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

Sundry Print Report

11/14/2023

Well Name: NORTH RIDGE 8040 FEDERAL COM

Well Location: T22S / R34E / SEC 35 / NENE /

County or Parish/State:

Well Number: 9H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM26396

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002549792

Well Status: Approved Application for Permit to Drill

Operator: BTA OIL PRODUCERS LLC

Notice of Intent

Sundry ID: 2746622

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 08/17/2023

Time Sundry Submitted: 09:39

Date proposed operation will begin: 08/17/2023

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 attached documents for more details. OLD FOOTAGES: SHL: 500' FNL & 1035'FEL (NO CHANGE) FTP: 100' FNL & 990'FEL LTP: 2540' FNL & 990'FEL BHL: 2600' FNL & 990'FEL NEW FOOTAGES KOP: 20' FNL & 1780'FEL FTP: 100' FNL & 1780'FEL LTP: 2540' FNL & 1780'FEL BHL: 2600' FNL & 1780'FEL

NOI Attachments

Procedure Description

North_Ridge__09H_Drill_Plans_20230817093737.pdf

North_Ridge_09H_directional_plan_A_20230817093722.pdf

North_Ridge_09H_Wall_plot_A_20230817093722.pdf

Signed_C102___North_Ridge_8040_Fed_Com__9H_20230817093642.pdf

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Conditions of Approval

Additional

Sec35_T22SR34E_North_Ridge_8040_FED_COM_9H_Lea__BTA_OIL_PRODUCERS_LLC_11_13_2023_JS_20231113145943.pdf

BTA_Oil_North_Ridge_8040_FED_COM_9H_COAs_20231113145927.pdf

Operator

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

Operator Electronic Signature: SAMMY HAJAR

Signed on: AUG 17, 2023 09:38 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 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: 11/13/2023

Signature: Chris Walls

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	BTA OIL PRODUCERS, LLC
WELL NAME & NO.:	NORTH RIGDE 8040 FED COM 9H
SURFACE HOLE FOOTAGE:	500'/N & 1035'/E
BOTTOM HOLE FOOTAGE	2600'/N & 1780'/E
LOCATION:	Section 35, T.22 S., R.34 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
Wellhead Variance	( ) Diverter		
Other	[ ] 4 String	[x] Capitan Reef	[ ] WIPP
Other	[x] Fluid Filled	[ ] Pilot Hole	[ ] Open Annulus
Cementing	[ ] Contingency Cement Squeeze	[ ] EchoMeter	[ ] Primary Cement Squeeze
Special Requirements	[ ] Water Disposal	[x] COM	[ ] Unit
Special Requirements	[ ] Batch Sundry		
Special Requirements Variance	[x] Break Testing	[ ] Offline Cementing	[ ] Casing Clearance

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated AT SPUD. As a result, the Hydrogen Sulfide area must meet 43 CFR part 3170 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

Primary Casing Design

1. The **13-3/8** inch surface casing shall be set at approximately **1775 feet** (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface. The surface hole shall be **17 1/2** inch in diameter.

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

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

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.

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, potash or capitan reef.

❖ In Capitan Reef 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.

❖ **Special Capitan Reef requirements.** If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:
(Use this for 3 string wells in the Capitan Reef, if 4 string well ensure FW based mud used across the capitan interval)

- Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.

- Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

    - Cement should tie-back at least **50 feet** on top of Capitan Reef top **or 200 feet** into the previous casing, whichever is greater. 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, potash or capitan reef.

C. PRESSURE CONTROL

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

2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the **13-3/8** inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
    e. Whenever any seal subject to test pressure is broken, all the tests in **43 CFR 3172.6(b)(9)** must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, 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.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3170.
- 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.

(Note: For a minimum 5M BOPE or less (Utilizing a 10M BOPE system)
BOPE Break Testing Variance

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

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ Eddy County
EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
BLM_NM_CFO_DrillingNotifications@BLM.GOV
(575) 361-2822

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.

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

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin

after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

e. The results of the test shall be reported to the appropriate BLM office.

f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR part 3170 Subpart 3172**.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

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

JS 11/13/2023

North Ridge 8040 FED COM 9H

13 3/8	surface csg in a	17 1/2	inch hole.		Design Factors			Surface			
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	54.50	j 55	stc	5.31	1.48	0.94	1,775	4	1.62	3.01	96,738
"B"			stc				0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig:	1,136	Tail Cmt	does not	circ to sfc.	Totals:	1,775				96,738

Comparison of Proposed to Minimum Required Cement Volumes

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
17 1/2	0.6946	1500	2466	1233	100	8.30	1681	2M	1.56

Burst Frac Gradient(s) for Segment(s) A, B = , b All > 0.70, OK.

9 5/8	casing inside the	13 3/8			Design Factors			Int 1			
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	40.00	j 55	ltc	2.09	0.87	0.79	5,644	1	1.44	1.53	225,760
"B"							0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig:	316				Totals:	5,644				225,760
	The cement volume(s) are intended to achieve a top of			0	ft from surface or a		1775				overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
12 1/4	0.3132	1700	3958	1855	113	10.00	2739	3M	0.81
D V Tool(s):			4062				sum of sx	Σ CuFt	Σ%excess
t by stage % :		699	107				2935	6772	265

Burst Frac Gradient(s) for Segment(s): A, B, C, D = 0.7, b, c, d All > 0.70, OK. Keep Casing Full Alt Burst ok

5 1/2	casing inside the	9 5/8			Design Factors			Prod 1			
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	17.00	p 110	btc	2.24	1.34	2.13	17,929	2	3.89	2.73	304,793
"B"			0.00				0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig:	2,246				Totals:	17,929				304,793
	The cement volume(s) are intended to achieve a top of			4644	ft from surface or a		1000				overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
8 3/4	0.2526	2560	4525	3364	35	9.40			1.35

Class 'C' tail cmt yld > 1.35

#N/A

0		5 1/2			Design Factors			<Choose Casing>			
Segment	#/ft	Grade	Coupling	#N/A	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"			0.00				0				0
"B"			0.00				0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig:					Totals:	0				0
	Cmt vol calc below includes this csg, TOC intended			#N/A	ft from surface or a		#N/A				overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
0		#N/A	#N/A	0	#N/A				

#N/A Capitan Reef est top XXXX.

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

WELL: North Ridge #09H
TVD: 10207
MD: 17929

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)
17 1/2	13 3/8	0	1775	0	1775	No	54.5	J-55	STC	1.5	3.6	8.8	5.3	Dry	8.3
12 1/4	9 5/8	0	5644	0	5612	No	40	J-55	LTC	1.5	1.4	2.8	2.3	Dry	10
8 3/4	5.5	0	17929	0	10207	No	17	P110	Buttress	1.5	2.1	1.8	1.9	Dry	9.4

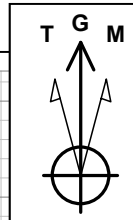
* 9 5/8" DV Tool @ 4062'
Dv Tool Depth 4062

KOP 9790

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
13 3/8	Lead		0	1440	Class C	1160	1.73	13.5	2006.8	100%	2% CaCl2
	Tail		1440	1775	Class C	340	1.35	14.8	459	100%	2% CaCl2
9 5/8	Stg 2 Lead		0	3505	Class C	1035	2.46	12.8	2546.1	100%	0.5% CaCl2
	Stg 2 Tail		3505	4062	Class C	200	1.34	14.8	268	25%	1% CaCl2
	Stage 1 Lead		4062	5085	Class C	1500	2.46	12.8	3690	100%	0.5% CaCl2
	Stg 1 Tail		5085	5644	Class C	200	1.34	14.8	268	25%	1% CaCl2
5 1/2	Lead		4644	9790	25% Poz 75% Class C	500	3.9	10.5	1950	60%	0.4% Fluid Loss
	Tail		9790	17929	Class H	2060	1.25	14.4	2575	25%	0.2% LT Retarder

BTA Oil Producers, LLC



Azimuths to Grid N
True North: -0
Magnetic North: 7

Magnetic Field
Strength: 48887.4nT
Dip Angle: 60.39°
Date: 12/31/2009
Model: IGRF200510

WELL DETAILS: North Ridge #09H

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude
0.0	0.0	493696.80	818542.90	32° 21' 14.574 N	103° 26' 8.293 W

Ground Level 3407.0

SITE DETAILS: North Ridge

Site Centre Northing: 493872.00
Easting: 815680.00

Positional Uncertainity: 0.0
Convergence: 0.48
Local North: Grid

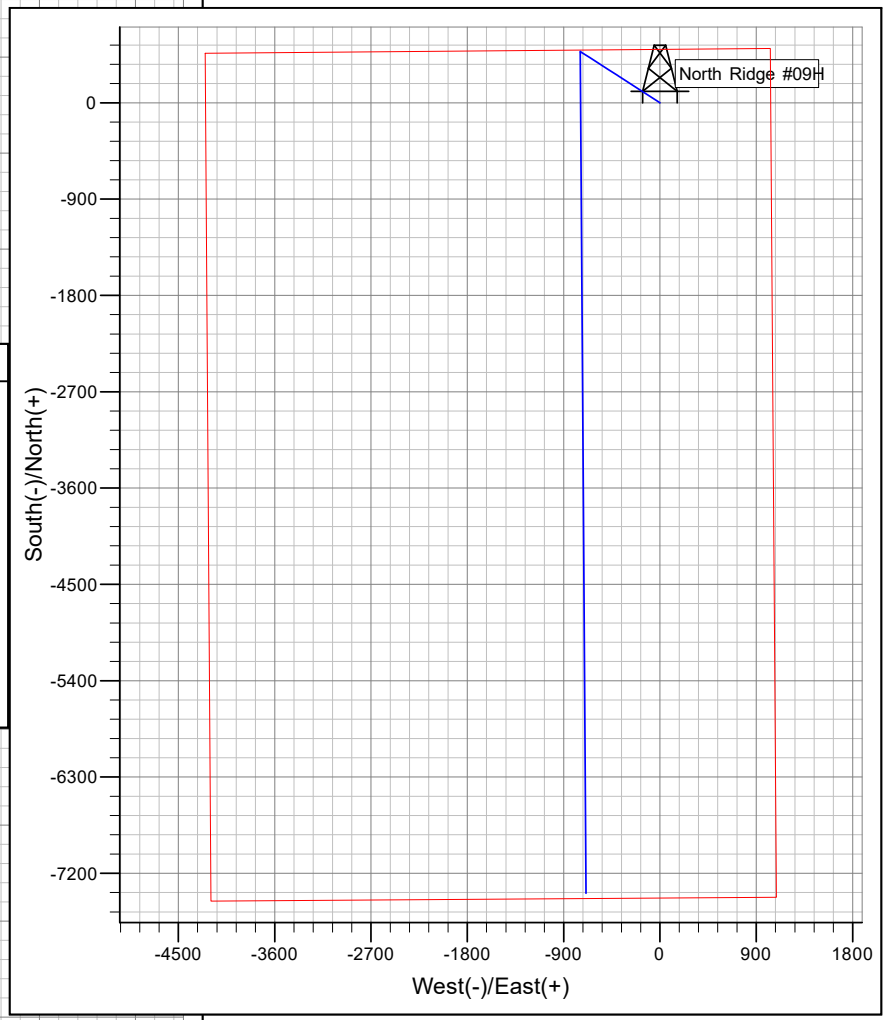
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DlegAnnotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00
2	2000.0	0.00	0.00	2000.0	0.0	0.0	0.00
3	2400.0	8.00	302.79	2398.7	15.1	-23.4	2.00
4	8367.3	8.00	302.79	8307.9	464.9	-721.6	0.00
5	8767.3	0.00	0.00	8706.6	480.0	-745.0	2.00
6	9740.2	0.00	0.00	9679.5	480.0	-745.0	0.00
7	9790.2	0.00	0.00	9729.5	480.0	-745.0	0.00
8	10540.2	90.00	179.61	10207.0	2.5	-741.7	12.00
9	17928.8	90.00	179.61	10207.0	-7385.9	-690.9	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)
North Ridge
North Ridge #09H

Wellbore #1

Plan: Design #1

Standard Planning Report - Geographic

17 August, 2023

Microsoft
Planning Report - Geographic

Database:	EDM16	**Local Co-ordinate Reference:**	Well North Ridge #09H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	WELL @ 3407.0usft (Original Well Elev)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3407.0usft (Original Well Elev)
Site:	North Ridge	**North Reference:**	Grid
Well:	North Ridge #09H	**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 North Ridge

Site Position:		**Northing:**	493,872.00 usft	**Latitude:**	32° 21' 16.544 N
From:	Map	**Easting:**	815,680.00 usft	**Longitude:**	103° 26' 41.649 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "		

Well North Ridge #09H

Well Position	**+N/-S**	0.0 usft	**Northing:**	493,696.80 usft	**Latitude:**	32° 21' 14.574 N
	+E/-W	0.0 usft	**Easting:**	818,542.90 usft	**Longitude:**	103° 26' 8.293 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,407.0 usft
Grid Convergence:		0.48 °				

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	7.70	60.39	48,887.39172525

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	185.34

Plan Survey Tool Program **Date** 8/17/2023

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,928.8	Design #1 (Wellbore #1)		

Microsoft

Planning Report - Geographic

Database:	EDM16	**Local Co-ordinate Reference:**	Well North Ridge #09H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	WELL @ 3407.0usft (Original Well Elev)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3407.0usft (Original Well Elev)
Site:	North Ridge	**North Reference:**	Grid
Well:	North Ridge #09H	**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	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,400.0	8.00	302.79	2,398.7	15.1	-23.4	2.00	2.00	0.00	302.79	
8,367.3	8.00	302.79	8,307.9	464.9	-721.6	0.00	0.00	0.00	0.00	
8,767.3	0.00	0.00	8,706.6	480.0	-745.0	2.00	-2.00	0.00	180.00	
9,740.2	0.00	0.00	9,679.5	480.0	-745.0	0.00	0.00	0.00	0.00	
9,790.2	0.00	0.00	9,729.5	480.0	-745.0	0.00	0.00	0.00	0.00	
10,540.2	90.00	179.61	10,207.0	2.5	-741.7	12.00	12.00	0.00	179.61	
17,928.8	90.00	179.61	10,207.0	-7,385.9	-690.9	0.00	0.00	0.00	0.00	North Ridge #9H BHL

Microsoft

Planning Report - Geographic

Database:	EDM16	**Local Co-ordinate Reference:**	Well North Ridge #09H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	WELL @ 3407.0usft (Original Well Elev)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3407.0usft (Original Well Elev)
Site:	North Ridge	**North Reference:**	Grid
Well:	North Ridge #09H	**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	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
100.0	0.00	0.00	100.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
200.0	0.00	0.00	200.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
300.0	0.00	0.00	300.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
400.0	0.00	0.00	400.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
500.0	0.00	0.00	500.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
600.0	0.00	0.00	600.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
700.0	0.00	0.00	700.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
800.0	0.00	0.00	800.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
900.0	0.00	0.00	900.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
1,500.0	0.00	0.00	1,500.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
1,700.0	0.00	0.00	1,700.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
1,900.0	0.00	0.00	1,900.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	493,696.80	818,542.90	32° 21' 14.574 N	103° 26' 8.293 W
2,100.0	2.00	302.79	2,100.0	0.9	-1.5	493,697.75	818,541.43	32° 21' 14.583 N	103° 26' 8.310 W
2,200.0	4.00	302.79	2,199.8	3.8	-5.9	493,700.58	818,537.03	32° 21' 14.612 N	103° 26' 8.361 W
2,300.0	6.00	302.79	2,299.5	8.5	-13.2	493,705.30	818,529.71	32° 21' 14.659 N	103° 26' 8.446 W
2,400.0	8.00	302.79	2,398.7	15.1	-23.4	493,711.90	818,519.46	32° 21' 14.725 N	103° 26' 8.565 W
2,500.0	8.00	302.79	2,497.7	22.6	-35.1	493,719.44	818,507.76	32° 21' 14.801 N	103° 26' 8.701 W
2,600.0	8.00	302.79	2,596.8	30.2	-46.8	493,726.98	818,496.06	32° 21' 14.876 N	103° 26' 8.836 W
2,700.0	8.00	302.79	2,695.8	37.7	-58.5	493,734.51	818,484.36	32° 21' 14.952 N	103° 26' 8.972 W
2,800.0	8.00	302.79	2,794.8	45.3	-70.2	493,742.05	818,472.66	32° 21' 15.028 N	103° 26' 9.108 W
2,900.0	8.00	302.79	2,893.8	52.8	-81.9	493,749.59	818,460.97	32° 21' 15.103 N	103° 26' 9.243 W
3,000.0	8.00	302.79	2,992.9	60.3	-93.6	493,757.13	818,449.27	32° 21' 15.179 N	103° 26' 9.379 W
3,100.0	8.00	302.79	3,091.9	67.9	-105.3	493,764.67	818,437.57	32° 21' 15.254 N	103° 26' 9.515 W
3,200.0	8.00	302.79	3,190.9	75.4	-117.0	493,772.20	818,425.87	32° 21' 15.330 N	103° 26' 9.650 W
3,300.0	8.00	302.79	3,289.9	82.9	-128.7	493,779.74	818,414.17	32° 21' 15.405 N	103° 26' 9.786 W
3,400.0	8.00	302.79	3,389.0	90.5	-140.4	493,787.28	818,402.47	32° 21' 15.481 N	103° 26' 9.921 W
3,500.0	8.00	302.79	3,488.0	98.0	-152.1	493,794.82	818,390.77	32° 21' 15.556 N	103° 26' 10.057 W
3,600.0	8.00	302.79	3,587.0	105.6	-163.8	493,802.35	818,379.07	32° 21' 15.632 N	103° 26' 10.193 W
3,700.0	8.00	302.79	3,686.0	113.1	-175.5	493,809.89	818,367.37	32° 21' 15.708 N	103° 26' 10.328 W
3,800.0	8.00	302.79	3,785.1	120.6	-187.2	493,817.43	818,355.67	32° 21' 15.783 N	103° 26' 10.464 W
3,900.0	8.00	302.79	3,884.1	128.2	-198.9	493,824.97	818,343.97	32° 21' 15.859 N	103° 26' 10.600 W
4,000.0	8.00	302.79	3,983.1	135.7	-210.6	493,832.51	818,332.27	32° 21' 15.934 N	103° 26' 10.735 W
4,100.0	8.00	302.79	4,082.2	143.2	-222.3	493,840.04	818,320.57	32° 21' 16.010 N	103° 26' 10.871 W
4,200.0	8.00	302.79	4,181.2	150.8	-234.0	493,847.58	818,308.88	32° 21' 16.085 N	103° 26' 11.007 W
4,300.0	8.00	302.79	4,280.2	158.3	-245.7	493,855.12	818,297.18	32° 21' 16.161 N	103° 26' 11.142 W
4,400.0	8.00	302.79	4,379.2	165.9	-257.4	493,862.66	818,285.48	32° 21' 16.236 N	103° 26' 11.278 W
4,500.0	8.00	302.79	4,478.3	173.4	-269.1	493,870.19	818,273.78	32° 21' 16.312 N	103° 26' 11.414 W
4,600.0	8.00	302.79	4,577.3	180.9	-280.8	493,877.73	818,262.08	32° 21' 16.388 N	103° 26' 11.549 W
4,700.0	8.00	302.79	4,676.3	188.5	-292.5	493,885.27	818,250.38	32° 21' 16.463 N	103° 26' 11.685 W
4,800.0	8.00	302.79	4,775.3	196.0	-304.2	493,892.81	818,238.68	32° 21' 16.539 N	103° 26' 11.820 W
4,900.0	8.00	302.79	4,874.4	203.5	-315.9	493,900.35	818,226.98	32° 21' 16.614 N	103° 26' 11.956 W
5,000.0	8.00	302.79	4,973.4	211.1	-327.6	493,907.88	818,215.28	32° 21' 16.690 N	103° 26' 12.092 W
5,100.0	8.00	302.79	5,072.4	218.6	-339.3	493,915.42	818,203.58	32° 21' 16.765 N	103° 26' 12.227 W
5,200.0	8.00	302.79	5,171.5	226.2	-351.0	493,922.96	818,191.88	32° 21' 16.841 N	103° 26' 12.363 W
5,300.0	8.00	302.79	5,270.5	233.7	-362.7	493,930.50	818,180.18	32° 21' 16.916 N	103° 26' 12.499 W
5,400.0	8.00	302.79	5,369.5	241.2	-374.4	493,938.03	818,168.48	32° 21' 16.992 N	103° 26' 12.634 W

Microsoft

Planning Report - Geographic

Database:	EDM16	**Local Co-ordinate Reference:**	Well North Ridge #09H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	WELL @ 3407.0usft (Original Well Elev)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3407.0usft (Original Well Elev)
Site:	North Ridge	**North Reference:**	Grid
Well:	North Ridge #09H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,500.0	8.00	302.79	5,468.5	248.8	-386.1	493,945.57	818,156.79	32° 21' 17.068 N	103° 26' 12.770 W
5,600.0	8.00	302.79	5,567.6	256.3	-397.8	493,953.11	818,145.09	32° 21' 17.143 N	103° 26' 12.906 W
5,700.0	8.00	302.79	5,666.6	263.8	-409.5	493,960.65	818,133.39	32° 21' 17.219 N	103° 26' 13.041 W
5,800.0	8.00	302.79	5,765.6	271.4	-421.2	493,968.19	818,121.69	32° 21' 17.294 N	103° 26' 13.177 W
5,900.0	8.00	302.79	5,864.6	278.9	-432.9	493,975.72	818,109.99	32° 21' 17.370 N	103° 26' 13.313 W
6,000.0	8.00	302.79	5,963.7	286.5	-444.6	493,983.26	818,098.29	32° 21' 17.445 N	103° 26' 13.448 W
6,100.0	8.00	302.79	6,062.7	294.0	-456.3	493,990.80	818,086.59	32° 21' 17.521 N	103° 26' 13.584 W
6,200.0	8.00	302.79	6,161.7	301.5	-468.0	493,998.34	818,074.89	32° 21' 17.596 N	103° 26' 13.719 W
6,300.0	8.00	302.79	6,260.7	309.1	-479.7	494,005.87	818,063.19	32° 21' 17.672 N	103° 26' 13.855 W
6,400.0	8.00	302.79	6,359.8	316.6	-491.4	494,013.41	818,051.49	32° 21' 17.747 N	103° 26' 13.991 W
6,500.0	8.00	302.79	6,458.8	324.1	-503.1	494,020.95	818,039.79	32° 21' 17.823 N	103° 26' 14.126 W
6,600.0	8.00	302.79	6,557.8	331.7	-514.8	494,028.49	818,028.09	32° 21' 17.899 N	103° 26' 14.262 W
6,700.0	8.00	302.79	6,656.9	339.2	-526.5	494,036.03	818,016.39	32° 21' 17.974 N	103° 26' 14.398 W
6,800.0	8.00	302.79	6,755.9	346.8	-538.2	494,043.56	818,004.69	32° 21' 18.050 N	103° 26' 14.533 W
6,900.0	8.00	302.79	6,854.9	354.3	-549.9	494,051.10	817,993.00	32° 21' 18.125 N	103° 26' 14.669 W
7,000.0	8.00	302.79	6,953.9	361.8	-561.6	494,058.64	817,981.30	32° 21' 18.201 N	103° 26' 14.805 W
7,100.0	8.00	302.79	7,053.0	369.4	-573.3	494,066.18	817,969.60	32° 21' 18.276 N	103° 26' 14.940 W
7,200.0	8.00	302.79	7,152.0	376.9	-585.0	494,073.71	817,957.90	32° 21' 18.352 N	103° 26' 15.076 W
7,300.0	8.00	302.79	7,251.0	384.5	-596.7	494,081.25	817,946.20	32° 21' 18.427 N	103° 26' 15.212 W
7,400.0	8.00	302.79	7,350.0	392.0	-608.4	494,088.79	817,934.50	32° 21' 18.503 N	103° 26' 15.347 W
7,500.0	8.00	302.79	7,449.1	399.5	-620.1	494,096.33	817,922.80	32° 21' 18.579 N	103° 26' 15.483 W
7,600.0	8.00	302.79	7,548.1	407.1	-631.8	494,103.87	817,911.10	32° 21' 18.654 N	103° 26' 15.618 W
7,700.0	8.00	302.79	7,647.1	414.6	-643.5	494,111.40	817,899.40	32° 21' 18.730 N	103° 26' 15.754 W
7,800.0	8.00	302.79	7,746.1	422.1	-655.2	494,118.94	817,887.70	32° 21' 18.805 N	103° 26' 15.890 W
7,900.0	8.00	302.79	7,845.2	429.7	-666.9	494,126.48	817,876.00	32° 21' 18.881 N	103° 26' 16.025 W
8,000.0	8.00	302.79	7,944.2	437.2	-678.6	494,134.02	817,864.30	32° 21' 18.956 N	103° 26' 16.161 W
8,100.0	8.00	302.79	8,043.2	444.8	-690.3	494,141.55	817,852.60	32° 21' 19.032 N	103° 26' 16.297 W
8,200.0	8.00	302.79	8,142.3	452.3	-702.0	494,149.09	817,840.91	32° 21' 19.107 N	103° 26' 16.432 W
8,300.0	8.00	302.79	8,241.3	459.8	-713.7	494,156.63	817,829.21	32° 21' 19.183 N	103° 26' 16.568 W
8,367.3	8.00	302.79	8,307.9	464.9	-721.6	494,161.70	817,821.34	32° 21' 19.234 N	103° 26' 16.659 W
8,400.0	7.35	302.79	8,340.3	467.3	-725.2	494,164.07	817,817.66	32° 21' 19.258 N	103° 26' 16.702 W
8,500.0	5.35	302.79	8,439.7	473.3	-734.5	494,170.05	817,808.37	32° 21' 19.318 N	103° 26' 16.810 W
8,600.0	3.35	302.79	8,539.4	477.4	-740.9	494,174.16	817,802.00	32° 21' 19.359 N	103° 26' 16.883 W
8,700.0	1.35	302.79	8,639.3	479.6	-744.3	494,176.37	817,798.56	32° 21' 19.381 N	103° 26' 16.923 W
8,767.3	0.00	0.00	8,706.6	480.0	-745.0	494,176.80	817,797.90	32° 21' 19.385 N	103° 26' 16.931 W
8,800.0	0.00	0.00	8,739.3	480.0	-745.0	494,176.80	817,797.90	32° 21' 19.385 N	103° 26' 16.931 W
8,900.0	0.00	0.00	8,839.3	480.0	-745.0	494,176.80	817,797.90	32° 21' 19.385 N	103° 26' 16.931 W
9,000.0	0.00	0.00	8,939.3	480.0	-745.0	494,176.80	817,797.90	32° 21' 19.385 N	103° 26' 16.931 W
9,100.0	0.00	0.00	9,039.3	480.0	-745.0	494,176.80	817,797.90	32° 21' 19.385 N	103° 26' 16.931 W
9,200.0	0.00	0.00	9,139.3	480.0	-745.0	494,176.80	817,797.90	32° 21' 19.385 N	103° 26' 16.931 W
9,300.0	0.00	0.00	9,239.3	480.0	-745.0	494,176.80	817,797.90	32° 21' 19.385 N	103° 26' 16.931 W
9,400.0	0.00	0.00	9,339.3	480.0	-745.0	494,176.80	817,797.90	32° 21' 19.385 N	103° 26' 16.931 W
9,500.0	0.00	0.00	9,439.3	480.0	-745.0	494,176.80	817,797.90	32° 21' 19.385 N	103° 26' 16.931 W
9,600.0	0.00	0.00	9,539.3	480.0	-745.0	494,176.80	817,797.90	32° 21' 19.385 N	103° 26' 16.931 W
9,700.0	0.00	0.00	9,639.3	480.0	-745.0	494,176.80	817,797.90	32° 21' 19.385 N	103° 26' 16.931 W
9,740.2	0.00	0.00	9,679.5	480.0	-745.0	494,176.80	817,797.90	32° 21' 19.385 N	103° 26' 16.931 W
9,790.2	0.00	0.00	9,729.5	480.0	-745.0	494,176.80	817,797.90	32° 21' 19.385 N	103° 26' 16.931 W
9,800.0	1.18	179.61	9,739.3	479.9	-745.0	494,176.70	817,797.90	32° 21' 19.384 N	103° 26' 16.931 W
9,900.0	13.18	179.61	9,838.4	467.4	-744.9	494,164.23	817,797.99	32° 21' 19.261 N	103° 26' 16.931 W
10,000.0	25.18	179.61	9,932.6	434.6	-744.7	494,131.45	817,798.21	32° 21' 18.936 N	103° 26' 16.932 W
10,100.0	37.18	179.61	10,018.0	383.0	-744.3	494,079.78	817,798.57	32° 21' 18.425 N	103° 26' 16.933 W
10,200.0	49.18	179.61	10,090.8	314.7	-743.9	494,011.48	817,799.04	32° 21' 17.749 N	103° 26' 16.934 W
10,300.0	61.18	179.61	10,147.8	232.7	-743.3	493,929.54	817,799.60	32° 21' 16.938 N	103° 26' 16.935 W
10,400.0	73.18	179.61	10,186.6	140.7	-742.7	493,837.54	817,800.23	32° 21' 16.028 N	103° 26' 16.937 W
10,500.0	85.18	179.61	10,205.3	42.7	-742.0	493,739.50	817,800.91	32° 21' 15.058 N	103° 26' 16.939 W

Microsoft

Planning Report - Geographic

Database:	EDM16	**Local Co-ordinate Reference:**	Well North Ridge #09H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	WELL @ 3407.0usft (Original Well Elev)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3407.0usft (Original Well Elev)
Site:	North Ridge	**North Reference:**	Grid
Well:	North Ridge #09H	**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
10,540.2	90.00	179.61	10,207.0	2.5	-741.7	493,699.35	817,801.18	32° 21' 14.661 N	103° 26' 16.939 W
10,600.0	90.00	179.61	10,207.0	-57.2	-741.3	493,639.55	817,801.60	32° 21' 14.069 N	103° 26' 16.940 W
10,700.0	90.00	179.61	10,207.0	-157.2	-740.6	493,539.56	817,802.28	32° 21' 13.079 N	103° 26' 16.942 W
10,800.0	90.00	179.61	10,207.0	-257.2	-739.9	493,439.56	817,802.97	32° 21' 12.090 N	103° 26' 16.944 W
10,900.0	90.00	179.61	10,207.0	-357.2	-739.2	493,339.56	817,803.66	32° 21' 11.100 N	103° 26' 16.945 W
11,000.0	90.00	179.61	10,207.0	-457.2	-738.6	493,239.56	817,804.35	32° 21' 10.111 N	103° 26' 16.947 W
11,100.0	90.00	179.61	10,207.0	-557.2	-737.9	493,139.57	817,805.03	32° 21' 9.122 N	103° 26' 16.949 W
11,200.0	90.00	179.61	10,207.0	-657.2	-737.2	493,039.57	817,805.72	32° 21' 8.132 N	103° 26' 16.951 W
11,300.0	90.00	179.61	10,207.0	-757.2	-736.5	492,939.57	817,806.41	32° 21' 7.143 N	103° 26' 16.952 W
11,400.0	90.00	179.61	10,207.0	-857.2	-735.8	492,839.58	817,807.10	32° 21' 6.153 N	103° 26' 16.954 W
11,500.0	90.00	179.61	10,207.0	-957.2	-735.1	492,739.58	817,807.78	32° 21' 5.164 N	103° 26' 16.956 W
11,600.0	90.00	179.61	10,207.0	-1,057.2	-734.4	492,639.58	817,808.47	32° 21' 4.174 N	103° 26' 16.958 W
11,700.0	90.00	179.61	10,207.0	-1,157.2	-733.7	492,539.58	817,809.16	32° 21' 3.185 N	103° 26' 16.959 W
11,800.0	90.00	179.61	10,207.0	-1,257.2	-733.1	492,439.59	817,809.85	32° 21' 2.195 N	103° 26' 16.961 W
11,900.0	90.00	179.61	10,207.0	-1,357.2	-732.4	492,339.59	817,810.54	32° 21' 1.206 N	103° 26' 16.963 W
12,000.0	90.00	179.61	10,207.0	-1,457.2	-731.7	492,239.59	817,811.22	32° 21' 0.216 N	103° 26' 16.964 W
12,100.0	90.00	179.61	10,207.0	-1,557.2	-731.0	492,139.59	817,811.91	32° 20' 59.227 N	103° 26' 16.966 W
12,200.0	90.00	179.61	10,207.0	-1,657.2	-730.3	492,039.60	817,812.60	32° 20' 58.237 N	103° 26' 16.968 W
12,300.0	90.00	179.61	10,207.0	-1,757.2	-729.6	491,939.60	817,813.29	32° 20' 57.248 N	103° 26' 16.970 W
12,400.0	90.00	179.61	10,207.0	-1,857.2	-728.9	491,839.60	817,813.97	32° 20' 56.258 N	103° 26' 16.971 W
12,500.0	90.00	179.61	10,207.0	-1,957.2	-728.2	491,739.60	817,814.66	32° 20' 55.269 N	103° 26' 16.973 W
12,600.0	90.00	179.61	10,207.0	-2,057.2	-727.6	491,639.61	817,815.35	32° 20' 54.279 N	103° 26' 16.975 W
12,700.0	90.00	179.61	10,207.0	-2,157.2	-726.9	491,539.61	817,816.04	32° 20' 53.290 N	103° 26' 16.977 W
12,800.0	90.00	179.61	10,207.0	-2,257.2	-726.2	491,439.61	817,816.73	32° 20' 52.300 N	103° 26' 16.978 W
12,900.0	90.00	179.61	10,207.0	-2,357.2	-725.5	491,339.62	817,817.41	32° 20' 51.311 N	103° 26' 16.980 W
13,000.0	90.00	179.61	10,207.0	-2,457.2	-724.8	491,239.62	817,818.10	32° 20' 50.321 N	103° 26' 16.982 W
13,100.0	90.00	179.61	10,207.0	-2,557.2	-724.1	491,139.62	817,818.79	32° 20' 49.332 N	103° 26' 16.984 W
13,200.0	90.00	179.61	10,207.0	-2,657.2	-723.4	491,039.62	817,819.48	32° 20' 48.342 N	103° 26' 16.985 W
13,300.0	90.00	179.61	10,207.0	-2,757.2	-722.7	490,939.63	817,820.16	32° 20' 47.353 N	103° 26' 16.987 W
13,400.0	90.00	179.61	10,207.0	-2,857.2	-722.0	490,839.63	817,820.85	32° 20' 46.363 N	103° 26' 16.989 W
13,500.0	90.00	179.61	10,207.0	-2,957.2	-721.4	490,739.63	817,821.54	32° 20' 45.374 N	103° 26' 16.990 W
13,600.0	90.00	179.61	10,207.0	-3,057.2	-720.7	490,639.63	817,822.23	32° 20' 44.384 N	103° 26' 16.992 W
13,700.0	90.00	179.61	10,207.0	-3,157.2	-720.0	490,539.64	817,822.92	32° 20' 43.395 N	103° 26' 16.994 W
13,800.0	90.00	179.61	10,207.0	-3,257.2	-719.3	490,439.64	817,823.60	32° 20' 42.405 N	103° 26' 16.996 W
13,900.0	90.00	179.61	10,207.0	-3,357.2	-718.6	490,339.64	817,824.29	32° 20' 41.416 N	103° 26' 16.997 W
14,000.0	90.00	179.61	10,207.0	-3,457.2	-717.9	490,239.64	817,824.98	32° 20' 40.426 N	103° 26' 16.999 W
14,100.0	90.00	179.61	10,207.0	-3,557.2	-717.2	490,139.65	817,825.67	32° 20' 39.437 N	103° 26' 17.001 W
14,200.0	90.00	179.61	10,207.0	-3,657.2	-716.5	490,039.65	817,826.35	32° 20' 38.447 N	103° 26' 17.003 W
14,300.0	90.00	179.61	10,207.0	-3,757.2	-715.9	489,939.65	817,827.04	32° 20' 37.458 N	103° 26' 17.004 W
14,400.0	90.00	179.61	10,207.0	-3,857.2	-715.2	489,839.65	817,827.73	32° 20' 36.468 N	103° 26' 17.006 W
14,500.0	90.00	179.61	10,207.0	-3,957.2	-714.5	489,739.66	817,828.42	32° 20' 35.479 N	103° 26' 17.008 W
14,600.0	90.00	179.61	10,207.0	-4,057.2	-713.8	489,639.66	817,829.10	32° 20' 34.489 N	103° 26' 17.009 W
14,700.0	90.00	179.61	10,207.0	-4,157.2	-713.1	489,539.66	817,829.79	32° 20' 33.500 N	103° 26' 17.011 W
14,800.0	90.00	179.61	10,207.0	-4,257.1	-712.4	489,439.67	817,830.48	32° 20' 32.510 N	103° 26' 17.013 W
14,900.0	90.00	179.61	10,207.0	-4,357.1	-711.7	489,339.67	817,831.17	32° 20' 31.521 N	103° 26' 17.015 W
15,000.0	90.00	179.61	10,207.0	-4,457.1	-711.0	489,239.67	817,831.86	32° 20' 30.531 N	103° 26' 17.016 W
15,100.0	90.00	179.61	10,207.0	-4,557.1	-710.4	489,139.67	817,832.54	32° 20' 29.542 N	103° 26' 17.018 W
15,200.0	90.00	179.61	10,207.0	-4,657.1	-709.7	489,039.68	817,833.23	32° 20' 28.552 N	103° 26' 17.020 W
15,300.0	90.00	179.61	10,207.0	-4,757.1	-709.0	488,939.68	817,833.92	32° 20' 27.563 N	103° 26' 17.022 W
15,400.0	90.00	179.61	10,207.0	-4,857.1	-708.3	488,839.68	817,834.61	32° 20' 26.573 N	103° 26' 17.023 W
15,500.0	90.00	179.61	10,207.0	-4,957.1	-707.6	488,739.68	817,835.29	32° 20' 25.584 N	103° 26' 17.025 W
15,600.0	90.00	179.61	10,207.0	-5,057.1	-706.9	488,639.69	817,835.98	32° 20' 24.594 N	103° 26' 17.027 W
15,700.0	90.00	179.61	10,207.0	-5,157.1	-706.2	488,539.69	817,836.67	32° 20' 23.605 N	103° 26' 17.028 W
15,800.0	90.00	179.61	10,207.0	-5,257.1	-705.5	488,439.69	817,837.36	32° 20' 22.615 N	103° 26' 17.030 W
15,900.0	90.00	179.61	10,207.0	-5,357.1	-704.9	488,339.69	817,838.05	32° 20' 21.626 N	103° 26' 17.032 W

Microsoft

Planning Report - Geographic

Database:	EDM16	**Local Co-ordinate Reference:**	Well North Ridge #09H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	WELL @ 3407.0usft (Original Well Elev)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3407.0usft (Original Well Elev)
Site:	North Ridge	**North Reference:**	Grid
Well:	North Ridge #09H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
16,000.0	90.00	179.61	10,207.0	-5,457.1	-704.2	488,239.70	817,838.73	32° 20' 20.636 N	103° 26' 17.034 W
16,100.0	90.00	179.61	10,207.0	-5,557.1	-703.5	488,139.70	817,839.42	32° 20' 19.647 N	103° 26' 17.035 W
16,200.0	90.00	179.61	10,207.0	-5,657.1	-702.8	488,039.70	817,840.11	32° 20' 18.657 N	103° 26' 17.037 W
16,300.0	90.00	179.61	10,207.0	-5,757.1	-702.1	487,939.71	817,840.80	32° 20' 17.668 N	103° 26' 17.039 W
16,400.0	90.00	179.61	10,207.0	-5,857.1	-701.4	487,839.71	817,841.48	32° 20' 16.678 N	103° 26' 17.041 W
16,500.0	90.00	179.61	10,207.0	-5,957.1	-700.7	487,739.71	817,842.17	32° 20' 15.689 N	103° 26' 17.042 W
16,600.0	90.00	179.61	10,207.0	-6,057.1	-700.0	487,639.71	817,842.86	32° 20' 14.699 N	103° 26' 17.044 W
16,700.0	90.00	179.61	10,207.0	-6,157.1	-699.4	487,539.72	817,843.55	32° 20' 13.710 N	103° 26' 17.046 W
16,800.0	90.00	179.61	10,207.0	-6,257.1	-698.7	487,439.72	817,844.23	32° 20' 12.720 N	103° 26' 17.047 W
16,900.0	90.00	179.61	10,207.0	-6,357.1	-698.0	487,339.72	817,844.92	32° 20' 11.731 N	103° 26' 17.049 W
17,000.0	90.00	179.61	10,207.0	-6,457.1	-697.3	487,239.72	817,845.61	32° 20' 10.741 N	103° 26' 17.051 W
17,100.0	90.00	179.61	10,207.0	-6,557.1	-696.6	487,139.73	817,846.30	32° 20' 9.752 N	103° 26' 17.053 W
17,200.0	90.00	179.61	10,207.0	-6,657.1	-695.9	487,039.73	817,846.99	32° 20' 8.762 N	103° 26' 17.054 W
17,300.0	90.00	179.61	10,207.0	-6,757.1	-695.2	486,939.73	817,847.67	32° 20' 7.773 N	103° 26' 17.056 W
17,400.0	90.00	179.61	10,207.0	-6,857.1	-694.5	486,839.73	817,848.36	32° 20' 6.783 N	103° 26' 17.058 W
17,500.0	90.00	179.61	10,207.0	-6,957.1	-693.9	486,739.74	817,849.05	32° 20' 5.794 N	103° 26' 17.060 W
17,600.0	90.00	179.61	10,207.0	-7,057.1	-693.2	486,639.74	817,849.74	32° 20' 4.804 N	103° 26' 17.061 W
17,700.0	90.00	179.61	10,207.0	-7,157.1	-692.5	486,539.74	817,850.42	32° 20' 3.815 N	103° 26' 17.063 W
17,800.0	90.00	179.61	10,207.0	-7,257.1	-691.8	486,439.75	817,851.11	32° 20' 2.825 N	103° 26' 17.065 W
17,900.0	90.00	179.61	10,207.0	-7,357.1	-691.1	486,339.75	817,851.80	32° 20' 1.836 N	103° 26' 17.066 W
17,928.8	90.00	179.61	10,207.0	-7,385.9	-690.9	486,310.90	817,852.00	32° 20' 1.550 N	103° 26' 17.067 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
North Ridge #9H BHL - plan hits target center - Point	0.00	0.00	10,207.0	-7,385.9	-690.9	486,310.90	817,852.00	32° 20' 1.550 N	103° 26' 17.067 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 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	Pool Code	Pool Name
30-025-49792	97293	OJO CHISO ; BONE SPRING, SOUTH

Property Code	Property Name	Well Number
327302	NORTH RIDGE 8040 FEDERAL COM	9H

OGRID No.	Operator Name	Elevation
260297	BTA OIL PRODUCERS, LLC	3407'

Surface Location

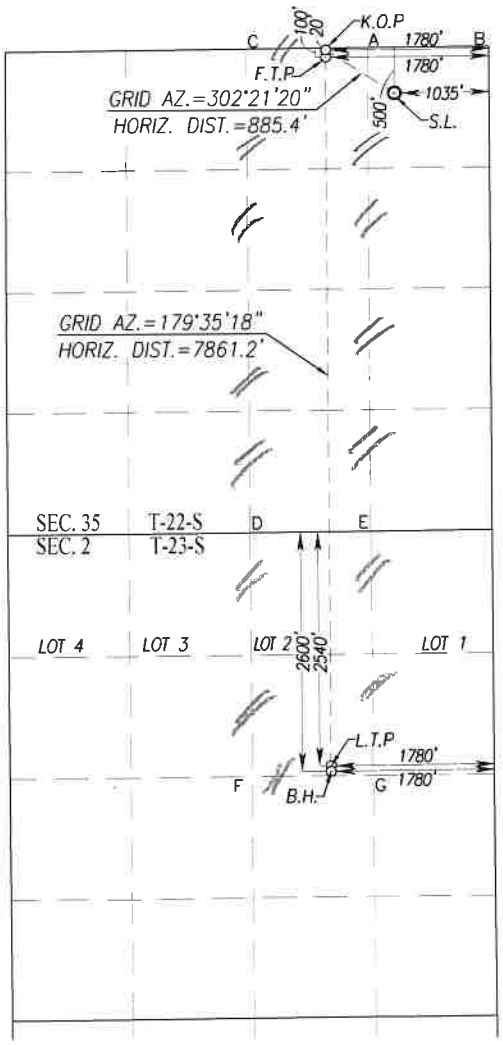
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	35	22-S	34-E		500	NORTH	1035	EAST	LEA

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
G	2	23-S	34-E		2600	NORTH	1780	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
240			

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



SCALE: 1"=2000'

GEODETIC COORDINATES NAD 83 NME SURFACE LOCATION	GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION
Y= 493696.8 N	Y= 493636.5 N
X= 818542.9 E	X= 777359.3 E
LAT.=32.354048° N	LAT.=32.353924° N
LONG.=103.435637° W	LONG.=103.435159° W
KICK OFF POINT NAD 83 NME	KICK OFF POINT NAD 27 NME
Y= 494170.6 N	Y= 494110.3 N
X= 817795.0 E	X= 776611.5 E
LAT.=32.355368° N	LAT.=32.355243° N
LONG.=103.438046° W	LONG.=103.437568° W
FIRST TAKE POINT NAD 83 NME	FIRST TAKE POINT NAD 27 NME
Y= 494090.6 N	Y= 494030.3 N
X= 817795.5 E	X= 776612.0 E
LAT.=32.355148° N	LAT.=32.355023° N
LONG.=103.438046° W	LONG.=103.437568° W

CORNER COORDINATES TABLE NAD 27 NME

A	Y= 494134.1 N,	X= 777069.1 E
B	Y= 494145.1 N,	X= 778391.0 E
C	Y= 494123.1 N,	X= 775747.3 E
D	Y= 488843.3 N,	X= 775782.6 E
E	Y= 488854.0 N,	X= 777103.3 E
F	Y= 486194.4 N,	X= 775806.2 E
G	Y= 486203.5 N,	X= 777127.4 E

CORNER COORDINATES TABLE NAD 83 NME

A	Y= 494194.4 N,	X= 818252.7 E
B	Y= 494205.5 N,	X= 819574.6 E
C	Y= 494183.4 N,	X= 816930.8 E
D	Y= 488903.5 N,	X= 816966.2 E
E	Y= 488914.1 N,	X= 818287.0 E
F	Y= 486254.4 N,	X= 816989.8 E
G	Y= 486263.6 N,	X= 818311.1 E

LAST TAKE POINT NAD 83 NME	LAST TAKE POINT NAD 27 NME
Y= 486370.9 N	Y= 486310.9 N
X= 817851.0 E	X= 776667.3 E
LAT.=32.333929° N	LAT.=32.333804° N
LONG.=103.438076° W	LONG.=103.437598° W
BOTTOM HOLE LOCATION NAD 83 NME	BOTTOM HOLE LOCATION NAD 27 NME
Y= 486310.9 N	Y= 486250.9 N
X= 817851.5 E	X= 776667.8 E
LAT.=32.333764° N	LAT.=32.333640° N
LONG.=103.438076° W	LONG.=103.437598° 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

Signature 8/9/23 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 of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

OCTOBER 29, 2020
Date of Survey

12641
Signature & Seal of Professional Surveyor

GARY G. EIDSON
NEW MEXICO
12641
REGISTERED PROFESSIONAL SURVEYOR

Gary G. Eidson 08/07/2023
Certificate Number Gary G. Eidson 12641

ACK REL W O 20110503 JWSC W O 23 13 0242

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 330045

CONDITIONS

Operator: BTA OIL PRODUCERS, LLC 104 S Pecos Midland, TX 79701	OGRID: 260297
	Action Number: 330045
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	4/11/2024