

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Well Name: GOLDEN TEE 31 FED COM	Well Location: T22S / R35E / SEC 31 / NENE /	County or Parish/State:
Well Number: 505H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM128836	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002549331	Well Status: Approved Application for Permit to Drill	Operator: AVANT OPERATING LLC

Notice of Intent

Sundry ID: 2663055

Type of Submission: Notice of Intent

Type of Action: Other

Date Sundry Submitted: 03/21/2022

Time Sundry Submitted: 10:20

Date proposed operation will begin: 03/28/2022

Procedure Description: Request to move SHL from 700' FNL & 400' FEL (Pad 2) to 400' FNL & 1415' FEL (Pad 4). Request to move BHL from 2540' FNL & 1254' FEL to 2540' FNL & 1548' FEL. TVD will not change. MD will change from 18119' to 18041'. Cement volume will change accordingly. Pad 4 will now host 6 wells instead of previous 3. Pad dimensions will change from 300' x 360' (= 2.48 ac.) to 285' x 550' (3.60 ac.). Will stockpile topsoil on south. Will interim reclaim south 60' of pad (60' x 550' = 0.76 ac.).

Surface Disturbance

Is any additional surface disturbance proposed?: Yes

Proposed Disturbance(acres): 3.6

Interim Reclamation (acres): 0.76

Long Term Disturbance (acres): 2.84

Surface Disturbance:

NOI Attachments

Procedure Description

Pad_Plat_20220321101850.pdf

AC_Report_20220321101835.pdf

Well_Bore_20220321101820.pdf

Well Name: GOLDEN TEE 31 FED
COM**Well Location:** T22S / R35E / SEC 31 /
NENE /**County or Parish/State:****Well Number:** 505H**Type of Well:** OIL WELL**Allottee or Tribe Name:****Lease Number:** NMNM128836**Unit or CA Name:****Unit or CA Number:****US Well Number:** 3002549331**Well Status:** Approved Application for
Permit to Drill**Operator:** AVANT OPERATING
LLC

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: BRIAN WOOD**Signed on:** APR 26, 2022 12:16 PM**Name:** AVANT OPERATING LLC**Title:** President**Street Address:** 37 VERANO LOOP**City:** SANTA FE**State:** NM**Phone:** (505) 466-8120**Email address:** AFMSS@PERMITSWEST.COM

Field

Representative Name:**Street Address:****City:****State:****Zip:****Phone:****Email address:**

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS**BLM POC Title:** Petroleum Engineer**BLM POC Phone:** 5752342234**BLM POC Email Address:** cwalls@blm.gov**Disposition:** Approved**Disposition Date:** 05/06/2022**Signature:** Cody R. Layton

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, N.M. 87505
Phone: (505) 476-3480 Fax: (505) 476-3482

State of New Mexico
Energy, Minerals & Natural Resources Department

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

Form C-102

Revised August 1, 2011

Submit one copy to appropriate
District Office

☒ AMENDED REPORT
revised SHL & BHL

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-49331	² Pool Code 2205	³ Pool Name ANTELOPE RIDGE; BONE SPRING, NORTH
⁴ Property Code 331355	⁵ Property Name Golden Tee 31 Fed Com	⁶ Well Number 505H
⁷ OGRID No. 330396	⁸ Operator Name Avant Operating, LLC	⁹ Elevation 3474

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
B	31	22 S	35 E		400	North	1415	East	Lea

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	6	23 S	35 E		2540	North	1548	East	Lea

¹² Dedicated Acres 240.15	¹³ Joint or Infill	¹⁴ Consolidation Code C	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

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SURFACE LOCATION
NAD 83 NMSPC ZONE 3001
Y= 493886.29 N
X= 828692.94 E
LAT.= 32.3543309° N
LONG.= 103.4027657° W

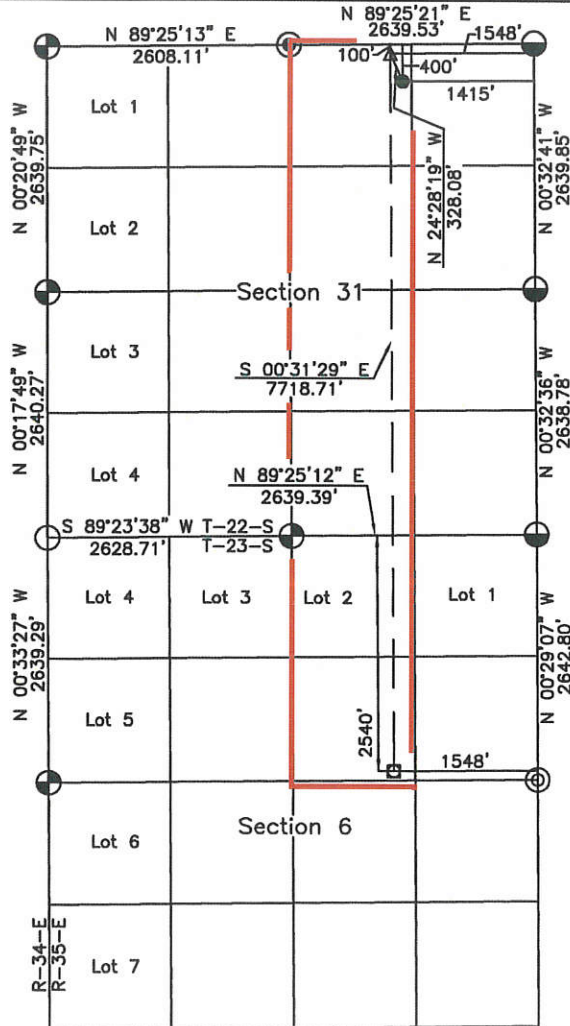
FIRST TAKE POINT
NAD 83 NMSPC ZONE 3001
100' FNL, 1548' FEL
SEC. 31, T22S, R35E
Y= 494184.89 N
X= 828557.03 E
LAT.= 32.3551549° N
LONG.= 103.4031974° W

LAST TAKE POINT
NAD 83 NMSPC ZONE 3001
2540' FNL, 1548' FEL
SEC. 6, T23S, R35E
Y= 486466.51 N
X= 828627.71 E
LAT.= 32.3339393° N
LONG.= 103.4031856° W

BOTTOM HOLE LOCATION
NAD 83 NMSPC ZONE 3001
Y= 486466.51 N
X= 828627.71 E
LAT.= 32.3339393° N
LONG.= 103.4031856° W

Legend:

- = Surface Location
- = Bottom Hole Location
- △ = First Take Point (FTP)
- = Last Take Point (LTP)
- = Found 1913 USGLO Brass Cap
- = Found 1918 USGLO Brass Cap
- = Found 1" Iron Rod
- = Found 1/2" Rebar with Cap
- = Found Cut Tee Post



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Brian Wood 3-19-22

Signature **BRIAN WOOD** Date

Printed Name **brian@permitswest.com**

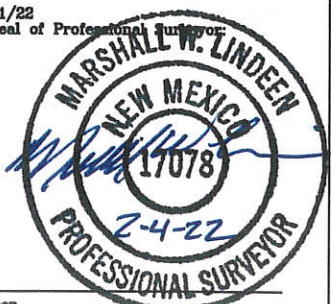
E-mail Address **505 466-8120**

18 SURVEYOR CERTIFICATION

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.

12/27/21

Date of Survey
Plat Revised: 2/1/22
Signature and Seal of Professional Surveyor:



17078
Certificate Number



Avant Operating, LLC

**Lea Co., NM (NAD 83)
Golden Tee 31 Fed Com 505H
505H**

**Planning
Plan 0.1**

Anticollision Report

09 February, 2022





Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Reference	Plan 0.1
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD + Stations Interval 100.00usft
Depth Range:	Unlimited
Results Limited by:	Maximum ellipse separation of 1,000.00 usft
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program		Date	2/9/2022		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	18,040.57	Plan 0.1 (Planning)	B001Mb_MWD+HRGM	OWSG MWD + HRGM	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Golden Tee 31 Fed Com 304H						
304H - Planning - Plan 0.1	5,620.00	5,620.00	99.02	59.17	2.485	CC, ES
304H - Planning - Plan 0.1	5,700.00	5,697.53	99.81	59.42	2.471	SF
Golden Tee 31 Fed Com 305H						
305H - Planning - Plan 0.1	9,167.68	9,166.87	17.87	-47.72	0.272	Level 1, CC, SF
305H - Planning - Plan 0.1	9,200.00	9,199.09	18.03	-47.80	0.274	Level 1, ES
Golden Tee 31 Fed Com 504H						
504H - Planning - Plan 0.1	5,620.00	5,620.00	65.97	26.13	1.656	CC, ES
504H - Planning - Plan 0.1	5,700.00	5,698.71	66.56	26.16	1.647	SF
Winnebago 30 State Com						
505H - OH / 68126 - Surveys (H&P 296)	9,737.75	9,792.65	467.59	395.16	6.455	CC, ES
505H - OH / 68126 - Surveys (H&P 296)	9,800.00	9,835.37	469.12	396.21	6.434	SF
506H - OH / 68127 - Surveys (H&P 296)	9,888.97	9,901.12	436.88	371.36	6.668	CC
506H - OH / 68127 - Surveys (H&P 296)	9,900.00	9,911.05	436.90	371.31	6.661	ES
506H - OH / 68127 - Surveys (H&P 296)	9,950.00	9,956.07	437.35	371.46	6.638	SF

Offset Design Golden Tee 31 Fed Com 304H - 304H - Planning - Plan 0.1													Offset Site Error:	0.00 usft
Survey Program: 0-B001Mb_MWD+HRGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
0.00	0.00	0.00	0.00	0.00	0.00	-90.66	-1.14	-99.01	99.02					
100.00	100.00	100.00	100.00	0.13	0.13	-90.66	-1.14	-99.01	99.02	98.75	0.27	368.291		
200.00	200.00	200.00	200.00	0.49	0.49	-90.66	-1.14	-99.01	99.02	98.03	0.99	100.443		
300.00	300.00	300.00	300.00	0.85	0.85	-90.66	-1.14	-99.01	99.02	97.31	1.70	58.151		
400.00	400.00	400.00	400.00	1.21	1.21	-90.66	-1.14	-99.01	99.02	96.60	2.42	40.921		
500.00	500.00	500.00	500.00	1.57	1.57	-90.66	-1.14	-99.01	99.02	95.88	3.14	31.568		
600.00	600.00	600.00	600.00	1.93	1.93	-90.66	-1.14	-99.01	99.02	95.16	3.85	25.695		
700.00	700.00	700.00	700.00	2.29	2.29	-90.66	-1.14	-99.01	99.02	94.45	4.57	21.664		
800.00	800.00	800.00	800.00	2.64	2.64	-90.66	-1.14	-99.01	99.02	93.73	5.29	18.727		
900.00	900.00	900.00	900.00	3.00	3.00	-90.66	-1.14	-99.01	99.02	93.01	6.00	16.491		
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	-90.66	-1.14	-99.01	99.02	92.30	6.72	14.732		
1,100.00	1,100.00	1,100.00	1,100.00	3.72	3.72	-90.66	-1.14	-99.01	99.02	91.58	7.44	13.312		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Aim Directional Services, LLC

Anticollision Report



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Offset Design Golden Tee 31 Fed Com 304H - 304H - Planning - Plan 0.1												Offset Site Error:	0.00 usft
Survey Program: 0-B001Mb_MWD+HRGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
1,200.00	1,200.00	1,200.00	1,200.00	4.08	4.08	-90.66	-1.14	-99.01	99.02	90.86	8.16	12.141	
1,300.00	1,300.00	1,300.00	1,300.00	4.44	4.44	-90.66	-1.14	-99.01	99.02	90.14	8.87	11.160	
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	-90.66	-1.14	-99.01	99.02	89.43	9.59	10.326	
1,500.00	1,500.00	1,500.00	1,500.00	5.15	5.15	-90.66	-1.14	-99.01	99.02	88.71	10.31	9.608	
1,600.00	1,600.00	1,600.00	1,600.00	5.51	5.51	-90.66	-1.14	-99.01	99.02	87.99	11.02	8.983	
1,700.00	1,700.00	1,700.00	1,700.00	5.87	5.87	-90.66	-1.14	-99.01	99.02	87.28	11.74	8.434	
1,800.00	1,800.00	1,800.00	1,800.00	6.23	6.23	-90.66	-1.14	-99.01	99.02	86.56	12.46	7.949	
1,900.00	1,900.00	1,900.00	1,900.00	6.59	6.59	-90.66	-1.14	-99.01	99.02	85.84	13.17	7.516	
2,000.00	2,000.00	2,000.00	2,000.00	6.95	6.95	-90.66	-1.14	-99.01	99.02	85.13	13.89	7.128	
2,100.00	2,100.00	2,100.00	2,100.00	7.30	7.30	-90.66	-1.14	-99.01	99.02	84.41	14.61	6.778	
2,200.00	2,200.00	2,200.00	2,200.00	7.66	7.66	-90.66	-1.14	-99.01	99.02	83.69	15.32	6.461	
2,300.00	2,300.00	2,300.00	2,300.00	8.02	8.02	-90.66	-1.14	-99.01	99.02	82.97	16.04	6.172	
2,400.00	2,400.00	2,400.00	2,400.00	8.38	8.38	-90.66	-1.14	-99.01	99.02	82.26	16.76	5.908	
2,500.00	2,500.00	2,500.00	2,500.00	8.74	8.74	-90.66	-1.14	-99.01	99.02	81.54	17.48	5.666	
2,600.00	2,600.00	2,600.00	2,600.00	9.10	9.10	-90.66	-1.14	-99.01	99.02	80.82	18.19	5.443	
2,700.00	2,700.00	2,700.00	2,700.00	9.45	9.45	-90.66	-1.14	-99.01	99.02	80.11	18.91	5.236	
2,800.00	2,800.00	2,800.00	2,800.00	9.81	9.81	-90.66	-1.14	-99.01	99.02	79.39	19.63	5.045	
2,900.00	2,900.00	2,900.00	2,900.00	10.17	10.17	-90.66	-1.14	-99.01	99.02	78.67	20.34	4.867	
3,000.00	3,000.00	3,000.00	3,000.00	10.53	10.53	-90.66	-1.14	-99.01	99.02	77.96	21.06	4.702	
3,100.00	3,100.00	3,100.00	3,100.00	10.89	10.89	-90.66	-1.14	-99.01	99.02	77.24	21.78	4.547	
3,200.00	3,200.00	3,200.00	3,200.00	11.25	11.25	-90.66	-1.14	-99.01	99.02	76.52	22.49	4.402	
3,300.00	3,300.00	3,300.00	3,300.00	11.61	11.61	-90.66	-1.14	-99.01	99.02	75.81	23.21	4.266	
3,400.00	3,400.00	3,400.00	3,400.00	11.96	11.96	-90.66	-1.14	-99.01	99.02	75.09	23.93	4.138	
3,500.00	3,500.00	3,500.00	3,500.00	12.32	12.32	-90.66	-1.14	-99.01	99.02	74.37	24.64	4.018	
3,600.00	3,600.00	3,600.00	3,600.00	12.68	12.68	-90.66	-1.14	-99.01	99.02	73.65	25.36	3.904	
3,700.00	3,700.00	3,700.00	3,700.00	13.04	13.04	-90.66	-1.14	-99.01	99.02	72.94	26.08	3.797	
3,800.00	3,800.00	3,800.00	3,800.00	13.40	13.40	-90.66	-1.14	-99.01	99.02	72.22	26.80	3.695	
3,900.00	3,900.00	3,900.00	3,900.00	13.76	13.76	-90.66	-1.14	-99.01	99.02	71.50	27.51	3.599	
4,000.00	4,000.00	4,000.00	4,000.00	14.11	14.11	-90.66	-1.14	-99.01	99.02	70.79	28.23	3.508	
4,100.00	4,100.00	4,100.00	4,100.00	14.47	14.47	-90.66	-1.14	-99.01	99.02	70.07	28.95	3.421	
4,200.00	4,200.00	4,200.00	4,200.00	14.83	14.83	-90.66	-1.14	-99.01	99.02	69.35	29.66	3.338	
4,300.00	4,300.00	4,300.00	4,300.00	15.19	15.19	-90.66	-1.14	-99.01	99.02	68.64	30.38	3.259	
4,400.00	4,400.00	4,400.00	4,400.00	15.55	15.55	-90.66	-1.14	-99.01	99.02	67.92	31.10	3.184	
4,500.00	4,500.00	4,500.00	4,500.00	15.91	15.91	-90.66	-1.14	-99.01	99.02	67.20	31.81	3.112	
4,600.00	4,600.00	4,600.00	4,600.00	16.27	16.27	-90.66	-1.14	-99.01	99.02	66.49	32.53	3.044	
4,700.00	4,700.00	4,700.00	4,700.00	16.62	16.62	-90.66	-1.14	-99.01	99.02	65.77	33.25	2.978	
4,800.00	4,800.00	4,800.00	4,800.00	16.98	16.98	-90.66	-1.14	-99.01	99.02	65.05	33.97	2.915	
4,900.00	4,900.00	4,900.00	4,900.00	17.34	17.34	-90.66	-1.14	-99.01	99.02	64.33	34.68	2.855	
5,000.00	5,000.00	5,000.00	5,000.00	17.70	17.70	-90.66	-1.14	-99.01	99.02	63.62	35.40	2.797	
5,100.00	5,100.00	5,100.00	5,100.00	18.06	18.06	-90.66	-1.14	-99.01	99.02	62.90	36.12	2.742	
5,200.00	5,200.00	5,200.00	5,200.00	18.42	18.42	-90.66	-1.14	-99.01	99.02	62.18	36.83	2.688	
5,300.00	5,300.00	5,300.00	5,300.00	18.77	18.77	-90.66	-1.14	-99.01	99.02	61.47	37.55	2.637	
5,400.00	5,400.00	5,400.00	5,400.00	19.13	19.13	-90.66	-1.14	-99.01	99.02	60.75	38.27	2.588	
5,500.00	5,500.00	5,500.00	5,500.00	19.49	19.49	-90.66	-1.14	-99.01	99.02	60.03	38.98	2.540	
5,600.00	5,600.00	5,600.00	5,600.00	19.85	19.85	-90.66	-1.14	-99.01	99.02	59.32	39.70	2.494	
5,620.00	5,620.00	5,620.00	5,620.00	19.92	19.92	-90.66	-1.14	-99.01	99.02	59.17	39.84	2.485 CC, ES	
5,700.00	5,700.00	5,697.53	5,697.52	20.21	20.19	-69.44	-0.91	-99.98	99.81	59.42	40.39	2.471 SF	
5,800.00	5,799.97	5,794.34	5,794.24	20.57	20.53	-70.01	0.01	-103.89	103.05	62.01	41.04	2.511	
5,900.00	5,899.89	5,890.90	5,890.54	20.92	20.86	-70.93	1.63	-110.79	108.80	67.15	41.65	2.612	
6,000.00	5,999.72	5,987.09	5,986.19	21.28	21.20	-72.08	3.95	-120.62	117.08	74.84	42.24	2.772	
6,100.00	6,099.44	6,082.77	6,080.98	21.64	21.53	-73.35	6.94	-133.33	127.90	85.11	42.79	2.989	
6,192.51	6,191.56	6,170.74	6,167.71	21.97	21.84	-74.53	10.29	-147.58	140.18	96.91	43.27	3.240	

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Aim Directional Services, LLC

Anticollision Report



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Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design Golden Tee 31 Fed Com 304H - 304H - Planning - Plan 0.1												Offset Site Error:	0.00 usft
Survey Program: 0-B001Mb_MWD+HRGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
6,200.00	6,199.01	6,177.83	6,174.69	21.99	21.87	-74.64	10.59	-148.84	141.27	97.96	43.31	3.262	
6,300.00	6,298.51	6,272.13	6,267.11	22.35	22.21	-75.66	14.87	-167.04	157.42	113.62	43.80	3.594	
6,400.00	6,398.01	6,365.50	6,358.01	22.71	22.54	-76.14	19.76	-187.81	176.45	132.18	44.26	3.986	
6,500.00	6,497.51	6,457.78	6,447.16	23.07	22.88	-76.22	25.22	-211.01	198.27	153.58	44.69	4.437	
6,600.00	6,597.02	6,548.83	6,534.36	23.42	23.22	-76.01	31.21	-236.47	222.84	177.76	45.08	4.943	
6,700.00	6,696.52	6,638.50	6,619.44	23.78	23.56	-75.61	37.70	-264.03	250.09	204.66	45.43	5.505	
6,800.00	6,796.02	6,726.68	6,702.25	24.14	23.91	-75.10	44.64	-293.51	279.99	234.24	45.75	6.120	
6,900.00	6,895.52	6,813.26	6,782.67	24.50	24.26	-74.52	51.98	-324.72	312.49	266.45	46.04	6.788	
7,000.00	6,995.02	6,900.00	6,862.29	24.87	24.63	-73.90	59.87	-358.23	347.53	301.16	46.38	7.494	
7,100.00	7,094.52	6,981.23	6,935.93	25.23	24.98	-73.29	67.72	-391.60	385.05	338.53	46.52	8.277	
7,200.00	7,194.02	7,062.49	7,008.64	25.59	25.36	-72.69	76.03	-426.89	424.98	378.26	46.72	9.097	
7,300.00	7,293.52	7,141.85	7,078.70	25.95	25.73	-72.10	84.57	-463.18	467.26	420.37	46.89	9.965	
7,400.00	7,393.02	7,219.28	7,146.09	26.32	26.12	-71.54	93.30	-500.30	511.82	464.77	47.05	10.879	
7,500.00	7,492.53	7,300.00	7,215.28	26.68	26.54	-70.97	102.83	-540.76	558.60	511.22	47.38	11.791	
7,600.00	7,592.03	7,368.23	7,272.88	27.04	26.92	-70.50	111.20	-576.35	607.44	560.14	47.30	12.843	
7,700.00	7,691.53	7,439.73	7,332.35	27.41	27.33	-70.03	120.30	-615.00	658.35	610.95	47.40	13.889	
7,800.00	7,791.03	7,513.70	7,392.92	27.77	27.77	-69.56	130.03	-656.32	711.14	663.50	47.64	14.927	
7,900.00	7,890.53	7,598.14	7,461.80	28.14	28.30	-69.08	141.22	-703.87	764.46	716.20	48.26	15.839	
8,000.00	7,990.03	7,682.58	7,530.67	28.51	28.85	-68.66	152.41	-751.42	817.81	768.92	48.90	16.726	
8,100.00	8,089.53	7,781.43	7,611.55	28.87	29.51	-68.25	165.42	-806.73	870.88	820.94	49.95	17.436	
8,200.00	8,189.03	7,902.63	7,712.94	29.24	30.33	-67.88	180.64	-871.37	921.22	869.67	51.55	17.870	
8,300.00	8,288.54	8,029.41	7,821.73	29.61	31.17	-67.62	195.54	-934.70	968.09	914.91	53.18	18.205	
8,400.00	8,388.04	8,161.68	7,938.04	29.97	32.04	-67.47	209.97	-996.00	1,011.24	956.43	54.81	18.449	
8,500.00	8,487.54	8,299.27	8,061.82	30.34	32.90	-67.41	223.73	-1,054.46	1,050.45	994.01	56.44	18.612	
8,600.00	8,587.04	8,441.92	8,192.89	30.71	33.76	-67.44	236.62	-1,109.22	1,085.48	1,027.44	58.04	18.703	
8,700.00	8,686.54	8,589.23	8,330.87	31.08	34.59	-67.55	248.43	-1,159.42	1,116.10	1,056.52	59.58	18.731	
8,800.00	8,786.04	8,740.73	8,475.20	31.45	35.39	-67.74	258.96	-1,204.17	1,142.13	1,081.06	61.06	18.704	
8,900.00	8,885.54	8,895.79	8,625.12	31.82	36.15	-68.02	268.02	-1,242.64	1,163.37	1,100.92	62.45	18.629	
9,000.00	8,985.04	9,053.71	8,779.68	32.18	36.85	-68.38	275.42	-1,274.10	1,179.71	1,115.98	63.73	18.511	
9,100.00	9,084.55	9,213.69	8,937.76	32.55	37.50	-68.82	281.03	-1,297.94	1,191.02	1,126.13	64.89	18.355	
9,200.00	9,184.05	9,374.87	9,098.11	32.92	38.09	-69.36	284.74	-1,313.71	1,197.25	1,131.34	65.91	18.165	
9,300.00	9,283.55	9,536.35	9,259.38	33.29	38.62	-69.99	286.50	-1,321.17	1,198.39	1,131.60	66.79	17.943	
9,372.30	9,355.48	9,630.64	9,353.65	33.56	38.90	-70.45	285.64	-1,321.80	1,196.36	1,129.02	67.33	17.767	
9,400.00	9,383.06	9,656.23	9,379.13	33.66	38.97	-70.67	283.29	-1,321.79	1,195.52	1,127.99	67.53	17.704	
9,500.00	9,482.68	9,743.43	9,464.30	34.03	39.19	-71.85	265.12	-1,321.66	1,193.58	1,125.34	68.24	17.491	
9,532.58	9,515.17	9,769.70	9,489.15	34.15	39.25	-72.34	256.64	-1,321.60	1,193.44	1,124.97	68.47	17.431	
9,600.00	9,582.44	9,820.26	9,535.51	34.40	39.35	-73.45	236.52	-1,321.46	1,194.15	1,125.23	68.93	17.325	
9,700.00	9,682.31	9,885.81	9,591.99	34.76	39.47	-75.21	203.36	-1,321.23	1,198.40	1,128.86	69.54	17.232	
9,800.00	9,782.25	9,940.89	9,635.57	35.12	39.55	-76.96	169.72	-1,321.00	1,207.36	1,137.34	70.03	17.242	
9,900.00	9,882.24	9,987.06	9,668.92	35.48	39.60	-78.64	137.82	-1,320.77	1,221.77	1,151.45	70.32	17.374	
9,944.81	9,927.04	10,005.29	9,681.21	35.64	39.61	-100.72	124.36	-1,320.68	1,230.13	1,159.75	70.38	17.478	
9,950.00	9,932.23	10,007.33	9,682.55	35.65	39.62	79.63	122.82	-1,320.67	1,231.17	1,160.78	70.38	17.492	
10,000.00	9,982.15	10,025.00	9,693.91	35.81	39.63	77.98	109.29	-1,320.58	1,241.53	1,171.17	70.36	17.646	
10,050.00	10,031.64	10,050.00	9,709.11	35.96	39.65	76.10	89.44	-1,320.44	1,252.37	1,182.03	70.33	17.806	
10,100.00	10,080.34	10,066.54	9,718.58	36.10	39.66	74.50	75.88	-1,320.34	1,263.50	1,193.32	70.19	18.002	
10,150.00	10,127.88	10,086.44	9,729.35	36.23	39.67	72.83	59.15	-1,320.23	1,274.79	1,204.77	70.02	18.206	
10,200.00	10,173.88	10,106.39	9,739.44	36.36	39.67	71.21	41.93	-1,320.11	1,286.07	1,216.25	69.82	18.421	
10,250.00	10,218.01	10,125.00	9,748.19	36.47	39.68	69.69	25.52	-1,319.99	1,297.19	1,227.62	69.57	18.646	
10,300.00	10,259.92	10,150.00	9,758.93	36.58	39.68	68.11	2.94	-1,319.83	1,308.03	1,238.67	69.36	18.858	
10,350.00	10,299.29	10,166.53	9,765.37	36.67	39.69	66.80	-12.28	-1,319.73	1,318.42	1,249.35	69.07	19.088	
10,400.00	10,335.84	10,186.65	9,772.50	36.76	39.69	65.52	-31.09	-1,319.60	1,328.29	1,259.47	68.81	19.302	
10,450.00	10,369.27	10,200.00	9,776.79	36.85	39.69	64.45	-43.73	-1,319.51	1,337.54	1,269.03	68.52	19.522	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

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COMPASS 5000.15 Build 93A



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design Golden Tee 31 Fed Com 304H - 304H - Planning - Plan 0.1													Offset Site Error:	0.00 usft
Survey Program: 0-B001Mb_MWVD+HRGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,500.00	10,399.34	10,225.00	9,783.86	36.93	39.68	63.33	-67.70	-1,319.34	1,345.98	1,277.65	68.33	19.698		
10,550.00	10,425.81	10,250.00	9,789.67	37.01	39.68	62.34	-92.02	-1,319.17	1,353.63	1,285.46	68.17	19.857		
10,600.00	10,448.49	10,267.36	9,792.96	37.09	39.68	61.56	-109.06	-1,319.05	1,360.36	1,292.36	67.99	20.007		
10,650.00	10,467.20	10,287.58	9,795.99	37.17	39.67	60.88	-129.05	-1,318.92	1,366.12	1,298.24	67.88	20.125		
10,700.00	10,481.80	10,307.81	9,798.18	37.26	39.67	60.33	-149.16	-1,318.78	1,370.86	1,303.04	67.82	20.212		
10,750.00	10,492.17	10,325.00	9,799.38	37.34	39.66	59.92	-166.31	-1,318.66	1,374.54	1,306.73	67.81	20.270		
10,800.00	10,498.25	10,349.51	9,800.00	37.43	39.66	59.61	-190.80	-1,318.49	1,377.11	1,309.23	67.88	20.287		
10,844.80	10,500.00	10,391.28	9,800.00	37.50	39.65	59.47	-232.58	-1,318.20	1,378.08	1,310.03	68.04	20.253		
10,900.00	10,500.00	10,446.48	9,800.00	37.61	39.64	59.48	-287.77	-1,317.81	1,378.18	1,309.88	68.31	20.176		
11,000.00	10,500.00	10,546.48	9,800.00	37.84	39.64	59.48	-387.77	-1,317.11	1,378.37	1,309.52	68.85	20.019		
11,100.00	10,500.00	10,646.48	9,800.00	38.13	39.67	59.48	-487.77	-1,316.42	1,378.56	1,309.07	69.49	19.839		
11,200.00	10,500.00	10,746.48	9,800.00	38.46	39.73	59.49	-587.76	-1,315.72	1,378.75	1,308.54	70.22	19.636		
11,300.00	10,500.00	10,846.48	9,800.00	38.85	39.83	59.49	-687.76	-1,315.03	1,378.94	1,307.91	71.03	19.413		
11,400.00	10,500.00	10,946.48	9,800.00	39.29	39.97	59.50	-787.76	-1,314.33	1,379.13	1,307.20	71.93	19.173		
11,500.00	10,500.00	11,046.48	9,800.00	39.77	40.18	59.50	-887.75	-1,313.63	1,379.32	1,306.41	72.91	18.917		
11,600.00	10,500.00	11,146.48	9,800.00	40.30	40.46	59.51	-987.75	-1,312.94	1,379.51	1,305.54	73.98	18.648		
11,700.00	10,500.00	11,246.48	9,800.00	40.87	40.82	59.51	-1,087.75	-1,312.24	1,379.70	1,304.59	75.11	18.369		
11,800.00	10,500.00	11,346.48	9,800.00	41.48	41.27	59.52	-1,187.75	-1,311.54	1,379.89	1,303.57	76.32	18.080		
11,900.00	10,500.00	11,446.48	9,800.00	42.14	41.79	59.52	-1,287.74	-1,310.85	1,380.08	1,302.48	77.60	17.785		
12,000.00	10,500.00	11,546.48	9,800.00	42.83	42.39	59.53	-1,387.74	-1,310.15	1,380.27	1,301.33	78.94	17.485		
12,100.00	10,500.00	11,646.47	9,800.00	43.56	43.05	59.53	-1,487.74	-1,309.46	1,380.46	1,300.12	80.34	17.182		
12,200.00	10,500.00	11,746.47	9,800.00	44.33	43.77	59.54	-1,587.74	-1,308.76	1,380.65	1,298.84	81.81	16.877		
12,300.00	10,500.00	11,846.47	9,800.00	45.12	44.53	59.54	-1,687.73	-1,308.06	1,380.84	1,297.51	83.33	16.571		
12,400.00	10,500.00	11,946.47	9,800.00	45.95	45.34	59.54	-1,787.73	-1,307.37	1,381.03	1,296.13	84.90	16.267		
12,500.00	10,500.00	12,046.47	9,800.00	46.81	46.18	59.55	-1,887.73	-1,306.67	1,381.22	1,294.70	86.52	15.964		
12,600.00	10,500.00	12,146.47	9,800.00	47.70	47.06	59.55	-1,987.73	-1,305.98	1,381.41	1,293.22	88.19	15.664		
12,700.00	10,500.00	12,246.47	9,800.00	48.61	47.96	59.56	-2,087.72	-1,305.28	1,381.60	1,291.69	89.90	15.367		
12,800.00	10,500.00	12,346.47	9,800.00	49.55	48.90	59.56	-2,187.72	-1,304.58	1,381.79	1,290.13	91.66	15.075		
12,900.00	10,500.00	12,446.47	9,800.00	50.51	49.86	59.57	-2,287.72	-1,303.89	1,381.98	1,288.52	93.46	14.787		
13,000.00	10,500.00	12,546.47	9,800.00	51.49	50.84	59.57	-2,387.71	-1,303.19	1,382.17	1,286.88	95.29	14.505		
13,100.00	10,500.00	12,646.47	9,800.00	52.49	51.85	59.58	-2,487.71	-1,302.49	1,382.36	1,285.20	97.16	14.228		
13,200.00	10,500.00	12,746.47	9,800.00	53.52	52.88	59.58	-2,587.71	-1,301.80	1,382.55	1,283.49	99.06	13.956		
13,300.00	10,500.00	12,846.47	9,800.00	54.56	53.93	59.59	-2,687.71	-1,301.10	1,382.74	1,281.74	101.00	13.691		
13,400.00	10,500.00	12,946.47	9,800.00	55.62	54.99	59.59	-2,787.70	-1,300.41	1,382.93	1,279.97	102.96	13.432		
13,500.00	10,500.00	13,046.47	9,800.00	56.70	56.08	59.60	-2,887.70	-1,299.71	1,383.12	1,278.16	104.95	13.179		
13,600.00	10,500.00	13,146.47	9,800.00	57.79	57.17	59.60	-2,987.70	-1,299.01	1,383.31	1,276.34	106.97	12.932		
13,700.00	10,500.00	13,246.47	9,800.00	58.90	58.29	59.60	-3,087.70	-1,298.32	1,383.50	1,274.48	109.01	12.691		
13,800.00	10,500.00	13,346.47	9,800.00	60.02	59.42	59.61	-3,187.69	-1,297.62	1,383.69	1,272.60	111.08	12.457		
13,900.00	10,500.00	13,446.47	9,800.00	61.16	60.56	59.61	-3,287.69	-1,296.92	1,383.88	1,270.70	113.17	12.228		
14,000.00	10,500.00	13,546.47	9,800.00	62.31	61.71	59.62	-3,387.69	-1,296.23	1,384.07	1,268.78	115.28	12.006		
14,100.00	10,500.00	13,646.47	9,800.00	63.47	62.88	59.62	-3,487.69	-1,295.53	1,384.26	1,266.84	117.41	11.790		
14,200.00	10,500.00	13,746.47	9,800.00	64.64	64.06	59.63	-3,587.68	-1,294.84	1,384.45	1,264.88	119.56	11.579		
14,300.00	10,500.00	13,846.47	9,800.00	65.82	65.24	59.63	-3,687.68	-1,294.14	1,384.64	1,262.90	121.73	11.374		
14,400.00	10,500.00	13,946.47	9,800.00	67.01	66.44	59.64	-3,787.68	-1,293.44	1,384.83	1,260.91	123.92	11.175		
14,500.00	10,500.00	14,046.47	9,800.00	68.21	67.65	59.64	-3,887.67	-1,292.75	1,385.02	1,258.90	126.12	10.982		
14,600.00	10,500.00	14,146.47	9,800.00	69.42	68.87	59.65	-3,987.67	-1,292.05	1,385.21	1,256.87	128.34	10.794		
14,700.00	10,500.00	14,246.47	9,800.00	70.64	70.09	59.65	-4,087.67	-1,291.35	1,385.40	1,254.83	130.57	10.610		
14,800.00	10,500.00	14,346.47	9,800.00	71.87	71.32	59.66	-4,187.67	-1,290.66	1,385.59	1,252.77	132.81	10.433		
14,900.00	10,500.00	14,446.47	9,800.00	73.10	72.56	59.66	-4,287.66	-1,289.96	1,385.78	1,250.70	135.07	10.259		
15,000.00	10,500.00	14,546.47	9,800.00	74.34	73.81	59.66	-4,387.66	-1,289.27	1,385.97	1,248.62	137.34	10.091		
15,100.00	10,500.00	14,646.47	9,800.00	75.59	75.07	59.67	-4,487.66	-1,288.57	1,386.16	1,246.53	139.63	9.927		
15,200.00	10,500.00	14,746.47	9,800.00	76.85	76.33	59.67	-4,587.66	-1,287.87	1,386.35	1,244.42	141.92	9.768		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

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COMPASS 5000.15 Build 93A



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design Golden Tee 31 Fed Com 304H - 304H - Planning - Plan 0.1												Offset Site Error:	0.00 usft
Survey Program: 0-B001Mb_MWD+HRGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,300.00	10,500.00	14,846.47	9,800.00	78.11	77.59	59.68	-4,687.65	-1,287.18	1,386.54	1,242.31	144.23	9.613	
15,400.00	10,500.00	14,946.47	9,800.00	79.38	78.87	59.68	-4,787.65	-1,286.48	1,386.73	1,240.18	146.54	9.463	
15,500.00	10,500.00	15,046.47	9,800.00	80.65	80.14	59.69	-4,887.65	-1,285.78	1,386.92	1,238.05	148.87	9.316	
15,600.00	10,500.00	15,146.47	9,800.00	81.93	81.43	59.69	-4,987.65	-1,285.09	1,387.11	1,235.90	151.21	9.174	
15,700.00	10,500.00	15,246.47	9,800.00	83.22	82.72	59.70	-5,087.64	-1,284.39	1,387.30	1,233.75	153.55	9.035	
15,800.00	10,500.00	15,346.47	9,800.00	84.51	84.01	59.70	-5,187.64	-1,283.70	1,387.49	1,231.58	155.90	8.900	
15,900.00	10,500.00	15,446.47	9,800.00	85.80	85.31	59.71	-5,287.64	-1,283.00	1,387.68	1,229.41	158.26	8.768	
16,000.00	10,500.00	15,546.47	9,800.00	87.10	86.61	59.71	-5,387.63	-1,282.30	1,387.87	1,227.23	160.63	8.640	
16,100.00	10,500.00	15,646.47	9,800.00	88.41	87.92	59.71	-5,487.63	-1,281.61	1,388.06	1,225.05	163.01	8.515	
16,200.00	10,500.00	15,746.46	9,800.00	89.71	89.23	59.72	-5,587.63	-1,280.91	1,388.25	1,222.85	165.39	8.394	
16,300.00	10,500.00	15,846.46	9,800.00	91.02	90.54	59.72	-5,687.63	-1,280.22	1,388.44	1,220.65	167.78	8.275	
16,400.00	10,500.00	15,946.46	9,800.00	92.34	91.86	59.73	-5,787.62	-1,279.52	1,388.63	1,218.44	170.18	8.160	
16,500.00	10,500.00	16,046.46	9,800.00	93.66	93.19	59.73	-5,887.62	-1,278.82	1,388.82	1,216.23	172.59	8.047	
16,600.00	10,500.00	16,146.46	9,800.00	94.98	94.51	59.74	-5,987.62	-1,278.13	1,389.01	1,214.01	175.00	7.937	
16,700.00	10,500.00	16,246.46	9,800.00	96.31	95.84	59.74	-6,087.62	-1,277.43	1,389.20	1,211.79	177.41	7.830	
16,800.00	10,500.00	16,346.46	9,800.00	97.64	97.17	59.75	-6,187.61	-1,276.73	1,389.39	1,209.55	179.83	7.726	
16,900.00	10,500.00	16,446.46	9,800.00	98.97	98.51	59.75	-6,287.61	-1,276.04	1,389.58	1,207.32	182.26	7.624	
17,000.00	10,500.00	16,546.46	9,800.00	100.30	99.84	59.76	-6,387.61	-1,275.34	1,389.77	1,205.08	184.69	7.525	
17,100.00	10,500.00	16,646.46	9,800.00	101.64	101.18	59.76	-6,487.61	-1,274.65	1,389.96	1,202.83	187.13	7.428	
17,200.00	10,500.00	16,746.46	9,800.00	102.98	102.53	59.77	-6,587.60	-1,273.95	1,390.15	1,200.58	189.57	7.333	
17,300.00	10,500.00	16,846.46	9,800.00	104.32	103.87	59.77	-6,687.60	-1,273.25	1,390.34	1,198.32	192.02	7.241	
17,400.00	10,500.00	16,946.46	9,800.00	105.67	105.22	59.77	-6,787.60	-1,272.56	1,390.53	1,196.06	194.47	7.150	
17,500.00	10,500.00	17,046.46	9,800.00	107.02	106.57	59.78	-6,887.59	-1,271.86	1,390.72	1,193.80	196.92	7.062	
17,600.00	10,500.00	17,146.46	9,800.00	108.37	107.93	59.78	-6,987.59	-1,271.16	1,390.91	1,191.53	199.38	6.976	
17,700.00	10,500.00	17,246.46	9,800.00	109.72	109.28	59.79	-7,087.59	-1,270.47	1,391.10	1,189.25	201.85	6.892	
17,800.00	10,500.00	17,346.46	9,800.00	111.08	110.64	59.79	-7,187.59	-1,269.77	1,391.29	1,186.98	204.31	6.810	
17,900.00	10,500.00	17,446.46	9,800.00	112.43	112.00	59.80	-7,287.58	-1,269.08	1,391.48	1,184.70	206.78	6.729	
18,000.00	10,500.00	17,546.46	9,800.00	113.79	113.36	59.80	-7,387.58	-1,268.38	1,391.67	1,182.41	209.26	6.650	
18,040.57	10,500.00	17,587.03	9,800.00	114.35	113.91	59.80	-7,428.15	-1,268.10	1,391.75	1,181.48	210.26	6.619	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design Golden Tee 31 Fed Com 305H - 305H - Planning - Plan 0.1												Offset Site Error:	0.00 usft
Survey Program: 0-B001Mb_MWD+HRGM												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	-90.62	-0.36	-33.04	33.04				
100.00	100.00	100.00	100.00	0.13	0.13	-90.62	-0.36	-33.04	33.04	32.77	0.27	122.899	
200.00	200.00	200.00	200.00	0.49	0.49	-90.62	-0.36	-33.04	33.04	32.06	0.99	33.518	
300.00	300.00	300.00	300.00	0.85	0.85	-90.62	-0.36	-33.04	33.04	31.34	1.70	19.405	
400.00	400.00	400.00	400.00	1.21	1.21	-90.62	-0.36	-33.04	33.04	30.62	2.42	13.655	
500.00	500.00	500.00	500.00	1.57	1.57	-90.62	-0.36	-33.04	33.04	29.91	3.14	10.534	
600.00	600.00	600.00	600.00	1.93	1.93	-90.62	-0.36	-33.04	33.04	29.19	3.85	8.574	
700.00	700.00	700.00	700.00	2.29	2.29	-90.62	-0.36	-33.04	33.04	28.47	4.57	7.229	
800.00	800.00	800.00	800.00	2.64	2.64	-90.62	-0.36	-33.04	33.04	27.75	5.29	6.249	
900.00	900.00	900.00	900.00	3.00	3.00	-90.62	-0.36	-33.04	33.04	27.04	6.00	5.503	
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	-90.62	-0.36	-33.04	33.04	26.32	6.72	4.916	
1,100.00	1,100.00	1,100.00	1,100.00	3.72	3.72	-90.62	-0.36	-33.04	33.04	25.60	7.44	4.442	
1,200.00	1,200.00	1,200.00	1,200.00	4.08	4.08	-90.62	-0.36	-33.04	33.04	24.89	8.16	4.052	
1,300.00	1,300.00	1,300.00	1,300.00	4.44	4.44	-90.62	-0.36	-33.04	33.04	24.17	8.87	3.724	
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	-90.62	-0.36	-33.04	33.04	23.45	9.59	3.446	
1,500.00	1,500.00	1,500.00	1,500.00	5.15	5.15	-90.62	-0.36	-33.04	33.04	22.74	10.31	3.206	
1,600.00	1,600.00	1,600.00	1,600.00	5.51	5.51	-90.62	-0.36	-33.04	33.04	22.02	11.02	2.998	
1,700.00	1,700.00	1,700.00	1,700.00	5.87	5.87	-90.62	-0.36	-33.04	33.04	21.30	11.74	2.814	
1,800.00	1,800.00	1,800.00	1,800.00	6.23	6.23	-90.62	-0.36	-33.04	33.04	20.59	12.46	2.653	
1,900.00	1,900.00	1,900.00	1,900.00	6.59	6.59	-90.62	-0.36	-33.04	33.04	19.87	13.17	2.508	
2,000.00	2,000.00	2,000.00	2,000.00	6.95	6.95	-90.62	-0.36	-33.04	33.04	19.15	13.89	2.379	
2,100.00	2,100.00	2,100.00	2,100.00	7.30	7.30	-90.62	-0.36	-33.04	33.04	18.43	14.61	2.262	
2,200.00	2,200.00	2,200.00	2,200.00	7.66	7.66	-90.62	-0.36	-33.04	33.04	17.72	15.32	2.156	
2,300.00	2,300.00	2,300.00	2,300.00	8.02	8.02	-90.62	-0.36	-33.04	33.04	17.00	16.04	2.060	
2,400.00	2,400.00	2,400.00	2,400.00	8.38	8.38	-90.62	-0.36	-33.04	33.04	16.28	16.76	1.972	
2,500.00	2,500.00	2,500.00	2,500.00	8.74	8.74	-90.62	-0.36	-33.04	33.04	15.57	17.48	1.891	
2,600.00	2,600.00	2,600.00	2,600.00	9.10	9.10	-90.62	-0.36	-33.04	33.04	14.85	18.19	1.816	
2,700.00	2,700.00	2,700.00	2,700.00	9.45	9.45	-90.62	-0.36	-33.04	33.04	14.13	18.91	1.747	
2,800.00	2,800.00	2,800.00	2,800.00	9.81	9.81	-90.62	-0.36	-33.04	33.04	13.42	19.63	1.684	
2,900.00	2,900.00	2,900.00	2,900.00	10.17	10.17	-90.62	-0.36	-33.04	33.04	12.70	20.34	1.624	
3,000.00	3,000.00	3,000.00	3,000.00	10.53	10.53	-90.62	-0.36	-33.04	33.04	11.98	21.06	1.569	
3,100.00	3,100.00	3,100.00	3,100.00	10.89	10.89	-90.62	-0.36	-33.04	33.04	11.26	21.78	1.517	
3,200.00	3,200.00	3,200.00	3,200.00	11.25	11.25	-90.62	-0.36	-33.04	33.04	10.55	22.49	1.469 Level 3	
3,300.00	3,300.00	3,300.00	3,300.00	11.61	11.61	-90.62	-0.36	-33.04	33.04	9.83	23.21	1.424 Level 3	
3,400.00	3,400.00	3,400.00	3,400.00	11.96	11.96	-90.62	-0.36	-33.04	33.04	9.11	23.93	1.381 Level 3	
3,500.00	3,500.00	3,500.00	3,500.00	12.32	12.32	-90.62	-0.36	-33.04	33.04	8.40	24.64	1.341 Level 3	
3,600.00	3,600.00	3,600.00	3,600.00	12.68	12.68	-90.62	-0.36	-33.04	33.04	7.68	25.36	1.303 Level 3	
3,700.00	3,700.00	3,700.00	3,700.00	13.04	13.04	-90.62	-0.36	-33.04	33.04	6.96	26.08	1.267 Level 3	
3,800.00	3,800.00	3,800.00	3,800.00	13.40	13.40	-90.62	-0.36	-33.04	33.04	6.25	26.80	1.233 Level 2	
3,900.00	3,900.00	3,900.00	3,900.00	13.76	13.76	-90.62	-0.36	-33.04	33.04	5.53	27.51	1.201 Level 2	
4,000.00	4,000.00	4,000.00	4,000.00	14.11	14.11	-90.62	-0.36	-33.04	33.04	4.81	28.23	1.170 Level 2	
4,100.00	4,100.00	4,100.00	4,100.00	14.47	14.47	-90.62	-0.36	-33.04	33.04	4.10	28.95	1.141 Level 2	
4,200.00	4,200.00	4,200.00	4,200.00	14.83	14.83	-90.62	-0.36	-33.04	33.04	3.38	29.66	1.114 Level 2	
4,300.00	4,300.00	4,300.00	4,300.00	15.19	15.19	-90.62	-0.36	-33.04	33.04	2.66	30.38	1.088 Level 2	
4,400.00	4,400.00	4,400.00	4,400.00	15.55	15.55	-90.62	-0.36	-33.04	33.04	1.94	31.10	1.063 Level 2	
4,500.00	4,500.00	4,500.00	4,500.00	15.91	15.91	-90.62	-0.36	-33.04	33.04	1.23	31.81	1.039 Level 2	
4,600.00	4,600.00	4,600.00	4,600.00	16.27	16.27	-90.62	-0.36	-33.04	33.04	0.51	32.53	1.016 Level 2	
4,700.00	4,700.00	4,700.00	4,700.00	16.62	16.62	-90.62	-0.36	-33.04	33.04	-0.21	33.25	0.994 Level 1	
4,800.00	4,800.00	4,800.00	4,800.00	16.98	16.98	-90.62	-0.36	-33.04	33.04	-0.92	33.97	0.973 Level 1	
4,900.00	4,900.00	4,900.00	4,900.00	17.34	17.34	-90.62	-0.36	-33.04	33.04	-1.64	34.68	0.953 Level 1	
5,000.00	5,000.00	5,000.00	5,000.00	17.70	17.70	-90.62	-0.36	-33.04	33.04	-2.36	35.40	0.933 Level 1	
5,100.00	5,100.00	5,100.00	5,100.00	18.06	18.06	-90.62	-0.36	-33.04	33.04	-3.07	36.12	0.915 Level 1	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design Golden Tee 31 Fed Com 305H - 305H - Planning - Plan 0.1													Offset Site Error:	0.00 usft
Survey Program: 0-B001Mb_MWD+HRGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.00	5,200.00	5,200.00	5,200.00	18.42	18.42	-90.62	-0.36	-33.04	33.04	-3.79	36.83	0.897	Level 1	
5,300.00	5,300.00	5,300.00	5,300.00	18.77	18.77	-90.62	-0.36	-33.04	33.04	-4.51	37.55	0.880	Level 1	
5,400.00	5,400.00	5,400.00	5,400.00	19.13	19.13	-90.62	-0.36	-33.04	33.04	-5.22	38.27	0.863	Level 1	
5,500.00	5,500.00	5,500.00	5,500.00	19.49	19.49	-90.62	-0.36	-33.04	33.04	-5.94	38.98	0.848	Level 1	
5,600.00	5,600.00	5,600.00	5,600.00	19.85	19.85	-90.62	-0.36	-33.04	33.04	-6.66	39.70	0.832	Level 1	
5,620.00	5,620.00	5,620.00	5,620.00	19.92	19.92	-90.62	-0.36	-33.04	33.04	-6.80	39.84	0.829	Level 1	
5,700.00	5,700.00	5,699.86	5,699.85	20.21	20.21	-69.24	0.17	-33.22	33.02	-7.40	40.42	0.817	Level 1	
5,800.00	5,799.97	5,799.67	5,799.64	20.57	20.56	-69.20	2.30	-33.96	32.93	-8.20	41.13	0.801	Level 1	
5,900.00	5,899.89	5,899.49	5,899.38	20.92	20.92	-69.11	6.08	-35.26	32.77	-9.07	41.84	0.783	Level 1	
6,000.00	5,999.72	5,999.31	5,999.03	21.28	21.28	-68.99	11.51	-37.12	32.54	-10.00	42.54	0.765	Level 1	
6,100.00	6,099.44	6,099.13	6,098.57	21.64	21.63	-68.83	18.57	-39.55	32.24	-11.00	43.25	0.746	Level 1	
6,192.51	6,191.56	6,191.47	6,190.52	21.97	21.96	-68.64	26.57	-42.31	31.91	-11.99	43.90	0.727	Level 1	
6,200.00	6,199.01	6,198.95	6,197.96	21.99	21.99	-68.61	27.28	-42.55	31.88	-12.07	43.95	0.725	Level 1	
6,300.00	6,298.51	6,298.95	6,297.46	22.35	22.35	-68.19	36.80	-45.82	31.52	-13.14	44.66	0.706	Level 1	
6,400.00	6,398.01	6,398.95	6,396.95	22.71	22.70	-67.76	46.32	-49.10	31.17	-14.21	45.38	0.687	Level 1	
6,500.00	6,497.51	6,498.95	6,496.44	23.07	23.06	-67.32	55.84	-52.38	30.81	-15.28	46.09	0.669	Level 1	
6,600.00	6,597.02	6,598.95	6,595.93	23.42	23.42	-66.87	65.36	-55.65	30.46	-16.34	46.80	0.651	Level 1	
6,700.00	6,696.52	6,698.94	6,695.42	23.78	23.78	-66.41	74.88	-58.93	30.11	-17.41	47.52	0.634	Level 1	
6,800.00	6,796.02	6,798.94	6,794.91	24.14	24.14	-65.94	84.40	-62.20	29.76	-18.48	48.24	0.617	Level 1	
6,900.00	6,895.52	6,898.94	6,894.40	24.50	24.50	-65.46	93.92	-65.48	29.41	-19.54	48.95	0.601	Level 1	
7,000.00	6,995.02	6,998.94	6,993.89	24.87	24.86	-64.96	103.44	-68.76	29.07	-20.60	49.67	0.585	Level 1	
7,100.00	7,094.52	7,098.94	7,093.38	25.23	25.22	-64.46	112.96	-72.03	28.73	-21.67	50.39	0.570	Level 1	
7,200.00	7,194.02	7,198.94	7,192.87	25.59	25.59	-63.94	122.48	-75.31	28.39	-22.73	51.11	0.555	Level 1	
7,300.00	7,293.52	7,298.94	7,292.37	25.95	25.95	-63.41	132.00	-78.58	28.05	-23.78	51.83	0.541	Level 1	
7,400.00	7,393.02	7,398.94	7,391.86	26.32	26.31	-62.86	141.52	-81.86	27.71	-24.84	52.55	0.527	Level 1	
7,500.00	7,492.53	7,498.94	7,491.35	26.68	26.68	-62.31	151.04	-85.14	27.38	-25.90	53.28	0.514	Level 1	
7,600.00	7,592.03	7,598.94	7,590.84	27.04	27.04	-61.74	160.56	-88.41	27.05	-26.95	54.00	0.501	Level 1	
7,700.00	7,691.53	7,698.94	7,690.33	27.41	27.41	-61.15	170.08	-91.69	26.72	-28.00	54.72	0.488	Level 1	
7,800.00	7,791.03	7,798.93	7,789.82	27.77	27.77	-60.55	179.60	-94.96	26.40	-29.05	55.45	0.476	Level 1	
7,900.00	7,890.53	7,898.93	7,889.31	28.14	28.14	-59.94	189.12	-98.24	26.08	-30.09	56.17	0.464	Level 1	
8,000.00	7,990.03	7,998.93	7,988.80	28.51	28.50	-59.31	198.64	-101.52	25.76	-31.14	56.89	0.453	Level 1	
8,100.00	8,089.53	8,098.93	8,088.29	28.87	28.87	-58.66	208.16	-104.79	25.44	-32.18	57.62	0.442	Level 1	
8,200.00	8,189.03	8,198.93	8,187.78	29.24	29.24	-58.00	217.68	-108.07	25.13	-33.21	58.34	0.431	Level 1	
8,300.00	8,288.54	8,298.93	8,287.27	29.61	29.60	-57.32	227.20	-111.34	24.82	-34.25	59.07	0.420	Level 1	
8,400.00	8,388.04	8,398.93	8,386.77	29.97	29.97	-56.63	236.73	-114.62	24.52	-35.28	59.79	0.410	Level 1	
8,500.00	8,487.54	8,498.93	8,486.26	30.34	30.34	-55.92	246.25	-117.90	24.22	-36.30	60.52	0.400	Level 1	
8,600.00	8,587.04	8,598.93	8,585.75	30.71	30.71	-55.19	255.77	-121.17	23.92	-37.32	61.25	0.391	Level 1	
8,700.00	8,686.54	8,698.93	8,685.24	31.08	31.08	-54.44	265.29	-124.45	23.63	-38.34	61.97	0.381	Level 1	
8,800.00	8,786.04	8,799.01	8,784.83	31.45	31.45	-53.95	274.69	-127.68	23.26	-39.44	62.70	0.371	Level 1	
8,900.00	8,885.54	8,899.22	8,884.67	31.82	31.81	-56.50	282.76	-130.46	22.13	-41.33	63.47	0.349	Level 1	
9,000.00	8,985.04	8,999.34	8,984.56	32.18	32.18	-63.68	289.17	-132.66	20.28	-43.97	64.25	0.316	Level 1	
9,100.00	9,084.55	9,099.32	9,084.41	32.55	32.54	-77.37	293.92	-134.30	18.41	-46.64	65.05	0.283	Level 1	
9,167.68	9,151.89	9,166.87	9,151.92	32.80	32.78	-91.01	296.20	-135.08	17.87	-47.72	65.58	0.272	Level 1, CC, SF	
9,200.00	9,184.05	9,199.09	9,184.13	32.92	32.90	-98.50	297.02	-135.37	18.03	-47.80	65.82	0.274	Level 1, ES	
9,300.00	9,283.55	9,298.60	9,283.63	33.29	33.26	-121.91	298.48	-135.87	20.95	-45.54	66.49	0.315	Level 1	
9,372.30	9,355.48	9,368.88	9,353.88	33.56	33.50	-136.19	297.57	-135.90	26.41	-40.33	66.75	0.396	Level 1	
9,400.00	9,383.06	9,394.65	9,379.54	33.66	33.57	-141.24	295.19	-135.88	30.85	-35.74	66.59	0.463	Level 1	
9,500.00	9,482.68	9,482.42	9,465.23	34.03	33.83	-152.20	276.78	-135.71	58.70	-6.26	64.97	0.904	Level 1	
9,600.00	9,582.44	9,559.63	9,536.73	34.40	34.02	-156.13	247.86	-135.44	101.96	39.64	62.33	1.636		
9,700.00	9,682.31	9,625.00	9,592.97	34.76	34.17	-157.69	214.64	-135.14	157.01	97.75	59.26	2.650		
9,800.00	9,782.25	9,680.55	9,636.82	35.12	34.28	-158.48	180.59	-134.83	220.95	164.54	56.40	3.917		
9,900.00	9,882.24	9,725.00	9,668.87	35.48	34.36	-158.98	149.82	-134.55	291.52	237.95	53.57	5.442		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design Golden Tee 31 Fed Com 305H - 305H - Planning - Plan 0.1												Offset Site Error:	0.00 usft
Survey Program: 0-B001Mb_MWD+HRGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,944.81	9,927.04	9,750.00	9,685.60	35.64	34.40	179.46	131.24	-134.37	324.89	271.67	53.22	6.105	
9,950.00	9,932.23	9,750.00	9,685.60	35.65	34.40	-0.01	131.24	-134.37	328.75	275.86	52.89	6.216	
10,000.00	9,982.15	9,766.61	9,696.16	35.81	34.43	-0.01	118.43	-134.26	365.47	314.05	51.41	7.108	
10,050.00	10,031.64	9,786.34	9,708.13	35.96	34.46	-0.01	102.74	-134.11	400.61	350.38	50.23	7.975	
10,100.00	10,080.34	9,806.16	9,719.48	36.10	34.49	-0.01	86.50	-133.96	434.08	385.03	49.04	8.851	
10,150.00	10,127.88	9,825.00	9,729.64	36.23	34.52	-0.01	70.63	-133.82	465.82	418.03	47.79	9.746	
10,200.00	10,173.88	9,850.00	9,742.14	36.36	34.56	-0.01	48.99	-133.62	495.80	448.83	46.97	10.557	
10,250.00	10,218.01	9,865.98	9,749.53	36.47	34.59	-0.01	34.82	-133.49	523.86	478.29	45.58	11.494	
10,300.00	10,259.92	9,886.02	9,758.11	36.58	34.62	-0.01	16.72	-133.32	550.06	505.57	44.49	12.364	
10,350.00	10,299.29	9,900.00	9,763.65	36.67	34.64	-0.01	3.88	-133.21	574.37	531.21	43.17	13.306	
10,400.00	10,335.84	9,925.00	9,772.61	36.76	34.68	-0.01	-19.46	-132.99	596.55	554.10	42.44	14.055	
10,450.00	10,369.27	9,950.00	9,780.34	36.85	34.72	-0.01	-43.23	-132.77	616.77	575.01	41.76	14.770	
10,500.00	10,399.34	9,966.51	9,784.75	36.93	34.74	0.00	-59.13	-132.63	634.87	594.02	40.85	15.542	
10,550.00	10,425.81	9,986.69	9,789.40	37.01	34.77	0.00	-78.77	-132.45	650.87	610.68	40.19	16.195	
10,600.00	10,448.49	10,000.00	9,792.01	37.09	34.79	0.00	-91.82	-132.33	664.82	625.29	39.53	16.819	
10,650.00	10,467.20	10,025.00	9,795.92	37.17	34.83	0.00	-116.51	-132.10	676.43	637.17	39.25	17.232	
10,700.00	10,481.80	10,050.00	9,798.53	37.26	34.87	0.00	-141.37	-131.87	685.92	646.84	39.09	17.548	
10,750.00	10,492.17	10,067.56	9,799.59	37.34	34.89	0.00	-158.90	-131.71	693.19	654.19	39.00	17.773	
10,800.00	10,498.25	10,088.23	9,800.00	37.43	34.92	0.00	-179.55	-131.52	698.24	659.13	39.11	17.853	
10,844.80	10,500.00	10,132.98	9,800.00	37.50	35.00	0.00	-224.31	-131.11	699.99	660.75	39.24	17.838	
10,900.00	10,500.00	10,188.18	9,800.00	37.61	35.11	0.00	-279.50	-130.61	699.99	660.58	39.41	17.761	
11,000.00	10,500.00	10,288.18	9,800.00	37.84	35.34	0.00	-379.50	-129.69	699.99	660.22	39.77	17.601	
11,100.00	10,500.00	10,388.18	9,800.00	38.13	35.64	0.00	-479.50	-128.77	699.99	659.81	40.18	17.419	
11,200.00	10,500.00	10,488.18	9,800.00	38.46	35.99	0.00	-579.49	-127.85	699.99	659.34	40.66	17.217	
11,300.00	10,500.00	10,588.18	9,800.00	38.85	36.39	0.00	-679.49	-126.94	699.99	658.81	41.18	16.997	
11,400.00	10,500.00	10,688.18	9,800.00	39.29	36.85	0.00	-779.48	-126.02	699.99	658.23	41.76	16.761	
11,500.00	10,500.00	10,788.18	9,800.00	39.77	37.35	0.00	-879.48	-125.10	699.99	657.60	42.39	16.513	
11,600.00	10,500.00	10,888.18	9,800.00	40.30	37.91	0.00	-979.48	-124.18	699.99	656.92	43.07	16.253	
11,700.00	10,500.00	10,988.18	9,800.00	40.87	38.51	-0.01	-1,079.47	-123.27	699.99	656.20	43.79	15.984	
11,800.00	10,500.00	11,088.18	9,800.00	41.48	39.15	-0.01	-1,179.47	-122.35	699.99	655.43	44.56	15.709	
11,900.00	10,500.00	11,188.18	9,800.00	42.14	39.83	-0.01	-1,279.46	-121.43	699.99	654.63	45.37	15.429	
12,000.00	10,500.00	11,288.18	9,800.00	42.83	40.56	-0.01	-1,379.46	-120.52	699.99	653.78	46.21	15.147	
12,100.00	10,500.00	11,388.18	9,800.00	43.56	41.32	-0.01	-1,479.45	-119.60	699.99	652.89	47.10	14.862	
12,200.00	10,500.00	11,488.18	9,800.00	44.33	42.11	-0.01	-1,579.45	-118.68	699.99	651.98	48.02	14.577	
12,300.00	10,500.00	11,588.18	9,800.00	45.12	42.94	-0.01	-1,679.45	-117.76	699.99	651.02	48.97	14.294	
12,400.00	10,500.00	11,688.18	9,800.00	45.95	43.81	-0.01	-1,779.44	-116.85	699.99	650.04	49.96	14.012	
12,500.00	10,500.00	11,788.18	9,800.00	46.81	44.70	-0.01	-1,879.44	-115.93	699.99	649.03	50.97	13.734	
12,600.00	10,500.00	11,888.18	9,800.00	47.70	45.62	-0.01	-1,979.43	-115.01	699.99	647.99	52.01	13.459	
12,700.00	10,500.00	11,988.18	9,800.00	48.61	46.56	-0.01	-2,079.43	-114.09	699.99	646.92	53.08	13.189	
12,800.00	10,500.00	12,088.18	9,800.00	49.55	47.53	-0.01	-2,179.42	-113.18	699.99	645.83	54.17	12.923	
12,900.00	10,500.00	12,188.18	9,800.00	50.51	48.53	-0.01	-2,279.42	-112.26	699.99	644.71	55.28	12.662	
13,000.00	10,500.00	12,288.18	9,800.00	51.49	49.54	-0.01	-2,379.42	-111.34	699.99	643.58	56.42	12.407	
13,100.00	10,500.00	12,388.18	9,800.00	52.49	50.58	-0.01	-2,479.41	-110.42	700.00	642.42	57.57	12.158	
13,200.00	10,500.00	12,488.18	9,800.00	53.52	51.63	-0.01	-2,579.41	-109.51	700.00	641.25	58.75	11.915	
13,300.00	10,500.00	12,588.18	9,800.00	54.56	52.71	-0.01	-2,679.40	-108.59	700.00	640.05	59.94	11.678	
13,400.00	10,500.00	12,688.18	9,800.00	55.62	53.80	-0.01	-2,779.40	-107.67	700.00	638.84	61.15	11.447	
13,500.00	10,500.00	12,788.18	9,800.00	56.70	54.91	-0.01	-2,879.40	-106.75	700.00	637.62	62.38	11.222	
13,600.00	10,500.00	12,888.18	9,800.00	57.79	56.03	-0.01	-2,979.39	-105.84	700.00	636.38	63.62	11.003	
13,700.00	10,500.00	12,988.18	9,800.00	58.90	57.16	-0.01	-3,079.39	-104.92	700.00	635.12	64.88	10.790	
13,800.00	10,500.00	13,088.18	9,800.00	60.02	58.31	-0.01	-3,179.38	-104.00	700.00	633.85	66.14	10.583	
13,900.00	10,500.00	13,188.18	9,800.00	61.16	59.48	-0.01	-3,279.38	-103.08	700.00	632.57	67.43	10.382	
14,000.00	10,500.00	13,288.18	9,800.00	62.31	60.65	-0.01	-3,379.37	-102.17	700.00	631.28	68.72	10.186	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design Golden Tee 31 Fed Com 305H - 305H - Planning - Plan 0.1												Offset Site Error:	0.00 usft
Survey Program: 0-B001Mb_MWVD+HRGM												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,100.00	10,500.00	13,388.18	9,800.00	63.47	61.84	-0.01	-3,479.37	-101.25	700.00	629.97	70.02	9.996	
14,200.00	10,500.00	13,488.18	9,800.00	64.64	63.03	-0.01	-3,579.37	-100.33	700.00	628.66	71.34	9.812	
14,300.00	10,500.00	13,588.18	9,800.00	65.82	64.24	-0.01	-3,679.36	-99.42	700.00	627.33	72.67	9.633	
14,400.00	10,500.00	13,688.18	9,800.00	67.01	65.45	-0.01	-3,779.36	-98.50	700.00	626.00	74.00	9.459	
14,500.00	10,500.00	13,788.18	9,800.00	68.21	66.68	-0.01	-3,879.35	-97.58	700.00	624.65	75.35	9.291	
14,600.00	10,500.00	13,888.18	9,800.00	69.42	67.91	-0.01	-3,979.35	-96.66	700.00	623.30	76.70	9.127	
14,700.00	10,500.00	13,988.18	9,800.00	70.64	69.15	-0.01	-4,079.35	-95.75	700.00	621.94	78.06	8.968	
14,800.00	10,500.00	14,088.18	9,800.00	71.87	70.40	-0.01	-4,179.34	-94.83	700.00	620.57	79.43	8.813	
14,900.00	10,500.00	14,188.18	9,800.00	73.10	71.65	-0.01	-4,279.34	-93.91	700.00	619.19	80.80	8.663	
15,000.00	10,500.00	14,288.18	9,800.00	74.34	72.92	-0.01	-4,379.33	-92.99	700.00	617.81	82.19	8.517	
15,100.00	10,500.00	14,388.18	9,800.00	75.59	74.19	-0.01	-4,479.33	-92.08	700.00	616.42	83.57	8.376	
15,200.00	10,500.00	14,488.18	9,800.00	76.85	75.46	-0.01	-4,579.32	-91.16	700.00	615.03	84.97	8.238	
15,300.00	10,500.00	14,588.18	9,800.00	78.11	76.74	-0.01	-4,679.32	-90.24	700.00	613.63	86.37	8.104	
15,400.00	10,500.00	14,688.18	9,800.00	79.38	78.03	-0.01	-4,779.32	-89.32	700.00	612.22	87.78	7.975	
15,500.00	10,500.00	14,788.18	9,800.00	80.65	79.32	-0.01	-4,879.31	-88.41	700.00	610.81	89.19	7.848	
15,600.00	10,500.00	14,888.18	9,800.00	81.93	80.62	-0.01	-4,979.31	-87.49	700.00	609.39	90.61	7.725	
15,700.00	10,500.00	14,988.18	9,800.00	83.22	81.92	-0.01	-5,079.30	-86.57	700.00	607.97	92.03	7.606	
15,800.00	10,500.00	15,088.18	9,800.00	84.51	83.22	-0.01	-5,179.30	-85.65	700.00	606.54	93.46	7.490	
15,900.00	10,500.00	15,188.18	9,800.00	85.80	84.53	-0.01	-5,279.29	-84.74	700.00	605.11	94.89	7.377	
16,000.00	10,500.00	15,288.18	9,800.00	87.10	85.85	-0.01	-5,379.29	-83.82	700.00	603.67	96.33	7.267	
16,100.00	10,500.00	15,388.18	9,800.00	88.41	87.16	-0.01	-5,479.29	-82.90	700.00	602.23	97.77	7.160	
16,200.00	10,500.00	15,488.18	9,800.00	89.71	88.49	-0.01	-5,579.28	-81.99	700.00	600.79	99.21	7.056	
16,300.00	10,500.00	15,588.18	9,800.00	91.02	89.81	-0.01	-5,679.28	-81.07	700.00	599.34	100.66	6.954	
16,400.00	10,500.00	15,688.18	9,800.00	92.34	91.14	-0.01	-5,779.27	-80.15	700.00	597.89	102.11	6.855	
16,500.00	10,500.00	15,788.18	9,800.00	93.66	92.47	-0.01	-5,879.27	-79.23	700.00	596.43	103.57	6.759	
16,600.00	10,500.00	15,888.18	9,800.00	94.98	93.81	-0.01	-5,979.27	-78.32	700.00	594.97	105.02	6.665	
16,700.00	10,500.00	15,988.18	9,800.00	96.31	95.15	-0.01	-6,079.26	-77.40	700.00	593.51	106.49	6.574	
16,800.00	10,500.00	16,088.18	9,800.00	97.64	96.49	-0.01	-6,179.26	-76.48	700.00	592.05	107.95	6.484	
16,900.00	10,500.00	16,188.18	9,800.00	98.97	97.83	-0.01	-6,279.25	-75.56	700.00	590.58	109.42	6.397	
17,000.00	10,500.00	16,288.18	9,800.00	100.30	99.18	-0.01	-6,379.25	-74.65	700.00	589.11	110.89	6.313	
17,100.00	10,500.00	16,388.18	9,800.00	101.64	100.53	-0.01	-6,479.24	-73.73	700.00	587.64	112.36	6.230	
17,200.00	10,500.00	16,488.18	9,800.00	102.98	101.88	-0.01	-6,579.24	-72.81	700.00	586.16	113.84	6.149	
17,300.00	10,500.00	16,588.18	9,800.00	104.32	103.24	-0.01	-6,679.24	-71.89	700.00	584.69	115.31	6.070	
17,400.00	10,500.00	16,688.18	9,800.00	105.67	104.59	-0.01	-6,779.23	-70.98	700.00	583.20	116.79	5.993	
17,500.00	10,500.00	16,788.18	9,800.00	107.02	105.95	-0.01	-6,879.23	-70.06	700.00	581.72	118.28	5.918	
17,600.00	10,500.00	16,888.18	9,800.00	108.37	107.31	-0.01	-6,979.22	-69.14	700.00	580.24	119.76	5.845	
17,700.00	10,500.00	16,988.18	9,800.00	109.72	108.68	-0.01	-7,079.22	-68.22	700.00	578.75	121.25	5.773	
17,800.00	10,500.00	17,088.18	9,800.00	111.08	110.04	-0.01	-7,179.21	-67.31	700.00	577.26	122.74	5.703	
17,900.00	10,500.00	17,188.18	9,800.00	112.43	111.41	-0.01	-7,279.21	-66.39	700.00	575.77	124.23	5.635	
18,000.00	10,500.00	17,288.18	9,800.00	113.79	112.78	-0.01	-7,379.21	-65.47	700.00	574.28	125.72	5.568	
18,040.57	10,500.00	17,328.75	9,800.00	114.35	113.33	-0.01	-7,419.78	-65.10	700.00	573.67	126.33	5.541	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design Golden Tee 31 Fed Com 504H - 504H - Planning - Plan 0.1													Offset Site Error:	0.00 usft
Survey Program: 0-B001Mb_MWD+HRGM													Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	-90.69	-0.80	-65.97	65.97					
100.00	100.00	100.00	100.00	0.13	0.13	-90.69	-0.80	-65.97	65.97	65.71	0.27	245.393		
200.00	200.00	200.00	200.00	0.49	0.49	-90.69	-0.80	-65.97	65.97	64.99	0.99	66.925		
300.00	300.00	300.00	300.00	0.85	0.85	-90.69	-0.80	-65.97	65.97	64.27	1.70	38.746		
400.00	400.00	400.00	400.00	1.21	1.21	-90.69	-0.80	-65.97	65.97	63.56	2.42	27.266		
500.00	500.00	500.00	500.00	1.57	1.57	-90.69	-0.80	-65.97	65.97	62.84	3.14	21.034		
600.00	600.00	600.00	600.00	1.93	1.93	-90.69	-0.80	-65.97	65.97	62.12	3.85	17.120		
700.00	700.00	700.00	700.00	2.29	2.29	-90.69	-0.80	-65.97	65.97	61.40	4.57	14.435		
800.00	800.00	800.00	800.00	2.64	2.64	-90.69	-0.80	-65.97	65.97	60.69	5.29	12.478		
900.00	900.00	900.00	900.00	3.00	3.00	-90.69	-0.80	-65.97	65.97	59.97	6.00	10.988		
1,000.00	1,000.00	1,000.00	1,000.00	3.36	3.36	-90.69	-0.80	-65.97	65.97	59.25	6.72	9.816		
1,100.00	1,100.00	1,100.00	1,100.00	3.72	3.72	-90.69	-0.80	-65.97	65.97	58.54	7.44	8.870		
1,200.00	1,200.00	1,200.00	1,200.00	4.08	4.08	-90.69	-0.80	-65.97	65.97	57.82	8.16	8.090		
1,300.00	1,300.00	1,300.00	1,300.00	4.44	4.44	-90.69	-0.80	-65.97	65.97	57.10	8.87	7.436		
1,400.00	1,400.00	1,400.00	1,400.00	4.79	4.79	-90.69	-0.80	-65.97	65.97	56.39	9.59	6.880		
1,500.00	1,500.00	1,500.00	1,500.00	5.15	5.15	-90.69	-0.80	-65.97	65.97	55.67	10.31	6.402		
1,600.00	1,600.00	1,600.00	1,600.00	5.51	5.51	-90.69	-0.80	-65.97	65.97	54.95	11.02	5.985		
1,700.00	1,700.00	1,700.00	1,700.00	5.87	5.87	-90.69	-0.80	-65.97	65.97	54.23	11.74	5.620		
1,800.00	1,800.00	1,800.00	1,800.00	6.23	6.23	-90.69	-0.80	-65.97	65.97	53.52	12.46	5.296		
1,900.00	1,900.00	1,900.00	1,900.00	6.59	6.59	-90.69	-0.80	-65.97	65.97	52.80	13.17	5.008		
2,000.00	2,000.00	2,000.00	2,000.00	6.95	6.95	-90.69	-0.80	-65.97	65.97	52.08	13.89	4.750		
2,100.00	2,100.00	2,100.00	2,100.00	7.30	7.30	-90.69	-0.80	-65.97	65.97	51.37	14.61	4.516		
2,200.00	2,200.00	2,200.00	2,200.00	7.66	7.66	-90.69	-0.80	-65.97	65.97	50.65	15.32	4.305		
2,300.00	2,300.00	2,300.00	2,300.00	8.02	8.02	-90.69	-0.80	-65.97	65.97	49.93	16.04	4.113		
2,400.00	2,400.00	2,400.00	2,400.00	8.38	8.38	-90.69	-0.80	-65.97	65.97	49.22	16.76	3.937		
2,500.00	2,500.00	2,500.00	2,500.00	8.74	8.74	-90.69	-0.80	-65.97	65.97	48.50	17.48	3.775		
2,600.00	2,600.00	2,600.00	2,600.00	9.10	9.10	-90.69	-0.80	-65.97	65.97	47.78	18.19	3.627		
2,700.00	2,700.00	2,700.00	2,700.00	9.45	9.45	-90.69	-0.80	-65.97	65.97	47.07	18.91	3.489		
2,800.00	2,800.00	2,800.00	2,800.00	9.81	9.81	-90.69	-0.80	-65.97	65.97	46.35	19.63	3.362		
2,900.00	2,900.00	2,900.00	2,900.00	10.17	10.17	-90.69	-0.80	-65.97	65.97	45.63	20.34	3.243		
3,000.00	3,000.00	3,000.00	3,000.00	10.53	10.53	-90.69	-0.80	-65.97	65.97	44.91	21.06	3.133		
3,100.00	3,100.00	3,100.00	3,100.00	10.89	10.89	-90.69	-0.80	-65.97	65.97	44.20	21.78	3.030		
3,200.00	3,200.00	3,200.00	3,200.00	11.25	11.25	-90.69	-0.80	-65.97	65.97	43.48	22.49	2.933		
3,300.00	3,300.00	3,300.00	3,300.00	11.61	11.61	-90.69	-0.80	-65.97	65.97	42.76	23.21	2.842		
3,400.00	3,400.00	3,400.00	3,400.00	11.96	11.96	-90.69	-0.80	-65.97	65.97	42.05	23.93	2.757		
3,500.00	3,500.00	3,500.00	3,500.00	12.32	12.32	-90.69	-0.80	-65.97	65.97	41.33	24.64	2.677		
3,600.00	3,600.00	3,600.00	3,600.00	12.68	12.68	-90.69	-0.80	-65.97	65.97	40.61	25.36	2.601		
3,700.00	3,700.00	3,700.00	3,700.00	13.04	13.04	-90.69	-0.80	-65.97	65.97	39.90	26.08	2.530		
3,800.00	3,800.00	3,800.00	3,800.00	13.40	13.40	-90.69	-0.80	-65.97	65.97	39.18	26.80	2.462		
3,900.00	3,900.00	3,900.00	3,900.00	13.76	13.76	-90.69	-0.80	-65.97	65.97	38.46	27.51	2.398		
4,000.00	4,000.00	4,000.00	4,000.00	14.11	14.11	-90.69	-0.80	-65.97	65.97	37.75	28.23	2.337		
4,100.00	4,100.00	4,100.00	4,100.00	14.47	14.47	-90.69	-0.80	-65.97	65.97	37.03	28.95	2.279		
4,200.00	4,200.00	4,200.00	4,200.00	14.83	14.83	-90.69	-0.80	-65.97	65.97	36.31	29.66	2.224		
4,300.00	4,300.00	4,300.00	4,300.00	15.19	15.19	-90.69	-0.80	-65.97	65.97	35.59	30.38	2.172		
4,400.00	4,400.00	4,400.00	4,400.00	15.55	15.55	-90.69	-0.80	-65.97	65.97	34.88	31.10	2.122		
4,500.00	4,500.00	4,500.00	4,500.00	15.91	15.91	-90.69	-0.80	-65.97	65.97	34.16	31.81	2.074		
4,600.00	4,600.00	4,600.00	4,600.00	16.27	16.27	-90.69	-0.80	-65.97	65.97	33.44	32.53	2.028		
4,700.00	4,700.00	4,700.00	4,700.00	16.62	16.62	-90.69	-0.80	-65.97	65.97	32.73	33.25	1.984		
4,800.00	4,800.00	4,800.00	4,800.00	16.98	16.98	-90.69	-0.80	-65.97	65.97	32.01	33.97	1.942		
4,900.00	4,900.00	4,900.00	4,900.00	17.34	17.34	-90.69	-0.80	-65.97	65.97	31.29	34.68	1.902		
5,000.00	5,000.00	5,000.00	5,000.00	17.70	17.70	-90.69	-0.80	-65.97	65.97	30.58	35.40	1.864		
5,100.00	5,100.00	5,100.00	5,100.00	18.06	18.06	-90.69	-0.80	-65.97	65.97	29.86	36.12	1.827		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design Golden Tee 31 Fed Com 504H - 504H - Planning - Plan 0.1													Offset Site Error:	0.00 usft
Survey Program: 0-B001Mb_MWD+HRGM													Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
5,200.00	5,200.00	5,200.00	5,200.00	18.42	18.42	-90.69	-0.80	-65.97	65.97	29.14	36.83	1.791		
5,300.00	5,300.00	5,300.00	5,300.00	18.77	18.77	-90.69	-0.80	-65.97	65.97	28.42	37.55	1.757		
5,400.00	5,400.00	5,400.00	5,400.00	19.13	19.13	-90.69	-0.80	-65.97	65.97	27.71	38.27	1.724		
5,500.00	5,500.00	5,500.00	5,500.00	19.49	19.49	-90.69	-0.80	-65.97	65.97	26.99	38.98	1.692		
5,600.00	5,600.00	5,600.00	5,600.00	19.85	19.85	-90.69	-0.80	-65.97	65.97	26.27	39.70	1.662		
5,620.00	5,620.00	5,620.00	5,620.00	19.92	19.92	-90.69	-0.80	-65.97	65.97	26.13	39.84	1.656 CC, ES		
5,700.00	5,700.00	5,698.71	5,698.70	20.21	20.20	-69.58	-0.59	-66.74	66.56	26.16	40.40	1.647 SF		
5,800.00	5,799.97	5,797.03	5,796.97	20.57	20.54	-70.55	0.25	-69.86	68.94	27.87	41.07	1.679		
5,900.00	5,899.89	5,895.21	5,894.98	20.92	20.88	-72.12	1.73	-75.38	73.20	31.48	41.72	1.754		
6,000.00	5,999.72	5,993.17	5,992.60	21.28	21.22	-74.06	3.84	-83.26	79.38	37.03	42.35	1.874		
6,100.00	6,099.44	6,090.84	6,089.69	21.64	21.56	-76.16	6.59	-93.48	87.55	44.58	42.97	2.038		
6,192.51	6,191.56	6,180.87	6,178.92	21.97	21.88	-78.10	9.68	-104.98	96.90	53.38	43.52	2.226		
6,200.00	6,199.01	6,188.14	6,186.12	21.99	21.90	-78.26	9.95	-106.00	97.74	54.17	43.57	2.243		
6,300.00	6,298.51	6,285.00	6,281.76	22.35	22.25	-79.84	13.92	-120.78	110.13	65.97	44.15	2.494		
6,400.00	6,398.01	6,381.33	6,376.47	22.71	22.59	-80.57	18.48	-137.75	124.76	80.04	44.72	2.790		
6,500.00	6,497.51	6,477.00	6,470.07	23.07	22.94	-80.69	23.61	-156.85	141.58	96.31	45.26	3.128		
6,600.00	6,597.02	6,571.91	6,562.42	23.42	23.28	-80.40	29.29	-177.99	160.53	114.75	45.78	3.506		
6,700.00	6,696.52	6,665.96	6,653.38	23.78	23.63	-79.83	35.49	-201.07	181.61	135.34	46.27	3.925		
6,800.00	6,796.02	6,759.06	6,742.82	24.14	23.99	-79.09	42.19	-226.01	204.81	158.07	46.74	4.382		
6,900.00	6,895.52	6,851.10	6,830.62	24.50	24.34	-78.26	49.35	-252.70	230.13	182.95	47.18	4.878		
7,000.00	6,995.02	6,942.01	6,916.67	24.87	24.70	-77.39	56.96	-281.02	257.56	209.96	47.59	5.411		
7,100.00	7,094.52	7,031.71	7,000.88	25.23	25.07	-76.51	64.98	-310.86	287.08	239.09	47.99	5.983		
7,200.00	7,194.02	7,120.13	7,083.17	25.59	25.44	-75.65	73.37	-342.10	318.66	270.31	48.35	6.590		
7,300.00	7,293.52	7,207.22	7,163.47	25.95	25.81	-74.82	82.10	-374.63	352.29	303.60	48.70	7.234		
7,400.00	7,393.02	7,292.90	7,241.72	26.32	26.20	-74.03	91.16	-408.33	387.93	338.91	49.02	7.913		
7,500.00	7,492.53	7,377.14	7,317.89	26.68	26.59	-73.28	100.49	-443.07	425.54	376.21	49.33	8.627		
7,600.00	7,592.03	7,459.89	7,391.94	27.04	26.99	-72.57	110.07	-478.75	465.08	415.46	49.62	9.373		
7,700.00	7,691.53	7,541.13	7,463.85	27.41	27.39	-71.90	119.87	-515.24	506.51	456.62	49.89	10.153		
7,800.00	7,791.03	7,620.82	7,533.61	27.77	27.81	-71.28	129.86	-552.44	549.77	499.63	50.14	10.964		
7,900.00	7,890.53	7,700.00	7,602.13	28.14	28.24	-70.69	140.16	-590.77	594.83	544.41	50.42	11.797		
8,000.00	7,990.03	7,775.47	7,666.67	28.51	28.66	-70.15	150.30	-628.54	641.63	591.02	50.62	12.676		
8,100.00	8,089.53	7,853.07	7,732.25	28.87	29.12	-69.62	161.06	-668.61	690.09	639.17	50.92	13.552		
8,200.00	8,189.03	7,940.04	7,805.48	29.24	29.65	-69.09	173.24	-713.92	739.10	687.54	51.57	14.333		
8,300.00	8,288.54	8,041.02	7,890.86	29.61	30.28	-68.57	187.22	-765.99	787.65	735.01	52.63	14.965		
8,400.00	8,388.04	8,151.83	7,986.06	29.97	30.97	-68.13	201.93	-820.75	833.97	780.04	53.93	15.464		
8,500.00	8,487.54	8,265.90	8,085.71	30.34	31.68	-67.80	216.33	-874.36	877.82	822.58	55.24	15.890		
8,600.00	8,587.04	8,383.16	8,189.80	30.71	32.41	-67.57	230.33	-926.50	919.09	862.52	56.57	16.247		
8,700.00	8,686.54	8,503.52	8,298.28	31.08	33.14	-67.41	243.85	-976.83	957.65	899.75	57.89	16.541		
8,800.00	8,786.04	8,626.87	8,411.08	31.45	33.87	-67.32	256.80	-1,025.03	993.39	934.18	59.21	16.776		
8,900.00	8,885.54	8,753.06	8,528.06	31.82	34.60	-67.30	269.07	-1,070.73	1,026.22	965.70	60.52	16.957		
9,000.00	8,985.04	8,881.92	8,649.03	32.18	35.31	-67.34	280.59	-1,113.59	1,056.03	994.23	61.81	17.086		
9,100.00	9,084.55	9,013.25	8,773.76	32.55	36.01	-67.44	291.24	-1,153.26	1,082.74	1,019.68	63.06	17.169		
9,200.00	9,184.05	9,146.79	8,901.95	32.92	36.68	-67.60	300.95	-1,189.41	1,106.26	1,041.98	64.28	17.209		
9,300.00	9,283.55	9,282.30	9,033.25	33.29	37.33	-67.81	309.63	-1,221.72	1,126.52	1,061.06	65.46	17.209		
9,372.30	9,355.48	9,381.32	9,129.90	33.56	37.78	-68.00	315.22	-1,242.52	1,139.10	1,072.82	66.28	17.186		
9,400.00	9,383.06	9,419.47	9,167.28	33.66	37.95	-68.12	317.20	-1,249.90	1,143.49	1,076.90	66.59	17.173		
9,500.00	9,482.68	9,557.99	9,303.58	34.03	38.54	-68.49	323.59	-1,273.71	1,157.56	1,089.90	67.65	17.110		
9,600.00	9,582.44	9,697.61	9,441.76	34.40	39.10	-68.78	328.76	-1,292.94	1,168.85	1,100.19	68.65	17.025		
9,700.00	9,682.31	9,838.11	9,581.44	34.76	39.62	-68.99	332.65	-1,307.45	1,177.32	1,107.73	69.59	16.919		
9,800.00	9,782.25	9,979.22	9,722.20	35.12	40.12	-69.13	335.25	-1,317.10	1,182.93	1,112.49	70.44	16.793		
9,900.00	9,882.24	10,120.71	9,863.60	35.48	40.58	-69.20	336.51	-1,321.82	1,185.67	1,114.45	71.23	16.647		
9,944.81	9,927.04	10,184.16	9,927.04	35.64	40.78	-90.58	336.65	-1,322.32	1,185.96	1,114.41	71.55	16.575		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design Golden Tee 31 Fed Com 504H - 504H - Planning - Plan 0.1												Offset Site Error:	0.00 usft
Survey Program: 0-B001Mb_MWD+HRGM												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,950.00	9,932.23	10,191.52	9,934.40	35.65	40.80	89.95	336.65	-1,322.31	1,185.96	1,114.37	71.59	16.566	
9,952.76	9,935.00	10,195.43	9,938.31	35.66	40.81	89.95	336.64	-1,322.30	1,185.95	1,114.34	71.61	16.562	
10,000.00	9,982.15	10,239.00	9,981.80	35.81	40.93	89.95	334.02	-1,322.30	1,185.97	1,114.07	71.90	16.496	
10,050.00	10,031.64	10,288.69	10,030.99	35.96	41.06	89.95	327.14	-1,322.25	1,185.98	1,113.79	72.19	16.429	
10,100.00	10,080.34	10,338.37	10,079.40	36.10	41.18	89.95	316.02	-1,322.17	1,186.01	1,113.54	72.47	16.366	
10,150.00	10,127.88	10,388.07	10,126.67	36.23	41.29	89.95	300.75	-1,322.07	1,186.04	1,113.31	72.73	16.308	
10,200.00	10,173.88	10,437.77	10,172.45	36.36	41.40	89.95	281.43	-1,321.93	1,186.08	1,113.11	72.97	16.254	
10,250.00	10,218.01	10,487.49	10,216.40	36.47	41.49	89.95	258.21	-1,321.77	1,186.13	1,112.93	73.20	16.204	
10,300.00	10,259.92	10,537.22	10,258.18	36.58	41.57	89.96	231.27	-1,321.58	1,186.19	1,112.78	73.42	16.157	
10,350.00	10,299.29	10,586.97	10,297.48	36.67	41.64	89.96	200.79	-1,321.37	1,186.26	1,112.64	73.62	16.113	
10,400.00	10,335.84	10,636.73	10,334.00	36.76	41.69	89.96	167.01	-1,321.13	1,186.33	1,112.52	73.81	16.072	
10,450.00	10,369.27	10,686.52	10,367.46	36.85	41.74	89.97	130.18	-1,320.87	1,186.41	1,112.42	74.00	16.033	
10,500.00	10,399.34	10,736.32	10,397.62	36.93	41.77	89.97	90.56	-1,320.60	1,186.50	1,112.32	74.18	15.996	
10,550.00	10,425.81	10,786.15	10,424.23	37.01	41.79	89.97	48.45	-1,320.30	1,186.59	1,112.24	74.35	15.959	
10,600.00	10,448.49	10,836.00	10,447.09	37.09	41.80	89.98	4.17	-1,319.99	1,186.69	1,112.16	74.52	15.923	
10,650.00	10,467.20	10,885.88	10,466.03	37.17	41.80	89.98	-41.96	-1,319.67	1,186.79	1,112.09	74.70	15.888	
10,700.00	10,481.80	10,935.79	10,480.89	37.26	41.80	89.99	-89.58	-1,319.34	1,186.89	1,112.02	74.87	15.853	
10,750.00	10,492.17	10,985.72	10,491.56	37.34	41.79	89.99	-138.34	-1,319.00	1,187.00	1,111.96	75.04	15.818	
10,800.00	10,498.25	11,035.68	10,497.95	37.43	41.78	90.00	-187.87	-1,318.65	1,187.11	1,111.89	75.21	15.783	
10,844.80	10,500.00	11,080.47	10,499.98	37.50	41.77	90.00	-232.60	-1,318.34	1,187.20	1,111.84	75.37	15.752	
10,900.00	10,500.00	11,135.66	10,500.00	37.61	41.76	90.00	-287.80	-1,317.96	1,187.33	1,111.75	75.58	15.710	
11,000.00	10,500.00	11,235.66	10,500.00	37.84	41.76	90.00	-387.79	-1,317.26	1,187.54	1,111.50	76.04	15.618	
11,100.00	10,500.00	11,335.66	10,500.00	38.13	41.79	90.00	-487.79	-1,316.56	1,187.76	1,111.16	76.60	15.505	
11,200.00	10,500.00	11,435.66	10,500.00	38.46	41.85	90.00	-587.79	-1,315.86	1,187.98	1,110.71	77.27	15.374	
11,300.00	10,500.00	11,535.66	10,500.00	38.85	41.95	90.00	-687.79	-1,315.16	1,188.20	1,110.16	78.04	15.225	
11,400.00	10,500.00	11,635.66	10,500.00	39.29	42.10	90.00	-787.78	-1,314.46	1,188.42	1,109.51	78.91	15.061	
11,500.00	10,500.00	11,735.66	10,500.00	39.77	42.32	90.00	-887.78	-1,313.77	1,188.63	1,108.77	79.87	14.883	
11,600.00	10,500.00	11,835.66	10,500.00	40.30	42.61	90.00	-987.78	-1,313.07	1,188.85	1,107.93	80.92	14.692	
11,700.00	10,500.00	11,935.66	10,500.00	40.87	42.99	90.00	-1,087.77	-1,312.37	1,189.07	1,107.01	82.06	14.491	
11,800.00	10,500.00	12,035.66	10,500.00	41.48	43.45	90.00	-1,187.77	-1,311.67	1,189.29	1,106.01	83.28	14.280	
11,900.00	10,500.00	12,135.66	10,500.00	42.14	43.99	90.00	-1,287.77	-1,310.97	1,189.51	1,104.92	84.58	14.063	
12,000.00	10,500.00	12,235.66	10,500.00	42.83	44.58	90.00	-1,387.77	-1,310.27	1,189.72	1,103.76	85.96	13.840	
12,100.00	10,500.00	12,335.66	10,500.00	43.56	45.24	90.00	-1,487.76	-1,309.58	1,189.94	1,102.52	87.42	13.612	
12,200.00	10,500.00	12,435.66	10,500.00	44.33	45.94	90.00	-1,587.76	-1,308.88	1,190.16	1,101.22	88.94	13.382	
12,300.00	10,500.00	12,535.66	10,500.00	45.12	46.69	90.00	-1,687.76	-1,308.18	1,190.38	1,099.85	90.53	13.149	
12,400.00	10,500.00	12,635.66	10,500.00	45.95	47.47	90.00	-1,787.76	-1,307.48	1,190.60	1,098.42	92.18	12.916	
12,500.00	10,500.00	12,735.66	10,500.00	46.81	48.29	90.00	-1,887.75	-1,306.78	1,190.81	1,096.93	93.89	12.683	
12,600.00	10,500.00	12,835.66	10,500.00	47.70	49.14	90.00	-1,987.75	-1,306.09	1,191.03	1,095.38	95.66	12.451	
12,700.00	10,500.00	12,935.66	10,500.00	48.61	50.02	90.00	-2,087.75	-1,305.39	1,191.25	1,093.78	97.47	12.221	
12,800.00	10,500.00	13,035.66	10,500.00	49.55	50.93	90.00	-2,187.75	-1,304.69	1,191.47	1,092.12	99.34	11.993	
12,900.00	10,500.00	13,135.66	10,500.00	50.51	51.86	90.00	-2,287.74	-1,303.99	1,191.69	1,090.43	101.26	11.769	
13,000.00	10,500.00	13,235.66	10,500.00	51.49	52.82	90.00	-2,387.74	-1,303.29	1,191.90	1,088.68	103.22	11.547	
13,100.00	10,500.00	13,335.66	10,500.00	52.49	53.80	90.00	-2,487.74	-1,302.59	1,192.12	1,086.90	105.23	11.329	
13,200.00	10,500.00	13,435.66	10,500.00	53.52	54.80	90.00	-2,587.73	-1,301.90	1,192.34	1,085.07	107.27	11.115	
13,300.00	10,500.00	13,535.66	10,500.00	54.56	55.82	90.00	-2,687.73	-1,301.20	1,192.56	1,083.21	109.35	10.906	
13,400.00	10,500.00	13,635.66	10,500.00	55.62	56.86	90.00	-2,787.73	-1,300.50	1,192.78	1,081.31	111.47	10.701	
13,500.00	10,500.00	13,735.66	10,500.00	56.70	57.91	90.00	-2,887.73	-1,299.80	1,192.99	1,079.38	113.62	10.500	
13,600.00	10,500.00	13,835.66	10,500.00	57.79	58.98	90.00	-2,987.72	-1,299.10	1,193.21	1,077.42	115.80	10.304	
13,700.00	10,500.00	13,935.66	10,500.00	58.90	60.07	90.00	-3,087.72	-1,298.40	1,193.43	1,075.42	118.01	10.113	
13,800.00	10,500.00	14,035.65	10,500.00	60.02	61.17	90.00	-3,187.72	-1,297.71	1,193.65	1,073.40	120.25	9.927	
13,900.00	10,500.00	14,135.65	10,500.00	61.16	62.29	90.00	-3,287.72	-1,297.01	1,193.87	1,071.35	122.51	9.745	
14,000.00	10,500.00	14,235.65	10,500.00	62.31	63.42	90.00	-3,387.71	-1,296.31	1,194.09	1,069.28	124.81	9.568	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design Golden Tee 31 Fed Com 504H - 504H - Planning - Plan 0.1												Offset Site Error:	0.00 usft
Survey Program: 0-B001Mb_MWD+HRGM												Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
14,100.00	10,500.00	14,335.65	10,500.00	63.47	64.56	90.00	-3,487.71	-1,295.61	1,194.30	1,067.18	127.12	9.395	
14,200.00	10,500.00	14,435.65	10,500.00	64.64	65.71	90.00	-3,587.71	-1,294.91	1,194.52	1,065.06	129.46	9.227	
14,300.00	10,500.00	14,535.65	10,500.00	65.82	66.88	90.00	-3,687.71	-1,294.22	1,194.74	1,062.92	131.82	9.063	
14,400.00	10,500.00	14,635.65	10,500.00	67.01	68.05	90.00	-3,787.70	-1,293.52	1,194.96	1,060.76	134.20	8.904	
14,500.00	10,500.00	14,735.65	10,500.00	68.21	69.24	90.00	-3,887.70	-1,292.82	1,195.18	1,058.58	136.60	8.750	
14,600.00	10,500.00	14,835.65	10,500.00	69.42	70.43	90.00	-3,987.70	-1,292.12	1,195.39	1,056.38	139.01	8.599	
14,700.00	10,500.00	14,935.65	10,500.00	70.64	71.63	90.00	-4,087.69	-1,291.42	1,195.61	1,054.16	141.45	8.453	
14,800.00	10,500.00	15,035.65	10,500.00	71.87	72.85	90.00	-4,187.69	-1,290.72	1,195.83	1,051.93	143.90	8.310	
14,900.00	10,500.00	15,135.65	10,500.00	73.10	74.07	90.00	-4,287.69	-1,290.03	1,196.05	1,049.68	146.37	8.172	
15,000.00	10,500.00	15,235.65	10,500.00	74.34	75.29	90.00	-4,387.69	-1,289.33	1,196.27	1,047.42	148.85	8.037	
15,100.00	10,500.00	15,335.65	10,500.00	75.59	76.53	90.00	-4,487.68	-1,288.63	1,196.48	1,045.14	151.34	7.906	
15,200.00	10,500.00	15,435.65	10,500.00	76.85	77.77	90.00	-4,587.68	-1,287.93	1,196.70	1,042.85	153.85	7.778	
15,300.00	10,500.00	15,535.65	10,500.00	78.11	79.02	90.00	-4,687.68	-1,287.23	1,196.92	1,040.55	156.37	7.654	
15,400.00	10,500.00	15,635.65	10,500.00	79.38	80.27	90.00	-4,787.68	-1,286.53	1,197.14	1,038.23	158.91	7.534	
15,500.00	10,500.00	15,735.65	10,500.00	80.65	81.53	90.00	-4,887.67	-1,285.84	1,197.36	1,035.91	161.45	7.416	
15,600.00	10,500.00	15,835.65	10,500.00	81.93	82.80	90.00	-4,987.67	-1,285.14	1,197.57	1,033.57	164.01	7.302	
15,700.00	10,500.00	15,935.65	10,500.00	83.22	84.07	90.00	-5,087.67	-1,284.44	1,197.79	1,031.22	166.57	7.191	
15,800.00	10,500.00	16,035.65	10,500.00	84.51	85.35	90.00	-5,187.67	-1,283.74	1,198.01	1,028.86	169.15	7.083	
15,900.00	10,500.00	16,135.65	10,500.00	85.80	86.63	90.00	-5,287.66	-1,283.04	1,198.23	1,026.49	171.74	6.977	
16,000.00	10,500.00	16,235.65	10,500.00	87.10	87.92	90.00	-5,387.66	-1,282.35	1,198.45	1,024.12	174.33	6.875	
16,100.00	10,500.00	16,335.65	10,500.00	88.41	89.21	90.00	-5,487.66	-1,281.65	1,198.66	1,021.73	176.93	6.775	
16,200.00	10,500.00	16,435.65	10,500.00	89.71	90.51	90.00	-5,587.65	-1,280.95	1,198.88	1,019.34	179.55	6.677	
16,300.00	10,500.00	16,535.65	10,500.00	91.02	91.81	90.00	-5,687.65	-1,280.25	1,199.10	1,016.93	182.17	6.582	
16,400.00	10,500.00	16,635.65	10,500.00	92.34	93.11	90.00	-5,787.65	-1,279.55	1,199.32	1,014.52	184.80	6.490	
16,500.00	10,500.00	16,735.65	10,500.00	93.66	94.42	90.00	-5,887.65	-1,278.85	1,199.54	1,012.11	187.43	6.400	
16,600.00	10,500.00	16,835.65	10,500.00	94.98	95.73	90.00	-5,987.64	-1,278.16	1,199.75	1,009.68	190.07	6.312	
16,700.00	10,500.00	16,935.65	10,500.00	96.31	97.05	90.00	-6,087.64	-1,277.46	1,199.97	1,007.25	192.72	6.226	
16,800.00	10,500.00	17,035.65	10,500.00	97.64	98.37	90.00	-6,187.64	-1,276.76	1,200.19	1,004.81	195.38	6.143	
16,900.00	10,500.00	17,135.65	10,500.00	98.97	99.69	90.00	-6,287.64	-1,276.06	1,200.41	1,002.37	198.04	6.061	
17,000.00	10,500.00	17,235.65	10,500.00	100.30	101.02	90.00	-6,387.63	-1,275.36	1,200.63	999.92	200.71	5.982	
17,100.00	10,500.00	17,335.65	10,500.00	101.64	102.34	90.00	-6,487.63	-1,274.66	1,200.85	997.46	203.38	5.904	
17,200.00	10,500.00	17,435.65	10,500.00	102.98	103.68	90.00	-6,587.63	-1,273.97	1,201.06	995.00	206.06	5.829	
17,300.00	10,500.00	17,535.65	10,500.00	104.32	105.01	90.00	-6,687.63	-1,273.27	1,201.28	992.54	208.75	5.755	
17,400.00	10,500.00	17,635.65	10,500.00	105.67	106.35	90.00	-6,787.62	-1,272.57	1,201.50	990.06	211.44	5.683	
17,500.00	10,500.00	17,735.65	10,500.00	107.02	107.69	90.00	-6,887.62	-1,271.87	1,201.72	987.59	214.13	5.612	
17,600.00	10,500.00	17,835.65	10,500.00	108.37	109.03	90.00	-6,987.62	-1,271.17	1,201.94	985.11	216.83	5.543	
17,700.00	10,500.00	17,935.65	10,500.00	109.72	110.37	90.00	-7,087.61	-1,270.47	1,202.15	982.62	219.53	5.476	
17,800.00	10,500.00	18,035.65	10,500.00	111.08	111.72	90.00	-7,187.61	-1,269.78	1,202.37	980.13	222.24	5.410	
17,900.00	10,500.00	18,135.65	10,500.00	112.43	113.07	90.00	-7,287.61	-1,269.08	1,202.59	977.64	224.95	5.346	
18,000.00	10,500.00	18,235.65	10,500.00	113.79	114.42	90.00	-7,387.61	-1,268.38	1,202.81	975.14	227.67	5.283	
18,040.57	10,500.00	18,276.22	10,500.00	114.35	114.97	90.00	-7,428.18	-1,268.10	1,202.90	974.12	228.77	5.258	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 191-												Offset Well Error:	1.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	14.12	14.12	0.00	1.01	17.66	702.18	223.56	736.91				
100.00	100.00	114.98	114.98	0.13	1.35	17.66	702.11	223.55	736.84	735.36	1.48	498.906	
200.00	200.00	214.93	214.93	0.49	1.92	17.67	701.92	223.55	736.66	734.29	2.38	310.139	
232.71	232.71	246.71	246.71	0.61	2.08	17.67	701.90	223.57	736.64	734.03	2.61	281.720	
300.00	300.00	312.09	312.09	0.85	2.44	17.68	701.95	223.69	736.73	733.61	3.12	236.385	
400.00	400.00	409.17	409.17	1.21	2.94	17.69	702.32	223.99	737.18	733.33	3.85	191.403	
500.00	500.00	509.34	509.34	1.57	3.33	17.69	702.94	224.18	737.84	733.24	4.59	160.632	
600.00	600.00	608.80	608.80	1.93	3.69	17.67	703.63	224.19	738.50	733.15	5.35	138.009	
700.00	700.00	708.07	708.06	2.29	4.03	17.64	704.47	224.08	739.27	733.18	6.08	121.514	
800.00	800.00	808.13	808.11	2.64	4.35	17.61	705.36	223.86	740.05	733.26	6.79	108.943	
900.00	900.00	908.91	908.89	3.00	4.66	17.57	706.25	223.69	740.85	733.37	7.48	99.066	
1,000.00	1,000.00	1,010.59	1,010.57	3.36	4.99	17.53	706.99	223.26	741.41	733.26	8.15	90.977	
1,100.00	1,100.00	1,113.83	1,113.81	3.72	5.29	17.47	707.48	222.67	741.69	732.93	8.76	84.673	
1,156.92	1,156.92	1,170.94	1,170.92	3.92	5.44	17.44	707.57	222.32	741.67	732.58	9.10	81.536	
1,200.00	1,200.00	1,213.48	1,213.45	4.08	5.54	17.42	707.67	222.06	741.69	732.34	9.35	79.327	
1,300.00	1,300.00	1,314.73	1,314.71	4.44	5.81	17.37	707.87	221.43	741.70	731.74	9.95	74.516	
1,400.00	1,400.00	1,414.08	1,414.05	4.79	6.08	17.31	708.06	220.67	741.64	731.08	10.56	70.223	
1,416.44	1,416.44	1,430.48	1,430.44	4.85	6.13	17.30	708.10	220.53	741.64	730.98	10.66	69.546	
1,500.00	1,500.00	1,513.95	1,513.91	5.15	6.37	17.25	708.28	219.97	741.66	730.47	11.19	66.303	
1,600.00	1,600.00	1,614.53	1,614.49	5.51	6.66	17.22	708.37	219.54	741.61	729.80	11.81	62.791	
1,659.76	1,659.76	1,673.79	1,673.76	5.73	6.84	17.20	708.43	219.29	741.59	729.40	12.19	60.858	
1,700.00	1,700.00	1,713.46	1,713.42	5.87	6.97	17.18	708.50	219.10	741.60	729.16	12.44	59.603	
1,800.00	1,800.00	1,811.92	1,811.88	6.23	7.31	17.15	708.81	218.73	741.80	728.70	13.09	56.664	
1,900.00	1,900.00	1,910.95	1,910.91	6.59	7.66	17.12	709.25	218.48	742.15	728.39	13.76	53.945	
2,000.00	2,000.00	2,008.69	2,008.64	6.95	7.98	17.09	709.85	218.23	742.66	728.25	14.41	51.540	
2,100.00	2,100.00	2,105.07	2,105.02	7.30	8.25	17.10	710.69	218.69	743.63	728.56	15.07	49.336	
2,200.00	2,200.00	2,205.00	2,204.94	7.66	8.53	17.19	711.69	220.14	745.01	729.27	15.74	47.331	
2,300.00	2,300.00	2,314.48	2,314.42	8.02	8.85	17.17	712.36	220.10	745.59	729.14	16.45	45.326	
2,400.00	2,400.00	2,424.24	2,424.12	8.38	9.31	16.94	712.50	217.04	744.90	727.67	17.22	43.251	
2,500.00	2,500.00	2,538.68	2,538.41	8.74	9.81	16.53	711.59	211.17	742.67	724.78	17.89	41.522	
2,600.00	2,600.00	2,652.18	2,651.58	9.10	10.27	15.98	708.98	203.07	738.45	719.96	18.49	39.941	
2,700.00	2,700.00	2,765.72	2,764.53	9.45	10.92	15.25	705.00	192.15	732.46	713.24	19.22	38.110	
2,800.00	2,800.00	2,879.60	2,877.41	9.81	12.25	14.30	699.49	178.26	724.62	704.38	20.24	35.800	
2,900.00	2,900.00	2,990.70	2,987.10	10.17	13.28	13.16	692.62	162.00	715.07	693.90	21.17	33.780	
3,000.00	3,000.00	3,093.10	3,087.83	10.53	13.77	11.94	685.52	144.97	704.56	682.78	21.77	32.358	
3,100.00	3,100.00	3,191.24	3,184.28	10.89	14.12	10.69	678.68	128.18	694.24	671.92	22.32	31.106	
3,200.00	3,200.00	3,288.02	3,279.41	11.25	14.46	9.44	672.02	111.71	684.38	661.51	22.87	29.924	
3,300.00	3,300.00	3,384.13	3,373.92	11.61	14.81	8.16	665.68	95.48	675.15	651.72	23.44	28.809	
3,400.00	3,400.00	3,480.03	3,468.31	11.96	15.25	6.88	659.64	79.59	666.64	642.54	24.10	27.664	
3,500.00	3,500.00	3,576.08	3,562.94	12.32	15.72	5.61	653.89	64.22	658.85	634.06	24.79	26.572	
3,600.00	3,600.00	3,675.74	3,661.19	12.68	16.15	4.28	648.05	48.55	651.58	626.13	25.44	25.612	
3,700.00	3,700.00	3,774.64	3,758.60	13.04	16.55	2.89	642.10	32.44	644.47	618.42	26.05	24.740	
3,800.00	3,800.00	3,871.42	3,853.81	13.40	16.96	1.44	636.42	16.04	637.87	611.21	26.66	23.923	
3,900.00	3,900.00	3,964.55	3,945.43	13.76	17.35	0.02	631.45	0.18	632.23	604.95	27.28	23.174	
4,000.00	4,000.00	4,063.26	4,042.65	14.11	17.78	-1.49	626.66	-16.29	627.52	599.60	27.92	22.477	
4,100.00	4,100.00	4,161.91	4,139.85	14.47	18.22	-2.98	621.78	-32.36	623.16	594.60	28.56	21.816	
4,200.00	4,200.00	4,259.42	4,235.91	14.83	18.65	-4.49	617.02	-48.48	619.31	590.09	29.22	21.195	
4,300.00	4,300.00	4,357.13	4,332.14	15.19	19.10	-6.04	612.39	-64.75	616.07	586.19	29.89	20.614	
4,400.00	4,400.00	4,456.21	4,429.68	15.55	19.56	-7.64	607.67	-81.50	613.31	582.75	30.57	20.066	
4,500.00	4,500.00	4,554.60	4,526.41	15.91	20.02	-9.31	602.83	-98.81	611.00	579.74	31.26	19.547	
4,600.00	4,600.00	4,650.77	4,620.96	16.27	20.48	-10.95	598.30	-115.80	609.44	577.48	31.96	19.070	
4,700.00	4,700.00	4,750.09	4,718.68	16.62	20.95	-12.62	593.74	-132.94	608.46	575.78	32.68	18.620	

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Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 191-												Offset Well Error:	1.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
4,800.00	4,800.00	4,847.38	4,814.49	16.98	21.42	-14.22	589.40	-149.34	608.02	574.62	33.41	18.201	
4,809.29	4,809.29	4,856.32	4,823.29	17.02	21.47	-14.36	589.01	-150.82	608.02	574.55	33.47	18.164	
4,900.00	4,900.00	4,944.06	4,909.76	17.34	21.90	-15.76	585.47	-165.25	608.36	574.22	34.14	17.818	
5,000.00	5,000.00	5,041.61	5,005.72	17.70	22.40	-17.41	581.38	-182.33	609.36	574.45	34.90	17.459	
5,100.00	5,100.00	5,137.84	5,100.23	18.06	22.90	-19.11	577.34	-200.00	611.16	575.48	35.67	17.132	
5,200.00	5,200.00	5,234.78	5,195.35	18.42	23.39	-20.84	573.43	-218.29	613.86	577.39	36.47	16.832	
5,300.00	5,300.00	5,334.49	5,293.08	18.77	23.90	-22.65	569.16	-237.55	617.10	579.80	37.30	16.545	
5,400.00	5,400.00	5,433.33	5,389.99	19.13	24.41	-24.43	564.65	-256.47	620.63	582.49	38.14	16.273	
5,500.00	5,500.00	5,530.49	5,485.31	19.49	24.90	-26.12	560.54	-274.81	624.94	585.96	38.97	16.035	
5,600.00	5,600.00	5,629.69	5,582.78	19.85	25.41	-27.75	556.58	-292.87	629.71	589.87	39.83	15.808	
5,620.00	5,620.00	5,649.53	5,602.29	19.92	25.51	-28.07	555.82	-296.39	630.71	590.70	40.01	15.765	
5,700.00	5,700.00	5,728.15	5,679.64	20.21	25.92	-7.92	552.90	-310.15	634.33	593.63	40.70	15.585	
5,800.00	5,799.97	5,827.84	5,777.81	20.57	26.44	-9.43	549.41	-327.11	637.66	596.07	41.59	15.333	
5,900.00	5,899.89	5,928.08	5,876.67	20.92	26.96	-10.89	546.11	-343.37	639.46	596.98	42.48	15.052	
6,000.00	5,999.72	6,025.66	5,972.97	21.28	27.47	-12.29	543.08	-358.81	639.90	596.52	43.37	14.754	
6,100.00	6,099.44	6,119.47	6,065.26	21.64	28.02	-13.83	539.56	-375.24	639.51	595.22	44.29	14.441	
6,192.51	6,191.56	6,211.04	6,154.90	21.97	28.57	-15.58	534.96	-393.39	638.47	593.26	45.21	14.122	
6,200.00	6,199.01	6,218.47	6,162.16	21.99	28.61	-15.72	534.54	-394.90	638.35	593.06	45.29	14.096	
6,300.00	6,298.51	6,317.59	6,259.12	22.35	29.15	-17.68	529.09	-414.74	636.97	590.67	46.30	13.758	
6,400.00	6,398.01	6,419.28	6,358.77	22.71	29.70	-19.63	523.63	-434.25	635.90	588.56	47.34	13.432	
6,500.00	6,497.51	6,521.32	6,458.94	23.07	30.24	-21.53	518.10	-452.91	634.90	586.51	48.39	13.121	
6,600.00	6,597.02	6,623.23	6,559.12	23.42	30.79	-23.39	512.38	-470.73	633.87	584.43	49.44	12.821	
6,700.00	6,696.52	6,723.33	6,657.80	23.78	31.34	-25.08	507.64	-486.80	633.04	582.56	50.48	12.541	
6,800.00	6,796.02	6,823.49	6,756.72	24.14	31.88	-26.69	503.43	-501.98	632.44	580.92	51.51	12.277	
6,900.00	6,895.52	6,923.93	6,856.11	24.50	32.41	-28.16	500.17	-516.02	632.04	579.49	52.54	12.029	
7,000.00	6,995.02	7,029.37	6,960.79	24.87	32.99	-29.45	498.61	-528.54	631.52	577.93	53.59	11.785	
7,100.00	7,094.52	7,137.22	7,068.09	25.23	33.56	-30.66	497.09	-539.30	629.83	575.22	54.61	11.533	
7,200.00	7,194.02	7,241.38	7,171.86	25.59	34.08	-31.74	495.78	-548.23	627.34	571.74	55.60	11.284	
7,300.00	7,293.52	7,349.47	7,279.76	25.95	34.57	-32.52	496.89	-554.37	624.07	567.53	56.54	11.038	
7,400.00	7,393.02	7,451.24	7,381.43	26.32	34.87	-32.93	500.27	-557.26	619.91	562.60	57.31	10.817	
7,500.00	7,492.53	7,561.40	7,491.51	26.68	35.08	-33.33	503.73	-559.17	614.77	556.78	57.99	10.601	
7,600.00	7,592.03	7,665.82	7,595.91	27.04	35.25	-33.76	505.90	-560.25	608.48	549.83	58.66	10.373	
7,700.00	7,691.53	7,768.95	7,699.01	27.41	35.35	-34.16	507.95	-560.52	601.54	542.27	59.27	10.150	
7,800.00	7,791.03	7,870.67	7,800.71	27.77	35.42	-34.54	509.89	-560.29	594.18	534.33	59.85	9.927	
7,900.00	7,890.53	7,969.38	7,899.41	28.14	35.49	-34.92	511.74	-559.85	586.65	526.20	60.45	9.704	
8,000.00	7,990.03	8,066.21	7,996.22	28.51	35.60	-35.33	513.53	-560.01	579.63	518.54	61.09	9.488	
8,100.00	8,089.53	8,166.14	8,096.14	28.87	35.76	-35.81	515.04	-560.69	572.90	511.15	61.76	9.277	
8,200.00	8,189.03	8,267.75	8,197.74	29.24	35.93	-36.35	516.24	-561.26	565.93	503.51	62.42	9.066	
8,300.00	8,288.54	8,367.47	8,297.45	29.61	36.09	-36.88	517.27	-561.63	558.78	495.69	63.09	8.857	
8,400.00	8,388.04	8,464.50	8,394.48	29.97	36.29	-37.43	518.30	-562.24	551.91	488.10	63.80	8.650	
8,500.00	8,487.54	8,576.52	8,506.49	30.34	36.50	-38.15	518.64	-562.83	544.66	480.29	64.37	8.461	
8,600.00	8,587.04	8,680.15	8,610.10	30.71	36.62	-38.95	516.99	-562.09	535.42	470.58	64.84	8.257	
8,700.00	8,686.54	8,777.00	8,706.93	31.08	36.70	-39.77	515.05	-561.60	526.27	460.90	65.36	8.051	
8,800.00	8,786.04	8,871.00	8,800.90	31.45	36.83	-40.67	512.69	-561.81	517.65	451.68	65.97	7.847	
8,900.00	8,885.54	8,966.67	8,896.56	31.82	37.09	-41.55	511.24	-562.43	510.00	443.32	66.68	7.648	
9,000.00	8,985.04	9,067.94	8,997.82	32.18	37.32	-42.29	511.64	-562.66	502.94	435.55	67.39	7.464	
9,100.00	9,084.55	9,164.17	9,094.04	32.55	37.46	-42.94	512.64	-562.80	496.17	428.10	68.07	7.289	
9,200.00	9,184.05	9,261.64	9,191.51	32.92	37.66	-43.62	513.81	-563.42	489.98	421.18	68.79	7.123	
9,300.00	9,283.55	9,356.52	9,286.37	33.29	37.90	-44.30	515.25	-564.65	484.60	415.04	69.56	6.966	
9,372.30	9,355.48	9,425.26	9,355.07	33.56	38.09	-44.76	516.91	-565.91	481.36	411.24	70.12	6.865	
9,400.00	9,383.06	9,453.55	9,383.35	33.66	38.16	-44.91	517.78	-566.46	480.29	409.95	70.33	6.829	
9,500.00	9,482.68	9,562.98	9,492.75	34.03	38.40	-45.52	519.84	-567.74	476.02	405.04	70.98	6.706	

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Aim Directional Services, LLC

Anticollision Report



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Well Error:	0.00 usft	Output errors are at	2.00 sigma
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Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 191-												Offset Well Error:	1.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
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9,600.00	9,582.44	9,666.77	9,596.54	34.40	38.57	-46.14	519.67	-567.92	471.31	399.76	71.55	6.587	
9,700.00	9,682.31	9,762.95	9,692.72	34.76	38.70	-46.47	520.42	-567.97	468.10	395.96	72.14	6.489	
9,737.75	9,720.03	9,792.65	9,722.40	34.90	38.74	-46.47	521.28	-568.05	467.59	395.16	72.44	6.455 CC, ES	
9,800.00	9,782.25	9,835.37	9,764.87	35.12	38.81	-46.11	525.76	-568.30	469.12	396.21	72.91	6.434 SF	
9,900.00	9,882.24	9,904.87	9,832.50	35.48	38.92	-44.55	541.49	-569.07	478.09	404.50	73.59	6.497	
9,944.81	9,927.04	9,936.13	9,862.16	35.64	38.98	-64.91	551.35	-569.43	484.59	410.66	73.93	6.554	
9,950.00	9,932.23	9,939.67	9,865.48	35.65	38.98	115.67	552.57	-569.47	485.46	411.48	73.97	6.563	
10,000.00	9,982.15	9,973.87	9,897.20	35.81	39.06	116.26	565.36	-569.85	495.80	421.50	74.30	6.673	
10,050.00	10,031.64	10,010.31	9,930.33	35.96	39.15	117.05	580.53	-569.95	509.58	435.09	74.49	6.841	
10,100.00	10,080.34	10,042.58	9,959.12	36.10	39.23	117.59	595.09	-569.70	526.94	452.32	74.63	7.061	
10,150.00	10,127.88	10,060.00	9,974.43	36.23	39.29	116.81	603.39	-569.43	548.25	473.82	74.43	7.366	
10,200.00	10,173.88	10,084.10	9,995.20	36.36	39.36	116.23	615.61	-569.01	573.56	499.12	74.44	7.705	
10,250.00	10,218.01	10,097.24	10,006.26	36.47	39.40	114.21	622.71	-568.81	602.90	528.73	74.18	8.128	
10,300.00	10,259.92	10,107.21	10,014.51	36.58	39.44	111.23	628.28	-568.66	635.75	561.88	73.88	8.606	
10,350.00	10,299.29	10,114.29	10,020.31	36.67	39.47	107.18	632.36	-568.56	671.59	598.03	73.56	9.129	
10,400.00	10,335.84	10,118.81	10,023.97	36.76	39.49	101.98	635.00	-568.50	709.85	636.59	73.26	9.690	
10,450.00	10,369.27	10,121.06	10,025.79	36.85	39.50	95.61	636.32	-568.47	749.99	677.01	72.98	10.277	
10,500.00	10,399.34	10,121.31	10,025.99	36.93	39.50	88.22	636.47	-568.47	791.48	718.74	72.74	10.881	
10,550.00	10,425.81	10,119.81	10,024.78	37.01	39.49	80.10	635.58	-568.49	833.82	761.29	72.53	11.496	
10,600.00	10,448.49	10,116.76	10,022.32	37.09	39.48	71.73	633.80	-568.53	876.58	804.22	72.37	12.113	
10,650.00	10,467.20	10,112.38	10,018.75	37.17	39.46	63.62	631.25	-568.59	919.36	847.12	72.24	12.726	
10,700.00	10,481.80	10,106.81	10,014.18	37.26	39.44	56.17	628.06	-568.67	961.79	889.64	72.16	13.329	
10,750.00	10,492.17	10,100.21	10,008.73	37.34	39.41	49.60	624.35	-568.76	1,003.57	931.46	72.10	13.919	
10,800.00	10,498.25	10,092.71	10,002.46	37.43	39.39	43.99	620.22	-568.88	1,044.39	972.32	72.08	14.490	
10,844.80	10,500.00	10,060.00	9,974.43	37.50	39.29	38.60	603.39	-569.43	1,080.88	1,009.81	71.07	15.208	
10,900.00	10,500.00	10,060.00	9,974.43	37.61	39.29	38.60	603.39	-569.43	1,123.91	1,052.43	71.47	15.725	
11,000.00	10,500.00	10,060.00	9,974.43	37.84	39.29	38.60	603.39	-569.43	1,204.38	1,132.29	72.10	16.705	
11,100.00	10,500.00	10,060.00	9,974.43	38.13	39.29	38.60	603.39	-569.43	1,287.60	1,214.99	72.61	17.733	
11,200.00	10,500.00	10,019.79	9,938.84	38.46	39.17	36.87	584.69	-569.91	1,371.68	1,299.94	71.73	19.122	
11,300.00	10,500.00	10,001.62	9,922.48	38.85	39.13	36.11	576.78	-569.97	1,457.51	1,385.94	71.57	20.366	
11,400.00	10,500.00	9,965.00	9,889.03	39.29	39.04	34.62	561.88	-569.76	1,544.89	1,474.08	70.81	21.818	
11,500.00	10,500.00	9,965.00	9,889.03	39.77	39.04	34.62	561.88	-569.76	1,632.72	1,561.56	71.15	22.946	
11,600.00	10,500.00	9,965.00	9,889.03	40.30	39.04	34.62	561.88	-569.76	1,721.87	1,650.42	71.45	24.099	
11,700.00	10,500.00	9,965.00	9,889.03	40.87	39.04	34.62	561.88	-569.76	1,812.16	1,740.45	71.70	25.273	
11,800.00	10,500.00	9,965.00	9,889.03	41.48	39.04	34.62	561.88	-569.76	1,903.41	1,831.49	71.93	26.464	
11,900.00	10,500.00	9,965.00	9,889.03	42.14	39.04	34.62	561.88	-569.76	1,995.51	1,923.39	72.12	27.670	
12,000.00	10,500.00	9,924.86	9,851.53	42.83	38.95	33.05	547.61	-569.30	2,086.58	2,016.38	70.20	29.723	
12,100.00	10,500.00	9,917.99	9,845.02	43.56	38.94	32.79	545.44	-569.22	2,179.41	2,109.39	70.02	31.124	
12,200.00	10,500.00	9,911.60	9,838.92	44.33	38.93	32.55	543.48	-569.15	2,272.75	2,202.89	69.86	32.533	
12,300.00	10,500.00	9,871.00	9,799.81	45.12	38.86	31.08	532.64	-568.67	2,367.84	2,299.80	68.04	34.801	
12,400.00	10,500.00	9,871.00	9,799.81	45.95	38.86	31.08	532.64	-568.67	2,461.68	2,393.50	68.18	36.105	
12,500.00	10,500.00	9,871.00	9,799.81	46.81	38.86	31.08	532.64	-568.67	2,555.99	2,487.68	68.31	37.417	
12,600.00	10,500.00	9,871.00	9,799.81	47.70	38.86	31.08	532.64	-568.67	2,650.72	2,582.29	68.43	38.736	
12,700.00	10,500.00	9,871.00	9,799.81	48.61	38.86	31.08	532.64	-568.67	2,745.83	2,677.29	68.54	40.062	
12,800.00	10,500.00	9,871.00	9,799.81	49.55	38.86	31.08	532.64	-568.67	2,841.27	2,772.62	68.64	41.392	
12,900.00	10,500.00	9,871.00	9,799.81	50.51	38.86	31.08	532.64	-568.67	2,937.01	2,868.27	68.74	42.727	
13,000.00	10,500.00	9,871.00	9,799.81	51.49	38.86	31.08	532.64	-568.67	3,033.02	2,964.20	68.83	44.066	
13,100.00	10,500.00	9,871.00	9,799.81	52.49	38.86	31.08	532.64	-568.67	3,129.29	3,060.38	68.91	45.408	
13,200.00	10,500.00	9,871.00	9,799.81	53.52	38.86	31.08	532.64	-568.67	3,225.79	3,156.79	69.00	46.754	
13,300.00	10,500.00	9,871.00	9,799.81	54.56	38.86	31.08	532.64	-568.67	3,322.49	3,253.41	69.07	48.101	
13,400.00	10,500.00	9,871.00	9,799.81	55.62	38.86	31.08	532.64	-568.67	3,419.38	3,350.23	69.15	49.451	
13,500.00	10,500.00	9,871.00	9,799.81	56.70	38.86	31.08	532.64	-568.67	3,516.44	3,447.22	69.22	50.802	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 191-												Offset Well Error:	1.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
13,600.00	10,500.00	9,871.00	9,799.81	57.79	38.86	31.08	532.64	-568.67	3,613.67	3,544.38	69.29	52.155	
13,700.00	10,500.00	9,871.00	9,799.81	58.90	38.86	31.08	532.64	-568.67	3,711.04	3,641.69	69.35	53.509	
13,800.00	10,500.00	9,871.00	9,799.81	60.02	38.86	31.08	532.64	-568.67	3,808.55	3,739.13	69.42	54.863	
13,900.00	10,500.00	9,871.00	9,799.81	61.16	38.86	31.08	532.64	-568.67	3,906.18	3,836.70	69.48	56.218	
14,000.00	10,500.00	9,871.00	9,799.81	62.31	38.86	31.08	532.64	-568.67	4,003.94	3,934.39	69.54	57.573	
14,100.00	10,500.00	9,871.00	9,799.81	63.47	38.86	31.08	532.64	-568.67	4,101.80	4,032.19	69.61	58.929	
14,200.00	10,500.00	9,871.00	9,799.81	64.64	38.86	31.08	532.64	-568.67	4,199.76	4,130.09	69.67	60.284	
14,300.00	10,500.00	9,871.00	9,799.81	65.82	38.86	31.08	532.64	-568.67	4,297.81	4,228.08	69.73	61.638	
14,400.00	10,500.00	9,871.00	9,799.81	67.01	38.86	31.08	532.64	-568.67	4,395.95	4,326.17	69.79	62.993	
14,500.00	10,500.00	9,871.00	9,799.81	68.21	38.86	31.08	532.64	-568.67	4,494.18	4,424.33	69.84	64.346	
14,600.00	10,500.00	9,871.00	9,799.81	69.42	38.86	31.08	532.64	-568.67	4,592.48	4,522.58	69.90	65.699	
14,700.00	10,500.00	9,871.00	9,799.81	70.64	38.86	31.08	532.64	-568.67	4,690.85	4,620.89	69.96	67.051	
14,800.00	10,500.00	9,871.00	9,799.81	71.87	38.86	31.08	532.64	-568.67	4,789.29	4,719.27	70.02	68.401	
14,900.00	10,500.00	9,871.00	9,799.81	73.10	38.86	31.08	532.64	-568.67	4,887.79	4,817.72	70.07	69.751	
15,000.00	10,500.00	9,871.00	9,799.81	74.34	38.86	31.08	532.64	-568.67	4,986.36	4,916.22	70.13	71.099	
15,100.00	10,500.00	9,871.00	9,799.81	75.59	38.86	31.08	532.64	-568.67	5,084.98	5,014.79	70.19	72.446	
15,200.00	10,500.00	9,871.00	9,799.81	76.85	38.86	31.08	532.64	-568.67	5,183.65	5,113.40	70.25	73.791	
15,300.00	10,500.00	9,871.00	9,799.81	78.11	38.86	31.08	532.64	-568.67	5,282.37	5,212.06	70.31	75.134	
15,400.00	10,500.00	9,871.00	9,799.81	79.38	38.86	31.08	532.64	-568.67	5,381.14	5,310.78	70.36	76.476	
15,500.00	10,500.00	9,871.00	9,799.81	80.65	38.86	31.08	532.64	-568.67	5,479.95	5,409.53	70.42	77.815	
15,600.00	10,500.00	9,871.00	9,799.81	81.93	38.86	31.08	532.64	-568.67	5,578.81	5,508.33	70.48	79.153	
15,700.00	10,500.00	9,826.55	9,756.14	83.22	38.79	29.58	524.50	-568.23	5,675.28	5,605.59	69.69	81.432	
15,800.00	10,500.00	9,825.61	9,755.20	84.51	38.79	29.55	524.37	-568.23	5,774.12	5,704.38	69.74	82.798	
15,900.00	10,500.00	9,824.69	9,754.30	85.80	38.79	29.52	524.25	-568.22	5,872.99	5,803.21	69.78	84.161	
16,000.00	10,500.00	9,823.81	9,753.42	87.10	38.79	29.49	524.14	-568.21	5,971.90	5,902.07	69.83	85.521	
16,100.00	10,500.00	9,822.95	9,752.57	88.41	38.79	29.46	524.03	-568.21	6,070.84	6,000.96	69.88	86.879	
16,200.00	10,500.00	9,822.12	9,751.74	89.71	38.79	29.44	523.93	-568.20	6,169.81	6,099.88	69.93	88.234	
16,300.00	10,500.00	9,821.31	9,750.94	91.02	38.78	29.41	523.83	-568.20	6,268.81	6,198.84	69.97	89.587	
16,400.00	10,500.00	9,820.53	9,750.16	92.34	38.78	29.39	523.74	-568.19	6,367.85	6,297.82	70.02	90.937	
16,500.00	10,500.00	9,776.00	9,705.76	93.66	38.72	28.01	520.65	-568.00	6,469.23	6,399.96	69.27	93.389	
16,600.00	10,500.00	9,776.00	9,705.76	94.98	38.72	28.01	520.65	-568.00	6,568.24	6,498.91	69.34	94.728	
16,700.00	10,500.00	9,776.00	9,705.76	96.31	38.72	28.01	520.65	-568.00	6,667.28	6,597.88	69.40	96.063	
16,800.00	10,500.00	9,776.00	9,705.76	97.64	38.72	28.01	520.65	-568.00	6,766.35	6,696.88	69.47	97.397	
16,900.00	10,500.00	9,776.00	9,705.76	98.97	38.72	28.01	520.65	-568.00	6,865.44	6,795.90	69.54	98.727	
17,000.00	10,500.00	9,776.00	9,705.76	100.30	38.72	28.01	520.65	-568.00	6,964.56	6,894.95	69.61	100.054	
17,100.00	10,500.00	9,776.00	9,705.76	101.64	38.72	28.01	520.65	-568.00	7,063.71	6,994.03	69.68	101.378	
17,200.00	10,500.00	9,776.00	9,705.76	102.98	38.72	28.01	520.65	-568.00	7,162.88	7,093.13	69.75	102.699	
17,300.00	10,500.00	9,776.00	9,705.76	104.32	38.72	28.01	520.65	-568.00	7,262.07	7,192.25	69.82	104.017	
17,400.00	10,500.00	9,776.00	9,705.76	105.67	38.72	28.01	520.65	-568.00	7,361.28	7,291.39	69.89	105.332	
17,500.00	10,500.00	9,776.00	9,705.76	107.02	38.72	28.01	520.65	-568.00	7,460.51	7,390.56	69.96	106.644	
17,600.00	10,500.00	9,776.00	9,705.76	108.37	38.72	28.01	520.65	-568.00	7,559.77	7,489.74	70.03	107.953	
17,700.00	10,500.00	9,776.00	9,705.76	109.72	38.72	28.01	520.65	-568.00	7,659.04	7,588.94	70.10	109.258	
17,800.00	10,500.00	9,776.00	9,705.76	111.08	38.72	28.01	520.65	-568.00	7,758.33	7,688.16	70.17	110.560	
17,900.00	10,500.00	9,776.00	9,705.76	112.43	38.72	28.01	520.65	-568.00	7,857.64	7,787.40	70.25	111.858	
18,000.00	10,500.00	9,776.00	9,705.76	113.79	38.72	28.01	520.65	-568.00	7,956.97	7,886.65	70.32	113.153	
18,040.57	10,500.00	9,776.00	9,705.76	114.35	38.72	28.01	520.65	-568.00	7,997.28	7,926.93	70.35	113.678	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 191-												Offset Well Error:	1.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	15.19	15.19	0.00	1.01	20.20	702.55	258.55	748.61				
100.00	100.00	113.83	113.83	0.13	1.34	20.20	702.68	258.54	748.73	747.27	1.46	511.207	
200.00	200.00	212.62	212.62	0.49	1.90	20.19	703.00	258.53	749.03	746.64	2.39	313.214	
300.00	300.00	312.16	312.16	0.85	2.46	20.19	703.38	258.67	749.44	746.19	3.26	230.130	
400.00	400.00	411.94	411.93	1.21	2.92	20.20	703.75	258.93	749.88	745.89	3.99	187.817	
500.00	500.00	511.18	511.17	1.57	3.37	20.21	704.19	259.20	750.39	745.65	4.74	158.470	
600.00	600.00	610.93	610.92	1.93	3.79	20.21	704.71	259.49	750.98	745.49	5.49	136.729	
700.00	700.00	709.69	709.68	2.29	4.19	20.21	705.33	259.67	751.64	745.37	6.27	119.964	
800.00	800.00	811.39	811.38	2.64	4.67	20.22	705.97	259.98	752.33	745.26	7.06	106.518	
900.00	900.00	914.36	914.35	3.00	5.04	20.24	706.22	260.34	752.68	744.92	7.76	97.033	
1,000.00	1,000.00	1,015.89	1,015.88	3.36	5.28	20.25	706.17	260.46	752.68	744.36	8.32	90.494	
1,100.00	1,100.00	1,117.45	1,117.44	3.72	5.58	20.25	706.02	260.43	752.52	743.58	8.95	84.114	
1,200.00	1,200.00	1,219.38	1,219.37	4.08	5.90	20.25	705.63	260.31	752.12	742.52	9.61	78.303	
1,300.00	1,300.00	1,321.13	1,321.11	4.44	6.24	20.24	705.05	259.97	751.48	741.21	10.26	73.210	
1,400.00	1,400.00	1,421.08	1,421.06	4.79	6.57	20.22	704.41	259.47	750.70	739.79	10.91	68.800	
1,500.00	1,500.00	1,519.65	1,519.63	5.15	6.88	20.19	703.96	258.93	750.08	738.55	11.54	65.020	
1,600.00	1,600.00	1,620.76	1,620.74	5.51	7.18	20.15	703.51	258.16	749.40	737.24	12.16	61.642	
1,700.00	1,700.00	1,719.40	1,719.38	5.87	7.45	20.10	703.18	257.27	748.78	736.01	12.77	58.649	
1,800.00	1,800.00	1,820.21	1,820.18	6.23	7.73	20.05	702.94	256.49	748.28	734.89	13.39	55.881	
1,900.00	1,900.00	1,920.28	1,920.25	6.59	8.03	20.00	702.39	255.64	747.48	733.46	14.02	53.314	
1,978.54	1,978.54	1,993.98	1,993.94	6.87	8.21	19.96	702.31	255.06	747.20	732.73	14.47	51.653	
2,000.00	2,000.00	2,013.00	2,012.96	6.95	8.24	19.95	702.38	254.96	747.22	732.66	14.57	51.297	
2,100.00	2,100.00	2,105.96	2,105.92	7.30	8.59	19.94	703.07	255.08	747.97	732.76	15.21	49.168	
2,200.00	2,200.00	2,204.55	2,204.49	7.66	8.99	20.00	704.31	256.38	749.60	733.75	15.85	47.295	
2,300.00	2,300.00	2,316.90	2,316.82	8.02	9.31	20.15	704.42	258.47	750.35	733.79	16.56	45.314	
2,400.00	2,400.00	2,434.45	2,434.30	8.38	9.57	20.43	701.68	261.40	749.03	731.81	17.21	43.517	
2,500.00	2,500.00	2,561.04	2,560.65	8.74	9.96	20.83	694.82	264.38	744.80	726.87	17.93	41.539	
2,600.00	2,600.00	2,687.49	2,686.59	9.10	10.41	21.25	683.53	265.80	736.84	718.03	18.81	39.168	
2,700.00	2,700.00	2,803.17	2,801.39	9.45	10.78	21.76	669.43	267.25	725.91	706.24	19.67	36.900	
2,800.00	2,800.00	2,909.66	2,906.75	9.81	11.30	22.41	654.21	269.78	713.52	692.94	20.58	34.666	
2,900.00	2,900.00	3,014.61	3,010.44	10.17	11.89	23.11	638.16	272.38	700.33	678.82	21.51	32.560	
3,000.00	3,000.00	3,120.18	3,114.56	10.53	12.46	23.89	620.96	274.98	686.32	663.92	22.40	30.639	
3,100.00	3,100.00	3,223.73	3,216.52	10.89	12.98	24.70	603.06	277.43	671.47	648.21	23.25	28.875	
3,200.00	3,200.00	3,320.01	3,311.31	11.25	13.33	25.50	586.31	279.68	656.64	632.69	23.95	27.413	
3,300.00	3,300.00	3,414.91	3,404.79	11.61	13.68	26.32	570.08	281.98	642.26	617.61	24.65	26.053	
3,400.00	3,400.00	3,503.37	3,492.20	11.96	14.08	26.97	556.58	283.27	629.22	603.81	25.41	24.762	
3,500.00	3,500.00	3,594.24	3,582.25	12.32	14.52	27.55	544.48	284.00	617.72	591.52	26.20	23.576	
3,600.00	3,600.00	3,687.06	3,674.40	12.68	14.90	28.09	533.37	284.69	607.46	580.54	26.92	22.565	
3,700.00	3,700.00	3,780.98	3,767.79	13.04	15.27	28.56	523.44	284.87	598.23	570.60	27.63	21.650	
3,800.00	3,800.00	3,875.52	3,861.94	13.40	15.64	28.89	514.88	284.08	589.88	561.52	28.36	20.798	
3,900.00	3,900.00	3,963.00	3,949.18	13.76	15.99	29.08	508.49	282.73	582.79	553.68	29.11	20.023	
4,000.00	4,000.00	4,058.00	4,044.05	14.11	16.42	29.14	504.01	281.04	577.78	547.81	29.96	19.283	
4,100.00	4,100.00	4,141.15	4,127.16	14.47	16.69	29.11	502.11	279.60	574.83	544.18	30.65	18.754	
4,200.00	4,200.00	4,239.94	4,225.94	14.83	16.96	29.03	500.90	278.03	572.99	541.67	31.31	18.298	
4,300.00	4,300.00	4,339.69	4,325.66	15.19	17.23	28.96	499.66	276.52	571.17	539.18	31.98	17.859	
4,400.00	4,400.00	4,438.13	4,424.09	15.55	17.50	28.90	498.54	275.17	569.50	536.86	32.65	17.444	
4,500.00	4,500.00	4,537.76	4,523.71	15.91	17.78	28.84	497.50	273.96	568.00	534.68	33.33	17.044	
4,600.00	4,600.00	4,636.52	4,622.46	16.27	18.07	28.79	496.55	272.90	566.65	532.65	34.00	16.666	
4,700.00	4,700.00	4,734.91	4,720.84	16.62	18.37	28.76	495.76	272.10	565.54	530.86	34.68	16.306	
4,800.00	4,800.00	4,833.83	4,819.75	16.98	18.68	28.74	495.11	271.53	564.69	529.32	35.38	15.962	
4,900.00	4,900.00	4,933.48	4,919.40	17.34	19.02	28.74	494.45	271.15	563.93	527.85	36.09	15.627	
5,000.00	5,000.00	5,032.06	5,017.99	17.70	19.36	28.75	493.90	270.97	563.35	526.56	36.79	15.311	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 191-												Offset Well Error:	1.00 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,100.00	5,100.00	5,130.87	5,116.79	18.06	19.69	28.76	493.54	270.91	563.01	525.53	37.48	15.022	
5,200.00	5,200.00	5,230.60	5,216.53	18.42	19.99	28.78	493.30	270.95	562.81	524.69	38.12	14.763	
5,300.00	5,300.00	5,331.14	5,317.06	18.77	20.27	28.81	492.94	271.08	562.56	523.81	38.75	14.517	
5,400.00	5,400.00	5,430.58	5,416.50	19.13	20.54	28.84	492.53	271.21	562.27	522.92	39.35	14.289	
5,462.36	5,462.36	5,491.84	5,477.76	19.36	20.66	28.87	492.34	271.43	562.20	522.52	39.69	14.166	
5,500.00	5,500.00	5,528.72	5,514.64	19.49	20.71	28.89	492.26	271.63	562.23	522.37	39.86	14.106	
5,600.00	5,600.00	5,628.91	5,614.82	19.85	20.89	28.94	492.14	272.10	562.35	521.98	40.37	13.931	
5,620.00	5,620.00	5,648.94	5,634.86	19.92	20.92	28.94	492.12	272.17	562.37	521.90	40.47	13.897	
5,700.00	5,700.00	5,729.61	5,715.52	20.21	21.08	50.38	492.08	272.34	562.06	521.16	40.90	13.742	
5,800.00	5,799.97	5,830.11	5,816.03	20.57	21.29	50.57	491.99	272.29	560.51	519.05	41.46	13.519	
5,900.00	5,899.89	5,928.90	5,914.81	20.92	21.42	50.85	492.19	271.81	557.92	515.94	41.98	13.291	
6,000.00	5,999.72	6,026.86	6,012.77	21.28	21.52	51.27	492.71	271.41	554.55	512.09	42.46	13.060	
6,100.00	6,099.44	6,127.60	6,113.51	21.64	21.64	51.85	493.42	271.04	550.30	507.34	42.96	12.810	
6,192.51	6,191.56	6,219.43	6,205.34	21.97	21.76	52.55	493.74	270.85	545.27	501.85	43.42	12.558	
6,200.00	6,199.01	6,226.77	6,212.68	21.99	21.77	52.61	493.78	270.83	544.84	501.38	43.46	12.537	
6,300.00	6,298.51	6,325.75	6,311.66	22.35	21.90	53.38	494.43	270.51	539.21	495.24	43.96	12.265	
6,400.00	6,398.01	6,424.94	6,410.84	22.71	22.03	54.14	495.25	270.05	533.74	489.26	44.47	12.001	
6,500.00	6,497.51	6,526.83	6,512.73	23.07	22.16	54.92	496.08	269.32	528.23	483.24	44.99	11.741	
6,600.00	6,597.02	6,625.43	6,611.32	23.42	22.29	55.69	496.74	268.51	522.63	477.12	45.50	11.485	
6,700.00	6,696.52	6,724.87	6,710.75	23.78	22.42	56.49	497.50	267.79	517.26	471.24	46.03	11.238	
6,800.00	6,796.02	6,823.60	6,809.48	24.14	22.57	57.29	498.37	267.08	512.10	465.54	46.56	11.000	
6,900.00	6,895.52	6,923.03	6,908.90	24.50	22.73	58.11	499.30	266.46	507.13	460.03	47.10	10.768	
7,000.00	6,995.02	7,021.72	7,007.59	24.87	22.90	58.96	500.22	266.03	502.39	454.74	47.65	10.544	
7,100.00	7,094.52	7,120.57	7,106.43	25.23	23.09	59.82	501.33	265.61	497.92	449.71	48.21	10.328	
7,200.00	7,194.02	7,219.03	7,204.89	25.59	23.28	60.68	502.65	265.26	493.77	444.99	48.78	10.123	
7,300.00	7,293.52	7,318.14	7,303.98	25.95	23.49	61.57	504.08	265.05	489.92	440.56	49.36	9.925	
7,400.00	7,393.02	7,418.09	7,403.92	26.32	23.70	62.50	505.36	265.07	486.21	436.26	49.95	9.734	
7,500.00	7,492.53	7,518.02	7,503.85	26.68	23.92	63.44	506.65	264.89	482.50	431.96	50.55	9.545	
7,600.00	7,592.03	7,616.27	7,602.08	27.04	24.14	64.33	508.23	264.53	479.04	427.90	51.14	9.367	
7,700.00	7,691.53	7,713.68	7,699.47	27.41	24.36	65.21	510.19	264.35	476.12	424.38	51.74	9.203	
7,800.00	7,791.03	7,811.07	7,796.83	27.77	24.59	66.07	512.64	264.35	473.79	421.45	52.33	9.053	
7,900.00	7,890.53	7,910.61	7,896.33	28.14	24.83	66.97	515.33	264.69	471.95	419.01	52.94	8.914	
8,000.00	7,990.03	8,010.72	7,996.41	28.51	25.08	67.86	518.03	264.73	470.01	416.44	53.57	8.774	
8,100.00	8,089.53	8,110.01	8,095.66	28.87	25.34	68.77	520.66	264.94	468.29	414.10	54.19	8.642	
8,200.00	8,189.03	8,208.93	8,194.54	29.24	25.61	69.64	523.57	265.01	466.76	411.95	54.82	8.515	
8,300.00	8,288.54	8,306.77	8,292.33	29.61	25.89	70.51	526.64	265.28	465.64	410.20	55.44	8.399	
8,400.00	8,388.04	8,405.03	8,390.53	29.97	26.17	71.41	529.82	266.01	465.04	408.97	56.07	8.294	
8,500.00	8,487.54	8,518.12	8,503.60	30.34	26.54	72.69	531.31	267.16	463.62	406.77	56.85	8.156	
8,600.00	8,587.04	8,621.94	8,607.38	30.71	26.98	74.22	528.97	268.08	460.07	402.40	57.67	7.978	
8,700.00	8,686.54	8,718.81	8,704.23	31.08	27.27	75.61	527.07	268.57	456.69	398.36	58.33	7.829	
8,800.00	8,786.04	8,817.78	8,803.19	31.45	27.55	76.97	525.75	268.88	453.80	394.80	59.00	7.692	
8,900.00	8,885.54	8,911.68	8,897.09	31.82	27.75	78.21	525.42	269.44	451.95	392.40	59.55	7.589	
9,000.00	8,985.04	9,012.68	8,998.08	32.18	27.90	79.47	525.78	270.13	450.78	390.70	60.08	7.503	
9,100.00	9,084.55	9,116.48	9,101.89	32.55	28.11	80.68	526.32	269.70	448.97	388.30	60.66	7.401	
9,200.00	9,184.05	9,215.84	9,201.23	32.92	28.35	81.72	527.56	268.52	447.03	385.76	61.27	7.296	
9,300.00	9,283.55	9,315.92	9,301.27	33.29	28.60	82.67	529.55	266.91	445.23	383.35	61.89	7.194	
9,372.30	9,355.48	9,389.16	9,374.48	33.56	28.79	83.35	531.09	265.55	443.89	381.56	62.33	7.121	
9,400.00	9,383.06	9,417.94	9,403.25	33.66	28.86	83.60	531.68	264.93	443.32	380.82	62.50	7.093	
9,500.00	9,482.68	9,519.88	9,505.13	34.03	29.10	84.30	533.81	262.15	440.95	377.84	63.11	6.987	
9,600.00	9,582.44	9,617.67	9,602.85	34.40	29.34	84.71	536.17	259.32	438.80	375.09	63.71	6.887	
9,700.00	9,682.31	9,714.00	9,699.17	34.76	29.59	85.13	537.33	257.97	437.62	373.31	64.32	6.804	
9,800.00	9,782.25	9,813.22	9,798.38	35.12	29.88	85.39	538.46	257.27	437.21	372.26	64.95	6.731	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 191-												Offset Well Error:	1.00 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
9,888.97	9,871.20	9,901.12	9,886.26	35.44	30.15	85.40	539.68	256.46	436.88	371.36	65.52	6.668	CC
9,900.00	9,882.24	9,911.05	9,896.20	35.48	30.18	85.38	539.88	256.38	436.90	371.31	65.59	6.661	ES
9,944.81	9,927.04	9,951.39	9,936.52	35.64	30.30	63.89	541.03	256.20	437.26	371.40	65.86	6.639	
9,950.00	9,932.23	9,956.07	9,941.19	35.65	30.32	-115.60	541.19	256.19	437.35	371.46	65.89	6.638	SF
10,000.00	9,982.15	9,990.67	9,975.73	35.81	30.48	-115.80	543.25	256.28	439.98	373.75	66.23	6.643	
10,050.00	10,031.64	10,021.41	10,006.20	35.96	30.90	-116.13	547.20	256.65	446.60	380.07	66.53	6.713	
10,100.00	10,080.34	10,060.00	10,043.96	36.10	31.65	-117.00	555.06	257.51	457.59	390.62	66.97	6.833	
10,150.00	10,127.88	10,077.46	10,060.80	36.23	32.42	-116.70	559.62	257.99	472.52	405.43	67.10	7.042	
10,200.00	10,173.88	10,102.65	10,084.81	36.36	33.54	-116.67	567.23	258.62	491.85	424.27	67.58	7.278	
10,250.00	10,218.01	10,123.80	10,104.66	36.47	34.49	-116.07	574.53	259.10	515.40	447.33	68.07	7.572	
10,300.00	10,259.92	10,154.00	10,132.42	36.58	35.84	-116.01	586.37	259.71	543.27	474.01	69.26	7.844	
10,350.00	10,299.29	10,154.00	10,132.42	36.67	35.84	-112.38	586.37	259.71	574.35	505.43	68.92	8.333	
10,400.00	10,335.84	10,154.00	10,132.42	36.76	35.84	-107.83	586.37	259.71	609.13	540.52	68.60	8.879	
10,450.00	10,369.27	10,176.20	10,152.45	36.85	36.33	-105.20	595.95	260.07	646.17	576.82	69.36	9.317	
10,500.00	10,399.34	10,181.92	10,157.56	36.93	36.45	-99.69	598.51	260.15	685.62	616.13	69.50	9.866	
10,550.00	10,425.81	10,184.63	10,159.98	37.01	36.51	-92.89	599.73	260.19	726.73	657.14	69.59	10.442	
10,600.00	10,448.49	10,184.65	10,159.99	37.09	36.51	-84.99	599.74	260.19	769.00	699.34	69.66	11.039	
10,650.00	10,467.20	10,182.24	10,157.84	37.17	36.46	-76.38	598.65	260.15	811.95	742.26	69.70	11.650	
10,700.00	10,481.80	10,177.66	10,153.75	37.26	36.36	-67.64	596.60	260.09	855.15	785.44	69.71	12.268	
10,750.00	10,492.17	10,154.00	10,132.42	37.34	35.84	-57.61	586.37	259.71	898.50	829.54	68.96	13.029	
10,800.00	10,498.25	10,154.00	10,132.42	37.43	35.84	-51.18	586.37	259.71	940.78	871.48	69.30	13.575	
10,844.80	10,500.00	10,154.00	10,132.42	37.50	35.84	-46.12	586.37	259.71	978.09	908.45	69.63	14.046	
10,900.00	10,500.00	10,154.00	10,132.42	37.61	35.84	-46.12	586.37	259.71	1,024.11	954.07	70.03	14.623	
11,000.00	10,500.00	10,154.00	10,132.42	37.84	35.84	-46.12	586.37	259.71	1,109.61	1,038.98	70.64	15.709	
11,100.00	10,500.00	10,120.56	10,101.64	38.13	34.34	-43.85	573.35	259.03	1,195.88	1,126.88	69.00	17.332	
11,200.00	10,500.00	10,109.94	10,091.68	38.46	33.87	-43.15	569.65	258.79	1,284.37	1,215.57	68.80	18.668	
11,300.00	10,500.00	10,100.42	10,082.70	38.85	33.44	-42.53	566.51	258.57	1,374.19	1,305.56	68.63	20.024	
11,400.00	10,500.00	10,060.00	10,043.96	39.29	31.65	-40.02	555.06	257.51	1,466.42	1,399.66	66.76	21.966	
11,500.00	10,500.00	10,060.00	10,043.96	39.77	31.65	-40.02	555.06	257.51	1,557.75	1,490.68	67.07	23.225	
11,600.00	10,500.00	10,060.00	10,043.96	40.30	31.65	-40.02	555.06	257.51	1,650.09	1,582.75	67.34	24.505	
11,700.00	10,500.00	10,060.00	10,043.96	40.87	31.65	-40.02	555.06	257.51	1,743.27	1,675.70	67.56	25.801	
11,800.00	10,500.00	10,060.00	10,043.96	41.48	31.65	-40.02	555.06	257.51	1,837.16	1,769.40	67.76	27.111	
11,900.00	10,500.00	10,060.00	10,043.96	42.14	31.65	-40.02	555.06	257.51	1,931.67	1,863.74	67.94	28.433	
12,000.00	10,500.00	10,060.00	10,043.96	42.83	31.65	-40.02	555.06	257.51	2,026.71	1,958.62	68.09	29.765	
12,100.00	10,500.00	10,060.00	10,043.96	43.56	31.65	-40.02	555.06	257.51	2,122.21	2,053.98	68.23	31.104	
12,200.00	10,500.00	10,060.00	10,043.96	44.33	31.65	-40.02	555.06	257.51	2,218.10	2,149.74	68.35	32.451	
12,300.00	10,500.00	10,060.00	10,043.96	45.12	31.65	-40.02	555.06	257.51	2,314.33	2,245.87	68.46	33.804	
12,400.00	10,500.00	10,060.00	10,043.96	45.95	31.65	-40.02	555.06	257.51	2,410.88	2,342.31	68.57	35.162	
12,500.00	10,500.00	10,060.00	10,043.96	46.81	31.65	-40.02	555.06	257.51	2,507.69	2,439.04	68.66	36.524	
12,600.00	10,500.00	10,060.00	10,043.96	47.70	31.65	-40.02	555.06	257.51	2,604.75	2,536.01	68.75	37.890	
12,700.00	10,500.00	10,060.00	10,043.96	48.61	31.65	-40.02	555.06	257.51	2,702.02	2,633.20	68.83	39.258	
12,800.00	10,500.00	10,060.00	10,043.96	49.55	31.65	-40.02	555.06	257.51	2,799.48	2,730.58	68.90	40.629	
12,900.00	10,500.00	10,060.00	10,043.96	50.51	31.65	-40.02	555.06	257.51	2,897.12	2,828.15	68.97	42.003	
13,000.00	10,500.00	10,060.00	10,043.96	51.49	31.65	-40.02	555.06	257.51	2,994.91	2,925.87	69.04	43.378	
13,100.00	10,500.00	10,060.00	10,043.96	52.49	31.65	-40.02	555.06	257.51	3,092.85	3,023.74	69.11	44.754	
13,200.00	10,500.00	10,060.00	10,043.96	53.52	31.65	-40.02	555.06	257.51	3,190.91	3,121.74	69.17	46.131	
13,300.00	10,500.00	10,018.22	10,003.05	54.56	30.84	-37.62	546.69	256.60	3,286.89	3,218.52	68.37	48.075	
13,400.00	10,500.00	10,016.39	10,001.25	55.62	30.81	-37.52	546.42	256.57	3,384.99	3,316.59	68.40	49.491	
13,500.00	10,500.00	10,014.66	9,999.53	56.70	30.78	-37.42	546.16	256.54	3,483.19	3,414.76	68.42	50.907	
13,600.00	10,500.00	10,013.01	9,997.90	57.79	30.75	-37.33	545.92	256.52	3,581.48	3,513.03	68.45	52.323	
13,700.00	10,500.00	10,011.44	9,996.35	58.90	30.73	-37.25	545.69	256.50	3,679.85	3,611.38	68.48	53.739	
13,800.00	10,500.00	10,009.94	9,994.86	60.02	30.70	-37.17	545.49	256.48	3,778.31	3,709.81	68.50	55.155	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.00 usft
Survey Program: 191-												Offset Well Error:	1.00 usft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
13,900.00	10,500.00	10,008.51	9,993.45	61.16	30.68	-37.09	545.29	256.46	3,876.84	3,808.31	68.53	56.570	
14,000.00	10,500.00	9,965.00	9,950.12	62.31	30.34	-34.90	541.53	256.18	3,977.62	3,909.97	67.65	58.795	
14,100.00	10,500.00	9,965.00	9,950.12	63.47	30.34	-34.90	541.53	256.18	4,076.15	4,008.44	67.71	60.197	
14,200.00	10,500.00	9,965.00	9,950.12	64.64	30.34	-34.90	541.53	256.18	4,174.74	4,106.97	67.77	61.598	
14,300.00	10,500.00	9,965.00	9,950.12	65.82	30.34	-34.90	541.53	256.18	4,273.40	4,205.57	67.83	62.997	
14,400.00	10,500.00	9,965.00	9,950.12	67.01	30.34	-34.90	541.53	256.18	4,372.12	4,304.23	67.89	64.396	
14,500.00	10,500.00	9,965.00	9,950.12	68.21	30.34	-34.90	541.53	256.18	4,470.90	4,402.95	67.95	65.794	
14,600.00	10,500.00	9,965.00	9,950.12	69.42	30.34	-34.90	541.53	256.18	4,569.73	4,501.72	68.01	67.190	
14,700.00	10,500.00	9,965.00	9,950.12	70.64	30.34	-34.90	541.53	256.18	4,668.61	4,600.54	68.07	68.584	
14,800.00	10,500.00	9,965.00	9,950.12	71.87	30.34	-34.90	541.53	256.18	4,767.54	4,699.41	68.13	69.977	
14,900.00	10,500.00	9,965.00	9,950.12	73.10	30.34	-34.90	541.53	256.18	4,866.51	4,798.32	68.19	71.369	
15,000.00	10,500.00	9,965.00	9,950.12	74.34	30.34	-34.90	541.53	256.18	4,965.52	4,897.27	68.25	72.758	
15,100.00	10,500.00	9,965.00	9,950.12	75.59	30.34	-34.90	541.53	256.18	5,064.57	4,996.27	68.31	74.146	
15,200.00	10,500.00	9,965.00	9,950.12	76.85	30.34	-34.90	541.53	256.18	5,163.66	5,095.30	68.36	75.531	
15,300.00	10,500.00	9,965.00	9,950.12	78.11	30.34	-34.90	541.53	256.18	5,262.78	5,194.36	68.42	76.915	
15,400.00	10,500.00	9,965.00	9,950.12	79.38	30.34	-34.90	541.53	256.18	5,361.94	5,293.45	68.48	78.296	
15,500.00	10,500.00	9,965.00	9,950.12	80.65	30.34	-34.90	541.53	256.18	5,461.12	5,392.58	68.54	79.675	
15,600.00	10,500.00	9,965.00	9,950.12	81.93	30.34	-34.90	541.53	256.18	5,560.34	5,491.73	68.60	81.051	
15,700.00	10,500.00	9,965.00	9,950.12	83.22	30.34	-34.90	541.53	256.18	5,659.58	5,590.92	68.66	82.425	
15,800.00	10,500.00	9,965.00	9,950.12	84.51	30.34	-34.90	541.53	256.18	5,758.85	5,690.12	68.72	83.797	
15,900.00	10,500.00	9,965.00	9,950.12	85.80	30.34	-34.90	541.53	256.18	5,858.14	5,789.36	68.79	85.166	
16,000.00	10,500.00	9,965.00	9,950.12	87.10	30.34	-34.90	541.53	256.18	5,957.46	5,888.61	68.85	86.532	
16,100.00	10,500.00	9,965.00	9,950.12	88.41	30.34	-34.90	541.53	256.18	6,056.80	5,987.89	68.91	87.896	
16,200.00	10,500.00	9,965.00	9,950.12	89.71	30.34	-34.90	541.53	256.18	6,156.16	6,087.19	68.97	89.256	
16,300.00	10,500.00	9,965.00	9,950.12	91.02	30.34	-34.90	541.53	256.18	6,255.54	6,186.51	69.03	90.614	
16,400.00	10,500.00	9,965.00	9,950.12	92.34	30.34	-34.90	541.53	256.18	6,354.94	6,285.84	69.10	91.969	
16,500.00	10,500.00	9,965.00	9,950.12	93.66	30.34	-34.90	541.53	256.18	6,454.36	6,385.20	69.16	93.321	
16,600.00	10,500.00	9,965.00	9,950.12	94.98	30.34	-34.90	541.53	256.18	6,553.80	6,484.57	69.23	94.670	
16,700.00	10,500.00	9,965.00	9,950.12	96.31	30.34	-34.90	541.53	256.18	6,653.25	6,583.96	69.29	96.016	
16,800.00	10,500.00	9,965.00	9,950.12	97.64	30.34	-34.90	541.53	256.18	6,752.72	6,683.36	69.36	97.359	
16,900.00	10,500.00	9,965.00	9,950.12	98.97	30.34	-34.90	541.53	256.18	6,852.21	6,782.78	69.43	98.698	
17,000.00	10,500.00	9,965.00	9,950.12	100.30	30.34	-34.90	541.53	256.18	6,951.71	6,882.21	69.49	100.035	
17,100.00	10,500.00	9,965.00	9,950.12	101.64	30.34	-34.90	541.53	256.18	7,051.22	6,981.66	69.56	101.368	
17,200.00	10,500.00	9,965.00	9,950.12	102.98	30.34	-34.90	541.53	256.18	7,150.75	7,081.12	69.63	102.697	
17,300.00	10,500.00	9,965.00	9,950.12	104.32	30.34	-34.90	541.53	256.18	7,250.29	7,180.59	69.70	104.024	
17,400.00	10,500.00	9,965.00	9,950.12	105.67	30.34	-34.90	541.53	256.18	7,349.84	7,280.07	69.77	105.346	
17,500.00	10,500.00	9,965.00	9,950.12	107.02	30.34	-34.90	541.53	256.18	7,449.41	7,379.57	69.84	106.666	
17,600.00	10,500.00	9,965.00	9,950.12	108.37	30.34	-34.90	541.53	256.18	7,548.98	7,479.07	69.91	107.982	
17,700.00	10,500.00	9,965.00	9,950.12	109.72	30.34	-34.90	541.53	256.18	7,648.57	7,578.59	69.98	109.294	
17,800.00	10,500.00	9,965.00	9,950.12	111.08	30.34	-34.90	541.53	256.18	7,748.17	7,678.12	70.05	110.603	
17,900.00	10,500.00	9,965.00	9,950.12	112.43	30.34	-34.90	541.53	256.18	7,847.78	7,777.65	70.13	111.908	
18,000.00	10,500.00	9,965.00	9,950.12	113.79	30.34	-34.90	541.53	256.18	7,947.40	7,877.20	70.20	113.209	
18,040.57	10,500.00	9,965.00	9,950.12	114.35	30.34	-34.90	541.53	256.18	7,987.82	7,917.59	70.23	113.736	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to Well @ 3499.00usft

Offset Depths are relative to Offset Datum

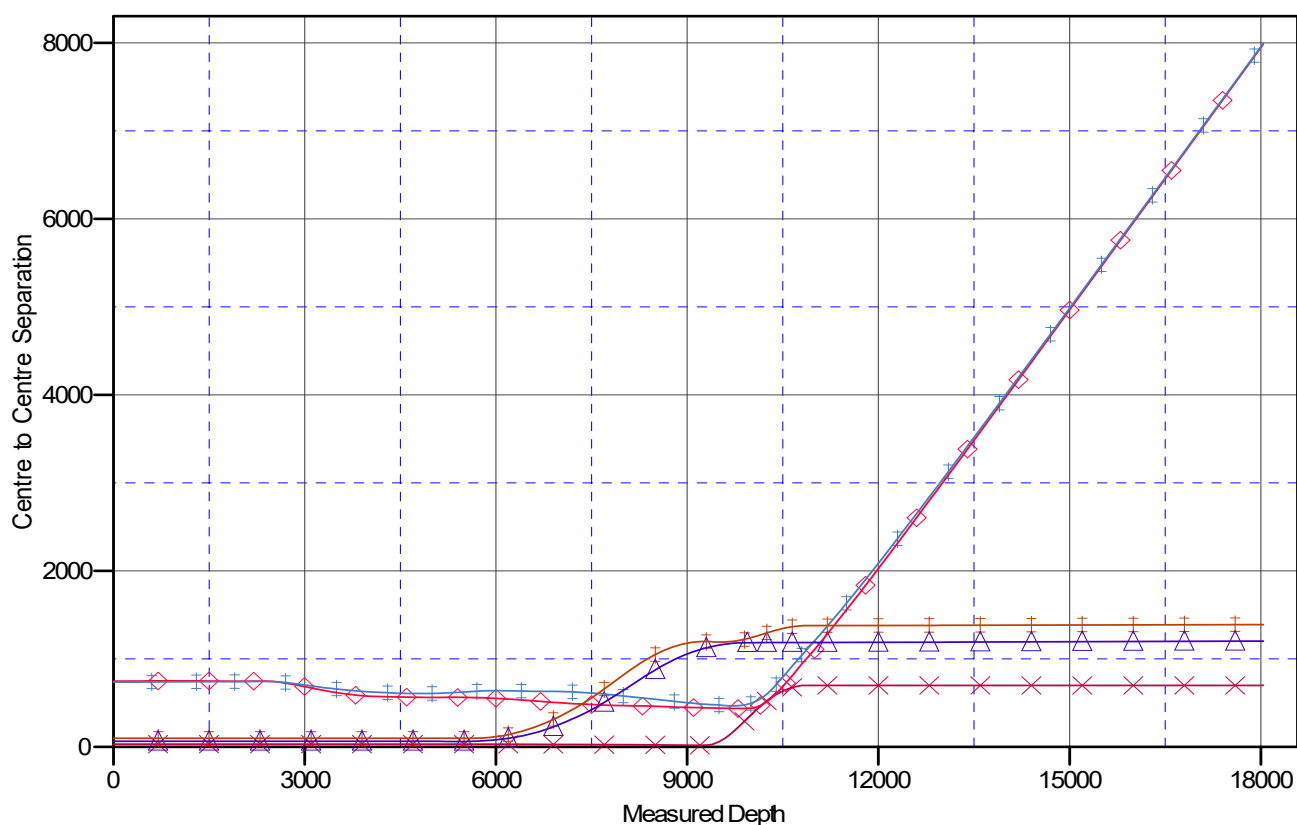
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 505H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Grid Convergence at Surface is: 0.50°

Ladder Plot



LEGEND

✕ 305H, Planning, Plan 0.1 V0
 ▲ 509H, CH / 6826, Surveys (H&P 296) V0
 ▲ 504H, Planning, Plan 0.1 V0
◆ 508H, CH / 6827, Surveys (H&P 296) V0
 ▲ 304H, Planning, Plan 0.1 V0



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 505H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 505H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	505H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to Well @ 3499.00usft

Offset Depths are relative to Offset Datum

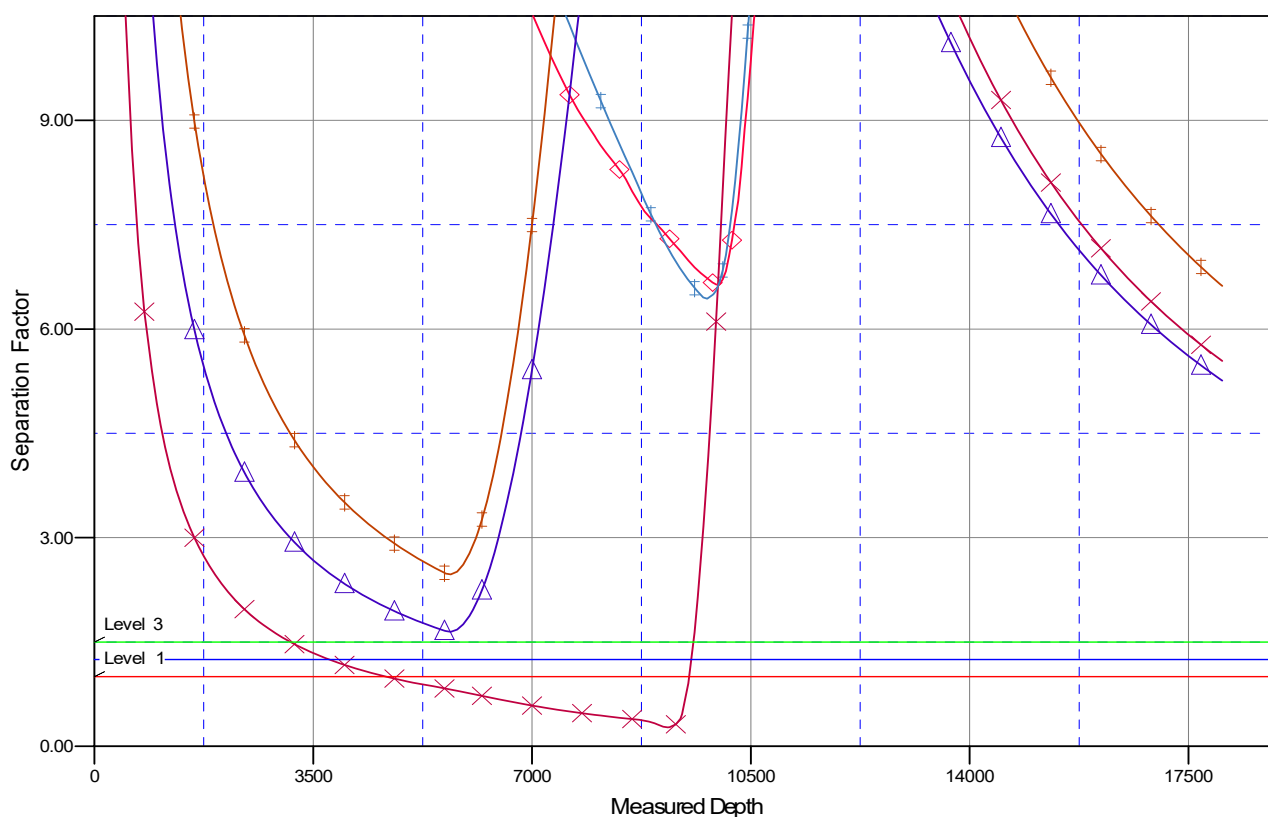
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 505H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Grid Convergence at Surface is: 0.50°

Separation Factor Plot



LEGEND

✕ 305H, Planning, Plan 0.1 V0
 ✕ 505H, OH / 6826, Surveys (H&P 296) V0
 ✕ 504H, Planning, Plan 0.1 V0
✕ 505H, OH / 6827, Surveys (H&P 296) V0
✕ 304H, Planning, Plan 0.1 V0



Golden Tee 31 Fed Com 505H
Lea Co., NM (NAD 83)
Job No. WT-22-***
Plan 0.1



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	5620.00	0.00	0.00	5620.00	0.00	0.00	0.00	0.00	0.00	Build: 1°/100
3	6192.51	5.73	338.63	6191.56	26.61	-10.41	1.000	338.63	-26.71	Hold: 5.73° Inc, 338.63° Azm
4	9372.30	5.73	338.63	9355.48	322.01	-126.00	0.000	0.00	-323.16	Drop: 1°/100'
5	9944.81	0.00	0.00	9927.04	348.62	-136.42	1.000	180.00	-349.87	KOP: 10°/100' @ 9944.81' MD
6	10844.80	90.00	179.47	10500.00	-224.31	-131.17	10.000	179.47	223.09	LP: 10844.80' MD, 90.00° Inc, 179.47° Azm
7	18040.57	90.00	179.47	10500.00	-7419.78	-65.23	0.000	0.00	7418.86	PBHL @ 18040.57' MD/10500.00' TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
505H VP	9927.04	348.62	-136.42	494234.91	828556.52	32° 21' 19.053 N	103° 24' 11.511 W
505H FTP	10500.00	298.60	-135.91	494184.89	828557.03	32° 21' 18.558 N	103° 24' 11.511 W
505H LTP/PBHL	10500.00	-7419.78	-65.23	486466.51	828627.71	32° 20' 2.181 N	103° 24' 11.468 W

PROJECT DETAILS: Lea Co., 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



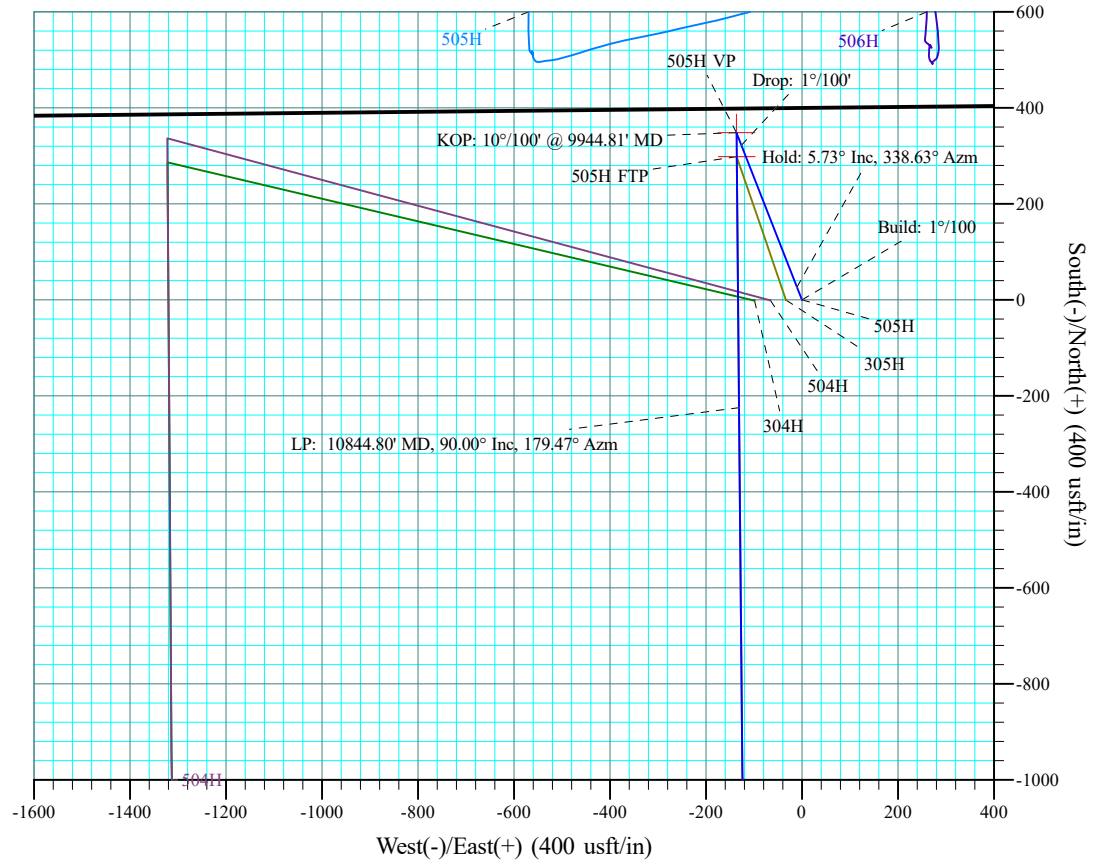
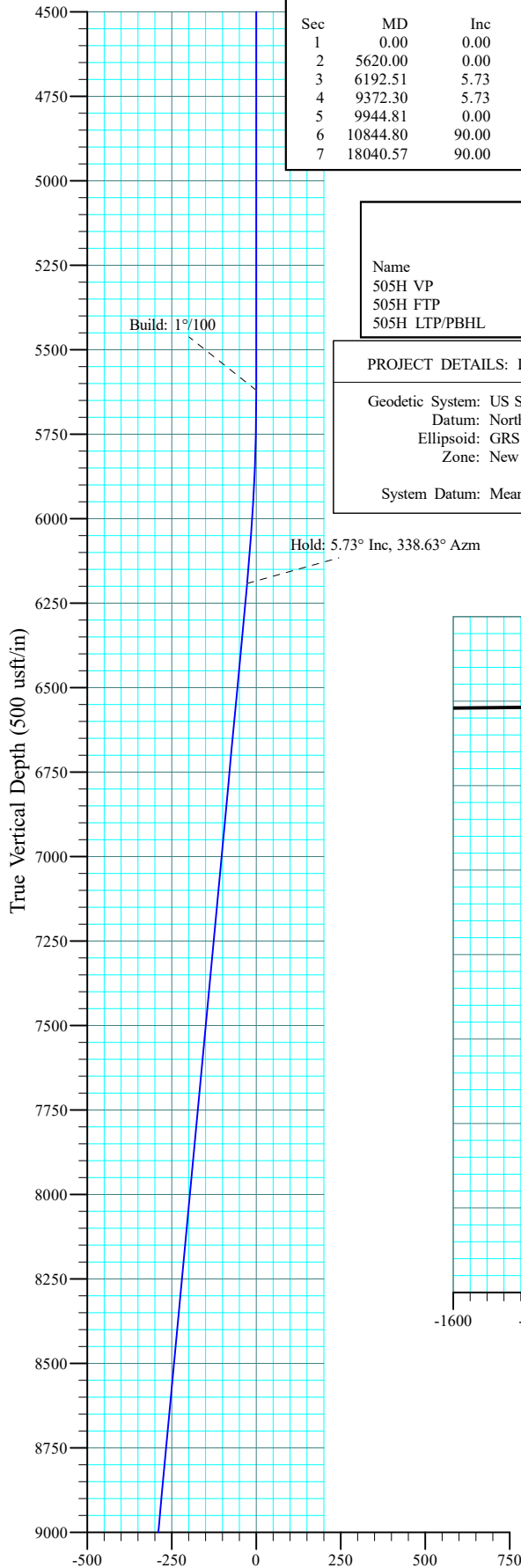
Azimuths to Grid North
 True North: -0.50°
 Magnetic North: 5.90°

Magnetic Field
 Strength: 47715.7nT
 Dip Angle: 59.97°
 Date: 4/1/2022
 Model: MVHD

SITE DETAILS: Golden Tee 31 Fed Com 505H

Site Centre Northing: 493886.29
 Easting: 828692.94

Positional Uncertainty: 0.00
 Convergence: 0.50
 Local North: Grid



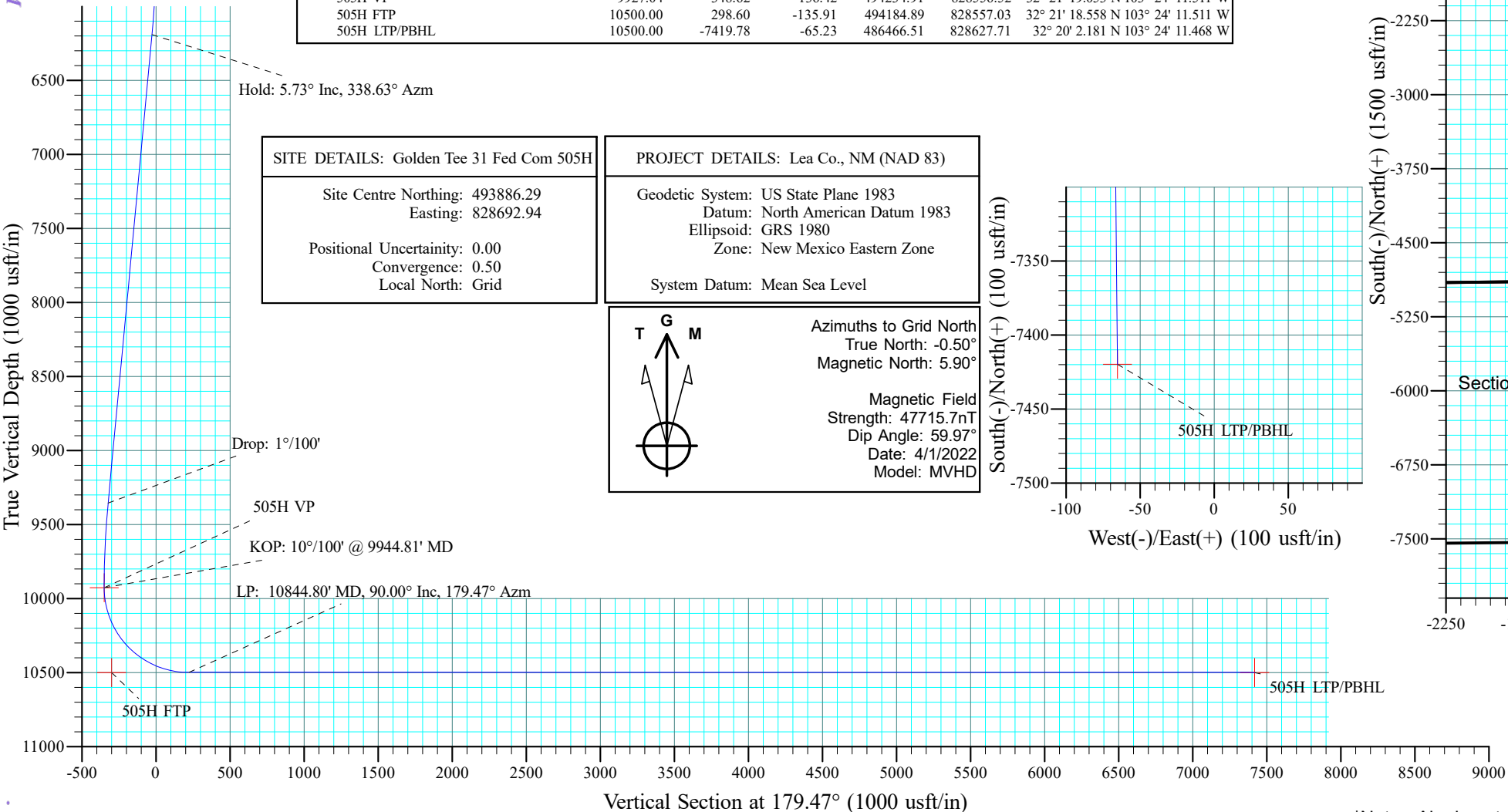
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Received by: 5/6/2022 10:58:54 AM

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	
3	6192.51	5.73	338.63	6191.56	26.61	-10.41	1.000	338.63	-26.71	
4	9372.30	5.73	338.63	9355.48	322.01	-126.00	0.000	0.00	-323.16	
5	9944.81	0.00	0.00	9927.04	348.62	-136.42	1.000	180.00	-349.87	505H VP
6	10844.80	90.00	179.47	10500.00	-224.31	-131.17	10.000	179.47	223.09	
7	18040.57	90.00	179.47	10500.00	-7419.78	-65.23	0.000	0.00	7418.86	505H LTP/PBHL

Build: 1°/100
Hold: 5.73° Inc, 338.63° Azm
Drop: 1°/100'
KOP: 10°/100' @ 9944.81' MD
LP: 10844.80' MD, 90.00° Inc, 179.47° Azm
PBHL @ 18040.57' MD/10500.00' TVD

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
505H VP	9927.04	348.62	-136.42	494234.91	828556.52	32° 21' 19.053 N 103° 24' 11.511 W	
505H FTP	10500.00	298.60	-135.91	494184.89	828557.03	32° 21' 18.558 N 103° 24' 11.511 W	
505H LTP/PBHL	10500.00	-7419.78	-65.23	486466.51	828627.71	32° 20' 2.181 N 103° 24' 11.468 W	



SITE DETAILS: Golden Tee 31 Fed Com 505H	
Site Centre Northing:	493886.29
Easting:	828692.94
Positional Uncertainty:	0.00
Convergence:	0.50
Local North:	Grid

PROJECT DETAILS: Lea Co., 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

T

G

M

Azimuths to Grid North

True North: -0.50°

Magnetic North: 5.90°

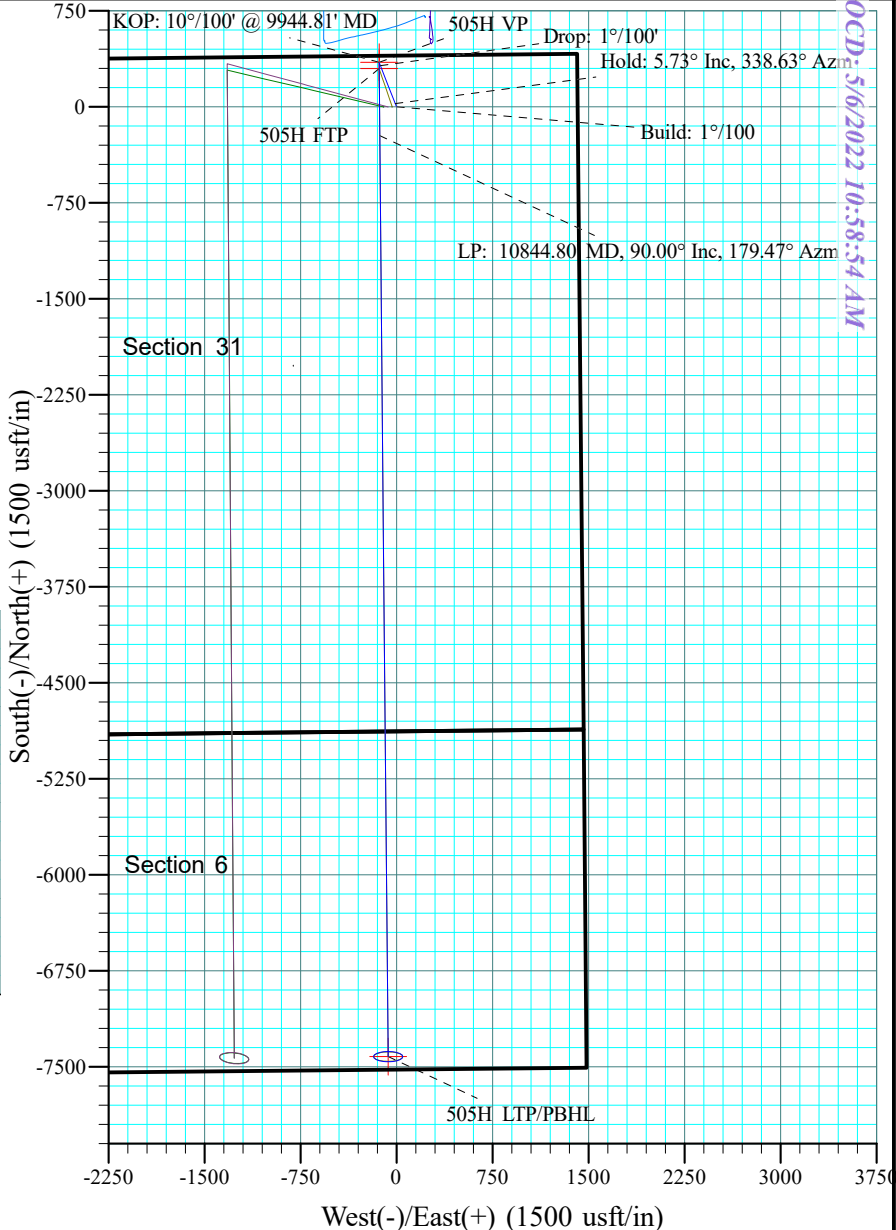
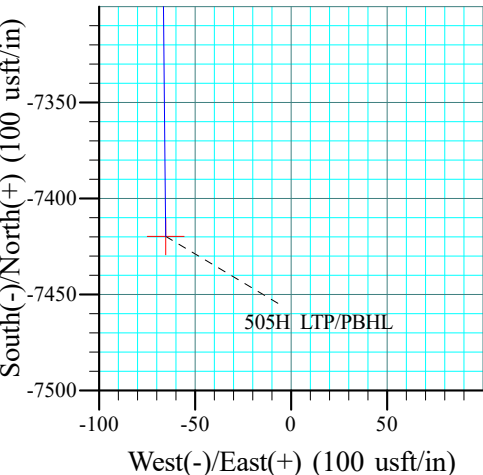
Magnetic Field

Strength: 47715.7nT

Dip Angle: 59.97°

Date: 4/1/2022

Model: MVHD



Page 2 of 30



Aim Directional Services, LLC

Planning Report



Database:	RTOC- EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 505H
Company:	Avant Operating, LLC	TVD Reference:	Well @ 3499.00usft
Project:	Lea Co., NM (NAD 83)	MD Reference:	Well @ 3499.00usft
Site:	Golden Tee 31 Fed Com 505H	North Reference:	Grid
Well:	505H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Planning		
Design:	Plan 0.1		

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	Golden Tee 31 Fed Com 505H		
Site Position:		Northing:	493,886.29 usft
From:	Map	Easting:	828,692.94 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 21' 15.591 N
		Longitude:	103° 24' 9.956 W
		Grid Convergence:	0.50 °

Well	505H		
Well Position	+N/-S	0.00 usft	Northing: 493,886.29 usft
	+E/-W	0.00 usft	Easting: 828,692.94 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	Latitude: 32° 21' 15.591 N
			Longitude: 103° 24' 9.956 W
			Ground Level: 3,474.00 usft

Wellbore	Planning				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	MVHD	4/1/2022	6.40	59.97	47,715.691

Design	Plan 0.1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	179.47

Plan Survey Tool Program	Date	2/9/2022		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,040.57	Plan 0.1 (Planning)	B001Mb_MWD+HRGM
				OWSG MWD + HRGM

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.00	
5,620.00	0.00	0.00	5,620.00	0.00	0.00	0.000	0.000	0.000	0.00	
6,192.51	5.73	338.63	6,191.56	26.61	-10.41	1.000	1.000	0.000	338.63	
9,372.30	5.73	338.63	9,355.48	322.01	-126.00	0.000	0.000	0.000	0.00	
9,944.81	0.00	0.00	9,927.04	348.62	-136.42	1.000	-1.000	0.000	180.00	505H VP
10,844.80	90.00	179.47	10,500.00	-224.31	-131.17	10.000	10.000	19.942	179.47	
18,040.57	90.00	179.47	10,500.00	-7,419.78	-65.23	0.000	0.000	0.000	0.00	505H LTP/PBHL



Aim Directional Services, LLC

Planning Report



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Project:	Lea Co., NM (NAD 83)	MD Reference:	Well @ 3499.00usft
Site:	Golden Tee 31 Fed Com 505H	North Reference:	Grid
Well:	505H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Planning		
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 (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.000	0.000	0.000
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.000	0.000	0.000
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.000	0.000	0.000
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.000	0.000	0.000
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.000	0.000	0.000
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.000	0.000	0.000
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.000	0.000	0.000
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.000	0.000	0.000
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.000	0.000	0.000
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.000	0.000	0.000
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.000	0.000	0.000
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.000	0.000	0.000
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.000	0.000	0.000
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.000	0.000	0.000
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.000	0.000	0.000
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.000	0.000	0.000
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.000	0.000	0.000
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.000	0.000	0.000
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.000	0.000	0.000
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.000	0.000	0.000
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.000	0.000	0.000
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.000	0.000	0.000
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.000	0.000	0.000
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.000	0.000	0.000
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.000	0.000	0.000
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.000	0.000	0.000
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.000	0.000	0.000
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.000	0.000	0.000
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.000	0.000	0.000
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.000	0.000	0.000
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.000	0.000	0.000
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.000	0.000	0.000
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.000	0.000	0.000
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.000	0.000	0.000
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.000	0.000	0.000
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.000	0.000	0.000
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.000	0.000	0.000
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.000	0.000	0.000
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.000	0.000	0.000
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.000	0.000	0.000
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.000	0.000	0.000
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.000	0.000	0.000
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.000	0.000	0.000
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.000	0.000	0.000
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.000	0.000	0.000
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.000	0.000	0.000
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.000	0.000	0.000
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.000	0.000	0.000
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.000	0.000	0.000
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.000	0.000	0.000
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.000	0.000	0.000
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.000	0.000	0.000
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.000	0.000	0.000



Aim Directional Services, LLC

Planning Report



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Company:	Avant Operating, LLC	TVD Reference:	Well @ 3499.00usft
Project:	Lea Co., NM (NAD 83)	MD Reference:	Well @ 3499.00usft
Site:	Golden Tee 31 Fed Com 505H	North Reference:	Grid
Well:	505H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Planning		
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 (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.000	0.000	0.000
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.000	0.000	0.000
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.000	0.000	0.000
5,620.00	0.00	0.00	5,620.00	0.00	0.00	0.00	0.000	0.000	0.000
Build: 1°/100									
5,700.00	0.80	338.63	5,700.00	0.52	-0.20	-0.52	1.000	1.000	0.000
5,800.00	1.80	338.63	5,799.97	2.63	-1.03	-2.64	1.000	1.000	0.000
5,900.00	2.80	338.63	5,899.89	6.37	-2.49	-6.39	1.000	1.000	0.000
6,000.00	3.80	338.63	5,999.72	11.73	-4.59	-11.77	1.000	1.000	0.000
6,100.00	4.80	338.63	6,099.44	18.71	-7.32	-18.78	1.000	1.000	0.000
6,192.51	5.73	338.63	6,191.56	26.61	-10.41	-26.71	1.000	1.000	0.000
Hold: 5.73° Inc, 338.63° Azm									
6,200.00	5.73	338.63	6,199.01	27.31	-10.69	-27.41	0.000	0.000	0.000
6,300.00	5.73	338.63	6,298.51	36.60	-14.32	-36.73	0.000	0.000	0.000
6,400.00	5.73	338.63	6,398.01	45.89	-17.96	-46.05	0.000	0.000	0.000
6,500.00	5.73	338.63	6,497.51	55.18	-21.59	-55.38	0.000	0.000	0.000
6,600.00	5.73	338.63	6,597.02	64.47	-25.23	-64.70	0.000	0.000	0.000
6,700.00	5.73	338.63	6,696.52	73.76	-28.86	-74.02	0.000	0.000	0.000
6,800.00	5.73	338.63	6,796.02	83.05	-32.50	-83.35	0.000	0.000	0.000
6,900.00	5.73	338.63	6,895.52	92.34	-36.13	-92.67	0.000	0.000	0.000
7,000.00	5.73	338.63	6,995.02	101.63	-39.77	-101.99	0.000	0.000	0.000
7,100.00	5.73	338.63	7,094.52	110.92	-43.40	-111.31	0.000	0.000	0.000
7,200.00	5.73	338.63	7,194.02	120.21	-47.04	-120.64	0.000	0.000	0.000
7,300.00	5.73	338.63	7,293.52	129.50	-50.67	-129.96	0.000	0.000	0.000
7,400.00	5.73	338.63	7,393.02	138.79	-54.31	-139.28	0.000	0.000	0.000
7,500.00	5.73	338.63	7,492.53	148.08	-57.94	-148.61	0.000	0.000	0.000
7,600.00	5.73	338.63	7,592.03	157.37	-61.58	-157.93	0.000	0.000	0.000
7,700.00	5.73	338.63	7,691.53	166.66	-65.21	-167.25	0.000	0.000	0.000
7,800.00	5.73	338.63	7,791.03	175.95	-68.85	-176.57	0.000	0.000	0.000
7,900.00	5.73	338.63	7,890.53	185.23	-72.48	-185.90	0.000	0.000	0.000
8,000.00	5.73	338.63	7,990.03	194.52	-76.12	-195.22	0.000	0.000	0.000
8,100.00	5.73	338.63	8,089.53	203.81	-79.75	-204.54	0.000	0.000	0.000
8,200.00	5.73	338.63	8,189.03	213.10	-83.39	-213.87	0.000	0.000	0.000
8,300.00	5.73	338.63	8,288.54	222.39	-87.02	-223.19	0.000	0.000	0.000
8,400.00	5.73	338.63	8,388.04	231.68	-90.66	-232.51	0.000	0.000	0.000
8,500.00	5.73	338.63	8,487.54	240.97	-94.29	-241.83	0.000	0.000	0.000
8,600.00	5.73	338.63	8,587.04	250.26	-97.93	-251.16	0.000	0.000	0.000
8,700.00	5.73	338.63	8,686.54	259.55	-101.56	-260.48	0.000	0.000	0.000
8,800.00	5.73	338.63	8,786.04	268.84	-105.20	-269.80	0.000	0.000	0.000
8,900.00	5.73	338.63	8,885.54	278.13	-108.83	-279.13	0.000	0.000	0.000
9,000.00	5.73	338.63	8,985.04	287.42	-112.47	-288.45	0.000	0.000	0.000
9,100.00	5.73	338.63	9,084.55	296.71	-116.10	-297.77	0.000	0.000	0.000
9,200.00	5.73	338.63	9,184.05	306.00	-119.74	-307.10	0.000	0.000	0.000
9,300.00	5.73	338.63	9,283.55	315.29	-123.37	-316.42	0.000	0.000	0.000
9,372.30	5.73	338.63	9,355.48	322.01	-126.00	-323.16	0.000	0.000	0.000
Drop: 1°/100'									
9,400.00	5.45	338.63	9,383.06	324.52	-126.98	-325.68	1.000	-1.000	0.000
9,500.00	4.45	338.63	9,482.68	332.55	-130.13	-333.74	1.000	-1.000	0.000
9,600.00	3.45	338.63	9,582.44	338.96	-132.64	-340.17	1.000	-1.000	0.000
9,700.00	2.45	338.63	9,682.31	343.75	-134.51	-344.98	1.000	-1.000	0.000
9,800.00	1.45	338.63	9,782.25	346.92	-135.75	-348.16	1.000	-1.000	0.000
9,900.00	0.45	338.63	9,882.24	348.46	-136.35	-349.70	1.000	-1.000	0.000
9,944.81	0.00	0.00	9,927.04	348.62	-136.42	-349.87	1.000	-1.000	0.000



Aim Directional Services, LLC

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Project:	Lea Co., NM (NAD 83)	MD Reference:	Well @ 3499.00usft
Site:	Golden Tee 31 Fed Com 505H	North Reference:	Grid
Well:	505H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Planning		
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 (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
KOP: 10°/100' @ 9944.81' MD									
9,950.00	0.52	179.47	9,932.23	348.60	-136.41	-349.84	10.000	10.000	0.000
10,000.00	5.52	179.47	9,982.15	345.96	-136.39	-347.21	10.000	10.000	0.000
10,050.00	10.52	179.47	10,031.64	338.99	-136.33	-340.24	10.000	10.000	0.000
10,100.00	15.52	179.47	10,080.34	327.73	-136.22	-328.98	10.000	10.000	0.000
10,150.00	20.52	179.47	10,127.88	312.27	-136.08	-313.52	10.000	10.000	0.000
10,200.00	25.52	179.47	10,173.88	292.72	-135.90	-293.97	10.000	10.000	0.000
10,250.00	30.52	179.47	10,218.01	269.24	-135.69	-270.49	10.000	10.000	0.000
10,300.00	35.52	179.47	10,259.92	242.01	-135.44	-243.25	10.000	10.000	0.000
10,350.00	40.52	179.47	10,299.29	211.22	-135.16	-212.46	10.000	10.000	0.000
10,400.00	45.52	179.47	10,335.84	177.12	-134.84	-178.36	10.000	10.000	0.000
10,450.00	50.52	179.47	10,369.27	139.97	-134.50	-141.21	10.000	10.000	0.000
10,500.00	55.52	179.47	10,399.34	100.04	-134.14	-101.28	10.000	10.000	0.000
10,550.00	60.52	179.47	10,425.81	57.64	-133.75	-58.88	10.000	10.000	0.000
10,600.00	65.52	179.47	10,448.49	13.10	-133.34	-14.33	10.000	10.000	0.000
10,650.00	70.52	179.47	10,467.20	-33.25	-132.92	32.02	10.000	10.000	0.000
10,700.00	75.52	179.47	10,481.80	-81.05	-132.48	79.82	10.000	10.000	0.000
10,750.00	80.52	179.47	10,492.17	-129.94	-132.03	128.72	10.000	10.000	0.000
10,800.00	85.52	179.47	10,498.25	-179.56	-131.58	178.33	10.000	10.000	0.000
10,844.80	90.00	179.47	10,500.00	-224.31	-131.17	223.09	10.000	10.000	0.000
LP: 10844.80' MD, 90.00° Inc, 179.47° Azm									
10,900.00	90.00	179.47	10,500.00	-279.51	-130.66	278.29	0.000	0.000	0.000
11,000.00	90.00	179.47	10,500.00	-379.50	-129.74	378.29	0.000	0.000	0.000
11,100.00	90.00	179.47	10,500.00	-479.50	-128.83	478.29	0.000	0.000	0.000
11,200.00	90.00	179.47	10,500.00	-579.49	-127.91	578.29	0.000	0.000	0.000
11,300.00	90.00	179.47	10,500.00	-679.49	-126.99	678.29	0.000	0.000	0.000
11,400.00	90.00	179.47	10,500.00	-779.48	-126.08	778.29	0.000	0.000	0.000
11,500.00	90.00	179.47	10,500.00	-879.48	-125.16	878.29	0.000	0.000	0.000
11,600.00	90.00	179.47	10,500.00	-979.48	-124.25	978.29	0.000	0.000	0.000
11,700.00	90.00	179.47	10,500.00	-1,079.47	-123.33	1,078.29	0.000	0.000	0.000
11,800.00	90.00	179.47	10,500.00	-1,179.47	-122.41	1,178.29	0.000	0.000	0.000
11,900.00	90.00	179.47	10,500.00	-1,279.46	-121.50	1,278.29	0.000	0.000	0.000
12,000.00	90.00	179.47	10,500.00	-1,379.46	-120.58	1,378.29	0.000	0.000	0.000
12,100.00	90.00	179.47	10,500.00	-1,479.46	-119.66	1,478.29	0.000	0.000	0.000
12,200.00	90.00	179.47	10,500.00	-1,579.45	-118.75	1,578.29	0.000	0.000	0.000
12,300.00	90.00	179.47	10,500.00	-1,679.45	-117.83	1,678.29	0.000	0.000	0.000
12,400.00	90.00	179.47	10,500.00	-1,779.44	-116.91	1,778.29	0.000	0.000	0.000
12,500.00	90.00	179.47	10,500.00	-1,879.44	-116.00	1,878.29	0.000	0.000	0.000
12,600.00	90.00	179.47	10,500.00	-1,979.43	-115.08	1,978.29	0.000	0.000	0.000
12,700.00	90.00	179.47	10,500.00	-2,079.43	-114.17	2,078.29	0.000	0.000	0.000
12,800.00	90.00	179.47	10,500.00	-2,179.43	-113.25	2,178.29	0.000	0.000	0.000
12,900.00	90.00	179.47	10,500.00	-2,279.42	-112.33	2,278.29	0.000	0.000	0.000
13,000.00	90.00	179.47	10,500.00	-2,379.42	-111.42	2,378.29	0.000	0.000	0.000
13,100.00	90.00	179.47	10,500.00	-2,479.41	-110.50	2,478.29	0.000	0.000	0.000
13,200.00	90.00	179.47	10,500.00	-2,579.41	-109.58	2,578.29	0.000	0.000	0.000
13,300.00	90.00	179.47	10,500.00	-2,679.41	-108.67	2,678.29	0.000	0.000	0.000
13,400.00	90.00	179.47	10,500.00	-2,779.40	-107.75	2,778.29	0.000	0.000	0.000
13,500.00	90.00	179.47	10,500.00	-2,879.40	-106.84	2,878.29	0.000	0.000	0.000
13,600.00	90.00	179.47	10,500.00	-2,979.39	-105.92	2,978.29	0.000	0.000	0.000
13,700.00	90.00	179.47	10,500.00	-3,079.39	-105.00	3,078.29	0.000	0.000	0.000
13,800.00	90.00	179.47	10,500.00	-3,179.38	-104.09	3,178.29	0.000	0.000	0.000
13,900.00	90.00	179.47	10,500.00	-3,279.38	-103.17	3,278.29	0.000	0.000	0.000
14,000.00	90.00	179.47	10,500.00	-3,379.38	-102.25	3,378.29	0.000	0.000	0.000



Aim Directional Services, LLC

Planning Report



Database:	RTOC- EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 505H
Company:	Avant Operating, LLC	TVD Reference:	Well @ 3499.00usft
Project:	Lea Co., NM (NAD 83)	MD Reference:	Well @ 3499.00usft
Site:	Golden Tee 31 Fed Com 505H	North Reference:	Grid
Well:	505H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Planning		
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 (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
14,100.00	90.00	179.47	10,500.00	-3,479.37	-101.34	3,478.29	0.000	0.000	0.000	
14,200.00	90.00	179.47	10,500.00	-3,579.37	-100.42	3,578.29	0.000	0.000	0.000	
14,300.00	90.00	179.47	10,500.00	-3,679.36	-99.51	3,678.29	0.000	0.000	0.000	
14,400.00	90.00	179.47	10,500.00	-3,779.36	-98.59	3,778.29	0.000	0.000	0.000	
14,500.00	90.00	179.47	10,500.00	-3,879.35	-97.67	3,878.29	0.000	0.000	0.000	
14,600.00	90.00	179.47	10,500.00	-3,979.35	-96.76	3,978.29	0.000	0.000	0.000	
14,700.00	90.00	179.47	10,500.00	-4,079.35	-95.84	4,078.29	0.000	0.000	0.000	
14,800.00	90.00	179.47	10,500.00	-4,179.34	-94.92	4,178.29	0.000	0.000	0.000	
14,900.00	90.00	179.47	10,500.00	-4,279.34	-94.01	4,278.29	0.000	0.000	0.000	
15,000.00	90.00	179.47	10,500.00	-4,379.33	-93.09	4,378.29	0.000	0.000	0.000	
15,100.00	90.00	179.47	10,500.00	-4,479.33	-92.17	4,478.29	0.000	0.000	0.000	
15,200.00	90.00	179.47	10,500.00	-4,579.33	-91.26	4,578.29	0.000	0.000	0.000	
15,300.00	90.00	179.47	10,500.00	-4,679.32	-90.34	4,678.29	0.000	0.000	0.000	
15,400.00	90.00	179.47	10,500.00	-4,779.32	-89.43	4,778.29	0.000	0.000	0.000	
15,500.00	90.00	179.47	10,500.00	-4,879.31	-88.51	4,878.29	0.000	0.000	0.000	
15,600.00	90.00	179.47	10,500.00	-4,979.31	-87.59	4,978.29	0.000	0.000	0.000	
15,700.00	90.00	179.47	10,500.00	-5,079.30	-86.68	5,078.29	0.000	0.000	0.000	
15,800.00	90.00	179.47	10,500.00	-5,179.30	-85.76	5,178.29	0.000	0.000	0.000	
15,900.00	90.00	179.47	10,500.00	-5,279.30	-84.84	5,278.29	0.000	0.000	0.000	
16,000.00	90.00	179.47	10,500.00	-5,379.29	-83.93	5,378.29	0.000	0.000	0.000	
16,100.00	90.00	179.47	10,500.00	-5,479.29	-83.01	5,478.29	0.000	0.000	0.000	
16,200.00	90.00	179.47	10,500.00	-5,579.28	-82.10	5,578.29	0.000	0.000	0.000	
16,300.00	90.00	179.47	10,500.00	-5,679.28	-81.18	5,678.29	0.000	0.000	0.000	
16,400.00	90.00	179.47	10,500.00	-5,779.27	-80.26	5,778.29	0.000	0.000	0.000	
16,500.00	90.00	179.47	10,500.00	-5,879.27	-79.35	5,878.29	0.000	0.000	0.000	
16,600.00	90.00	179.47	10,500.00	-5,979.27	-78.43	5,978.29	0.000	0.000	0.000	
16,700.00	90.00	179.47	10,500.00	-6,079.26	-77.51	6,078.29	0.000	0.000	0.000	
16,800.00	90.00	179.47	10,500.00	-6,179.26	-76.60	6,178.29	0.000	0.000	0.000	
16,900.00	90.00	179.47	10,500.00	-6,279.25	-75.68	6,278.29	0.000	0.000	0.000	
17,000.00	90.00	179.47	10,500.00	-6,379.25	-74.76	6,378.29	0.000	0.000	0.000	
17,100.00	90.00	179.47	10,500.00	-6,479.25	-73.85	6,478.29	0.000	0.000	0.000	
17,200.00	90.00	179.47	10,500.00	-6,579.24	-72.93	6,578.29	0.000	0.000	0.000	
17,300.00	90.00	179.47	10,500.00	-6,679.24	-72.02	6,678.29	0.000	0.000	0.000	
17,400.00	90.00	179.47	10,500.00	-6,779.23	-71.10	6,778.29	0.000	0.000	0.000	
17,500.00	90.00	179.47	10,500.00	-6,879.23	-70.18	6,878.29	0.000	0.000	0.000	
17,600.00	90.00	179.47	10,500.00	-6,979.22	-69.27	6,978.29	0.000	0.000	0.000	
17,700.00	90.00	179.47	10,500.00	-7,079.22	-68.35	7,078.29	0.000	0.000	0.000	
17,800.00	90.00	179.47	10,500.00	-7,179.22	-67.43	7,178.29	0.000	0.000	0.000	
17,900.00	90.00	179.47	10,500.00	-7,279.21	-66.52	7,278.29	0.000	0.000	0.000	
18,000.00	90.00	179.47	10,500.00	-7,379.21	-65.60	7,378.29	0.000	0.000	0.000	
18,040.57	90.00	179.47	10,500.00	-7,419.78	-65.23	7,418.86	0.000	0.000	0.000	
PBHL @ 18040.57' MD/10500.00' TVD										



Aim Directional Services, LLC

Planning Report



Database:	RTOC- EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 505H
Company:	Avant Operating, LLC	TVD Reference:	Well @ 3499.00usft
Project:	Lea Co., NM (NAD 83)	MD Reference:	Well @ 3499.00usft
Site:	Golden Tee 31 Fed Com 505H	North Reference:	Grid
Well:	505H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Planning		
Design:	Plan 0.1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
5,620.00	5,620.00	0.00	0.00	Build: 1°/100
6,192.51	6,191.56	26.61	-10.41	Hold: 5.73° Inc, 338.63° Azm
9,372.30	9,355.48	322.01	-126.00	Drop: 1°/100'
9,944.81	9,927.04	348.62	-136.42	KOP: 10°/100' @ 9944.81' MD
10,844.80	10,500.00	-224.31	-131.17	LP: 10844.80' MD, 90.00° Inc, 179.47° Azm
18,040.57	10,500.00	-7,419.78	-65.23	PBHL @ 18040.57' MD/10500.00' TVD

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

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

CONDITIONS

Action 104950

CONDITIONS

Operator: Avant Operating, LLC 1515 Wynkoop Street Denver, CO 80202	OGRID: 330396
	Action Number: 104950
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	5/10/2022