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

Sundry Print Report

05/08/2024

Well Name: VACA DRAW 9418 10 FEDERAL

Well Location: T25S / R33E / SEC 10 / NENE / 32.152028 / -103.554697

County or Parish/State: LEA / NM

Well Number: 29H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM97153

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002549309

Operator: BTA OIL PRODUCERS LLC

Notice of Intent

Sundry ID: 2777064

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 02/28/2024

Time Sundry Submitted: 09:08

Date proposed operation will begin: 02/28/2024

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: 110' FNL & 940' FEL (NO CHANGE) FTP: 100' FNL & 380' FEL LTP: 100' FSL & 380' FEL BHL: 50' FSL & 380' FEL NEW FOOTAGES KOP: 50' FNL & 660' FEL FTP: 100' FNL & 660' FEL LTP: 100' FSL & 660' FEL BHL: 50' FSL & 660’ FEL

NOI Attachments

Procedure Description

Vaca_Draw_9418_10_Fed__29H_Drill_Plans_PDF_20240228090405.pdf

Vaca_Draw__29___directional_plan____updated_2_27_2024_20240228090146.pdf

Vaca_Draw__29H___Wall_Plot____Updated_2_27_2024_20240228090133.pdf

Signed_C102___Vaca_Draw_9418_10_Fed_29H_20240228090108.pdf

Well Name: VACA DRAW 9418 10 FEDERAL

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County or Parish/State: LEA / NM

Well Number: 29H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM97153

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002549309

Operator: BTA OIL PRODUCERS LLC

Conditions of Approval

Additional

SEC10_T25S_R33E_VACA_DRAW_9418_10_FED_Lea__BTA_OIL_PRODUCERS_LLC_5_7_2024_JS_20240507082407.pdf

VACA_DRAW_9418_10_FED_29H_COAs_20240507082407.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: FEB 28, 2024 09:08 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: 05/08/2024

Signature: Chris Walls

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	BTA OIL PRODUCERS LLC
WELL NAME & NO.:	VACA DRAW 9418 10 FEDERAL 29H
SURFACE HOLE FOOTAGE:	110'/N & 940'/E
BOTTOM HOLE FOOTAGE	50'/S & 660'/E
LOCATION:	Section 10, T.25 S., R.33 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	[ ] Capitan Reef	[ ] WIPP
Other	[x] Fluid Filled	[ ] Pilot Hole	[ ] Open Annulus
Cementing	[ ] Contingency Cement Squeeze	[ ] EchoMeter	[ ] Primary Cement Squeeze
Special Requirements	[ ] Water Disposal	[ ] 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 **1165 feet per BLM Geologist** (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:

- Cement to surface. If cement does not circulate see B.1.a, c-d above.

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

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

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.
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.

D. SPECIAL REQUIREMENT (S)

(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 Onshore Oil and Gas Order No. 2.
- 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 5/7/2024

VACA DRAW 9418 10 FED

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	8.20	2.25	1.02	1,150	6	1.78	4.54	62,675
"B"			STC				0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig: 1,409		Tail Cmt	does not	circ to sfc.	Totals:	1,150				62,675

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	970	1602	799	101	8.40	1537	2M	1.56

Site plat (plus racks 5 or 6) as per O.O.1 III.D.4.i not found

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	2.53	0.96	0.81	5,133	1	1.49	1.67	205,320
"B"							0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig: 525					Totals:	5,133				205,320
	The cement volume(s) are intended to achieve a top of			0	ft from surface or a		1150				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	1550	3589	1665	116	10.00	2651	3M	0.81
D V Tool(s):							sum of sx	Σ CuFt	Σ%excess
t by stage % :		#VALUE!	#VALUE!				1550	3589	116

Class 'H' tail cmt yld > 1.20

Burst Frac Gradient(s) for Segment(s): A, B, C, D = 0.77, 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	2.37	1.4	2.19	15,030	2	4.01	2.82	255,510
"B"							0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig: 2,217					Totals:	15,030				255,510
	The cement volume(s) are intended to achieve a top of			4933	ft from surface or a		200				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	1860	3822	2552	50	9.30			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.

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
30-025-49309	97900	RED HILLS; UPPER BONE SPRING SHALE

Property Code	Property Name	Well Number
317432	VACA DRAW 9418 10 FEDERAL	29H

OGRID No.	Operator Name	Elevation
260297	BTA OIL PRODUCERS, LLC	3420'

Surface Location

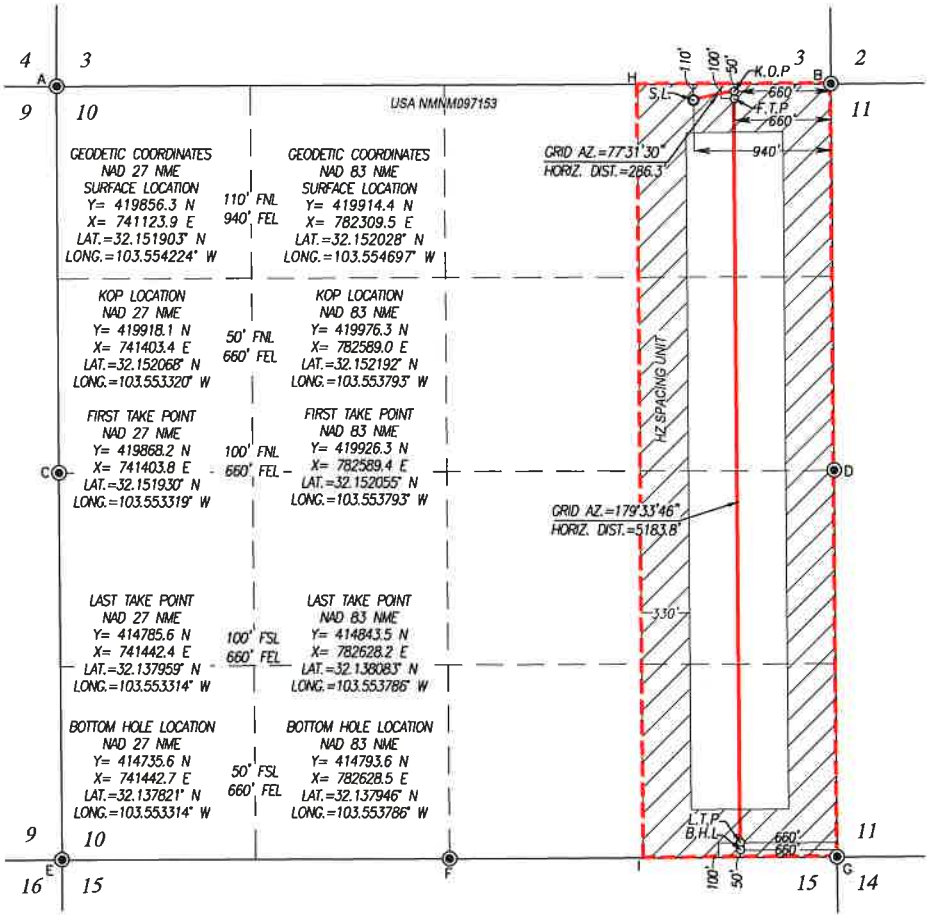
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	10	25-S	33-E		110	NORTH	940	EAST	LEA

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
P	10	25-S	33-E		50	SOUTH	660	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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



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 — Date: 2/28/2024

Sammy Hajar
Printed Name

SHAJAR@BTAOIL.COM
E-mail Address

CORNER COORDINATES TABLE NAD 27 NME
A – Y= 419937.5 N, X= 736770.5 E
B – Y= 419972.5 N, X= 742062.9 E
C – Y= 417297.0 N, X= 736784.4 E
D – Y= 417331.9 N, X= 742084.0 E
E – Y= 414656.6 N, X= 736802.4 E
F – Y= 414669.2 N, X= 739451.8 E
G – Y= 414691.0 N, X= 742102.9 E
H – Y= 419963.7 N, X= 740739.8 E
I – Y= 414680.1 N, X= 740777.4 E

CORNER COORDINATES TABLE NAD 83 NME
A – Y= 419995.6 N, X= 777956.0 E
B – Y= 420030.6 N, X= 783248.4 E
C – Y= 417355.1 N, X= 777970.0 E
D – Y= 417390.0 N, X= 783269.6 E
E – Y= 414714.6 N, X= 777988.1 E
F – Y= 414727.2 N, X= 780637.6 E
G – Y= 414749.0 N, X= 783288.7 E
H – Y= 420021.9 N, X= 781925.3 E
I – Y= 414738.1 N, X= 781963.2 E

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.

JULY 06, 2020

Date of Survey 12641
Signature & Seal of Professional Surveyor:

NEW MEXICO — GARY G. EIDSON — REGISTERED PROFESSIONAL SURVEYOR

Gary G Eidson 02/22/2024
Certificate Number Gary G. Eidson 12641

ACK REL. W.O.:20110336 JWSC W.O.: 24.13.0052

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

WELL: Vaca Draw 9418 10 Fed #29H
TVD: 10075
MD: 15030

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	1150	0	1150	No	54.5	J-55	STC	2.3	5.5	13.6	8.2	Dry	8.3
12 1/4	9 5/8	0	5138	0	5111	No	40	J-55	LTC	1.7	1.5	3.1	2.5	Dry	10
8 3/4	5.5	0	15030	0	10075	No	17	P110	Buttress	1.5	2.2	2.1	2.2	Dry	9.4

Cementing Program

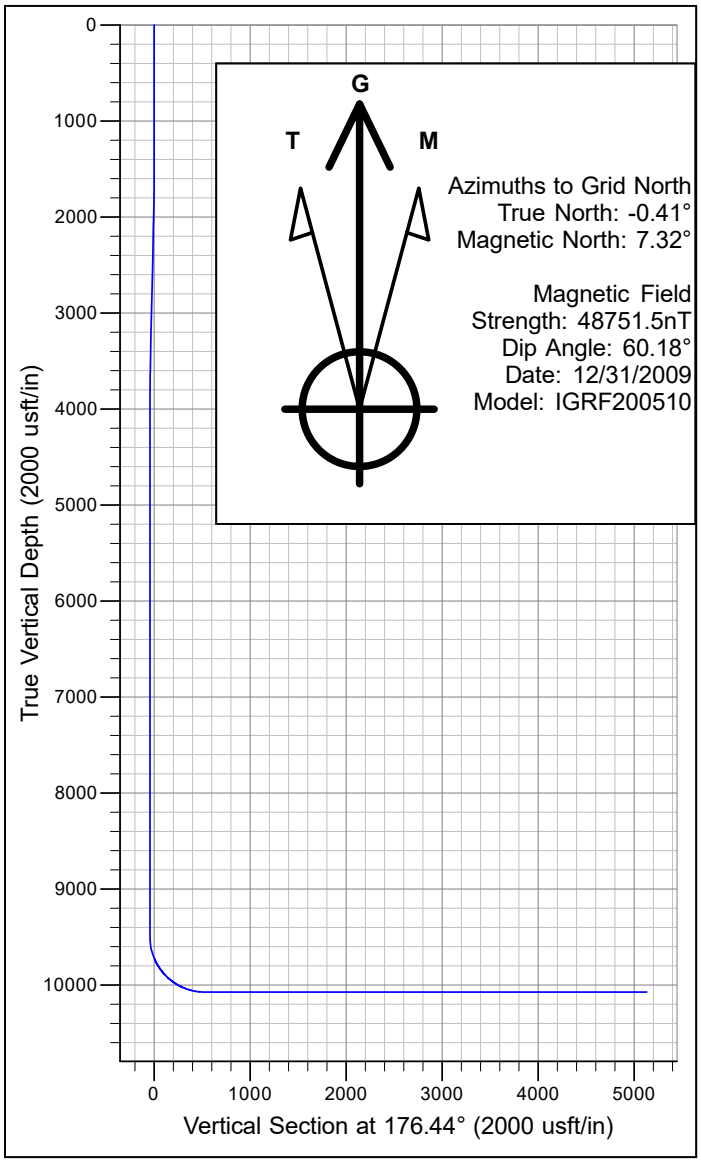
Csg. Size		Stage Tool Depth	Top MD of Segment	Bottom MD of Segment	Cement Type	Quantity (sk)	Yield (cu. Ft./sk)	Density (lbs. gal)	Volume (cu.ft.)	% Excess	Additives
13 3/8	Lead		0	955	Class C	770	1.73	13.5	1332.1	100%	2% CaCl2
	Tail		955	1150	Class C	200	1.35	14.8	270	100%	2% CaCl2
9 5/8	Lead		0	4580	Class C	1350	2.46	12.8	3321	100%	0.5% CaCl2
	Tail		4580	5138	Class C	200	1.34	14.8	268	25%	1% CaCl2
5 1/2	Lead		4138	9910	25% Poz 75% Class C	565	3.9	10.5	2203.5	60%	0.4% Fluid Loss
	Tail		9910	15030	Class H	1295	1.25	14.4	1618.75	25%	0.2% LT Retarder

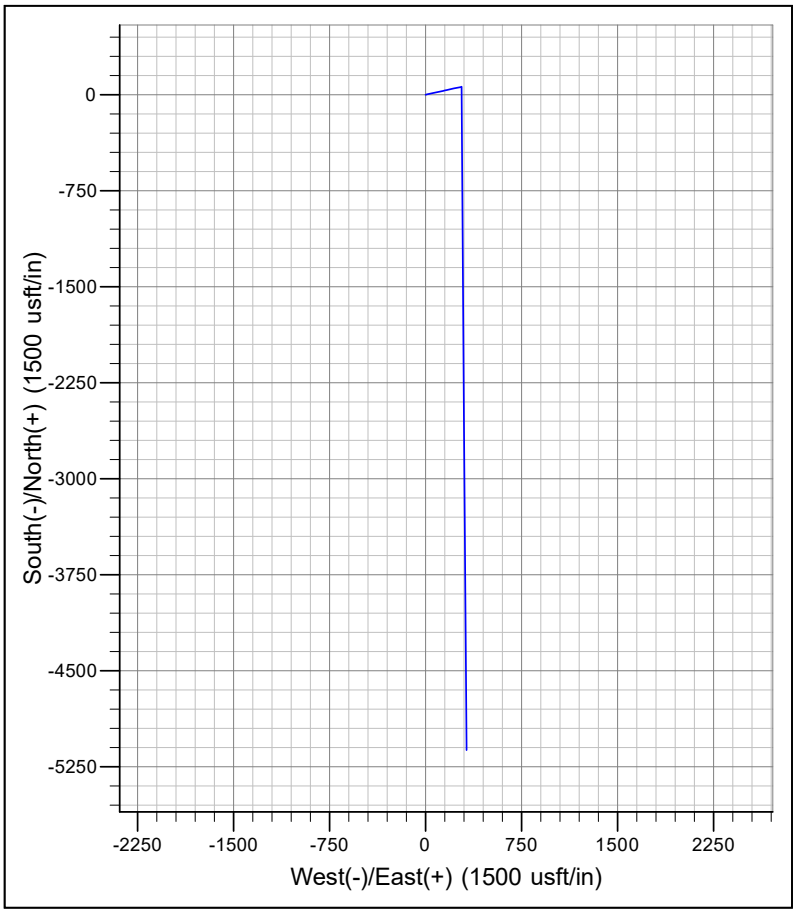
BTA Oil Producers, LLC

WELL DETAILS: Vaca Draw #29H

3420.0 Ground Level

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude
0.0	0.0	419914.40	782309.50	32° 9' 7.300 N	103° 33' 16.910 W





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

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DIeg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
3	1900.0	8.00	77.51	1898.7	6.0	27.2	2.00	77.51	-4.3	
4	3556.4	8.00	77.51	3538.9	55.9	252.3	0.00	0.00	-40.1	
5	3956.4	0.00	0.00	3937.6	61.9	279.5	2.00	180.00	-44.4	
6	9018.7	0.00	0.00	9000.0	61.9	279.5	0.00	0.00	-44.4	Vaca Draw #29 KOP 9000
7	9520.8	0.00	0.00	9502.0	61.9	279.5	0.00	0.00	-44.4	
8	10420.8	90.00	179.56	10075.0	-511.0	283.9	10.00	179.56	527.7	
9	15030.8	90.00	179.56	10075.0	-5120.9	319.0	0.00	0.00	5130.9	Vaca Draw #29H BHL new

BTA Oil Producers, LLC

Lea County, NM (NAD 83)
Vaca Draw Sec 10, T25S, R33E
Vaca Draw #29H

Wellbore #1

Plan: Design #2

Standard Planning Report - Geographic

27 February, 2024

Microsoft

Planning Report - Geographic

Database:	EDM5000_OLD	**Local Co-ordinate Reference:**	Well Vaca Draw #29H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3420.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3420.0usft
Site:	Vaca Draw Sec 10, T25S, R33E	**North Reference:**	Grid
Well:	Vaca Draw #29H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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 Vaca Draw Sec 10, T25S, R33E

Site Position:		**Northing:**	419,812.34 usft	**Latitude:**	32° 9' 6.483 N
From:	Map	**Easting:**	779,596.21 usft	**Longitude:**	103° 33' 48.478 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "		

Well Vaca Draw #29H

Well Position	**+N/-S**	0.0 usft	**Northing:**	419,914.40 usft	**Latitude:**	32° 9' 7.300 N
	+E/-W	0.0 usft	**Easting:**	782,309.50 usft	**Longitude:**	103° 33' 16.910 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,420.0 usft
Grid Convergence:		0.41 °				

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	7.74	60.18	48,751.46255991

Design Design #2

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	176.44

Plan Survey Tool Program **Date** 2/27/2024

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	0.0	Design #2 (Wellbore #1)		

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	

Microsoft

Planning Report - Geographic

Database:	EDM5000_OLD	**Local Co-ordinate Reference:**	Well Vaca Draw #29H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3420.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3420.0usft
Site:	Vaca Draw Sec 10, T25S, R33E	**North Reference:**	Grid
Well:	Vaca Draw #29H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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	419,914.40	782,309.50	32° 9' 7.300 N	103° 33' 16.910 W
100.0	0.00	0.00	100.0	0.0	0.0	419,914.40	782,309.50	32° 9' 7.300 N	103° 33' 16.910 W
200.0	0.00	0.00	200.0	0.0	0.0	419,914.40	782,309.50	32° 9' 7.300 N	103° 33' 16.910 W
300.0	0.00	0.00	300.0	0.0	0.0	419,914.40	782,309.50	32° 9' 7.300 N	103° 33' 16.910 W
400.0	0.00	0.00	400.0	0.0	0.0	419,914.40	782,309.50	32° 9' 7.300 N	103° 33' 16.910 W
500.0	0.00	0.00	500.0	0.0	0.0	419,914.40	782,309.50	32° 9' 7.300 N	103° 33' 16.910 W
600.0	0.00	0.00	600.0	0.0	0.0	419,914.40	782,309.50	32° 9' 7.300 N	103° 33' 16.910 W
700.0	0.00	0.00	700.0	0.0	0.0	419,914.40	782,309.50	32° 9' 7.300 N	103° 33' 16.910 W
800.0	0.00	0.00	800.0	0.0	0.0	419,914.40	782,309.50	32° 9' 7.300 N	103° 33' 16.910 W
900.0	0.00	0.00	900.0	0.0	0.0	419,914.40	782,309.50	32° 9' 7.300 N	103° 33' 16.910 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	419,914.40	782,309.50	32° 9' 7.300 N	103° 33' 16.910 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	419,914.40	782,309.50	32° 9' 7.300 N	103° 33' 16.910 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	419,914.40	782,309.50	32° 9' 7.300 N	103° 33' 16.910 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	419,914.40	782,309.50	32° 9' 7.300 N	103° 33' 16.910 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	419,914.40	782,309.50	32° 9' 7.300 N	103° 33' 16.910 W
1,500.0	0.00	0.00	1,500.0	0.0	0.0	419,914.40	782,309.50	32° 9' 7.300 N	103° 33' 16.910 W
1,600.0	2.00	77.51	1,600.0	0.4	1.7	419,914.78	782,311.20	32° 9' 7.303 N	103° 33' 16.891 W
1,700.0	4.00	77.51	1,699.8	1.5	6.8	419,915.91	782,316.31	32° 9' 7.314 N	103° 33' 16.831 W
1,800.0	6.00	77.51	1,799.5	3.4	15.3	419,917.79	782,324.82	32° 9' 7.332 N	103° 33' 16.732 W
1,900.0	8.00	77.51	1,898.7	6.0	27.2	419,920.43	782,336.72	32° 9' 7.357 N	103° 33' 16.593 W
2,000.0	8.00	77.51	1,997.7	9.0	40.8	419,923.44	782,350.30	32° 9' 7.386 N	103° 33' 16.435 W
2,100.0	8.00	77.51	2,096.8	12.0	54.4	419,926.45	782,363.89	32° 9' 7.415 N	103° 33' 16.277 W
2,200.0	8.00	77.51	2,195.8	15.1	68.0	419,929.46	782,377.48	32° 9' 7.444 N	103° 33' 16.118 W
2,300.0	8.00	77.51	2,294.8	18.1	81.6	419,932.46	782,391.07	32° 9' 7.473 N	103° 33' 15.960 W
2,400.0	8.00	77.51	2,393.8	21.1	95.2	419,935.47	782,404.66	32° 9' 7.501 N	103° 33' 15.802 W
2,500.0	8.00	77.51	2,492.9	24.1	108.7	419,938.48	782,418.24	32° 9' 7.530 N	103° 33' 15.643 W
2,600.0	8.00	77.51	2,591.9	27.1	122.3	419,941.49	782,431.83	32° 9' 7.559 N	103° 33' 15.485 W
2,700.0	8.00	77.51	2,690.9	30.1	135.9	419,944.50	782,445.42	32° 9' 7.588 N	103° 33' 15.327 W
2,800.0	8.00	77.51	2,789.9	33.1	149.5	419,947.51	782,459.01	32° 9' 7.617 N	103° 33' 15.169 W
2,900.0	8.00	77.51	2,889.0	36.1	163.1	419,950.52	782,472.59	32° 9' 7.645 N	103° 33' 15.010 W
3,000.0	8.00	77.51	2,988.0	39.1	176.7	419,953.53	782,486.18	32° 9' 7.674 N	103° 33' 14.852 W
3,100.0	8.00	77.51	3,087.0	42.1	190.3	419,956.54	782,499.77	32° 9' 7.703 N	103° 33' 14.694 W
3,200.0	8.00	77.51	3,186.1	45.1	203.9	419,959.55	782,513.36	32° 9' 7.732 N	103° 33' 14.535 W
3,300.0	8.00	77.51	3,285.1	48.2	217.5	419,962.56	782,526.95	32° 9' 7.761 N	103° 33' 14.377 W
3,400.0	8.00	77.51	3,384.1	51.2	231.0	419,965.57	782,540.53	32° 9' 7.789 N	103° 33' 14.219 W
3,500.0	8.00	77.51	3,483.1	54.2	244.6	419,968.58	782,554.12	32° 9' 7.818 N	103° 33' 14.060 W
3,556.4	8.00	77.51	3,538.9	55.9	252.3	419,970.27	782,561.78	32° 9' 7.834 N	103° 33' 13.971 W
3,600.0	7.13	77.51	3,582.2	57.1	257.9	419,971.51	782,567.39	32° 9' 7.846 N	103° 33' 13.906 W
3,700.0	5.13	77.51	3,681.6	59.4	268.3	419,973.82	782,577.81	32° 9' 7.868 N	103° 33' 13.785 W
3,800.0	3.13	77.51	3,781.4	61.0	275.3	419,975.38	782,584.83	32° 9' 7.883 N	103° 33' 13.703 W
3,900.0	1.13	77.51	3,881.3	61.8	279.0	419,976.18	782,588.46	32° 9' 7.891 N	103° 33' 13.660 W
3,956.4	0.00	0.00	3,937.6	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
4,000.0	0.00	0.00	3,981.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
4,100.0	0.00	0.00	4,081.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
4,200.0	0.00	0.00	4,181.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
4,300.0	0.00	0.00	4,281.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
4,400.0	0.00	0.00	4,381.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
4,500.0	0.00	0.00	4,481.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
4,600.0	0.00	0.00	4,581.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
4,700.0	0.00	0.00	4,681.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
4,800.0	0.00	0.00	4,781.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
4,900.0	0.00	0.00	4,881.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
5,000.0	0.00	0.00	4,981.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
5,100.0	0.00	0.00	5,081.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
5,200.0	0.00	0.00	5,181.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W

Microsoft

Planning Report - Geographic

Database:	EDM5000_OLD	**Local Co-ordinate Reference:**	Well Vaca Draw #29H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3420.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3420.0usft
Site:	Vaca Draw Sec 10, T25S, R33E	**North Reference:**	Grid
Well:	Vaca Draw #29H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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	0.00	0.00	5,281.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
5,400.0	0.00	0.00	5,381.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
5,500.0	0.00	0.00	5,481.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
5,600.0	0.00	0.00	5,581.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
5,700.0	0.00	0.00	5,681.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
5,800.0	0.00	0.00	5,781.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
5,900.0	0.00	0.00	5,881.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
6,000.0	0.00	0.00	5,981.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
6,100.0	0.00	0.00	6,081.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
6,200.0	0.00	0.00	6,181.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
6,300.0	0.00	0.00	6,281.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
6,400.0	0.00	0.00	6,381.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
6,500.0	0.00	0.00	6,481.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
6,600.0	0.00	0.00	6,581.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
6,700.0	0.00	0.00	6,681.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
6,800.0	0.00	0.00	6,781.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
6,900.0	0.00	0.00	6,881.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
7,000.0	0.00	0.00	6,981.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
7,100.0	0.00	0.00	7,081.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
7,200.0	0.00	0.00	7,181.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
7,300.0	0.00	0.00	7,281.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
7,400.0	0.00	0.00	7,381.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
7,500.0	0.00	0.00	7,481.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
7,600.0	0.00	0.00	7,581.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
7,700.0	0.00	0.00	7,681.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
7,800.0	0.00	0.00	7,781.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
7,900.0	0.00	0.00	7,881.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
8,000.0	0.00	0.00	7,981.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
8,100.0	0.00	0.00	8,081.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
8,200.0	0.00	0.00	8,181.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
8,300.0	0.00	0.00	8,281.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
8,400.0	0.00	0.00	8,381.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
8,500.0	0.00	0.00	8,481.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
8,600.0	0.00	0.00	8,581.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
8,700.0	0.00	0.00	8,681.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
8,800.0	0.00	0.00	8,781.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
8,900.0	0.00	0.00	8,881.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
9,000.0	0.00	0.00	8,981.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
9,018.7	0.00	0.00	9,000.0	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
9,100.0	0.00	0.00	9,081.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
9,200.0	0.00	0.00	9,181.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
9,300.0	0.00	0.00	9,281.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
9,400.0	0.00	0.00	9,381.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
9,500.0	0.00	0.00	9,481.3	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
9,520.8	0.00	0.00	9,502.0	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
9,600.0	7.92	179.56	9,581.0	56.4	279.5	419,970.83	782,589.04	32° 9' 7.838 N	103° 33' 13.654 W
9,700.0	17.92	179.56	9,678.4	34.1	279.7	419,948.49	782,589.21	32° 9' 7.617 N	103° 33' 13.654 W
9,800.0	27.92	179.56	9,770.4	-4.8	280.0	419,909.59	782,589.51	32° 9' 7.232 N	103° 33' 13.654 W
9,900.0	37.92	179.56	9,854.2	-59.1	280.4	419,855.31	782,589.92	32° 9' 6.695 N	103° 33' 13.654 W
10,000.0	47.92	179.56	9,927.3	-127.1	280.9	419,787.30	782,590.44	32° 9' 6.022 N	103° 33' 13.653 W
10,100.0	57.92	179.56	9,987.5	-206.8	281.6	419,707.62	782,591.05	32° 9' 5.233 N	103° 33' 13.653 W
10,200.0	67.92	179.56	10,033.0	-295.7	282.2	419,618.70	782,591.72	32° 9' 4.353 N	103° 33' 13.653 W
10,300.0	77.92	179.56	10,062.3	-391.2	283.0	419,523.23	782,592.45	32° 9' 3.409 N	103° 33' 13.652 W
10,400.0	87.92	179.56	10,074.6	-490.3	283.7	419,424.13	782,593.21	32° 9' 2.428 N	103° 33' 13.652 W
10,420.8	90.00	179.56	10,075.0	-511.0	283.9	419,403.37	782,593.36	32° 9' 2.223 N	103° 33' 13.652 W

Microsoft

Planning Report - Geographic

Database:	EDM5000_OLD	**Local Co-ordinate Reference:**	Well Vaca Draw #29H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3420.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3420.0usft
Site:	Vaca Draw Sec 10, T25S, R33E	**North Reference:**	Grid
Well:	Vaca Draw #29H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,500.0	90.00	179.56	10,075.0	-590.3	284.5	419,324.14	782,593.97	32° 9' 1.438 N	103° 33' 13.651 W
10,600.0	90.00	179.56	10,075.0	-690.3	285.2	419,224.14	782,594.73	32° 9' 0.449 N	103° 33' 13.651 W
10,700.0	90.00	179.56	10,075.0	-790.3	286.0	419,124.15	782,595.49	32° 8' 59.459 N	103° 33' 13.650 W
10,800.0	90.00	179.56	10,075.0	-890.3	286.8	419,024.15	782,596.25	32° 8' 58.470 N	103° 33' 13.650 W
10,900.0	90.00	179.56	10,075.0	-990.3	287.5	418,924.16	782,597.02	32° 8' 57.480 N	103° 33' 13.649 W
11,000.0	90.00	179.56	10,075.0	-1,090.3	288.3	418,824.16	782,597.78	32° 8' 56.491 N	103° 33' 13.649 W
11,100.0	90.00	179.56	10,075.0	-1,190.3	289.1	418,724.17	782,598.54	32° 8' 55.501 N	103° 33' 13.649 W
11,200.0	90.00	179.56	10,075.0	-1,290.3	289.8	418,624.17	782,599.30	32° 8' 54.512 N	103° 33' 13.648 W
11,300.0	90.00	179.56	10,075.0	-1,390.3	290.6	418,524.18	782,600.06	32° 8' 53.522 N	103° 33' 13.648 W
11,400.0	90.00	179.56	10,075.0	-1,490.3	291.3	418,424.18	782,600.83	32° 8' 52.533 N	103° 33' 13.647 W
11,500.0	90.00	179.56	10,075.0	-1,590.2	292.1	418,324.19	782,601.59	32° 8' 51.543 N	103° 33' 13.647 W
11,600.0	90.00	179.56	10,075.0	-1,690.2	292.9	418,224.19	782,602.35	32° 8' 50.554 N	103° 33' 13.646 W
11,700.0	90.00	179.56	10,075.0	-1,790.2	293.6	418,124.20	782,603.11	32° 8' 49.564 N	103° 33' 13.646 W
11,800.0	90.00	179.56	10,075.0	-1,890.2	294.4	418,024.20	782,603.88	32° 8' 48.575 N	103° 33' 13.645 W
11,900.0	90.00	179.56	10,075.0	-1,990.2	295.1	417,924.21	782,604.64	32° 8' 47.585 N	103° 33' 13.645 W
12,000.0	90.00	179.56	10,075.0	-2,090.2	295.9	417,824.22	782,605.40	32° 8' 46.596 N	103° 33' 13.645 W
12,100.0	90.00	179.56	10,075.0	-2,190.2	296.7	417,724.22	782,606.16	32° 8' 45.606 N	103° 33' 13.644 W
12,200.0	90.00	179.56	10,075.0	-2,290.2	297.4	417,624.23	782,606.92	32° 8' 44.616 N	103° 33' 13.644 W
12,300.0	90.00	179.56	10,075.0	-2,390.2	298.2	417,524.23	782,607.69	32° 8' 43.627 N	103° 33' 13.643 W
12,400.0	90.00	179.56	10,075.0	-2,490.2	299.0	417,424.24	782,608.45	32° 8' 42.637 N	103° 33' 13.643 W
12,500.0	90.00	179.56	10,075.0	-2,590.2	299.7	417,324.24	782,609.21	32° 8' 41.648 N	103° 33' 13.642 W
12,600.0	90.00	179.56	10,075.0	-2,690.2	300.5	417,224.25	782,609.97	32° 8' 40.658 N	103° 33' 13.642 W
12,700.0	90.00	179.56	10,075.0	-2,790.2	301.2	417,124.25	782,610.73	32° 8' 39.669 N	103° 33' 13.642 W
12,800.0	90.00	179.56	10,075.0	-2,890.2	302.0	417,024.26	782,611.50	32° 8' 38.679 N	103° 33' 13.641 W
12,900.0	90.00	179.56	10,075.0	-2,990.2	302.8	416,924.26	782,612.26	32° 8' 37.690 N	103° 33' 13.641 W
13,000.0	90.00	179.56	10,075.0	-3,090.2	303.5	416,824.27	782,613.02	32° 8' 36.700 N	103° 33' 13.640 W
13,100.0	90.00	179.56	10,075.0	-3,190.2	304.3	416,724.27	782,613.78	32° 8' 35.711 N	103° 33' 13.640 W
13,200.0	90.00	179.56	10,075.0	-3,290.2	305.1	416,624.28	782,614.54	32° 8' 34.721 N	103° 33' 13.639 W
13,300.0	90.00	179.56	10,075.0	-3,390.2	305.8	416,524.28	782,615.31	32° 8' 33.732 N	103° 33' 13.639 W
13,400.0	90.00	179.56	10,075.0	-3,490.2	306.6	416,424.29	782,616.07	32° 8' 32.742 N	103° 33' 13.638 W
13,500.0	90.00	179.56	10,075.0	-3,590.2	307.3	416,324.30	782,616.83	32° 8' 31.753 N	103° 33' 13.638 W
13,600.0	90.00	179.56	10,075.0	-3,690.2	308.1	416,224.30	782,617.59	32° 8' 30.763 N	103° 33' 13.638 W
13,700.0	90.00	179.56	10,075.0	-3,790.2	308.9	416,124.31	782,618.36	32° 8' 29.774 N	103° 33' 13.637 W
13,800.0	90.00	179.56	10,075.0	-3,890.2	309.6	416,024.31	782,619.12	32° 8' 28.784 N	103° 33' 13.637 W
13,900.0	90.00	179.56	10,075.0	-3,990.2	310.4	415,924.32	782,619.88	32° 8' 27.794 N	103° 33' 13.636 W
14,000.0	90.00	179.56	10,075.0	-4,090.2	311.2	415,824.32	782,620.64	32° 8' 26.805 N	103° 33' 13.636 W
14,100.0	90.00	179.56	10,075.0	-4,190.2	311.9	415,724.33	782,621.40	32° 8' 25.815 N	103° 33' 13.635 W
14,200.0	90.00	179.56	10,075.0	-4,290.2	312.7	415,624.33	782,622.17	32° 8' 24.826 N	103° 33' 13.635 W
14,300.0	90.00	179.56	10,075.0	-4,390.2	313.4	415,524.34	782,622.93	32° 8' 23.836 N	103° 33' 13.634 W
14,400.0	90.00	179.56	10,075.0	-4,490.2	314.2	415,424.34	782,623.69	32° 8' 22.847 N	103° 33' 13.634 W
14,500.0	90.00	179.56	10,075.0	-4,590.2	315.0	415,324.35	782,624.45	32° 8' 21.857 N	103° 33' 13.633 W
14,600.0	90.00	179.56	10,075.0	-4,690.2	315.7	415,224.35	782,625.21	32° 8' 20.868 N	103° 33' 13.633 W
14,700.0	90.00	179.56	10,075.0	-4,790.2	316.5	415,124.36	782,625.98	32° 8' 19.878 N	103° 33' 13.633 W
14,800.0	90.00	179.56	10,075.0	-4,890.2	317.2	415,024.36	782,626.74	32° 8' 18.889 N	103° 33' 13.632 W
14,900.0	90.00	179.56	10,075.0	-4,990.2	318.0	414,924.37	782,627.50	32° 8' 17.899 N	103° 33' 13.632 W
15,000.0	90.00	179.56	10,075.0	-5,090.1	318.8	414,824.38	782,628.26	32° 8' 16.910 N	103° 33' 13.631 W
15,030.8	90.00	179.56	10,075.0	-5,120.9	319.0	414,793.60	782,628.50	32° 8' 16.605 N	103° 33' 13.631 W

Microsoft

Planning Report - Geographic

Database:	EDM5000_OLD	**Local Co-ordinate Reference:**	Well Vaca Draw #29H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3420.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3420.0usft
Site:	Vaca Draw Sec 10, T25S, R33E	**North Reference:**	Grid
Well:	Vaca Draw #29H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2		

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
Vaca Draw #29 KOP 90(- plan hits target center - Point	0.00	0.00	9,000.0	61.9	279.5	419,976.30	782,589.00	32° 9' 7.892 N	103° 33' 13.654 W
Vaca Draw #29H BHL ne - plan hits target center - Point	0.00	0.00	10,075.0	-5,120.9	319.0	414,793.60	782,628.50	32° 8' 16.605 N	103° 33' 13.631 W

District I
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District III
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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 342008

CONDITIONS

Operator: BTA OIL PRODUCERS, LLC 104 S Pecos Midland, TX 79701	OGRID: 260297
	Action Number: 342008
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	5/10/2024