

Submit 1 Copy To Appropriate District Office

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

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO. 30-025-51020	
5. Indicate Type of Lease STATE ☒ FEE ☐	
6. State Oil & Gas Lease No.	
7. Lease Name or Unit Agreement Name Vindicator Canyon State Unit Com	
8. Well Number	404H
9. OGRID Number	260297
10. Pool name or Wildcat WC-025 G-09 S173615C ; UPPER PENN	

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
BTA OIL PRODUCERS, LLC

3. Address of Operator
104 S. Pecos, Midland, TX 79701

4. Well Location
Unit Letter J : 2500 feet from the South line and 1351 feet from the East line
Section 21 Township 17S Range 36E NMPM County LEA

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
3857'

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☒
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐
CLOSED-LOOP SYSTEM ☐
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐
OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

BTA Oil Producers, LLC respectfully requests the following Footage (KOP, FTP, LTP, BHL), Casing, and Drill plan changes to the original Permit as approved. SHL will remain the same. Please see attached for more details.

Old FTP Location: 2535' FNL, 1980' FEL ; Section 21
Old LTP Location: 2556' FSL, 1980' FEL ; Section 9
Old BHL Location: 2606' FSL, 1980' FEL ; Section 9

New KOP Location: 2583' FNL, 2260' FEL ; Section 21
New FTP Location: 2533' FNL, 2260' FEL ; Section 21
New LTP Location: 2558' FSL, 2260' FEL ; Section 9
New BHL Location: 2608' FSL, 2260' FEL ; Section 9

Spud Date:

12/12/2023

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE



TITLE

Regulatory Analyst

DATE

11/30/2023

Type or print name

E-mail address:

SHAJAR@BTAOIL.COM

PHONE:

432-682-3753

For State Use Only

APPROVED BY:

TITLE

DATE

Conditions of Approval (if any):

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
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1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION AS-DRILLED PLAT

¹ API Number 30-025-51020	² Pool Code 98333	³ Pool Name WC025 G09 S173615C; UPPER PENN
⁴ Property Code 333408	Property Name VINDICATOR CANYON STATE UNIT COM	⁶ Well Number 404H
⁷ OGRID No. 260297	⁸ Operator Name BTA OIL PRODUCERS, LLC	⁹ Elevation 3857'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	21	17S	36E		2500	SOUTH	1351	EAST	LEA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	9	17S	36E		2608	SOUTH	2260	EAST	LEA

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

BOTTOM HOLE LOCATION 2608' FSL 2260' FEL, SECTION 9 NAD 83, SPCS NM EAST X:840743.16' / Y:674107.70' LAT:32.84934759 / LON:-103.35839661 NAD 27, SPCS NM EAST X:799564.63' / Y:674043.62' LAT:32.84922756 / LON:-103.35790159 LAST TAKE POINT 2558' FSL 2260' FEL, SECTION 9 NAD 83, SPCS NM EAST X:840743.59' / Y:674057.70' LAT:32.84921017 / LON:-103.35839671 NAD 27, SPCS NM EAST X:799565.06' / Y:673993.62' LAT:32.84909053 / LON:-103.35790170 FIRST TAKE POINT 2533' FNL 2260' FEL, SECTION 21 NAD 83, SPCS NM EAST X:840858.35' / Y:663689.82' LAT:32.82071384 / LON:-103.35833455 NAD 27, SPCS NM EAST X:799679.50' / Y:663625.99' LAT:32.82059401 / LON:-103.35784072 KICK OFF POINT 2583' FNL 2260' FEL, SECTION 21 NAD 83, SPCS NM EAST X:840859.00' / Y:663639.82' LAT:32.82057641 / LON:-103.35833396 NAD 27, SPCS NM EAST X:799679.15' / Y:663575.99' LAT:32.82045660 / LON:-103.35784337 SURFACE HOLE LOCATION 2500' FSL 1351' FEL, SECTION 21 NAD 83, SPCS NM EAST X:841771.29' / Y:663427.01' LAT:32.81996839 / LON:-103.35537105 0' MEASURED DEPTH IN FEET NAD 27, SPCS NM EAST X:800592.43' / Y:663363.22' LAT:32.81967332 / LON:-103.35487925		¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division Signature: <i>Sammy Hajar</i> Date: 11/30/2023 Printed Name: Sammy Hajar E-mail Address: SHAJAR@BTAOIL.COM ¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well surface location shown on this plat was plotted from field notes of the as-staked surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Data used for underground measurements were provided by others for reference only and does not constitute field measurements performed by Delta Field Services, LLC. NOVEMBER 29, 2023 Date of Survey Signature and Seal of Professional Surveyor: <i>Lloyd P. Short</i> LLOYD P. SHORT 21653 Certificate Number
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Distances/areas relative to NAD 83 Combined Scale Factor: 0.99981955 Convergence Angle: 0.50466944°



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

WELL: Vindicator Canyon State Unit Com #404H
TVD: 11843
MD: 22178

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	2033	0	2033	No	54.5	J-55	STC	2.6	3.1	7.7	4.6	Dry	8.3
12 1/4	9 5/8	0	5209	0	5173	No	40	J-55	LTC	1.7	1.5	3.0	2.5	Dry	10
8 3/4	7 5/8	5149	11387	5113	11316	No	29.7	P110	FJ	1.8	1.7	2.8	2.8	Dry	9.4
6 3/4	5 1/2	0	11187	11316	11116	Yes	20	P110	BTC	1.6	1.8	2.9	3.0	Dry	12
6 3/4	5	11187	22178	11116	11843	Yes	18	P110	BTC	1.8	1.9	2.9	3.1	Dry	12

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	1840	Class C	1425	1.8	13.5	2565	100%	2% CaCl2
	Tail		1840	2033	Class C	200	1.34	14.8	268	100%	2% CaCl2
9 5/8	Lead		0	4520	Class C	1505	2.18	12.7	3280.9	100%	0.5% CaCl2
	Tail		4520	5209	Class C	250	1.33	14.8	332.5	25%	1% CaCl2
7 5/8	Lead		5149	9520	25% Poz 75% Class C	185	2.99	11	553.15	15%	0.5% CaCl2
	Tail		9520	11387	Class H	200	1.19	15.6	238	15%	1% CaCl2
5 1/2	Lead										
	Tail		10390	11316							
5	Lead										
	Tail		11187	22178	Class H	1150	1.27	14.8	1460.5	10%	0.1% Fluid Loss

BTA Oil Producers, LLC

T

G

M



Azimuths to Grid North

True North: -0.53°

Magnetic North: 7.16°

Magnetic Field

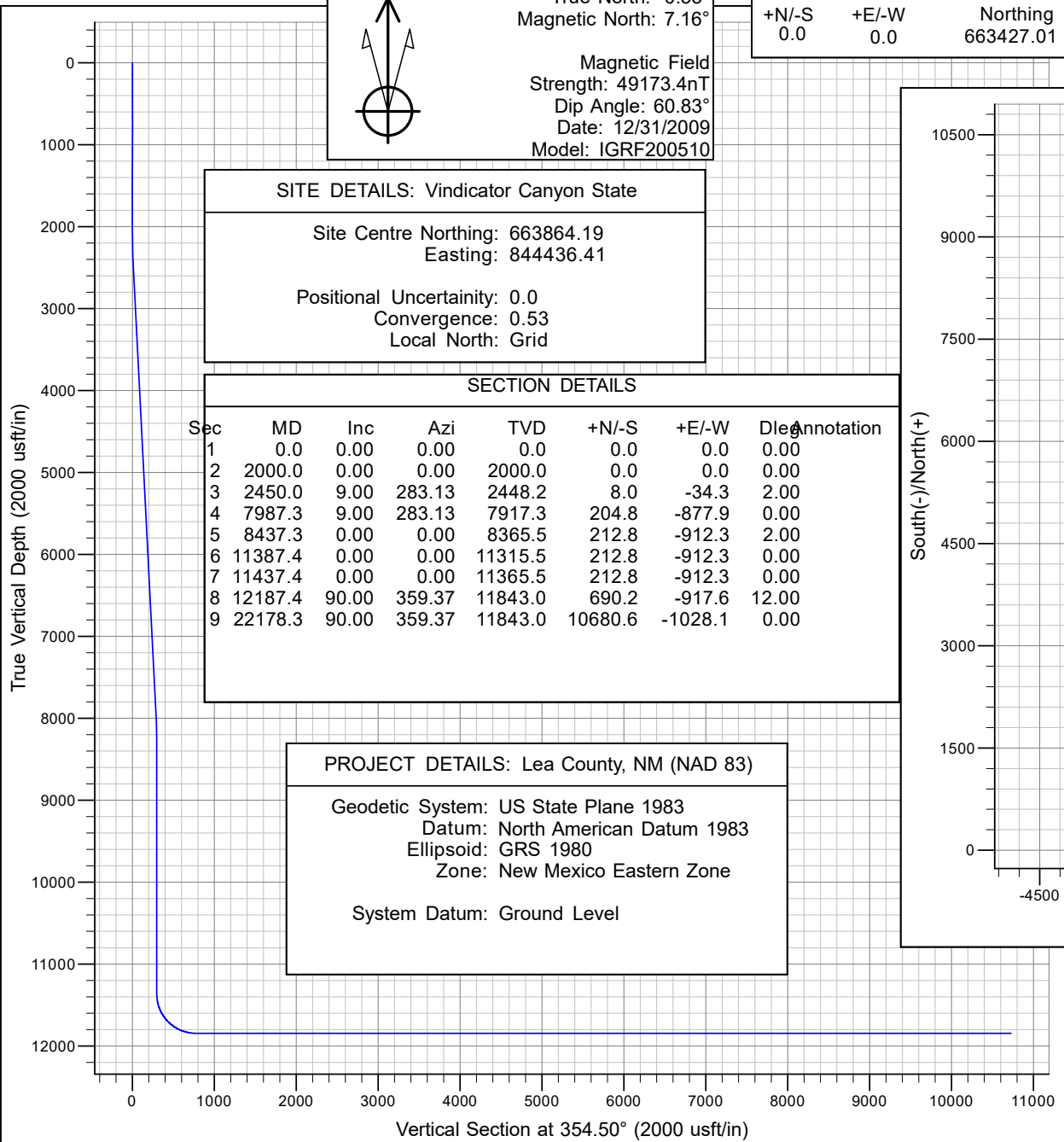
Strength: 49173.4nT

Dip Angle: 60.83°

Date: 12/31/2009

Model: IGRF200510

WELL DETAILS: Vindicator Canyon State #404H					
+N/-S	+E/-W	Northing	Ground Level Easting	3858.0 Latitude	Longitude
0.0	0.0	663427.01	841771.29	32° 49' 11.886 N	103° 21' 19.336 W



SITE DETAILS: Vindicator Canyon State

Site Centre Northing: 663864.19

Easting: 844436.41

Positional Uncertainty: 0.0

Convergence: 0.53

Local North: Grid

SECTION DETAILS							
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DieAnnotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00
2	2000.0	0.00	0.00	2000.0	0.0	0.0	0.00
3	2450.0	9.00	283.13	2448.2	8.0	-34.3	2.00
4	7987.3	9.00	283.13	7917.3	204.8	-877.9	0.00
5	8437.3	0.00	0.00	8365.5	212.8	-912.3	2.00
6	11387.4	0.00	0.00	11315.5	212.8	-912.3	0.00
7	11437.4	0.00	0.00	11365.5	212.8	-912.3	0.00
8	12187.4	90.00	359.37	11843.0	690.2	-917.6	12.00
9	22178.3	90.00	359.37	11843.0	10680.6	-1028.1	0.00

PROJECT DETAILS: Lea County, NM (NAD 83)

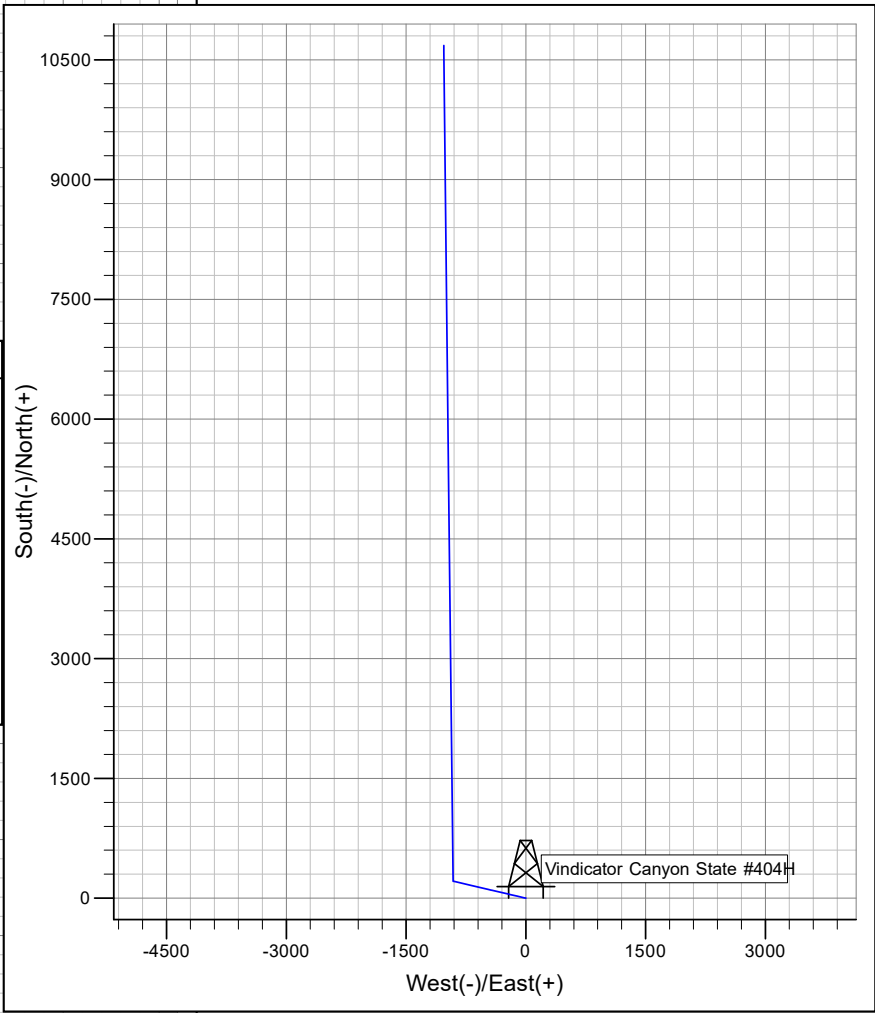
Geodetic System: US State Plane 1983

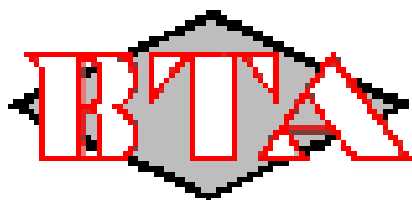
Datum: North American Datum 1983

Ellipsoid: GRS 1980

Zone: New Mexico Eastern Zone

System Datum: Ground Level





BTA Oil Producers, LLC

Lea County, NM (NAD 83)

Vindicator Canyon State

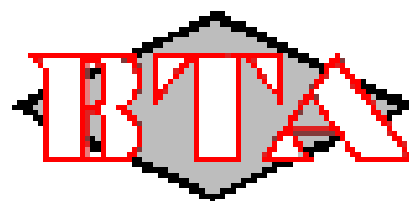
Vindicator Canyon State #404H

Wellbore #1

Plan: Design #1

Standard Planning Report - Geographic

30 November, 2023





Microsoft
Planning Report - Geographic



Database:	EDM16	Local Co-ordinate Reference:	Well Vindicator Canyon State #404H
Company:	BTA Oil Producers, LLC	TVD Reference:	NA @ 3857.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	NA @ 3857.0usft
Site:	Vindicator Canyon State	North Reference:	Grid
Well:	Vindicator Canyon State #404H	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 #404H					
Well Position	+N/-S	0.0 usft	Northing:	663,427.01 usft	Latitude:	32° 49' 11.886 N
	+E/-W	0.0 usft	Easting:	841,771.29 usft	Longitude:	103° 21' 19.336 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,858.0 usft
Grid Convergence:		0.53 °				

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	7.69	60.83	49,173.36184095

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	354.50

Plan Survey Tool Program	Date	11/30/2023		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	22,178.3 Design #1 (Wellbore #1)		



Microsoft
Planning Report - Geographic



Database:	EDM16	Local Co-ordinate Reference:	Well Vindicator Canyon State #404H
Company:	BTA Oil Producers, LLC	TVD Reference:	NA @ 3857.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	NA @ 3857.0usft
Site:	Vindicator Canyon State	North Reference:	Grid
Well:	Vindicator Canyon State #404H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,450.0	9.00	283.13	2,448.2	8.0	-34.3	2.00	2.00	0.00	283.13	
7,987.3	9.00	283.13	7,917.3	204.8	-877.9	0.00	0.00	0.00	0.00	
8,437.3	0.00	0.00	8,365.5	212.8	-912.3	2.00	-2.00	0.00	180.00	
11,387.4	0.00	0.00	11,315.5	212.8	-912.3	0.00	0.00	0.00	0.00	Vindicator Canyon State
11,437.4	0.00	0.00	11,365.5	212.8	-912.3	0.00	0.00	0.00	0.00	
12,187.4	90.00	359.37	11,843.0	690.2	-917.6	12.00	12.00	0.00	359.37	
22,178.3	90.00	359.37	11,843.0	10,680.6	-1,028.1	0.00	0.00	0.00	0.00	Vindicator Canyon State



Microsoft
Planning Report - Geographic



Database:	EDM16	Local Co-ordinate Reference:	Well Vindicator Canyon State #404H
Company:	BTA Oil Producers, LLC	TVD Reference:	NA @ 3857.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	NA @ 3857.0usft
Site:	Vindicator Canyon State	North Reference:	Grid
Well:	Vindicator Canyon State #404H	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	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
100.0	0.00	0.00	100.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
200.0	0.00	0.00	200.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
300.0	0.00	0.00	300.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
400.0	0.00	0.00	400.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
500.0	0.00	0.00	500.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
600.0	0.00	0.00	600.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
700.0	0.00	0.00	700.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
800.0	0.00	0.00	800.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
900.0	0.00	0.00	900.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
1,000.0	0.00	0.00	1,000.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
1,100.0	0.00	0.00	1,100.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
1,200.0	0.00	0.00	1,200.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
1,300.0	0.00	0.00	1,300.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
1,400.0	0.00	0.00	1,400.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
1,500.0	0.00	0.00	1,500.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
1,600.0	0.00	0.00	1,600.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
1,700.0	0.00	0.00	1,700.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
1,800.0	0.00	0.00	1,800.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
1,900.0	0.00	0.00	1,900.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
2,000.0	0.00	0.00	2,000.0	0.0	0.0	663,427.01	841,771.29	32° 49' 11.886 N	103° 21' 19.336 W
2,100.0	2.00	283.13	2,100.0	0.4	-1.7	663,427.41	841,769.59	32° 49' 11.890 N	103° 21' 19.356 W
2,200.0	4.00	283.13	2,199.8	1.6	-6.8	663,428.60	841,764.49	32° 49' 11.902 N	103° 21' 19.415 W
2,300.0	6.00	283.13	2,299.5	3.6	-15.3	663,430.58	841,756.01	32° 49' 11.923 N	103° 21' 19.514 W
2,400.0	8.00	283.13	2,398.7	6.3	-27.2	663,433.35	841,744.14	32° 49' 11.951 N	103° 21' 19.653 W
2,450.0	9.00	283.13	2,448.2	8.0	-34.3	663,435.03	841,736.94	32° 49' 11.969 N	103° 21' 19.737 W
2,500.0	9.00	283.13	2,497.5	9.8	-42.0	663,436.80	841,729.32	32° 49' 11.987 N	103° 21' 19.826 W
2,600.0	9.00	283.13	2,596.3	13.3	-57.2	663,440.36	841,714.09	32° 49' 12.023 N	103° 21' 20.005 W
2,700.0	9.00	283.13	2,695.1	16.9	-72.4	663,443.91	841,698.85	32° 49' 12.060 N	103° 21' 20.183 W
2,800.0	9.00	283.13	2,793.8	20.5	-87.7	663,447.47	841,683.62	32° 49' 12.097 N	103° 21' 20.361 W
2,900.0	9.00	283.13	2,892.6	24.0	-102.9	663,451.02	841,668.38	32° 49' 12.133 N	103° 21' 20.539 W
3,000.0	9.00	283.13	2,991.4	27.6	-118.1	663,454.57	841,653.15	32° 49' 12.170 N	103° 21' 20.717 W
3,100.0	9.00	283.13	3,090.1	31.1	-133.4	663,458.13	841,637.92	32° 49' 12.206 N	103° 21' 20.895 W
3,200.0	9.00	283.13	3,188.9	34.7	-148.6	663,461.68	841,622.68	32° 49' 12.243 N	103° 21' 21.073 W
3,300.0	9.00	283.13	3,287.7	38.2	-163.8	663,465.23	841,607.45	32° 49' 12.279 N	103° 21' 21.251 W
3,400.0	9.00	283.13	3,386.5	41.8	-179.1	663,468.79	841,592.21	32° 49' 12.316 N	103° 21' 21.430 W
3,500.0	9.00	283.13	3,485.2	45.3	-194.3	663,472.34	841,576.98	32° 49' 12.352 N	103° 21' 21.608 W
3,600.0	9.00	283.13	3,584.0	48.9	-209.5	663,475.90	841,561.74	32° 49' 12.389 N	103° 21' 21.786 W
3,700.0	9.00	283.13	3,682.8	52.4	-224.8	663,479.45	841,546.51	32° 49' 12.426 N	103° 21' 21.964 W
3,800.0	9.00	283.13	3,781.5	56.0	-240.0	663,483.00	841,531.27	32° 49' 12.462 N	103° 21' 22.142 W
3,900.0	9.00	283.13	3,880.3	59.5	-255.2	663,486.56	841,516.04	32° 49' 12.499 N	103° 21' 22.320 W
4,000.0	9.00	283.13	3,979.1	63.1	-270.5	663,490.11	841,500.80	32° 49' 12.535 N	103° 21' 22.498 W
4,100.0	9.00	283.13	4,077.8	66.6	-285.7	663,493.66	841,485.57	32° 49' 12.572 N	103° 21' 22.676 W
4,200.0	9.00	283.13	4,176.6	70.2	-301.0	663,497.22	841,470.33	32° 49' 12.608 N	103° 21' 22.855 W
4,300.0	9.00	283.13	4,275.4	73.8	-316.2	663,500.77	841,455.10	32° 49' 12.645 N	103° 21' 23.033 W
4,400.0	9.00	283.13	4,374.1	77.3	-331.4	663,504.33	841,439.86	32° 49' 12.681 N	103° 21' 23.211 W
4,500.0	9.00	283.13	4,472.9	80.9	-346.7	663,507.88	841,424.63	32° 49' 12.718 N	103° 21' 23.389 W
4,600.0	9.00	283.13	4,571.7	84.4	-361.9	663,511.43	841,409.40	32° 49' 12.755 N	103° 21' 23.567 W
4,700.0	9.00	283.13	4,670.5	88.0	-377.1	663,514.99	841,394.16	32° 49' 12.791 N	103° 21' 23.745 W
4,800.0	9.00	283.13	4,769.2	91.5	-392.4	663,518.54	841,378.93	32° 49' 12.828 N	103° 21' 23.923 W
4,900.0	9.00	283.13	4,868.0	95.1	-407.6	663,522.10	841,363.69	32° 49' 12.864 N	103° 21' 24.101 W
5,000.0	9.00	283.13	4,966.8	98.6	-422.8	663,525.65	841,348.46	32° 49' 12.901 N	103° 21' 24.279 W
5,100.0	9.00	283.13	5,065.5	102.2	-438.1	663,529.20	841,333.22	32° 49' 12.937 N	103° 21' 24.458 W
5,200.0	9.00	283.13	5,164.3	105.7	-453.3	663,532.76	841,317.99	32° 49' 12.974 N	103° 21' 24.636 W
5,300.0	9.00	283.13	5,263.1	109.3	-468.5	663,536.31	841,302.75	32° 49' 13.010 N	103° 21' 24.814 W



Microsoft
Planning Report - Geographic



Database:	EDM16	Local Co-ordinate Reference:	Well Vindicator Canyon State #404H
Company:	BTA Oil Producers, LLC	TVD Reference:	NA @ 3857.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	NA @ 3857.0usft
Site:	Vindicator Canyon State	North Reference:	Grid
Well:	Vindicator Canyon State #404H	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	
5,400.0	9.00	283.13	5,361.8	112.8	-483.8	663,539.86	841,287.52	32° 49' 13.047 N	103° 21' 24.992 W	
5,500.0	9.00	283.13	5,460.6	116.4	-499.0	663,543.42	841,272.28	32° 49' 13.083 N	103° 21' 25.170 W	
5,600.0	9.00	283.13	5,559.4	120.0	-514.2	663,546.97	841,257.05	32° 49' 13.120 N	103° 21' 25.348 W	
5,700.0	9.00	283.13	5,658.1	123.5	-529.5	663,550.53	841,241.81	32° 49' 13.157 N	103° 21' 25.526 W	
5,800.0	9.00	283.13	5,756.9	127.1	-544.7	663,554.08	841,226.58	32° 49' 13.193 N	103° 21' 25.704 W	
5,900.0	9.00	283.13	5,855.7	130.6	-559.9	663,557.63	841,211.35	32° 49' 13.230 N	103° 21' 25.883 W	
6,000.0	9.00	283.13	5,954.4	134.2	-575.2	663,561.19	841,196.11	32° 49' 13.266 N	103° 21' 26.061 W	
6,100.0	9.00	283.13	6,053.2	137.7	-590.4	663,564.74	841,180.88	32° 49' 13.303 N	103° 21' 26.239 W	
6,200.0	9.00	283.13	6,152.0	141.3	-605.6	663,568.29	841,165.64	32° 49' 13.339 N	103° 21' 26.417 W	
6,300.0	9.00	283.13	6,250.8	144.8	-620.9	663,571.85	841,150.41	32° 49' 13.376 N	103° 21' 26.595 W	
6,400.0	9.00	283.13	6,349.5	148.4	-636.1	663,575.40	841,135.17	32° 49' 13.412 N	103° 21' 26.773 W	
6,500.0	9.00	283.13	6,448.3	151.9	-651.3	663,578.96	841,119.94	32° 49' 13.449 N	103° 21' 26.951 W	
6,600.0	9.00	283.13	6,547.1	155.5	-666.6	663,582.51	841,104.70	32° 49' 13.486 N	103° 21' 27.129 W	
6,700.0	9.00	283.13	6,645.8	159.0	-681.8	663,586.06	841,089.47	32° 49' 13.522 N	103° 21' 27.308 W	
6,800.0	9.00	283.13	6,744.6	162.6	-697.0	663,589.62	841,074.23	32° 49' 13.559 N	103° 21' 27.486 W	
6,900.0	9.00	283.13	6,843.4	166.2	-712.3	663,593.17	841,059.00	32° 49' 13.595 N	103° 21' 27.664 W	
7,000.0	9.00	283.13	6,942.1	169.7	-727.5	663,596.72	841,043.76	32° 49' 13.632 N	103° 21' 27.842 W	
7,100.0	9.00	283.13	7,040.9	173.3	-742.7	663,600.28	841,028.53	32° 49' 13.668 N	103° 21' 28.020 W	
7,200.0	9.00	283.13	7,139.7	176.8	-758.0	663,603.83	841,013.30	32° 49' 13.705 N	103° 21' 28.198 W	
7,300.0	9.00	283.13	7,238.4	180.4	-773.2	663,607.39	840,998.06	32° 49' 13.741 N	103° 21' 28.376 W	
7,400.0	9.00	283.13	7,337.2	183.9	-788.5	663,610.94	840,982.83	32° 49' 13.778 N	103° 21' 28.554 W	
7,500.0	9.00	283.13	7,436.0	187.5	-803.7	663,614.49	840,967.59	32° 49' 13.815 N	103° 21' 28.733 W	
7,600.0	9.00	283.13	7,534.7	191.0	-818.9	663,618.05	840,952.36	32° 49' 13.851 N	103° 21' 28.911 W	
7,700.0	9.00	283.13	7,633.5	194.6	-834.2	663,621.60	840,937.12	32° 49' 13.888 N	103° 21' 29.089 W	
7,800.0	9.00	283.13	7,732.3	198.1	-849.4	663,625.15	840,921.89	32° 49' 13.924 N	103° 21' 29.267 W	
7,900.0	9.00	283.13	7,831.1	201.7	-864.6	663,628.71	840,906.65	32° 49' 13.961 N	103° 21' 29.445 W	
7,987.3	9.00	283.13	7,917.3	204.8	-877.9	663,631.81	840,893.35	32° 49' 13.993 N	103° 21' 29.601 W	
8,000.0	8.75	283.13	7,929.8	205.2	-879.8	663,632.26	840,891.44	32° 49' 13.997 N	103° 21' 29.623 W	
8,100.0	6.75	283.13	8,028.9	208.3	-893.0	663,635.32	840,878.32	32° 49' 14.029 N	103° 21' 29.776 W	
8,200.0	4.75	283.13	8,128.4	210.6	-902.7	663,637.59	840,868.57	32° 49' 14.052 N	103° 21' 29.890 W	
8,300.0	2.75	283.13	8,228.2	212.1	-909.1	663,639.08	840,862.20	32° 49' 14.067 N	103° 21' 29.965 W	
8,400.0	0.75	283.13	8,328.1	212.8	-912.0	663,639.77	840,859.24	32° 49' 14.074 N	103° 21' 29.999 W	
8,437.3	0.00	0.00	8,365.5	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
8,500.0	0.00	0.00	8,428.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
8,600.0	0.00	0.00	8,528.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
8,700.0	0.00	0.00	8,628.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
8,800.0	0.00	0.00	8,728.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
8,900.0	0.00	0.00	8,828.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
9,000.0	0.00	0.00	8,928.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
9,100.0	0.00	0.00	9,028.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
9,200.0	0.00	0.00	9,128.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
9,300.0	0.00	0.00	9,228.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
9,400.0	0.00	0.00	9,328.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
9,500.0	0.00	0.00	9,428.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
9,600.0	0.00	0.00	9,528.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
9,700.0	0.00	0.00	9,628.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
9,800.0	0.00	0.00	9,728.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
9,900.0	0.00	0.00	9,828.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
10,000.0	0.00	0.00	9,928.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
10,100.0	0.00	0.00	10,028.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
10,200.0	0.00	0.00	10,128.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
10,300.0	0.00	0.00	10,228.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
10,400.0	0.00	0.00	10,328.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
10,500.0	0.00	0.00	10,428.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
10,600.0	0.00	0.00	10,528.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	



Microsoft
Planning Report - Geographic



Database:	EDM16	Local Co-ordinate Reference:	Well Vindicator Canyon State #404H
Company:	BTA Oil Producers, LLC	TVD Reference:	NA @ 3857.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	NA @ 3857.0usft
Site:	Vindicator Canyon State	North Reference:	Grid
Well:	Vindicator Canyon State #404H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
10,700.0	0.00	0.00	10,628.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
10,800.0	0.00	0.00	10,728.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
10,900.0	0.00	0.00	10,828.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
11,000.0	0.00	0.00	10,928.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
11,100.0	0.00	0.00	11,028.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
11,200.0	0.00	0.00	11,128.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
11,300.0	0.00	0.00	11,228.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
11,387.4	0.00	0.00	11,315.5	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
11,400.0	0.00	0.00	11,328.1	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
11,437.4	0.00	0.00	11,365.5	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
11,500.0	7.51	359.37	11,428.0	216.9	-912.3	663,643.92	840,858.95	32° 49' 14.116 N	103° 21' 30.002 W	
11,600.0	19.51	359.37	11,525.0	240.2	-912.6	663,667.24	840,858.70	32° 49' 14.346 N	103° 21' 30.003 W	
11,700.0	31.51	359.37	11,615.1	283.2	-913.1	663,710.23	840,858.22	32° 49' 14.772 N	103° 21' 30.004 W	
11,800.0	43.51	359.37	11,694.3	344.0	-913.7	663,771.01	840,857.55	32° 49' 15.373 N	103° 21' 30.005 W	
11,900.0	55.51	359.37	11,759.1	419.9	-914.6	663,846.92	840,856.71	32° 49' 16.124 N	103° 21' 30.007 W	
12,000.0	67.51	359.37	11,806.7	507.6	-915.5	663,934.64	840,855.74	32° 49' 16.992 N	103° 21' 30.009 W	
12,100.0	79.51	359.37	11,835.0	603.3	-916.6	664,030.35	840,854.68	32° 49' 17.939 N	103° 21' 30.011 W	
12,187.4	90.00	359.37	11,843.0	690.2	-917.6	664,117.27	840,853.72	32° 49' 18.799 N	103° 21' 30.013 W	
12,200.0	90.00	359.37	11,843.0	702.8	-917.7	664,129.86	840,853.58	32° 49' 18.924 N	103° 21' 30.013 W	
12,300.0	90.00	359.37	11,843.0	802.8	-918.8	664,229.86	840,852.47	32° 49' 19.913 N	103° 21' 30.015 W	
12,400.0	90.00	359.37	11,843.0	902.8	-919.9	664,329.85	840,851.36	32° 49' 20.903 N	103° 21' 30.017 W	
12,500.0	90.00	359.37	11,843.0	1,002.8	-921.0	664,429.85	840,850.26	32° 49' 21.892 N	103° 21' 30.019 W	
12,600.0	90.00	359.37	11,843.0	1,102.8	-922.1	664,529.84	840,849.15	32° 49' 22.881 N	103° 21' 30.021 W	
12,700.0	90.00	359.37	11,843.0	1,202.8	-923.2	664,629.84	840,848.04	32° 49' 23.871 N	103° 21' 30.024 W	
12,800.0	90.00	359.37	11,843.0	1,302.8	-924.3	664,729.83	840,846.94	32° 49' 24.860 N	103° 21' 30.026 W	
12,900.0	90.00	359.37	11,843.0	1,402.8	-925.4	664,829.83	840,845.83	32° 49' 25.850 N	103° 21' 30.028 W	
13,000.0	90.00	359.37	11,843.0	1,502.8	-926.6	664,929.82	840,844.72	32° 49' 26.839 N	103° 21' 30.030 W	
13,100.0	90.00	359.37	11,843.0	1,602.8	-927.7	665,029.82	840,843.62	32° 49' 27.829 N	103° 21' 30.032 W	
13,200.0	90.00	359.37	11,843.0	1,702.8	-928.8	665,129.81	840,842.51	32° 49' 28.818 N	103° 21' 30.034 W	
13,300.0	90.00	359.37	11,843.0	1,802.8	-929.9	665,229.81	840,841.40	32° 49' 29.807 N	103° 21' 30.037 W	
13,400.0	90.00	359.37	11,843.0	1,902.8	-931.0	665,329.80	840,840.30	32° 49' 30.797 N	103° 21' 30.039 W	
13,500.0	90.00	359.37	11,843.0	2,002.8	-932.1	665,429.80	840,839.19	32° 49' 31.786 N	103° 21' 30.041 W	
13,600.0	90.00	359.37	11,843.0	2,102.8	-933.2	665,529.79	840,838.08	32° 49' 32.776 N	103° 21' 30.043 W	
13,700.0	90.00	359.37	11,843.0	2,202.7	-934.3	665,629.79	840,836.98	32° 49' 33.765 N	103° 21' 30.045 W	
13,800.0	90.00	359.37	11,843.0	2,302.7	-935.4	665,729.78	840,835.87	32° 49' 34.755 N	103° 21' 30.047 W	
13,900.0	90.00	359.37	11,843.0	2,402.7	-936.5	665,829.78	840,834.76	32° 49' 35.744 N	103° 21' 30.049 W	
14,000.0	90.00	359.37	11,843.0	2,502.7	-937.6	665,929.77	840,833.66	32° 49' 36.733 N	103° 21' 30.052 W	
14,100.0	90.00	359.37	11,843.0	2,602.7	-938.7	666,029.77	840,832.55	32° 49' 37.723 N	103° 21' 30.054 W	
14,200.0	90.00	359.37	11,843.0	2,702.7	-939.8	666,129.76	840,831.44	32° 49' 38.712 N	103° 21' 30.056 W	
14,300.0	90.00	359.37	11,843.0	2,802.7	-940.9	666,229.76	840,830.34	32° 49' 39.702 N	103° 21' 30.058 W	
14,400.0	90.00	359.37	11,843.0	2,902.7	-942.0	666,329.75	840,829.23	32° 49' 40.691 N	103° 21' 30.060 W	
14,500.0	90.00	359.37	11,843.0	3,002.7	-943.2	666,429.75	840,828.12	32° 49' 41.680 N	103° 21' 30.062 W	
14,600.0	90.00	359.37	11,843.0	3,102.7	-944.3	666,529.74	840,827.02	32° 49' 42.670 N	103° 21' 30.065 W	
14,700.0	90.00	359.37	11,843.0	3,202.7	-945.4	666,629.74	840,825.91	32° 49' 43.659 N	103° 21' 30.067 W	
14,800.0	90.00	359.37	11,843.0	3,302.7	-946.5	666,729.73	840,824.81	32° 49' 44.649 N	103° 21' 30.069 W	
14,900.0	90.00	359.37	11,843.0	3,402.7	-947.6	666,829.73	840,823.70	32° 49' 45.638 N	103° 21' 30.071 W	
15,000.0	90.00	359.37	11,843.0	3,502.7	-948.7	666,929.72	840,822.59	32° 49' 46.628 N	103° 21' 30.073 W	
15,100.0	90.00	359.37	11,843.0	3,602.7	-949.8	667,029.72	840,821.49	32° 49' 47.617 N	103° 21' 30.075 W	
15,200.0	90.00	359.37	11,843.0	3,702.7	-950.9	667,129.71	840,820.38	32° 49' 48.606 N	103° 21' 30.077 W	
15,300.0	90.00	359.37	11,843.0	3,802.6	-952.0	667,229.71	840,819.27	32° 49' 49.596 N	103° 21' 30.080 W	
15,400.0	90.00	359.37	11,843.0	3,902.6	-953.1	667,329.70	840,818.17	32° 49' 50.585 N	103° 21' 30.082 W	
15,500.0	90.00	359.37	11,843.0	4,002.6	-954.2	667,429.70	840,817.06	32° 49' 51.575 N	103° 21' 30.084 W	
15,600.0	90.00	359.37	11,843.0	4,102.6	-955.3	667,529.69	840,815.95	32° 49' 52.564 N	103° 21' 30.086 W	
15,700.0	90.00	359.37	11,843.0	4,202.6	-956.4	667,629.69	840,814.85	32° 49' 53.554 N	103° 21' 30.088 W	
15,800.0	90.00	359.37	11,843.0	4,302.6	-957.5	667,729.68	840,813.74	32° 49' 54.543 N	103° 21' 30.090 W	



Microsoft
Planning Report - Geographic



Database:	EDM16	Local Co-ordinate Reference:	Well Vindicator Canyon State #404H
Company:	BTA Oil Producers, LLC	TVD Reference:	NA @ 3857.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	NA @ 3857.0usft
Site:	Vindicator Canyon State	North Reference:	Grid
Well:	Vindicator Canyon State #404H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
15,900.0	90.00	359.37	11,843.0	4,402.6	-958.6	667,829.68	840,812.63	32° 49' 55.532 N	103° 21' 30.093 W	
16,000.0	90.00	359.37	11,843.0	4,502.6	-959.8	667,929.68	840,811.53	32° 49' 56.522 N	103° 21' 30.095 W	
16,100.0	90.00	359.37	11,843.0	4,602.6	-960.9	668,029.67	840,810.42	32° 49' 57.511 N	103° 21' 30.097 W	
16,200.0	90.00	359.37	11,843.0	4,702.6	-962.0	668,129.67	840,809.31	32° 49' 58.501 N	103° 21' 30.099 W	
16,300.0	90.00	359.37	11,843.0	4,802.6	-963.1	668,229.66	840,808.21	32° 49' 59.490 N	103° 21' 30.101 W	
16,400.0	90.00	359.37	11,843.0	4,902.6	-964.2	668,329.66	840,807.10	32° 50' 0.479 N	103° 21' 30.103 W	
16,500.0	90.00	359.37	11,843.0	5,002.6	-965.3	668,429.65	840,805.99	32° 50' 1.469 N	103° 21' 30.106 W	
16,600.0	90.00	359.37	11,843.0	5,102.6	-966.4	668,529.65	840,804.89	32° 50' 2.458 N	103° 21' 30.108 W	
16,700.0	90.00	359.37	11,843.0	5,202.6	-967.5	668,629.64	840,803.78	32° 50' 3.448 N	103° 21' 30.110 W	
16,800.0	90.00	359.37	11,843.0	5,302.6	-968.6	668,729.64	840,802.67	32° 50' 4.437 N	103° 21' 30.112 W	
16,900.0	90.00	359.37	11,843.0	5,402.5	-969.7	668,829.63	840,801.57	32° 50' 5.427 N	103° 21' 30.114 W	
17,000.0	90.00	359.37	11,843.0	5,502.5	-970.8	668,929.63	840,800.46	32° 50' 6.416 N	103° 21' 30.116 W	
17,100.0	90.00	359.37	11,843.0	5,602.5	-971.9	669,029.62	840,799.35	32° 50' 7.405 N	103° 21' 30.118 W	
17,200.0	90.00	359.37	11,843.0	5,702.5	-973.0	669,129.62	840,798.25	32° 50' 8.395 N	103° 21' 30.121 W	
17,300.0	90.00	359.37	11,843.0	5,802.5	-974.1	669,229.61	840,797.14	32° 50' 9.384 N	103° 21' 30.123 W	
17,400.0	90.00	359.37	11,843.0	5,902.5	-975.2	669,329.61	840,796.03	32° 50' 10.374 N	103° 21' 30.125 W	
17,500.0	90.00	359.37	11,843.0	6,002.5	-976.3	669,429.60	840,794.93	32° 50' 11.363 N	103° 21' 30.127 W	
17,600.0	90.00	359.37	11,843.0	6,102.5	-977.5	669,529.60	840,793.82	32° 50' 12.352 N	103° 21' 30.129 W	
17,700.0	90.00	359.37	11,843.0	6,202.5	-978.6	669,629.59	840,792.71	32° 50' 13.342 N	103° 21' 30.131 W	
17,800.0	90.00	359.37	11,843.0	6,302.5	-979.7	669,729.59	840,791.61	32° 50' 14.331 N	103° 21' 30.134 W	
17,900.0	90.00	359.37	11,843.0	6,402.5	-980.8	669,829.58	840,790.50	32° 50' 15.321 N	103° 21' 30.136 W	
18,000.0	90.00	359.37	11,843.0	6,502.5	-981.9	669,929.58	840,789.39	32° 50' 16.310 N	103° 21' 30.138 W	
18,100.0	90.00	359.37	11,843.0	6,602.5	-983.0	670,029.57	840,788.29	32° 50' 17.300 N	103° 21' 30.140 W	
18,200.0	90.00	359.37	11,843.0	6,702.5	-984.1	670,129.57	840,787.18	32° 50' 18.289 N	103° 21' 30.142 W	
18,300.0	90.00	359.37	11,843.0	6,802.5	-985.2	670,229.56	840,786.08	32° 50' 19.278 N	103° 21' 30.144 W	
18,400.0	90.00	359.37	11,843.0	6,902.5	-986.3	670,329.56	840,784.97	32° 50' 20.268 N	103° 21' 30.146 W	
18,500.0	90.00	359.37	11,843.0	7,002.5	-987.4	670,429.55	840,783.86	32° 50' 21.257 N	103° 21' 30.149 W	
18,600.0	90.00	359.37	11,843.0	7,102.4	-988.5	670,529.55	840,782.76	32° 50' 22.247 N	103° 21' 30.151 W	
18,700.0	90.00	359.37	11,843.0	7,202.4	-989.6	670,629.54	840,781.65	32° 50' 23.236 N	103° 21' 30.153 W	
18,800.0	90.00	359.37	11,843.0	7,302.4	-990.7	670,729.54	840,780.54	32° 50' 24.226 N	103° 21' 30.155 W	
18,900.0	90.00	359.37	11,843.0	7,402.4	-991.8	670,829.53	840,779.44	32° 50' 25.215 N	103° 21' 30.157 W	
19,000.0	90.00	359.37	11,843.0	7,502.4	-992.9	670,929.53	840,778.33	32° 50' 26.204 N	103° 21' 30.159 W	
19,100.0	90.00	359.37	11,843.0	7,602.4	-994.1	671,029.52	840,777.22	32° 50' 27.194 N	103° 21' 30.162 W	
19,200.0	90.00	359.37	11,843.0	7,702.4	-995.2	671,129.51	840,776.12	32° 50' 28.183 N	103° 21' 30.164 W	
19,300.0	90.00	359.37	11,843.0	7,802.4	-996.3	671,229.50	840,775.01	32° 50' 29.173 N	103° 21' 30.166 W	
19,400.0	90.00	359.37	11,843.0	7,902.4	-997.4	671,329.50	840,773.90	32° 50' 30.162 N	103° 21' 30.168 W	
19,500.0	90.00	359.37	11,843.0	8,002.4	-998.5	671,429.49	840,772.80	32° 50' 31.151 N	103° 21' 30.170 W	
19,600.0	90.00	359.37	11,843.0	8,102.4	-999.6	671,529.49	840,771.69	32° 50' 32.141 N	103° 21' 30.172 W	
19,700.0	90.00	359.37	11,843.0	8,202.4	-1,000.7	671,629.48	840,770.58	32° 50' 33.130 N	103° 21' 30.174 W	
19,800.0	90.00	359.37	11,843.0	8,302.4	-1,001.8	671,729.48	840,769.48	32° 50' 34.120 N	103° 21' 30.177 W	
19,900.0	90.00	359.37	11,843.0	8,402.4	-1,002.9	671,829.47	840,768.37	32° 50' 35.109 N	103° 21' 30.179 W	
20,000.0	90.00	359.37	11,843.0	8,502.4	-1,004.0	671,929.47	840,767.26	32° 50' 36.099 N	103° 21' 30.181 W	
20,100.0	90.00	359.37	11,843.0	8,602.4	-1,005.1	672,029.47	840,766.16	32° 50' 37.088 N	103° 21' 30.183 W	
20,200.0	90.00	359.37	11,843.0	8,702.3	-1,006.2	672,129.46	840,765.05	32° 50' 38.077 N	103° 21' 30.185 W	
20,300.0	90.00	359.37	11,843.0	8,802.3	-1,007.3	672,229.46	840,763.94	32° 50' 39.067 N	103° 21' 30.187 W	
20,400.0	90.00	359.37	11,843.0	8,902.3	-1,008.4	672,329.45	840,762.84	32° 50' 40.056 N	103° 21' 30.190 W	
20,500.0	90.00	359.37	11,843.0	9,002.3	-1,009.5	672,429.45	840,761.73	32° 50' 41.046 N	103° 21' 30.192 W	
20,600.0	90.00	359.37	11,843.0	9,102.3	-1,010.7	672,529.44	840,760.62	32° 50' 42.035 N	103° 21' 30.194 W	
20,700.0	90.00	359.37	11,843.0	9,202.3	-1,011.8	672,629.44	840,759.52	32° 50' 43.024 N	103° 21' 30.196 W	
20,800.0	90.00	359.37	11,843.0	9,302.3	-1,012.9	672,729.43	840,758.41	32° 50' 44.014 N	103° 21' 30.198 W	
20,900.0	90.00	359.37	11,843.0	9,402.3	-1,014.0	672,829.43	840,757.30	32° 50' 45.003 N	103° 21' 30.200 W	
21,000.0	90.00	359.37	11,843.0	9,502.3	-1,015.1	672,929.42	840,756.20	32° 50' 45.993 N	103° 21' 30.202 W	
21,100.0	90.00	359.37	11,843.0	9,602.3	-1,016.2	673,029.42	840,755.09	32° 50' 46.982 N	103° 21' 30.205 W	
21,200.0	90.00	359.37	11,843.0	9,702.3	-1,017.3	673,129.41	840,753.98	32° 50' 47.972 N	103° 21' 30.207 W	
21,300.0	90.00	359.37	11,843.0	9,802.3	-1,018.4	673,229.41	840,752.88	32° 50' 48.961 N	103° 21' 30.209 W	



Microsoft
Planning Report - Geographic



Database:	EDM16	Local Co-ordinate Reference:	Well Vindicator Canyon State #404H
Company:	BTA Oil Producers, LLC	TVD Reference:	NA @ 3857.0usft
Project:	Lea County, NM (NAD 83)	MD Reference:	NA @ 3857.0usft
Site:	Vindicator Canyon State	North Reference:	Grid
Well:	Vindicator Canyon State #404H	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	
21,400.0	90.00	359.37	11,843.0	9,902.3	-1,019.5	673,329.40	840,751.77	32° 50' 49.950 N	103° 21' 30.211 W	
21,500.0	90.00	359.37	11,843.0	10,002.3	-1,020.6	673,429.40	840,750.66	32° 50' 50.940 N	103° 21' 30.213 W	
21,600.0	90.00	359.37	11,843.0	10,102.3	-1,021.7	673,529.39	840,749.56	32° 50' 51.929 N	103° 21' 30.215 W	
21,700.0	90.00	359.37	11,843.0	10,202.3	-1,022.8	673,629.39	840,748.45	32° 50' 52.919 N	103° 21' 30.217 W	
21,800.0	90.00	359.37	11,843.0	10,302.2	-1,023.9	673,729.38	840,747.35	32° 50' 53.908 N	103° 21' 30.220 W	
21,900.0	90.00	359.37	11,843.0	10,402.2	-1,025.0	673,829.38	840,746.24	32° 50' 54.897 N	103° 21' 30.222 W	
22,000.0	90.00	359.37	11,843.0	10,502.2	-1,026.1	673,929.37	840,745.13	32° 50' 55.887 N	103° 21' 30.224 W	
22,100.0	90.00	359.37	11,843.0	10,602.2	-1,027.3	674,029.37	840,744.03	32° 50' 56.876 N	103° 21' 30.226 W	
22,178.3	90.00	359.37	11,843.0	10,680.6	-1,028.1	674,107.70	840,743.16	32° 50' 57.651 N	103° 21' 30.228 W	

Design Targets										
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Vindicator Canyon State - plan hits target center - Point	0.00	0.00	11,315.5	212.8	-912.3	663,639.82	840,859.00	32° 49' 14.075 N	103° 21' 30.002 W	
Vindicator Canyon State - plan hits target center - Point	0.00	0.00	11,843.0	10,680.6	-1,028.1	674,107.70	840,743.16	32° 50' 57.651 N	103° 21' 30.228 W	

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

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

CONDITIONS

Action 289984

CONDITIONS

Operator: BTA OIL PRODUCERS, LLC 104 S Pecos Midland, TX 79701	OGRID: 260297
	Action Number: 289984
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	1/2/2024