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 427774

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

1. Operator Name and Address	2. OGRID Number
Avant Operating II, LLC 1515 Wynkoop Street Denver, CO 80202	332947
	3. API Number 30-025-57118

4. Property Code	5. Property Name	6. Well No.
339703	POSSE EAST 24 25 STATE COM	821H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
K	24	17S	35E	K	2501	S	2000	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
M	25	17S	35E	M	100	S	907	W	Lea

9. Pool Information

VACUUM;CISCO-CANYON, NORTHEAST	97202

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	3911
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	19128	Cisco		3/1/2027
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	14.75	11.75	42	1863	760	0
Int1	10.625	8.625	32	10919	2065	0
Prod	7.875	5.5	20	19128	1970	0

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Pipe	10000	5000	CAMERON

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I hereby certify that no additives containing PFAS chemicals will be added to the completion or recompletion of this well.
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 Sarah Ferreyros	Approved By:	Jeffrey Harrison
Title:	Director of Regulatory	Title:	Petroleum Specialist III
Email Address:	sarah@avantnr.com	Approved Date:	11/23/2026 Expiration Date: 11/23/2028
Date:	10/27/2026 Phone: 720-854-9020	Conditions of Approval Attached	

C-102	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
Submit Electronically Via OCD Permitting		Submittal Type: ☒ Initial Submittal ☐ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-025-57118	97202	VACUUM; CISCO-CANYON, NORTHEAST

Property Code	Property Name	Well Number
339703	POSSE EAST 24 25 STATE COM	#821H

OGRID No.	Operator Name	Ground Level Elevation
332947	AVANT OPERATING II, LLC	3911'

Surface Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal | Mineral Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
K	24	17S	35E		2501' FSL	2000' FWL	32.819844°	-103.413152°	LEA

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	25	17S	35E		100' FSL	907' FWL	32.798722°	-103.416655°	LEA

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
960.00	Infill	Posse East 835H	N	C,F

Order Numbers. Pending | Well setbacks are under Common Ownership: ☐Yes ☒No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
K	24	17S	35E		2501' FSL	2000' FWL	32.819844°	-103.413152°	LEA

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
L	24	17S	35E		2552' FSL	907' FWL	32.819992°	-103.416710°	LEA

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	25	17S	35E		100' FSL	907' FWL	32.798722°	-103.416655°	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation:
Y, CA Pending		3938' DF

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.

10/21/2026

Signature	Date
Sarah Ferreyros	

Printed Name	
Sarah@avantnr.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.

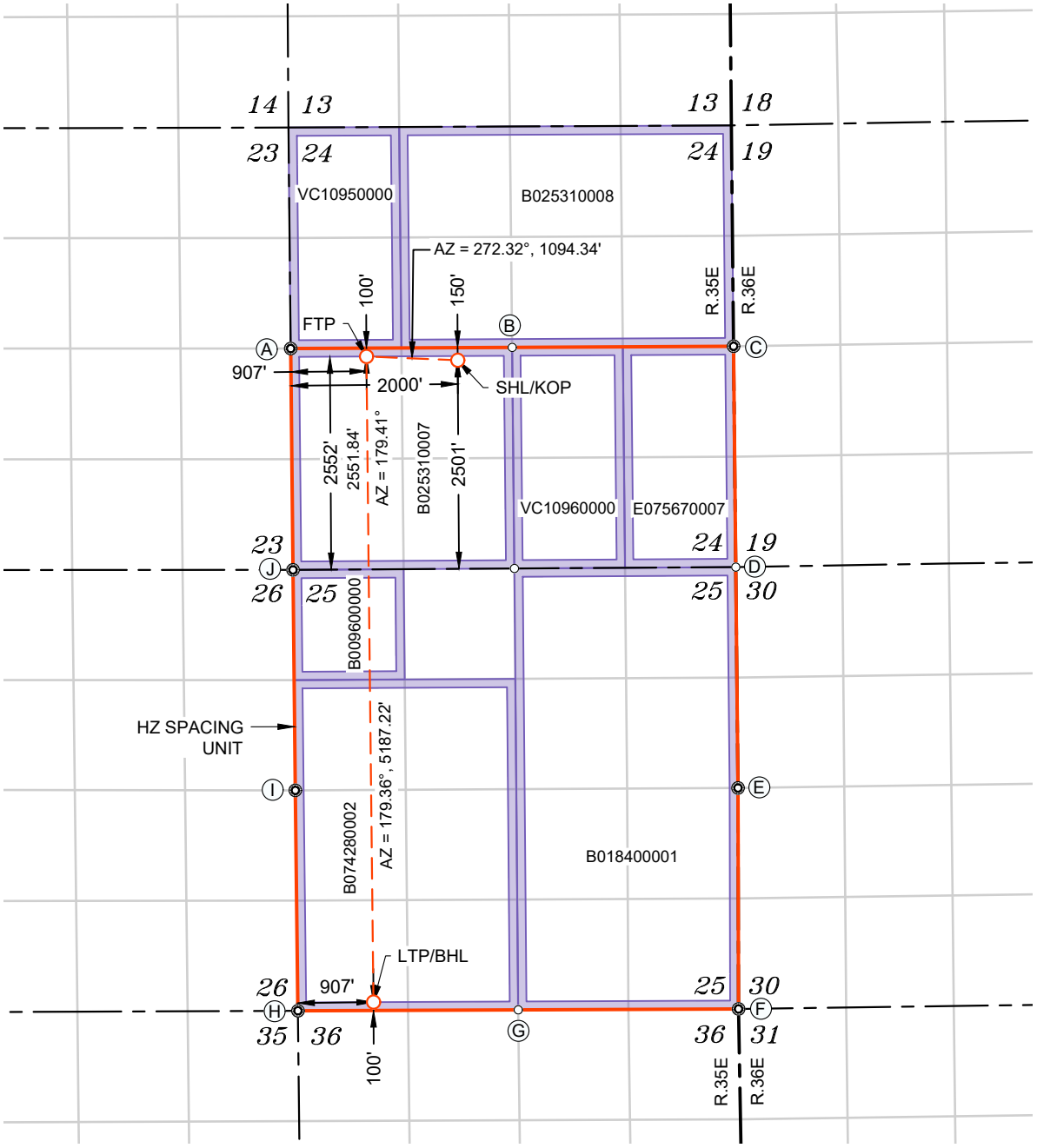
TIM C. PAPPAS NEW MEXICO 21209 PROFESSIONAL SURVEYOR

25 August 2026

Signature and Seal of Professional Surveyor	
21209	JULY 15, 2026

Certificate Number	Date of Survey

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.



N

LEASE UNIT COORDINATES	
P.I.	NM NAD 83 N/E
A	Y:663362.10 X:822018.93
B	Y:663375.80 X:824672.71
C	Y:663389.50 X:827325.76
D	Y:660742.38 X:827352.46
E	Y:658095.26 X:827379.15
F	Y:655446.23 X:827385.51
G	Y:655435.34 X:824745.39
H	Y:655424.45 X:822105.27
I	Y:658066.28 X:822074.03
J	Y:660709.46 X:822046.42

LEASE UNIT COORDINATES	
P.I.	NM NAD 27 N/E
A	Y:663297.63 X:780840.15
B	Y:663311.42 X:783493.92
C	Y:663325.21 X:786146.96
D	Y:660678.15 X:786173.58
E	Y:658031.09 X:786200.21
F	Y:655382.12 X:786206.49
G	Y:655371.13 X:783566.38
H	Y:655360.15 X:780926.27
I	Y:658001.92 X:780895.10
J	Y:660645.04 X:780867.56

WELL NAME: POSSE EAST 24 25 STATE COM #821H ELEVATION: 3911'

(SHL/KOP) 2501' FSL & 2000' FWL
NEW MEXICO EAST - NAD 83
X=824020.40 LAT.= 32.819844°
Y=663222.43 LONG.= -103.413152°
NEW MEXICO EAST - NAD 27
X=782841.61 LAT.= 32.819723°
Y=663158.03 LONG.= -103.412657°

(FTP) 2552' FSL & 907' FWL
NEW MEXICO EAST - NAD 83
X=822926.97 LAT.= 32.819992°
Y=663266.79 LONG.= -103.416710°
NEW MEXICO EAST - NAD 27
X=781748.18 LAT.= 32.819871°
Y=663202.35 LONG.= -103.416215°

(LTP/BHL) 100' FSL & 907' FWL
NEW MEXICO EAST - NAD 83
X=823011.10 LAT.= 32.798722°
Y=655528.19 LONG.= -103.416655°
NEW MEXICO EAST - NAD 27
X=781832.10 LAT.= 32.798601°
Y=655463.91 LONG.= -103.416160°

APPROXIMATE WELL BORE DISTANCE FROM FTP TO LTP	
B025310007	2551.84'
B009600000	1322.00'
B074280002	3865.22'
TOTAL	7739.06'

LEGEND

SHL / KOP / FTP / PPP / LTP / BHL — CALCULATED POINT — FOUND MONUMENT — SET MONUMENT — FOUND FENCE POST — BLM OIL & GAS LEASE
WELL BORE — HORIZONTAL SPACING UNIT — SECTION BOUNDARY — TOWNSHIP BOUNDARY — STATE OIL & GAS LEASE

DATAPOINT
ENGINEERING • LAND SURVEYING • GIS • UAS

12400 Network Blvd. - Suite 130
San Antonio, TX 78249
Phone: 726-777-4240

0' 1000' 2000'
SCALE: 1"=2000'

DRAWN BY: JW | DATE : 07/15/2026 | REV. 0
CHECKED BY: JH | DATE : 07/15/2026
PROJECT # 26-05-6728 | SHEET 2 OF 2

Posse East 24 25 State Com Development\PLATS\FED PACKET\C102\POSSE EAST 24 25 STATE COM #821H\20260715\NM-POSSE EAST 24 25 STATE COM #821H C102.dwg

Sante Fe Main Office
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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 427774

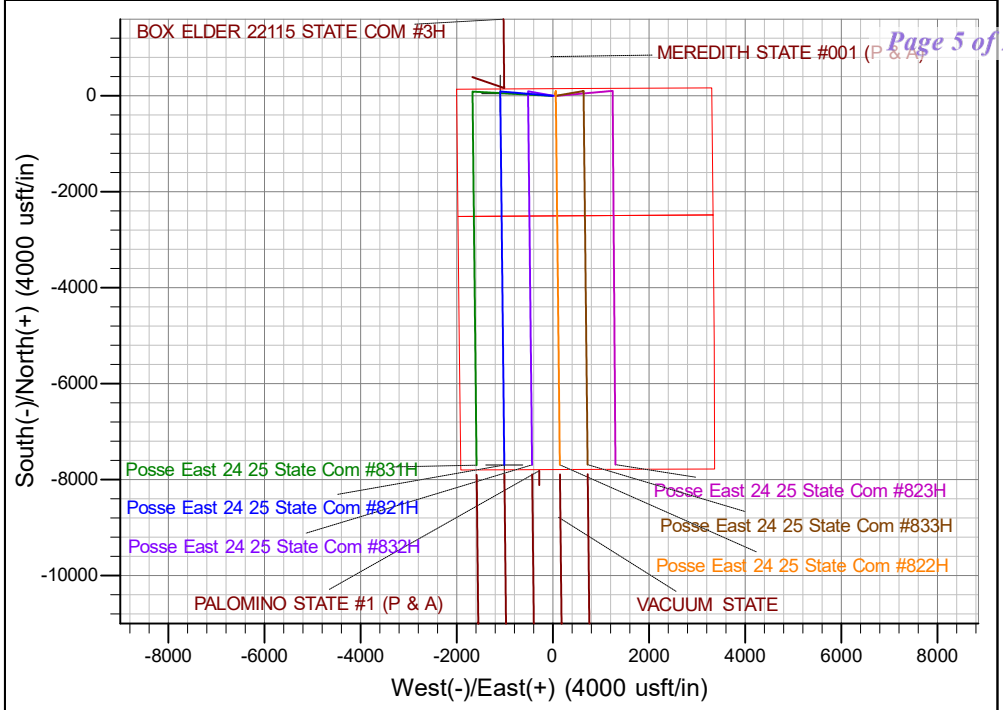
PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
Avant Operating II, LLC [332947] 1515 Wynkoop Street Denver, CO 80202	30-025-57118
	Well: POSSE EAST 24 25 STATE COM #821H

OCD Reviewer	Condition
jeffrey.harrison	File As Drilled C-102 and a directional Survey with C-104 completion packet.
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	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	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.
jeffrey.harrison	Cement is required to circulate on both surface and intermediate1 strings of casing.
jeffrey.harrison	If the method of isolation was not by circulation, a CBL must be performed; if strata isolation is not achieved, then remediation will be required before further operations.
jeffrey.harrison	NSP required prior to production IF not included in an existing order OR not an infill to an appropriate defining well in the same pool and spacing unit.
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	If a DV tool is used, once the DV tool is opened and circulation is established, it needs to be noted if cement is circulated off of the top of the DV tool and how much.
jeffrey.harrison	If cement is not circulated off of the top of the DV tool, then a CBL will be required. Depending upon the results of the CBL, remedial action may be required prior to drilling operations continuing.
jeffrey.harrison	Cement must be in place for at least 8 hours AND achieve a minimum compressive strength of 500 psi before performing further operations on the well.
jeffrey.harrison	No additives containing PFAS chemicals will be added to the drilling fluids or completion fluids used during drilling, completions, or recompletions operations.
jeffrey.harrison	All logs run on the well must be submitted to NMOCD.

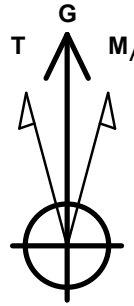
WELL DETAILS: Posse East 24 25 State Com #821H					
Ground Elev: 3911.0 KB: 3937.5					
+N/-S	+E/-W	Northing	Easting	Latittude	Longitude
0.0	0.0	663222.43	824020.40	32.819844	-103.413152

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:	Mean Sea Level



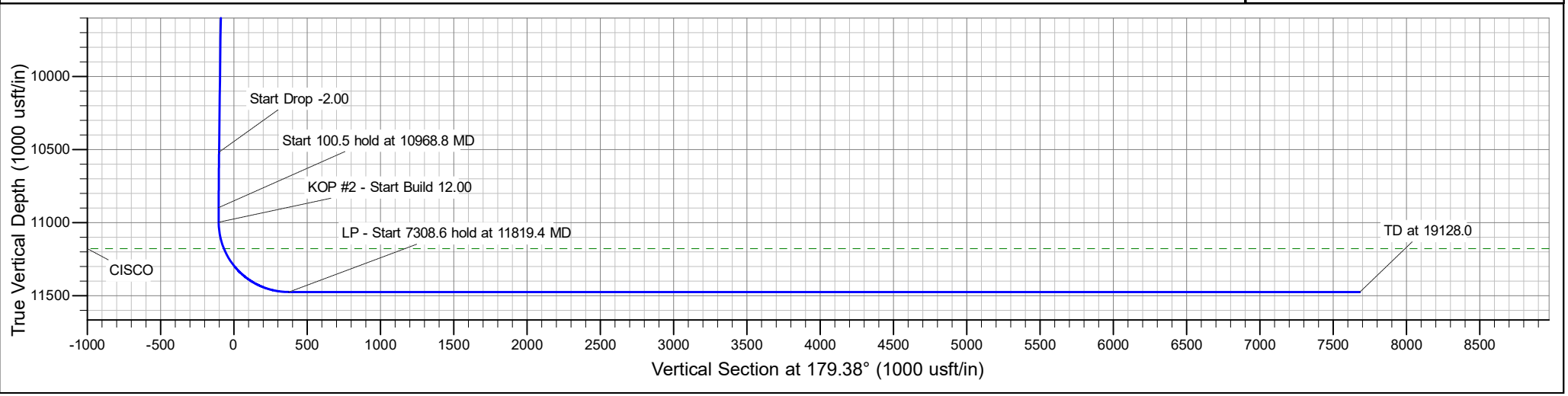
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DIeg	TFace	VSect	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2300.0	0.00	0.00	2300.0	0.0	0.0	0.00	0.00	0.0	KOP - Start Build 2.00
3	2680.3	7.61	274.78	2679.2	2.1	-25.1	2.00	274.78	-2.4	Start 7908.2 hold at 2680.3 MD
4	10588.5	7.61	274.78	10517.8	89.3	-1068.3	0.00	0.00	-100.9	Start Drop -2.00
5	10968.8	0.00	0.00	10897.0	91.4	-1093.4	2.00	180.00	-103.2	Start 100.5 hold at 10968.8 MD
6	11069.4	0.00	0.00	10997.5	91.4	-1093.4	0.00	0.00	-103.2	KOP #2 - Start Build 12.00
7	11819.4	90.00	179.38	11475.0	-386.0	-1088.3	12.00	179.38	374.2	LP - Start 7308.6 hold at 11819.4 MD
8	19128.0	90.00	179.38	11475.0	-7694.2	-1009.3	0.00	0.00	7682.9	TD at 19128.0



Azimuths to Grid North
True North: -0.50°
Magnetic North: 7.22°

Magnetic Field
Strength: 49165.8nT
Dip Angle: 60.82°
Date: 12/31/2009
Model: IGRF200510



Avant Operating II, LLC

Lea County, NM (NAD 83)
Posse East 24 25 State Com Pad 2
Posse East 24 25 State Com #821H

OH

Plan: Plan 0.1

Standard Planning Report

21 October, 2026

Planning Report

Database:	EDM 5000.16 Single User Db	**Local Co-ordinate Reference:**	Well Posse East 24 25 State Com #821H
Company:	Avant Operating II, LLC	**TVD Reference:**	WELL @ 3937.5usft (3937.5)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3937.5usft (3937.5)
Site:	Posse East 24 25 State Com Pad 2	**North Reference:**	Grid
Well:	Posse East 24 25 State Com #821H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 0.1		

Project Lea County, NM (NAD 83)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Posse East 24 25 State Com Pad 2

Site Position:		**Northing:**	663,173.00 usft	**Latitude:**	32.819707
From:	Map	**Easting:**	824,081.00 usft	**Longitude:**	-103.412957
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "		

Well Posse East 24 25 State Com #821H

Well Position	**+N/-S**	0.0 usft	**Northing:**	663,222.43 usft	**Latitude:**	32.819844
	+E/-W	0.0 usft	**Easting:**	824,020.40 usft	**Longitude:**	-103.413153
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,911.0 usft
Grid Convergence:		0.50 °				

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	7.72	60.82	49,165.77131288

Design Plan 0.1

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	179.38

Plan Survey Tool Program **Date** 10/21/2026

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	19,128.0	Plan 0.1 (OH)	MWD	
				OWSG MWD - Standard	

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	
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,680.3	7.61	274.78	2,679.2	2.1	-25.1	2.00	2.00	0.00	274.78	
10,588.5	7.61	274.78	10,517.8	89.3	-1,068.3	0.00	0.00	0.00	0.00	
10,968.8	0.00	0.00	10,897.0	91.4	-1,093.4	2.00	-2.00	0.00	180.00	
11,069.4	0.00	0.00	10,997.5	91.4	-1,093.4	0.00	0.00	0.00	0.00	
11,819.4	90.00	179.38	11,475.0	-386.0	-1,088.3	12.00	12.00	0.00	179.38	
19,128.0	90.00	179.38	11,475.0	-7,694.2	-1,009.3	0.00	0.00	0.00	0.00	LTP/BHL - Posse Eas

Planning Report

Database:	EDM 5000.16 Single User Db	**Local Co-ordinate Reference:**	Well Posse East 24 25 State Com #821H
Company:	Avant Operating II, LLC	**TVD Reference:**	WELL @ 3937.5usft (3937.5)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3937.5usft (3937.5)
Site:	Posse East 24 25 State Com Pad 2	**North Reference:**	Grid
Well:	Posse East 24 25 State Com #821H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 0.1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,838.0	0.00	0.00	1,838.0	0.0	0.0	0.0	0.00	0.00	0.00
RUSTLER									
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,988.0	0.00	0.00	1,988.0	0.0	0.0	0.0	0.00	0.00	0.00
SALADO/ TOP of SALT									
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 2.00									
2,400.0	2.00	274.78	2,400.0	0.1	-1.7	-0.2	2.00	2.00	0.00
2,500.0	4.00	274.78	2,499.8	0.6	-7.0	-0.7	2.00	2.00	0.00
2,600.0	6.00	274.78	2,599.5	1.3	-15.6	-1.5	2.00	2.00	0.00
2,680.3	7.61	274.78	2,679.2	2.1	-25.1	-2.4	2.00	2.00	0.00
Start 7908.2 hold at 2680.3 MD									
2,700.0	7.61	274.78	2,698.7	2.3	-27.7	-2.6	0.00	0.00	0.00
2,800.0	7.61	274.78	2,797.8	3.4	-40.9	-3.9	0.00	0.00	0.00
2,900.0	7.61	274.78	2,897.0	4.5	-54.1	-5.1	0.00	0.00	0.00
3,000.0	7.61	274.78	2,996.1	5.6	-67.3	-6.4	0.00	0.00	0.00
3,100.0	7.61	274.78	3,095.2	6.7	-80.5	-7.6	0.00	0.00	0.00
3,133.1	7.61	274.78	3,128.0	7.1	-84.8	-8.0	0.00	0.00	0.00
YATES/ BASE of SALT									
3,200.0	7.61	274.78	3,194.3	7.8	-93.7	-8.8	0.00	0.00	0.00
3,300.0	7.61	274.78	3,293.4	8.9	-106.9	-10.1	0.00	0.00	0.00
3,400.0	7.61	274.78	3,392.6	10.0	-120.1	-11.3	0.00	0.00	0.00
3,500.0	7.61	274.78	3,491.7	11.1	-133.2	-12.6	0.00	0.00	0.00
3,600.0	7.61	274.78	3,590.8	12.2	-146.4	-13.8	0.00	0.00	0.00
3,700.0	7.61	274.78	3,689.9	13.3	-159.6	-15.1	0.00	0.00	0.00
3,800.0	7.61	274.78	3,789.0	14.4	-172.8	-16.3	0.00	0.00	0.00
3,900.0	7.61	274.78	3,888.2	15.5	-186.0	-17.6	0.00	0.00	0.00
4,000.0	7.61	274.78	3,987.3	16.7	-199.2	-18.8	0.00	0.00	0.00
4,005.8	7.61	274.78	3,993.0	16.7	-200.0	-18.9	0.00	0.00	0.00
QUEEN									
4,100.0	7.61	274.78	4,086.4	17.8	-212.4	-20.1	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	**Local Co-ordinate Reference:**	Well Posse East 24 25 State Com #821H
Company:	Avant Operating II, LLC	**TVD Reference:**	WELL @ 3937.5usft (3937.5)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3937.5usft (3937.5)
Site:	Posse East 24 25 State Com Pad 2	**North Reference:**	Grid
Well:	Posse East 24 25 State Com #821H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 0.1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,200.0	7.61	274.78	4,185.5	18.9	-225.6	-21.3	0.00	0.00	0.00
4,300.0	7.61	274.78	4,284.6	20.0	-238.8	-22.5	0.00	0.00	0.00
4,400.0	7.61	274.78	4,383.8	21.1	-252.0	-23.8	0.00	0.00	0.00
4,500.0	7.61	274.78	4,482.9	22.2	-265.2	-25.0	0.00	0.00	0.00
4,600.0	7.61	274.78	4,582.0	23.3	-278.4	-26.3	0.00	0.00	0.00
4,626.2	7.61	274.78	4,608.0	23.6	-281.8	-26.6	0.00	0.00	0.00
SAN ANDRES									
4,700.0	7.61	274.78	4,681.1	24.4	-291.5	-27.5	0.00	0.00	0.00
4,800.0	7.61	274.78	4,780.2	25.5	-304.7	-28.8	0.00	0.00	0.00
4,900.0	7.61	274.78	4,879.4	26.6	-317.9	-30.0	0.00	0.00	0.00
5,000.0	7.61	274.78	4,978.5	27.7	-331.1	-31.3	0.00	0.00	0.00
5,100.0	7.61	274.78	5,077.6	28.8	-344.3	-32.5	0.00	0.00	0.00
5,200.0	7.61	274.78	5,176.7	29.9	-357.5	-33.7	0.00	0.00	0.00
5,300.0	7.61	274.78	5,275.8	31.0	-370.7	-35.0	0.00	0.00	0.00
5,400.0	7.61	274.78	5,375.0	32.1	-383.9	-36.2	0.00	0.00	0.00
5,500.0	7.61	274.78	5,474.1	33.2	-397.1	-37.5	0.00	0.00	0.00
5,600.0	7.61	274.78	5,573.2	34.3	-410.3	-38.7	0.00	0.00	0.00
5,700.0	7.61	274.78	5,672.3	35.4	-423.5	-40.0	0.00	0.00	0.00
5,800.0	7.61	274.78	5,771.4	36.5	-436.6	-41.2	0.00	0.00	0.00
5,900.0	7.61	274.78	5,870.6	37.6	-449.8	-42.5	0.00	0.00	0.00
6,000.0	7.61	274.78	5,969.7	38.7	-463.0	-43.7	0.00	0.00	0.00
6,100.0	7.61	274.78	6,068.8	39.8	-476.2	-45.0	0.00	0.00	0.00
6,200.0	7.61	274.78	6,167.9	40.9	-489.4	-46.2	0.00	0.00	0.00
6,226.3	7.61	274.78	6,194.0	41.2	-492.9	-46.5	0.00	0.00	0.00
GLORIETA									
6,300.0	7.61	274.78	6,267.0	42.0	-502.6	-47.4	0.00	0.00	0.00
6,400.0	7.61	274.78	6,366.2	43.1	-515.8	-48.7	0.00	0.00	0.00
6,500.0	7.61	274.78	6,465.3	44.2	-529.0	-49.9	0.00	0.00	0.00
6,600.0	7.61	274.78	6,564.4	45.3	-542.2	-51.2	0.00	0.00	0.00
6,700.0	7.61	274.78	6,663.5	46.4	-555.4	-52.4	0.00	0.00	0.00
6,800.0	7.61	274.78	6,762.6	47.5	-568.6	-53.7	0.00	0.00	0.00
6,900.0	7.61	274.78	6,861.8	48.6	-581.7	-54.9	0.00	0.00	0.00
7,000.0	7.61	274.78	6,960.9	49.7	-594.9	-56.2	0.00	0.00	0.00
7,100.0	7.61	274.78	7,060.0	50.8	-608.1	-57.4	0.00	0.00	0.00
7,200.0	7.61	274.78	7,159.1	51.9	-621.3	-58.7	0.00	0.00	0.00
7,300.0	7.61	274.78	7,258.2	53.0	-634.5	-59.9	0.00	0.00	0.00
7,400.0	7.61	274.78	7,357.4	54.1	-647.7	-61.1	0.00	0.00	0.00
7,500.0	7.61	274.78	7,456.5	55.2	-660.9	-62.4	0.00	0.00	0.00
7,600.0	7.61	274.78	7,555.6	56.3	-674.1	-63.6	0.00	0.00	0.00
7,700.0	7.61	274.78	7,654.7	57.4	-687.3	-64.9	0.00	0.00	0.00
7,800.0	7.61	274.78	7,753.8	58.6	-700.5	-66.1	0.00	0.00	0.00
7,900.0	7.61	274.78	7,853.0	59.7	-713.7	-67.4	0.00	0.00	0.00
7,980.8	7.61	274.78	7,933.0	60.5	-724.3	-68.4	0.00	0.00	0.00
TUBB									
8,000.0	7.61	274.78	7,952.1	60.8	-726.9	-68.6	0.00	0.00	0.00
8,100.0	7.61	274.78	8,051.2	61.9	-740.0	-69.9	0.00	0.00	0.00
8,200.0	7.61	274.78	8,150.3	63.0	-753.2	-71.1	0.00	0.00	0.00
8,300.0	7.61	274.78	8,249.4	64.1	-766.4	-72.4	0.00	0.00	0.00
8,400.0	7.61	274.78	8,348.6	65.2	-779.6	-73.6	0.00	0.00	0.00
8,500.0	7.61	274.78	8,447.7	66.3	-792.8	-74.8	0.00	0.00	0.00
8,600.0	7.61	274.78	8,546.8	67.4	-806.0	-76.1	0.00	0.00	0.00
8,700.0	7.61	274.78	8,645.9	68.5	-819.2	-77.3	0.00	0.00	0.00
8,712.2	7.61	274.78	8,658.0	68.6	-820.8	-77.5	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	**Local Co-ordinate Reference:**	Well Posse East 24 25 State Com #821H
Company:	Avant Operating II, LLC	**TVD Reference:**	WELL @ 3937.5usft (3937.5)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3937.5usft (3937.5)
Site:	Posse East 24 25 State Com Pad 2	**North Reference:**	Grid
Well:	Posse East 24 25 State Com #821H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 0.1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
ABO									
8,800.0	7.61	274.78	8,745.0	69.6	-832.4	-78.6	0.00	0.00	0.00
8,900.0	7.61	274.78	8,844.2	70.7	-845.6	-79.8	0.00	0.00	0.00
9,000.0	7.61	274.78	8,943.3	71.8	-858.8	-81.1	0.00	0.00	0.00
9,100.0	7.61	274.78	9,042.4	72.9	-872.0	-82.3	0.00	0.00	0.00
9,200.0	7.61	274.78	9,141.5	74.0	-885.1	-83.6	0.00	0.00	0.00
9,222.7	7.61	274.78	9,164.0	74.2	-888.1	-83.8	0.00	0.00	0.00
WFMP									
9,300.0	7.61	274.78	9,240.6	75.1	-898.3	-84.8	0.00	0.00	0.00
9,400.0	7.61	274.78	9,339.8	76.2	-911.5	-86.1	0.00	0.00	0.00
9,500.0	7.61	274.78	9,438.9	77.3	-924.7	-87.3	0.00	0.00	0.00
9,600.0	7.61	274.78	9,538.0	78.4	-937.9	-88.5	0.00	0.00	0.00
9,700.0	7.61	274.78	9,637.1	79.5	-951.1	-89.8	0.00	0.00	0.00
9,800.0	7.61	274.78	9,736.2	80.6	-964.3	-91.0	0.00	0.00	0.00
9,900.0	7.61	274.78	9,835.4	81.7	-977.5	-92.3	0.00	0.00	0.00
10,000.0	7.61	274.78	9,934.5	82.8	-990.7	-93.5	0.00	0.00	0.00
10,100.0	7.61	274.78	10,033.6	83.9	-1,003.9	-94.8	0.00	0.00	0.00
10,200.0	7.61	274.78	10,132.7	85.0	-1,017.1	-96.0	0.00	0.00	0.00
10,300.0	7.61	274.78	10,231.8	86.1	-1,030.3	-97.3	0.00	0.00	0.00
10,400.0	7.61	274.78	10,331.0	87.2	-1,043.4	-98.5	0.00	0.00	0.00
10,500.0	7.61	274.78	10,430.1	88.3	-1,056.6	-99.8	0.00	0.00	0.00
10,588.5	7.61	274.78	10,517.8	89.3	-1,068.3	-100.9	0.00	0.00	0.00
Start Drop -2.00									
10,600.0	7.38	274.78	10,529.2	89.4	-1,069.8	-101.0	2.00	-2.00	0.00
10,700.0	5.38	274.78	10,628.6	90.4	-1,080.9	-102.0	2.00	-2.00	0.00
10,800.0	3.38	274.78	10,728.3	91.0	-1,088.5	-102.8	2.00	-2.00	0.00
10,900.0	1.38	274.78	10,828.2	91.3	-1,092.6	-103.1	2.00	-2.00	0.00
10,968.8	0.00	0.00	10,897.0	91.4	-1,093.4	-103.2	2.00	-2.00	0.00
Start 100.5 hold at 10968.8 MD									
11,000.0	0.00	0.00	10,928.2	91.4	-1,093.4	-103.2	0.00	0.00	0.00
11,069.4	0.00	0.00	10,997.5	91.4	-1,093.4	-103.2	0.00	0.00	0.00
KOP #2 - Start Build 12.00									
11,100.0	3.68	179.38	11,028.2	90.4	-1,093.4	-102.2	12.00	12.00	0.00
11,200.0	15.68	179.38	11,126.6	73.6	-1,093.2	-85.5	12.00	12.00	0.00
11,254.4	22.21	179.38	11,178.0	56.0	-1,093.0	-67.8	12.00	12.00	0.00
CISCO									
11,300.0	27.68	179.38	11,219.3	36.8	-1,092.8	-48.6	12.00	12.00	0.00
11,400.0	39.68	179.38	11,302.4	-18.6	-1,092.2	6.8	12.00	12.00	0.00
11,475.7	48.76	179.38	11,356.6	-71.3	-1,091.7	59.5	12.00	12.00	0.00
FTP - Posse East 24 25 State Com #821H									
11,500.0	51.68	179.38	11,372.1	-90.0	-1,091.5	78.2	12.00	12.00	0.00
11,600.0	63.68	179.38	11,425.5	-174.3	-1,090.6	162.5	12.00	12.00	0.00
11,700.0	75.68	179.38	11,460.2	-267.9	-1,089.5	256.1	12.00	12.00	0.00
11,800.0	87.68	179.38	11,474.6	-366.7	-1,088.5	354.9	12.00	12.00	0.00
11,819.4	90.00	179.38	11,475.0	-386.0	-1,088.3	374.2	12.00	12.00	0.00
LP - Start 7308.6 hold at 11819.4 MD									
11,900.0	90.00	179.38	11,475.0	-466.7	-1,087.4	454.9	0.00	0.00	0.00
12,000.0	90.00	179.38	11,475.0	-566.7	-1,086.3	554.9	0.00	0.00	0.00
12,100.0	90.00	179.38	11,475.0	-666.7	-1,085.2	654.9	0.00	0.00	0.00
12,200.0	90.00	179.38	11,475.0	-766.7	-1,084.2	754.9	0.00	0.00	0.00
12,300.0	90.00	179.38	11,475.0	-866.6	-1,083.1	854.9	0.00	0.00	0.00
12,400.0	90.00	179.38	11,475.0	-966.6	-1,082.0	954.9	0.00	0.00	0.00
12,500.0	90.00	179.38	11,475.0	-1,066.6	-1,080.9	1,054.9	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	**Local Co-ordinate Reference:**	Well Posse East 24 25 State Com #821H
Company:	Avant Operating II, LLC	**TVD Reference:**	WELL @ 3937.5usft (3937.5)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3937.5usft (3937.5)
Site:	Posse East 24 25 State Com Pad 2	**North Reference:**	Grid
Well:	Posse East 24 25 State Com #821H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 0.1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,600.0	90.00	179.38	11,475.0	-1,166.6	-1,079.8	1,154.9	0.00	0.00	0.00
12,700.0	90.00	179.38	11,475.0	-1,266.6	-1,078.8	1,254.9	0.00	0.00	0.00
12,800.0	90.00	179.38	11,475.0	-1,366.6	-1,077.7	1,354.9	0.00	0.00	0.00
12,900.0	90.00	179.38	11,475.0	-1,466.6	-1,076.6	1,454.9	0.00	0.00	0.00
13,000.0	90.00	179.38	11,475.0	-1,566.6	-1,075.5	1,554.9	0.00	0.00	0.00
13,100.0	90.00	179.38	11,475.0	-1,666.6	-1,074.4	1,654.9	0.00	0.00	0.00
13,200.0	90.00	179.38	11,475.0	-1,766.6	-1,073.4	1,754.9	0.00	0.00	0.00
13,300.0	90.00	179.38	11,475.0	-1,866.6	-1,072.3	1,854.9	0.00	0.00	0.00
13,400.0	90.00	179.38	11,475.0	-1,966.6	-1,071.2	1,954.9	0.00	0.00	0.00
13,500.0	90.00	179.38	11,475.0	-2,066.6	-1,070.1	2,054.9	0.00	0.00	0.00
13,600.0	90.00	179.38	11,475.0	-2,166.6	-1,069.0	2,154.9	0.00	0.00	0.00
13,700.0	90.00	179.38	11,475.0	-2,266.6	-1,068.0	2,254.9	0.00	0.00	0.00
13,800.0	90.00	179.38	11,475.0	-2,366.6	-1,066.9	2,354.9	0.00	0.00	0.00
13,900.0	90.00	179.38	11,475.0	-2,466.6	-1,065.8	2,454.9	0.00	0.00	0.00
14,000.0	90.00	179.38	11,475.0	-2,566.6	-1,064.7	2,554.9	0.00	0.00	0.00
14,100.0	90.00	179.38	11,475.0	-2,666.5	-1,063.6	2,654.9	0.00	0.00	0.00
14,200.0	90.00	179.38	11,475.0	-2,766.5	-1,062.5	2,754.9	0.00	0.00	0.00
14,300.0	90.00	179.38	11,475.0	-2,866.5	-1,061.5	2,854.9	0.00	0.00	0.00
14,400.0	90.00	179.38	11,475.0	-2,966.5	-1,060.4	2,954.9	0.00	0.00	0.00
14,500.0	90.00	179.38	11,475.0	-3,066.5	-1,059.3	3,054.9	0.00	0.00	0.00
14,600.0	90.00	179.38	11,475.0	-3,166.5	-1,058.2	3,154.9	0.00	0.00	0.00
14,700.0	90.00	179.38	11,475.0	-3,266.5	-1,057.1	3,254.9	0.00	0.00	0.00
14,800.0	90.00	179.38	11,475.0	-3,366.5	-1,056.1	3,354.9	0.00	0.00	0.00
14,900.0	90.00	179.38	11,475.0	-3,466.5	-1,055.0	3,454.9	0.00	0.00	0.00
15,000.0	90.00	179.38	11,475.0	-3,566.5	-1,053.9	3,554.9	0.00	0.00	0.00
15,100.0	90.00	179.38	11,475.0	-3,666.5	-1,052.8	3,654.9	0.00	0.00	0.00
15,200.0	90.00	179.38	11,475.0	-3,766.5	-1,051.7	3,754.9	0.00	0.00	0.00
15,300.0	90.00	179.38	11,475.0	-3,866.5	-1,050.7	3,854.9	0.00	0.00	0.00
15,400.0	90.00	179.38	11,475.0	-3,966.5	-1,049.6	3,954.9	0.00	0.00	0.00
15,500.0	90.00	179.38	11,475.0	-4,066.5	-1,048.5	4,054.9	0.00	0.00	0.00
15,600.0	90.00	179.38	11,475.0	-4,166.5	-1,047.4	4,154.9	0.00	0.00	0.00
15,700.0	90.00	179.38	11,475.0	-4,266.5	-1,046.3	4,254.9	0.00	0.00	0.00
15,800.0	90.00	179.38	11,475.0	-4,366.4	-1,045.3	4,354.9	0.00	0.00	0.00
15,900.0	90.00	179.38	11,475.0	-4,466.4	-1,044.2	4,454.9	0.00	0.00	0.00
16,000.0	90.00	179.38	11,475.0	-4,566.4	-1,043.1	4,554.9	0.00	0.00	0.00
16,100.0	90.00	179.38	11,475.0	-4,666.4	-1,042.0	4,654.9	0.00	0.00	0.00
16,200.0	90.00	179.38	11,475.0	-4,766.4	-1,040.9	4,754.9	0.00	0.00	0.00
16,300.0	90.00	179.38	11,475.0	-4,866.4	-1,039.9	4,854.9	0.00	0.00	0.00
16,400.0	90.00	179.38	11,475.0	-4,966.4	-1,038.8	4,954.9	0.00	0.00	0.00
16,500.0	90.00	179.38	11,475.0	-5,066.4	-1,037.7	5,054.9	0.00	0.00	0.00
16,600.0	90.00	179.38	11,475.0	-5,166.4	-1,036.6	5,154.9	0.00	0.00	0.00
16,700.0	90.00	179.38	11,475.0	-5,266.4	-1,035.5	5,254.9	0.00	0.00	0.00
16,800.0	90.00	179.38	11,475.0	-5,366.4	-1,034.5	5,354.9	0.00	0.00	0.00
16,900.0	90.00	179.38	11,475.0	-5,466.4	-1,033.4	5,454.9	0.00	0.00	0.00
17,000.0	90.00	179.38	11,475.0	-5,566.4	-1,032.3	5,554.9	0.00	0.00	0.00
17,100.0	90.00	179.38	11,475.0	-5,666.4	-1,031.2	5,654.9	0.00	0.00	0.00
17,200.0	90.00	179.38	11,475.0	-5,766.4	-1,030.1	5,754.9	0.00	0.00	0.00
17,300.0	90.00	179.38	11,475.0	-5,866.4	-1,029.1	5,854.9	0.00	0.00	0.00
17,400.0	90.00	179.38	11,475.0	-5,966.4	-1,028.0	5,954.9	0.00	0.00	0.00
17,500.0	90.00	179.38	11,475.0	-6,066.3	-1,026.9	6,054.9	0.00	0.00	0.00
17,600.0	90.00	179.38	11,475.0	-6,166.3	-1,025.8	6,154.9	0.00	0.00	0.00
17,700.0	90.00	179.38	11,475.0	-6,266.3	-1,024.7	6,254.9	0.00	0.00	0.00
17,800.0	90.00	179.38	11,475.0	-6,366.3	-1,023.6	6,354.9	0.00	0.00	0.00
17,900.0	90.00	179.38	11,475.0	-6,466.3	-1,022.6	6,454.9	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	**Local Co-ordinate Reference:**	Well Posse East 24 25 State Com #821H
Company:	Avant Operating II, LLC	**TVD Reference:**	WELL @ 3937.5usft (3937.5)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3937.5usft (3937.5)
Site:	Posse East 24 25 State Com Pad 2	**North Reference:**	Grid
Well:	Posse East 24 25 State Com #821H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 0.1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
18,000.0	90.00	179.38	11,475.0	-6,566.3	-1,021.5	6,554.9	0.00	0.00	0.00
18,100.0	90.00	179.38	11,475.0	-6,666.3	-1,020.4	6,654.9	0.00	0.00	0.00
18,200.0	90.00	179.38	11,475.0	-6,766.3	-1,019.3	6,754.9	0.00	0.00	0.00
18,300.0	90.00	179.38	11,475.0	-6,866.3	-1,018.2	6,854.9	0.00	0.00	0.00
18,400.0	90.00	179.38	11,475.0	-6,966.3	-1,017.2	6,954.9	0.00	0.00	0.00
18,500.0	90.00	179.38	11,475.0	-7,066.3	-1,016.1	7,054.9	0.00	0.00	0.00
18,600.0	90.00	179.38	11,475.0	-7,166.3	-1,015.0	7,154.9	0.00	0.00	0.00
18,700.0	90.00	179.38	11,475.0	-7,266.3	-1,013.9	7,254.9	0.00	0.00	0.00
18,800.0	90.00	179.38	11,475.0	-7,366.3	-1,012.8	7,354.9	0.00	0.00	0.00
18,900.0	90.00	179.38	11,475.0	-7,466.3	-1,011.8	7,454.9	0.00	0.00	0.00
19,000.0	90.00	179.38	11,475.0	-7,566.3	-1,010.7	7,554.9	0.00	0.00	0.00
19,100.0	90.00	179.38	11,475.0	-7,666.3	-1,009.6	7,654.9	0.00	0.00	0.00
19,128.0	90.00	179.38	11,475.0	-7,694.2	-1,009.3	7,682.9	0.00	0.00	0.00
TD at 19128.0 - LTP/BHL - Posse East 24 25 State Com #821H									

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
FTP - Posse East 24 25	0.00	0.00	11,475.0	44.4	-1,093.4	663,266.79	822,926.97	32.819992	-103.416710
- plan misses target center by 165.6usft at 11475.7usft MD (11356.6 TVD, -71.3 N, -1091.7 E)									
- Point									
LTP/BHL - Posse East 2	0.00	0.00	11,475.0	-7,694.2	-1,009.3	655,528.19	823,011.10	32.798722	-103.416655
- plan hits target center									
- Point									

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,838.0	1,838.0	RUSTLER			
1,988.0	1,988.0	SALADO/ TOP of SALT			
3,133.1	3,128.0	YATES/ BASE of SALT			
4,005.8	3,993.0	QUEEN			
4,626.2	4,608.0	SAN ANDRES			
6,226.3	6,194.0	GLORIETA			
7,980.8	7,933.0	TUBB			
8,712.2	8,658.0	ABO			
9,222.7	9,164.0	WFMP			
11,254.4	11,178.0	CISCO			

Planning Report

Database:	EDM 5000.16 Single User Db	**Local Co-ordinate Reference:**	Well Posse East 24 25 State Com #821H
Company:	Avant Operating II, LLC	**TVD Reference:**	WELL @ 3937.5usft (3937.5)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	WELL @ 3937.5usft (3937.5)
Site:	Posse East 24 25 State Com Pad 2	**North Reference:**	Grid
Well:	Posse East 24 25 State Com #821H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 0.1		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
2,300.0	2,300.0	0.0	0.0	KOP - Start Build 2.00
2,680.3	2,679.2	2.1	-25.1	Start 7908.2 hold at 2680.3 MD
10,588.5	10,517.8	89.3	-1,068.3	Start Drop -2.00
10,968.8	10,897.0	91.4	-1,093.4	Start 100.5 hold at 10968.8 MD
11,069.4	10,997.5	91.4	-1,093.4	KOP #2 - Start Build 12.00
11,819.4	11,475.0	-386.0	-1,088.3	LP - Start 7308.6 hold at 11819.4 MD
19,128.0	11,475.0	-7,694.2	-1,009.3	TD at 19128.0

AFE: **NM1720**

API:

REGULATORY: NMOCD

PERMIT #

RIG: HP 615

KB: 3937.5 (26.5')

GL: 3911'

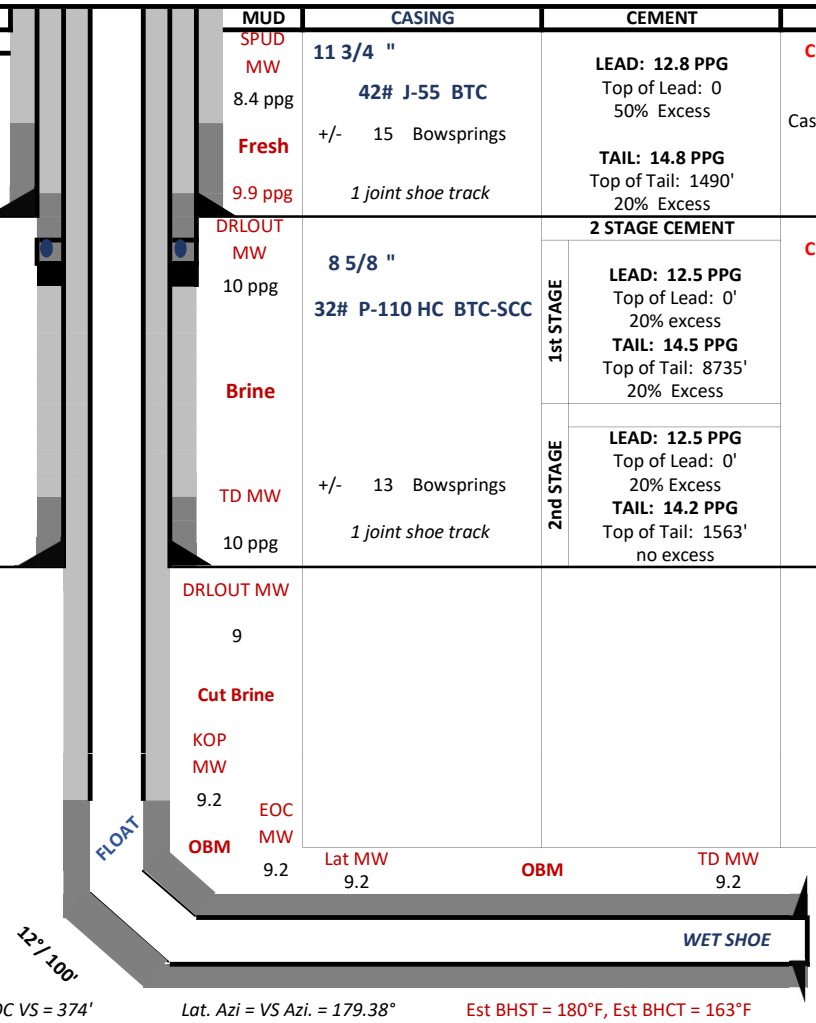
Posse East 24 25 State Com #821H

Pennsylvanian

Lea County, NM

SHL: *Sec. 24, T-17S, R-35E; 2501 FSL, 2000 FWL*

Lat: 32.819844, Long: -103.413152 (NAD83)



HOLE SIZE	MD	FORMATION	TVD	MUD	CASING	CEMENT	SPECIAL INSTRUCTIONS
	120	20" Conductor	120	SPUD MW 8.4 ppg	11 3/4 " 42# J-55 BTC +/- 15 Bowsprings 1 joint shoe track	LEAD: 12.8 PPG Top of Lead: 0 50% Excess TAIL: 14.8 PPG Top of Tail: 1490' 20% Excess	Circ cement to surface is a NMOCD requirement. Casing must be set 25' into the Rustler. MUD: Fresh water only
14 3/4 "	1,838	Rustler	1,838	Fresh 9.9 ppg			
	1,863	**SURF CSG PT**	**1,863**				
10 5/8 "	1,988	Solado	1,988	DRLOUT MW 10 ppg	8 5/8 " 32# P-110 HC BTC-SCC +/- 13 Bowsprings 1 joint shoe track	2 STAGE CEMENT 1st STAGE: LEAD: 12.5 PPG Top of Lead: 0' 20% excess TAIL: 14.5 PPG Top of Tail: 8735' 20% Excess 2nd STAGE: LEAD: 12.5 PPG Top of Lead: 0' 20% Excess TAIL: 14.2 PPG Top of Tail: 1563' no excess	Circ cement to surface is a NMOCD requirement
	1,963	DV TOOL & PACKER	1,963				
	3,133	Yates/Base of Salt	3,128	Brine			
	4,006	Queen	3,993				
	4,626	San Andreas	4,608				
	6,226	Glorieta	6,194				
	7,981	Tubb	7,933				
	8,712	Abo	8,658	TD MW 10 ppg			
	9,223	Wolfcamp	9,167				
	10,919	**INTRM CSG PT**	**10,848**				
7 7/8 " VERTICAL				DRLOUT MW 9 Cut Brine KOP MW 9.2 EOC MW 9.2 OBM			
7 7/8 " CURVE	**11,069**	**KOP**	**10,998**	Lat MW 9.2 OBM TD MW 9.2			**19,128 ' MD** *7,683 ' VS* 11,475 ' TVD *BHL: 100 FSL, 907 FWL*
	11,115	Cisco	11,043				
	11,819	**EOC**	**11,475**				
7 7/8 " LATERAL					5 1/2 " 20# P-110 HC GBCD 1 5' pup jt 3 20' Marker Jts +/- 2 Bowsprings +/- 27 Doublebows +/- 174 Solid Bodies	LEAD: 10.7 PPG Top of Lead: 0 20% Excess TAIL: 14.8 PPG Top of Tail: 11069 20% Excess All aqueous fluids (spacer and disp) left inside or outside of pipe must have biocide & corrision inhibitor	Expected BH Presure: 5279

EOC VS = 374' *Lat. Azi = VS Azi. = 179.38°* Est BHST = 180°F, Est BHCT = 163°F

DIRECTIONAL PLAN

MD	INC	INC	TVD	ANNOTATION

PRELIMINARY

DIRECTIONS TO LOCATION:

Drilling Engineer: Ryan Harris

Posse East 24 25 State Com #821H (HP 615)

Date: 10/22/2026

Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Is this well the defining well for the Horizontal Spacing Unit? ☐

Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

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: Avant Operating II, LLC **OGRID:** 332947 **Date:** 10/22/2026

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
Posse East 24 25 State Com 821H		K-24-T17S-R35E	2501FSL/2000FWL	1050 BBL/D	2100MCF/D	5800BBL/D
Posse East 24 25 State Com 822H		K-24-T17S-R35E	2501FSL/2040FWL	1050 BBL/D	2100MCF/D	5800BBL/D
Posse East 24 25 State Com 823H		K-24-T17S-R35E	2501FSL/2080FWL	1050 BBL/D	2100MCF/D	5800BBL/D
Posse East 24 25 State Com 831H		K-24-T17S-R35E	2501FSL/1980FWL	1050 BBL/D	2100MCF/D	5800BBL/D
Posse East 24 25 State Com 832H		K-24-T17S-R35E	2501FSL/2020FWL	1050 BBL/D	2100MCF/D	5800BBL/D
Posse East 24 25 State Com 833H		K-24-T17S-R35E	2501FSL/2060FWL	1050 BBL/D	2100MCF/D	5800BBL/D

IV. Central Delivery Point Name: Posse East 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
Posse East 24 25 State Com 821H		05/01/2027	6/15/2027	08/01/2027	12/01/2027	12/01/2027
Posse East 24 25 State Com 822H		05/01/2027	6/15/2027	08/01/2027	12/01/2027	12/01/2027
Posse East 24 25 State Com 823H		05/01/2027	6/15/2027	08/01/2027	12/01/2027	12/01/2027
Posse East 24 25 State Com 831H		05/01/2027	6/15/2027	08/01/2027	12/01/2027	12/01/2027
Posse East 24 25 State Com 832H		05/01/2027	6/15/2027	08/01/2027	12/01/2027	12/01/2027
Posse East 24 25 State Com 833H		05/01/2027	6/15/2027	08/01/2027	12/01/2027	12/01/2027

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: John Harper
Title: SVP – Assets and Exploration
E-mail Address: John@avantnr.com
Date: 9/30/2026
Phone: 678-988-6644

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval:

Avant Operating II, LLC Natural Gas Management Plan

VI. Separation equipment will be sized by construction engineering staff based on stated manufacturer daily throughput capacities and anticipated daily production rates to ensure adequate capacity. Closed vent system piping, compression needs, and VRUs will be sized utilizing ProMax modelling software to ensure adequate capacity for anticipated production volumes and conditions.

VII. Avant Operating, LLC (Avant) will take the following actions to comply with the regulations listed in 19.15.27.8:

A. Avant will maximize the recovery of natural gas by minimizing the waste, as defined by 19.15.2 NMAC,of natural gas through venting and flaring. Avant will ensure that well(s) will be connected to a natural gas gathering system with sufficient capacity to transport natural gas.

B. All drilling operations will be equipped with a rig flare located at least 100' from the nearest surface hole. Rig flare will be utilized to combust any natural gas that is brought to surface during normal drilling operations. In the case of emergency venting or flaring the volumes will be estimated and reported appropriately.

C. During completion operations any natural gas brought to surface will be flared. Immediately following the finish of completion operations, all well flowback will be directed to permanent separation equipment. Produced natural gas from separation equipment will be sent to sales. Avant will ensure that the flare is sized properly and is equipped with automatic igniter or continuous pilot. The gas sample will be analyzed twice per week, and the gas will be routed into a gathering system as soon as pipeline specifications are met.

D. Avant will comply with the performance standards requirements and provisions listed in 19.15.27.8 (l)through (8). All equipment will be designed and sized to handle maximum anticipated pressures and throughputs to minimize the waste. Production storage tanks constructed after May 25, 2021, will be equipped with automatic gauging system. Flares constructed after May 25, 2021, will be equipped with automatic igniter or continuous pilot. Flares will be located at least 100' from the well and storage tanks unless otherwise approved by the division. Avant will conduct AVO inspections as described in 19.15.27.8 E (5) (a) with frequencies specified in 19.15.27.8 E (5) (b) and (c). All emergencies will be resolved as quickly and safely as feasible to minimize waste.

E. The volume of natural gas that is vented or flared as the result of malfunction or emergency during drilling and completions operations will be estimated. The volume of natural gas that is vented, flared, or beneficially used during production operations, will be measured, or estimated. Avant will install equipment to measure

F. Measurement meters will be in place for low- and high-pressure gas that is flared due to not being able to use for reuse or sales. Equipment will be installed off tanks to reduce vented gas and the gas will be measured with a meter.

VIII. Best Management Practices: Avant plans to communicate consistently with midstream partners to ensure sufficient takeaway capacity is available and understand planned maintenance to minimize venting. Avant will depressurize equipment and capture vented gases for reuse before any maintenance occurs. Avant will use vapor recovery units for the vented gas off the tanks to capture for reuse or sales to minimize venting during active operations. Avant will be proactive on inspections to identify and fix leaks before they escalate.