

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HOBBS OGD
NOV 21 2019
RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other			5. Lease Serial No. NMNM05792		
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr. Other _____			6. If Indian, Allottee or Tribe Name		
2. Name of Operator BTA OIL PRODUCERS, LLC			Contact: KATY REDDELL E-Mail: kreddell@btaoil.com		
3. Address 104 S. PECOS MIDLAND, TX 79701			3a. Phone No. (include area code) Ph: 432-682-3753 Ext: 139		
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface Lot K 2504FSL 1950FWL 32.086642 N Lat, 103.562443 W Lon At top prod interval reported below Sec 34 T25S R33E Mer At total depth Lot C 20.4FNL 1653FWL 32.108729 N Lat, 103.563452 W Lon			8. Lease Name and Well No. ROJO 7811 34-27 FEDERAL COM 19H		
14. Date Spudded 03/25/2019			15. Date T.D. Reached 05/21/2019		
16. Date Completed ☐ D & A ☐ Ready to Prod. 08/06/2019			17. Elevations (DF, KB, RT, GL)* 3323 GL		
18. Total Depth: MD 20035 TVD 12323			19. Plug Back T.D.: MD TVD		
20. Depth Bridge Plug Set: MD TVD			21. Type Electric & Other Mechanical Logs Run (Submit copy of each) MWD		
22. Was well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit analysis) Directional Survey? ☐ No ☒ Yes (Submit analysis)					

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
14.750	10.750 J-55	40.5		1135		765		0	
9.875	7.625 P-110	29.7		11670		2070		0	
6.750	5.500 P-110	18.0		20026		1585		0	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	11586	11586						

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WOLFCAMP	12710		12500 TO 19950			FRAC
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
12500 TO 19950	401,838 BBLs TOTAL FLUID; 18,834,970#S 100MESH AND 40/70 SAND.

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
08/06/2019	08/16/2019	24	→	1022.0	1838.0	2633.0	43.0		FLOW FROM WELL
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
19/64	SI	4400.0	→	1022	1838	2633	1819	POW	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
	SI		→						

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #486219 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

Reclamation due: 02/06/2020

ACCEPTED FOR RECORD

NOV 12 2019
BUREAU OF LAND MANAGEMENT
ROSWELL FIELD OFFICE

Krz

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

29. Disposition of Gas(Sold, used for fuel, vented, etc.)
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
WOLFCAMP	12170			RUSTLER TOP SALT BASE SALT DELAWARE BELL CANYON CHERRY CANYON BRUSHY CANYON BONESPRING LIME	2543 2626 4758 4992 5225 6288 7524 9076

32. Additional remarks (include plugging procedure):

FORMATION MARKERS CONT.:
FIRST BONESPRING SAND: 10027
SECOND BONESPRING SAND: 10622
THIRD BONESPRING CARBONATE: 11098
WOLFCAMP: 12170

33. Circle enclosed attachments:

- | | | | |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.) | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis | 7. Other: | |

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #486219 Verified by the BLM Well Information System.
For BTA OIL PRODUCERS, LLC, sent to the Hobbs
Committed to AFMSS for processing by JENNIFER SANCHEZ on 11/12/2019 ()

Name (please print) KATY REDDELLTitle REGULATORY ANALYSTSignature (Electronic Submission)Date 10/02/2019

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.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

DISTRICT I
1625 N French Dr., Hobbs, NM 88240
Phone (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 Rio Arriba Road, Aztec, NM 87410
Phone: (505) 134-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-44298	Pool Code WC RED HILLS	Pool Name WC RED HILLS
Property Code	Property Name ROJO 7811 34-27 FEDERAL COM	Well Number 19H
OGRID No. 260297	Operator Name BTA OIL PRODUCERS, LLC	Elevation 3323'

Surface Location

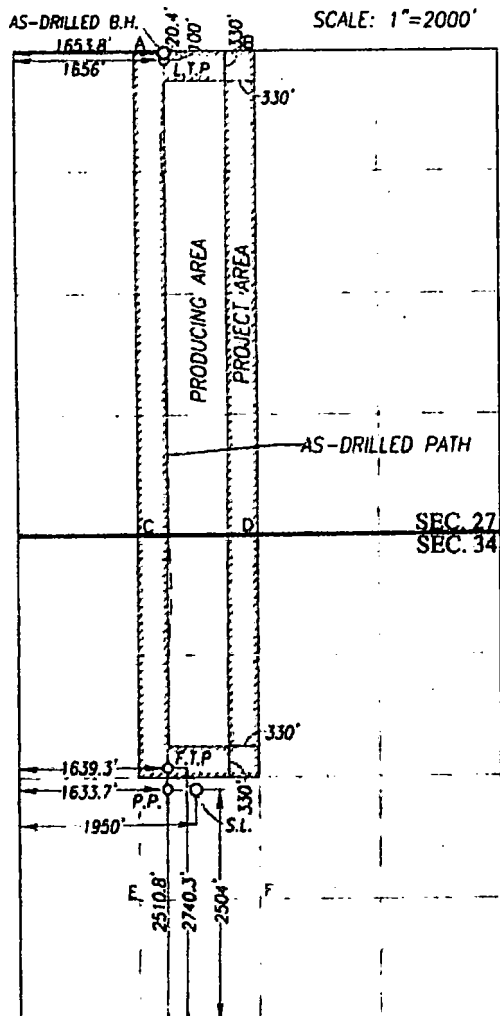
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	34	25-S	33-E		2504	SOUTH	1950	WEST	LEA

AS-Drilled Bottom Hole Location If Different From Surface

UL or lot No	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	27	25-S	33-E		20.4	NORTH	1653.8	WEST	LEA

Dedicated Acres 240	Joint or Infill	Consolidation Code	Order No.
-------------------------------	-----------------	--------------------	-----------

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



BOTTOM HOLE LOCATION

NAD 27 NME MD=20035 NAD 83 NME
Y= 404085.5 N Y= 404143.2 N
X= 738526.3 E X= 779712.6 E
LAT.=32.108604° N LAT.=32.108729° N
LONG.=103.562981° W LONG.=103.563452° W

LAST TAKE POINT MD=19955 LAST TAKE POINT

NAD 27 NME NAD 83 NME
Y= 404006.0 N Y= 404063.7 N
X= 738529.3 E X= 779715.6 E
LAT.=32.108385° N LAT.=32.108510° N
LONG.=103.562973° W LONG.=103.563444° W

CORNER COORDINATES TABLE

NAD 27 NME

A - Y= 404103.8 N, X= 738199.0 E
B - Y= 404112.5 N, X= 739525.3 E
C - Y= 398822.6 N, X= 738243.9 E
D - Y= 398831.1 N, X= 739566.4 E
E - Y= 394866.1 N, X= 738279.6 E
F - Y= 394873.3 N, X= 739601.2 E

CORNER COORDINATES TABLE

NAD 83 NME

A - Y= 404161.5 N, X= 779385.3 E
B - Y= 404170.2 N, X= 780711.6 E
C - Y= 398880.1 N, X= 779430.4 E
D - Y= 398888.7 N, X= 780753.0 E
E - Y= 394923.6 N, X= 779466.4 E
F - Y= 394930.8 N, X= 780787.9 E

PROPOSED POINT MD=9028 PROPOSED POINT

NAD 27 NME NAD 83 NME
Y= 396058.0 N Y= 396115.6 N
X= 738579.6 E X= 779766.2 E
LAT.=32.086537° N LAT.=32.086662° N
LONG.=103.562994° W LONG.=103.563464° W

FIRST TAKE POINT MD=12180 FIRST TAKE POINT

NAD 27 NME NAD 83 NME
Y= 396287.4 N Y= 396345.0 N
X= 738583.1 E X= 779769.7 E
LAT.=32.087168° N LAT.=32.087293° N
LONG.=103.562978° W LONG.=103.563447° W

GEODEIC COORDINATES

NAD 27 NME
SURFACE LOCATION
Y= 396052.9 N
X= 738895.9 E
LAT.=32.086517° N
LONG.=103.561973° W

GEODEIC COORDINATES

NAD 83 NME
SURFACE LOCATION
Y= 396110.4 N
X= 780082.6 E
LAT.=32.086642° N
LONG.=103.562443° W

OPERATOR CERTIFICATION

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

KATY REDDELL 9/16/19
Signature Date

KATY REDDELL
Printed Name
kreddell@btaoil.com
E-mail Address

SURVEYOR CERTIFICATION

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

MARCH 8, 2017

Date of Survey
Signature of Surveyor
RONALD J. EIDSON
Surveyor
NEW MEXICO
3239
Certification Number
Ronald J. Eidson 12641
3239
LSL Rel 17.11 0185 JWSC W O 19.13.0718

Intent ☐ As Drilled ☒API #
30-025-44298Operator Name:
BTA OIL PRODUCERS, LLCProperty Name:
ROJO 7811 22 FEDERAL COMWell Number
19H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
K	34	25S	33E		2504	SOUTH	1950	WEST	LEA
Latitude					Longitude				NAD
32.086642					-103.562443				83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
C	34	25S	33E		330	SOUTH	1639	WEST	LEA
Latitude					Longitude				NAD
32.087293					-103.263447				83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
K	27	34	33E		330	NORTH	1656	WEST	LEA
Latitude					Longitude				NAD
32.108510					103.563444				83

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

☐ NO

Is this well an infill well?

☐ YES

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

API #
30-025-44297Operator Name:
BTA OIL PRODUCERS, LLCProperty Name:
ROJO 7811 34-27 FEDERAL COMWell Number
18H

KZ 06/29/2018

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Original
to Appropriate
District Office

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

GAS CAPTURE PLAN

Date: 10/4/2017

☒ Original Operator & OGRID No.: BTA Oil Producers, LLC OGRID # 260297
☐ Amended - Reason for Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
Rojo 7811 34-27 Fed Com #19H	NA	A-34-25S-33E	2504'FSL 1950'FWL	1000	0	NA

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to Energy Transfer and will be connected to Energy Transfer's low pressure gathering system located in Lea County, New Mexico. It will require ~8976' of pipeline to connect the facility to low pressure gathering system. BTA Oil Producers, LLC provides (periodically) to Energy Transfer a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, BTA Oil Producers, LLC and Energy Transfer have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Jal 3 Plant located in Sec. 22, Twn. 24 South, Rng. 37 East, Lea County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on energy Transfers system at that time. Based on current information, it is BTA Oil Producers, LLC belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
 - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines



BTA Oil Producers, LLC

Lea County, NM (NAD 83)

Sec 34, T25-S, R33-E

Rojo 7811 34-27 Fed Com #19H

Wellbore #1

Design: Wellbore #1

Survey Report - Geographic

18 May, 2019





Survey Report - Geographic



Company: BTA Oil Producers, LLC
 Project: Lea County, NM (NAD 83)
 Site: Sec 34, T25-S, R33-E
 Well: Rojo 7811 34-27 Fed Com #19H
 Wellbore: Wellbore #1
 Design: Wellbore #1

Local Co-ordinate Reference: Well Rojo 7811 34-27 Fed Com #19H
 TVD Reference: WELL @ 3348.0usft (Patterson #566)
 MD Reference: WELL @ 3348.0usft (Patterson #566)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.1 Single User Db

Project Lea County, NM (NAD 83)

Map System: US State Plane 1983
 Geo Datum: North American Datum 1983
 Map Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

Site Sec 34, T25-S, R33-E

Site Position: Northing: 396,110.60 usft Latitude: 32° 5' 11.910 N
 From: Map Easting: 780,112.60 usft Longitude: 103° 33' 44.445 W
 Position Uncertainty: 0.0 usft Slot Radius: 13-3/16 " Grid Convergence: 0.41 °

Well Rojo 7811 34-27 Fed Com #19H

Well Position: +N/-S 0.0 usft Northing: 396,110.40 usft Latitude: 32° 5' 11.910 N
 +E/-W 0.0 usft Easting: 780,082.60 usft Longitude: 103° 33' 44.793 W
 Position Uncertainty: 0.0 usft Wellhead Elevation: usft Ground Level: 3,323.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/29/2019	6.74	59.91	47,666.65172419

Design Wellbore #1

Audit Notes:

Version: 1.0 Phase: ACTUAL Tie On Depth: 0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	357.33

Survey Program Date 5/18/2019

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
157.0	20,035.0	QES MWD Surveys (Wellbore #1)	OWSG (Rev2) MWD	OWSG MWD - Standard

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	396,110.40	780,082.60	32° 5' 11.910 N	103° 33' 44.793 W
157.0	0.20	269.80	157.0	0.0	-0.3	396,110.40	780,082.32	32° 5' 11.910 N	103° 33' 44.797 W
First MWD Survey @ 157.0' MD / 157.0' TVD									
268.0	0.30	304.80	268.0	0.2	-0.7	396,110.56	780,081.89	32° 5' 11.912 N	103° 33' 44.802 W
360.0	0.10	1.20	360.0	0.4	-0.9	396,110.78	780,081.69	32° 5' 11.914 N	103° 33' 44.804 W
453.0	0.10	357.60	453.0	0.5	-0.9	396,110.94	780,081.69	32° 5' 11.915 N	103° 33' 44.804 W
546.0	0.00	341.00	546.0	0.6	-0.9	396,111.02	780,081.69	32° 5' 11.916 N	103° 33' 44.804 W
639.0	0.30	51.50	639.0	0.8	-0.7	396,111.18	780,081.88	32° 5' 11.918 N	103° 33' 44.802 W
732.0	0.50	19.70	732.0	1.3	-0.4	396,111.71	780,082.21	32° 5' 11.923 N	103° 33' 44.798 W
826.0	1.10	21.60	826.0	2.5	0.1	396,112.93	780,082.68	32° 5' 11.935 N	103° 33' 44.792 W
919.0	1.20	22.70	919.0	4.3	0.8	396,114.66	780,083.38	32° 5' 11.952 N	103° 33' 44.784 W
1,012.0	1.20	22.20	1,011.9	6.1	1.5	396,116.46	780,084.13	32° 5' 11.970 N	103° 33' 44.775 W



Survey Report - Geographic



Company: BTA Oil Producers, LLC
 Project: Lea County, NM (NAD 83)
 Site: Sec 34, T25-S, R33-E
 Well: Rojo 7811 34-27 Fed Com #19H
 Wellbore: Wellbore #1
 Design: Wellbore #1

Local Co-ordinate Reference: Well Rojo 7811 34-27 Fed Com #19H
 TVD Reference: WELL @ 3348.0usft (Patterson #566)
 MD Reference: WELL @ 3348.0usft (Patterson #566)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,105.0	1.60	23.00	1,104.9	8.2	2.4	396,118.56	780,085.00	32° 5' 11.990 N	103° 33' 44.765 W
1,196.0	1.50	3.90	1,195.9	10.5	3.0	396,120.92	780,085.58	32° 5' 12.014 N	103° 33' 44.758 W
1,289.0	1.30	357.20	1,288.9	12.8	3.0	396,123.19	780,085.61	32° 5' 12.036 N	103° 33' 44.757 W
1,383.0	1.10	344.50	1,382.8	14.7	2.7	396,125.12	780,085.32	32° 5' 12.055 N	103° 33' 44.761 W
1,476.0	1.20	348.20	1,475.8	16.5	2.3	396,126.93	780,084.88	32° 5' 12.073 N	103° 33' 44.765 W
1,569.0	1.20	351.60	1,568.8	18.5	1.9	396,128.85	780,084.54	32° 5' 12.092 N	103° 33' 44.769 W
1,663.0	1.10	355.40	1,662.8	20.3	1.7	396,130.72	780,084.32	32° 5' 12.111 N	103° 33' 44.772 W
1,756.0	1.10	356.10	1,755.8	22.1	1.6	396,132.50	780,084.19	32° 5' 12.128 N	103° 33' 44.773 W
1,849.0	1.10	353.30	1,848.7	23.9	1.4	396,134.28	780,084.02	32° 5' 12.146 N	103° 33' 44.775 W
1,942.0	0.30	316.90	1,941.7	24.9	1.2	396,135.35	780,083.75	32° 5' 12.157 N	103° 33' 44.778 W
2,036.0	0.60	242.80	2,035.7	24.9	0.6	396,135.30	780,083.15	32° 5' 12.156 N	103° 33' 44.785 W
2,129.0	0.40	258.60	2,128.7	24.6	-0.2	396,135.01	780,082.40	32° 5' 12.153 N	103° 33' 44.794 W
2,222.0	0.40	242.80	2,221.7	24.4	-0.8	396,134.80	780,081.79	32° 5' 12.151 N	103° 33' 44.801 W
2,315.0	0.20	240.50	2,314.7	24.2	-1.2	396,134.57	780,081.36	32° 5' 12.149 N	103° 33' 44.806 W
2,409.0	0.20	341.40	2,408.7	24.2	-1.4	396,134.65	780,081.16	32° 5' 12.150 N	103° 33' 44.808 W
2,502.0	0.40	40.20	2,501.7	24.6	-1.3	396,135.05	780,081.32	32° 5' 12.154 N	103° 33' 44.806 W
2,595.0	0.60	35.30	2,594.7	25.3	-0.8	396,135.69	780,081.81	32° 5' 12.160 N	103° 33' 44.800 W
2,689.0	0.70	89.70	2,688.7	25.7	0.1	396,136.10	780,082.67	32° 5' 12.164 N	103° 33' 44.790 W
2,782.0	0.90	90.40	2,781.7	25.7	1.4	396,136.10	780,083.97	32° 5' 12.164 N	103° 33' 44.775 W
2,875.0	1.20	85.60	2,874.7	25.8	3.1	396,136.17	780,085.67	32° 5' 12.165 N	103° 33' 44.756 W
2,969.0	0.90	180.00	2,968.7	25.1	4.1	396,135.50	780,086.65	32° 5' 12.158 N	103° 33' 44.744 W
3,062.0	1.10	183.40	3,061.7	23.5	4.0	396,133.88	780,086.60	32° 5' 12.142 N	103° 33' 44.745 W
3,155.0	1.00	131.00	3,154.7	22.1	4.6	396,132.46	780,087.16	32° 5' 12.128 N	103° 33' 44.739 W
3,248.0	2.30	99.90	3,247.6	21.2	7.0	396,131.61	780,089.61	32° 5' 12.119 N	103° 33' 44.710 W
3,342.0	1.00	140.60	3,341.6	20.2	9.4	396,130.65	780,091.99	32° 5' 12.110 N	103° 33' 44.683 W
3,435.0	2.10	268.40	3,434.6	19.6	8.2	396,129.97	780,090.80	32° 5' 12.103 N	103° 33' 44.696 W
3,528.0	1.70	296.40	3,527.5	20.1	5.3	396,130.54	780,087.86	32° 5' 12.109 N	103° 33' 44.731 W
3,621.0	1.80	320.10	3,620.5	21.9	3.1	396,132.27	780,085.69	32° 5' 12.126 N	103° 33' 44.756 W
3,715.0	2.00	314.50	3,714.4	24.2	1.0	396,134.55	780,083.57	32° 5' 12.149 N	103° 33' 44.780 W
3,808.0	1.60	324.50	3,807.4	26.3	-0.9	396,136.75	780,081.66	32° 5' 12.171 N	103° 33' 44.802 W
3,901.0	1.70	340.50	3,900.3	28.7	-2.2	396,139.11	780,080.45	32° 5' 12.194 N	103° 33' 44.816 W
3,995.0	1.80	283.90	3,994.3	30.4	-4.0	396,140.77	780,078.55	32° 5' 12.211 N	103° 33' 44.838 W
4,088.0	4.60	262.50	4,087.1	30.2	-9.2	396,140.64	780,073.43	32° 5' 12.210 N	103° 33' 44.897 W
4,181.0	7.40	263.50	4,179.6	29.1	-18.8	396,139.47	780,063.78	32° 5' 12.199 N	103° 33' 45.010 W
4,274.0	7.90	269.50	4,271.8	28.3	-31.2	396,138.74	780,051.44	32° 5' 12.192 N	103° 33' 45.153 W
4,368.0	6.20	276.20	4,365.1	28.8	-42.7	396,139.23	780,039.93	32° 5' 12.198 N	103° 33' 45.287 W
4,461.0	4.30	271.60	4,457.7	29.5	-51.1	396,139.87	780,031.46	32° 5' 12.205 N	103° 33' 45.385 W
4,554.0	3.90	276.20	4,550.5	29.9	-57.8	396,140.31	780,024.83	32° 5' 12.210 N	103° 33' 45.462 W
4,648.0	4.50	248.90	4,644.2	28.9	-64.4	396,139.33	780,018.21	32° 5' 12.201 N	103° 33' 45.539 W
4,741.0	3.90	229.90	4,737.0	25.6	-70.2	396,135.98	780,012.38	32° 5' 12.168 N	103° 33' 45.607 W
4,835.0	4.60	239.60	4,830.7	21.6	-75.9	396,132.01	780,006.69	32° 5' 12.129 N	103° 33' 45.674 W
4,928.0	4.10	243.10	4,923.4	18.2	-82.1	396,128.62	780,000.51	32° 5' 12.096 N	103° 33' 45.746 W
5,021.0	5.60	252.40	5,016.1	15.3	-89.4	396,125.74	779,993.21	32° 5' 12.068 N	103° 33' 45.831 W
5,114.0	6.30	254.90	5,108.6	12.6	-98.6	396,123.04	779,983.96	32° 5' 12.042 N	103° 33' 45.939 W
5,208.0	6.50	254.50	5,202.0	9.9	-108.7	396,120.28	779,973.86	32° 5' 12.015 N	103° 33' 46.056 W
5,301.0	6.60	253.50	5,294.4	7.0	-118.9	396,117.35	779,963.66	32° 5' 11.987 N	103° 33' 46.175 W
5,394.0	6.40	254.70	5,386.8	4.1	-129.1	396,114.47	779,953.54	32° 5' 11.959 N	103° 33' 46.293 W
5,487.0	6.90	258.60	5,479.2	1.6	-139.5	396,111.99	779,943.06	32° 5' 11.935 N	103° 33' 46.415 W
5,580.0	6.50	259.10	5,571.6	-0.5	-150.2	396,109.89	779,932.41	32° 5' 11.915 N	103° 33' 46.539 W
5,674.0	6.60	260.00	5,664.9	-2.4	-160.7	396,107.95	779,921.87	32° 5' 11.897 N	103° 33' 46.662 W
5,767.0	6.60	260.30	5,757.3	-4.3	-171.3	396,106.12	779,911.34	32° 5' 11.880 N	103° 33' 46.784 W
5,861.0	6.40	259.10	5,850.7	-6.2	-181.7	396,104.22	779,900.87	32° 5' 11.862 N	103° 33' 46.906 W
5,954.0	6.10	277.40	5,943.2	-6.5	-191.7	396,103.88	779,890.88	32° 5' 11.859 N	103° 33' 47.022 W
6,047.0	5.30	275.10	6,035.7	-5.5	-200.9	396,104.90	779,881.70	32° 5' 11.870 N	103° 33' 47.129 W
6,140.0	5.30	274.20	6,128.3	-4.8	-209.5	396,105.59	779,873.14	32° 5' 11.877 N	103° 33' 47.228 W



Survey Report - Geographic



Company: BTA Oil Producers, LLC
Project: Lea County, NM (NAD 83)
Site: Sec 34, T25-S, R33-E
Well: Rojo 7811 34-27 Fed Com #19H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Rojo 7811 34-27 Fed Com #19H
TVD Reference: WELL @ 3348.0usft (Patterson #566)
MD Reference: WELL @ 3348.0usft (Patterson #566)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,234.0	5.30	273.90	6,221.9	-4.2	-218.1	396,106.21	779,864.48	32° 5' 11.884 N	103° 33' 47.329 W
6,327.0	5.00	274.60	6,314.5	-3.6	-226.4	396,106.82	779,856.15	32° 5' 11.890 N	103° 33' 47.426 W
6,420.0	4.90	275.10	6,407.2	-2.9	-234.4	396,107.50	779,848.16	32° 5' 11.898 N	103° 33' 47.519 W
6,514.0	4.70	274.10	6,500.9	-2.3	-242.3	396,108.13	779,840.32	32° 5' 11.905 N	103° 33' 47.610 W
6,607.0	4.70	272.60	6,593.5	-1.8	-249.9	396,108.58	779,832.71	32° 5' 11.909 N	103° 33' 47.698 W
6,700.0	4.50	272.30	6,686.2	-1.5	-257.3	396,108.90	779,825.26	32° 5' 11.913 N	103° 33' 47.785 W
6,794.0	4.50	273.20	6,780.0	-1.1	-264.7	396,109.25	779,817.89	32° 5' 11.917 N	103° 33' 47.870 W
6,887.0	4.20	270.90	6,872.7	-0.9	-271.8	396,109.51	779,810.84	32° 5' 11.920 N	103° 33' 47.952 W
6,980.0	3.90	269.70	6,965.5	-0.9	-278.3	396,109.55	779,804.28	32° 5' 11.921 N	103° 33' 48.028 W
7,073.0	3.80	269.10	7,058.2	-0.9	-284.6	396,109.48	779,798.03	32° 5' 11.921 N	103° 33' 48.101 W
7,167.0	3.60	269.70	7,152.1	-1.0	-290.6	396,109.42	779,791.97	32° 5' 11.921 N	103° 33' 48.172 W
7,260.0	3.40	269.50	7,244.9	-1.0	-296.3	396,109.38	779,786.29	32° 5' 11.921 N	103° 33' 48.238 W
7,353.0	2.40	285.80	7,337.8	-0.5	-300.9	396,109.88	779,781.66	32° 5' 11.926 N	103° 33' 48.291 W
7,446.0	2.80	319.20	7,430.7	1.7	-304.3	396,112.13	779,778.30	32° 5' 11.949 N	103° 33' 48.330 W
7,539.0	1.30	356.80	7,523.6	4.5	-305.8	396,114.91	779,776.76	32° 5' 11.976 N	103° 33' 48.348 W
7,633.0	0.70	24.10	7,617.6	6.1	-305.7	396,116.49	779,776.93	32° 5' 11.992 N	103° 33' 48.346 W
7,726.0	0.30	354.40	7,710.6	6.9	-305.5	396,117.26	779,777.14	32° 5' 11.999 N	103° 33' 48.343 W
7,820.0	0.40	268.60	7,804.6	7.1	-305.8	396,117.49	779,776.79	32° 5' 12.002 N	103° 33' 48.347 W
7,913.0	0.80	256.10	7,897.6	6.9	-306.8	396,117.33	779,775.83	32° 5' 12.000 N	103° 33' 48.358 W
8,006.0	1.10	261.80	7,990.6	6.6	-308.3	396,117.05	779,774.32	32° 5' 11.997 N	103° 33' 48.376 W
8,099.0	1.10	266.50	8,083.6	6.5	-310.1	396,116.86	779,772.54	32° 5' 11.996 N	103° 33' 48.397 W
8,193.0	0.40	289.20	8,177.5	6.5	-311.3	396,116.92	779,771.33	32° 5' 11.996 N	103° 33' 48.411 W
8,286.0	0.40	277.70	8,270.5	6.7	-311.9	396,117.07	779,770.70	32° 5' 11.998 N	103° 33' 48.418 W
8,379.0	0.40	271.20	8,363.5	6.7	-312.5	396,117.12	779,770.06	32° 5' 11.998 N	103° 33' 48.426 W
8,473.0	0.60	255.10	8,457.5	6.6	-313.3	396,117.00	779,769.25	32° 5' 11.997 N	103° 33' 48.435 W
8,566.0	0.50	238.20	8,550.5	6.3	-314.2	396,116.66	779,768.44	32° 5' 11.994 N	103° 33' 48.444 W
8,659.0	0.20	224.80	8,643.5	5.9	-314.6	396,116.33	779,767.98	32° 5' 11.991 N	103° 33' 48.450 W
8,753.0	0.20	215.00	8,737.5	5.7	-314.8	396,116.08	779,767.77	32° 5' 11.988 N	103° 33' 48.452 W
8,846.0	0.40	246.30	8,830.5	5.4	-315.2	396,115.81	779,767.38	32° 5' 11.986 N	103° 33' 48.457 W
8,939.0	0.50	258.40	8,923.5	5.2	-315.9	396,115.60	779,766.69	32° 5' 11.984 N	103° 33' 48.465 W
9,032.0	0.20	266.50	9,016.5	5.1	-316.5	396,115.51	779,766.13	32° 5' 11.983 N	103° 33' 48.471 W
9,125.0	0.40	303.80	9,109.5	5.3	-316.9	396,115.68	779,765.69	32° 5' 11.985 N	103° 33' 48.476 W
9,219.0	0.70	306.40	9,203.5	5.8	-317.6	396,116.21	779,764.96	32° 5' 11.990 N	103° 33' 48.485 W
9,312.0	1.00	295.10	9,296.5	6.5	-318.8	396,116.89	779,763.77	32° 5' 11.997 N	103° 33' 48.499 W
9,405.0	0.90	62.20	9,389.5	7.2	-318.9	396,117.57	779,763.68	32° 5' 12.003 N	103° 33' 48.500 W
9,498.0	1.20	64.30	9,482.5	7.9	-317.4	396,118.33	779,765.20	32° 5' 12.011 N	103° 33' 48.482 W
9,592.0	0.40	53.30	9,576.5	8.6	-316.2	396,118.96	779,766.35	32° 5' 12.017 N	103° 33' 48.468 W
9,685.0	0.70	27.60	9,669.5	9.3	-315.7	396,119.65	779,766.88	32° 5' 12.024 N	103° 33' 48.462 W
9,778.0	0.60	24.30	9,762.5	10.2	-315.3	396,120.60	779,767.34	32° 5' 12.033 N	103° 33' 48.457 W
9,870.0	1.10	8.30	9,854.5	11.5	-314.9	396,121.91	779,767.66	32° 5' 12.046 N	103° 33' 48.453 W
9,963.0	1.60	2.80	9,947.4	13.7	-314.7	396,124.09	779,767.86	32° 5' 12.068 N	103° 33' 48.451 W
10,056.0	1.50	7.40	10,040.4	16.2	-314.5	396,126.60	779,768.08	32° 5' 12.092 N	103° 33' 48.448 W
10,150.0	1.10	13.20	10,134.4	18.3	-314.2	396,128.70	779,768.44	32° 5' 12.113 N	103° 33' 48.443 W
10,243.0	0.60	2.60	10,227.4	19.7	-313.9	396,130.05	779,768.67	32° 5' 12.127 N	103° 33' 48.441 W
10,336.0	0.20	267.90	10,320.4	20.1	-314.1	396,130.53	779,768.53	32° 5' 12.131 N	103° 33' 48.442 W
10,430.0	0.40	37.30	10,414.4	20.4	-314.0	396,130.79	779,768.56	32° 5' 12.134 N	103° 33' 48.442 W
10,523.0	1.10	93.90	10,507.4	20.6	-312.9	396,130.99	779,769.65	32° 5' 12.136 N	103° 33' 48.429 W
10,616.0	3.00	106.20	10,600.3	19.8	-309.7	396,130.25	779,772.88	32° 5' 12.128 N	103° 33' 48.392 W
10,710.0	3.30	115.70	10,694.1	18.0	-304.9	396,128.39	779,777.68	32° 5' 12.109 N	103° 33' 48.336 W
10,803.0	2.10	123.60	10,787.0	15.9	-301.1	396,126.28	779,781.51	32° 5' 12.088 N	103° 33' 48.292 W
10,896.0	1.80	133.80	10,880.0	13.9	-298.6	396,124.33	779,783.98	32° 5' 12.069 N	103° 33' 48.263 W
10,989.0	0.70	168.20	10,973.0	12.4	-297.4	396,122.76	779,785.15	32° 5' 12.053 N	103° 33' 48.250 W
11,082.0	1.20	255.20	11,066.0	11.6	-298.3	396,121.96	779,784.33	32° 5' 12.045 N	103° 33' 48.259 W
11,176.0	1.90	249.40	11,159.9	10.8	-300.7	396,121.16	779,781.92	32° 5' 12.038 N	103° 33' 48.287 W
11,269.0	2.60	248.90	11,252.9	9.5	-304.1	396,119.86	779,778.51	32° 5' 12.025 N	103° 33' 48.327 W



Survey Report - Geographic



Company: BTA Oil Producers, LLC
 Project: Lea County, NM (NAD 83)
 Site: Sec 34, T25-S, R33-E
 Well: Rojo 7811 34-27 Fed Com #19H
 Wellbore: Wellbore #1
 Design: Wellbore #1

Local Co-ordinate Reference: Well Rojo 7811 34-27 Fed Com #19H
 TVD Reference: WELL @ 3348.0usft (Patterson #566)
 MD Reference: WELL @ 3348.0usft (Patterson #566)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
11,362.0	2.90	248.20	11,345.7	7.8	-308.2	396,118.22	779,774.35	32° 5' 12.009 N	103° 33' 48.376 W
11,456.0	3.10	265.60	11,439.6	6.7	-313.0	396,117.14	779,769.61	32° 5' 11.999 N	103° 33' 48.431 W
11,549.0	3.40	280.60	11,532.5	7.1	-318.2	396,117.46	779,764.39	32° 5' 12.002 N	103° 33' 48.491 W
11,634.0	3.80	304.50	11,617.3	9.1	-323.0	396,119.52	779,759.59	32° 5' 12.023 N	103° 33' 48.547 W
11,728.0	6.20	323.00	11,710.9	14.9	-328.6	396,125.34	779,753.97	32° 5' 12.081 N	103° 33' 48.612 W
11,823.0	19.30	1.80	11,803.5	34.8	-331.2	396,145.24	779,751.36	32° 5' 12.278 N	103° 33' 48.641 W
11,919.0	33.60	10.10	11,889.3	77.1	-326.1	396,187.48	779,756.55	32° 5' 12.696 N	103° 33' 48.577 W
12,014.0	35.10	7.80	11,967.7	130.0	-317.7	396,240.42	779,764.86	32° 5' 13.219 N	103° 33' 48.476 W
12,020.4	35.23	7.41	11,972.9	133.7	-317.2	396,244.08	779,765.35	32° 5' 13.255 N	103° 33' 48.470 W
Cross LL@ 12020.4' MD / 11972.9' TVD									
12,109.0	37.20	2.30	12,044.4	185.8	-312.9	396,296.20	779,769.73	32° 5' 13.771 N	103° 33' 48.415 W
12,180.8	46.78	358.88	12,097.8	233.8	-312.5	396,344.17	779,770.09	32° 5' 14.245 N	103° 33' 48.406 W
FTP @ 12180.8' MD / 12097.8' TVD									
12,204.0	49.90	358.00	12,113.2	251.1	-313.0	396,361.49	779,769.61	32° 5' 14.417 N	103° 33' 48.410 W
12,299.0	60.50	359.00	12,167.3	329.0	-315.0	396,439.36	779,767.61	32° 5' 15.187 N	103° 33' 48.427 W
12,394.0	65.60	1.80	12,210.4	413.6	-314.3	396,524.00	779,768.25	32° 5' 16.025 N	103° 33' 48.413 W
12,489.0	71.50	0.90	12,245.1	502.0	-312.3	396,612.36	779,770.32	32° 5' 16.899 N	103° 33' 48.381 W
12,584.0	76.90	359.90	12,270.9	593.3	-311.6	396,703.73	779,770.95	32° 5' 17.803 N	103° 33' 48.367 W
12,678.0	83.40	2.20	12,287.0	685.9	-309.9	396,796.27	779,772.66	32° 5' 18.719 N	103° 33' 48.339 W
12,773.0	89.40	0.80	12,293.0	780.6	-307.5	396,891.01	779,775.14	32° 5' 19.656 N	103° 33' 48.302 W
12,869.0	92.00	2.20	12,291.8	876.6	-304.9	396,986.96	779,777.65	32° 5' 20.605 N	103° 33' 48.265 W
12,904.0	90.20	0.90	12,291.1	911.5	-304.0	397,021.93	779,778.60	32° 5' 20.951 N	103° 33' 48.251 W
12,997.0	91.70	0.10	12,289.6	1,004.5	-303.2	397,114.92	779,779.41	32° 5' 21.871 N	103° 33' 48.234 W
13,092.0	88.50	359.20	12,289.4	1,099.5	-303.8	397,209.90	779,778.83	32° 5' 22.811 N	103° 33' 48.233 W
13,187.0	89.20	359.20	12,291.3	1,194.5	-305.1	397,304.87	779,777.50	32° 5' 23.751 N	103° 33' 48.240 W
13,282.0	91.40	358.00	12,290.8	1,289.4	-307.4	397,399.83	779,775.18	32° 5' 24.691 N	103° 33' 48.260 W
13,376.0	91.80	359.70	12,288.2	1,383.4	-309.3	397,493.77	779,773.30	32° 5' 25.621 N	103° 33' 48.274 W
13,471.0	89.20	0.60	12,287.4	1,478.4	-309.1	397,588.76	779,773.54	32° 5' 26.561 N	103° 33' 48.263 W
13,566.0	88.80	4.10	12,289.0	1,573.3	-305.2	397,683.65	779,777.44	32° 5' 27.499 N	103° 33' 48.210 W
13,662.0	89.70	4.30	12,290.3	1,669.0	-298.1	397,779.39	779,784.47	32° 5' 28.446 N	103° 33' 48.120 W
13,757.0	89.40	2.00	12,291.0	1,763.8	-292.9	397,874.23	779,789.69	32° 5' 29.384 N	103° 33' 48.052 W
13,852.0	89.50	1.80	12,292.0	1,858.8	-289.8	397,969.18	779,792.84	32° 5' 30.324 N	103° 33' 48.007 W
13,866.0	88.50	1.80	12,292.2	1,872.8	-289.3	397,983.17	779,793.28	32° 5' 30.462 N	103° 33' 48.001 W
13,915.0	91.60	2.70	12,292.2	1,921.7	-287.4	398,032.12	779,795.20	32° 5' 30.946 N	103° 33' 47.974 W
13,946.0	89.40	2.00	12,291.9	1,952.7	-286.1	398,063.09	779,796.47	32° 5' 31.253 N	103° 33' 47.957 W
13,976.0	90.00	1.60	12,292.0	1,982.7	-285.2	398,093.08	779,797.41	32° 5' 31.549 N	103° 33' 47.944 W
14,016.0	89.50	1.10	12,292.2	2,022.7	-284.2	398,133.07	779,798.36	32° 5' 31.945 N	103° 33' 47.929 W
14,042.0	90.00	0.90	12,292.3	2,048.7	-283.8	398,159.06	779,798.81	32° 5' 32.202 N	103° 33' 47.922 W
14,062.0	90.60	1.30	12,292.2	2,068.7	-283.4	398,179.06	779,799.20	32° 5' 32.400 N	103° 33' 47.916 W
14,135.0	86.30	0.90	12,294.2	2,141.6	-282.0	398,252.00	779,800.60	32° 5' 33.122 N	103° 33' 47.893 W
14,205.0	85.70	358.70	12,299.1	2,211.4	-282.2	398,321.82	779,800.35	32° 5' 33.813 N	103° 33' 47.890 W
14,230.0	86.80	358.30	12,300.7	2,236.4	-282.9	398,346.76	779,799.70	32° 5' 34.059 N	103° 33' 47.896 W
14,270.0	88.80	357.20	12,302.3	2,276.3	-284.5	398,386.70	779,798.13	32° 5' 34.455 N	103° 33' 47.911 W
14,294.0	89.50	356.90	12,302.6	2,300.3	-285.7	398,410.66	779,796.90	32° 5' 34.692 N	103° 33' 47.923 W
14,326.0	89.80	357.10	12,302.8	2,332.2	-287.4	398,442.62	779,795.22	32° 5' 35.008 N	103° 33' 47.940 W
14,420.0	90.60	357.20	12,302.5	2,426.1	-292.1	398,536.50	779,790.55	32° 5' 35.938 N	103° 33' 47.987 W
14,516.0	88.60	356.90	12,303.1	2,522.0	-297.0	398,632.37	779,785.61	32° 5' 36.887 N	103° 33' 48.036 W
14,547.0	87.60	356.70	12,304.2	2,552.9	-298.7	398,663.30	779,783.88	32° 5' 37.193 N	103° 33' 48.054 W
14,610.0	87.90	356.70	12,306.7	2,615.7	-302.3	398,726.15	779,780.25	32° 5' 37.815 N	103° 33' 48.091 W
14,705.0	88.60	356.90	12,309.6	2,710.6	-307.6	398,820.96	779,774.95	32° 5' 38.754 N	103° 33' 48.144 W
14,801.0	87.70	356.40	12,312.7	2,806.3	-313.3	398,916.74	779,769.35	32° 5' 39.702 N	103° 33' 48.202 W
14,896.0	89.80	358.80	12,314.7	2,901.2	-317.2	399,011.62	779,765.37	32° 5' 40.641 N	103° 33' 48.240 W
14,991.0	90.90	0.40	12,314.1	2,996.2	-317.9	399,106.61	779,764.71	32° 5' 41.581 N	103° 33' 48.240 W
15,085.0	88.80	1.30	12,314.4	3,090.2	-316.5	399,200.60	779,766.10	32° 5' 42.511 N	103° 33' 48.216 W
15,180.0	89.30	0.80	12,316.0	3,185.2	-314.8	399,295.57	779,767.84	32° 5' 43.451 N	103° 33' 48.188 W



Survey Report - Geographic



Company: BTA Oil Producers, LLC
 Project: Lea County, NM (NAD 83)
 Site: Sec 34, T25-S, R33-E
 Well: Rojo 7811 34-27 Fed Com #19H
 Wellbore: Wellbore #1
 Design: Wellbore #1

Local Co-ordinate Reference: Well Rojo 7811 34-27 Fed Com #19H
 TVD Reference: WELL @ 3348.0usft (Patterson #566)
 MD Reference: WELL @ 3348.0usft (Patterson #566)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
15,273.0	90.60	357.20	12,316.0	3,278.1	-316.4	399,388.54	779,766.22	32° 5' 44.371 N	103° 33' 48.199 W
15,367.0	89.60	356.40	12,315.9	3,372.0	-321.6	399,482.39	779,760.97	32° 5' 45.300 N	103° 33' 48.252 W
15,462.0	90.10	357.80	12,316.1	3,466.9	-326.4	399,577.26	779,756.17	32° 5' 46.239 N	103° 33' 48.300 W
15,557.0	91.70	359.40	12,314.6	3,561.8	-328.8	399,672.22	779,753.84	32° 5' 47.179 N	103° 33' 48.319 W
15,651.0	90.90	357.80	12,312.5	3,655.8	-331.0	399,766.16	779,751.55	32° 5' 48.108 N	103° 33' 48.338 W
15,746.0	90.70	356.90	12,311.2	3,750.6	-335.4	399,861.05	779,747.16	32° 5' 49.048 N	103° 33' 48.381 W
15,841.0	88.80	357.60	12,311.6	3,845.5	-340.0	399,955.93	779,742.60	32° 5' 49.987 N	103° 33' 48.426 W
15,911.0	87.30	358.70	12,314.0	3,915.5	-342.3	400,025.85	779,740.34	32° 5' 50.679 N	103° 33' 48.447 W
15,936.0	86.50	358.80	12,315.3	3,940.4	-342.8	400,050.81	779,739.80	32° 5' 50.926 N	103° 33' 48.451 W
15,976.0	86.70	358.50	12,317.7	3,980.3	-343.7	400,090.73	779,738.86	32° 5' 51.321 N	103° 33' 48.459 W
16,031.0	88.50	359.70	12,320.0	4,035.3	-344.6	400,145.67	779,737.99	32° 5' 51.865 N	103° 33' 48.464 W
16,046.0	90.00	0.40	12,320.2	4,050.3	-344.6	400,160.67	779,738.01	32° 5' 52.013 N	103° 33' 48.463 W
16,126.0	92.90	1.80	12,318.2	4,130.2	-343.1	400,240.62	779,739.54	32° 5' 52.804 N	103° 33' 48.438 W
16,220.0	90.00	359.40	12,315.8	4,224.2	-342.1	400,334.57	779,740.52	32° 5' 53.734 N	103° 33' 48.419 W
16,253.0	88.50	357.60	12,316.2	4,257.1	-342.9	400,367.55	779,739.66	32° 5' 54.060 N	103° 33' 48.426 W
16,315.0	89.60	358.50	12,317.3	4,319.1	-345.0	400,429.50	779,737.55	32° 5' 54.673 N	103° 33' 48.446 W
16,410.0	91.10	359.90	12,316.7	4,414.1	-346.4	400,524.49	779,736.22	32° 5' 55.613 N	103° 33' 48.453 W
16,505.0	89.30	359.50	12,316.3	4,509.1	-346.9	400,619.48	779,735.73	32° 5' 56.553 N	103° 33' 48.451 W
16,600.0	92.20	0.20	12,315.1	4,604.1	-347.1	400,714.46	779,735.48	32° 5' 57.493 N	103° 33' 48.446 W
16,695.0	89.10	358.30	12,314.0	4,699.0	-348.4	400,809.43	779,734.23	32° 5' 58.433 N	103° 33' 48.453 W
16,790.0	91.60	359.90	12,313.4	4,794.0	-349.9	400,904.41	779,732.74	32° 5' 59.373 N	103° 33' 48.462 W
16,884.0	91.40	0.60	12,311.0	4,888.0	-349.4	400,998.37	779,733.15	32° 6' 0.303 N	103° 33' 48.449 W
16,979.0	91.90	0.40	12,308.2	4,982.9	-348.6	401,093.33	779,733.98	32° 6' 1.242 N	103° 33' 48.432 W
17,051.0	90.00	359.90	12,307.1	5,054.9	-348.4	401,165.32	779,734.17	32° 6' 1.955 N	103° 33' 48.424 W
17,074.0	90.00	359.50	12,307.1	5,077.9	-348.5	401,188.32	779,734.05	32° 6' 2.182 N	103° 33' 48.423 W
17,105.0	90.80	359.50	12,306.8	5,108.9	-348.8	401,219.31	779,733.78	32° 6' 2.489 N	103° 33' 48.424 W
17,168.0	90.20	359.20	12,306.3	5,171.9	-349.5	401,282.31	779,733.06	32° 6' 3.113 N	103° 33' 48.427 W
17,263.0	89.90	1.10	12,306.2	5,266.9	-349.3	401,377.30	779,733.31	32° 6' 4.052 N	103° 33' 48.416 W
17,358.0	87.30	2.00	12,308.5	5,361.8	-346.7	401,472.23	779,735.88	32° 6' 4.992 N	103° 33' 48.378 W
17,453.0	87.80	2.00	12,312.6	5,456.7	-343.4	401,567.09	779,739.19	32° 6' 5.930 N	103° 33' 48.332 W
17,548.0	89.50	359.90	12,314.8	5,551.6	-341.8	401,662.04	779,740.77	32° 6' 6.870 N	103° 33' 48.306 W
17,642.0	90.10	0.40	12,315.2	5,645.6	-341.6	401,756.04	779,741.01	32° 6' 7.800 N	103° 33' 48.295 W
17,737.0	86.10	358.70	12,318.3	5,740.6	-342.3	401,850.96	779,740.27	32° 6' 8.739 N	103° 33' 48.296 W
17,831.0	87.20	359.40	12,323.8	5,834.4	-343.9	401,944.78	779,738.71	32° 6' 9.668 N	103° 33' 48.306 W
17,926.0	87.80	359.40	12,327.9	5,929.3	-344.9	402,039.69	779,737.72	32° 6' 10.607 N	103° 33' 48.310 W
18,020.0	90.20	359.90	12,329.6	6,023.3	-345.5	402,133.66	779,737.14	32° 6' 11.537 N	103° 33' 48.309 W
18,115.0	85.70	356.90	12,333.0	6,118.1	-348.1	402,228.53	779,734.50	32° 6' 12.476 N	103° 33' 48.332 W
18,209.0	90.60	357.60	12,336.0	6,211.9	-352.6	402,322.34	779,729.99	32° 6' 13.404 N	103° 33' 48.376 W
18,304.0	89.30	358.10	12,336.1	6,306.9	-356.2	402,417.27	779,726.43	32° 6' 14.344 N	103° 33' 48.410 W
18,398.0	89.40	358.70	12,337.2	6,400.8	-358.8	402,511.23	779,723.80	32° 6' 15.274 N	103° 33' 48.433 W
18,492.0	89.00	357.40	12,338.5	6,494.8	-362.0	402,605.17	779,720.61	32° 6' 16.204 N	103° 33' 48.462 W
18,587.0	90.70	355.00	12,338.7	6,589.5	-368.3	402,699.95	779,714.31	32° 6' 17.142 N	103° 33' 48.527 W
18,683.0	90.90	352.30	12,337.4	6,684.9	-378.9	402,795.34	779,703.70	32° 6' 18.087 N	103° 33' 48.643 W
18,777.0	91.70	355.00	12,335.2	6,778.3	-389.3	402,888.73	779,693.30	32° 6' 19.011 N	103° 33' 48.756 W
18,872.0	90.90	357.40	12,333.1	6,873.1	-395.6	402,983.49	779,687.01	32° 6' 19.950 N	103° 33' 48.821 W
18,966.0	90.10	358.00	12,332.3	6,967.0	-399.4	403,077.41	779,683.24	32° 6' 20.879 N	103° 33' 48.857 W
19,061.0	89.60	358.50	12,332.5	7,062.0	-402.3	403,172.36	779,680.34	32° 6' 21.819 N	103° 33' 48.883 W
19,156.0	90.40	6.00	12,332.5	7,156.8	-398.5	403,267.22	779,684.06	32° 6' 22.757 N	103° 33' 48.832 W
19,251.0	92.60	5.50	12,330.0	7,251.3	-389.0	403,361.70	779,693.58	32° 6' 23.692 N	103° 33' 48.713 W
19,345.0	92.20	4.30	12,326.1	7,344.9	-381.0	403,455.28	779,701.60	32° 6' 24.617 N	103° 33' 48.612 W
19,440.0	90.20	2.30	12,324.1	7,439.7	-375.5	403,550.09	779,707.06	32° 6' 25.555 N	103° 33' 48.541 W
19,535.0	89.80	3.00	12,324.1	7,534.6	-371.1	403,644.99	779,711.46	32° 6' 26.494 N	103° 33' 48.482 W
19,631.0	89.30	2.70	12,324.9	7,630.5	-366.4	403,740.86	779,716.23	32° 6' 27.442 N	103° 33' 48.418 W
19,726.0	89.30	0.60	12,326.0	7,725.4	-363.6	403,835.81	779,718.97	32° 6' 28.381 N	103° 33' 48.379 W
19,822.0	89.60	359.40	12,326.9	7,821.4	-363.6	403,931.81	779,718.97	32° 6' 29.331 N	103° 33' 48.371 W



Survey Report - Geographic



Company: BTA Oil Producers, LLC
Project: Lea County, NM (NAD 83)
Site: Sec 34, T25-S, R33-E
Well: Rojo 7811 34-27 Fed Com #19H
Wellbore: Wellbore #1
Design: Wellbore #1

Local Co-ordinate Reference: Well Rojo 7811 34-27 Fed Com #19H
TVD Reference: WELL @ 3348.0usft (Patterson #566)
MD Reference: WELL @ 3348.0usft (Patterson #566)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
19,917.0	91.70	358.10	12,325.9	7,916.4	-365.7	404,026.77	779,716.89	32° 6' 30.271 N	103° 33' 48.387 W
19,954.0	91.26	357.94	12,324.9	7,953.3	-367.0	404,063.73	779,715.61	32° 6' 30.637 N	103° 33' 48.399 W
LTP @ 19954.0' MD / 12324.9' TVD									
19,985.0	90.90	357.80	12,324.3	7,984.3	-368.1	404,094.71	779,714.46	32° 6' 30.944 N	103° 33' 48.410 W
20,035.0	90.90	357.80	12,323.5	8,034.3	-370.1	404,144.66	779,712.54	32° 6' 31.438 N	103° 33' 48.428 W
TD @ 20035.0' MD / 12323.5' TVD									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
157.0	157.0	0.0	-0.3	First MWD Survey @ 157.0' MD / 157.0' TVD
12,020.4	11,972.9	133.7	-317.2	Cross LL @ 12020.4' MD / 11972.9' TVD
12,180.8	12,097.8	233.8	-312.5	FTP @ 12180.8' MD / 12097.8' TVD
19,954.0	12,324.9	7,953.3	-367.0	LTP @ 19954.0' MD / 12324.9' TVD
20,035.0	12,323.5	8,034.3	-370.1	TD @ 20035.0' MD / 12323.5' TVD