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 405923

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 30-025-55842

4. Property Code	5. Property Name	6. Well No.
337745	QUAIL 16 STATE COM	203H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
M	16	20S	34E		479	S	1059	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
C	16	20S	34E	C	100	N	2310	W	Lea

9. Pool Information

LEA;BONE SPRING, SOUTH	37580

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	3637
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	14043	1st Bone Spring Sand		2/15/2026
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	10.75	40.5	1577	765	0
Int1	9.875	8.625	32	5406	835	0
Prod	7.875	5.5	20	14043	890	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:	1/26/2026 — Expiration Date: 1/26/2028
Date:	1/6/2026 — 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
30-025-55842	37580	Lea; Bone Spring, South

Property Code	Property Name	Well Number
337745	QUAIL 16 STATE COM	#203H

OGRID No.	Operator Name	Ground Level Elevation
332947	AVANT OPERATING II, LLC	3637'

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
M	16	20 S	34 E		479' FSL	1059' FWL	32.567224°	-103.570423°	LEA

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	16	20 S	34 E		100' FNL	2310' FWL	32.580119°	-103.566369°	LEA

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
320.00	Infill	n/a	No	n/a

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
M	16	20 S	34 E		479' FSL	1059' FWL	32.567224°	-103.570423°	LEA

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
N	16	20 S	34 E		100' FSL	2310' FWL	32.566175°	-103.566361°	LEA

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	16	20 S	34 E		100' FNL	2310' FWL	32.580119°	-103.566369°	LEA

Unitized Area or Area of Uniform Interest	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation:
Yes		3637'

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.

1/5/2025

Signature Date

Sarah Ferreyros

Printed Name

sarah@avantnr.com

Email Address

SURVEYOR CERTIFICATIONS

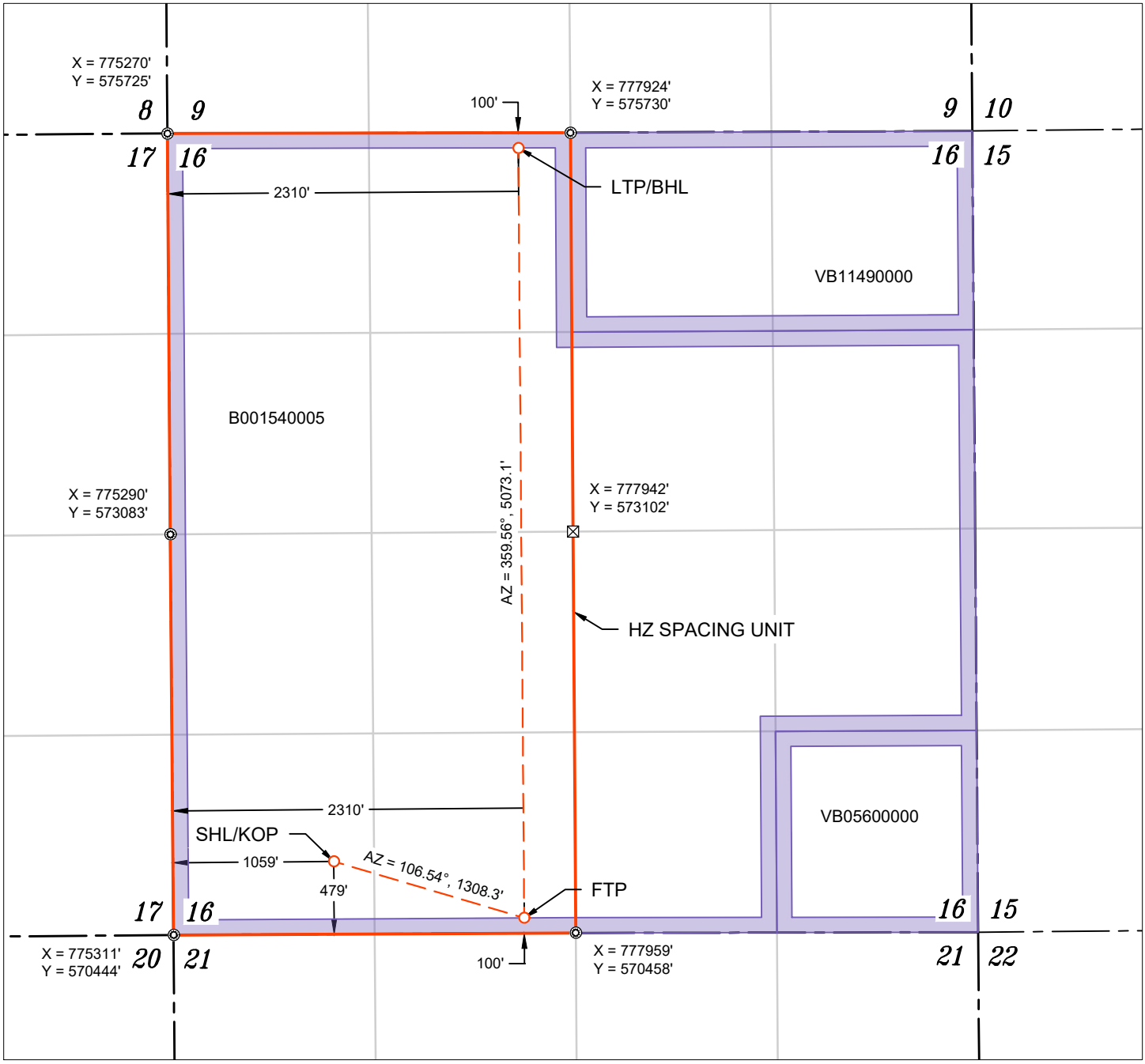
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Signature and Seal of Professional Surveyor

23203 DECEMBER 18, 2025

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.



WELL NAME: QUAIL 16 STATE COM #203H
ELEVATION: 3637'

NAD 83 (SHL/KOP) 479' FSL & 1059' FWL
LATITUDE = 32.567224°
LONGITUDE = -103.570423°
NAD 27 (SHL/KOP)
LATITUDE = 32.567104°
LONGITUDE = -103.569932°
STATE PLANE NAD 83 (N.M. EAST)
N: 570928.94' E: 776366.17'
STATE PLANE NAD 27 (N.M. EAST)
N: 570867.68' E: 735185.27'

NAD 83 (FTP) 100' FSL & 2310' FWL
LATITUDE = 32.566175°
LONGITUDE = -103.566361°
NAD 27 (FTP)
LATITUDE = 32.566055°
LONGITUDE = -103.565870°
STATE PLANE NAD 83 (N.M. EAST)
N: 570556.43' E: 777620.34'
STATE PLANE NAD 27 (N.M. EAST)
N: 570495.19' E: 736439.40'

NAD 83 (LTP/BHL) 100' FNL & 2310' FWL
LATITUDE = 32.580119°
LONGITUDE = -103.566369°
NAD 27 (LTP/BHL)
LATITUDE = 32.579999°
LONGITUDE = -103.565878°
STATE PLANE NAD 83 (N.M. EAST)
N: 575629.39' E: 777581.13'
STATE PLANE NAD 27 (N.M. EAST)
N: 575568.04' E: 736400.37'

APPROXIMATE WELL BORE DISTANCE FROM FTP TO LTP	
B001540005	5073.11'
TOTAL	5073.11'

FOUND MONUMENT
CALC. CORNER
SHL/ KOP/ FTP / PPP/ LTP / BHL
WELLBORE
HORIZONTAL SPACING UNIT
STATE OIL & GAS LEASE
BLM OIL & GAS LEASE

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

NOTES

1. ALL COORDINATES, BEARINGS, AND DISTANCES CONTAINED HEREIN ARE GRID, BASED UPON THE NEW MEXICO STATE PLANE COORDINATES SYSTEM, NORTH AMERICAN DATUM 83, NEW MEXICO EAST (3001).

2. THIS DOCUMENT IS BASED UPON AN ON THE GROUND SURVEY PERFORMED DURING DECEMBER, 2025. CERTIFICATION OF THIS DOCUMENT IS ONLY TO THE LOCATION OF THIS INFORMATION IN RELATION TO RECORDED MONUMENT OF DEEDS PROVIDED BY THE CLIENT.

3. ELEVATIONS MSL, DERIVED FROM G.N.S.S. OBSERVATION AND DERIVED FROM SAID ON-THE-GROUND SURVEY.

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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 405923

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
Avant Operating II, LLC [332947] 1515 Wynkoop Street Denver, CO 80202	30-025-55842
	Well: QUAIL 16 STATE COM #203H

OCD Reviewer	Condition
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	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	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	NSP required 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	The OCD is currently reviewing the areas containing the Capitan Reef Aquifer and may expand the designated 4-string casing area to encompass additional portions of it in the future.
jeffrey.harrison	This well is within the Capitan Reef aquifer zone. The first intermediate casing string shall be set and cemented back to surface immediately below the Capitan Reef.
jeffrey.harrison	In Capitan Reef areas if lost circulation (50% or greater) occurs below the base of the salt, the operator shall switch to freshwater mud until the intermediate casing is set..
jeffrey.harrison	This well is within the R-111-Q defined boundary. Operator must follow all procedures and requirements listed within the order.
jeffrey.harrison	Designs must align to one of the six options mandated within R-111-Q. No alterations or modifications are permitted to any of the casing design options mandated within order R-111-Q. If you have any questions, please contact Justin.Wrinkle@emnrd.nm.gov.

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.

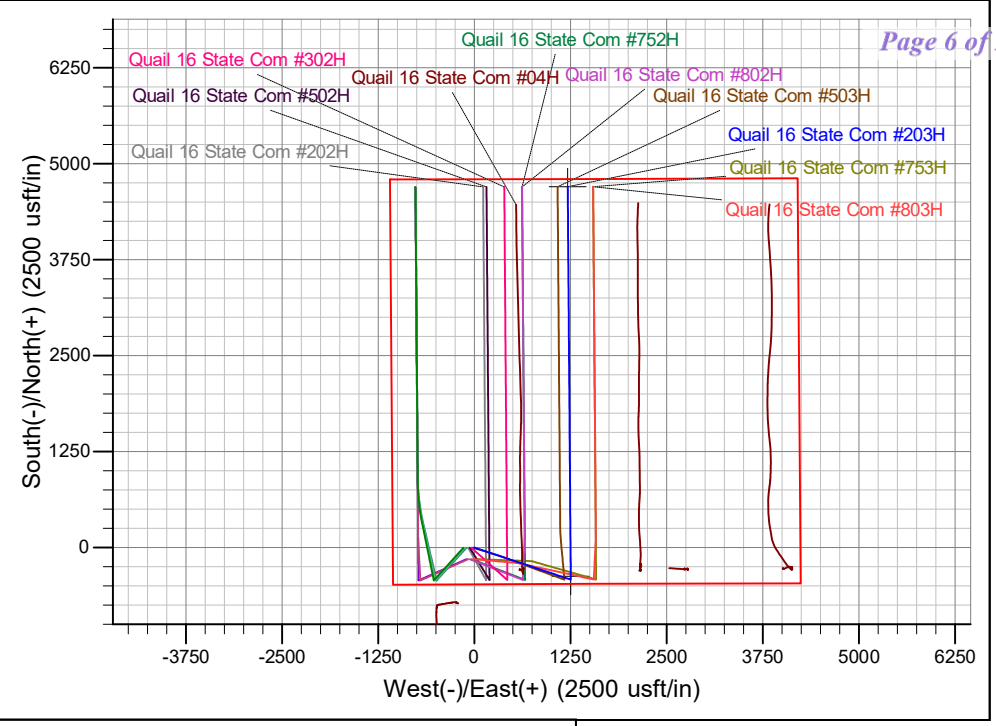
API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

AVANT NATURAL RESOURCES

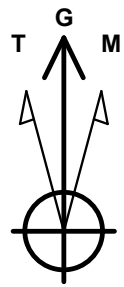
WELL DETAILS: Quail 16 State Com #203H					
Ground Elev: 3637.0 KB: 3662					
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	570928.94	776366.17	32.567224	-103.570423

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



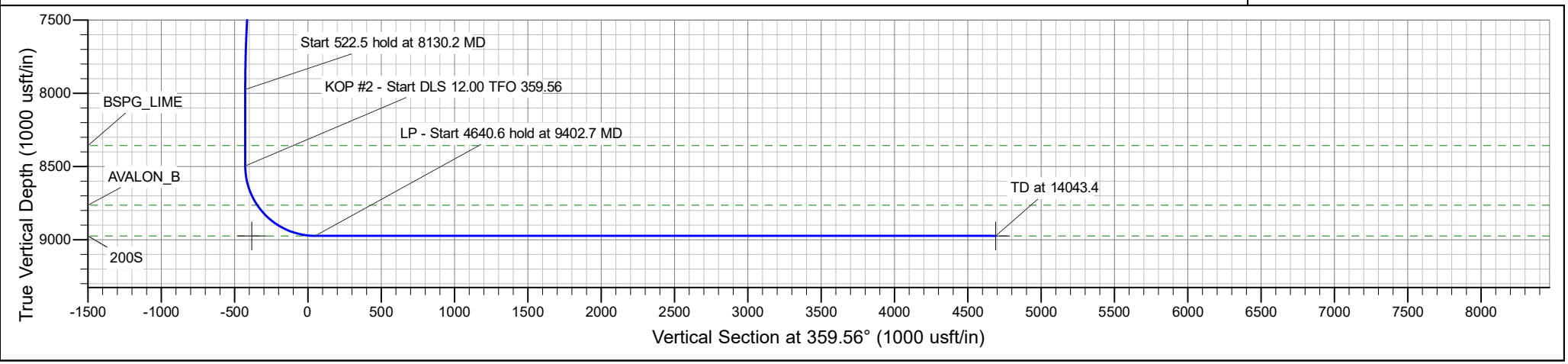
SECTION DETAILS

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	2000.0	0.00	0.00	2000.0	0.0	0.0	0.00	0.00	0.0	KOP - Start Build 2.00
3	2704.6	14.09	108.41	2697.5	-27.2	81.8	2.00	108.41	-27.9	Start 4721.1 hold at 2704.6 MD
4	7425.7	14.09	108.41	7276.5	-390.3	1172.4	0.00	0.00	-399.3	Start Drop -2.00
5	8130.2	0.00	0.00	7974.0	-417.5	1254.2	2.00	180.00	-427.1	Start 522.5 hold at 8130.2 MD
6	8652.7	0.00	0.00	8496.5	-417.5	1254.2	0.00	0.00	-427.1	KOP #2 - Start DLS 12.00 TFO 359.56
7	9402.7	90.00	359.56	8974.0	59.9	1250.5	12.00	359.56	50.3	LP - Start 4640.6 hold at 9402.7 MD
8	14043.4	90.00	359.56	8974.0	4700.5	1215.0	0.00	0.00	4691.0	TD at 14043.4



Azimuths to Grid North
True North: -0.41°
Magnetic North: 7.36°

Magnetic Field
Strength: 48998.5nT
Dip Angle: 60.56°
Date: 12/31/2009
Model: IGRF200510



Avant Operating II, LLC

Lea County, NM (NAD 83)
Quail 16 State Com Pad 1
Quail 16 State Com #203H

OH

Plan: Plan 0.1

Standard Planning Report

22 December, 2025

Planning Report

Database:	EDM 5000.16 Single User Db	**Local Co-ordinate Reference:**	Well Quail 16 State Com #203H
Company:	Avant Operating II, LLC	**TVD Reference:**	Well @ 3662.0usft (3662)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	Well @ 3662.0usft (3662)
Site:	Quail 16 State Com Pad 1	**North Reference:**	Grid
Well:	Quail 16 State Com #203H	**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 Quail 16 State Com Pad 1

Site Position:		**Northing:**	571,105.87 usft	**Latitude:**	32.567724
From:	Map	**Easting:**	775,635.79 usft	**Longitude:**	-103.572789
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "		

Well Quail 16 State Com #203H

Well Position	**+N/-S**	0.0 usft	**Northing:**	570,928.94 usft	**Latitude:**	32.567224
	+E/-W	0.0 usft	**Easting:**	776,366.17 usft	**Longitude:**	-103.570423
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	3,637.0 usft	**Ground Level:**	3,637.0 usft
Grid Convergence:		0.41 °				

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	12/31/2009	7.77	60.56	48,998.54339036

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	359.56

Plan Survey Tool Program **Date** 12/22/2025

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	14,043.4	Plan 0.1 (OH)	B001Mb_MWD+HRGM OWSG MWD + HRGM	

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	
2,704.6	14.09	108.41	2,697.5	-27.2	81.8	2.00	2.00	0.00	108.41	
7,425.7	14.09	108.41	7,276.5	-390.3	1,172.4	0.00	0.00	0.00	0.00	
8,130.2	0.00	0.00	7,974.0	-417.5	1,254.2	2.00	-2.00	0.00	180.00	
8,652.7	0.00	0.00	8,496.5	-417.5	1,254.2	0.00	0.00	0.00	0.00	
9,402.7	90.00	359.56	8,974.0	59.9	1,250.5	12.00	12.00	-0.06	359.56	
14,043.4	90.00	359.56	8,974.0	4,700.4	1,215.0	0.00	0.00	0.00	0.00	Quail 16 State Com #

Planning Report

Database:	EDM 5000.16 Single User Db	**Local Co-ordinate Reference:**	Well Quail 16 State Com #203H
Company:	Avant Operating II, LLC	**TVD Reference:**	Well @ 3662.0usft (3662)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	Well @ 3662.0usft (3662)
Site:	Quail 16 State Com Pad 1	**North Reference:**	Grid
Well:	Quail 16 State Com #203H	**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
1,552.0	0.00	0.00	1,552.0	0.0	0.0	0.0	0.00	0.00	0.00
RUSTLER									
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
1,881.0	0.00	0.00	1,881.0	0.0	0.0	0.0	0.00	0.00	0.00
SOLADO									
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 2.00									
2,100.0	2.00	108.41	2,100.0	-0.6	1.7	-0.6	2.00	2.00	0.00
2,200.0	4.00	108.41	2,199.8	-2.2	6.6	-2.3	2.00	2.00	0.00
2,300.0	6.00	108.41	2,299.5	-5.0	14.9	-5.1	2.00	2.00	0.00
2,400.0	8.00	108.41	2,398.7	-8.8	26.5	-9.0	2.00	2.00	0.00
2,500.0	10.00	108.41	2,497.5	-13.7	41.3	-14.1	2.00	2.00	0.00
2,600.0	12.00	108.41	2,595.6	-19.8	59.4	-20.2	2.00	2.00	0.00
2,700.0	14.00	108.41	2,693.1	-26.9	80.7	-27.5	2.00	2.00	0.00
2,704.6	14.09	108.41	2,697.5	-27.2	81.8	-27.9	2.00	2.00	0.00
Start 4721.1 hold at 2704.6 MD									
2,800.0	14.09	108.41	2,790.0	-34.6	103.8	-35.4	0.00	0.00	0.00
2,900.0	14.09	108.41	2,887.0	-42.3	126.9	-43.2	0.00	0.00	0.00
3,000.0	14.09	108.41	2,984.0	-49.9	150.0	-51.1	0.00	0.00	0.00
3,100.0	14.09	108.41	3,081.0	-57.6	173.1	-59.0	0.00	0.00	0.00
3,200.0	14.09	108.41	3,178.0	-65.3	196.2	-66.8	0.00	0.00	0.00
3,300.0	14.09	108.41	3,275.0	-73.0	219.3	-74.7	0.00	0.00	0.00
3,334.0	14.09	108.41	3,308.0	-75.6	227.2	-77.4	0.00	0.00	0.00
BASE_OF_SALT									
3,400.0	14.09	108.41	3,372.0	-80.7	242.4	-82.6	0.00	0.00	0.00
3,439.2	14.09	108.41	3,410.0	-83.7	251.5	-85.6	0.00	0.00	0.00
YATES									
3,500.0	14.09	108.41	3,469.0	-88.4	265.5	-90.4	0.00	0.00	0.00
3,600.0	14.09	108.41	3,566.0	-96.1	288.6	-98.3	0.00	0.00	0.00
3,700.0	14.09	108.41	3,663.0	-103.8	311.7	-106.2	0.00	0.00	0.00
3,800.0	14.09	108.41	3,760.0	-111.5	334.8	-114.0	0.00	0.00	0.00
3,886.7	14.09	108.41	3,844.0	-118.1	354.9	-120.8	0.00	0.00	0.00
SVRV									
3,900.0	14.09	108.41	3,856.9	-119.2	357.9	-121.9	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	**Local Co-ordinate Reference:**	Well Quail 16 State Com #203H
Company:	Avant Operating II, LLC	**TVD Reference:**	Well @ 3662.0usft (3662)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	Well @ 3662.0usft (3662)
Site:	Quail 16 State Com Pad 1	**North Reference:**	Grid
Well:	Quail 16 State Com #203H	**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)
4,000.0	14.09	108.41	3,953.9	-126.8	381.0	-129.8	0.00	0.00	0.00
4,059.9	14.09	108.41	4,012.0	-131.4	394.9	-134.5	0.00	0.00	0.00
CAPITAN_REEF									
4,100.0	14.09	108.41	4,050.9	-134.5	404.1	-137.6	0.00	0.00	0.00
4,200.0	14.09	108.41	4,147.9	-142.2	427.2	-145.5	0.00	0.00	0.00
4,300.0	14.09	108.41	4,244.9	-149.9	450.3	-153.4	0.00	0.00	0.00
4,400.0	14.09	108.41	4,341.9	-157.6	473.4	-161.2	0.00	0.00	0.00
4,500.0	14.09	108.41	4,438.9	-165.3	496.5	-169.1	0.00	0.00	0.00
4,600.0	14.09	108.41	4,535.9	-173.0	519.6	-177.0	0.00	0.00	0.00
4,700.0	14.09	108.41	4,632.9	-180.7	542.7	-184.8	0.00	0.00	0.00
4,800.0	14.09	108.41	4,729.9	-188.4	565.8	-192.7	0.00	0.00	0.00
4,900.0	14.09	108.41	4,826.9	-196.1	588.9	-200.6	0.00	0.00	0.00
5,000.0	14.09	108.41	4,923.8	-203.7	612.0	-208.4	0.00	0.00	0.00
5,100.0	14.09	108.41	5,020.8	-211.4	635.1	-216.3	0.00	0.00	0.00
5,200.0	14.09	108.41	5,117.8	-219.1	658.2	-224.2	0.00	0.00	0.00
5,300.0	14.09	108.41	5,214.8	-226.8	681.3	-232.0	0.00	0.00	0.00
5,355.9	14.09	108.41	5,269.0	-231.1	694.2	-236.4	0.00	0.00	0.00
CPTN_REEF_BASE									
5,400.0	14.09	108.41	5,311.8	-234.5	704.4	-239.9	0.00	0.00	0.00
5,500.0	14.09	108.41	5,408.8	-242.2	727.5	-247.8	0.00	0.00	0.00
5,600.0	14.09	108.41	5,505.8	-249.9	750.6	-255.6	0.00	0.00	0.00
5,654.9	14.09	108.41	5,559.0	-254.1	763.3	-260.0	0.00	0.00	0.00
CHERRY_CNYN									
5,700.0	14.09	108.41	5,602.8	-257.6	773.7	-263.5	0.00	0.00	0.00
5,800.0	14.09	108.41	5,699.8	-265.3	796.8	-271.4	0.00	0.00	0.00
5,900.0	14.09	108.41	5,796.8	-273.0	819.9	-279.2	0.00	0.00	0.00
6,000.0	14.09	108.41	5,893.8	-280.6	843.0	-287.1	0.00	0.00	0.00
6,100.0	14.09	108.41	5,990.7	-288.3	866.1	-295.0	0.00	0.00	0.00
6,200.0	14.09	108.41	6,087.7	-296.0	889.2	-302.8	0.00	0.00	0.00
6,300.0	14.09	108.41	6,184.7	-303.7	912.3	-310.7	0.00	0.00	0.00
6,400.0	14.09	108.41	6,281.7	-311.4	935.4	-318.6	0.00	0.00	0.00
6,500.0	14.09	108.41	6,378.7	-319.1	958.5	-326.4	0.00	0.00	0.00
6,600.0	14.09	108.41	6,475.7	-326.8	981.6	-334.3	0.00	0.00	0.00
6,700.0	14.09	108.41	6,572.7	-334.5	1,004.7	-342.2	0.00	0.00	0.00
6,748.8	14.09	108.41	6,620.0	-338.2	1,016.0	-346.0	0.00	0.00	0.00
BRUSHY_CANYON									
6,800.0	14.09	108.41	6,669.7	-342.2	1,027.8	-350.0	0.00	0.00	0.00
6,900.0	14.09	108.41	6,766.7	-349.9	1,050.9	-357.9	0.00	0.00	0.00
7,000.0	14.09	108.41	6,863.7	-357.5	1,074.1	-365.8	0.00	0.00	0.00
7,100.0	14.09	108.41	6,960.7	-365.2	1,097.2	-373.6	0.00	0.00	0.00
7,200.0	14.09	108.41	7,057.6	-372.9	1,120.3	-381.5	0.00	0.00	0.00
7,300.0	14.09	108.41	7,154.6	-380.6	1,143.4	-389.4	0.00	0.00	0.00
7,400.0	14.09	108.41	7,251.6	-388.3	1,166.5	-397.2	0.00	0.00	0.00
7,425.7	14.09	108.41	7,276.5	-390.3	1,172.4	-399.3	0.00	0.00	0.00
Start Drop -2.00									
7,500.0	12.60	108.41	7,348.8	-395.7	1,188.7	-404.8	2.00	-2.00	0.00
7,600.0	10.60	108.41	7,446.8	-402.0	1,207.7	-411.3	2.00	-2.00	0.00
7,700.0	8.60	108.41	7,545.4	-407.3	1,223.6	-416.7	2.00	-2.00	0.00
7,800.0	6.60	108.41	7,644.5	-411.5	1,236.1	-421.0	2.00	-2.00	0.00
7,900.0	4.60	108.41	7,744.0	-414.6	1,245.4	-424.1	2.00	-2.00	0.00
8,000.0	2.60	108.41	7,843.8	-416.6	1,251.4	-426.2	2.00	-2.00	0.00
8,100.0	0.60	108.41	7,943.8	-417.4	1,254.0	-427.1	2.00	-2.00	0.00
8,130.2	0.00	0.00	7,974.0	-417.5	1,254.2	-427.1	2.00	-2.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	**Local Co-ordinate Reference:**	Well Quail 16 State Com #203H
Company:	Avant Operating II, LLC	**TVD Reference:**	Well @ 3662.0usft (3662)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	Well @ 3662.0usft (3662)
Site:	Quail 16 State Com Pad 1	**North Reference:**	Grid
Well:	Quail 16 State Com #203H	**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)
Start 522.5 hold at 8130.2 MD									
8,200.0	0.00	0.00	8,043.8	-417.5	1,254.2	-427.1	0.00	0.00	0.00
8,300.0	0.00	0.00	8,143.8	-417.5	1,254.2	-427.1	0.00	0.00	0.00
8,400.0	0.00	0.00	8,243.8	-417.5	1,254.2	-427.1	0.00	0.00	0.00
8,500.0	0.00	0.00	8,343.8	-417.5	1,254.2	-427.1	0.00	0.00	0.00
8,513.2	0.00	0.00	8,357.0	-417.5	1,254.2	-427.1	0.00	0.00	0.00
BSPG_LIME									
8,600.0	0.00	0.00	8,443.8	-417.5	1,254.2	-427.1	0.00	0.00	0.00
8,652.7	0.00	0.00	8,496.5	-417.5	1,254.2	-427.1	0.00	0.00	0.00
KOP #2 - Start DLS 12.00 TFO 359.56									
8,700.0	5.67	359.56	8,543.7	-415.2	1,254.2	-424.8	12.00	12.00	0.00
8,800.0	17.67	359.56	8,641.5	-395.0	1,254.0	-404.6	12.00	12.00	0.00
8,900.0	29.67	359.56	8,732.9	-354.9	1,253.7	-364.5	12.00	12.00	0.00
8,936.7	34.07	359.56	8,764.0	-335.5	1,253.5	-345.1	12.00	12.00	0.00
AVALON_B									
9,000.0	41.67	359.56	8,814.0	-296.7	1,253.2	-306.3	12.00	12.00	0.00
9,051.8	47.89	359.56	8,850.7	-260.2	1,253.0	-269.8	12.00	12.00	0.00
Quail 16 State Com #203H FTP									
9,100.0	53.67	359.56	8,881.2	-222.9	1,252.7	-232.5	12.00	12.00	0.00
9,200.0	65.67	359.56	8,931.6	-136.7	1,252.0	-146.3	12.00	12.00	0.00
9,300.0	77.67	359.56	8,963.0	-42.0	1,251.3	-51.6	12.00	12.00	0.00
9,400.0	89.67	359.56	8,974.0	57.2	1,250.5	47.6	12.00	12.00	0.00
9,402.7	90.00	359.56	8,974.0	59.9	1,250.5	50.3	12.00	12.00	0.00
LP - Start 4640.6 hold at 9402.7 MD									
9,407.5	89.67	359.56	8,974.0	64.8	1,250.5	55.2	6.79	-6.79	0.00
200S									
9,500.0	90.00	359.56	8,974.0	157.2	1,249.8	147.6	0.35	0.35	0.00
9,600.0	90.00	359.56	8,974.0	257.2	1,249.0	247.6	0.00	0.00	0.00
9,700.0	90.00	359.56	8,974.0	357.2	1,248.2	347.6	0.00	0.00	0.00
9,800.0	90.00	359.56	8,974.0	457.2	1,247.5	447.6	0.00	0.00	0.00
9,900.0	90.00	359.56	8,974.0	557.2	1,246.7	547.6	0.00	0.00	0.00
10,000.0	90.00	359.56	8,974.0	657.2	1,245.9	647.6	0.00	0.00	0.00
10,100.0	90.00	359.56	8,974.0	757.2	1,245.2	747.6	0.00	0.00	0.00
10,200.0	90.00	359.56	8,974.0	857.2	1,244.4	847.6	0.00	0.00	0.00
10,300.0	90.00	359.56	8,974.0	957.2	1,243.6	947.6	0.00	0.00	0.00
10,400.0	90.00	359.56	8,974.0	1,057.2	1,242.9	1,047.6	0.00	0.00	0.00
10,500.0	90.00	359.56	8,974.0	1,157.2	1,242.1	1,147.6	0.00	0.00	0.00
10,600.0	90.00	359.56	8,974.0	1,257.2	1,241.3	1,247.6	0.00	0.00	0.00
10,700.0	90.00	359.56	8,974.0	1,357.2	1,240.6	1,347.6	0.00	0.00	0.00
10,800.0	90.00	359.56	8,974.0	1,457.2	1,239.8	1,447.6	0.00	0.00	0.00
10,900.0	90.00	359.56	8,974.0	1,557.2	1,239.0	1,547.6	0.00	0.00	0.00
11,000.0	90.00	359.56	8,974.0	1,657.2	1,238.3	1,647.6	0.00	0.00	0.00
11,100.0	90.00	359.56	8,974.0	1,757.2	1,237.5	1,747.6	0.00	0.00	0.00
11,200.0	90.00	359.56	8,974.0	1,857.2	1,236.7	1,847.6	0.00	0.00	0.00
11,300.0	90.00	359.56	8,974.0	1,957.2	1,236.0	1,947.6	0.00	0.00	0.00
11,400.0	90.00	359.56	8,974.0	2,057.2	1,235.2	2,047.6	0.00	0.00	0.00
11,500.0	90.00	359.56	8,974.0	2,157.2	1,234.4	2,147.6	0.00	0.00	0.00
11,600.0	90.00	359.56	8,974.0	2,257.2	1,233.7	2,247.6	0.00	0.00	0.00
11,700.0	90.00	359.56	8,974.0	2,357.2	1,232.9	2,347.6	0.00	0.00	0.00
11,800.0	90.00	359.56	8,974.0	2,457.2	1,232.1	2,447.6	0.00	0.00	0.00
11,900.0	90.00	359.56	8,974.0	2,557.2	1,231.4	2,547.6	0.00	0.00	0.00
12,000.0	90.00	359.56	8,974.0	2,657.2	1,230.6	2,647.6	0.00	0.00	0.00
12,100.0	90.00	359.56	8,974.0	2,757.1	1,229.8	2,747.6	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	**Local Co-ordinate Reference:**	Well Quail 16 State Com #203H
Company:	Avant Operating II, LLC	**TVD Reference:**	Well @ 3662.0usft (3662)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	Well @ 3662.0usft (3662)
Site:	Quail 16 State Com Pad 1	**North Reference:**	Grid
Well:	Quail 16 State Com #203H	**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)
12,200.0	90.00	359.56	8,974.0	2,857.1	1,229.1	2,847.6	0.00	0.00	0.00
12,300.0	90.00	359.56	8,974.0	2,957.1	1,228.3	2,947.6	0.00	0.00	0.00
12,400.0	90.00	359.56	8,974.0	3,057.1	1,227.5	3,047.6	0.00	0.00	0.00
12,500.0	90.00	359.56	8,974.0	3,157.1	1,226.8	3,147.6	0.00	0.00	0.00
12,600.0	90.00	359.56	8,974.0	3,257.1	1,226.0	3,247.6	0.00	0.00	0.00
12,700.0	90.00	359.56	8,974.0	3,357.1	1,225.3	3,347.6	0.00	0.00	0.00
12,800.0	90.00	359.56	8,974.0	3,457.1	1,224.5	3,447.6	0.00	0.00	0.00
12,900.0	90.00	359.56	8,974.0	3,557.1	1,223.7	3,547.6	0.00	0.00	0.00
13,000.0	90.00	359.56	8,974.0	3,657.1	1,223.0	3,647.6	0.00	0.00	0.00
13,100.0	90.00	359.56	8,974.0	3,757.1	1,222.2	3,747.6	0.00	0.00	0.00
13,200.0	90.00	359.56	8,974.0	3,857.1	1,221.4	3,847.6	0.00	0.00	0.00
13,300.0	90.00	359.56	8,974.0	3,957.1	1,220.7	3,947.6	0.00	0.00	0.00
13,400.0	90.00	359.56	8,974.0	4,057.1	1,219.9	4,047.6	0.00	0.00	0.00
13,500.0	90.00	359.56	8,974.0	4,157.1	1,219.1	4,147.6	0.00	0.00	0.00
13,600.0	90.00	359.56	8,974.0	4,257.1	1,218.4	4,247.6	0.00	0.00	0.00
13,700.0	90.00	359.56	8,974.0	4,357.1	1,217.6	4,347.6	0.00	0.00	0.00
13,800.0	90.00	359.56	8,974.0	4,457.1	1,216.8	4,447.6	0.00	0.00	0.00
13,900.0	90.00	359.56	8,974.0	4,557.1	1,216.1	4,547.6	0.00	0.00	0.00
14,000.0	90.00	359.56	8,974.0	4,657.1	1,215.3	4,647.6	0.00	0.00	0.00
14,043.4	90.00	359.56	8,974.0	4,700.4	1,215.0	4,691.0	0.00	0.00	0.00
TD at 14043.4 - Quail 16 State Com #203H LTP/BHL									

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
Quail 16 State Com #20 - plan misses target center by 166.8usft at 9051.8usft MD (8850.7 TVD, -260.2 N, 1253.0 E) - Point	0.00	0.00	8,974.0	-372.5	1,254.2	570,556.43	777,620.34	32.566175	-103.566361
Quail 16 State Com #20 - plan hits target center - Point	0.00	0.00	8,974.0	4,700.4	1,215.0	575,629.39	777,581.13	32.580119	-103.566369

Planning Report

Database:	EDM 5000.16 Single User Db	**Local Co-ordinate Reference:**	Well Quail 16 State Com #203H
Company:	Avant Operating II, LLC	**TVD Reference:**	Well @ 3662.0usft (3662)
Project:	Lea County, NM (NAD 83)	**MD Reference:**	Well @ 3662.0usft (3662)
Site:	Quail 16 State Com Pad 1	**North Reference:**	Grid
Well:	Quail 16 State Com #203H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 0.1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,552.0	1,552.0	RUSTLER			
1,881.0	1,881.0	SOLADO			
3,334.0	3,308.0	BASE_OF_SALT			
3,439.2	3,410.0	YATES			
3,886.7	3,844.0	SVRV			
4,059.9	4,012.0	CAPITAN_REEF			
5,355.9	5,269.0	CPTN_REEF_BASE			
5,654.9	5,559.0	CHERRY_CNYN			
6,748.8	6,620.0	BRUSHY_CANYON			
8,513.2	8,357.0	BSPG_LIME			
8,936.7	8,764.0	AVALON_B			
9,407.5	8,974.0	200S			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
2,000.0	2,000.0	0.0	0.0	KOP - Start Build 2.00
2,704.6	2,697.5	-27.2	81.8	Start 4721.1 hold at 2704.6 MD
7,425.7	7,276.5	-390.3	1,172.4	Start Drop -2.00
8,130.2	7,974.0	-417.5	1,254.2	Start 522.5 hold at 8130.2 MD
8,652.7	8,496.5	-417.5	1,254.2	KOP #2 - Start DLS 12.00 TFO 359.56
9,402.7	8,974.0	59.9	1,250.5	LP - Start 4640.6 hold at 9402.7 MD
14,043.4	8,974.0	4,700.4	1,215.0	TD at 14043.4

AFE: NM1359

API:

REGULATORY: NM State

PERMIT #

RIG:

KB: 3663.5 (26.5')

GL: 3637'

Quail 16 State Com #203H

Avalon

Lea County, NM

SHL: *Sec. 16, T-20S, R-34E; 479 FSL, 1059 FWL*

Lat: 32.567224, Long: -103.570423 (NAD83)

HOLE SIZE	MD	FORMATION	TVD	MUD	CASING	CEMENT	SPECIAL INSTRUCTIONS
	120	20" Conductor	120	SPUD MW 8.4 ppg	10 3/4 " 40.5# J-55 BTC	LEAD: 12.8 PPG Top of Lead: 0 50% Excess	Circ cement to surface is a NMOCD requirement
14 3/4 "	1,552	Rustler	1,552	Fresh	+/- 13 Bowsprings 1 20' pup jt	TAIL: 14.8 PPG Top of Tail: 1262' 20% Excess	Casing must be set 25' into the Rustler
	1,577	SURF CSG PT	1,577	9.9 ppg	*1 joint shoe track*		MUD: Fresh water only
	1,881	Solado	1,881	DRLOUT MW 10 ppg	8 5/8 " 32# L-80 HC BK	2 STAGE CEMENT	Circ cement to surface is a NMOCD requirement
	3,334	Yates	3,308			1st STAGE: LEAD: 12.5 PPG Top of Lead: 0' 20% excess TAIL: 14.5 PPG Top of Tail: 4324' 20% Excess	
9 7/8 "	3,800	DV TOOL & PACKER	3,800	Brine	1 20' pup jt		
	4,060	Capitan Reef	4,012			2nd STAGE: LEAD: 12.5 PPG Top of Lead: 0' 20% Excess TAIL: 14.2 PPG Top of Tail: 3200' no excess	
	5,356	Base of Capitan	5,269	TD MW 10 ppg	+/- 9 Bowsprings *1 joint shoe track*		
	5,406	INTRM CSG PT	5,319				
	5,655	Cherry Canyon	5,559	DRLOUT MW 9 Cut Brine		R-111-Q FIGURE B Set production cement >500' short of Int1 shoe and perform post-frac bullhead cement job.	
7 7/8 " VERTICAL	6,749	Brushy Canyon	6,620				
	8,513	Bone Spring	8,357	KOP MW 9.2 OBM			
7 7/8 " CURVE	**8,653**	**KOP**	**8,497**	EOC MW 9.2	Lat MW 9.2 OBM TD MW 9.2		**14,043 ' MD**
	8,937	Avalon	8,764				*4,691 ' VS*
	9,403	**EOC**	**8,974**				8,974 ' TVD
7 7/8 " LATERAL					5 1/2 " 20# P-110 HC GBCD	LEAD: 10.7 PPG Top of Lead: 6500 0% Excess	Expected BH Presure: 4128
					1 15' pup jt 2 20' Marker Jts +/- 27 Bowsprings +/- 27 Doublebows +/- 110 Solid Bodies	TAIL: 14.8 PPG Top of Tail: 8653 0% Excess	POST FRAC: SQUEEZE CEMENT TO TIE IN 5.5'' STRING. FINAL TOP OF CEMENT 500' ABOVE PREVIOUS SHOE WITH ≈47BBLS
						All aqueous fluids (spacer and disp) left inside or outside of pipe must have biocide & corrision inhibitor	

12°/100'

WET SHOE

BHL: 100 FNL, 2310 FWL

DIRECTIONAL PLAN

MD	INC	INC	TVD	ANNOTATION

EOC VS = 50' *Lat. Azi = VS Azi. = 359.56°* Est BHST = 155°F, Est BHCT = 138°F

PRELIMINARY

DIRECTIONS TO LOCATION:

Drilling Engineer: Ryan Harris

Quail 16 State Com #203H ()

Date: 12/22/2025

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:** 09/29/2025

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
Quail 16 State Com 201H		M-16-T20S-R34E	480FSL/919FWL	1200 BBL/D	3600 MCF/D	6000 BBL/D
Quail 16 State Com 202H		M-16-T20S-R34E	479FSL/979FWL	1200 BBL/D	3600 MCF/D	6000 BBL/D
Quail 16 State Com 203H		M-16-T20S-R34E	479FSL/1059FWL	1200 BBL/D	3600 MCF/D	6000 BBL/D
Quail 16 State Com 301H		M-16-T20S-R34E	480FSL/939FWL	950 BBL/D	2000 MCF/D	6650 BBL/D
Quail 16 State Com 302H		M-16-T20S-R34E	479FSL/1019FWL	950 BBL/D	2000 MCF/D	6650 BBL/D
Quail 16 State Com 501H		M-16-T20S-R34E	479FSL/959FEL	1400 BBL/D	2400 MCF/D	7500 BBL/D
Quail 16 State Com 502H		M-16-T20S-R34E	479FSL/999FWL	1400 BBL/D	2400 MCF/D	7500 BBL/D
Quail 16 State Com 503H		M-16-T20S-R34E	479FSL/1039FWL	1400 BBL/D	2400 MCF/D	7500 BBL/D
Quail 16 State Com 751H		M-16-T20S-R34E	329FSL/958FWL	1250 BBL/D	2600 MCF/D	7500 BBL/D
Quail 16 State Com 752H		M-16-T20S-R34E	329FSL/1018FWL	1250 BBL/D	2600 MCF/D	7500 BBL/D
Quail 16 State Com 753H		M-16-T20S-R34E	329FSL/1058FWL	1250 BBL/D	2600 MCF/D	7500 BBL/D
Quail 16 State Com 801H		M-16-T20S-R34E	329FSL/978FWL	1200 BBL/D	2500 MCF/D	6000 BBL/D
Quail 16 State Com 802H		M-16-T20S-R34E	329FSL/998FWL	1200 BBL/D	2500 MCF/D	6000 BBL/D
Quail 16 State Com 803H		M-16-T20S-R34E	329FSL/1038FWL	1200 BBL/D	2500 MCF/D	6000 BBL/D

IV. Central Delivery Point Name: Quail 16 State 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
Quail 16 State Com 201H		02/15/2026	03/30/2026	05/01/2026	07/01/2026	07/01/2026
Quail 16 State Com 202H		02/15/2026	03/30/2026	05/01/2026	07/01/2026	07/01/2026
Quail 16 State Com 203H		02/15/2026	03/30/2026	05/01/2026	07/01/2026	07/01/2026
Quail 16 State Com 301H		02/15/2026	03/30/2026	05/01/2026	07/01/2026	07/01/2026
Quail 16 State Com 302H		02/15/2026	03/30/2026	05/01/2026	07/01/2026	07/01/2026
Quail 16 State Com 501H		02/15/2026	03/30/2026	05/01/2026	07/01/2026	07/01/2026
Quail 16 State Com 502H		02/15/2026	03/30/2026	05/01/2026	07/01/2026	07/01/2026
Quail 16 State Com 503H		02/15/2026	03/30/2026	05/01/2026	07/01/2026	07/01/2026
Quail 16 State Com 751H		02/15/2026	03/30/2026	05/01/2026	07/01/2026	07/01/2026
Quail 16 State Com 752H		02/15/2026	03/30/2026	05/01/2026	07/01/2026	07/01/2026
Quail 16 State Com 753H		02/15/2026	03/30/2026	05/01/2026	07/01/2026	07/01/2026
Quail 16 State Com 801H		02/15/2026	03/30/2026	05/01/2026	07/01/2026	07/01/2026
Quail 16 State Com 802H		02/15/2026	03/30/2026	05/01/2026	07/01/2026	07/01/2026
Quail 16 State Com 803H		02/15/2026	03/30/2026	05/01/2026	07/01/2026	07/01/2026

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: 08/15/25
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.