

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: 304H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM128836	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002549327	Well Status: Approved Application for Permit to Drill	Operator: AVANT OPERATING LLC

Notice of Intent

Sundry ID: 2663005

Type of Submission: Notice of Intent

Type of Action: Other

Date Sundry Submitted: 03/21/2022

Time Sundry Submitted: 09:59

Date proposed operation will begin: 03/28/2022

Procedure Description: Request to move SHL from 550' FNL & 430' FEL (Pad 2) to 400' FNL & 1514' FEL (Pad 4). Request to move BHL from 2540' FNL & 2178' FEL to 2540' FNL & 2514' FWL. TVD will change from 9880' to 9800'. MD will change from 17616' to 17591'. 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 acre)

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_20220321090903.pdf

AC_Report_20220321090839.pdf

Well_Bore_20220321090823.pdf

Well Name: GOLDEN TEE 31 FED
COM**Well Location:** T22S / R35E / SEC 31 /
NENE /**County or Parish/State:****Well Number:** 304H**Type of Well:** OIL WELL**Allottee or Tribe Name:****Lease Number:** NMNM128836**Unit or CA Name:****Unit or CA Number:****US Well Number:** 3002549327**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 12:19 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:** 05/05/2022**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) 476-3460 Fax: (505) 476-3462

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

x AMENDED REPORT
revised SHL & BHL

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-49327	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 304H
⁷ OGRID No. 330396	⁸ Operator Name Avant Operating, LLC	⁹ Elevation 3474

¹⁰ Surface Location

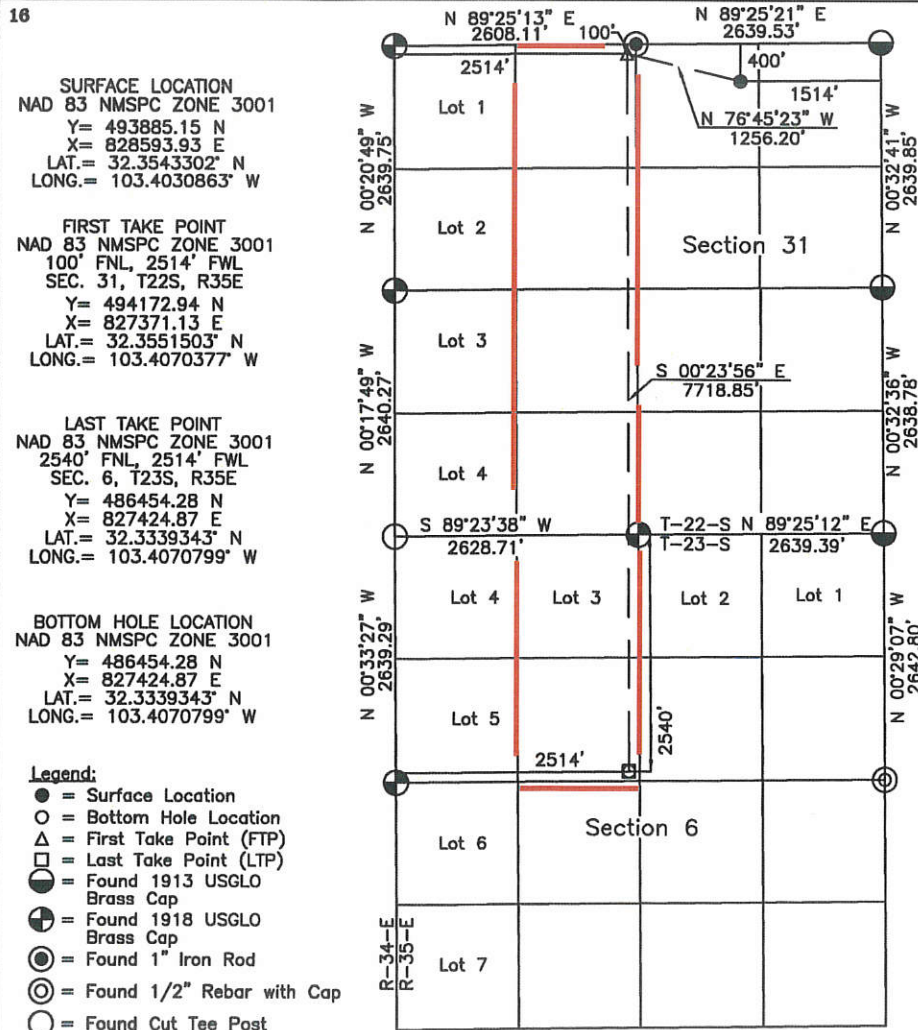
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	31	22 S	35 E		400	North	1514	East	Lea

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
F	6	23 S	35 E		2540	North	2514	West	Lea

¹² Dedicated Acres 240.09	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



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 3-15-22
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 304H
304H**

**Planning
Plan 0.1**

Anticollision Report

09 February, 2022





Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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)
0.00	17,590.89	Plan 0.1 (Planning)
		Tool Name
		B001Mb_MWD+HRGM
		Description
		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
Centennial Winnebago 30 State Com 302H						
302H Offset - Centennial 302H Offset Plan - 302H Offset	9,521.22	9,258.86	941.52	884.30	16.454	CC, ES
302H Offset - Centennial 302H Offset Plan - 302H Offset	9,599.51	9,315.47	943.45	886.00	16.421	SF
Centennial Winnebago 30 State Com 303H						
303H Offset - Centennial 303H Offset Plan - 303H Offse	9,177.28	9,109.22	212.44	143.91	3.100	CC
303H Offset - Centennial 303H Offset Plan - 303H Offse	9,300.00	9,231.45	213.00	143.72	3.075	ES
303H Offset - Centennial 303H Offset Plan - 303H Offse	9,400.00	9,331.29	213.65	143.89	3.063	SF
Golden Tee 31 Fed Com 305H						
305H - Planning - Plan 0.1	5,620.00	5,620.00	65.97	26.13	1.656	CC, ES
305H - Planning - Plan 0.1	5,700.00	5,700.28	66.82	26.41	1.654	SF
Golden Tee 31 Fed Com 504H						
504H - Planning - Plan 0.1	5,620.00	5,620.00	33.04	-6.80	0.829	Level 1, CC
504H - Planning - Plan 0.1	9,650.00	9,631.78	56.67	-18.89	0.750	Level 1, ES, SF
Golden Tee 31 Fed Com 505H						
505H - Planning - Plan 0.1	5,620.00	5,620.00	99.02	59.17	2.485	CC, ES
505H - Planning - Plan 0.1	5,700.00	5,700.49	99.84	59.43	2.471	SF
Winnebago 30 State Com						
302H - OH - AC Plan	9,521.22	9,258.86	941.52	874.02	13.949	CC, ES
302H - OH - AC Plan	9,599.51	9,315.47	943.44	875.64	13.913	SF
303H - OH - AC Plan	9,177.25	9,109.19	212.45	143.46	3.079	CC
303H - OH - AC Plan	9,400.00	9,331.29	213.66	142.83	3.017	ES, SF
503H - OH / 65920 - Surveys (H&P 618)	9,548.11	9,271.84	890.51	829.48	14.590	CC, ES
503H - OH / 65920 - Surveys (H&P 618)	9,700.00	9,413.96	895.68	833.63	14.434	SF
504H - OH / 65921 - Surveys (H&P 618)	9,600.72	9,335.89	294.00	227.49	4.421	CC, ES, SF
505H - OH / 68126 - Surveys (H&P 296)	7,462.02	7,422.44	382.74	329.34	7.168	CC
505H - OH / 68126 - Surveys (H&P 296)	7,489.65	7,444.04	383.08	329.24	7.116	ES
505H - OH / 68126 - Surveys (H&P 296)	7,600.00	7,540.38	390.19	334.37	6.990	SF
Winnebago 30 State Com 503H						
503H (Offset) - Drilling - Surveys	9,547.73	9,271.32	893.00	844.74	18.503	CC, ES
503H (Offset) - Drilling - Surveys	9,700.00	9,413.84	898.21	849.17	18.317	SF

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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Reference Wellbore	Planning	Database:	RTOC- EDM 5000.1 Single User Db
Reference Design:	Plan 0.1	Offset TVD Reference:	Offset Datum

Offset Design Centennial Winnebago 30 State Com 302H - 302H Offset - Centennial 302H Offset Plan - 302H Offset										Offset Site Error:		0.00 usft	
Survey Program: 0-MWD+IFR1+MS										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	-76.57	673.59	-2,821.06	2,900.42				
100.00	100.00	82.10	82.10	0.13	0.35	-76.57	673.59	-2,821.06	2,900.37	2,899.89	0.48	6,030.632	
200.00	200.00	182.10	182.10	0.49	1.10	-76.57	673.59	-2,821.06	2,900.37	2,898.77	1.59	1,819.726	
300.00	300.00	282.10	282.10	0.85	1.66	-76.57	673.59	-2,821.06	2,900.37	2,897.86	2.51	1,156.874	
400.00	400.00	382.10	382.10	1.21	2.06	-76.57	673.59	-2,821.06	2,900.37	2,897.09	3.27	886.624	
500.00	500.00	482.10	482.10	1.57	2.40	-76.57	673.59	-2,821.06	2,900.37	2,896.40	3.97	730.782	
600.00	600.00	582.10	582.10	1.93	2.70	-76.57	673.59	-2,821.06	2,900.37	2,895.74	4.63	626.953	
700.00	700.00	682.10	682.10	2.29	2.97	-76.57	673.59	-2,821.06	2,900.37	2,895.11	5.26	551.872	
800.00	800.00	782.10	782.10	2.64	3.22	-76.57	673.59	-2,821.06	2,900.37	2,894.50	5.86	494.594	
900.00	900.00	882.10	882.10	3.00	3.45	-76.57	673.59	-2,821.06	2,900.37	2,893.91	6.46	449.213	
1,000.00	1,000.00	982.10	982.10	3.36	3.68	-76.57	673.59	-2,821.06	2,900.37	2,893.33	7.04	412.226	
1,100.00	1,100.00	1,082.10	1,082.10	3.72	3.89	-76.57	673.59	-2,821.06	2,900.37	2,892.76	7.60	381.409	
1,200.00	1,200.00	1,182.10	1,182.10	4.08	4.09	-76.57	673.59	-2,821.06	2,900.37	2,892.20	8.16	355.278	
1,300.00	1,300.00	1,282.10	1,282.10	4.44	4.28	-76.57	673.59	-2,821.06	2,900.37	2,891.65	8.72	332.799	
1,400.00	1,400.00	1,382.10	1,382.10	4.79	4.47	-76.57	673.59	-2,821.06	2,900.37	2,891.11	9.26	313.226	
1,500.00	1,500.00	1,482.10	1,482.10	5.15	4.65	-76.57	673.59	-2,821.06	2,900.37	2,890.57	9.80	296.010	
1,600.00	1,600.00	1,582.10	1,582.10	5.51	4.82	-76.57	673.59	-2,821.06	2,900.37	2,890.03	10.33	280.733	
1,700.00	1,700.00	1,682.10	1,682.10	5.87	4.99	-76.57	673.59	-2,821.06	2,900.37	2,889.51	10.86	267.073	
1,800.00	1,800.00	1,782.10	1,782.10	6.23	5.16	-76.57	673.59	-2,821.06	2,900.37	2,888.98	11.38	254.777	
1,900.00	1,900.00	1,882.10	1,882.10	6.59	5.32	-76.57	673.59	-2,821.06	2,900.37	2,888.46	11.90	243.643	
2,000.00	2,000.00	1,982.10	1,982.10	6.95	5.48	-76.57	673.59	-2,821.06	2,900.37	2,887.95	12.42	233.509	
2,100.00	2,100.00	2,166.04	2,166.02	7.30	5.71	-76.57	672.92	-2,818.75	2,899.18	2,886.16	13.01	222.796	
2,200.00	2,200.00	2,367.88	2,367.63	7.66	6.03	-76.58	670.33	-2,809.72	2,894.52	2,880.86	13.67	211.792	
2,300.00	2,300.00	2,568.81	2,567.88	8.02	6.42	-76.60	665.79	-2,793.95	2,886.37	2,871.98	14.39	200.634	
2,400.00	2,400.00	2,768.35	2,766.05	8.38	6.89	-76.62	659.37	-2,771.63	2,874.73	2,859.56	15.18	189.418	
2,500.00	2,500.00	2,966.03	2,961.46	8.74	7.45	-76.65	651.14	-2,742.98	2,859.67	2,843.64	16.03	178.344	
2,600.00	2,600.00	3,081.44	3,075.14	9.10	7.80	-76.67	645.63	-2,723.82	2,842.37	2,825.64	16.74	169.798	
2,700.00	2,700.00	3,179.92	3,172.12	9.45	8.12	-76.68	640.90	-2,707.38	2,825.03	2,807.61	17.42	162.179	
2,800.00	2,800.00	3,278.40	3,269.11	9.81	8.45	-76.70	636.17	-2,690.95	2,807.68	2,789.57	18.11	155.029	
2,900.00	2,900.00	3,376.89	3,366.09	10.17	8.79	-76.72	631.45	-2,674.51	2,790.34	2,771.53	18.81	148.319	
3,000.00	3,000.00	3,475.37	3,463.07	10.53	9.14	-76.73	626.72	-2,658.08	2,772.99	2,753.47	19.52	142.024	
3,100.00	3,100.00	3,573.85	3,560.06	10.89	9.50	-76.75	622.00	-2,641.64	2,755.65	2,735.40	20.25	136.115	
3,200.00	3,200.00	3,672.33	3,657.04	11.25	9.86	-76.77	617.27	-2,625.21	2,738.30	2,717.33	20.97	130.565	
3,300.00	3,300.00	3,770.81	3,754.03	11.61	10.24	-76.79	612.54	-2,608.77	2,720.96	2,699.25	21.71	125.349	
3,400.00	3,400.00	3,869.29	3,851.01	11.96	10.61	-76.80	607.82	-2,592.34	2,703.62	2,681.17	22.45	120.442	
3,500.00	3,500.00	3,967.77	3,948.00	12.32	11.00	-76.82	603.09	-2,575.90	2,686.27	2,663.08	23.19	115.822	
3,600.00	3,600.00	4,066.25	4,044.98	12.68	11.39	-76.84	598.37	-2,559.47	2,668.93	2,644.98	23.94	111.467	
3,700.00	3,700.00	4,164.73	4,141.97	13.04	11.78	-76.86	593.64	-2,543.03	2,651.58	2,626.89	24.70	107.358	
3,800.00	3,800.00	4,263.21	4,238.95	13.40	12.18	-76.88	588.91	-2,526.60	2,634.24	2,608.78	25.46	103.477	
3,900.00	3,900.00	4,361.69	4,335.94	13.76	12.58	-76.90	584.19	-2,510.16	2,616.90	2,590.68	26.22	99.808	
4,000.00	4,000.00	4,460.17	4,432.92	14.11	12.98	-76.92	579.46	-2,493.73	2,599.56	2,572.57	26.98	96.334	
4,100.00	4,100.00	4,558.65	4,529.91	14.47	13.39	-76.94	574.74	-2,477.29	2,582.21	2,554.46	27.75	93.043	
4,200.00	4,200.00	4,657.14	4,626.89	14.83	13.80	-76.96	570.01	-2,460.86	2,564.87	2,536.35	28.52	89.920	
4,300.00	4,300.00	4,755.62	4,723.88	15.19	14.21	-76.98	565.28	-2,444.42	2,547.53	2,518.23	29.30	86.954	
4,400.00	4,400.00	4,854.10	4,820.86	15.55	14.62	-77.00	560.56	-2,427.99	2,530.19	2,500.12	30.07	84.135	
4,500.00	4,500.00	4,952.58	4,917.84	15.91	15.04	-77.02	555.83	-2,411.55	2,512.85	2,482.00	30.85	81.452	
4,600.00	4,600.00	5,051.06	5,014.83	16.27	15.46	-77.04	551.11	-2,395.12	2,495.51	2,463.88	31.63	78.897	
4,700.00	4,700.00	5,149.54	5,111.81	16.62	15.88	-77.06	546.38	-2,378.68	2,478.17	2,445.76	32.41	76.460	
4,800.00	4,800.00	5,248.02	5,208.80	16.98	16.30	-77.09	541.65	-2,362.25	2,460.83	2,427.63	33.19	74.135	
4,900.00	4,900.00	5,346.50	5,305.78	17.34	16.72	-77.11	536.93	-2,345.81	2,443.49	2,409.51	33.98	71.913	
5,000.00	5,000.00	5,444.98	5,402.77	17.70	17.15	-77.13	532.20	-2,329.38	2,426.15	2,391.39	34.76	69.789	
5,100.00	5,100.00	5,543.46	5,499.75	18.06	17.57	-77.15	527.48	-2,312.94	2,408.81	2,373.26	35.55	67.757	

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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: 0-MWD+IFR1+MS												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	5,641.94	5,596.74	18.42	18.00	-77.18	522.75	-2,296.51	2,391.47	2,355.13	36.34	65.810	
5,300.00	5,300.00	5,740.42	5,693.72	18.77	18.43	-77.20	518.02	-2,280.07	2,374.14	2,337.01	37.13	63.945	
5,400.00	5,400.00	5,838.91	5,790.71	19.13	18.86	-77.22	513.30	-2,263.64	2,356.80	2,318.88	37.92	62.155	
5,500.00	5,500.00	5,937.39	5,887.69	19.49	19.29	-77.25	508.57	-2,247.20	2,339.46	2,300.75	38.71	60.437	
5,600.00	5,600.00	6,035.87	5,984.68	19.85	19.72	-77.27	503.85	-2,230.77	2,322.12	2,282.63	39.50	58.794	
5,620.00	5,620.00	6,055.56	6,004.07	19.92	19.80	-77.28	502.90	-2,227.48	2,318.66	2,279.00	39.65	58.476	
5,700.00	5,699.99	6,100.00	6,047.86	20.20	19.98	-0.54	500.80	-2,220.18	2,304.12	2,263.96	40.16	57.373	
5,800.00	5,799.89	6,183.80	6,130.57	20.55	20.34	-0.56	497.09	-2,207.28	2,283.98	2,243.10	40.88	55.871	
5,900.00	5,899.60	6,253.65	6,199.67	20.90	20.64	-0.58	494.26	-2,197.43	2,261.86	2,220.32	41.55	54.442	
6,000.00	5,999.01	6,323.36	6,268.74	21.24	20.93	-0.60	491.66	-2,188.40	2,237.72	2,195.52	42.20	53.023	
6,100.00	6,098.00	6,400.00	6,344.81	21.59	21.24	-0.63	489.08	-2,179.40	2,211.57	2,168.70	42.87	51.587	
6,200.00	6,196.47	6,462.29	6,406.72	21.95	21.49	-0.65	487.18	-2,172.81	2,183.39	2,139.91	43.47	50.223	
6,300.00	6,294.31	6,531.48	6,475.57	22.31	21.76	-0.67	485.29	-2,166.25	2,153.21	2,109.13	44.09	48.838	
6,400.00	6,391.42	6,600.00	6,543.83	22.67	22.02	-0.69	483.65	-2,160.54	2,121.05	2,076.36	44.69	47.464	
6,500.00	6,487.69	6,669.25	6,612.89	23.04	22.27	-0.72	482.22	-2,155.57	2,086.91	2,041.64	45.27	46.099	
6,600.00	6,583.01	6,737.79	6,681.29	23.41	22.51	-0.74	481.03	-2,151.44	2,050.79	2,004.96	45.84	44.743	
6,700.00	6,677.29	6,800.00	6,743.42	23.80	22.73	-0.77	480.15	-2,148.37	2,012.74	1,966.38	46.36	43.413	
6,800.00	6,770.41	6,874.11	6,817.47	24.21	22.96	-0.79	479.34	-2,145.56	1,972.71	1,925.81	46.91	42.055	
6,900.00	6,862.29	6,941.85	6,885.18	24.63	23.16	-0.82	478.84	-2,143.79	1,930.77	1,883.36	47.41	40.728	
7,000.00	6,952.81	7,009.29	6,952.61	25.07	23.33	-0.85	478.55	-2,142.80	1,886.91	1,839.04	47.87	39.415	
7,100.00	7,041.88	7,080.65	7,023.98	25.53	23.39	-0.88	478.48	-2,142.56	1,841.13	1,792.89	48.24	38.169	
7,200.00	7,129.40	7,168.17	7,111.50	26.02	23.41	-0.92	478.48	-2,142.56	1,792.77	1,744.20	48.57	36.913	
7,300.00	7,215.28	7,254.05	7,197.38	26.54	23.44	-0.97	478.48	-2,142.56	1,741.55	1,692.65	48.90	35.614	
7,400.00	7,299.42	7,338.20	7,281.52	27.09	23.47	-1.02	478.48	-2,142.56	1,687.53	1,638.30	49.23	34.278	
7,489.65	7,373.30	7,412.07	7,355.40	27.62	23.49	-1.08	478.48	-2,142.56	1,636.76	1,587.24	49.52	33.051	
7,500.00	7,381.75	7,420.52	7,363.85	27.69	23.50	-1.08	478.48	-2,142.56	1,630.77	1,581.22	49.56	32.907	
7,600.00	7,463.31	7,502.09	7,445.41	28.31	23.52	-1.12	478.48	-2,142.56	1,572.93	1,523.05	49.88	31.534	
7,700.00	7,544.88	7,583.66	7,526.98	28.97	23.55	-1.16	478.48	-2,142.56	1,515.09	1,464.88	50.21	30.175	
7,729.86	7,569.24	7,608.02	7,551.34	29.16	23.56	-1.18	478.48	-2,142.56	1,497.82	1,447.51	50.31	29.772	
7,800.00	7,626.91	7,665.69	7,609.01	29.64	23.58	-1.19	478.48	-2,142.56	1,457.91	1,407.37	50.54	28.844	
7,900.00	7,710.71	7,749.48	7,692.81	30.31	23.61	-1.21	478.48	-2,142.56	1,403.35	1,352.46	50.89	27.576	
8,000.00	7,796.26	7,835.03	7,778.36	30.98	23.64	-1.23	478.48	-2,142.56	1,351.59	1,300.34	51.25	26.373	
8,100.00	7,883.46	7,922.24	7,865.56	31.64	23.67	-1.25	478.48	-2,142.56	1,302.67	1,251.05	51.62	25.237	
8,200.00	7,972.24	8,011.01	7,954.34	32.28	23.70	-1.28	478.48	-2,142.56	1,256.66	1,204.66	52.00	24.168	
8,300.00	8,062.49	8,101.26	8,044.59	32.91	23.73	-1.30	478.48	-2,142.56	1,213.60	1,161.21	52.38	23.168	
8,400.00	8,154.10	8,192.88	8,136.20	33.51	23.76	-1.33	478.48	-2,142.56	1,173.54	1,120.76	52.78	22.236	
8,500.00	8,246.99	8,285.77	8,229.09	34.09	23.80	-1.35	478.48	-2,142.56	1,136.52	1,083.35	53.18	21.373	
8,600.00	8,341.05	8,379.83	8,323.15	34.65	23.83	-1.38	478.48	-2,142.56	1,102.59	1,049.02	53.58	20.579	
8,700.00	8,436.18	8,474.95	8,418.28	35.18	23.86	-1.40	478.48	-2,142.56	1,071.78	1,017.80	53.98	19.854	
8,800.00	8,532.27	8,571.05	8,514.37	35.69	23.90	-1.43	478.48	-2,142.56	1,044.13	989.74	54.39	19.197	
8,900.00	8,629.23	8,668.00	8,611.33	36.17	23.93	-1.45	478.48	-2,142.56	1,019.66	964.86	54.80	18.608	
9,000.00	8,726.93	8,765.71	8,709.03	36.62	23.97	-1.47	478.48	-2,142.56	998.40	943.20	55.20	18.086	
9,100.00	8,825.29	8,864.06	8,807.39	37.04	24.01	-1.49	478.48	-2,142.56	980.37	924.77	55.61	17.630	
9,200.00	8,924.19	8,962.96	8,906.29	37.45	24.04	-1.50	478.48	-2,142.56	965.60	909.59	56.01	17.240	
9,300.00	9,023.52	9,062.29	9,005.62	37.82	24.08	-1.51	478.48	-2,142.56	954.10	897.70	56.41	16.915	
9,400.00	9,123.18	9,161.95	9,105.28	38.18	24.11	-1.52	478.48	-2,142.56	945.88	889.09	56.79	16.654	
9,500.00	9,223.05	9,261.72	9,205.05	38.51	24.14	-1.53	478.48	-2,142.56	937.66	880.87	57.15	16.400	
9,521.22	9,244.26	9,282.86	9,226.19	38.57	24.10	-1.28	482.65	-2,142.58	941.52	884.30	57.22	16.454 CC, ES	
9,599.51	9,322.54	9,315.47	9,257.79	38.82	24.06	-77.47	492.23	-2,142.64	943.45	886.00	57.45	16.421 SF	
9,600.00	9,323.03	9,315.82	9,258.13	38.82	24.06	102.93	492.30	-2,142.64	943.48	886.02	57.45	16.421	
9,625.00	9,348.02	9,333.29	9,275.12	38.89	24.05	103.02	496.38	-2,142.67	944.98	887.46	57.52	16.430	
9,650.00	9,372.94	9,350.00	9,291.24	38.96	24.03	103.12	500.76	-2,142.70	947.00	889.43	57.57	16.449	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 0-MWD+IFR1+MS												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	
9,675.00	9,397.72	9,366.30	9,306.84	39.02	24.02	103.22	505.48	-2,142.72	949.57	891.95	57.62	16.480	
9,700.00	9,422.29	9,381.58	9,321.34	39.09	24.01	103.28	510.31	-2,142.75	952.71	895.05	57.66	16.522	
9,725.00	9,446.59	9,400.00	9,338.64	39.15	23.99	103.45	516.64	-2,142.79	956.48	898.77	57.70	16.575	
9,750.00	9,470.55	9,409.29	9,347.28	39.20	23.98	103.27	520.04	-2,142.81	960.86	903.13	57.73	16.645	
9,775.00	9,494.11	9,421.59	9,358.64	39.26	23.97	103.15	524.76	-2,142.84	965.92	908.17	57.75	16.726	
9,800.00	9,517.19	9,432.83	9,368.92	39.31	23.97	102.94	529.29	-2,142.87	971.66	913.90	57.76	16.821	
9,825.00	9,539.74	9,450.00	9,384.47	39.36	23.95	102.96	536.59	-2,142.91	978.16	920.36	57.79	16.925	
9,850.00	9,561.70	9,450.00	9,384.47	39.41	23.95	102.09	536.59	-2,142.91	985.29	927.52	57.77	17.056	
9,875.00	9,583.00	9,460.10	9,393.50	39.45	23.94	101.62	541.10	-2,142.94	993.18	935.40	57.77	17.191	
9,900.00	9,603.58	9,467.11	9,399.72	39.49	23.94	100.91	544.33	-2,142.96	1,001.78	944.01	57.77	17.342	
9,925.00	9,623.40	9,473.12	9,405.03	39.53	23.93	100.06	547.15	-2,142.98	1,011.09	953.33	57.76	17.506	
9,950.00	9,642.39	9,478.18	9,409.47	39.56	23.93	99.06	549.58	-2,142.99	1,021.08	963.33	57.74	17.683	
9,975.00	9,660.51	9,482.34	9,413.10	39.59	23.93	97.90	551.59	-2,143.01	1,031.73	973.99	57.73	17.871	
10,000.00	9,677.69	9,485.62	9,415.97	39.61	23.92	96.59	553.21	-2,143.02	1,043.00	985.28	57.72	18.070	
10,025.00	9,693.91	9,488.09	9,418.11	39.63	23.92	95.13	554.43	-2,143.02	1,054.86	997.15	57.71	18.278	
10,050.00	9,709.11	9,500.00	9,428.38	39.65	23.91	94.16	560.46	-2,143.06	1,067.37	1,009.61	57.76	18.479	
10,075.00	9,723.24	9,500.00	9,428.38	39.66	23.91	92.36	560.46	-2,143.06	1,080.26	1,022.51	57.76	18.704	
10,100.00	9,736.28	9,500.00	9,428.38	39.67	23.91	90.46	560.46	-2,143.06	1,093.62	1,035.86	57.76	18.934	
10,125.00	9,748.19	9,500.00	9,428.38	39.68	23.91	88.48	560.46	-2,143.06	1,107.40	1,049.62	57.78	19.167	
10,150.00	9,758.93	9,500.00	9,428.38	39.68	23.91	86.43	560.46	-2,143.06	1,121.53	1,063.72	57.80	19.403	
10,175.00	9,768.47	9,500.00	9,428.38	39.69	23.91	84.31	560.46	-2,143.06	1,135.97	1,078.13	57.84	19.640	
10,200.00	9,776.79	9,486.17	9,416.45	39.69	23.92	81.32	553.48	-2,143.02	1,150.48	1,092.68	57.80	19.903	
10,225.00	9,783.86	9,483.64	9,414.24	39.68	23.93	78.99	552.23	-2,143.01	1,165.31	1,107.46	57.85	20.144	
10,250.00	9,789.67	9,480.64	9,411.62	39.68	23.93	76.63	550.77	-2,143.00	1,180.27	1,122.37	57.90	20.384	
10,275.00	9,794.20	9,477.21	9,408.63	39.67	23.93	74.25	549.11	-2,142.99	1,195.31	1,137.34	57.97	20.621	
10,300.00	9,797.44	9,473.39	9,405.27	39.67	23.93	71.88	547.28	-2,142.98	1,210.37	1,152.33	58.04	20.855	
10,325.00	9,799.38	9,469.19	9,401.57	39.66	23.94	69.54	545.30	-2,142.97	1,225.40	1,167.29	58.12	21.085	
10,349.51	9,800.00	9,450.00	9,384.47	39.66	23.95	66.59	536.59	-2,142.91	1,240.28	1,182.17	58.11	21.344	
10,400.00	9,800.00	9,450.00	9,384.47	39.65	23.95	66.59	536.59	-2,142.91	1,270.76	1,212.40	58.36	21.774	
10,500.00	9,800.00	9,450.00	9,384.47	39.64	23.95	66.59	536.59	-2,142.91	1,334.72	1,275.87	58.85	22.681	
10,600.00	9,800.00	9,424.09	9,360.93	39.66	23.97	65.36	525.75	-2,142.85	1,402.21	1,343.04	59.17	23.699	
10,700.00	9,800.00	9,400.00	9,338.64	39.70	23.99	64.22	516.64	-2,142.79	1,473.26	1,413.78	59.48	24.769	
10,800.00	9,800.00	9,400.00	9,338.64	39.78	23.99	64.22	516.64	-2,142.79	1,546.97	1,487.08	59.89	25.831	
10,900.00	9,800.00	9,400.00	9,338.64	39.90	23.99	64.22	516.64	-2,142.79	1,623.50	1,563.25	60.26	26.943	
11,000.00	9,800.00	9,378.58	9,318.50	40.07	24.01	63.22	509.33	-2,142.75	1,702.00	1,641.50	60.50	28.132	
11,100.00	9,800.00	9,369.75	9,310.13	40.32	24.02	62.80	506.53	-2,142.73	1,782.61	1,721.84	60.77	29.332	
11,200.00	9,800.00	9,350.00	9,291.24	40.64	24.03	61.88	500.76	-2,142.70	1,865.10	1,804.12	60.98	30.587	
11,300.00	9,800.00	9,350.00	9,291.24	41.05	24.03	61.88	500.76	-2,142.70	1,948.86	1,887.63	61.23	31.827	
11,400.00	9,800.00	9,350.00	9,291.24	41.54	24.03	61.88	500.76	-2,142.70	2,034.09	1,972.63	61.46	33.095	
11,500.00	9,800.00	9,350.00	9,291.24	42.10	24.03	61.88	500.76	-2,142.70	2,120.61	2,058.94	61.67	34.388	
11,600.00	9,800.00	9,350.00	9,291.24	42.74	24.03	61.88	500.76	-2,142.70	2,208.27	2,146.41	61.85	35.701	
11,700.00	9,800.00	9,330.03	9,271.95	43.43	24.05	60.95	495.58	-2,142.66	2,296.53	2,234.56	61.97	37.061	
11,800.00	9,800.00	9,325.02	9,267.09	44.17	24.05	60.72	494.38	-2,142.66	2,385.87	2,323.76	62.11	38.414	
11,900.00	9,800.00	9,320.35	9,262.55	44.96	24.06	60.50	493.31	-2,142.65	2,475.97	2,413.73	62.24	39.780	
12,000.00	9,800.00	9,300.00	9,242.65	45.78	24.07	59.57	489.06	-2,142.62	2,567.03	2,504.71	62.32	41.189	
12,100.00	9,800.00	9,300.00	9,242.65	46.64	24.07	59.57	489.06	-2,142.62	2,658.34	2,595.89	62.45	42.569	
12,200.00	9,800.00	9,300.00	9,242.65	47.54	24.07	59.57	489.06	-2,142.62	2,750.25	2,687.69	62.56	43.959	
12,300.00	9,800.00	9,300.00	9,242.65	48.46	24.07	59.57	489.06	-2,142.62	2,842.71	2,780.04	62.67	45.359	
12,400.00	9,800.00	9,300.00	9,242.65	49.41	24.07	59.57	489.06	-2,142.62	2,935.67	2,872.90	62.77	46.768	
12,500.00	9,800.00	9,300.00	9,242.65	50.38	24.07	59.57	489.06	-2,142.62	3,029.07	2,966.21	62.86	48.184	
12,600.00	9,800.00	9,300.00	9,242.65	51.38	24.07	59.57	489.06	-2,142.62	3,122.88	3,059.93	62.95	49.608	
12,700.00	9,800.00	9,300.00	9,242.65	52.40	24.07	59.57	489.06	-2,142.62	3,217.07	3,154.03	63.03	51.037	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 0-MWD+IFR1+MS												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	
12,800.00	9,800.00	9,300.00	9,242.65	53.44	24.07	59.57	489.06	-2,142.62	3,311.59	3,248.48	63.11	52.471	
12,900.00	9,800.00	9,300.00	9,242.65	54.49	24.07	59.57	489.06	-2,142.62	3,406.43	3,343.24	63.19	53.910	
13,000.00	9,800.00	9,300.00	9,242.65	55.57	24.07	59.57	489.06	-2,142.62	3,501.56	3,438.30	63.26	55.353	
13,100.00	9,800.00	9,300.00	9,242.65	56.66	24.07	59.57	489.06	-2,142.62	3,596.95	3,533.62	63.33	56.800	
13,200.00	9,800.00	9,300.00	9,242.65	57.77	24.07	59.57	489.06	-2,142.62	3,692.58	3,629.19	63.39	58.250	
13,300.00	9,800.00	9,277.62	9,220.60	58.89	24.08	58.56	485.21	-2,142.60	3,787.95	3,724.54	63.41	59.738	
13,400.00	9,800.00	9,275.61	9,218.61	60.03	24.09	58.47	484.91	-2,142.60	3,883.93	3,820.46	63.47	61.196	
13,500.00	9,800.00	9,273.68	9,216.71	61.17	24.09	58.38	484.62	-2,142.60	3,980.09	3,916.57	63.52	62.656	
13,600.00	9,800.00	9,250.00	9,193.21	62.34	24.10	57.33	481.65	-2,142.58	4,076.90	4,013.37	63.53	64.169	
13,700.00	9,800.00	9,250.00	9,193.21	63.51	24.10	57.33	481.65	-2,142.58	4,173.34	4,109.75	63.59	65.628	
13,800.00	9,800.00	9,250.00	9,193.21	64.69	24.10	57.33	481.65	-2,142.58	4,269.94	4,206.30	63.65	67.087	
13,900.00	9,800.00	9,250.00	9,193.21	65.88	24.10	57.33	481.65	-2,142.58	4,366.70	4,303.00	63.70	68.548	
14,000.00	9,800.00	9,250.00	9,193.21	67.09	24.10	57.33	481.65	-2,142.58	4,463.60	4,399.84	63.76	70.009	
14,100.00	9,800.00	9,250.00	9,193.21	68.30	24.10	57.33	481.65	-2,142.58	4,560.63	4,496.82	63.81	71.471	
14,200.00	9,800.00	9,250.00	9,193.21	69.52	24.10	57.33	481.65	-2,142.58	4,657.79	4,593.93	63.86	72.933	
14,300.00	9,800.00	9,250.00	9,193.21	70.75	24.10	57.33	481.65	-2,142.58	4,755.06	4,691.15	63.92	74.396	
14,400.00	9,800.00	9,250.00	9,193.21	71.99	24.10	57.33	481.65	-2,142.58	4,852.45	4,788.48	63.97	75.858	
14,500.00	9,800.00	9,250.00	9,193.21	73.23	24.10	57.33	481.65	-2,142.58	4,949.94	4,885.92	64.02	77.320	
14,600.00	9,800.00	9,250.00	9,193.21	74.48	24.10	57.33	481.65	-2,142.58	5,047.53	4,983.46	64.07	78.782	
14,700.00	9,800.00	9,250.00	9,193.21	75.74	24.10	57.33	481.65	-2,142.58	5,145.21	5,081.09	64.12	80.243	
14,800.00	9,800.00	9,250.00	9,193.21	77.00	24.10	57.33	481.65	-2,142.58	5,242.98	5,178.81	64.17	81.703	
14,900.00	9,800.00	9,250.00	9,193.21	78.27	24.10	57.33	481.65	-2,142.58	5,340.83	5,276.61	64.22	83.163	
15,000.00	9,800.00	9,250.00	9,193.21	79.55	24.10	57.33	481.65	-2,142.58	5,438.76	5,374.49	64.27	84.621	
15,100.00	9,800.00	9,250.00	9,193.21	80.83	24.10	57.33	481.65	-2,142.58	5,536.77	5,472.44	64.32	86.079	
15,200.00	9,800.00	9,250.00	9,193.21	82.12	24.10	57.33	481.65	-2,142.58	5,634.84	5,570.47	64.37	87.535	
15,300.00	9,800.00	9,250.00	9,193.21	83.41	24.10	57.33	481.65	-2,142.58	5,732.98	5,668.56	64.42	88.989	
15,400.00	9,800.00	9,250.00	9,193.21	84.70	24.10	57.33	481.65	-2,142.58	5,831.18	5,766.71	64.47	90.443	
15,500.00	9,800.00	9,250.00	9,193.21	86.01	24.10	57.33	481.65	-2,142.58	5,929.45	5,864.92	64.52	91.895	
15,600.00	9,800.00	9,250.00	9,193.21	87.31	24.10	57.33	481.65	-2,142.58	6,027.77	5,963.19	64.58	93.345	
15,700.00	9,800.00	9,250.00	9,193.21	88.62	24.10	57.33	481.65	-2,142.58	6,126.14	6,061.52	64.63	94.793	
15,800.00	9,800.00	9,250.00	9,193.21	89.93	24.10	57.33	481.65	-2,142.58	6,224.57	6,159.89	64.68	96.239	
15,900.00	9,800.00	9,250.00	9,193.21	91.25	24.10	57.33	481.65	-2,142.58	6,323.05	6,258.32	64.73	97.684	
16,000.00	9,800.00	9,250.00	9,193.21	92.57	24.10	57.33	481.65	-2,142.58	6,421.57	6,356.79	64.78	99.126	
16,100.00	9,800.00	9,250.00	9,193.21	93.89	24.10	57.33	481.65	-2,142.58	6,520.14	6,455.31	64.83	100.566	
16,200.00	9,800.00	9,250.00	9,193.21	95.22	24.10	57.33	481.65	-2,142.58	6,618.75	6,553.86	64.89	102.005	
16,300.00	9,800.00	9,250.00	9,193.21	96.55	24.10	57.33	481.65	-2,142.58	6,717.40	6,652.46	64.94	103.440	
16,400.00	9,800.00	9,250.00	9,193.21	97.89	24.10	57.33	481.65	-2,142.58	6,816.09	6,751.10	64.99	104.874	
16,500.00	9,800.00	9,250.00	9,193.21	99.22	24.10	57.33	481.65	-2,142.58	6,914.82	6,849.78	65.05	106.305	
16,600.00	9,800.00	9,250.00	9,193.21	100.56	24.10	57.33	481.65	-2,142.58	7,013.59	6,948.49	65.10	107.734	
16,700.00	9,800.00	9,250.00	9,193.21	101.90	24.10	57.33	481.65	-2,142.58	7,112.39	7,047.23	65.16	109.160	
16,800.00	9,800.00	9,250.00	9,193.21	103.25	24.10	57.33	481.65	-2,142.58	7,211.22	7,146.01	65.21	110.583	
16,900.00	9,800.00	9,250.00	9,193.21	104.60	24.10	57.33	481.65	-2,142.58	7,310.09	7,244.82	65.27	112.004	
17,000.00	9,800.00	9,250.00	9,193.21	105.94	24.10	57.33	481.65	-2,142.58	7,408.98	7,343.66	65.32	113.422	
17,100.00	9,800.00	9,250.00	9,193.21	107.30	24.10	57.33	481.65	-2,142.58	7,507.91	7,442.53	65.38	114.837	
17,200.00	9,800.00	9,250.00	9,193.21	108.65	24.10	57.33	481.65	-2,142.58	7,606.86	7,541.42	65.44	116.249	
17,300.00	9,800.00	9,250.00	9,193.21	110.01	24.10	57.33	481.65	-2,142.58	7,705.84	7,640.34	65.49	117.659	
17,400.00	9,800.00	9,250.00	9,193.21	111.36	24.10	57.33	481.65	-2,142.58	7,804.84	7,739.29	65.55	119.065	
17,500.00	9,800.00	9,250.00	9,193.21	112.73	24.10	57.33	481.65	-2,142.58	7,903.87	7,838.26	65.61	120.469	
17,590.89	9,800.00	9,250.00	9,193.21	113.96	24.10	57.33	481.65	-2,142.58	7,993.90	7,928.24	65.66	121.742	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 0-MWD+IFR1+MS												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	-76.43	673.44	-2,791.06	2,871.21				
100.00	100.00	82.10	82.10	0.13	0.35	-76.43	673.44	-2,791.06	2,871.16	2,870.68	0.48	5,969.899	
200.00	200.00	182.10	182.10	0.49	1.10	-76.43	673.44	-2,791.06	2,871.16	2,869.56	1.59	1,801.400	
300.00	300.00	282.10	282.10	0.85	1.66	-76.43	673.44	-2,791.06	2,871.16	2,868.65	2.51	1,145.223	
400.00	400.00	382.10	382.10	1.21	2.06	-76.43	673.44	-2,791.06	2,871.16	2,867.89	3.27	877.695	
500.00	500.00	482.10	482.10	1.57	2.40	-76.43	673.44	-2,791.06	2,871.16	2,867.19	3.97	723.422	
600.00	600.00	582.10	582.10	1.93	2.70	-76.43	673.44	-2,791.06	2,871.16	2,866.53	4.63	620.640	
700.00	700.00	682.10	682.10	2.29	2.97	-76.43	673.44	-2,791.06	2,871.16	2,865.90	5.26	546.314	
800.00	800.00	782.10	782.10	2.64	3.22	-76.43	673.44	-2,791.06	2,871.16	2,865.29	5.86	489.613	
900.00	900.00	882.10	882.10	3.00	3.45	-76.43	673.44	-2,791.06	2,871.16	2,864.70	6.46	444.689	
1,000.00	1,000.00	982.10	982.10	3.36	3.68	-76.43	673.44	-2,791.06	2,871.16	2,864.12	7.04	408.074	
1,100.00	1,100.00	1,082.10	1,082.10	3.72	3.89	-76.43	673.44	-2,791.06	2,871.16	2,863.55	7.60	377.568	
1,200.00	1,200.00	1,182.10	1,182.10	4.08	4.09	-76.43	673.44	-2,791.06	2,871.16	2,862.99	8.16	351.700	
1,300.00	1,300.00	1,282.10	1,282.10	4.44	4.28	-76.43	673.44	-2,791.06	2,871.16	2,862.44	8.72	329.447	
1,400.00	1,400.00	1,382.10	1,382.10	4.79	4.47	-76.43	673.44	-2,791.06	2,871.16	2,861.90	9.26	310.072	
1,500.00	1,500.00	1,482.10	1,482.10	5.15	4.65	-76.43	673.44	-2,791.06	2,871.16	2,861.36	9.80	293.029	
1,600.00	1,600.00	1,582.10	1,582.10	5.51	4.82	-76.43	673.44	-2,791.06	2,871.16	2,860.83	10.33	277.905	
1,700.00	1,700.00	1,682.10	1,682.10	5.87	4.99	-76.43	673.44	-2,791.06	2,871.16	2,860.30	10.86	264.383	
1,800.00	1,800.00	1,782.10	1,782.10	6.23	5.16	-76.43	673.44	-2,791.06	2,871.16	2,859.77	11.38	252.211	
1,900.00	1,900.00	1,882.10	1,882.10	6.59	5.32	-76.43	673.44	-2,791.06	2,871.16	2,859.25	11.90	241.190	
2,000.00	2,000.00	1,982.10	1,982.10	6.95	5.48	-76.43	673.44	-2,791.06	2,871.16	2,858.74	12.42	231.158	
2,100.00	2,100.00	2,163.25	2,163.23	7.30	5.72	-76.43	673.18	-2,788.75	2,870.00	2,856.98	13.02	220.493	
2,200.00	2,200.00	2,361.71	2,361.47	7.66	6.03	-76.41	672.17	-2,779.72	2,865.45	2,851.78	13.67	209.598	
2,300.00	2,300.00	2,559.30	2,558.41	8.02	6.42	-76.37	670.39	-2,763.95	2,857.48	2,843.10	14.39	198.614	
2,400.00	2,400.00	2,755.56	2,753.38	8.38	6.89	-76.31	667.88	-2,741.63	2,846.12	2,830.95	15.17	187.627	
2,500.00	2,500.00	2,950.07	2,945.72	8.74	7.43	-76.23	664.66	-2,712.96	2,831.41	2,815.40	16.01	176.807	
2,600.00	2,600.00	3,142.38	3,134.83	9.10	8.04	-76.14	660.75	-2,678.26	2,813.39	2,796.48	16.91	166.336	
2,700.00	2,700.00	3,332.12	3,320.16	9.45	8.70	-76.03	656.21	-2,637.86	2,792.14	2,774.28	17.86	156.352	
2,800.00	2,800.00	3,518.94	3,501.21	9.81	9.41	-75.90	651.06	-2,592.15	2,767.72	2,748.88	18.84	146.941	
2,900.00	2,900.00	3,702.50	3,677.56	10.17	10.15	-75.75	645.37	-2,541.55	2,740.20	2,720.37	19.84	138.142	
3,000.00	3,000.00	3,815.33	3,785.26	10.53	10.59	-75.65	641.61	-2,508.14	2,710.63	2,690.02	20.61	131.504	
3,100.00	3,100.00	3,910.76	3,876.33	10.89	10.99	-75.56	638.42	-2,479.80	2,681.00	2,659.63	21.38	125.402	
3,200.00	3,200.00	4,006.19	3,967.39	11.25	11.40	-75.47	635.23	-2,451.45	2,651.38	2,629.23	22.16	119.661	
3,300.00	3,300.00	4,101.61	4,058.46	11.61	11.83	-75.38	632.04	-2,423.11	2,621.77	2,598.83	22.94	114.281	
3,400.00	3,400.00	4,197.04	4,149.52	11.96	12.25	-75.29	628.85	-2,394.76	2,592.16	2,568.43	23.73	109.234	
3,500.00	3,500.00	4,292.47	4,240.59	12.32	12.68	-75.19	625.66	-2,366.42	2,562.56	2,538.03	24.52	104.492	
3,600.00	3,600.00	4,387.90	4,331.66	12.68	13.12	-75.09	622.47	-2,338.07	2,532.96	2,507.64	25.32	100.033	
3,700.00	3,700.00	4,483.33	4,422.72	13.04	13.56	-74.99	619.28	-2,309.73	2,503.37	2,477.25	26.12	95.833	
3,800.00	3,800.00	4,578.76	4,513.79	13.40	14.00	-74.89	616.10	-2,281.38	2,473.79	2,446.86	26.93	91.870	
3,900.00	3,900.00	4,674.18	4,604.85	13.76	14.45	-74.78	612.91	-2,253.04	2,444.22	2,416.48	27.73	88.130	
4,000.00	4,000.00	4,769.61	4,695.92	14.11	14.90	-74.67	609.72	-2,224.69	2,414.65	2,386.11	28.54	84.594	
4,100.00	4,100.00	4,865.04	4,786.98	14.47	15.35	-74.56	606.53	-2,196.35	2,385.09	2,355.74	29.36	81.247	
4,200.00	4,200.00	4,960.47	4,878.05	14.83	15.81	-74.45	603.34	-2,168.00	2,355.54	2,325.37	30.17	78.075	
4,300.00	4,300.00	5,055.90	4,969.11	15.19	16.27	-74.33	600.15	-2,139.66	2,326.00	2,295.02	30.99	75.065	
4,400.00	4,400.00	5,151.32	5,060.18	15.55	16.73	-74.21	596.96	-2,111.31	2,296.47	2,264.67	31.80	72.205	
4,500.00	4,500.00	5,246.75	5,151.25	15.91	17.19	-74.09	593.77	-2,082.97	2,266.95	2,234.33	32.62	69.486	
4,600.00	4,600.00	5,342.18	5,242.31	16.27	17.66	-73.96	590.58	-2,054.62	2,237.44	2,203.99	33.45	66.898	
4,700.00	4,700.00	5,437.61	5,333.38	16.62	18.12	-73.83	587.39	-2,026.27	2,207.94	2,173.67	34.27	64.431	
4,800.00	4,800.00	5,533.04	5,424.44	16.98	18.59	-73.70	584.20	-1,997.93	2,178.44	2,143.35	35.09	62.079	
4,900.00	4,900.00	5,628.47	5,515.51	17.34	19.06	-73.56	581.01	-1,969.58	2,148.96	2,113.05	35.92	59.832	
5,000.00	5,000.00	5,723.89	5,606.57	17.70	19.53	-73.42	577.82	-1,941.24	2,119.49	2,082.75	36.74	57.685	
5,100.00	5,100.00	5,819.32	5,697.64	18.06	20.00	-73.28	574.63	-1,912.89	2,090.04	2,052.47	37.57	55.632	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 0-MWD+IFR1+MS												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	5,914.75	5,788.70	18.42	20.48	-73.13	571.44	-1,884.55	2,060.59	2,022.20	38.40	53.666	
5,300.00	5,300.00	6,010.18	5,879.77	18.77	20.95	-72.98	568.25	-1,856.20	2,031.16	1,991.94	39.23	51.782	
5,400.00	5,400.00	6,105.61	5,970.83	19.13	21.43	-72.82	565.07	-1,827.86	2,001.74	1,961.69	40.05	49.976	
5,500.00	5,500.00	6,201.04	6,061.90	19.49	21.91	-72.66	561.88	-1,799.51	1,972.34	1,931.45	40.88	48.243	
5,600.00	5,600.00	6,296.46	6,152.97	19.85	22.39	-72.49	558.69	-1,771.17	1,942.95	1,901.24	41.71	46.578	
5,620.00	5,620.00	6,315.55	6,171.18	19.92	22.48	-72.46	558.05	-1,765.50	1,937.07	1,895.19	41.88	46.253	
5,700.00	5,699.99	6,391.57	6,243.72	20.20	22.87	4.47	555.51	-1,742.92	1,912.57	1,870.03	42.54	44.962	
5,800.00	5,799.89	6,485.63	6,333.49	20.55	23.34	4.72	552.36	-1,714.98	1,879.16	1,835.81	43.35	43.351	
5,900.00	5,899.60	6,578.53	6,422.14	20.90	23.81	4.98	549.26	-1,687.38	1,842.68	1,798.53	44.15	41.739	
6,000.00	5,999.01	6,670.17	6,509.58	21.24	24.27	5.28	546.20	-1,660.17	1,803.19	1,758.25	44.94	40.126	
6,100.00	6,098.00	6,760.43	6,595.72	21.59	24.73	5.61	543.18	-1,633.35	1,760.72	1,715.00	45.72	38.512	
6,200.00	6,196.47	6,849.24	6,680.47	21.95	25.18	5.97	540.21	-1,606.97	1,715.34	1,668.85	46.49	36.900	
6,300.00	6,294.31	6,936.48	6,763.73	22.31	25.62	6.38	537.30	-1,581.06	1,667.08	1,619.84	47.24	35.289	
6,400.00	6,391.42	7,022.07	6,845.40	22.67	26.06	6.84	534.44	-1,555.64	1,616.02	1,568.04	47.98	33.679	
6,500.00	6,487.69	7,105.92	6,925.41	23.04	26.49	7.35	531.63	-1,530.73	1,562.21	1,513.50	48.71	32.072	
6,600.00	6,583.01	7,187.92	7,003.67	23.41	26.91	7.94	528.89	-1,506.38	1,505.73	1,456.31	49.42	30.467	
6,700.00	6,677.29	7,267.99	7,080.08	23.80	27.32	8.61	526.22	-1,482.59	1,446.64	1,396.52	50.12	28.865	
6,800.00	6,770.41	7,346.05	7,154.57	24.21	27.71	9.37	523.61	-1,459.41	1,385.01	1,334.22	50.80	27.265	
6,900.00	6,862.29	7,422.01	7,227.05	24.63	28.10	10.25	521.07	-1,436.84	1,320.94	1,269.48	51.46	25.669	
7,000.00	6,952.81	7,495.78	7,297.45	25.07	28.48	11.27	518.60	-1,414.93	1,254.52	1,202.41	52.11	24.076	
7,100.00	7,041.88	7,559.40	7,358.20	25.53	28.80	12.35	516.49	-1,396.16	1,185.99	1,133.25	52.73	22.491	
7,200.00	7,129.40	7,618.08	7,414.41	26.02	29.10	13.56	514.61	-1,379.40	1,115.95	1,062.59	53.35	20.917	
7,300.00	7,215.28	7,675.99	7,470.04	26.54	29.39	14.96	512.81	-1,363.43	1,044.50	990.54	53.96	19.358	
7,400.00	7,299.42	7,733.09	7,525.05	27.09	29.67	16.61	511.10	-1,348.22	971.72	917.17	54.55	17.815	
7,489.65	7,373.30	7,783.54	7,573.78	27.62	29.92	18.35	509.64	-1,335.24	905.42	850.36	55.06	16.443	
7,500.00	7,381.75	7,789.34	7,579.39	27.69	29.95	18.50	509.47	-1,333.77	897.71	842.59	55.12	16.285	
7,600.00	7,463.31	7,846.01	7,634.28	28.31	30.23	20.06	507.89	-1,319.75	823.82	768.13	55.70	14.791	
7,700.00	7,544.88	7,900.00	7,686.69	28.97	30.49	21.76	506.45	-1,306.90	751.03	694.73	56.29	13.342	
7,729.86	7,569.24	7,921.61	7,707.71	29.16	30.59	22.50	505.89	-1,301.90	729.50	673.04	56.46	12.921	
7,800.00	7,626.91	7,963.94	7,748.93	29.64	30.79	23.51	504.81	-1,292.32	679.96	623.08	56.88	11.954	
7,900.00	7,710.71	8,027.34	7,810.79	30.31	31.09	25.23	503.26	-1,278.54	612.43	554.91	57.52	10.647	
8,000.00	7,796.26	8,094.29	7,876.28	30.98	31.40	27.32	501.70	-1,264.72	548.84	490.65	58.19	9.431	
8,100.00	7,883.46	8,164.73	7,945.35	31.64	31.73	29.85	500.16	-1,251.01	489.57	430.67	58.91	8.311	
8,200.00	7,972.24	8,238.59	8,017.96	32.28	32.06	32.91	498.64	-1,237.55	435.04	375.37	59.66	7.291	
8,300.00	8,062.49	8,315.77	8,094.01	32.91	32.40	36.59	497.17	-1,224.47	385.70	325.23	60.47	6.378	
8,400.00	8,154.10	8,396.15	8,173.39	33.51	32.75	40.97	495.76	-1,211.93	342.07	280.74	61.33	5.577	
8,500.00	8,246.99	8,479.59	8,255.98	34.09	33.11	46.12	494.43	-1,200.08	304.64	242.39	62.25	4.894	
8,600.00	8,341.05	8,565.91	8,341.59	34.65	33.46	52.04	493.19	-1,189.09	273.85	210.64	63.22	4.332	
8,700.00	8,436.18	8,654.92	8,430.03	35.18	33.82	58.63	492.07	-1,179.10	249.93	185.71	64.22	3.892	
8,800.00	8,532.27	8,746.40	8,521.07	35.69	34.18	65.64	491.07	-1,170.25	232.73	167.49	65.24	3.567	
8,900.00	8,629.23	8,840.10	8,614.45	36.17	34.53	72.69	490.22	-1,162.69	221.61	155.38	66.23	3.346	
9,000.00	8,726.93	8,935.75	8,709.90	36.62	34.86	79.33	489.53	-1,156.54	215.46	148.31	67.15	3.209	
9,100.00	8,825.29	9,033.06	8,807.11	37.04	35.18	85.16	489.01	-1,151.91	212.88	144.91	67.97	3.132	
9,177.28	8,901.68	9,109.22	8,883.22	37.35	35.41	88.92	488.73	-1,149.42	212.44	143.91	68.53	3.100 CC	
9,200.00	8,924.19	9,131.74	8,905.73	37.45	35.47	89.88	488.67	-1,148.88	212.47	143.79	68.68	3.094	
9,300.00	9,023.52	9,231.45	9,005.44	37.82	35.69	93.34	488.52	-1,147.54	213.00	143.72	69.28	3.075 ES	
9,400.00	9,123.18	9,331.29	9,105.28	38.18	35.73	95.57	488.51	-1,147.48	213.65	143.89	69.76	3.063 SF	
9,500.00	9,223.05	9,412.31	9,186.22	38.51	35.74	96.50	490.98	-1,147.49	217.33	147.11	70.22	3.095	
9,599.51	9,322.54	9,484.18	9,257.18	38.82	35.77	19.34	502.12	-1,147.56	232.06	161.94	70.12	3.309	
9,600.00	9,323.03	9,484.53	9,257.52	38.82	35.77	-160.26	502.20	-1,147.56	232.16	162.04	70.12	3.311	
9,625.00	9,348.02	9,500.00	9,272.57	38.89	35.78	-160.34	505.76	-1,147.58	238.28	168.40	69.88	3.410	
9,650.00	9,372.94	9,518.73	9,290.65	38.96	35.79	-160.52	510.61	-1,147.61	246.26	176.49	69.77	3.530	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 0-MWD+IFR1+MS												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	
9,675.00	9,397.72	9,534.79	9,306.04	39.02	35.79	-160.64	515.25	-1,147.64	256.07	186.54	69.53	3.683	
9,700.00	9,422.29	9,550.00	9,320.47	39.09	35.80	-160.72	520.03	-1,147.67	267.62	198.37	69.25	3.865	
9,725.00	9,446.59	9,564.33	9,333.95	39.15	35.81	-160.74	524.89	-1,147.70	280.82	211.86	68.96	4.072	
9,750.00	9,470.55	9,577.64	9,346.36	39.20	35.82	-160.68	529.70	-1,147.73	295.57	226.93	68.64	4.306	
9,775.00	9,494.11	9,589.91	9,357.70	39.26	35.83	-160.50	534.39	-1,147.76	311.77	243.45	68.32	4.564	
9,800.00	9,517.19	9,600.00	9,366.95	39.31	35.83	-160.12	538.43	-1,147.78	329.29	261.37	67.93	4.848	
9,825.00	9,539.74	9,611.26	9,377.18	39.36	35.84	-159.71	543.13	-1,147.81	348.01	280.35	67.67	5.143	
9,850.00	9,561.70	9,620.33	9,385.36	39.41	35.85	-159.02	547.06	-1,147.83	367.83	300.47	67.36	5.460	
9,875.00	9,583.00	9,628.36	9,392.54	39.45	35.85	-158.05	550.64	-1,147.86	388.61	321.53	67.08	5.793	
9,900.00	9,603.58	9,635.36	9,398.76	39.49	35.86	-156.74	553.85	-1,147.88	410.23	343.41	66.82	6.139	
9,925.00	9,623.40	9,650.00	9,411.64	39.53	35.87	-155.98	560.81	-1,147.92	432.75	365.70	67.05	6.454	
9,950.00	9,642.39	9,650.00	9,411.64	39.56	35.87	-153.05	560.81	-1,147.92	455.62	389.04	66.58	6.843	
9,975.00	9,660.51	9,650.00	9,411.64	39.59	35.87	-149.05	560.81	-1,147.92	479.11	412.92	66.19	7.238	
10,000.00	9,677.69	9,650.00	9,411.64	39.61	35.87	-143.40	560.81	-1,147.92	503.08	437.20	65.88	7.636	
10,025.00	9,693.91	9,650.00	9,411.64	39.63	35.87	-135.13	560.81	-1,147.92	527.41	461.76	65.65	8.034	
10,050.00	9,709.11	9,650.00	9,411.64	39.65	35.87	-122.73	560.81	-1,147.92	551.97	486.49	65.48	8.429	
10,075.00	9,723.24	9,650.00	9,411.64	39.66	35.87	-104.70	560.81	-1,147.92	576.69	511.30	65.38	8.820	
10,100.00	9,736.28	9,650.00	9,411.64	39.67	35.87	-82.26	560.81	-1,147.92	601.47	536.13	65.34	9.205	
10,125.00	9,748.19	9,650.00	9,411.64	39.68	35.87	-61.15	560.81	-1,147.92	626.25	560.90	65.35	9.583	
10,150.00	9,758.93	9,650.00	9,411.64	39.68	35.87	-45.54	560.81	-1,147.92	650.96	585.56	65.40	9.953	
10,175.00	9,768.47	9,650.00	9,411.64	39.69	35.87	-35.04	560.81	-1,147.92	675.54	610.05	65.49	10.314	
10,200.00	9,776.79	9,650.00	9,411.64	39.69	35.87	-27.96	560.81	-1,147.92	699.95	634.33	65.62	10.667	
10,225.00	9,783.86	9,650.00	9,411.64	39.68	35.87	-23.02	560.81	-1,147.92	724.14	658.36	65.78	11.009	
10,250.00	9,789.67	9,650.00	9,411.64	39.68	35.87	-19.43	560.81	-1,147.92	748.07	682.11	65.96	11.341	
10,275.00	9,794.20	9,650.00	9,411.64	39.67	35.87	-16.74	560.81	-1,147.92	771.69	705.53	66.16	11.663	
10,300.00	9,797.44	9,650.00	9,411.64	39.67	35.87	-14.66	560.81	-1,147.92	794.98	728.59	66.39	11.975	
10,325.00	9,799.38	9,650.00	9,411.64	39.66	35.87	-13.02	560.81	-1,147.92	817.90	751.27	66.62	12.276	
10,349.51	9,800.00	9,633.33	9,396.96	39.66	35.86	-11.27	552.92	-1,147.87	839.57	773.19	66.38	12.648	
10,400.00	9,800.00	9,624.17	9,388.79	39.65	35.85	-11.04	548.76	-1,147.84	884.40	817.73	66.66	13.267	
10,500.00	9,800.00	9,600.00	9,366.95	39.64	35.83	-10.48	538.43	-1,147.78	974.30	907.30	67.00	14.542	
10,600.00	9,800.00	9,600.00	9,366.95	39.66	35.83	-10.48	538.43	-1,147.78	1,065.30	997.56	67.74	15.725	
10,700.00	9,800.00	9,579.72	9,348.29	39.70	35.82	-10.03	530.48	-1,147.73	1,157.26	1,089.28	67.97	17.025	
10,800.00	9,800.00	9,567.89	9,337.28	39.78	35.81	-9.79	526.15	-1,147.71	1,250.13	1,181.84	68.29	18.307	
10,900.00	9,800.00	9,550.00	9,320.47	39.90	35.80	-9.44	520.03	-1,147.67	1,343.79	1,275.34	68.45	19.631	
11,000.00	9,800.00	9,550.00	9,320.47	40.07	35.80	-9.44	520.03	-1,147.67	1,437.95	1,369.12	68.83	20.892	
11,100.00	9,800.00	9,550.00	9,320.47	40.32	35.80	-9.44	520.03	-1,147.67	1,532.85	1,463.71	69.14	22.170	
11,200.00	9,800.00	9,530.72	9,302.15	40.64	35.79	-9.08	514.03	-1,147.63	1,627.93	1,558.73	69.20	23.525	
11,300.00	9,800.00	9,523.35	9,295.09	41.05	35.79	-8.95	511.90	-1,147.62	1,723.56	1,654.19	69.37	24.847	
11,400.00	9,800.00	9,500.00	9,272.57	41.54	35.78	-8.56	505.76	-1,147.58	1,819.87	1,750.51	69.36	26.237	
11,500.00	9,800.00	9,500.00	9,272.57	42.10	35.78	-8.56	505.76	-1,147.58	1,915.99	1,846.42	69.56	27.542	
11,600.00	9,800.00	9,500.00	9,272.57	42.74	35.78	-8.56	505.76	-1,147.58	2,012.48	1,942.74	69.74	28.857	
11,700.00	9,800.00	9,500.00	9,272.57	43.43	35.78	-8.56	505.76	-1,147.58	2,109.30	2,039.41	69.89	30.178	
11,800.00	9,800.00	9,500.00	9,272.57	44.17	35.78	-8.56	505.76	-1,147.58	2,206.41	2,136.38	70.03	31.506	
11,900.00	9,800.00	9,500.00	9,272.57	44.96	35.78	-8.56	505.76	-1,147.58	2,303.76	2,233.61	70.15	32.838	
12,000.00	9,800.00	9,500.00	9,272.57	45.78	35.78	-8.56	505.76	-1,147.58	2,401.33	2,331.07	70.27	34.175	
12,100.00	9,800.00	9,500.00	9,272.57	46.64	35.78	-8.56	505.76	-1,147.58	2,499.10	2,428.73	70.37	35.516	
12,200.00	9,800.00	9,477.27	9,250.41	47.54	35.77	-8.21	500.66	-1,147.55	2,596.48	2,526.14	70.34	36.914	
12,300.00	9,800.00	9,473.67	9,246.89	48.46	35.76	-8.16	499.94	-1,147.55	2,694.38	2,623.97	70.41	38.266	
12,400.00	9,800.00	9,450.00	9,223.60	49.41	35.76	-7.82	495.71	-1,147.52	2,792.84	2,722.46	70.38	39.681	
12,500.00	9,800.00	9,450.00	9,223.60	50.38	35.76	-7.82	495.71	-1,147.52	2,890.85	2,820.38	70.47	41.023	
12,600.00	9,800.00	9,450.00	9,223.60	51.38	35.76	-7.82	495.71	-1,147.52	2,989.00	2,918.45	70.55	42.368	
12,700.00	9,800.00	9,450.00	9,223.60	52.40	35.76	-7.82	495.71	-1,147.52	3,087.26	3,016.63	70.62	43.714	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 0-MWD+IFR1+MS												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	
12,800.00	9,800.00	9,450.00	9,223.60	53.44	35.76	-7.82	495.71	-1,147.52	3,185.63	3,114.93	70.70	45.061	
12,900.00	9,800.00	9,450.00	9,223.60	54.49	35.76	-7.82	495.71	-1,147.52	3,284.10	3,213.33	70.76	46.409	
13,000.00	9,800.00	9,450.00	9,223.60	55.57	35.76	-7.82	495.71	-1,147.52	3,382.66	3,311.83	70.83	47.758	
13,100.00	9,800.00	9,450.00	9,223.60	56.66	35.76	-7.82	495.71	-1,147.52	3,481.30	3,410.41	70.89	49.107	
13,200.00	9,800.00	9,450.00	9,223.60	57.77	35.76	-7.82	495.71	-1,147.52	3,580.02	3,509.06	70.95	50.456	
13,300.00	9,800.00	9,450.00	9,223.60	58.89	35.76	-7.82	495.71	-1,147.52	3,678.80	3,607.79	71.01	51.806	
13,400.00	9,800.00	9,450.00	9,223.60	60.03	35.76	-7.82	495.71	-1,147.52	3,777.65	3,706.58	71.07	53.155	
13,500.00	9,800.00	9,450.00	9,223.60	61.17	35.76	-7.82	495.71	-1,147.52	3,876.56	3,805.44	71.12	54.504	
13,600.00	9,800.00	9,450.00	9,223.60	62.34	35.76	-7.82	495.71	-1,147.52	3,975.52	3,904.35	71.18	55.853	
13,700.00	9,800.00	9,450.00	9,223.60	63.51	35.76	-7.82	495.71	-1,147.52	4,074.54	4,003.31	71.23	57.201	
13,800.00	9,800.00	9,450.00	9,223.60	64.69	35.76	-7.82	495.71	-1,147.52	4,173.60	4,102.32	71.28	58.548	
13,900.00	9,800.00	9,450.00	9,223.60	65.88	35.76	-7.82	495.71	-1,147.52	4,272.71	4,201.37	71.34	59.895	
14,000.00	9,800.00	9,450.00	9,223.60	67.09	35.76	-7.82	495.71	-1,147.52	4,371.85	4,300.46	71.39	61.240	
14,100.00	9,800.00	9,450.00	9,223.60	68.30	35.76	-7.82	495.71	-1,147.52	4,471.03	4,399.60	71.44	62.585	
14,200.00	9,800.00	9,450.00	9,223.60	69.52	35.76	-7.82	495.71	-1,147.52	4,570.25	4,498.76	71.49	63.928	
14,300.00	9,800.00	9,450.00	9,223.60	70.75	35.76	-7.82	495.71	-1,147.52	4,669.51	4,597.97	71.54	65.271	
14,400.00	9,800.00	9,450.00	9,223.60	71.99	35.76	-7.82	495.71	-1,147.52	4,768.79	4,697.20	71.59	66.611	
14,500.00	9,800.00	9,427.58	9,201.40	73.23	35.75	-7.53	492.60	-1,147.50	4,867.61	4,796.01	71.60	67.984	
14,600.00	9,800.00	9,426.34	9,200.18	74.48	35.75	-7.51	492.46	-1,147.50	4,966.90	4,895.25	71.65	69.323	
14,700.00	9,800.00	9,425.15	9,198.99	75.74	35.75	-7.50	492.32	-1,147.50	5,066.21	4,994.51	71.70	70.660	
14,800.00	9,800.00	9,424.00	9,197.85	77.00	35.75	-7.48	492.19	-1,147.50	5,165.55	5,093.80	71.75	71.996	
14,900.00	9,800.00	9,422.89	9,196.75	78.27	35.75	-7.47	492.06	-1,147.50	5,264.91	5,193.11	71.80	73.330	
15,000.00	9,800.00	9,400.00	9,173.95	79.55	35.74	-7.19	489.97	-1,147.49	5,364.75	5,292.93	71.81	74.706	
15,100.00	9,800.00	9,400.00	9,173.95	80.83	35.74	-7.19	489.97	-1,147.49	5,464.10	5,392.24	71.86	76.033	
15,200.00	9,800.00	9,400.00	9,173.95	82.12	35.74	-7.19	489.97	-1,147.49	5,563.48	5,491.56	71.92	77.359	
15,300.00	9,800.00	9,400.00	9,173.95	83.41	35.74	-7.19	489.97	-1,147.49	5,662.88	5,590.91	71.97	78.682	
15,400.00	9,800.00	9,400.00	9,173.95	84.70	35.74	-7.19	489.97	-1,147.49	5,762.31	5,690.28	72.03	80.003	
15,500.00	9,800.00	9,400.00	9,173.95	86.01	35.74	-7.19	489.97	-1,147.49	5,861.75	5,789.67	72.08	81.323	
15,600.00	9,800.00	9,400.00	9,173.95	87.31	35.74	-7.19	489.97	-1,147.49	5,961.21	5,889.08	72.13	82.640	
15,700.00	9,800.00	9,400.00	9,173.95	88.62	35.74	-7.19	489.97	-1,147.49	6,060.69	5,988.50	72.19	83.955	
15,800.00	9,800.00	9,400.00	9,173.95	89.93	35.74	-7.19	489.97	-1,147.49	6,160.18	6,087.94	72.25	85.268	
15,900.00	9,800.00	9,400.00	9,173.95	91.25	35.74	-7.19	489.97	-1,147.49	6,259.70	6,187.39	72.30	86.579	
16,000.00	9,800.00	9,400.00	9,173.95	92.57	35.74	-7.19	489.97	-1,147.49	6,359.22	6,286.87	72.36	87.887	
16,100.00	9,800.00	9,400.00	9,173.95	93.89	35.74	-7.19	489.97	-1,147.49	6,458.76	6,386.35	72.41	89.193	
16,200.00	9,800.00	9,400.00	9,173.95	95.22	35.74	-7.19	489.97	-1,147.49	6,558.32	6,485.85	72.47	90.496	
16,300.00	9,800.00	9,400.00	9,173.95	96.55	35.74	-7.19	489.97	-1,147.49	6,657.89	6,585.36	72.53	91.797	
16,400.00	9,800.00	9,400.00	9,173.95	97.89	35.74	-7.19	489.97	-1,147.49	6,757.47	6,684.88	72.59	93.096	
16,500.00	9,800.00	9,400.00	9,173.95	99.22	35.74	-7.19	489.97	-1,147.49	6,857.06	6,784.42	72.64	94.392	
16,600.00	9,800.00	9,400.00	9,173.95	100.56	35.74	-7.19	489.97	-1,147.49	6,956.67	6,883.97	72.70	95.685	
16,700.00	9,800.00	9,400.00	9,173.95	101.90	35.74	-7.19	489.97	-1,147.49	7,056.29	6,983.52	72.76	96.975	
16,800.00	9,800.00	9,400.00	9,173.95	103.25	35.74	-7.19	489.97	-1,147.49	7,155.91	7,083.09	72.82	98.263	
16,900.00	9,800.00	9,400.00	9,173.95	104.60	35.74	-7.19	489.97	-1,147.49	7,255.55	7,182.67	72.88	99.549	
17,000.00	9,800.00	9,400.00	9,173.95	105.94	35.74	-7.19	489.97	-1,147.49	7,355.20	7,282.25	72.95	100.831	
17,100.00	9,800.00	9,400.00	9,173.95	107.30	35.74	-7.19	489.97	-1,147.49	7,454.85	7,381.85	73.01	102.111	
17,200.00	9,800.00	9,400.00	9,173.95	108.65	35.74	-7.19	489.97	-1,147.49	7,554.52	7,481.45	73.07	103.387	
17,300.00	9,800.00	9,400.00	9,173.95	110.01	35.74	-7.19	489.97	-1,147.49	7,654.19	7,581.06	73.13	104.661	
17,400.00	9,800.00	9,400.00	9,173.95	111.36	35.74	-7.19	489.97	-1,147.49	7,753.88	7,680.68	73.20	105.932	
17,500.00	9,800.00	9,400.00	9,173.95	112.73	35.74	-7.19	489.97	-1,147.49	7,853.57	7,780.31	73.26	107.200	
17,590.89	9,800.00	9,400.00	9,173.95	113.96	35.74	-7.19	489.97	-1,147.49	7,944.18	7,870.87	73.32	108.350	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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	
0.00	0.00	0.00	0.00	0.00	0.00	89.32	0.78	65.97	65.97				
100.00	100.00	100.00	100.00	0.13	0.13	89.32	0.78	65.97	65.97	65.71	0.27	245.392	
200.00	200.00	200.00	200.00	0.49	0.49	89.32	0.78	65.97	65.97	64.99	0.99	66.925	
300.00	300.00	300.00	300.00	0.85	0.85	89.32	0.78	65.97	65.97	64.27	1.70	38.746	
400.00	400.00	400.00	400.00	1.21	1.21	89.32	0.78	65.97	65.97	63.55	2.42	27.266	
500.00	500.00	500.00	500.00	1.57	1.57	89.32	0.78	65.97	65.97	62.84	3.14	21.034	
600.00	600.00	600.00	600.00	1.93	1.93	89.32	0.78	65.97	65.97	62.12	3.85	17.120	
700.00	700.00	700.00	700.00	2.29	2.29	89.32	0.78	65.97	65.97	61.40	4.57	14.435	
800.00	800.00	800.00	800.00	2.64	2.64	89.32	0.78	65.97	65.97	60.69	5.29	12.478	
900.00	900.00	900.00	900.00	3.00	3.00	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	65.97	65.97	47.78	18.19	3.626	
2,700.00	2,700.00	2,700.00	2,700.00	9.45	9.45	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	65.97	65.97	37.74	28.23	2.337	
4,100.00	4,100.00	4,100.00	4,100.00	14.47	14.47	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	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	89.32	0.78	65.97	65.97	26.13	39.84	1.656 CC, ES		
5,700.00	5,699.99	5,700.28	5,700.28	20.20	20.21	165.84	1.31	65.79	66.82	26.41	40.41	1.654 SF		
5,800.00	5,799.89	5,800.58	5,800.55	20.55	20.57	164.91	3.47	65.04	70.28	29.17	41.11	1.710		
5,900.00	5,899.60	5,900.73	5,900.62	20.90	20.93	163.47	7.28	63.73	76.44	34.63	41.81	1.828		
6,000.00	5,999.01	6,000.67	6,000.39	21.24	21.28	161.76	12.73	61.86	85.34	42.83	42.51	2.007		
6,100.00	6,098.00	6,100.31	6,099.75	21.59	21.64	160.00	19.81	59.42	97.00	53.79	43.21	2.245		
6,200.00	6,196.47	6,199.57	6,198.59	21.95	21.99	158.32	28.47	56.44	111.44	67.54	43.90	2.539		
6,300.00	6,294.31	6,298.03	6,296.54	22.31	22.34	157.19	37.85	53.22	128.81	84.22	44.59	2.889		
6,400.00	6,391.42	6,395.92	6,393.94	22.67	22.69	156.79	47.17	50.01	149.19	103.91	45.28	3.295		
6,500.00	6,487.69	6,493.16	6,490.68	23.04	23.04	156.87	56.43	46.82	172.52	126.56	45.96	3.753		
6,600.00	6,583.01	6,589.62	6,586.65	23.41	23.39	157.25	65.61	43.66	198.80	152.16	46.64	4.262		
6,700.00	6,677.29	6,685.21	6,681.75	23.80	23.73	157.80	74.71	40.53	228.04	180.72	47.32	4.819		
6,800.00	6,770.41	6,779.81	6,775.88	24.21	24.07	158.44	83.72	37.43	260.22	212.23	47.99	5.422		
6,900.00	6,862.29	6,873.34	6,868.93	24.63	24.41	159.10	92.62	34.37	295.36	246.70	48.66	6.070		
7,000.00	6,952.81	6,965.68	6,960.80	25.07	24.74	159.77	101.41	31.34	333.43	284.11	49.31	6.761		
7,100.00	7,041.88	7,056.74	7,051.40	25.53	25.07	160.41	110.08	28.36	374.42	324.45	49.97	7.493		
7,200.00	7,129.40	7,146.41	7,140.62	26.02	25.40	161.02	118.62	25.42	418.30	367.69	50.61	8.265		
7,300.00	7,215.28	7,234.61	7,228.36	26.54	25.72	161.58	127.02	22.53	465.04	413.79	51.25	9.074		
7,400.00	7,299.42	7,321.22	7,314.54	27.09	26.03	162.09	135.26	19.70	514.61	462.73	51.88	9.920		
7,489.65	7,373.30	7,397.45	7,390.38	27.62	26.31	162.50	142.52	17.20	561.41	508.98	52.43	10.707		
7,500.00	7,381.75	7,406.18	7,399.06	27.69	26.34	162.58	143.35	16.91	566.95	514.45	52.50	10.799		
7,600.00	7,463.31	7,490.44	7,482.89	28.31	26.65	163.30	151.37	14.15	620.43	567.31	53.12	11.680		
7,700.00	7,544.88	7,574.70	7,566.72	28.97	26.95	163.91	159.39	11.39	673.97	620.23	53.74	12.541		
7,729.86	7,569.24	7,599.86	7,591.76	29.16	27.05	164.07	161.79	10.57	689.97	636.04	53.93	12.794		
7,800.00	7,626.91	7,659.39	7,650.98	29.64	27.26	164.62	167.46	8.62	726.90	672.53	54.37	13.369		
7,900.00	7,710.71	7,745.68	7,736.84	30.31	27.58	165.27	175.67	5.79	777.25	722.23	55.02	14.126		
8,000.00	7,796.26	7,833.58	7,824.29	30.98	27.90	165.77	184.04	2.91	824.84	769.15	55.69	14.812		
8,100.00	7,883.46	7,922.97	7,913.22	31.64	28.23	166.16	192.55	-0.02	869.60	813.23	56.37	15.427		
8,200.00	7,972.24	8,013.77	8,003.56	32.28	28.56	166.46	201.20	-2.99	911.47	854.41	57.06	15.973		
8,300.00	8,062.49	8,105.86	8,095.19	32.91	28.90	166.68	209.96	-6.01	950.42	892.64	57.77	16.452		
8,400.00	8,154.10	8,199.17	8,188.02	33.51	29.24	166.83	218.85	-9.07	986.38	927.89	58.49	16.865		
8,500.00	8,246.99	8,293.57	8,281.94	34.09	29.58	166.92	227.83	-12.16	1,019.33	960.12	59.22	17.214		
8,600.00	8,341.05	8,388.98	8,376.86	34.65	29.94	166.95	236.92	-15.28	1,049.23	989.29	59.95	17.502		
8,700.00	8,436.18	8,485.28	8,472.67	35.18	30.29	166.94	246.09	-18.44	1,076.06	1,015.37	60.69	17.731		
8,800.00	8,532.27	8,582.37	8,569.27	35.69	30.65	166.87	255.33	-21.62	1,099.78	1,038.35	61.43	17.903		
8,900.00	8,629.23	8,680.14	8,666.55	36.17	31.01	166.76	264.64	-24.82	1,120.38	1,058.20	62.18	18.019		
9,000.00	8,726.93	8,777.35	8,763.26	36.62	31.37	166.61	273.87	-28.00	1,137.85	1,074.94	62.92	18.085		
9,100.00	8,825.29	8,870.14	8,855.68	37.04	31.71	166.47	281.72	-30.70	1,152.53	1,088.90	63.63	18.114		
9,200.00	8,924.19	8,963.28	8,948.57	37.45	32.05	166.36	288.19	-32.92	1,164.55	1,100.23	64.33	18.104		
9,300.00	9,023.52	9,056.71	9,041.84	37.82	32.39	166.28	293.23	-34.66	1,173.92	1,108.90	65.02	18.056		
9,400.00	9,123.18	9,150.34	9,135.40	38.18	32.72	166.22	296.85	-35.91	1,180.62	1,114.92	65.70	17.971		
9,500.00	9,223.05	9,244.13	9,229.15	38.51	33.06	166.19	299.02	-36.65	1,184.63	1,118.26	66.37	17.850		
9,599.51	9,322.54	9,337.52	9,322.54	38.82	33.39	89.42	299.74	-36.90	1,185.96	1,118.94	67.02	17.695		
9,600.00	9,323.03	9,338.01	9,323.03	38.82	33.40	-90.18	299.74	-36.90	1,185.96	1,118.94	67.03	17.694		
9,625.00	9,348.02	9,363.07	9,348.08	38.89	33.48	-90.18	299.06	-36.89	1,185.96	1,118.77	67.19	17.652		
9,650.00	9,372.94	9,388.12	9,373.05	38.96	33.55	-90.18	297.06	-36.88	1,185.97	1,118.63	67.34	17.612		
9,675.00	9,397.72	9,413.18	9,397.88	39.02	33.63	-90.18	293.76	-36.85	1,185.97	1,118.49	67.49	17.573		

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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	
9,700.00	9,422.29	9,438.23	9,422.51	39.09	33.70	-90.17	289.16	-36.80	1,185.98	1,118.35	67.63	17.536		
9,725.00	9,446.59	9,463.29	9,446.86	39.15	33.77	-90.17	283.27	-36.75	1,186.00	1,118.23	67.77	17.500		
9,750.00	9,470.55	9,488.34	9,470.87	39.20	33.84	-90.17	276.12	-36.68	1,186.01	1,118.11	67.91	17.466		
9,775.00	9,494.11	9,513.39	9,494.47	39.26	33.91	-90.17	267.71	-36.61	1,186.03	1,118.00	68.03	17.433		
9,800.00	9,517.19	9,538.45	9,517.59	39.31	33.97	-90.16	258.08	-36.52	1,186.05	1,117.89	68.16	17.401		
9,825.00	9,539.74	9,563.50	9,540.18	39.36	34.03	-90.16	247.26	-36.42	1,186.08	1,117.80	68.28	17.371		
9,850.00	9,561.70	9,588.55	9,562.16	39.41	34.09	-90.15	235.26	-36.31	1,186.10	1,117.71	68.39	17.342		
9,875.00	9,583.00	9,613.59	9,583.49	39.45	34.14	-90.15	222.13	-36.19	1,186.13	1,117.63	68.50	17.315		
9,900.00	9,603.58	9,638.64	9,604.09	39.49	34.20	-90.14	207.90	-36.06	1,186.16	1,117.55	68.61	17.288		
9,925.00	9,623.40	9,663.68	9,623.92	39.53	34.25	-90.14	192.60	-35.92	1,186.20	1,117.48	68.71	17.263		
9,950.00	9,642.39	9,688.73	9,642.92	39.56	34.29	-90.13	176.30	-35.77	1,186.23	1,117.42	68.81	17.238		
9,975.00	9,660.51	9,713.77	9,661.04	39.59	34.34	-90.13	159.01	-35.61	1,186.27	1,117.36	68.91	17.215		
10,000.00	9,677.69	9,738.81	9,678.23	39.61	34.38	-90.12	140.81	-35.44	1,186.31	1,117.31	69.00	17.192		
10,025.00	9,693.91	9,763.84	9,694.43	39.63	34.43	-90.11	121.73	-35.27	1,186.35	1,117.26	69.09	17.171		
10,050.00	9,709.11	9,788.88	9,709.61	39.65	34.47	-90.10	101.83	-35.08	1,186.40	1,117.22	69.18	17.149		
10,075.00	9,723.24	9,813.91	9,723.73	39.66	34.51	-90.10	81.16	-34.89	1,186.44	1,117.18	69.27	17.129		
10,100.00	9,736.28	9,838.94	9,736.74	39.67	34.54	-90.09	59.79	-34.70	1,186.49	1,117.14	69.35	17.109		
10,125.00	9,748.19	9,863.96	9,748.62	39.68	34.58	-90.08	37.76	-34.50	1,186.54	1,117.10	69.43	17.089		
10,150.00	9,758.93	9,888.99	9,759.32	39.68	34.62	-90.07	15.15	-34.29	1,186.59	1,117.07	69.51	17.070		
10,175.00	9,768.47	9,914.01	9,768.82	39.69	34.66	-90.06	-8.00	-34.08	1,186.64	1,117.04	69.59	17.051		
10,200.00	9,776.79	9,939.03	9,777.10	39.69	34.70	-90.05	-31.60	-33.86	1,186.69	1,117.02	69.67	17.032		
10,225.00	9,783.86	9,964.04	9,784.13	39.68	34.74	-90.05	-55.61	-33.64	1,186.74	1,116.99	69.75	17.014		
10,250.00	9,789.67	9,989.06	9,789.89	39.68	34.78	-90.04	-79.94	-33.42	1,186.80	1,116.97	69.83	16.995		
10,275.00	9,794.20	10,014.07	9,794.37	39.67	34.81	-90.03	-104.55	-33.19	1,186.85	1,116.94	69.91	16.977		
10,300.00	9,797.44	10,039.07	9,797.55	39.67	34.85	-90.02	-129.35	-32.96	1,186.91	1,116.92	69.98	16.960		
10,325.00	9,799.38	10,064.08	9,799.43	39.66	34.89	-90.01	-154.28	-32.73	1,186.96	1,116.90	70.06	16.942		
10,349.51	9,800.00	10,088.58	9,800.00	39.66	34.92	-90.00	-178.77	-32.51	1,187.02	1,116.88	70.13	16.926		
10,400.00	9,800.00	10,139.08	9,800.00	39.65	35.01	-90.00	-229.26	-32.05	1,187.13	1,116.82	70.30	16.886		
10,500.00	9,800.00	10,239.08	9,800.00	39.64	35.22	-90.00	-329.26	-31.13	1,187.35	1,116.63	70.72	16.789		
10,600.00	9,800.00	10,339.08	9,800.00	39.66	35.49	-90.00	-429.25	-30.21	1,187.57	1,116.32	71.25	16.667		
10,700.00	9,800.00	10,439.08	9,800.00	39.70	35.81	-90.00	-529.25	-29.29	1,187.79	1,115.89	71.90	16.521		
10,800.00	9,800.00	10,539.08	9,800.00	39.78	36.19	-90.00	-629.25	-28.38	1,188.01	1,115.36	72.65	16.353		
10,900.00	9,800.00	10,639.08	9,800.00	39.90	36.62	-90.00	-729.24	-27.46	1,188.23	1,114.73	73.51	16.165		
11,000.00	9,800.00	10,739.08	9,800.00	40.07	37.10	-90.00	-829.24	-26.54	1,188.45	1,113.99	74.46	15.960		
11,100.00	9,800.00	10,839.08	9,800.00	40.32	37.63	-90.00	-929.23	-25.63	1,188.68	1,113.16	75.52	15.740		
11,200.00	9,800.00	10,939.08	9,800.00	40.64	38.21	-90.00	-1,029.23	-24.71	1,188.90	1,112.23	76.67	15.507		
11,300.00	9,800.00	11,039.08	9,800.00	41.05	38.83	-90.00	-1,129.22	-23.79	1,189.12	1,111.21	77.91	15.263		
11,400.00	9,800.00	11,139.07	9,800.00	41.54	39.49	-90.00	-1,229.22	-22.87	1,189.34	1,110.11	79.23	15.011		
11,500.00	9,800.00	11,239.07	9,800.00	42.10	40.20	-90.00	-1,329.21	-21.96	1,189.56	1,108.92	80.64	14.752		
11,600.00	9,800.00	11,339.07	9,800.00	42.74	40.94	-90.00	-1,429.21	-21.04	1,189.78	1,107.66	82.12	14.489		
11,700.00	9,800.00	11,439.07	9,800.00	43.43	41.72	-90.00	-1,529.21	-20.12	1,190.00	1,106.33	83.67	14.222		
11,800.00	9,800.00	11,539.07	9,800.00	44.17	42.53	-90.00	-1,629.20	-19.20	1,190.22	1,104.93	85.30	13.954		
11,900.00	9,800.00	11,639.07	9,800.00	44.96	43.38	-90.00	-1,729.20	-18.29	1,190.45	1,103.46	86.99	13.686		
12,000.00	9,800.00	11,739.07	9,800.00	45.78	44.26	-90.00	-1,829.19	-17.37	1,190.67	1,101.93	88.74	13.418		
12,100.00	9,800.00	11,839.07	9,800.00	46.64	45.16	-90.00	-1,929.19	-16.45	1,190.89	1,100.34	90.54	13.153		
12,200.00	9,800.00	11,939.07	9,800.00	47.54	46.10	-90.00	-2,029.18	-15.53	1,191.11	1,098.70	92.40	12.890		
12,300.00	9,800.00	12,039.07	9,800.00	48.46	47.06	-90.00	-2,129.18	-14.62	1,191.33	1,097.01	94.32	12.631		
12,400.00	9,800.00	12,139.07	9,800.00	49.41	48.04	-90.00	-2,229.17	-13.70	1,191.55	1,095.27	96.28	12.376		
12,500.00	9,800.00	12,239.07	9,800.00	50.38	49.04	-90.00	-2,329.17	-12.78	1,191.77	1,093.49	98.28	12.126		
12,600.00	9,800.00	12,339.07	9,800.00	51.38	50.07	-90.00	-2,429.17	-11.86	1,191.99	1,091.66	100.33	11.880		
12,700.00	9,800.00	12,439.07	9,800.00	52.40	51.12	-90.00	-2,529.16	-10.95	1,192.21	1,089.79	102.42	11.640		
12,800.00	9,800.00	12,539.07	9,800.00	53.44	52.18	-90.00	-2,629.16	-10.03	1,192.44	1,087.89	104.55	11.406		

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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								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	
12,900.00	9,800.00	12,639.07	9,800.00	54.49	53.26	-90.00	-2,729.15	-9.11	1,192.66	1,085.95	106.71	11.177	
13,000.00	9,800.00	12,739.07	9,800.00	55.57	54.36	-90.00	-2,829.15	-8.19	1,192.88	1,083.97	108.90	10.953	
13,100.00	9,800.00	12,839.07	9,800.00	56.66	55.48	-90.00	-2,929.14	-7.28	1,193.10	1,081.97	111.13	10.736	
13,200.00	9,800.00	12,939.07	9,800.00	57.77	56.61	-90.00	-3,029.14	-6.36	1,193.32	1,079.94	113.38	10.525	
13,300.00	9,800.00	13,039.07	9,800.00	58.89	57.75	-90.00	-3,129.13	-5.44	1,193.54	1,077.87	115.67	10.319	
13,400.00	9,800.00	13,139.07	9,800.00	60.03	58.90	-90.00	-3,229.13	-4.53	1,193.76	1,075.79	117.98	10.119	
13,500.00	9,800.00	13,239.07	9,800.00	61.17	60.07	-90.00	-3,329.13	-3.61	1,193.98	1,073.67	120.31	9.924	
13,600.00	9,800.00	13,339.07	9,800.00	62.34	61.25	-90.00	-3,429.12	-2.69	1,194.20	1,071.54	122.67	9.735	
13,700.00	9,800.00	13,439.07	9,800.00	63.51	62.44	-90.00	-3,529.12	-1.77	1,194.43	1,069.38	125.04	9.552	
13,800.00	9,800.00	13,539.07	9,800.00	64.69	63.64	-90.00	-3,629.11	-0.86	1,194.65	1,067.20	127.44	9.374	
13,900.00	9,800.00	13,639.07	9,800.00	65.88	64.86	-90.00	-3,729.11	0.06	1,194.87	1,065.01	129.86	9.201	
14,000.00	9,800.00	13,739.07	9,800.00	67.09	66.08	-90.00	-3,829.10	0.98	1,195.09	1,062.79	132.30	9.033	
14,100.00	9,800.00	13,839.07	9,800.00	68.30	67.30	-90.00	-3,929.10	1.90	1,195.31	1,060.56	134.75	8.870	
14,200.00	9,800.00	13,939.07	9,800.00	69.52	68.54	-90.00	-4,029.09	2.81	1,195.53	1,058.31	137.22	8.712	
14,300.00	9,800.00	14,039.07	9,800.00	70.75	69.79	-90.00	-4,129.09	3.73	1,195.75	1,056.04	139.71	8.559	
14,400.00	9,800.00	14,139.07	9,800.00	71.99	71.04	-90.00	-4,229.09	4.65	1,195.97	1,053.76	142.21	8.410	
14,500.00	9,800.00	14,239.07	9,800.00	73.23	72.30	-90.00	-4,329.08	5.57	1,196.20	1,051.47	144.73	8.265	
14,600.00	9,800.00	14,339.07	9,800.00	74.48	73.56	-90.00	-4,429.08	6.48	1,196.42	1,049.16	147.26	8.125	
14,700.00	9,800.00	14,439.07	9,800.00	75.74	74.83	-90.00	-4,529.07	7.40	1,196.64	1,046.84	149.80	7.988	
14,800.00	9,800.00	14,539.07	9,800.00	77.00	76.11	-90.00	-4,629.07	8.32	1,196.86	1,044.51	152.35	7.856	
14,900.00	9,800.00	14,639.07	9,800.00	78.27	77.40	-90.00	-4,729.06	9.24	1,197.08	1,042.17	154.91	7.727	
15,000.00	9,800.00	14,739.07	9,800.00	79.55	78.68	-90.00	-4,829.06	10.15	1,197.30	1,039.81	157.49	7.602	
15,100.00	9,800.00	14,839.07	9,800.00	80.83	79.98	-90.00	-4,929.05	11.07	1,197.52	1,037.45	160.08	7.481	
15,200.00	9,800.00	14,939.07	9,800.00	82.12	81.28	-90.00	-5,029.05	11.99	1,197.74	1,035.07	162.67	7.363	
15,300.00	9,800.00	15,039.07	9,800.00	83.41	82.58	-90.00	-5,129.05	12.90	1,197.96	1,032.69	165.28	7.248	
15,400.00	9,800.00	15,139.07	9,800.00	84.70	83.89	-90.00	-5,229.04	13.82	1,198.19	1,030.30	167.89	7.137	
15,500.00	9,800.00	15,239.06	9,800.00	86.01	85.20	-90.00	-5,329.04	14.74	1,198.41	1,027.89	170.51	7.028	
15,600.00	9,800.00	15,339.06	9,800.00	87.31	86.52	-90.00	-5,429.03	15.66	1,198.63	1,025.49	173.14	6.923	
15,700.00	9,800.00	15,439.06	9,800.00	88.62	87.84	-90.00	-5,529.03	16.57	1,198.85	1,023.07	175.78	6.820	
15,800.00	9,800.00	15,539.06	9,800.00	89.93	89.16	-90.00	-5,629.02	17.49	1,199.07	1,020.64	178.43	6.720	
15,900.00	9,800.00	15,639.06	9,800.00	91.25	90.49	-90.00	-5,729.02	18.41	1,199.29	1,018.21	181.08	6.623	
16,000.00	9,800.00	15,739.06	9,800.00	92.57	91.82	-90.00	-5,829.01	19.33	1,199.51	1,015.77	183.74	6.528	
16,100.00	9,800.00	15,839.06	9,800.00	93.89	93.15	-90.00	-5,929.01	20.24	1,199.73	1,013.33	186.41	6.436	
16,200.00	9,800.00	15,939.06	9,800.00	95.22	94.49	-90.00	-6,029.01	21.16	1,199.96	1,010.88	189.08	6.346	
16,300.00	9,800.00	16,039.06	9,800.00	96.55	95.83	-90.00	-6,129.00	22.08	1,200.18	1,008.42	191.76	6.259	
16,400.00	9,800.00	16,139.06	9,800.00	97.89	97.17	-90.00	-6,229.00	23.00	1,200.40	1,005.96	194.44	6.174	
16,500.00	9,800.00	16,239.06	9,800.00	99.22	98.52	-90.00	-6,328.99	23.91	1,200.62	1,003.49	197.13	6.091	
16,600.00	9,800.00	16,339.06	9,800.00	100.56	99.87	-90.00	-6,428.99	24.83	1,200.84	1,001.02	199.82	6.009	
16,700.00	9,800.00	16,439.06	9,800.00	101.90	101.22	-90.00	-6,528.98	25.75	1,201.06	998.54	202.52	5.930	
16,800.00	9,800.00	16,539.06	9,800.00	103.25	102.57	-90.00	-6,628.98	26.67	1,201.28	996.05	205.23	5.853	
16,900.00	9,800.00	16,639.06	9,800.00	104.60	103.93	-90.00	-6,728.97	27.58	1,201.50	993.57	207.94	5.778	
17,000.00	9,800.00	16,739.06	9,800.00	105.94	105.28	-90.00	-6,828.97	28.50	1,201.72	991.07	210.65	5.705	
17,100.00	9,800.00	16,839.06	9,800.00	107.30	106.64	-90.00	-6,928.97	29.42	1,201.95	988.58	213.37	5.633	
17,200.00	9,800.00	16,939.06	9,800.00	108.65	108.01	-90.00	-7,028.96	30.34	1,202.17	986.08	216.09	5.563	
17,300.00	9,800.00	17,039.06	9,800.00	110.01	109.37	-90.00	-7,128.96	31.25	1,202.39	983.57	218.82	5.495	
17,400.00	9,800.00	17,139.06	9,800.00	111.36	110.74	-90.00	-7,228.95	32.17	1,202.61	981.06	221.55	5.428	
17,500.00	9,800.00	17,239.06	9,800.00	112.73	112.10	-90.00	-7,328.95	33.09	1,202.83	978.55	224.28	5.363	
17,590.89	9,800.00	17,328.76	9,800.00	113.96	113.33	-90.00	-7,418.64	33.91	1,203.03	976.29	226.74	5.306	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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		Highside Toolface (°)	Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		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	89.41	0.34	33.04	33.04				
100.00	100.00	100.00	100.00	0.13	0.13	89.41	0.34	33.04	33.04	32.77	0.27	122.898	
200.00	200.00	200.00	200.00	0.49	0.49	89.41	0.34	33.04	33.04	32.06	0.99	33.518	
300.00	300.00	300.00	300.00	0.85	0.85	89.41	0.34	33.04	33.04	31.34	1.70	19.405	
400.00	400.00	400.00	400.00	1.21	1.21	89.41	0.34	33.04	33.04	30.62	2.42	13.655	
500.00	500.00	500.00	500.00	1.57	1.57	89.41	0.34	33.04	33.04	29.91	3.14	10.534	
600.00	600.00	600.00	600.00	1.93	1.93	89.41	0.34	33.04	33.04	29.19	3.85	8.574	
700.00	700.00	700.00	700.00	2.29	2.29	89.41	0.34	33.04	33.04	28.47	4.57	7.229	
800.00	800.00	800.00	800.00	2.64	2.64	89.41	0.34	33.04	33.04	27.75	5.29	6.249	
900.00	900.00	900.00	900.00	3.00	3.00	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	33.04	33.04	20.58	12.46	2.652	
1,900.00	1,900.00	1,900.00	1,900.00	6.59	6.59	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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	89.41	0.34	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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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		
5,200.00	5,200.00	5,200.00	5,200.00	18.42	18.42	89.41	0.34	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	89.41	0.34	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	89.41	0.34	33.04	33.04	-5.23	38.27	0.863	Level 1	
5,500.00	5,500.00	5,500.00	5,500.00	19.49	19.49	89.41	0.34	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	89.41	0.34	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	89.41	0.34	33.04	33.04	-6.80	39.84	0.829	Level 1, CC	
5,700.00	5,699.99	5,700.66	5,700.66	20.20	20.21	166.22	0.56	32.23	33.27	-7.13	40.40	0.823	Level 1	
5,800.00	5,799.89	5,801.50	5,801.43	20.55	20.55	166.41	1.44	28.95	34.18	-6.88	41.07	0.832	Level 1	
5,900.00	5,899.60	5,902.36	5,902.11	20.90	20.90	166.73	3.00	23.14	35.81	-5.90	41.71	0.859	Level 1	
6,000.00	5,999.01	6,003.26	6,002.64	21.24	21.26	167.13	5.24	14.81	38.14	-4.19	42.33	0.901	Level 1	
6,100.00	6,098.00	6,104.21	6,102.96	21.59	21.61	167.59	8.15	3.95	41.17	-1.75	42.93	0.959	Level 1	
6,200.00	6,196.47	6,205.22	6,203.01	21.95	21.96	168.07	11.75	-9.43	44.92	1.42	43.50	1.033	Level 2	
6,300.00	6,294.31	6,306.31	6,302.75	22.31	22.32	168.55	16.02	-25.33	49.36	5.32	44.05	1.121	Level 2	
6,400.00	6,391.42	6,407.49	6,402.12	22.67	22.69	169.00	20.96	-43.74	54.51	9.94	44.57	1.223	Level 2	
6,500.00	6,487.69	6,508.78	6,501.06	23.04	23.05	169.42	26.59	-64.67	60.37	15.29	45.07	1.339	Level 3	
6,600.00	6,583.01	6,610.19	6,599.51	23.41	23.42	169.80	32.88	-88.11	66.91	21.36	45.55	1.469	Level 3	
6,700.00	6,677.29	6,711.73	6,697.43	23.80	23.81	170.14	39.85	-114.06	74.16	28.15	46.00	1.612		
6,800.00	6,770.41	6,813.41	6,794.75	24.21	24.19	170.44	47.49	-142.52	82.09	35.65	46.43	1.768		
6,900.00	6,862.29	6,915.26	6,891.42	24.63	24.59	170.71	55.81	-173.47	90.71	43.87	46.84	1.936		
7,000.00	6,952.81	7,017.28	6,987.38	25.07	25.01	170.95	64.79	-206.92	100.01	52.78	47.23	2.117		
7,100.00	7,041.88	7,119.50	7,082.58	25.53	25.43	171.15	74.45	-242.86	109.98	62.39	47.59	2.311		
7,200.00	7,129.40	7,221.91	7,176.95	26.02	25.88	171.33	84.77	-281.28	120.63	72.68	47.94	2.516		
7,300.00	7,215.28	7,324.55	7,270.44	26.54	26.34	171.49	95.75	-322.19	131.93	83.66	48.27	2.733		
7,400.00	7,299.42	7,427.43	7,362.99	27.09	26.83	171.63	107.40	-365.56	143.90	95.32	48.58	2.962		
7,489.65	7,373.30	7,519.86	7,445.11	27.62	27.28	171.73	118.41	-406.54	155.17	106.33	48.84	3.177		
7,500.00	7,381.75	7,530.56	7,454.54	27.69	27.34	171.75	119.71	-411.40	156.49	107.62	48.87	3.202		
7,600.00	7,463.31	7,634.18	7,545.23	28.31	27.88	171.79	132.72	-459.81	167.79	118.64	49.15	3.414		
7,700.00	7,544.88	7,738.35	7,635.02	28.97	28.45	171.67	146.41	-510.80	176.47	127.03	49.43	3.570		
7,729.86	7,569.24	7,769.54	7,661.63	29.16	28.63	171.61	150.64	-526.52	178.55	129.03	49.52	3.606		
7,800.00	7,626.91	7,842.58	7,723.42	29.64	29.06	171.38	160.74	-564.13	181.71	131.96	49.75	3.652		
7,900.00	7,710.71	7,942.56	7,807.60	30.31	29.66	170.90	174.73	-616.22	182.73	132.19	50.54	3.615		
8,000.00	7,796.26	8,039.31	7,889.41	30.98	30.27	170.30	188.13	-666.12	181.15	129.48	51.67	3.506		
8,100.00	7,883.46	8,134.92	7,971.43	31.64	30.87	169.66	200.87	-713.56	178.67	125.76	52.91	3.377		
8,200.00	7,972.24	8,230.59	8,054.69	32.28	31.46	168.97	213.09	-759.05	175.37	121.23	54.14	3.239		
8,300.00	8,062.49	8,326.31	8,139.13	32.91	32.06	168.22	224.78	-802.59	171.26	115.91	55.36	3.094		
8,400.00	8,154.10	8,422.12	8,224.74	33.51	32.65	167.38	235.94	-844.13	166.36	109.80	56.56	2.941		
8,500.00	8,246.99	8,518.02	8,311.46	34.09	33.23	166.45	246.56	-883.66	160.67	102.92	57.75	2.782		
8,600.00	8,341.05	8,614.02	8,399.26	34.65	33.80	165.40	256.63	-921.16	154.21	95.27	58.93	2.617		
8,700.00	8,436.18	8,710.14	8,488.10	35.18	34.35	164.19	266.15	-956.59	146.98	86.87	60.11	2.445		
8,800.00	8,532.27	8,806.39	8,577.94	35.69	34.90	162.79	275.10	-989.93	139.02	77.74	61.28	2.269		
8,900.00	8,629.23	8,902.79	8,668.75	36.17	35.42	161.12	283.49	-1,021.16	130.35	67.90	62.45	2.087		
9,000.00	8,726.93	9,000.00	8,761.11	36.62	35.94	159.10	291.36	-1,050.44	121.03	57.41	63.61	1.903		
9,100.00	8,825.29	9,096.08	8,853.12	37.04	36.43	156.64	298.54	-1,077.18	111.09	46.20	64.89	1.712		
9,200.00	8,924.19	9,193.01	8,946.59	37.45	36.91	153.52	305.18	-1,101.92	100.65	34.44	66.21	1.520		
9,300.00	9,023.52	9,290.14	9,040.88	37.82	37.37	149.48	311.23	-1,124.44	89.84	22.17	67.67	1.328	Level 3	
9,400.00	9,123.18	9,387.48	9,135.93	38.18	37.81	144.08	316.68	-1,144.73	78.90	9.54	69.36	1.138	Level 2	
9,500.00	9,223.05	9,485.07	9,231.71	38.51	38.24	136.65	321.52	-1,162.75	68.23	-3.18	71.41	0.955	Level 1	
9,599.51	9,322.54	9,582.42	9,327.70	38.82	38.64	49.48	325.73	-1,178.41	58.62	-15.32	73.94	0.793	Level 1	
9,600.00	9,323.03	9,582.90	9,328.17	38.82	38.64	-130.18	325.75	-1,178.48	58.58	-15.37	73.95	0.792	Level 1	
9,625.00	9,348.02	9,607.37	9,352.37	38.89	38.74	-133.91	326.71	-1,182.05	56.98	-17.73	74.71	0.763	Level 1	
9,643.16	9,366.13	9,625.11	9,369.91	38.94	38.81	-137.11	327.38	-1,184.54	56.62	-18.71	75.33	0.752	Level 1	
9,650.00	9,372.94	9,631.78	9,376.52	38.96	38.84	-138.41	327.62	-1,185.46	56.67	-18.89	75.56	0.750	Level 1, ES, SF	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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
9,675.00	9,397.72	9,656.06	9,400.56	39.02	38.94	-143.40	328.49	-1,188.71	57.83	-18.59	76.42	0.757	Level 1
9,700.00	9,422.29	9,680.14	9,424.43	39.09	39.03	-148.54	329.32	-1,191.79	60.60	-16.58	77.19	0.785	Level 1
9,725.00	9,446.59	9,703.96	9,448.06	39.15	39.13	-153.47	330.10	-1,194.69	65.06	-12.73	77.79	0.836	Level 1
9,750.00	9,470.55	9,727.46	9,471.39	39.20	39.21	-157.95	330.84	-1,197.42	71.19	-7.04	78.22	0.910	Level 1
9,775.00	9,494.11	9,750.58	9,494.36	39.26	39.30	-161.84	331.52	-1,199.97	78.93	0.42	78.51	1.005	Level 2
9,800.00	9,517.19	9,773.25	9,516.90	39.31	39.39	-165.12	332.16	-1,202.35	88.18	9.49	78.70	1.121	Level 2
9,825.00	9,539.74	9,795.42	9,538.95	39.36	39.47	-167.83	332.75	-1,204.55	98.86	20.04	78.82	1.254	Level 3
9,850.00	9,561.70	9,817.02	9,560.45	39.41	39.55	-170.04	333.29	-1,206.57	110.85	31.95	78.91	1.405	Level 3
9,875.00	9,583.00	9,838.00	9,581.34	39.45	39.62	-171.83	333.79	-1,208.43	124.08	45.11	78.98	1.571	
9,900.00	9,603.58	9,858.29	9,601.56	39.49	39.70	-173.27	334.25	-1,210.12	138.47	59.43	79.04	1.752	
9,925.00	9,623.40	9,877.85	9,621.05	39.53	39.77	-174.43	334.66	-1,211.66	153.95	74.85	79.10	1.946	
9,950.00	9,642.39	9,896.62	9,639.76	39.56	39.83	-175.37	335.03	-1,213.04	170.46	91.30	79.16	2.153	
9,975.00	9,660.51	9,914.53	9,657.63	39.59	39.90	-176.12	335.36	-1,214.28	187.94	108.72	79.22	2.372	
10,000.00	9,677.69	9,931.55	9,674.61	39.61	39.95	-176.73	335.66	-1,215.38	206.33	127.05	79.28	2.603	
10,025.00	9,693.91	9,947.63	9,690.65	39.63	40.01	-177.21	335.92	-1,216.36	225.58	146.24	79.34	2.843	
10,050.00	9,709.11	9,962.71	9,705.70	39.65	40.06	-177.60	336.15	-1,217.21	245.63	166.24	79.39	3.094	
10,075.00	9,723.24	9,976.75	9,719.72	39.66	40.11	-177.91	336.35	-1,217.96	266.43	186.98	79.45	3.354	
10,100.00	9,736.28	9,989.71	9,732.67	39.67	40.15	-178.15	336.53	-1,218.61	287.92	208.42	79.50	3.622	
10,125.00	9,748.19	10,001.54	9,744.49	39.68	40.19	-178.34	336.67	-1,219.16	310.04	230.50	79.55	3.898	
10,150.00	9,758.93	10,012.22	9,755.16	39.68	40.23	-178.47	336.80	-1,219.63	332.74	253.15	79.59	4.181	
10,175.00	9,768.47	10,021.71	9,764.63	39.69	40.26	-178.56	336.91	-1,220.03	355.95	276.33	79.62	4.471	
10,200.00	9,776.79	10,029.97	9,772.88	39.69	40.29	-178.59	336.99	-1,220.35	379.60	299.95	79.65	4.766	
10,225.00	9,783.86	10,036.97	9,779.89	39.68	40.31	-178.55	337.06	-1,220.61	403.65	323.97	79.68	5.066	
10,250.00	9,789.67	10,042.70	9,785.61	39.68	40.33	-178.43	337.12	-1,220.82	428.02	348.32	79.70	5.370	
10,275.00	9,794.20	10,047.12	9,790.03	39.67	40.34	-178.12	337.16	-1,220.97	452.64	372.93	79.71	5.678	
10,300.00	9,797.44	10,050.22	9,793.13	39.67	40.35	-177.38	337.19	-1,221.08	477.46	397.73	79.72	5.989	
10,325.00	9,799.38	10,051.99	9,794.89	39.66	40.36	-174.61	337.20	-1,221.14	502.39	422.66	79.73	6.301	
10,349.51	9,800.00	10,052.41	9,795.31	39.66	40.36	-23.04	337.21	-1,221.15	526.89	447.16	79.73	6.608	
10,400.00	9,800.00	10,051.94	9,794.84	39.65	40.36	-21.27	337.20	-1,221.13	577.38	497.65	79.73	7.242	
10,500.00	9,800.00	10,050.99	9,793.89	39.64	40.35	-18.47	337.20	-1,221.10	677.38	597.65	79.73	8.496	
10,600.00	9,800.00	11,289.16	10,500.00	39.66	41.77	179.99	-440.15	-1,217.87	699.99	656.91	43.08	16.249	
10,700.00	9,800.00	11,389.16	10,500.00	39.70	41.82	179.99	-540.15	-1,217.18	699.99	656.23	43.76	15.996	
10,800.00	9,800.00	11,489.16	10,500.00	39.78	41.90	179.99	-640.15	-1,216.48	699.99	655.51	44.48	15.736	
10,900.00	9,800.00	11,589.16	10,500.00	39.90	42.02	179.99	-740.14	-1,215.78	699.99	654.74	45.25	15.469	
11,000.00	9,800.00	11,689.16	10,500.00	40.07	42.21	179.99	-840.14	-1,215.08	699.99	653.93	46.06	15.198	
11,100.00	9,800.00	11,789.16	10,500.00	40.32	42.47	179.99	-940.14	-1,214.38	699.99	653.09	46.91	14.924	
11,200.00	9,800.00	11,889.16	10,500.00	40.64	42.81	179.99	-1,040.14	-1,213.68	699.99	652.21	47.79	14.648	
11,300.00	9,800.00	11,989.16	10,500.00	41.05	43.23	179.99	-1,140.13	-1,212.99	699.99	651.29	48.71	14.372	
11,400.00	9,800.00	12,089.16	10,500.00	41.54	43.73	179.99	-1,240.13	-1,212.29	699.99	650.34	49.66	14.097	
11,500.00	9,800.00	12,189.16	10,500.00	42.10	44.30	179.99	-1,340.13	-1,211.59	699.99	649.36	50.64	13.824	
11,600.00	9,800.00	12,289.16	10,500.00	42.74	44.93	179.99	-1,440.13	-1,210.89	699.99	648.35	51.65	13.553	
11,700.00	9,800.00	12,389.16	10,500.00	43.43	45.61	179.99	-1,540.12	-1,210.19	699.99	647.31	52.68	13.286	
11,800.00	9,800.00	12,489.16	10,500.00	44.17	46.33	179.99	-1,640.12	-1,209.49	699.99	646.25	53.75	13.024	
11,900.00	9,800.00	12,589.16	10,500.00	44.96	47.10	179.99	-1,740.12	-1,208.80	699.99	645.16	54.84	12.765	
12,000.00	9,800.00	12,689.16	10,500.00	45.78	47.90	179.99	-1,840.12	-1,208.10	699.99	644.05	55.95	12.512	
12,100.00	9,800.00	12,789.16	10,500.00	46.64	48.74	179.99	-1,940.11	-1,207.40	699.99	642.92	57.08	12.264	
12,200.00	9,800.00	12,889.16	10,500.00	47.54	49.61	179.99	-2,040.11	-1,206.70	699.99	641.76	58.23	12.021	
12,300.00	9,800.00	12,989.16	10,500.00	48.46	50.50	179.99	-2,140.11	-1,206.00	699.99	640.59	59.40	11.784	
12,400.00	9,800.00	13,089.16	10,500.00	49.41	51.42	179.99	-2,240.11	-1,205.31	699.99	639.40	60.59	11.553	
12,500.00	9,800.00	13,189.16	10,500.00	50.38	52.37	179.99	-2,340.10	-1,204.61	699.99	638.20	61.80	11.327	
12,600.00	9,800.00	13,289.16	10,500.00	51.38	53.34	179.99	-2,440.10	-1,203.91	700.00	636.98	63.02	11.108	
12,700.00	9,800.00	13,389.16	10,500.00	52.40	54.33	179.99	-2,540.10	-1,203.21	700.00	635.74	64.26	10.894	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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	
12,800.00	9,800.00	13,489.16	10,500.00	53.44	55.34	179.99	-2,640.10	-1,202.51	700.00	634.49	65.51	10.686	
12,900.00	9,800.00	13,589.16	10,500.00	54.49	56.37	179.99	-2,740.09	-1,201.81	700.00	633.22	66.77	10.483	
13,000.00	9,800.00	13,689.16	10,500.00	55.57	57.42	179.99	-2,840.09	-1,201.12	700.00	631.94	68.05	10.286	
13,100.00	9,800.00	13,789.16	10,500.00	56.66	58.48	179.99	-2,940.09	-1,200.42	700.00	630.66	69.34	10.095	
13,200.00	9,800.00	13,889.16	10,500.00	57.77	59.56	179.99	-3,040.09	-1,199.72	700.00	629.35	70.64	9.909	
13,300.00	9,800.00	13,989.16	10,500.00	58.89	60.66	179.99	-3,140.08	-1,199.02	700.00	628.04	71.95	9.729	
13,400.00	9,800.00	14,089.16	10,500.00	60.03	61.77	179.99	-3,240.08	-1,198.32	700.00	626.72	73.27	9.553	
13,500.00	9,800.00	14,189.16	10,500.00	61.17	62.89	179.99	-3,340.08	-1,197.62	700.00	625.39	74.61	9.383	
13,600.00	9,800.00	14,289.16	10,500.00	62.34	64.03	179.99	-3,440.08	-1,196.93	700.00	624.05	75.95	9.217	
13,700.00	9,800.00	14,389.16	10,500.00	63.51	65.18	179.99	-3,540.07	-1,196.23	700.00	622.70	77.30	9.056	
13,800.00	9,800.00	14,489.16	10,500.00	64.69	66.33	179.99	-3,640.07	-1,195.53	700.00	621.34	78.65	8.900	
13,900.00	9,800.00	14,589.16	10,500.00	65.88	67.50	179.99	-3,740.07	-1,194.83	700.00	619.98	80.02	8.748	
14,000.00	9,800.00	14,689.16	10,500.00	67.09	68.68	179.99	-3,840.07	-1,194.13	700.00	618.61	81.39	8.601	
14,100.00	9,800.00	14,789.16	10,500.00	68.30	69.87	179.99	-3,940.06	-1,193.44	700.00	617.23	82.77	8.457	
14,200.00	9,800.00	14,889.16	10,500.00	69.52	71.07	179.99	-4,040.06	-1,192.74	700.00	615.84	84.16	8.318	
14,300.00	9,800.00	14,989.16	10,500.00	70.75	72.28	179.99	-4,140.06	-1,192.04	700.00	614.45	85.55	8.183	
14,400.00	9,800.00	15,089.16	10,500.00	71.99	73.50	179.99	-4,240.06	-1,191.34	700.00	613.05	86.95	8.051	
14,500.00	9,800.00	15,189.16	10,500.00	73.23	74.72	179.99	-4,340.06	-1,190.64	700.00	611.65	88.35	7.923	
14,600.00	9,800.00	15,289.16	10,500.00	74.48	75.95	180.00	-4,440.05	-1,189.94	700.00	610.24	89.76	7.799	
14,700.00	9,800.00	15,389.16	10,500.00	75.74	77.19	180.00	-4,540.05	-1,189.25	700.00	608.82	91.17	7.678	
14,800.00	9,800.00	15,489.16	10,500.00	77.00	78.44	180.00	-4,640.05	-1,188.55	700.00	607.40	92.59	7.560	
14,900.00	9,800.00	15,589.16	10,500.00	78.27	79.69	180.00	-4,740.05	-1,187.85	700.00	605.98	94.02	7.445	
15,000.00	9,800.00	15,689.16	10,500.00	79.55	80.95	180.00	-4,840.04	-1,187.15	700.00	604.55	95.45	7.334	
15,100.00	9,800.00	15,789.16	10,500.00	80.83	82.21	180.00	-4,940.04	-1,186.45	700.00	603.12	96.88	7.225	
15,200.00	9,800.00	15,889.16	10,500.00	82.12	83.48	180.00	-5,040.04	-1,185.75	700.00	601.68	98.32	7.120	
15,300.00	9,800.00	15,989.16	10,500.00	83.41	84.75	180.00	-5,140.04	-1,185.06	700.00	600.24	99.76	7.017	
15,400.00	9,800.00	16,089.16	10,500.00	84.70	86.03	180.00	-5,240.03	-1,184.36	700.00	598.79	101.21	6.917	
15,500.00	9,800.00	16,189.16	10,500.00	86.01	87.32	180.00	-5,340.03	-1,183.66	700.00	597.34	102.66	6.819	
15,600.00	9,800.00	16,289.16	10,500.00	87.31	88.61	180.00	-5,440.03	-1,182.96	700.00	595.89	104.11	6.724	
15,700.00	9,800.00	16,389.16	10,500.00	88.62	89.90	180.00	-5,540.03	-1,182.26	700.00	594.43	105.56	6.631	
15,800.00	9,800.00	16,489.16	10,500.00	89.93	91.20	180.00	-5,640.02	-1,181.56	700.00	592.98	107.02	6.541	
15,900.00	9,800.00	16,589.16	10,500.00	91.25	92.50	180.00	-5,740.02	-1,180.87	700.00	591.51	108.48	6.453	
16,000.00	9,800.00	16,689.16	10,500.00	92.57	93.81	180.00	-5,840.02	-1,180.17	700.00	590.05	109.95	6.367	
16,100.00	9,800.00	16,789.16	10,500.00	93.89	95.12	180.00	-5,940.02	-1,179.47	700.00	588.58	111.42	6.283	
16,200.00	9,800.00	16,889.16	10,500.00	95.22	96.44	180.00	-6,040.01	-1,178.77	700.00	587.11	112.89	6.201	
16,300.00	9,800.00	16,989.16	10,500.00	96.55	97.75	180.00	-6,140.01	-1,178.07	700.00	585.64	114.36	6.121	
16,400.00	9,800.00	17,089.16	10,500.00	97.89	99.07	180.00	-6,240.01	-1,177.38	700.00	584.16	115.84	6.043	
16,500.00	9,800.00	17,189.16	10,500.00	99.22	100.40	180.00	-6,340.01	-1,176.68	700.00	582.68	117.32	5.967	
16,600.00	9,800.00	17,289.16	10,500.00	100.56	101.73	180.00	-6,440.00	-1,175.98	700.00	581.20	118.80	5.892	
16,700.00	9,800.00	17,389.16	10,500.00	101.90	103.06	180.00	-6,540.00	-1,175.28	700.00	579.72	120.28	5.820	
16,800.00	9,800.00	17,489.16	10,500.00	103.25	104.39	180.00	-6,640.00	-1,174.58	700.00	578.23	121.76	5.749	
16,900.00	9,800.00	17,589.16	10,500.00	104.60	105.72	180.00	-6,740.00	-1,173.88	700.00	576.75	123.25	5.679	
17,000.00	9,800.00	17,689.16	10,500.00	105.94	107.06	180.00	-6,839.99	-1,173.19	700.00	575.26	124.74	5.612	
17,100.00	9,800.00	17,789.16	10,500.00	107.30	108.40	180.00	-6,939.99	-1,172.49	700.00	573.77	126.23	5.545	
17,200.00	9,800.00	17,889.16	10,500.00	108.65	109.75	180.00	-7,039.99	-1,171.79	700.00	572.27	127.73	5.481	
17,300.00	9,800.00	17,989.16	10,500.00	110.01	111.09	180.00	-7,139.99	-1,171.09	700.00	570.78	129.22	5.417	
17,400.00	9,800.00	18,089.16	10,500.00	111.36	112.44	180.00	-7,239.98	-1,170.39	700.00	569.28	130.72	5.355	
17,500.00	9,800.00	18,189.16	10,500.00	112.73	113.79	180.00	-7,339.98	-1,169.69	700.00	567.79	132.21	5.294	
17,590.89	9,800.00	18,280.05	10,500.00	113.96	115.02	-180.00	-7,430.87	-1,169.06	700.00	566.42	133.58	5.240	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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 505H - 505H - 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	89.34	1.14	99.01	99.02				
100.00	100.00	100.00	100.00	0.13	0.13	89.34	1.14	99.01	99.02	98.75	0.27	368.291	
200.00	200.00	200.00	200.00	0.49	0.49	89.34	1.14	99.01	99.02	98.03	0.99	100.443	
300.00	300.00	300.00	300.00	0.85	0.85	89.34	1.14	99.01	99.02	97.31	1.70	58.151	
400.00	400.00	400.00	400.00	1.21	1.21	89.34	1.14	99.01	99.02	96.60	2.42	40.921	
500.00	500.00	500.00	500.00	1.57	1.57	89.34	1.14	99.01	99.02	95.88	3.14	31.568	
600.00	600.00	600.00	600.00	1.93	1.93	89.34	1.14	99.01	99.02	95.16	3.85	25.695	
700.00	700.00	700.00	700.00	2.29	2.29	89.34	1.14	99.01	99.02	94.45	4.57	21.664	
800.00	800.00	800.00	800.00	2.64	2.64	89.34	1.14	99.01	99.02	93.73	5.29	18.727	
900.00	900.00	900.00	900.00	3.00	3.00	89.34	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	89.34	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	89.34	1.14	99.01	99.02	91.58	7.44	13.312	
1,200.00	1,200.00	1,200.00	1,200.00	4.08	4.08	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	1.14	99.01	99.02	62.90	36.12	2.742	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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 505H - 505H - Planning - Plan 0.1												Offset Site Error:	0.00 usft
Survey Program: 0-B001Mb_MWVD+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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	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	89.34	1.14	99.01	99.02	59.17	39.84	2.485 CC, ES	
5,700.00	5,699.99	5,700.49	5,700.48	20.20	20.21	165.94	1.67	98.80	99.84	59.43	40.41	2.471 SF	
5,800.00	5,799.89	5,801.04	5,801.01	20.55	20.57	165.31	3.80	97.97	103.21	62.09	41.11	2.510	
5,900.00	5,899.60	5,901.46	5,901.34	20.90	20.93	164.29	7.58	96.49	109.18	67.37	41.81	2.611	
6,000.00	5,999.01	6,001.68	6,001.40	21.24	21.29	163.01	12.97	94.38	117.80	75.29	42.51	2.771	
6,100.00	6,098.00	6,101.62	6,101.06	21.59	21.64	161.59	19.98	91.64	129.09	85.89	43.21	2.988	
6,200.00	6,196.47	6,201.17	6,200.18	21.95	22.00	160.14	28.56	88.28	143.07	99.17	43.90	3.259	
6,300.00	6,294.31	6,299.70	6,298.21	22.31	22.35	159.09	37.71	84.70	159.99	115.40	44.59	3.588	
6,400.00	6,391.42	6,397.67	6,395.70	22.67	22.70	158.59	46.81	81.14	179.95	134.67	45.28	3.974	
6,500.00	6,487.69	6,494.99	6,492.53	23.04	23.05	158.49	55.85	77.60	202.92	156.96	45.96	4.415	
6,600.00	6,583.01	6,591.55	6,588.61	23.41	23.39	158.66	64.82	74.09	228.87	182.23	46.64	4.907	
6,700.00	6,677.29	6,687.25	6,683.83	23.80	23.74	159.02	73.71	70.61	257.79	210.47	47.32	5.448	
6,800.00	6,770.41	6,781.97	6,778.08	24.21	24.08	159.48	82.51	67.17	289.68	241.69	47.99	6.036	
6,900.00	6,862.29	6,875.63	6,871.27	24.63	24.42	160.00	91.21	63.76	324.52	275.86	48.66	6.670	
7,000.00	6,952.81	6,968.10	6,963.28	25.07	24.75	160.54	99.80	60.40	362.30	312.98	49.31	7.347	
7,100.00	7,041.88	7,059.30	7,054.03	25.53	25.08	161.08	108.28	57.09	403.00	353.03	49.97	8.065	
7,200.00	7,129.40	7,149.13	7,143.41	26.02	25.41	161.60	116.62	53.82	446.60	395.99	50.61	8.824	
7,300.00	7,215.28	7,237.48	7,231.32	26.54	25.73	162.09	124.83	50.61	493.07	441.82	51.25	9.621	
7,400.00	7,299.42	7,324.27	7,317.67	27.09	26.04	162.55	132.89	47.46	542.36	490.48	51.88	10.454	
7,489.65	7,373.30	7,400.65	7,393.68	27.62	26.32	162.92	139.99	44.68	588.92	536.48	52.44	11.231	
7,500.00	7,381.75	7,409.40	7,402.38	27.69	26.35	163.00	140.80	44.36	594.43	541.92	52.50	11.322	
7,600.00	7,463.31	7,493.84	7,486.39	28.31	26.66	163.67	148.64	41.29	647.64	594.52	53.12	12.192	
7,700.00	7,544.88	7,578.28	7,570.41	28.97	26.97	164.24	156.49	38.22	700.91	647.16	53.75	13.041	
7,729.86	7,569.24	7,603.49	7,595.50	29.16	27.06	164.39	158.83	37.31	716.82	662.89	53.93	13.291	
7,800.00	7,626.91	7,663.14	7,654.85	29.64	27.27	164.93	164.37	35.14	753.55	699.17	54.38	13.858	
7,900.00	7,710.71	7,749.61	7,740.89	30.31	27.59	165.55	172.40	31.99	803.61	748.59	55.03	14.604	
8,000.00	7,796.26	7,837.66	7,828.50	30.98	27.91	166.04	180.58	28.79	850.90	795.21	55.69	15.278	
8,100.00	7,883.46	7,927.21	7,917.60	31.64	28.24	166.42	188.90	25.54	895.35	838.97	56.37	15.882	
8,200.00	7,972.24	8,018.15	8,008.09	32.28	28.57	166.72	197.35	22.23	936.91	879.84	57.07	16.417	
8,300.00	8,062.49	8,110.39	8,099.87	32.91	28.91	166.93	205.92	18.88	975.53	917.75	57.78	16.884	
8,400.00	8,154.10	8,203.82	8,192.83	33.51	29.25	167.08	214.60	15.48	1,011.16	952.66	58.50	17.286	
8,500.00	8,246.99	8,298.34	8,286.88	34.09	29.60	167.18	223.38	12.05	1,043.77	984.55	59.22	17.625	
8,600.00	8,341.05	8,393.85	8,381.92	34.65	29.95	167.21	232.25	8.58	1,073.33	1,013.37	59.96	17.902	
8,700.00	8,436.18	8,490.25	8,477.84	35.18	30.31	167.20	241.21	5.07	1,099.80	1,039.10	60.69	18.120	
8,800.00	8,532.27	8,587.43	8,574.54	35.69	30.66	167.14	250.24	1.54	1,123.16	1,061.72	61.44	18.281	
8,900.00	8,629.23	8,685.29	8,671.90	36.17	31.02	167.04	259.33	-2.02	1,143.39	1,081.21	62.18	18.388	
9,000.00	8,726.93	8,783.72	8,769.84	36.62	31.39	166.89	268.47	-5.60	1,160.48	1,097.56	62.93	18.442	
9,100.00	8,825.29	8,882.60	8,868.23	37.04	31.75	166.70	277.66	-9.19	1,174.42	1,110.75	63.67	18.445	
9,200.00	8,924.19	8,981.85	8,966.98	37.45	32.12	166.46	286.88	-12.80	1,185.19	1,120.78	64.42	18.399	
9,300.00	9,023.52	9,081.33	9,065.97	37.82	32.48	166.18	296.12	-16.41	1,192.81	1,127.65	65.16	18.307	
9,400.00	9,123.18	9,180.96	9,165.10	38.18	32.85	165.85	305.37	-20.04	1,197.26	1,131.37	65.89	18.170	
9,500.00	9,223.05	9,280.61	9,264.26	38.51	33.22	165.46	314.63	-23.66	1,198.57	1,131.95	66.62	17.991	
9,599.51	9,322.54	9,379.21	9,362.37	38.82	33.59	88.28	323.79	-27.24	1,196.76	1,129.42	67.34	17.771	
9,600.00	9,323.03	9,379.67	9,362.82	38.82	33.59	-91.33	323.83	-27.26	1,196.75	1,129.40	67.35	17.770	
9,625.00	9,348.02	9,400.00	9,383.06	38.89	33.66	-91.54	325.66	-27.97	1,195.96	1,128.46	67.50	17.718	
9,650.00	9,372.94	9,425.89	9,408.83	38.96	33.76	-91.83	327.89	-28.85	1,195.24	1,127.56	67.68	17.660	
9,675.00	9,397.72	9,448.73	9,431.58	39.02	33.84	-92.13	329.77	-29.58	1,194.62	1,126.77	67.85	17.608	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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 505H - 505H - Planning - Plan 0.1												Offset Site Error:	0.00 usft
Survey Program: 0-B001Mb_MWVD+HRGM												Offset Well Error:	0.00 usft
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
9,700.00	9,422.29	9,471.32	9,454.09	39.09	33.93	-92.48	331.55	-30.28	1,194.11	1,126.09	68.01	17.557	
9,725.00	9,446.59	9,493.62	9,476.32	39.15	34.01	-92.85	333.23	-30.93	1,193.72	1,125.55	68.18	17.510	
9,750.00	9,470.55	9,515.56	9,498.20	39.20	34.09	-93.25	334.79	-31.55	1,193.49	1,125.16	68.34	17.464	
9,769.69	9,489.14	9,532.57	9,515.16	39.25	34.15	-93.58	335.96	-32.00	1,193.44	1,124.97	68.47	17.431	
9,775.00	9,494.11	9,537.11	9,519.69	39.26	34.17	-93.67	336.26	-32.12	1,193.44	1,124.94	68.50	17.422	
9,800.00	9,517.19	9,558.22	9,540.74	39.31	34.24	-94.10	337.62	-32.65	1,193.59	1,124.93	68.66	17.384	
9,825.00	9,539.74	9,578.82	9,561.31	39.36	34.32	-94.54	338.88	-33.15	1,193.97	1,125.15	68.82	17.349	
9,850.00	9,561.70	9,600.00	9,582.44	39.41	34.40	-95.00	340.10	-33.63	1,194.61	1,125.62	68.99	17.317	
9,875.00	9,583.00	9,618.35	9,600.76	39.45	34.46	-95.39	341.10	-34.02	1,195.53	1,126.40	69.14	17.293	
9,900.00	9,603.58	9,637.17	9,619.55	39.49	34.53	-95.79	342.07	-34.40	1,196.78	1,127.49	69.29	17.272	
9,925.00	9,623.40	9,655.30	9,637.66	39.53	34.60	-96.16	342.95	-34.74	1,198.39	1,128.94	69.44	17.257	
9,950.00	9,642.39	9,672.69	9,655.03	39.56	34.66	-96.49	343.74	-35.05	1,200.37	1,130.78	69.59	17.248	
9,975.00	9,660.51	9,689.30	9,671.62	39.59	34.72	-96.77	344.46	-35.33	1,202.77	1,133.02	69.74	17.246	
10,000.00	9,677.69	9,705.08	9,687.38	39.61	34.78	-97.00	345.09	-35.58	1,205.60	1,135.71	69.89	17.251	
10,025.00	9,693.91	9,719.98	9,702.27	39.63	34.83	-97.16	345.65	-35.80	1,208.90	1,138.87	70.03	17.263	
10,050.00	9,709.11	9,733.96	9,716.25	39.65	34.88	-97.25	346.15	-35.99	1,212.69	1,142.52	70.17	17.283	
10,075.00	9,723.24	9,746.99	9,729.26	39.66	34.93	-97.25	346.58	-36.16	1,216.99	1,146.69	70.30	17.311	
10,100.00	9,736.28	9,759.01	9,741.28	39.67	34.97	-97.16	346.96	-36.31	1,221.82	1,151.38	70.43	17.347	
10,125.00	9,748.19	9,769.99	9,752.25	39.68	35.01	-96.97	347.28	-36.43	1,227.18	1,156.62	70.56	17.392	
10,150.00	9,758.93	9,779.88	9,762.14	39.68	35.05	-96.68	347.55	-36.54	1,233.09	1,162.41	70.68	17.446	
10,175.00	9,768.47	9,788.66	9,770.92	39.69	35.08	-96.27	347.78	-36.63	1,239.55	1,168.75	70.80	17.509	
10,200.00	9,776.79	9,796.29	9,778.54	39.69	35.11	-95.75	347.97	-36.70	1,246.56	1,175.66	70.91	17.581	
10,225.00	9,783.86	9,802.73	9,784.98	39.68	35.13	-95.10	348.12	-36.76	1,254.11	1,183.11	71.01	17.662	
10,250.00	9,789.67	9,807.96	9,790.20	39.68	35.15	-94.32	348.24	-36.81	1,262.20	1,191.10	71.10	17.752	
10,275.00	9,794.20	9,811.94	9,794.18	39.67	35.16	-93.41	348.33	-36.84	1,270.80	1,199.62	71.19	17.852	
10,300.00	9,797.44	9,814.65	9,796.90	39.67	35.17	-92.37	348.38	-36.87	1,279.90	1,208.64	71.26	17.960	
10,325.00	9,799.38	9,816.07	9,798.31	39.66	35.18	-91.20	348.41	-36.88	1,289.46	1,218.13	71.33	18.077	
10,349.51	9,800.00	9,816.18	9,798.43	39.66	35.18	-89.92	348.42	-36.88	1,299.26	1,227.87	71.39	18.200	
10,400.00	9,800.00	9,815.10	9,797.35	39.65	35.17	-89.87	348.39	-36.87	1,320.65	1,249.16	71.50	18.472	
10,500.00	9,800.00	9,812.91	9,795.16	39.64	35.17	-89.77	348.35	-36.85	1,367.54	1,295.84	71.71	19.072	
10,600.00	9,800.00	11,050.91	10,500.00	39.66	37.98	-120.52	-429.27	-30.27	1,378.47	1,309.30	69.17	19.928	
10,700.00	9,800.00	11,150.91	10,500.00	39.70	38.30	-120.51	-529.26	-29.35	1,378.66	1,308.81	69.85	19.736	
10,800.00	9,800.00	11,250.91	10,500.00	39.78	38.66	-120.51	-629.26	-28.43	1,378.85	1,308.22	70.63	19.523	
10,900.00	9,800.00	11,350.91	10,500.00	39.90	39.07	-120.50	-729.25	-27.52	1,379.04	1,307.55	71.49	19.291	
11,000.00	9,800.00	11,450.91	10,500.00	40.07	39.53	-120.50	-829.25	-26.60	1,379.23	1,306.80	72.43	19.042	
11,100.00	9,800.00	11,550.91	10,500.00	40.32	40.04	-120.49	-929.25	-25.69	1,379.42	1,305.97	73.45	18.780	
11,200.00	9,800.00	11,650.91	10,500.00	40.64	40.59	-120.49	-1,029.24	-24.77	1,379.61	1,305.06	74.55	18.505	
11,300.00	9,800.00	11,750.91	10,500.00	41.05	41.18	-120.49	-1,129.24	-23.85	1,379.80	1,304.07	75.73	18.221	
11,400.00	9,800.00	11,850.91	10,500.00	41.54	41.82	-120.48	-1,229.23	-22.94	1,379.99	1,303.02	76.97	17.929	
11,500.00	9,800.00	11,950.91	10,500.00	42.10	42.49	-120.48	-1,329.23	-22.02	1,380.18	1,301.90	78.28	17.631	
11,600.00	9,800.00	12,050.91	10,500.00	42.74	43.20	-120.47	-1,429.22	-21.10	1,380.37	1,300.71	79.65	17.329	
11,700.00	9,800.00	12,150.91	10,500.00	43.43	43.95	-120.47	-1,529.22	-20.19	1,380.56	1,299.47	81.09	17.025	
11,800.00	9,800.00	12,250.91	10,500.00	44.17	44.73	-120.46	-1,629.21	-19.27	1,380.75	1,298.17	82.58	16.720	
11,900.00	9,800.00	12,350.91	10,500.00	44.96	45.54	-120.46	-1,729.21	-18.35	1,380.94	1,296.81	84.13	16.415	
12,000.00	9,800.00	12,450.91	10,500.00	45.78	46.39	-120.45	-1,829.21	-17.44	1,381.13	1,295.40	85.73	16.111	
12,100.00	9,800.00	12,550.91	10,500.00	46.64	47.26	-120.45	-1,929.20	-16.52	1,381.32	1,293.94	87.37	15.809	
12,200.00	9,800.00	12,650.90	10,500.00	47.54	48.16	-120.44	-2,029.20	-15.61	1,381.51	1,292.44	89.07	15.511	
12,300.00	9,800.00	12,750.90	10,500.00	48.46	49.08	-120.44	-2,129.19	-14.69	1,381.70	1,290.90	90.80	15.217	
12,400.00	9,800.00	12,850.90	10,500.00	49.41	50.03	-120.43	-2,229.19	-13.77	1,381.89	1,289.31	92.58	14.927	
12,500.00	9,800.00	12,950.90	10,500.00	50.38	51.01	-120.43	-2,329.18	-12.86	1,382.08	1,287.68	94.39	14.642	
12,600.00	9,800.00	13,050.90	10,500.00	51.38	52.00	-120.43	-2,429.18	-11.94	1,382.27	1,286.02	96.25	14.362	
12,700.00	9,800.00	13,150.90	10,500.00	52.40	53.02	-120.42	-2,529.17	-11.02	1,382.46	1,284.32	98.13	14.088	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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 505H - 505H - 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		
12,800.00	9,800.00	13,250.90	10,500.00	53.44	54.05	-120.42	-2,629.17	-10.11	1,382.65	1,282.60	100.05	13.820		
12,900.00	9,800.00	13,350.90	10,500.00	54.49	55.10	-120.41	-2,729.17	-9.19	1,382.84	1,280.84	102.00	13.557		
13,000.00	9,800.00	13,450.90	10,500.00	55.57	56.17	-120.41	-2,829.16	-8.28	1,383.03	1,279.05	103.98	13.301		
13,100.00	9,800.00	13,550.90	10,500.00	56.66	57.26	-120.40	-2,929.16	-7.36	1,383.22	1,277.23	105.98	13.051		
13,200.00	9,800.00	13,650.90	10,500.00	57.77	58.36	-120.40	-3,029.15	-6.44	1,383.41	1,275.39	108.02	12.807		
13,300.00	9,800.00	13,750.90	10,500.00	58.89	59.47	-120.39	-3,129.15	-5.53	1,383.60	1,273.52	110.07	12.570		
13,400.00	9,800.00	13,850.90	10,500.00	60.03	60.60	-120.39	-3,229.14	-4.61	1,383.78	1,271.63	112.15	12.339		
13,500.00	9,800.00	13,950.90	10,500.00	61.17	61.74	-120.38	-3,329.14	-3.69	1,383.97	1,269.72	114.25	12.113		
13,600.00	9,800.00	14,050.90	10,500.00	62.34	62.90	-120.38	-3,429.13	-2.78	1,384.16	1,267.79	116.37	11.894		
13,700.00	9,800.00	14,150.90	10,500.00	63.51	64.06	-120.37	-3,529.13	-1.86	1,384.35	1,265.84	118.51	11.681		
13,800.00	9,800.00	14,250.90	10,500.00	64.69	65.24	-120.37	-3,629.13	-0.94	1,384.54	1,263.87	120.67	11.473		
13,900.00	9,800.00	14,350.90	10,500.00	65.88	66.42	-120.37	-3,729.12	-0.03	1,384.73	1,261.88	122.85	11.272		
14,000.00	9,800.00	14,450.90	10,500.00	67.09	67.62	-120.36	-3,829.12	0.89	1,384.92	1,259.88	125.04	11.075		
14,100.00	9,800.00	14,550.90	10,500.00	68.30	68.83	-120.36	-3,929.11	1.80	1,385.11	1,257.86	127.25	10.885		
14,200.00	9,800.00	14,650.90	10,500.00	69.52	70.04	-120.35	-4,029.11	2.72	1,385.30	1,255.83	129.48	10.699		
14,300.00	9,800.00	14,750.90	10,500.00	70.75	71.27	-120.35	-4,129.10	3.64	1,385.49	1,253.78	131.72	10.519		
14,400.00	9,800.00	14,850.90	10,500.00	71.99	72.50	-120.34	-4,229.10	4.55	1,385.68	1,251.71	133.97	10.343		
14,500.00	9,800.00	14,950.90	10,500.00	73.23	73.73	-120.34	-4,329.09	5.47	1,385.87	1,249.64	136.24	10.173		
14,600.00	9,800.00	15,050.90	10,500.00	74.48	74.98	-120.33	-4,429.09	6.39	1,386.06	1,247.55	138.51	10.007		
14,700.00	9,800.00	15,150.90	10,500.00	75.74	76.23	-120.33	-4,529.09	7.30	1,386.25	1,245.45	140.80	9.845		
14,800.00	9,800.00	15,250.90	10,500.00	77.00	77.49	-120.32	-4,629.08	8.22	1,386.44	1,243.34	143.10	9.688		
14,900.00	9,800.00	15,350.90	10,500.00	78.27	78.76	-120.32	-4,729.08	9.13	1,386.63	1,241.22	145.41	9.536		
15,000.00	9,800.00	15,450.90	10,500.00	79.55	80.03	-120.31	-4,829.07	10.05	1,386.82	1,239.09	147.73	9.387		
15,100.00	9,800.00	15,550.90	10,500.00	80.83	81.31	-120.31	-4,929.07	10.97	1,387.01	1,236.95	150.07	9.243		
15,200.00	9,800.00	15,650.90	10,500.00	82.12	82.59	-120.31	-5,029.06	11.88	1,387.20	1,234.80	152.41	9.102		
15,300.00	9,800.00	15,750.90	10,500.00	83.41	83.88	-120.30	-5,129.06	12.80	1,387.39	1,232.64	154.75	8.965		
15,400.00	9,800.00	15,850.90	10,500.00	84.70	85.17	-120.30	-5,229.05	13.72	1,387.58	1,230.47	157.11	8.832		
15,500.00	9,800.00	15,950.90	10,500.00	86.01	86.46	-120.29	-5,329.05	14.63	1,387.77	1,228.30	159.48	8.702		
15,600.00	9,800.00	16,050.90	10,500.00	87.31	87.77	-120.29	-5,429.05	15.55	1,387.97	1,226.12	161.85	8.576		
15,700.00	9,800.00	16,150.90	10,500.00	88.62	89.07	-120.28	-5,529.04	16.46	1,388.16	1,223.93	164.23	8.453		
15,800.00	9,800.00	16,250.90	10,500.00	89.93	90.38	-120.28	-5,629.04	17.38	1,388.35	1,221.73	166.62	8.333		
15,900.00	9,800.00	16,350.90	10,500.00	91.25	91.69	-120.27	-5,729.03	18.30	1,388.54	1,219.52	169.01	8.216		
16,000.00	9,800.00	16,450.90	10,500.00	92.57	93.01	-120.27	-5,829.03	19.21	1,388.73	1,217.31	171.41	8.102		
16,100.00	9,800.00	16,550.90	10,500.00	93.89	94.33	-120.26	-5,929.02	20.13	1,388.92	1,215.10	173.82	7.991		
16,200.00	9,800.00	16,650.90	10,500.00	95.22	95.66	-120.26	-6,029.02	21.05	1,389.11	1,212.87	176.23	7.882		
16,300.00	9,800.00	16,750.90	10,500.00	96.55	96.98	-120.26	-6,129.02	21.96	1,389.30	1,210.65	178.65	7.777		
16,400.00	9,800.00	16,850.89	10,500.00	97.89	98.31	-120.25	-6,229.01	22.88	1,389.49	1,208.41	181.07	7.674		
16,500.00	9,800.00	16,950.89	10,500.00	99.22	99.65	-120.25	-6,329.01	23.80	1,389.68	1,206.17	183.50	7.573		
16,600.00	9,800.00	17,050.89	10,500.00	100.56	100.98	-120.24	-6,429.00	24.71	1,389.87	1,203.93	185.94	7.475		
16,700.00	9,800.00	17,150.89	10,500.00	101.90	102.32	-120.24	-6,529.00	25.63	1,390.06	1,201.68	188.38	7.379		
16,800.00	9,800.00	17,250.89	10,500.00	103.25	103.67	-120.23	-6,628.99	26.54	1,390.25	1,199.43	190.82	7.286		
16,900.00	9,800.00	17,350.89	10,500.00	104.60	105.01	-120.23	-6,728.99	27.46	1,390.44	1,197.17	193.27	7.194		
17,000.00	9,800.00	17,450.89	10,500.00	105.94	106.36	-120.22	-6,828.98	28.38	1,390.63	1,194.90	195.72	7.105		
17,100.00	9,800.00	17,550.89	10,500.00	107.30	107.71	-120.22	-6,928.98	29.29	1,390.82	1,192.64	198.18	7.018		
17,200.00	9,800.00	17,650.89	10,500.00	108.65	109.06	-120.21	-7,028.98	30.21	1,391.01	1,190.37	200.64	6.933		
17,300.00	9,800.00	17,750.89	10,500.00	110.01	110.41	-120.21	-7,128.97	31.13	1,391.20	1,188.09	203.11	6.850		
17,400.00	9,800.00	17,850.89	10,500.00	111.36	111.77	-120.21	-7,228.97	32.04	1,391.39	1,185.81	205.58	6.768		
17,500.00	9,800.00	17,950.89	10,500.00	112.73	113.13	-120.20	-7,328.96	32.96	1,391.58	1,183.53	208.05	6.689		
17,590.89	9,800.00	18,040.57	10,500.00	113.96	114.35	-120.20	-7,418.64	33.78	1,391.75	1,181.48	210.27	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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 0-												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	0.00	0.00	0.00	1.00	-76.57	673.59	-2,821.06	2,900.42				
100.00	100.00	82.10	82.10	0.13	1.07	-76.57	673.59	-2,821.06	2,900.36	2,899.15	1.21	2,403.725	
200.00	200.00	182.10	182.10	0.49	1.62	-76.57	673.59	-2,821.06	2,900.36	2,898.25	2.11	1,374.481	
300.00	300.00	282.10	282.10	0.85	2.22	-76.57	673.59	-2,821.06	2,900.36	2,897.29	3.07	945.206	
400.00	400.00	382.10	382.10	1.21	2.73	-76.57	673.59	-2,821.06	2,900.36	2,896.42	3.94	736.404	
500.00	500.00	482.10	482.10	1.57	3.20	-76.57	673.59	-2,821.06	2,900.36	2,895.60	4.77	608.620	
600.00	600.00	582.10	582.10	1.93	3.64	-76.57	673.59	-2,821.06	2,900.36	2,894.79	5.57	520.992	
700.00	700.00	682.10	682.10	2.29	4.07	-76.57	673.59	-2,821.06	2,900.36	2,894.01	6.35	456.628	
800.00	800.00	782.10	782.10	2.64	4.48	-76.57	673.59	-2,821.06	2,900.36	2,893.24	7.12	407.100	
900.00	900.00	882.10	882.10	3.00	4.89	-76.57	673.59	-2,821.06	2,900.36	2,892.47	7.89	367.677	
1,000.00	1,000.00	982.10	982.10	3.36	5.28	-76.57	673.59	-2,821.06	2,900.36	2,891.72	8.65	335.480	
1,100.00	1,100.00	1,082.10	1,082.10	3.72	5.68	-76.57	673.59	-2,821.06	2,900.36	2,890.96	9.40	308.644	
1,200.00	1,200.00	1,182.10	1,182.10	4.08	6.07	-76.57	673.59	-2,821.06	2,900.36	2,890.22	10.14	285.905	
1,300.00	1,300.00	1,282.10	1,282.10	4.44	6.45	-76.57	673.59	-2,821.06	2,900.36	2,889.47	10.89	266.373	
1,400.00	1,400.00	1,382.10	1,382.10	4.79	6.83	-76.57	673.59	-2,821.06	2,900.36	2,888.73	11.63	249.402	
1,500.00	1,500.00	1,482.10	1,482.10	5.15	7.21	-76.57	673.59	-2,821.06	2,900.36	2,887.99	12.37	234.511	
1,600.00	1,600.00	1,582.10	1,582.10	5.51	7.59	-76.57	673.59	-2,821.06	2,900.36	2,887.26	13.10	221.333	
1,700.00	1,700.00	1,682.10	1,682.10	5.87	7.97	-76.57	673.59	-2,821.06	2,900.36	2,886.52	13.84	209.585	
1,800.00	1,800.00	1,782.10	1,782.10	6.23	8.34	-76.57	673.59	-2,821.06	2,900.36	2,885.79	14.57	199.042	
1,900.00	1,900.00	1,882.10	1,882.10	6.59	8.72	-76.57	673.59	-2,821.06	2,900.36	2,885.06	15.30	189.525	
2,000.00	2,000.00	1,982.10	1,982.10	6.95	9.09	-76.57	673.59	-2,821.06	2,900.36	2,884.33	16.03	180.891	
2,100.00	2,100.00	2,166.04	2,166.02	7.30	9.47	-76.57	672.92	-2,818.75	2,899.17	2,882.41	16.77	172.926	
2,200.00	2,200.00	2,367.88	2,367.63	7.66	9.81	-76.58	670.32	-2,809.71	2,894.52	2,877.09	17.43	166.092	
2,300.00	2,300.00	2,568.81	2,567.88	8.02	10.24	-76.60	665.79	-2,793.95	2,886.36	2,868.19	18.17	158.865	
2,400.00	2,400.00	2,768.34	2,766.04	8.38	10.76	-76.62	659.37	-2,771.62	2,874.73	2,855.74	18.99	151.388	
2,500.00	2,500.00	2,966.02	2,961.45	8.74	11.36	-76.65	651.13	-2,742.98	2,859.67	2,839.78	19.88	143.824	
2,600.00	2,600.00	3,081.44	3,075.14	9.10	11.76	-76.67	645.62	-2,723.81	2,842.37	2,821.75	20.62	137.817	
2,700.00	2,700.00	3,179.93	3,172.12	9.45	12.11	-76.68	640.90	-2,707.38	2,825.02	2,803.68	21.34	132.366	
2,800.00	2,800.00	3,278.41	3,269.11	9.81	12.48	-76.70	636.17	-2,690.94	2,807.68	2,785.60	22.08	127.174	
2,900.00	2,900.00	3,376.89	3,366.09	10.17	12.86	-76.72	631.44	-2,674.51	2,790.33	2,767.51	22.83	122.238	
3,000.00	3,000.00	3,475.37	3,463.08	10.53	13.26	-76.73	626.72	-2,658.07	2,772.99	2,749.40	23.59	117.547	
3,100.00	3,100.00	3,573.85	3,560.06	10.89	13.67	-76.75	621.99	-2,641.64	2,755.64	2,731.28	24.37	113.093	
3,200.00	3,200.00	3,672.33	3,657.05	11.25	14.09	-76.77	617.27	-2,625.20	2,738.30	2,713.15	25.15	108.865	
3,300.00	3,300.00	3,770.81	3,754.03	11.61	14.52	-76.79	612.54	-2,608.77	2,720.95	2,695.00	25.95	104.852	
3,400.00	3,400.00	3,869.29	3,851.01	11.96	14.97	-76.80	607.81	-2,592.33	2,703.61	2,676.85	26.76	101.043	
3,500.00	3,500.00	3,967.77	3,948.00	12.32	15.42	-76.82	603.09	-2,575.90	2,686.27	2,658.69	27.57	97.426	
3,600.00	3,600.00	4,066.25	4,044.98	12.68	15.87	-76.84	598.36	-2,559.46	2,668.92	2,640.53	28.40	93.992	
3,700.00	3,700.00	4,164.73	4,141.97	13.04	16.34	-76.86	593.64	-2,543.03	2,651.58	2,622.35	29.23	90.729	
3,800.00	3,800.00	4,263.21	4,238.95	13.40	16.81	-76.88	588.91	-2,526.59	2,634.24	2,604.17	30.06	87.628	
3,900.00	3,900.00	4,361.69	4,335.94	13.76	17.29	-76.90	584.18	-2,510.16	2,616.89	2,585.99	30.90	84.678	
4,000.00	4,000.00	4,460.18	4,432.92	14.11	17.77	-76.92	579.46	-2,493.72	2,599.55	2,567.80	31.75	81.870	
4,100.00	4,100.00	4,558.66	4,529.91	14.47	18.26	-76.94	574.73	-2,477.29	2,582.21	2,549.60	32.61	79.196	
4,200.00	4,200.00	4,657.14	4,626.89	14.83	18.75	-76.96	570.01	-2,460.85	2,564.87	2,531.40	33.46	76.648	
4,300.00	4,300.00	4,755.62	4,723.88	15.19	19.25	-76.98	565.28	-2,444.42	2,547.52	2,513.20	34.32	74.218	
4,400.00	4,400.00	4,854.10	4,820.86	15.55	19.75	-77.00	560.55	-2,427.98	2,530.18	2,494.99	35.19	71.899	
4,500.00	4,500.00	4,952.58	4,917.85	15.91	20.26	-77.02	555.83	-2,411.55	2,512.84	2,476.78	36.06	69.685	
4,600.00	4,600.00	5,051.06	5,014.83	16.27	20.77	-77.04	551.10	-2,395.11	2,495.50	2,458.57	36.93	67.568	
4,700.00	4,700.00	5,149.54	5,111.82	16.62	21.28	-77.06	546.38	-2,378.68	2,478.16	2,440.35	37.81	65.544	
4,800.00	4,800.00	5,248.02	5,208.80	16.98	21.79	-77.09	541.65	-2,362.24	2,460.82	2,422.13	38.69	63.607	
4,900.00	4,900.00	5,346.50	5,305.78	17.34	22.31	-77.11	536.92	-2,345.81	2,443.48	2,403.91	39.57	61.751	
5,000.00	5,000.00	5,444.98	5,402.77	17.70	22.83	-77.13	532.20	-2,329.37	2,426.14	2,385.69	40.45	59.973	
5,100.00	5,100.00	5,543.46	5,499.75	18.06	23.36	-77.15	527.47	-2,312.94	2,408.80	2,367.46	41.34	58.267	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 0-												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	
5,200.00	5,200.00	5,641.94	5,596.74	18.42	23.88	-77.18	522.75	-2,296.50	2,391.47	2,349.24	42.23	56.630	
5,300.00	5,300.00	5,740.43	5,693.72	18.77	24.41	-77.20	518.02	-2,280.07	2,374.13	2,331.01	43.12	55.058	
5,400.00	5,400.00	5,838.91	5,790.71	19.13	24.94	-77.22	513.29	-2,263.63	2,356.79	2,312.78	44.01	53.548	
5,500.00	5,500.00	5,937.39	5,887.69	19.49	25.47	-77.25	508.57	-2,247.20	2,339.45	2,294.55	44.91	52.095	
5,600.00	5,600.00	6,035.87	5,984.68	19.85	26.00	-77.27	503.84	-2,230.76	2,322.12	2,276.32	45.80	50.703	
5,620.00	5,620.00	6,055.56	6,004.07	19.92	26.10	-77.28	502.90	-2,227.48	2,318.65	2,272.67	45.97	50.434	
5,700.00	5,699.99	6,100.00	6,047.86	20.20	26.33	-0.54	500.80	-2,220.17	2,304.11	2,257.58	46.54	49.511	
5,800.00	5,799.89	6,183.80	6,130.57	20.55	26.77	-0.56	497.09	-2,207.28	2,283.97	2,236.63	47.35	48.239	
5,900.00	5,899.60	6,253.65	6,199.67	20.90	27.14	-0.58	494.25	-2,197.42	2,261.86	2,213.76	48.09	47.030	
6,000.00	5,999.01	6,323.36	6,268.74	21.24	27.51	-0.60	491.66	-2,188.39	2,237.71	2,188.88	48.83	45.827	
6,100.00	6,098.00	6,400.00	6,344.81	21.59	27.91	-0.63	489.07	-2,179.39	2,211.57	2,161.98	49.59	44.601	
6,200.00	6,196.47	6,462.29	6,406.72	21.95	28.23	-0.65	487.18	-2,172.80	2,183.38	2,133.12	50.26	43.441	
6,300.00	6,294.31	6,531.48	6,475.57	22.31	28.58	-0.67	485.29	-2,166.24	2,153.21	2,102.25	50.95	42.258	
6,400.00	6,391.42	6,600.00	6,543.83	22.67	28.92	-0.69	483.65	-2,160.53	2,121.04	2,069.41	51.63	41.080	
6,500.00	6,487.69	6,669.25	6,612.89	23.04	29.26	-0.72	482.22	-2,155.56	2,086.90	2,034.60	52.29	39.907	
6,600.00	6,583.01	6,737.79	6,681.29	23.41	29.58	-0.74	481.03	-2,151.43	2,050.79	1,997.85	52.94	38.738	
6,700.00	6,677.29	6,800.00	6,743.42	23.80	29.87	-0.77	480.15	-2,148.36	2,012.73	1,959.19	53.54	37.595	
6,800.00	6,770.41	6,874.11	6,817.47	24.21	30.20	-0.79	479.34	-2,145.55	1,972.71	1,918.53	54.17	36.414	
6,900.00	6,862.29	6,941.85	6,885.18	24.63	30.49	-0.82	478.83	-2,143.79	1,930.76	1,876.00	54.76	35.260	
7,000.00	6,952.81	7,009.29	6,952.61	25.07	30.75	-0.85	478.55	-2,142.80	1,886.90	1,831.59	55.31	34.116	
7,100.00	7,041.88	7,080.65	7,023.98	25.53	30.90	-0.88	478.48	-2,142.55	1,841.12	1,785.38	55.74	33.028	
7,200.00	7,129.40	7,168.17	7,111.50	26.02	31.01	-0.92	478.48	-2,142.55	1,792.76	1,736.61	56.16	31.924	
7,300.00	7,215.28	7,254.05	7,197.38	26.54	31.12	-0.97	478.48	-2,142.55	1,741.54	1,684.97	56.57	30.783	
7,400.00	7,299.42	7,338.20	7,281.52	27.09	31.23	-1.02	478.48	-2,142.55	1,687.52	1,630.53	56.99	29.611	
7,489.65	7,373.30	7,412.07	7,355.40	27.62	31.33	-1.08	478.48	-2,142.55	1,636.76	1,579.40	57.36	28.535	
7,500.00	7,381.75	7,420.52	7,363.85	27.69	31.34	-1.08	478.48	-2,142.55	1,630.77	1,573.36	57.40	28.409	
7,600.00	7,463.31	7,502.09	7,445.41	28.31	31.46	-1.12	478.48	-2,142.55	1,572.92	1,515.11	57.81	27.207	
7,700.00	7,544.88	7,583.66	7,526.98	28.97	31.57	-1.16	478.48	-2,142.55	1,515.08	1,456.85	58.23	26.018	
7,729.86	7,569.24	7,608.02	7,551.34	29.16	31.61	-1.18	478.48	-2,142.55	1,497.81	1,439.45	58.36	25.666	
7,800.00	7,626.91	7,665.69	7,609.01	29.64	31.69	-1.19	478.48	-2,142.55	1,457.91	1,399.25	58.66	24.854	
7,900.00	7,710.71	7,749.48	7,692.81	30.31	31.82	-1.21	478.48	-2,142.55	1,403.34	1,344.24	59.10	23.745	
8,000.00	7,796.26	7,835.03	7,778.36	30.98	31.95	-1.23	478.48	-2,142.55	1,351.58	1,292.02	59.56	22.693	
8,100.00	7,883.46	7,922.24	7,865.56	31.64	32.08	-1.25	478.48	-2,142.55	1,302.66	1,242.63	60.03	21.699	
8,200.00	7,972.24	8,011.01	7,954.34	32.28	32.22	-1.28	478.48	-2,142.55	1,256.65	1,196.13	60.52	20.764	
8,300.00	8,062.49	8,101.26	8,044.59	32.91	32.37	-1.30	478.48	-2,142.55	1,213.59	1,152.57	61.02	19.889	
8,400.00	8,154.10	8,192.88	8,136.20	33.51	32.51	-1.33	478.48	-2,142.55	1,173.53	1,112.00	61.53	19.072	
8,500.00	8,246.99	8,285.77	8,229.09	34.09	32.67	-1.35	478.48	-2,142.55	1,136.52	1,074.47	62.05	18.316	
8,600.00	8,341.05	8,379.83	8,323.15	34.65	32.83	-1.38	478.48	-2,142.55	1,102.59	1,040.01	62.58	17.619	
8,700.00	8,436.18	8,474.95	8,418.28	35.18	32.99	-1.40	478.48	-2,142.55	1,071.78	1,008.66	63.11	16.982	
8,800.00	8,532.27	8,571.05	8,514.37	35.69	33.16	-1.43	478.48	-2,142.55	1,044.12	980.47	63.65	16.403	
8,900.00	8,629.23	8,668.00	8,611.33	36.17	33.33	-1.45	478.48	-2,142.55	1,019.65	955.45	64.20	15.883	
9,000.00	8,726.93	8,765.71	8,709.03	36.62	33.51	-1.47	478.48	-2,142.55	998.39	933.65	64.75	15.420	
9,100.00	8,825.29	8,864.06	8,807.39	37.04	33.69	-1.49	478.48	-2,142.55	980.37	915.07	65.29	15.015	
9,200.00	8,924.19	8,962.96	8,906.29	37.45	33.87	-1.50	478.48	-2,142.55	965.60	899.75	65.84	14.665	
9,300.00	9,023.52	9,062.29	9,005.62	37.82	34.06	-1.51	478.48	-2,142.55	954.09	887.70	66.39	14.371	
9,400.00	9,123.18	9,161.95	9,105.28	38.18	34.24	-1.52	478.48	-2,142.55	945.87	878.94	66.93	14.132	
9,500.00	9,223.05	9,261.72	9,205.05	38.51	34.42	-1.53	480.97	-2,142.57	941.65	874.25	67.41	13.970	
9,521.22	9,244.26	9,282.86	9,226.19	38.57	34.39	-1.28	482.64	-2,142.58	941.52	874.02	67.50	13.949 CC, ES	
9,599.51	9,322.54	9,315.47	9,257.79	38.82	34.47	-77.47	492.22	-2,142.64	943.44	875.64	67.81	13.913 SF	
9,600.00	9,323.03	9,315.82	9,258.13	38.82	34.47	102.93	492.30	-2,142.64	943.47	875.66	67.81	13.913	
9,625.00	9,348.02	9,333.29	9,275.12	38.89	34.49	103.02	496.37	-2,142.66	944.97	877.08	67.90	13.918	
9,650.00	9,372.94	9,350.00	9,291.24	38.96	34.51	103.12	500.75	-2,142.69	946.99	879.02	67.97	13.933	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 0-												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	
9,675.00	9,397.72	9,366.30	9,306.84	39.02	34.53	103.22	505.47	-2,142.72	949.56	881.52	68.04	13.957	
9,700.00	9,422.29	9,381.59	9,321.34	39.09	34.55	103.28	510.30	-2,142.75	952.70	884.61	68.09	13.992	
9,725.00	9,446.59	9,400.00	9,338.64	39.15	34.57	103.45	516.63	-2,142.79	956.47	888.31	68.16	14.033	
9,750.00	9,470.55	9,409.29	9,347.28	39.20	34.58	103.27	520.04	-2,142.81	960.85	892.68	68.17	14.095	
9,775.00	9,494.11	9,421.59	9,358.64	39.26	34.59	103.15	524.76	-2,142.83	965.91	897.72	68.19	14.165	
9,800.00	9,517.19	9,432.83	9,368.92	39.31	34.60	102.94	529.28	-2,142.86	971.66	903.45	68.20	14.247	
9,825.00	9,539.74	9,450.00	9,384.46	39.36	34.62	102.96	536.59	-2,142.91	978.15	909.90	68.25	14.331	
9,850.00	9,561.70	9,450.00	9,384.46	39.41	34.62	102.09	536.59	-2,142.91	985.28	917.11	68.17	14.453	
9,875.00	9,583.00	9,460.10	9,393.50	39.45	34.63	101.62	541.10	-2,142.93	993.17	925.00	68.17	14.569	
9,900.00	9,603.58	9,467.11	9,399.72	39.49	34.64	100.91	544.32	-2,142.95	1,001.77	933.63	68.14	14.702	
9,925.00	9,623.40	9,473.12	9,405.03	39.53	34.64	100.06	547.15	-2,142.97	1,011.08	942.98	68.10	14.847	
9,950.00	9,642.39	9,478.18	9,409.48	39.56	34.65	99.06	549.57	-2,142.99	1,021.07	953.01	68.06	15.002	
9,975.00	9,660.51	9,482.34	9,413.11	39.59	34.65	97.90	551.59	-2,143.00	1,031.72	963.70	68.02	15.169	
10,000.00	9,677.69	9,485.63	9,415.97	39.61	34.65	96.59	553.20	-2,143.01	1,042.99	975.02	67.97	15.344	
10,025.00	9,693.91	9,488.10	9,418.12	39.63	34.66	95.13	554.43	-2,143.02	1,054.86	986.93	67.93	15.529	
10,050.00	9,709.11	9,500.00	9,428.38	39.65	34.67	94.16	560.46	-2,143.05	1,067.36	999.36	68.01	15.695	
10,075.00	9,723.24	9,500.00	9,428.38	39.66	34.67	92.35	560.46	-2,143.05	1,080.26	1,012.29	67.96	15.895	
10,100.00	9,736.28	9,500.00	9,428.38	39.67	34.67	90.46	560.46	-2,143.05	1,093.62	1,025.68	67.93	16.099	
10,125.00	9,748.19	9,500.00	9,428.38	39.68	34.67	88.48	560.46	-2,143.05	1,107.39	1,039.47	67.92	16.305	
10,150.00	9,758.93	9,500.00	9,428.38	39.68	34.67	86.43	560.46	-2,143.05	1,121.52	1,053.60	67.92	16.513	
10,175.00	9,768.47	9,500.00	9,428.38	39.69	34.67	84.31	560.46	-2,143.05	1,135.96	1,068.02	67.94	16.721	
10,200.00	9,776.79	9,486.17	9,416.45	39.69	34.66	81.32	553.48	-2,143.01	1,150.47	1,082.67	67.80	16.969	
10,225.00	9,783.86	9,483.64	9,414.24	39.68	34.65	78.99	552.23	-2,143.00	1,165.30	1,097.48	67.82	17.183	
10,250.00	9,789.67	9,480.64	9,411.63	39.68	34.65	76.63	550.76	-2,142.99	1,180.26	1,112.41	67.85	17.395	
10,275.00	9,794.20	9,477.22	9,408.63	39.67	34.65	74.25	549.11	-2,142.98	1,195.30	1,127.41	67.89	17.605	
10,300.00	9,797.44	9,473.39	9,405.27	39.67	34.64	71.88	547.28	-2,142.97	1,210.36	1,142.41	67.95	17.812	
10,325.00	9,799.38	9,469.19	9,401.57	39.66	34.64	69.54	545.30	-2,142.96	1,225.40	1,157.38	68.02	18.016	
10,349.51	9,800.00	9,450.00	9,384.46	39.66	34.62	66.59	536.59	-2,142.91	1,240.27	1,172.38	67.90	18.267	
10,400.00	9,800.00	9,450.00	9,384.46	39.65	34.62	66.59	536.59	-2,142.91	1,270.76	1,202.56	68.20	18.633	
10,500.00	9,800.00	9,450.00	9,384.46	39.64	34.62	66.59	536.59	-2,142.91	1,334.71	1,265.93	68.78	19.406	
10,600.00	9,800.00	9,424.09	9,360.93	39.66	34.59	65.36	525.75	-2,142.84	1,402.20	1,333.19	69.02	20.317	
10,700.00	9,800.00	9,400.00	9,338.64	39.70	34.57	64.22	516.63	-2,142.79	1,473.25	1,403.99	69.26	21.273	
10,800.00	9,800.00	9,400.00	9,338.64	39.78	34.57	64.22	516.63	-2,142.79	1,546.97	1,477.22	69.75	22.179	
10,900.00	9,800.00	9,400.00	9,338.64	39.90	34.57	64.22	516.63	-2,142.79	1,623.50	1,553.30	70.19	23.129	
11,000.00	9,800.00	9,378.58	9,318.50	40.07	34.54	63.22	509.32	-2,142.74	1,701.99	1,631.62	70.38	24.185	
11,100.00	9,800.00	9,369.75	9,310.13	40.32	34.53	62.80	506.53	-2,142.72	1,782.60	1,711.94	70.66	25.228	
11,200.00	9,800.00	9,350.00	9,291.24	40.64	34.51	61.88	500.75	-2,142.69	1,865.09	1,794.28	70.81	26.340	
11,300.00	9,800.00	9,350.00	9,291.24	41.05	34.51	61.88	500.75	-2,142.69	1,948.85	1,877.73	71.12	27.401	
11,400.00	9,800.00	9,350.00	9,291.24	41.54	34.51	61.88	500.75	-2,142.69	2,034.08	1,962.68	71.41	28.486	
11,500.00	9,800.00	9,350.00	9,291.24	42.10	34.51	61.88	500.75	-2,142.69	2,120.60	2,048.94	71.66	29.592	
11,600.00	9,800.00	9,350.00	9,291.24	42.74	34.51	61.88	500.75	-2,142.69	2,208.26	2,136.37	71.89	30.717	
11,700.00	9,800.00	9,330.03	9,271.95	43.43	34.49	60.95	495.57	-2,142.66	2,296.52	2,224.58	71.94	31.924	
11,800.00	9,800.00	9,325.02	9,267.09	44.17	34.48	60.72	494.38	-2,142.65	2,385.86	2,313.76	72.09	33.094	
11,900.00	9,800.00	9,320.35	9,262.55	44.96	34.47	60.50	493.30	-2,142.64	2,475.96	2,403.73	72.24	34.275	
12,000.00	9,800.00	9,300.00	9,242.65	45.78	34.45	59.57	489.06	-2,142.62	2,567.02	2,494.77	72.25	35.531	
12,100.00	9,800.00	9,300.00	9,242.65	46.64	34.45	59.57	489.06	-2,142.62	2,658.33	2,585.93	72.41	36.714	
12,200.00	9,800.00	9,300.00	9,242.65	47.54	34.45	59.57	489.06	-2,142.62	2,750.25	2,677.69	72.55	37.908	
12,300.00	9,800.00	9,300.00	9,242.65	48.46	34.45	59.57	489.06	-2,142.62	2,842.71	2,770.02	72.69	39.110	
12,400.00	9,800.00	9,300.00	9,242.65	49.41	34.45	59.57	489.06	-2,142.62	2,935.66	2,862.85	72.81	40.319	
12,500.00	9,800.00	9,300.00	9,242.65	50.38	34.45	59.57	489.06	-2,142.62	3,029.06	2,956.14	72.93	41.535	
12,600.00	9,800.00	9,300.00	9,242.65	51.38	34.45	59.57	489.06	-2,142.62	3,122.87	3,049.84	73.04	42.758	
12,700.00	9,800.00	9,300.00	9,242.65	52.40	34.45	59.57	489.06	-2,142.62	3,217.06	3,143.92	73.14	43.985	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 0-												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	
12,800.00	9,800.00	9,300.00	9,242.65	53.44	34.45	59.57	489.06	-2,142.62	3,311.59	3,238.35	73.24	45.218	
12,900.00	9,800.00	9,300.00	9,242.65	54.49	34.45	59.57	489.06	-2,142.62	3,406.42	3,333.10	73.33	46.454	
13,000.00	9,800.00	9,300.00	9,242.65	55.57	34.45	59.57	489.06	-2,142.62	3,501.55	3,428.13	73.42	47.695	
13,100.00	9,800.00	9,300.00	9,242.65	56.66	34.45	59.57	489.06	-2,142.62	3,596.94	3,523.44	73.50	48.939	
13,200.00	9,800.00	9,300.00	9,242.65	57.77	34.45	59.57	489.06	-2,142.62	3,692.57	3,618.99	73.58	50.185	
13,300.00	9,800.00	9,277.62	9,220.60	58.89	34.42	58.56	485.21	-2,142.59	3,787.94	3,714.43	73.51	51.529	
13,400.00	9,800.00	9,275.61	9,218.61	60.03	34.41	58.47	484.90	-2,142.59	3,883.92	3,810.35	73.57	52.790	
13,500.00	9,800.00	9,273.68	9,216.71	61.17	34.41	58.38	484.62	-2,142.59	3,980.09	3,906.45	73.63	54.053	
13,600.00	9,800.00	9,250.00	9,193.21	62.34	34.38	57.33	481.64	-2,142.57	4,076.90	4,003.34	73.55	55.428	
13,700.00	9,800.00	9,250.00	9,193.21	63.51	34.38	57.33	481.64	-2,142.57	4,173.34	4,099.71	73.62	56.686	
13,800.00	9,800.00	9,250.00	9,193.21	64.69	34.38	57.33	481.64	-2,142.57	4,269.94	4,196.25	73.69	57.944	
13,900.00	9,800.00	9,250.00	9,193.21	65.88	34.38	57.33	481.64	-2,142.57	4,366.69	4,292.94	73.76	59.205	
14,000.00	9,800.00	9,250.00	9,193.21	67.09	34.38	57.33	481.64	-2,142.57	4,463.59	4,389.77	73.82	60.466	
14,100.00	9,800.00	9,250.00	9,193.21	68.30	34.38	57.33	481.64	-2,142.57	4,560.62	4,486.74	73.88	61.727	
14,200.00	9,800.00	9,250.00	9,193.21	69.52	34.38	57.33	481.64	-2,142.57	4,657.78	4,583.84	73.95	62.990	
14,300.00	9,800.00	9,250.00	9,193.21	70.75	34.38	57.33	481.64	-2,142.57	4,755.06	4,681.05	74.01	64.253	
14,400.00	9,800.00	9,250.00	9,193.21	71.99	34.38	57.33	481.64	-2,142.57	4,852.45	4,778.38	74.07	65.516	
14,500.00	9,800.00	9,250.00	9,193.21	73.23	34.38	57.33	481.64	-2,142.57	4,949.94	4,875.81	74.12	66.779	
14,600.00	9,800.00	9,250.00	9,193.21	74.48	34.38	57.33	481.64	-2,142.57	5,047.53	4,973.34	74.18	68.042	
14,700.00	9,800.00	9,250.00	9,193.21	75.74	34.38	57.33	481.64	-2,142.57	5,145.21	5,070.97	74.24	69.305	
14,800.00	9,800.00	9,250.00	9,193.21	77.00	34.38	57.33	481.64	-2,142.57	5,242.98	5,168.68	74.30	70.567	
14,900.00	9,800.00	9,250.00	9,193.21	78.27	34.38	57.33	481.64	-2,142.57	5,340.83	5,266.47	74.35	71.829	
15,000.00	9,800.00	9,250.00	9,193.21	79.55	34.38	57.33	481.64	-2,142.57	5,438.76	5,364.35	74.41	73.091	
15,100.00	9,800.00	9,250.00	9,193.21	80.83	34.38	57.33	481.64	-2,142.57	5,536.76	5,462.29	74.47	74.352	
15,200.00	9,800.00	9,250.00	9,193.21	82.12	34.38	57.33	481.64	-2,142.57	5,634.83	5,560.31	74.52	75.612	
15,300.00	9,800.00	9,250.00	9,193.21	83.41	34.38	57.33	481.64	-2,142.57	5,732.98	5,658.40	74.58	76.872	
15,400.00	9,800.00	9,250.00	9,193.21	84.70	34.38	57.33	481.64	-2,142.57	5,831.18	5,756.54	74.63	78.130	
15,500.00	9,800.00	9,250.00	9,193.21	86.01	34.38	57.33	481.64	-2,142.57	5,929.44	5,854.75	74.69	79.387	
15,600.00	9,800.00	9,250.00	9,193.21	87.31	34.38	57.33	481.64	-2,142.57	6,027.76	5,953.02	74.75	80.644	
15,700.00	9,800.00	9,250.00	9,193.21	88.62	34.38	57.33	481.64	-2,142.57	6,126.14	6,051.34	74.80	81.899	
15,800.00	9,800.00	9,250.00	9,193.21	89.93	34.38	57.33	481.64	-2,142.57	6,224.57	6,149.71	74.86	83.153	
15,900.00	9,800.00	9,250.00	9,193.21	91.25	34.38	57.33	481.64	-2,142.57	6,323.04	6,248.13	74.91	84.405	
16,000.00	9,800.00	9,250.00	9,193.21	92.57	34.38	57.33	481.64	-2,142.57	6,421.57	6,346.60	74.97	85.657	
16,100.00	9,800.00	9,250.00	9,193.21	93.89	34.38	57.33	481.64	-2,142.57	6,520.13	6,445.11	75.02	86.906	
16,200.00	9,800.00	9,250.00	9,193.21	95.22	34.38	57.33	481.64	-2,142.57	6,618.75	6,543.66	75.08	88.155	
16,300.00	9,800.00	9,250.00	9,193.21	96.55	34.38	57.33	481.64	-2,142.57	6,717.40	6,642.26	75.14	89.401	
16,400.00	9,800.00	9,250.00	9,193.21	97.89	34.38	57.33	481.64	-2,142.57	6,816.09	6,740.89	75.19	90.646	
16,500.00	9,800.00	9,250.00	9,193.21	99.22	34.38	57.33	481.64	-2,142.57	6,914.82	6,839.57	75.25	91.889	
16,600.00	9,800.00	9,250.00	9,193.21	100.56	34.38	57.33	481.64	-2,142.57	7,013.58	6,938.27	75.31	93.131	
16,700.00	9,800.00	9,250.00	9,193.21	101.90	34.38	57.33	481.64	-2,142.57	7,112.38	7,037.02	75.37	94.370	
16,800.00	9,800.00	9,250.00	9,193.21	103.25	34.38	57.33	481.64	-2,142.57	7,211.22	7,135.79	75.42	95.608	
16,900.00	9,800.00	9,250.00	9,193.21	104.60	34.38	57.33	481.64	-2,142.57	7,310.08	7,234.60	75.48	96.844	
17,000.00	9,800.00	9,250.00	9,193.21	105.94	34.38	57.33	481.64	-2,142.57	7,408.98	7,333.43	75.54	98.078	
17,100.00	9,800.00	9,250.00	9,193.21	107.30	34.38	57.33	481.64	-2,142.57	7,507.90	7,432.30	75.60	99.310	
17,200.00	9,800.00	9,250.00	9,193.21	108.65	34.38	57.33	481.64	-2,142.57	7,606.85	7,531.19	75.66	100.539	
17,300.00	9,800.00	9,250.00	9,193.21	110.01	34.38	57.33	481.64	-2,142.57	7,705.83	7,630.11	75.72	101.767	
17,400.00	9,800.00	9,250.00	9,193.21	111.36	34.38	57.33	481.64	-2,142.57	7,804.84	7,729.06	75.78	102.993	
17,500.00	9,800.00	9,250.00	9,193.21	112.73	34.38	57.33	481.64	-2,142.57	7,903.87	7,828.03	75.84	104.216	
17,590.89	9,800.00	9,250.00	9,193.21	113.96	34.38	57.33	481.64	-2,142.57	7,993.90	7,918.00	75.90	105.326	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 0-												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	0.00	0.00	0.00	1.00	-76.43	673.45	-2,791.06	2,871.21				
100.00	100.00	82.10	82.10	0.13	1.07	-76.43	673.45	-2,791.06	2,871.15	2,869.95	1.21	2,379.519	
200.00	200.00	182.10	182.10	0.49	1.62	-76.43	673.45	-2,791.06	2,871.15	2,869.04	2.11	1,360.639	
300.00	300.00	282.10	282.10	0.85	2.22	-76.43	673.45	-2,791.06	2,871.15	2,868.09	3.07	935.688	
400.00	400.00	382.10	382.10	1.21	2.73	-76.43	673.45	-2,791.06	2,871.15	2,867.22	3.94	728.988	
500.00	500.00	482.10	482.10	1.57	3.20	-76.43	673.45	-2,791.06	2,871.15	2,866.39	4.77	602.491	
600.00	600.00	582.10	582.10	1.93	3.64	-76.43	673.45	-2,791.06	2,871.15	2,865.59	5.57	515.745	
700.00	700.00	682.10	682.10	2.29	4.07	-76.43	673.45	-2,791.06	2,871.15	2,864.80	6.35	452.029	
800.00	800.00	782.10	782.10	2.64	4.48	-76.43	673.45	-2,791.06	2,871.15	2,864.03	7.12	403.000	
900.00	900.00	882.10	882.10	3.00	4.89	-76.43	673.45	-2,791.06	2,871.15	2,863.27	7.89	363.975	
1,000.00	1,000.00	982.10	982.10	3.36	5.28	-76.43	673.45	-2,791.06	2,871.15	2,862.51	8.65	332.102	
1,100.00	1,100.00	1,082.10	1,082.10	3.72	5.68	-76.43	673.45	-2,791.06	2,871.15	2,861.76	9.40	305.536	
1,200.00	1,200.00	1,182.10	1,182.10	4.08	6.07	-76.43	673.45	-2,791.06	2,871.15	2,861.01	10.14	283.026	
1,300.00	1,300.00	1,282.10	1,282.10	4.44	6.45	-76.43	673.45	-2,791.06	2,871.15	2,860.27	10.89	263.691	
1,400.00	1,400.00	1,382.10	1,382.10	4.79	6.83	-76.43	673.45	-2,791.06	2,871.15	2,859.52	11.63	246.891	
1,500.00	1,500.00	1,482.10	1,482.10	5.15	7.21	-76.43	673.45	-2,791.06	2,871.15	2,858.79	12.37	232.149	
1,600.00	1,600.00	1,582.10	1,582.10	5.51	7.59	-76.43	673.45	-2,791.06	2,871.15	2,858.05	13.10	219.104	
1,700.00	1,700.00	1,682.10	1,682.10	5.87	7.97	-76.43	673.45	-2,791.06	2,871.15	2,857.32	13.84	207.474	
1,800.00	1,800.00	1,782.10	1,782.10	6.23	8.34	-76.43	673.45	-2,791.06	2,871.15	2,856.58	14.57	197.037	
1,900.00	1,900.00	1,882.10	1,882.10	6.59	8.72	-76.43	673.45	-2,791.06	2,871.15	2,855.85	15.30	187.617	
2,000.00	2,000.00	1,982.10	1,982.10	6.95	9.09	-76.43	673.45	-2,791.06	2,871.15	2,855.12	16.03	179.069	
2,100.00	2,100.00	2,163.25	2,163.23	7.30	9.45	-76.43	673.19	-2,788.74	2,869.99	2,853.25	16.74	171.408	
2,200.00	2,200.00	2,361.70	2,361.46	7.66	9.74	-76.41	672.17	-2,779.71	2,865.45	2,848.08	17.37	165.011	
2,300.00	2,300.00	2,559.30	2,558.41	8.02	10.13	-76.37	670.40	-2,763.95	2,857.48	2,839.42	18.07	158.171	
2,400.00	2,400.00	2,755.56	2,753.37	8.38	10.61	-76.31	667.89	-2,741.62	2,846.12	2,827.27	18.85	151.018	
2,500.00	2,500.00	2,950.06	2,945.71	8.74	11.18	-76.23	664.66	-2,712.96	2,831.41	2,811.71	19.70	143.717	
2,600.00	2,600.00	3,142.38	3,134.82	9.10	11.83	-76.14	660.76	-2,678.26	2,813.39	2,792.77	20.62	136.415	
2,700.00	2,700.00	3,332.12	3,320.15	9.45	12.55	-76.03	656.21	-2,637.86	2,792.14	2,770.53	21.60	129.251	
2,800.00	2,800.00	3,518.93	3,501.20	9.81	13.33	-75.90	651.07	-2,592.15	2,767.71	2,745.09	22.63	122.322	
2,900.00	2,900.00	3,702.50	3,677.56	10.17	14.14	-75.75	645.37	-2,541.54	2,740.20	2,716.52	23.68	115.701	
3,000.00	3,000.00	3,815.33	3,785.26	10.53	14.64	-75.65	641.61	-2,508.14	2,710.63	2,686.11	24.52	110.557	
3,100.00	3,100.00	3,910.76	3,876.33	10.89	15.09	-75.56	638.43	-2,479.80	2,681.00	2,655.66	25.34	105.797	
3,200.00	3,200.00	4,006.19	3,967.39	11.25	15.56	-75.47	635.24	-2,451.45	2,651.38	2,625.20	26.18	101.267	
3,300.00	3,300.00	4,101.61	4,058.46	11.61	16.04	-75.38	632.05	-2,423.10	2,621.77	2,594.73	27.03	96.987	
3,400.00	3,400.00	4,197.04	4,149.53	11.96	16.52	-75.29	628.86	-2,394.76	2,592.16	2,564.27	27.89	92.939	
3,500.00	3,500.00	4,292.47	4,240.59	12.32	17.02	-75.19	625.67	-2,366.41	2,562.55	2,533.80	28.76	89.109	
3,600.00	3,600.00	4,387.90	4,331.66	12.68	17.52	-75.09	622.48	-2,338.07	2,532.96	2,503.33	29.63	85.484	
3,700.00	3,700.00	4,483.33	4,422.72	13.04	18.03	-74.99	619.29	-2,309.72	2,503.37	2,472.86	30.51	82.050	
3,800.00	3,800.00	4,578.76	4,513.79	13.40	18.54	-74.89	616.10	-2,281.38	2,473.79	2,442.39	31.40	78.794	
3,900.00	3,900.00	4,674.18	4,604.85	13.76	19.06	-74.78	612.91	-2,253.03	2,444.22	2,411.93	32.29	75.705	
4,000.00	4,000.00	4,769.61	4,695.92	14.11	19.58	-74.67	609.72	-2,224.69	2,414.65	2,381.47	33.18	72.772	
4,100.00	4,100.00	4,865.04	4,786.98	14.47	20.11	-74.56	606.53	-2,196.34	2,385.09	2,351.01	34.08	69.984	
4,200.00	4,200.00	4,960.47	4,878.05	14.83	20.64	-74.45	603.34	-2,168.00	2,355.54	2,320.56	34.98	67.333	
4,300.00	4,300.00	5,055.90	4,969.11	15.19	21.18	-74.33	600.15	-2,139.65	2,326.00	2,290.11	35.89	64.809	
4,400.00	4,400.00	5,151.33	5,060.18	15.55	21.72	-74.21	596.96	-2,111.31	2,296.47	2,259.67	36.80	62.404	
4,500.00	4,500.00	5,246.75	5,151.25	15.91	22.27	-74.09	593.77	-2,082.96	2,266.95	2,229.23	37.71	60.110	
4,600.00	4,600.00	5,342.18	5,242.31	16.27	22.81	-73.96	590.59	-2,054.62	2,237.43	2,198.81	38.63	57.921	
4,700.00	4,700.00	5,437.61	5,333.38	16.62	23.36	-73.83	587.40	-2,026.27	2,207.93	2,168.38	39.55	55.830	
4,800.00	4,800.00	5,533.04	5,424.44	16.98	23.92	-73.70	584.21	-1,997.92	2,178.44	2,137.97	40.47	53.832	
4,900.00	4,900.00	5,628.47	5,515.51	17.34	24.47	-73.56	581.02	-1,969.58	2,148.96	2,107.57	41.39	51.919	
5,000.00	5,000.00	5,723.89	5,606.57	17.70	25.03	-73.42	577.83	-1,941.23	2,119.49	2,077.18	42.31	50.089	
5,100.00	5,100.00	5,819.32	5,697.64	18.06	25.59	-73.28	574.64	-1,912.89	2,090.03	2,046.79	43.24	48.335	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 0-												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	
5,200.00	5,200.00	5,914.75	5,788.70	18.42	26.15	-73.13	571.45	-1,884.54	2,060.59	2,016.42	44.17	46.653	
5,300.00	5,300.00	6,010.18	5,879.77	18.77	26.72	-72.98	568.26	-1,856.20	2,031.16	1,986.06	45.10	45.039	
5,400.00	5,400.00	6,105.61	5,970.83	19.13	27.28	-72.82	565.07	-1,827.85	2,001.74	1,955.71	46.03	43.490	
5,500.00	5,500.00	6,201.04	6,061.90	19.49	27.85	-72.66	561.88	-1,799.51	1,972.33	1,925.38	46.96	42.001	
5,600.00	5,600.00	6,296.46	6,152.97	19.85	28.42	-72.49	558.69	-1,771.16	1,942.95	1,895.05	47.89	40.570	
5,620.00	5,620.00	6,315.55	6,171.18	19.92	28.53	-72.46	558.05	-1,765.49	1,937.07	1,888.99	48.08	40.290	
5,700.00	5,699.99	6,391.57	6,243.72	20.20	28.99	4.48	555.51	-1,742.91	1,912.57	1,863.75	48.82	39.178	
5,800.00	5,799.89	6,485.63	6,333.49	20.55	29.55	4.72	552.37	-1,714.97	1,879.15	1,829.43	49.73	37.789	
5,900.00	5,899.60	6,578.53	6,422.14	20.90	30.11	4.98	549.26	-1,687.37	1,842.68	1,792.05	50.63	36.397	
6,000.00	5,999.01	6,670.17	6,509.58	21.24	30.66	5.28	546.20	-1,660.16	1,803.18	1,751.67	51.52	35.002	
6,100.00	6,098.00	6,760.43	6,595.72	21.59	31.21	5.61	543.19	-1,633.35	1,760.72	1,708.33	52.39	33.606	
6,200.00	6,196.47	6,849.24	6,680.47	21.95	31.75	5.97	540.22	-1,606.97	1,715.33	1,662.08	53.25	32.210	
6,300.00	6,294.31	6,936.48	6,763.73	22.31	32.28	6.38	537.30	-1,581.05	1,667.08	1,612.98	54.10	30.814	
6,400.00	6,391.42	7,022.07	6,845.40	22.67	32.80	6.84	534.44	-1,555.63	1,616.02	1,561.09	54.93	29.419	
6,500.00	6,487.69	7,105.92	6,925.41	23.04	33.31	7.36	531.64	-1,530.73	1,562.21	1,506.47	55.74	28.025	
6,600.00	6,583.01	7,187.92	7,003.66	23.41	33.81	7.94	528.90	-1,506.37	1,505.72	1,449.19	56.54	26.632	
6,700.00	6,677.29	7,267.99	7,080.08	23.80	34.29	8.61	526.22	-1,482.59	1,446.63	1,389.32	57.31	25.241	
6,800.00	6,770.41	7,346.05	7,154.57	24.21	34.77	9.37	523.61	-1,459.40	1,385.01	1,326.95	58.06	23.853	
6,900.00	6,862.29	7,422.01	7,227.05	24.63	35.24	10.25	521.07	-1,436.84	1,320.94	1,262.15	58.79	22.467	
7,000.00	6,952.81	7,495.78	7,297.45	25.07	35.69	11.27	518.61	-1,414.93	1,254.51	1,195.01	59.50	21.084	
7,100.00	7,041.88	7,559.40	7,358.20	25.53	36.07	12.35	516.50	-1,396.16	1,185.98	1,125.81	60.17	19.709	
7,200.00	7,129.40	7,618.08	7,414.41	26.02	36.42	13.56	514.61	-1,379.40	1,115.94	1,055.11	60.83	18.346	
7,300.00	7,215.28	7,675.99	7,470.04	26.54	36.77	14.97	512.81	-1,363.42	1,044.49	983.03	61.46	16.994	
7,400.00	7,299.42	7,733.09	7,525.05	27.09	37.12	16.61	511.10	-1,348.21	971.72	909.65	62.07	15.656	
7,489.65	7,373.30	7,783.54	7,573.78	27.62	37.42	18.35	509.64	-1,335.23	905.42	842.83	62.59	14.467	
7,500.00	7,381.75	7,789.34	7,579.39	27.69	37.46	18.50	509.48	-1,333.77	897.71	835.06	62.64	14.330	
7,600.00	7,463.31	7,846.01	7,634.28	28.31	37.80	20.06	507.90	-1,319.75	823.82	760.62	63.20	13.036	
7,700.00	7,544.88	7,900.00	7,686.69	28.97	38.12	21.76	506.45	-1,306.90	751.02	687.28	63.74	11.782	
7,729.86	7,569.24	7,921.61	7,707.70	29.16	38.25	22.50	505.89	-1,301.89	729.50	665.60	63.90	11.417	
7,800.00	7,626.91	7,963.94	7,748.92	29.64	38.50	23.51	504.81	-1,292.31	679.96	615.69	64.26	10.581	
7,900.00	7,710.71	8,027.34	7,810.79	30.31	38.87	25.23	503.26	-1,278.53	612.42	547.64	64.78	9.454	
8,000.00	7,796.26	8,094.28	7,876.28	30.98	39.26	27.32	501.71	-1,264.72	548.84	483.56	65.28	8.407	
8,100.00	7,883.46	8,164.73	7,945.35	31.64	39.66	29.85	500.17	-1,251.01	489.57	423.83	65.74	7.447	
8,200.00	7,972.24	8,238.59	8,017.96	32.28	40.09	32.91	498.65	-1,237.54	435.04	368.90	66.14	6.577	
8,300.00	8,062.49	8,315.77	8,094.01	32.91	40.52	36.59	497.18	-1,224.46	385.70	319.25	66.45	5.804	
8,400.00	8,154.10	8,396.15	8,173.39	33.51	40.97	40.97	495.77	-1,211.92	342.07	275.42	66.65	5.132	
8,500.00	8,246.99	8,479.59	8,255.98	34.09	41.43	46.12	494.44	-1,200.08	304.64	237.93	66.71	4.566	
8,600.00	8,341.05	8,565.91	8,341.59	34.65	41.89	52.04	493.20	-1,189.09	273.85	207.20	66.66	4.108	
8,700.00	8,436.18	8,654.92	8,430.02	35.18	42.36	58.63	492.07	-1,179.09	249.93	183.38	66.56	3.755	
8,800.00	8,532.27	8,746.40	8,521.07	35.69	42.83	65.64	491.08	-1,170.25	232.73	166.18	66.55	3.497	
8,900.00	8,629.23	8,840.10	8,614.45	36.17	43.29	72.69	490.23	-1,162.69	221.61	154.80	66.81	3.317	
9,000.00	8,726.93	8,935.75	8,709.90	36.62	43.75	79.33	489.54	-1,156.53	215.46	148.07	67.39	3.197	
9,100.00	8,825.29	9,033.06	8,807.11	37.04	44.20	85.16	489.01	-1,151.90	212.89	144.65	68.24	3.120	
9,177.25	8,901.65	9,109.19	8,883.19	37.35	44.53	88.92	488.74	-1,149.42	212.45	143.46	68.99	3.079 CC	
9,200.00	8,924.19	9,131.74	8,905.73	37.45	44.62	89.88	488.67	-1,148.88	212.48	143.26	69.22	3.070	
9,300.00	9,023.52	9,231.45	9,005.44	37.82	44.96	93.34	488.52	-1,147.54	213.00	142.86	70.14	3.037	
9,400.00	9,123.18	9,331.29	9,105.28	38.18	45.07	95.57	488.52	-1,147.47	213.66	142.83	70.83	3.017 ES, SF	
9,500.00	9,223.05	9,432.31	9,186.22	38.51	45.12	96.50	490.99	-1,147.49	217.34	145.84	71.50	3.040	
9,599.51	9,322.54	9,484.18	9,257.18	38.82	45.15	19.34	502.12	-1,147.55	232.07	160.45	71.62	3.240	
9,600.00	9,323.03	9,484.53	9,257.51	38.82	45.15	-160.26	502.20	-1,147.56	232.17	160.55	71.61	3.242	
9,625.00	9,348.02	9,500.00	9,272.57	38.89	45.15	-160.34	505.76	-1,147.58	238.29	166.87	71.41	3.337	
9,650.00	9,372.94	9,518.73	9,290.65	38.96	45.16	-160.52	510.62	-1,147.61	246.26	174.94	71.32	3.453	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 0-												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	
9,675.00	9,397.72	9,534.79	9,306.04	39.02	45.17	-160.64	515.26	-1,147.63	256.07	184.97	71.10	3.602	
9,700.00	9,422.29	9,550.00	9,320.47	39.09	45.17	-160.72	520.04	-1,147.66	267.62	196.79	70.83	3.778	
9,725.00	9,446.59	9,564.33	9,333.95	39.15	45.18	-160.74	524.89	-1,147.69	280.83	210.29	70.54	3.981	
9,750.00	9,470.55	9,577.64	9,346.36	39.20	45.18	-160.68	529.71	-1,147.72	295.58	225.35	70.23	4.209	
9,775.00	9,494.11	9,589.91	9,357.70	39.26	45.19	-160.50	534.40	-1,147.75	311.77	241.87	69.90	4.460	
9,800.00	9,517.19	9,600.00	9,366.95	39.31	45.19	-160.12	538.43	-1,147.78	329.30	259.79	69.51	4.737	
9,825.00	9,539.74	9,611.26	9,377.18	39.36	45.20	-159.71	543.13	-1,147.80	348.02	278.76	69.26	5.025	
9,850.00	9,561.70	9,620.33	9,385.36	39.41	45.20	-159.02	547.06	-1,147.83	367.83	298.87	68.96	5.334	
9,875.00	9,583.00	9,628.36	9,392.54	39.45	45.20	-158.05	550.65	-1,147.85	388.61	319.94	68.67	5.659	
9,900.00	9,603.58	9,635.36	9,398.76	39.49	45.20	-156.74	553.86	-1,147.87	410.24	341.83	68.41	5.997	
9,925.00	9,623.40	9,650.00	9,411.64	39.53	45.21	-155.98	560.81	-1,147.91	432.75	364.12	68.64	6.305	
9,950.00	9,642.39	9,650.00	9,411.64	39.56	45.21	-153.05	560.81	-1,147.91	455.62	387.48	68.15	6.686	
9,975.00	9,660.51	9,650.00	9,411.64	39.59	45.21	-149.05	560.81	-1,147.91	479.12	411.38	67.74	7.073	
10,000.00	9,677.69	9,650.00	9,411.64	39.61	45.21	-143.39	560.81	-1,147.91	503.09	435.68	67.41	7.463	
10,025.00	9,693.91	9,650.00	9,411.64	39.63	45.21	-135.13	560.81	-1,147.91	527.41	460.25	67.16	7.853	
10,050.00	9,709.11	9,650.00	9,411.64	39.65	45.21	-122.73	560.81	-1,147.91	551.98	485.00	66.98	8.241	
10,075.00	9,723.24	9,650.00	9,411.64	39.66	45.21	-104.70	560.81	-1,147.91	576.69	509.82	66.87	8.624	
10,100.00	9,736.28	9,650.00	9,411.64	39.67	45.21	-82.26	560.81	-1,147.91	601.48	534.66	66.81	9.002	
10,125.00	9,748.19	9,650.00	9,411.64	39.68	45.21	-61.16	560.81	-1,147.91	626.25	559.44	66.81	9.373	
10,150.00	9,758.93	9,650.00	9,411.64	39.68	45.21	-45.54	560.81	-1,147.91	650.96	584.11	66.86	9.736	
10,175.00	9,768.47	9,650.00	9,411.64	39.69	45.21	-35.04	560.81	-1,147.91	675.55	608.60	66.94	10.091	
10,200.00	9,776.79	9,650.00	9,411.64	39.69	45.21	-27.96	560.81	-1,147.91	699.96	632.89	67.07	10.437	
10,225.00	9,783.86	9,650.00	9,411.64	39.68	45.21	-23.02	560.81	-1,147.91	724.15	656.92	67.22	10.772	
10,250.00	9,789.67	9,650.00	9,411.64	39.68	45.21	-19.44	560.81	-1,147.91	748.07	680.67	67.40	11.098	
10,275.00	9,794.20	9,650.00	9,411.64	39.67	45.21	-16.75	560.81	-1,147.91	771.70	704.09	67.61	11.414	
10,300.00	9,797.44	9,650.00	9,411.64	39.67	45.21	-14.67	560.81	-1,147.91	794.98	727.15	67.83	11.720	
10,325.00	9,799.38	9,650.00	9,411.64	39.66	45.21	-13.02	560.81	-1,147.91	817.90	749.83	68.07	12.015	
10,349.51	9,800.00	9,633.33	9,396.96	39.66	45.20	-11.27	552.92	-1,147.86	839.58	771.79	67.79	12.385	
10,400.00	9,800.00	9,624.17	9,388.79	39.65	45.20	-11.05	548.76	-1,147.84	884.40	816.36	68.05	12.997	
10,500.00	9,800.00	9,600.00	9,366.95	39.64	45.19	-10.48	538.43	-1,147.78	974.30	906.01	68.29	14.267	
10,600.00	9,800.00	9,600.00	9,366.95	39.66	45.19	-10.48	538.43	-1,147.78	1,065.31	996.24	69.06	15.425	
10,700.00	9,800.00	9,579.72	9,348.29	39.70	45.18	-10.03	530.48	-1,147.73	1,157.26	1,088.03	69.23	16.716	
10,800.00	9,800.00	9,567.89	9,337.28	39.78	45.18	-9.79	526.16	-1,147.70	1,250.13	1,180.61	69.53	17.981	
10,900.00	9,800.00	9,550.00	9,320.47	39.90	45.17	-9.44	520.04	-1,147.66	1,343.79	1,274.14	69.65	19.293	
11,000.00	9,800.00	9,550.00	9,320.47	40.07	45.17	-9.44	520.04	-1,147.66	1,437.96	1,367.91	70.05	20.527	
11,100.00	9,800.00	9,550.00	9,320.47	40.32	45.17	-9.44	520.04	-1,147.66	1,532.86	1,462.48	70.38	21.779	
11,200.00	9,800.00	9,530.72	9,302.15	40.64	45.16	-9.08	514.04	-1,147.63	1,627.93	1,557.54	70.39	23.128	
11,300.00	9,800.00	9,523.35	9,295.09	41.05	45.16	-8.96	511.91	-1,147.61	1,723.57	1,653.02	70.55	24.431	
11,400.00	9,800.00	9,500.00	9,272.57	41.54	45.15	-8.56	505.76	-1,147.58	1,819.88	1,749.40	70.48	25.822	
11,500.00	9,800.00	9,500.00	9,272.57	42.10	45.15	-8.56	505.76	-1,147.58	1,915.99	1,845.30	70.70	27.102	
11,600.00	9,800.00	9,500.00	9,272.57	42.74	45.15	-8.56	505.76	-1,147.58	2,012.49	1,941.60	70.89	28.390	
11,700.00	9,800.00	9,500.00	9,272.57	43.43	45.15	-8.56	505.76	-1,147.58	2,109.31	2,038.25	71.06	29.685	
11,800.00	9,800.00	9,500.00	9,272.57	44.17	45.15	-8.56	505.76	-1,147.58	2,206.42	2,135.21	71.21	30.986	
11,900.00	9,800.00	9,500.00	9,272.57	44.96	45.15	-8.56	505.76	-1,147.58	2,303.77	2,232.43	71.34	32.292	
12,000.00	9,800.00	9,500.00	9,272.57	45.78	45.15	-8.56	505.76	-1,147.58	2,401.34	2,329.88	71.46	33.602	
12,100.00	9,800.00	9,500.00	9,272.57	46.64	45.15	-8.56	505.76	-1,147.58	2,499.10	2,427.53	71.57	34.916	
12,200.00	9,800.00	9,477.27	9,250.41	47.54	45.14	-8.21	500.67	-1,147.55	2,596.48	2,525.01	71.48	36.326	
12,300.00	9,800.00	9,473.67	9,246.89	48.46	45.14	-8.16	499.94	-1,147.54	2,694.39	2,622.84	71.55	37.659	
12,400.00	9,800.00	9,450.00	9,223.60	49.41	45.13	-7.82	495.72	-1,147.52	2,792.85	2,721.40	71.44	39.092	
12,500.00	9,800.00	9,450.00	9,223.60	50.38	45.13	-7.82	495.72	-1,147.52	2,890.86	2,819.32	71.54	40.410	
12,600.00	9,800.00	9,450.00	9,223.60	51.38	45.13	-7.82	495.72	-1,147.52	2,989.00	2,917.37	71.63	41.730	
12,700.00	9,800.00	9,450.00	9,223.60	52.40	45.13	-7.82	495.72	-1,147.52	3,087.26	3,015.55	71.71	43.051	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 0-												Offset Well Error:	1.00 usft
Winnabago 30 State Com - 303H - OH - AC Plan													
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
12,800.00	9,800.00	9,450.00	9,223.60	53.44	45.13	-7.82	495.72	-1,147.52	3,185.64	3,113.84	71.79	44.374	
12,900.00	9,800.00	9,450.00	9,223.60	54.49	45.13	-7.82	495.72	-1,147.52	3,284.10	3,212.24	71.87	45.697	
13,000.00	9,800.00	9,450.00	9,223.60	55.57	45.13	-7.82	495.72	-1,147.52	3,382.66	3,310.72	71.94	47.021	
13,100.00	9,800.00	9,450.00	9,223.60	56.66	45.13	-7.82	495.72	-1,147.52	3,481.30	3,409.30	72.01	48.346	
13,200.00	9,800.00	9,450.00	9,223.60	57.77	45.13	-7.82	495.72	-1,147.52	3,580.02	3,507.95	72.07	49.671	
13,300.00	9,800.00	9,450.00	9,223.60	58.89	45.13	-7.82	495.72	-1,147.52	3,678.81	3,606.67	72.14	50.996	
13,400.00	9,800.00	9,450.00	9,223.60	60.03	45.13	-7.82	495.72	-1,147.52	3,777.66	3,705.46	72.20	52.321	
13,500.00	9,800.00	9,450.00	9,223.60	61.17	45.13	-7.82	495.72	-1,147.52	3,876.57	3,804.30	72.26	53.645	
13,600.00	9,800.00	9,450.00	9,223.60	62.34	45.13	-7.82	495.72	-1,147.52	3,975.53	3,903.21	72.32	54.970	
13,700.00	9,800.00	9,450.00	9,223.60	63.51	45.13	-7.82	495.72	-1,147.52	4,074.54	4,002.16	72.38	56.293	
13,800.00	9,800.00	9,450.00	9,223.60	64.69	45.13	-7.82	495.72	-1,147.52	4,173.61	4,101.17	72.44	57.616	
13,900.00	9,800.00	9,450.00	9,223.60	65.88	45.13	-7.82	495.72	-1,147.52	4,272.71	4,200.22	72.49	58.938	
14,000.00	9,800.00	9,450.00	9,223.60	67.09	45.13	-7.82	495.72	-1,147.52	4,371.86	4,299.31	72.55	60.259	
14,100.00	9,800.00	9,450.00	9,223.60	68.30	45.13	-7.82	495.72	-1,147.52	4,471.04	4,398.43	72.61	61.580	
14,200.00	9,800.00	9,450.00	9,223.60	69.52	45.13	-7.82	495.72	-1,147.52	4,570.26	4,497.60	72.66	62.899	
14,300.00	9,800.00	9,450.00	9,223.60	70.75	45.13	-7.82	495.72	-1,147.52	4,669.51	4,596.80	72.71	64.217	
14,400.00	9,800.00	9,450.00	9,223.60	71.99	45.13	-7.82	495.72	-1,147.52	4,768.80	4,696.03	72.77	65.533	
14,500.00	9,800.00	9,427.58	9,201.40	73.23	45.12	-7.53	492.61	-1,147.50	4,867.62	4,794.90	72.71	66.942	
14,600.00	9,800.00	9,426.35	9,200.18	74.48	45.12	-7.51	492.46	-1,147.50	4,966.90	4,894.14	72.76	68.261	
14,700.00	9,800.00	9,425.16	9,198.99	75.74	45.12	-7.50	492.32	-1,147.49	5,066.22	4,993.40	72.81	69.579	
14,800.00	9,800.00	9,424.01	9,197.85	77.00	45.12	-7.48	492.19	-1,147.49	5,165.55	5,092.69	72.86	70.895	
14,900.00	9,800.00	9,422.90	9,196.75	78.27	45.12	-7.47	492.07	-1,147.49	5,264.91	5,192.00	72.91	72.209	
15,000.00	9,800.00	9,400.00	9,173.95	79.55	45.11	-7.19	489.98	-1,147.48	5,364.75	5,291.89	72.86	73.629	
15,100.00	9,800.00	9,400.00	9,173.95	80.83	45.11	-7.19	489.98	-1,147.48	5,464.11	5,391.19	72.92	74.935	
15,200.00	9,800.00	9,400.00	9,173.95	82.12	45.11	-7.19	489.98	-1,147.48	5,563.49	5,490.51	72.97	76.239	
15,300.00	9,800.00	9,400.00	9,173.95	83.41	45.11	-7.19	489.98	-1,147.48	5,662.89	5,589.86	73.03	77.541	
15,400.00	9,800.00	9,400.00	9,173.95	84.70	45.11	-7.19	489.98	-1,147.48	5,762.31	5,689.22	73.09	78.841	
15,500.00	9,800.00	9,400.00	9,173.95	86.01	45.11	-7.19	489.98	-1,147.48	5,861.75	5,788.61	73.14	80.139	
15,600.00	9,800.00	9,400.00	9,173.95	87.31	45.11	-7.19	489.98	-1,147.48	5,961.22	5,888.01	73.20	81.435	
15,700.00	9,800.00	9,400.00	9,173.95	88.62	45.11	-7.19	489.98	-1,147.48	6,060.69	5,987.43	73.26	82.729	
15,800.00	9,800.00	9,400.00	9,173.95	89.93	45.11	-7.19	489.98	-1,147.48	6,160.19	6,086.87	73.32	84.021	
15,900.00	9,800.00	9,400.00	9,173.95	91.25	45.11	-7.19	489.98	-1,147.48	6,259.70	6,186.33	73.38	85.311	
16,000.00	9,800.00	9,400.00	9,173.95	92.57	45.11	-7.19	489.98	-1,147.48	6,359.23	6,285.79	73.43	86.598	
16,100.00	9,800.00	9,400.00	9,173.95	93.89	45.11	-7.19	489.98	-1,147.48	6,458.77	6,385.28	73.49	87.883	
16,200.00	9,800.00	9,400.00	9,173.95	95.22	45.11	-7.19	489.98	-1,147.48	6,558.32	6,484.77	73.55	89.166	
16,300.00	9,800.00	9,400.00	9,173.95	96.55	45.11	-7.19	489.98	-1,147.48	6,657.89	6,584.28	73.61	90.447	
16,400.00	9,800.00	9,400.00	9,173.95	97.89	45.11	-7.19	489.98	-1,147.48	6,757.48	6,683.80	73.67	91.725	
16,500.00	9,800.00	9,400.00	9,173.95	99.22	45.11	-7.19	489.98	-1,147.48	6,857.07	6,783.34	73.73	93.000	
16,600.00	9,800.00	9,400.00	9,173.95	100.56	45.11	-7.19	489.98	-1,147.48	6,956.67	6,882.88	73.79	94.273	
16,700.00	9,800.00	9,400.00	9,173.95	101.90	45.11	-7.19	489.98	-1,147.48	7,056.29	6,982.44	73.85	95.543	
16,800.00	9,800.00	9,400.00	9,173.95	103.25	45.11	-7.19	489.98	-1,147.48	7,155.92	7,082.00	73.92	96.811	
16,900.00	9,800.00	9,400.00	9,173.95	104.60	45.11	-7.19	489.98	-1,147.48	7,255.56	7,181.58	73.98	98.076	
17,000.00	9,800.00	9,400.00	9,173.95	105.94	45.11	-7.19	489.98	-1,147.48	7,355.20	7,281.16	74.04	99.338	
17,100.00	9,800.00	9,400.00	9,173.95	107.30	45.11	-7.19	489.98	-1,147.48	7,454.86	7,380.75	74.11	100.598	
17,200.00	9,800.00	9,400.00	9,173.95	108.65	45.11	-7.19	489.98	-1,147.48	7,554.53	7,480.36	74.17	101.855	
17,300.00	9,800.00	9,400.00	9,173.95	110.01	45.11	-7.19	489.98	-1,147.48	7,654.20	7,579.97	74.23	103.109	
17,400.00	9,800.00	9,400.00	9,173.95	111.36	45.11	-7.19	489.98	-1,147.48	7,753.88	7,679.58	74.30	104.361	
17,500.00	9,800.00	9,400.00	9,173.95	112.73	45.11	-7.19	489.98	-1,147.48	7,853.57	7,779.21	74.36	105.609	
17,590.89	9,800.00	9,400.00	9,173.95	113.96	45.11	-7.19	489.98	-1,147.48	7,944.19	7,869.77	74.42	106.741	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 131-, 1884-												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	0.00	0.00	0.00	1.00	-68.97	682.18	-1,774.33	1,900.96				
100.00	100.00	114.83	114.82	0.13	1.09	-68.95	682.51	-1,773.52	1,900.43	1,899.20	1.23	1,545.576	
200.00	200.00	225.34	225.32	0.49	1.38	-68.93	682.55	-1,771.75	1,898.94	1,897.08	1.86	1,020.835	
300.00	300.00	312.22	312.19	0.85	1.64	-68.93	682.26	-1,770.64	1,897.63	1,895.19	2.44	776.645	
400.00	400.00	407.66	407.63	1.21	1.96	-68.92	682.12	-1,769.86	1,896.81	1,893.73	3.08	615.044	
500.00	500.00	517.06	517.03	1.57	2.32	-68.93	681.52	-1,769.01	1,895.89	1,892.14	3.76	504.855	
600.00	600.00	619.21	619.17	1.93	2.69	-68.93	680.98	-1,767.56	1,894.38	1,889.94	4.44	426.871	
700.00	700.00	718.25	718.20	2.29	3.05	-68.93	680.70	-1,766.51	1,893.28	1,888.14	5.14	368.311	
800.00	800.00	816.56	816.49	2.64	3.39	-68.92	680.34	-1,765.09	1,891.80	1,885.98	5.83	324.722	
900.00	900.00	906.30	906.24	3.00	3.70	-68.93	679.69	-1,764.50	1,890.92	1,884.46	6.47	292.296	
1,000.00	1,000.00	1,010.99	1,010.92	3.36	4.07	-68.94	679.31	-1,763.90	1,890.26	1,883.09	7.17	263.579	
1,100.00	1,100.00	1,106.92	1,106.84	3.72	4.41	-68.95	678.70	-1,763.16	1,889.32	1,881.46	7.86	240.496	
1,200.00	1,200.00	1,199.74	1,199.66	4.08	4.74	-68.95	678.54	-1,762.75	1,888.84	1,880.32	8.52	221.605	
1,260.87	1,260.87	1,254.55	1,254.47	4.30	4.91	-68.95	678.38	-1,762.69	1,888.72	1,879.80	8.92	211.722	
1,300.00	1,300.00	1,287.83	1,287.75	4.44	5.01	-68.95	678.31	-1,762.77	1,888.78	1,879.61	9.17	206.001	
1,400.00	1,400.00	1,377.09	1,377.01	4.79	5.29	-68.96	678.21	-1,763.42	1,889.42	1,879.58	9.83	192.122	
1,500.00	1,500.00	1,468.80	1,468.72	5.15	5.60	-68.98	678.10	-1,764.54	1,890.51	1,880.00	10.52	179.767	
1,600.00	1,600.00	1,569.12	1,569.02	5.51	5.94	-68.99	678.13	-1,766.04	1,891.92	1,880.69	11.23	168.509	
1,700.00	1,700.00	1,664.39	1,664.28	5.87	6.26	-69.02	677.93	-1,767.47	1,893.25	1,881.33	11.92	158.775	
1,800.00	1,800.00	1,762.95	1,762.83	6.23	6.60	-69.04	677.77	-1,769.29	1,894.91	1,882.28	12.63	149.995	
1,900.00	1,900.00	1,858.24	1,858.09	6.59	6.87	-69.05	677.91	-1,771.02	1,896.66	1,883.40	13.26	143.027	
2,000.00	2,000.00	1,957.73	1,957.57	6.95	7.00	-69.07	678.17	-1,772.92	1,898.54	1,884.78	13.76	137.976	
2,100.00	2,100.00	2,067.02	2,066.84	7.30	7.17	-69.10	677.86	-1,775.03	1,900.25	1,885.94	14.31	132.805	
2,200.00	2,200.00	2,167.00	2,166.79	7.66	7.32	-69.16	676.44	-1,777.01	1,901.60	1,886.72	14.88	127.828	
2,300.00	2,300.00	2,251.33	2,251.04	8.02	7.46	-69.26	673.99	-1,779.54	1,903.38	1,887.93	15.45	123.230	
2,400.00	2,400.00	2,330.74	2,330.28	8.38	7.69	-69.40	670.43	-1,783.23	1,906.14	1,890.12	16.03	118.922	
2,500.00	2,500.00	2,412.73	2,411.99	8.74	8.02	-69.58	665.77	-1,788.31	1,909.97	1,893.31	16.66	114.632	
2,600.00	2,600.00	2,505.00	2,503.85	9.10	8.33	-69.81	660.15	-1,794.90	1,914.55	1,897.29	17.27	110.890	
2,700.00	2,700.00	2,602.69	2,601.10	9.45	8.63	-70.05	654.24	-1,801.96	1,919.29	1,901.40	17.89	107.293	
2,800.00	2,800.00	2,705.06	2,703.02	9.81	8.96	-70.29	648.17	-1,809.38	1,924.11	1,905.57	18.54	103.794	
2,900.00	2,900.00	2,796.67	2,794.24	10.17	9.28	-70.51	642.77	-1,815.98	1,928.94	1,909.78	19.16	100.650	
3,000.00	3,000.00	2,871.39	2,868.61	10.53	9.54	-70.68	638.69	-1,821.89	1,934.64	1,914.88	19.77	97.882	
3,100.00	3,100.00	2,948.23	2,945.03	10.89	9.83	-70.85	635.07	-1,829.05	1,941.86	1,921.47	20.39	95.219	
3,200.00	3,200.00	3,051.79	3,048.00	11.25	10.22	-71.08	630.31	-1,838.99	1,949.46	1,928.33	21.13	92.254	
3,300.00	3,300.00	3,145.64	3,141.34	11.61	10.60	-71.28	626.10	-1,847.76	1,956.88	1,935.05	21.83	89.645	
3,400.00	3,400.00	3,225.68	3,220.82	11.96	10.97	-71.48	621.86	-1,856.24	1,965.24	1,942.74	22.50	87.345	
3,500.00	3,500.00	3,320.84	3,315.23	12.32	11.41	-71.72	616.60	-1,866.92	1,974.19	1,950.95	23.24	84.948	
3,600.00	3,600.00	3,425.27	3,418.86	12.68	11.85	-71.98	611.09	-1,878.56	1,983.17	1,959.17	24.00	82.645	
3,700.00	3,700.00	3,542.01	3,534.83	13.04	12.35	-72.24	605.42	-1,890.72	1,991.62	1,966.81	24.81	80.263	
3,800.00	3,800.00	3,660.53	3,652.74	13.40	12.86	-72.48	600.31	-1,901.62	1,999.10	1,973.45	25.64	77.961	
3,900.00	3,900.00	3,763.78	3,755.48	13.76	13.31	-72.69	595.51	-1,910.60	2,006.02	1,979.61	26.41	75.967	
4,000.00	4,000.00	3,868.64	3,859.79	14.11	13.78	-72.92	589.79	-1,919.78	2,012.78	1,985.60	27.18	74.052	
4,100.00	4,100.00	3,965.86	3,956.46	14.47	14.23	-73.15	584.07	-1,928.31	2,019.49	1,991.56	27.92	72.319	
4,200.00	4,200.00	4,057.15	4,047.17	14.83	14.65	-73.38	578.25	-1,936.74	2,026.52	1,997.87	28.65	70.744	
4,300.00	4,300.00	4,163.00	4,152.36	15.19	15.14	-73.64	571.44	-1,946.39	2,033.45	2,004.01	29.44	69.078	
4,400.00	4,400.00	4,242.00	4,230.82	15.55	15.52	-73.84	566.37	-1,954.06	2,040.98	2,010.87	30.11	67.780	
4,500.00	4,500.00	4,339.02	4,327.15	15.91	15.99	-74.07	560.39	-1,963.97	2,049.13	2,018.24	30.88	66.355	
4,600.00	4,600.00	4,444.00	4,431.43	16.27	16.49	-74.32	554.26	-1,974.38	2,057.11	2,025.41	31.69	64.906	
4,700.00	4,700.00	4,538.14	4,524.94	16.62	16.96	-74.54	548.55	-1,983.71	2,065.06	2,032.60	32.46	63.623	
4,800.00	4,800.00	4,619.00	4,605.12	16.98	17.38	-74.75	543.08	-1,992.54	2,073.81	2,040.63	33.18	62.510	
4,900.00	4,900.00	4,709.83	4,695.11	17.34	17.87	-75.00	536.69	-2,003.13	2,083.26	2,049.31	33.95	61.358	
5,000.00	5,000.00	4,811.04	4,795.41	17.70	18.37	-75.26	529.97	-2,014.82	2,092.76	2,057.99	34.77	60.190	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 131-, 1884-												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	4,916.93	4,900.44	18.06	18.91	-75.52	523.49	-2,026.70	2,102.11	2,066.49	35.61	59.025	
5,200.00	5,200.00	5,028.17	5,010.83	18.42	19.47	-75.77	516.85	-2,038.63	2,111.05	2,074.57	36.49	57.858	
5,300.00	5,300.00	5,139.15	5,121.05	18.77	20.03	-76.02	510.28	-2,049.81	2,119.40	2,082.05	37.36	56.736	
5,400.00	5,400.00	5,249.30	5,230.55	19.13	20.58	-76.25	504.31	-2,060.26	2,127.34	2,089.13	38.22	55.662	
5,500.00	5,500.00	5,351.21	5,331.90	19.49	21.09	-76.44	499.00	-2,069.45	2,134.89	2,095.85	39.04	54.685	
5,600.00	5,600.00	5,452.92	5,433.06	19.85	21.60	-76.64	493.68	-2,078.60	2,142.45	2,102.59	39.86	53.747	
5,620.00	5,620.00	5,474.13	5,454.16	19.92	21.71	-76.68	492.58	-2,080.49	2,143.94	2,103.91	40.03	53.560	
5,700.00	5,699.99	5,563.48	5,543.06	20.20	22.15	-0.09	487.99	-2,088.15	2,148.64	2,107.92	40.71	52.778	
5,800.00	5,799.89	5,710.45	5,689.39	20.55	22.91	-0.35	480.52	-2,099.68	2,151.14	2,109.38	41.75	51.519	
5,900.00	5,899.60	5,958.68	5,937.24	20.90	23.80	-0.67	469.76	-2,105.00	2,144.31	2,101.66	42.65	50.275	
6,000.00	5,999.01	6,065.48	6,044.01	21.24	23.83	-0.71	467.98	-2,103.00	2,131.27	2,088.30	42.98	49.592	
6,100.00	6,098.00	6,169.02	6,147.50	21.59	23.85	-0.70	468.30	-2,100.13	2,114.52	2,071.13	43.39	48.736	
6,200.00	6,196.47	6,263.70	6,242.13	21.95	23.88	-0.66	469.41	-2,097.44	2,094.65	2,050.78	43.87	47.752	
6,300.00	6,294.31	6,348.91	6,327.30	22.31	23.92	-0.63	470.48	-2,095.11	2,071.70	2,027.35	44.34	46.718	
6,400.00	6,391.42	6,411.00	6,389.38	22.67	23.96	-0.60	471.56	-2,094.04	2,046.67	2,001.86	44.81	45.672	
6,500.00	6,487.69	6,488.40	6,466.75	23.04	24.01	-0.55	473.45	-2,093.63	2,019.70	1,974.41	45.29	44.598	
6,600.00	6,583.01	6,580.40	6,558.71	23.41	24.06	-0.49	476.28	-2,093.88	1,990.39	1,944.63	45.75	43.502	
6,700.00	6,677.29	6,680.29	6,658.55	23.80	24.11	-0.41	479.26	-2,094.00	1,957.79	1,911.58	46.21	42.367	
6,800.00	6,770.41	6,772.89	6,751.12	24.21	24.16	-0.35	481.76	-2,094.02	1,921.95	1,875.29	46.66	41.191	
6,900.00	6,862.29	6,866.40	6,844.61	24.63	24.22	-0.29	483.78	-2,094.18	1,883.07	1,835.96	47.11	39.975	
7,000.00	6,952.81	6,954.76	6,932.96	25.07	24.38	-0.29	484.32	-2,094.64	1,841.17	1,793.54	47.63	38.657	
7,100.00	7,041.88	7,047.08	7,025.27	25.53	24.71	-0.35	483.32	-2,095.53	1,796.34	1,748.07	48.26	37.220	
7,200.00	7,129.40	7,130.82	7,109.00	26.02	25.03	-0.41	482.16	-2,096.32	1,748.52	1,699.66	48.86	35.787	
7,300.00	7,215.28	7,224.88	7,203.04	26.54	25.35	-0.51	480.47	-2,097.42	1,697.95	1,648.53	49.42	34.358	
7,400.00	7,299.42	7,316.42	7,294.57	27.09	25.61	-0.61	478.85	-2,097.81	1,643.94	1,594.03	49.90	32.942	
7,489.65	7,373.30	7,406.25	7,384.38	27.62	25.78	-0.70	477.43	-2,097.75	1,592.89	1,542.64	50.25	31.698	
7,500.00	7,381.75	7,418.03	7,396.16	27.69	25.80	-0.72	477.24	-2,097.65	1,586.80	1,536.51	50.29	31.555	
7,600.00	7,463.31	7,509.50	7,487.61	28.31	25.87	-0.80	475.71	-2,096.29	1,527.46	1,476.88	50.58	30.200	
7,700.00	7,544.88	7,596.13	7,574.20	28.97	25.89	-0.89	474.20	-2,094.69	1,467.85	1,416.99	50.86	28.861	
7,729.86	7,569.24	7,622.49	7,600.56	29.16	25.90	-0.92	473.77	-2,094.11	1,449.97	1,399.03	50.94	28.464	
7,800.00	7,626.91	7,679.18	7,657.23	29.64	25.91	-0.95	472.95	-2,092.75	1,408.55	1,357.39	51.16	27.530	
7,900.00	7,710.71	7,759.11	7,737.13	30.31	25.94	-0.98	472.32	-2,090.82	1,351.89	1,300.37	51.52	26.241	
8,000.00	7,796.26	7,839.05	7,817.05	30.98	25.98	-0.98	472.12	-2,088.98	1,298.17	1,246.24	51.92	25.002	
8,100.00	7,883.46	7,920.00	7,897.99	31.64	26.04	-0.98	472.18	-2,087.57	1,247.77	1,195.39	52.38	23.822	
8,200.00	7,972.24	8,007.38	7,985.35	32.28	26.12	-0.95	472.78	-2,086.13	1,200.46	1,147.58	52.88	22.701	
8,300.00	8,062.49	8,089.85	8,067.80	32.91	26.23	-0.90	473.79	-2,084.76	1,156.18	1,102.74	53.44	21.635	
8,400.00	8,154.10	8,178.78	8,156.72	33.51	26.34	-0.84	475.01	-2,083.72	1,115.33	1,061.33	54.00	20.653	
8,500.00	8,246.99	8,265.10	8,243.02	34.09	26.45	-0.76	476.44	-2,082.88	1,077.77	1,023.20	54.57	19.751	
8,600.00	8,341.05	8,357.53	8,335.44	34.65	26.57	-0.71	477.50	-2,082.61	1,043.80	988.68	55.12	18.936	
8,700.00	8,436.18	8,446.49	8,424.40	35.18	26.68	-0.67	478.41	-2,082.47	1,013.07	957.38	55.68	18.194	
8,800.00	8,532.27	8,543.47	8,521.37	35.69	26.80	-0.62	479.55	-2,082.97	986.13	929.92	56.21	17.542	
8,900.00	8,629.23	8,639.02	8,616.92	36.17	26.91	-0.56	480.89	-2,082.99	961.97	905.22	56.75	16.950	
9,000.00	8,726.93	8,731.79	8,709.67	36.62	27.04	-0.50	482.01	-2,083.62	941.62	884.31	57.31	16.429	
9,100.00	8,825.29	8,828.65	8,806.52	37.04	27.26	-0.50	482.53	-2,084.78	924.86	866.93	57.92	15.967	
9,200.00	8,924.19	8,926.67	8,904.54	37.45	27.55	-0.52	482.58	-2,086.16	911.45	852.87	58.58	15.559	
9,300.00	9,023.52	9,029.59	9,007.45	37.82	27.88	-0.54	482.57	-2,087.58	901.29	842.04	59.25	15.212	
9,400.00	9,123.18	9,125.28	9,103.12	38.18	28.24	-0.62	481.67	-2,088.94	894.24	834.28	59.97	14.912	
9,500.00	9,223.05	9,224.89	9,202.69	38.51	28.65	-0.76	480.00	-2,090.98	890.94	830.25	60.69	14.680	
9,548.11	9,271.14	9,271.84	9,249.63	38.66	28.84	-0.83	479.02	-2,091.96	890.51	829.48	61.04	14.590 CC, ES	
9,599.51	9,322.54	9,321.03	9,298.79	38.82	29.04	-77.66	478.17	-2,093.06	891.01	829.61	61.41	14.510	
9,600.00	9,323.03	9,321.50	9,299.26	38.82	29.04	102.74	478.16	-2,093.07	891.02	829.61	61.41	14.510	
9,625.00	9,348.02	9,345.09	9,322.84	38.89	29.14	102.67	477.83	-2,093.63	891.68	830.09	61.58	14.479	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 131-, 1884-												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	
9,650.00	9,372.94	9,368.20	9,345.95	38.96	29.23	102.65	477.56	-2,094.21	892.67	830.92	61.75	14.457	
9,675.00	9,397.72	9,391.18	9,368.92	39.02	29.32	102.66	477.36	-2,094.83	894.00	832.10	61.90	14.442	
9,700.00	9,422.29	9,413.96	9,391.69	39.09	29.40	102.70	477.21	-2,095.47	895.68	833.63	62.05	14.434 SF	
9,725.00	9,446.59	9,437.42	9,415.14	39.15	29.49	102.79	477.13	-2,096.16	897.72	835.53	62.19	14.435	
9,750.00	9,470.55	9,462.43	9,440.14	39.20	29.57	102.95	477.11	-2,096.86	900.08	837.77	62.31	14.445	
9,775.00	9,494.11	9,486.97	9,464.67	39.26	29.65	103.14	477.15	-2,097.51	902.77	840.35	62.42	14.462	
9,800.00	9,517.19	9,510.97	9,488.66	39.31	29.72	103.35	477.27	-2,098.10	905.81	843.28	62.53	14.486	
9,825.00	9,539.74	9,534.06	9,511.75	39.36	29.79	103.57	477.44	-2,098.63	909.23	846.61	62.63	14.519	
9,850.00	9,561.70	9,556.13	9,533.81	39.41	29.84	103.77	477.65	-2,099.11	913.08	850.38	62.71	14.561	
9,875.00	9,583.00	9,577.47	9,555.15	39.45	29.89	103.95	477.90	-2,099.56	917.40	854.61	62.78	14.612	
9,900.00	9,603.58	9,598.02	9,575.69	39.49	29.93	104.11	478.18	-2,099.97	922.21	859.35	62.86	14.671	
9,925.00	9,623.40	9,617.72	9,595.39	39.53	29.98	104.22	478.49	-2,100.35	927.54	864.61	62.93	14.739	
9,950.00	9,642.39	9,635.70	9,613.35	39.56	30.00	104.24	478.86	-2,100.68	933.44	870.45	62.99	14.819	
9,975.00	9,660.51	9,652.69	9,630.34	39.59	30.02	104.19	479.27	-2,100.98	939.94	876.89	63.05	14.908	
10,000.00	9,677.69	9,668.68	9,646.32	39.61	30.07	104.06	479.71	-2,101.25	947.06	883.93	63.12	15.003	
10,025.00	9,693.91	9,683.27	9,660.89	39.63	30.16	103.81	480.32	-2,101.42	954.82	891.60	63.23	15.102	
10,050.00	9,709.11	9,696.27	9,673.87	39.65	30.23	103.43	481.07	-2,101.51	963.25	899.93	63.32	15.212	
10,075.00	9,723.24	9,707.71	9,685.29	39.66	30.30	102.89	481.88	-2,101.53	972.37	908.95	63.42	15.333	
10,100.00	9,736.28	9,717.65	9,695.19	39.67	30.36	102.20	482.71	-2,101.50	982.18	918.67	63.51	15.465	
10,125.00	9,748.19	9,726.14	9,703.64	39.68	30.41	101.33	483.51	-2,101.45	992.67	929.07	63.60	15.609	
10,150.00	9,758.93	9,733.22	9,710.69	39.68	30.45	100.28	484.24	-2,101.38	1,003.83	940.15	63.68	15.763	
10,175.00	9,768.47	9,738.97	9,716.40	39.69	30.48	99.05	484.87	-2,101.31	1,015.64	951.88	63.76	15.928	
10,200.00	9,776.79	9,743.46	9,720.85	39.69	30.51	97.62	485.39	-2,101.25	1,028.07	964.23	63.85	16.103	
10,225.00	9,783.86	9,746.74	9,724.11	39.68	30.53	96.02	485.79	-2,101.19	1,041.08	977.16	63.92	16.286	
10,250.00	9,789.67	9,757.00	9,734.29	39.68	30.59	94.75	487.10	-2,101.00	1,054.67	990.66	64.02	16.475	
10,275.00	9,794.20	9,757.00	9,734.29	39.67	30.59	92.73	487.10	-2,101.00	1,068.70	1,004.61	64.09	16.675	
10,300.00	9,797.44	9,757.00	9,734.29	39.67	30.59	90.60	487.10	-2,101.00	1,083.17	1,019.01	64.16	16.882	
10,325.00	9,799.38	9,757.00	9,734.29	39.66	30.59	88.38	487.10	-2,101.00	1,098.04	1,033.80	64.23	17.094	
10,349.51	9,800.00	9,757.00	9,734.29	39.66	30.59	86.13	487.10	-2,101.00	1,112.93	1,048.63	64.30	17.307	
10,400.00	9,800.00	9,757.00	9,734.29	39.65	30.59	86.13	487.10	-2,101.00	1,144.61	1,080.15	64.46	17.757	
10,500.00	9,800.00	9,735.81	9,713.26	39.64	30.47	84.77	484.52	-2,101.35	1,210.82	1,146.09	64.73	18.705	
10,600.00	9,800.00	9,729.37	9,706.85	39.66	30.43	84.35	483.84	-2,101.42	1,281.47	1,216.42	65.06	19.697	
10,700.00	9,800.00	9,723.72	9,701.24	39.70	30.39	83.99	483.28	-2,101.47	1,355.78	1,290.39	65.39	20.735	
10,800.00	9,800.00	9,718.74	9,696.27	39.78	30.37	83.67	482.81	-2,101.50	1,433.18	1,367.47	65.71	21.812	
10,900.00	9,800.00	9,714.31	9,691.86	39.90	30.34	83.39	482.42	-2,101.51	1,513.20	1,447.19	66.01	22.923	
11,000.00	9,800.00	9,710.35	9,687.91	40.07	30.32	83.13	482.09	-2,101.52	1,595.46	1,529.16	66.30	24.065	
11,100.00	9,800.00	9,706.78	9,684.35	40.32	30.29	82.90	481.81	-2,101.53	1,679.62	1,613.06	66.57	25.232	
11,200.00	9,800.00	9,703.55	9,681.14	40.64	30.28	82.70	481.57	-2,101.53	1,765.43	1,698.61	66.82	26.421	
11,300.00	9,800.00	9,700.61	9,678.21	41.05	30.26	82.51	481.36	-2,101.52	1,852.64	1,785.59	67.05	27.629	
11,400.00	9,800.00	9,697.93	9,675.53	41.54	30.24	82.34	481.18	-2,101.52	1,941.08	1,873.81	67.27	28.855	
11,500.00	9,800.00	9,695.48	9,673.08	42.10	30.23	82.18	481.02	-2,101.51	2,030.58	1,963.11	67.47	30.095	
11,600.00	9,800.00	9,663.00	9,640.64	42.74	30.04	80.11	479.54	-2,101.16	2,121.62	2,054.07	67.56	31.404	
11,700.00	9,800.00	9,663.00	9,640.64	43.43	30.04	80.11	479.54	-2,101.16	2,212.79	2,145.05	67.74	32.665	
11,800.00	9,800.00	9,663.00	9,640.64	44.17	30.04	80.11	479.54	-2,101.16	2,304.69	2,236.78	67.91	33.936	
11,900.00	9,800.00	9,663.00	9,640.64	44.96	30.04	80.11	479.54	-2,101.16	2,397.24	2,329.17	68.07	35.217	
12,000.00	9,800.00	9,663.00	9,640.64	45.78	30.04	80.11	479.54	-2,101.16	2,490.37	2,422.15	68.22	36.504	
12,100.00	9,800.00	9,663.00	9,640.64	46.64	30.04	80.11	479.54	-2,101.16	2,584.01	2,515.65	68.36	37.799	
12,200.00	9,800.00	9,663.00	9,640.64	47.54	30.04	80.11	479.54	-2,101.16	2,678.11	2,609.62	68.49	39.100	
12,300.00	9,800.00	9,663.00	9,640.64	48.46	30.04	80.11	479.54	-2,101.16	2,772.62	2,704.00	68.62	40.406	
12,400.00	9,800.00	9,663.00	9,640.64	49.41	30.04	80.11	479.54	-2,101.16	2,867.51	2,798.77	68.74	41.716	
12,500.00	9,800.00	9,663.00	9,640.64	50.38	30.04	80.11	479.54	-2,101.16	2,962.73	2,893.88	68.85	43.031	
12,600.00	9,800.00	9,663.00	9,640.64	51.38	30.04	80.11	479.54	-2,101.16	3,058.25	2,989.30	68.96	44.349	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 131-, 1884-												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	
12,700.00	9,800.00	9,663.00	9,640.64	52.40	30.04	80.11	479.54	-2,101.16	3,154.06	3,085.00	69.06	45.670	
12,800.00	9,800.00	9,663.00	9,640.64	53.44	30.04	80.11	479.54	-2,101.16	3,250.12	3,180.95	69.16	46.994	
12,900.00	9,800.00	9,663.00	9,640.64	54.49	30.04	80.11	479.54	-2,101.16	3,346.40	3,277.15	69.26	48.320	
13,000.00	9,800.00	9,663.00	9,640.64	55.57	30.04	80.11	479.54	-2,101.16	3,442.90	3,373.56	69.35	49.648	
13,100.00	9,800.00	9,663.00	9,640.64	56.66	30.04	80.11	479.54	-2,101.16	3,539.60	3,470.16	69.43	50.977	
13,200.00	9,800.00	9,663.00	9,640.64	57.77	30.04	80.11	479.54	-2,101.16	3,636.47	3,566.95	69.52	52.308	
13,300.00	9,800.00	9,663.00	9,640.64	58.89	30.04	80.11	479.54	-2,101.16	3,733.51	3,663.90	69.60	53.641	
13,400.00	9,800.00	9,663.00	9,640.64	60.03	30.04	80.11	479.54	-2,101.16	3,830.70	3,761.01	69.68	54.973	
13,500.00	9,800.00	9,663.00	9,640.64	61.17	30.04	80.11	479.54	-2,101.16	3,928.03	3,858.27	69.76	56.307	
13,600.00	9,800.00	9,663.00	9,640.64	62.34	30.04	80.11	479.54	-2,101.16	4,025.49	3,955.65	69.84	57.641	
13,700.00	9,800.00	9,663.00	9,640.64	63.51	30.04	80.11	479.54	-2,101.16	4,123.07	4,053.16	69.91	58.976	
13,800.00	9,800.00	9,663.00	9,640.64	64.69	30.04	80.11	479.54	-2,101.16	4,220.77	4,150.78	69.98	60.310	
13,900.00	9,800.00	9,663.00	9,640.64	65.88	30.04	80.11	479.54	-2,101.16	4,318.57	4,248.51	70.06	61.644	
14,000.00	9,800.00	9,663.00	9,640.64	67.09	30.04	80.11	479.54	-2,101.16	4,416.47	4,346.34	70.13	62.979	
14,100.00	9,800.00	9,663.00	9,640.64	68.30	30.04	80.11	479.54	-2,101.16	4,514.46	4,444.27	70.20	64.312	
14,200.00	9,800.00	9,663.00	9,640.64	69.52	30.04	80.11	479.54	-2,101.16	4,612.54	4,542.28	70.26	65.646	
14,300.00	9,800.00	9,663.00	9,640.64	70.75	30.04	80.11	479.54	-2,101.16	4,710.70	4,640.37	70.33	66.978	
14,400.00	9,800.00	9,663.00	9,640.64	71.99	30.04	80.11	479.54	-2,101.16	4,808.94	4,738.54	70.40	68.311	
14,500.00	9,800.00	9,663.00	9,640.64	73.23	30.04	80.11	479.54	-2,101.16	4,907.24	4,836.78	70.46	69.642	
14,600.00	9,800.00	9,663.00	9,640.64	74.48	30.04	80.11	479.54	-2,101.16	5,005.62	4,935.09	70.53	70.972	
14,700.00	9,800.00	9,663.00	9,640.64	75.74	30.04	80.11	479.54	-2,101.16	5,104.05	5,033.46	70.59	72.301	
14,800.00	9,800.00	9,663.00	9,640.64	77.00	30.04	80.11	479.54	-2,101.16	5,202.55	5,131.89	70.66	73.630	
14,900.00	9,800.00	9,663.00	9,640.64	78.27	30.04	80.11	479.54	-2,101.16	5,301.10	5,230.38	70.72	74.956	
15,000.00	9,800.00	9,663.00	9,640.64	79.55	30.04	80.11	479.54	-2,101.16	5,399.71	5,328.92	70.79	76.282	
15,100.00	9,800.00	9,663.00	9,640.64	80.83	30.04	80.11	479.54	-2,101.16	5,498.36	5,427.51	70.85	77.606	
15,200.00	9,800.00	9,663.00	9,640.64	82.12	30.04	80.11	479.54	-2,101.16	5,597.07	5,526.16	70.91	78.929	
15,300.00	9,800.00	9,654.98	9,632.62	83.41	30.03	79.60	479.33	-2,101.02	5,695.81	5,624.83	70.98	80.247	
15,400.00	9,800.00	9,653.60	9,631.24	84.70	30.02	79.51	479.29	-2,100.99	5,794.59	5,723.55	71.04	81.566	
15,500.00	9,800.00	9,652.24	9,629.89	86.01	30.02	79.42	479.26	-2,100.97	5,893.42	5,822.32	71.10	82.884	
15,600.00	9,800.00	9,650.90	9,628.55	87.31	30.02	79.34	479.22	-2,100.95	5,992.29	5,921.12	71.17	84.199	
15,700.00	9,800.00	9,649.59	9,627.24	88.62	30.02	79.26	479.19	-2,100.92	6,091.19	6,019.96	71.23	85.513	
15,800.00	9,800.00	9,648.29	9,625.94	89.93	30.02	79.17	479.16	-2,100.90	6,190.13	6,118.84	71.29	86.825	
15,900.00	9,800.00	9,647.02	9,624.67	91.25	30.02	79.09	479.13	-2,100.88	6,289.10	6,217.74	71.36	88.135	
16,000.00	9,800.00	9,645.77	9,623.42	92.57	30.01	79.01	479.09	-2,100.86	6,388.11	6,316.68	71.42	89.443	
16,100.00	9,800.00	9,644.53	9,622.18	93.89	30.01	78.94	479.06	-2,100.83	6,487.14	6,415.65	71.48	90.749	
16,200.00	9,800.00	9,643.32	9,620.97	95.22	30.01	78.86	479.04	-2,100.81	6,586.20	6,514.65	71.55	92.053	
16,300.00	9,800.00	9,642.12	9,619.77	96.55	30.01	78.78	479.01	-2,100.79	6,685.29	6,613.68	71.61	93.355	
16,400.00	9,800.00	9,640.94	9,618.60	97.89	30.01	78.71	478.98	-2,100.77	6,784.40	6,712.73	71.68	94.654	
16,500.00	9,800.00	9,639.78	9,617.44	99.22	30.01	78.64	478.95	-2,100.75	6,883.54	6,811.80	71.74	95.952	
16,600.00	9,800.00	9,631.00	9,608.66	100.56	30.00	78.08	478.75	-2,100.60	6,982.72	6,910.91	71.81	97.243	
16,700.00	9,800.00	9,631.00	9,608.66	101.90	30.00	78.08	478.75	-2,100.60	7,081.90	7,010.03	71.87	98.536	
16,800.00	9,800.00	9,631.00	9,608.66	103.25	30.00	78.08	478.75	-2,100.60	7,181.11	7,109.18	71.94	99.827	
16,900.00	9,800.00	9,631.00	9,608.66	104.60	30.00	78.08	478.75	-2,100.60	7,280.34	7,208.34	72.00	101.115	
17,000.00	9,800.00	9,631.00	9,608.66	105.94	30.00	78.08	478.75	-2,100.60	7,379.59	7,307.53	72.07	102.401	
17,100.00	9,800.00	9,631.00	9,608.66	107.30	30.00	78.08	478.75	-2,100.60	7,478.86	7,406.73	72.13	103.685	
17,200.00	9,800.00	9,631.00	9,608.66	108.65	30.00	78.08	478.75	-2,100.60	7,578.15	7,505.96	72.20	104.966	
17,300.00	9,800.00	9,631.00	9,608.66	110.01	30.00	78.08	478.75	-2,100.60	7,677.46	7,605.20	72.26	106.244	
17,400.00	9,800.00	9,631.00	9,608.66	111.36	30.00	78.08	478.75	-2,100.60	7,776.79	7,704.46	72.33	107.520	
17,500.00	9,800.00	9,631.00	9,608.66	112.73	30.00	78.08	478.75	-2,100.60	7,876.13	7,803.73	72.40	108.794	
17,590.89	9,800.00	9,631.00	9,608.66	113.96	30.00	78.08	478.75	-2,100.60	7,966.43	7,893.98	72.46	109.949	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 132-, 1900-												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 Tooface (")	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	1.00	-68.64	682.36	-1,744.33	1,873.06				
100.00	100.00	92.06	92.06	0.13	1.06	-68.65	682.03	-1,744.53	1,873.11	1,871.93	1.18	1,590.847	
200.00	200.00	199.97	199.96	0.49	1.32	-68.68	680.95	-1,744.98	1,873.15	1,871.44	1.71	1,097.412	
300.00	300.00	302.38	302.37	0.85	1.63	-68.72	679.81	-1,744.98	1,872.74	1,870.46	2.28	822.707	
400.00	400.00	400.49	400.47	1.21	1.95	-68.75	678.70	-1,745.00	1,872.35	1,869.46	2.89	648.613	
458.02	458.02	452.55	452.52	1.42	2.12	-68.76	678.19	-1,745.11	1,872.25	1,868.99	3.26	574.462	
500.00	500.00	491.78	491.75	1.57	2.26	-68.77	677.83	-1,745.29	1,872.30	1,868.76	3.54	529.515	
600.00	600.00	604.67	604.64	1.93	2.65	-68.80	676.85	-1,745.35	1,872.03	1,867.78	4.24	441.186	
700.00	700.00	701.74	701.70	2.29	2.99	-68.83	675.80	-1,745.18	1,871.48	1,866.57	4.90	381.581	
759.54	759.54	754.08	754.04	2.50	3.18	-68.84	675.41	-1,745.23	1,871.36	1,866.07	5.29	353.425	
800.00	800.00	793.22	793.18	2.64	3.31	-68.85	675.20	-1,745.34	1,871.39	1,865.81	5.58	335.271	
900.00	900.00	892.74	892.70	3.00	3.67	-68.88	674.24	-1,745.78	1,871.46	1,865.15	6.31	296.647	
1,000.00	1,000.00	989.22	989.17	3.36	4.01	-68.91	673.34	-1,746.29	1,871.62	1,864.59	7.03	266.323	
1,100.00	1,100.00	1,082.16	1,082.10	3.72	4.33	-68.94	672.68	-1,747.01	1,872.08	1,864.34	7.74	241.844	
1,200.00	1,200.00	1,182.47	1,182.41	4.08	4.66	-68.97	672.18	-1,748.05	1,872.87	1,864.39	8.48	220.809	
1,300.00	1,300.00	1,279.02	1,278.96	4.44	4.99	-68.99	671.51	-1,748.87	1,873.43	1,864.22	9.20	203.549	
1,400.00	1,400.00	1,380.96	1,380.88	4.79	5.34	-69.02	670.99	-1,750.17	1,874.44	1,864.49	9.95	188.475	
1,500.00	1,500.00	1,475.71	1,475.62	5.15	5.66	-69.04	670.59	-1,750.99	1,875.10	1,864.45	10.65	176.013	
1,600.00	1,600.00	1,572.86	1,572.77	5.51	5.98	-69.06	670.54	-1,752.28	1,876.32	1,864.96	11.36	165.098	
1,700.00	1,700.00	1,677.48	1,677.38	5.87	6.32	-69.08	670.32	-1,753.52	1,877.35	1,865.25	12.10	155.177	
1,800.00	1,800.00	1,790.08	1,789.98	6.23	6.70	-69.09	670.33	-1,754.25	1,877.97	1,865.11	12.86	146.068	
1,900.00	1,900.00	1,880.54	1,880.44	6.59	6.93	-69.10	670.11	-1,755.07	1,878.70	1,865.25	13.45	139.708	
2,000.00	2,000.00	2,072.42	2,072.28	6.95	7.34	-69.09	669.77	-1,752.73	1,877.95	1,863.68	14.28	131.551	
2,100.00	2,100.00	2,188.71	2,188.43	7.30	7.73	-69.07	668.34	-1,747.36	1,873.17	1,858.15	15.02	124.747	
2,200.00	2,200.00	2,278.81	2,278.43	7.66	7.90	-69.06	667.11	-1,743.33	1,868.50	1,852.95	15.55	120.165	
2,300.00	2,300.00	2,412.18	2,411.63	8.02	8.25	-69.06	664.84	-1,736.98	1,863.55	1,847.31	16.24	114.728	
2,400.00	2,400.00	2,588.46	2,587.24	8.38	9.05	-69.10	657.94	-1,723.41	1,854.77	1,837.41	17.36	106.844	
2,500.00	2,500.00	2,695.41	2,693.56	8.74	9.41	-69.15	652.49	-1,713.17	1,844.00	1,825.93	18.07	102.030	
2,600.00	2,600.00	2,788.93	2,786.54	9.10	9.69	-69.19	647.66	-1,704.34	1,833.34	1,814.62	18.72	97.923	
2,700.00	2,700.00	2,881.90	2,879.00	9.45	9.99	-69.24	642.94	-1,695.91	1,823.05	1,803.67	19.39	94.040	
2,800.00	2,800.00	2,973.70	2,970.33	9.81	10.30	-69.28	638.48	-1,687.85	1,813.12	1,793.06	20.06	90.383	
2,900.00	2,900.00	3,063.82	3,060.05	10.17	10.61	-69.32	634.35	-1,680.31	1,803.68	1,782.94	20.74	86.958	
3,000.00	3,000.00	3,161.95	3,157.77	10.53	10.97	-69.36	630.12	-1,672.45	1,794.66	1,773.20	21.46	83.637	
3,100.00	3,100.00	3,301.73	3,296.84	10.89	11.55	-69.41	623.61	-1,660.03	1,784.81	1,762.45	22.36	79.819	
3,200.00	3,200.00	3,395.93	3,390.45	11.25	11.97	-69.45	618.90	-1,650.57	1,773.65	1,750.50	23.14	76.638	
3,300.00	3,300.00	3,493.72	3,487.64	11.61	12.36	-69.47	614.48	-1,640.76	1,762.66	1,738.76	23.90	73.743	
3,400.00	3,400.00	3,600.67	3,593.92	11.96	12.81	-69.48	610.06	-1,629.61	1,751.45	1,726.74	24.70	70.901	
3,500.00	3,500.00	3,698.38	3,690.99	12.32	13.23	-69.48	606.15	-1,619.21	1,740.08	1,714.60	25.48	68.286	
3,600.00	3,600.00	3,793.96	3,785.98	12.68	13.64	-69.47	602.71	-1,609.13	1,728.94	1,702.68	26.26	65.836	
3,700.00	3,700.00	3,898.82	3,890.18	13.04	14.10	-69.47	598.39	-1,598.22	1,717.75	1,690.67	27.08	63.433	
3,800.00	3,800.00	4,005.91	3,996.53	13.40	14.59	-69.51	592.99	-1,586.92	1,706.10	1,678.18	27.92	61.117	
3,900.00	3,900.00	4,102.52	4,092.46	13.76	15.03	-69.55	587.90	-1,576.58	1,694.23	1,665.51	28.72	58.989	
4,000.00	4,000.00	4,186.56	4,175.95	14.11	15.42	-69.58	583.65	-1,567.99	1,682.91	1,653.42	29.48	57.078	
4,100.00	4,100.00	4,271.40	4,260.35	14.47	15.81	-69.61	579.85	-1,560.19	1,672.70	1,642.46	30.25	55.299	
4,200.00	4,200.00	4,379.67	4,368.06	14.83	16.31	-69.65	574.97	-1,550.38	1,662.65	1,631.54	31.10	53.457	
4,300.00	4,300.00	4,480.07	4,467.88	15.19	16.78	-69.69	570.27	-1,540.66	1,651.94	1,620.00	31.93	51.731	
4,400.00	4,400.00	4,569.32	4,556.66	15.55	17.21	-69.72	566.34	-1,532.47	1,641.80	1,609.07	32.72	50.170	
4,500.00	4,500.00	4,664.51	4,651.39	15.91	17.66	-69.77	561.88	-1,524.28	1,632.10	1,598.56	33.54	48.667	
4,600.00	4,600.00	4,758.56	4,745.00	16.27	18.10	-69.83	557.00	-1,516.53	1,622.58	1,588.24	34.34	47.249	
4,700.00	4,700.00	4,847.19	4,833.25	16.62	18.51	-69.90	552.46	-1,509.75	1,613.63	1,578.51	35.12	45.944	
4,800.00	4,800.00	4,933.26	4,919.01	16.98	18.91	-69.96	548.39	-1,503.71	1,605.42	1,569.54	35.89	44.735	
4,900.00	4,900.00	5,018.89	5,004.39	17.34	19.31	-70.03	544.60	-1,498.48	1,598.16	1,561.51	36.64	43.613	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 132-, 1900-												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
5,000.00	5,000.00	5,113.43	5,098.71	17.70	19.74	-70.09	540.80	-1,493.18	1,591.51	1,554.07	37.43	42.515	
5,100.00	5,100.00	5,214.52	5,199.56	18.06	20.21	-70.15	536.91	-1,487.44	1,584.86	1,546.61	38.25	41.430	
5,200.00	5,200.00	5,310.48	5,295.30	18.42	20.65	-70.20	533.48	-1,482.06	1,578.37	1,539.32	39.06	40.414	
5,300.00	5,300.00	5,405.08	5,389.72	18.77	21.09	-70.25	530.17	-1,476.92	1,572.08	1,532.23	39.85	39.451	
5,400.00	5,400.00	5,493.97	5,478.45	19.13	21.49	-70.30	527.18	-1,472.61	1,566.38	1,525.77	40.61	38.571	
5,500.00	5,500.00	5,585.24	5,569.60	19.49	21.90	-70.35	524.48	-1,468.68	1,561.32	1,519.95	41.38	37.734	
5,600.00	5,600.00	5,678.42	5,662.67	19.85	22.33	-70.39	521.88	-1,465.06	1,556.73	1,514.57	42.16	36.927	
5,620.00	5,620.00	5,697.15	5,681.38	19.92	22.41	-70.40	521.37	-1,464.38	1,555.86	1,513.55	42.31	36.772	
5,700.00	5,699.99	5,774.71	5,758.86	20.20	22.75	6.32	519.20	-1,461.73	1,551.49	1,508.56	42.93	36.140	
5,800.00	5,799.89	5,877.20	5,861.24	20.55	23.21	6.30	516.24	-1,458.10	1,542.93	1,499.21	43.72	35.292	
5,900.00	5,899.60	5,972.94	5,956.88	20.90	23.63	6.30	513.50	-1,454.78	1,531.19	1,486.71	44.48	34.427	
6,000.00	5,999.01	6,067.24	6,051.10	21.24	24.04	6.31	510.67	-1,451.83	1,516.47	1,471.25	45.22	33.536	
6,100.00	6,098.00	6,161.72	6,145.50	21.59	24.45	6.35	508.27	-1,449.02	1,498.80	1,452.84	45.96	32.610	
6,200.00	6,196.47	6,254.40	6,238.12	21.95	24.85	6.43	506.20	-1,446.39	1,478.15	1,431.45	46.70	31.652	
6,300.00	6,294.31	6,345.81	6,329.49	22.31	25.25	6.53	504.62	-1,444.14	1,454.81	1,407.38	47.43	30.674	
6,400.00	6,391.42	6,444.47	6,428.11	22.67	25.67	6.69	503.39	-1,441.54	1,428.30	1,380.11	48.19	29.638	
6,500.00	6,487.69	6,541.00	6,524.60	23.04	26.10	6.87	501.95	-1,439.01	1,398.58	1,349.63	48.95	28.573	
6,600.00	6,583.01	6,634.88	6,618.43	23.41	26.51	7.09	500.63	-1,436.41	1,365.65	1,315.96	49.69	27.483	
6,700.00	6,677.29	6,724.34	6,707.86	23.80	26.90	7.34	499.47	-1,434.14	1,329.90	1,279.49	50.41	26.382	
6,800.00	6,770.41	6,816.09	6,799.57	24.21	27.30	7.64	498.48	-1,431.90	1,291.26	1,240.13	51.14	25.252	
6,900.00	6,862.29	6,907.79	6,891.23	24.63	27.70	8.00	497.57	-1,429.54	1,249.57	1,197.71	51.86	24.096	
7,000.00	6,952.81	6,994.55	6,977.97	25.07	28.07	8.41	496.88	-1,427.33	1,205.04	1,152.49	52.55	22.929	
7,100.00	7,041.88	7,079.47	7,062.86	25.53	28.43	8.89	496.18	-1,425.42	1,157.87	1,104.63	53.24	21.748	
7,200.00	7,129.40	7,168.11	7,151.47	26.02	28.81	9.45	495.30	-1,423.49	1,107.89	1,053.95	53.94	20.539	
7,300.00	7,215.28	7,252.79	7,236.13	26.54	29.17	10.12	494.60	-1,421.50	1,055.08	1,000.46	54.62	19.316	
7,400.00	7,299.42	7,336.32	7,319.63	27.09	29.52	10.93	494.19	-1,419.38	999.56	944.28	55.29	18.079	
7,489.65	7,373.30	7,405.12	7,388.41	27.62	29.79	11.75	493.96	-1,417.67	947.67	891.82	55.85	16.967	
7,500.00	7,381.75	7,412.85	7,396.14	27.69	29.82	11.82	493.94	-1,417.50	941.58	885.66	55.92	16.838	
7,600.00	7,463.31	7,491.03	7,474.30	28.31	30.13	12.59	493.75	-1,415.96	883.04	826.49	56.56	15.614	
7,700.00	7,544.88	7,571.41	7,554.67	28.97	30.46	13.49	493.41	-1,414.45	824.64	767.43	57.21	14.414	
7,729.86	7,569.24	7,595.03	7,578.29	29.16	30.55	13.77	493.33	-1,414.02	807.24	749.84	57.41	14.062	
7,800.00	7,626.91	7,651.07	7,634.32	29.64	30.76	14.27	493.23	-1,412.99	767.13	709.27	57.87	13.257	
7,900.00	7,710.71	7,732.83	7,716.06	30.31	31.05	15.07	493.38	-1,411.46	712.46	653.95	58.51	12.177	
8,000.00	7,796.26	7,815.05	7,798.27	30.98	31.29	15.97	493.75	-1,410.05	660.93	601.80	59.13	11.177	
8,100.00	7,883.46	7,900.69	7,883.90	31.64	31.50	17.02	494.39	-1,408.72	612.64	552.91	59.73	10.257	
8,200.00	7,972.24	7,985.69	7,968.88	32.28	31.63	18.17	495.38	-1,407.46	567.68	507.42	60.26	9.420	
8,300.00	8,062.49	8,074.15	8,057.32	32.91	31.72	19.47	496.54	-1,406.63	526.37	465.62	60.75	8.664	
8,400.00	8,154.10	8,163.56	8,146.72	33.51	31.77	20.90	497.90	-1,405.89	488.49	427.28	61.21	7.981	
8,500.00	8,246.99	8,253.39	8,236.54	34.09	31.80	22.42	499.44	-1,405.65	454.44	392.81	61.63	7.373	
8,600.00	8,341.05	8,346.06	8,329.19	34.65	31.81	24.12	501.65	-1,405.65	424.30	362.25	62.04	6.839	
8,700.00	8,436.18	8,441.13	8,424.23	35.18	31.83	25.98	504.09	-1,405.64	397.64	335.19	62.45	6.368	
8,800.00	8,532.27	8,537.26	8,520.32	35.69	31.85	27.90	506.59	-1,405.69	374.43	311.58	62.85	5.958	
8,900.00	8,629.23	8,633.85	8,616.88	36.17	31.89	29.76	508.77	-1,406.07	354.60	291.34	63.25	5.606	
9,000.00	8,726.93	8,731.09	8,714.10	36.62	31.94	31.49	510.68	-1,407.04	338.24	274.55	63.69	5.311	
9,100.00	8,825.29	8,831.76	8,814.75	37.04	32.01	32.95	511.73	-1,408.84	324.91	260.74	64.17	5.064	
9,200.00	8,924.19	8,931.69	8,914.66	37.45	32.07	34.07	511.78	-1,410.67	313.83	249.17	64.66	4.853	
9,300.00	9,023.52	9,032.20	9,015.16	37.82	32.14	34.93	511.69	-1,412.51	305.49	240.33	65.16	4.688	
9,400.00	9,123.18	9,134.07	9,117.02	38.18	32.21	35.60	511.50	-1,413.64	299.37	233.73	65.64	4.561	
9,500.00	9,223.05	9,234.67	9,217.61	38.51	32.26	35.91	510.85	-1,414.49	295.43	229.35	66.08	4.471	
9,599.51	9,322.54	9,334.68	9,317.61	38.82	32.29	-41.01	509.65	-1,415.71	294.00	227.50	66.50	4.421	
9,600.00	9,323.03	9,335.18	9,318.10	38.82	32.29	139.39	509.64	-1,415.72	294.00	227.50	66.51	4.421	
9,600.72	9,323.75	9,335.89	9,318.82	38.82	32.29	139.39	509.63	-1,415.73	294.00	227.49	66.51	4.421 CC, ES, SF	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 132-, 1900-												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 Tooface (")	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,625.00	9,348.02	9,360.01	9,342.93	38.89	32.30	139.33	509.24	-1,416.12	294.47	227.87	66.61	4.421	
9,650.00	9,372.94	9,384.80	9,367.71	38.96	32.31	139.33	508.76	-1,416.62	295.95	229.24	66.71	4.436	
9,675.00	9,397.72	9,409.49	9,392.39	39.02	32.32	139.38	508.22	-1,417.23	298.44	231.63	66.81	4.467	
9,700.00	9,422.29	9,433.97	9,416.85	39.09	32.33	139.49	507.61	-1,417.93	301.94	235.02	66.92	4.512	
9,725.00	9,446.59	9,458.02	9,440.88	39.15	32.34	139.65	506.97	-1,418.69	306.46	239.43	67.03	4.572	
9,750.00	9,470.55	9,481.76	9,464.60	39.20	32.34	139.84	506.33	-1,419.51	312.02	244.88	67.14	4.648	
9,775.00	9,494.11	9,505.14	9,487.96	39.26	32.35	140.06	505.69	-1,420.38	318.62	251.38	67.24	4.738	
9,800.00	9,517.19	9,528.24	9,511.02	39.31	32.36	140.30	505.03	-1,421.30	326.27	258.93	67.35	4.845	
9,825.00	9,539.74	9,551.48	9,534.23	39.36	32.37	140.56	504.34	-1,422.25	334.95	267.49	67.45	4.966	
9,850.00	9,561.70	9,574.19	9,556.91	39.41	32.37	140.81	503.63	-1,423.19	344.63	277.07	67.55	5.101	
9,875.00	9,583.00	9,596.31	9,579.00	39.45	32.38	141.04	502.90	-1,424.11	355.31	287.66	67.65	5.252	
9,900.00	9,603.58	9,617.78	9,600.44	39.49	32.39	141.21	502.15	-1,425.01	367.00	299.25	67.75	5.417	
9,925.00	9,623.40	9,638.17	9,620.80	39.53	32.39	141.31	501.43	-1,425.85	379.70	311.85	67.84	5.597	
9,950.00	9,642.39	9,657.74	9,640.35	39.56	32.40	141.32	500.76	-1,426.63	393.40	325.47	67.93	5.791	
9,975.00	9,660.51	9,676.45	9,659.02	39.59	32.41	141.24	500.14	-1,427.34	408.09	340.08	68.01	6.000	
10,000.00	9,677.69	9,694.23	9,676.78	39.61	32.42	141.02	499.56	-1,427.98	423.74	355.65	68.09	6.223	
10,025.00	9,693.91	9,711.04	9,693.58	39.63	32.42	140.65	499.02	-1,428.57	440.32	372.16	68.16	6.460	
10,050.00	9,709.11	9,726.45	9,708.97	39.65	32.43	140.06	498.54	-1,429.10	457.81	389.59	68.22	6.710	
10,075.00	9,723.24	9,740.80	9,723.31	39.66	32.43	139.25	498.10	-1,429.61	476.16	407.88	68.28	6.973	
10,100.00	9,736.28	9,754.09	9,736.58	39.67	32.44	138.16	497.70	-1,430.08	495.33	426.99	68.34	7.248	
10,125.00	9,748.19	9,766.27	9,748.75	39.68	32.44	136.76	497.34	-1,430.53	515.26	446.87	68.39	7.535	
10,150.00	9,758.93	9,777.31	9,759.78	39.68	32.45	134.97	497.02	-1,430.94	535.89	467.46	68.43	7.831	
10,175.00	9,768.47	9,787.19	9,769.65	39.69	32.45	132.71	496.74	-1,431.31	557.16	488.69	68.46	8.138	
10,200.00	9,776.79	9,795.88	9,778.33	39.69	32.46	129.87	496.50	-1,431.64	579.00	510.51	68.50	8.453	
10,225.00	9,783.86	9,800.00	9,782.44	39.68	32.46	125.76	496.38	-1,431.80	601.37	532.85	68.52	8.776	
10,250.00	9,789.67	9,800.00	9,782.44	39.68	32.46	120.06	496.38	-1,431.80	624.23	555.69	68.53	9.108	
10,275.00	9,794.20	9,800.00	9,782.44	39.67	32.46	113.24	496.38	-1,431.80	647.49	578.95	68.54	9.447	
10,300.00	9,797.44	9,800.00	9,782.44	39.67	32.46	105.25	496.38	-1,431.80	671.06	602.51	68.55	9.790	
10,325.00	9,799.38	9,811.30	9,793.73	39.66	32.51	99.25	496.18	-1,432.15	694.65	626.07	68.58	10.129	
10,349.51	9,800.00	9,811.71	9,794.14	39.66	32.51	89.90	496.18	-1,432.16	718.06	649.48	68.58	10.470	
10,400.00	9,800.00	9,800.00	9,782.44	39.65	32.46	86.67	496.38	-1,431.80	766.72	698.16	68.56	11.183	
10,500.00	9,800.00	9,800.00	9,782.44	39.64	32.46	86.67	496.38	-1,431.80	863.40	794.83	68.57	12.591	
10,600.00	9,800.00	9,800.00	9,782.44	39.66	32.46	86.67	496.38	-1,431.80	960.76	892.18	68.58	14.010	
10,700.00	9,800.00	9,800.00	9,782.44	39.70	32.46	86.67	496.38	-1,431.80	1,058.61	990.03	68.58	15.436	
10,800.00	9,800.00	9,800.00	9,782.44	39.78	32.46	86.67	496.38	-1,431.80	1,156.83	1,088.24	68.59	16.867	
10,900.00	9,800.00	9,800.00	9,782.44	39.90	32.46	86.67	496.38	-1,431.80	1,255.33	1,186.74	68.59	18.302	
11,000.00	9,800.00	9,800.00	9,782.44	40.07	32.46	86.67	496.38	-1,431.80	1,354.05	1,285.46	68.59	19.740	
11,100.00	9,800.00	9,800.00	9,782.44	40.32	32.46	86.67	496.38	-1,431.80	1,452.95	1,384.35	68.60	21.180	
11,200.00	9,800.00	9,800.00	9,782.44	40.64	32.46	86.67	496.38	-1,431.80	1,551.98	1,483.38	68.61	22.622	
11,300.00	9,800.00	9,800.00	9,782.44	41.05	32.46	86.67	496.38	-1,431.80	1,651.14	1,582.52	68.61	24.065	
11,400.00	9,800.00	9,800.00	9,782.44	41.54	32.46	86.67	496.38	-1,431.80	1,750.39	1,681.77	68.62	25.508	
11,500.00	9,800.00	9,800.00	9,782.44	42.10	32.46	86.67	496.38	-1,431.80	1,849.72	1,781.09	68.63	26.952	
11,600.00	9,800.00	9,800.00	9,782.44	42.74	32.46	86.67	496.38	-1,431.80	1,949.12	1,880.48	68.64	28.396	
11,700.00	9,800.00	9,800.00	9,782.44	43.43	32.46	86.67	496.38	-1,431.80	2,048.57	1,979.92	68.65	29.841	
11,800.00	9,800.00	9,800.00	9,782.44	44.17	32.46	86.67	496.38	-1,431.80	2,148.08	2,079.42	68.66	31.285	
11,900.00	9,800.00	9,800.00	9,782.44	44.96	32.46	86.67	496.38	-1,431.80	2,247.63	2,178.96	68.68	32.728	
12,000.00	9,800.00	9,800.00	9,782.44	45.78	32.46	86.67	496.38	-1,431.80	2,347.22	2,278.53	68.69	34.171	
12,100.00	9,800.00	9,800.00	9,782.44	46.64	32.46	86.67	496.38	-1,431.80	2,446.84	2,378.14	68.70	35.614	
12,200.00	9,800.00	9,800.00	9,782.44	47.54	32.46	86.67	496.38	-1,431.80	2,546.50	2,477.78	68.72	37.056	
12,300.00	9,800.00	9,800.00	9,782.44	48.46	32.46	86.67	496.38	-1,431.80	2,646.18	2,577.44	68.74	38.497	
12,400.00	9,800.00	9,800.00	9,782.44	49.41	32.46	86.67	496.38	-1,431.80	2,745.88	2,677.12	68.75	39.937	
12,500.00	9,800.00	9,800.00	9,782.44	50.38	32.46	86.67	496.38	-1,431.80	2,845.60	2,776.83	68.77	41.376	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 132-, 1900-												Offset Well Error:	1.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Reference Measured Depth (usft)	Offset 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
12,600.00	9,800.00	9,800.00	9,782.44	51.38	32.46	86.67	496.38	-1,431.80	2,945.34	2,876.55	68.79	42.815	
12,700.00	9,800.00	9,800.00	9,782.44	52.40	32.46	86.67	496.38	-1,431.80	3,045.10	2,976.29	68.81	44.252	
12,800.00	9,800.00	9,800.00	9,782.44	53.44	32.46	86.67	496.38	-1,431.80	3,144.88	3,076.04	68.83	45.687	
12,900.00	9,800.00	9,800.00	9,782.44	54.49	32.46	86.67	496.38	-1,431.80	3,244.66	3,175.81	68.86	47.122	
13,000.00	9,800.00	9,800.00	9,782.44	55.57	32.46	86.67	496.38	-1,431.80	3,344.46	3,275.58	68.88	48.555	
13,100.00	9,800.00	9,800.00	9,782.44	56.66	32.46	86.67	496.38	-1,431.80	3,444.28	3,375.37	68.90	49.986	
13,200.00	9,800.00	9,800.00	9,782.44	57.77	32.46	86.67	496.38	-1,431.80	3,544.10	3,475.17	68.93	51.416	
13,300.00	9,800.00	9,800.00	9,782.44	58.89	32.46	86.67	496.38	-1,431.80	3,643.93	3,574.98	68.96	52.845	
13,400.00	9,800.00	9,800.00	9,782.44	60.03	32.46	86.67	496.38	-1,431.80	3,743.77	3,674.79	68.98	54.272	
13,500.00	9,800.00	9,800.00	9,782.44	61.17	32.46	86.67	496.38	-1,431.80	3,843.62	3,774.61	69.01	55.697	
13,600.00	9,800.00	9,800.00	9,782.44	62.34	32.46	86.67	496.38	-1,431.80	3,943.48	3,874.44	69.04	57.120	
13,700.00	9,800.00	9,800.00	9,782.44	63.51	32.46	86.67	496.38	-1,431.80	4,043.35	3,974.28	69.07	58.542	
13,800.00	9,800.00	9,800.00	9,782.44	64.69	32.46	86.67	496.38	-1,431.80	4,143.22	4,074.12	69.10	59.962	
13,900.00	9,800.00	9,800.00	9,782.44	65.88	32.46	86.67	496.38	-1,431.80	4,243.09	4,173.96	69.13	61.380	
14,000.00	9,800.00	9,800.00	9,782.44	67.09	32.46	86.67	496.38	-1,431.80	4,342.98	4,273.82	69.16	62.796	
14,100.00	9,800.00	9,800.00	9,782.44	68.30	32.46	86.67	496.38	-1,431.80	4,442.86	4,373.67	69.19	64.210	
14,200.00	9,800.00	9,800.00	9,782.44	69.52	32.46	86.67	496.38	-1,431.80	4,542.76	4,473.53	69.23	65.621	
14,300.00	9,800.00	9,800.00	9,782.44	70.75	32.46	86.67	496.38	-1,431.80	4,642.65	4,573.39	69.26	67.031	
14,400.00	9,800.00	9,800.00	9,782.44	71.99	32.46	86.67	496.38	-1,431.80	4,742.56	4,673.26	69.30	68.439	
14,500.00	9,800.00	9,800.00	9,782.44	73.23	32.46	86.67	496.38	-1,431.80	4,842.46	4,773.13	69.33	69.844	
14,600.00	9,800.00	9,800.00	9,782.44	74.48	32.46	86.67	496.38	-1,431.80	4,942.37	4,873.00	69.37	71.247	
14,700.00	9,800.00	9,800.00	9,782.44	75.74	32.46	86.67	496.38	-1,431.80	5,042.28	4,972.88	69.41	72.648	
14,800.00	9,800.00	9,800.00	9,782.44	77.00	32.46	86.67	496.38	-1,431.80	5,142.20	5,072.76	69.45	74.046	
14,900.00	9,800.00	9,800.00	9,782.44	78.27	32.46	86.67	496.38	-1,431.80	5,242.12	5,172.64	69.48	75.443	
15,000.00	9,800.00	9,800.00	9,782.44	79.55	32.46	86.67	496.38	-1,431.80	5,342.04	5,272.52	69.53	76.836	
15,100.00	9,800.00	9,800.00	9,782.44	80.83	32.46	86.67	496.38	-1,431.80	5,441.97	5,372.40	69.57	78.227	
15,200.00	9,800.00	9,800.00	9,782.44	82.12	32.46	86.67	496.38	-1,431.80	5,541.90	5,472.29	69.61	79.616	
15,300.00	9,800.00	9,800.00	9,782.44	83.41	32.46	86.67	496.38	-1,431.80	5,641.83	5,572.18	69.65	81.002	
15,400.00	9,800.00	9,800.00	9,782.44	84.70	32.46	86.67	496.38	-1,431.80	5,741.76	5,672.07	69.69	82.385	
15,500.00	9,800.00	9,800.00	9,782.44	86.01	32.46	86.67	496.38	-1,431.80	5,841.70	5,771.96	69.74	83.766	
15,600.00	9,800.00	9,800.00	9,782.44	87.31	32.46	86.67	496.38	-1,431.80	5,941.64	5,871.85	69.78	85.144	
15,700.00	9,800.00	9,800.00	9,782.44	88.62	32.46	86.67	496.38	-1,431.80	6,041.58	5,971.75	69.83	86.519	
15,800.00	9,800.00	9,800.00	9,782.44	89.93	32.46	86.67	496.38	-1,431.80	6,141.52	6,071.64	69.88	87.892	
15,900.00	9,800.00	9,800.00	9,782.44	91.25	32.46	86.67	496.38	-1,431.80	6,241.46	6,171.54	69.92	89.262	
16,000.00	9,800.00	9,800.00	9,782.44	92.57	32.46	86.67	496.38	-1,431.80	6,341.41	6,271.43	69.97	90.629	
16,100.00	9,800.00	9,800.00	9,782.44	93.89	32.46	86.67	496.38	-1,431.80	6,441.35	6,371.33	70.02	91.993	
16,200.00	9,800.00	9,800.00	9,782.44	95.22	32.46	86.67	496.38	-1,431.80	6,541.30	6,471.23	70.07	93.354	
16,300.00	9,800.00	9,800.00	9,782.44	96.55	32.46	86.67	496.38	-1,431.80	6,641.25	6,571.13	70.12	94.712	
16,400.00	9,800.00	9,800.00	9,782.44	97.89	32.46	86.67	496.38	-1,431.80	6,741.20	6,671.03	70.17	96.067	
16,500.00	9,800.00	9,800.00	9,782.44	99.22	32.46	86.67	496.38	-1,431.80	6,841.16	6,770.93	70.22	97.419	
16,600.00	9,800.00	9,800.00	9,782.44	100.56	32.46	86.67	496.38	-1,431.80	6,941.11	6,870.83	70.28	98.768	
16,700.00	9,800.00	9,800.00	9,782.44	101.90	32.46	86.67	496.38	-1,431.80	7,041.07	6,970.74	70.33	100.114	
16,800.00	9,800.00	9,800.00	9,782.44	103.25	32.46	86.67	496.38	-1,431.80	7,141.02	7,070.64	70.38	101.457	
16,900.00	9,800.00	9,800.00	9,782.44	104.60	32.46	86.67	496.38	-1,431.80	7,240.98	7,170.54	70.44	102.797	
17,000.00	9,800.00	9,800.00	9,782.44	105.94	32.46	86.67	496.38	-1,431.80	7,340.94	7,270.45	70.50	104.133	
17,100.00	9,800.00	9,800.00	9,782.44	107.30	32.46	86.67	496.38	-1,431.80	7,440.90	7,370.35	70.55	105.466	
17,200.00	9,800.00	9,800.00	9,782.44	108.65	32.46	86.67	496.38	-1,431.80	7,540.86	7,470.25	70.61	106.796	
17,300.00	9,800.00	9,800.00	9,782.44	110.01	32.46	86.67	496.38	-1,431.80	7,640.83	7,570.16	70.67	108.123	
17,400.00	9,800.00	9,800.00	9,782.44	111.36	32.46	86.67	496.38	-1,431.80	7,740.79	7,670.06	70.73	109.447	
17,500.00	9,800.00	9,800.00	9,782.44	112.73	32.46	86.67	496.38	-1,431.80	7,840.75	7,769.97	70.79	110.767	
17,590.89	9,800.00	9,800.00	9,782.44	113.96	32.46	86.67	496.38	-1,431.80	7,931.61	7,860.77	70.84	111.964	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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	24.64	703.32	322.57	773.77				
100.00	100.00	114.99	114.99	0.13	1.35	24.64	703.25	322.56	773.69	772.22	1.48	523.346	
200.00	200.00	214.89	214.89	0.49	1.91	24.65	703.06	322.56	773.53	771.14	2.38	324.698	
229.36	229.36	243.36	243.36	0.60	2.06	24.65	703.04	322.58	773.51	770.91	2.60	297.236	
300.00	300.00	311.85	311.85	0.85	2.44	24.65	703.09	322.69	773.61	770.46	3.14	246.179	
400.00	400.00	408.81	408.81	1.21	2.94	24.66	703.45	323.00	774.08	770.19	3.89	198.972	
500.00	500.00	509.34	509.33	1.57	3.33	24.66	704.08	323.19	774.73	770.09	4.64	166.984	
600.00	600.00	608.78	608.78	1.93	3.69	24.64	704.77	323.20	775.36	769.97	5.39	143.783	
700.00	700.00	708.27	708.27	2.29	4.03	24.60	705.61	323.09	776.08	769.96	6.12	126.824	
800.00	800.00	808.29	808.28	2.64	4.35	24.56	706.50	322.87	776.80	769.98	6.82	113.891	
900.00	900.00	909.20	909.18	3.00	4.66	24.52	707.39	322.70	777.54	770.04	7.50	103.684	
1,000.00	1,000.00	1,011.10	1,011.07	3.36	5.00	24.47	708.13	322.26	778.02	769.85	8.17	95.249	
1,100.00	1,100.00	1,114.45	1,114.43	3.72	5.29	24.42	708.62	321.68	778.21	769.44	8.78	88.657	
1,200.00	1,200.00	1,214.06	1,214.04	4.08	5.54	24.37	708.81	321.07	778.13	768.77	9.37	83.054	
1,300.00	1,300.00	1,315.39	1,315.36	4.44	5.81	24.32	709.01	320.44	778.06	768.09	9.97	78.012	
1,400.00	1,400.00	1,414.93	1,414.90	4.79	6.08	24.26	709.20	319.67	777.91	767.33	10.58	73.515	
1,500.00	1,500.00	1,514.47	1,514.44	5.15	6.37	24.21	709.42	318.98	777.84	766.63	11.21	69.411	
1,600.00	1,600.00	1,614.90	1,614.87	5.51	6.66	24.18	709.51	318.55	777.74	765.91	11.83	65.741	
1,692.85	1,692.85	1,706.89	1,706.85	5.84	6.94	24.15	709.62	318.14	777.68	765.26	12.42	62.633	
1,700.00	1,700.00	1,713.90	1,713.86	5.87	6.97	24.15	709.64	318.11	777.68	765.21	12.46	62.401	
1,800.00	1,800.00	1,812.21	1,812.18	6.23	7.31	24.11	709.95	317.74	777.81	764.70	13.11	59.328	
1,900.00	1,900.00	1,911.20	1,911.16	6.59	7.66	24.08	710.40	317.49	778.12	764.35	13.77	56.504	
2,000.00	2,000.00	2,008.72	2,008.67	6.95	7.98	24.05	710.99	317.24	778.58	764.16	14.41	54.015	
2,100.00	2,100.00	2,104.09	2,104.05	7.30	8.25	24.05	711.82	317.69	779.56	764.49	15.07	51.715	
2,200.00	2,200.00	2,203.66	2,203.59	7.66	8.53	24.12	712.82	319.13	781.06	765.32	15.74	49.620	
2,300.00	2,300.00	2,316.04	2,315.97	8.02	8.86	24.09	713.50	319.09	781.61	765.15	16.46	47.498	
2,400.00	2,400.00	2,428.75	2,428.63	8.38	9.34	23.87	713.63	315.86	780.55	763.31	17.24	45.287	
2,500.00	2,500.00	2,545.90	2,545.61	8.74	9.84	23.49	712.61	309.73	777.66	759.75	17.91	43.432	
2,600.00	2,600.00	2,661.74	2,661.11	9.10	10.31	23.00	709.84	301.29	772.57	754.04	18.53	41.691	
2,700.00	2,700.00	2,778.60	2,777.32	9.45	11.07	22.32	705.60	289.73	765.39	746.01	19.38	39.492	
2,800.00	2,800.00	2,895.30	2,892.94	9.81	12.43	21.46	699.74	275.13	756.02	735.50	20.52	36.840	
2,900.00	2,900.00	3,008.56	3,004.70	10.17	13.40	20.44	692.56	258.15	744.65	723.16	21.49	34.651	
3,000.00	3,000.00	3,110.22	3,104.65	10.53	13.83	19.38	685.46	241.06	732.25	710.16	22.09	33.155	
3,100.00	3,100.00	3,208.12	3,200.87	10.89	14.17	18.29	678.64	224.31	720.01	697.38	22.63	31.816	
3,200.00	3,200.00	3,304.55	3,295.66	11.25	14.52	17.19	672.05	207.92	708.20	685.02	23.18	30.547	
3,300.00	3,300.00	3,400.38	3,389.92	11.61	14.87	16.07	665.77	191.77	696.99	673.24	23.75	29.348	
3,400.00	3,400.00	3,495.72	3,483.76	11.96	15.32	14.94	659.82	176.05	686.46	662.03	24.42	28.105	
3,500.00	3,500.00	3,591.22	3,577.88	12.32	15.79	13.81	654.15	160.86	676.66	651.54	25.11	26.946	
3,600.00	3,600.00	3,691.97	3,677.18	12.68	16.22	12.61	648.21	144.97	667.22	641.49	25.74	25.925	
3,700.00	3,700.00	3,791.33	3,775.01	13.04	16.62	11.33	642.24	128.64	657.84	631.51	26.33	24.983	
3,800.00	3,800.00	3,887.85	3,869.97	13.40	17.03	10.00	636.63	112.24	648.86	621.93	26.93	24.094	
3,900.00	3,900.00	3,980.65	3,961.28	13.76	17.42	8.68	631.81	96.47	640.88	613.35	27.53	23.276	
4,000.00	4,000.00	4,079.60	4,058.75	14.11	17.85	7.28	626.99	80.05	633.66	605.51	28.15	22.512	
4,100.00	4,100.00	4,177.96	4,155.67	14.47	18.29	5.88	622.13	64.05	626.81	598.04	28.77	21.788	
4,200.00	4,200.00	4,276.01	4,252.23	14.83	18.73	4.42	617.36	47.73	620.38	590.99	29.39	21.106	
4,300.00	4,300.00	4,373.70	4,348.46	15.19	19.17	2.95	612.76	31.53	614.54	584.51	30.03	20.467	
4,400.00	4,400.00	4,473.62	4,446.80	15.55	19.64	1.36	607.96	14.48	609.02	578.35	30.67	19.859	
4,500.00	4,500.00	4,571.74	4,543.26	15.91	20.10	-0.27	603.13	-2.84	603.84	572.53	31.31	19.283	
4,600.00	4,600.00	4,668.31	4,638.21	16.27	20.56	-1.90	598.64	-19.86	599.46	567.49	31.97	18.752	
4,700.00	4,700.00	4,766.77	4,735.10	16.62	21.03	-3.54	594.12	-36.76	595.63	563.00	32.63	18.252	
4,800.00	4,800.00	4,863.46	4,830.33	16.98	21.50	-5.13	589.85	-53.00	592.45	559.15	33.31	17.788	
4,900.00	4,900.00	4,960.82	4,926.28	17.34	21.99	-6.72	585.93	-69.06	590.12	556.12	33.99	17.360	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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	
5,000.00	5,000.00	5,059.33	5,023.13	17.70	22.49	-8.46	581.76	-86.54	588.24	553.54	34.70	16.954	
5,100.00	5,100.00	5,156.02	5,118.07	18.06	22.99	-10.24	577.74	-104.38	587.11	551.70	35.41	16.580	
5,200.00	5,200.00	5,254.08	5,214.27	18.42	23.49	-12.10	573.77	-122.98	586.80	550.66	36.15	16.234	
5,212.03	5,212.03	5,266.08	5,226.03	18.46	23.55	-12.33	573.27	-125.29	586.80	550.56	36.24	16.193	
5,300.00	5,300.00	5,354.14	5,312.35	18.77	24.00	-14.03	569.42	-142.33	586.94	550.03	36.91	15.902	
5,400.00	5,400.00	5,451.69	5,408.00	19.13	24.50	-15.90	564.98	-160.95	587.48	549.80	37.68	15.590	
5,500.00	5,500.00	5,549.06	5,503.55	19.49	25.00	-17.72	560.92	-179.24	588.95	550.49	38.46	15.313	
5,600.00	5,600.00	5,647.41	5,600.20	19.85	25.50	-19.48	557.04	-197.01	591.01	551.75	39.26	15.052	
5,620.00	5,620.00	5,666.99	5,619.46	19.92	25.61	-19.82	556.30	-200.46	591.49	552.06	39.43	15.002	
5,700.00	5,699.99	5,745.39	5,696.61	20.20	26.01	55.66	553.43	-214.12	593.06	552.99	40.07	14.800	
5,800.00	5,799.89	5,845.16	5,794.89	20.55	26.53	54.35	549.96	-230.98	593.68	552.80	40.87	14.525	
5,900.00	5,899.60	5,945.11	5,893.48	20.90	27.05	53.40	546.72	-247.04	592.49	550.84	41.66	14.224	
6,000.00	5,999.01	6,043.88	5,990.95	21.24	27.57	52.76	543.64	-262.75	589.53	547.11	42.42	13.897	
6,100.00	6,098.00	6,143.81	6,089.11	21.59	28.17	52.14	539.57	-280.97	584.73	541.53	43.20	13.535	
6,200.00	6,196.47	6,245.96	6,189.03	21.95	28.76	51.55	534.14	-301.47	577.66	533.66	44.00	13.129	
6,300.00	6,294.31	6,346.41	6,287.34	22.31	29.30	51.27	528.69	-321.35	568.39	523.63	44.76	12.698	
6,400.00	6,391.42	6,448.21	6,387.15	22.67	29.85	51.37	523.21	-340.62	556.73	511.23	45.50	12.235	
6,500.00	6,487.69	6,550.01	6,487.12	23.04	30.40	51.86	517.65	-359.00	542.58	496.37	46.21	11.742	
6,600.00	6,583.01	6,648.63	6,584.12	23.41	30.93	52.77	512.19	-375.95	526.02	479.16	46.86	11.225	
6,700.00	6,677.29	6,745.31	6,679.50	23.80	31.46	54.23	507.83	-391.18	507.94	460.47	47.46	10.702	
6,800.00	6,770.41	6,841.19	6,774.21	24.21	31.97	56.21	503.90	-405.55	488.35	440.32	48.03	10.167	
6,900.00	6,862.29	6,933.15	6,865.25	24.63	32.46	58.77	501.10	-418.20	468.06	419.49	48.57	9.638	
7,000.00	6,952.81	7,026.65	6,958.09	25.07	32.97	62.21	499.78	-429.23	448.00	398.90	49.10	9.124	
7,100.00	7,041.88	7,122.54	7,053.48	25.53	33.48	66.60	498.47	-438.90	427.80	378.11	49.69	8.610	
7,200.00	7,129.40	7,212.04	7,142.60	26.02	33.93	71.55	497.10	-446.94	408.59	358.20	50.39	8.108	
7,300.00	7,215.28	7,294.40	7,224.76	26.54	34.33	76.96	497.08	-452.75	393.30	342.00	51.30	7.667	
7,400.00	7,299.42	7,373.27	7,303.53	27.09	34.65	82.90	498.67	-456.17	384.36	331.87	52.49	7.322	
7,462.02	7,350.69	7,422.44	7,352.66	27.46	34.79	86.85	500.29	-457.58	382.74	329.34	53.39	7.168 CC	
7,489.65	7,373.30	7,444.04	7,374.23	27.62	34.85	88.61	501.12	-458.10	383.08	329.24	53.83	7.116 ES	
7,500.00	7,381.75	7,452.10	7,382.29	27.69	34.87	89.28	501.45	-458.27	383.38	329.37	54.01	7.099	
7,600.00	7,463.31	7,540.38	7,470.51	28.31	35.05	96.57	504.37	-459.86	390.19	334.37	55.82	6.990 SF	
7,700.00	7,544.88	7,623.64	7,553.73	28.97	35.19	103.28	506.21	-460.89	404.12	346.47	57.65	7.010	
7,729.86	7,569.24	7,648.12	7,578.21	29.16	35.23	105.20	506.70	-461.11	409.69	351.51	58.18	7.042	
7,800.00	7,626.91	7,704.98	7,635.05	29.64	35.29	109.72	507.82	-461.43	425.00	365.69	59.31	7.165	
7,900.00	7,710.71	7,787.95	7,718.01	30.31	35.37	115.72	509.46	-461.49	451.03	390.32	60.71	7.429	
8,000.00	7,796.26	7,872.79	7,802.83	30.98	35.42	121.09	511.07	-461.27	480.33	418.46	61.86	7.765	
8,100.00	7,883.46	7,960.50	7,890.53	31.64	35.49	125.84	512.71	-460.86	511.49	448.66	62.82	8.142	
8,200.00	7,972.24	8,052.78	7,982.79	32.28	35.58	130.01	514.43	-460.94	542.89	479.21	63.68	8.525	
8,300.00	8,062.49	8,145.95	8,075.95	32.91	35.72	133.53	515.90	-461.54	573.50	509.03	64.46	8.896	
8,400.00	8,154.10	8,237.64	8,167.63	33.51	35.88	136.47	517.04	-462.11	603.11	537.95	65.16	9.256	
8,500.00	8,246.99	8,330.22	8,260.21	34.09	36.03	138.98	518.03	-462.47	631.54	565.75	65.79	9.599	
8,600.00	8,341.05	8,426.26	8,356.24	34.65	36.21	141.15	519.02	-462.93	658.21	591.79	66.42	9.909	
8,700.00	8,436.18	8,522.91	8,452.88	35.18	36.41	142.95	519.99	-463.77	682.57	615.50	67.07	10.177	
8,800.00	8,532.27	8,615.83	8,545.80	35.69	36.55	144.56	519.22	-463.59	705.05	637.40	67.65	10.422	
8,900.00	8,629.23	8,713.79	8,643.74	36.17	36.65	146.05	517.50	-462.82	725.50	657.26	68.24	10.632	
9,000.00	8,726.93	8,818.24	8,748.16	36.62	36.76	147.38	515.23	-462.62	742.86	674.01	68.85	10.789	
9,100.00	8,825.29	8,917.69	8,847.58	37.04	36.96	148.42	512.81	-463.07	757.02	687.53	69.48	10.895	
9,200.00	8,924.19	9,009.81	8,939.69	37.45	37.19	149.09	512.40	-463.65	768.96	698.93	70.03	10.980	
9,300.00	9,023.52	9,105.85	9,035.73	37.82	37.38	149.55	513.15	-463.62	779.12	708.60	70.52	11.049	
9,400.00	9,123.18	9,209.25	9,139.13	38.18	37.55	149.85	514.31	-464.03	786.18	715.14	71.04	11.066	
9,500.00	9,223.05	9,313.93	9,243.79	38.51	37.79	149.95	515.68	-464.99	789.95	718.33	71.62	11.029	
9,599.51	9,322.54	9,414.77	9,344.60	38.82	38.06	73.08	517.75	-466.69	790.34	718.16	72.19	10.949	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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	
9,600.00	9,323.03	9,415.26	9,345.09	38.82	38.06	-106.52	517.76	-466.70	790.34	718.15	72.19	10.948	
9,616.29	9,339.32	9,431.43	9,361.24	38.86	38.10	-106.59	518.24	-467.02	790.26	717.98	72.27	10.934	
9,625.00	9,348.02	9,439.00	9,368.81	38.89	38.12	-106.63	518.47	-467.17	790.28	717.97	72.31	10.929	
9,650.00	9,372.94	9,463.66	9,393.45	38.96	38.18	-106.78	519.20	-467.63	790.63	718.21	72.42	10.918	
9,675.00	9,397.72	9,487.17	9,416.95	39.02	38.24	-106.96	519.79	-468.00	791.40	718.89	72.52	10.914	
9,700.00	9,422.29	9,510.49	9,440.26	39.09	38.30	-107.15	520.28	-468.29	792.62	720.00	72.62	10.915	
9,725.00	9,446.59	9,533.60	9,463.37	39.15	38.35	-107.36	520.66	-468.52	794.30	721.58	72.72	10.923	
9,750.00	9,470.55	9,557.27	9,487.04	39.20	38.39	-107.60	520.93	-468.69	796.44	723.62	72.81	10.938	
9,775.00	9,494.11	9,580.61	9,510.38	39.26	38.43	-107.85	521.08	-468.82	799.05	726.15	72.90	10.961	
9,800.00	9,517.19	9,603.58	9,533.35	39.31	38.47	-108.10	521.09	-468.89	802.16	729.18	72.98	10.991	
9,825.00	9,539.74	9,626.13	9,555.90	39.36	38.51	-108.35	520.99	-468.91	805.78	732.73	73.06	11.030	
9,850.00	9,561.70	9,647.21	9,576.98	39.41	38.54	-108.54	520.86	-468.91	809.97	736.86	73.11	11.079	
9,875.00	9,583.00	9,667.50	9,597.27	39.45	38.57	-108.71	520.81	-468.91	814.76	741.61	73.15	11.138	
9,900.00	9,603.58	9,687.02	9,616.79	39.49	38.59	-108.83	520.83	-468.92	820.18	747.00	73.18	11.208	
9,925.00	9,623.40	9,705.71	9,635.48	39.53	38.62	-108.90	520.91	-468.92	826.26	753.06	73.20	11.288	
9,950.00	9,642.39	9,723.00	9,652.77	39.56	38.64	-108.87	521.05	-468.93	833.03	759.83	73.21	11.379	
9,975.00	9,660.51	9,740.76	9,670.52	39.59	38.66	-108.81	521.24	-468.94	840.51	767.31	73.21	11.481	
10,000.00	9,677.69	9,756.98	9,686.74	39.61	38.69	-108.64	521.46	-468.95	848.72	775.53	73.19	11.596	
10,025.00	9,693.91	9,772.15	9,701.91	39.63	38.71	-108.35	521.72	-468.98	857.66	784.50	73.16	11.723	
10,050.00	9,709.11	9,776.00	9,705.76	39.65	38.72	-107.35	521.79	-468.99	867.42	794.38	73.03	11.877	
10,075.00	9,723.24	9,776.00	9,705.76	39.66	38.72	-105.99	521.79	-468.99	878.12	805.26	72.86	12.053	
10,100.00	9,736.28	9,776.00	9,705.76	39.67	38.72	-104.47	521.79	-468.99	889.71	817.04	72.67	12.243	
10,125.00	9,748.19	9,776.00	9,705.76	39.68	38.72	-102.80	521.79	-468.99	902.13	829.64	72.49	12.445	
10,150.00	9,758.93	9,804.03	9,733.75	39.68	38.76	-102.88	523.21	-469.09	914.40	841.68	72.72	12.574	
10,175.00	9,768.47	9,807.55	9,737.26	39.69	38.76	-101.22	523.51	-469.10	928.02	855.42	72.61	12.781	
10,200.00	9,776.79	9,810.33	9,740.03	39.69	38.77	-99.36	523.77	-469.12	942.29	869.80	72.49	12.999	
10,225.00	9,783.86	9,812.41	9,742.10	39.68	38.77	-97.32	523.98	-469.13	957.16	884.79	72.37	13.225	
10,250.00	9,789.67	9,813.84	9,743.51	39.68	38.77	-95.09	524.12	-469.14	972.57	900.31	72.25	13.461	
10,275.00	9,794.20	9,814.65	9,744.32	39.67	38.77	-92.69	524.21	-469.14	988.45	916.32	72.13	13.703	
10,300.00	9,797.44	9,814.88	9,744.56	39.67	38.77	-90.13	524.24	-469.15	1,004.75	932.74	72.01	13.952	
10,325.00	9,799.38	9,814.59	9,744.26	39.66	38.77	-87.43	524.20	-469.14	1,021.40	949.51	71.90	14.207	
10,349.51	9,800.00	9,813.81	9,743.49	39.66	38.77	-84.67	524.12	-469.14	1,038.01	966.23	71.78	14.461	
10,400.00	9,800.00	9,811.83	9,741.52	39.65	38.77	-84.52	523.92	-469.13	1,073.11	1,001.55	71.56	14.997	
10,500.00	9,800.00	9,808.37	9,738.07	39.64	38.76	-84.26	523.59	-469.11	1,145.99	1,074.85	71.14	16.109	
10,600.00	9,800.00	9,776.00	9,705.76	39.66	38.72	-81.85	521.79	-468.99	1,223.79	1,153.53	70.26	17.417	
10,700.00	9,800.00	9,776.00	9,705.76	39.70	38.72	-81.85	521.79	-468.99	1,303.46	1,233.49	69.97	18.629	
10,800.00	9,800.00	9,776.00	9,705.76	39.78	38.72	-81.85	521.79	-468.99	1,385.76	1,316.06	69.71	19.879	
10,900.00	9,800.00	9,776.00	9,705.76	39.90	38.72	-81.85	521.79	-468.99	1,470.27	1,400.79	69.48	21.161	
11,000.00	9,800.00	9,776.00	9,705.76	40.07	38.72	-81.85	521.79	-468.99	1,556.61	1,487.33	69.28	22.468	
11,100.00	9,800.00	9,776.00	9,705.76	40.32	38.72	-81.85	521.79	-468.99	1,644.49	1,575.39	69.11	23.797	
11,200.00	9,800.00	9,776.00	9,705.76	40.64	38.72	-81.85	521.79	-468.99	1,733.70	1,664.74	68.95	25.143	
11,300.00	9,800.00	9,776.00	9,705.76	41.05	38.72	-81.85	521.79	-468.99	1,824.02	1,755.20	68.82	26.505	
11,400.00	9,800.00	9,776.00	9,705.76	41.54	38.72	-81.85	521.79	-468.99	1,915.30	1,846.60	68.70	27.878	
11,500.00	9,800.00	9,776.00	9,705.76	42.10	38.72	-81.85	521.79	-468.99	2,007.42	1,938.82	68.60	29.262	
11,600.00	9,800.00	9,776.00	9,705.76	42.74	38.72	-81.85	521.79	-468.99	2,100.25	2,031.74	68.51	30.655	
11,700.00	9,800.00	9,776.00	9,705.76	43.43	38.72	-81.85	521.79	-468.99	2,193.72	2,125.28	68.44	32.055	
11,800.00	9,800.00	9,776.00	9,705.76	44.17	38.72	-81.85	521.79	-468.99	2,287.74	2,219.37	68.37	33.461	
11,900.00	9,800.00	9,776.00	9,705.76	44.96	38.72	-81.85	521.79	-468.99	2,382.24	2,313.93	68.31	34.873	
12,000.00	9,800.00	9,776.00	9,705.76	45.78	38.72	-81.85	521.79	-468.99	2,477.18	2,408.92	68.26	36.289	
12,100.00	9,800.00	9,776.00	9,705.76	46.64	38.72	-81.85	521.79	-468.99	2,572.50	2,504.28	68.22	37.708	
12,200.00	9,800.00	9,776.00	9,705.76	47.54	38.72	-81.85	521.79	-468.99	2,668.17	2,599.98	68.18	39.131	
12,300.00	9,800.00	9,776.00	9,705.76	48.46	38.72	-81.85	521.79	-468.99	2,764.14	2,695.98	68.15	40.557	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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	
12,400.00	9,800.00	9,776.00	9,705.76	49.41	38.72	-81.85	521.79	-468.99	2,860.38	2,792.25	68.13	41.985	
12,500.00	9,800.00	9,776.00	9,705.76	50.38	38.72	-81.85	521.79	-468.99	2,956.88	2,888.77	68.11	43.414	
12,600.00	9,800.00	9,776.00	9,705.76	51.38	38.72	-81.85	521.79	-468.99	3,053.60	2,985.51	68.09	44.845	
12,700.00	9,800.00	9,776.00	9,705.76	52.40	38.72	-81.85	521.79	-468.99	3,150.53	3,082.44	68.08	46.277	
12,800.00	9,800.00	9,776.00	9,705.76	53.44	38.72	-81.85	521.79	-468.99	3,247.64	3,179.57	68.07	47.709	
12,900.00	9,800.00	9,776.00	9,705.76	54.49	38.72	-81.85	521.79	-468.99	3,344.92	3,276.85	68.07	49.142	
13,000.00	9,800.00	9,776.00	9,705.76	55.57	38.72	-81.85	521.79	-468.99	3,442.36	3,374.29	68.06	50.575	
13,100.00	9,800.00	9,776.00	9,705.76	56.66	38.72	-81.85	521.79	-468.99	3,539.94	3,471.87	68.06	52.008	
13,200.00	9,800.00	9,776.00	9,705.76	57.77	38.72	-81.85	521.79	-468.99	3,637.65	3,569.58	68.07	53.441	
13,300.00	9,800.00	9,776.00	9,705.76	58.89	38.72	-81.85	521.79	-468.99	3,735.49	3,667.41	68.07	54.874	
13,400.00	9,800.00	9,776.00	9,705.76	60.03	38.72	-81.85	521.79	-468.99	3,833.43	3,765.35	68.08	56.306	
13,500.00	9,800.00	9,776.00	9,705.76	61.17	38.72	-81.85	521.79	-468.99	3,931.48	3,863.39	68.09	57.737	
13,600.00	9,800.00	9,776.00	9,705.76	62.34	38.72	-81.85	521.79	-468.99	4,029.62	3,961.52	68.11	59.168	
13,700.00	9,800.00	9,776.00	9,705.76	63.51	38.72	-81.85	521.79	-468.99	4,127.86	4,059.74	68.12	60.597	
13,800.00	9,800.00	9,776.00	9,705.76	64.69	38.72	-81.85	521.79	-468.99	4,226.18	4,158.04	68.14	62.025	
13,900.00	9,800.00	9,776.00	9,705.76	65.88	38.72	-81.85	521.79	-468.99	4,324.57	4,256.41	68.15	63.452	
14,000.00	9,800.00	9,776.00	9,705.76	67.09	38.72	-81.85	521.79	-468.99	4,423.03	4,354.86	68.17	64.878	
14,100.00	9,800.00	9,776.00	9,705.76	68.30	38.72	-81.85	521.79	-468.99	4,521.57	4,453.37	68.20	66.302	
14,200.00	9,800.00	9,776.00	9,705.76	69.52	38.72	-81.85	521.79	-468.99	4,620.16	4,551.94	68.22	67.725	
14,300.00	9,800.00	9,776.00	9,705.76	70.75	38.72	-81.85	521.79	-468.99	4,718.82	4,650.57	68.24	69.146	
14,400.00	9,800.00	9,776.00	9,705.76	71.99	38.72	-81.85	521.79	-468.99	4,817.53	4,749.26	68.27	70.565	
14,500.00	9,800.00	9,776.00	9,705.76	73.23	38.72	-81.85	521.79	-468.99	4,916.29	4,847.99	68.30	71.982	
14,600.00	9,800.00	9,776.00	9,705.76	74.48	38.72	-81.85	521.79	-468.99	5,015.11	4,946.78	68.33	73.397	
14,700.00	9,800.00	9,776.00	9,705.76	75.74	38.72	-81.85	521.79	-468.99	5,113.96	5,045.60	68.36	74.811	
14,800.00	9,800.00	9,776.00	9,705.76	77.00	38.72	-81.85	521.79	-468.99	5,212.86	5,144.47	68.39	76.222	
14,900.00	9,800.00	9,776.00	9,705.76	78.27	38.72	-81.85	521.79	-468.99	5,311.81	5,243.38	68.42	77.631	
15,000.00	9,800.00	9,776.00	9,705.76	79.55	38.72	-81.85	521.79	-468.99	5,410.79	5,342.33	68.46	79.037	
15,100.00	9,800.00	9,776.00	9,705.76	80.83	38.72	-81.85	521.79	-468.99	5,509.81	5,441.31	68.49	80.442	
15,200.00	9,800.00	9,776.00	9,705.76	82.12	38.72	-81.85	521.79	-468.99	5,608.86	5,540.33	68.53	81.844	
15,300.00	9,800.00	9,776.00	9,705.76	83.41	38.72	-81.85	521.79	-468.99	5,707.95	5,639.38	68.57	83.243	
15,400.00	9,800.00	9,776.00	9,705.76	84.70	38.72	-81.85	521.79	-468.99	5,807.06	5,738.46	68.61	84.640	
15,500.00	9,800.00	9,776.00	9,705.76	86.01	38.72	-81.85	521.79	-468.99	5,906.21	5,837.56	68.65	86.035	
15,600.00	9,800.00	9,776.00	9,705.76	87.31	38.72	-81.85	521.79	-468.99	6,005.39	5,936.70	68.69	87.427	
15,700.00	9,800.00	9,776.00	9,705.76	88.62	38.72	-81.85	521.79	-468.99	6,104.59	6,035.86	68.73	88.816	
15,800.00	9,800.00	9,776.00	9,705.76	89.93	38.72	-81.85	521.79	-468.99	6,203.82	6,135.04	68.78	90.202	
15,900.00	9,800.00	9,776.00	9,705.76	91.25	38.72	-81.85	521.79	-468.99	6,303.07	6,234.25	68.82	91.585	
16,000.00	9,800.00	9,776.00	9,705.76	92.57	38.72	-81.85	521.79	-468.99	6,402.35	6,333.48	68.87	92.966	
16,100.00	9,800.00	9,776.00	9,705.76	93.89	38.72	-81.85	521.79	-468.99	6,501.64	6,432.73	68.91	94.344	
16,200.00	9,800.00	9,776.00	9,705.76	95.22	38.72	-81.85	521.79	-468.99	6,600.96	6,532.00	68.96	95.719	
16,300.00	9,800.00	9,776.00	9,705.76	96.55	38.72	-81.85	521.79	-468.99	6,700.30	6,631.29	69.01	97.090	
16,400.00	9,800.00	9,776.00	9,705.76	97.89	38.72	-81.85	521.79	-468.99	6,799.66	6,730.60	69.06	98.459	
16,500.00	9,800.00	9,776.00	9,705.76	99.22	38.72	-81.85	521.79	-468.99	6,899.04	6,829.93	69.11	99.825	
16,600.00	9,800.00	9,776.00	9,705.76	100.56	38.72	-81.85	521.79	-468.99	6,998.43	6,929.27	69.16	101.187	
16,700.00	9,800.00	9,776.00	9,705.76	101.90	38.72	-81.85	521.79	-468.99	7,097.85	7,028.63	69.22	102.546	
16,800.00	9,800.00	9,776.00	9,705.76	103.25	38.72	-81.85	521.79	-468.99	7,197.28	7,128.01	69.27	103.902	
16,900.00	9,800.00	9,776.00	9,705.76	104.60	38.72	-81.85	521.79	-468.99	7,296.72	7,227.39	69.32	105.255	
17,000.00	9,800.00	9,776.00	9,705.76	105.94	38.72	-81.85	521.79	-468.99	7,396.18	7,326.80	69.38	106.604	
17,100.00	9,800.00	9,776.00	9,705.76	107.30	38.72	-81.85	521.79	-468.99	7,495.65	7,426.22	69.44	107.950	
17,200.00	9,800.00	9,776.00	9,705.76	108.65	38.72	-81.85	521.79	-468.99	7,595.14	7,525.65	69.49	109.293	
17,300.00	9,800.00	9,776.00	9,705.76	110.01	38.72	-81.85	521.79	-468.99	7,694.64	7,625.09	69.55	110.632	
17,400.00	9,800.00	9,776.00	9,705.76	111.36	38.72	-81.85	521.79	-468.99	7,794.15	7,724.54	69.61	111.968	
17,500.00	9,800.00	9,760.20	9,689.97	112.73	38.69	-80.68	521.52	-468.96	7,893.64	7,823.98	69.66	113.321	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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		Winnebago 30 State Com - 505H - OH / 68126 - Surveys (H&P 296)											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		
17,590.89	9,800.00	9,759.60	9,689.36	113.96	38.69	-80.63	521.51	-468.96	7,984.11	7,914.39	69.71	114.530			



Aim Directional Services, LLC

Anticollision Report



Company:	Avant Operating, LLC	Local Co-ordinate Reference:	Well 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 1884-MWD+IFR1+MS												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 Tooface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.00	0.00	1,826.50	1,826.36	0.00	0.00	-69.06	677.67	-1,770.68	2,636.96				
100.00	100.00	1,826.50	1,826.36	0.13	0.00	-69.06	677.67	-1,770.68	2,568.46	2,566.91	1.55	1,652.274	
200.00	200.00	1,826.50	1,826.36	0.49	0.00	-69.06	677.67	-1,770.68	2,502.09	2,500.54	1.55	1,612.636	
300.00	300.00	1,826.50	1,826.36	0.85	0.00	-69.06	677.67	-1,770.68	2,438.01	2,436.41	1.60	1,521.315	
400.00	400.00	1,826.50	1,826.36	1.21	0.00	-69.06	677.67	-1,770.68	2,376.41	2,374.70	1.71	1,390.079	
500.00	500.00	1,826.50	1,826.36	1.57	0.00	-69.06	677.67	-1,770.68	2,317.50	2,315.63	1.87	1,239.587	
600.00	600.00	1,826.50	1,826.36	1.93	0.00	-69.06	677.67	-1,770.68	2,261.47	2,259.39	2.08	1,089.012	
700.00	700.00	1,826.50	1,826.36	2.29	0.00	-69.06	677.67	-1,770.68	2,208.55	2,206.23	2.32	950.408	
800.00	800.00	1,826.50	1,826.36	2.64	0.00	-69.06	677.67	-1,770.68	2,158.97	2,156.36	2.60	828.923	
900.00	900.00	1,826.50	1,826.36	3.00	0.00	-69.06	677.67	-1,770.68	2,112.96	2,110.04	2.91	725.310	
1,000.00	1,000.00	1,826.50	1,826.36	3.36	0.00	-69.06	677.67	-1,770.68	2,070.76	2,067.51	3.24	638.188	
1,100.00	1,100.00	1,826.50	1,826.36	3.72	0.00	-69.06	677.67	-1,770.68	2,032.60	2,029.01	3.59	565.423	
1,200.00	1,200.00	1,826.50	1,826.36	4.08	0.00	-69.06	677.67	-1,770.68	1,998.73	1,994.77	3.96	504.812	
1,300.00	1,300.00	1,826.50	1,826.36	4.44	0.00	-69.06	677.67	-1,770.68	1,969.36	1,965.03	4.33	454.364	
1,400.00	1,400.00	1,826.50	1,826.36	4.79	0.00	-69.06	677.67	-1,770.68	1,944.69	1,939.98	4.72	412.380	
1,500.00	1,500.00	1,826.50	1,826.36	5.15	0.00	-69.06	677.67	-1,770.68	1,924.91	1,919.81	5.10	377.450	
1,600.00	1,600.00	1,826.50	1,826.36	5.51	0.00	-69.06	677.67	-1,770.68	1,910.16	1,904.68	5.48	348.421	
1,700.00	1,700.00	1,826.50	1,826.36	5.87	0.00	-69.06	677.67	-1,770.68	1,900.57	1,894.71	5.86	324.351	
1,800.00	1,800.00	1,826.50	1,826.36	6.23	0.00	-69.06	677.67	-1,770.68	1,896.21	1,889.98	6.23	304.468	
1,832.76	1,832.76	1,826.50	1,826.36	6.35	0.00	-69.06	677.67	-1,770.68	1,895.93	1,889.58	6.35	298.757	
1,900.00	1,900.00	1,858.18	1,858.04	6.59	0.18	-69.06	677.79	-1,771.27	1,896.86	1,890.09	6.77	280.357	
2,000.00	2,000.00	1,957.64	1,957.47	6.95	0.99	-69.07	678.08	-1,773.16	1,898.74	1,890.81	7.93	239.485	
2,100.00	2,100.00	2,066.76	2,066.58	7.30	1.65	-69.10	677.78	-1,775.28	1,900.45	1,891.51	8.94	212.508	
2,200.00	2,200.00	2,167.00	2,166.78	7.66	2.10	-69.16	676.38	-1,777.28	1,901.82	1,892.09	9.73	195.545	
2,300.00	2,300.00	2,250.66	2,250.37	8.02	2.58	-69.26	673.97	-1,779.80	1,903.63	1,893.22	10.41	182.820	
2,400.00	2,400.00	2,329.85	2,329.39	8.38	3.19	-69.40	670.47	-1,783.49	1,906.44	1,895.34	11.10	171.752	
2,500.00	2,500.00	2,411.63	2,410.88	8.74	3.67	-69.58	665.87	-1,788.59	1,910.31	1,898.56	11.75	162.591	
2,600.00	2,600.00	2,503.63	2,502.48	9.10	4.05	-69.81	660.32	-1,795.20	1,914.96	1,902.57	12.40	154.479	
2,700.00	2,700.00	2,601.38	2,599.79	9.45	4.40	-70.04	654.47	-1,802.32	1,919.77	1,906.73	13.04	147.214	
2,800.00	2,800.00	2,703.62	2,701.59	9.81	4.77	-70.29	648.47	-1,809.79	1,924.66	1,910.97	13.69	140.580	
2,900.00	2,900.00	2,795.52	2,793.08	10.17	5.10	-70.50	643.11	-1,816.45	1,929.55	1,915.25	14.31	134.868	
3,000.00	3,000.00	2,870.50	2,867.71	10.53	5.38	-70.68	639.06	-1,822.40	1,935.30	1,920.41	14.89	129.941	
3,100.00	3,100.00	2,946.93	2,943.73	10.89	5.67	-70.84	635.52	-1,829.54	1,942.57	1,927.07	15.50	125.311	
3,200.00	3,200.00	3,050.41	3,046.63	11.25	6.07	-71.07	630.85	-1,839.52	1,950.23	1,934.03	16.20	120.351	
3,300.00	3,300.00	3,144.62	3,140.33	11.61	6.45	-71.27	626.70	-1,848.35	1,957.71	1,940.85	16.87	116.079	
3,400.00	3,400.00	3,224.24	3,219.39	11.96	6.80	-71.46	622.56	-1,856.81	1,966.13	1,948.64	17.49	112.387	
3,500.00	3,500.00	3,319.29	3,313.69	12.32	7.21	-71.71	617.40	-1,867.53	1,975.15	1,956.97	18.18	108.643	
3,600.00	3,600.00	3,423.64	3,417.24	12.68	7.63	-71.96	611.99	-1,879.21	1,984.20	1,965.32	18.88	105.099	
3,700.00	3,700.00	3,540.42	3,533.25	13.04	8.08	-72.22	606.42	-1,891.43	1,992.73	1,973.11	19.62	101.558	
3,800.00	3,800.00	3,659.16	3,651.36	13.40	8.54	-72.46	601.38	-1,902.42	2,000.27	1,979.91	20.36	98.229	
3,900.00	3,900.00	3,762.42	3,754.12	13.76	8.94	-72.66	596.67	-1,911.44	2,007.25	1,986.21	21.04	95.391	
4,000.00	4,000.00	3,867.28	3,858.43	14.11	9.35	-72.90	591.03	-1,920.66	2,014.09	1,992.37	21.72	92.731	
4,100.00	4,100.00	3,964.51	3,955.11	14.47	9.74	-73.12	585.40	-1,929.25	2,020.86	1,998.49	22.37	90.339	
4,200.00	4,200.00	4,055.33	4,045.36	14.83	10.10	-73.34	579.69	-1,937.67	2,027.95	2,004.95	23.00	88.172	
4,300.00	4,300.00	4,161.83	4,151.20	15.19	10.53	-73.61	572.92	-1,947.45	2,034.96	2,011.28	23.68	85.926	
4,400.00	4,400.00	4,242.00	4,230.82	15.55	10.85	-73.81	567.84	-1,955.27	2,042.55	2,018.27	24.28	84.112	
4,500.00	4,500.00	4,337.41	4,325.54	15.91	11.24	-74.04	562.04	-1,965.07	2,050.76	2,025.81	24.95	82.199	
4,600.00	4,600.00	4,442.53	4,429.97	16.27	11.67	-74.28	555.99	-1,975.55	2,058.81	2,033.16	25.65	80.264	
4,700.00	4,700.00	4,536.93	4,523.73	16.62	12.05	-74.50	550.35	-1,984.95	2,066.82	2,040.51	26.31	78.543	
4,800.00	4,800.00	4,619.00	4,605.12	16.98	12.41	-74.72	544.89	-1,993.95	2,075.63	2,048.69	26.95	77.025	
4,900.00	4,900.00	4,708.10	4,693.39	17.34	12.80	-74.96	538.71	-2,004.39	2,085.15	2,057.54	27.62	75.505	
5,000.00	5,000.00	4,809.26	4,793.65	17.70	13.23	-75.22	532.08	-2,016.14	2,094.73	2,066.41	28.33	73.953	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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 Winnebago 30 State Com 503H - 503H (Offset) - Drilling - Surveys												Offset Site Error:	0.00 usft
Survey Program: 1884-MWD+IFR1+MS												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	
5,100.00	5,100.00	4,915.18	4,898.70	18.06	13.67	-75.47	525.69	-2,028.08	2,104.15	2,075.09	29.06	72.419	
5,200.00	5,200.00	5,026.38	5,009.05	18.42	14.13	-75.72	519.15	-2,040.07	2,113.17	2,083.37	29.80	70.907	
5,300.00	5,300.00	5,137.58	5,119.49	18.77	14.58	-75.97	512.67	-2,051.34	2,121.59	2,091.05	30.54	69.464	
5,400.00	5,400.00	5,247.75	5,229.00	19.13	15.03	-76.19	506.78	-2,061.86	2,129.60	2,098.32	31.27	68.095	
5,500.00	5,500.00	5,349.88	5,330.57	19.49	15.44	-76.39	501.54	-2,071.11	2,137.20	2,105.23	31.97	66.845	
5,600.00	5,600.00	5,451.53	5,431.67	19.85	15.84	-76.58	496.30	-2,080.31	2,144.81	2,112.14	32.67	65.652	
5,620.00	5,620.00	5,472.60	5,452.63	19.92	15.93	-76.62	495.22	-2,082.19	2,146.32	2,113.51	32.81	65.415	
5,700.00	5,699.99	5,562.13	5,541.71	20.20	16.28	-0.03	490.69	-2,089.91	2,151.06	2,117.68	33.38	64.438	
5,800.00	5,799.89	5,704.61	5,683.56	20.55	16.85	-0.28	483.56	-2,101.25	2,153.64	2,119.44	34.20	62.969	
5,900.00	5,899.60	5,958.45	5,937.00	20.90	17.56	-0.61	472.54	-2,107.04	2,146.91	2,112.05	34.85	61.601	
6,000.00	5,999.01	6,065.50	6,044.02	21.24	17.54	-0.65	470.74	-2,105.06	2,133.88	2,098.81	35.07	60.847	
6,100.00	6,098.00	6,169.32	6,147.79	21.59	17.38	-0.64	471.04	-2,102.17	2,117.11	2,081.87	35.24	60.076	
6,200.00	6,196.47	6,264.06	6,242.49	21.95	17.17	-0.60	472.13	-2,099.47	2,097.23	2,061.80	35.43	59.187	
6,300.00	6,294.31	6,349.16	6,327.55	22.31	16.99	-0.57	473.17	-2,097.13	2,074.27	2,038.60	35.67	58.154	
6,400.00	6,391.42	6,411.00	6,389.37	22.67	16.87	-0.54	474.24	-2,096.07	2,049.24	2,013.27	35.97	56.969	
6,500.00	6,487.69	6,488.71	6,467.05	23.04	16.77	-0.49	476.14	-2,095.64	2,022.24	1,985.89	36.35	55.627	
6,600.00	6,583.01	6,580.85	6,559.15	23.41	16.70	-0.42	478.97	-2,095.87	1,992.91	1,956.14	36.78	54.188	
6,700.00	6,677.29	6,680.70	6,658.96	23.80	16.61	-0.34	481.96	-2,095.95	1,960.29	1,923.11	37.19	52.716	
6,800.00	6,770.41	6,773.23	6,751.46	24.21	16.53	-0.28	484.45	-2,095.96	1,924.44	1,886.85	37.58	51.206	
6,900.00	6,862.29	6,866.61	6,844.81	24.63	16.48	-0.22	486.47	-2,096.10	1,885.54	1,847.55	37.99	49.634	
7,000.00	6,952.81	6,954.65	6,932.85	25.07	16.55	-0.22	487.01	-2,096.55	1,843.64	1,805.21	38.43	47.976	
7,100.00	7,041.88	7,046.87	7,025.06	25.53	16.74	-0.27	486.01	-2,097.44	1,798.81	1,759.91	38.91	46.233	
7,200.00	7,129.40	7,130.58	7,108.76	26.02	16.95	-0.33	484.87	-2,098.25	1,751.00	1,711.65	39.36	44.491	
7,300.00	7,215.28	7,224.58	7,202.74	26.54	17.17	-0.42	483.19	-2,099.36	1,700.45	1,660.67	39.77	42.753	
7,400.00	7,299.42	7,316.22	7,294.36	27.09	17.35	-0.51	481.57	-2,099.77	1,646.45	1,606.31	40.14	41.016	
7,489.65	7,373.30	7,406.06	7,384.19	27.62	17.47	-0.61	480.15	-2,099.73	1,595.41	1,555.02	40.39	39.496	
7,500.00	7,381.75	7,417.86	7,395.99	27.69	17.48	-0.62	479.96	-2,099.63	1,589.32	1,548.91	40.42	39.323	
7,600.00	7,463.31	7,509.40	7,487.51	28.31	17.51	-0.70	478.41	-2,098.28	1,529.99	1,489.37	40.62	37.666	
7,700.00	7,544.88	7,596.06	7,574.14	28.97	17.50	-0.78	476.89	-2,096.69	1,470.39	1,429.59	40.80	36.037	
7,729.86	7,569.24	7,622.44	7,600.51	29.16	17.49	-0.81	476.45	-2,096.11	1,452.51	1,411.66	40.85	35.555	
7,800.00	7,626.91	7,679.19	7,657.23	29.64	17.45	-0.84	475.63	-2,094.76	1,411.09	1,370.11	40.99	34.428	
7,900.00	7,710.71	7,759.17	7,737.19	30.31	17.37	-0.87	474.98	-2,092.83	1,354.43	1,313.24	41.19	32.882	
8,000.00	7,796.26	7,839.14	7,817.13	30.98	17.26	-0.87	474.76	-2,091.00	1,300.70	1,259.29	41.41	31.409	
8,100.00	7,883.46	7,920.00	7,897.98	31.64	17.14	-0.87	474.80	-2,089.58	1,250.30	1,208.64	41.66	30.014	
8,200.00	7,972.24	8,007.56	7,985.53	32.28	17.00	-0.84	475.40	-2,088.14	1,202.99	1,161.08	41.91	28.705	
8,300.00	8,062.49	8,089.98	8,067.93	32.91	16.85	-0.78	476.40	-2,086.76	1,158.70	1,116.48	42.22	27.446	
8,400.00	8,154.10	8,178.95	8,156.88	33.51	16.69	-0.72	477.60	-2,085.71	1,117.84	1,075.30	42.54	26.280	
8,500.00	8,246.99	8,265.20	8,243.12	34.09	16.57	-0.64	479.02	-2,084.86	1,080.26	1,037.35	42.91	25.175	
8,600.00	8,341.05	8,357.61	8,335.52	34.65	16.46	-0.59	480.08	-2,084.58	1,046.29	1,002.99	43.30	24.163	
8,700.00	8,436.18	8,446.54	8,424.45	35.18	16.41	-0.55	481.00	-2,084.44	1,015.55	971.80	43.75	23.212	
8,800.00	8,532.27	8,543.55	8,521.45	35.69	16.38	-0.50	482.14	-2,084.92	988.60	944.40	44.21	22.362	
8,900.00	8,629.23	8,639.08	8,616.97	36.17	16.34	-0.43	483.48	-2,084.93	964.44	919.77	44.67	21.588	
9,000.00	8,726.93	8,731.80	8,709.68	36.62	16.37	-0.37	484.61	-2,085.55	944.08	898.89	45.20	20.889	
9,100.00	8,825.29	8,828.61	8,806.49	37.04	16.51	-0.36	485.14	-2,086.71	927.31	881.55	45.76	20.265	
9,200.00	8,924.19	8,926.63	8,904.50	37.45	16.70	-0.38	485.19	-2,088.09	913.91	867.57	46.34	19.721	
9,300.00	9,023.52	9,029.52	9,007.37	37.82	16.91	-0.41	485.20	-2,089.51	903.75	856.85	46.90	19.270	
9,400.00	9,123.18	9,125.16	9,103.00	38.18	17.14	-0.49	484.31	-2,090.88	896.71	849.25	47.46	18.895	
9,500.00	9,223.05	9,224.71	9,202.52	38.51	17.41	-0.62	482.66	-2,092.92	893.42	845.42	48.00	18.613	
9,547.73	9,270.76	9,271.32	9,249.11	38.65	17.53	-0.69	481.69	-2,093.91	893.00	844.74	48.26	18.503 CC, ES	
9,599.51	9,322.54	9,320.88	9,298.64	38.82	17.67	-77.52	480.85	-2,095.02	893.51	844.96	48.55	18.404	
9,600.00	9,323.03	9,321.35	9,299.11	38.82	17.67	102.88	480.84	-2,095.04	893.52	844.96	48.55	18.403	
9,625.00	9,348.02	9,344.95	9,322.70	38.89	17.73	102.81	480.51	-2,095.60	894.17	845.49	48.69	18.366	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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: 1884-MWD+IFR1+MS												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	
9,650.00	9,372.94	9,368.07	9,345.81	38.96	17.79	102.79	480.25	-2,096.18	895.17	846.36	48.81	18.338	
9,675.00	9,397.72	9,391.05	9,368.79	39.02	17.86	102.80	480.05	-2,096.79	896.51	847.58	48.93	18.322	
9,700.00	9,422.29	9,413.84	9,391.57	39.09	17.92	102.84	479.91	-2,097.44	898.21	849.17	49.04	18.317 SF	
9,725.00	9,446.59	9,437.30	9,415.02	39.15	17.98	102.93	479.83	-2,098.13	900.27	851.13	49.13	18.324	
9,750.00	9,470.55	9,462.33	9,440.03	39.20	18.03	103.08	479.82	-2,098.83	902.64	853.43	49.21	18.341	
9,775.00	9,494.11	9,486.89	9,464.58	39.26	18.09	103.27	479.87	-2,099.48	905.35	856.06	49.29	18.369	
9,800.00	9,517.19	9,510.90	9,488.59	39.31	18.14	103.48	479.99	-2,100.07	908.41	859.06	49.35	18.407	
9,825.00	9,539.74	9,534.01	9,511.70	39.36	18.19	103.69	480.16	-2,100.60	911.86	862.45	49.40	18.457	
9,850.00	9,561.70	9,556.10	9,533.77	39.41	18.22	103.88	480.37	-2,101.08	915.74	866.29	49.45	18.519	
9,875.00	9,583.00	9,577.45	9,555.12	39.45	18.25	104.07	480.63	-2,101.53	920.08	870.59	49.49	18.592	
9,900.00	9,603.58	9,598.01	9,575.68	39.49	18.28	104.22	480.92	-2,101.94	924.91	875.39	49.52	18.678	
9,925.00	9,623.40	9,617.72	9,595.38	39.53	18.31	104.32	481.23	-2,102.32	930.28	880.73	49.55	18.776	
9,950.00	9,642.39	9,635.73	9,613.38	39.56	18.32	104.34	481.60	-2,102.64	936.21	886.64	49.56	18.889	
9,975.00	9,660.51	9,652.73	9,630.38	39.59	18.33	104.29	482.01	-2,102.93	942.73	893.16	49.58	19.016	
10,000.00	9,677.69	9,668.77	9,646.41	39.61	18.35	104.14	482.46	-2,103.20	949.89	900.28	49.61	19.148	
10,025.00	9,693.91	9,683.45	9,661.08	39.63	18.38	103.90	483.08	-2,103.37	957.68	908.01	49.67	19.283	
10,050.00	9,709.11	9,696.54	9,674.14	39.65	18.41	103.51	483.83	-2,103.45	966.14	916.42	49.72	19.431	
10,075.00	9,723.24	9,708.06	9,685.63	39.66	18.44	102.98	484.66	-2,103.46	975.29	925.51	49.77	19.594	
10,100.00	9,736.28	9,718.06	9,695.60	39.67	18.46	102.28	485.50	-2,103.42	985.12	935.29	49.83	19.771	
10,125.00	9,748.19	9,726.60	9,704.09	39.68	18.48	101.41	486.30	-2,103.36	995.63	945.76	49.88	19.962	
10,150.00	9,758.93	9,733.72	9,711.18	39.68	18.50	100.36	487.04	-2,103.28	1,006.82	956.89	49.93	20.166	
10,175.00	9,768.47	9,739.50	9,716.92	39.69	18.51	99.12	487.68	-2,103.21	1,018.66	968.68	49.98	20.383	
10,200.00	9,776.79	9,744.00	9,721.40	39.69	18.52	97.70	488.20	-2,103.14	1,031.11	981.09	50.02	20.612	
10,225.00	9,783.86	9,757.00	9,734.29	39.68	18.55	96.71	489.84	-2,102.89	1,044.20	994.11	50.09	20.847	
10,250.00	9,789.67	9,757.00	9,734.29	39.68	18.55	94.78	489.84	-2,102.89	1,057.75	1,007.62	50.13	21.099	
10,275.00	9,794.20	9,757.00	9,734.29	39.67	18.55	92.75	489.84	-2,102.89	1,071.80	1,021.63	50.18	21.361	
10,300.00	9,797.44	9,757.00	9,734.29	39.67	18.55	90.61	489.84	-2,102.89	1,086.30	1,036.08	50.22	21.631	
10,325.00	9,799.38	9,757.00	9,734.29	39.66	18.55	88.39	489.84	-2,102.89	1,101.18	1,050.92	50.26	21.908	
10,349.51	9,800.00	9,757.00	9,734.29	39.66	18.55	86.14	489.84	-2,102.89	1,116.09	1,065.79	50.31	22.185	
10,400.00	9,800.00	9,757.00	9,734.29	39.65	18.55	86.14	489.84	-2,102.89	1,147.80	1,097.40	50.41	22.770	
10,500.00	9,800.00	9,736.22	9,713.67	39.64	18.50	84.80	487.31	-2,103.25	1,214.08	1,163.49	50.60	23.995	
10,600.00	9,800.00	9,729.72	9,707.20	39.66	18.49	84.39	486.62	-2,103.33	1,284.78	1,233.92	50.86	25.261	
10,700.00	9,800.00	9,724.03	9,701.54	39.70	18.48	84.02	486.05	-2,103.38	1,359.11	1,307.96	51.14	26.574	
10,800.00	9,800.00	9,719.01	9,696.54	39.78	18.46	83.70	485.58	-2,103.42	1,436.52	1,385.08	51.44	27.927	
10,900.00	9,800.00	9,714.54	9,692.09	39.90	18.45	83.41	485.19	-2,103.44	1,516.55	1,464.82	51.73	29.315	
11,000.00	9,800.00	9,710.55	9,688.11	40.07	18.44	83.16	484.86	-2,103.45	1,598.81	1,546.79	52.02	30.734	
11,100.00	9,800.00	9,706.95	9,684.52	40.32	18.44	82.93	484.57	-2,103.46	1,682.97	1,630.67	52.30	32.179	
11,200.00	9,800.00	9,703.70	9,681.28	40.64	18.43	82.72	484.33	-2,103.46	1,768.77	1,716.20	52.57	33.648	
11,300.00	9,800.00	9,700.74	9,678.33	41.05	18.42	82.53	484.12	-2,103.46	1,855.97	1,803.15	52.82	35.136	
11,400.00	9,800.00	9,698.04	9,675.64	41.54	18.42	82.36	483.93	-2,103.45	1,944.40	1,891.34	53.06	36.643	
11,500.00	9,800.00	9,695.57	9,673.17	42.10	18.41	82.20	483.77	-2,103.45	2,033.90	1,980.60	53.29	38.165	
11,600.00	9,800.00	9,663.00	9,640.64	42.74	18.34	80.13	482.28	-2,103.11	2,124.93	2,071.53	53.40	39.796	
11,700.00	9,800.00	9,663.00	9,640.64	43.43	18.34	80.13	482.28	-2,103.11	2,216.09	2,162.48	53.61	41.338	
11,800.00	9,800.00	9,663.00	9,640.64	44.17	18.34	80.13	482.28	-2,103.11	2,307.98	2,254.16	53.81	42.891	
11,900.00	9,800.00	9,663.00	9,640.64	44.96	18.34	80.13	482.28	-2,103.11	2,400.51	2,346.51	54.00	44.453	
12,000.00	9,800.00	9,663.00	9,640.64	45.78	18.34	80.13	482.28	-2,103.11	2,493.63	2,439.45	54.18	46.024	
12,100.00	9,800.00	9,663.00	9,640.64	46.64	18.34	80.13	482.28	-2,103.11	2,587.26	2,532.90	54.35	47.602	
12,200.00	9,800.00	9,663.00	9,640.64	47.54	18.34	80.13	482.28	-2,103.11	2,681.34	2,626.83	54.51	49.187	
12,300.00	9,800.00	9,663.00	9,640.64	48.46	18.34	80.13	482.28	-2,103.11	2,775.85	2,721.18	54.67	50.778	
12,400.00	9,800.00	9,663.00	9,640.64	49.41	18.34	80.13	482.28	-2,103.11	2,870.72	2,815.91	54.81	52.373	
12,500.00	9,800.00	9,663.00	9,640.64	50.38	18.34	80.13	482.28	-2,103.11	2,965.93	2,910.98	54.95	53.973	
12,600.00	9,800.00	9,663.00	9,640.64	51.38	18.34	80.13	482.28	-2,103.11	3,061.45	3,006.36	55.08	55.577	

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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 Winnebago 30 State Com 503H - 503H (Offset) - Drilling - Surveys												Offset Site Error:	0.00 usft
Survey Program: 1884-MWD+HFR1+MS												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	
12,700.00	9,800.00	9,663.00	9,640.64	52.40	18.34	80.13	482.28	-2,103.11	3,157.24	3,102.03	55.21	57.184	
12,800.00	9,800.00	9,663.00	9,640.64	53.44	18.34	80.13	482.28	-2,103.11	3,253.29	3,197.96	55.33	58.793	
12,900.00	9,800.00	9,663.00	9,640.64	54.49	18.34	80.13	482.28	-2,103.11	3,349.57	3,294.12	55.45	60.405	
13,000.00	9,800.00	9,663.00	9,640.64	55.57	18.34	80.13	482.28	-2,103.11	3,446.06	3,390.50	55.56	62.019	
13,100.00	9,800.00	9,663.00	9,640.64	56.66	18.34	80.13	482.28	-2,103.11	3,542.74	3,487.07	55.67	63.635	
13,200.00	9,800.00	9,663.00	9,640.64	57.77	18.34	80.13	482.28	-2,103.11	3,639.61	3,583.83	55.78	65.251	
13,300.00	9,800.00	9,663.00	9,640.64	58.89	18.34	80.13	482.28	-2,103.11	3,736.64	3,680.76	55.88	66.869	
13,400.00	9,800.00	9,663.00	9,640.64	60.03	18.34	80.13	482.28	-2,103.11	3,833.82	3,777.84	55.98	68.487	
13,500.00	9,800.00	9,663.00	9,640.64	61.17	18.34	80.13	482.28	-2,103.11	3,931.14	3,875.07	56.07	70.106	
13,600.00	9,800.00	9,663.00	9,640.64	62.34	18.34	80.13	482.28	-2,103.11	4,028.60	3,972.43	56.17	71.724	
13,700.00	9,800.00	9,663.00	9,640.64	63.51	18.34	80.13	482.28	-2,103.11	4,126.18	4,069.92	56.26	73.343	
13,800.00	9,800.00	9,663.00	9,640.64	64.69	18.34	80.13	482.28	-2,103.11	4,223.87	4,167.52	56.35	74.961	
13,900.00	9,800.00	9,663.00	9,640.64	65.88	18.34	80.13	482.28	-2,103.11	4,321.66	4,265.23	56.43	76.579	
14,000.00	9,800.00	9,663.00	9,640.64	67.09	18.34	80.13	482.28	-2,103.11	4,419.56	4,363.04	56.52	78.196	
14,100.00	9,800.00	9,663.00	9,640.64	68.30	18.34	80.13	482.28	-2,103.11	4,517.54	4,460.94	56.60	79.812	
14,200.00	9,800.00	9,663.00	9,640.64	69.52	18.34	80.13	482.28	-2,103.11	4,615.62	4,558.93	56.68	81.427	
14,300.00	9,800.00	9,663.00	9,640.64	70.75	18.34	80.13	482.28	-2,103.11	4,713.77	4,657.00	56.76	83.041	
14,400.00	9,800.00	9,663.00	9,640.64	71.99	18.34	80.13	482.28	-2,103.11	4,812.00	4,755.16	56.84	84.654	
14,500.00	9,800.00	9,663.00	9,640.64	73.23	18.34	80.13	482.28	-2,103.11	4,910.30	4,853.38	56.92	86.265	
14,600.00	9,800.00	9,663.00	9,640.64	74.48	18.34	80.13	482.28	-2,103.11	5,008.67	4,951.67	57.00	87.874	
14,700.00	9,800.00	9,663.00	9,640.64	75.74	18.34	80.13	482.28	-2,103.11	5,107.10	5,050.03	57.07	89.482	
14,800.00	9,800.00	9,663.00	9,640.64	77.00	18.34	80.13	482.28	-2,103.11	5,205.59	5,148.44	57.15	91.087	
14,900.00	9,800.00	9,663.00	9,640.64	78.27	18.34	80.13	482.28	-2,103.11	5,304.14	5,246.92	57.22	92.691	
15,000.00	9,800.00	9,663.00	9,640.64	79.55	18.34	80.13	482.28	-2,103.11	5,402.74	5,345.44	57.30	94.293	
15,100.00	9,800.00	9,663.00	9,640.64	80.83	18.34	80.13	482.28	-2,103.11	5,501.39	5,444.02	57.37	95.892	
15,200.00	9,800.00	9,663.00	9,640.64	82.12	18.34	80.13	482.28	-2,103.11	5,600.09	5,542.65	57.44	97.489	
15,300.00	9,800.00	9,654.58	9,632.23	83.41	18.33	79.59	482.06	-2,102.96	5,698.83	5,641.30	57.53	99.059	
15,400.00	9,800.00	9,653.19	9,630.84	84.70	18.33	79.51	482.02	-2,102.94	5,797.61	5,740.01	57.60	100.647	
15,500.00	9,800.00	9,651.83	9,629.48	86.01	18.33	79.42	481.99	-2,102.92	5,896.44	5,838.76	57.68	102.232	
15,600.00	9,800.00	9,650.49	9,628.13	87.31	18.33	79.34	481.95	-2,102.89	5,995.30	5,937.55	57.75	103.814	
15,700.00	9,800.00	9,649.17	9,626.82	88.62	18.33	79.25	481.92	-2,102.87	6,094.20	6,036.38	57.82	105.394	
15,800.00	9,800.00	9,647.87	9,625.52	89.93	18.33	79.17	481.89	-2,102.85	6,193.13	6,135.24	57.90	106.970	
15,900.00	9,800.00	9,646.59	9,624.24	91.25	18.33	79.09	481.86	-2,102.83	6,292.10	6,234.13	57.97	108.543	
16,000.00	9,800.00	9,645.33	9,622.98	92.57	18.33	79.01	481.83	-2,102.81	6,391.10	6,333.06	58.04	110.114	
16,100.00	9,800.00	9,644.09	9,621.74	93.89	18.33	78.93	481.80	-2,102.78	6,490.13	6,432.02	58.11	111.681	
16,200.00	9,800.00	9,642.87	9,620.52	95.22	18.33	78.86	481.77	-2,102.76	6,589.19	6,531.00	58.19	113.245	
16,300.00	9,800.00	9,641.67	9,619.32	96.55	18.33	78.78	481.74	-2,102.74	6,688.27	6,630.02	58.26	114.806	
16,400.00	9,800.00	9,640.49	9,618.14	97.89	18.33	78.71	481.71	-2,102.72	6,787.39	6,729.06	58.33	116.363	
16,500.00	9,800.00	9,639.33	9,616.98	99.22	18.33	78.63	481.68	-2,102.70	6,886.52	6,828.12	58.40	117.917	
16,600.00	9,800.00	9,631.00	9,608.66	100.56	18.32	78.11	481.49	-2,102.56	6,985.69	6,927.21	58.49	119.443	
16,700.00	9,800.00	9,631.00	9,608.66	101.90	18.32	78.11	481.49	-2,102.56	7,084.87	7,026.32	58.56	120.993	
16,800.00	9,800.00	9,631.00	9,608.66	103.25	18.32	78.11	481.49	-2,102.56	7,184.08	7,125.45	58.63	122.540	
16,900.00	9,800.00	9,631.00	9,608.66	104.60	18.32	78.11	481.49	-2,102.56	7,283.31	7,224.61	58.70	124.084	
17,000.00	9,800.00	9,631.00	9,608.66	105.94	18.32	78.11	481.49	-2,102.56	7,382.56	7,323.79	58.77	125.624	
17,100.00	9,800.00	9,631.00	9,608.66	107.30	18.32	78.11	481.49	-2,102.56	7,481.82	7,422.99	58.84	127.160	
17,200.00	9,800.00	9,631.00	9,608.66	108.65	18.32	78.11	481.49	-2,102.56	7,581.11	7,522.20	58.91	128.692	
17,300.00	9,800.00	9,631.00	9,608.66	110.01	18.32	78.11	481.49	-2,102.56	7,680.42	7,621.44	58.98	130.221	
17,400.00	9,800.00	9,631.00	9,608.66	111.36	18.32	78.11	481.49	-2,102.56	7,779.74	7,720.69	59.05	131.745	
17,500.00	9,800.00	9,631.00	9,608.66	112.73	18.32	78.11	481.49	-2,102.56	7,879.08	7,819.96	59.12	133.266	
17,590.89	9,800.00	9,631.00	9,608.66	113.96	18.32	78.11	481.49	-2,102.56	7,969.38	7,910.20	59.19	134.645	

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
Project: Lea Co., NM (NAD 83)
Reference Site: Golden Tee 31 Fed Com 304H
Site Error: 0.00 usft
Reference Well: 304H
Well Error: 0.00 usft
Reference Wellbore: Planning
Reference Design: Plan 0.1

Local Co-ordinate Reference: Well 304H
TVD Reference: Well @ 3499.00usft
MD Reference: Well @ 3499.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: RTOC- EDM 5000.1 Single User Db
Offset TVD Reference: Offset Datum

Reference Depths are relative to Well @ 3499.00usft

Offset Depths are relative to Offset Datum

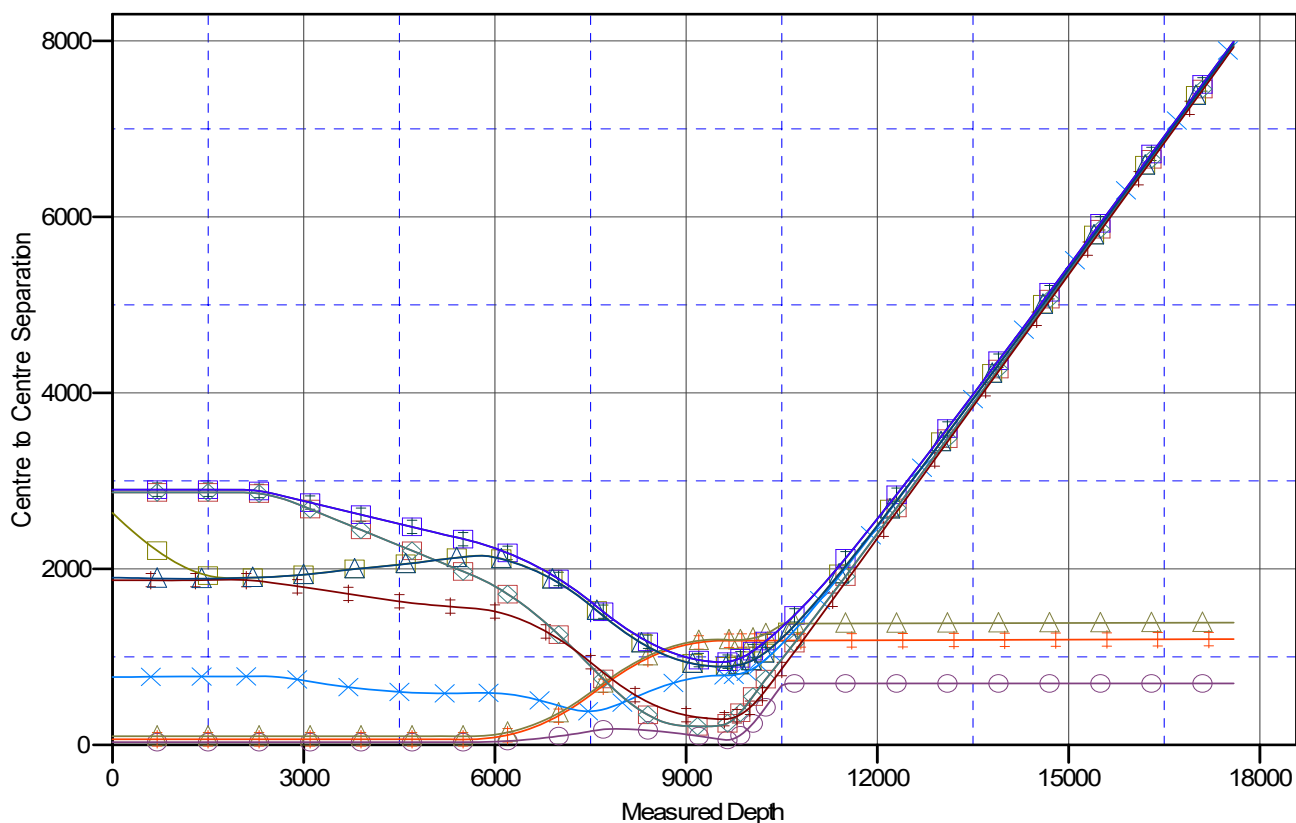
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 304H

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, OH / 6926, Surveys (H&P 206) V0
 504H, Planning, Plan 0.1 V0
 509H, Planning, Plan 0.1 V0
 302H Offset, Antennal 302H Offset Plan, 302H Offset V0
 303H Offset, Antennal 303H Offset Plan, 303H Offset V0
 504H, OH / 6921, Surveys (H&P 618) V0
 503H, OH / 6920, Surveys (H&P 618) V0
 302H, OH, ACPlan V0

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 304H
Project:	Lea Co., NM (NAD 83)	TVD Reference:	Well @ 3499.00usft
Reference Site:	Golden Tee 31 Fed Com 304H	MD Reference:	Well @ 3499.00usft
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	304H	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

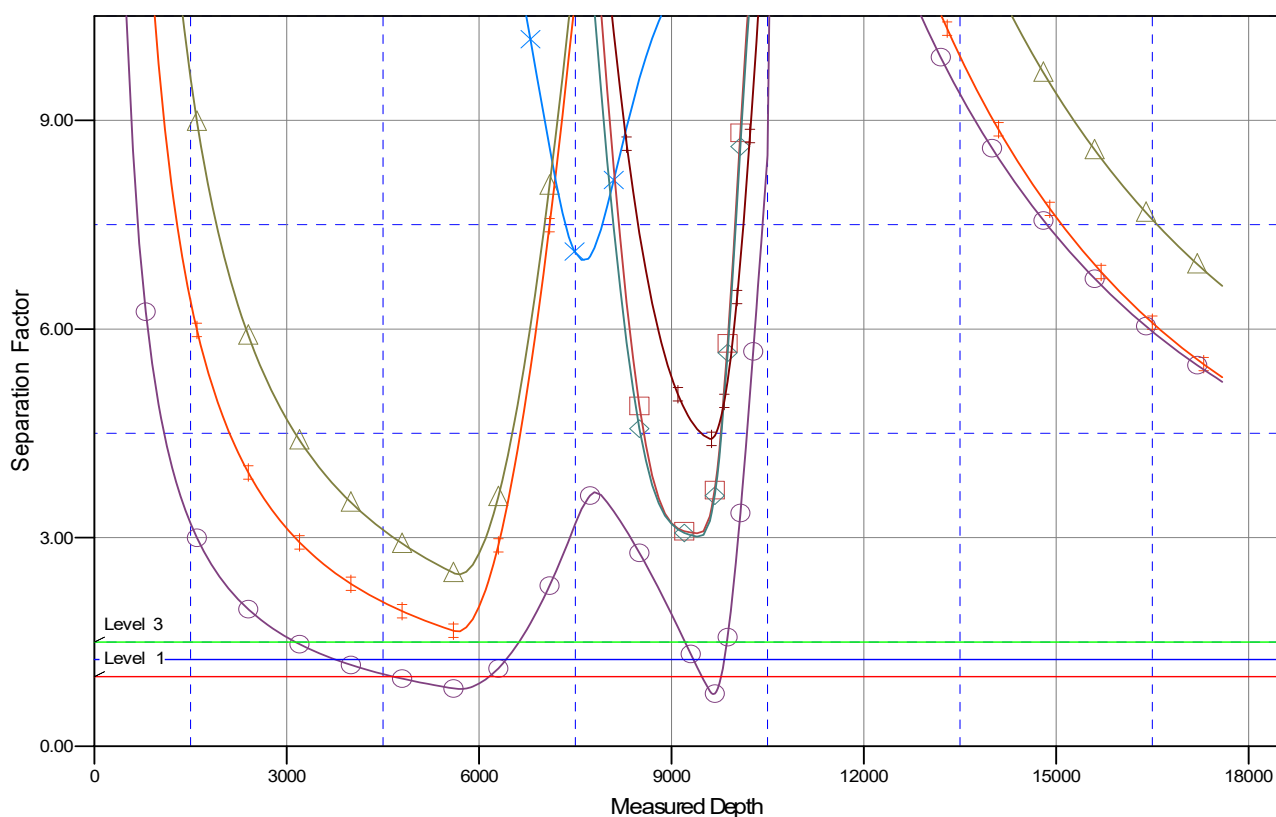
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 304H

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	303H Offset, Genterial 302H Offset Plan, 302H Offset V0	303H, OH, ACPlan V0
509H, OH / 6926, Surveys (H&P 299) V0	303H Offset, Genterial 303H Offset Plan, 303H Offset V0	504H, OH / 6921, Surveys (H&P 618) V0
504H, Planning, Plan 0.1 V0	503H (Offset), Drilling, Surveys V0	503H, OH / 6920, Surveys (H&P 618) V0
509H, Planning, Plan 0.1 V0	302H, OH, ACPlan V0	

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



Golden Tee 31 Fed Com 304H
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	0.000	0.00	0.00	
2	5620.00	0.00	0.00	5620.00	0.00	0.00	0.000	0.00	0.00	Build: 1.89°/100
3	7489.65	35.34	283.24	7373.30	127.98	-543.77	1.890	283.24	-131.77	Hold: 35.34° Inc, 283.24° Azm
4	7729.86	35.34	283.24	7569.24	159.81	-679.03	0.000	0.00	-164.55	Drop: 1.89°/100'
5	9599.51	0.00	0.00	9322.54	287.79	-1222.80	1.890	180.00	-296.32	KOP: 12°/100' @ 9599.51' MD
6	10349.51	90.00	179.60	9800.00	-189.66	-1219.48	12.000	179.60	181.14	LP: 10349.51' MD, 90.00° Inc, 179.60° Azm
7	17590.89	90.00	179.60	9800.00	-7430.87	-1169.06	0.000	0.00	7422.53	PBHL @ 17590.89' MD/9800.00' TVD

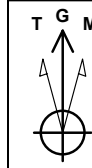
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
304H FTP	9800.00	287.79	-1222.80	494172.94	827371.13	32° 21' 18.541 N	103° 24' 25.336 W
304H LTP/PBHL	9800.00	-7430.87	-1169.06	486454.28	827424.87	32° 20' 2.164 N	103° 24' 25.488 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



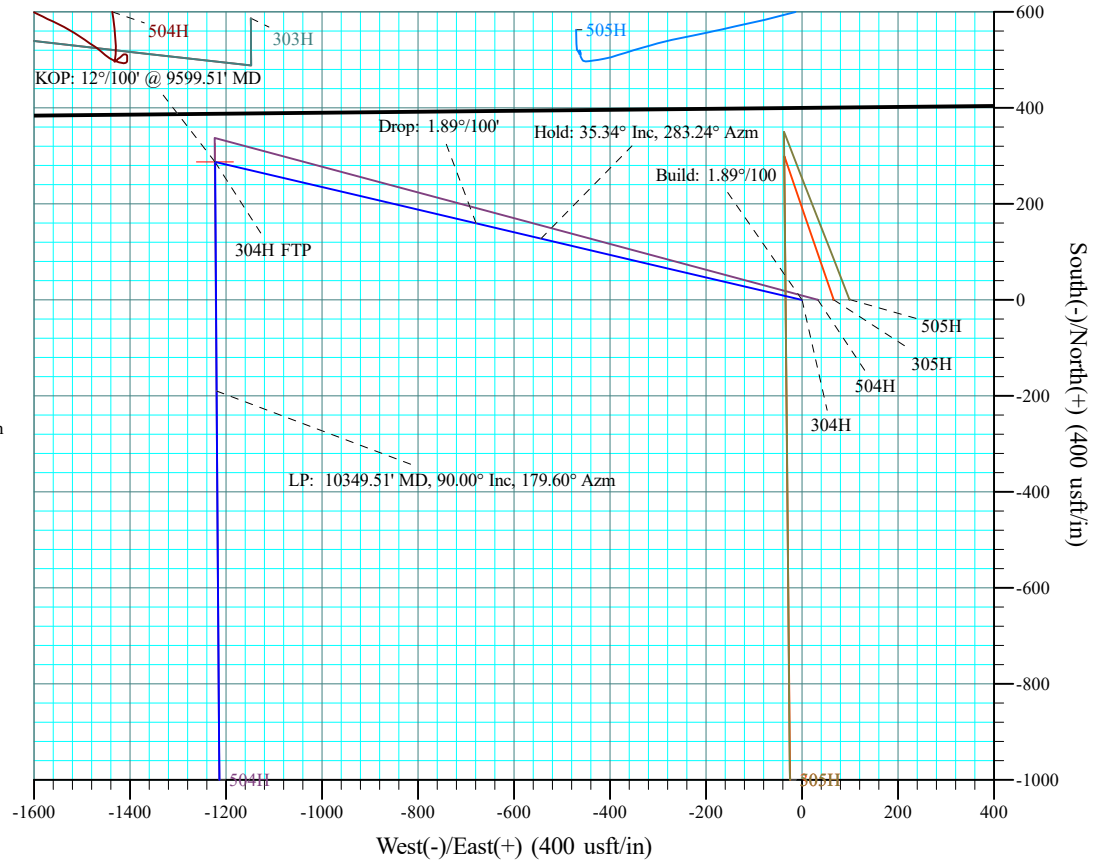
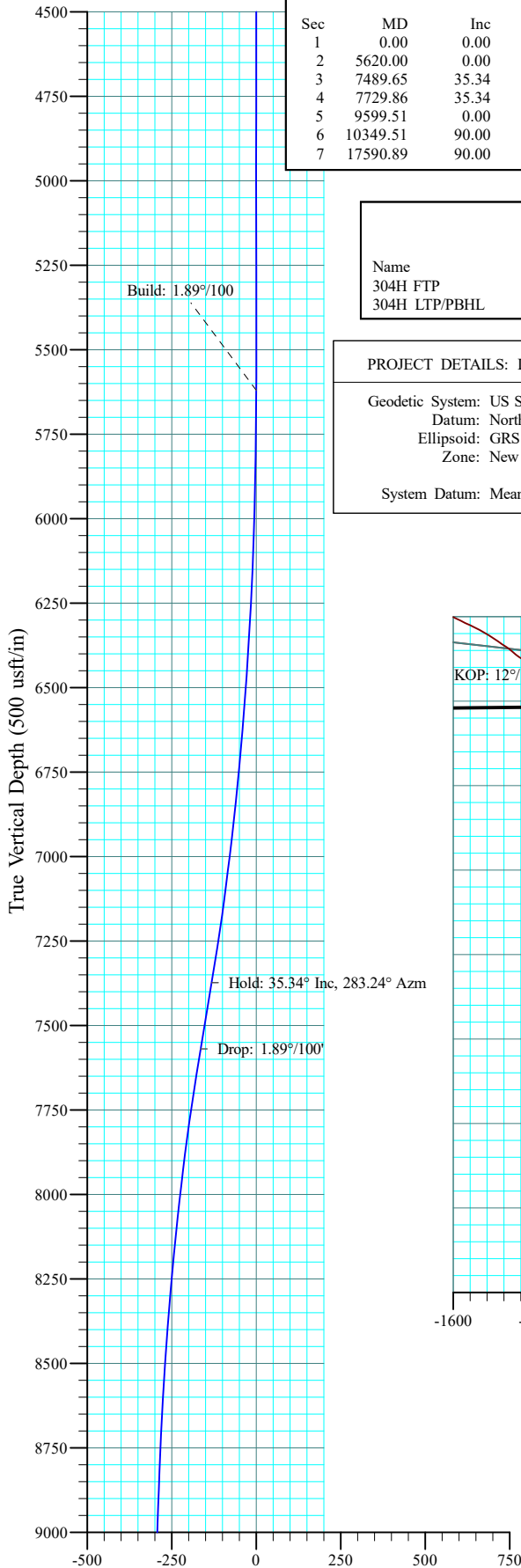
Azimuths to Grid North
 True North: -0.50°
 Magnetic North: 5.90°

Magnetic Field
 Strength: 47715.6nT
 Dip Angle: 59.97°
 Date: 4/1/2022
 Model: MVHD

SITE DETAILS: Golden Tee 31 Fed Com 304H

Site Centre Northing: 493885.15
 Easting: 828593.93

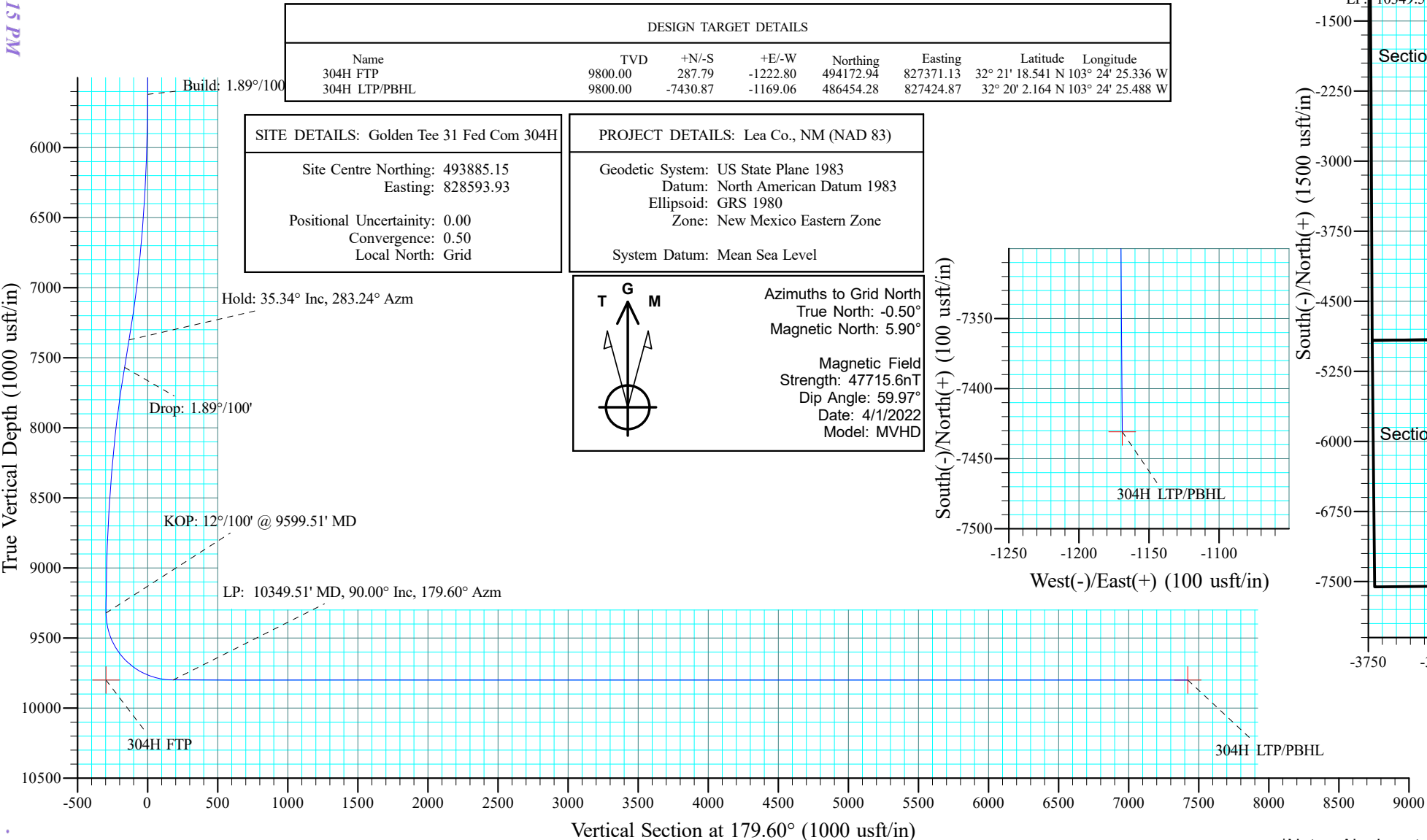
Positional Uncertainty: 0.00
 Convergence: 0.50
 Local North: Grid



Released for Imaging: 6/1/2022 3:32:15 PM

Received by OCD: 6/1/2022 2:21:48 PM

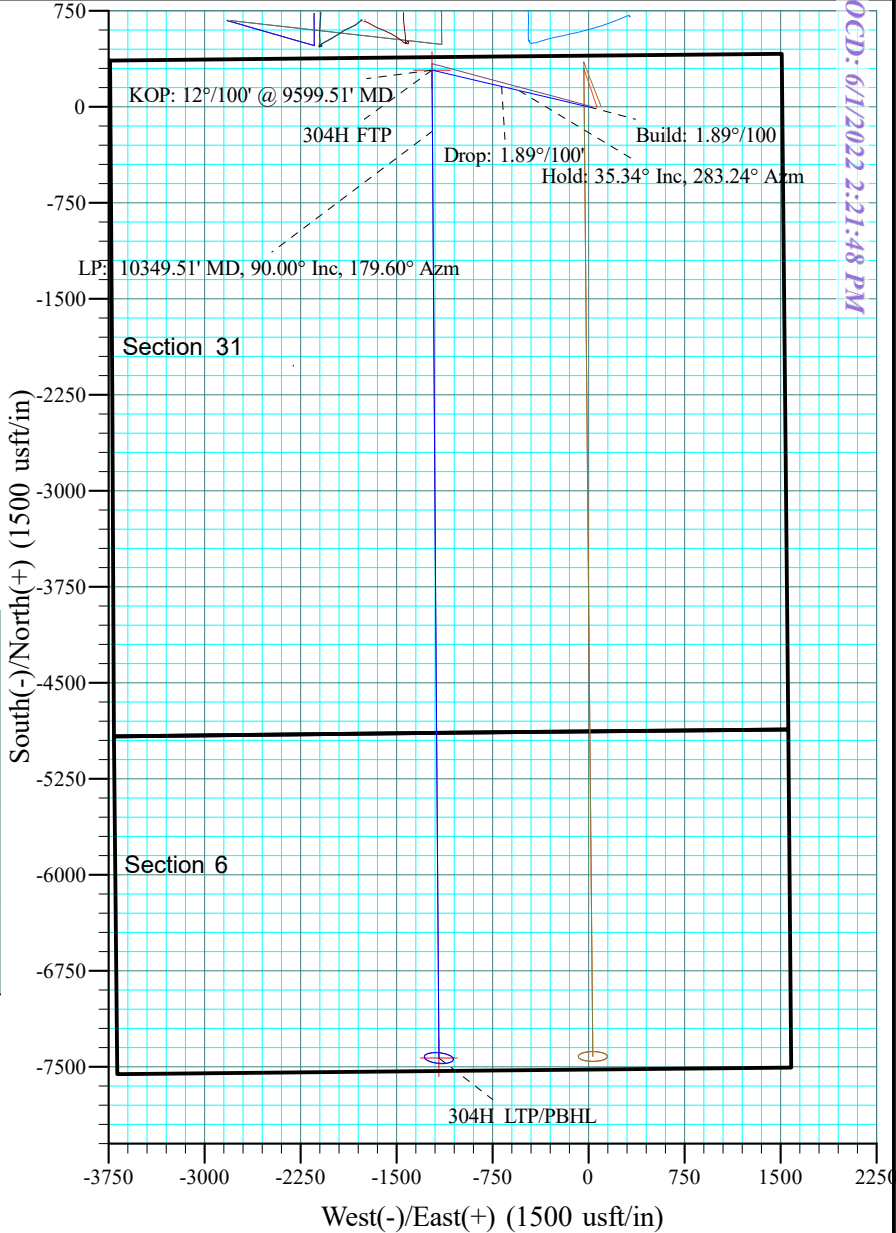
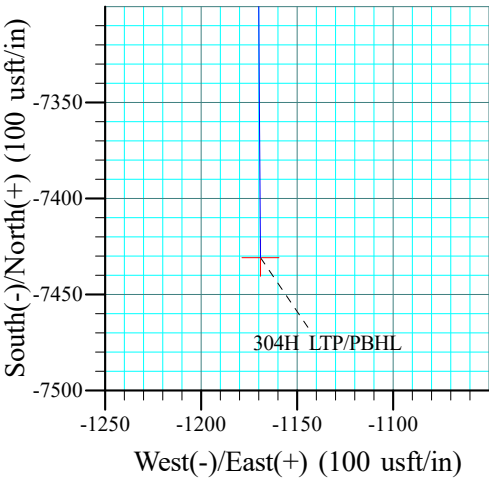
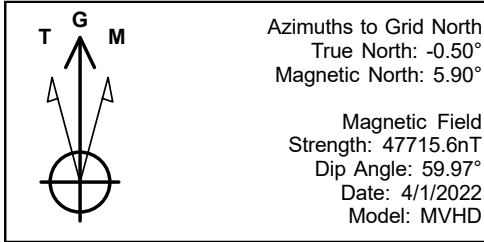
SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	
2	5620.00	0.00	0.00	5620.00	0.00	0.00	0.000	0.00	0.00	
3	7489.65	35.34	283.24	7373.30	127.98	-543.77	1.890	283.24	-131.77	Build: 1.89°/100
4	7729.86	35.34	283.24	7569.24	159.81	-679.03	0.000	0.00	-164.55	Hold: 35.34° Inc, 283.24° Azm
5	9599.51	0.00	0.00	9322.54	287.79	-1222.80	1.890	180.00	-296.32	Drop: 1.89°/100'
6	10349.51	90.00	179.60	9800.00	-189.66	-1219.48	12.000	179.60	181.14	KOP: 12°/100' @ 9599.51' MD
7	17590.89	90.00	179.60	9800.00	-7430.87	-1169.06	0.000	0.00	7422.53	LP: 10349.51' MD, 90.00° Inc, 179.60° Azm
										PBHL @ 17590.89' MD/9800.00' TVD



DESIGN TARGET DETAILS						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude Longitude
304H FTP	9800.00	287.79	-1222.80	494172.94	827371.13	32° 21' 18.541 N 103° 24' 25.336 W
304H LTP/PBHL	9800.00	-7430.87	-1169.06	486454.28	827424.87	32° 20' 2.164 N 103° 24' 25.488 W

SITE DETAILS: Golden Tee 31 Fed Com 304H	
Site Centre Northing: 493885.15	
Easting: 828593.93	
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	



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Aim Directional Services, LLC

Planning Report



Database:	RTOC- EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 304H
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 304H	North Reference:	Grid
Well:	304H	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 304H			
Site Position:		Northing:	493,885.15 usft	Latitude:	32° 21' 15.589 N
From:	Map	Easting:	828,593.93 usft	Longitude:	103° 24' 11.111 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.50

Well	304H					
Well Position	+N/-S	0.00 usft	Northing:	493,885.15 usft	Latitude:	32° 21' 15.589 N
	+E/-W	0.00 usft	Easting:	828,593.93 usft	Longitude:	103° 24' 11.111 W
Position Uncertainty		0.00 usft	Wellhead Elevation:		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	47,715.586

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	179.60

Plan Survey Tool Program	Date	2/9/2022		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	17,590.89	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	
7,489.65	35.34	283.24	7,373.30	127.98	-543.77	1.890	1.890	0.000	283.24	
7,729.86	35.34	283.24	7,569.24	159.81	-679.03	0.000	0.000	0.000	0.00	
9,599.51	0.00	0.00	9,322.54	287.79	-1,222.80	1.890	-1.890	0.000	180.00	
10,349.51	90.00	179.60	9,800.00	-189.66	-1,219.48	12.000	12.000	23.947	179.60	
17,590.89	90.00	179.60	9,800.00	-7,430.87	-1,169.06	0.000	0.000	0.000	0.00	304H LTP/PBHL



Aim Directional Services, LLC

Planning Report



Database:	RTOC- EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 304H
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 304H	North Reference:	Grid
Well:	304H	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



Database:	RTOC- EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 304H
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 304H	North Reference:	Grid
Well:	304H	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: 1.89°/100'									
5,700.00	1.51	283.24	5,699.99	0.24	-1.03	-0.25	1.890	1.890	0.000
5,800.00	3.40	283.24	5,799.89	1.22	-5.20	-1.26	1.890	1.890	0.000
5,900.00	5.29	283.24	5,899.60	2.96	-12.58	-3.05	1.890	1.890	0.000
6,000.00	7.18	283.24	5,999.01	5.45	-23.16	-5.61	1.890	1.890	0.000
6,100.00	9.07	283.24	6,098.00	8.69	-36.92	-8.95	1.890	1.890	0.000
6,200.00	10.96	283.24	6,196.47	12.68	-53.86	-13.05	1.890	1.890	0.000
6,300.00	12.86	283.24	6,294.31	17.40	-73.94	-17.92	1.890	1.890	0.000
6,400.00	14.75	283.24	6,391.42	22.87	-97.16	-23.55	1.890	1.890	0.000
6,500.00	16.64	283.24	6,487.69	29.06	-123.49	-29.92	1.890	1.890	0.000
6,600.00	18.53	283.24	6,583.01	35.98	-152.89	-37.05	1.890	1.890	0.000
6,700.00	20.42	283.24	6,677.29	43.62	-185.33	-44.91	1.890	1.890	0.000
6,800.00	22.31	283.24	6,770.41	51.96	-220.79	-53.50	1.890	1.890	0.000
6,900.00	24.20	283.24	6,862.29	61.01	-259.22	-62.82	1.890	1.890	0.000
7,000.00	26.09	283.24	6,952.81	70.74	-300.57	-72.84	1.890	1.890	0.000
7,100.00	27.98	283.24	7,041.88	81.15	-344.81	-83.56	1.890	1.890	0.000
7,200.00	29.87	283.24	7,129.40	92.23	-391.89	-94.97	1.890	1.890	0.000
7,300.00	31.76	283.24	7,215.28	103.97	-441.75	-107.05	1.890	1.890	0.000
7,400.00	33.65	283.24	7,299.42	116.35	-494.34	-119.79	1.890	1.890	0.000
7,489.65	35.34	283.24	7,373.30	127.98	-543.77	-131.77	1.890	1.890	0.000
Hold: 35.34° Inc, 283.24° Azm									
7,500.00	35.34	283.24	7,381.75	129.35	-549.60	-133.18	0.000	0.000	0.000
7,600.00	35.34	283.24	7,463.31	142.60	-605.91	-146.83	0.000	0.000	0.000
7,700.00	35.34	283.24	7,544.88	155.86	-662.22	-160.47	0.000	0.000	0.000
7,729.86	35.34	283.24	7,569.24	159.81	-679.04	-164.55	0.000	0.000	0.000
Drop: 1.89°/100'									
7,800.00	34.02	283.24	7,626.91	168.96	-717.88	-173.96	1.890	-1.890	0.000
7,900.00	32.13	283.24	7,710.71	181.46	-771.00	-186.84	1.890	-1.890	0.000
8,000.00	30.24	283.24	7,796.26	193.32	-821.40	-199.05	1.890	-1.890	0.000
8,100.00	28.35	283.24	7,883.46	204.53	-869.02	-210.59	1.890	-1.890	0.000
8,200.00	26.46	283.24	7,972.24	215.07	-913.82	-221.45	1.890	-1.890	0.000
8,300.00	24.57	283.24	8,062.49	224.94	-955.74	-231.60	1.890	-1.890	0.000
8,400.00	22.68	283.24	8,154.10	234.12	-994.75	-241.06	1.890	-1.890	0.000
8,500.00	20.79	283.24	8,246.99	242.60	-1,030.78	-249.79	1.890	-1.890	0.000
8,600.00	18.90	283.24	8,341.05	250.37	-1,063.82	-257.79	1.890	-1.890	0.000
8,700.00	17.00	283.24	8,436.18	257.43	-1,093.82	-265.06	1.890	-1.890	0.000
8,800.00	15.11	283.24	8,532.27	263.77	-1,120.74	-271.59	1.890	-1.890	0.000
8,900.00	13.22	283.24	8,629.23	269.38	-1,144.57	-277.36	1.890	-1.890	0.000
9,000.00	11.33	283.24	8,726.93	274.25	-1,165.27	-282.38	1.890	-1.890	0.000
9,100.00	9.44	283.24	8,825.29	278.38	-1,182.82	-286.63	1.890	-1.890	0.000
9,200.00	7.55	283.24	8,924.19	281.77	-1,197.21	-290.12	1.890	-1.890	0.000
9,300.00	5.66	283.24	9,023.52	284.40	-1,208.41	-292.83	1.890	-1.890	0.000
9,400.00	3.77	283.24	9,123.18	286.29	-1,216.41	-294.77	1.890	-1.890	0.000
9,500.00	1.88	283.24	9,223.05	287.42	-1,221.21	-295.93	1.890	-1.890	0.000
9,599.51	0.00	0.00	9,322.54	287.79	-1,222.80	-296.32	1.890	-1.890	0.000
KOP: 12°/100' @ 9599.51' MD									
9,625.00	3.06	179.60	9,348.02	287.11	-1,222.80	-295.64	12.000	12.000	0.000
9,650.00	6.06	179.60	9,372.94	285.12	-1,222.78	-293.65	12.000	12.000	0.000
9,675.00	9.06	179.60	9,397.72	281.83	-1,222.76	-290.36	12.000	12.000	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 304H	North Reference:	Grid
Well:	304H	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)
9,700.00	12.06	179.60	9,422.29	277.25	-1,222.73	-285.78	12.000	12.000	0.000
9,725.00	15.06	179.60	9,446.59	271.39	-1,222.69	-279.92	12.000	12.000	0.000
9,750.00	18.06	179.60	9,470.55	264.27	-1,222.64	-272.80	12.000	12.000	0.000
9,775.00	21.06	179.60	9,494.11	255.90	-1,222.58	-264.43	12.000	12.000	0.000
9,800.00	24.06	179.60	9,517.19	246.31	-1,222.51	-254.84	12.000	12.000	0.000
9,825.00	27.06	179.60	9,539.74	235.53	-1,222.44	-244.06	12.000	12.000	0.000
9,850.00	30.06	179.60	9,561.70	223.58	-1,222.35	-232.11	12.000	12.000	0.000
9,875.00	33.06	179.60	9,583.00	210.49	-1,222.26	-219.02	12.000	12.000	0.000
9,900.00	36.06	179.60	9,603.58	196.32	-1,222.16	-204.84	12.000	12.000	0.000
9,925.00	39.06	179.60	9,623.40	181.08	-1,222.06	-189.60	12.000	12.000	0.000
9,950.00	42.06	179.60	9,642.39	164.82	-1,221.94	-173.35	12.000	12.000	0.000
9,975.00	45.06	179.60	9,660.51	147.60	-1,221.82	-156.13	12.000	12.000	0.000
10,000.00	48.06	179.60	9,677.69	129.45	-1,221.70	-137.98	12.000	12.000	0.000
10,025.00	51.06	179.60	9,693.91	110.43	-1,221.57	-118.95	12.000	12.000	0.000
10,050.00	54.06	179.60	9,709.11	90.58	-1,221.43	-99.10	12.000	12.000	0.000
10,075.00	57.06	179.60	9,723.24	69.96	-1,221.28	-78.49	12.000	12.000	0.000
10,100.00	60.06	179.60	9,736.28	48.64	-1,221.13	-57.16	12.000	12.000	0.000
10,125.00	63.06	179.60	9,748.19	26.66	-1,220.98	-35.18	12.000	12.000	0.000
10,150.00	66.06	179.60	9,758.93	4.08	-1,220.82	-12.61	12.000	12.000	0.000
10,175.00	69.06	179.60	9,768.47	-19.02	-1,220.66	10.50	12.000	12.000	0.000
10,200.00	72.06	179.60	9,776.79	-42.59	-1,220.50	34.07	12.000	12.000	0.000
10,225.00	75.06	179.60	9,783.86	-66.56	-1,220.33	58.04	12.000	12.000	0.000
10,250.00	78.06	179.60	9,789.67	-90.88	-1,220.16	82.36	12.000	12.000	0.000
10,275.00	81.06	179.60	9,794.20	-115.46	-1,219.99	106.94	12.000	12.000	0.000
10,300.00	84.06	179.60	9,797.44	-140.25	-1,219.82	131.73	12.000	12.000	0.000
10,325.00	87.06	179.60	9,799.38	-165.17	-1,219.65	156.65	12.000	12.000	0.000
10,349.51	90.00	179.60	9,800.00	-189.66	-1,219.48	181.14	12.000	12.000	0.000
LP: 10349.51' MD, 90.00° Inc, 179.60° Azm									
10,400.00	90.00	179.60	9,800.00	-240.15	-1,219.12	231.64	0.000	0.000	0.000
10,500.00	90.00	179.60	9,800.00	-340.15	-1,218.43	331.64	0.000	0.000	0.000
10,600.00	90.00	179.60	9,800.00	-440.15	-1,217.73	431.64	0.000	0.000	0.000
10,700.00	90.00	179.60	9,800.00	-540.15	-1,217.04	531.64	0.000	0.000	0.000
10,800.00	90.00	179.60	9,800.00	-640.14	-1,216.34	631.64	0.000	0.000	0.000
10,900.00	90.00	179.60	9,800.00	-740.14	-1,215.64	731.64	0.000	0.000	0.000
11,000.00	90.00	179.60	9,800.00	-840.14	-1,214.95	831.64	0.000	0.000	0.000
11,100.00	90.00	179.60	9,800.00	-940.14	-1,214.25	931.64	0.000	0.000	0.000
11,200.00	90.00	179.60	9,800.00	-1,040.14	-1,213.55	1,031.64	0.000	0.000	0.000
11,300.00	90.00	179.60	9,800.00	-1,140.13	-1,212.86	1,131.64	0.000	0.000	0.000
11,400.00	90.00	179.60	9,800.00	-1,240.13	-1,212.16	1,231.64	0.000	0.000	0.000
11,500.00	90.00	179.60	9,800.00	-1,340.13	-1,211.47	1,331.64	0.000	0.000	0.000
11,600.00	90.00	179.60	9,800.00	-1,440.13	-1,210.77	1,431.64	0.000	0.000	0.000
11,700.00	90.00	179.60	9,800.00	-1,540.12	-1,210.07	1,531.64	0.000	0.000	0.000
11,800.00	90.00	179.60	9,800.00	-1,640.12	-1,209.38	1,631.64	0.000	0.000	0.000
11,900.00	90.00	179.60	9,800.00	-1,740.12	-1,208.68	1,731.64	0.000	0.000	0.000
12,000.00	90.00	179.60	9,800.00	-1,840.12	-1,207.98	1,831.64	0.000	0.000	0.000
12,100.00	90.00	179.60	9,800.00	-1,940.11	-1,207.29	1,931.64	0.000	0.000	0.000
12,200.00	90.00	179.60	9,800.00	-2,040.11	-1,206.59	2,031.64	0.000	0.000	0.000
12,300.00	90.00	179.60	9,800.00	-2,140.11	-1,205.90	2,131.64	0.000	0.000	0.000
12,400.00	90.00	179.60	9,800.00	-2,240.11	-1,205.20	2,231.64	0.000	0.000	0.000
12,500.00	90.00	179.60	9,800.00	-2,340.10	-1,204.50	2,331.64	0.000	0.000	0.000
12,600.00	90.00	179.60	9,800.00	-2,440.10	-1,203.81	2,431.64	0.000	0.000	0.000
12,700.00	90.00	179.60	9,800.00	-2,540.10	-1,203.11	2,531.64	0.000	0.000	0.000
12,800.00	90.00	179.60	9,800.00	-2,640.10	-1,202.42	2,631.64	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 304H
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 304H	North Reference:	Grid
Well:	304H	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)
12,900.00	90.00	179.60	9,800.00	-2,740.09	-1,201.72	2,731.64	0.000	0.000	0.000
13,000.00	90.00	179.60	9,800.00	-2,840.09	-1,201.02	2,831.64	0.000	0.000	0.000
13,100.00	90.00	179.60	9,800.00	-2,940.09	-1,200.33	2,931.64	0.000	0.000	0.000
13,200.00	90.00	179.60	9,800.00	-3,040.09	-1,199.63	3,031.64	0.000	0.000	0.000
13,300.00	90.00	179.60	9,800.00	-3,140.08	-1,198.93	3,131.64	0.000	0.000	0.000
13,400.00	90.00	179.60	9,800.00	-3,240.08	-1,198.24	3,231.64	0.000	0.000	0.000
13,500.00	90.00	179.60	9,800.00	-3,340.08	-1,197.54	3,331.64	0.000	0.000	0.000
13,600.00	90.00	179.60	9,800.00	-3,440.08	-1,196.85	3,431.64	0.000	0.000	0.000
13,700.00	90.00	179.60	9,800.00	-3,540.07	-1,196.15	3,531.64	0.000	0.000	0.000
13,800.00	90.00	179.60	9,800.00	-3,640.07	-1,195.45	3,631.64	0.000	0.000	0.000
13,900.00	90.00	179.60	9,800.00	-3,740.07	-1,194.76	3,731.64	0.000	0.000	0.000
14,000.00	90.00	179.60	9,800.00	-3,840.07	-1,194.06	3,831.64	0.000	0.000	0.000
14,100.00	90.00	179.60	9,800.00	-3,940.06	-1,193.36	3,931.64	0.000	0.000	0.000
14,200.00	90.00	179.60	9,800.00	-4,040.06	-1,192.67	4,031.64	0.000	0.000	0.000
14,300.00	90.00	179.60	9,800.00	-4,140.06	-1,191.97	4,131.64	0.000	0.000	0.000
14,400.00	90.00	179.60	9,800.00	-4,240.06	-1,191.28	4,231.64	0.000	0.000	0.000
14,500.00	90.00	179.60	9,800.00	-4,340.06	-1,190.58	4,331.64	0.000	0.000	0.000
14,600.00	90.00	179.60	9,800.00	-4,440.05	-1,189.88	4,431.64	0.000	0.000	0.000
14,700.00	90.00	179.60	9,800.00	-4,540.05	-1,189.19	4,531.64	0.000	0.000	0.000
14,800.00	90.00	179.60	9,800.00	-4,640.05	-1,188.49	4,631.64	0.000	0.000	0.000
14,900.00	90.00	179.60	9,800.00	-4,740.05	-1,187.79	4,731.64	0.000	0.000	0.000
15,000.00	90.00	179.60	9,800.00	-4,840.04	-1,187.10	4,831.64	0.000	0.000	0.000
15,100.00	90.00	179.60	9,800.00	-4,940.04	-1,186.40	4,931.64	0.000	0.000	0.000
15,200.00	90.00	179.60	9,800.00	-5,040.04	-1,185.71	5,031.64	0.000	0.000	0.000
15,300.00	90.00	179.60	9,800.00	-5,140.04	-1,185.01	5,131.64	0.000	0.000	0.000
15,400.00	90.00	179.60	9,800.00	-5,240.03	-1,184.31	5,231.64	0.000	0.000	0.000
15,500.00	90.00	179.60	9,800.00	-5,340.03	-1,183.62	5,331.64	0.000	0.000	0.000
15,600.00	90.00	179.60	9,800.00	-5,440.03	-1,182.92	5,431.64	0.000	0.000	0.000
15,700.00	90.00	179.60	9,800.00	-5,540.03	-1,182.22	5,531.64	0.000	0.000	0.000
15,800.00	90.00	179.60	9,800.00	-5,640.02	-1,181.53	5,631.64	0.000	0.000	0.000
15,900.00	90.00	179.60	9,800.00	-5,740.02	-1,180.83	5,731.64	0.000	0.000	0.000
16,000.00	90.00	179.60	9,800.00	-5,840.02	-1,180.14	5,831.64	0.000	0.000	0.000
16,100.00	90.00	179.60	9,800.00	-5,940.02	-1,179.44	5,931.64	0.000	0.000	0.000
16,200.00	90.00	179.60	9,800.00	-6,040.01	-1,178.74	6,031.64	0.000	0.000	0.000
16,300.00	90.00	179.60	9,800.00	-6,140.01	-1,178.05	6,131.64	0.000	0.000	0.000
16,400.00	90.00	179.60	9,800.00	-6,240.01	-1,177.35	6,231.64	0.000	0.000	0.000
16,500.00	90.00	179.60	9,800.00	-6,340.01	-1,176.65	6,331.64	0.000	0.000	0.000
16,600.00	90.00	179.60	9,800.00	-6,440.00	-1,175.96	6,431.64	0.000	0.000	0.000
16,700.00	90.00	179.60	9,800.00	-6,540.00	-1,175.26	6,531.64	0.000	0.000	0.000
16,800.00	90.00	179.60	9,800.00	-6,640.00	-1,174.57	6,631.64	0.000	0.000	0.000
16,900.00	90.00	179.60	9,800.00	-6,740.00	-1,173.87	6,731.64	0.000	0.000	0.000
17,000.00	90.00	179.60	9,800.00	-6,839.99	-1,173.17	6,831.64	0.000	0.000	0.000
17,100.00	90.00	179.60	9,800.00	-6,939.99	-1,172.48	6,931.64	0.000	0.000	0.000
17,200.00	90.00	179.60	9,800.00	-7,039.99	-1,171.78	7,031.64	0.000	0.000	0.000
17,300.00	90.00	179.60	9,800.00	-7,139.99	-1,171.09	7,131.64	0.000	0.000	0.000
17,400.00	90.00	179.60	9,800.00	-7,239.98	-1,170.39	7,231.64	0.000	0.000	0.000
17,500.00	90.00	179.60	9,800.00	-7,339.98	-1,169.69	7,331.64	0.000	0.000	0.000
17,590.89	90.00	179.60	9,800.00	-7,430.87	-1,169.06	7,422.53	0.000	0.000	0.000
PBHL @ 17590.89' MD/9800.00' TVD									



Aim Directional Services, LLC

Planning Report



Database:	RTOC- EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well 304H
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 304H	North Reference:	Grid
Well:	304H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Planning		
Design:	Plan 0.1		

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
5,620.00	5,620.00	20" Casing	20	24

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: 1.89°/100'
7,489.65	7,373.30	127.98	-543.77	Hold: 35.34° Inc, 283.24° Azm
7,729.86	7,569.24	159.81	-679.04	Drop: 1.89°/100'
9,599.51	9,322.54	287.79	-1,222.80	KOP: 12°/100' @ 9599.51' MD
10,349.51	9,800.00	-189.66	-1,219.48	LP: 10349.51' MD, 90.00° Inc, 179.60° Azm
17,590.89	9,800.00	-7,430.87	-1,169.06	PBHL @ 17590.89' MD/9800.00' 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 112774

CONDITIONS

Operator: Avant Operating, LLC 1515 Wynkoop Street Denver, CO 80202	OGRID: 330396
	Action Number: 112774
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	6/1/2022