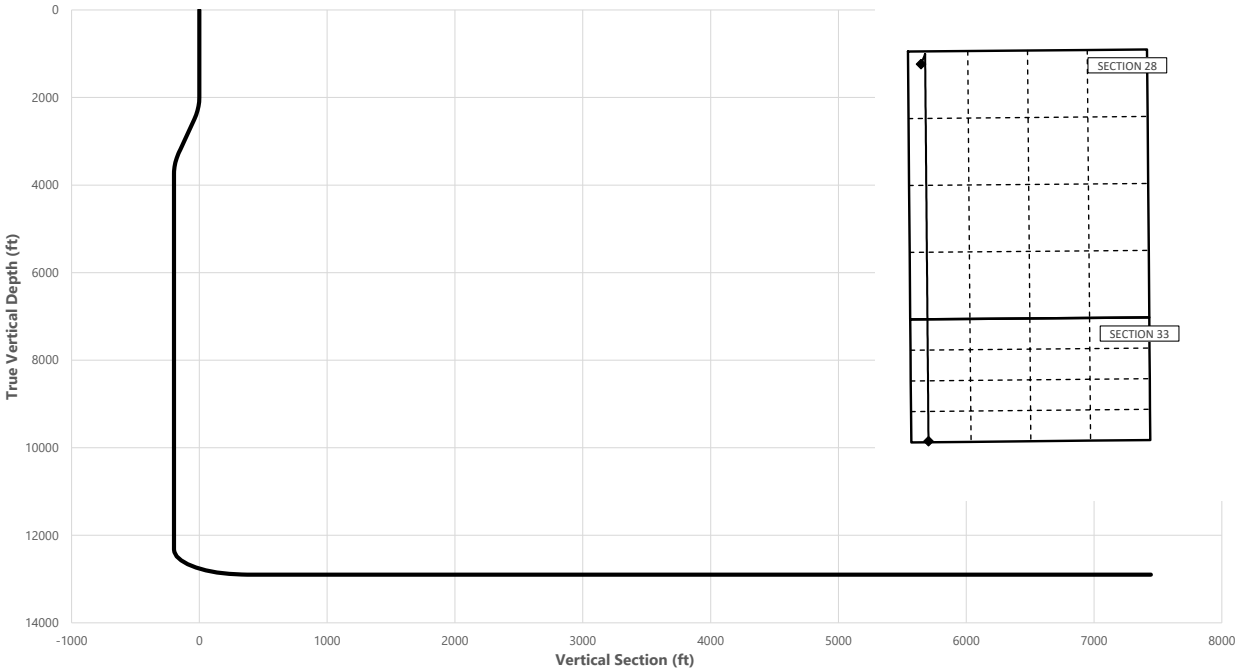
Attachments

X Directional Plan
_____ Other, describe

Well: Arena Roja 28-33 Fed Com 801H
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	24.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2500.00	10.00	24.00	2497.47	39.76	17.70	-39.36	2.00	Hold Tangent
3262.94	10.00	24.00	3248.82	160.79	71.59	-159.17	0.00	Drop to Vertical
3762.94	0.00	24.00	3746.28	200.55	89.29	-198.53	2.00	Hold Vertical
12343.70	0.00	179.44	12327.04	200.55	89.29	-198.53	0.00	KOP
13243.70	90.00	179.44	12900.00	-372.38	94.89	374.38	10.00	Landing Point
20314.66	90.00	179.44	12900.00	-7443.00	164.00	7444.81	0.00	BHL



Key Depths	MD (ft)	TVD (ft)
Rustler	1035.00	1035.00
Salt	1615.00	1615.00
Base of Salt	4966.66	4950.00
Delaware	5296.66	5280.00
Cherry Canyon	6341.66	6325.00
Brushy Canyon	7946.66	7930.00
1st Bone Spring Lime	9186.66	9170.00
Bone Spring 1st	10446.66	10430.00
Bone Spring 2nd	10976.66	10960.00
3rd Bone Spring Lime	11411.66	11395.00
Bone Spring 3rd	12076.66	12060.00
Wolfcamp / Point of Penetration	12396.74	12380.00
exit	20234.66	12900.01

	MD (ft)	TVD (ft)	Lat (°)	Long (°)	Section Footages
SHL	0.00	0.00	32.0207	-103.3801	250' FNL, 288' FWL of Sec 28 in T26S, R35E
KOP	12343.70	12327.04	32.0213	-103.3798	49' FNL, 379' FWL of Sec 28 in T26S, R35E
Point of Penetration	12396.74	12380.00	32.0212	103.3797	100' FNL, 380' FWL of Sec 28 in T26S, R35E
Exit	20234.66	12900.01	32.0006	-103.3797	100' FSL, 380' FWL of Sec 33 in T26S, R35E
BHL	20314.66	12900.00	32.0003	-103.3797	20' FSL, 380' FWL of Sec 33 in T26S, R35E

devon

Well: Arena Roja 28-33 Fed Com 801H
County: Lea
Wellbore: Permit Plan
Design: Permit Plan #1

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

MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
100.00	0.00	24.00	100.00	0.00	0.00	0.00	0.00	
200.00	0.00	24.00	200.00	0.00	0.00	0.00	0.00	
300.00	0.00	24.00	300.00	0.00	0.00	0.00	0.00	
400.00	0.00	24.00	400.00	0.00	0.00	0.00	0.00	
500.00	0.00	24.00	500.00	0.00	0.00	0.00	0.00	
600.00	0.00	24.00	600.00	0.00	0.00	0.00	0.00	
700.00	0.00	24.00	700.00	0.00	0.00	0.00	0.00	
800.00	0.00	24.00	800.00	0.00	0.00	0.00	0.00	
900.00	0.00	24.00	900.00	0.00	0.00	0.00	0.00	
1000.00	0.00	24.00	1000.00	0.00	0.00	0.00	0.00	
1035.00	0.00	24.00	1035.00	0.00	0.00	0.00	0.00	Rustler
1100.00	0.00	24.00	1100.00	0.00	0.00	0.00	0.00	
1200.00	0.00	24.00	1200.00	0.00	0.00	0.00	0.00	
1300.00	0.00	24.00	1300.00	0.00	0.00	0.00	0.00	
1400.00	0.00	24.00	1400.00	0.00	0.00	0.00	0.00	
1500.00	0.00	24.00	1500.00	0.00	0.00	0.00	0.00	
1600.00	0.00	24.00	1600.00	0.00	0.00	0.00	0.00	
1615.00	0.00	24.00	1615.00	0.00	0.00	0.00	0.00	Salt
1700.00	0.00	24.00	1700.00	0.00	0.00	0.00	0.00	
1800.00	0.00	24.00	1800.00	0.00	0.00	0.00	0.00	
1900.00	0.00	24.00	1900.00	0.00	0.00	0.00	0.00	
2000.00	0.00	24.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2100.00	2.00	24.00	2099.98	1.59	0.71	-1.58	2.00	
2200.00	4.00	24.00	2199.84	6.38	2.84	-6.31	2.00	
2300.00	6.00	24.00	2299.45	14.34	6.38	-14.19	2.00	
2400.00	8.00	24.00	2398.70	25.47	11.34	-25.21	2.00	
2500.00	10.00	24.00	2497.47	39.76	17.70	-39.36	2.00	Hold Tangent
2600.00	10.00	24.00	2595.95	55.62	24.77	-55.06	0.00	
2700.00	10.00	24.00	2694.43	71.49	31.83	-70.77	0.00	
2800.00	10.00	24.00	2792.91	87.35	38.89	-86.47	0.00	
2900.00	10.00	24.00	2891.39	103.21	45.95	-102.18	0.00	
3000.00	10.00	24.00	2989.87	119.08	53.02	-117.88	0.00	
3100.00	10.00	24.00	3088.35	134.94	60.08	-133.58	0.00	
3200.00	10.00	24.00	3186.83	150.80	67.14	-149.29	0.00	
3262.94	10.00	24.00	3248.82	160.79	71.59	-159.17	0.00	Drop to Vertical
3300.00	9.26	24.00	3285.35	166.45	74.11	-164.78	2.00	
3400.00	7.26	24.00	3384.31	179.57	79.95	-177.77	2.00	
3500.00	5.26	24.00	3483.71	189.53	84.39	-187.63	2.00	
3600.00	3.26	24.00	3583.43	196.32	87.41	-194.34	2.00	
3700.00	1.26	24.00	3683.35	199.92	89.01	-197.91	2.00	
3762.94	0.00	24.00	3746.28	200.55	89.29	-198.53	2.00	Hold Vertical
3800.00	0.00	179.44	3783.34	200.55	89.29	-198.53	0.00	
3900.00	0.00	179.44	3883.34	200.55	89.29	-198.53	0.00	
4000.00	0.00	179.44	3983.34	200.55	89.29	-198.53	0.00	
4100.00	0.00	179.44	4083.34	200.55	89.29	-198.53	0.00	
4200.00	0.00	179.44	4183.34	200.55	89.29	-198.53	0.00	
4300.00	0.00	179.44	4283.34	200.55	89.29	-198.53	0.00	
4400.00	0.00	179.44	4383.34	200.55	89.29	-198.53	0.00	
4500.00	0.00	179.44	4483.34	200.55	89.29	-198.53	0.00	
4600.00	0.00	179.44	4583.34	200.55	89.29	-198.53	0.00	
4700.00	0.00	179.44	4683.34	200.55	89.29	-198.53	0.00	
4800.00	0.00	179.44	4783.34	200.55	89.29	-198.53	0.00	
4900.00	0.00	179.44	4883.34	200.55	89.29	-198.53	0.00	
4966.66	0.00	179.44	4950.00	200.55	89.29	-198.53	0.00	Base of Salt
5000.00	0.00	179.44	4983.34	200.55	89.29	-198.53	0.00	
5100.00	0.00	179.44	5083.34	200.55	89.29	-198.53	0.00	
5200.00	0.00	179.44	5183.34	200.55	89.29	-198.53	0.00	
5296.66	0.00	179.44	5280.00	200.55	89.29	-198.53	0.00	Delaware
5300.00	0.00	179.44	5283.34	200.55	89.29	-198.53	0.00	
5400.00	0.00	179.44	5383.34	200.55	89.29	-198.53	0.00	
5500.00	0.00	179.44	5483.34	200.55	89.29	-198.53	0.00	
5600.00	0.00	179.44	5583.34	200.55	89.29	-198.53	0.00	
5700.00	0.00	179.44	5683.34	200.55	89.29	-198.53	0.00	
5800.00	0.00	179.44	5783.34	200.55	89.29	-198.53	0.00	
5900.00	0.00	179.44	5883.34	200.55	89.29	-198.53	0.00	
6000.00	0.00	179.44	5983.34	200.55	89.29	-198.53	0.00	
6100.00	0.00	179.44	6083.34	200.55	89.29	-198.53	0.00	
6200.00	0.00	179.44	6183.34	200.55	89.29	-198.53	0.00	
6300.00	0.00	179.44	6283.34	200.55	89.29	-198.53	0.00	

devon

Well: Arena Roja 28-33 Fed Com 801H
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
6341.66	0.00	179.44	6325.00	200.55	89.29	-198.53	0.00	Cherry Canyon
6400.00	0.00	179.44	6383.34	200.55	89.29	-198.53	0.00	
6500.00	0.00	179.44	6483.34	200.55	89.29	-198.53	0.00	
6600.00	0.00	179.44	6583.34	200.55	89.29	-198.53	0.00	
6700.00	0.00	179.44	6683.34	200.55	89.29	-198.53	0.00	
6800.00	0.00	179.44	6783.34	200.55	89.29	-198.53	0.00	
6900.00	0.00	179.44	6883.34	200.55	89.29	-198.53	0.00	
7000.00	0.00	179.44	6983.34	200.55	89.29	-198.53	0.00	
7100.00	0.00	179.44	7083.34	200.55	89.29	-198.53	0.00	
7200.00	0.00	179.44	7183.34	200.55	89.29	-198.53	0.00	
7300.00	0.00	179.44	7283.34	200.55	89.29	-198.53	0.00	
7400.00	0.00	179.44	7383.34	200.55	89.29	-198.53	0.00	
7500.00	0.00	179.44	7483.34	200.55	89.29	-198.53	0.00	
7600.00	0.00	179.44	7583.34	200.55	89.29	-198.53	0.00	
7700.00	0.00	179.44	7683.34	200.55	89.29	-198.53	0.00	
7800.00	0.00	179.44	7783.34	200.55	89.29	-198.53	0.00	
7900.00	0.00	179.44	7883.34	200.55	89.29	-198.53	0.00	
7946.66	0.00	179.44	7930.00	200.55	89.29	-198.53	0.00	Brushy Canyon
8000.00	0.00	179.44	7983.34	200.55	89.29	-198.53	0.00	
8100.00	0.00	179.44	8083.34	200.55	89.29	-198.53	0.00	
8200.00	0.00	179.44	8183.34	200.55	89.29	-198.53	0.00	
8300.00	0.00	179.44	8283.34	200.55	89.29	-198.53	0.00	
8400.00	0.00	179.44	8383.34	200.55	89.29	-198.53	0.00	
8500.00	0.00	179.44	8483.34	200.55	89.29	-198.53	0.00	
8600.00	0.00	179.44	8583.34	200.55	89.29	-198.53	0.00	
8700.00	0.00	179.44	8683.34	200.55	89.29	-198.53	0.00	
8800.00	0.00	179.44	8783.34	200.55	89.29	-198.53	0.00	
8900.00	0.00	179.44	8883.34	200.55	89.29	-198.53	0.00	
9000.00	0.00	179.44	8983.34	200.55	89.29	-198.53	0.00	
9100.00	0.00	179.44	9083.34	200.55	89.29	-198.53	0.00	
9186.66	0.00	179.44	9170.00	200.55	89.29	-198.53	0.00	1st Bone Spring Lime
9200.00	0.00	179.44	9183.34	200.55	89.29	-198.53	0.00	
9300.00	0.00	179.44	9283.34	200.55	89.29	-198.53	0.00	
9400.00	0.00	179.44	9383.34	200.55	89.29	-198.53	0.00	
9500.00	0.00	179.44	9483.34	200.55	89.29	-198.53	0.00	
9600.00	0.00	179.44	9583.34	200.55	89.29	-198.53	0.00	
9700.00	0.00	179.44	9683.34	200.55	89.29	-198.53	0.00	
9800.00	0.00	179.44	9783.34	200.55	89.29	-198.53	0.00	
9900.00	0.00	179.44	9883.34	200.55	89.29	-198.53	0.00	
10000.00	0.00	179.44	9983.34	200.55	89.29	-198.53	0.00	
10100.00	0.00	179.44	10083.34	200.55	89.29	-198.53	0.00	
10200.00	0.00	179.44	10183.34	200.55	89.29	-198.53	0.00	
10300.00	0.00	179.44	10283.34	200.55	89.29	-198.53	0.00	
10400.00	0.00	179.44	10383.34	200.55	89.29	-198.53	0.00	
10446.66	0.00	179.44	10430.00	200.55	89.29	-198.53	0.00	Bone Spring 1st
10500.00	0.00	179.44	10483.34	200.55	89.29	-198.53	0.00	
10600.00	0.00	179.44	10583.34	200.55	89.29	-198.53	0.00	
10700.00	0.00	179.44	10683.34	200.55	89.29	-198.53	0.00	
10800.00	0.00	179.44	10783.34	200.55	89.29	-198.53	0.00	
10900.00	0.00	179.44	10883.34	200.55	89.29	-198.53	0.00	
10976.66	0.00	179.44	10960.00	200.55	89.29	-198.53	0.00	Bone Spring 2nd
11000.00	0.00	179.44	10983.34	200.55	89.29	-198.53	0.00	
11100.00	0.00	179.44	11083.34	200.55	89.29	-198.53	0.00	
11200.00	0.00	179.44	11183.34	200.55	89.29	-198.53	0.00	
11300.00	0.00	179.44	11283.34	200.55	89.29	-198.53	0.00	
11400.00	0.00	179.44	11383.34	200.55	89.29	-198.53	0.00	
11411.66	0.00	179.44	11395.00	200.55	89.29	-198.53	0.00	3rd Bone Spring Lime
11500.00	0.00	179.44	11483.34	200.55	89.29	-198.53	0.00	
11600.00	0.00	179.44	11583.34	200.55	89.29	-198.53	0.00	
11700.00	0.00	179.44	11683.34	200.55	89.29	-198.53	0.00	
11800.00	0.00	179.44	11783.34	200.55	89.29	-198.53	0.00	
11900.00	0.00	179.44	11883.34	200.55	89.29	-198.53	0.00	
12000.00	0.00	179.44	11983.34	200.55	89.29	-198.53	0.00	
12076.66	0.00	179.44	12060.00	200.55	89.29	-198.53	0.00	Bone Spring 3rd
12100.00	0.00	179.44	12083.34	200.55	89.29	-198.53	0.00	
12200.00	0.00	179.44	12183.34	200.55	89.29	-198.53	0.00	
12300.00	0.00	179.44	12283.34	200.55	89.29	-198.53	0.00	
12343.70	0.00	179.44	12327.04	200.55	89.29	-198.53	0.00	KOP
12396.74	5.30	179.44	12380.00	198.10	89.31	-196.08	10.00	Wolfcamp / Point of Penetration
12400.00	5.63	179.44	12383.25	197.79	89.32	-195.77	10.00	

devon

Well: Arena Roja 28-33 Fed Com 801H
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
12500.00	15.63	179.44	12481.41	179.36	89.50	-177.35	10.00	
12600.00	25.63	179.44	12574.88	144.18	89.84	-142.16	10.00	
12700.00	35.63	179.44	12660.82	93.30	90.34	-91.28	10.00	
12800.00	45.63	179.44	12736.61	28.27	90.97	-26.25	10.00	
12900.00	55.63	179.44	12799.97	-48.94	91.73	50.95	10.00	
13000.00	65.63	179.44	12848.95	-135.97	92.58	137.98	10.00	
13100.00	75.63	179.44	12882.07	-230.19	93.50	232.19	10.00	
13200.00	85.63	179.44	12898.33	-328.72	94.47	330.72	10.00	
13243.70	90.00	179.44	12900.00	-372.38	94.89	374.38	10.00	Landing Point
13300.00	90.00	179.44	12900.00	-428.68	95.44	430.67	0.00	
13400.00	90.00	179.44	12900.00	-528.67	96.42	530.67	0.00	
13500.00	90.00	179.44	12900.00	-628.67	97.40	630.66	0.00	
13600.00	90.00	179.44	12900.00	-728.66	98.37	730.65	0.00	
13700.00	90.00	179.44	12900.00	-828.66	99.35	830.64	0.00	
13800.00	90.00	179.44	12900.00	-928.65	100.33	930.64	0.00	
13900.00	90.00	179.44	12900.00	-1028.65	101.31	1030.63	0.00	
14000.00	90.00	179.44	12900.00	-1128.64	102.28	1130.62	0.00	
14100.00	90.00	179.44	12900.00	-1228.64	103.26	1230.61	0.00	
14200.00	90.00	179.44	12900.00	-1328.63	104.24	1330.61	0.00	
14300.00	90.00	179.44	12900.00	-1428.63	105.22	1430.60	0.00	
14400.00	90.00	179.44	12900.00	-1528.62	106.19	1530.59	0.00	
14500.00	90.00	179.44	12900.00	-1628.62	107.17	1630.58	0.00	
14600.00	90.00	179.44	12900.00	-1728.61	108.15	1730.58	0.00	
14700.00	90.00	179.44	12900.00	-1828.61	109.13	1830.57	0.00	
14800.00	90.00	179.44	12900.00	-1928.60	110.11	1930.56	0.00	
14900.00	90.00	179.44	12900.00	-2028.60	111.08	2030.55	0.00	
15000.00	90.00	179.44	12900.00	-2128.59	112.06	2130.55	0.00	
15100.00	90.00	179.44	12900.00	-2228.59	113.04	2230.54	0.00	
15200.00	90.00	179.44	12900.00	-2328.59	114.02	2330.53	0.00	
15300.00	90.00	179.44	12900.00	-2428.58	114.99	2430.52	0.00	
15400.00	90.00	179.44	12900.00	-2528.58	115.97	2530.52	0.00	
15500.00	90.00	179.44	12900.00	-2628.57	116.95	2630.51	0.00	
15600.00	90.00	179.44	12900.00	-2728.57	117.93	2730.50	0.00	
15700.00	90.00	179.44	12900.00	-2828.56	118.90	2830.49	0.00	
15800.00	90.00	179.44	12900.00	-2928.56	119.88	2930.49	0.00	
15900.00	90.00	179.44	12900.00	-3028.55	120.86	3030.48	0.00	
16000.00	90.00	179.44	12900.00	-3128.55	121.84	3130.47	0.00	
16100.00	90.00	179.44	12900.00	-3228.54	122.81	3230.46	0.00	
16200.00	90.00	179.44	12900.00	-3328.54	123.79	3330.46	0.00	
16300.00	90.00	179.44	12900.00	-3428.53	124.77	3430.45	0.00	
16400.00	90.00	179.44	12900.00	-3528.53	125.75	3530.44	0.00	
16500.00	90.00	179.44	12900.00	-3628.52	126.73	3630.43	0.00	
16600.00	90.00	179.44	12900.00	-3728.52	127.70	3730.43	0.00	
16700.00	90.00	179.44	12900.00	-3828.51	128.68	3830.42	0.00	
16800.00	90.00	179.44	12900.00	-3928.51	129.66	3930.41	0.00	
16900.00	90.00	179.44	12900.00	-4028.50	130.64	4030.40	0.00	
17000.00	90.00	179.44	12900.00	-4128.50	131.61	4130.40	0.00	
17100.00	90.00	179.44	12900.01	-4228.49	132.59	4230.39	0.00	
17200.00	90.00	179.44	12900.01	-4328.49	133.57	4330.38	0.00	
17300.00	90.00	179.44	12900.01	-4428.48	134.55	4430.37	0.00	
17400.00	90.00	179.44	12900.01	-4528.48	135.52	4530.37	0.00	
17500.00	90.00	179.44	12900.01	-4628.48	136.50	4630.36	0.00	
17600.00	90.00	179.44	12900.01	-4728.47	137.48	4730.35	0.00	
17700.00	90.00	179.44	12900.01	-4828.47	138.46	4830.34	0.00	
17800.00	90.00	179.44	12900.01	-4928.46	139.43	4930.34	0.00	
17900.00	90.00	179.44	12900.01	-5028.46	140.41	5030.33	0.00	
18000.00	90.00	179.44	12900.01	-5128.45	141.39	5130.32	0.00	
18100.00	90.00	179.44	12900.01	-5228.45	142.37	5230.31	0.00	
18200.00	90.00	179.44	12900.01	-5328.44	143.34	5330.31	0.00	
18300.00	90.00	179.44	12900.01	-5428.44	144.32	5430.30	0.00	
18400.00	90.00	179.44	12900.01	-5528.43	145.30	5530.29	0.00	
18500.00	90.00	179.44	12900.01	-5628.43	146.28	5630.28	0.00	
18600.00	90.00	179.44	12900.01	-5728.42	147.26	5730.28	0.00	
18700.00	90.00	179.44	12900.01	-5828.42	148.23	5830.27	0.00	
18800.00	90.00	179.44	12900.01	-5928.41	149.21	5930.26	0.00	
18900.00	90.00	179.44	12900.01	-6028.41	150.19	6030.25	0.00	
19000.00	90.00	179.44	12900.01	-6128.40	151.17	6130.25	0.00	
19100.00	90.00	179.44	12900.01	-6228.40	152.14	6230.24	0.00	
19200.00	90.00	179.44	12900.01	-6328.39	153.12	6330.23	0.00	
19300.00	90.00	179.44	12900.01	-6428.39	154.10	6430.22	0.00	

devon

Well: Arena Roja 28-33 Fed Com 801H
County: Lea
Wellbore: Permit Plan
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Geodetic System: US State Plane 1983
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Ellipsoid: Clarke 1866
Zone: 3001 - NM East (NAD83)

MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
19400.00	90.00	179.44	12900.01	-6528.38	155.08	6530.22	0.00	
19500.00	90.00	179.44	12900.01	-6628.38	156.05	6630.21	0.00	
19600.00	90.00	179.44	12900.01	-6728.37	157.03	6730.20	0.00	
19700.00	90.00	179.44	12900.01	-6828.37	158.01	6830.19	0.00	
19800.00	90.00	179.44	12900.01	-6928.37	158.99	6930.19	0.00	
19900.00	90.00	179.44	12900.01	-7028.36	159.96	7030.18	0.00	
20000.00	90.00	179.44	12900.01	-7128.36	160.94	7130.17	0.00	
20100.00	90.00	179.44	12900.01	-7228.35	161.92	7230.16	0.00	
20200.00	90.00	179.44	12900.01	-7328.35	162.90	7330.16	0.00	
20234.66	90.00	179.44	12900.01	-7363.00	163.24	7364.81	0.00	exit
20300.00	90.00	179.44	12900.01	-7428.34	163.88	7430.15	0.00	
20314.66	90.00	179.44	12900.00	-7443.00	164.00	7444.81	0.00	BHL

Well: Arena Roja 28-33 Fed Com 801H
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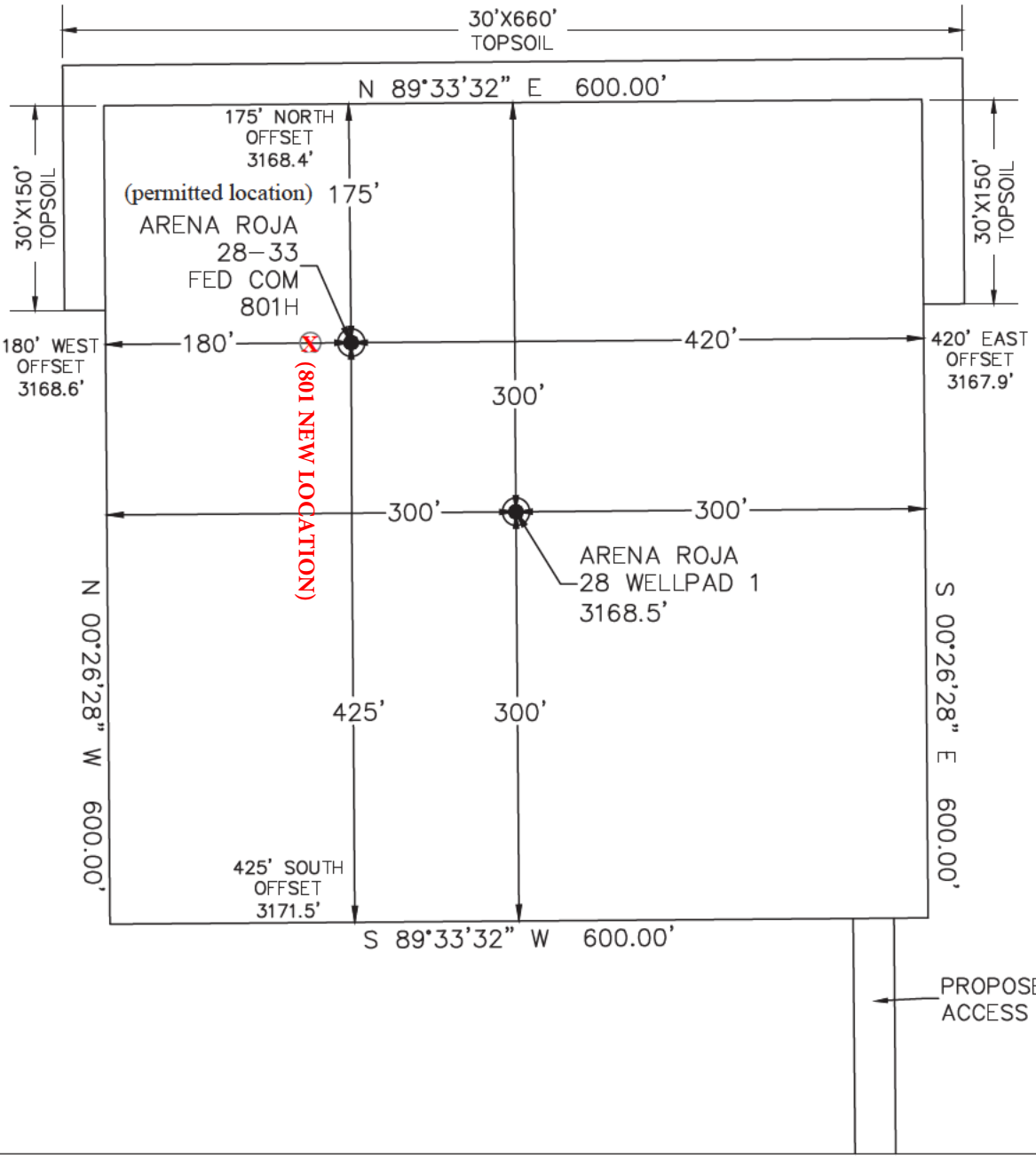
Zone: 3001 - NM East (NAD83)

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

SECTION 28, TOWNSHIP 26 SOUTH, RANGE 35 EAST, N.M.P.M.
LEA COUNTY, STATE OF NEW MEXICO
SITE MAP



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.

0 125 250

DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF J-3 AND BECKHAM RANCH ROAD, HEAD WEST ON BECKHAM RANCH ROAD FOR 2.3 MILES. AT THE Y-INTERSECTION CONTINUE LEFT ONTO AN EXISTING ACCESS ROAD FOR 4.2 MILES. TURN RIGHT ONTO AN EXISTING ACCESS ROAD AND FOLLOW FOR 0.4 OF A MILE TO THE POINT OF BEGINNING OF A PROPOSED ACCESS ROAD. TURN RIGHT ON THE PROPOSED ACCESS ROAD AND FOLLOW NORTH AND THE WEST FOR 0.8 OF A MILE TO THE POINT OF BEGINNING OF THE WELLPAD 1 ACCESS ROAD. TURN RIGHT AND HEAD NORTH ON THE ARENA ROJA 28 WELLPAD 1 ACCESS ROAD 660' TO THE SOUTHEAST CORNER OF THE ARENA ROJA 28 WELLPAD 1.

HORIZON ROW LLC

DEVON ENERGY PRODUCTION CO., L.P.

Drawn by: JEANNIE PERRY

Date: 03/19/2022

Drawn for: devon

28-26-35-D Sundry ID 2706227 Arena Roja 28-33 Fed Com 801H Lea NM125400 DEVON ENERGY PRODUCTION COMPANY LP 13-22d 8-29-2022 LV.xlsm

Arena Roja 28-33 Fed Com 801H

10 3/4	surface csg in a	13 1/2	inch hole.		Design Factors			Surface			
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	40.50	h 40	btc	10.12	2.67	0.34	1,115	5	0.57	5.04	45,158
"B"			btc				0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig:	1,109	Tail Cmt	does not	circ to sfc.	Totals:	1,115				45,158

Comparison of Proposed to Minimum Required Cement Volumes

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
13 1/2	0.3637	426	613	406	51	9.00	3985	5M	1.38

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

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

8 5/8	casing inside the	10 3/4			Design Factors			Int 1			
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	32.00	p 110	vam sprint fj	1.90	0.6	1.02	12,243	1	1.70	1.00	391,776
"B"							0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig:	-337				Totals:	12,243				391,776
	The cement volume(s) are intended to achieve a top of			0	ft from surface or a		1115				overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
9 7/8	0.1261	893	2003	1565	28	10.50	4198	5M	0.61
D V Tool(s):			7930				sum of sx	Σ CuFt	Σ%excess
t by stage % :		268	21				1748	3234	107

Class 'H' tail cmt yld > 1.20

Tail cmt

5 1/2	casing inside the	8 5/8			Design Factors			Prod 1			
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	17.00	p 110	btc	2.49	1.06	1.51	20,315	2	2.53	1.78	345,355
"B"							0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig:	2,838				Totals:	20,315				345,355
	The cement volume(s) are intended to achieve a top of			12043	ft from surface or a		200				overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
7 7/8	0.1733	1172	1902	1434	33	10.50			0.91

Class 'C' tail cmt yld > 1.35

#N/A

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

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

#N/A Capitan Reef est top XXXX.

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Devon Energy Production Company LP**
LEASE NO.:	**NMNM125400**
LOCATION:	Section 28, T.26 S., R.35 E., NMPM
COUNTY:	Lea County, New Mexico

WELL NAME & NO.:	**Arena Roja 28-33 Fed Com 701H**
SURFACE HOLE FOOTAGE:	250'/N & 318'/W
BOTTOM HOLE FOOTAGE	20'/S & 1030'/W
ATS/API ID:	**ATS-22-1137**
APD ID:	**10400084746**
Sundry ID:	**N/A**

WELL NAME & NO.:	**Arena Roja 28-33 Fed Com 801H**
SURFACE HOLE FOOTAGE:	250'/N & 288'/W
BOTTOM HOLE FOOTAGE	20'/S & 380'/W
ATS/API ID:	**ATS-22-1136**
APD ID:	**10400084754**
Sundry ID:	**N/A**

COA

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

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and

personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **10-3/4** inch surface casing shall be set at approximately **1115 feet** (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

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

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

    Option 1 (Single Stage):

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

    Option 2:

    Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.

    a. First stage: Operator will cement with intent to reach the top of the **Brushy Canyon at 7930' (Class H/C+ additives)**.

    b. Second stage:

- Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified. **(Squeeze 855 sxs Class C)**

Operator has proposed to pump down 10-3/4" X 8-5/8" annulus after primary cementing stage. Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus Or operator shall run a CBL from TD of the 8-5/8" casing to surface after the second stage BH to verify TOC.
Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out. Operator must run one CBL per Well Pad.

If cement does not reach surface, the next casing string must come to surface.

Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

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

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

- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

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

2.

Option 1:

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

b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **8-5/8** inch intermediate casing shoe shall be **10,000 (10M)** psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

Option 2:

Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the **10-3/4** inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M)** psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

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

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in Onshore Order 1 and 2.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.

- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted **(575-689-5981 Lea County)** 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at **14**-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

GENERAL REQUIREMENTS

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

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

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

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

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

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

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

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

A. CASING

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

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

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

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

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

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

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

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

LVO 1/18/2023

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 180365

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 180365
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	2/3/2023