

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.5. Lease Serial No.
NMNM05792

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
ROJO 7811 34-27 FEDERAL 41H9. API Well No.
30-025-46098-00-X110. Field and Pool or Exploratory Area
BOBCAT DRAW-UPR WOLFCAMP11. County or Parish, State
LEA COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on page 2**1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator
BTA OIL PRODUCERS LLC
Contact: SAMMY HAJAR
E-Mail: shajar@btaoil.com3a. Address
104 S. PECOS
MIDLAND, TX 797013b. Phone No. (include area code)
Ph: 432-682-37534. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 34 T25S R33E SENW 2510FNL 1365FWL
32.087369 N Lat, 103.564333 W Lon**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A PD
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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

BTA OIL PRODUCERS LLC RESPECTFULLY REQUESTS THE FOLLOWING FOOTAGE, CASING & DRILLING DESIGN, MUD, AND BATCH DRILLING CHANGES TO THE ORIGINAL APD AS APPROVED. PLEASE SEE ATTACHED DOCUMENT FOR MORE DETAILS.

ORIGINAL FOOTAGES:

SHL: 2510'FNL & 1365'FWL in Sec. 34 (SHL IS UNCHANGED/WILL STAY THE SAME)

FTP: 2310' FNL & 2260'FWL in Sec. 34

LTP: 330' FNL & 2260'FWL in Sec. 27

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

Electronic Submission #515034 verified by the BLM Well Information System
For BTA OIL PRODUCERS LLC, sent to the Hobbs
Committed to AFMSS for processing by PRISCILLA PEREZ on 05/13/2020 (20PP2552SE)

Name (Printed/Typed) SAMMY HAJAR

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 05/12/2020

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By OLABODE AJIBOLA

Title PETROLEUM ENGINEER

Date 05/17/2020

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

Office Hobbs

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

(Instructions on page 2)

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

Rec NMOC 05/19/2020

Additional data for EC transaction #515034 that would not fit on the form

32. Additional remarks, continued

BHL: 100' FNL & 2260'FWL in Sec. 27

NEW FOOTAGES:

FTP: 2540' FNL & 330'FWL in Sec. 34

LTP: 100' FNL & 330'FWL in Sec. 27

BHL: 50' FNL & 330'FWL in Sec. 27

Revisions to Operator-Submitted EC Data for Sundry Notice #515034

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	OTHER NOI	APDCH NOI
Lease:	NMNM05792	NMNM05792
Agreement:		
Operator:	BTA OIL PRODUCERS, LLC 104 S. PECOS MIDLAND, TX 79701 Ph: 432-682-3753	BTA OIL PRODUCERS LLC 104 S. PECOS MIDLAND, TX 79701 Ph: 4326823753
Admin Contact:	SAMMY HAJAR REGULATORY ANALYST E-Mail: shajar@btaoil.com Ph: 432-682-3753	SAMMY HAJAR REGULATORY ANALYST E-Mail: shajar@btaoil.com Ph: 432-682-3753
Tech Contact:	SAMMY HAJAR REGULATORY ANALYST E-Mail: shajar@btaoil.com Ph: 432-682-3753	SAMMY HAJAR REGULATORY ANALYST E-Mail: shajar@btaoil.com Ph: 432-682-3753
Location: State: County:	NM LEA COUNTY	NM LEA
Field/Pool:	BOBCAT DRAW/UPPER WOLFCAM	BOBCAT DRAW-UPR WOLFCAMP
Well/Facility:	ROJO 7811 34-27 FEDERAL 41H Sec 34 T25S R33E SENW 2510FNL 1365FWL 32.087369 N Lat, 103.564333 W Lon	ROJO 7811 34-27 FEDERAL 41H Sec 34 T25S R33E SENW 2510FNL 1365FWL 32.087369 N Lat, 103.564333 W Lon

BTA OIL PRODUCERS LLC RESPECTFULLY REQUEST THE FOLLOWING CHANGES TO THE ORIGINAL APD AS APPROVED.

BATCH DRILLING SEQUENCE OF THE 40H and 41H:

- SPUD Rojo #40H – drill 14-3/4” hole and set 10-3/4” csg
- Walk to Rojo #41H, SPUD 14-3/4” hole and set 10-3/4” csg test BOP, drill 9-7/8” hole and set 7-5/8” csg
- Walk to Rojo #40H, test BOP, drill 9-7/8” hole and set 7-5/8” csg, drill 6-3/4” hole and set 5-1/2” x 5” casing.
- Walk to Rojo #41H, test BOP, drill 6-3/4” hole and set 5-1/2” x 5” casing.
- Rig release

Mud Program:

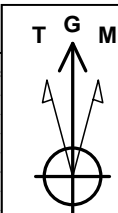
Original Permit

- Surface Section – Fresh water 8.4 ppg
- Intermediate – Brine 10.0 – 10.2 ppg
- 2nd Intermediate – Cut brine 8.6 – 9.2 ppg
- Production – OBM 11.5 – 12.0 ppg

Proposed Change

- Surface Section – Fresh water 8.3 - 8.4 ppg
- Intermediate – DBE 9.0 - 9.4 ppg
- Production – OBM 11.5 – 12.0 ppg

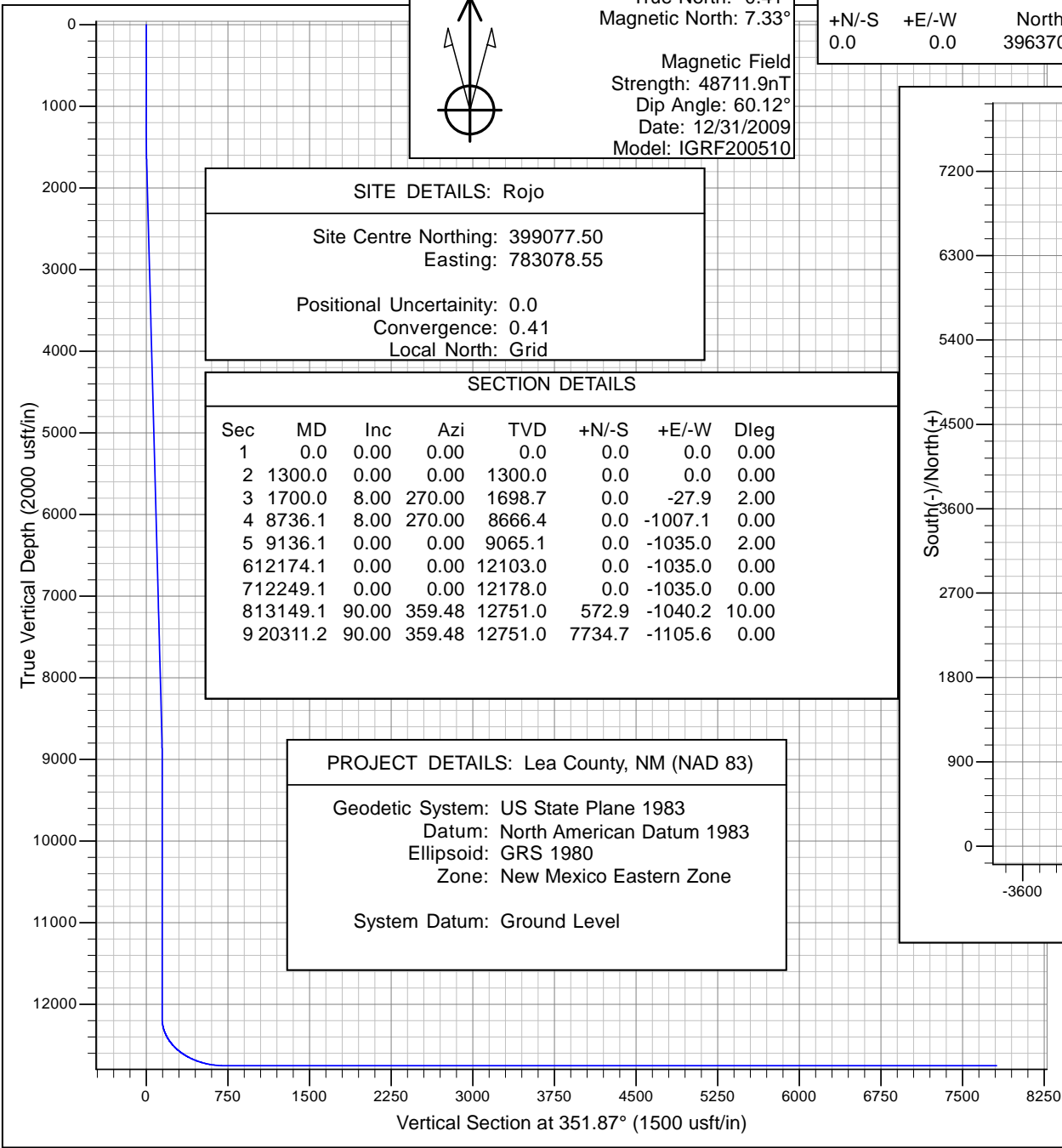
BTA Oil Producers, LLC



Azimuths to Grid North
True North: -0.41°
Magnetic North: 7.33°

Magnetic Field
Strength: 48711.9nT
Dip Angle: 60.12°
Date: 12/31/2009
Model: IGRF200510

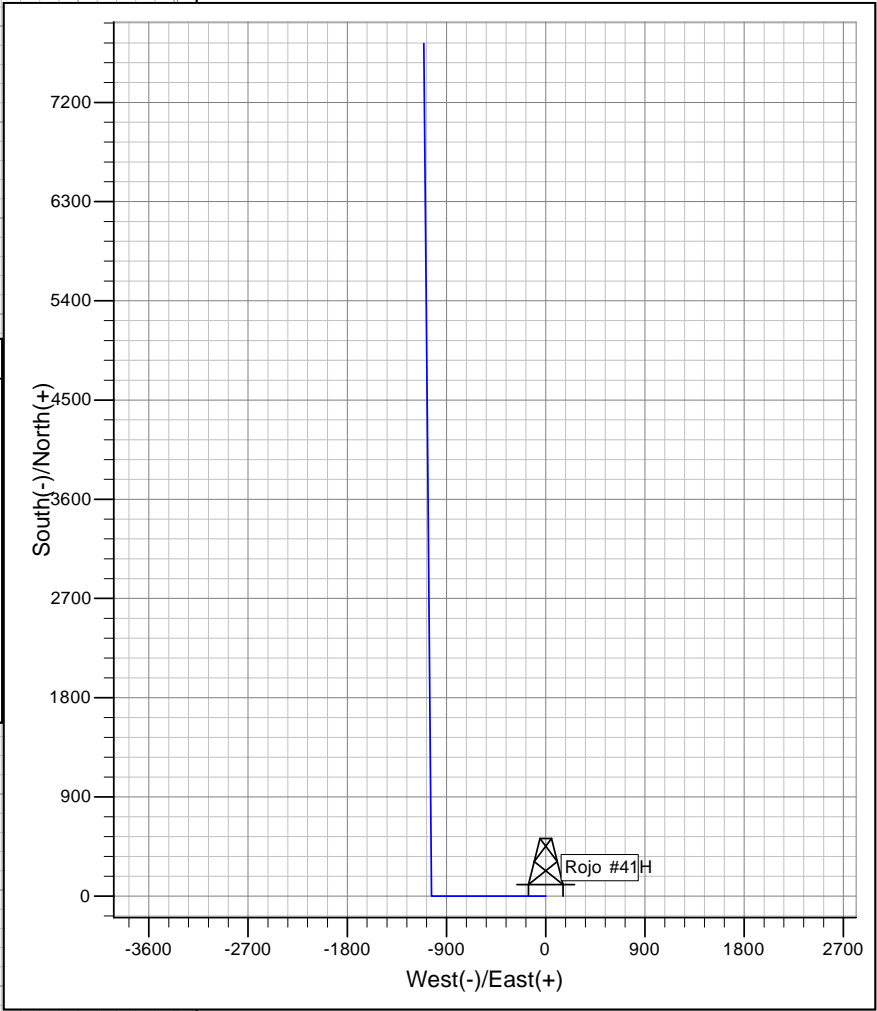
WELL DETAILS: Rojo #41H					
		Ground Level	Ground Level: 3329.0		
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	396370.90	779495.00	32° 5' 14.529 N	103° 33' 51.602 W



SITE DETAILS: Rojo	
Site Centre Northing:	399077.50
Easting:	783078.55
Positional Uncertainty:	0.0
Convergence:	0.41
Local North:	Grid

SECTION DETAILS							
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00
2	1300.0	0.00	0.00	1300.0	0.0	0.0	0.00
3	1700.0	8.00	270.00	1698.7	0.0	-27.9	2.00
4	8736.1	8.00	270.00	8666.4	0.0	-1007.1	0.00
5	9136.1	0.00	0.00	9065.1	0.0	-1035.0	2.00
6	12174.1	0.00	0.00	12103.0	0.0	-1035.0	0.00
7	12249.1	0.00	0.00	12178.0	0.0	-1035.0	0.00
8	13149.1	90.00	359.48	12751.0	572.9	-1040.2	10.00
9	20311.2	90.00	359.48	12751.0	7734.7	-1105.6	0.00

PROJECT DETAILS: Lea County, NM (NAD 83)	
Geodetic System:	US State Plane 1983
Datum:	North American Datum 1983
Ellipsoid:	GRS 1980
Zone:	New Mexico Eastern Zone
System Datum:	Ground Level



BTA Oil Producers, LLC

Lea County, NM (NAD 83)

Rojo

Rojo #41H

Wellbore #1

Plan: Design #1

Standard Planning Report - Geographic

12 May, 2020

OCD – HOBBS
05/19/2020
RECEIVED

Microsoft
Planning Report - Geographic

Database:	Old	Local Co-ordinate Reference:	Well Rojo #41H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3329.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	GL @ 3329.0usft
Site:	Rojo	North Reference:	Grid
Well:	Rojo #41H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Lea County, NM (NAD 83), Lea County, NM		
Map System:	US State Plane 1983	System Datum:	Ground Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		Using geodetic scale factor

Site	Rojo					
Site Position:		Northing:	399,077.50 usft	Latitude:	32° 5' 41.057 N	
From:	Map	Easting:	783,078.55 usft	Longitude:	103° 33' 9.721 W	
Position Uncertainty:		0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.41 °

Well	Rojo #41H					
Well Position	+N/-S	0.0 usft	Northing:	396,370.90 usft	Latitude:	32° 5' 14.529 N
	+E/-W	0.0 usft	Easting:	779,495.00 usft	Longitude:	103° 33' 51.602 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,329.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	7.74	60.12	48,711.93929572

Design	Design #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	351.87

Plan Survey Tool Program	Date	5/12/2020		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	20,311.2 Design #1 (Wellbore #1)		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,700.0	8.00	270.00	1,698.7	0.0	-27.9	2.00	2.00	0.00	270.00	
8,736.1	8.00	270.00	8,666.4	0.0	-1,007.1	0.00	0.00	0.00	0.00	
9,136.1	0.00	0.00	9,065.1	0.0	-1,035.0	2.00	-2.00	0.00	180.00	
12,174.1	0.00	0.00	12,103.0	0.0	-1,035.0	0.00	0.00	0.00	0.00	
12,249.1	0.00	0.00	12,178.0	0.0	-1,035.0	0.00	0.00	0.00	0.00	
13,149.1	90.00	359.48	12,751.0	572.9	-1,040.2	10.00	10.00	0.00	359.48	
20,311.2	90.00	359.48	12,751.0	7,734.7	-1,105.6	0.00	0.00	0.00	0.00	Rojo #41H BHL

Microsoft
Planning Report - Geographic

Database:	Old	Local Co-ordinate Reference:	Well Rojo #41H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3329.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	GL @ 3329.0usft
Site:	Rojo	North Reference:	Grid
Well:	Rojo #41H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	396,370.90	779,495.00	32° 5' 14.529 N	103° 33' 51.602 W
100.0	0.00	0.00	100.0	0.0	0.0	396,370.90	779,495.00	32° 5' 14.529 N	103° 33' 51.602 W
200.0	0.00	0.00	200.0	0.0	0.0	396,370.90	779,495.00	32° 5' 14.529 N	103° 33' 51.602 W
300.0	0.00	0.00	300.0	0.0	0.0	396,370.90	779,495.00	32° 5' 14.529 N	103° 33' 51.602 W
400.0	0.00	0.00	400.0	0.0	0.0	396,370.90	779,495.00	32° 5' 14.529 N	103° 33' 51.602 W
500.0	0.00	0.00	500.0	0.0	0.0	396,370.90	779,495.00	32° 5' 14.529 N	103° 33' 51.602 W
600.0	0.00	0.00	600.0	0.0	0.0	396,370.90	779,495.00	32° 5' 14.529 N	103° 33' 51.602 W
700.0	0.00	0.00	700.0	0.0	0.0	396,370.90	779,495.00	32° 5' 14.529 N	103° 33' 51.602 W
800.0	0.00	0.00	800.0	0.0	0.0	396,370.90	779,495.00	32° 5' 14.529 N	103° 33' 51.602 W
900.0	0.00	0.00	900.0	0.0	0.0	396,370.90	779,495.00	32° 5' 14.529 N	103° 33' 51.602 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	396,370.90	779,495.00	32° 5' 14.529 N	103° 33' 51.602 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	396,370.90	779,495.00	32° 5' 14.529 N	103° 33' 51.602 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	396,370.90	779,495.00	32° 5' 14.529 N	103° 33' 51.602 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	396,370.90	779,495.00	32° 5' 14.529 N	103° 33' 51.602 W
1,400.0	2.00	270.00	1,400.0	0.0	-1.7	396,370.90	779,493.25	32° 5' 14.529 N	103° 33' 51.622 W
1,500.0	4.00	270.00	1,499.8	0.0	-7.0	396,370.90	779,488.02	32° 5' 14.530 N	103° 33' 51.683 W
1,600.0	6.00	270.00	1,599.5	0.0	-15.7	396,370.90	779,479.30	32° 5' 14.530 N	103° 33' 51.784 W
1,700.0	8.00	270.00	1,698.7	0.0	-27.9	396,370.90	779,467.12	32° 5' 14.531 N	103° 33' 51.926 W
1,800.0	8.00	270.00	1,797.7	0.0	-41.8	396,370.90	779,453.20	32° 5' 14.532 N	103° 33' 52.087 W
1,900.0	8.00	270.00	1,896.8	0.0	-55.7	396,370.90	779,439.28	32° 5' 14.533 N	103° 33' 52.249 W
2,000.0	8.00	270.00	1,995.8	0.0	-69.6	396,370.90	779,425.37	32° 5' 14.534 N	103° 33' 52.411 W
2,100.0	8.00	270.00	2,094.8	0.0	-83.5	396,370.90	779,411.45	32° 5' 14.535 N	103° 33' 52.573 W
2,200.0	8.00	270.00	2,193.8	0.0	-97.5	396,370.90	779,397.53	32° 5' 14.536 N	103° 33' 52.734 W
2,300.0	8.00	270.00	2,292.9	0.0	-111.4	396,370.90	779,383.62	32° 5' 14.537 N	103° 33' 52.896 W
2,400.0	8.00	270.00	2,391.9	0.0	-125.3	396,370.90	779,369.70	32° 5' 14.538 N	103° 33' 53.058 W
2,500.0	8.00	270.00	2,490.9	0.0	-139.2	396,370.90	779,355.78	32° 5' 14.539 N	103° 33' 53.220 W
2,600.0	8.00	270.00	2,589.9	0.0	-153.1	396,370.90	779,341.87	32° 5' 14.540 N	103° 33' 53.382 W
2,700.0	8.00	270.00	2,689.0	0.0	-167.1	396,370.90	779,327.95	32° 5' 14.541 N	103° 33' 53.543 W
2,800.0	8.00	270.00	2,788.0	0.0	-181.0	396,370.90	779,314.03	32° 5' 14.542 N	103° 33' 53.705 W
2,900.0	8.00	270.00	2,887.0	0.0	-194.9	396,370.90	779,300.11	32° 5' 14.543 N	103° 33' 53.867 W
3,000.0	8.00	270.00	2,986.1	0.0	-208.8	396,370.90	779,286.20	32° 5' 14.544 N	103° 33' 54.029 W
3,100.0	8.00	270.00	3,085.1	0.0	-222.7	396,370.90	779,272.28	32° 5' 14.545 N	103° 33' 54.190 W
3,200.0	8.00	270.00	3,184.1	0.0	-236.6	396,370.90	779,258.36	32° 5' 14.546 N	103° 33' 54.352 W
3,300.0	8.00	270.00	3,283.1	0.0	-250.6	396,370.90	779,244.45	32° 5' 14.547 N	103° 33' 54.514 W
3,400.0	8.00	270.00	3,382.2	0.0	-264.5	396,370.90	779,230.53	32° 5' 14.548 N	103° 33' 54.676 W
3,500.0	8.00	270.00	3,481.2	0.0	-278.4	396,370.90	779,216.61	32° 5' 14.549 N	103° 33' 54.837 W
3,600.0	8.00	270.00	3,580.2	0.0	-292.3	396,370.90	779,202.70	32° 5' 14.550 N	103° 33' 54.999 W
3,700.0	8.00	270.00	3,679.2	0.0	-306.2	396,370.90	779,188.78	32° 5' 14.551 N	103° 33' 55.161 W
3,800.0	8.00	270.00	3,778.3	0.0	-320.1	396,370.90	779,174.86	32° 5' 14.552 N	103° 33' 55.323 W
3,900.0	8.00	270.00	3,877.3	0.0	-334.1	396,370.90	779,160.95	32° 5' 14.553 N	103° 33' 55.484 W
4,000.0	8.00	270.00	3,976.3	0.0	-348.0	396,370.90	779,147.03	32° 5' 14.554 N	103° 33' 55.646 W
4,100.0	8.00	270.00	4,075.3	0.0	-361.9	396,370.90	779,133.11	32° 5' 14.555 N	103° 33' 55.808 W
4,200.0	8.00	270.00	4,174.4	0.0	-375.8	396,370.90	779,119.19	32° 5' 14.556 N	103° 33' 55.970 W
4,300.0	8.00	270.00	4,273.4	0.0	-389.7	396,370.90	779,105.28	32° 5' 14.557 N	103° 33' 56.131 W
4,400.0	8.00	270.00	4,372.4	0.0	-403.6	396,370.90	779,091.36	32° 5' 14.558 N	103° 33' 56.293 W
4,500.0	8.00	270.00	4,471.5	0.0	-417.6	396,370.90	779,077.44	32° 5' 14.559 N	103° 33' 56.455 W
4,600.0	8.00	270.00	4,570.5	0.0	-431.5	396,370.90	779,063.53	32° 5' 14.560 N	103° 33' 56.617 W
4,700.0	8.00	270.00	4,669.5	0.0	-445.4	396,370.90	779,049.61	32° 5' 14.560 N	103° 33' 56.779 W
4,800.0	8.00	270.00	4,768.5	0.0	-459.3	396,370.90	779,035.69	32° 5' 14.561 N	103° 33' 56.940 W
4,900.0	8.00	270.00	4,867.6	0.0	-473.2	396,370.90	779,021.78	32° 5' 14.562 N	103° 33' 57.102 W
5,000.0	8.00	270.00	4,966.6	0.0	-487.2	396,370.90	779,007.86	32° 5' 14.563 N	103° 33' 57.264 W
5,100.0	8.00	270.00	5,065.6	0.0	-501.1	396,370.90	778,993.94	32° 5' 14.564 N	103° 33' 57.426 W
5,200.0	8.00	270.00	5,164.6	0.0	-515.0	396,370.90	778,980.02	32° 5' 14.565 N	103° 33' 57.587 W
5,300.0	8.00	270.00	5,263.7	0.0	-528.9	396,370.90	778,966.11	32° 5' 14.566 N	103° 33' 57.749 W
5,400.0	8.00	270.00	5,362.7	0.0	-542.8	396,370.90	778,952.19	32° 5' 14.567 N	103° 33' 57.911 W

Microsoft
Planning Report - Geographic

Database:	Old	Local Co-ordinate Reference:	Well Rojo #41H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3329.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	GL @ 3329.0usft
Site:	Rojo	North Reference:	Grid
Well:	Rojo #41H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
5,500.0	8.00	270.00	5,461.7	0.0	-556.7	396,370.90	778,938.27	32° 5' 14.568 N	103° 33' 58.073 W	
5,600.0	8.00	270.00	5,560.7	0.0	-570.7	396,370.90	778,924.36	32° 5' 14.569 N	103° 33' 58.234 W	
5,700.0	8.00	270.00	5,659.8	0.0	-584.6	396,370.90	778,910.44	32° 5' 14.570 N	103° 33' 58.396 W	
5,800.0	8.00	270.00	5,758.8	0.0	-598.5	396,370.90	778,896.52	32° 5' 14.571 N	103° 33' 58.558 W	
5,900.0	8.00	270.00	5,857.8	0.0	-612.4	396,370.90	778,882.61	32° 5' 14.572 N	103° 33' 58.720 W	
6,000.0	8.00	270.00	5,956.9	0.0	-626.3	396,370.90	778,868.69	32° 5' 14.573 N	103° 33' 58.881 W	
6,100.0	8.00	270.00	6,055.9	0.0	-640.2	396,370.90	778,854.77	32° 5' 14.574 N	103° 33' 59.043 W	
6,200.0	8.00	270.00	6,154.9	0.0	-654.2	396,370.90	778,840.86	32° 5' 14.575 N	103° 33' 59.205 W	
6,300.0	8.00	270.00	6,253.9	0.0	-668.1	396,370.90	778,826.94	32° 5' 14.576 N	103° 33' 59.367 W	
6,400.0	8.00	270.00	6,353.0	0.0	-682.0	396,370.90	778,813.02	32° 5' 14.577 N	103° 33' 59.528 W	
6,500.0	8.00	270.00	6,452.0	0.0	-695.9	396,370.90	778,799.10	32° 5' 14.578 N	103° 33' 59.690 W	
6,600.0	8.00	270.00	6,551.0	0.0	-709.8	396,370.90	778,785.19	32° 5' 14.579 N	103° 33' 59.852 W	
6,700.0	8.00	270.00	6,650.0	0.0	-723.7	396,370.90	778,771.27	32° 5' 14.580 N	103° 34' 0.014 W	
6,800.0	8.00	270.00	6,749.1	0.0	-737.7	396,370.90	778,757.35	32° 5' 14.581 N	103° 34' 0.176 W	
6,900.0	8.00	270.00	6,848.1	0.0	-751.6	396,370.90	778,743.44	32° 5' 14.582 N	103° 34' 0.337 W	
7,000.0	8.00	270.00	6,947.1	0.0	-765.5	396,370.90	778,729.52	32° 5' 14.583 N	103° 34' 0.499 W	
7,100.0	8.00	270.00	7,046.1	0.0	-779.4	396,370.90	778,715.60	32° 5' 14.584 N	103° 34' 0.661 W	
7,200.0	8.00	270.00	7,145.2	0.0	-793.3	396,370.90	778,701.69	32° 5' 14.585 N	103° 34' 0.823 W	
7,300.0	8.00	270.00	7,244.2	0.0	-807.2	396,370.90	778,687.77	32° 5' 14.586 N	103° 34' 0.984 W	
7,400.0	8.00	270.00	7,343.2	0.0	-821.2	396,370.90	778,673.85	32° 5' 14.587 N	103° 34' 1.146 W	
7,500.0	8.00	270.00	7,442.3	0.0	-835.1	396,370.90	778,659.94	32° 5' 14.588 N	103° 34' 1.308 W	
7,600.0	8.00	270.00	7,541.3	0.0	-849.0	396,370.90	778,646.02	32° 5' 14.589 N	103° 34' 1.470 W	
7,700.0	8.00	270.00	7,640.3	0.0	-862.9	396,370.90	778,632.10	32° 5' 14.590 N	103° 34' 1.631 W	
7,800.0	8.00	270.00	7,739.3	0.0	-876.8	396,370.90	778,618.18	32° 5' 14.591 N	103° 34' 1.793 W	
7,900.0	8.00	270.00	7,838.4	0.0	-890.8	396,370.90	778,604.27	32° 5' 14.592 N	103° 34' 1.955 W	
8,000.0	8.00	270.00	7,937.4	0.0	-904.7	396,370.90	778,590.35	32° 5' 14.593 N	103° 34' 2.117 W	
8,100.0	8.00	270.00	8,036.4	0.0	-918.6	396,370.90	778,576.43	32° 5' 14.594 N	103° 34' 2.278 W	
8,200.0	8.00	270.00	8,135.4	0.0	-932.5	396,370.90	778,562.52	32° 5' 14.595 N	103° 34' 2.440 W	
8,300.0	8.00	270.00	8,234.5	0.0	-946.4	396,370.90	778,548.60	32° 5' 14.596 N	103° 34' 2.602 W	
8,400.0	8.00	270.00	8,333.5	0.0	-960.3	396,370.90	778,534.68	32° 5' 14.597 N	103° 34' 2.764 W	
8,500.0	8.00	270.00	8,432.5	0.0	-974.3	396,370.90	778,520.77	32° 5' 14.598 N	103° 34' 2.925 W	
8,600.0	8.00	270.00	8,531.6	0.0	-988.2	396,370.90	778,506.85	32° 5' 14.599 N	103° 34' 3.087 W	
8,700.0	8.00	270.00	8,630.6	0.0	-1,002.1	396,370.90	778,492.93	32° 5' 14.600 N	103° 34' 3.249 W	
8,736.1	8.00	270.00	8,666.4	0.0	-1,007.1	396,370.90	778,487.90	32° 5' 14.600 N	103° 34' 3.307 W	
8,800.0	6.72	270.00	8,729.7	0.0	-1,015.3	396,370.90	778,479.72	32° 5' 14.601 N	103° 34' 3.403 W	
8,900.0	4.72	270.00	8,829.2	0.0	-1,025.3	396,370.90	778,469.75	32° 5' 14.601 N	103° 34' 3.518 W	
9,000.0	2.72	270.00	8,929.0	0.0	-1,031.8	396,370.90	778,463.26	32° 5' 14.602 N	103° 34' 3.594 W	
9,100.0	0.72	270.00	9,028.9	0.0	-1,034.8	396,370.90	778,460.25	32° 5' 14.602 N	103° 34' 3.629 W	
9,136.1	0.00	0.00	9,065.1	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
9,200.0	0.00	0.00	9,128.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
9,300.0	0.00	0.00	9,228.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
9,400.0	0.00	0.00	9,328.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
9,500.0	0.00	0.00	9,428.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
9,600.0	0.00	0.00	9,528.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
9,700.0	0.00	0.00	9,628.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
9,800.0	0.00	0.00	9,728.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
9,900.0	0.00	0.00	9,828.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
10,000.0	0.00	0.00	9,928.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
10,100.0	0.00	0.00	10,028.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
10,200.0	0.00	0.00	10,128.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
10,300.0	0.00	0.00	10,228.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
10,400.0	0.00	0.00	10,328.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
10,500.0	0.00	0.00	10,428.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
10,600.0	0.00	0.00	10,528.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
10,700.0	0.00	0.00	10,628.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	

Microsoft
Planning Report - Geographic

Database:	Old	Local Co-ordinate Reference:	Well Rojo #41H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3329.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	GL @ 3329.0usft
Site:	Rojo	North Reference:	Grid
Well:	Rojo #41H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
10,800.0	0.00	0.00	10,728.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
10,900.0	0.00	0.00	10,828.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
11,000.0	0.00	0.00	10,928.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
11,100.0	0.00	0.00	11,028.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
11,200.0	0.00	0.00	11,128.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
11,300.0	0.00	0.00	11,228.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
11,400.0	0.00	0.00	11,328.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
11,500.0	0.00	0.00	11,428.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
11,600.0	0.00	0.00	11,528.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
11,700.0	0.00	0.00	11,628.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
11,800.0	0.00	0.00	11,728.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
11,900.0	0.00	0.00	11,828.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
12,000.0	0.00	0.00	11,928.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
12,100.0	0.00	0.00	12,028.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
12,174.1	0.00	0.00	12,103.0	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
12,200.0	0.00	0.00	12,128.9	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
12,249.1	0.00	0.00	12,178.0	0.0	-1,035.0	396,370.90	778,460.02	32° 5' 14.602 N	103° 34' 3.631 W	
12,300.0	5.09	359.48	12,228.9	2.3	-1,035.0	396,373.16	778,460.00	32° 5' 14.624 N	103° 34' 3.632 W	
12,400.0	15.09	359.48	12,327.2	19.8	-1,035.2	396,390.65	778,459.84	32° 5' 14.797 N	103° 34' 3.632 W	
12,500.0	25.09	359.48	12,421.0	54.1	-1,035.5	396,424.95	778,459.53	32° 5' 15.137 N	103° 34' 3.633 W	
12,600.0	35.09	359.48	12,507.4	104.1	-1,036.0	396,475.02	778,459.07	32° 5' 15.632 N	103° 34' 3.634 W	
12,700.0	45.09	359.48	12,583.8	168.4	-1,036.5	396,539.33	778,458.49	32° 5' 16.269 N	103° 34' 3.635 W	
12,800.0	55.09	359.48	12,647.9	245.0	-1,037.2	396,615.93	778,457.79	32° 5' 17.027 N	103° 34' 3.637 W	
12,900.0	65.09	359.48	12,697.7	331.6	-1,038.0	396,702.49	778,457.00	32° 5' 17.883 N	103° 34' 3.639 W	
13,000.0	75.09	359.48	12,731.7	425.5	-1,038.9	396,796.39	778,456.14	32° 5' 18.813 N	103° 34' 3.642 W	
13,100.0	85.09	359.48	12,748.9	523.9	-1,039.8	396,894.77	778,455.24	32° 5' 19.786 N	103° 34' 3.644 W	
13,149.1	90.00	359.48	12,751.0	572.9	-1,040.2	396,943.82	778,454.79	32° 5' 20.272 N	103° 34' 3.645 W	
13,200.0	90.00	359.48	12,751.0	623.8	-1,040.7	396,994.70	778,454.33	32° 5' 20.775 N	103° 34' 3.646 W	
13,300.0	90.00	359.48	12,751.0	723.8	-1,041.6	397,094.69	778,453.41	32° 5' 21.765 N	103° 34' 3.649 W	
13,400.0	90.00	359.48	12,751.0	823.8	-1,042.5	397,194.69	778,452.50	32° 5' 22.754 N	103° 34' 3.651 W	
13,500.0	90.00	359.48	12,751.0	923.8	-1,043.4	397,294.68	778,451.59	32° 5' 23.744 N	103° 34' 3.653 W	
13,600.0	90.00	359.48	12,751.0	1,023.8	-1,044.3	397,394.67	778,450.68	32° 5' 24.733 N	103° 34' 3.656 W	
13,700.0	90.00	359.48	12,751.0	1,123.8	-1,045.3	397,494.67	778,449.76	32° 5' 25.723 N	103° 34' 3.658 W	
13,800.0	90.00	359.48	12,751.0	1,223.8	-1,046.2	397,594.66	778,448.85	32° 5' 26.712 N	103° 34' 3.660 W	
13,900.0	90.00	359.48	12,751.0	1,323.8	-1,047.1	397,694.65	778,447.94	32° 5' 27.702 N	103° 34' 3.663 W	
14,000.0	90.00	359.48	12,751.0	1,423.8	-1,048.0	397,794.65	778,447.02	32° 5' 28.691 N	103° 34' 3.665 W	
14,100.0	90.00	359.48	12,751.0	1,523.8	-1,048.9	397,894.64	778,446.11	32° 5' 29.681 N	103° 34' 3.667 W	
14,200.0	90.00	359.48	12,751.0	1,623.8	-1,049.8	397,994.63	778,445.20	32° 5' 30.670 N	103° 34' 3.670 W	
14,300.0	90.00	359.48	12,751.0	1,723.8	-1,050.7	398,094.63	778,444.28	32° 5' 31.660 N	103° 34' 3.672 W	
14,400.0	90.00	359.48	12,751.0	1,823.8	-1,051.7	398,194.62	778,443.37	32° 5' 32.650 N	103° 34' 3.675 W	
14,500.0	90.00	359.48	12,751.0	1,923.8	-1,052.6	398,294.61	778,442.46	32° 5' 33.639 N	103° 34' 3.677 W	
14,600.0	90.00	359.48	12,751.0	2,023.8	-1,053.5	398,394.61	778,441.54	32° 5' 34.629 N	103° 34' 3.679 W	
14,700.0	90.00	359.48	12,751.0	2,123.8	-1,054.4	398,494.60	778,440.63	32° 5' 35.618 N	103° 34' 3.682 W	
14,800.0	90.00	359.48	12,751.0	2,223.8	-1,055.3	398,594.59	778,439.72	32° 5' 36.608 N	103° 34' 3.684 W	
14,900.0	90.00	359.48	12,751.0	2,323.7	-1,056.2	398,694.59	778,438.81	32° 5' 37.597 N	103° 34' 3.686 W	
15,000.0	90.00	359.48	12,751.0	2,423.7	-1,057.1	398,794.58	778,437.89	32° 5' 38.587 N	103° 34' 3.689 W	
15,100.0	90.00	359.48	12,751.0	2,523.7	-1,058.0	398,894.57	778,436.98	32° 5' 39.576 N	103° 34' 3.691 W	
15,200.0	90.00	359.48	12,751.0	2,623.7	-1,059.0	398,994.57	778,436.07	32° 5' 40.566 N	103° 34' 3.693 W	
15,300.0	90.00	359.48	12,751.0	2,723.7	-1,059.9	399,094.56	778,435.15	32° 5' 41.555 N	103° 34' 3.696 W	
15,400.0	90.00	359.48	12,751.0	2,823.7	-1,060.8	399,194.55	778,434.24	32° 5' 42.545 N	103° 34' 3.698 W	
15,500.0	90.00	359.48	12,751.0	2,923.7	-1,061.7	399,294.54	778,433.33	32° 5' 43.534 N	103° 34' 3.701 W	
15,600.0	90.00	359.48	12,751.0	3,023.7	-1,062.6	399,394.54	778,432.41	32° 5' 44.524 N	103° 34' 3.703 W	
15,700.0	90.00	359.48	12,751.0	3,123.7	-1,063.5	399,494.53	778,431.50	32° 5' 45.514 N	103° 34' 3.705 W	
15,800.0	90.00	359.48	12,751.0	3,223.7	-1,064.4	399,594.52	778,430.59	32° 5' 46.503 N	103° 34' 3.708 W	
15,900.0	90.00	359.48	12,751.0	3,323.7	-1,065.4	399,694.52	778,429.67	32° 5' 47.493 N	103° 34' 3.710 W	

Microsoft
Planning Report - Geographic

Database:	Old	Local Co-ordinate Reference:	Well Rojo #41H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3329.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	GL @ 3329.0usft
Site:	Rojo	North Reference:	Grid
Well:	Rojo #41H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
16,000.0	90.00	359.48	12,751.0	3,423.7	-1,066.3	399,794.51	778,428.76	32° 5' 48.482 N	103° 34' 3.712 W	
16,100.0	90.00	359.48	12,751.0	3,523.7	-1,067.2	399,894.50	778,427.85	32° 5' 49.472 N	103° 34' 3.715 W	
16,200.0	90.00	359.48	12,751.0	3,623.7	-1,068.1	399,994.50	778,426.94	32° 5' 50.461 N	103° 34' 3.717 W	
16,300.0	90.00	359.48	12,751.0	3,723.7	-1,069.0	400,094.49	778,426.02	32° 5' 51.451 N	103° 34' 3.719 W	
16,400.0	90.00	359.48	12,751.0	3,823.7	-1,069.9	400,194.48	778,425.11	32° 5' 52.440 N	103° 34' 3.722 W	
16,500.0	90.00	359.48	12,751.0	3,923.7	-1,070.8	400,294.48	778,424.20	32° 5' 53.430 N	103° 34' 3.724 W	
16,600.0	90.00	359.48	12,751.0	4,023.7	-1,071.7	400,394.47	778,423.28	32° 5' 54.419 N	103° 34' 3.726 W	
16,700.0	90.00	359.48	12,751.0	4,123.7	-1,072.7	400,494.46	778,422.37	32° 5' 55.409 N	103° 34' 3.729 W	
16,800.0	90.00	359.48	12,751.0	4,223.7	-1,073.6	400,594.46	778,421.46	32° 5' 56.398 N	103° 34' 3.731 W	
16,900.0	90.00	359.48	12,751.0	4,323.7	-1,074.5	400,694.45	778,420.54	32° 5' 57.388 N	103° 34' 3.734 W	
17,000.0	90.00	359.48	12,751.0	4,423.7	-1,075.4	400,794.44	778,419.63	32° 5' 58.377 N	103° 34' 3.736 W	
17,100.0	90.00	359.48	12,751.0	4,523.7	-1,076.3	400,894.44	778,418.72	32° 5' 59.367 N	103° 34' 3.738 W	
17,200.0	90.00	359.48	12,751.0	4,623.7	-1,077.2	400,994.43	778,417.80	32° 6' 0.357 N	103° 34' 3.741 W	
17,300.0	90.00	359.48	12,751.0	4,723.6	-1,078.1	401,094.42	778,416.89	32° 6' 1.346 N	103° 34' 3.743 W	
17,400.0	90.00	359.48	12,751.0	4,823.6	-1,079.0	401,194.42	778,415.98	32° 6' 2.336 N	103° 34' 3.745 W	
17,500.0	90.00	359.48	12,751.0	4,923.6	-1,080.0	401,294.41	778,415.07	32° 6' 3.325 N	103° 34' 3.748 W	
17,600.0	90.00	359.48	12,751.0	5,023.6	-1,080.9	401,394.40	778,414.15	32° 6' 4.315 N	103° 34' 3.750 W	
17,700.0	90.00	359.48	12,751.0	5,123.6	-1,081.8	401,494.40	778,413.24	32° 6' 5.304 N	103° 34' 3.752 W	
17,800.0	90.00	359.48	12,751.0	5,223.6	-1,082.7	401,594.39	778,412.33	32° 6' 6.294 N	103° 34' 3.755 W	
17,900.0	90.00	359.48	12,751.0	5,323.6	-1,083.6	401,694.38	778,411.41	32° 6' 7.283 N	103° 34' 3.757 W	
18,000.0	90.00	359.48	12,751.0	5,423.6	-1,084.5	401,794.38	778,410.50	32° 6' 8.273 N	103° 34' 3.760 W	
18,100.0	90.00	359.48	12,751.0	5,523.6	-1,085.4	401,894.37	778,409.59	32° 6' 9.262 N	103° 34' 3.762 W	
18,200.0	90.00	359.48	12,751.0	5,623.6	-1,086.4	401,994.36	778,408.67	32° 6' 10.252 N	103° 34' 3.764 W	
18,300.0	90.00	359.48	12,751.0	5,723.6	-1,087.3	402,094.36	778,407.76	32° 6' 11.241 N	103° 34' 3.767 W	
18,400.0	90.00	359.48	12,751.0	5,823.6	-1,088.2	402,194.35	778,406.85	32° 6' 12.231 N	103° 34' 3.769 W	
18,500.0	90.00	359.48	12,751.0	5,923.6	-1,089.1	402,294.34	778,405.93	32° 6' 13.220 N	103° 34' 3.771 W	
18,600.0	90.00	359.48	12,751.0	6,023.6	-1,090.0	402,394.34	778,405.02	32° 6' 14.210 N	103° 34' 3.774 W	
18,700.0	90.00	359.48	12,751.0	6,123.6	-1,090.9	402,494.33	778,404.11	32° 6' 15.200 N	103° 34' 3.776 W	
18,800.0	90.00	359.48	12,751.0	6,223.6	-1,091.8	402,594.32	778,403.20	32° 6' 16.189 N	103° 34' 3.778 W	
18,900.0	90.00	359.48	12,751.0	6,323.6	-1,092.7	402,694.31	778,402.28	32° 6' 17.179 N	103° 34' 3.781 W	
19,000.0	90.00	359.48	12,751.0	6,423.6	-1,093.7	402,794.31	778,401.37	32° 6' 18.168 N	103° 34' 3.783 W	
19,100.0	90.00	359.48	12,751.0	6,523.6	-1,094.6	402,894.30	778,400.46	32° 6' 19.158 N	103° 34' 3.785 W	
19,200.0	90.00	359.48	12,751.0	6,623.6	-1,095.5	402,994.29	778,399.54	32° 6' 20.147 N	103° 34' 3.788 W	
19,300.0	90.00	359.48	12,751.0	6,723.6	-1,096.4	403,094.29	778,398.63	32° 6' 21.137 N	103° 34' 3.790 W	
19,400.0	90.00	359.48	12,751.0	6,823.6	-1,097.3	403,194.28	778,397.72	32° 6' 22.126 N	103° 34' 3.793 W	
19,500.0	90.00	359.48	12,751.0	6,923.6	-1,098.2	403,294.27	778,396.80	32° 6' 23.116 N	103° 34' 3.795 W	
19,600.0	90.00	359.48	12,751.0	7,023.6	-1,099.1	403,394.27	778,395.89	32° 6' 24.105 N	103° 34' 3.797 W	
19,700.0	90.00	359.48	12,751.0	7,123.5	-1,100.0	403,494.26	778,394.98	32° 6' 25.095 N	103° 34' 3.800 W	
19,800.0	90.00	359.48	12,751.0	7,223.5	-1,101.0	403,594.25	778,394.06	32° 6' 26.084 N	103° 34' 3.802 W	
19,900.0	90.00	359.48	12,751.0	7,323.5	-1,101.9	403,694.25	778,393.15	32° 6' 27.074 N	103° 34' 3.804 W	
20,000.0	90.00	359.48	12,751.0	7,423.5	-1,102.8	403,794.24	778,392.24	32° 6' 28.063 N	103° 34' 3.807 W	
20,100.0	90.00	359.48	12,751.0	7,523.5	-1,103.7	403,894.23	778,391.33	32° 6' 29.053 N	103° 34' 3.809 W	
20,200.0	90.00	359.48	12,751.0	7,623.5	-1,104.6	403,994.23	778,390.41	32° 6' 30.043 N	103° 34' 3.811 W	
20,300.0	90.00	359.48	12,751.0	7,723.5	-1,105.5	404,094.22	778,389.50	32° 6' 31.032 N	103° 34' 3.814 W	
20,311.2	90.00	359.48	12,751.0	7,734.7	-1,105.6	404,105.40	778,389.40	32° 6' 31.143 N	103° 34' 3.814 W	

Microsoft
Planning Report - Geographic

Database:	Old	Local Co-ordinate Reference:	Well Rojo #41H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3329.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	GL @ 3329.0usft
Site:	Rojo	North Reference:	Grid
Well:	Rojo #41H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
Rojo #41H BHL	0.00	0.00	12,751.0	7,734.7	-1,105.6	404,105.40	778,389.40	32° 6' 31.143 N	103° 34' 3.814 W
- plan hits target center									
- Point									

Casing Program

Hole Size	Csg.Size	From (MD)	To (MD)	From (TYD)	To (TYD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/Buoyant	Mud Weight (ppg)
14 3/4	10 3/4	0	500	0	500	No	40.5	J-55	STC	7.3	14.5	31.1	20.7	Dry	8.3
9 7/8	7 5/8	0	8063	0	8000	yes	23.7	P110	Buttress	1.4	2.4	3.9	4.0	Dry	9.4
8 3/4	7 5/8	8063	12174	8000	12103	yes	23.7	P110	FJ	1.6	1.6	2.6	2.7	Dry	9.4
6 3/4	5 1/2	0	11374	0	11303	Yes	20	P110	Buttress	1.8	1.4	2.7	2.8	Dry	14
6 3/4	5	11374	20311	11303	12751	Yes	18	P110	Buttress	1.8	1.4	1.6	1.7	Dry	14

* 7 5/8" has DV Tool @ 5000'

Dv Tool Depth

5000

Cementing Program

Csg. Size		Stage Tool Depth	Top MD of Segment	Bottom MD of Segment	Cement Type	Quantity (sk)	Yield (cu. Ft./sk)	Density (lbs./gal)	Volume (cu.ft.)	% Excess	Additives
10 3/4	Lead		0	255	Class C	160	1.8	13.5	288	100%	2% CaCl2
	Tail		255	500	Class C	200	1.34	14.8	268	100%	2% CaCl2
7 5/8	Stg 2 Lead		0	4575	Class C	735	2.19	12.7	1609.65	50%	0.5% CaCl2
	Stg 2 Tail		4575	5000	Class C	150	1.33	14.8	199.5	50%	1% CaCl2
	Stg 1 Lead		5000	8625	Class H	370	2.64	10.5	976.8	25%	0.5% CaCl2
	Stg 1 Tail		8625	12174	Class H	400	1.19	15.6	476	25%	1% CaCl2
5 1/2	Lead										
	Tail		11175	11374							
5	Lead										
	Tail		11374	20311	Class H	890	1.27	14.8	1130.3	10%	0.1% Fluid Loss

PECOS DISTRICT

DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	BTA OIL PRODUCERS, LLC
LEASE NO.:	NMNM05792
WELL NAME & NO.:	Rojo 7811 34-27 Federal 41H
SURFACE HOLE FOOTAGE:	2510'N & 1365'/W
BOTTOM HOLE FOOTAGE:	50'N & 330'/W
LOCATION:	Section 34, T.25 S., R.33 E., NMPM
COUNTY:	Lea County, New Mexico

COA

H2S	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input type="radio"/> Multibowl	<input checked="" type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input type="checkbox"/> Fluid Filled	<input type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input type="checkbox"/> Unit

All previous COAs still apply.

A. CASING

Primary Casing Design:

- The **10-3/4** inch surface casing shall be set at approximately **1050 feet** (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt) and cemented to the surface.

Excess cement calculates to -5%, additional cement might be required.

- 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.
- 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)
- 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.

2. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

Option 1 (Single Stage):

- Cement to surface. If cement does not circulate see B.1.a, c-d above. **Excess cement calculates to -45%, additional cement might be required.**

Option 2:

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job. **Excess cement calculates to -6%, additional cement might be required.**
- b. Second stage above DV tool:
 - Cement to surface. If cement does not circulate, contact the appropriate BLM office.

3. The minimum required fill of cement behind the production casing is:

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

B. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
- 2.

Option 1:

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

1. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M)** psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

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