

Well Name: OCHOA 8703 FEDERAL COM	Well Location: T23S / R28E / SEC 12 / SENE /	County or Parish/State:
Well Number: 2H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM103879	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001548175	Well Status: Approved Application for Permit to Drill	Operator: BTA OIL PRODUCERS LLC

Notice of Intent

Type of Submission: Notice of Intent	Type of Action Other
Date Sundry Submitted: 05/10/2021	Time Sundry Submitted: 01:37
Date proposed operation will begin: 05/09/2021	

Procedure Description: BTA Oil Producers LLC respectfully requests the following footage, casing, cement, and drill plan changes to the original APD as approved. Please see attachments documents for more details OLD FOOTAGES: SHL: 1647' FNL & 361'FEL in Sec 12, T23S, R28E FTP: 1001' FNL & 330'FWL in Sec 7, T23S, R29E LTP: 999' FNL & 2328'FWL in Sec 8, T23S, R29E BHL: 999' FNL &2600'FWL in Sec 8, T23S, R29E NEW FOOTAGES SHL: 1647' FNL & 361'FEL in Sec 12, T23S, R28E FTP: 660' FNL & 330'FWL in Sec 7, T23S, R29E LTP: 660' FNL & 2325'FWL in Sec 8, T23S, R29E BHL: 660' FNL &2600'FWL in Sec 8, T23S, R29E

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

- Ochoa_2H_Sundry_Intermediate_Production_5_10_21_20210510133623.pdf
- Ochoa_8703_Federal_2H_DRILL_PLAN_20210510133610.pdf
- Ochoa_8703_Federal_2H_Wall_Plot_NEW_20210510133309.pdf
- Ochoa_8703_Federal_2H_directional_plan_NEW_20210510133309.pdf
- Signed___NEW_OCHOA_8703_FEDERAL_2H_c102_20210510133223.pdf

Well Name: OCHOA 8703 FEDERAL COM	Well Location: T23S / R28E / SEC 12 / SENE /	County or Parish/State:
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Lease Number: NMNM103879	Unit or CA Name:	Unit or CA Number:
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Conditions of Approval

Specialist Review

OCHOA_8703_FEDERAL_COM_2H__Sundry_2157583_and_2386551_COA_OTA_20210518124012.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: MAY 10, 2021 12:39 PM
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: AJIBOLA OLABODE	BLM POC Title: Engineer
BLM POC Phone: 5752342231	BLM POC Email Address: OAJIBOLAEIT@BLM.GOV
Disposition: Approved	Disposition Date: 05/18/2021
Signature: Olabode Thomas Ajibola	

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	BTA Oil Producers LLC
LEASE NO.:	NMNM103879
WELL NAME & NO.:	Ochoa 8703 Federal Com 2H
SURFACE HOLE FOOTAGE:	1647'N & 361'E
BOTTOM HOLE FOOTAGE:	660'N & 2600'W
LOCATION:	Section 12, T.23 S., R.28 E., NMPM
COUNTY:	Eddy 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

1. The **10-3/4** inch surface casing shall be set at approximately **323 feet** (a minimum of **70 feet (Eddy 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 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 -19%, 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 16%, 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 the lead 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 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 **3000 (3M)** psi.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be **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 **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.

C. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Carlsbad Field Office, 620 E Greene St. Carlsbad, New Mexico 88220, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

OTA05182021

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, 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 30-015-48175	Pool Code 98220	Pool Name PURPLE SAGE ; WOLFCAMP
Property Code 330658	Property Name OCHOA 8703 FEDERAL COM	Well Number 2H
OGRID No. 260297	Operator Name BTA OIL PRODUCERS, LLC	Elevation 3016'

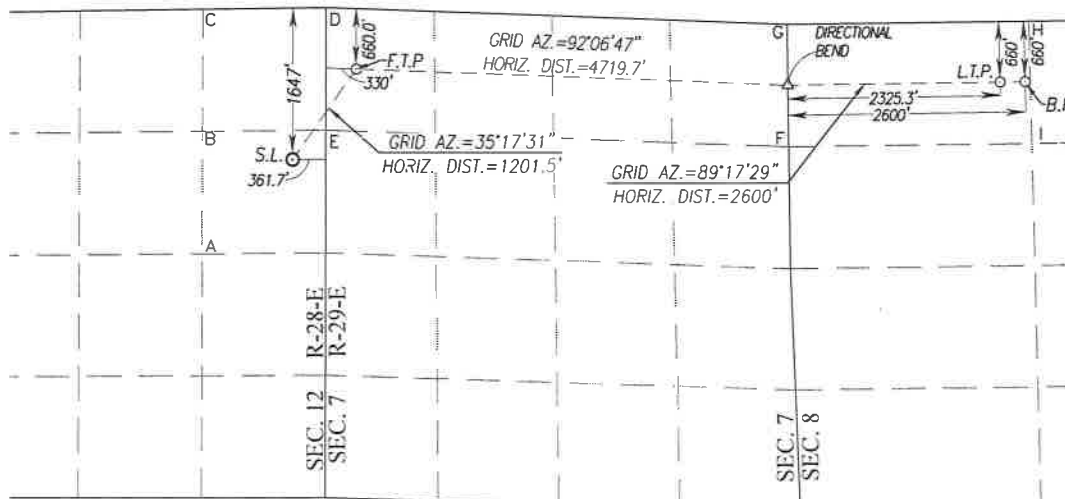
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	12	23-S	28-E		1647	NORTH	361.7	EAST	EDDY

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	8	23-S	29-E		660	NORTH	2600	WEST	EDDY
Dedicated Acres 480	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



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.

Sammy Hajar
Signature

5/10/2021

Date

Sammy Hajar

Printed Name

SHAJAR@BTAOIL.COM

E-mail Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes and that the same is true and correct to the best of my belief.

Gary G. Eidson
Date of Survey
Signature & Seal of Professional Surveyor
12641
REGISTERED PROFESSIONAL SURVEYOR

Gary G. Eidson 05/06/2021

Certificate Number Gary G. Eidson 12641
Ronald J. Eidson 3239

ACK REL W/O 19110282 JWSC W/O 21130194

GEODETIC COORDINATES
NAD 27 NME
SURFACE LOCATION
Y= 481295.8 N
X= 592873.7 E
LAT.=32.322840° N
LONG.=104.032678° W

FIRST TAKE POINT
NAD 27 NME
Y= 482276.2 N
X= 593567.7 E
LAT.=32.325530° N
LONG.=104.033422° W

SCALE: 1"=2000'

DIRECTIONAL BEND
NAD 27 NME
Y= 482102.1 N
X= 598283.1 E
LAT.=32.325014° N
LONG.=104.015159° W

LAST TAKE POINT
NAD 27 NME
Y= 482130.8 N
X= 600607.7 E
LAT.=32.325073° N
LONG.=104.007633° W

BOTTOM HOLE LOCATION
NAD 27 NME
Y= 482134.2 N
X= 600882.3 E
LAT.=32.325080° N
LONG.=104.006744° W

GEODETIC COORDINATES
NAD 83 NME
SURFACE LOCATION
Y= 481355.4 N
X= 634056.5 E
LAT.=32.322961° N
LONG.=104.033172° W

FIRST TAKE POINT
NAD 83 NME
Y= 482335.8 N
X= 634750.4 E
LAT.=32.325651° N
LONG.=104.033916° W

DIRECTIONAL BEND
NAD 83 NME
Y= 482161.8 N
X= 639465.9 E
LAT.=32.325135° N
LONG.=104.015652° W

LAST TAKE POINT
NAD 83 NME
Y= 482190.6 N
X= 641790.5 E
LAT.=32.325195° N
LONG.=104.008127° W

BOTTOM HOLE LOCATION
NAD 83 NME
Y= 482194.0 N
X= 642065.1 E
LAT.=32.325202° N
LONG.=104.007238° W

CORNER COORDINATES TABLE
NAD 27 NME

A - Y= 480271.9 N, X= 591890.3 E
B - Y= 481599.7 N, X= 591894.8 E
C - Y= 482927.6 N, X= 591899.2 E
D - Y= 482948.2 N, X= 593239.8 E
E - Y= 481615.9 N, X= 593236.2 E
F - Y= 481432.3 N, X= 598292.8 E
G - Y= 482761.9 N, X= 598273.6 E
H - Y= 482794.6 N, X= 600921.6 E
I - Y= 481465.4 N, X= 600953.9 E

CORNER COORDINATES TABLE
NAD 83 NME

A - Y= 480331.5 N, X= 633073.1 E
B - Y= 481659.3 N, X= 633077.5 E
C - Y= 482987.3 N, X= 633081.8 E
D - Y= 483007.9 N, X= 634422.5 E
E - Y= 481675.5 N, X= 634418.9 E
F - Y= 481492.0 N, X= 639475.6 E
G - Y= 482821.6 N, X= 639456.4 E
H - Y= 482854.4 N, X= 642104.4 E
I - Y= 481525.1 N, X= 642136.7 E

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

Casing Programs

Ochoa 8703 Federal #2H

Original APD

- Intermediate
7-5/8” 29.7# P-110 BTC @ 10000’ (DV Tool @ 2762’) in a 9-7/8” hole
- Production
9800’ of 5-1/2” 20# P-110 BTC and 8548’ of 5” 18# P-110 BTC set at 18348’ (9800’ TVD) in a 6-3/4” hole

Proposed Change

- Intermediate
7-5/8” 29.7# P-110 BTC @ 9257’ (DV Tool @ 2780’) in a 9-7/8” hole
- Production
9057’ of 5-1/2” 20# P-110 BTC and 8608’ of 5” 18# P-110 BTC set at 17665’ (9792’ TVD) in a 6-3/4” hole

Cement Programs

Ochoa 8703 Federal #2H

Original APD

- Intermediate Cement
 - Stg 1 Lead: 505 sx
100% TXI Lite
10.5 ppg, 2.64 ft3/sx
 - Stg 1 Tail: 400 sx
100% Class H
15.6 ppg, 1.19 ft3/sx
 - Stg 2 Lead: 375 sx
100% Class C Blend
12.7 ppg, 2.19 ft3/sx
 - Stg 2 Tail: 150 sx
100% Class C
14.8 ppg, 1.33 ft3/sx
- Production Cement
 - Tail: 905 sx
50:50 Class H Blend
14.8 ppg, 1.27 ft3/sx

Proposed Change

- Intermediate Cement
 - Stg 1 Lead: 440 sx
100% TXI Lite
10.5 ppg, 2.64 ft3/sx
 - Stg 1 Tail: 400 sx
100% Class H
15.0 ppg, 1.19 ft3/sx
 - Stg 2 Lead: 380 sx
100% Class C Blend
12.7 ppg, 2.19 ft3/sx
 - Stg 2 Tail: 150 sx

	100% Class C
	14.8 ppg, 1.33 ft3/sx
-Production Cement	
Tail:	905 sx
	50:50 Class H Blend
	14.8 ppg, 1.27 ft3/sx

Variances:

-Wave the centralizer requirements for the 5-1/2” and 5” casing in the 6-3/4” hole size. An expansion additive will be utilized in the cement slurry for the entire length of the 6-3/4” hole interval to maximize cement bond and zonal isolation.



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

WELL: Ochoa 8703 Federal #2H
TVD: 9792
MD: 17665

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	323	0	323	No	40.5	J-55	STC	11.3	22.5	48.1	32.1	Dry	8.3
9 7/8	7 5/8	0	9332	0	9264	No	29.7	P110	Buttress	2.1	2.1	3.4	3.5	Dry	9.4
6 3/4	5 1/2	0	9132	0	9064	Yes	20	P110	Buttress	1.7	1.9	3.5	3.7	Dry	13
6 3/4	5	9132	17665	9064	9792	Yes	18	P110	Buttress	1.9	1.9	1.8	1.9	Dry	13

*7 5/8" has DV Tool @ 2780'

Dv Tool Depth 2780

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	80	Class C	50	1.8	13.5	90	100%	2% CaCl2
	Tail		80	323	Class C	200	1.34	14.8	268	100%	2% CaCl2
7 5/8	Stg 2 Lead		0	2350	Class C	380	2.19	12.7	832.2	50%	0.5% CaCl2
	Stg 2 Tail		2350	2780	Class C	150	1.33	14.8	199.5	50%	1% CaCl2
	Stg 1 Lead		2780	7445	Class H	440	2.64	10.5	1161.6	15%	0.5% CaCl2
	Stg 1 Tail		7445	9332	Class H	400	1.19	15.6	476	15%	1% CaCl2
5 1/2	Lead										
	Tail		8130	9132							
5	Lead										
	Tail		9132	17665	Class H	905	1.27	14.8	1149.35	10%	0.1% Fluid Loss

BOP/CHOKE

Pressure Rating: 10M

Rating Depth: 14000

Requesting Variance?

5M Annular on 10M BOPE
Choke Hose
Multi Bowl Wellhead

Pressure

Anticipated Bottom Hole Pressure: 6,619 psi

Anticipated Bottom Hole Temperature: 158 °F

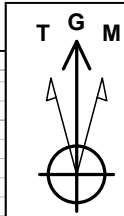
Anticipated abnormal pressures, temperatures, or potential geologic hazards? None

Anticipated Surface Hole Pressure: 4465.152

Hydrogen sulfide drilling operations plan required? Yes

Circulating Medium Table			
Depth (TVD)		Type	Weight (ppg)
From	To		
0	323	FW Spud	8.3 – 8.4
323	9264	DBE	9–9.4
9264	9792	OBM	11.0 – 13.0

BTA Oil Producers, LLC



Azimuths to Grid North
True North: -0.16°
Magnetic North: 7.81°

Magnetic Field
Strength: 48804.4nT
Dip Angle: 60.25°
Date: 12/31/2009
Model: IGRF200510

WELL DETAILS: Ochoa #02H

+N/-S	+E/-W	Northing	Ground Level Easting	3016.0 Latitude	Longitude
0.0	0.0	481355.40	634056.50	$32^\circ 19' 22.661$ N	$104^\circ 1' 59.419$ W

SITE DETAILS: Ochoa

Site Centre Northing: 481307.00
Easting: 634083.00

Positional Uncertainty: 0.0
Convergence: 0.16
Local North: Grid

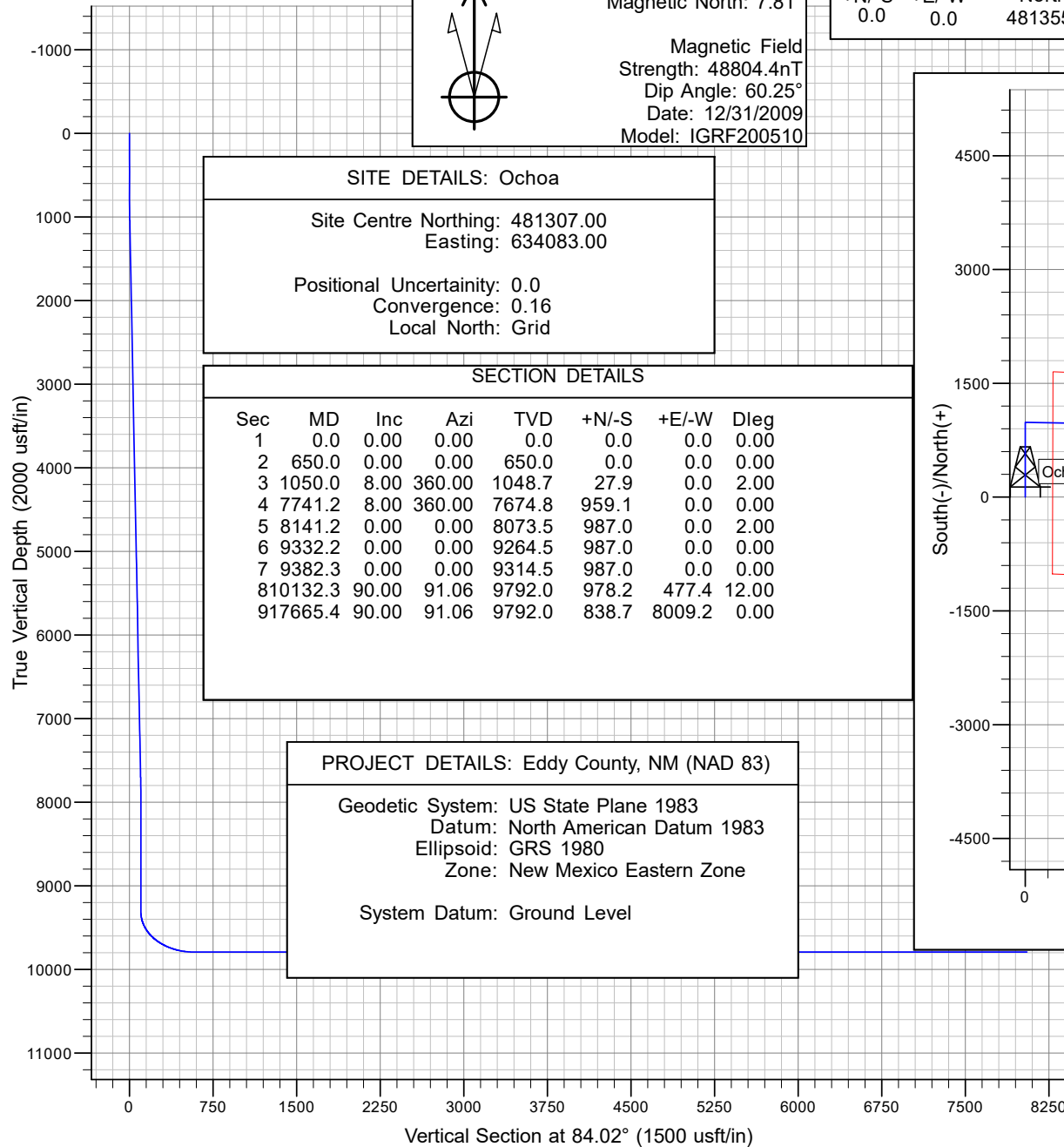
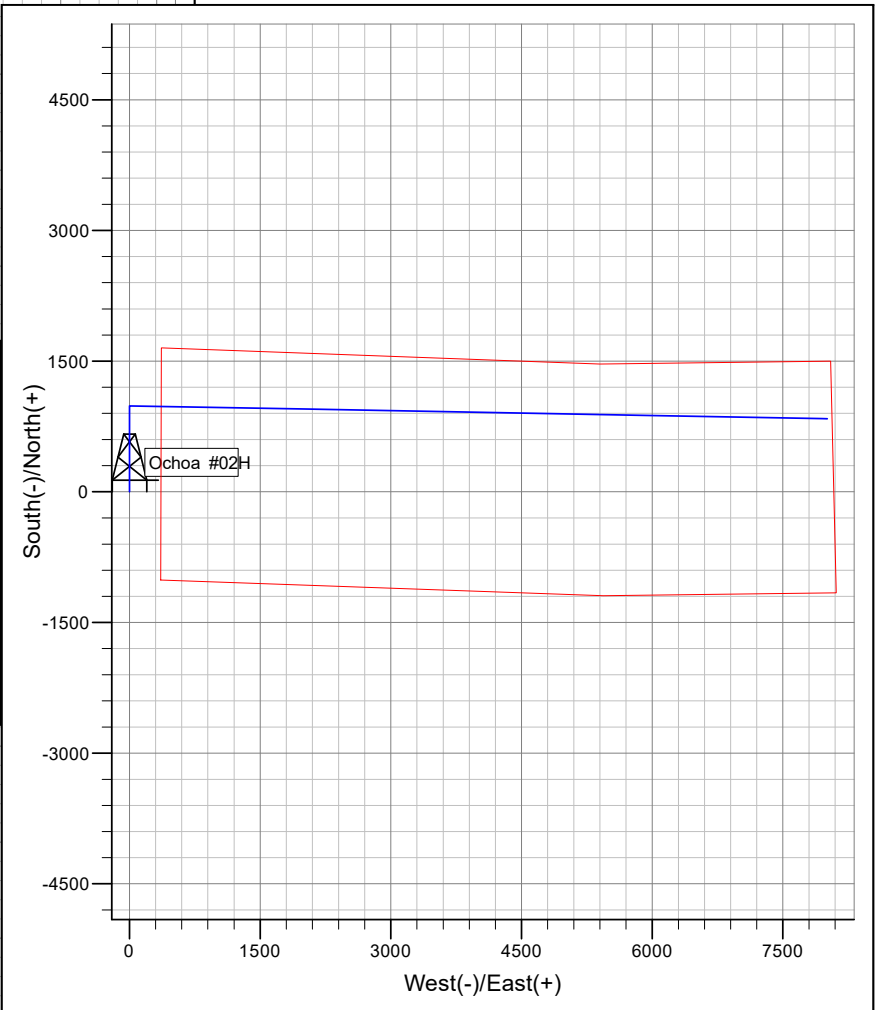
SECTION DETAILS

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	650.0	0.00	0.00	650.0	0.0	0.0	0.00
3	1050.0	8.00	360.00	1048.7	27.9	0.0	2.00
4	7741.2	8.00	360.00	7674.8	959.1	0.0	0.00
5	8141.2	0.00	0.00	8073.5	987.0	0.0	2.00
6	9332.2	0.00	0.00	9264.5	987.0	0.0	0.00
7	9382.3	0.00	0.00	9314.5	987.0	0.0	0.00
8	10132.3	90.00	91.06	9792.0	978.2	477.4	12.00
9	17665.4	90.00	91.06	9792.0	838.7	8009.2	0.00

PROJECT DETAILS: Eddy 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

Eddy County, NM (NAD 83)

Ochoa

Ochoa #02H

Wellbore #1

Plan: Design #1

Standard Planning Report - Geographic

10 May, 2021

Microsoft
Planning Report - Geographic

Database:	EDM16	Local Co-ordinate Reference:	Well Ochoa #02H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3016.0usft
Project:	Eddy County, NM (NAD 83)	MD Reference:	GL @ 3016.0usft
Site:	Ochoa	North Reference:	Grid
Well:	Ochoa #02H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Eddy County, NM (NAD 83)		
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	Ochoa				
Site Position:		Northing:	481,307.00 usft	Latitude:	32° 19' 22.181 N
From:	Map	Easting:	634,083.00 usft	Longitude:	104° 1' 59.112 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "		

Well	Ochoa #02H					
Well Position	+N/-S	0.0 usft	Northing:	481,355.40 usft	Latitude:	32° 19' 22.661 N
	+E/-W	0.0 usft	Easting:	634,056.50 usft	Longitude:	104° 1' 59.419 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,016.0 usft
Grid Convergence:		0.16 °				

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	7.97	60.25	48,804.41172669

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	84.02

Plan Survey Tool Program	Date	5/10/2021		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,665.4 Design #1 (Wellbore #1)		

Microsoft
Planning Report - Geographic

Database:	EDM16	Local Co-ordinate Reference:	Well Ochoa #02H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3016.0usft
Project:	Eddy County, NM (NAD 83)	MD Reference:	GL @ 3016.0usft
Site:	Ochoa	North Reference:	Grid
Well:	Ochoa #02H	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	
650.0	0.00	0.00	650.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,050.0	8.00	360.00	1,048.7	27.9	0.0	2.00	2.00	0.00	360.00	
7,741.2	8.00	360.00	7,674.8	959.1	0.0	0.00	0.00	0.00	0.00	
8,141.2	0.00	0.00	8,073.5	987.0	0.0	2.00	-2.00	0.00	180.00	
9,332.2	0.00	0.00	9,264.5	987.0	0.0	0.00	0.00	0.00	0.00	
9,382.3	0.00	0.00	9,314.5	987.0	0.0	0.00	0.00	0.00	0.00	
10,132.3	90.00	91.06	9,792.0	978.2	477.4	12.00	12.00	0.00	91.06	
17,665.4	90.00	91.06	9,792.0	838.7	8,009.2	0.00	0.00	0.00	0.00	Ochoa #2H BHL

Microsoft
Planning Report - Geographic

Database:	EDM16	Local Co-ordinate Reference:	Well Ochoa #02H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3016.0usft
Project:	Eddy County, NM (NAD 83)	MD Reference:	GL @ 3016.0usft
Site:	Ochoa	North Reference:	Grid
Well:	Ochoa #02H	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	481,355.40	634,056.50	32° 19' 22.661 N	104° 1' 59.419 W
100.0	0.00	0.00	100.0	0.0	0.0	481,355.40	634,056.50	32° 19' 22.661 N	104° 1' 59.419 W
200.0	0.00	0.00	200.0	0.0	0.0	481,355.40	634,056.50	32° 19' 22.661 N	104° 1' 59.419 W
300.0	0.00	0.00	300.0	0.0	0.0	481,355.40	634,056.50	32° 19' 22.661 N	104° 1' 59.419 W
400.0	0.00	0.00	400.0	0.0	0.0	481,355.40	634,056.50	32° 19' 22.661 N	104° 1' 59.419 W
500.0	0.00	0.00	500.0	0.0	0.0	481,355.40	634,056.50	32° 19' 22.661 N	104° 1' 59.419 W
600.0	0.00	0.00	600.0	0.0	0.0	481,355.40	634,056.50	32° 19' 22.661 N	104° 1' 59.419 W
650.0	0.00	0.00	650.0	0.0	0.0	481,355.40	634,056.50	32° 19' 22.661 N	104° 1' 59.419 W
700.0	1.00	360.00	700.0	0.4	0.0	481,355.84	634,056.50	32° 19' 22.665 N	104° 1' 59.419 W
800.0	3.00	360.00	799.9	3.9	0.0	481,359.33	634,056.50	32° 19' 22.700 N	104° 1' 59.419 W
900.0	5.00	360.00	899.7	10.9	0.0	481,366.30	634,056.50	32° 19' 22.769 N	104° 1' 59.419 W
1,000.0	7.00	360.00	999.1	21.4	0.0	481,376.75	634,056.50	32° 19' 22.872 N	104° 1' 59.418 W
1,050.0	8.00	360.00	1,048.7	27.9	0.0	481,383.28	634,056.50	32° 19' 22.937 N	104° 1' 59.418 W
1,100.0	8.00	360.00	1,098.2	34.8	0.0	481,390.24	634,056.50	32° 19' 23.005 N	104° 1' 59.418 W
1,200.0	8.00	360.00	1,197.2	48.8	0.0	481,404.15	634,056.50	32° 19' 23.143 N	104° 1' 59.417 W
1,300.0	8.00	360.00	1,296.3	62.7	0.0	481,418.07	634,056.50	32° 19' 23.281 N	104° 1' 59.417 W
1,400.0	8.00	360.00	1,395.3	76.6	0.0	481,431.99	634,056.50	32° 19' 23.419 N	104° 1' 59.417 W
1,500.0	8.00	360.00	1,494.3	90.5	0.0	481,445.90	634,056.50	32° 19' 23.556 N	104° 1' 59.416 W
1,600.0	8.00	360.00	1,593.3	104.4	0.0	481,459.82	634,056.50	32° 19' 23.694 N	104° 1' 59.416 W
1,700.0	8.00	360.00	1,692.4	118.3	0.0	481,473.73	634,056.50	32° 19' 23.832 N	104° 1' 59.415 W
1,800.0	8.00	360.00	1,791.4	132.3	0.0	481,487.65	634,056.50	32° 19' 23.969 N	104° 1' 59.415 W
1,900.0	8.00	360.00	1,890.4	146.2	0.0	481,501.57	634,056.50	32° 19' 24.107 N	104° 1' 59.414 W
2,000.0	8.00	360.00	1,989.5	160.1	0.0	481,515.48	634,056.50	32° 19' 24.245 N	104° 1' 59.414 W
2,100.0	8.00	360.00	2,088.5	174.0	0.0	481,529.40	634,056.50	32° 19' 24.383 N	104° 1' 59.413 W
2,200.0	8.00	360.00	2,187.5	187.9	0.0	481,543.31	634,056.50	32° 19' 24.520 N	104° 1' 59.413 W
2,300.0	8.00	360.00	2,286.5	201.8	0.0	481,557.23	634,056.50	32° 19' 24.658 N	104° 1' 59.412 W
2,400.0	8.00	360.00	2,385.6	215.8	0.0	481,571.15	634,056.50	32° 19' 24.796 N	104° 1' 59.412 W
2,500.0	8.00	360.00	2,484.6	229.7	0.0	481,585.06	634,056.50	32° 19' 24.933 N	104° 1' 59.412 W
2,600.0	8.00	360.00	2,583.6	243.6	0.0	481,598.98	634,056.50	32° 19' 25.071 N	104° 1' 59.411 W
2,700.0	8.00	360.00	2,682.6	257.5	0.0	481,612.90	634,056.50	32° 19' 25.209 N	104° 1' 59.411 W
2,800.0	8.00	360.00	2,781.7	271.4	0.0	481,626.81	634,056.50	32° 19' 25.347 N	104° 1' 59.410 W
2,900.0	8.00	360.00	2,880.7	285.4	0.0	481,640.73	634,056.50	32° 19' 25.484 N	104° 1' 59.410 W
3,000.0	8.00	360.00	2,979.7	299.3	0.0	481,654.64	634,056.50	32° 19' 25.622 N	104° 1' 59.409 W
3,100.0	8.00	360.00	3,078.8	313.2	0.0	481,668.56	634,056.50	32° 19' 25.760 N	104° 1' 59.409 W
3,200.0	8.00	360.00	3,177.8	327.1	0.0	481,682.48	634,056.50	32° 19' 25.897 N	104° 1' 59.408 W
3,300.0	8.00	360.00	3,276.8	341.0	0.0	481,696.39	634,056.50	32° 19' 26.035 N	104° 1' 59.408 W
3,400.0	8.00	360.00	3,375.8	354.9	0.0	481,710.31	634,056.50	32° 19' 26.173 N	104° 1' 59.407 W
3,500.0	8.00	360.00	3,474.9	368.9	0.0	481,724.22	634,056.50	32° 19' 26.310 N	104° 1' 59.407 W
3,600.0	8.00	360.00	3,573.9	382.8	0.0	481,738.14	634,056.50	32° 19' 26.448 N	104° 1' 59.407 W
3,700.0	8.00	360.00	3,672.9	396.7	0.0	481,752.06	634,056.50	32° 19' 26.586 N	104° 1' 59.406 W
3,800.0	8.00	360.00	3,771.9	410.6	0.0	481,765.97	634,056.50	32° 19' 26.724 N	104° 1' 59.406 W
3,900.0	8.00	360.00	3,871.0	424.5	0.0	481,779.89	634,056.50	32° 19' 26.861 N	104° 1' 59.405 W
4,000.0	8.00	360.00	3,970.0	438.4	0.0	481,793.81	634,056.50	32° 19' 26.999 N	104° 1' 59.405 W
4,100.0	8.00	360.00	4,069.0	452.4	0.0	481,807.72	634,056.50	32° 19' 27.137 N	104° 1' 59.404 W
4,200.0	8.00	360.00	4,168.0	466.3	0.0	481,821.64	634,056.50	32° 19' 27.274 N	104° 1' 59.404 W
4,300.0	8.00	360.00	4,267.1	480.2	0.0	481,835.55	634,056.50	32° 19' 27.412 N	104° 1' 59.403 W
4,400.0	8.00	360.00	4,366.1	494.1	0.0	481,849.47	634,056.50	32° 19' 27.550 N	104° 1' 59.403 W
4,500.0	8.00	360.00	4,465.1	508.0	0.0	481,863.39	634,056.50	32° 19' 27.688 N	104° 1' 59.402 W
4,600.0	8.00	360.00	4,564.2	521.9	0.0	481,877.30	634,056.50	32° 19' 27.825 N	104° 1' 59.402 W
4,700.0	8.00	360.00	4,663.2	535.9	0.0	481,891.22	634,056.50	32° 19' 27.963 N	104° 1' 59.402 W
4,800.0	8.00	360.00	4,762.2	549.8	0.0	481,905.14	634,056.50	32° 19' 28.101 N	104° 1' 59.401 W
4,900.0	8.00	360.00	4,861.2	563.7	0.0	481,919.05	634,056.50	32° 19' 28.238 N	104° 1' 59.401 W
5,000.0	8.00	360.00	4,960.3	577.6	0.0	481,932.97	634,056.50	32° 19' 28.376 N	104° 1' 59.400 W
5,100.0	8.00	360.00	5,059.3	591.5	0.0	481,946.88	634,056.50	32° 19' 28.514 N	104° 1' 59.400 W
5,200.0	8.00	360.00	5,158.3	605.4	0.0	481,960.80	634,056.50	32° 19' 28.652 N	104° 1' 59.399 W

Microsoft
Planning Report - Geographic

Database:	EDM16	Local Co-ordinate Reference:	Well Ochoa #02H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3016.0usft
Project:	Eddy County, NM (NAD 83)	MD Reference:	GL @ 3016.0usft
Site:	Ochoa	North Reference:	Grid
Well:	Ochoa #02H	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	
5,300.0	8.00	360.00	5,257.3	619.4	0.0	481,974.72	634,056.50	32° 19' 28.789 N	104° 1' 59.399 W	
5,400.0	8.00	360.00	5,356.4	633.3	0.0	481,988.63	634,056.50	32° 19' 28.927 N	104° 1' 59.398 W	
5,500.0	8.00	360.00	5,455.4	647.2	0.0	482,002.55	634,056.50	32° 19' 29.065 N	104° 1' 59.398 W	
5,600.0	8.00	360.00	5,554.4	661.1	0.0	482,016.46	634,056.50	32° 19' 29.202 N	104° 1' 59.397 W	
5,700.0	8.00	360.00	5,653.4	675.0	0.0	482,030.38	634,056.50	32° 19' 29.340 N	104° 1' 59.397 W	
5,800.0	8.00	360.00	5,752.5	689.0	0.0	482,044.30	634,056.50	32° 19' 29.478 N	104° 1' 59.397 W	
5,900.0	8.00	360.00	5,851.5	702.9	0.0	482,058.21	634,056.50	32° 19' 29.616 N	104° 1' 59.396 W	
6,000.0	8.00	360.00	5,950.5	716.8	0.0	482,072.13	634,056.50	32° 19' 29.753 N	104° 1' 59.396 W	
6,100.0	8.00	360.00	6,049.6	730.7	0.0	482,086.05	634,056.50	32° 19' 29.891 N	104° 1' 59.395 W	
6,200.0	8.00	360.00	6,148.6	744.6	0.0	482,099.96	634,056.50	32° 19' 30.029 N	104° 1' 59.395 W	
6,300.0	8.00	360.00	6,247.6	758.5	0.0	482,113.88	634,056.50	32° 19' 30.166 N	104° 1' 59.394 W	
6,400.0	8.00	360.00	6,346.6	772.5	0.0	482,127.79	634,056.50	32° 19' 30.304 N	104° 1' 59.394 W	
6,500.0	8.00	360.00	6,445.7	786.4	0.0	482,141.71	634,056.50	32° 19' 30.442 N	104° 1' 59.393 W	
6,600.0	8.00	360.00	6,544.7	800.3	0.0	482,155.63	634,056.50	32° 19' 30.580 N	104° 1' 59.393 W	
6,700.0	8.00	360.00	6,643.7	814.2	0.0	482,169.54	634,056.50	32° 19' 30.717 N	104° 1' 59.392 W	
6,800.0	8.00	360.00	6,742.7	828.1	0.0	482,183.46	634,056.50	32° 19' 30.855 N	104° 1' 59.392 W	
6,900.0	8.00	360.00	6,841.8	842.0	0.0	482,197.38	634,056.50	32° 19' 30.993 N	104° 1' 59.392 W	
7,000.0	8.00	360.00	6,940.8	856.0	0.0	482,211.29	634,056.50	32° 19' 31.130 N	104° 1' 59.391 W	
7,100.0	8.00	360.00	7,039.8	869.9	0.0	482,225.21	634,056.50	32° 19' 31.268 N	104° 1' 59.391 W	
7,200.0	8.00	360.00	7,138.9	883.8	0.0	482,239.12	634,056.50	32° 19' 31.406 N	104° 1' 59.390 W	
7,300.0	8.00	360.00	7,237.9	897.7	0.0	482,253.04	634,056.50	32° 19' 31.544 N	104° 1' 59.390 W	
7,400.0	8.00	360.00	7,336.9	911.6	0.0	482,266.96	634,056.50	32° 19' 31.681 N	104° 1' 59.389 W	
7,500.0	8.00	360.00	7,435.9	925.5	0.0	482,280.87	634,056.50	32° 19' 31.819 N	104° 1' 59.389 W	
7,600.0	8.00	360.00	7,535.0	939.5	0.0	482,294.79	634,056.50	32° 19' 31.957 N	104° 1' 59.388 W	
7,700.0	8.00	360.00	7,634.0	953.4	0.0	482,308.70	634,056.50	32° 19' 32.094 N	104° 1' 59.388 W	
7,741.2	8.00	360.00	7,674.8	959.1	0.0	482,314.44	634,056.50	32° 19' 32.151 N	104° 1' 59.388 W	
7,800.0	6.82	360.00	7,733.1	966.7	0.0	482,322.02	634,056.50	32° 19' 32.226 N	104° 1' 59.387 W	
7,900.0	4.82	360.00	7,832.6	976.8	0.0	482,332.17	634,056.50	32° 19' 32.327 N	104° 1' 59.387 W	
8,000.0	2.82	360.00	7,932.3	983.5	0.0	482,338.84	634,056.50	32° 19' 32.393 N	104° 1' 59.387 W	
8,100.0	0.82	360.00	8,032.3	986.7	0.0	482,342.02	634,056.50	32° 19' 32.424 N	104° 1' 59.387 W	
8,141.2	0.00	0.00	8,073.5	987.0	0.0	482,342.32	634,056.50	32° 19' 32.427 N	104° 1' 59.387 W	
8,200.0	0.00	0.00	8,132.3	987.0	0.0	482,342.32	634,056.50	32° 19' 32.427 N	104° 1' 59.387 W	
8,300.0	0.00	0.00	8,232.3	987.0	0.0	482,342.32	634,056.50	32° 19' 32.427 N	104° 1' 59.387 W	
8,400.0	0.00	0.00	8,332.3	987.0	0.0	482,342.32	634,056.50	32° 19' 32.427 N	104° 1' 59.387 W	
8,500.0	0.00	0.00	8,432.3	987.0	0.0	482,342.32	634,056.50	32° 19' 32.427 N	104° 1' 59.387 W	
8,600.0	0.00	0.00	8,532.3	987.0	0.0	482,342.32	634,056.50	32° 19' 32.427 N	104° 1' 59.387 W	
8,700.0	0.00	0.00	8,632.3	987.0	0.0	482,342.32	634,056.50	32° 19' 32.427 N	104° 1' 59.387 W	
8,800.0	0.00	0.00	8,732.3	987.0	0.0	482,342.32	634,056.50	32° 19' 32.427 N	104° 1' 59.387 W	
8,900.0	0.00	0.00	8,832.3	987.0	0.0	482,342.32	634,056.50	32° 19' 32.427 N	104° 1' 59.387 W	
9,000.0	0.00	0.00	8,932.3	987.0	0.0	482,342.32	634,056.50	32° 19' 32.427 N	104° 1' 59.387 W	
9,100.0	0.00	0.00	9,032.3	987.0	0.0	482,342.32	634,056.50	32° 19' 32.427 N	104° 1' 59.387 W	
9,200.0	0.00	0.00	9,132.3	987.0	0.0	482,342.32	634,056.50	32° 19' 32.427 N	104° 1' 59.387 W	
9,300.0	0.00	0.00	9,232.3	987.0	0.0	482,342.32	634,056.50	32° 19' 32.427 N	104° 1' 59.387 W	
9,332.2	0.00	0.00	9,264.5	987.0	0.0	482,342.32	634,056.50	32° 19' 32.427 N	104° 1' 59.387 W	
9,382.3	0.00	0.00	9,314.5	987.0	0.0	482,342.32	634,056.50	32° 19' 32.427 N	104° 1' 59.387 W	
9,400.0	2.13	91.06	9,332.3	987.0	0.3	482,342.31	634,056.83	32° 19' 32.427 N	104° 1' 59.383 W	
9,500.0	14.13	91.06	9,431.1	986.7	14.4	482,342.05	634,070.95	32° 19' 32.424 N	104° 1' 59.219 W	
9,600.0	26.13	91.06	9,524.8	986.1	48.8	482,341.42	634,105.29	32° 19' 32.417 N	104° 1' 58.818 W	
9,700.0	38.13	91.06	9,609.3	985.1	101.9	482,340.43	634,158.36	32° 19' 32.406 N	104° 1' 58.200 W	
9,800.0	50.13	91.06	9,681.0	983.8	171.4	482,339.15	634,227.85	32° 19' 32.391 N	104° 1' 57.390 W	
9,900.0	62.13	91.06	9,736.6	982.3	254.2	482,337.61	634,310.71	32° 19' 32.373 N	104° 1' 56.424 W	
10,000.0	74.13	91.06	9,773.8	980.6	346.8	482,335.90	634,403.32	32° 19' 32.354 N	104° 1' 55.345 W	
10,100.0	86.13	91.06	9,790.9	978.8	445.2	482,334.08	634,501.63	32° 19' 32.333 N	104° 1' 54.199 W	
10,132.3	90.00	91.06	9,792.0	978.2	477.4	482,333.48	634,533.85	32° 19' 32.326 N	104° 1' 53.824 W	
10,200.0	90.00	91.06	9,792.0	976.9	545.1	482,332.23	634,601.58	32° 19' 32.312 N	104° 1' 53.035 W	

Microsoft
Planning Report - Geographic

Database:	EDM16	Local Co-ordinate Reference:	Well Ochoa #02H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3016.0usft
Project:	Eddy County, NM (NAD 83)	MD Reference:	GL @ 3016.0usft
Site:	Ochoa	North Reference:	Grid
Well:	Ochoa #02H	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	
10,300.0	90.00	91.06	9,792.0	975.1	645.1	482,330.37	634,701.56	32° 19' 32.291 N	104° 1' 51.869 W	
10,400.0	90.00	91.06	9,792.0	973.2	745.1	482,328.52	634,801.53	32° 19' 32.270 N	104° 1' 50.704 W	
10,500.0	90.00	91.06	9,792.0	971.3	845.1	482,326.67	634,901.50	32° 19' 32.249 N	104° 1' 49.539 W	
10,600.0	90.00	91.06	9,792.0	969.5	945.1	482,324.82	635,001.48	32° 19' 32.228 N	104° 1' 48.374 W	
10,700.0	90.00	91.06	9,792.0	967.6	1,045.0	482,322.97	635,101.45	32° 19' 32.206 N	104° 1' 47.209 W	
10,800.0	90.00	91.06	9,792.0	965.8	1,145.0	482,321.12	635,201.43	32° 19' 32.185 N	104° 1' 46.044 W	
10,900.0	90.00	91.06	9,792.0	963.9	1,245.0	482,319.27	635,301.40	32° 19' 32.164 N	104° 1' 44.879 W	
11,000.0	90.00	91.06	9,792.0	962.1	1,345.0	482,317.41	635,401.38	32° 19' 32.143 N	104° 1' 43.714 W	
11,100.0	90.00	91.06	9,792.0	960.2	1,445.0	482,315.56	635,501.35	32° 19' 32.122 N	104° 1' 42.549 W	
11,200.0	90.00	91.06	9,792.0	958.4	1,544.9	482,313.71	635,601.33	32° 19' 32.101 N	104° 1' 41.384 W	
11,300.0	90.00	91.06	9,792.0	956.5	1,644.9	482,311.86	635,701.30	32° 19' 32.080 N	104° 1' 40.218 W	
11,400.0	90.00	91.06	9,792.0	954.7	1,744.9	482,310.01	635,801.28	32° 19' 32.058 N	104° 1' 39.053 W	
11,500.0	90.00	91.06	9,792.0	952.8	1,844.9	482,308.16	635,901.25	32° 19' 32.037 N	104° 1' 37.888 W	
11,600.0	90.00	91.06	9,792.0	951.0	1,944.9	482,306.30	636,001.23	32° 19' 32.016 N	104° 1' 36.723 W	
11,700.0	90.00	91.06	9,792.0	949.1	2,044.9	482,304.45	636,101.20	32° 19' 31.995 N	104° 1' 35.558 W	
11,800.0	90.00	91.06	9,792.0	947.3	2,144.8	482,302.60	636,201.18	32° 19' 31.974 N	104° 1' 34.393 W	
11,900.0	90.00	91.06	9,792.0	945.4	2,244.8	482,300.75	636,301.15	32° 19' 31.953 N	104° 1' 33.228 W	
12,000.0	90.00	91.06	9,792.0	943.6	2,344.8	482,298.90	636,401.13	32° 19' 31.931 N	104° 1' 32.063 W	
12,100.0	90.00	91.06	9,792.0	941.7	2,444.8	482,297.05	636,501.10	32° 19' 31.910 N	104° 1' 30.898 W	
12,200.0	90.00	91.06	9,792.0	939.9	2,544.8	482,295.20	636,601.08	32° 19' 31.889 N	104° 1' 29.733 W	
12,300.0	90.00	91.06	9,792.0	938.0	2,644.8	482,293.34	636,701.05	32° 19' 31.868 N	104° 1' 28.567 W	
12,400.0	90.00	91.06	9,792.0	936.2	2,744.7	482,291.49	636,801.03	32° 19' 31.847 N	104° 1' 27.402 W	
12,500.0	90.00	91.06	9,792.0	934.3	2,844.7	482,289.64	636,901.00	32° 19' 31.826 N	104° 1' 26.237 W	
12,600.0	90.00	91.06	9,792.0	932.5	2,944.7	482,287.79	637,000.97	32° 19' 31.804 N	104° 1' 25.072 W	
12,700.0	90.00	91.06	9,792.0	930.6	3,044.7	482,285.94	637,100.95	32° 19' 31.783 N	104° 1' 23.907 W	
12,800.0	90.00	91.06	9,792.0	928.8	3,144.7	482,284.09	637,200.92	32° 19' 31.762 N	104° 1' 22.742 W	
12,900.0	90.00	91.06	9,792.0	926.9	3,244.7	482,282.23	637,300.90	32° 19' 31.741 N	104° 1' 21.577 W	
13,000.0	90.00	91.06	9,792.0	925.1	3,344.6	482,280.38	637,400.87	32° 19' 31.720 N	104° 1' 20.412 W	
13,100.0	90.00	91.06	9,792.0	923.2	3,444.6	482,278.53	637,500.85	32° 19' 31.699 N	104° 1' 19.247 W	
13,200.0	90.00	91.06	9,792.0	921.4	3,544.6	482,276.68	637,600.82	32° 19' 31.677 N	104° 1' 18.082 W	
13,300.0	90.00	91.06	9,792.0	919.5	3,644.6	482,274.83	637,700.80	32° 19' 31.656 N	104° 1' 16.916 W	
13,400.0	90.00	91.06	9,792.0	917.7	3,744.6	482,272.98	637,800.77	32° 19' 31.635 N	104° 1' 15.751 W	
13,500.0	90.00	91.06	9,792.0	915.8	3,844.6	482,271.13	637,900.75	32° 19' 31.614 N	104° 1' 14.586 W	
13,600.0	90.00	91.06	9,792.0	913.9	3,944.5	482,269.27	638,000.72	32° 19' 31.592 N	104° 1' 13.421 W	
13,700.0	90.00	91.06	9,792.0	912.1	4,044.5	482,267.42	638,100.70	32° 19' 31.571 N	104° 1' 12.256 W	
13,800.0	90.00	91.06	9,792.0	910.2	4,144.5	482,265.57	638,200.67	32° 19' 31.550 N	104° 1' 11.091 W	
13,900.0	90.00	91.06	9,792.0	908.4	4,244.5	482,263.72	638,300.65	32° 19' 31.529 N	104° 1' 9.926 W	
14,000.0	90.00	91.06	9,792.0	906.5	4,344.5	482,261.87	638,400.62	32° 19' 31.508 N	104° 1' 8.761 W	
14,100.0	90.00	91.06	9,792.0	904.7	4,444.5	482,260.02	638,500.60	32° 19' 31.486 N	104° 1' 7.596 W	
14,200.0	90.00	91.06	9,792.0	902.8	4,544.4	482,258.16	638,600.57	32° 19' 31.465 N	104° 1' 6.431 W	
14,300.0	90.00	91.06	9,792.0	901.0	4,644.4	482,256.31	638,700.55	32° 19' 31.444 N	104° 1' 5.266 W	
14,400.0	90.00	91.06	9,792.0	899.1	4,744.4	482,254.46	638,800.52	32° 19' 31.423 N	104° 1' 4.100 W	
14,500.0	90.00	91.06	9,792.0	897.3	4,844.4	482,252.61	638,900.49	32° 19' 31.401 N	104° 1' 2.935 W	
14,600.0	90.00	91.06	9,792.0	895.4	4,944.4	482,250.76	639,000.47	32° 19' 31.380 N	104° 1' 1.770 W	
14,700.0	90.00	91.06	9,792.0	893.6	5,044.3	482,248.91	639,100.44	32° 19' 31.359 N	104° 1' 0.605 W	
14,800.0	90.00	91.06	9,792.0	891.7	5,144.3	482,247.06	639,200.42	32° 19' 31.338 N	104° 0' 59.440 W	
14,900.0	90.00	91.06	9,792.0	889.9	5,244.3	482,245.20	639,300.39	32° 19' 31.316 N	104° 0' 58.275 W	
15,000.0	90.00	91.06	9,792.0	888.0	5,344.3	482,243.35	639,400.37	32° 19' 31.295 N	104° 0' 57.110 W	
15,100.0	90.00	91.06	9,792.0	886.2	5,444.3	482,241.50	639,500.34	32° 19' 31.274 N	104° 0' 55.945 W	
15,200.0	90.00	91.06	9,792.0	884.3	5,544.3	482,239.65	639,600.32	32° 19' 31.253 N	104° 0' 54.780 W	
15,300.0	90.00	91.06	9,792.0	882.5	5,644.2	482,237.80	639,700.29	32° 19' 31.231 N	104° 0' 53.615 W	
15,400.0	90.00	91.06	9,792.0	880.6	5,744.2	482,235.95	639,800.27	32° 19' 31.210 N	104° 0' 52.449 W	
15,500.0	90.00	91.06	9,792.0	878.8	5,844.2	482,234.09	639,900.24	32° 19' 31.189 N	104° 0' 51.284 W	
15,600.0	90.00	91.06	9,792.0	876.9	5,944.2	482,232.24	640,000.22	32° 19' 31.168 N	104° 0' 50.119 W	
15,700.0	90.00	91.06	9,792.0	875.1	6,044.2	482,230.39	640,100.19	32° 19' 31.146 N	104° 0' 48.954 W	

Microsoft
Planning Report - Geographic

Database:	EDM16	Local Co-ordinate Reference:	Well Ochoa #02H
Company:	BTA Oil Producers, LLC	TVD Reference:	GL @ 3016.0usft
Project:	Eddy County, NM (NAD 83)	MD Reference:	GL @ 3016.0usft
Site:	Ochoa	North Reference:	Grid
Well:	Ochoa #02H	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	
15,800.0	90.00	91.06	9,792.0	873.2	6,144.2	482,228.54	640,200.17	32° 19' 31.125 N	104° 0' 47.789 W	
15,900.0	90.00	91.06	9,792.0	871.4	6,244.1	482,226.69	640,300.14	32° 19' 31.104 N	104° 0' 46.624 W	
16,000.0	90.00	91.06	9,792.0	869.5	6,344.1	482,224.84	640,400.12	32° 19' 31.083 N	104° 0' 45.459 W	
16,100.0	90.00	91.06	9,792.0	867.7	6,444.1	482,222.98	640,500.09	32° 19' 31.061 N	104° 0' 44.294 W	
16,200.0	90.00	91.06	9,792.0	865.8	6,544.1	482,221.13	640,600.07	32° 19' 31.040 N	104° 0' 43.129 W	
16,300.0	90.00	91.06	9,792.0	864.0	6,644.1	482,219.28	640,700.04	32° 19' 31.019 N	104° 0' 41.964 W	
16,400.0	90.00	91.06	9,792.0	862.1	6,744.1	482,217.43	640,800.02	32° 19' 30.997 N	104° 0' 40.799 W	
16,500.0	90.00	91.06	9,792.0	860.2	6,844.0	482,215.58	640,899.99	32° 19' 30.976 N	104° 0' 39.633 W	
16,600.0	90.00	91.06	9,792.0	858.4	6,944.0	482,213.73	640,999.96	32° 19' 30.955 N	104° 0' 38.468 W	
16,700.0	90.00	91.06	9,792.0	856.5	7,044.0	482,211.88	641,099.94	32° 19' 30.933 N	104° 0' 37.303 W	
16,800.0	90.00	91.06	9,792.0	854.7	7,144.0	482,210.02	641,199.91	32° 19' 30.912 N	104° 0' 36.138 W	
16,900.0	90.00	91.06	9,792.0	852.8	7,244.0	482,208.17	641,299.89	32° 19' 30.891 N	104° 0' 34.973 W	
17,000.0	90.00	91.06	9,792.0	851.0	7,344.0	482,206.32	641,399.86	32° 19' 30.870 N	104° 0' 33.808 W	
17,100.0	90.00	91.06	9,792.0	849.1	7,443.9	482,204.47	641,499.84	32° 19' 30.848 N	104° 0' 32.643 W	
17,200.0	90.00	91.06	9,792.0	847.3	7,543.9	482,202.62	641,599.81	32° 19' 30.827 N	104° 0' 31.478 W	
17,300.0	90.00	91.06	9,792.0	845.4	7,643.9	482,200.77	641,699.79	32° 19' 30.806 N	104° 0' 30.313 W	
17,400.0	90.00	91.06	9,792.0	843.6	7,743.9	482,198.91	641,799.76	32° 19' 30.784 N	104° 0' 29.148 W	
17,500.0	90.00	91.06	9,792.0	841.7	7,843.9	482,197.06	641,899.74	32° 19' 30.763 N	104° 0' 27.983 W	
17,600.0	90.00	91.06	9,792.0	839.9	7,943.9	482,195.21	641,999.71	32° 19' 30.742 N	104° 0' 26.817 W	
17,665.4	90.00	91.06	9,792.0	838.7	8,009.2	482,194.00	642,065.10	32° 19' 30.728 N	104° 0' 26.055 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	
Ochoa #2H BHL - plan hits target center - Point	0.00	0.00	9,792.0	838.7	8,009.2	482,194.00	642,065.10	32° 19' 30.728 N	104° 0' 26.055 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

COMMENTS

Action 30844

COMMENTS

Operator: BTA OIL PRODUCERS, LLC 104 S Pecos Midland, TX 79701	OGRID: 260297
	Action Number: 30844
	Action Type: [C-103] NOI Change of Plans (C-103A)

COMMENTS

Created By	Comment	Comment Date
kpickford	KP GEO Review 6/9/2021	6/9/2021

District I
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CONDITIONS

Action 30844

CONDITIONS

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	Action Number: 30844
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CONDITIONS

Created By	Condition	Condition Date
kpickford	Adhere to previous NMOCD Conditions of Approval	6/9/2021