Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

Form C-101
August 1, 2011

Permit 392742

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
BTA OIL PRODUCERS, LLC 104 S Pecos Midland, TX 79701	260297
	3. API Number 30-025-54819

4. Property Code	5. Property Name	6. Well No.
337380	VINDICATOR CANYON STATE UNIT COM	417H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
F	21	17S	36E	F	2251	N	1525	W	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
F	33	17S	36E	F	2621	N	2590	W	Lea

9. Pool Information

98333	98333

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	3874
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	22768	Upper Pennsylvanian Undesignated		9/8/2025
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	2049	1070	0
Int1	12.25	9.625	36	5171	1295	0
Liner1	8.75	7.625	29.7	11307	305	4971
Prod	6.75	5.5	20	22768	875	0

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	5000	140000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.** Signature:		**OIL CONSERVATION DIVISION**	
Printed Name:	Electronically filed by Katy Reddell	Approved By:	Jeffrey Harrison
Title:		Title:	Petroleum Specialist III
Email Address:	kreddell@btaoil.com	Approved Date:	7/10/2025 Expiration Date: 7/10/2027
Date:	7/3/2025 Phone: 432-682-3753	Conditions of Approval Attached	

C-102

Submit Electronically
Via OCD Permitting

State of New Mexico
Energy, Minerals, & Natural Resources Department
OIL CONSERVATION DIVISION

Revised July 9, 2024
PAGE 1 OF 2

Submittal Type: [X] Initial Submittal [ ] Amended Report [ ] As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-025-54819	98333	WC-025 G-09 S173615C; UPPER PENN

Property Code	Property Name	Well Number
337380	VINDICATOR CANYON STATE UNIT COM	417H

OGRID No.	Operator Name	Ground Level Elevation
260297	BTA OIL PRODUCERS, LLC	3874'

Surface Owner: [ ] State [X] Fee [ ] Tribal [ ] Federal
Mineral Owner: [X] State [ ] Fee [ ] Tribal [ ] Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
F	21	17S	36E		2251' FNL	1525' FWL	32.82147150	-103.36316520	LEA

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
F	33	17S	36E		2621' FNL	2590' FWL	32.79134187	-103.35977016	LEA

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
640.00	Defining		N	P

Order Numbers: Pending
Well setbacks are under Common Ownership: [ ] Yes [X] No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
F	21	17S	36E		2140' FNL	2590' FWL	32.82179240	-103.35970340	LEA

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
K	21	17S	36E		2575' FSL	2590' FWL	32.82017376	-103.35968704	LEA

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
F	33	17S	36E		2571' FNL	2590' FWL	32.79147929	-103.35976982	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type: [X] Horizontal [ ] Vertical	Ground Floor Elevation
Pending		3874'

OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Signature — Date: 2/26/2025

Liz Velasco
Printed Name

lvelasco@btaoil.com
Email Address

SURVEYOR CERTIFICATIONS

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.

JOHN M RUSSELL
NEW MEXICO
29049
PROFESSIONAL SURVEYOR

Signature and Seal of Professional Surveyor

Certificate Number	Date of Survey
29049	FEBRUARY 24, 2025

Notice to allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

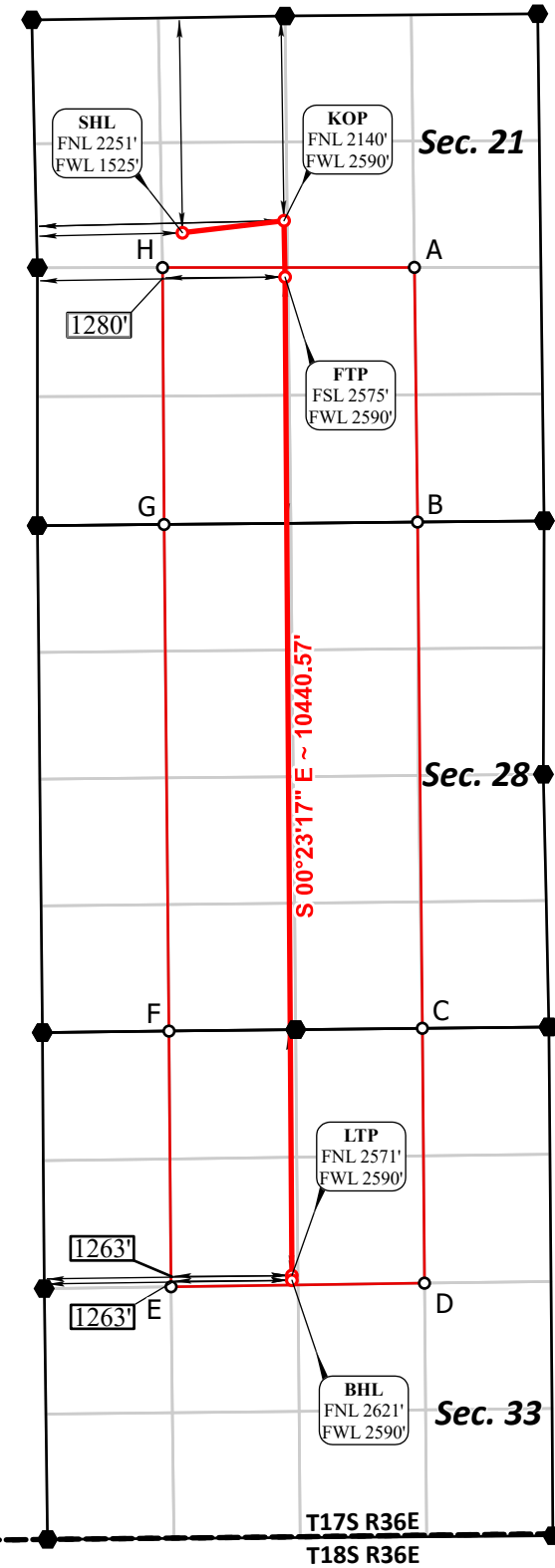
SHL
FNL 2251' FWL 1525', SECTION 21
NAD 83, SPCS NM EAST
X:839371.78' / Y:663951.83'
LAT:32.82147150 / LON:-103.36316520
NAD 27, SPCS NM EAST
X:798192.95' / Y:663887.95'
LAT:32.82135156 / LON:-103.36267119

KOP
FNL 2140' FWL 2590', SECTION 21
NAD 83, SPCS NM EAST
X:840434.21' / Y:664078.37'
LAT:32.82179240 / LON:-103.35970340
NAD 27, SPCS NM EAST
X:799255.38' / Y:664014.52'
LAT:32.82167255 / LON:-103.35920947

FTP
FSL 2575' FWL 2590', SECTION 21
NAD 83, SPCS NM EAST
X:840444.66' / Y:663489.49'
LAT:32.82017376 / LON:-103.35968704
NAD 27, SPCS NM EAST
X:799265.81' / Y:663425.66'
LAT:32.82005390 / LON:-103.35919318

LTP
FNL 2571' FWL 2590', SECTION 33
NAD 83, SPCS NM EAST
X:840515.35' / Y:653049.16'
LAT:32.79147929 / LON:-103.35976982
NAD 27, SPCS NM EAST
X:799336.19' / Y:652985.57'
LAT:32.79135923 / LON:-103.35927713

BHL
FNL 2621' FWL 2590', SECTION 33
NAD 83, SPCS NM EAST
X:840515.71' / Y:652999.16'
LAT:32.79134187 / LON:-103.35977016
NAD 27, SPCS NM EAST
X:799336.54' / Y:652935.58'
LAT:32.79122181 / LON:-103.35927747



CORNER COORDINATES NAD 83, SPCS NM EAST	CORNER COORDINATES NAD 27, SPCS NM EAST
A - X: 841796.57' / Y:663590.57'	A - X: 800617.72' / Y:663526.78'
B - X: 841829.10' / Y:660927.76'	B - X: 800650.17' / Y:660864.03'
C - X: 841879.57' / Y:655634.01'	C - X: 800700.48' / Y:655570.41'
D - X: 841902.09' / Y:652968.93'	D - X: 800722.91' / Y:652905.39'
E - X: 839253.00' / Y:652931.15'	E - X: 798073.85' / Y:652867.52'
F - X: 839231.50' / Y:655604.67'	F - X: 798052.42' / Y:655540.98'
G - X: 839179.57' / Y:660902.17'	G - X: 798000.65' / Y:660838.35'
H - X: 839164.00' / Y:663588.48'	H - X: 797985.16' / Y:663524.59'

Drill Line Events Section Corners Drill Line Dimension Lines Federal Leases Project Area

All bearings and coordinates refer to New Mexico State Plane Coordinate System, East Zone, U.S. Survey Feet.

Distances/areas relative to NAD 83 grid measurements. Combined Scale Factor: 0.99981955 and a Convergence Angle: 0.50466944°

JOB No. BTA_0006_VC22
REV 1 ANC 2/21/2025

Sante Fe Main Office
Phone: (505) 476-3441

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

Form APD Comments

Permit 392742

PERMIT COMMENTS

Operator Name and Address:	API Number:
BTA OIL PRODUCERS, LLC [260297] 104 S Pecos Midland, TX 79701	30-025-54819
	Well: VINDICATOR CANYON STATE UNIT COM #417H

Created By	Comment	Comment Date
jeffrey.harrison	Submitted as defining well for 640-acre HSU.	7/10/2025

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

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

Form APD Conditions

Permit 392742

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
BTA OIL PRODUCERS, LLC [260297] 104 S Pecos Midland, TX 79701	30-025-54819
	Well: VINDICATOR CANYON STATE UNIT COM #417H

OCD Reviewer	Condition
jeffrey.harrison	Administrative order required for non-standard location prior to production.
jeffrey.harrison	Surface casing shall be set a minimum of 25' into the Rustler Anhydrite, above the salt, and below usable fresh water and cemented to the surface. If salt is encountered set casing at least 25 ft. above the salt.
jeffrey.harrison	Notify the OCD 24 hours prior to casing & cement.
jeffrey.harrison	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.
jeffrey.harrison	File As Drilled C-102 and a directional Survey with C-104 completion packet.
jeffrey.harrison	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.
jeffrey.harrison	Cement is required to circulate on both surface and intermediate1 strings of casing.
jeffrey.harrison	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.
jeffrey.harrison	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: BTA Oil Producers, LLC **OGRID:** 260297 **Date:** 7 / 3 / 2025

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
VINDICATOR CANYON STATE UNIT COM 417H		F-21-17S-36E	2251 FNL, 1525 FWL	+/- 800	+/- 2000	+/- 1200

IV. Central Delivery Point Name: VINDICATOR CTB [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
VINDICATOR CANYON STATE UNIT COM 417H		09/8/2025	9/28/2025	10/12/2025	11/2/2025	12/2/2025

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. ***If Operator checks this box, Operator will select one of the following:***

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- **(a)** power generation on lease;
- **(b)** power generation for grid;
- **(c)** compression on lease;
- **(d)** liquids removal on lease;
- **(e)** reinjection for underground storage;
- **(f)** reinjection for temporary storage;
- **(g)** reinjection for enhanced oil recovery;
- **(h)** fuel cell production; and
- **(i)** other alternative beneficial uses approved by the division.

Section 4 - Notices

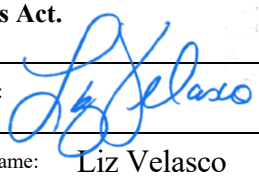
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:	
Printed Name:	Liz Velasco
Title:	Regulatory Analyst
E-mail Address:	lvelasco@btaoil.com
Date:	3/3/2025
Phone:	432-682-3753

OIL CONSERVATION DIVISION

(Only applicable when submitted as a standalone form)

Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.

- Separation equipment will be sized to provide adequate separation for anticipated rates.
- Separation equipment will allow for adequate retention time to allow gas and liquids to separate.
- Separation equipment will utilize air power pneumatic dump controllers and ventless pressure control valves.
- Separation equipment will separate all three phases (Oil, Water, and Gas).
- Storage tanks will utilize blanket gas and vapor recovery systems to moderate tank pressures and capture gas from storage tanks.
- Collection systems are appropriately sized to handle facility production rates on all (3) phases.
- Ancillary equipment and metering is selected to be serviced without flow interruptions or the need to release gas from the well.

VII. Operational Practices: Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F 19.15.27.8 NMAC.

Drilling Operations

- All flare stacks will be properly sized. The flare stacks will be located at a minimum 100’ from the nearest surface hole location on the pad.
- All natural gas produced during drilling operations will be flared, unless there is an equipment malfunction and/or to avoid risk of an immediate and substantial adverse impact on safety and the environment, at which point the gas will be vented.

Completions/Recompletions Operations

- New wells will not be flowed back until they are connected to a properly sized gathering system.
- The facility will be built/sized for maximum anticipated flowrates and pressures to minimize waste.
- For flowback operations, multiple stages of separation will be used as well as excess VRU and blowers to make sure waste is minimized off the storage tanks and facility.
- During initial flowback, the well stream will be routed to separation equipment.
- At an existing facility, when necessary, post separation natural gas will be flared until it meets pipeline specifications, at which point it will be turned into a collection system.
- At a new facility, post separation natural gas will be vented until storage tanks can safely function, at which point it will be flared until it meets pipeline spec.

Production Operations

- Weekly AVOs will be performed on all facilities that produce more than 60 MCFD.
- All facilities will be inspected with an Optical Gas Imaging Thermographer Camera quarterly to find and repair fugitive emissions.
- Leaking thief hatches and pressure safety valves found during AVOs will be cleaned and properly re-sealed.

- All flares will be equipped with continuous pilot system and air assist systems that will ensure the flare burns efficiently.
- After a well is stabilized from liquid unloading, the well will be turned back into the collection system.
- All gas lift systems will be optimized to limit the amount of waste.
- All tanks will have automatic gauging equipment installed.

Performance Standards

- Production equipment will be designed to handle maximum anticipated rates and pressure.
- All flared gas will be combusted in a flare stack that is properly sized and designed to ensure proper combustion.
- All gas will have multiple points of separation to ensure no liquids enter flares, combustors, or gas sales line.
- Weekly AVOs will be performed on all wells and facilities that produce more than 60 MCFD.
- All OOOOa facilities will be filmed with an Optical Gas Imaging Thermographer camera once per month to check for fugitive emissions.

Measurement & Estimation

- All volume that is flared and vented that is not measured will be estimated.
- All measurement equipment for flared volumes will conform to API 14.10.
- All meters will be calibrated at regular intervals according to meter manufacturer recommendations.
- When metering is not practical due to low pressure/low rate, the vented or flared volume will be estimated.

VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

- During downhole well maintenance, BTA will use best management practices to vent as minimally as possible.
- Prior to the commencement of any maintenance, the tank or vessel will be isolated from the rest of the facilities.
- All valves upstream of the equipment will be closed and isolated.
- After equipment has been isolated, the equipment will be blown down to as low a pressure as possible into the collection system.
- If the equipment being maintained cannot be relieved into the collection system, it shall be released to a tank where the vapor can either be captured or combusted if possible.
- After downhole well maintenance, natural gas will be flared until it reaches pipeline specification.

BTA Oil Producers, LLC

Lea County, NM (NAD 83)
Vindicator Canyon State
Vindicator Canyon State #417H

Wellbore #1

Plan: Design #1

Standard Planning Report - Geographic

14 March, 2025

Microsoft

Planning Report - Geographic

Database:	EDM16	**Local Co-ordinate Reference:**	Well Vindicator Canyon State #417H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3874.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3874.0usft
Site:	Vindicator Canyon State	**North Reference:**	Grid
Well:	Vindicator Canyon State #417H	**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 Vindicator Canyon State

Site Position:		**Northing:**	663,864.19 usft	**Latitude:**	32° 49' 15.966 N
From:	Map	**Easting:**	844,436.41 usft	**Longitude:**	103° 20' 48.060 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "		

Well Vindicator Canyon State #417H

Well Position	**+N/-S**	0.0 usft	**Northing:**	663,951.83 usft	**Latitude:**	32° 49' 17.297 N
	+E/-W	0.0 usft	**Easting:**	839,371.78 usft	**Longitude:**	103° 21' 47.395 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,874.0 usft
Grid Convergence:		0.53 °				

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	7.70	60.83	49,173.28253597

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	174.04

Plan Survey Tool Program **Date** 3/14/2025

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	22,768.1	Design #1 (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	
3,426.1	0.00	0.00	3,426.1	0.0	0.0	0.00	0.00	0.00	0.00	
3,926.1	10.00	84.05	3,923.6	4.5	43.3	2.00	2.00	0.00	84.05	
9,591.1	10.00	84.05	9,502.5	106.5	1,021.7	0.00	0.00	0.00	0.00	
10,091.1	0.00	0.00	10,000.0	111.0	1,065.0	2.00	-2.00	0.00	180.00	
11,377.2	0.00	0.00	11,286.0	111.0	1,065.0	0.00	0.00	0.00	0.00	
12,277.2	90.00	179.59	11,859.0	-461.9	1,069.1	10.00	10.00	0.00	179.59	
22,768.1	90.00	179.59	11,859.0	-10,952.6	1,143.9	0.00	0.00	0.00	0.00	Vindicator 417H BH

Microsoft

Planning Report - Geographic

Database:	EDM16	**Local Co-ordinate Reference:**	Well Vindicator Canyon State #417H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3874.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3874.0usft
Site:	Vindicator Canyon State	**North Reference:**	Grid
Well:	Vindicator Canyon State #417H	**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	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
100.0	0.00	0.00	100.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
200.0	0.00	0.00	200.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
300.0	0.00	0.00	300.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
400.0	0.00	0.00	400.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
500.0	0.00	0.00	500.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
600.0	0.00	0.00	600.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
700.0	0.00	0.00	700.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
800.0	0.00	0.00	800.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
900.0	0.00	0.00	900.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
1,500.0	0.00	0.00	1,500.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
1,700.0	0.00	0.00	1,700.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
1,900.0	0.00	0.00	1,900.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
2,100.0	0.00	0.00	2,100.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
2,200.0	0.00	0.00	2,200.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
2,300.0	0.00	0.00	2,300.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
2,400.0	0.00	0.00	2,400.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
2,500.0	0.00	0.00	2,500.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
2,600.0	0.00	0.00	2,600.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
2,700.0	0.00	0.00	2,700.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
2,800.0	0.00	0.00	2,800.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
2,900.0	0.00	0.00	2,900.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
3,000.0	0.00	0.00	3,000.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
3,100.0	0.00	0.00	3,100.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
3,200.0	0.00	0.00	3,200.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
3,300.0	0.00	0.00	3,300.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
3,400.0	0.00	0.00	3,400.0	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
3,426.1	0.00	0.00	3,426.1	0.0	0.0	663,951.83	839,371.78	32° 49' 17.297 N	103° 21' 47.395 W
Start Build 2.00									
3,500.0	1.48	84.05	3,500.0	0.1	0.9	663,951.93	839,372.73	32° 49' 17.298 N	103° 21' 47.384 W
3,600.0	3.48	84.05	3,599.9	0.5	5.2	663,952.38	839,377.03	32° 49' 17.302 N	103° 21' 47.333 W
3,700.0	5.48	84.05	3,699.6	1.4	13.0	663,953.19	839,384.79	32° 49' 17.310 N	103° 21' 47.242 W
3,800.0	7.48	84.05	3,798.9	2.5	24.2	663,954.36	839,396.01	32° 49' 17.320 N	103° 21' 47.111 W
3,900.0	9.48	84.05	3,897.8	4.1	38.9	663,955.89	839,410.68	32° 49' 17.334 N	103° 21' 46.939 W
3,926.1	10.00	84.05	3,923.6	4.5	43.3	663,956.35	839,415.07	32° 49' 17.338 N	103° 21' 46.887 W
Start 5665.0 hold at 3926.1 MD									
4,000.0	10.00	84.05	3,996.3	5.8	56.1	663,957.68	839,427.83	32° 49' 17.350 N	103° 21' 46.737 W
4,100.0	10.00	84.05	4,094.8	7.6	73.3	663,959.48	839,445.10	32° 49' 17.366 N	103° 21' 46.535 W
4,200.0	10.00	84.05	4,193.3	9.4	90.6	663,961.28	839,462.37	32° 49' 17.383 N	103° 21' 46.332 W
4,300.0	10.00	84.05	4,291.8	11.2	107.9	663,963.08	839,479.65	32° 49' 17.399 N	103° 21' 46.130 W
4,400.0	10.00	84.05	4,390.3	13.0	125.1	663,964.88	839,496.92	32° 49' 17.415 N	103° 21' 45.927 W
4,500.0	10.00	84.05	4,488.7	14.8	142.4	663,966.68	839,514.19	32° 49' 17.431 N	103° 21' 45.724 W
4,600.0	10.00	84.05	4,587.2	16.6	159.7	663,968.48	839,531.46	32° 49' 17.448 N	103° 21' 45.522 W
4,700.0	10.00	84.05	4,685.7	18.4	177.0	663,970.28	839,548.73	32° 49' 17.464 N	103° 21' 45.319 W
4,800.0	10.00	84.05	4,784.2	20.2	194.2	663,972.08	839,566.00	32° 49' 17.480 N	103° 21' 45.117 W
4,900.0	10.00	84.05	4,882.7	22.0	211.5	663,973.88	839,583.27	32° 49' 17.496 N	103° 21' 44.914 W

Microsoft

Planning Report - Geographic

Database:	EDM16	**Local Co-ordinate Reference:**	Well Vindicator Canyon State #417H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3874.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3874.0usft
Site:	Vindicator Canyon State	**North Reference:**	Grid
Well:	Vindicator Canyon State #417H	**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
5,000.0	10.00	84.05	4,981.2	23.8	228.8	663,975.68	839,600.55	32° 49' 17.512 N	103° 21' 44.712 W
5,100.0	10.00	84.05	5,079.6	25.6	246.0	663,977.48	839,617.82	32° 49' 17.529 N	103° 21' 44.509 W
5,200.0	10.00	84.05	5,178.1	27.4	263.3	663,979.28	839,635.09	32° 49' 17.545 N	103° 21' 44.307 W
5,300.0	10.00	84.05	5,276.6	29.2	280.6	663,981.08	839,652.36	32° 49' 17.561 N	103° 21' 44.104 W
5,400.0	10.00	84.05	5,375.1	31.0	297.9	663,982.88	839,669.63	32° 49' 17.577 N	103° 21' 43.901 W
5,500.0	10.00	84.05	5,473.6	32.8	315.1	663,984.68	839,686.90	32° 49' 17.594 N	103° 21' 43.699 W
5,600.0	10.00	84.05	5,572.0	34.6	332.4	663,986.48	839,704.18	32° 49' 17.610 N	103° 21' 43.496 W
5,700.0	10.00	84.05	5,670.5	36.4	349.7	663,988.28	839,721.45	32° 49' 17.626 N	103° 21' 43.294 W
5,800.0	10.00	84.05	5,769.0	38.2	366.9	663,990.08	839,738.72	32° 49' 17.642 N	103° 21' 43.091 W
5,900.0	10.00	84.05	5,867.5	40.0	384.2	663,991.88	839,755.99	32° 49' 17.659 N	103° 21' 42.889 W
6,000.0	10.00	84.05	5,966.0	41.8	401.5	663,993.68	839,773.26	32° 49' 17.675 N	103° 21' 42.686 W
6,100.0	10.00	84.05	6,064.4	43.6	418.7	663,995.48	839,790.53	32° 49' 17.691 N	103° 21' 42.483 W
6,200.0	10.00	84.05	6,162.9	45.4	436.0	663,997.28	839,807.80	32° 49' 17.707 N	103° 21' 42.281 W
6,300.0	10.00	84.05	6,261.4	47.2	453.3	663,999.08	839,825.08	32° 49' 17.724 N	103° 21' 42.078 W
6,400.0	10.00	84.05	6,359.9	49.0	470.6	664,000.88	839,842.35	32° 49' 17.740 N	103° 21' 41.876 W
6,500.0	10.00	84.05	6,458.4	50.8	487.8	664,002.68	839,859.62	32° 49' 17.756 N	103° 21' 41.673 W
6,600.0	10.00	84.05	6,556.8	52.6	505.1	664,004.48	839,876.89	32° 49' 17.772 N	103° 21' 41.471 W
6,700.0	10.00	84.05	6,655.3	54.4	522.4	664,006.28	839,894.16	32° 49' 17.789 N	103° 21' 41.268 W
6,800.0	10.00	84.05	6,753.8	56.2	539.6	664,008.08	839,911.43	32° 49' 17.805 N	103° 21' 41.065 W
6,900.0	10.00	84.05	6,852.3	58.0	556.9	664,009.88	839,928.70	32° 49' 17.821 N	103° 21' 40.863 W
7,000.0	10.00	84.05	6,950.8	59.8	574.2	664,011.68	839,945.98	32° 49' 17.837 N	103° 21' 40.660 W
7,100.0	10.00	84.05	7,049.2	61.6	591.5	664,013.48	839,963.25	32° 49' 17.854 N	103° 21' 40.458 W
7,200.0	10.00	84.05	7,147.7	63.4	608.7	664,015.28	839,980.52	32° 49' 17.870 N	103° 21' 40.255 W
7,300.0	10.00	84.05	7,246.2	65.2	626.0	664,017.08	839,997.79	32° 49' 17.886 N	103° 21' 40.053 W
7,400.0	10.00	84.05	7,344.7	67.0	643.3	664,018.88	840,015.06	32° 49' 17.902 N	103° 21' 39.850 W
7,500.0	10.00	84.05	7,443.2	68.8	660.5	664,020.68	840,032.33	32° 49' 17.918 N	103° 21' 39.647 W
7,600.0	10.00	84.05	7,541.7	70.6	677.8	664,022.48	840,049.60	32° 49' 17.935 N	103° 21' 39.445 W
7,700.0	10.00	84.05	7,640.1	72.4	695.1	664,024.28	840,066.88	32° 49' 17.951 N	103° 21' 39.242 W
7,800.0	10.00	84.05	7,738.6	74.2	712.4	664,026.08	840,084.15	32° 49' 17.967 N	103° 21' 39.040 W
7,900.0	10.00	84.05	7,837.1	76.0	729.6	664,027.88	840,101.42	32° 49' 17.983 N	103° 21' 38.837 W
8,000.0	10.00	84.05	7,935.6	77.8	746.9	664,029.68	840,118.69	32° 49' 18.000 N	103° 21' 38.635 W
8,100.0	10.00	84.05	8,034.1	79.6	764.2	664,031.48	840,135.96	32° 49' 18.016 N	103° 21' 38.432 W
8,200.0	10.00	84.05	8,132.5	81.4	781.4	664,033.28	840,153.23	32° 49' 18.032 N	103° 21' 38.229 W
8,300.0	10.00	84.05	8,231.0	83.2	798.7	664,035.08	840,170.50	32° 49' 18.048 N	103° 21' 38.027 W
8,400.0	10.00	84.05	8,329.5	85.0	816.0	664,036.88	840,187.78	32° 49' 18.065 N	103° 21' 37.824 W
8,500.0	10.00	84.05	8,428.0	86.8	833.3	664,038.68	840,205.05	32° 49' 18.081 N	103° 21' 37.622 W
8,600.0	10.00	84.05	8,526.5	88.6	850.5	664,040.48	840,222.32	32° 49' 18.097 N	103° 21' 37.419 W
8,700.0	10.00	84.05	8,624.9	90.4	867.8	664,042.28	840,239.59	32° 49' 18.113 N	103° 21' 37.217 W
8,800.0	10.00	84.05	8,723.4	92.2	885.1	664,044.08	840,256.86	32° 49' 18.130 N	103° 21' 37.014 W
8,900.0	10.00	84.05	8,821.9	94.0	902.3	664,045.88	840,274.13	32° 49' 18.146 N	103° 21' 36.811 W
9,000.0	10.00	84.05	8,920.4	95.8	919.6	664,047.68	840,291.40	32° 49' 18.162 N	103° 21' 36.609 W
9,100.0	10.00	84.05	9,018.9	97.6	936.9	664,049.48	840,308.68	32° 49' 18.178 N	103° 21' 36.406 W
9,200.0	10.00	84.05	9,117.3	99.4	954.2	664,051.28	840,325.95	32° 49' 18.194 N	103° 21' 36.204 W
9,300.0	10.00	84.05	9,215.8	101.2	971.4	664,053.08	840,343.22	32° 49' 18.211 N	103° 21' 36.001 W
9,400.0	10.00	84.05	9,314.3	103.0	988.7	664,054.88	840,360.49	32° 49' 18.227 N	103° 21' 35.799 W
9,500.0	10.00	84.05	9,412.8	104.8	1,006.0	664,056.68	840,377.76	32° 49' 18.243 N	103° 21' 35.596 W
9,591.1	10.00	84.05	9,502.5	106.5	1,021.7	664,058.32	840,393.50	32° 49' 18.258 N	103° 21' 35.411 W
Start Drop -2.00									
9,600.0	9.82	84.05	9,511.3	106.6	1,023.2	664,058.48	840,395.02	32° 49' 18.259 N	103° 21' 35.394 W
9,700.0	7.82	84.05	9,610.1	108.2	1,038.5	664,060.07	840,410.27	32° 49' 18.274 N	103° 21' 35.215 W
9,800.0	5.82	84.05	9,709.4	109.5	1,050.3	664,061.30	840,422.09	32° 49' 18.285 N	103° 21' 35.076 W
9,900.0	3.82	84.05	9,809.0	110.3	1,058.7	664,062.18	840,430.45	32° 49' 18.293 N	103° 21' 34.978 W
10,000.0	1.82	84.05	9,908.9	110.8	1,063.6	664,062.69	840,435.35	32° 49' 18.297 N	103° 21' 34.921 W

Microsoft

Planning Report - Geographic

Database:	EDM16	**Local Co-ordinate Reference:**	Well Vindicator Canyon State #417H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3874.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3874.0usft
Site:	Vindicator Canyon State	**North Reference:**	Grid
Well:	Vindicator Canyon State #417H	**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
10,091.1	0.00	0.00	10,000.0	111.0	1,065.0	664,062.84	840,436.79	32° 49' 18.299 N	103° 21' 34.904 W
Start 1286.0 hold at 10091.1 MD									
10,100.0	0.00	0.00	10,008.9	111.0	1,065.0	664,062.84	840,436.79	32° 49' 18.299 N	103° 21' 34.904 W
10,200.0	0.00	0.00	10,108.9	111.0	1,065.0	664,062.84	840,436.79	32° 49' 18.299 N	103° 21' 34.904 W
10,300.0	0.00	0.00	10,208.9	111.0	1,065.0	664,062.84	840,436.79	32° 49' 18.299 N	103° 21' 34.904 W
10,400.0	0.00	0.00	10,308.9	111.0	1,065.0	664,062.84	840,436.79	32° 49' 18.299 N	103° 21' 34.904 W
10,500.0	0.00	0.00	10,408.9	111.0	1,065.0	664,062.84	840,436.79	32° 49' 18.299 N	103° 21' 34.904 W
10,600.0	0.00	0.00	10,508.9	111.0	1,065.0	664,062.84	840,436.79	32° 49' 18.299 N	103° 21' 34.904 W
10,700.0	0.00	0.00	10,608.9	111.0	1,065.0	664,062.84	840,436.79	32° 49' 18.299 N	103° 21' 34.904 W
10,800.0	0.00	0.00	10,708.9	111.0	1,065.0	664,062.84	840,436.79	32° 49' 18.299 N	103° 21' 34.904 W
10,900.0	0.00	0.00	10,808.9	111.0	1,065.0	664,062.84	840,436.79	32° 49' 18.299 N	103° 21' 34.904 W
11,000.0	0.00	0.00	10,908.9	111.0	1,065.0	664,062.84	840,436.79	32° 49' 18.299 N	103° 21' 34.904 W
11,100.0	0.00	0.00	11,008.9	111.0	1,065.0	664,062.84	840,436.79	32° 49' 18.299 N	103° 21' 34.904 W
11,200.0	0.00	0.00	11,108.9	111.0	1,065.0	664,062.84	840,436.79	32° 49' 18.299 N	103° 21' 34.904 W
11,300.0	0.00	0.00	11,208.9	111.0	1,065.0	664,062.84	840,436.79	32° 49' 18.299 N	103° 21' 34.904 W
11,377.2	0.00	0.00	11,286.0	111.0	1,065.0	664,062.84	840,436.79	32° 49' 18.299 N	103° 21' 34.904 W
Start Build 10.00									
11,400.0	2.28	179.59	11,308.9	110.5	1,065.0	664,062.38	840,436.79	32° 49' 18.294 N	103° 21' 34.904 W
11,500.0	12.28	179.59	11,407.9	97.9	1,065.1	664,049.72	840,436.88	32° 49' 18.169 N	103° 21' 34.904 W
11,600.0	22.28	179.59	11,503.3	68.2	1,065.3	664,020.05	840,437.10	32° 49' 17.875 N	103° 21' 34.905 W
11,700.0	32.28	179.59	11,592.1	22.4	1,065.6	663,974.27	840,437.42	32° 49' 17.422 N	103° 21' 34.906 W
11,800.0	42.28	179.59	11,671.5	-38.1	1,066.1	663,913.78	840,437.85	32° 49' 16.824 N	103° 21' 34.907 W
11,900.0	52.28	179.59	11,739.3	-111.4	1,066.6	663,840.40	840,438.38	32° 49' 16.098 N	103° 21' 34.909 W
12,000.0	62.28	179.59	11,793.3	-195.5	1,067.2	663,756.37	840,438.98	32° 49' 15.266 N	103° 21' 34.911 W
12,100.0	72.28	179.59	11,831.8	-287.6	1,067.8	663,664.25	840,439.63	32° 49' 14.355 N	103° 21' 34.913 W
12,200.0	82.28	179.59	11,853.8	-385.0	1,068.5	663,566.83	840,440.33	32° 49' 13.391 N	103° 21' 34.916 W
12,277.2	90.00	179.59	11,859.0	-461.9	1,069.1	663,489.89	840,440.88	32° 49' 12.630 N	103° 21' 34.918 W
Start 10490.9 hold at 12277.2 MD									
12,300.0	90.00	179.59	11,859.0	-484.8	1,069.2	663,467.06	840,441.04	32° 49' 12.404 N	103° 21' 34.918 W
12,400.0	90.00	179.59	11,859.0	-584.8	1,070.0	663,367.06	840,441.75	32° 49' 11.414 N	103° 21' 34.921 W
12,500.0	90.00	179.59	11,859.0	-684.8	1,070.7	663,267.07	840,442.47	32° 49' 10.425 N	103° 21' 34.923 W
12,600.0	90.00	179.59	11,859.0	-784.8	1,071.4	663,167.07	840,443.18	32° 49' 9.436 N	103° 21' 34.925 W
12,700.0	90.00	179.59	11,859.0	-884.8	1,072.1	663,067.07	840,443.89	32° 49' 8.446 N	103° 21' 34.928 W
12,800.0	90.00	179.59	11,859.0	-984.8	1,072.8	662,967.07	840,444.61	32° 49' 7.457 N	103° 21' 34.930 W
12,900.0	90.00	179.59	11,859.0	-1,084.8	1,073.5	662,867.07	840,445.32	32° 49' 6.467 N	103° 21' 34.933 W
13,000.0	90.00	179.59	11,859.0	-1,184.7	1,074.2	662,767.07	840,446.03	32° 49' 5.478 N	103° 21' 34.935 W
13,100.0	90.00	179.59	11,859.0	-1,284.7	1,075.0	662,667.07	840,446.75	32° 49' 4.489 N	103° 21' 34.938 W
13,200.0	90.00	179.59	11,859.0	-1,384.7	1,075.7	662,567.08	840,447.46	32° 49' 3.499 N	103° 21' 34.940 W
13,300.0	90.00	179.59	11,859.0	-1,484.7	1,076.4	662,467.08	840,448.17	32° 49' 2.510 N	103° 21' 34.943 W
13,400.0	90.00	179.59	11,859.0	-1,584.7	1,077.1	662,367.08	840,448.89	32° 49' 1.520 N	103° 21' 34.945 W
13,500.0	90.00	179.59	11,859.0	-1,684.7	1,077.8	662,267.08	840,449.60	32° 49' 0.531 N	103° 21' 34.947 W
13,600.0	90.00	179.59	11,859.0	-1,784.7	1,078.5	662,167.08	840,450.31	32° 48' 59.541 N	103° 21' 34.950 W
13,700.0	90.00	179.59	11,859.0	-1,884.7	1,079.2	662,067.08	840,451.03	32° 48' 58.552 N	103° 21' 34.952 W
13,800.0	90.00	179.59	11,859.0	-1,984.7	1,079.9	661,967.08	840,451.74	32° 48' 57.563 N	103° 21' 34.955 W
13,900.0	90.00	179.59	11,859.0	-2,084.7	1,080.7	661,867.09	840,452.45	32° 48' 56.573 N	103° 21' 34.957 W
14,000.0	90.00	179.59	11,859.0	-2,184.7	1,081.4	661,767.09	840,453.17	32° 48' 55.584 N	103° 21' 34.960 W
14,100.0	90.00	179.59	11,859.0	-2,284.7	1,082.1	661,667.09	840,453.88	32° 48' 54.594 N	103° 21' 34.962 W
14,200.0	90.00	179.59	11,859.0	-2,384.7	1,082.8	661,567.09	840,454.59	32° 48' 53.605 N	103° 21' 34.964 W
14,300.0	90.00	179.59	11,859.0	-2,484.7	1,083.5	661,467.09	840,455.31	32° 48' 52.616 N	103° 21' 34.967 W
14,400.0	90.00	179.59	11,859.0	-2,584.7	1,084.2	661,367.09	840,456.02	32° 48' 51.626 N	103° 21' 34.969 W
14,500.0	90.00	179.59	11,859.0	-2,684.7	1,084.9	661,267.10	840,456.73	32° 48' 50.637 N	103° 21' 34.972 W
14,600.0	90.00	179.59	11,859.0	-2,784.7	1,085.7	661,167.10	840,457.45	32° 48' 49.647 N	103° 21' 34.974 W
14,700.0	90.00	179.59	11,859.0	-2,884.7	1,086.4	661,067.10	840,458.16	32° 48' 48.658 N	103° 21' 34.977 W
14,800.0	90.00	179.59	11,859.0	-2,984.7	1,087.1	660,967.10	840,458.87	32° 48' 47.668 N	103° 21' 34.979 W

Microsoft

Planning Report - Geographic

Database:	EDM16	**Local Co-ordinate Reference:**	Well Vindicator Canyon State #417H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3874.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3874.0usft
Site:	Vindicator Canyon State	**North Reference:**	Grid
Well:	Vindicator Canyon State #417H	**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
14,900.0	90.00	179.59	11,859.0	-3,084.7	1,087.8	660,867.10	840,459.59	32° 48' 46.679 N	103° 21' 34.981 W
15,000.0	90.00	179.59	11,859.0	-3,184.7	1,088.5	660,767.10	840,460.30	32° 48' 45.690 N	103° 21' 34.984 W
15,100.0	90.00	179.59	11,859.0	-3,284.7	1,089.2	660,667.10	840,461.01	32° 48' 44.700 N	103° 21' 34.986 W
15,200.0	90.00	179.59	11,859.0	-3,384.7	1,089.9	660,567.11	840,461.73	32° 48' 43.711 N	103° 21' 34.989 W
15,300.0	90.00	179.59	11,859.0	-3,484.7	1,090.6	660,467.11	840,462.44	32° 48' 42.721 N	103° 21' 34.991 W
15,400.0	90.00	179.59	11,859.0	-3,584.7	1,091.4	660,367.11	840,463.15	32° 48' 41.732 N	103° 21' 34.994 W
15,500.0	90.00	179.59	11,859.0	-3,684.7	1,092.1	660,267.11	840,463.87	32° 48' 40.742 N	103° 21' 34.996 W
15,600.0	90.00	179.59	11,859.0	-3,784.7	1,092.8	660,167.11	840,464.58	32° 48' 39.753 N	103° 21' 34.998 W
15,700.0	90.00	179.59	11,859.0	-3,884.7	1,093.5	660,067.11	840,465.29	32° 48' 38.764 N	103° 21' 35.001 W
15,800.0	90.00	179.59	11,859.0	-3,984.7	1,094.2	659,967.11	840,466.01	32° 48' 37.774 N	103° 21' 35.003 W
15,900.0	90.00	179.59	11,859.0	-4,084.7	1,094.9	659,867.12	840,466.72	32° 48' 36.785 N	103° 21' 35.006 W
16,000.0	90.00	179.59	11,859.0	-4,184.7	1,095.6	659,767.12	840,467.43	32° 48' 35.795 N	103° 21' 35.008 W
16,100.0	90.00	179.59	11,859.0	-4,284.7	1,096.4	659,667.12	840,468.15	32° 48' 34.806 N	103° 21' 35.011 W
16,200.0	90.00	179.59	11,859.0	-4,384.7	1,097.1	659,567.12	840,468.86	32° 48' 33.817 N	103° 21' 35.013 W
16,300.0	90.00	179.59	11,859.0	-4,484.7	1,097.8	659,467.12	840,469.57	32° 48' 32.827 N	103° 21' 35.015 W
16,400.0	90.00	179.59	11,859.0	-4,584.7	1,098.5	659,367.12	840,470.29	32° 48' 31.838 N	103° 21' 35.018 W
16,500.0	90.00	179.59	11,859.0	-4,684.7	1,099.2	659,267.12	840,471.00	32° 48' 30.848 N	103° 21' 35.020 W
16,600.0	90.00	179.59	11,859.0	-4,784.7	1,099.9	659,167.13	840,471.71	32° 48' 29.859 N	103° 21' 35.023 W
16,700.0	90.00	179.59	11,859.0	-4,884.7	1,100.6	659,067.13	840,472.43	32° 48' 28.869 N	103° 21' 35.025 W
16,800.0	90.00	179.59	11,859.0	-4,984.7	1,101.3	658,967.13	840,473.14	32° 48' 27.880 N	103° 21' 35.028 W
16,900.0	90.00	179.59	11,859.0	-5,084.6	1,102.1	658,867.13	840,473.85	32° 48' 26.891 N	103° 21' 35.030 W
17,000.0	90.00	179.59	11,859.0	-5,184.6	1,102.8	658,767.13	840,474.57	32° 48' 25.901 N	103° 21' 35.033 W
17,100.0	90.00	179.59	11,859.0	-5,284.6	1,103.5	658,667.13	840,475.28	32° 48' 24.912 N	103° 21' 35.035 W
17,200.0	90.00	179.59	11,859.0	-5,384.6	1,104.2	658,567.13	840,475.99	32° 48' 23.922 N	103° 21' 35.037 W
17,300.0	90.00	179.59	11,859.0	-5,484.6	1,104.9	658,467.14	840,476.71	32° 48' 22.933 N	103° 21' 35.040 W
17,400.0	90.00	179.59	11,859.0	-5,584.6	1,105.6	658,367.14	840,477.42	32° 48' 21.943 N	103° 21' 35.042 W
17,500.0	90.00	179.59	11,859.0	-5,684.6	1,106.3	658,267.14	840,478.13	32° 48' 20.954 N	103° 21' 35.045 W
17,600.0	90.00	179.59	11,859.0	-5,784.6	1,107.1	658,167.14	840,478.84	32° 48' 19.965 N	103° 21' 35.047 W
17,700.0	90.00	179.59	11,859.0	-5,884.6	1,107.8	658,067.14	840,479.56	32° 48' 18.975 N	103° 21' 35.050 W
17,800.0	90.00	179.59	11,859.0	-5,984.6	1,108.5	657,967.14	840,480.27	32° 48' 17.986 N	103° 21' 35.052 W
17,900.0	90.00	179.59	11,859.0	-6,084.6	1,109.2	657,867.14	840,480.98	32° 48' 16.996 N	103° 21' 35.054 W
18,000.0	90.00	179.59	11,859.0	-6,184.6	1,109.9	657,767.15	840,481.70	32° 48' 16.007 N	103° 21' 35.057 W
18,100.0	90.00	179.59	11,859.0	-6,284.6	1,110.6	657,667.15	840,482.41	32° 48' 15.017 N	103° 21' 35.059 W
18,200.0	90.00	179.59	11,859.0	-6,384.6	1,111.3	657,567.15	840,483.12	32° 48' 14.028 N	103° 21' 35.062 W
18,300.0	90.00	179.59	11,859.0	-6,484.6	1,112.0	657,467.15	840,483.84	32° 48' 13.039 N	103° 21' 35.064 W
18,400.0	90.00	179.59	11,859.0	-6,584.6	1,112.8	657,367.15	840,484.55	32° 48' 12.049 N	103° 21' 35.067 W
18,500.0	90.00	179.59	11,859.0	-6,684.6	1,113.5	657,267.15	840,485.26	32° 48' 11.060 N	103° 21' 35.069 W
18,600.0	90.00	179.59	11,859.0	-6,784.6	1,114.2	657,167.16	840,485.98	32° 48' 10.070 N	103° 21' 35.071 W
18,700.0	90.00	179.59	11,859.0	-6,884.6	1,114.9	657,067.16	840,486.69	32° 48' 9.081 N	103° 21' 35.074 W
18,800.0	90.00	179.59	11,859.0	-6,984.6	1,115.6	656,967.16	840,487.40	32° 48' 8.092 N	103° 21' 35.076 W
18,900.0	90.00	179.59	11,859.0	-7,084.6	1,116.3	656,867.16	840,488.12	32° 48' 7.102 N	103° 21' 35.079 W
19,000.0	90.00	179.59	11,859.0	-7,184.6	1,117.0	656,767.16	840,488.83	32° 48' 6.113 N	103° 21' 35.081 W
19,100.0	90.00	179.59	11,859.0	-7,284.6	1,117.8	656,667.16	840,489.54	32° 48' 5.123 N	103° 21' 35.084 W
19,200.0	90.00	179.59	11,859.0	-7,384.6	1,118.5	656,567.16	840,490.26	32° 48' 4.134 N	103° 21' 35.086 W
19,300.0	90.00	179.59	11,859.0	-7,484.6	1,119.2	656,467.17	840,490.97	32° 48' 3.144 N	103° 21' 35.088 W
19,400.0	90.00	179.59	11,859.0	-7,584.6	1,119.9	656,367.17	840,491.68	32° 48' 2.155 N	103° 21' 35.091 W
19,500.0	90.00	179.59	11,859.0	-7,684.6	1,120.6	656,267.17	840,492.40	32° 48' 1.166 N	103° 21' 35.093 W
19,600.0	90.00	179.59	11,859.0	-7,784.6	1,121.3	656,167.17	840,493.11	32° 48' 0.176 N	103° 21' 35.096 W
19,700.0	90.00	179.59	11,859.0	-7,884.6	1,122.0	656,067.17	840,493.82	32° 47' 59.187 N	103° 21' 35.098 W
19,800.0	90.00	179.59	11,859.0	-7,984.6	1,122.7	655,967.17	840,494.54	32° 47' 58.197 N	103° 21' 35.101 W
19,900.0	90.00	179.59	11,859.0	-8,084.6	1,123.5	655,867.17	840,495.25	32° 47' 57.208 N	103° 21' 35.103 W
20,000.0	90.00	179.59	11,859.0	-8,184.6	1,124.2	655,767.18	840,495.96	32° 47' 56.218 N	103° 21' 35.105 W
20,100.0	90.00	179.59	11,859.0	-8,284.6	1,124.9	655,667.18	840,496.68	32° 47' 55.229 N	103° 21' 35.108 W
20,200.0	90.00	179.59	11,859.0	-8,384.6	1,125.6	655,567.18	840,497.39	32° 47' 54.240 N	103° 21' 35.110 W
20,300.0	90.00	179.59	11,859.0	-8,484.6	1,126.3	655,467.18	840,498.10	32° 47' 53.250 N	103° 21' 35.113 W

Microsoft

Planning Report - Geographic

Database:	EDM16	**Local Co-ordinate Reference:**	Well Vindicator Canyon State #417H
Company:	BTA Oil Producers, LLC	**TVD Reference:**	GL @ 3874.0usft
Project:	Lea County, NM (NAD 83)	**MD Reference:**	GL @ 3874.0usft
Site:	Vindicator Canyon State	**North Reference:**	Grid
Well:	Vindicator Canyon State #417H	**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
20,400.0	90.00	179.59	11,859.0	-8,584.6	1,127.0	655,367.18	840,498.82	32° 47' 52.261 N	103° 21' 35.115 W
20,500.0	90.00	179.59	11,859.0	-8,684.6	1,127.7	655,267.18	840,499.53	32° 47' 51.271 N	103° 21' 35.118 W
20,600.0	90.00	179.59	11,859.0	-8,784.6	1,128.5	655,167.18	840,500.24	32° 47' 50.282 N	103° 21' 35.120 W
20,700.0	90.00	179.59	11,859.0	-8,884.6	1,129.2	655,067.19	840,500.96	32° 47' 49.292 N	103° 21' 35.122 W
20,800.0	90.00	179.59	11,859.0	-8,984.6	1,129.9	654,967.19	840,501.67	32° 47' 48.303 N	103° 21' 35.125 W
20,900.0	90.00	179.59	11,859.0	-9,084.5	1,130.6	654,867.19	840,502.38	32° 47' 47.314 N	103° 21' 35.127 W
21,000.0	90.00	179.59	11,859.0	-9,184.5	1,131.3	654,767.19	840,503.10	32° 47' 46.324 N	103° 21' 35.130 W
21,100.0	90.00	179.59	11,859.0	-9,284.5	1,132.0	654,667.19	840,503.81	32° 47' 45.335 N	103° 21' 35.132 W
21,200.0	90.00	179.59	11,859.0	-9,384.5	1,132.7	654,567.19	840,504.52	32° 47' 44.345 N	103° 21' 35.135 W
21,300.0	90.00	179.59	11,859.0	-9,484.5	1,133.4	654,467.19	840,505.24	32° 47' 43.356 N	103° 21' 35.137 W
21,400.0	90.00	179.59	11,859.0	-9,584.5	1,134.2	654,367.20	840,505.95	32° 47' 42.367 N	103° 21' 35.139 W
21,500.0	90.00	179.59	11,859.0	-9,684.5	1,134.9	654,267.20	840,506.66	32° 47' 41.377 N	103° 21' 35.142 W
21,600.0	90.00	179.59	11,859.0	-9,784.5	1,135.6	654,167.20	840,507.38	32° 47' 40.388 N	103° 21' 35.144 W
21,700.0	90.00	179.59	11,859.0	-9,884.5	1,136.3	654,067.20	840,508.09	32° 47' 39.398 N	103° 21' 35.147 W
21,800.0	90.00	179.59	11,859.0	-9,984.5	1,137.0	653,967.20	840,508.80	32° 47' 38.409 N	103° 21' 35.149 W
21,900.0	90.00	179.59	11,859.0	-10,084.5	1,137.7	653,867.20	840,509.52	32° 47' 37.419 N	103° 21' 35.151 W
22,000.0	90.00	179.59	11,859.0	-10,184.5	1,138.4	653,767.20	840,510.23	32° 47' 36.430 N	103° 21' 35.154 W
22,100.0	90.00	179.59	11,859.0	-10,284.5	1,139.2	653,667.21	840,510.94	32° 47' 35.441 N	103° 21' 35.156 W
22,200.0	90.00	179.59	11,859.0	-10,384.5	1,139.9	653,567.21	840,511.66	32° 47' 34.451 N	103° 21' 35.159 W
22,300.0	90.00	179.59	11,859.0	-10,484.5	1,140.6	653,467.21	840,512.37	32° 47' 33.462 N	103° 21' 35.161 W
22,400.0	90.00	179.59	11,859.0	-10,584.5	1,141.3	653,367.21	840,513.08	32° 47' 32.472 N	103° 21' 35.164 W
22,500.0	90.00	179.59	11,859.0	-10,684.5	1,142.0	653,267.21	840,513.80	32° 47' 31.483 N	103° 21' 35.166 W
22,600.0	90.00	179.59	11,859.0	-10,784.5	1,142.7	653,167.21	840,514.51	32° 47' 30.493 N	103° 21' 35.168 W
22,700.0	90.00	179.59	11,859.0	-10,884.5	1,143.4	653,067.21	840,515.22	32° 47' 29.504 N	103° 21' 35.171 W
22,768.1	90.00	179.59	11,859.0	-10,952.6	1,143.9	652,999.16	840,515.71	32° 47' 28.831 N	103° 21' 35.173 W
TD at 22768.1									

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
Vindicator 417H BHL - plan hits target center - Point	0.00	0.00	11,859.0	-10,952.6	1,143.9	652,999.16	840,515.71	32° 47' 28.831 N	103° 21' 35.173 W

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
3,426.1	3,426.1	0.0	0.0	Start Build 2.00
3,926.1	3,923.6	4.5	43.3	Start 5665.0 hold at 3926.1 MD
9,591.1	9,502.5	106.5	1,021.7	Start Drop -2.00
10,091.1	10,000.0	111.0	1,065.0	Start 1286.0 hold at 10091.1 MD
11,377.2	11,286.0	111.0	1,065.0	Start Build 10.00
12,277.2	11,859.0	-461.9	1,069.1	Start 10490.9 hold at 12277.2 MD
22,768.1	11,859.0	-10,952.6	1,143.9	TD at 22768.1

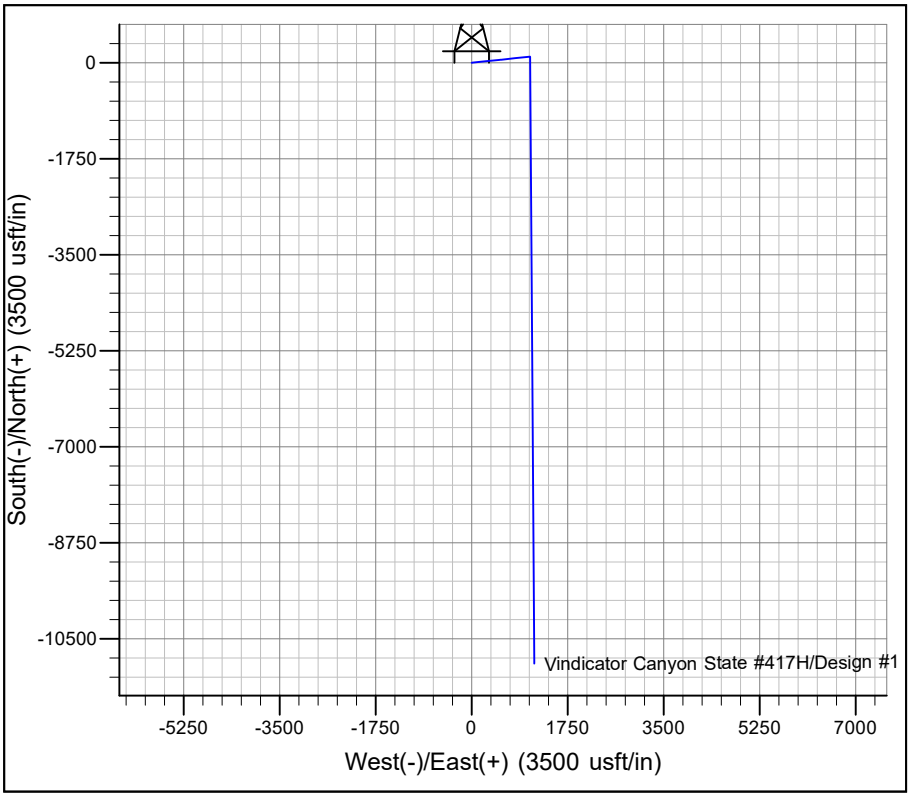
 WELL DETAILS: Vindicator Canyon State #417H

3874.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	663951.83	839371.78	32° 49' 17.297 N	103° 21' 47.395 W	

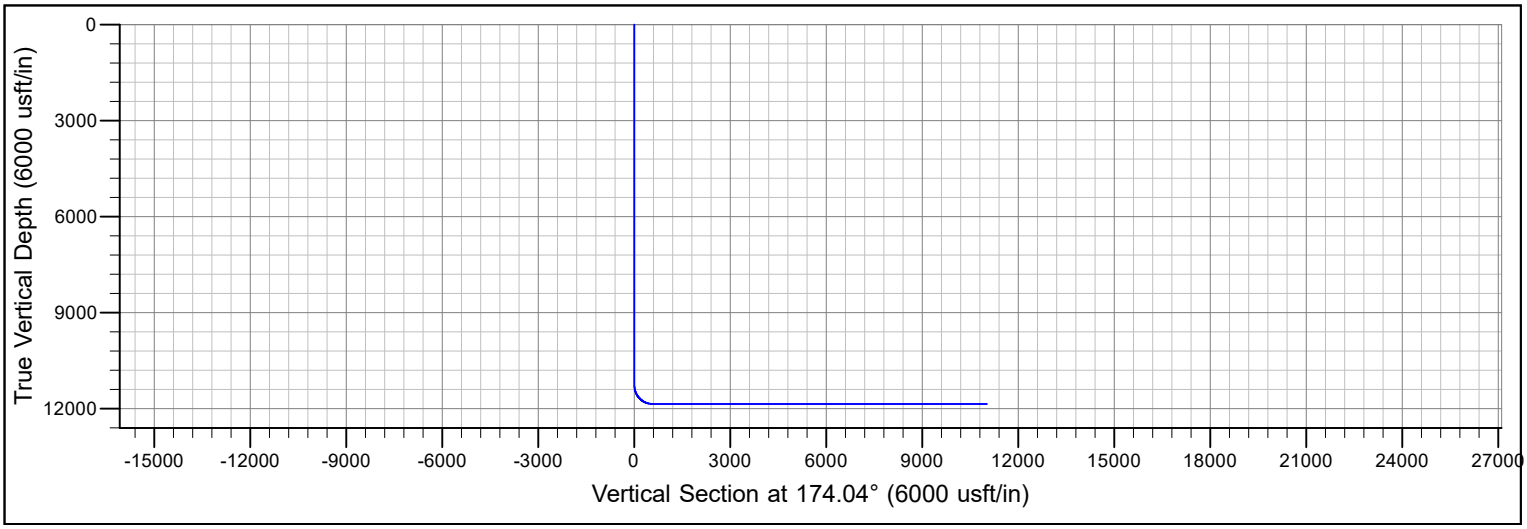
ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
3426.1	0.00	0.00	3426.1	0.0	0.0	0.0	0.0	Start Build 2.00
3926.1	10.00	84.05	3923.6	4.5	43.3	0.0	43.5	Start 5665.0 hold at 3926.1 MD
9591.1	10.00	84.05	9502.5	106.5	1021.7	0.2	1027.2	Start Drop -2.00
10091.1	0.00	0.00	10000.0	111.0	1065.0	0.2	1070.8	Start 1286.0 hold at 10091.1 MD
11377.2	0.00	0.00	11286.0	111.0	1065.0	0.2	1070.8	Start Build 10.00
12277.2	90.00	179.59	11859.0	-461.9	1069.1	570.5	1643.7	Start 10490.9 hold at 12277.2 MD
22768.1	90.00	179.59	11859.0	-10952.6	1143.9	11012.1	12134.6	TD at 22768.1



Azimuths to Grid North
True North: -0.53°
Magnetic North: 7.17°

Magnetic Field
Strength: 49173.3nT
Dip Angle: 60.83°
Date: 12/31/2009
Model: IGRF200510



C-102

Submit Electronically
Via OCD Permitting

State of New Mexico
Energy, Minerals, & Natural Resources Department
OIL CONSERVATION DIVISION

Revised July 9, 2024
PAGE 1 OF 2

Submittal Type: [X] Initial Submittal [ ] Amended Report [ ] As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
	98333	WC-025 G-09 S173615C; UPPER PENN

Property Code	Property Name	Well Number
	VINDICATOR CANYON STATE UNIT COM	417H

OGRID No.	Operator Name	Ground Level Elevation
260297	BTA OIL PRODUCERS, LLC	3874'

Surface Owner: [ ] State [X] Fee [ ] Tribal [ ] Federal
Mineral Owner: [X] State [ ] Fee [ ] Tribal [ ] Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
F	21	17S	36E		2251' FNL	1525' FWL	32.82147150	-103.36316520	LEA

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
F	33	17S	36E		2621' FNL	2590' FWL	32.79134187	-103.35977016	LEA

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
640.00	Defining		N	P

Order Numbers: Pending
Well setbacks are under Common Ownership: [ ] Yes [X] No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
F	21	17S	36E		2140' FNL	2590' FWL	32.82179240	-103.35970340	LEA

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
K	21	17S	36E		2575' FSL	2590' FWL	32.82017376	-103.35968704	LEA

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude (NAD83)	Longitude (NAD83)	County
F	33	17S	36E		2571' FNL	2590' FWL	32.79147929	-103.35976982	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type: [X] Horizontal [ ] Vertical	Ground Floor Elevation
Pending		3874'

OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Signature — Date: 2/26/2025

Liz Velasco
Printed Name

lvelasco@btaoil.com
Email Address

SURVEYOR CERTIFICATIONS

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.

JOHN M RUSSELL
NEW MEXICO
29049
PROFESSIONAL SURVEYOR

Signature and Seal of Professional Surveyor

Certificate Number	Date of Survey
29049	FEBRUARY 24, 2025

Note: 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.

ACREAGE DEDICATION PLATS

VINDICATOR CANYON STATE UNIT COM 417H

PAGE 2 OF 2

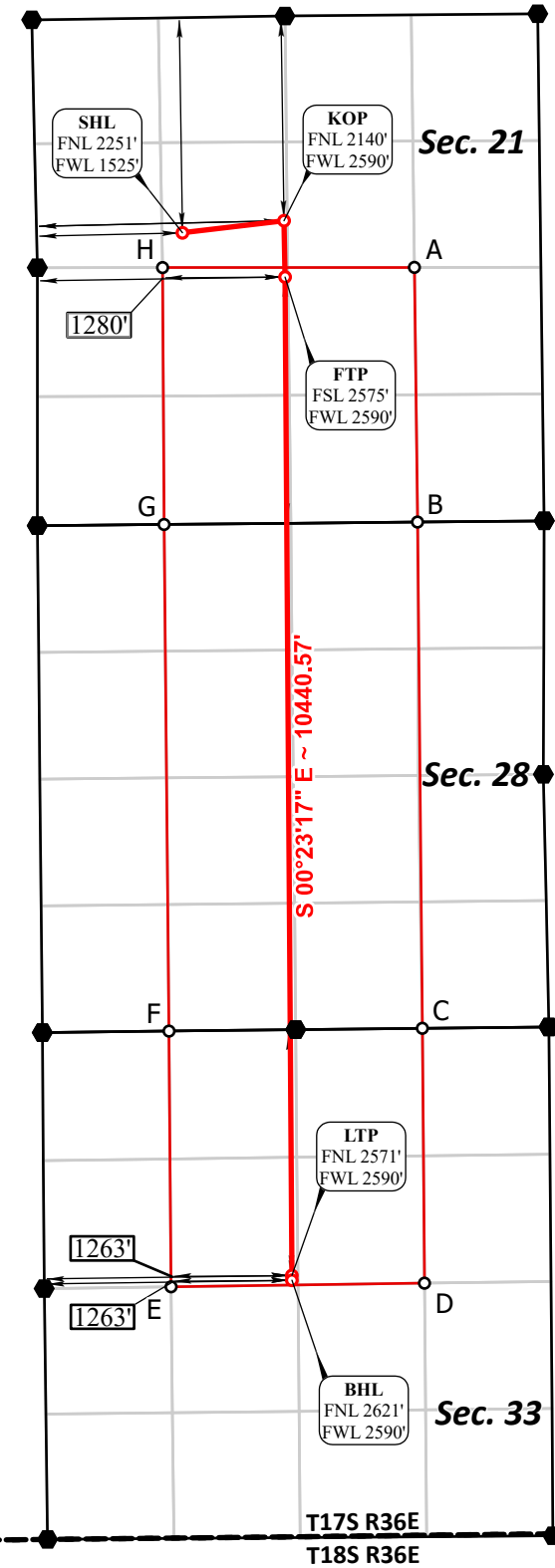
SHL
FNL 2251' FWL 1525', SECTION 21
NAD 83, SPCS NM EAST
X:839371.78' / Y:663951.83'
LAT:32.82147150 / LON:-103.36316520
NAD 27, SPCS NM EAST
X:798192.95' / Y:663887.95'
LAT:32.82135156 / LON:-103.36267119

KOP
FNL 2140' FWL 2590', SECTION 21
NAD 83, SPCS NM EAST
X:840434.21' / Y:664078.37'
LAT:32.82179240 / LON:-103.35970340
NAD 27, SPCS NM EAST
X:799255.38' / Y:664014.52'
LAT:32.82167255 / LON:-103.35920947

FTP
FSL 2575' FWL 2590', SECTION 21
NAD 83, SPCS NM EAST
X:840444.66' / Y:663489.49'
LAT:32.82017376 / LON:-103.35968704
NAD 27, SPCS NM EAST
X:799265.81' / Y:663425.66'
LAT:32.82005390 / LON:-103.35919318

LTP
FNL 2571' FWL 2590', SECTION 33
NAD 83, SPCS NM EAST
X:840515.35' / Y:653049.16'
LAT:32.79147929 / LON:-103.35976982
NAD 27, SPCS NM EAST
X:799336.19' / Y:652985.57'
LAT:32.79135923 / LON:-103.35927713

BHL
FNL 2621' FWL 2590', SECTION 33
NAD 83, SPCS NM EAST
X:840515.71' / Y:652999.16'
LAT:32.79134187 / LON:-103.35977016
NAD 27, SPCS NM EAST
X:799336.54' / Y:652935.58'
LAT:32.79122181 / LON:-103.35927747



CORNER COORDINATES NAD 83, SPCS NM EAST	CORNER COORDINATES NAD 27, SPCS NM EAST
A - X: 841796.57' / Y:663590.57'	A - X: 800617.72' / Y:663526.78'
B - X: 841829.10' / Y:660927.76'	B - X: 800650.17' / Y:660864.03'
C - X: 841879.57' / Y:655634.01'	C - X: 800700.48' / Y:655570.41'
D - X: 841902.09' / Y:652968.93'	D - X: 800722.91' / Y:652905.39'
E - X: 839253.00' / Y:652931.15'	E - X: 798073.85' / Y:652867.52'
F - X: 839231.50' / Y:655604.67'	F - X: 798052.42' / Y:655540.98'
G - X: 839179.57' / Y:660902.17'	G - X: 798000.65' / Y:660838.35'
H - X: 839164.00' / Y:663588.48'	H - X: 797985.16' / Y:663524.59'

DELTA FIELD SERVICES

Drill Line Events | Section Corners | Drill Line | Dimension Lines | Federal Leases | Project Area

JOB No. BTA_0006_VC22
REV 1 ANC 2/21/2025

All bearings and coordinates refer to New Mexico State Plane Coordinate System, East Zone, U.S. Survey Feet.

Distances/areas relative to NAD 83 grid measurements. Combined Scale Factor: 0.99981955 and a Convergence Angle: 0.50466944°