

Well Name: ARENA ROJA FED UNIT	Well Location: T26S / R35E / SEC 27 / NWNE / 32.019843 / -103.35303	County or Parish/State: LEA / NM
Well Number: 713H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM97910	Unit or CA Name: ARENA ROJA FEDERAL	Unit or CA Number: NMNM112744X
US Well Number: 3002553643	Operator: DEVON ENERGY PRODUCTION COMPANY LP	

Notice of Intent

Sundry ID: 2875420

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 09/24/2025

Time Sundry Submitted: 12:00

Date proposed operation will begin: 09/24/2025

Procedure Description: Devon Energy Production Company L.P. respectfully requests the following changes to the approved APD: BHL change from 20 FSL & 2430 FEL, 34-26S-35E to 20 FNL & 350 FEL, 27-26S-35E. MD/TVD change from 12600'/20055' to 12475'/ 28070' Casing program change: Surface casing size change. Surface, Intermediate, and Production casing depth changes. Cement volume changes to accommodate casing change. Please see attached revised C-102, spec sheets, and drilling & directional plans.

NOI Attachments

Procedure Description

ARENA_ROJA_FED_UNIT_713H_Permit_Plan_1_20251016121000.pdf

ARENA_ROJA_FED_UNIT_713H_09_24_2025_202509241115821.pdf

13.375_54.5lb_J55_20250924111835.pdf

5.5_20lb_P110HP_CDC_HTQ_20250924111835.pdf

ARENA_ROJA_FED_UNIT_713H_C_102_U_Turn_NOI_20250924111834.pdf

Well Name: ARENA ROJA FEDERAL UNIT	Well Location: T26S / R35E / SEC 27 / NWNE / 32.019843 / -103.35303	County or Parish/State: LEA / NM
Well Number: 713H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM97910	Unit or CA Name: ARENA ROJA FEDERAL	Unit or CA Number: NMNM112744X
US Well Number: 3002553643	Operator: DEVON ENERGY PRODUCTION COMPANY LP	

Conditions of Approval

Specialist Review

Arena_Roja_Fed_Unit_713H_Sundry_ID_2875420_20251023090817.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: REBECCA DEAL

Signed on: OCT 16, 2025 12:23 PM

Name: DEVON ENERGY PRODUCTION COMPANY LP

Title: Regulatory Professional

Street Address: 333 W SHERIDAN AVE

City: OKLAHOMA CITY

State: OK

Phone: (405) 228-8429

Email address: REBECCA.DEAL@DVN.COM

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: LONG VO

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5759885402

BLM POC Email Address: LVO@BLM.GOV

Disposition: Approved

Disposition Date: 10/23/2025

Signature: Long Vo

Form 3160-5
(October 2024)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0220
Expires: October 31, 2027

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.	NMNM97910
6. If Indian, Allottee or Tribe Name	

SUBMIT IN TRIPLICATE - Other instructions on page 2		7. If Unit of CA/Agreement, Name and/or No. ARENA ROJA FEDERAL/NMNM112744X
1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		8. Well Name and No. ARENA ROJA FED UNIT7/13H
2. Name of Operator DEVON ENERGY PRODUCTION COMPANY LP		9. API Well No. 3002553643
3a. Address 333 WEST SHERIDAN AVE, OKLAHOMA CITY,	3b. Phone No. (include area code) (405) 235-3611	10. Field and Pool or Exploratory Area JABALINA/WOLFCAMP, SOUTHWEST
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) SEC 27/T26S/R35E/NMP		11. Country or Parish, State LEA/NM

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		
	☐ 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 recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

Devon Energy Production Company L.P. respectfully requests the following changes to the approved APD:

BHL change from 20 FSL & 2430 FEL, 34-26S-35E to 20 FNL & 350 FEL, 27-26S-35E.
MD/TVD change from 12600/20055 to 12475/ 28070
Casing program change: Surface casing size change. Surface, Intermediate, and Production casing depth changes. Cement volume changes to accommodate casing change.
Please see attached revised C-102, spec sheets, and drilling & directional plans.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) REBECCA DEAL / Ph: (405) 228-8429	Title Regulatory Professional
Signature (Electronic Submission)	Date 10/16/2025

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by LONG VO / Ph: (575) 988-5402 / Approved	Title Petroleum Engineer	Date 10/23/2025
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)

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

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

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

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

Additional Information

Location of Well

0. SHL: NWN / 600 FNL / 1925 FEL / TWSP: 26S / RANGE: 35E / SECTION: 27 / LAT: 32.019843 / LONG: -103.35303 (TVD: 0 feet, MD: 0 feet)

PPP: NWN / 100 FNL / 2430 FEL / TWSP: 26S / RANGE: 35E / SECTION: 27 / LAT: 32.021217 / LONG: -103.354661 (TVD: 12317 feet, MD: 12394 feet)

BHL: LOT 2 / 20 FSL / 2430 FEL / TWSP: 26S / RANGE: 35E / SECTION: 34 / LAT: 32.000361 / LONG: -103.354648 (TVD: 12600 feet, MD: 20055 feet)

CONFIDENTIAL



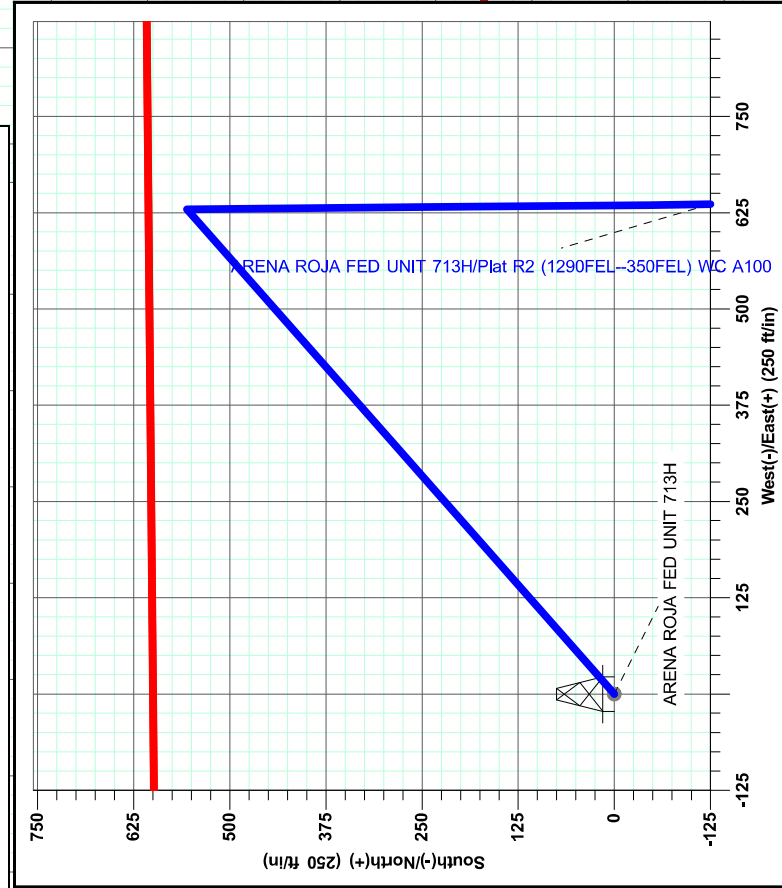
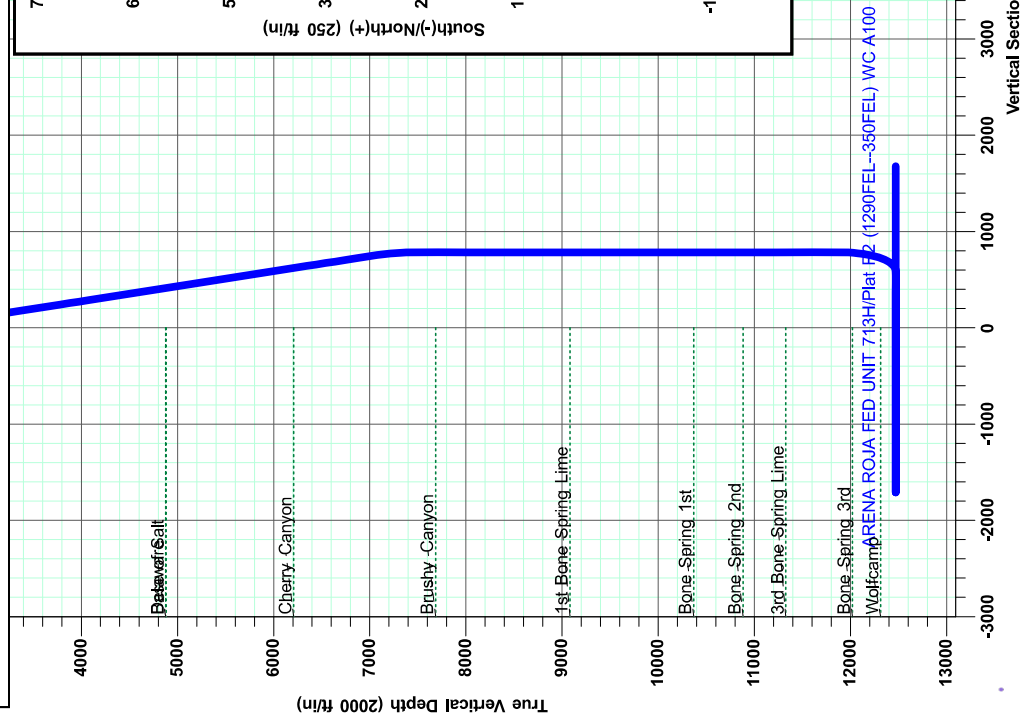
GL:3064.60+25ft @ 3089.60ft
Ground Level 3064.60

ARENA ROJA FED UNIT 713H
Lea County (NAD83 New Mexico East)
Northing: 372335.85
Easting: 845160.94

Lat: 32.0198427
Long: -103.3530299

SECTION DETAILS ARENA ROJA FED UNIT 713H

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00
2474.41	9.49	48.55	2472.24	25.94	29.37	2.00	36.66
7093.11	9.49	48.55	7027.76	529.98	600.01	0.00	748.89
7567.52	0.00	0.00	7500.00	555.92	629.38	0.00	785.55
11969.56	0.00	0.00	11902.04	555.92	629.38	0.00	785.55
12869.56	90.00	179.45	12475.00	-17.01	634.88	10.00	587.64
19434.56	90.00	179.45	12475.00	-6581.71	697.90	0.00	-1680.06
20164.17	90.00	90.00	12475.00	-7044.56	1165.22	12.26	-1407.12
20902.42	90.00	359.49	12475.00	-6573.06	1632.54	12.26	-803.02
27990.49	90.00	359.50	12475.00	514.73	1569.83	0.00	1650.36
28070.49	90.00	359.50	12475.00	594.73	1569.13	0.00	1678.06



Plat R2 (1290FEL--350FEL) WC A100

KOP@11969.56'MD_50FNL, 1290FEL



FTP@12212.95'MD_100FNL, 1290FEL

Sec. 27

ARENA ROJA FED UNIT 713H/Plat R2 (1290FEL-350FEL) WC A100

LTP@27990.49'MD_100FNL, 350FNL

Sec. 34

Start No Perf@19720.90'MD

End No Perf@20616.69'MD

End No Perf@20616.69'MD

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSC Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL--350FEL) WC A100		

Project	Lea County (NAD83 New Mexico East)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Sec 27-T26S-R35E			
Site Position:		Northing:	372,704.19 usft	Latitude:	32.0209382
From:	Lat/Long	Easting:	841,809.63 usft	Longitude:	-103.3638311
Position Uncertainty:		5.00 ft	Slot Radius:	13.20 in	

Well	ARENA ROJA FED UNIT 713H					
Well Position	+N/-S	0.00 ft	Northing:	372,335.85 usft	Latitude:	32.0198427
	+E/-W	0.00 ft	Easting:	845,160.94 usft	Longitude:	-103.3530299
Position Uncertainty		0.50 ft	Wellhead Elevation:	ft	Ground Level:	3,064.60 ft
Grid Convergence:		0.52 °				

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/31/2019	6.56	59.88	47,581.88182581

Design	Plat R2 (1290FEL--350FEL) WC A100				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	69.24	

Plan Survey Tool Program	Date	10/16/2025			
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	28,070.50 Plat R2 (1290FEL--350FEL) WC	MWD+HDGM OWSG MWD + HDGM		

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSC Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL-350FEL) WC A100		

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,474.41	9.49	48.55	2,472.24	25.94	29.37	2.00	2.00	0.00	48.55	
7,093.11	9.49	48.55	7,027.76	529.98	600.01	0.00	0.00	0.00	0.00	
7,567.52	0.00	0.00	7,500.00	555.92	629.38	2.00	-2.00	0.00	180.00	
11,969.56	0.00	0.00	11,902.04	555.92	629.38	0.00	0.00	0.00	0.00	
12,869.56	90.00	179.45	12,475.00	-17.01	634.88	10.00	10.00	0.00	179.45	
19,434.56	90.00	179.45	12,475.00	-6,581.71	697.90	0.00	0.00	0.00	0.00	
20,164.17	90.00	90.00	12,475.00	-7,044.56	1,165.22	12.26	0.00	-12.26	-90.00	
20,902.42	90.00	359.49	12,475.00	-6,573.06	1,632.54	12.26	0.00	-12.26	-90.00	
27,990.50	90.00	359.50	12,475.00	514.73	1,569.83	0.00	0.00	0.00	90.16	LTP (713H) 100Fnl, 3
28,070.50	90.00	359.50	12,475.00	594.73	1,569.13	0.00	0.00	0.00	0.00	

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSC Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL-350FEL) WC A100		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
100.00	0.00	0.00	100.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
200.00	0.00	0.00	200.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
300.00	0.00	0.00	300.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
400.00	0.00	0.00	400.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
500.00	0.00	0.00	500.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
600.00	0.00	0.00	600.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
700.00	0.00	0.00	700.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
800.00	0.00	0.00	800.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
900.00	0.00	0.00	900.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
967.00	0.00	0.00	967.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
Rustler									
1,000.00	0.00	0.00	1,000.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
1,100.00	0.00	0.00	1,100.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
1,200.00	0.00	0.00	1,200.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
1,300.00	0.00	0.00	1,300.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
1,400.00	0.00	0.00	1,400.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
1,430.00	0.00	0.00	1,430.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
Salt									
1,500.00	0.00	0.00	1,500.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
1,600.00	0.00	0.00	1,600.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
1,700.00	0.00	0.00	1,700.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
1,800.00	0.00	0.00	1,800.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
1,900.00	0.00	0.00	1,900.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
2,000.00	0.00	0.00	2,000.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
2,100.00	2.00	48.55	2,099.98	1.16	1.31	372,337.00	845,162.25	32.0198458	-103.3530256
2,200.00	4.00	48.55	2,199.84	4.62	5.23	372,340.47	845,166.17	32.0198553	-103.3530129
2,300.00	6.00	48.55	2,299.45	10.39	11.76	372,346.24	845,172.70	32.0198710	-103.3529917
2,400.00	8.00	48.55	2,398.70	18.46	20.90	372,354.31	845,181.83	32.0198929	-103.3529619
2,474.41	9.49	48.55	2,472.24	25.94	29.37	372,361.79	845,190.31	32.0199133	-103.3529344
2,500.00	9.49	48.55	2,497.48	28.74	32.54	372,364.59	845,193.47	32.0199209	-103.3529241
2,600.00	9.49	48.55	2,596.12	39.65	44.89	372,375.50	845,205.83	32.0199506	-103.3528839
2,700.00	9.49	48.55	2,694.75	50.56	57.25	372,386.41	845,218.18	32.0199802	-103.3528437
2,800.00	9.49	48.55	2,793.38	61.48	69.60	372,397.32	845,230.54	32.0200099	-103.3528036
2,900.00	9.49	48.55	2,892.01	72.39	81.95	372,408.24	845,242.89	32.0200396	-103.3527634
3,000.00	9.49	48.55	2,990.64	83.30	94.31	372,419.15	845,255.25	32.0200693	-103.3527232
3,100.00	9.49	48.55	3,089.28	94.21	106.66	372,430.06	845,267.60	32.0200990	-103.3526830
3,200.00	9.49	48.55	3,187.91	105.13	119.02	372,440.98	845,279.96	32.0201287	-103.3526429
3,300.00	9.49	48.55	3,286.54	116.04	131.37	372,451.89	845,292.31	32.0201584	-103.3526027
3,400.00	9.49	48.55	3,385.17	126.95	143.73	372,462.80	845,304.67	32.0201880	-103.3525625
3,500.00	9.49	48.55	3,483.80	137.87	156.08	372,473.71	845,317.02	32.0202177	-103.3525223
3,600.00	9.49	48.55	3,582.44	148.78	168.44	372,484.63	845,329.38	32.0202474	-103.3524821
3,700.00	9.49	48.55	3,681.07	159.69	180.79	372,495.54	845,341.73	32.0202771	-103.3524420
3,800.00	9.49	48.55	3,779.70	170.60	193.15	372,506.45	845,354.09	32.0203068	-103.3524018
3,900.00	9.49	48.55	3,878.33	181.52	205.50	372,517.37	845,366.44	32.0203365	-103.3523616
4,000.00	9.49	48.55	3,976.96	192.43	217.86	372,528.28	845,378.80	32.0203662	-103.3523214
4,100.00	9.49	48.55	4,075.60	203.34	230.21	372,539.19	845,391.15	32.0203959	-103.3522812
4,200.00	9.49	48.55	4,174.23	214.26	242.57	372,550.10	845,403.51	32.0204255	-103.3522411
4,300.00	9.49	48.55	4,272.86	225.17	254.92	372,561.02	845,415.86	32.0204552	-103.3522009
4,400.00	9.49	48.55	4,371.49	236.08	267.28	372,571.93	845,428.22	32.0204849	-103.3521607
4,500.00	9.49	48.55	4,470.12	246.99	279.63	372,582.84	845,440.57	32.0205146	-103.3521205
4,600.00	9.49	48.55	4,568.76	257.91	291.99	372,593.76	845,452.93	32.0205443	-103.3520804
4,700.00	9.49	48.55	4,667.39	268.82	304.34	372,604.67	845,465.28	32.0205740	-103.3520402
4,800.00	9.49	48.55	4,766.02	279.73	316.70	372,615.58	845,477.64	32.0206037	-103.3520000

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSO Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL-350FEL) WC A100		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
4,900.00	9.49	48.55	4,864.65	290.65	329.05	372,626.49	845,489.99	32.0206333	-103.3519598
4,915.56	9.49	48.55	4,880.00	292.34	330.97	372,628.19	845,491.91	32.0206380	-103.3519536
Base of Salt - Delaware									
5,000.00	9.49	48.55	4,963.28	301.56	341.41	372,637.41	845,502.35	32.0206630	-103.3519196
5,100.00	9.49	48.55	5,061.92	312.47	353.76	372,648.32	845,514.70	32.0206927	-103.3518795
5,200.00	9.49	48.55	5,160.55	323.38	366.12	372,659.23	845,527.05	32.0207224	-103.3518393
5,300.00	9.49	48.55	5,259.18	334.30	378.47	372,670.14	845,539.41	32.0207521	-103.3517991
5,400.00	9.49	48.55	5,357.81	345.21	390.83	372,681.06	845,551.76	32.0207818	-103.3517589
5,500.00	9.49	48.55	5,456.44	356.12	403.18	372,691.97	845,564.12	32.0208115	-103.3517187
5,600.00	9.49	48.55	5,555.08	367.04	415.54	372,702.88	845,576.47	32.0208412	-103.3516786
5,700.00	9.49	48.55	5,653.71	377.95	427.89	372,713.80	845,588.83	32.0208708	-103.3516384
5,800.00	9.49	48.55	5,752.34	388.86	440.25	372,724.71	845,601.18	32.0209005	-103.3515982
5,900.00	9.49	48.55	5,850.97	399.77	452.60	372,735.62	845,613.54	32.0209302	-103.3515580
6,000.00	9.49	48.55	5,949.60	410.69	464.96	372,746.53	845,625.89	32.0209599	-103.3515178
6,100.00	9.49	48.55	6,048.24	421.60	477.31	372,757.45	845,638.25	32.0209896	-103.3514777
6,200.00	9.49	48.55	6,146.87	432.51	489.67	372,768.36	845,650.60	32.0210193	-103.3514375
6,265.02	9.49	48.55	6,211.00	439.61	497.70	372,775.46	845,658.64	32.0210386	-103.3514114
Cherry Canyon									
6,300.00	9.49	48.55	6,245.50	443.43	502.02	372,779.27	845,662.96	32.0210490	-103.3513973
6,400.00	9.49	48.55	6,344.13	454.34	514.38	372,790.19	845,675.31	32.0210786	-103.3513571
6,500.00	9.49	48.55	6,442.76	465.25	526.73	372,801.10	845,687.67	32.0211083	-103.3513170
6,600.00	9.49	48.55	6,541.40	476.16	539.09	372,812.01	845,700.02	32.0211380	-103.3512768
6,700.00	9.49	48.55	6,640.03	487.08	551.44	372,822.92	845,712.38	32.0211677	-103.3512366
6,800.00	9.49	48.55	6,738.66	497.99	563.79	372,833.84	845,724.73	32.0211974	-103.3511964
6,900.00	9.49	48.55	6,837.29	508.90	576.15	372,844.75	845,737.09	32.0212271	-103.3511562
7,000.00	9.49	48.55	6,935.92	519.82	588.50	372,855.66	845,749.44	32.0212568	-103.3511161
7,093.11	9.49	48.55	7,027.76	529.98	600.01	372,865.82	845,760.95	32.0212844	-103.3510786
7,100.00	9.35	48.55	7,034.56	530.72	600.85	372,866.57	845,761.79	32.0212864	-103.3510759
7,200.00	7.35	48.55	7,133.49	540.34	611.74	372,876.18	845,772.67	32.0213126	-103.3510405
7,300.00	5.35	48.55	7,232.87	547.66	620.03	372,883.51	845,780.96	32.0213325	-103.3510135
7,400.00	3.35	48.55	7,332.58	552.68	625.71	372,888.53	845,786.65	32.0213462	-103.3509951
7,500.00	1.35	48.55	7,432.49	555.39	628.79	372,891.24	845,789.72	32.0213535	-103.3509851
7,567.52	0.00	0.00	7,500.00	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
7,600.00	0.00	0.00	7,532.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
7,700.00	0.00	0.00	7,632.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
7,751.52	0.00	0.00	7,684.00	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
Brushy Canyon									
7,800.00	0.00	0.00	7,732.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
7,900.00	0.00	0.00	7,832.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,000.00	0.00	0.00	7,932.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,100.00	0.00	0.00	8,032.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,200.00	0.00	0.00	8,132.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,300.00	0.00	0.00	8,232.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,400.00	0.00	0.00	8,332.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,500.00	0.00	0.00	8,432.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,600.00	0.00	0.00	8,532.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,700.00	0.00	0.00	8,632.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,800.00	0.00	0.00	8,732.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,900.00	0.00	0.00	8,832.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
9,000.00	0.00	0.00	8,932.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
9,100.00	0.00	0.00	9,032.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
9,150.52	0.00	0.00	9,083.00	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
1st Bone Spring Lime									
9,200.00	0.00	0.00	9,132.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSC Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL-350FEL) WC A100		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,300.00	0.00	0.00	9,232.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
9,400.00	0.00	0.00	9,332.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
9,500.00	0.00	0.00	9,432.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
9,600.00	0.00	0.00	9,532.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
9,700.00	0.00	0.00	9,632.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
9,800.00	0.00	0.00	9,732.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
9,900.00	0.00	0.00	9,832.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,000.00	0.00	0.00	9,932.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,100.00	0.00	0.00	10,032.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,200.00	0.00	0.00	10,132.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,300.00	0.00	0.00	10,232.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,400.00	0.00	0.00	10,332.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,437.52	0.00	0.00	10,370.00	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
Bone Spring 1st									
10,500.00	0.00	0.00	10,432.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,600.00	0.00	0.00	10,532.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,700.00	0.00	0.00	10,632.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,800.00	0.00	0.00	10,732.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,900.00	0.00	0.00	10,832.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,951.52	0.00	0.00	10,884.00	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
Bone Spring 2nd									
11,000.00	0.00	0.00	10,932.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,100.00	0.00	0.00	11,032.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,200.00	0.00	0.00	11,132.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,300.00	0.00	0.00	11,232.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,397.52	0.00	0.00	11,330.00	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
3rd Bone Spring Lime									
11,400.00	0.00	0.00	11,332.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,500.00	0.00	0.00	11,432.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,600.00	0.00	0.00	11,532.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,700.00	0.00	0.00	11,632.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,800.00	0.00	0.00	11,732.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,900.00	0.00	0.00	11,832.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,969.56	0.00	0.00	11,902.04	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
KOP@11969.56 MD_50FNL, 1290FEL									
12,000.00	3.04	179.45	11,932.47	555.11	629.39	372,890.96	845,790.33	32.0213528	-103.3509831
12,050.00	8.04	179.45	11,982.22	550.28	629.44	372,886.13	845,790.37	32.0213395	-103.3509831
12,088.37	11.88	179.45	12,020.00	543.65	629.50	372,879.49	845,790.44	32.0213212	-103.3509831
Bone Spring 3rd									
12,100.00	13.04	179.45	12,031.36	541.14	629.52	372,876.98	845,790.46	32.0213143	-103.3509831
12,150.00	18.04	179.45	12,079.52	527.74	629.65	372,863.59	845,790.59	32.0212775	-103.3509831
12,200.00	23.04	179.45	12,126.32	510.20	629.82	372,846.05	845,790.76	32.0212293	-103.3509830
12,212.95	24.34	179.45	12,138.18	505.00	629.87	372,840.85	845,790.81	32.0212150	-103.3509830
FTP@12212.95 MD_100FNL, 1290FEL									
12,250.00	28.04	179.45	12,171.42	488.65	630.03	372,824.50	845,790.96	32.0211701	-103.3509830
12,300.00	33.04	179.45	12,214.47	463.25	630.27	372,799.10	845,791.21	32.0211002	-103.3509830
12,350.00	38.04	179.45	12,255.14	434.19	630.55	372,770.04	845,791.49	32.0210204	-103.3509829
12,400.00	43.04	179.45	12,293.12	401.70	630.86	372,737.55	845,791.80	32.0209311	-103.3509829
12,433.61	46.41	179.45	12,317.00	378.05	631.09	372,713.90	845,792.03	32.0208660	-103.3509828
Wolfcamp									
12,450.00	48.04	179.45	12,328.13	366.03	631.20	372,701.87	845,792.14	32.0208330	-103.3509828
12,500.00	53.04	179.45	12,359.89	327.43	631.57	372,663.28	845,792.51	32.0207269	-103.3509827
12,550.00	58.04	179.45	12,388.17	286.22	631.97	372,622.07	845,792.91	32.0206136	-103.3509827
12,600.00	63.04	179.45	12,412.75	242.70	632.39	372,578.55	845,793.33	32.0204940	-103.3509826

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSO Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL-350FEL) WC A100		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
12,650.00	68.04	179.45	12,433.44	197.20	632.82	372,533.05	845,793.76	32.0203689	-103.3509825	
12,700.00	73.04	179.45	12,450.09	150.07	633.28	372,485.92	845,794.21	32.0202394	-103.3509825	
12,750.00	78.04	179.45	12,462.57	101.67	633.74	372,437.52	845,794.68	32.0201063	-103.3509824	
12,800.00	83.04	179.45	12,470.78	52.37	634.22	372,388.22	845,795.15	32.0199708	-103.3509823	
12,850.00	88.04	179.45	12,474.67	2.54	634.69	372,338.39	845,795.63	32.0198338	-103.3509822	
12,869.56	90.00	179.45	12,475.00	-17.01	634.88	372,318.84	845,795.82	32.0197801	-103.3509822	
12,900.00	90.00	179.45	12,475.00	-47.45	635.17	372,288.40	845,796.11	32.0196964	-103.3509821	
13,000.00	90.00	179.45	12,475.00	-147.45	636.13	372,188.40	845,797.07	32.0194215	-103.3509820	
13,100.00	90.00	179.45	12,475.00	-247.44	637.09	372,088.41	845,798.03	32.0191467	-103.3509818	
13,200.00	90.00	179.45	12,475.00	-347.44	638.05	371,988.41	845,798.99	32.0188718	-103.3509816	
13,300.00	90.00	179.45	12,475.00	-447.43	639.01	371,888.41	845,799.95	32.0185969	-103.3509815	
13,400.00	90.00	179.45	12,475.00	-547.43	639.97	371,788.42	845,800.91	32.0183221	-103.3509813	
13,500.00	90.00	179.45	12,475.00	-647.43	640.93	371,688.42	845,801.87	32.0180472	-103.3509811	
13,600.00	90.00	179.45	12,475.00	-747.42	641.89	371,588.43	845,802.83	32.0177723	-103.3509810	
13,700.00	90.00	179.45	12,475.00	-847.42	642.85	371,488.43	845,803.79	32.0174974	-103.3509808	
13,800.00	90.00	179.45	12,475.00	-947.41	643.81	371,388.44	845,804.75	32.0172226	-103.3509807	
13,900.00	90.00	179.45	12,475.00	-1,047.41	644.77	371,288.44	845,805.71	32.0169477	-103.3509805	
14,000.00	90.00	179.45	12,475.00	-1,147.40	645.73	371,188.45	845,806.67	32.0166728	-103.3509803	
14,100.00	90.00	179.45	12,475.00	-1,247.40	646.69	371,088.45	845,807.63	32.0163980	-103.3509802	
14,200.00	90.00	179.45	12,475.00	-1,347.39	647.65	370,988.46	845,808.59	32.0161231	-103.3509800	
14,300.00	90.00	179.45	12,475.00	-1,447.39	648.61	370,888.46	845,809.55	32.0158482	-103.3509798	
14,400.00	90.00	179.45	12,475.00	-1,547.38	649.57	370,788.47	845,810.51	32.0155734	-103.3509797	
14,500.00	90.00	179.45	12,475.00	-1,647.38	650.53	370,688.47	845,811.47	32.0152985	-103.3509795	
14,600.00	90.00	179.45	12,475.00	-1,747.37	651.49	370,588.48	845,812.43	32.0150236	-103.3509793	
14,700.00	90.00	179.45	12,475.00	-1,847.37	652.45	370,488.48	845,813.39	32.0147488	-103.3509792	
14,800.00	90.00	179.45	12,475.00	-1,947.37	653.41	370,388.49	845,814.35	32.0144739	-103.3509790	
14,900.00	90.00	179.45	12,475.00	-2,047.36	654.37	370,288.49	845,815.31	32.0141990	-103.3509789	
15,000.00	90.00	179.45	12,475.00	-2,147.36	655.33	370,188.50	845,816.27	32.0139241	-103.3509787	
15,100.00	90.00	179.45	12,475.00	-2,247.35	656.29	370,088.50	845,817.23	32.0136493	-103.3509785	
15,200.00	90.00	179.45	12,475.00	-2,347.35	657.25	369,988.51	845,818.19	32.0133744	-103.3509784	
15,300.00	90.00	179.45	12,475.00	-2,447.34	658.21	369,888.51	845,819.15	32.0130995	-103.3509782	
15,400.00	90.00	179.45	12,475.00	-2,547.34	659.17	369,788.52	845,820.11	32.0128247	-103.3509780	
15,500.00	90.00	179.45	12,475.00	-2,647.33	660.13	369,688.52	845,821.07	32.0125498	-103.3509779	
15,600.00	90.00	179.45	12,475.00	-2,747.33	661.09	369,588.53	845,822.03	32.0122749	-103.3509777	
15,700.00	90.00	179.45	12,475.00	-2,847.32	662.05	369,488.53	845,822.99	32.0120000	-103.3509775	
15,800.00	90.00	179.45	12,475.00	-2,947.32	663.01	369,388.53	845,823.95	32.0117252	-103.3509774	
15,900.00	90.00	179.45	12,475.00	-3,047.31	663.97	369,288.54	845,824.91	32.0114503	-103.3509772	
16,000.00	90.00	179.45	12,475.00	-3,147.31	664.93	369,188.54	845,825.87	32.0111754	-103.3509770	
16,100.00	90.00	179.45	12,475.00	-3,247.31	665.89	369,088.55	845,826.83	32.0109006	-103.3509769	
16,200.00	90.00	179.45	12,475.00	-3,347.30	666.85	368,988.55	845,827.79	32.0106257	-103.3509767	
16,300.00	90.00	179.45	12,475.00	-3,447.30	667.81	368,888.56	845,828.75	32.0103508	-103.3509765	
16,400.00	90.00	179.45	12,475.00	-3,547.29	668.77	368,788.56	845,829.71	32.0100760	-103.3509764	
16,500.00	90.00	179.45	12,475.00	-3,647.29	669.73	368,688.57	845,830.67	32.0098011	-103.3509762	
16,600.00	90.00	179.45	12,475.00	-3,747.28	670.69	368,588.57	845,831.63	32.0095262	-103.3509761	
16,700.00	90.00	179.45	12,475.00	-3,847.28	671.65	368,488.58	845,832.59	32.0092513	-103.3509759	
16,800.00	90.00	179.45	12,475.00	-3,947.27	672.61	368,388.58	845,833.55	32.0089765	-103.3509757	
16,900.00	90.00	179.45	12,475.00	-4,047.27	673.57	368,288.59	845,834.51	32.0087016	-103.3509756	
17,000.00	90.00	179.45	12,475.00	-4,147.26	674.53	368,188.59	845,835.47	32.0084267	-103.3509754	
17,100.00	90.00	179.45	12,475.00	-4,247.26	675.49	368,088.60	845,836.43	32.0081519	-103.3509752	
17,200.00	90.00	179.45	12,475.00	-4,347.25	676.45	367,988.60	845,837.39	32.0078770	-103.3509751	
17,300.00	90.00	179.45	12,475.00	-4,447.25	677.41	367,888.61	845,838.35	32.0076021	-103.3509749	
17,400.00	90.00	179.45	12,475.00	-4,547.25	678.37	367,788.61	845,839.31	32.0073273	-103.3509747	
17,500.00	90.00	179.45	12,475.00	-4,647.24	679.33	367,688.62	845,840.27	32.0070524	-103.3509746	
17,600.00	90.00	179.45	12,475.00	-4,747.24	680.29	367,588.62	845,841.23	32.0067775	-103.3509744	
17,700.00	90.00	179.45	12,475.00	-4,847.23	681.25	367,488.63	845,842.19	32.0065026	-103.3509742	

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSC Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL-350FEL) WC A100		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
17,800.00	90.00	179.45	12,475.00	-4,947.23	682.21	367,388.63	845,843.15	32.0062278	-103.3509741
17,900.00	90.00	179.45	12,475.00	-5,047.22	683.17	367,288.64	845,844.11	32.0059529	-103.3509739
18,000.00	90.00	179.45	12,475.00	-5,147.22	684.13	367,188.64	845,845.07	32.0056780	-103.3509737
18,100.00	90.00	179.45	12,475.00	-5,247.21	685.09	367,088.65	845,846.03	32.0054032	-103.3509736
18,200.00	90.00	179.45	12,475.00	-5,347.21	686.05	366,988.65	845,846.99	32.0051283	-103.3509734
18,300.00	90.00	179.45	12,475.00	-5,447.20	687.01	366,888.66	845,847.95	32.0048534	-103.3509733
18,400.00	90.00	179.45	12,475.00	-5,547.20	687.97	366,788.66	845,848.91	32.0045786	-103.3509731
18,500.00	90.00	179.45	12,475.00	-5,647.19	688.93	366,688.66	845,849.87	32.0043037	-103.3509729
18,600.00	90.00	179.45	12,475.00	-5,747.19	689.89	366,588.67	845,850.83	32.0040288	-103.3509728
18,700.00	90.00	179.45	12,475.00	-5,847.19	690.85	366,488.67	845,851.79	32.0037539	-103.3509726
18,800.00	90.00	179.45	12,475.00	-5,947.18	691.81	366,388.68	845,852.75	32.0034791	-103.3509724
18,900.00	90.00	179.45	12,475.00	-6,047.18	692.77	366,288.68	845,853.71	32.0032042	-103.3509723
19,000.00	90.00	179.45	12,475.00	-6,147.17	693.73	366,188.69	845,854.67	32.0029293	-103.3509721
19,100.00	90.00	179.45	12,475.00	-6,247.17	694.69	366,088.69	845,855.63	32.0026545	-103.3509719
19,200.00	90.00	179.45	12,475.00	-6,347.16	695.65	365,988.70	845,856.59	32.0023796	-103.3509718
19,300.00	90.00	179.45	12,475.00	-6,447.16	696.61	365,888.70	845,857.55	32.0021047	-103.3509716
19,400.00	90.00	179.45	12,475.00	-6,547.15	697.57	365,788.71	845,858.51	32.0018298	-103.3509714
19,434.56	90.00	179.45	12,475.00	-6,581.71	697.90	365,754.15	845,858.84	32.0017349	-103.3509714
19,450.00	90.00	177.56	12,475.00	-6,597.15	698.30	365,738.72	845,859.24	32.0016924	-103.3509705
19,475.00	90.00	174.49	12,475.00	-6,622.08	700.04	365,713.78	845,860.97	32.0016238	-103.3509657
19,500.00	90.00	171.43	12,475.00	-6,646.89	703.10	365,688.97	845,864.04	32.0015556	-103.3509565
19,525.00	90.00	168.36	12,475.00	-6,671.50	707.49	365,664.36	845,868.42	32.0014878	-103.3509431
19,550.00	90.00	165.30	12,475.00	-6,695.84	713.18	365,640.02	845,874.12	32.0014208	-103.3509254
19,575.00	90.00	162.23	12,475.00	-6,719.84	720.17	365,616.02	845,881.11	32.0013546	-103.3509036
19,600.00	90.00	159.17	12,475.00	-6,743.43	728.43	365,592.43	845,889.37	32.0012896	-103.3508776
19,625.00	90.00	156.10	12,475.00	-6,766.55	737.94	365,569.31	845,898.88	32.0012258	-103.3508476
19,650.00	90.00	153.04	12,475.00	-6,789.12	748.68	365,546.74	845,909.62	32.0011635	-103.3508137
19,675.00	90.00	149.97	12,475.00	-6,811.09	760.61	365,524.77	845,921.54	32.0011028	-103.3507758
19,700.00	90.00	146.91	12,475.00	-6,832.39	773.69	365,503.47	845,934.63	32.0010439	-103.3507343
19,720.90	90.00	144.34	12,475.00	-6,849.64	785.49	365,486.22	845,946.42	32.0009962	-103.3506967
Start No Perf@19720.90'MD									
19,725.00	90.00	143.84	12,475.00	-6,852.96	787.89	365,482.90	845,948.83	32.0009870	-103.3506891
19,750.00	90.00	140.78	12,475.00	-6,872.74	803.18	365,463.12	845,964.11	32.0009323	-103.3506403
19,775.00	90.00	137.71	12,475.00	-6,891.68	819.49	365,444.18	845,980.43	32.0008798	-103.3505883
19,800.00	90.00	134.65	12,475.00	-6,909.71	836.80	365,426.15	845,997.74	32.0008298	-103.3505330
19,825.00	90.00	131.58	12,475.00	-6,926.80	855.05	365,409.06	846,015.99	32.0007824	-103.3504746
19,850.00	90.00	128.52	12,475.00	-6,942.88	874.18	365,392.98	846,035.12	32.0007377	-103.3504134
19,875.00	90.00	125.45	12,475.00	-6,957.92	894.15	365,377.94	846,055.09	32.0006959	-103.3503494
19,900.00	90.00	122.39	12,475.00	-6,971.87	914.90	365,363.99	846,075.83	32.0006570	-103.3502829
19,925.00	90.00	119.32	12,475.00	-6,984.69	936.35	365,351.17	846,097.29	32.0006213	-103.3502141
19,950.00	90.00	116.26	12,475.00	-6,996.34	958.47	365,339.52	846,119.41	32.0005887	-103.3501431
19,975.00	90.00	113.19	12,475.00	-7,006.80	981.17	365,329.06	846,142.11	32.0005594	-103.3500701
20,000.00	90.00	110.13	12,475.00	-7,016.02	1,004.41	365,319.84	846,165.34	32.0005334	-103.3499955
20,025.00	90.00	107.06	12,475.00	-7,023.99	1,028.10	365,311.87	846,189.04	32.0005109	-103.3499193
20,050.00	90.00	104.00	12,475.00	-7,030.69	1,052.18	365,305.18	846,213.12	32.0004919	-103.3498418
20,075.00	90.00	100.93	12,475.00	-7,036.08	1,076.59	365,299.78	846,237.53	32.0004765	-103.3497632
20,100.00	90.00	97.87	12,475.00	-7,040.16	1,101.25	365,295.70	846,262.19	32.0004647	-103.3496838
20,125.00	90.00	94.80	12,475.00	-7,042.92	1,126.10	365,292.94	846,287.03	32.0004565	-103.3496038
20,150.00	90.00	91.74	12,475.00	-7,044.35	1,151.05	365,291.51	846,311.99	32.0004519	-103.3495233
20,164.17	90.00	90.00	12,475.00	-7,044.56	1,165.22	365,291.30	846,326.15	32.0004510	-103.3494776
20,175.00	90.00	88.67	12,475.00	-7,044.44	1,176.05	365,291.42	846,336.99	32.0004511	-103.3494427
20,200.00	90.00	85.61	12,475.00	-7,043.19	1,201.02	365,292.67	846,361.95	32.0004539	-103.3493621
20,225.00	90.00	82.54	12,475.00	-7,040.61	1,225.88	365,295.25	846,386.82	32.0004603	-103.3492818
20,250.00	90.00	79.48	12,475.00	-7,036.70	1,250.57	365,299.16	846,411.51	32.0004704	-103.3492021

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDCS Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL-350FEL) WC A100		

Planned Survey										
Measured			Vertical			Map		Map		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)			
20,275.00	90.00	76.41	12,475.00	-7,031.48	1,275.02	365,304.38	846,435.95	32.0004842	-103.3491231	
20,300.00	90.00	73.35	12,475.00	-7,024.96	1,299.15	365,310.90	846,460.08	32.0005015	-103.3490451	
20,325.00	90.00	70.28	12,475.00	-7,017.16	1,322.90	365,318.70	846,483.83	32.0005224	-103.3489682	
20,350.00	90.00	67.22	12,475.00	-7,008.10	1,346.19	365,327.76	846,507.13	32.0005467	-103.3488928	
20,375.00	90.00	64.15	12,475.00	-6,997.81	1,368.97	365,338.05	846,529.91	32.0005744	-103.3488190	
20,400.00	90.00	61.09	12,475.00	-6,986.31	1,391.17	365,349.55	846,552.10	32.0006054	-103.3487471	
20,425.00	90.00	58.02	12,475.00	-6,973.64	1,412.72	365,362.22	846,573.65	32.0006397	-103.3486772	
20,450.00	90.00	54.96	12,475.00	-6,959.84	1,433.56	365,376.02	846,594.50	32.0006771	-103.3486096	
20,475.00	90.00	51.89	12,475.00	-6,944.95	1,453.64	365,390.91	846,614.57	32.0007176	-103.3485444	
20,500.00	90.00	48.83	12,475.00	-6,929.00	1,472.88	365,406.86	846,633.82	32.0007609	-103.3484819	
20,525.00	90.00	45.76	12,475.00	-6,912.05	1,491.25	365,423.81	846,652.19	32.0008071	-103.3484221	
20,550.00	90.00	42.70	12,475.00	-6,894.14	1,508.69	365,441.73	846,669.63	32.0008558	-103.3483653	
20,575.00	90.00	39.63	12,475.00	-6,875.32	1,525.14	365,460.54	846,686.08	32.0009072	-103.3483117	
20,600.00	90.00	36.57	12,475.00	-6,855.65	1,540.57	365,480.22	846,701.50	32.0009608	-103.3482614	
20,616.69	90.00	34.52	12,475.00	-6,842.07	1,550.27	365,493.79	846,711.21	32.0009979	-103.3482297	
End No Perf@20616.69'MD										
20,625.00	90.00	33.50	12,475.00	-6,835.18	1,554.92	365,500.68	846,715.85	32.0010167	-103.3482145	
20,650.00	90.00	30.44	12,475.00	-6,813.97	1,568.15	365,521.89	846,729.09	32.0010747	-103.3481712	
20,675.00	90.00	27.37	12,475.00	-6,792.09	1,580.23	365,543.77	846,741.17	32.0011345	-103.3481316	
20,700.00	90.00	24.31	12,475.00	-6,769.59	1,591.13	365,566.27	846,752.07	32.0011961	-103.3480958	
20,725.00	90.00	21.24	12,475.00	-6,746.54	1,600.81	365,589.32	846,761.74	32.0012592	-103.3480639	
20,750.00	90.00	18.18	12,475.00	-6,723.01	1,609.24	365,612.85	846,770.17	32.0013237	-103.3480360	
20,775.00	90.00	15.11	12,475.00	-6,699.06	1,616.40	365,636.80	846,777.33	32.0013893	-103.3480122	
20,800.00	90.00	12.05	12,475.00	-6,674.76	1,622.27	365,661.10	846,783.20	32.0014560	-103.3479926	
20,825.00	90.00	8.98	12,475.00	-6,650.19	1,626.83	365,685.68	846,787.76	32.0015234	-103.3479771	
20,850.00	90.00	5.92	12,475.00	-6,625.40	1,630.07	365,710.46	846,791.00	32.0015915	-103.3479659	
20,875.00	90.00	2.85	12,475.00	-6,600.48	1,631.98	365,735.38	846,792.92	32.0016599	-103.3479590	
20,902.42	90.00	359.49	12,475.00	-6,573.06	1,632.54	365,762.80	846,793.48	32.0017352	-103.3479564	
21,000.00	90.00	359.49	12,475.00	-6,475.49	1,631.67	365,860.37	846,792.61	32.0020035	-103.3479564	
21,100.00	90.00	359.49	12,475.00	-6,375.49	1,630.78	365,960.37	846,791.72	32.0022783	-103.3479563	
21,200.00	90.00	359.49	12,475.00	-6,275.50	1,629.89	366,060.36	846,790.83	32.0025532	-103.3479562	
21,300.00	90.00	359.49	12,475.00	-6,175.50	1,629.00	366,160.36	846,789.94	32.0028281	-103.3479562	
21,400.00	90.00	359.49	12,475.00	-6,075.51	1,628.11	366,260.35	846,789.05	32.0031029	-103.3479561	
21,500.00	90.00	359.49	12,475.00	-5,975.51	1,627.22	366,360.35	846,788.16	32.0033778	-103.3479560	
21,600.00	90.00	359.49	12,475.00	-5,875.51	1,626.33	366,460.35	846,787.27	32.0036527	-103.3479559	
21,700.00	90.00	359.49	12,475.00	-5,775.52	1,625.45	366,560.34	846,786.38	32.0039275	-103.3479559	
21,800.00	90.00	359.49	12,475.00	-5,675.52	1,624.56	366,660.34	846,785.49	32.0042024	-103.3479558	
21,900.00	90.00	359.49	12,475.00	-5,575.53	1,623.67	366,760.33	846,784.60	32.0044773	-103.3479557	
22,000.00	90.00	359.49	12,475.00	-5,475.53	1,622.78	366,860.33	846,783.72	32.0047522	-103.3479556	
22,100.00	90.00	359.49	12,475.00	-5,375.53	1,621.89	366,960.33	846,782.83	32.0050270	-103.3479556	
22,200.00	90.00	359.49	12,475.00	-5,275.54	1,621.00	367,060.32	846,781.94	32.0053019	-103.3479555	
22,300.00	90.00	359.49	12,475.00	-5,175.54	1,620.11	367,160.32	846,781.05	32.0055768	-103.3479554	
22,400.00	90.00	359.49	12,475.00	-5,075.55	1,619.23	367,260.31	846,780.16	32.0058516	-103.3479553	
22,500.00	90.00	359.49	12,475.00	-4,975.55	1,618.34	367,360.31	846,779.27	32.0061265	-103.3479553	
22,600.00	90.00	359.49	12,475.00	-4,875.55	1,617.45	367,460.30	846,778.39	32.0064014	-103.3479552	
22,700.00	90.00	359.49	12,475.00	-4,775.56	1,616.56	367,560.30	846,777.50	32.0066762	-103.3479551	
22,800.00	90.00	359.49	12,475.00	-4,675.56	1,615.68	367,660.30	846,776.61	32.0069511	-103.3479550	
22,900.00	90.00	359.49	12,475.00	-4,575.57	1,614.79	367,760.29	846,775.73	32.0072260	-103.3479550	
23,000.00	90.00	359.49	12,475.00	-4,475.57	1,613.90	367,860.29	846,774.84	32.0075009	-103.3479549	
23,100.00	90.00	359.49	12,475.00	-4,375.57	1,613.02	367,960.28	846,773.95	32.0077757	-103.3479548	
23,200.00	90.00	359.49	12,475.00	-4,275.58	1,612.13	368,060.28	846,773.07	32.0080506	-103.3479547	
23,300.00	90.00	359.49	12,475.00	-4,175.58	1,611.24	368,160.28	846,772.18	32.0083255	-103.3479546	
23,400.00	90.00	359.49	12,475.00	-4,075.58	1,610.36	368,260.27	846,771.29	32.0086003	-103.3479546	
23,500.00	90.00	359.49	12,475.00	-3,975.59	1,609.47	368,360.27	846,770.41	32.0088752	-103.3479545	

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSC Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL-350FEL) WC A100		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
23,600.00	90.00	359.49	12,475.00	-3,875.59	1,608.58	368,460.26	846,769.52	32.0091501	-103.3479544
23,700.00	90.00	359.49	12,475.00	-3,775.60	1,607.70	368,560.26	846,768.63	32.0094249	-103.3479543
23,800.00	90.00	359.49	12,475.00	-3,675.60	1,606.81	368,660.26	846,767.75	32.0096998	-103.3479542
23,900.00	90.00	359.49	12,475.00	-3,575.60	1,605.93	368,760.25	846,766.86	32.0099747	-103.3479541
24,000.00	90.00	359.49	12,475.00	-3,475.61	1,605.04	368,860.25	846,765.98	32.0102496	-103.3479541
24,100.00	90.00	359.49	12,475.00	-3,375.61	1,604.16	368,960.24	846,765.09	32.0105244	-103.3479540
24,200.00	90.00	359.49	12,475.00	-3,275.62	1,603.27	369,060.24	846,764.21	32.0107993	-103.3479539
24,300.00	90.00	359.49	12,475.00	-3,175.62	1,602.39	369,160.23	846,763.32	32.0110742	-103.3479538
24,400.00	90.00	359.49	12,475.00	-3,075.62	1,601.50	369,260.23	846,762.44	32.0113490	-103.3479537
24,500.00	90.00	359.49	12,475.00	-2,975.63	1,600.62	369,360.23	846,761.55	32.0116239	-103.3479536
24,600.00	90.00	359.49	12,475.00	-2,875.63	1,599.73	369,460.22	846,760.67	32.0118988	-103.3479535
24,700.00	90.00	359.49	12,475.00	-2,775.64	1,598.85	369,560.22	846,759.78	32.0121736	-103.3479534
24,800.00	90.00	359.49	12,475.00	-2,675.64	1,597.96	369,660.21	846,758.90	32.0124485	-103.3479534
24,900.00	90.00	359.49	12,475.00	-2,575.64	1,597.08	369,760.21	846,758.02	32.0127234	-103.3479533
25,000.00	90.00	359.49	12,475.00	-2,475.65	1,596.20	369,860.21	846,757.13	32.0129983	-103.3479532
25,100.00	90.00	359.49	12,475.00	-2,375.65	1,595.31	369,960.20	846,756.25	32.0132731	-103.3479531
25,200.00	90.00	359.49	12,475.00	-2,275.66	1,594.43	370,060.20	846,755.36	32.0135480	-103.3479530
25,300.00	90.00	359.49	12,475.00	-2,175.66	1,593.54	370,160.19	846,754.48	32.0138229	-103.3479529
25,400.00	90.00	359.49	12,475.00	-2,075.66	1,592.66	370,260.19	846,753.60	32.0140977	-103.3479528
25,500.00	90.00	359.49	12,475.00	-1,975.67	1,591.78	370,360.19	846,752.71	32.0143726	-103.3479527
25,600.00	90.00	359.49	12,475.00	-1,875.67	1,590.90	370,460.18	846,751.83	32.0146475	-103.3479526
25,700.00	90.00	359.49	12,475.00	-1,775.67	1,590.01	370,560.18	846,750.95	32.0149223	-103.3479525
25,800.00	90.00	359.49	12,475.00	-1,675.68	1,589.13	370,660.17	846,750.07	32.0151972	-103.3479524
25,900.00	90.00	359.49	12,475.00	-1,575.68	1,588.25	370,760.17	846,749.18	32.0154721	-103.3479523
26,000.00	90.00	359.49	12,475.00	-1,475.69	1,587.36	370,860.16	846,748.30	32.0157470	-103.3479523
26,100.00	90.00	359.49	12,475.00	-1,375.69	1,586.48	370,960.16	846,747.42	32.0160218	-103.3479522
26,200.00	90.00	359.49	12,475.00	-1,275.69	1,585.60	371,060.16	846,746.54	32.0162967	-103.3479521
26,300.00	90.00	359.49	12,475.00	-1,175.70	1,584.72	371,160.15	846,745.65	32.0165716	-103.3479520
26,400.00	90.00	359.49	12,475.00	-1,075.70	1,583.84	371,260.15	846,744.77	32.0168464	-103.3479519
26,500.00	90.00	359.49	12,475.00	-975.71	1,582.96	371,360.14	846,743.89	32.0171213	-103.3479518
26,600.00	90.00	359.50	12,475.00	-875.71	1,582.07	371,460.14	846,743.01	32.0173962	-103.3479517
26,700.00	90.00	359.50	12,475.00	-775.71	1,581.19	371,560.14	846,742.13	32.0176710	-103.3479516
26,800.00	90.00	359.50	12,475.00	-675.72	1,580.31	371,660.13	846,741.25	32.0179459	-103.3479515
26,900.00	90.00	359.50	12,475.00	-575.72	1,579.43	371,760.13	846,740.37	32.0182208	-103.3479514
27,000.00	90.00	359.50	12,475.00	-475.73	1,578.55	371,860.12	846,739.49	32.0184957	-103.3479513
27,100.00	90.00	359.50	12,475.00	-375.73	1,577.67	371,960.12	846,738.60	32.0187705	-103.3479512
27,200.00	90.00	359.50	12,475.00	-275.73	1,576.79	372,060.12	846,737.72	32.0190454	-103.3479511
27,300.00	90.00	359.50	12,475.00	-175.74	1,575.91	372,160.11	846,736.84	32.0193203	-103.3479510
27,400.00	90.00	359.50	12,475.00	-75.74	1,575.03	372,260.11	846,735.96	32.0195951	-103.3479509
27,500.00	90.00	359.50	12,475.00	24.26	1,574.15	372,360.10	846,735.08	32.0198700	-103.3479508
27,600.00	90.00	359.50	12,475.00	124.25	1,573.27	372,460.10	846,734.20	32.0201449	-103.3479507
27,700.00	90.00	359.50	12,475.00	224.25	1,572.39	372,560.10	846,733.32	32.0204197	-103.3479506
27,800.00	90.00	359.50	12,475.00	324.24	1,571.51	372,660.09	846,732.44	32.0206946	-103.3479505
27,900.00	90.00	359.50	12,475.00	424.24	1,570.63	372,760.09	846,731.56	32.0209695	-103.3479503
27,990.49	90.00	359.50	12,475.00	514.73	1,569.83	372,850.57	846,730.77	32.0212182	-103.3479503
LTP@27990.49 MD_100FNI, 350FEL									
28,000.00	90.00	359.50	12,475.00	524.24	1,569.75	372,860.08	846,730.69	32.0212444	-103.3479502
28,070.50	90.00	359.50	12,475.00	594.73	1,569.13	372,930.58	846,730.07	32.0214381	-103.3479502

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSC Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL-350FEL) WC A100		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
TP#3 (251FSL, 475FEL)	0.00	0.00	0.00	-6,842.07	1,515.46	365,493.79	846,676.40	32.0009988	-103.3483420
- plan misses target center by 7007.90ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
KOP (713H) 50FNL, 129FEL	0.00	0.00	0.00	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
- plan misses target center by 839.74ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
TP#2 (251FSL, 1166FEL)	0.00	0.00	0.00	-6,849.64	824.99	365,486.22	845,985.93	32.0009952	-103.3505693
- plan misses target center by 6899.15ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
FTP (100FNL, 1290FEL)	0.00	0.00	0.00	505.92	629.87	372,841.77	845,790.81	32.0212175	-103.3509830
- plan misses target center by 807.89ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
LTP (713H) 100FNL, 350FEL	0.00	0.00	12,475.00	514.73	1,569.83	372,850.58	846,730.77	32.0212182	-103.3479503
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
967.00	967.00	Rustler				
1,430.00	1,430.00	Salt				
4,915.56	4,880.00	Base of Salt				
4,915.56	4,880.00	Delaware				
6,265.02	6,211.00	Cherry Canyon				
7,751.52	7,684.00	Brushy Canyon				
9,150.52	9,083.00	1st Bone Spring Lime				
10,437.52	10,370.00	Bone Spring 1st				
10,951.52	10,884.00	Bone Spring 2nd				
11,397.52	11,330.00	3rd Bone Spring Lime				
12,088.37	12,020.00	Bone Spring 3rd				
12,433.61	12,317.00	Wolfcamp				

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
11,969.56	11,902.04	555.92	629.38	KOP@11969.56'MD_50FNL, 1290FEL
12,212.95	12,138.18	505.00	629.87	FTP@12212.95'MD_100FNL, 1290FEL
19,720.90	12,475.00	-6,849.64	785.49	Start No Perf@19720.90'MD
20,616.69	12,475.00	-6,842.07	1,550.27	End No Perf@20616.69'MD
27,990.49	12,475.00	514.73	1,569.83	LTP@27990.49'MD_100FNL, 350FEL

ARENA ROJA FED UNIT 713H

1. Geologic Formations

TVD of target	12475	Pilot hole depth	N/A
MD at TD:	28070	Deepest expected fresh water	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	967		
Salt	1430		
Base of Salt	4880		
Delaware	4880		
Cherry Canyon	6211		
Brushy Canyon	7684		
1st Bone Spring Lime	9083		
Bone Spring 1st	10370		
Bone Spring 2nd	10884		
3rd Bone Spring Lime	11330		
Bone Spring 3rd	12020		
Wolfcamp	12317		

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

ARENA ROJA FED UNIT 713H

2. Casing Program

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	54 1/2	J-55	BTC	0	1037	0	1037
9 7/8	8 5/8	32	P110HP	Sprint FJ	0	11869	0	11869
7 7/8	5 1/2	20	P110HP	CDC-HTQ	0	28070	0	12475

• 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

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	# Sks	TOC	Wt. ppg	Yld (ft3/sack)	Slurry Description
Surface	788	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	687	Surf	13.0	2.3	2nd State: Bradenhead Squeeze - Lead: Class C Cement + additives
	479	7751	13.2	1.44	Tail: Class H / C + additives
Production	117	9969	9	3.27	Lead: Class H / C + additives
	2131	11969	13.2	1.44	Tail: Class H / C + additives

Devon Energy requests to offline cement on intermediate strings that are set in formations shallower than the Wolfcamp. Prior to commencing offline cementing operations, the well will be monitored for any abnormal pressures and confirmed to be static. A dual manifold system (equipped with chokes) for the returns will also be utilized as a redundancy. All equipment used for offline cementing will have a minimum 5M rating to match intermediate sections' 5M BOPE requirements.

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

ARENA ROJA FED UNIT 713H

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						

ARENA ROJA FED UNIT 713H

5. Mud Program (Three String Design)

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

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

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

6. Logging and Testing Procedures

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

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

7. Drilling Conditions

Condition	Specify what type and where?
BH pressure at deepest TVD	6811
Abnormal temperature	No

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

Hydrogen Sulfide (H ₂ S) monitors will be installed prior to drilling out the surface shoe. If H ₂ S 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.

ARENA ROJA FED UNIT 713H

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

X Directional Plan
 Other, describe



13-3/8" 54.50# .380 J-55

Dimensions (Nominal)

Outside Diameter	13.375	in.
Wall	0.380	in.
Inside Diameter	12.615	in.
Drift	12.459	in.
Weight, T&C	54.500	lbs/ft
Weight, PE	52.790	lbs/ft

Performance Ratings, Minimum

Collapse, PE	1130	psi
Internal Yields Pressure		
PE	2730	psi
STC	2730	PSI
BTC	2730	psi
Yield Strength, Pipe Body	853	1000 lbs
Joint Strength, STC	514	1000 lbs
Joint Strength, BTC	909	1000 lbs

Note: SeAH Steel has produced this specification sheet for general information only. SeAH does not assume liability or responsibility for any loss or injury resulting from the use of information or data contained herein. All applications for the material described are at the customer's own risk and responsibility.



U. S. Steel Tubular Products
5.500" 20.00lb/ft (0.361" Wall) P110 HP USS-CDC HTQ®

2/21/2024 7:47:29 AM



MECHANICAL PROPERTIES	Pipe	USS-CDC HTQ®		--
Minimum Yield Strength	125,000	--	psi	--
Maximum Yield Strength	140,000	--	psi	--
Minimum Tensile Strength	130,000	--	psi	--
DIMENSIONS	Pipe	USS-CDC HTQ®		--
Outside Diameter	5.500	6.300	in.	--
Wall Thickness	0.361	--	in.	--
Inside Diameter	4.778	4.778	in.	--
Standard Drift	4.653	4.653	in.	--
Alternate Drift	--	--	in.	--
Nominal Linear Weight, T&C	20.00	--	lb/ft	--
Plain End Weight	19.83	--	lb/ft	--
SECTION AREA	Pipe	USS-CDC HTQ®		--
Critical Area	5.828	5.828	sq. in.	--
Joint Efficiency	--	97.0	%	--
PERFORMANCE	Pipe	USS-CDC HTQ®		--
Minimum Collapse Pressure	13,150	13,150	psi	--
External Pressure Leak Resistance	--	10,520	psi	--
Minimum Internal Yield Pressure	14,360	14,360	psi	--
Minimum Pipe Body Yield Strength	729,000	--	lb	--
Joint Strength	--	707,000	lb	--
Compression Rating	--	424,000	lb	--
Reference Length	--	23,567	ft	--
Maximum Uniaxial Bend Rating	--	60.6	deg/100 ft	--
MAKE-UP DATA	Pipe	USS-CDC HTQ®		--
Make-Up Loss	--	4.63	in.	--
Minimum Make-Up Torque	--	14,500	ft-lb	--
Maximum Make-Up Torque	--	20,500	ft-lb	--
Connection Yield Torque	--	25,300	ft-lb	--

UNCONTROLLED

Notes

- Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness and Specified Minimum Yield Strength (SMYS).
- Uniaxial bending rating shown is structural only, and equal to compression efficiency.
- Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
- Reference length is calculated by joint strength divided by nominal threaded and coupled weight with 1.5 safety factor.
- Connection external pressure leak resistance has been verified to 80% API pipe body collapse pressure following the guidelines of API 5C5 Cal II.

Legal Notice

USS - CDC HTQ® (High Torque Casing Drilling Connection) is a trademark of U. S. Steel Corporation. This product is a modified API Butress threaded and coupled connection designed for drilling with casing applications. All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U. S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application.

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION		Revised July, 2024	
			Submittal Type: ☐ Initial Submittal ☒ Amended Report ☐ As Drilled	

WELL LOCATION INFORMATION

API Number 30-025-53643	Pool Code 96776	Pool Name JABALINA;WOLFCAMP, SOUTHWEST
Property Code 34832	Property Name ARENA ROJA FED UNIT	Well Number 713H
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	Ground Level Elevation 3064.6'
Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal		Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	27	26-S	35-E		600' N	1925' E	32.019843	103.353030	LEA

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	27	26-S	35-E		20' N	350' E	32.021438	103.347950	LEA

Dedicated Acres 933.76	Infill or Defining Well Infill	Defining Well API 30-025-53446	Overlapping Spacing Unit (Y/N) Y	Consolidation Code U
Order Numbers			Well setbacks are under Common Ownership: ☒ Yes ☐ No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	27	26-S	35-E		50' N	1290' E	32.021355	103.350983	LEA

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	27	26-S	35-E		100' N	1290' E	32.021218	103.350983	LEA

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	27	26-S	35-E		100' N	350' E	32.021218	103.347950	LEA

Spacing Unit Type		Horizontal	Vertical	Ground Floor Elevation:
		HZ		

OPERATOR CERTIFICATIONS

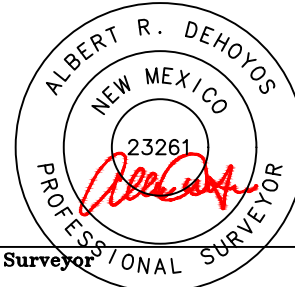
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Signature <i>Rebecca Deal</i>	Date 9/23/2025
Printed Name Rebecca Deal, Regulatory Analyst	
Email Address rebecca.deal@dmn.com	

SURVEYOR CERTIFICATIONS

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



Signature and Seal of Professional Surveyor	
Certificate Number 23261	Date of Survey 08/20/2025

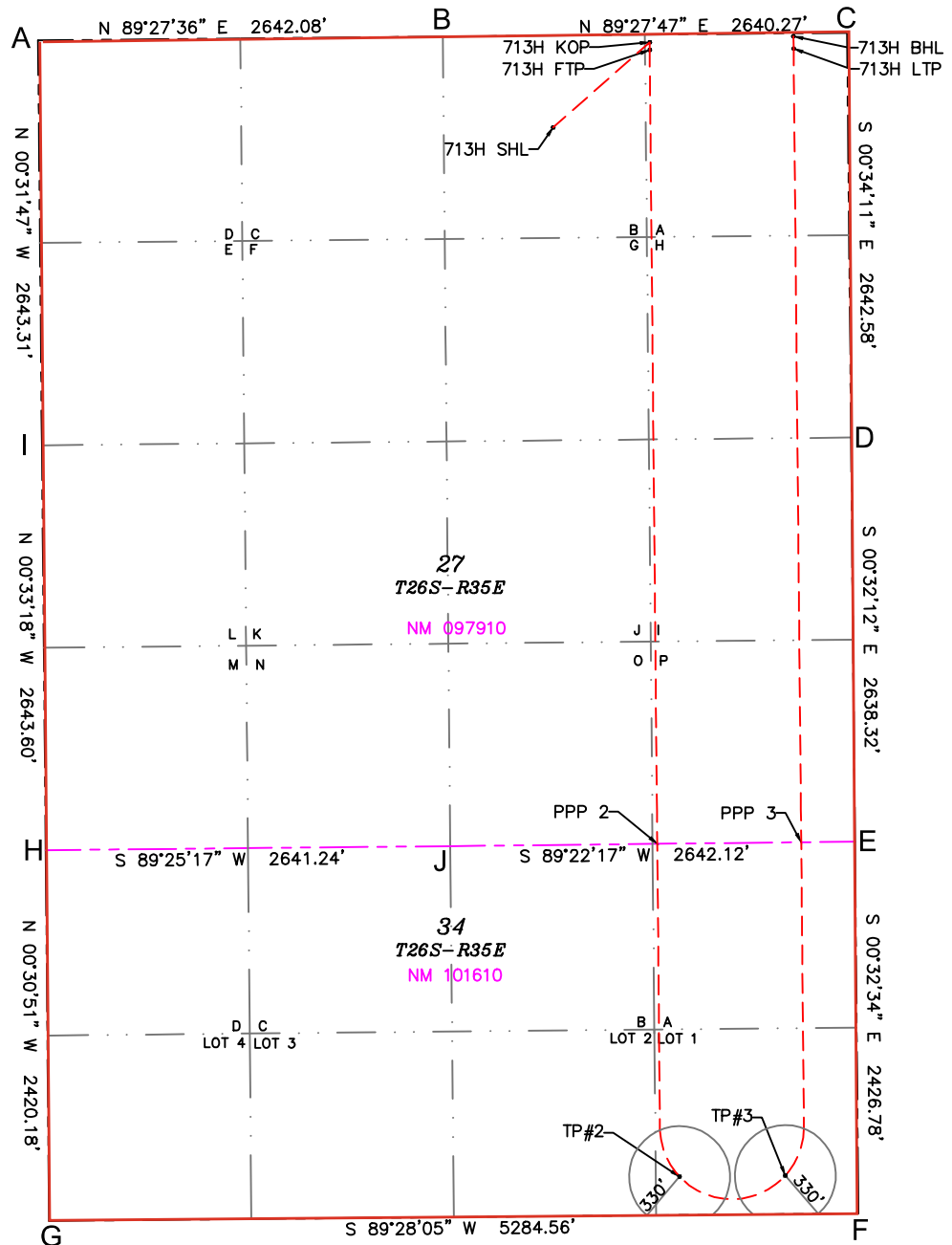
ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

SURFACE HOLE LOCATION GEODETIC COORDINATES NAD 83 NMSP EAST SURFACE LOCATION 600' FNL 1925' FEL SECTION 27 EL: 3064.6' N: 372335.84/E: 845160.94 LAT: 32.019843/LON: 103.353030
KICK OFF POINT 50' FNL 1290' FEL SECTION 27 N: 372891.77/E: 845790.32 LAT: 32.021355/LON: 103.350983
FIRST TAKE POINT 100' FNL 1290' FEL SECTION 27 N: 372841.77/E: 845790.81 LAT: 32.021218/LON: 103.350983
TAKE POINT #2 251' FSL 1166' FEL SECTION 34 N: 365486.22/E: 845985.93 LAT: 32.000995/LON: 103.350569
TAKE POINT #3 251' FSL 475' FEL SECTION 34 N: 365493.79/E: 846676.40 LAT: 32.000999/LON: 103.348342
LAST TAKE POINT 100' FNL 350' FEL SECTION 27 N: 372850.58/E: 846730.77 LAT: 32.021218/LON: 103.347950
BOTTOM HOLE LOCATION 20' FNL 350' FEL SECTION 27 N: 372930.58/E: 846729.98 LAT: 32.021438/LON: 103.347950
PPP 2 0' FNL 1291' FEL SECTION 34 N: 367659.05/E: 845840.34 LAT: 32.006971/LON: 103.350975
PPP 3 0' FNL 351' FEL SECTION 34 N: 367669.36/E: 846780.29 LAT: 32.006976/LON: 103.347943

A=N:372904.21 E:841797.65
B=N:372929.11 E:844439.61
C=N:372953.86 E:847079.76
D=N:370311.41 E:847106.04
E=N:367673.21 E:847130.76
F=N:365246.54/E:847153.74
G=N:365197.46/E:841869.41
H=N:367617.55 E:841847.69
I=N:370261.02 E:841822.08
J=N:367644.22 E:844488.79



Well Name: ARENA ROJA FED UNIT	Well Location: T26S / R35E / SEC 27 / NWNE / 32.019843 / -103.35303	County or Parish/State: LEA / NM
Well Number: 713H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM97910	Unit or CA Name: ARENA ROJA FEDERAL	Unit or CA Number: NMNM112744X
US Well Number: 3002553643	Operator: DEVON ENERGY PRODUCTION COMPANY LP	

LONG VO

Digitally signed by
LONG VO
Date: 2025.10.23
10:07:34 -05'00'

Notice of Intent

Sundry ID: 2875420

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 09/24/2025

Time Sundry Submitted: 12:00

Date proposed operation will begin: 09/24/2025

Procedure Description: Devon Energy Production Company L.P. respectfully requests the following changes to the approved APD: BHL change from 20 FSL & 2430 FEL, 34-26S-35E to 20 FNL & 350 FEL, 27-26S-35E. MD/TVD change from 12600'/20055' to 12475'/28070' Casing program change: Surface casing size change. Surface, Intermediate, and Production casing depth changes. Cement volume changes to accommodate casing change. Please see attached revised C-102, spec sheets, and drilling & directional plans.

NOI Attachments

Procedure Description

ARENA_ROJA_FED_UNIT_713H_Permit_Plan_1_20251016121000.pdf

ARENA_ROJA_FED_UNIT_713H_09_24_2025_202509241115821.pdf

13.375_54.5lb_J55_20250924111835.pdf

5.5_20lb_P110HP_CDC_HTQ_20250924111835.pdf

ARENA_ROJA_FED_UNIT_713H_C_102_U_Turn_NOI_20250924111834.pdf

Well Name: ARENA ROJA FEDERAL UNIT	Well Location: T26S / R35E / SEC 27 / NWNE / 32.019843 / -103.35303	County or Parish/State: LEA / NM
Well Number: 713H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM97910	Unit or CA Name: ARENA ROJA FEDERAL	Unit or CA Number: NMNM112744X
US Well Number: 3002553643	Operator: DEVON ENERGY PRODUCTION COMPANY LP	

Operator

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

Operator Electronic Signature: REBECCA DEAL**Signed on:** OCT 16, 2025 12:23 PM**Name:** DEVON ENERGY PRODUCTION COMPANY LP**Title:** Regulatory Professional**Street Address:** 333 W SHERIDAN AVE**City:** OKLAHOMA CITY **State:** OK**Phone:** (405) 228-8429**Email address:** REBECCA.DEAL@DVN.COM**Field****Representative Name:****Street Address:****City:****State:****Zip:****Phone:****Email address:**

APPROVED by Long Vo
Petroleum Engineer
Carlsbad Field Office
575-988-50402
LVO@BLM.GOV

**PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL**

OPERATOR'S NAME:	Devon Energy Production Company LP
LEASE NO.:	NMNM97910
LOCATION:	Section 27, T.26 S., R.35 E., NMPM
COUNTY:	Lea County, New Mexico

WELL NAME & NO.:	Arena Roja Fed Unit 713H
ATS/API ID:	3002553643
APD ID:	10400095822
Sundry ID:	2875420

COA

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

A. HYDROGEN SULFIDE

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

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **1040 feet** (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite and above the salt when present, and below usable fresh water) and cemented to the surface. The surface hole shall be **17 1/2** inch in diameter.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

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 7684'**.
- 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 687 sxs Class C)**

Operator has proposed to pump down **13-3/8" 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. Operator may conduct a negative and positive pressure test during completion to remediate sustained casing pressure.

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.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
 - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.
Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

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 **13-3/8** 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 43 CFR 3172.6(b)(9) must be followed.

D. SPECIAL REQUIREMENT (S)

Unit Wells

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months.

BOPE Break Testing Variance (Approved)

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted **(575-689-5981 Lea County)** 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at **21-day** intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per **43 CFR part 3170 Subpart 3172**.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

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

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

Notify the BLM 4hrs prior to cementing offline at **Lea County: 575-689-5981**.

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)

☒ 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 **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

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 of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR part 3170 Subpart 3172 and API STD 53 Sec. 5.3**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke

manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be

initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR part 3170 Subpart 3172**.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and

disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

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

Long Vo (LVO) 10/23/2025



GL:3064.60+25ft @ 3089.60ft
Ground Level 3064.60

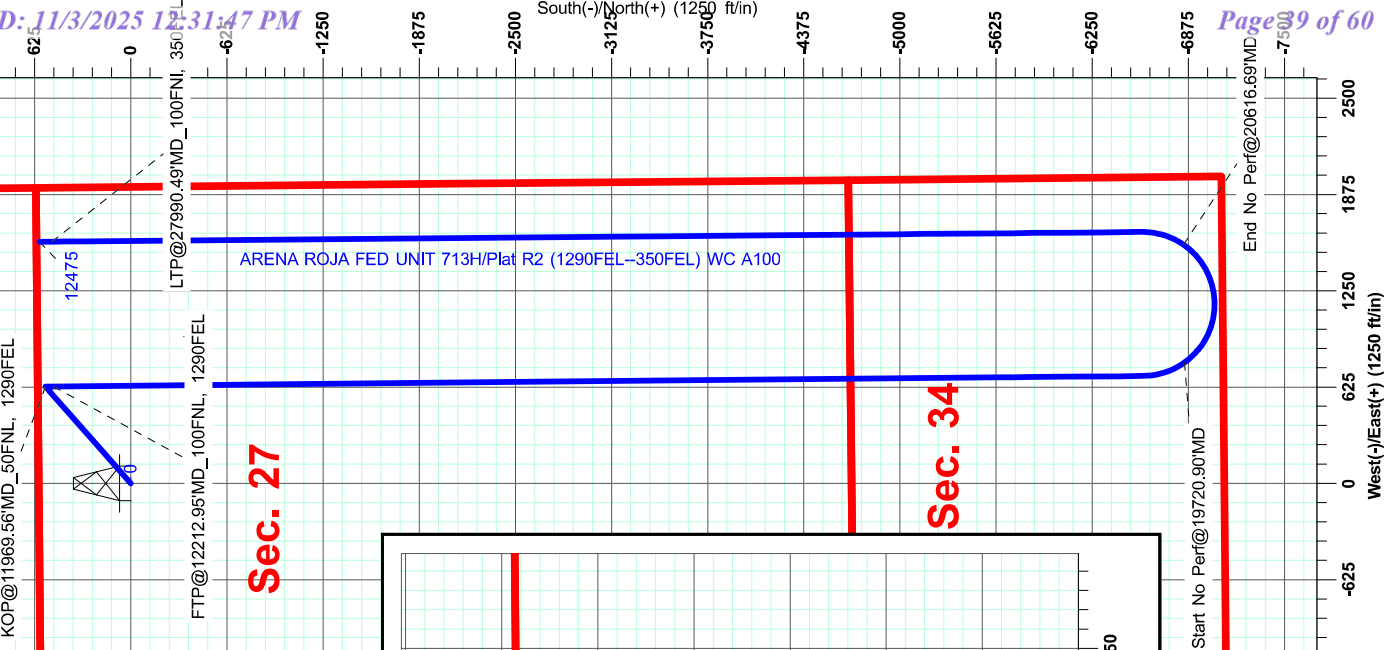
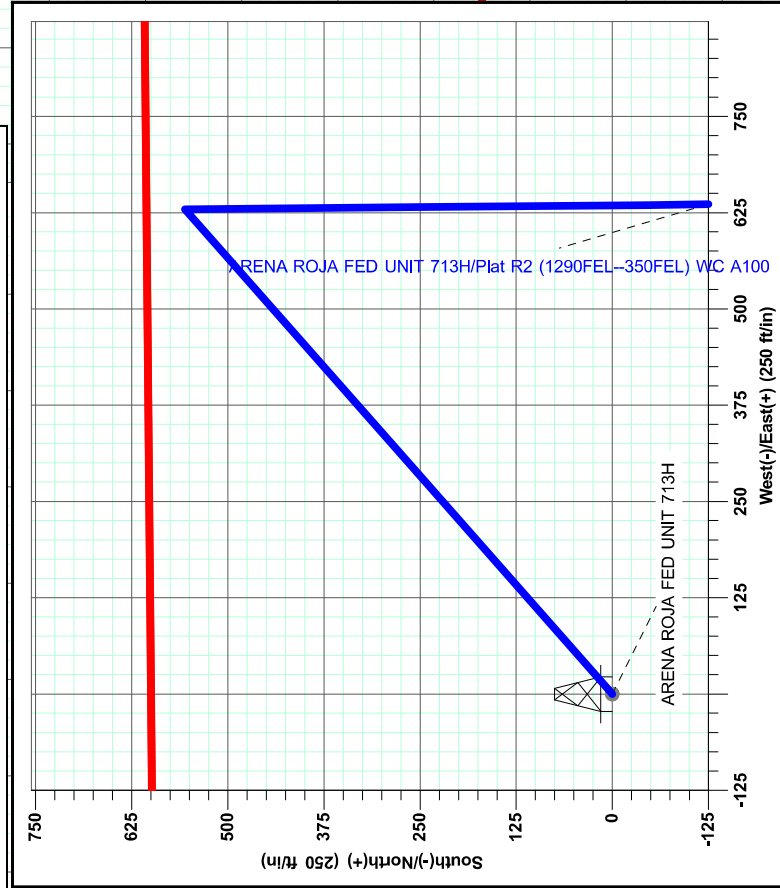
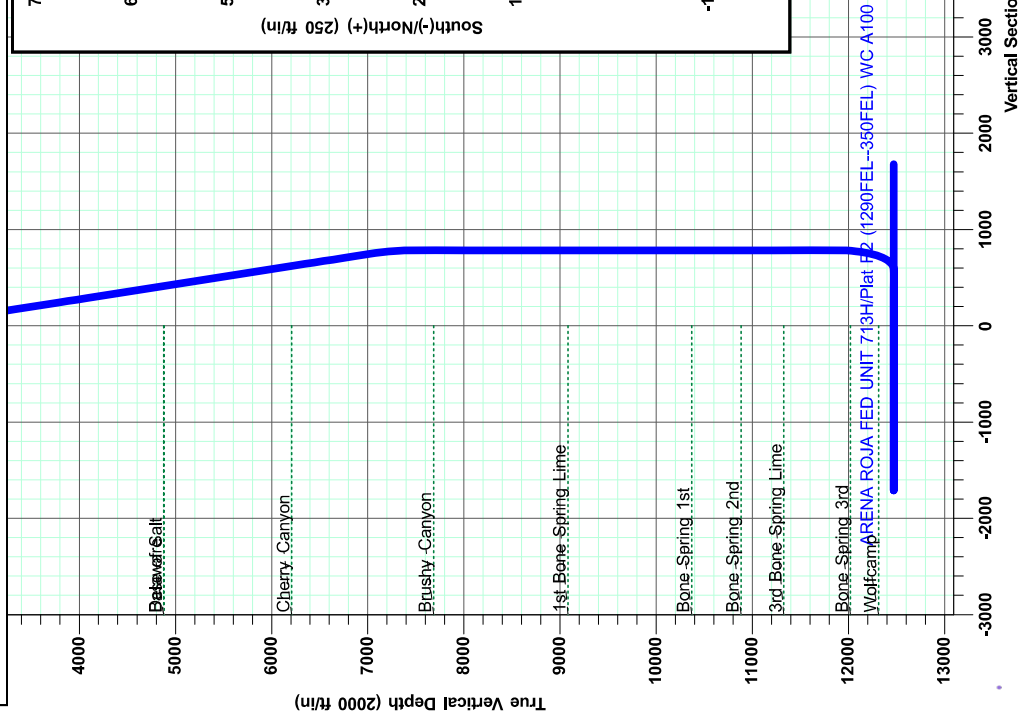
ARENA ROJA FED UNIT 713H
Lea County (NAD83 New Mexico East)
Northing: 372335.85
Easting: 845160.94

Lat: 32.0198427
Long: -103.3530299

Plat R2 (1290FEL--350FEL) WC A100

SECTION DETAILS ARENA ROJA FED UNIT 713H

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00
2474.41	9.49	48.55	2472.24	25.94	29.37	2.00	36.66
7093.11	9.49	48.55	7027.76	529.98	600.01	0.00	748.89
7567.52	0.00	0.00	7500.00	555.92	629.38	0.00	785.55
11969.56	0.00	0.00	11902.04	555.92	629.38	0.00	785.55
12869.56	90.00	179.45	12475.00	-17.01	634.88	10.00	587.64
19434.56	90.00	179.45	12475.00	-6581.71	697.90	0.00	-1680.06
20164.17	90.00	90.00	12475.00	-7044.56	1165.22	12.26	-1407.12
20902.42	90.00	359.49	12475.00	-6573.06	1632.54	12.26	-803.02
27990.49	90.00	359.50	12475.00	514.73	1569.83	0.00	1650.36
28070.49	90.00	359.50	12475.00	594.73	1569.13	0.00	1678.06



Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSC Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL--350FEL) WC A100		

Project	Lea County (NAD83 New Mexico East)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Sec 27-T26S-R35E				
Site Position:		Northing:	372,704.19 usft	Latitude:	32.0209382
From:	Lat/Long	Easting:	841,809.63 usft	Longitude:	-103.3638311
Position Uncertainty:	5.00 ft	Slot Radius:	13.20 in		

Well	ARENA ROJA FED UNIT 713H					
Well Position	+N/-S	0.00 ft	Northing:	372,335.85 usft	Latitude:	32.0198427
	+E/-W	0.00 ft	Easting:	845,160.94 usft	Longitude:	-103.3530299
Position Uncertainty		0.50 ft	Wellhead Elevation:	ft	Ground Level:	3,064.60 ft
Grid Convergence:		0.52 °				

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/31/2019	6.56	59.88	47,581.88182581

Design	Plat R2 (1290FEL--350FEL) WC A100				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	69.24	

Plan Survey Tool Program	Date	10/16/2025			
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	28,070.50 Plat R2 (1290FEL--350FEL) WC	MWD+HDGM OWSG MWD + HDGM		

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSC Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL–350FEL) WC A100		

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,474.41	9.49	48.55	2,472.24	25.94	29.37	2.00	2.00	0.00	48.55	
7,093.11	9.49	48.55	7,027.76	529.98	600.01	0.00	0.00	0.00	0.00	
7,567.52	0.00	0.00	7,500.00	555.92	629.38	2.00	-2.00	0.00	180.00	
11,969.56	0.00	0.00	11,902.04	555.92	629.38	0.00	0.00	0.00	0.00	
12,869.56	90.00	179.45	12,475.00	-17.01	634.88	10.00	10.00	0.00	179.45	
19,434.56	90.00	179.45	12,475.00	-6,581.71	697.90	0.00	0.00	0.00	0.00	
20,164.17	90.00	90.00	12,475.00	-7,044.56	1,165.22	12.26	0.00	-12.26	-90.00	
20,902.42	90.00	359.49	12,475.00	-6,573.06	1,632.54	12.26	0.00	-12.26	-90.00	
27,990.50	90.00	359.50	12,475.00	514.73	1,569.83	0.00	0.00	0.00	90.16	LTP (713H) 100Fnl, 3
28,070.50	90.00	359.50	12,475.00	594.73	1,569.13	0.00	0.00	0.00	0.00	

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSC Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL-350FEL) WC A100		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
100.00	0.00	0.00	100.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
200.00	0.00	0.00	200.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
300.00	0.00	0.00	300.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
400.00	0.00	0.00	400.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
500.00	0.00	0.00	500.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
600.00	0.00	0.00	600.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
700.00	0.00	0.00	700.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
800.00	0.00	0.00	800.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
900.00	0.00	0.00	900.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
967.00	0.00	0.00	967.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
Rustler									
1,000.00	0.00	0.00	1,000.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
1,100.00	0.00	0.00	1,100.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
1,200.00	0.00	0.00	1,200.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
1,300.00	0.00	0.00	1,300.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
1,400.00	0.00	0.00	1,400.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
1,430.00	0.00	0.00	1,430.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
Salt									
1,500.00	0.00	0.00	1,500.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
1,600.00	0.00	0.00	1,600.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
1,700.00	0.00	0.00	1,700.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
1,800.00	0.00	0.00	1,800.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
1,900.00	0.00	0.00	1,900.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
2,000.00	0.00	0.00	2,000.00	0.00	0.00	372,335.85	845,160.94	32.0198427	-103.3530299
2,100.00	2.00	48.55	2,099.98	1.16	1.31	372,337.00	845,162.25	32.0198458	-103.3530256
2,200.00	4.00	48.55	2,199.84	4.62	5.23	372,340.47	845,166.17	32.0198553	-103.3530129
2,300.00	6.00	48.55	2,299.45	10.39	11.76	372,346.24	845,172.70	32.0198710	-103.3529917
2,400.00	8.00	48.55	2,398.70	18.46	20.90	372,354.31	845,181.83	32.0198929	-103.3529619
2,474.41	9.49	48.55	2,472.24	25.94	29.37	372,361.79	845,190.31	32.0199133	-103.3529344
2,500.00	9.49	48.55	2,497.48	28.74	32.54	372,364.59	845,193.47	32.0199209	-103.3529241
2,600.00	9.49	48.55	2,596.12	39.65	44.89	372,375.50	845,205.83	32.0199506	-103.3528839
2,700.00	9.49	48.55	2,694.75	50.56	57.25	372,386.41	845,218.18	32.0199802	-103.3528437
2,800.00	9.49	48.55	2,793.38	61.48	69.60	372,397.32	845,230.54	32.0200099	-103.3528036
2,900.00	9.49	48.55	2,892.01	72.39	81.95	372,408.24	845,242.89	32.0200396	-103.3527634
3,000.00	9.49	48.55	2,990.64	83.30	94.31	372,419.15	845,255.25	32.0200693	-103.3527232
3,100.00	9.49	48.55	3,089.28	94.21	106.66	372,430.06	845,267.60	32.0200990	-103.3526830
3,200.00	9.49	48.55	3,187.91	105.13	119.02	372,440.98	845,279.96	32.0201287	-103.3526429
3,300.00	9.49	48.55	3,286.54	116.04	131.37	372,451.89	845,292.31	32.0201584	-103.3526027
3,400.00	9.49	48.55	3,385.17	126.95	143.73	372,462.80	845,304.67	32.0201880	-103.3525625
3,500.00	9.49	48.55	3,483.80	137.87	156.08	372,473.71	845,317.02	32.0202177	-103.3525223
3,600.00	9.49	48.55	3,582.44	148.78	168.44	372,484.63	845,329.38	32.0202474	-103.3524821
3,700.00	9.49	48.55	3,681.07	159.69	180.79	372,495.54	845,341.73	32.0202771	-103.3524420
3,800.00	9.49	48.55	3,779.70	170.60	193.15	372,506.45	845,354.09	32.0203068	-103.3524018
3,900.00	9.49	48.55	3,878.33	181.52	205.50	372,517.37	845,366.44	32.0203365	-103.3523616
4,000.00	9.49	48.55	3,976.96	192.43	217.86	372,528.28	845,378.80	32.0203662	-103.3523214
4,100.00	9.49	48.55	4,075.60	203.34	230.21	372,539.19	845,391.15	32.0203959	-103.3522812
4,200.00	9.49	48.55	4,174.23	214.26	242.57	372,550.10	845,403.51	32.0204255	-103.3522411
4,300.00	9.49	48.55	4,272.86	225.17	254.92	372,561.02	845,415.86	32.0204552	-103.3522009
4,400.00	9.49	48.55	4,371.49	236.08	267.28	372,571.93	845,428.22	32.0204849	-103.3521607
4,500.00	9.49	48.55	4,470.12	246.99	279.63	372,582.84	845,440.57	32.0205146	-103.3521205
4,600.00	9.49	48.55	4,568.76	257.91	291.99	372,593.76	845,452.93	32.0205443	-103.3520804
4,700.00	9.49	48.55	4,667.39	268.82	304.34	372,604.67	845,465.28	32.0205740	-103.3520402
4,800.00	9.49	48.55	4,766.02	279.73	316.70	372,615.58	845,477.64	32.0206037	-103.3520000

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSO Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL-350FEL) WC A100		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
4,900.00	9.49	48.55	4,864.65	290.65	329.05	372,626.49	845,489.99	32.0206333	-103.3519598
4,915.56	9.49	48.55	4,880.00	292.34	330.97	372,628.19	845,491.91	32.0206380	-103.3519536
Base of Salt - Delaware									
5,000.00	9.49	48.55	4,963.28	301.56	341.41	372,637.41	845,502.35	32.0206630	-103.3519196
5,100.00	9.49	48.55	5,061.92	312.47	353.76	372,648.32	845,514.70	32.0206927	-103.3518795
5,200.00	9.49	48.55	5,160.55	323.38	366.12	372,659.23	845,527.05	32.0207224	-103.3518393
5,300.00	9.49	48.55	5,259.18	334.30	378.47	372,670.14	845,539.41	32.0207521	-103.3517991
5,400.00	9.49	48.55	5,357.81	345.21	390.83	372,681.06	845,551.76	32.0207818	-103.3517589
5,500.00	9.49	48.55	5,456.44	356.12	403.18	372,691.97	845,564.12	32.0208115	-103.3517187
5,600.00	9.49	48.55	5,555.08	367.04	415.54	372,702.88	845,576.47	32.0208412	-103.3516786
5,700.00	9.49	48.55	5,653.71	377.95	427.89	372,713.80	845,588.83	32.0208708	-103.3516384
5,800.00	9.49	48.55	5,752.34	388.86	440.25	372,724.71	845,601.18	32.0209005	-103.3515982
5,900.00	9.49	48.55	5,850.97	399.77	452.60	372,735.62	845,613.54	32.0209302	-103.3515580
6,000.00	9.49	48.55	5,949.60	410.69	464.96	372,746.53	845,625.89	32.0209599	-103.3515178
6,100.00	9.49	48.55	6,048.24	421.60	477.31	372,757.45	845,638.25	32.0209896	-103.3514777
6,200.00	9.49	48.55	6,146.87	432.51	489.67	372,768.36	845,650.60	32.0210193	-103.3514375
6,265.02	9.49	48.55	6,211.00	439.61	497.70	372,775.46	845,658.64	32.0210386	-103.3514114
Cherry Canyon									
6,300.00	9.49	48.55	6,245.50	443.43	502.02	372,779.27	845,662.96	32.0210490	-103.3513973
6,400.00	9.49	48.55	6,344.13	454.34	514.38	372,790.19	845,675.31	32.0210786	-103.3513571
6,500.00	9.49	48.55	6,442.76	465.25	526.73	372,801.10	845,687.67	32.0211083	-103.3513170
6,600.00	9.49	48.55	6,541.40	476.16	539.09	372,812.01	845,700.02	32.0211380	-103.3512768
6,700.00	9.49	48.55	6,640.03	487.08	551.44	372,822.92	845,712.38	32.0211677	-103.3512366
6,800.00	9.49	48.55	6,738.66	497.99	563.79	372,833.84	845,724.73	32.0211974	-103.3511964
6,900.00	9.49	48.55	6,837.29	508.90	576.15	372,844.75	845,737.09	32.0212271	-103.3511562
7,000.00	9.49	48.55	6,935.92	519.82	588.50	372,855.66	845,749.44	32.0212568	-103.3511161
7,093.11	9.49	48.55	7,027.76	529.98	600.01	372,865.82	845,760.95	32.0212844	-103.3510786
7,100.00	9.35	48.55	7,034.56	530.72	600.85	372,866.57	845,761.79	32.0212864	-103.3510759
7,200.00	7.35	48.55	7,133.49	540.34	611.74	372,876.18	845,772.67	32.0213126	-103.3510405
7,300.00	5.35	48.55	7,232.87	547.66	620.03	372,883.51	845,780.96	32.0213325	-103.3510135
7,400.00	3.35	48.55	7,332.58	552.68	625.71	372,888.53	845,786.65	32.0213462	-103.3509951
7,500.00	1.35	48.55	7,432.49	555.39	628.79	372,891.24	845,789.72	32.0213535	-103.3509851
7,567.52	0.00	0.00	7,500.00	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
7,600.00	0.00	0.00	7,532.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
7,700.00	0.00	0.00	7,632.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
7,751.52	0.00	0.00	7,684.00	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
Brushy Canyon									
7,800.00	0.00	0.00	7,732.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
7,900.00	0.00	0.00	7,832.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,000.00	0.00	0.00	7,932.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,100.00	0.00	0.00	8,032.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,200.00	0.00	0.00	8,132.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,300.00	0.00	0.00	8,232.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,400.00	0.00	0.00	8,332.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,500.00	0.00	0.00	8,432.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,600.00	0.00	0.00	8,532.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,700.00	0.00	0.00	8,632.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,800.00	0.00	0.00	8,732.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
8,900.00	0.00	0.00	8,832.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
9,000.00	0.00	0.00	8,932.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
9,100.00	0.00	0.00	9,032.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
9,150.52	0.00	0.00	9,083.00	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
1st Bone Spring Lime									
9,200.00	0.00	0.00	9,132.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSC Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL-350FEL) WC A100		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,300.00	0.00	0.00	9,232.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
9,400.00	0.00	0.00	9,332.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
9,500.00	0.00	0.00	9,432.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
9,600.00	0.00	0.00	9,532.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
9,700.00	0.00	0.00	9,632.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
9,800.00	0.00	0.00	9,732.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
9,900.00	0.00	0.00	9,832.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,000.00	0.00	0.00	9,932.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,100.00	0.00	0.00	10,032.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,200.00	0.00	0.00	10,132.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,300.00	0.00	0.00	10,232.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,400.00	0.00	0.00	10,332.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,437.52	0.00	0.00	10,370.00	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
Bone Spring 1st									
10,500.00	0.00	0.00	10,432.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,600.00	0.00	0.00	10,532.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,700.00	0.00	0.00	10,632.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,800.00	0.00	0.00	10,732.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,900.00	0.00	0.00	10,832.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
10,951.52	0.00	0.00	10,884.00	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
Bone Spring 2nd									
11,000.00	0.00	0.00	10,932.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,100.00	0.00	0.00	11,032.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,200.00	0.00	0.00	11,132.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,300.00	0.00	0.00	11,232.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,397.52	0.00	0.00	11,330.00	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
3rd Bone Spring Lime									
11,400.00	0.00	0.00	11,332.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,500.00	0.00	0.00	11,432.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,600.00	0.00	0.00	11,532.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,700.00	0.00	0.00	11,632.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,800.00	0.00	0.00	11,732.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,900.00	0.00	0.00	11,832.48	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
11,969.56	0.00	0.00	11,902.04	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
KOP@11969.56 MD_50FNL, 1290FEL									
12,000.00	3.04	179.45	11,932.47	555.11	629.39	372,890.96	845,790.33	32.0213528	-103.3509831
12,050.00	8.04	179.45	11,982.22	550.28	629.44	372,886.13	845,790.37	32.0213395	-103.3509831
12,088.37	11.88	179.45	12,020.00	543.65	629.50	372,879.49	845,790.44	32.0213212	-103.3509831
Bone Spring 3rd									
12,100.00	13.04	179.45	12,031.36	541.14	629.52	372,876.98	845,790.46	32.0213143	-103.3509831
12,150.00	18.04	179.45	12,079.52	527.74	629.65	372,863.59	845,790.59	32.0212775	-103.3509831
12,200.00	23.04	179.45	12,126.32	510.20	629.82	372,846.05	845,790.76	32.0212293	-103.3509830
12,212.95	24.34	179.45	12,138.18	505.00	629.87	372,840.85	845,790.81	32.0212150	-103.3509830
FTP@12212.95 MD_100FNL, 1290FEL									
12,250.00	28.04	179.45	12,171.42	488.65	630.03	372,824.50	845,790.96	32.0211701	-103.3509830
12,300.00	33.04	179.45	12,214.47	463.25	630.27	372,799.10	845,791.21	32.0211002	-103.3509830
12,350.00	38.04	179.45	12,255.14	434.19	630.55	372,770.04	845,791.49	32.0210204	-103.3509829
12,400.00	43.04	179.45	12,293.12	401.70	630.86	372,737.55	845,791.80	32.0209311	-103.3509829
12,433.61	46.41	179.45	12,317.00	378.05	631.09	372,713.90	845,792.03	32.0208660	-103.3509828
Wolfcamp									
12,450.00	48.04	179.45	12,328.13	366.03	631.20	372,701.87	845,792.14	32.0208330	-103.3509828
12,500.00	53.04	179.45	12,359.89	327.43	631.57	372,663.28	845,792.51	32.0207269	-103.3509827
12,550.00	58.04	179.45	12,388.17	286.22	631.97	372,622.07	845,792.91	32.0206136	-103.3509827
12,600.00	63.04	179.45	12,412.75	242.70	632.39	372,578.55	845,793.33	32.0204940	-103.3509826

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSC Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL-350FEL) WC A100		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
12,650.00	68.04	179.45	12,433.44	197.20	632.82	372,533.05	845,793.76	32.0203689	-103.3509825	
12,700.00	73.04	179.45	12,450.09	150.07	633.28	372,485.92	845,794.21	32.0202394	-103.3509825	
12,750.00	78.04	179.45	12,462.57	101.67	633.74	372,437.52	845,794.68	32.0201063	-103.3509824	
12,800.00	83.04	179.45	12,470.78	52.37	634.22	372,388.22	845,795.15	32.0199708	-103.3509823	
12,850.00	88.04	179.45	12,474.67	2.54	634.69	372,338.39	845,795.63	32.0198338	-103.3509822	
12,869.56	90.00	179.45	12,475.00	-17.01	634.88	372,318.84	845,795.82	32.0197801	-103.3509822	
12,900.00	90.00	179.45	12,475.00	-47.45	635.17	372,288.40	845,796.11	32.0196964	-103.3509821	
13,000.00	90.00	179.45	12,475.00	-147.45	636.13	372,188.40	845,797.07	32.0194215	-103.3509820	
13,100.00	90.00	179.45	12,475.00	-247.44	637.09	372,088.41	845,798.03	32.0191467	-103.3509818	
13,200.00	90.00	179.45	12,475.00	-347.44	638.05	371,988.41	845,798.99	32.0188718	-103.3509816	
13,300.00	90.00	179.45	12,475.00	-447.43	639.01	371,888.41	845,799.95	32.0185969	-103.3509815	
13,400.00	90.00	179.45	12,475.00	-547.43	639.97	371,788.42	845,800.91	32.0183221	-103.3509813	
13,500.00	90.00	179.45	12,475.00	-647.43	640.93	371,688.42	845,801.87	32.0180472	-103.3509811	
13,600.00	90.00	179.45	12,475.00	-747.42	641.89	371,588.43	845,802.83	32.0177723	-103.3509810	
13,700.00	90.00	179.45	12,475.00	-847.42	642.85	371,488.43	845,803.79	32.0174974	-103.3509808	
13,800.00	90.00	179.45	12,475.00	-947.41	643.81	371,388.44	845,804.75	32.0172226	-103.3509807	
13,900.00	90.00	179.45	12,475.00	-1,047.41	644.77	371,288.44	845,805.71	32.0169477	-103.3509805	
14,000.00	90.00	179.45	12,475.00	-1,147.40	645.73	371,188.45	845,806.67	32.0166728	-103.3509803	
14,100.00	90.00	179.45	12,475.00	-1,247.40	646.69	371,088.45	845,807.63	32.0163980	-103.3509802	
14,200.00	90.00	179.45	12,475.00	-1,347.39	647.65	370,988.46	845,808.59	32.0161231	-103.3509800	
14,300.00	90.00	179.45	12,475.00	-1,447.39	648.61	370,888.46	845,809.55	32.0158482	-103.3509798	
14,400.00	90.00	179.45	12,475.00	-1,547.38	649.57	370,788.47	845,810.51	32.0155734	-103.3509797	
14,500.00	90.00	179.45	12,475.00	-1,647.38	650.53	370,688.47	845,811.47	32.0152985	-103.3509795	
14,600.00	90.00	179.45	12,475.00	-1,747.37	651.49	370,588.48	845,812.43	32.0150236	-103.3509793	
14,700.00	90.00	179.45	12,475.00	-1,847.37	652.45	370,488.48	845,813.39	32.0147488	-103.3509792	
14,800.00	90.00	179.45	12,475.00	-1,947.37	653.41	370,388.49	845,814.35	32.0144739	-103.3509790	
14,900.00	90.00	179.45	12,475.00	-2,047.36	654.37	370,288.49	845,815.31	32.0141990	-103.3509789	
15,000.00	90.00	179.45	12,475.00	-2,147.36	655.33	370,188.50	845,816.27	32.0139241	-103.3509787	
15,100.00	90.00	179.45	12,475.00	-2,247.35	656.29	370,088.50	845,817.23	32.0136493	-103.3509785	
15,200.00	90.00	179.45	12,475.00	-2,347.35	657.25	369,988.51	845,818.19	32.0133744	-103.3509784	
15,300.00	90.00	179.45	12,475.00	-2,447.34	658.21	369,888.51	845,819.15	32.0130995	-103.3509782	
15,400.00	90.00	179.45	12,475.00	-2,547.34	659.17	369,788.52	845,820.11	32.0128247	-103.3509780	
15,500.00	90.00	179.45	12,475.00	-2,647.33	660.13	369,688.52	845,821.07	32.0125498	-103.3509779	
15,600.00	90.00	179.45	12,475.00	-2,747.33	661.09	369,588.53	845,822.03	32.0122749	-103.3509777	
15,700.00	90.00	179.45	12,475.00	-2,847.32	662.05	369,488.53	845,822.99	32.0120000	-103.3509775	
15,800.00	90.00	179.45	12,475.00	-2,947.32	663.01	369,388.53	845,823.95	32.0117252	-103.3509774	
15,900.00	90.00	179.45	12,475.00	-3,047.31	663.97	369,288.54	845,824.91	32.0114503	-103.3509772	
16,000.00	90.00	179.45	12,475.00	-3,147.31	664.93	369,188.54	845,825.87	32.0111754	-103.3509770	
16,100.00	90.00	179.45	12,475.00	-3,247.31	665.89	369,088.55	845,826.83	32.0109006	-103.3509769	
16,200.00	90.00	179.45	12,475.00	-3,347.30	666.85	368,988.55	845,827.79	32.0106257	-103.3509767	
16,300.00	90.00	179.45	12,475.00	-3,447.30	667.81	368,888.56	845,828.75	32.0103508	-103.3509765	
16,400.00	90.00	179.45	12,475.00	-3,547.29	668.77	368,788.56	845,829.71	32.0100760	-103.3509764	
16,500.00	90.00	179.45	12,475.00	-3,647.29	669.73	368,688.57	845,830.67	32.0098011	-103.3509762	
16,600.00	90.00	179.45	12,475.00	-3,747.28	670.69	368,588.57	845,831.63	32.0095262	-103.3509761	
16,700.00	90.00	179.45	12,475.00	-3,847.28	671.65	368,488.58	845,832.59	32.0092513	-103.3509759	
16,800.00	90.00	179.45	12,475.00	-3,947.27	672.61	368,388.58	845,833.55	32.0089765	-103.3509757	
16,900.00	90.00	179.45	12,475.00	-4,047.27	673.57	368,288.59	845,834.51	32.0087016	-103.3509756	
17,000.00	90.00	179.45	12,475.00	-4,147.26	674.53	368,188.59	845,835.47	32.0084267	-103.3509754	
17,100.00	90.00	179.45	12,475.00	-4,247.26	675.49	368,088.60	845,836.43	32.0081519	-103.3509752	
17,200.00	90.00	179.45	12,475.00	-4,347.25	676.45	367,988.60	845,837.39	32.0078770	-103.3509751	
17,300.00	90.00	179.45	12,475.00	-4,447.25	677.41	367,888.61	845,838.35	32.0076021	-103.3509749	
17,400.00	90.00	179.45	12,475.00	-4,547.25	678.37	367,788.61	845,839.31	32.0073273	-103.3509747	
17,500.00	90.00	179.45	12,475.00	-4,647.24	679.33	367,688.62	845,840.27	32.0070524	-103.3509746	
17,600.00	90.00	179.45	12,475.00	-4,747.24	680.29	367,588.62	845,841.23	32.0067775	-103.3509744	
17,700.00	90.00	179.45	12,475.00	-4,847.23	681.25	367,488.63	845,842.19	32.0065026	-103.3509742	

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSC Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL-350FEL) WC A100		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
17,800.00	90.00	179.45	12,475.00	-4,947.23	682.21	367,388.63	845,843.15	32.0062278	-103.3509741
17,900.00	90.00	179.45	12,475.00	-5,047.22	683.17	367,288.64	845,844.11	32.0059529	-103.3509739
18,000.00	90.00	179.45	12,475.00	-5,147.22	684.13	367,188.64	845,845.07	32.0056780	-103.3509737
18,100.00	90.00	179.45	12,475.00	-5,247.21	685.09	367,088.65	845,846.03	32.0054032	-103.3509736
18,200.00	90.00	179.45	12,475.00	-5,347.21	686.05	366,988.65	845,846.99	32.0051283	-103.3509734
18,300.00	90.00	179.45	12,475.00	-5,447.20	687.01	366,888.66	845,847.95	32.0048534	-103.3509733
18,400.00	90.00	179.45	12,475.00	-5,547.20	687.97	366,788.66	845,848.91	32.0045786	-103.3509731
18,500.00	90.00	179.45	12,475.00	-5,647.19	688.93	366,688.66	845,849.87	32.0043037	-103.3509729
18,600.00	90.00	179.45	12,475.00	-5,747.19	689.89	366,588.67	845,850.83	32.0040288	-103.3509728
18,700.00	90.00	179.45	12,475.00	-5,847.19	690.85	366,488.67	845,851.79	32.0037539	-103.3509726
18,800.00	90.00	179.45	12,475.00	-5,947.18	691.81	366,388.68	845,852.75	32.0034791	-103.3509724
18,900.00	90.00	179.45	12,475.00	-6,047.18	692.77	366,288.68	845,853.71	32.0032042	-103.3509723
19,000.00	90.00	179.45	12,475.00	-6,147.17	693.73	366,188.69	845,854.67	32.0029293	-103.3509721
19,100.00	90.00	179.45	12,475.00	-6,247.17	694.69	366,088.69	845,855.63	32.0026545	-103.3509719
19,200.00	90.00	179.45	12,475.00	-6,347.16	695.65	365,988.70	845,856.59	32.0023796	-103.3509718
19,300.00	90.00	179.45	12,475.00	-6,447.16	696.61	365,888.70	845,857.55	32.0021047	-103.3509716
19,400.00	90.00	179.45	12,475.00	-6,547.15	697.57	365,788.71	845,858.51	32.0018298	-103.3509714
19,434.56	90.00	179.45	12,475.00	-6,581.71	697.90	365,754.15	845,858.84	32.0017349	-103.3509714
19,450.00	90.00	177.56	12,475.00	-6,597.15	698.30	365,738.72	845,859.24	32.0016924	-103.3509705
19,475.00	90.00	174.49	12,475.00	-6,622.08	700.04	365,713.78	845,860.97	32.0016238	-103.3509657
19,500.00	90.00	171.43	12,475.00	-6,646.89	703.10	365,688.97	845,864.04	32.0015556	-103.3509565
19,525.00	90.00	168.36	12,475.00	-6,671.50	707.49	365,664.36	845,868.42	32.0014878	-103.3509431
19,550.00	90.00	165.30	12,475.00	-6,695.84	713.18	365,640.02	845,874.12	32.0014208	-103.3509254
19,575.00	90.00	162.23	12,475.00	-6,719.84	720.17	365,616.02	845,881.11	32.0013546	-103.3509036
19,600.00	90.00	159.17	12,475.00	-6,743.43	728.43	365,592.43	845,889.37	32.0012896	-103.3508776
19,625.00	90.00	156.10	12,475.00	-6,766.55	737.94	365,569.31	845,898.88	32.0012258	-103.3508476
19,650.00	90.00	153.04	12,475.00	-6,789.12	748.68	365,546.74	845,909.62	32.0011635	-103.3508137
19,675.00	90.00	149.97	12,475.00	-6,811.09	760.61	365,524.77	845,921.54	32.0011028	-103.3507758
19,700.00	90.00	146.91	12,475.00	-6,832.39	773.69	365,503.47	845,934.63	32.0010439	-103.3507343
19,720.90	90.00	144.34	12,475.00	-6,849.64	785.49	365,486.22	845,946.42	32.0009962	-103.3506967
Start No Perf@19720.90'MD									
19,725.00	90.00	143.84	12,475.00	-6,852.96	787.89	365,482.90	845,948.83	32.0009870	-103.3506891
19,750.00	90.00	140.78	12,475.00	-6,872.74	803.18	365,463.12	845,964.11	32.0009323	-103.3506403
19,775.00	90.00	137.71	12,475.00	-6,891.68	819.49	365,444.18	845,980.43	32.0008798	-103.3505883
19,800.00	90.00	134.65	12,475.00	-6,909.71	836.80	365,426.15	845,997.74	32.0008298	-103.3505330
19,825.00	90.00	131.58	12,475.00	-6,926.80	855.05	365,409.06	846,015.99	32.0007824	-103.3504746
19,850.00	90.00	128.52	12,475.00	-6,942.88	874.18	365,392.98	846,035.12	32.0007377	-103.3504134
19,875.00	90.00	125.45	12,475.00	-6,957.92	894.15	365,377.94	846,055.09	32.0006959	-103.3503494
19,900.00	90.00	122.39	12,475.00	-6,971.87	914.90	365,363.99	846,075.83	32.0006570	-103.3502829
19,925.00	90.00	119.32	12,475.00	-6,984.69	936.35	365,351.17	846,097.29	32.0006213	-103.3502141
19,950.00	90.00	116.26	12,475.00	-6,996.34	958.47	365,339.52	846,119.41	32.0005887	-103.3501431
19,975.00	90.00	113.19	12,475.00	-7,006.80	981.17	365,329.06	846,142.11	32.0005594	-103.3500701
20,000.00	90.00	110.13	12,475.00	-7,016.02	1,004.41	365,319.84	846,165.34	32.0005334	-103.3499955
20,025.00	90.00	107.06	12,475.00	-7,023.99	1,028.10	365,311.87	846,189.04	32.0005109	-103.3499193
20,050.00	90.00	104.00	12,475.00	-7,030.69	1,052.18	365,305.18	846,213.12	32.0004919	-103.3498418
20,075.00	90.00	100.93	12,475.00	-7,036.08	1,076.59	365,299.78	846,237.53	32.0004765	-103.3497632
20,100.00	90.00	97.87	12,475.00	-7,040.16	1,101.25	365,295.70	846,262.19	32.0004647	-103.3496838
20,125.00	90.00	94.80	12,475.00	-7,042.92	1,126.10	365,292.94	846,287.03	32.0004565	-103.3496038
20,150.00	90.00	91.74	12,475.00	-7,044.35	1,151.05	365,291.51	846,311.99	32.0004519	-103.3495233
20,164.17	90.00	90.00	12,475.00	-7,044.56	1,165.22	365,291.30	846,326.15	32.0004510	-103.3494776
20,175.00	90.00	88.67	12,475.00	-7,044.44	1,176.05	365,291.42	846,336.99	32.0004511	-103.3494427
20,200.00	90.00	85.61	12,475.00	-7,043.19	1,201.02	365,292.67	846,361.95	32.0004539	-103.3493621
20,225.00	90.00	82.54	12,475.00	-7,040.61	1,225.88	365,295.25	846,386.82	32.0004603	-103.3492818
20,250.00	90.00	79.48	12,475.00	-7,036.70	1,250.57	365,299.16	846,411.51	32.0004704	-103.3492021

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSC Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL-350FEL) WC A100		

Planned Survey										
Measured			Vertical			Map		Map		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting		Latitude	Longitude
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)			
20,275.00	90.00	76.41	12,475.00	-7,031.48	1,275.02	365,304.38	846,435.95		32.0004842	-103.3491231
20,300.00	90.00	73.35	12,475.00	-7,024.96	1,299.15	365,310.90	846,460.08		32.0005015	-103.3490451
20,325.00	90.00	70.28	12,475.00	-7,017.16	1,322.90	365,318.70	846,483.83		32.0005224	-103.3489682
20,350.00	90.00	67.22	12,475.00	-7,008.10	1,346.19	365,327.76	846,507.13		32.0005467	-103.3488928
20,375.00	90.00	64.15	12,475.00	-6,997.81	1,368.97	365,338.05	846,529.91		32.0005744	-103.3488190
20,400.00	90.00	61.09	12,475.00	-6,986.31	1,391.17	365,349.55	846,552.10		32.0006054	-103.3487471
20,425.00	90.00	58.02	12,475.00	-6,973.64	1,412.72	365,362.22	846,573.65		32.0006397	-103.3486772
20,450.00	90.00	54.96	12,475.00	-6,959.84	1,433.56	365,376.02	846,594.50		32.0006771	-103.3486096
20,475.00	90.00	51.89	12,475.00	-6,944.95	1,453.64	365,390.91	846,614.57		32.0007176	-103.3485444
20,500.00	90.00	48.83	12,475.00	-6,929.00	1,472.88	365,406.86	846,633.82		32.0007609	-103.3484819
20,525.00	90.00	45.76	12,475.00	-6,912.05	1,491.25	365,423.81	846,652.19		32.0008071	-103.3484221
20,550.00	90.00	42.70	12,475.00	-6,894.14	1,508.69	365,441.73	846,669.63		32.0008558	-103.3483653
20,575.00	90.00	39.63	12,475.00	-6,875.32	1,525.14	365,460.54	846,686.08		32.0009072	-103.3483117
20,600.00	90.00	36.57	12,475.00	-6,855.65	1,540.57	365,480.22	846,701.50		32.0009608	-103.3482614
20,616.69	90.00	34.52	12,475.00	-6,842.07	1,550.27	365,493.79	846,711.21		32.0009979	-103.3482297
End No Perf@20616.69'MD										
20,625.00	90.00	33.50	12,475.00	-6,835.18	1,554.92	365,500.68	846,715.85		32.0010167	-103.3482145
20,650.00	90.00	30.44	12,475.00	-6,813.97	1,568.15	365,521.89	846,729.09		32.0010747	-103.3481712
20,675.00	90.00	27.37	12,475.00	-6,792.09	1,580.23	365,543.77	846,741.17		32.0011345	-103.3481316
20,700.00	90.00	24.31	12,475.00	-6,769.59	1,591.13	365,566.27	846,752.07		32.0011961	-103.3480958
20,725.00	90.00	21.24	12,475.00	-6,746.54	1,600.81	365,589.32	846,761.74		32.0012592	-103.3480639
20,750.00	90.00	18.18	12,475.00	-6,723.01	1,609.24	365,612.85	846,770.17		32.0013237	-103.3480360
20,775.00	90.00	15.11	12,475.00	-6,699.06	1,616.40	365,636.80	846,777.33		32.0013893	-103.3480122
20,800.00	90.00	12.05	12,475.00	-6,674.76	1,622.27	365,661.10	846,783.20		32.0014560	-103.3479926
20,825.00	90.00	8.98	12,475.00	-6,650.19	1,626.83	365,685.68	846,787.76		32.0015234	-103.3479771
20,850.00	90.00	5.92	12,475.00	-6,625.40	1,630.07	365,710.46	846,791.00		32.0015915	-103.3479659
20,875.00	90.00	2.85	12,475.00	-6,600.48	1,631.98	365,735.38	846,792.92		32.0016599	-103.3479590
20,902.42	90.00	359.49	12,475.00	-6,573.06	1,632.54	365,762.80	846,793.48		32.0017352	-103.3479564
21,000.00	90.00	359.49	12,475.00	-6,475.49	1,631.67	365,860.37	846,792.61		32.0020035	-103.3479564
21,100.00	90.00	359.49	12,475.00	-6,375.49	1,630.78	365,960.37	846,791.72		32.0022783	-103.3479563
21,200.00	90.00	359.49	12,475.00	-6,275.50	1,629.89	366,060.36	846,790.83		32.0025532	-103.3479562
21,300.00	90.00	359.49	12,475.00	-6,175.50	1,629.00	366,160.36	846,789.94		32.0028281	-103.3479562
21,400.00	90.00	359.49	12,475.00	-6,075.51	1,628.11	366,260.35	846,789.05		32.0031029	-103.3479561
21,500.00	90.00	359.49	12,475.00	-5,975.51	1,627.22	366,360.35	846,788.16		32.0033778	-103.3479560
21,600.00	90.00	359.49	12,475.00	-5,875.51	1,626.33	366,460.35	846,787.27		32.0036527	-103.3479559
21,700.00	90.00	359.49	12,475.00	-5,775.52	1,625.45	366,560.34	846,786.38		32.0039275	-103.3479559
21,800.00	90.00	359.49	12,475.00	-5,675.52	1,624.56	366,660.34	846,785.49		32.0042024	-103.3479558
21,900.00	90.00	359.49	12,475.00	-5,575.53	1,623.67	366,760.33	846,784.60		32.0044773	-103.3479557
22,000.00	90.00	359.49	12,475.00	-5,475.53	1,622.78	366,860.33	846,783.72		32.0047522	-103.3479556
22,100.00	90.00	359.49	12,475.00	-5,375.53	1,621.89	366,960.33	846,782.83		32.0050270	-103.3479556
22,200.00	90.00	359.49	12,475.00	-5,275.54	1,621.00	367,060.32	846,781.94		32.0053019	-103.3479555
22,300.00	90.00	359.49	12,475.00	-5,175.54	1,620.11	367,160.32	846,781.05		32.0055768	-103.3479554
22,400.00	90.00	359.49	12,475.00	-5,075.55	1,619.23	367,260.31	846,780.16		32.0058516	-103.3479553
22,500.00	90.00	359.49	12,475.00	-4,975.55	1,618.34	367,360.31	846,779.27		32.0061265	-103.3479553
22,600.00	90.00	359.49	12,475.00	-4,875.55	1,617.45	367,460.30	846,778.39		32.0064014	-103.3479552
22,700.00	90.00	359.49	12,475.00	-4,775.56	1,616.56	367,560.30	846,777.50		32.0066762	-103.3479551
22,800.00	90.00	359.49	12,475.00	-4,675.56	1,615.68	367,660.30	846,776.61		32.0069511	-103.3479550
22,900.00	90.00	359.49	12,475.00	-4,575.57	1,614.79	367,760.29	846,775.73		32.0072260	-103.3479550
23,000.00	90.00	359.49	12,475.00	-4,475.57	1,613.90	367,860.29	846,774.84		32.0075009	-103.3479549
23,100.00	90.00	359.49	12,475.00	-4,375.57	1,613.02	367,960.28	846,773.95		32.0077757	-103.3479548
23,200.00	90.00	359.49	12,475.00	-4,275.58	1,612.13	368,060.28	846,773.07		32.0080506	-103.3479547
23,300.00	90.00	359.49	12,475.00	-4,175.58	1,611.24	368,160.28	846,772.18		32.0083255	-103.3479546
23,400.00	90.00	359.49	12,475.00	-4,075.58	1,610.36	368,260.27	846,771.29		32.0086003	-103.3479546
23,500.00	90.00	359.49	12,475.00	-3,975.59	1,609.47	368,360.27	846,770.41		32.0088752	-103.3479545

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSC Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL-350FEL) WC A100		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
23,600.00	90.00	359.49	12,475.00	-3,875.59	1,608.58	368,460.26	846,769.52	32.0091501	-103.3479544
23,700.00	90.00	359.49	12,475.00	-3,775.60	1,607.70	368,560.26	846,768.63	32.0094249	-103.3479543
23,800.00	90.00	359.49	12,475.00	-3,675.60	1,606.81	368,660.26	846,767.75	32.0096998	-103.3479542
23,900.00	90.00	359.49	12,475.00	-3,575.60	1,605.93	368,760.25	846,766.86	32.0099747	-103.3479541
24,000.00	90.00	359.49	12,475.00	-3,475.61	1,605.04	368,860.25	846,765.98	32.0102496	-103.3479541
24,100.00	90.00	359.49	12,475.00	-3,375.61	1,604.16	368,960.24	846,765.09	32.0105244	-103.3479540
24,200.00	90.00	359.49	12,475.00	-3,275.62	1,603.27	369,060.24	846,764.21	32.0107993	-103.3479539
24,300.00	90.00	359.49	12,475.00	-3,175.62	1,602.39	369,160.23	846,763.32	32.0110742	-103.3479538
24,400.00	90.00	359.49	12,475.00	-3,075.62	1,601.50	369,260.23	846,762.44	32.0113490	-103.3479537
24,500.00	90.00	359.49	12,475.00	-2,975.63	1,600.62	369,360.23	846,761.55	32.0116239	-103.3479536
24,600.00	90.00	359.49	12,475.00	-2,875.63	1,599.73	369,460.22	846,760.67	32.0118988	-103.3479535
24,700.00	90.00	359.49	12,475.00	-2,775.64	1,598.85	369,560.22	846,759.78	32.0121736	-103.3479534
24,800.00	90.00	359.49	12,475.00	-2,675.64	1,597.96	369,660.21	846,758.90	32.0124485	-103.3479534
24,900.00	90.00	359.49	12,475.00	-2,575.64	1,597.08	369,760.21	846,758.02	32.0127234	-103.3479533
25,000.00	90.00	359.49	12,475.00	-2,475.65	1,596.20	369,860.21	846,757.13	32.0129983	-103.3479532
25,100.00	90.00	359.49	12,475.00	-2,375.65	1,595.31	369,960.20	846,756.25	32.0132731	-103.3479531
25,200.00	90.00	359.49	12,475.00	-2,275.66	1,594.43	370,060.20	846,755.36	32.0135480	-103.3479530
25,300.00	90.00	359.49	12,475.00	-2,175.66	1,593.54	370,160.19	846,754.48	32.0138229	-103.3479529
25,400.00	90.00	359.49	12,475.00	-2,075.66	1,592.66	370,260.19	846,753.60	32.0140977	-103.3479528
25,500.00	90.00	359.49	12,475.00	-1,975.67	1,591.78	370,360.19	846,752.71	32.0143726	-103.3479527
25,600.00	90.00	359.49	12,475.00	-1,875.67	1,590.90	370,460.18	846,751.83	32.0146475	-103.3479526
25,700.00	90.00	359.49	12,475.00	-1,775.67	1,590.01	370,560.18	846,750.95	32.0149223	-103.3479525
25,800.00	90.00	359.49	12,475.00	-1,675.68	1,589.13	370,660.17	846,750.07	32.0151972	-103.3479524
25,900.00	90.00	359.49	12,475.00	-1,575.68	1,588.25	370,760.17	846,749.18	32.0154721	-103.3479523
26,000.00	90.00	359.49	12,475.00	-1,475.69	1,587.36	370,860.16	846,748.30	32.0157470	-103.3479523
26,100.00	90.00	359.49	12,475.00	-1,375.69	1,586.48	370,960.16	846,747.42	32.0160218	-103.3479522
26,200.00	90.00	359.49	12,475.00	-1,275.69	1,585.60	371,060.16	846,746.54	32.0162967	-103.3479521
26,300.00	90.00	359.49	12,475.00	-1,175.70	1,584.72	371,160.15	846,745.65	32.0165716	-103.3479520
26,400.00	90.00	359.49	12,475.00	-1,075.70	1,583.84	371,260.15	846,744.77	32.0168464	-103.3479519
26,500.00	90.00	359.49	12,475.00	-975.71	1,582.96	371,360.14	846,743.89	32.0171213	-103.3479518
26,600.00	90.00	359.50	12,475.00	-875.71	1,582.07	371,460.14	846,743.01	32.0173962	-103.3479517
26,700.00	90.00	359.50	12,475.00	-775.71	1,581.19	371,560.14	846,742.13	32.0176710	-103.3479516
26,800.00	90.00	359.50	12,475.00	-675.72	1,580.31	371,660.13	846,741.25	32.0179459	-103.3479515
26,900.00	90.00	359.50	12,475.00	-575.72	1,579.43	371,760.13	846,740.37	32.0182208	-103.3479514
27,000.00	90.00	359.50	12,475.00	-475.73	1,578.55	371,860.12	846,739.49	32.0184957	-103.3479513
27,100.00	90.00	359.50	12,475.00	-375.73	1,577.67	371,960.12	846,738.60	32.0187705	-103.3479512
27,200.00	90.00	359.50	12,475.00	-275.73	1,576.79	372,060.12	846,737.72	32.0190454	-103.3479511
27,300.00	90.00	359.50	12,475.00	-175.74	1,575.91	372,160.11	846,736.84	32.0193203	-103.3479510
27,400.00	90.00	359.50	12,475.00	-75.74	1,575.03	372,260.11	846,735.96	32.0195951	-103.3479509
27,500.00	90.00	359.50	12,475.00	24.26	1,574.15	372,360.10	846,735.08	32.0198700	-103.3479508
27,600.00	90.00	359.50	12,475.00	124.25	1,573.27	372,460.10	846,734.20	32.0201449	-103.3479507
27,700.00	90.00	359.50	12,475.00	224.25	1,572.39	372,560.10	846,733.32	32.0204197	-103.3479506
27,800.00	90.00	359.50	12,475.00	324.24	1,571.51	372,660.09	846,732.44	32.0206946	-103.3479505
27,900.00	90.00	359.50	12,475.00	424.24	1,570.63	372,760.09	846,731.56	32.0209695	-103.3479503
27,990.49	90.00	359.50	12,475.00	514.73	1,569.83	372,850.57	846,730.77	32.0212182	-103.3479503
LTP@27990.49 MD_100FNI, 350FEL									
28,000.00	90.00	359.50	12,475.00	524.24	1,569.75	372,860.08	846,730.69	32.0212444	-103.3479502
28,070.50	90.00	359.50	12,475.00	594.73	1,569.13	372,930.58	846,730.07	32.0214381	-103.3479502

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well ARENA ROJA FED UNIT 713H
Company:	WCDSC Permian NM	TVD Reference:	GL:3064.60+25ft @ 3089.60ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3064.60+25ft @ 3089.60ft
Site:	Sec 27-T26S-R35E	North Reference:	Grid
Well:	ARENA ROJA FED UNIT 713H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R2 (1290FEL-350FEL) WC A100		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
TP#3 (251FSL, 475FEL) - plan misses target center by 7007.90ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E) - Point	0.00	0.00	0.00	-6,842.07	1,515.46	365,493.79	846,676.40	32.0009988	-103.3483420
KOP (713H) 50FNL, 129FEL - plan misses target center by 839.74ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E) - Point	0.00	0.00	0.00	555.92	629.38	372,891.77	845,790.32	32.0213550	-103.3509831
TP#2 (251FSL, 1166FEL) - plan misses target center by 6899.15ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E) - Point	0.00	0.00	0.00	-6,849.64	824.99	365,486.22	845,985.93	32.0009952	-103.3505693
FTP (100FNL, 1290FEL) - plan misses target center by 807.89ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E) - Point	0.00	0.00	0.00	505.92	629.87	372,841.77	845,790.81	32.0212175	-103.3509830
LTP (713H) 100FNL, 350FEL - plan hits target center - Point	0.00	0.00	12,475.00	514.73	1,569.83	372,850.58	846,730.77	32.0212182	-103.3479503

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
967.00	967.00	Rustler				
1,430.00	1,430.00	Salt				
4,915.56	4,880.00	Base of Salt				
4,915.56	4,880.00	Delaware				
6,265.02	6,211.00	Cherry Canyon				
7,751.52	7,684.00	Brushy Canyon				
9,150.52	9,083.00	1st Bone Spring Lime				
10,437.52	10,370.00	Bone Spring 1st				
10,951.52	10,884.00	Bone Spring 2nd				
11,397.52	11,330.00	3rd Bone Spring Lime				
12,088.37	12,020.00	Bone Spring 3rd				
12,433.61	12,317.00	Wolfcamp				

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
11,969.56	11,902.04	555.92	629.38	KOP@11969.56'MD_50FNL, 1290FEL
12,212.95	12,138.18	505.00	629.87	FTP@12212.95'MD_100FNL, 1290FEL
19,720.90	12,475.00	-6,849.64	785.49	Start No Perf@19720.90'MD
20,616.69	12,475.00	-6,842.07	1,550.27	End No Perf@20616.69'MD
27,990.49	12,475.00	514.73	1,569.83	LTP@27990.49'MD_100FNL, 350FEL

ARENA ROJA FED UNIT 713H

1. Geologic Formations

TVD of target	12475	Pilot hole depth	N/A
MD at TD:	28070	Deepest expected fresh water	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	967		
Salt	1430		
Base of Salt	4880		
Delaware	4880		
Cherry Canyon	6211		
Brushy Canyon	7684		
1st Bone Spring Lime	9083		
Bone Spring 1st	10370		
Bone Spring 2nd	10884		
3rd Bone Spring Lime	11330		
Bone Spring 3rd	12020		
Wolfcamp	12317		

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

ARENA ROJA FED UNIT 713H

2. Casing Program

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	54 1/2	J-55	BTC	0	1037	0	1037
9 7/8	8 5/8	32	P110HP	Sprint FJ	0	11869	0	11869
7 7/8	5 1/2	20	P110HP	CDC-HTQ	0	28070	0	12475

• 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

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	# Sks	TOC	Wt. ppg	Yld (ft3/sack)	Slurry Description
Surface	788	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	687	Surf	13.0	2.3	2nd State: Bradenhead Squeeze - Lead: Class C Cement + additives
	479	7751	13.2	1.44	Tail: Class H / C + additives
Production	117	9969	9	3.27	Lead: Class H / C + additives
	2131	11969	13.2	1.44	Tail: Class H / C + additives

Devon Energy requests to offline cement on intermediate strings that are set in formations shallower than the Wolfcamp. Prior to commencing offline cementing operations, the well will be monitored for any abnormal pressures and confirmed to be static. A dual manifold system (equipped with chokes) for the returns will also be utilized as a redundancy. All equipment used for offline cementing will have a minimum 5M rating to match intermediate sections' 5M BOPE requirements.

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

ARENA ROJA FED UNIT 713H

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					

ARENA ROJA FED UNIT 713H

5. Mud Program (Three String Design)

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

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

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

6. Logging and Testing Procedures

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

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

7. Drilling Conditions

Condition	Specify what type and where?
BH pressure at deepest TVD	6811
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.

ARENA ROJA FED UNIT 713H

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

Attachments

X Directional Plan
 Other, describe



13-3/8" 54.50# .380 J-55

Dimensions (Nominal)

Outside Diameter	13.375	in.
Wall	0.380	in.
Inside Diameter	12.615	in.
Drift	12.459	in.
Weight, T&C	54.500	lbs/ft
Weight, PE	52.790	lbs/ft

Performance Ratings, Minimum

Collapse, PE	1130	psi
Internal Yields Pressure		
PE	2730	psi
STC	2730	PSI
BTC	2730	psi
Yield Strength, Pipe Body	853	1000 lbs
Joint Strength, STC	514	1000 lbs
Joint Strength, BTC	909	1000 lbs

Note: SeAH Steel has produced this specification sheet for general information only. SeAH does not assume liability or responsibility for any loss or injury resulting from the use of information or data contained herein. All applications for the material described are at the customer's own risk and responsibility.



U. S. Steel Tubular Products
5.500" 20.00lb/ft (0.361" Wall) P110 HP USS-CDC HTQ[®]

2/21/2024 7:47:29 AM



MECHANICAL PROPERTIES	Pipe	USS-CDC HTQ [®]		--
Minimum Yield Strength	125,000	--	psi	--
Maximum Yield Strength	140,000	--	psi	--
Minimum Tensile Strength	130,000	--	psi	--
DIMENSIONS	Pipe	USS-CDC HTQ [®]		--
Outside Diameter	5.500	6.300	in.	--
Wall Thickness	0.361	--	in.	--
Inside Diameter	4.778	4.778	in.	--
Standard Drift	4.653	4.653	in.	--
Alternate Drift	--	--	in.	--
Nominal Linear Weight, T&C	20.00	--	lb/ft	--
Plain End Weight	19.83	--	lb/ft	--
SECTION AREA	Pipe	USS-CDC HTQ [®]		--
Critical Area	5.828	5.828	sq. in.	--
Joint Efficiency	--	97.0	%	--
PERFORMANCE	Pipe	USS-CDC HTQ [®]		--
Minimum Collapse Pressure	13,150	13,150	psi	--
External Pressure Leak Resistance	--	10,520	psi	--
Minimum Internal Yield Pressure	14,360	14,360	psi	--
Minimum Pipe Body Yield Strength	729,000	--	lb	--
Joint Strength	--	707,000	lb	--
Compression Rating	--	424,000	lb	--
Reference Length	--	23,567	ft	--
Maximum Uniaxial Bend Rating	--	60.6	deg/100 ft	--
MAKE-UP DATA	Pipe	USS-CDC HTQ [®]		--
Make-Up Loss	--	4.63	in.	--
Minimum Make-Up Torque	--	14,500	ft-lb	--
Maximum Make-Up Torque	--	20,500	ft-lb	--
Connection Yield Torque	--	25,300	ft-lb	--

UNCONTROLLED

Notes

- Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness and Specified Minimum Yield Strength (SMYS).
- Uniaxial bending rating shown is structural only, and equal to compression efficiency.
- Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
- Reference length is calculated by joint strength divided by nominal threaded and coupled weight with 1.5 safety factor.
- Connection external pressure leak resistance has been verified to 80% API pipe body collapse pressure following the guidelines of API 5C5 Cal II.

Legal Notice

USS - CDC HTQ[®] (High Torque Casing Drilling Connection) is a trademark of U. S. Steel Corporation. This product is a modified API Buttress threaded and coupled connection designed for drilling with casing applications. All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U. S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application.

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Spring, Texas 77380

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www.usstubular.com

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION		Revised July, 2024	
			Submittal Type:	☐ Initial Submittal
				☒ Amended Report
		☐ As Drilled		

WELL LOCATION INFORMATION

API Number 30-025-53643	Pool Code 96776	Pool Name JABALINA;WOLFCAMP, SOUTHWEST
Property Code 34832	Property Name ARENA ROJA FED UNIT	Well Number 713H
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	Ground Level Elevation 3064.6'
Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal		Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	27	26-S	35-E		600' N	1925' E	32.019843	103.353030	LEA

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	27	26-S	35-E		20' N	350' E	32.021438	103.347950	LEA

Dedicated Acres 933.76	Infill or Defining Well Infill	Defining Well API 30-025-53446	Overlapping Spacing Unit (Y/N) Y	Consolidation Code U
Order Numbers			Well setbacks are under Common Ownership: ☒ Yes ☐ No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	27	26-S	35-E		50' N	1290' E	32.021355	103.350983	LEA

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	27	26-S	35-E		100' N	1290' E	32.021218	103.350983	LEA

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	27	26-S	35-E		100' N	350' E	32.021218	103.347950	LEA

Spacing Unit Type		Horizontal	Vertical	Ground Floor Elevation:
		HZ		

OPERATOR CERTIFICATIONS

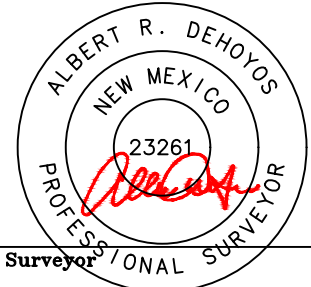
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Signature <i>Rebecca Deal</i>	Date 9/23/2025
Printed Name Rebecca Deal, Regulatory Analyst	
Email Address rebecca.deal@dmn.com	

SURVEYOR CERTIFICATIONS

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



Signature and Seal of Professional Surveyor	
Certificate Number 23261	Date of Survey 08/20/2025

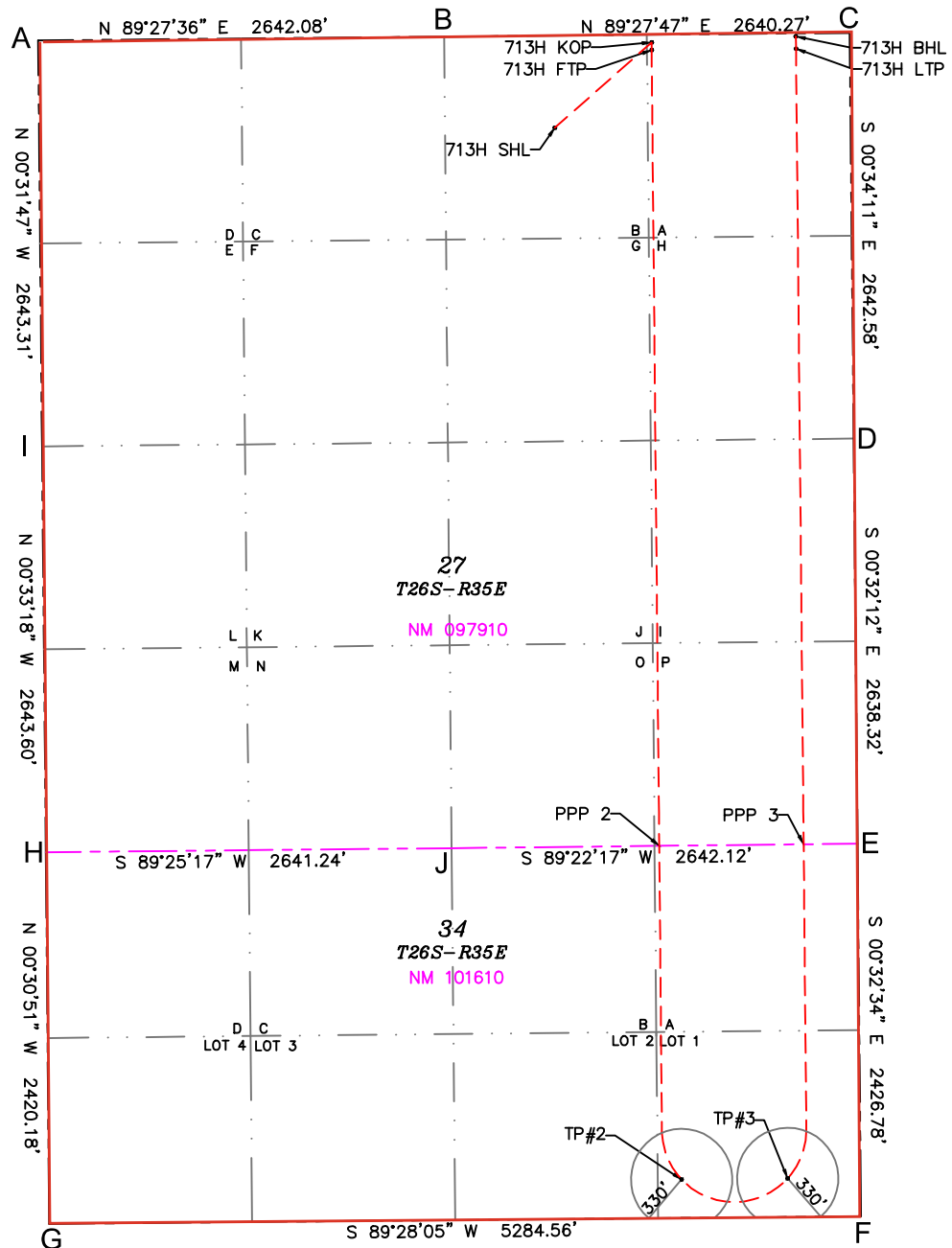
ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

SURFACE HOLE LOCATION GEODETIC COORDINATES NAD 83 NMSP EAST SURFACE LOCATION 600' FNL 1925' FEL SECTION 27 EL: 3064.6' N: 372335.84/E: 845160.94 LAT: 32.019843/LON: 103.353030
KICK OFF POINT 50' FNL 1290' FEL SECTION 27 N: 372891.77/E: 845790.32 LAT: 32.021355/LON: 103.350983
FIRST TAKE POINT 100' FNL 1290' FEL SECTION 27 N: 372841.77/E: 845790.81 LAT: 32.021218/LON: 103.350983
TAKE POINT #2 251' FSL 1166' FEL SECTION 34 N: 365486.22/E: 845985.93 LAT: 32.000995/LON: 103.350569
TAKE POINT #3 251' FSL 475' FEL SECTION 34 N: 365493.79/E: 846676.40 LAT: 32.000999/LON: 103.348342
LAST TAKE POINT 100' FNL 350' FEL SECTION 27 N: 372850.58/E: 846730.77 LAT: 32.021218/LON: 103.347950
BOTTOM HOLE LOCATION 20' FNL 350' FEL SECTION 27 N: 372930.58/E: 846729.98 LAT: 32.021438/LON: 103.347950
PPP 2 0' FNL 1291' FEL SECTION 34 N: 367659.05/E: 845840.34 LAT: 32.006971/LON: 103.350975
PPP 3 0' FNL 351' FEL SECTION 34 N: 367669.36/E: 846780.29 LAT: 32.006976/LON: 103.347943

A=N:372904.21 E:841797.65
B=N:372929.11 E:844439.61
C=N:372953.86 E:847079.76
D=N:370311.41 E:847106.04
E=N:367673.21 E:847130.76
F=N:365246.54/E:847153.74
G=N:365197.46/E:841869.41
H=N:367617.55 E:841847.69
I=N:370261.02 E:841822.08
J=N:367644.22 E:844488.79



27-26-35B Sundry ID 2875420 Arena Roja Fed Unit 713H.xlsm

Arena Roja Fed Unit 713H

13 3/8	surface csg in a		17 1/2	inch hole.		Design Factors			Surface			
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	54.50		j 55	btc	15.05	2.32	0.42	1,040	6	0.71	4.39	56,680
"B"				btc				0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,457				Tail Cmt	does not	circ to sfc.		Totals:	1,040			56,680
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
17 1/2	0.6946	788	1135	722	57	9.00	3863	5M				1.56
Burst Frac Gradient(s) for Segment(s) A, B = , b All > 0.70, OK.												
Site plot (pipe racks 5 or 6) as per D.O.D. 1.01 D-4 L not found.												

8 5/8		casing inside the		13 3/8		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	1.96	0.62	1.05	11,869	1	1.76	1.04	379,808	
"B"								0				0	
w/8.4#/g mud, 30min Sfc Csg Test psig: -174								Totals:	11,869				379,808
The cement volume(s) are intended to achieve a top of 0								ft from surface or a		1040			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	479	690	1847	-63	10.50	4060	5M					0.61
r D V Tool(s):			7684		sum of sx			Σ CuFt					Σ%excess
t by stage % :		31	20		1166			2270					23
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	Joint	Collapse	Burst	Length	B@s	a-B	Weight
"A"	20.00		p 110	cdc-htq	2.57	1.87	1.86	11,969	2	3.11	239,380
"B"	20.00		p 110	cdc-htq	2.54	1.65	1.86	7,465	2	3.11	149,300
"C"	20.00		p 110	cdc-htq	2.63	1.62	1.86	730	2	3.11	14,600
"D"	20.00		p 110	cdc-htq	7.58	1.63	1.86	7,906	2	3.11	158,120
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,633								Totals:	28,070		561,400
The cement volume(s) are intended to achieve a top of						11669	ft from surface or a		200	overlap.	
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd			Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE			Hole-Cplg
7 7/8	0.1733	2248	3451	2842	21	10.50					0.79
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.											

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

CONDITIONS

Action 522564

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 522564
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
matthew.gomez	No additives containing PFAS chemicals will be added to the drilling fluids or completion fluids used during drilling, completions, or recompletions operations.	11/24/2025
matthew.gomez	Administrative order required for non-standard spacing unit prior to production.	11/24/2025
matthew.gomez	Directional survey reports the first take point is anticipated to occur within the Bone Spring formation. If production is desired to occur outside of the Wolfcamp formation, a second pool must be added via a [C-103] NOI Change of Plans (C-103A) and a DHC must be approved prior to producing the well.	11/24/2025
matthew.gomez	If cement is not circulated to surface during cementing operations, a Cement Bond Log (CBL) is required.	11/24/2025
matthew.gomez	Cement is required to circulate on both surface and intermediate1 strings of casing.	11/24/2025
matthew.gomez	Notify the OCD 24 hours prior to casing & cement.	11/24/2025
matthew.gomez	All previous COA's still apply.	11/24/2025