

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised August 1, 2011

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

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Avant Operaing, LLC 1515 Wynkoop Street, Suite 700 Denver, CO 80202		² OGRID Number 330396
		³ Reason for Filing Code/ Effective Date RT 10/29/23
⁴ API Number 30 - 0 25-51303	⁵ Pool Name GRAMA RIDGE; BONE SPRINGS, WEST	⁶ Pool Code 28432
⁷ Property Code 333899	⁸ Property Name Speyside 18 Federal	⁹ Well Number 501H

II. ¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South Line	Feet from the	East/West line	County
A	18	22S	34E		152	North	656	East	Lea

¹¹ Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	18	22S	34E		72	South	653	East	Lea
¹² Lse Code F	¹³ Producing Method Code F	¹⁴ Gas Connection Date 10/29/23	¹⁵ C-129 Permit Number		¹⁶ C-129 Effective Date		¹⁷ C-129 Expiration Date		

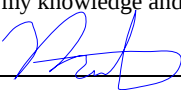
III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
195739	Plains Pipeline, L.P.	O

IV. Well Completion Data

²¹ Spud Date 4/16/2023	²² Ready Date 10/29/23	²³ TD 15,859MD/10,561TVD	²⁴ PBTD 15,806'	²⁵ Perforations 11,069'-15,796'	²⁶ DHC, MC
²⁷ Hole Size		²⁸ Casing & Tubing Size	²⁹ Depth Set		³⁰ Sacks Cement
17-1/2"		13-3/8"	1,722'		1020
12-1/4"		9-5/8"	5,008'		1540
8-3/4"		5-1/2"	15,844'		2225

V. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date	³⁴ Test Length	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
³⁷ Choke Size	³⁸ Oil	³⁹ Water	⁴⁰ Gas		⁴¹ Test Method
⁴² I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief. Signature: 			OIL CONSERVATION DIVISION		
Printed name: Meghan Twele			Approved by: PATRICIA MARTINEZ		
Title: Contract Regulatory Analyst			Title: PETROLEUM SPECIALIST		
E-mail Address: mtwele@outlook.com			Approval Date: 1/5/2024		
Date: 12/10/2023		Phone: 720-339-6880	RT EXPIRES 1/29/2024		

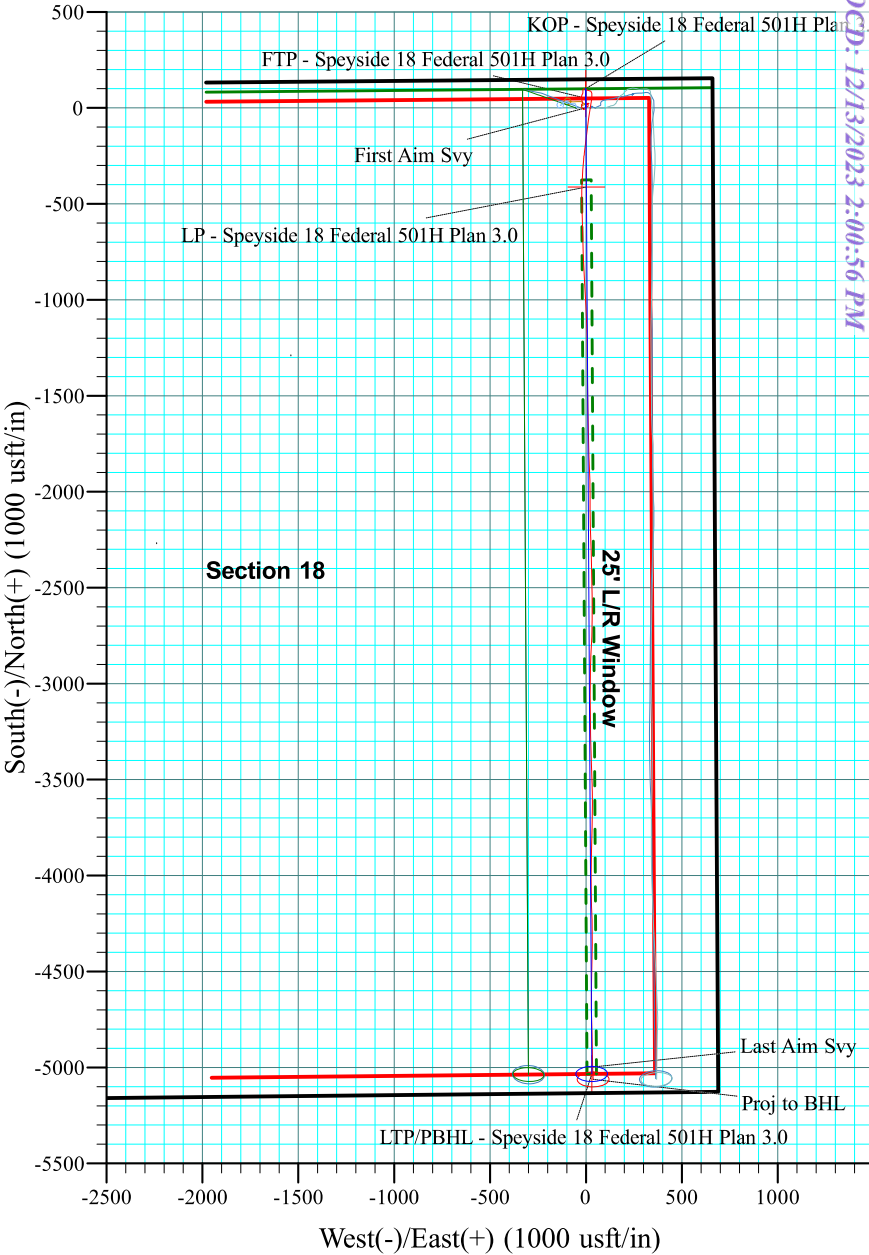
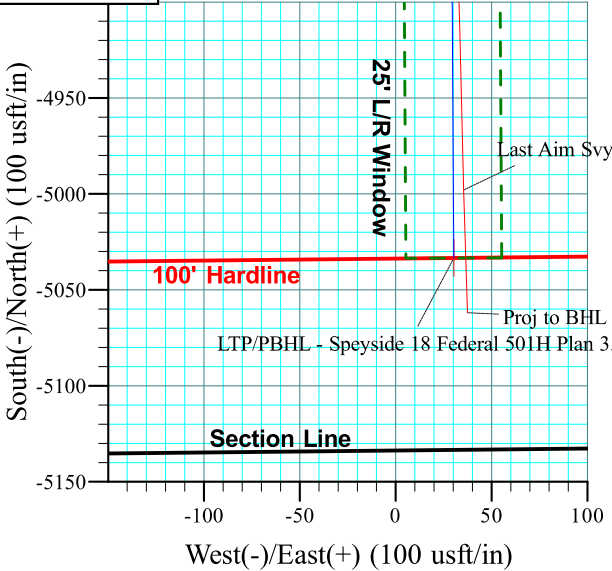
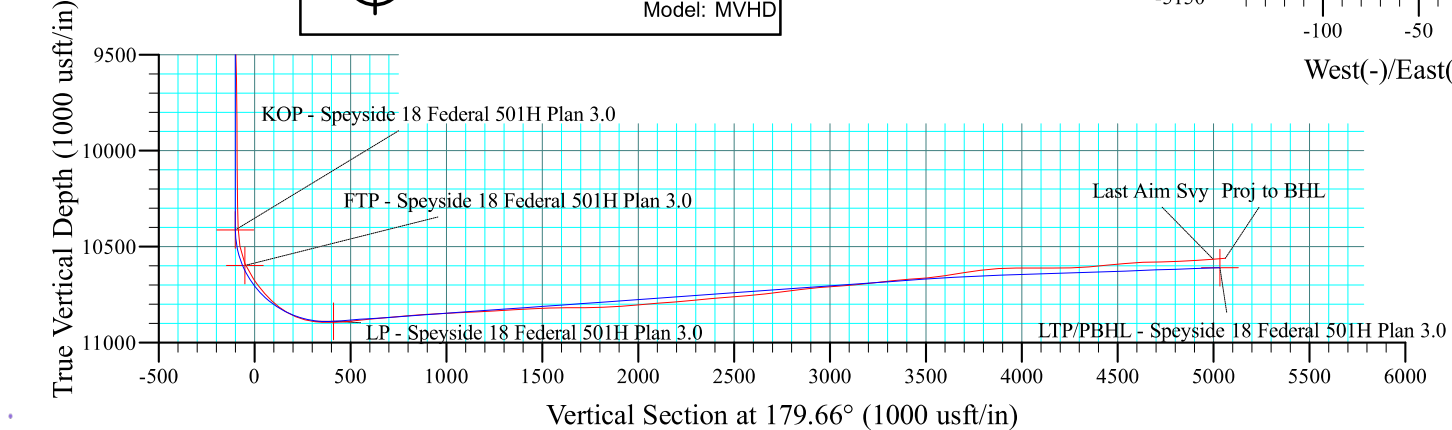
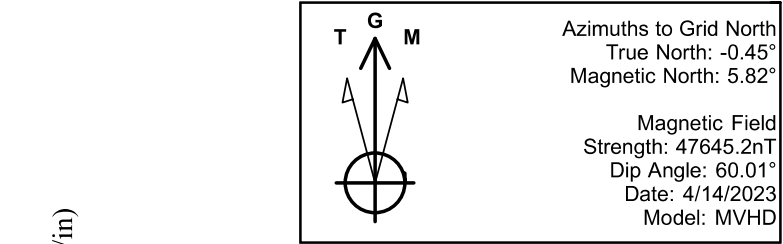
Released for Imaging: 1/5/2024 3:42:19 PM

Received by OCPD: 12/13/2023 2:00:56 PM

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	
2	5620.00	0.00	0.00	5620.00	0.00	0.00	0.000	0.00	0.00	Build: 2°/100'
3	5723.12	2.06	359.67	5723.10	1.86	-0.01	2.000	359.67	-1.86	Hold: 2.06° Inc, 359.67° Azm
4	8398.65	2.06	359.67	8396.90	98.14	-0.56	0.000	0.00	-98.15	Drop: 2°/100'
5	8501.78	0.00	0.00	8500.00	100.00	-0.57	2.000	180.00	-100.00	Hold
6	10415.25	0.00	0.00	10413.47	100.00	-0.57	0.000	0.00	-100.00	KOP: 12°/100' @ 10415.25' MD
7	11199.21	94.08	179.66	10889.70	-411.40	2.50	12.001	179.66	411.41	LP/Hold: 94.08° Inc, 179.66° Azm
8	11199.21	94.08	179.66	10889.70	-411.40	2.50	0.000	0.00	411.41	LP/Hold: 94.08° Inc, 179.66° Azm
9	14397.99	94.08	179.66	10662.11	-3602.02	21.65	0.000	0.00	3602.08	Drop: 2°/100' @ 14398.00' MD
10	14501.92	92.00	179.65	10656.60	-3705.79	22.28	2.000	-179.89	3705.86	Hold: 92.00° Inc, 179.65° Azm
11	15830.36	92.00	179.65	10610.20	-5033.40	30.34	0.000	0.00	5033.49	LTP/PBHL - Speyside 18 Federal 501H Plan 3.0 PBHL

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
KOP - Speyside 18 Federal 501H Plan 3.0	10413.47	100.00	-0.57	509824.04	797693.21	32.39884	-103.50274
FTP - Speyside 18 Federal 501H Plan 3.0	10598.00	50.00	-0.27	509774.04	797693.51	32.39870	-103.50274
LTP/PBHL - Speyside 18 Federal 501H Plan 3.0	10610.20	-5033.40	30.34	504690.64	797724.12	32.38473	-103.50277
LP - Speyside 18 Federal 501H Plan 3.0	10889.70	-411.40	2.50	509312.64	797696.28	32.39743	-103.50275

PROJECT DETAILS: Lea Co., NM (NAD 83)	SITE DETAILS: Speyside 18 Federal Pad
Geodetic System: US State Plane 1983 Datum: North American Datum 1983 Ellipsoid: GRS 1980 Zone: New Mexico Eastern Zone System Datum: Mean Sea Level	Site Centre Northing: 509649.38 Easting: 797697.64 Positional Uncertainty: 0.00 Convergence: 0.45 Local North: Grid



Aim Directional Services

Survey Report

Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well Speyside 18 Federal 501H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3534.00usft (25' RKB)
Site:	Speyside 18 Federal Pad	MD Reference:	Well @ 3534.00usft (25' RKB)
Well:	Speyside 18 Federal 501H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.17-Aim-DB

Project	Lea Co., 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	Speyside 18 Federal Pad		
Site Position:		Northing:	509,649.38 usft
From:	Map	Easting:	797,697.63 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.39836
		Longitude:	-103.50274

Well	Speyside 18 Federal 501H		
Well Position	+N/-S	0.00 usft	Northing: 509,724.04 usft
	+E/-W	0.00 usft	Easting: 797,693.78 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
Grid Convergence:	0.45 °	Ground Level:	3,509.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	MVHD	4/14/2023	6.27
			Dip Angle (°)
			60.01
			Field Strength (nT)
			47,645.18512200

Design	Surveys		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
			Direction (°)
			179.66

Survey Program	Date	5/19/2023		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
205.00	15,859.00	Aim MWD Surveys (OH)	B001Mb_MWD+HRGM	OWSG MWD + HRGM

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)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	
205.00	0.35	348.07	205.00	0.61	-0.13	-0.61	0.171	0.171	0.000	
First Aim Svy										
294.00	0.35	341.91	294.00	1.14	-0.27	-1.14	0.042	0.000	-6.921	
383.00	0.35	13.91	383.00	1.66	-0.29	-1.66	0.217	0.000	35.955	
474.00	0.40	19.79	473.99	2.23	-0.11	-2.23	0.069	0.055	6.462	
563.00	0.70	50.47	562.99	2.87	0.41	-2.86	0.461	0.337	34.472	
654.00	0.44	5.03	653.99	3.57	0.87	-3.56	0.551	-0.286	-49.934	
744.00	0.44	64.09	743.98	4.06	1.21	-4.06	0.482	0.000	65.622	
924.00	0.44	67.61	923.98	4.63	2.47	-4.61	0.015	0.000	1.956	

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Site:	Speyside 18 Federal Pad	MD Reference:	Well @ 3534.00usft (25' RKB)
Well:	Speyside 18 Federal 501H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.17-Aim-DB

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)	
1,018.00	0.62	165.78	1,017.98	4.27	2.93	-4.26	0.861	0.191	104.436	
1,112.00	1.10	67.17	1,111.97	4.13	3.89	-4.11	1.427	0.511	-104.904	
1,206.00	0.84	43.96	1,205.95	4.98	5.20	-4.95	0.496	-0.277	-24.691	
1,301.00	0.97	55.30	1,300.94	5.94	6.34	-5.90	0.232	0.137	11.937	
1,395.00	0.79	54.34	1,394.93	6.77	7.52	-6.72	0.192	-0.191	-1.021	
1,489.00	1.32	63.21	1,488.92	7.63	9.01	-7.58	0.588	0.564	9.436	
1,584.00	0.97	25.16	1,583.90	8.85	10.33	-8.79	0.859	-0.368	-40.053	
1,658.00	1.36	15.49	1,657.88	10.27	10.83	-10.20	0.588	0.527	-13.068	
1,773.00	1.89	8.81	1,772.84	13.46	11.49	-13.39	0.489	0.461	-5.809	
1,867.00	1.45	4.06	1,866.80	16.17	11.81	-16.10	0.490	-0.468	-5.053	
1,962.00	0.84	299.29	1,961.78	17.71	11.29	-17.65	1.400	-0.642	-68.179	
2,056.00	1.05	284.78	2,055.77	18.27	9.85	-18.21	0.337	0.223	-15.436	
2,151.00	1.10	268.96	2,150.75	18.48	8.10	-18.43	0.316	0.053	-16.653	
2,245.00	1.23	289.79	2,244.73	18.80	6.25	-18.76	0.468	0.138	22.160	
2,340.00	1.23	299.55	2,339.71	19.65	4.40	-19.62	0.220	0.000	10.274	
2,434.00	0.92	299.55	2,433.69	20.52	2.87	-20.50	0.330	-0.330	0.000	
2,527.00	0.79	284.87	2,526.68	21.05	1.60	-21.04	0.273	-0.140	-15.785	
2,621.00	0.44	295.33	2,620.68	21.37	0.65	-21.37	0.390	-0.372	11.128	
2,716.00	0.48	325.65	2,715.67	21.86	0.09	-21.86	0.256	0.042	31.916	
2,810.00	0.57	60.05	2,809.67	22.42	0.28	-22.41	0.822	0.096	100.426	
2,904.00	1.41	85.89	2,903.66	22.73	1.83	-22.72	0.990	0.894	27.489	
2,998.00	2.29	83.95	2,997.61	23.01	4.86	-22.98	0.938	0.936	-2.064	
3,092.00	1.80	93.53	3,091.55	23.12	8.20	-23.07	0.634	-0.521	10.191	
3,186.00	0.44	149.61	3,185.53	22.72	9.85	-22.66	1.699	-1.447	59.660	
3,281.00	0.31	251.30	3,280.53	22.32	9.79	-22.26	0.618	-0.137	107.042	
3,375.00	0.62	71.83	3,374.53	22.40	10.04	-22.34	0.989	0.330	-190.926	
3,469.00	1.32	93.62	3,468.51	22.49	11.60	-22.42	0.829	0.745	23.181	
3,564.00	1.14	88.61	3,563.49	22.44	13.64	-22.36	0.221	-0.189	-5.274	
3,658.00	0.79	49.41	3,657.48	22.89	15.06	-22.80	0.773	-0.372	-41.702	
3,753.00	0.62	42.29	3,752.47	23.69	15.91	-23.60	0.201	-0.179	-7.495	
3,847.00	0.53	277.49	3,846.47	24.12	15.82	-24.03	1.085	-0.096	-132.766	
3,941.00	1.54	267.82	3,940.45	24.13	14.13	-24.05	1.087	1.074	-10.287	
4,035.00	1.41	270.37	4,034.42	24.09	11.71	-24.02	0.155	-0.138	2.713	
4,130.00	1.10	271.60	4,129.40	24.13	9.63	-24.07	0.328	-0.326	1.295	
4,224.00	1.14	238.99	4,223.38	23.67	7.92	-23.62	0.670	0.043	-34.691	
4,318.00	1.27	223.35	4,317.36	22.43	6.41	-22.39	0.375	0.138	-16.638	
4,413.00	1.63	204.01	4,412.33	20.43	5.13	-20.40	0.634	0.379	-20.358	
4,507.00	1.93	212.54	4,506.29	17.87	3.74	-17.85	0.425	0.319	9.074	
4,601.00	2.20	216.85	4,600.22	15.10	1.80	-15.09	0.331	0.287	4.585	
4,695.00	1.54	210.87	4,694.17	12.57	0.07	-12.57	0.731	-0.702	-6.362	
4,790.00	1.63	191.53	4,789.14	10.15	-0.85	-10.15	0.568	0.095	-20.358	
4,884.00	1.76	196.72	4,883.10	7.46	-1.53	-7.47	0.214	0.138	5.521	
4,944.00	1.49	196.02	4,943.07	5.82	-2.01	-5.84	0.451	-0.450	-1.167	

Aim Directional Services

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Well:	Speyside 18 Federal 501H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.17-Aim-DB

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)	
5,084.00	1.41	205.95	5,083.03	2.53	-3.27	-2.55	0.188	-0.057	7.093	
5,178.00	1.63	214.82	5,177.00	0.39	-4.54	-0.42	0.342	0.234	9.436	
5,272.00	1.67	203.31	5,270.96	-1.97	-5.84	1.93	0.355	0.043	-12.245	
5,367.00	1.54	205.60	5,365.92	-4.39	-6.94	4.35	0.153	-0.137	2.411	
5,461.00	1.71	209.29	5,459.88	-6.75	-8.18	6.70	0.212	0.181	3.926	
5,555.00	2.02	265.19	5,553.84	-8.11	-10.51	8.05	1.882	0.330	59.468	
5,650.00	3.38	315.02	5,648.74	-6.27	-14.16	6.19	2.723	1.432	52.453	
5,744.00	4.04	326.09	5,742.55	-1.57	-17.97	1.46	1.033	0.702	11.777	
5,838.00	3.12	332.86	5,836.36	3.46	-20.98	-3.58	1.075	-0.979	7.202	
5,933.00	2.51	347.10	5,931.25	7.79	-22.63	-7.92	0.972	-0.642	14.989	
6,027.00	1.93	15.49	6,025.18	11.32	-22.66	-11.45	1.303	-0.617	30.202	
6,121.00	1.54	14.52	6,119.14	14.07	-21.92	-14.20	0.416	-0.415	-1.032	
6,215.00	1.63	20.85	6,213.10	16.54	-21.13	-16.67	0.209	0.096	6.734	
6,309.00	1.67	11.88	6,307.06	19.13	-20.37	-19.25	0.278	0.043	-9.543	
6,404.00	1.63	20.85	6,402.02	21.75	-19.61	-21.86	0.275	-0.042	9.442	
6,498.00	1.45	19.88	6,495.99	24.12	-18.73	-24.23	0.193	-0.191	-1.032	
6,592.00	1.85	4.59	6,589.95	26.75	-18.20	-26.85	0.629	0.426	-16.266	
6,686.00	2.37	346.48	6,683.89	30.15	-18.53	-30.26	0.893	0.553	-19.266	
6,781.00	2.33	347.01	6,778.81	33.94	-19.43	-34.05	0.048	-0.042	0.558	
6,875.00	2.59	349.12	6,872.72	37.89	-20.26	-38.01	0.293	0.277	2.245	
6,970.00	2.46	351.58	6,967.63	42.01	-20.96	-42.14	0.178	-0.137	2.589	
7,064.00	2.11	351.85	7,061.55	45.72	-21.50	-45.85	0.373	-0.372	0.287	
7,159.00	2.02	358.17	7,156.49	49.13	-21.80	-49.25	0.258	-0.095	6.653	
7,253.00	1.76	355.98	7,250.44	52.22	-21.96	-52.35	0.287	-0.277	-2.330	
7,347.00	1.63	359.58	7,344.40	55.00	-22.07	-55.13	0.179	-0.138	3.830	
7,441.00	1.54	358.35	7,438.36	57.60	-22.11	-57.73	0.102	-0.096	-1.309	
7,536.00	1.76	359.84	7,533.32	60.33	-22.15	-60.46	0.236	0.232	1.568	
7,631.00	2.46	15.40	7,628.26	63.76	-21.62	-63.88	0.946	0.737	16.379	
7,725.00	2.07	20.67	7,722.19	67.29	-20.48	-67.41	0.470	-0.415	5.606	
7,819.00	2.20	22.34	7,816.12	70.55	-19.20	-70.66	0.153	0.138	1.777	
7,914.00	1.93	22.43	7,911.06	73.71	-17.89	-73.82	0.284	-0.284	0.095	
8,009.00	1.76	22.52	8,006.01	76.54	-16.72	-76.64	0.179	-0.179	0.095	
8,103.00	1.36	16.10	8,099.98	78.94	-15.86	-79.04	0.464	-0.426	-6.830	
8,197.00	2.07	0.90	8,193.93	81.71	-15.53	-81.80	0.891	0.755	-16.170	
8,291.00	2.55	358.88	8,287.86	85.50	-15.54	-85.59	0.518	0.511	-2.149	
8,386.00	2.02	0.63	8,382.78	89.29	-15.56	-89.38	0.563	-0.558	1.842	
8,480.00	1.63	4.77	8,476.73	92.28	-15.43	-92.37	0.438	-0.415	4.404	
8,575.00	1.49	12.85	8,571.70	94.83	-15.05	-94.92	0.274	-0.147	8.505	
8,669.00	1.23	28.32	8,665.67	96.91	-14.30	-96.99	0.476	-0.277	16.457	
8,763.00	0.79	29.81	8,759.66	98.36	-13.50	-98.44	0.469	-0.468	1.585	
8,857.00	0.75	63.30	8,853.65	99.20	-12.62	-99.27	0.474	-0.043	35.628	
8,951.00	0.88	82.11	8,947.64	99.57	-11.36	-99.64	0.314	0.138	20.011	
9,045.00	1.05	92.92	9,041.63	99.63	-9.78	-99.68	0.264	0.181	11.500	

Aim Directional Services

Survey Report

Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well Speyside 18 Federal 501H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3534.00usft (25' RKB)
Site:	Speyside 18 Federal Pad	MD Reference:	Well @ 3534.00usft (25' RKB)
Well:	Speyside 18 Federal 501H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.17-Aim-DB

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)
9,139.00	1.67	106.10	9,135.60	99.20	-7.61	-99.25	0.735	0.660	14.021
9,233.00	2.33	103.73	9,229.54	98.37	-4.44	-98.40	0.707	0.702	-2.521
9,328.00	0.88	101.97	9,324.50	97.76	-1.85	-97.77	1.527	-1.526	-1.853
9,422.00	0.31	37.72	9,418.50	97.81	-0.98	-97.82	0.847	-0.606	-68.351
9,516.00	1.54	123.95	9,512.49	97.31	0.22	-97.30	1.650	1.309	91.734
9,610.00	2.46	119.46	9,606.43	95.61	3.02	-95.59	0.992	0.979	-4.777
9,704.00	1.80	124.74	9,700.36	93.78	5.99	-93.74	0.732	-0.702	5.617
9,798.00	1.14	112.87	9,794.33	92.57	8.07	-92.52	0.770	-0.702	-12.628
9,892.00	1.54	106.45	9,888.30	91.85	10.14	-91.79	0.454	0.426	-6.830
9,986.00	1.76	101.62	9,982.27	91.20	12.77	-91.13	0.277	0.234	-5.138
10,080.00	2.11	104.96	10,076.21	90.47	15.85	-90.37	0.391	0.372	3.553
10,174.00	2.15	96.70	10,170.15	89.81	19.27	-89.70	0.329	0.043	-8.787
10,255.00	1.80	107.16	10,251.10	89.26	22.00	-89.13	0.619	-0.432	12.914
10,314.00	2.02	119.90	10,310.07	88.47	23.79	-88.33	0.808	0.373	21.593
10,408.00	2.90	137.13	10,403.98	85.90	26.84	-85.74	1.213	0.936	18.330
10,503.00	9.10	165.87	10,498.43	76.84	30.31	-76.66	7.055	6.526	30.253
10,597.00	23.65	185.82	10,588.43	50.72	30.21	-50.54	16.377	15.479	21.223
10,691.00	35.30	190.13	10,670.13	5.07	23.50	-4.93	12.590	12.394	4.585
10,786.00	41.27	188.11	10,744.67	-53.03	14.25	53.11	6.420	6.284	-2.126
10,880.00	51.38	187.05	10,809.50	-120.34	5.34	120.37	10.786	10.755	-1.128
10,975.00	65.19	186.70	10,859.32	-200.38	-4.29	200.35	14.540	14.537	-0.368
11,069.00	79.96	185.20	10,887.40	-289.34	-13.51	289.25	15.786	15.713	-1.596
11,163.00	90.81	182.66	10,894.95	-382.67	-19.91	382.54	11.852	11.543	-2.702
11,203.00	91.56	181.34	10,894.12	-422.63	-21.30	422.50	3.795	1.875	-3.300
11,257.00	94.95	178.79	10,891.06	-476.53	-21.37	476.40	7.851	6.278	-4.722
11,282.00	95.65	178.61	10,888.75	-501.42	-20.80	501.29	2.890	2.800	-0.720
11,377.00	96.18	178.26	10,878.96	-595.88	-18.22	595.76	0.667	0.558	-0.368
11,471.00	94.68	178.17	10,870.06	-689.41	-15.31	689.31	1.599	-1.596	-0.096
11,565.00	95.12	178.61	10,862.03	-783.03	-12.68	782.94	0.661	0.468	0.468
11,659.00	93.67	177.21	10,854.83	-876.68	-9.26	876.61	2.141	-1.543	-1.489
11,754.00	93.36	176.06	10,849.00	-971.34	-3.69	971.30	1.252	-0.326	-1.211
11,849.00	92.35	177.21	10,844.27	-1,066.06	1.88	1,066.05	1.610	-1.063	1.211
11,943.00	92.09	178.70	10,840.63	-1,159.92	5.23	1,159.93	1.608	-0.277	1.585
12,037.00	93.67	179.58	10,835.91	-1,253.79	6.64	1,253.81	1.923	1.681	0.936
12,131.00	94.20	179.49	10,829.46	-1,347.56	7.40	1,347.58	0.572	0.564	-0.096
12,225.00	92.13	178.79	10,824.27	-1,441.40	8.81	1,441.43	2.324	-2.202	-0.745
12,320.00	92.26	179.67	10,820.63	-1,536.33	10.08	1,536.36	0.936	0.137	0.926
12,413.00	90.33	179.23	10,818.53	-1,629.29	10.98	1,629.33	2.128	-2.075	-0.473
12,507.00	89.89	177.91	10,818.35	-1,723.26	13.32	1,723.31	1.480	-0.468	-1.404
12,601.00	92.66	177.73	10,816.25	-1,817.16	16.90	1,817.23	2.953	2.947	-0.191
12,695.00	93.67	178.53	10,811.06	-1,910.97	19.96	1,911.05	1.370	1.074	0.851
12,789.00	95.52	180.20	10,803.53	-2,004.65	21.00	2,004.74	2.647	1.968	1.777
12,884.00	93.93	179.14	10,795.71	-2,099.32	21.55	2,099.41	2.009	-1.674	-1.116
12,978.00	94.29	178.00	10,788.97	-2,193.05	23.89	2,193.15	1.269	0.383	-1.213

Aim Directional Services

Survey Report

Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well Speyside 18 Federal 501H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3534.00usft (25' RKB)
Site:	Speyside 18 Federal Pad	MD Reference:	Well @ 3534.00usft (25' RKB)
Well:	Speyside 18 Federal 501H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.17-Aim-DB

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)
13,072.00	95.56	178.26	10,780.90	-2,286.65	26.94	2,286.77	1.379	1.351	0.277
13,166.00	95.56	178.61	10,771.79	-2,380.17	29.50	2,380.31	0.371	0.000	0.372
13,260.00	94.81	179.67	10,763.30	-2,473.77	30.90	2,473.91	1.378	-0.798	1.128
13,354.00	93.32	178.79	10,756.64	-2,567.53	32.16	2,567.67	1.840	-1.585	-0.936
13,448.00	97.63	180.63	10,747.67	-2,661.07	32.64	2,661.22	4.982	4.585	1.957
13,543.00	97.58	182.39	10,735.09	-2,755.20	30.16	2,755.33	1.837	-0.053	1.853
13,638.00	96.97	182.83	10,723.06	-2,849.33	25.87	2,849.44	0.790	-0.642	0.463
13,732.00	94.46	180.81	10,713.70	-2,942.81	22.90	2,942.89	3.421	-2.670	-2.149
13,826.00	93.67	179.49	10,707.04	-3,036.57	22.66	3,036.65	1.633	-0.840	-1.404
13,921.00	95.65	179.67	10,699.32	-3,131.25	23.35	3,131.33	2.093	2.084	0.189
14,015.00	96.70	179.84	10,689.21	-3,224.70	23.75	3,224.78	1.131	1.117	0.181
14,110.00	96.04	178.44	10,678.67	-3,319.10	25.17	3,319.19	1.621	-0.695	-1.474
14,204.00	94.02	177.73	10,670.43	-3,412.68	28.30	3,412.79	2.277	-2.149	-0.755
14,298.00	94.68	178.09	10,663.30	-3,506.35	31.72	3,506.47	0.799	0.702	0.383
14,392.00	98.59	179.49	10,652.44	-3,599.67	33.69	3,599.81	4.415	4.160	1.489
14,486.00	99.25	181.16	10,637.86	-3,692.53	33.17	3,692.66	1.890	0.702	1.777
14,580.00	98.15	181.34	10,623.65	-3,785.43	31.14	3,785.55	1.185	-1.170	0.191
14,675.00	93.05	181.34	10,614.38	-3,879.92	28.93	3,880.02	5.368	-5.368	0.000
14,769.00	89.76	180.46	10,612.07	-3,973.86	27.45	3,973.96	3.623	-3.500	-0.936
14,863.00	90.20	179.49	10,612.11	-4,067.86	27.50	4,067.95	1.133	0.468	-1.032
14,957.00	89.49	178.44	10,612.36	-4,161.84	29.19	4,161.94	1.348	-0.755	-1.117
15,052.00	91.87	178.61	10,611.23	-4,256.80	31.64	4,256.91	2.512	2.505	0.179
15,146.00	94.33	179.58	10,606.15	-4,350.64	33.12	4,350.76	2.813	2.617	1.032
15,240.00	96.84	181.78	10,597.00	-4,444.18	32.02	4,444.29	3.543	2.670	2.340
15,334.00	94.11	181.16	10,588.03	-4,537.71	29.62	4,537.80	2.978	-2.904	-0.660
15,429.00	92.35	180.20	10,582.68	-4,632.54	28.49	4,632.63	2.110	-1.853	-1.011
15,523.00	90.59	178.96	10,580.27	-4,726.51	29.18	4,726.60	2.290	-1.872	-1.319
15,617.00	92.22	178.35	10,577.96	-4,820.45	31.39	4,820.55	1.851	1.734	-0.649
15,711.00	94.64	179.14	10,572.34	-4,914.25	33.44	4,914.36	2.708	2.574	0.840
15,795.00	93.80	178.17	10,566.16	-4,998.00	35.41	4,998.12	1.525	-1.000	-1.155
Last Aim Svy									
15,859.00	93.80	178.17	10,561.92	-5,061.82	37.45	5,061.96	0.000	0.000	0.000
Proj to BHL									

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
205.00	205.00	0.61	-0.13	First Aim Svy
15,795.00	10,566.16	-4,998.00	35.41	Last Aim Svy
15,859.00	10,561.92	-5,061.82	37.45	Proj to BHL

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

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

ACKNOWLEDGMENTS

Action 287881

ACKNOWLEDGMENTS

Operator: Avant Operating, LLC 1515 Wynkoop Street Denver, CO 80202	OGRID: 330396
	Action Number: 287881
	Action Type: [C-104] Completion Packet (C-104C)

ACKNOWLEDGMENTS

☒	I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.
☒	I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion.

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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

CONDITIONS

Action 287881

CONDITIONS

Operator: Avant Operating, LLC 1515 Wynkoop Street Denver, CO 80202	OGRID: 330396
	Action Number: 287881
	Action Type: [C-104] Completion Packet (C-104C)

CONDITIONS

Created By	Condition	Condition Date
plmartinez	RT EXPIRES 1/29/2024.	1/5/2024