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

Sundry Print Report

03/14/2022

Well Name: MESA 8105 11 FEDERAL	**Well Location:** T26S / R32E / SEC 11 / NWNE /	**County or Parish/State:**
Well Number: 77H	**Type of Well:** OIL WELL	**Allottee or Tribe Name:**
Lease Number: NMNM014492	**Unit or CA Name:**	**Unit or CA Number:**
US Well Number: 3002549295	**Well Status:** Approved Application for Permit to Drill	**Operator:** BTA OIL PRODUCERS LLC

Notice of Intent

Sundry ID: 2645065

Type of Submission: Notice of Intent

Type of Action: Other

Date Sundry Submitted: 11/18/2021

Time Sundry Submitted: 11:36

Date proposed operation will begin: 11/18/2021

Procedure Description: BTA Oil Producers, LLC respectfully requests the following SHL Footage, Casing, and Drill plan changes to the original APD as approved. Please see attached for more details. Original SHL Location 490 FNL / 1820 FEL / LAT 32.063663 / LONG -103.642855 New SHL Location 290 FNL / 1880 FEL / LAT 32.064228 / LONG -103.643104

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Mesa_77H_Wall_plot_20211118113531.pdf

Mesa_77H_directional_plan_20211118113531.pdf

Signed_MESA_8105_11_FED_77H_c102_20211118113519.pdf

Mesa_8105_11_FED_77H_drill_plans_20211118113519.pdf

MESA_8105_11_FED_60H__61H_76H__77H_Well_pad_plat_20211118113519.pdf

Well Name: MESA 8105 11 FEDERAL

Well Location: T26S / R32E / SEC 11 / NWNE /

County or Parish/State:

Well Number: 77H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM014492

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002549295

Well Status: Approved Application for Permit to Drill

Operator: BTA OIL PRODUCERS LLC

Conditions of Approval

Additional Reviews

MESA_8105_11_Federal_77H_Sundry_2645065_Drilling_COA_OTA_20220215181404.pdf

Operator Certification

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 submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: SAMMY HAJAR

Signed on: NOV 18, 2021 11:35 AM

Name: BTA OIL PRODUCERS LLC

Title: Regulatory Analyst

Street Address: 104 S. Pecos

City: Midland **State:** TX

Phone: (432) 682-3753

Email address: shajar@btaoil.com

Field Representative

Representative Name:

Street Address:

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

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 03/10/2022

Signature: Cody R. Layton

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**BTA Oil Producers LLC**
LEASE NO.:	**NMNM014492**
WELL NAME & NO.:	MESA 8105 11 Federal 77H
SURFACE HOLE FOOTAGE:	290'/N & 1880'/E
BOTTOM HOLE FOOTAGE	50'/S & 2310'/E
LOCATION:	Section 11, T.26 S., R.32 E., NMP
COUNTY:	Lea County, New Mexico

COA

H2S	○ Yes	◉ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	○ Low	◉ Medium	○ High
Cave/Karst Potential	○ Critical		
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	◉ Multibowl	○ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☐ COM	☐ Unit

All Previous COAs Still Apply.

A. CASING

Casing Design:

1. The **10-3/4** inch surface casing shall be set at approximately **760 feet** (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.

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

whichever is greater.

d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The **7-5/8** inch intermediate casing shall be set at approximately **11,978** feet. 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. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**
  Excess cement calculates to -42%, 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 -5%, additional cement might be required.

b. Second stage above DV tool:

- Cement to surface. If cement does not circulate, contact the appropriate BLM office.
  Wait on cement (WOC) time for a primary cement job is to include tlead cement slurry due to cave/karst or potash.

❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

3. The minimum required fill of cement behind the **5 1/2 X 5 inch** 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. 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.

OTA02152022

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

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

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

[X] AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-49295	98158	WC-025 ; Wolfcamp

[4] Property Code	[5] Property Name	[6] Well Number
328173	MESA 8105 11 FED	77H

[7] OGRID No.	[8] Operator Name	[9] Elevation
260297	BTA OIL PRODUCERS, LLC	3252'

[10] Surface Location

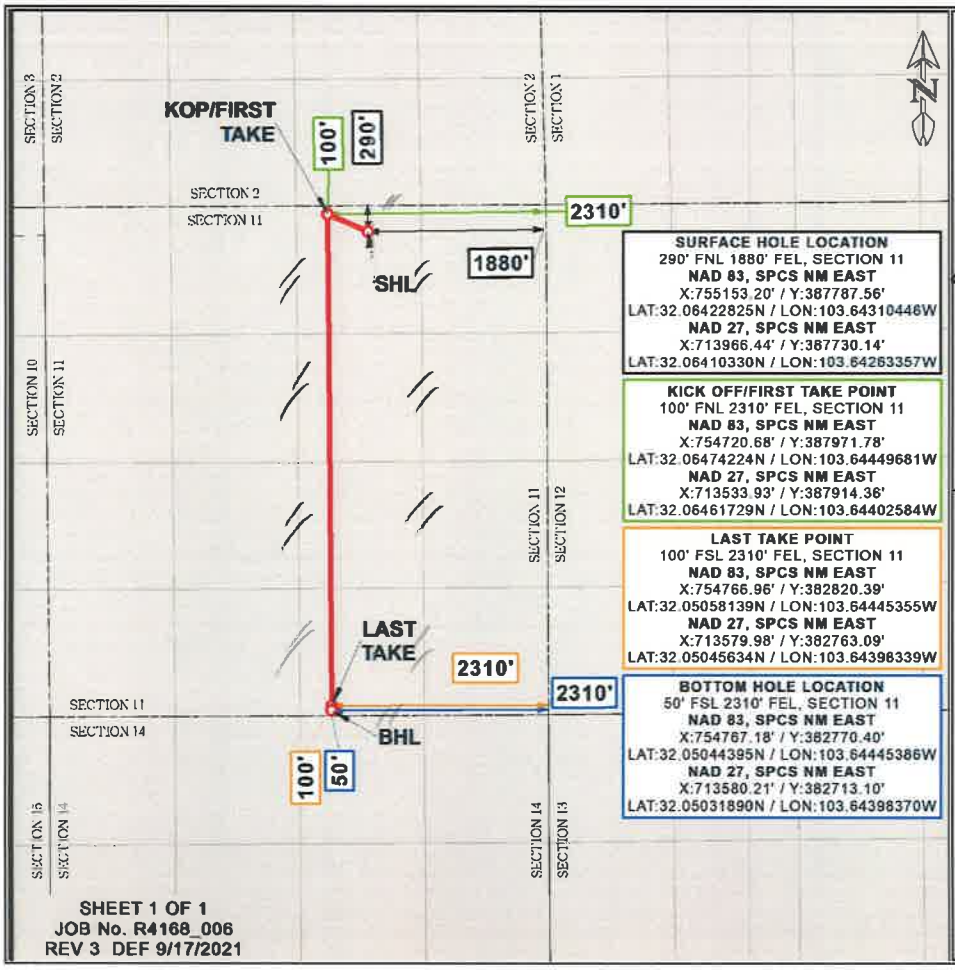
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	11	26S	32E		290	NORTH	1880	EAST	LEA

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	11	26S	32E		50	SOUTH	2310	EAST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
160			

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.



[17] OPERATOR CERTIFICATION

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

Signature 11/11/2021 Date

Sammy Hajar
Printed Name

SHAJAR@BTAOIL.COM
E-mail Address

[18] SURVEYOR CERTIFICATION

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

SEPTEMBER 17, 2021
Date of Survey

Signature and Seal of Professional Surveyor

DAVID W. MYERS NEW MEXICO 11403 PROFESSIONAL SURVEYOR

Certificate Number
DAVID W. MYERS 11403

Distances/areas relative to NAD 83 Combined Scale Factor: 0.99981493 Convergence Angle: 00°23'48.779988"

[ ] Horizontal Spacing Unit

BTA Oil Producers, LLC
104 S Pecos
Midland, TX 79701

WELL: Mesa 8105 11 Federal #77H
TVD: 12707
MD: 17822

DRILLING PLAN

Casing Program

Hole Size	Csg.Size	From (MD)	To (MD)	From (TVD)	To (TVD)	Tapered String	Weight (lbs)	Grade	Conn.	Collapse	Burst	Body Tension	Joint Tension	Dry/ Buoyant	Mud Weight (ppg)
14 3/4	10 3/4	0	750	0	750	No	40.5	J-55	STC	4.9	9.7	20.7	13.8	Dry	8.3
9 7/8	7 5/8	0	8032	0	8000	yes	29.7	P110	Buttress	1.4	2.4	3.9	4.0	Dry	9.4
8 3/4	7 5/8	8032	11978	8000	11935	yes	29.7	P110	FJ	1.7	1.6	2.6	2.7	Dry	9.4
6 3/4	5 1/2	0	11778	0	11735	Yes	20	P110	Buttress	1.9	1.4	2.7	2.8	Dry	14
6 3/4	5	11778	17822	11735	12707	Yes	18	P110	Buttress	1.9	1.4	1.8	1.9	Dry	14

*7 5/8" has DV Tool @ 4655'

Dv Tool Depth 4655

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	505	Class C	315	1.8	13.5	567	100%	2% CaCl2
	Tail		505	750	Class C	200	1.34	14.8	268	100%	2% CaCl2
7 5/8	Stg 2 Lead		0	4230	Class C	680	2.19	12.7	1489.2	50%	0.5% CaCl2
	Stg 2 Tail		4230	4655	Class C	150	1.33	14.8	199.5	50%	1% CaCl2
	Stg 1 Lead		4655	8425	Class H	385	2.64	10.5	1016.4	25%	0.5% CaCl2
	Stg 1 Tail		8425	11978	Class H	400	1.19	15.6	476	25%	1% CaCl2
5 1/2	Lead										
	Tail		10980	11778							
5	Lead										
	Tail		11778	17822	Class H	665	1.27	14.8	844.55	10%	0.1% Fluid Loss

BOP/CHOKE

Pressure Rating: 10M

Rating Depth: 14000

Requesting Variance? Testing BOP break when we don't penetrate WC
5M Annular on 10M BOPE
Choke Hose
Multi Bowl Wellhead

Pressure

Anticipated Bottom Hole Pressure: 9,251 psi

Anticipated Bottom Hole Temperature: 183 °F

Anticipated abnormal pressures, temperatures, or potential geologic hazards? None

Anticipated Bottom Surface Pressure: 6,455 psi

Hydrogen sulfide drilling operations plan required? Yes

Circulating Medium Table			
Depth (TVD)		Type	Weight (ppg)
From	To		
0	750	FW Spud	8.3 - 8.4
750	11978	DBE	9.0 - 9.4
11978	12707	OBM	11.0 - 14.0

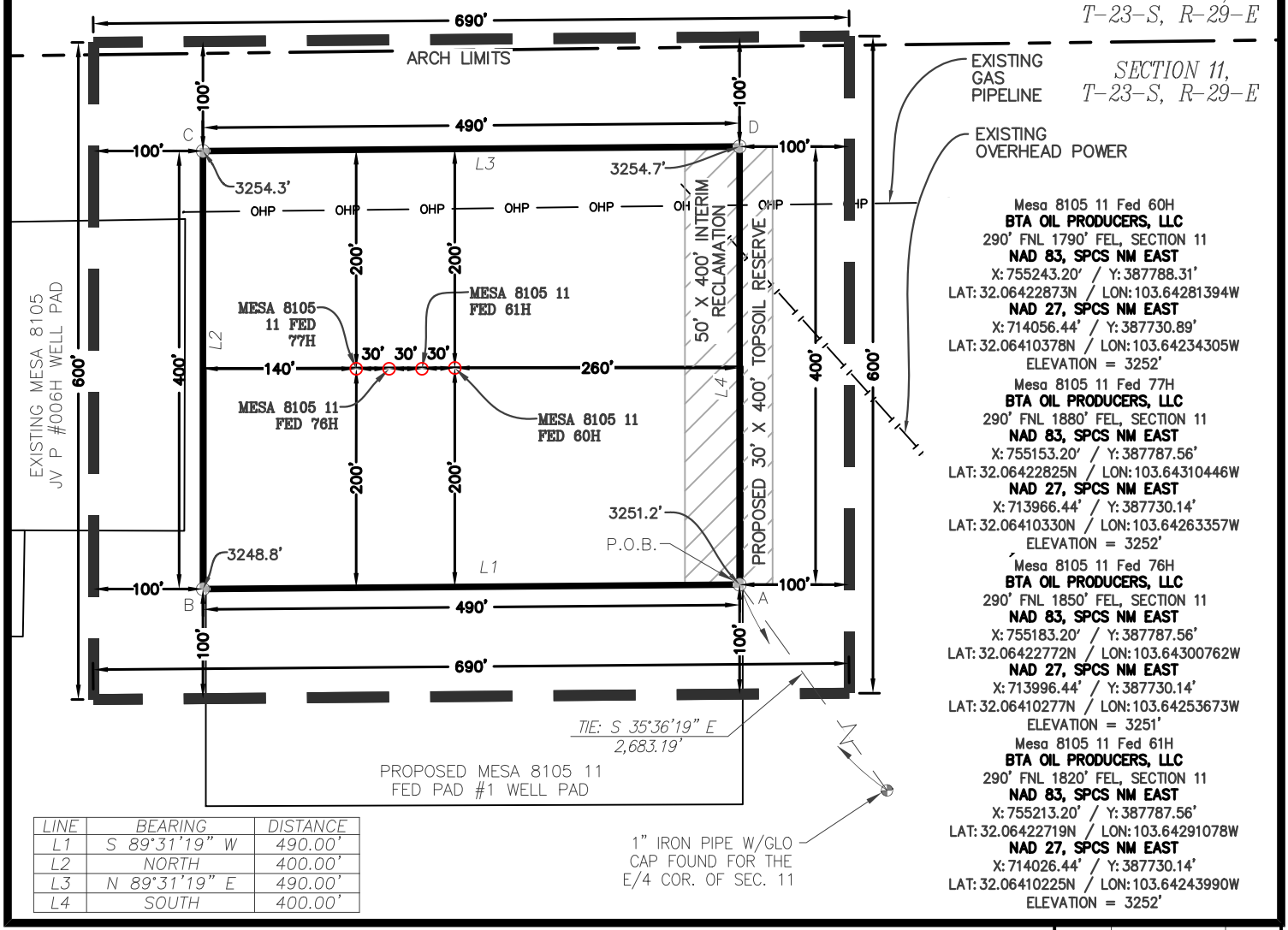
WELL PAD PLAT

MESA 8105 11 FED PAD #2
SEC. 11 TWP. 26-S RGE. 32-E
SURVEY: N.M.P.M.
COUNTY: LEA
OPERATOR: BTA OIL PRODUCERS, LLC
U.S.G.S. TOPOGRAPHIC MAP: PADUCA BREAKS WEST, N.M., TX

LEGEND
PROPOSED WELL PAD
ARCH SURVEY LIMITS
PROPOSED LEASE ROAD
SECTION LINE
RECLAMATION & TOPSOIL AREA

PROPOSED WELL PAD AREA = 4.50 ACRES
PROPOSED SHORT-TERM DISTURBANCE AREA = 4.78 ACRES
PROPOSED INTERIM RECLAMATION AREA = 0.73 ACRES
PROPOSED LONG-TERM DISTURBANCE AREA = 4.04 ACRES

	NAD 83		NAD 27	
A	E:(X)755503.19 N:(Y)387590.48	LAT:32.06368036 LON:-103.64197879	E:(X)714316.41 N:(Y)387533.06	LAT:32.06355541 LON:-103.64150797
B	E:(X)755013.21 N:(Y)387586.39	LAT:32.06367774 LON:-103.64356050	E:(X)713826.44 N:(Y)387528.97	LAT:32.06355279 LON:-103.64308962
C	E:(X)755013.21 N:(Y)387986.39	LAT:32.06477725 LON:-103.64355225	E:(X)713826.46 N:(Y)387928.96	LAT:32.06465231 LON:-103.64308130
D	E:(X)755503.19 N:(Y)387990.48	LAT:32.06477987 LON:-103.64197052	E:(X)714316.43 N:(Y)387933.05	LAT:32.06465493 LON:-103.64149964



Mesa 8105 11 Fed 60H
BTA OIL PRODUCERS, LLC
290' FNL 1790' FEL, SECTION 11
NAD 83, SPCS NM EAST
X: 755243.20' / Y: 387788.31'
LAT: 32.06422873N / LON: 103.64281394W
NAD 27, SPCS NM EAST
X: 714056.44' / Y: 387730.89'
LAT: 32.06410378N / LON: 103.64234305W
ELEVATION = 3252'

Mesa 8105 11 Fed 77H
BTA OIL PRODUCERS, LLC
290' FNL 1880' FEL, SECTION 11
NAD 83, SPCS NM EAST
X: 755153.20' / Y: 387787.56'
LAT: 32.06422825N / LON: 103.64310446W
NAD 27, SPCS NM EAST
X: 713966.44' / Y: 387730.14'
LAT: 32.06410330N / LON: 103.64263357W
ELEVATION = 3252'

Mesa 8105 11 Fed 76H
BTA OIL PRODUCERS, LLC
290' FNL 1850' FEL, SECTION 11
NAD 83, SPCS NM EAST
X: 755183.20' / Y: 387787.56'
LAT: 32.06422772N / LON: 103.64300762W
NAD 27, SPCS NM EAST
X: 713996.44' / Y: 387730.14'
LAT: 32.06410277N / LON: 103.64253673W
ELEVATION = 3251'

Mesa 8105 11 Fed 61H
BTA OIL PRODUCERS, LLC
290' FNL 1820' FEL, SECTION 11
NAD 83, SPCS NM EAST
X: 755213.20' / Y: 387787.56'
LAT: 32.06422719N / LON: 103.64291078W
NAD 27, SPCS NM EAST
X: 714026.44' / Y: 387730.14'
LAT: 32.06410225N / LON: 103.64243990W
ELEVATION = 3252'

LINE	BEARING	DISTANCE
L1	S 89°31'19" W	490.00'
L2	NORTH	400.00'
L3	N 89°31'19" E	490.00'
L4	SOUTH	400.00'

REV.	DATE	BY
5	10/21/2021	DEF

NOTE:
THIS IS NOT A BOUNDARY SURVEY, APPARENT PROPERTY CORNERS AND PROPERTY LINES ARE SHOWN FOR INFORMATION ONLY. BOUNDARY DATA SHOWN IS FROM STATE OF NEW MEXICO OIL CONSERVATION DIVISION FORM C-102 INCLUDED IN THIS SUBMITTAL.

75' 0' 75' 150'
SCALE: 1" = 150'

NOVEMBER 1, 2021

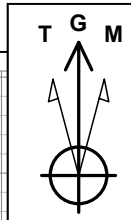
DAVID W. MYERS NEW MEXICO 11403 PROFESSIONAL SURVEYOR

DAVID W. MYERS 11403

SHEET 2 OF 3

PREPARED BY:
R-SQUARED GLOBAL, LLC
510 TRENTON ST., UNIT B,
WEST MONROE, LA 71291
318-323-6900 OFFICE
JOB No. R4168_006

BTA Oil Producers, LLC



Azimuths to Grid North
True North: -0.37°
Magnetic North: 7.40°

Magnetic Field
Strength: 48690.3nT
Dip Angle: 60.08°
Date: 12/31/2009
Model: IGRF200510

WELL DETAILS: Mesa #77H

+N/-S	+E/-W	Northing	Easting	Ground Level 3252.0 Latittude	Longitude
0.0	0.0	387787.56	755153.20	32° 3' 51.222 N	103° 38' 35.176 W

SITE DETAILS: Mesa Sec 11, T26S, R32E

Site Centre Northing: 387721.83
Easting: 752135.43

Positional Uncertainity: 0.0
Convergence: 0.36
Local North: Grid

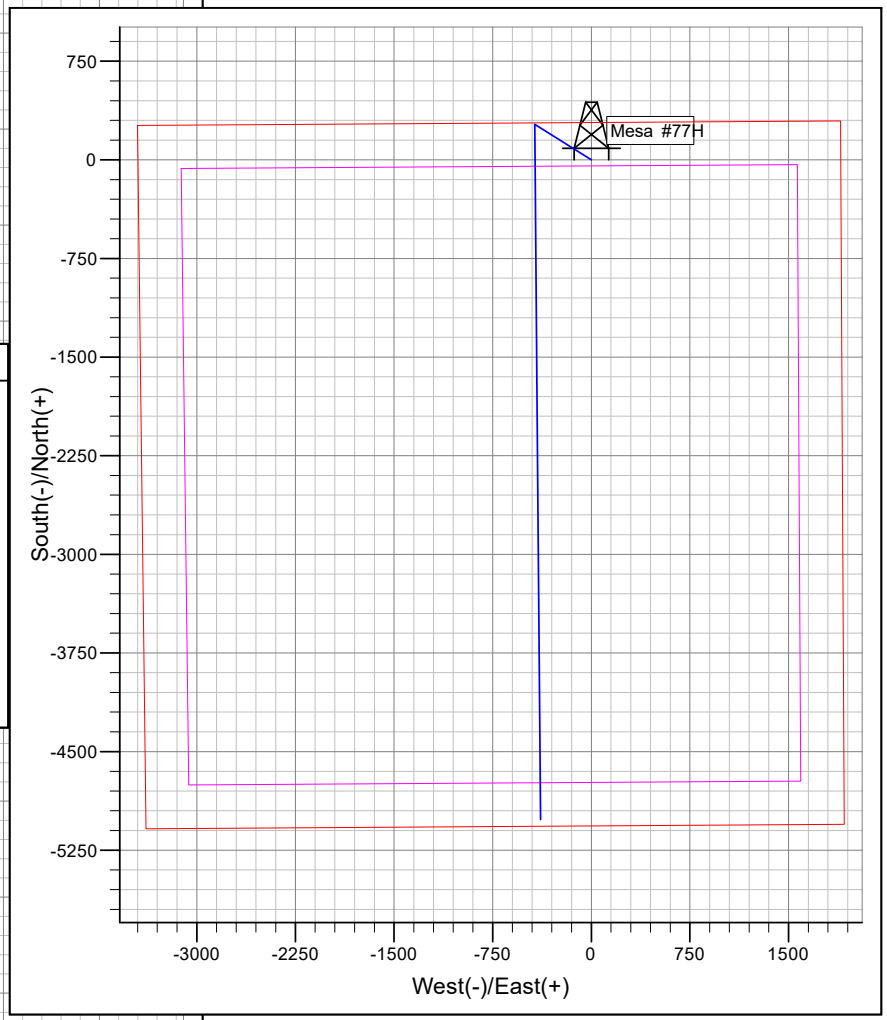
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	
3	1375.0	7.50	302.12	1373.9	13.0	-20.8	2.00	
4	4889.4	7.50	302.12	4858.3	257.0	-409.2	0.00	
5	5264.4	0.00	0.00	5232.2	270.0	-430.0	2.00	
612211.7		0.00	0.00	12179.5	270.0	-430.0	0.00	
712261.7		0.00	0.00	12229.5	270.0	-430.0	0.00	
813011.7		90.00	179.52	12707.0	-207.4	-426.0	12.00	
917821.8		90.00	179.52	12707.0	-5017.4	-386.0	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)
Mesa Sec 11, T26S, R32E
Mesa #77H

Wellbore #1

Plan: Design #1

Standard Planning Report - Geographic

12 November, 2021

Microsoft

Planning Report - Geographic

Database:	EDM16	**Local Co-ordinate Reference:**	Well Mesa #77H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3252.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3252.0usft
Site:	Mesa Sec 11, T26S, R32E	**North Reference:**	Grid
Well:	Mesa #77H	**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 Mesa Sec 11, T26S, R32E

Site Position:		**Northing:**	387,721.83 usft	**Latitude:**	32° 3' 50.761 N
From:	Map	**Easting:**	752,135.43 usft	**Longitude:**	103° 39' 10.249 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "		

Well Mesa #77H

Well Position	**+N/-S**	0.0 usft	**Northing:**	387,787.56 usft	**Latitude:**	32° 3' 51.222 N
	+E/-W	0.0 usft	**Easting:**	755,153.20 usft	**Longitude:**	103° 38' 35.176 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,252.0 usft
Grid Convergence:		0.37 °				

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	7.77	60.08	48,690.29259466

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	184.40

Plan Survey Tool Program **Date** 11/12/2021

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,821.8	Design #1 (Wellbore #1)		

Microsoft

Planning Report - Geographic

Database:	EDM16	**Local Co-ordinate Reference:**	Well Mesa #77H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3252.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3252.0usft
Site:	Mesa Sec 11, T26S, R32E	**North Reference:**	Grid
Well:	Mesa #77H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,375.0	7.50	302.13	1,373.9	13.0	-20.8	2.00	2.00	0.00	302.13	
4,889.4	7.50	302.13	4,858.3	257.0	-409.2	0.00	0.00	0.00	0.00	
5,264.4	0.00	0.00	5,232.2	270.0	-430.0	2.00	-2.00	0.00	180.00	
12,211.7	0.00	0.00	12,179.5	270.0	-430.0	0.00	0.00	0.00	0.00	
12,261.7	0.00	0.00	12,229.5	270.0	-430.0	0.00	0.00	0.00	0.00	
13,011.7	90.00	179.52	12,707.0	-207.4	-426.0	12.00	12.00	0.00	179.52	
17,821.8	90.00	179.52	12,707.0	-5,017.4	-386.0	0.00	0.00	0.00	0.00	Mesa #77H BHL

Microsoft

Planning Report - Geographic

Database:	EDM16	**Local Co-ordinate Reference:**	Well Mesa #77H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3252.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3252.0usft
Site:	Mesa Sec 11, T26S, R32E	**North Reference:**	Grid
Well:	Mesa #77H	**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	387,787.56	755,153.20	32° 3' 51.222 N	103° 38' 35.176 W
100.0	0.00	0.00	100.0	0.0	0.0	387,787.56	755,153.20	32° 3' 51.222 N	103° 38' 35.176 W
200.0	0.00	0.00	200.0	0.0	0.0	387,787.56	755,153.20	32° 3' 51.222 N	103° 38' 35.176 W
300.0	0.00	0.00	300.0	0.0	0.0	387,787.56	755,153.20	32° 3' 51.222 N	103° 38' 35.176 W
400.0	0.00	0.00	400.0	0.0	0.0	387,787.56	755,153.20	32° 3' 51.222 N	103° 38' 35.176 W
500.0	0.00	0.00	500.0	0.0	0.0	387,787.56	755,153.20	32° 3' 51.222 N	103° 38' 35.176 W
600.0	0.00	0.00	600.0	0.0	0.0	387,787.56	755,153.20	32° 3' 51.222 N	103° 38' 35.176 W
700.0	0.00	0.00	700.0	0.0	0.0	387,787.56	755,153.20	32° 3' 51.222 N	103° 38' 35.176 W
800.0	0.00	0.00	800.0	0.0	0.0	387,787.56	755,153.20	32° 3' 51.222 N	103° 38' 35.176 W
900.0	0.00	0.00	900.0	0.0	0.0	387,787.56	755,153.20	32° 3' 51.222 N	103° 38' 35.176 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	387,787.56	755,153.20	32° 3' 51.222 N	103° 38' 35.176 W
1,100.0	2.00	302.13	1,100.0	0.9	-1.5	387,788.49	755,151.72	32° 3' 51.231 N	103° 38' 35.193 W
1,200.0	4.00	302.13	1,199.8	3.7	-5.9	387,791.27	755,147.29	32° 3' 51.259 N	103° 38' 35.244 W
1,300.0	6.00	302.13	1,299.5	8.3	-13.3	387,795.90	755,139.91	32° 3' 51.305 N	103° 38' 35.330 W
1,375.0	7.50	302.13	1,373.9	13.0	-20.8	387,800.59	755,132.44	32° 3' 51.352 N	103° 38' 35.416 W
1,400.0	7.50	302.13	1,398.7	14.8	-23.5	387,802.33	755,129.68	32° 3' 51.369 N	103° 38' 35.448 W
1,500.0	7.50	302.13	1,497.9	21.7	-34.6	387,809.27	755,118.62	32° 3' 51.439 N	103° 38' 35.576 W
1,600.0	7.50	302.13	1,597.0	28.7	-45.6	387,816.21	755,107.57	32° 3' 51.508 N	103° 38' 35.704 W
1,700.0	7.50	302.13	1,696.1	35.6	-56.7	387,823.15	755,096.52	32° 3' 51.577 N	103° 38' 35.832 W
1,800.0	7.50	302.13	1,795.3	42.5	-67.7	387,830.09	755,085.46	32° 3' 51.647 N	103° 38' 35.960 W
1,900.0	7.50	302.13	1,894.4	49.5	-78.8	387,837.03	755,074.41	32° 3' 51.716 N	103° 38' 36.088 W
2,000.0	7.50	302.13	1,993.6	56.4	-89.8	387,843.97	755,063.36	32° 3' 51.786 N	103° 38' 36.216 W
2,100.0	7.50	302.13	2,092.7	63.4	-100.9	387,850.91	755,052.30	32° 3' 51.855 N	103° 38' 36.344 W
2,200.0	7.50	302.13	2,191.9	70.3	-112.0	387,857.85	755,041.25	32° 3' 51.924 N	103° 38' 36.472 W
2,300.0	7.50	302.13	2,291.0	77.2	-123.0	387,864.79	755,030.19	32° 3' 51.994 N	103° 38' 36.600 W
2,400.0	7.50	302.13	2,390.2	84.2	-134.1	387,871.73	755,019.14	32° 3' 52.063 N	103° 38' 36.728 W
2,500.0	7.50	302.13	2,489.3	91.1	-145.1	387,878.67	755,008.09	32° 3' 52.133 N	103° 38' 36.856 W
2,600.0	7.50	302.13	2,588.4	98.1	-156.2	387,885.61	754,997.03	32° 3' 52.202 N	103° 38' 36.983 W
2,700.0	7.50	302.13	2,687.6	105.0	-167.2	387,892.56	754,985.98	32° 3' 52.271 N	103° 38' 37.111 W
2,800.0	7.50	302.13	2,786.7	111.9	-178.3	387,899.50	754,974.93	32° 3' 52.341 N	103° 38' 37.239 W
2,900.0	7.50	302.13	2,885.9	118.9	-189.3	387,906.44	754,963.87	32° 3' 52.410 N	103° 38' 37.367 W
3,000.0	7.50	302.13	2,985.0	125.8	-200.4	387,913.38	754,952.82	32° 3' 52.479 N	103° 38' 37.495 W
3,100.0	7.50	302.13	3,084.2	132.8	-211.4	387,920.32	754,941.77	32° 3' 52.549 N	103° 38' 37.623 W
3,200.0	7.50	302.13	3,183.3	139.7	-222.5	387,927.26	754,930.71	32° 3' 52.618 N	103° 38' 37.751 W
3,300.0	7.50	302.13	3,282.5	146.6	-233.5	387,934.20	754,919.66	32° 3' 52.688 N	103° 38' 37.879 W
3,400.0	7.50	302.13	3,381.6	153.6	-244.6	387,941.14	754,908.60	32° 3' 52.757 N	103° 38' 38.007 W
3,500.0	7.50	302.13	3,480.8	160.5	-255.7	387,948.08	754,897.55	32° 3' 52.826 N	103° 38' 38.135 W
3,600.0	7.50	302.13	3,579.9	167.5	-266.7	387,955.02	754,886.50	32° 3' 52.896 N	103° 38' 38.263 W
3,700.0	7.50	302.13	3,679.0	174.4	-277.8	387,961.96	754,875.44	32° 3' 52.965 N	103° 38' 38.391 W
3,800.0	7.50	302.13	3,778.2	181.4	-288.8	387,968.90	754,864.39	32° 3' 53.034 N	103° 38' 38.519 W
3,900.0	7.50	302.13	3,877.3	188.3	-299.9	387,975.84	754,853.34	32° 3' 53.104 N	103° 38' 38.647 W
4,000.0	7.50	302.13	3,976.5	195.2	-310.9	387,982.78	754,842.28	32° 3' 53.173 N	103° 38' 38.775 W
4,100.0	7.50	302.13	4,075.6	202.2	-322.0	387,989.73	754,831.23	32° 3' 53.243 N	103° 38' 38.903 W
4,200.0	7.50	302.13	4,174.8	209.1	-333.0	387,996.67	754,820.17	32° 3' 53.312 N	103° 38' 39.030 W
4,300.0	7.50	302.13	4,273.9	216.1	-344.1	388,003.61	754,809.12	32° 3' 53.381 N	103° 38' 39.158 W
4,400.0	7.50	302.13	4,373.1	223.0	-355.1	388,010.55	754,798.07	32° 3' 53.451 N	103° 38' 39.286 W
4,500.0	7.50	302.13	4,472.2	229.9	-366.2	388,017.49	754,787.01	32° 3' 53.520 N	103° 38' 39.414 W
4,600.0	7.50	302.13	4,571.3	236.9	-377.3	388,024.43	754,775.96	32° 3' 53.590 N	103° 38' 39.542 W
4,700.0	7.50	302.13	4,670.5	243.8	-388.3	388,031.37	754,764.91	32° 3' 53.659 N	103° 38' 39.670 W
4,800.0	7.50	302.13	4,769.6	250.8	-399.4	388,038.31	754,753.85	32° 3' 53.728 N	103° 38' 39.798 W
4,889.4	7.50	302.13	4,858.3	257.0	-409.2	388,044.52	754,743.97	32° 3' 53.790 N	103° 38' 39.912 W
4,900.0	7.29	302.13	4,868.8	257.7	-410.4	388,045.24	754,742.81	32° 3' 53.798 N	103° 38' 39.926 W
5,000.0	5.29	302.13	4,968.2	263.5	-419.7	388,051.06	754,733.54	32° 3' 53.856 N	103° 38' 40.033 W
5,100.0	3.29	302.13	5,067.9	267.5	-426.0	388,055.04	754,727.21	32° 3' 53.896 N	103° 38' 40.106 W
5,200.0	1.29	302.13	5,167.8	269.6	-429.4	388,057.16	754,723.83	32° 3' 53.917 N	103° 38' 40.146 W

Microsoft

Planning Report - Geographic

Database:	EDM16	**Local Co-ordinate Reference:**	Well Mesa #77H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3252.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3252.0usft
Site:	Mesa Sec 11, T26S, R32E	**North Reference:**	Grid
Well:	Mesa #77H	**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
5,264.4	0.00	0.00	5,232.2	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
5,300.0	0.00	0.00	5,267.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
5,400.0	0.00	0.00	5,367.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
5,500.0	0.00	0.00	5,467.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
5,600.0	0.00	0.00	5,567.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
5,700.0	0.00	0.00	5,667.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
5,800.0	0.00	0.00	5,767.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
5,900.0	0.00	0.00	5,867.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
6,000.0	0.00	0.00	5,967.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
6,100.0	0.00	0.00	6,067.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
6,200.0	0.00	0.00	6,167.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
6,300.0	0.00	0.00	6,267.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
6,400.0	0.00	0.00	6,367.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
6,500.0	0.00	0.00	6,467.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
6,600.0	0.00	0.00	6,567.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
6,700.0	0.00	0.00	6,667.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
6,800.0	0.00	0.00	6,767.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
6,900.0	0.00	0.00	6,867.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
7,000.0	0.00	0.00	6,967.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
7,100.0	0.00	0.00	7,067.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
7,200.0	0.00	0.00	7,167.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
7,300.0	0.00	0.00	7,267.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
7,400.0	0.00	0.00	7,367.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
7,500.0	0.00	0.00	7,467.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
7,600.0	0.00	0.00	7,567.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
7,700.0	0.00	0.00	7,667.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
7,800.0	0.00	0.00	7,767.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
7,900.0	0.00	0.00	7,867.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
8,000.0	0.00	0.00	7,967.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
8,100.0	0.00	0.00	8,067.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
8,200.0	0.00	0.00	8,167.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
8,300.0	0.00	0.00	8,267.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
8,400.0	0.00	0.00	8,367.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
8,500.0	0.00	0.00	8,467.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
8,600.0	0.00	0.00	8,567.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
8,700.0	0.00	0.00	8,667.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
8,800.0	0.00	0.00	8,767.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
8,900.0	0.00	0.00	8,867.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
9,000.0	0.00	0.00	8,967.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
9,100.0	0.00	0.00	9,067.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
9,200.0	0.00	0.00	9,167.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
9,300.0	0.00	0.00	9,267.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
9,400.0	0.00	0.00	9,367.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
9,500.0	0.00	0.00	9,467.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
9,600.0	0.00	0.00	9,567.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
9,700.0	0.00	0.00	9,667.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
9,800.0	0.00	0.00	9,767.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
9,900.0	0.00	0.00	9,867.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
10,000.0	0.00	0.00	9,967.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
10,100.0	0.00	0.00	10,067.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
10,200.0	0.00	0.00	10,167.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
10,300.0	0.00	0.00	10,267.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
10,400.0	0.00	0.00	10,367.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
10,500.0	0.00	0.00	10,467.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
10,600.0	0.00	0.00	10,567.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W

Microsoft

Planning Report - Geographic

Database:	EDM16	**Local Co-ordinate Reference:**	Well Mesa #77H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3252.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3252.0usft
Site:	Mesa Sec 11, T26S, R32E	**North Reference:**	Grid
Well:	Mesa #77H	**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
10,700.0	0.00	0.00	10,667.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
10,800.0	0.00	0.00	10,767.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
10,900.0	0.00	0.00	10,867.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
11,000.0	0.00	0.00	10,967.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
11,100.0	0.00	0.00	11,067.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
11,200.0	0.00	0.00	11,167.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
11,300.0	0.00	0.00	11,267.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
11,400.0	0.00	0.00	11,367.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
11,500.0	0.00	0.00	11,467.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
11,600.0	0.00	0.00	11,567.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
11,700.0	0.00	0.00	11,667.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
11,800.0	0.00	0.00	11,767.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
11,900.0	0.00	0.00	11,867.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
12,000.0	0.00	0.00	11,967.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
12,100.0	0.00	0.00	12,067.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
12,200.0	0.00	0.00	12,167.8	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
12,211.7	0.00	0.00	12,179.5	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
12,261.7	0.00	0.00	12,229.5	270.0	-430.0	388,057.55	754,723.21	32° 3' 53.921 N	103° 38' 40.153 W
12,300.0	4.59	179.52	12,267.8	268.5	-430.0	388,056.02	754,723.23	32° 3' 53.905 N	103° 38' 40.153 W
12,400.0	16.59	179.52	12,365.9	250.1	-429.8	388,037.67	754,723.38	32° 3' 53.724 N	103° 38' 40.152 W
12,500.0	28.59	179.52	12,458.0	211.8	-429.5	387,999.33	754,723.70	32° 3' 53.344 N	103° 38' 40.151 W
12,600.0	40.59	179.52	12,540.2	155.1	-429.0	387,942.67	754,724.17	32° 3' 52.784 N	103° 38' 40.150 W
12,700.0	52.59	179.52	12,608.8	82.6	-428.4	387,870.16	754,724.77	32° 3' 52.066 N	103° 38' 40.148 W
12,800.0	64.59	179.52	12,660.8	-2.6	-427.7	387,784.97	754,725.48	32° 3' 51.223 N	103° 38' 40.147 W
12,900.0	76.59	179.52	12,694.0	-96.7	-426.9	387,690.83	754,726.26	32° 3' 50.292 N	103° 38' 40.144 W
13,000.0	88.59	179.52	12,706.9	-195.7	-426.1	387,591.86	754,727.09	32° 3' 49.312 N	103° 38' 40.142 W
13,011.7	90.00	179.52	12,707.0	-207.4	-426.0	387,580.12	754,727.19	32° 3' 49.196 N	103° 38' 40.142 W
13,100.0	90.00	179.52	12,707.0	-295.7	-425.3	387,491.87	754,727.92	32° 3' 48.323 N	103° 38' 40.140 W
13,200.0	90.00	179.52	12,707.0	-395.7	-424.5	387,391.87	754,728.75	32° 3' 47.333 N	103° 38' 40.138 W
13,300.0	90.00	179.52	12,707.0	-495.7	-423.6	387,291.88	754,729.58	32° 3' 46.343 N	103° 38' 40.135 W
13,400.0	90.00	179.52	12,707.0	-595.7	-422.8	387,191.89	754,730.41	32° 3' 45.354 N	103° 38' 40.133 W
13,500.0	90.00	179.52	12,707.0	-695.7	-422.0	387,091.90	754,731.25	32° 3' 44.364 N	103° 38' 40.131 W
13,600.0	90.00	179.52	12,707.0	-795.7	-421.1	386,991.90	754,732.08	32° 3' 43.375 N	103° 38' 40.129 W
13,700.0	90.00	179.52	12,707.0	-895.7	-420.3	386,891.91	754,732.91	32° 3' 42.385 N	103° 38' 40.126 W
13,800.0	90.00	179.52	12,707.0	-995.7	-419.5	386,791.92	754,733.74	32° 3' 41.396 N	103° 38' 40.124 W
13,900.0	90.00	179.52	12,707.0	-1,095.7	-418.6	386,691.92	754,734.57	32° 3' 40.406 N	103° 38' 40.122 W
14,000.0	90.00	179.52	12,707.0	-1,195.7	-417.8	386,591.93	754,735.41	32° 3' 39.417 N	103° 38' 40.120 W
14,100.0	90.00	179.52	12,707.0	-1,295.7	-417.0	386,491.94	754,736.24	32° 3' 38.427 N	103° 38' 40.117 W
14,200.0	90.00	179.52	12,707.0	-1,395.7	-416.1	386,391.95	754,737.07	32° 3' 37.438 N	103° 38' 40.115 W
14,300.0	90.00	179.52	12,707.0	-1,495.7	-415.3	386,291.95	754,737.90	32° 3' 36.448 N	103° 38' 40.113 W
14,400.0	90.00	179.52	12,707.0	-1,595.7	-414.5	386,191.96	754,738.73	32° 3' 35.459 N	103° 38' 40.111 W
14,500.0	90.00	179.52	12,707.0	-1,695.7	-413.6	386,091.97	754,739.56	32° 3' 34.469 N	103° 38' 40.108 W
14,600.0	90.00	179.52	12,707.0	-1,795.7	-412.8	385,991.98	754,740.40	32° 3' 33.479 N	103° 38' 40.106 W
14,700.0	90.00	179.52	12,707.0	-1,895.6	-412.0	385,891.98	754,741.23	32° 3' 32.490 N	103° 38' 40.104 W
14,800.0	90.00	179.52	12,707.0	-1,995.6	-411.2	385,791.99	754,742.06	32° 3' 31.500 N	103° 38' 40.102 W
14,900.0	90.00	179.52	12,707.0	-2,095.6	-410.3	385,692.00	754,742.89	32° 3' 30.511 N	103° 38' 40.099 W
15,000.0	90.00	179.52	12,707.0	-2,195.6	-409.5	385,592.01	754,743.72	32° 3' 29.521 N	103° 38' 40.097 W
15,100.0	90.00	179.52	12,707.0	-2,295.6	-408.7	385,492.01	754,744.56	32° 3' 28.532 N	103° 38' 40.095 W
15,200.0	90.00	179.52	12,707.0	-2,395.6	-407.8	385,392.02	754,745.39	32° 3' 27.542 N	103° 38' 40.093 W
15,300.0	90.00	179.52	12,707.0	-2,495.6	-407.0	385,292.03	754,746.22	32° 3' 26.553 N	103° 38' 40.090 W
15,400.0	90.00	179.52	12,707.0	-2,595.6	-406.2	385,192.03	754,747.05	32° 3' 25.563 N	103° 38' 40.088 W
15,500.0	90.00	179.52	12,707.0	-2,695.6	-405.3	385,092.04	754,747.88	32° 3' 24.574 N	103° 38' 40.086 W
15,600.0	90.00	179.52	12,707.0	-2,795.6	-404.5	384,992.05	754,748.72	32° 3' 23.584 N	103° 38' 40.084 W
15,700.0	90.00	179.52	12,707.0	-2,895.6	-403.7	384,892.06	754,749.55	32° 3' 22.594 N	103° 38' 40.081 W
15,800.0	90.00	179.52	12,707.0	-2,995.6	-402.8	384,792.06	754,750.38	32° 3' 21.605 N	103° 38' 40.079 W

Microsoft

Planning Report - Geographic

Database:	EDM16	**Local Co-ordinate Reference:**	Well Mesa #77H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3252.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3252.0usft
Site:	Mesa Sec 11, T26S, R32E	**North Reference:**	Grid
Well:	Mesa #77H	**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
15,900.0	90.00	179.52	12,707.0	-3,095.6	-402.0	384,692.07	754,751.21	32° 3' 20.615 N	103° 38' 40.077 W
16,000.0	90.00	179.52	12,707.0	-3,195.6	-401.2	384,592.08	754,752.04	32° 3' 19.626 N	103° 38' 40.075 W
16,100.0	90.00	179.52	12,707.0	-3,295.6	-400.3	384,492.09	754,752.87	32° 3' 18.636 N	103° 38' 40.072 W
16,200.0	90.00	179.52	12,707.0	-3,395.6	-399.5	384,392.09	754,753.71	32° 3' 17.647 N	103° 38' 40.070 W
16,300.0	90.00	179.52	12,707.0	-3,495.6	-398.7	384,292.10	754,754.54	32° 3' 16.657 N	103° 38' 40.068 W
16,400.0	90.00	179.52	12,707.0	-3,595.6	-397.8	384,192.11	754,755.37	32° 3' 15.668 N	103° 38' 40.066 W
16,500.0	90.00	179.52	12,707.0	-3,695.6	-397.0	384,092.11	754,756.20	32° 3' 14.678 N	103° 38' 40.063 W
16,600.0	90.00	179.52	12,707.0	-3,795.6	-396.2	383,992.12	754,757.03	32° 3' 13.689 N	103° 38' 40.061 W
16,700.0	90.00	179.52	12,707.0	-3,895.6	-395.3	383,892.13	754,757.87	32° 3' 12.699 N	103° 38' 40.059 W
16,800.0	90.00	179.52	12,707.0	-3,995.6	-394.5	383,792.14	754,758.70	32° 3' 11.710 N	103° 38' 40.057 W
16,900.0	90.00	179.52	12,707.0	-4,095.6	-393.7	383,692.14	754,759.53	32° 3' 10.720 N	103° 38' 40.054 W
17,000.0	90.00	179.52	12,707.0	-4,195.6	-392.9	383,592.15	754,760.36	32° 3' 9.730 N	103° 38' 40.052 W
17,100.0	90.00	179.52	12,707.0	-4,295.6	-392.0	383,492.16	754,761.19	32° 3' 8.741 N	103° 38' 40.050 W
17,200.0	90.00	179.52	12,707.0	-4,395.6	-391.2	383,392.17	754,762.02	32° 3' 7.751 N	103° 38' 40.048 W
17,300.0	90.00	179.52	12,707.0	-4,495.6	-390.4	383,292.17	754,762.86	32° 3' 6.762 N	103° 38' 40.045 W
17,400.0	90.00	179.52	12,707.0	-4,595.6	-389.5	383,192.18	754,763.69	32° 3' 5.772 N	103° 38' 40.043 W
17,500.0	90.00	179.52	12,707.0	-4,695.6	-388.7	383,092.19	754,764.52	32° 3' 4.783 N	103° 38' 40.041 W
17,600.0	90.00	179.52	12,707.0	-4,795.5	-387.9	382,992.20	754,765.35	32° 3' 3.793 N	103° 38' 40.039 W
17,700.0	90.00	179.52	12,707.0	-4,895.5	-387.0	382,892.20	754,766.18	32° 3' 2.804 N	103° 38' 40.036 W
17,800.0	90.00	179.52	12,707.0	-4,995.5	-386.2	382,792.21	754,767.02	32° 3' 1.814 N	103° 38' 40.034 W
17,821.8	90.00	179.52	12,707.0	-5,017.4	-386.0	382,770.40	754,767.20	32° 3' 1.598 N	103° 38' 40.034 W

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Mesa #77H BHL - plan hits target center - Point	0.00	0.00	12,707.0	-5,017.4	-386.0	382,770.40	754,767.20	32° 3' 1.598 N	103° 38' 40.034 W

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 91163

CONDITIONS

Operator: BTA OIL PRODUCERS, LLC 104 S Pecos Midland, TX 79701	OGRID: 260297
	Action Number: 91163
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	PREVIOUS COA'S APPLY	5/2/2022