

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

Form C-101
August 1, 2011

Permit 303068

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

1. Operator Name and Address MARSHALL & WINSTON INC P.O. Box 50880 Midland, TX 79710		2. OGRID Number 14187
		3. API Number 30-025-49505
4. Property Code 39736	5. Property Name LOCO DINERO 36 STATE COM	6. Well No. 006H

7. Surface Location

UL - Lot C	Section 36	Township 21S	Range 33E	Lot Idn C	Feet From 160	N/S Line N	Feet From 1960	E/W Line W	County Lea
---------------	---------------	-----------------	--------------	--------------	------------------	---------------	-------------------	---------------	---------------

8. Proposed Bottom Hole Location

UL - Lot N	Section 36	Township 21S	Range 33E	Lot Idn N	Feet From 20	N/S Line S	Feet From 1960	E/W Line W	County Lea
---------------	---------------	-----------------	--------------	--------------	-----------------	---------------	-------------------	---------------	---------------

9. Pool Information

WC-025 G-06 S213326D;BONE SPRING	97929
----------------------------------	-------

Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3657
16. Multiple N	17. Proposed Depth 16327	18. Formation Bone Spring	19. Contractor	20. Spud Date 2/5/2022
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	1805	1550	0
Int1	12.25	9.625	40	5305	1300	0
Prod	8.75	5.5	20	16327	2450	0

Casing/Cement Program: Additional Comments

10 ppg brine water will be used to drill the intermediate hole. 9.6 ppg cut brine will be used to drill the intermediate hole from intermediate casing depth to KOP at 10815'. From 10815' (KOP) to TD 9.8-10.5 ppg oil based mud will be used.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	Cameron

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable.		OIL CONSERVATION DIVISION	
Signature:			
Printed Name: Electronically filed by Sherry Roberts	Approved By: Paul F Kautz		
Title: Operations Secretary	Title: Geologist		
Email Address: sroberts@mar-win.com	Approved Date: 11/3/2021	Expiration Date: 11/3/2023	
Date: 11/1/2021	Phone: 432-684-6373	Conditions of Approval Attached	

DISTRICT I
1025 N. FRANKLIN DR., SUITE 200, NM 87504
Phone: (505) 399-6161 Fax: (505) 399-6162

DISTRICT II
511 E. FIRST ST., ALBUQUERQUE, NM 87102
Phone: (505) 748-1888 Fax: (505) 748-9728

DISTRICT III
1000 N. GAZDAR RD., ALBUQUERQUE, NM 87104
Phone: (505) 399-6178 Fax: (505) 399-6179

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 478-3400 Fax: (505) 478-3401

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-49505	Pool Code 97929	Pool Name WC-025 G 06 5213324D; Bone Springs
Property Code 39736	Property Name LOCO DINERO 38 STATE COM	Well Number 6H
GRID No. 14187	Operator Name MARSHALL & WINSTON, INC.	Elevation 3657.4'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	36	21-S	33-E		160	NORTH	1960	WEST	LEA

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
N	36	21-S	33-E		20	SOUTH	1960	WEST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

**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**

	OPERATOR CERTIFICATION I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>T. Passmore</i> 9/28/21 Signature Date Todd Passmore Printed Name tpassmore@mar-wln.com E-mail Address
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. AUGUST 26, 2021 Date of Survey Signature & Seal of Professional Surveyor Chad L. Hargrow 9/8/21 Certificate No. CHAD HARGROW 17777 W.O. #21-760 DRAWN BY: AH	

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

Form APD Comments

Permit 303068

PERMIT COMMENTS

Operator Name and Address: MARSHALL & WINSTON INC [14187] P.O. Box 50880 Midland, TX 79710		API Number: 30-025-49505
		Well: LOCO DINERO 36 STATE COM #006H
Created By	Comment	Comment Date
pkautz	HOLD FOR NGMP	11/2/2021

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

Form APD Conditions

Permit 303068

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: MARSHALL & WINSTON INC [14187] P.O. Box 50880 Midland, TX 79710	API Number: 30-025-49505
	Well: LOCO DINERO 36 STATE COM #006H

OCD Reviewer	Condition
pkautz	Notify OCD 24 hours prior to casing & cement
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud

Marshall & Winston, Inc.

Lea County, NM (NAD83 NME)

Loco Dinero 36 State Com 3U #6H

3U #6H

Planning

Lateral 1r0

Anticollision Report

26 October, 2021

Aim Directional Services, LLC

Anticollision Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #6H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	EDMRESTORED
Reference Design:	Lateral 1r0	Offset TVD Reference:	Offset Datum

Reference	Lateral 1r0
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 centre distance of 100,000.00usft
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	10/26/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	16,327.13	Lateral 1r0 (Planning)	MWD+HDGM	OWSG MWD + HDGM	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Loco Dinero 35 State Com 3U #5H						
35 St Com 3U #5H - Office - Drilling - Surveys	12,526.81	12,335.52	1,495.62	1,417.67	19.187	CC
35 St Com 3U #5H - Office - Drilling - Surveys	16,300.00	16,093.00	1,500.99	1,338.25	9.223	ES
35 St Com 3U #5H - Office - Drilling - Surveys	16,328.12	16,093.00	1,501.56	1,338.57	9.213	SF
Loco Dinero 36 State Com 2L #4H						
36 St Com 2L #4H - Office - Drilling - Surveys	3,714.69	3,714.03	1,598.50	1,576.72	73.409	CC
36 St Com 2L #4H - Office - Drilling - Surveys	15,800.00	15,336.17	1,650.69	1,501.50	11.065	ES
36 St Com 2L #4H - Office - Drilling - Surveys	16,328.12	15,843.00	1,668.07	1,505.92	10.287	SF
Loco Dinero 36 State Com 3U #7H						
3U #7H - Planning - Lateral 1r0	16,328.12	16,373.75	1,489.87	1,322.53	8.903	CC, ES, SF

Offset Design: Loco Dinero 35 State Com 3U #5H - 35 St Com 3U #5H - Office - Drilling - Surveys												
Survey Program: 100-GYRO-NS-CT, 5446-MWD+HDGM												
Rule Assigned:												
Reference	Offset	Semi Major Axis	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre	Distance	Minimum Separation	Separation Factor	Warning	Offset Site Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		Offset Well Error:	0.00 usft
0.00	0.00	0.00	0.00	0.00	0.00	-90.36	-9.80	-1,560.00	1,560.03			
100.00	100.00	108.43	108.42	0.13	0.17	-90.33	-9.09	-1,559.65	1,559.70	1,559.40	0.30	5,205.251
200.00	200.00	205.68	205.67	0.49	0.51	-90.29	-7.91	-1,559.17	1,559.20	1,558.20	1.00	1,556.535
300.00	300.00	307.32	307.30	0.85	0.87	-90.25	-6.68	-1,558.68	1,558.72	1,557.00	1.72	907.906
400.00	400.00	405.21	405.18	1.21	1.21	-90.22	-5.86	-1,558.24	1,558.26	1,555.84	2.42	644.739
500.00	500.00	504.50	504.47	1.57	1.55	-90.20	-5.44	-1,557.87	1,557.89	1,554.77	3.12	499.137
600.00	600.00	602.20	602.17	1.93	1.89	-90.19	-5.15	-1,557.61	1,557.62	1,553.80	3.82	407.731
700.00	700.00	702.98	702.95	2.29	2.25	-90.18	-4.90	-1,557.38	1,557.40	1,552.87	4.53	343.771
800.00	800.00	800.29	800.26	2.64	2.59	-90.17	-4.73	-1,557.23	1,557.24	1,552.01	5.23	297.837
900.00	900.00	900.00	899.97	3.00	2.94	-90.17	-4.66	-1,557.17	1,557.18	1,551.24	5.93	262.375
1,000.00	1,000.00	1,000.00	999.97	3.36	3.28	-90.17	-4.75	-1,557.09	1,557.10	1,550.46	6.64	234.421
1,035.98	1,035.98	1,035.11	1,035.08	3.49	3.41	-90.18	-4.86	-1,557.07	1,557.08	1,550.18	6.89	225.869
1,100.00	1,100.00	1,095.96	1,095.93	3.72	3.62	-90.19	-5.16	-1,557.13	1,557.14	1,549.81	7.34	212.280
1,200.00	1,200.00	1,193.84	1,193.80	4.08	3.96	-90.22	-5.89	-1,557.40	1,557.42	1,549.38	8.04	193.828
1,300.00	1,300.00	1,294.57	1,294.53	4.44	4.31	-90.25	-6.80	-1,557.72	1,557.74	1,549.00	8.75	178.126
1,400.00	1,400.00	1,394.39	1,394.34	4.79	4.66	-90.28	-7.73	-1,558.01	1,558.04	1,548.59	9.45	164.832
1,500.00	1,500.00	1,493.07	1,493.03	5.15	5.00	-90.32	-8.71	-1,558.35	1,558.38	1,548.23	10.16	153.451

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

Aim Directional Services, LLC

Anticollision Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #6H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	EDMRESTORED
Reference Design:	Lateral 1r0	Offset TVD Reference:	Offset Datum

Offset Design: Loco Dinero 35 State Com 3U #5H - 35 St Com 3U #5H - Office - Drilling - Surveys													Offset Site Error: 0.00 usft
Survey Program:	100-GYRO-NS-CT, 5446-MWD+HDM						Rule Assigned:						Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis	Reference	Offset	Highside	Offset Wellbore Centre	Distance	Between	Between	Minimum	Separation	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	
1,600.00	1,600.00	1,592.24	1,592.18	5.51	5.35	-90.36	-9.68	-1,558.76	1,558.80	1,547.94	10.86	143.529	
1,700.00	1,700.00	1,694.11	1,694.06	5.87	5.71	-90.39	-10.65	-1,559.15	1,559.19	1,547.62	11.58	134.702	
1,800.00	1,800.00	1,800.56	1,800.50	6.23	6.08	-90.43	-11.74	-1,559.27	1,559.32	1,547.01	12.31	126.713	
1,900.00	1,900.00	1,907.55	1,907.48	6.59	6.45	-90.47	-12.89	-1,558.92	1,559.00	1,545.96	13.04	119.567	
2,000.00	2,000.00	2,011.29	2,011.21	6.95	6.82	-90.52	-14.15	-1,558.22	1,558.33	1,544.57	13.76	113.251	
2,100.00	2,100.00	2,112.62	2,112.53	7.30	7.17	-90.56	-15.23	-1,557.36	1,557.49	1,543.02	14.47	107.614	
2,200.00	2,200.00	2,210.07	2,209.97	7.66	7.51	-90.59	-16.05	-1,556.61	1,556.73	1,541.56	15.17	102.603	
2,300.00	2,300.00	2,311.06	2,310.96	8.02	7.86	-90.62	-16.78	-1,555.84	1,555.97	1,540.09	15.88	97.960	
2,400.00	2,400.00	2,406.22	2,406.12	8.38	8.20	-90.64	-17.27	-1,555.27	1,555.38	1,538.80	16.57	93.839	
2,500.00	2,500.00	2,505.97	2,505.86	8.74	8.55	-90.65	-17.58	-1,554.81	1,554.93	1,537.65	17.28	89.974	
2,600.00	2,600.00	2,602.67	2,602.56	9.10	8.88	-90.65	-17.76	-1,554.50	1,554.61	1,536.63	17.98	86.471	
2,700.00	2,700.00	2,709.71	2,709.60	9.45	9.26	-90.66	-17.82	-1,554.07	1,554.21	1,535.50	18.71	83.066	
2,800.00	2,800.00	2,833.72	2,833.60	9.81	9.69	-90.65	-17.64	-1,552.20	1,552.68	1,533.18	19.50	79.628	
2,900.00	2,900.00	2,944.72	2,944.55	10.17	10.08	-90.64	-17.18	-1,549.26	1,550.02	1,529.78	20.24	76.571	
3,000.00	3,000.00	3,047.80	3,047.58	10.53	10.44	-90.61	-16.55	-1,546.11	1,546.96	1,525.99	20.96	73.802	
3,100.00	3,100.00	3,150.46	3,150.19	10.89	10.80	-90.59	-15.89	-1,542.83	1,543.76	1,522.08	21.68	71.215	
3,200.00	3,200.00	3,253.77	3,253.44	11.25	11.17	-90.56	-15.18	-1,539.29	1,540.33	1,517.93	22.40	68.777	
3,300.00	3,300.00	3,353.46	3,353.06	11.61	11.52	-90.54	-14.48	-1,535.75	1,536.77	1,513.66	23.10	66.518	
3,400.00	3,400.00	3,452.27	3,451.81	11.96	11.87	-90.52	-13.90	-1,532.34	1,533.31	1,509.51	23.81	64.404	
3,500.00	3,500.00	3,551.49	3,550.97	12.32	12.22	-90.50	-13.28	-1,528.95	1,529.89	1,505.37	24.51	62.409	
3,600.00	3,600.00	3,650.12	3,649.54	12.68	12.57	-90.49	-12.97	-1,525.65	1,526.54	1,501.32	25.22	60.534	
3,700.00	3,700.00	3,745.52	3,744.89	13.04	12.91	-90.48	-12.65	-1,522.59	1,523.33	1,497.42	25.91	58.789	
3,800.00	3,800.00	3,839.37	3,838.71	13.40	13.24	-90.46	-12.28	-1,519.99	1,520.56	1,493.96	26.60	57.162	
3,900.00	3,900.00	3,936.66	3,935.96	13.76	13.58	-90.45	-11.90	-1,517.56	1,518.06	1,490.76	27.30	55.605	
4,000.00	4,000.00	4,036.02	4,035.30	14.11	13.93	-90.44	-11.63	-1,515.19	1,515.67	1,487.66	28.01	54.117	
4,100.00	4,100.00	4,136.87	4,136.12	14.47	14.29	-90.43	-11.39	-1,512.75	1,513.25	1,484.53	28.72	52.692	
4,200.00	4,200.00	4,231.71	4,230.93	14.83	14.62	-90.42	-11.19	-1,510.48	1,510.85	1,481.44	29.41	51.371	
4,300.00	4,300.00	4,316.79	4,316.00	15.19	14.92	-90.42	-11.17	-1,509.10	1,509.24	1,479.17	30.07	50.192	
4,400.00	4,400.00	4,400.00	4,399.21	15.55	15.21	-90.42	-11.01	-1,508.59	1,508.63	1,477.91	30.72	49.111	
4,432.01	4,432.01	4,431.90	4,431.11	15.66	15.32	-90.41	-10.90	-1,508.57	1,508.61	1,477.67	30.94	48.752	
4,500.00	4,500.00	4,496.63	4,495.84	15.91	15.55	-90.41	-10.75	-1,508.64	1,508.69	1,477.27	31.41	48.027	
4,600.00	4,600.00	4,596.50	4,595.71	16.27	15.89	-90.40	-10.55	-1,508.87	1,508.91	1,476.79	32.12	46.980	
4,700.00	4,700.00	4,698.13	4,697.34	16.62	16.25	-90.39	-10.23	-1,509.05	1,509.09	1,476.25	32.83	45.966	
4,800.00	4,800.00	4,797.46	4,796.66	16.98	16.59	-90.37	-9.71	-1,509.19	1,509.22	1,475.69	33.53	45.005	
4,900.00	4,900.00	4,898.09	4,897.29	17.34	16.94	-90.34	-9.07	-1,509.34	1,509.36	1,475.12	34.24	44.077	
5,000.00	5,000.00	5,000.98	5,000.18	17.70	17.30	-90.32	-8.34	-1,509.37	1,509.39	1,474.43	34.96	43.173	
5,100.00	5,100.00	5,102.22	5,101.41	18.06	17.65	-90.28	-7.46	-1,509.26	1,509.28	1,473.60	35.67	42.308	
5,200.00	5,200.00	5,202.74	5,201.93	18.42	18.00	-90.25	-6.54	-1,509.09	1,509.11	1,472.72	36.38	41.478	
5,300.00	5,300.00	5,301.13	5,300.32	18.77	18.34	-90.21	-5.65	-1,508.96	1,508.97	1,471.89	37.09	40.689	
5,350.00	5,350.00	5,351.13	5,350.31	18.95	18.52	-90.19	-5.13	-1,508.92	1,508.93	1,471.49	37.44	40.303	
5,400.00	5,400.00	5,400.00	5,399.18	19.13	18.69	-89.75	-4.50	-1,508.89	1,508.89	1,471.10	37.79	39.929	
5,426.39	5,426.38	5,426.71	5,425.89	19.23	18.73	-89.76	-4.12	-1,508.87	1,508.87	1,470.94	37.93	39.779	
5,446.32	5,446.30	5,446.06	5,445.24	19.30	18.77	-89.77	-3.84	-1,508.87	1,508.87	1,470.83	38.04	39.669	
5,500.00	5,499.96	5,498.18	5,497.35	19.49	18.86	-89.79	-3.03	-1,508.91	1,508.90	1,470.58	38.32	39.376	
5,600.00	5,599.93	5,595.19	5,594.35	19.85	18.93	-89.83	-1.44	-1,509.12	1,509.10	1,470.35	38.75	38.948	
5,700.00	5,699.89	5,694.45	5,693.60	20.21	18.94	-89.87	0.09	-1,509.48	1,509.45	1,470.33	39.12	38.589	
5,800.00	5,799.86	5,796.75	5,795.88	20.57	18.96	-89.91	1.66	-1,509.79	1,509.74	1,470.25	39.49	38.228	
5,900.00	5,899.82	5,893.00	5,892.12	20.92	18.98	-89.96	2.88	-1,510.16	1,510.11	1,470.24	39.87	37.872	
6,000.00	5,999.79	5,991.98	5,991.10	21.28	19.02	-90.02	3.91	-1,510.70	1,510.65	1,470.38	40.26	37.518	
6,100.00	6,099.75	6,088.45	6,087.56	21.64	19.05	-90.09	4.85	-1,511.37	1,511.33	1,470.67	40.66	37.171	
6,200.00	6,199.72	6,191.13	6,190.23	22.00	19.10	-90.15	5.79	-1,511.96	1,511.90	1,470.84	41.06	36.818	
6,300.00	6,299.68	6,287.91	6,287.01	22.36	19.15	-90.22	6.73	-1,512.68	1,512.65	1,471.18	41.47	36.475	

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

Aim Directional Services, LLC

Anticollision Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #6H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	EDMRESTORED
Reference Design:	Lateral 1r0	Offset TVD Reference:	Offset Datum

Offset Design: Loco Dinero 35 State Com 3U #5H - 35 St Com 3U #5H - Office - Drilling - Surveys													Offset Site Error:
Survey Program: 100-GYRO-NS-CT, 5446-MWD+HDMG													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)					
6,400.00	6,399.64	6,386.76	6,385.85	22.72	19.21	-90.28	7.65	-1,513.45	1,513.42	1,471.53	41.89	36.132	
6,500.00	6,499.61	6,482.70	6,481.78	23.08	19.27	-90.34	8.56	-1,514.41	1,514.43	1,472.12	42.30	35.798	
6,600.00	6,599.57	6,585.15	6,584.22	23.43	19.34	-90.40	9.68	-1,515.57	1,515.56	1,472.82	42.74	35.463	
6,700.00	6,699.54	6,682.29	6,681.35	23.79	19.42	-90.46	10.75	-1,516.54	1,516.56	1,473.39	43.17	35.131	
6,800.00	6,799.50	6,780.87	6,779.91	24.15	19.50	-90.52	11.68	-1,517.74	1,517.79	1,474.18	43.61	34.806	
6,900.00	6,899.47	6,881.31	6,880.34	24.51	19.59	-90.59	12.69	-1,518.99	1,519.04	1,474.99	44.06	34.480	
7,000.00	6,999.43	6,988.02	6,987.04	24.87	19.69	-90.65	13.82	-1,520.06	1,520.06	1,475.54	44.52	34.144	
7,100.00	7,099.40	7,094.55	7,093.56	25.23	19.80	-90.72	14.73	-1,520.63	1,520.60	1,475.62	44.99	33.800	
7,200.00	7,199.36	7,195.56	7,194.57	25.58	19.91	-90.80	15.22	-1,520.88	1,520.87	1,475.42	45.46	33.458	
7,300.00	7,299.33	7,296.69	7,295.70	25.94	20.02	-90.88	15.89	-1,521.16	1,521.18	1,475.25	45.93	33.120	
7,400.00	7,399.29	7,391.86	7,390.87	26.30	20.14	-90.94	16.74	-1,521.43	1,521.48	1,475.08	46.40	32.790	
7,500.00	7,499.25	7,488.53	7,487.53	26.66	20.26	-91.02	17.38	-1,522.06	1,522.17	1,475.29	46.88	32.470	
7,600.00	7,599.22	7,598.63	7,597.63	27.02	20.40	-91.10	17.96	-1,522.55	1,522.65	1,475.27	47.38	32.135	
7,700.00	7,699.18	7,710.79	7,709.78	27.38	20.55	-91.21	18.25	-1,522.14	1,522.33	1,474.44	47.89	31.788	
7,800.00	7,799.15	7,814.46	7,813.45	27.74	20.69	-91.31	18.29	-1,521.12	1,521.41	1,473.02	48.39	31.443	
7,900.00	7,899.11	7,915.15	7,914.14	28.09	20.83	-91.41	18.34	-1,520.16	1,520.51	1,471.63	48.88	31.104	
8,000.00	7,999.08	8,015.73	8,014.71	28.45	20.97	-91.51	18.37	-1,519.04	1,519.47	1,470.08	49.39	30.767	
8,100.00	8,099.04	8,117.13	8,116.11	28.81	21.12	-91.61	18.39	-1,517.92	1,518.43	1,468.53	49.90	30.432	
8,200.00	8,199.01	8,222.08	8,221.05	29.17	21.28	-91.73	18.16	-1,516.50	1,517.17	1,466.75	50.41	30.095	
8,300.00	8,298.97	8,319.88	8,318.83	29.53	21.43	-91.86	17.38	-1,515.06	1,515.81	1,464.88	50.93	29.765	
8,400.00	8,398.93	8,418.25	8,417.19	29.89	21.60	-91.97	17.12	-1,513.80	1,514.62	1,463.18	51.44	29.442	
8,500.00	8,498.90	8,520.57	8,519.50	30.25	21.77	-92.05	17.83	-1,512.39	1,513.31	1,461.33	51.98	29.115	
8,600.00	8,598.86	8,615.87	8,614.79	30.60	21.94	-92.11	18.74	-1,511.19	1,512.11	1,459.61	52.50	28.800	
8,700.00	8,698.83	8,709.32	8,708.24	30.96	22.11	-92.18	19.43	-1,510.39	1,511.32	1,458.29	53.03	28.498	
8,800.00	8,798.79	8,804.93	8,803.84	31.32	22.28	-92.26	20.03	-1,509.94	1,510.92	1,457.35	53.57	28.205	
8,882.64	8,881.40	8,883.23	8,882.13	31.62	22.43	-92.32	20.42	-1,509.72	1,510.76	1,456.75	54.01	27.970	
8,900.00	8,898.76	8,899.11	8,898.02	31.68	22.46	-92.34	20.50	-1,509.72	1,510.77	1,456.67	54.11	27.923	
9,000.00	8,998.72	8,993.37	8,992.28	32.04	22.64	-92.41	20.93	-1,509.94	1,511.10	1,456.45	54.64	27.653	
9,100.00	9,098.69	9,084.15	9,083.06	32.40	22.82	-92.50	20.97	-1,510.50	1,511.82	1,456.65	55.18	27.400	
9,200.00	9,198.65	9,172.03	9,170.92	32.76	22.99	-92.59	21.04	-1,511.70	1,513.31	1,457.61	55.70	27.168	
9,300.00	9,298.61	9,280.46	9,279.34	33.12	23.21	-92.68	21.36	-1,513.60	1,515.19	1,458.90	56.28	26.922	
9,400.00	9,398.58	9,389.75	9,388.62	33.47	23.42	-92.82	20.63	-1,514.48	1,516.15	1,459.29	56.86	26.664	
9,500.00	9,498.54	9,484.44	9,483.29	33.83	23.61	-92.99	18.59	-1,515.11	1,517.07	1,459.66	57.41	26.426	
9,600.00	9,598.51	9,584.21	9,583.02	34.19	23.82	-93.17	16.35	-1,515.92	1,518.17	1,460.20	57.97	26.188	
9,700.00	9,698.47	9,680.46	9,679.26	34.55	24.02	-93.32	14.81	-1,516.79	1,519.32	1,460.79	58.53	25.958	
9,800.00	9,798.44	9,776.79	9,775.56	34.91	24.22	-93.48	12.96	-1,518.13	1,520.99	1,461.90	59.09	25.740	
9,900.00	9,898.40	9,881.98	9,880.74	35.27	24.45	-93.61	12.33	-1,519.27	1,522.27	1,462.59	59.68	25.507	
10,000.00	9,998.37	9,976.33	9,975.08	35.63	24.66	-93.68	12.85	-1,520.50	1,523.71	1,463.46	60.25	25.290	
10,100.00	10,098.33	10,082.46	10,081.21	35.99	24.90	-93.78	13.05	-1,522.02	1,525.30	1,464.45	60.85	25.066	
10,200.00	10,198.29	10,184.47	10,183.21	36.34	25.14	-93.90	12.35	-1,522.93	1,526.42	1,464.98	61.44	24.843	
10,300.00	10,298.26	10,280.00	10,278.72	36.70	25.35	-94.04	11.08	-1,523.89	1,527.71	1,465.69	62.02	24.633	
10,400.00	10,398.22	10,385.42	10,384.14	37.06	25.60	-94.19	9.93	-1,524.87	1,528.92	1,466.29	62.62	24.414	
10,500.00	10,498.19	10,478.45	10,477.16	37.42	25.82	-94.29	9.70	-1,525.85	1,530.19	1,466.99	63.20	24.212	
10,562.07	10,560.24	10,535.03	10,533.73	37.64	25.95	-94.33	10.04	-1,526.73	1,531.24	1,467.68	63.56	24.092	
10,600.00	10,598.16	10,571.40	10,570.09	37.78	26.04	-94.35	10.45	-1,527.40	1,531.97	1,468.19	63.78	24.019	
10,700.00	10,698.15	10,670.60	10,669.26	38.14	26.29	-94.36	11.71	-1,529.31	1,533.86	1,469.48	64.38	23.824	
10,714.85	10,713.00	10,685.47	10,684.13	38.19	26.32	-94.79	11.91	-1,529.60	1,534.14	1,469.66	64.47	23.795	
10,800.00	10,798.15	10,749.37	10,747.99	38.50	26.48	-94.82	10.83	-1,531.11	1,536.27	1,471.35	64.92	23.665	
10,815.35	10,813.50	10,760.71	10,759.30	38.55	26.51	-94.85	10.01	-1,531.42	1,536.78	1,471.78	65.00	23.644	
10,825.00	10,823.15	10,767.83	10,766.38	38.58	26.52	85.55	9.37	-1,531.62	1,537.12	1,472.07	65.04	23.632	
10,850.00	10,848.12	10,789.36	10,787.75	38.66	26.58	85.39	6.84	-1,532.21	1,537.97	1,472.80	65.17	23.599	
10,875.00	10,872.99	10,813.33	10,811.40	38.74	26.63	85.24	2.97	-1,532.81	1,538.75	1,473.45	65.31	23.562	

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

Aim Directional Services, LLC

Anticollision Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #6H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	EDMRESTORED
Reference Design:	Lateral 1r0	Offset TVD Reference:	Offset Datum

Offset Design: Loco Dinero 35 State Com 3U #5H - 35 St Com 3U #5H - Office - Drilling - Surveys													Offset Site Error: 0.00 usft
Survey Program:	100-GYRO-NS-CT, 5446-MWD+HDGM						Rule Assigned:						Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis	Reference	Offset	Highside	Offset Wellbore Centre	Distance	Between	Between	Minimum	Separation	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	
10,900.00	10,897.70	10,856.72	10,853.66	38.82	26.74	85.06	-6.80	-1,533.41	1,539.33	1,473.83	65.50	23.501	
10,925.00	10,922.19	10,899.00	10,893.83	38.90	26.83	84.87	-19.91	-1,533.10	1,539.45	1,473.76	65.68	23.438	
10,950.00	10,946.37	10,964.24	10,952.95	38.98	26.98	84.48	-47.26	-1,530.57	1,538.91	1,472.99	65.91	23.347	
10,975.00	10,970.19	10,983.95	10,970.12	39.05	27.02	84.43	-56.87	-1,529.46	1,538.07	1,472.04	66.03	23.293	
11,000.00	10,993.58	11,004.07	10,987.32	39.12	27.06	84.40	-67.25	-1,528.32	1,537.19	1,471.05	66.15	23.239	
11,025.00	11,016.48	11,025.60	11,005.28	39.19	27.11	84.37	-79.06	-1,527.08	1,536.26	1,470.00	66.27	23.183	
11,050.00	11,038.82	11,074.55	11,044.24	39.25	27.22	84.18	-108.48	-1,523.79	1,535.23	1,468.78	66.45	23.104	
11,075.00	11,060.54	11,125.87	11,082.11	39.32	27.34	83.96	-142.72	-1,518.77	1,533.40	1,466.76	66.64	23.011	
11,100.00	11,081.58	11,149.03	11,097.97	39.38	27.40	83.99	-159.39	-1,516.17	1,531.31	1,464.55	66.76	22.937	
11,125.00	11,101.89	11,167.88	11,110.23	39.43	27.45	84.07	-173.56	-1,514.03	1,529.18	1,462.31	66.87	22.867	
11,150.00	11,121.41	11,179.00	11,117.16	39.49	27.48	84.23	-182.15	-1,512.77	1,527.06	1,460.10	66.96	22.805	
11,175.00	11,140.09	11,194.98	11,126.81	39.55	27.52	84.35	-194.78	-1,511.03	1,524.97	1,457.91	67.06	22.740	
11,200.00	11,157.87	11,206.41	11,133.51	39.60	27.55	84.52	-203.96	-1,509.89	1,523.00	1,455.85	67.15	22.682	
11,225.00	11,174.71	11,223.00	11,142.94	39.66	27.60	84.66	-217.52	-1,508.37	1,521.14	1,453.90	67.24	22.621	
11,250.00	11,190.55	11,223.00	11,142.94	39.71	27.60	84.87	-217.52	-1,508.37	1,519.38	1,452.09	67.29	22.580	
11,275.00	11,205.37	11,242.49	11,153.48	39.77	27.65	85.02	-233.84	-1,506.77	1,517.66	1,450.27	67.39	22.519	
11,300.00	11,219.11	11,255.05	11,159.91	39.82	27.69	85.18	-244.59	-1,505.83	1,516.06	1,448.59	67.48	22.468	
11,325.00	11,231.74	11,268.00	11,166.24	39.87	27.72	85.35	-255.85	-1,504.95	1,514.56	1,447.00	67.56	22.418	
11,350.00	11,243.22	11,268.00	11,166.24	39.92	27.72	85.51	-255.85	-1,504.95	1,513.25	1,445.66	67.60	22.386	
11,375.00	11,253.52	11,285.74	11,174.41	39.97	27.78	85.68	-271.56	-1,503.94	1,511.97	1,444.27	67.70	22.334	
11,400.00	11,262.62	11,294.74	11,178.33	40.02	27.81	85.83	-279.66	-1,503.55	1,510.92	1,443.15	67.77	22.295	
11,425.00	11,270.48	11,313.00	11,185.78	40.07	27.86	86.02	-296.31	-1,503.00	1,510.12	1,442.24	67.87	22.250	
11,450.00	11,277.10	11,313.00	11,185.78	40.12	27.86	86.11	-296.31	-1,503.00	1,509.33	1,441.42	67.91	22.225	
11,475.00	11,282.44	11,327.13	11,191.16	40.17	27.90	86.27	-309.37	-1,502.74	1,508.76	1,440.76	68.00	22.187	
11,500.00	11,286.50	11,341.68	11,196.42	40.21	27.95	86.44	-322.94	-1,502.55	1,508.28	1,440.18	68.10	22.149	
11,525.00	11,289.26	11,358.00	11,201.97	40.26	28.00	86.63	-338.29	-1,502.42	1,507.90	1,439.70	68.20	22.111	
11,550.00	11,290.72	11,372.74	11,206.62	40.30	28.05	86.82	-352.27	-1,502.37	1,507.61	1,439.31	68.30	22.075	
11,562.44	11,290.96	11,381.13	11,209.11	40.33	28.08	86.92	-360.28	-1,502.36	1,507.49	1,439.14	68.35	22.056	
11,600.00	11,291.18	11,408.51	11,216.37	40.40	28.17	87.19	-386.68	-1,502.40	1,507.32	1,438.80	68.52	21.998	
11,625.10	11,291.34	11,432.20	11,221.91	40.45	28.25	87.39	-409.72	-1,502.45	1,507.31	1,438.64	68.66	21.952	
11,700.00	11,291.79	11,500.63	11,233.60	40.62	28.51	87.82	-477.11	-1,502.55	1,507.50	1,438.40	69.09	21.818	
11,800.00	11,292.40	11,603.19	11,240.18	40.89	28.92	88.05	-579.41	-1,502.51	1,508.04	1,438.26	69.79	21.609	
11,900.00	11,293.01	11,723.72	11,242.65	41.21	29.49	88.12	-699.90	-1,501.11	1,507.63	1,436.95	70.68	21.331	
12,000.00	11,293.62	11,857.33	11,248.97	41.58	30.23	88.32	-833.31	-1,497.55	1,505.69	1,433.90	71.79	20.975	
12,100.00	11,294.23	11,945.46	11,252.79	41.99	30.79	88.45	-921.30	-1,494.56	1,502.97	1,430.21	72.76	20.656	
12,200.00	11,294.84	12,052.21	11,255.67	42.46	31.51	88.53	-1,027.94	-1,490.53	1,499.92	1,425.97	73.95	20.283	
12,300.00	11,295.45	12,125.03	11,257.73	42.96	32.04	88.59	-1,100.70	-1,488.58	1,497.97	1,422.98	74.98	19.977	
12,400.00	11,296.06	12,226.25	11,259.81	43.51	32.81	88.64	-1,201.88	-1,486.66	1,496.84	1,420.53	76.31	19.616	
12,500.00	11,296.67	12,317.82	11,260.26	44.10	33.54	88.64	-1,293.43	-1,484.86	1,495.70	1,418.07	77.63	19.266	
12,526.81	11,296.83	12,335.52	11,260.35	44.27	33.69	88.64	-1,311.13	-1,484.66	1,495.62	1,417.67	77.95	19.187 CC	
12,600.00	11,297.28	12,388.00	11,261.01	44.73	34.13	88.65	-1,363.60	-1,484.72	1,496.23	1,417.39	78.84	18.978	
12,700.00	11,297.89	12,488.42	11,262.88	45.40	35.00	88.70	-1,464.00	-1,485.56	1,497.84	1,417.46	80.38	18.634	
12,800.00	11,298.50	12,606.80	11,264.52	46.10	36.08	88.74	-1,582.37	-1,485.55	1,498.63	1,416.46	82.17	18.238	
12,881.51	11,299.00	12,690.19	11,265.12	46.71	36.87	88.74	-1,665.75	-1,484.71	1,498.46	1,414.90	83.56	17.933	
12,900.00	11,299.11	12,705.34	11,265.30	46.84	37.01	88.74	-1,680.90	-1,484.61	1,498.48	1,414.63	83.84	17.873	
13,000.00	11,299.72	12,797.89	11,267.04	47.61	37.92	88.79	-1,773.43	-1,484.51	1,499.13	1,413.61	85.52	17.530	
13,100.00	11,300.33	12,912.81	11,269.25	48.42	39.08	88.85	-1,888.33	-1,484.02	1,499.50	1,412.02	87.48	17.140	
13,196.18	11,300.91	13,004.92	11,270.37	49.22	40.04	88.87	-1,980.43	-1,483.08	1,499.28	1,410.04	89.24	16.800	
13,200.00	11,300.94	13,008.46	11,270.40	49.25	40.07	88.87	-1,983.97	-1,483.06	1,499.29	1,409.97	89.31	16.787	
13,300.00	11,301.55	13,096.58	11,270.42	50.11	41.01	88.85	-2,072.08	-1,482.70	1,499.69	1,408.59	91.10	16.461	
13,400.00	11,302.16	13,193.00	11,270.63	51.00	42.05	88.83	-2,168.50	-1,482.51	1,500.32	1,407.29	93.03	16.127	
13,500.00	11,302.77	13,283.00	11,273.18	51.91	43.04	88.91	-2,258.46	-1,482.92	1,501.56	1,406.62	94.94	15.817	

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

Aim Directional Services, LLC

Anticollision Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #6H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	EDMRESTORED
Reference Design:	Lateral 1r0	Offset TVD Reference:	Offset Datum

Offset Design: Loco Dinero 35 State Com 3U #5H - 35 St Com 3U #5H - Office - Drilling - Surveys													Offset Site Error: 0.00 usft
Survey Program: 100-GYRO-NS-CT, 5446-MWD+HDGM													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis	Rule Assigned:										
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)					
13,600.00	11,303.37	13,372.00	11,276.77	52.85	44.04	89.03	-2,347.38	-1,484.33	1,503.85	1,406.99	96.86	15.526	
13,700.00	11,303.98	13,467.06	11,280.26	53.81	45.11	89.14	-2,442.35	-1,486.15	1,506.52	1,407.62	98.90	15.233	
13,800.00	11,304.59	13,576.59	11,283.44	54.79	46.37	89.24	-2,551.82	-1,488.07	1,509.05	1,407.90	101.15	14.919	
13,900.00	11,305.20	13,693.75	11,285.45	55.80	47.74	89.29	-2,668.96	-1,488.96	1,510.59	1,407.05	103.53	14.590	
14,000.00	11,305.81	13,822.59	11,286.22	56.82	49.28	89.29	-2,797.79	-1,488.37	1,511.01	1,404.92	106.09	14.243	
14,084.68	11,306.33	13,893.92	11,286.26	57.70	50.14	89.27	-2,869.11	-1,487.08	1,510.24	1,402.41	107.84	14.005	
14,100.00	11,306.42	13,903.64	11,286.33	57.86	50.26	89.27	-2,878.83	-1,487.02	1,510.27	1,402.16	108.11	13.969	
14,200.00	11,307.03	13,981.23	11,287.45	58.92	51.20	89.30	-2,956.41	-1,487.54	1,511.65	1,401.55	110.10	13.729	
14,300.00	11,307.64	14,095.54	11,289.69	59.99	52.60	89.36	-3,070.69	-1,488.45	1,513.27	1,400.68	112.59	13.441	
14,400.00	11,308.25	14,222.15	11,291.56	61.08	54.18	89.40	-3,197.28	-1,487.39	1,513.21	1,397.96	115.25	13.130	
14,500.00	11,308.86	14,333.18	11,292.16	62.19	55.57	89.40	-3,308.29	-1,485.22	1,512.07	1,394.32	117.75	12.841	
14,600.00	11,309.47	14,451.04	11,291.45	63.31	57.08	89.34	-3,426.09	-1,481.65	1,509.84	1,389.49	120.35	12.545	
14,700.00	11,310.08	14,541.17	11,290.16	64.44	58.24	89.27	-3,516.15	-1,478.49	1,507.19	1,384.54	122.65	12.288	
14,800.00	11,310.69	14,635.52	11,289.84	65.59	59.45	89.23	-3,610.47	-1,476.03	1,505.39	1,380.37	125.02	12.041	
14,900.00	11,311.30	14,717.66	11,289.79	66.75	60.51	89.21	-3,692.59	-1,474.28	1,504.10	1,376.85	127.25	11.820	
14,937.78	11,311.53	14,747.00	11,289.81	67.19	60.89	89.21	-3,721.93	-1,473.96	1,504.00	1,375.92	128.07	11.743	
15,000.00	11,311.91	14,806.63	11,289.94	67.92	61.67	89.20	-3,781.56	-1,473.54	1,504.06	1,374.48	129.58	11.608	
15,100.00	11,312.52	14,912.70	11,289.84	69.10	63.05	89.17	-3,887.63	-1,472.75	1,504.13	1,371.99	132.14	11.383	
15,137.22	11,312.74	14,946.45	11,289.48	69.54	63.49	89.15	-3,921.37	-1,472.40	1,504.05	1,371.04	133.02	11.307	
15,200.00	11,313.13	14,996.73	11,289.36	70.29	64.15	89.13	-3,971.65	-1,472.20	1,504.32	1,369.90	134.42	11.191	
15,300.00	11,313.74	15,088.13	11,290.09	71.49	65.34	89.14	-4,063.04	-1,472.58	1,505.52	1,368.71	136.81	11.004	
15,400.00	11,314.35	15,185.99	11,290.88	72.70	66.63	89.15	-4,160.90	-1,473.25	1,507.01	1,367.71	139.30	10.818	
15,500.00	11,314.96	15,301.19	11,290.54	73.91	68.15	89.11	-4,276.10	-1,473.46	1,508.00	1,365.95	142.05	10.616	
15,600.00	11,315.57	15,402.19	11,291.43	75.14	69.49	89.12	-4,377.09	-1,473.22	1,508.57	1,363.95	144.62	10.431	
15,700.00	11,316.17	15,513.54	11,293.29	76.38	70.98	89.16	-4,488.42	-1,472.51	1,508.72	1,361.38	147.35	10.239	
15,800.00	11,316.78	15,627.59	11,294.20	77.62	72.51	89.17	-4,602.46	-1,470.73	1,507.96	1,357.84	150.11	10.045	
15,900.00	11,317.39	15,737.29	11,293.72	78.87	74.00	89.13	-4,712.12	-1,468.10	1,506.37	1,353.54	152.83	9.856	
16,000.00	11,318.00	15,828.84	11,293.05	80.12	75.24	89.08	-4,803.64	-1,465.94	1,504.83	1,349.49	155.34	9.687	
16,100.00	11,318.61	15,933.58	11,291.29	81.39	76.67	88.99	-4,908.33	-1,463.40	1,503.24	1,345.22	158.02	9.513	
16,200.00	11,319.22	16,030.91	11,287.54	82.66	77.99	88.82	-5,005.57	-1,461.27	1,501.94	1,341.33	160.61	9.351	
16,283.44	11,319.73	16,093.00	11,284.57	83.72	78.84	88.69	-5,067.57	-1,459.81	1,500.90	1,338.36	162.53	9.234	
16,300.00	11,319.83	16,093.00	11,284.57	83.93	78.84	88.69	-5,067.57	-1,459.81	1,500.99	1,338.25	162.74	9.223 ES	
16,327.63	11,320.00	16,093.00	11,284.57	84.23	78.84	88.69	-5,067.57	-1,459.81	1,501.55	1,338.56	162.99	9.213	
16,328.12	11,320.00	16,093.00	11,284.57	84.23	78.84	88.69	-5,067.57	-1,459.81	1,501.56	1,338.57	162.99	9.213 SF	

Aim Directional Services, LLC

Anticollision Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #6H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	EDMRESTORED
Reference Design:	Lateral 1r0	Offset TVD Reference:	Offset Datum

Offset Design: Loco Dinero 36 State Com 2L #4H - 36 St Com 2L #4H - Office - Drilling - Surveys													Offset Site Error: 0.00 usft
Survey Program:	440-GYRO-NS-CT, 1866-MWD+HDM						Rule Assigned:						Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis	Reference	Offset	Highside	Offset Wellbore Centre	Distance	Between	Between	Minimum	Separation	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	
0.00	0.00	0.00	0.00	0.00	0.00	-90.36	-10.00	-1,599.90	1,599.93				
100.00	100.00	96.29	96.29	0.13	0.16	-90.36	-10.07	-1,599.99	1,600.02	1,599.73	0.29	5,429.766	
200.00	200.00	193.36	193.36	0.49	0.32	-90.37	-10.27	-1,600.25	1,600.29	1,599.48	0.81	1,964.530	
300.00	300.00	290.42	290.42	0.85	0.49	-90.38	-10.62	-1,600.69	1,600.75	1,599.42	1.33	1,199.512	
400.00	400.00	387.48	387.48	1.21	0.65	-90.40	-11.10	-1,601.31	1,601.39	1,599.54	1.85	863.566	
500.00	500.00	487.66	487.65	1.57	0.90	-90.42	-11.70	-1,602.09	1,602.17	1,599.70	2.47	649.488	
600.00	600.00	591.53	591.51	1.93	1.27	-90.43	-12.16	-1,602.71	1,602.77	1,599.58	3.19	502.702	
700.00	700.00	692.73	692.72	2.29	1.62	-90.44	-12.42	-1,603.14	1,603.20	1,599.30	3.90	411.003	
800.00	800.00	793.28	793.27	2.64	1.97	-90.45	-12.54	-1,603.52	1,603.58	1,598.97	4.61	347.789	
900.00	900.00	892.00	891.98	3.00	2.31	-90.45	-12.51	-1,603.87	1,603.94	1,598.62	5.31	301.806	
1,000.00	1,000.00	991.94	991.92	3.36	2.66	-90.45	-12.51	-1,604.27	1,604.33	1,598.31	6.02	266.373	
1,100.00	1,100.00	1,090.08	1,090.06	3.72	3.01	-90.45	-12.67	-1,604.77	1,604.84	1,598.12	6.73	238.638	
1,200.00	1,200.00	1,191.04	1,191.02	4.08	3.36	-90.46	-13.02	-1,605.35	1,605.42	1,597.99	7.44	215.875	
1,300.00	1,300.00	1,294.19	1,294.17	4.44	3.72	-90.48	-13.58	-1,605.77	1,605.83	1,597.68	8.16	196.888	
1,400.00	1,400.00	1,397.34	1,397.31	4.79	4.08	-90.51	-14.35	-1,605.98	1,606.05	1,597.17	8.88	180.956	
1,500.00	1,500.00	1,495.97	1,495.94	5.15	4.43	-90.54	-15.22	-1,606.12	1,606.20	1,596.62	9.58	167.679	
1,600.00	1,600.00	1,594.18	1,594.15	5.51	4.77	-90.58	-16.13	-1,606.37	1,606.46	1,596.18	10.28	156.253	
1,700.00	1,700.00	1,693.54	1,693.50	5.87	5.12	-90.61	-17.07	-1,606.72	1,606.82	1,595.83	10.99	146.245	
1,800.00	1,800.00	1,794.72	1,794.68	6.23	5.42	-90.64	-17.82	-1,606.97	1,607.07	1,595.43	11.64	138.030	
1,900.00	1,900.00	1,893.36	1,893.32	6.59	5.55	-90.65	-18.22	-1,607.36	1,607.48	1,595.34	12.13	132.477	
2,000.00	2,000.00	2,000.94	2,000.89	6.95	5.58	-90.66	-18.63	-1,607.48	1,607.58	1,595.06	12.53	128.348	
2,100.00	2,100.00	2,102.06	2,102.02	7.30	5.64	-90.67	-18.93	-1,607.27	1,607.38	1,594.45	12.94	124.245	
2,200.00	2,200.00	2,204.80	2,204.75	7.66	5.71	-90.69	-19.34	-1,607.05	1,607.18	1,593.80	13.37	120.189	
2,300.00	2,300.00	2,305.59	2,305.54	8.02	5.81	-90.70	-19.52	-1,606.65	1,606.78	1,592.95	13.83	116.212	
2,400.00	2,400.00	2,402.00	2,401.95	8.38	5.92	-90.70	-19.65	-1,606.40	1,606.52	1,592.23	14.30	112.377	
2,500.00	2,500.00	2,500.22	2,500.18	8.74	6.05	-90.70	-19.62	-1,606.33	1,606.45	1,591.66	14.78	108.667	
2,600.00	2,600.00	2,600.38	2,600.33	9.10	6.19	-90.69	-19.40	-1,606.27	1,606.39	1,591.10	15.29	105.083	
2,700.00	2,700.00	2,701.14	2,701.09	9.45	6.36	-90.68	-18.98	-1,606.17	1,606.28	1,590.48	15.81	101.614	
2,800.00	2,800.00	2,800.96	2,800.90	9.81	6.53	-90.66	-18.54	-1,606.06	1,606.17	1,589.83	16.34	98.281	
2,900.00	2,900.00	2,902.34	2,902.28	10.17	6.73	-90.65	-18.10	-1,605.94	1,606.05	1,589.15	16.90	95.059	
3,000.00	3,000.00	3,006.94	3,006.89	10.53	6.94	-90.63	-17.76	-1,605.61	1,605.73	1,588.26	17.47	91.919	
3,100.00	3,100.00	3,112.13	3,112.07	10.89	7.17	-90.62	-17.23	-1,604.94	1,605.09	1,587.03	18.06	88.890	
3,200.00	3,200.00	3,214.40	3,214.33	11.25	7.41	-90.57	-16.07	-1,604.07	1,604.22	1,585.57	18.65	86.014	
3,300.00	3,300.00	3,318.74	3,318.65	11.61	7.66	-90.52	-14.52	-1,602.91	1,603.10	1,583.84	19.26	83.237	
3,400.00	3,400.00	3,417.31	3,417.21	11.96	7.90	-90.47	-13.18	-1,601.78	1,601.94	1,582.07	19.86	80.645	
3,500.00	3,500.00	3,519.08	3,518.96	12.32	8.17	-90.43	-11.93	-1,600.64	1,600.80	1,580.32	20.48	78.147	
3,600.00	3,600.00	3,620.53	3,620.40	12.68	8.43	-90.39	-10.76	-1,599.29	1,599.47	1,578.36	21.11	75.761	
3,700.00	3,700.00	3,703.14	3,703.00	13.04	8.66	-90.36	-10.07	-1,598.48	1,598.52	1,576.82	21.69	73.687	
3,714.69	3,714.69	3,714.03	3,713.89	13.09	8.69	-90.36	-10.00	-1,598.47	1,598.50	1,576.72	21.78	73.409 CC	
3,800.00	3,800.00	3,780.18	3,780.04	13.40	8.86	-90.35	-9.67	-1,598.90	1,599.05	1,576.79	22.26	71.845	
3,900.00	3,900.00	3,870.90	3,870.75	13.76	9.11	-90.33	-9.26	-1,600.46	1,600.74	1,577.88	22.86	70.030	
4,000.00	4,000.00	3,983.51	3,983.34	14.11	9.42	-90.31	-8.55	-1,602.06	1,602.16	1,578.63	23.53	68.094	
4,100.00	4,100.00	4,086.18	4,086.01	14.47	9.71	-90.28	-7.92	-1,602.90	1,602.97	1,578.80	24.18	66.301	
4,200.00	4,200.00	4,184.64	4,184.46	14.83	9.99	-90.27	-7.43	-1,603.76	1,603.84	1,579.03	24.82	64.625	
4,300.00	4,300.00	4,291.90	4,291.72	15.19	10.30	-90.25	-7.12	-1,604.50	1,604.53	1,579.04	25.49	62.951	
4,400.00	4,400.00	4,390.86	4,390.68	15.55	10.59	-90.25	-6.89	-1,604.99	1,605.02	1,578.89	26.14	61.404	
4,500.00	4,500.00	4,490.74	4,490.56	15.91	10.89	-90.23	-6.51	-1,605.55	1,605.59	1,578.79	26.80	59.917	
4,600.00	4,600.00	4,592.34	4,592.15	16.27	11.20	-90.22	-6.13	-1,606.02	1,606.05	1,578.59	27.46	58.478	
4,700.00	4,700.00	4,694.46	4,694.27	16.62	11.52	-90.20	-5.52	-1,606.45	1,606.46	1,578.33	28.14	57.094	
4,800.00	4,800.00	4,795.17	4,794.98	16.98	11.83	-90.17	-4.76	-1,606.70	1,606.71	1,577.90	28.81	55.770	
4,900.00	4,900.00	4,898.93	4,898.73	17.34	12.16	-90.14	-4.05	-1,606.88	1,606.89	1,577.40	29.49	54.481	
5,000.00	5,000.00	4,999.47	4,999.28	17.70	12.47	-90.13	-3.52	-1,606.89	1,606.89	1,576.72	30.17	53.258	

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

Aim Directional Services, LLC

Anticollision Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #6H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	EDMRESTORED
Reference Design:	Lateral 1r0	Offset TVD Reference:	Offset Datum

Offset Design: Loco Dinero 36 State Com 2L #4H - 36 St Com 2L #4H - Office - Drilling - Surveys													Offset Site Error:
Survey Program: 440-GYRO-NS-CT, 1866-MWD+HDMG													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
+N/-S (usft)	+E/-W (usft)												
5,003.10	5,003.10	5,002.49	5,002.30	17.71	12.48	-90.12	-3.50	-1,606.89	1,606.89	1,576.70	30.19	53.221	
5,100.00	5,100.00	5,097.49	5,097.29	18.06	12.79	-90.10	-2.94	-1,606.96	1,606.96	1,576.12	30.84	52.100	
5,200.00	5,200.00	5,198.04	5,197.84	18.42	13.11	-90.08	-2.29	-1,607.03	1,607.03	1,575.51	31.53	50.976	
5,300.00	5,300.00	5,295.23	5,295.03	18.77	13.43	-90.06	-1.69	-1,607.22	1,607.22	1,575.03	32.20	49.917	
5,350.00	5,350.00	5,344.91	5,344.70	18.95	13.59	-90.05	-1.37	-1,607.35	1,607.36	1,574.82	32.54	49.400	
5,400.00	5,400.00	5,394.50	5,394.29	19.13	13.75	-89.61	-1.03	-1,607.50	1,607.50	1,574.62	32.88	48.893	
5,426.39	5,426.38	5,420.66	5,420.46	19.23	13.83	-89.62	-0.83	-1,607.58	1,607.58	1,574.52	33.06	48.630	
5,500.00	5,499.96	5,492.70	5,492.49	19.49	14.07	-89.67	-0.26	-1,607.84	1,607.83	1,574.28	33.56	47.915	
5,600.00	5,599.93	5,592.53	5,592.31	19.85	14.39	-89.74	0.51	-1,608.29	1,608.27	1,574.03	34.24	46.970	
5,700.00	5,699.89	5,694.17	5,693.96	20.21	14.73	-89.81	1.18	-1,608.67	1,608.63	1,573.70	34.93	46.051	
5,800.00	5,799.86	5,795.64	5,795.42	20.57	15.06	-89.89	1.74	-1,608.95	1,608.90	1,573.27	35.62	45.163	
5,900.00	5,899.82	5,894.00	5,893.78	20.92	15.39	-89.96	2.24	-1,609.24	1,609.18	1,572.87	36.31	44.320	
6,000.00	5,999.79	5,991.99	5,991.77	21.28	15.71	-90.04	2.68	-1,609.64	1,609.59	1,572.60	36.99	43.514	
6,100.00	6,099.75	6,090.35	6,090.12	21.64	16.04	-90.12	3.05	-1,610.15	1,610.10	1,572.43	37.67	42.738	
6,200.00	6,199.72	6,190.08	6,189.85	22.00	16.37	-90.21	3.32	-1,610.69	1,610.66	1,572.29	38.36	41.985	
6,300.00	6,299.68	6,287.67	6,287.44	22.36	16.69	-90.29	3.51	-1,611.30	1,611.29	1,572.24	39.04	41.269	
6,400.00	6,399.64	6,384.56	6,384.33	22.72	17.02	-90.38	3.71	-1,612.09	1,612.12	1,572.40	39.72	40.584	
6,500.00	6,499.61	6,483.12	6,482.89	23.08	17.34	-90.46	3.96	-1,613.04	1,613.09	1,572.68	40.41	39.919	
6,600.00	6,599.57	6,582.98	6,582.74	23.43	17.68	-90.54	4.23	-1,614.04	1,614.12	1,573.02	41.10	39.273	
6,700.00	6,699.54	6,684.35	6,684.10	23.79	18.02	-90.63	4.54	-1,615.02	1,615.10	1,573.30	41.80	38.640	
6,800.00	6,799.50	6,787.21	6,786.96	24.15	18.37	-90.71	4.97	-1,615.87	1,615.96	1,573.45	42.50	38.019	
6,900.00	6,899.47	6,916.56	6,916.30	24.51	18.80	-90.80	5.79	-1,615.47	1,615.62	1,572.33	43.29	37.317	
7,000.00	6,999.43	7,022.66	7,022.39	24.87	19.15	-90.87	6.63	-1,614.05	1,614.31	1,570.31	44.00	36.685	
7,100.00	7,099.40	7,120.32	7,120.03	25.23	19.48	-90.94	7.47	-1,612.66	1,612.91	1,568.22	44.69	36.091	
7,200.00	7,199.36	7,214.41	7,214.12	25.58	19.80	-90.99	8.45	-1,611.59	1,611.79	1,566.43	45.37	35.529	
7,300.00	7,299.33	7,310.64	7,310.33	25.94	20.12	-91.04	9.72	-1,610.83	1,611.01	1,564.96	46.05	34.983	
7,400.00	7,399.29	7,409.09	7,408.77	26.30	20.46	-91.09	10.93	-1,610.19	1,610.38	1,563.64	46.75	34.450	
7,500.00	7,499.25	7,505.87	7,505.55	26.66	20.79	-91.15	11.91	-1,609.70	1,609.89	1,562.46	47.43	33.940	
7,600.00	7,599.22	7,609.67	7,609.34	27.02	21.14	-91.22	12.80	-1,609.14	1,609.39	1,561.24	48.15	33.427	
7,700.00	7,699.18	7,712.85	7,712.52	27.38	21.49	-91.29	13.47	-1,608.35	1,608.66	1,559.81	48.85	32.928	
7,800.00	7,799.15	7,814.05	7,813.71	27.74	21.83	-91.37	13.97	-1,607.41	1,607.78	1,558.23	49.55	32.445	
7,900.00	7,899.11	7,913.58	7,913.24	28.09	22.17	-91.45	14.47	-1,606.49	1,606.91	1,556.66	50.25	31.978	
8,000.00	7,999.08	8,011.58	8,011.23	28.45	22.51	-91.52	15.04	-1,605.64	1,606.09	1,555.15	50.94	31.527	
8,100.00	8,099.04	8,114.38	8,114.02	28.81	22.86	-91.60	15.70	-1,604.80	1,605.32	1,553.67	51.65	31.080	
8,200.00	8,199.01	8,216.38	8,216.01	29.17	23.20	-91.68	16.24	-1,603.73	1,604.33	1,551.98	52.36	30.643	
8,300.00	8,298.97	8,300.64	8,300.27	29.53	23.48	-91.76	16.11	-1,603.18	1,603.77	1,550.77	53.00	30.261	
8,311.43	8,310.40	8,311.00	8,310.63	29.57	23.52	-91.77	16.03	-1,603.17	1,603.77	1,550.70	53.07	30.218	
8,400.00	8,398.93	8,392.27	8,391.90	29.89	23.78	-91.88	15.32	-1,603.30	1,604.01	1,550.36	53.66	29.894	
8,500.00	8,498.90	8,487.41	8,487.04	30.25	24.10	-92.00	14.43	-1,603.78	1,604.65	1,550.32	54.33	29.536	
8,600.00	8,598.86	8,585.40	8,585.02	30.60	24.42	-92.13	13.44	-1,604.47	1,605.50	1,550.49	55.01	29.186	
8,700.00	8,698.83	8,681.62	8,681.22	30.96	24.74	-92.26	12.32	-1,605.32	1,606.53	1,550.84	55.69	28.849	
8,800.00	8,798.79	8,780.98	8,780.58	31.32	25.07	-92.39	11.19	-1,606.39	1,607.77	1,551.40	56.38	28.518	
8,900.00	8,898.76	8,887.73	8,887.32	31.68	25.43	-92.50	10.97	-1,607.24	1,608.68	1,551.59	57.10	28.174	
9,000.00	8,998.72	8,984.36	8,983.95	32.04	25.76	-92.58	11.07	-1,607.92	1,609.51	1,551.72	57.79	27.853	
9,100.00	9,098.69	9,079.24	9,078.82	32.40	26.08	-92.69	10.56	-1,608.90	1,610.68	1,552.22	58.46	27.550	
9,200.00	9,198.65	9,173.80	9,173.37	32.76	26.40	-92.81	9.60	-1,610.10	1,612.14	1,553.00	59.14	27.260	
9,300.00	9,298.61	9,276.34	9,275.89	33.12	26.75	-92.94	8.74	-1,611.62	1,613.81	1,553.96	59.85	26.966	
9,400.00	9,398.58	9,387.23	9,386.78	33.47	27.13	-93.03	8.88	-1,612.79	1,614.99	1,554.40	60.59	26.656	
9,500.00	9,498.54	9,478.92	9,478.46	33.83	27.44	-93.13	8.56	-1,613.64	1,616.08	1,554.82	61.26	26.382	
9,600.00	9,598.51	9,568.79	9,568.32	34.19	27.75	-93.25	7.54	-1,614.95	1,617.75	1,555.83	61.91	26.129	
9,700.00	9,698.47	9,668.25	9,667.76	34.55	28.08	-93.39	6.15	-1,616.71	1,619.77	1,557.15	62.61	25.871	
9,800.00	9,798.44	9,782.33	9,781.82	34.91	28.47	-93.51	5.63	-1,618.46	1,621.51	1,558.14	63.36	25.590	

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

Aim Directional Services, LLC

Anticollision Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #6H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	EDMRESTORED
Reference Design:	Lateral 1r0	Offset TVD Reference:	Offset Datum

Offset Design: Loco Dinero 36 State Com 2L #4H - 36 St Com 2L #4H - Office - Drilling - Surveys													Offset Site Error: 0.00 usft
Survey Program:	440-GYRO-NS-CT, 1866-MWD+HDM						Rule Assigned:						Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Distance	Minimum	Separation	Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor	
9,900.00	9,898.40	9,889.20	9,888.68	35.27	28.84	-93.57	6.59	-1,619.05	1,622.14	1,558.05	64.10	25.308	
10,000.00	9,998.37	9,973.05	9,972.52	35.63	29.14	-93.62	7.53	-1,619.91	1,623.27	1,558.53	64.74	25.073	
10,100.00	10,098.33	10,064.82	10,064.26	35.99	29.45	-93.67	8.26	-1,621.79	1,625.41	1,560.00	65.41	24.848	
10,200.00	10,198.29	10,162.74	10,162.17	36.34	29.79	-93.77	7.99	-1,623.79	1,627.65	1,561.54	66.11	24.621	
10,300.00	10,298.26	10,275.82	10,275.21	36.70	30.18	-93.90	7.18	-1,626.19	1,630.05	1,563.19	66.86	24.380	
10,400.00	10,398.22	10,396.01	10,395.38	37.06	30.58	-94.09	4.81	-1,626.25	1,630.32	1,562.69	67.63	24.107	
10,500.00	10,498.19	10,537.22	10,536.21	37.42	31.05	-94.54	-4.01	-1,624.12	1,629.59	1,561.15	68.45	23.808	
10,562.07	10,560.24	10,574.61	10,573.00	37.64	31.18	-94.80	-10.52	-1,622.78	1,628.57	1,559.76	68.80	23.670	
10,579.47	10,577.63	10,581.97	10,580.20	37.71	31.20	-94.86	-12.03	-1,622.61	1,628.51	1,559.62	68.89	23.639	
10,600.00	10,598.16	10,599.00	10,596.80	37.78	31.26	-95.01	-15.80	-1,622.34	1,628.64	1,559.62	69.02	23.597	
10,700.00	10,698.15	10,733.00	10,722.44	38.14	31.68	-96.66	-61.21	-1,617.38	1,628.98	1,559.18	69.80	23.337	
10,714.85	10,713.00	10,749.10	10,736.76	38.19	31.73	-97.35	-68.46	-1,616.17	1,628.68	1,558.77	69.91	23.298	
10,753.01	10,751.16	10,768.25	10,753.56	38.33	31.78	-97.68	-77.54	-1,614.83	1,628.35	1,558.25	70.11	23.227	
10,800.00	10,798.15	10,800.77	10,781.54	38.50	31.89	-98.26	-93.97	-1,612.68	1,628.58	1,558.21	70.37	23.142	
10,815.35	10,813.50	10,813.55	10,792.20	38.55	31.93	-98.50	-100.62	-1,611.82	1,628.75	1,558.29	70.47	23.114	
10,825.00	10,823.15	10,822.00	10,799.46	38.58	31.95	81.79	-105.27	-1,611.22	1,628.87	1,558.34	70.53	23.096	
10,850.00	10,848.12	10,822.00	10,799.46	38.66	31.95	81.74	-105.27	-1,611.22	1,629.25	1,558.66	70.59	23.081	
10,875.00	10,872.99	10,841.23	10,815.29	38.74	32.01	81.36	-116.10	-1,609.94	1,629.57	1,558.85	70.72	23.043	
10,900.00	10,897.70	10,851.06	10,823.18	38.82	32.04	81.15	-121.94	-1,609.34	1,630.00	1,559.19	70.81	23.020	
10,925.00	10,922.19	10,866.00	10,834.87	38.90	32.09	80.86	-131.20	-1,608.50	1,630.50	1,559.59	70.91	22.993	
10,950.00	10,946.37	10,866.00	10,834.87	38.98	32.09	80.80	-131.20	-1,608.50	1,631.02	1,560.08	70.95	22.989	
10,975.00	10,970.19	10,881.03	10,846.18	39.05	32.13	80.52	-141.06	-1,607.72	1,631.56	1,560.52	71.04	22.967	
11,000.00	10,993.58	10,891.06	10,853.43	39.12	32.16	80.31	-147.97	-1,607.22	1,632.14	1,561.04	71.10	22.954	
11,025.00	11,016.48	10,911.00	10,867.05	39.19	32.22	79.97	-162.50	-1,606.28	1,632.82	1,561.61	71.21	22.930	
11,050.00	11,038.82	10,911.00	10,867.05	39.25	32.22	79.91	-162.50	-1,606.28	1,633.36	1,562.14	71.22	22.935	
11,075.00	11,060.54	10,911.00	10,867.05	39.32	32.22	79.82	-162.50	-1,606.28	1,634.06	1,562.84	71.22	22.945	
11,100.00	11,081.58	10,930.80	10,879.56	39.38	32.28	79.52	-177.82	-1,605.43	1,634.63	1,563.32	71.31	22.923	
11,125.00	11,101.89	10,940.70	10,885.44	39.43	32.31	79.34	-185.78	-1,605.04	1,635.26	1,563.91	71.35	22.919	
11,150.00	11,121.41	10,956.00	10,894.02	39.49	32.35	79.11	-198.43	-1,604.49	1,635.91	1,564.50	71.41	22.908	
11,175.00	11,140.09	10,956.00	10,894.02	39.55	32.35	79.04	-198.43	-1,604.49	1,636.53	1,565.13	71.40	22.921	
11,200.00	11,157.87	10,975.21	10,904.08	39.60	32.41	78.81	-214.78	-1,603.86	1,637.07	1,565.59	71.48	22.903	
11,225.00	11,174.71	10,988.47	10,910.66	39.66	32.44	78.65	-226.28	-1,603.45	1,637.56	1,566.03	71.53	22.894	
11,250.00	11,190.55	11,001.00	10,916.61	39.71	32.48	78.52	-237.31	-1,603.09	1,637.98	1,566.41	71.57	22.885	
11,275.00	11,205.37	11,014.21	10,922.55	39.77	32.52	78.40	-249.11	-1,602.72	1,638.32	1,566.70	71.62	22.874	
11,300.00	11,219.11	11,026.72	10,927.81	39.82	32.55	78.30	-260.44	-1,602.39	1,638.60	1,566.93	71.67	22.863	
11,325.00	11,231.74	11,046.00	10,935.25	39.87	32.61	78.19	-278.23	-1,601.91	1,638.83	1,567.08	71.75	22.841	
11,350.00	11,243.22	11,046.00	10,935.25	39.92	32.61	78.18	-278.23	-1,601.91	1,638.95	1,567.20	71.74	22.845	
11,375.00	11,253.52	11,063.65	10,941.32	39.97	32.65	78.12	-294.79	-1,601.52	1,638.98	1,567.16	71.82	22.821	
11,400.00	11,262.62	11,075.77	10,945.10	40.02	32.69	78.10	-306.30	-1,601.27	1,638.97	1,567.09	71.87	22.804	
11,425.00	11,270.48	11,091.00	10,949.38	40.07	32.73	78.09	-320.92	-1,601.00	1,638.88	1,566.94	71.94	22.780	
11,450.00	11,277.10	11,091.00	10,949.38	40.12	32.73	78.11	-320.92	-1,601.00	1,638.76	1,566.81	71.96	22.774	
11,475.00	11,282.44	11,105.25	10,952.85	40.17	32.77	78.14	-334.74	-1,600.83	1,638.57	1,566.54	72.03	22.748	
11,500.00	11,286.50	11,117.00	10,955.25	40.21	32.80	78.18	-346.24	-1,600.79	1,638.40	1,566.30	72.10	22.724	
11,525.00	11,289.26	11,125.66	10,956.84	40.26	32.83	78.23	-354.75	-1,600.80	1,638.19	1,566.03	72.16	22.702	
11,550.00	11,290.72	11,141.01	10,959.46	40.30	32.87	78.33	-369.87	-1,600.84	1,637.88	1,565.62	72.25	22.668	
11,562.44	11,290.96	11,148.63	10,960.68	40.33	32.89	78.39	-377.40	-1,600.88	1,637.68	1,565.38	72.30	22.651	
11,600.00	11,291.18	11,175.78	10,964.59	40.40	32.97	78.52	-404.26	-1,601.08	1,637.19	1,564.72	72.47	22.592	
11,700.00	11,291.79	11,285.18	10,978.16	40.62	33.32	78.97	-512.81	-1,601.40	1,635.95	1,562.86	73.10	22.381	
11,800.00	11,292.40	11,368.13	10,985.27	40.89	33.62	79.20	-595.45	-1,601.01	1,634.78	1,561.09	73.70	22.183	
11,854.53	11,292.74	11,414.10	10,987.49	41.06	33.80	79.27	-641.36	-1,600.92	1,634.68	1,560.62	74.06	22.074	
11,900.00	11,293.01	11,455.45	10,988.40	41.21	33.97	79.29	-682.70	-1,600.77	1,634.73	1,560.36	74.37	21.981	
12,000.00	11,293.62	11,560.00	10,988.79	41.58	34.44	79.28	-787.25	-1,600.07	1,634.91	1,559.72	75.19	21.743	

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

Aim Directional Services, LLC

Anticollision Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #6H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	EDMRESTORED
Reference Design:	Lateral 1r0	Offset TVD Reference:	Offset Datum

Offset Design: Loco Dinero 36 State Com 2L #4H - 36 St Com 2L #4H - Office - Drilling - Surveys													Offset Site Error: 0.00 usft
Survey Program:	440-GYRO-NS-CT, 1866-MWD+HDM							Rule Assigned:					Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis	Reference	Offset	Highside	Offset Wellbore Centre	Distance	Between	Between	Minimum	Separation	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor	
12,100.00	11,294.23	11,699.38	10,989.31	41.99	35.14	79.26	-926.60	-1,597.64	1,634.17	1,557.88	76.29	21.420	
12,200.00	11,294.84	11,808.70	10,990.99	42.46	35.79	79.28	-1,035.84	-1,593.86	1,631.39	1,554.00	77.38	21.082	
12,300.00	11,295.45	11,902.37	10,992.88	42.96	36.38	79.31	-1,129.44	-1,590.58	1,628.48	1,550.00	78.47	20.752	
12,400.00	11,296.06	11,985.62	10,993.54	43.51	36.94	79.30	-1,212.65	-1,588.16	1,626.37	1,546.80	79.57	20.439	
12,500.00	11,296.67	12,073.75	10,991.35	44.10	37.57	79.20	-1,300.72	-1,585.94	1,625.25	1,544.49	80.76	20.124	
12,600.00	11,297.28	12,174.22	10,986.45	44.73	38.34	78.99	-1,401.02	-1,582.98	1,624.18	1,542.08	82.10	19.783	
12,676.98	11,297.75	12,237.00	10,984.12	45.25	38.83	78.89	-1,463.75	-1,581.68	1,623.85	1,540.78	83.08	19.547	
12,700.00	11,297.89	12,253.12	10,983.71	45.40	38.96	78.87	-1,479.86	-1,581.49	1,623.90	1,540.55	83.35	19.482	
12,800.00	11,298.50	12,326.00	10,982.63	46.10	39.55	78.83	-1,552.73	-1,581.57	1,625.20	1,540.58	84.62	19.206	
12,900.00	11,299.11	12,440.81	10,981.66	46.84	40.52	78.78	-1,667.53	-1,582.46	1,627.05	1,540.76	86.29	18.856	
13,000.00	11,299.72	12,553.30	10,980.10	47.61	41.51	78.70	-1,780.01	-1,581.54	1,627.38	1,539.37	88.01	18.490	
13,100.00	11,300.33	12,632.67	10,979.69	48.42	42.24	78.68	-1,859.38	-1,581.49	1,628.34	1,538.83	89.51	18.192	
13,200.00	11,300.94	12,718.47	10,980.28	49.25	43.03	78.69	-1,945.16	-1,582.93	1,630.72	1,539.60	91.12	17.897	
13,300.00	11,301.55	12,880.36	10,981.67	50.11	44.60	78.72	-2,107.03	-1,583.25	1,631.82	1,538.32	93.50	17.452	
13,400.00	11,302.16	12,979.62	10,982.65	51.00	45.60	78.72	-2,206.26	-1,581.14	1,630.45	1,535.08	95.37	17.097	
13,493.49	11,302.73	13,041.00	10,983.28	51.85	46.23	78.73	-2,267.63	-1,580.17	1,629.87	1,533.03	96.84	16.831	
13,500.00	11,302.77	13,058.02	10,983.46	51.91	46.41	78.73	-2,284.64	-1,580.02	1,629.79	1,532.72	97.07	16.790	
13,600.00	11,303.37	13,131.00	10,984.13	52.85	47.17	78.75	-2,357.62	-1,580.55	1,631.10	1,532.36	98.75	16.518	
13,700.00	11,303.98	13,219.68	10,984.10	53.81	48.10	78.74	-2,446.28	-1,582.08	1,633.66	1,533.05	100.61	16.238	
13,800.00	11,304.59	13,347.83	10,982.86	54.79	49.48	78.68	-2,574.43	-1,582.26	1,634.78	1,531.85	102.93	15.883	
13,900.00	11,305.20	13,454.10	10,983.48	55.80	50.65	78.69	-2,680.69	-1,582.32	1,635.64	1,530.57	105.07	15.567	
14,000.00	11,305.81	13,568.80	10,984.73	56.82	51.94	78.70	-2,795.38	-1,581.30	1,635.45	1,528.10	107.34	15.236	
14,047.61	11,306.10	13,607.85	10,985.49	57.31	52.38	78.72	-2,834.43	-1,580.95	1,635.29	1,527.01	108.28	15.103	
14,100.00	11,306.42	13,647.76	10,986.20	57.86	52.84	78.74	-2,874.32	-1,580.88	1,635.49	1,526.22	109.27	14.967	
14,200.00	11,307.03	13,726.42	10,986.94	58.92	53.74	78.76	-2,952.98	-1,581.45	1,636.93	1,525.72	111.20	14.720	
14,300.00	11,307.64	13,835.92	10,985.45	59.99	55.01	78.70	-3,062.46	-1,582.50	1,639.07	1,525.57	113.50	14.441	
14,400.00	11,308.25	13,937.33	10,983.68	61.08	56.20	78.62	-3,163.85	-1,582.63	1,640.44	1,524.71	115.73	14.175	
14,500.00	11,308.86	14,046.51	10,981.08	62.19	57.50	78.51	-3,273.00	-1,582.28	1,641.50	1,523.43	118.07	13.903	
14,600.00	11,309.47	14,138.83	10,978.64	63.31	58.61	78.41	-3,365.28	-1,581.79	1,642.43	1,522.19	120.24	13.660	
14,700.00	11,310.08	14,221.41	10,977.99	64.44	59.61	78.38	-3,447.85	-1,582.62	1,644.45	1,522.13	122.32	13.444	
14,800.00	11,310.69	14,390.68	10,977.93	65.59	61.68	78.35	-3,617.11	-1,582.26	1,645.46	1,520.01	125.45	13.117	
14,900.00	11,311.30	14,461.90	10,978.43	66.75	62.56	78.35	-3,688.32	-1,581.15	1,644.64	1,517.15	127.49	12.900	
15,000.00	11,311.91	14,580.97	10,979.59	67.92	64.05	78.36	-3,807.37	-1,579.45	1,643.96	1,513.87	130.09	12.637	
15,100.00	11,312.52	14,653.00	10,980.24	69.10	64.96	78.36	-3,879.39	-1,578.29	1,643.23	1,511.06	132.17	12.433	
15,114.34	11,312.60	14,670.82	10,980.35	69.27	65.18	78.36	-3,897.20	-1,578.12	1,643.20	1,510.64	132.55	12.397	
15,200.00	11,313.13	14,722.57	10,980.53	70.29	65.83	78.36	-3,948.95	-1,578.36	1,644.29	1,510.10	134.19	12.254	
15,300.00	11,313.74	14,814.51	10,980.56	71.49	66.98	78.36	-4,040.88	-1,580.23	1,647.17	1,510.67	136.50	12.067	
15,400.00	11,314.35	14,959.88	10,981.19	72.70	68.83	78.37	-4,186.23	-1,581.11	1,648.57	1,509.05	139.52	11.816	
15,500.00	11,314.96	15,062.05	10,983.99	73.91	70.14	78.44	-4,288.36	-1,580.40	1,648.25	1,506.21	142.04	11.604	
15,510.11	11,315.02	15,070.70	10,984.23	74.04	70.25	78.45	-4,297.01	-1,580.37	1,648.24	1,505.97	142.28	11.585	
15,600.00	11,315.57	15,144.65	10,985.86	75.14	71.21	78.49	-4,370.94	-1,580.35	1,648.65	1,504.33	144.32	11.424	
15,700.00	11,316.17	15,248.21	10,986.05	76.38	72.54	78.49	-4,474.50	-1,580.74	1,649.90	1,503.05	146.85	11.235	
15,800.00	11,316.78	15,336.17	10,985.51	77.62	73.68	78.46	-4,562.45	-1,580.48	1,650.69	1,501.50	149.19	11.065 ES	
15,900.00	11,317.39	15,400.77	10,984.96	78.87	74.52	78.43	-4,627.05	-1,581.33	1,653.12	1,501.93	151.19	10.934	
16,000.00	11,318.00	15,458.03	10,984.97	80.12	75.26	78.44	-4,684.25	-1,583.66	1,658.03	1,504.99	153.04	10.834	
16,100.00	11,318.61	15,563.07	10,985.32	81.39	76.61	78.48	-4,789.14	-1,589.32	1,664.15	1,508.51	155.64	10.692	
16,200.00	11,319.22	15,761.54	10,984.77	82.66	79.20	78.46	-4,987.51	-1,593.86	1,667.63	1,508.05	159.58	10.450	
16,281.93	11,319.72	15,843.00	10,984.53	83.70	80.28	78.43	-5,068.97	-1,592.85	1,667.43	1,505.77	161.66	10.314	
16,300.00	11,319.83	15,843.00	10,984.53	83.93	80.28	78.43	-5,068.97	-1,592.85	1,667.53	1,505.64	161.89	10.300	
16,327.63	11,320.00	15,843.00	10,984.53	84.23	80.28	78.43	-5,068.97	-1,592.85	1,668.06	1,505.90	162.15	10.287	
16,328.12	11,320.00	15,843.00	10,984.53	84.23	80.28	78.43	-5,068.97	-1,592.85	1,668.07	1,505.92	162.16	10.287 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:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #6H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	EDMRESTORED
Reference Design:	Lateral 1r0	Offset TVD Reference:	Offset Datum

Offset Design: Loco Dinero 36 State Com 3U #7H - 3U #7H - Planning - Lateral 1r0													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis	Highside	Rule Assigned:		Distance		Minimum	Separation	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor	
0.00	0.00	0.00	0.00	0.00	0.00	90.93	-28.60	1,761.90	1,762.17				
100.00	100.00	88.00	88.00	0.13	0.12	90.93	-28.60	1,761.90	1,762.13	1,761.88	0.25	6,972.590	
200.00	200.00	188.00	188.00	0.49	0.45	90.93	-28.60	1,761.90	1,762.13	1,761.19	0.94	1,869.080	
300.00	300.00	288.00	288.00	0.85	0.81	90.93	-28.60	1,761.90	1,762.13	1,760.47	1.66	1,061.702	
400.00	400.00	388.00	388.00	1.21	1.17	90.93	-28.60	1,761.90	1,762.13	1,759.76	2.38	741.430	
500.00	500.00	488.00	488.00	1.57	1.53	90.93	-28.60	1,761.90	1,762.13	1,759.04	3.09	569.604	
600.00	600.00	588.00	588.00	1.93	1.88	90.93	-28.60	1,761.90	1,762.13	1,758.32	3.81	462.435	
700.00	700.00	688.00	688.00	2.29	2.24	90.93	-28.60	1,761.90	1,762.13	1,757.60	4.53	389.207	
800.00	800.00	788.00	788.00	2.64	2.60	90.93	-28.60	1,761.90	1,762.13	1,756.89	5.24	336.000	
900.00	900.00	888.00	888.00	3.00	2.96	90.93	-28.60	1,761.90	1,762.13	1,756.17	5.96	295.591	
1,000.00	1,000.00	988.00	988.00	3.36	3.32	90.93	-28.60	1,761.90	1,762.13	1,755.45	6.68	263.858	
1,100.00	1,100.00	1,088.00	1,088.00	3.72	3.68	90.93	-28.60	1,761.90	1,762.13	1,754.74	7.40	238.278	
1,200.00	1,200.00	1,188.00	1,188.00	4.08	4.03	90.93	-28.60	1,761.90	1,762.13	1,754.02	8.11	217.220	
1,300.00	1,300.00	1,288.00	1,288.00	4.44	4.39	90.93	-28.60	1,761.90	1,762.13	1,753.30	8.83	199.581	
1,400.00	1,400.00	1,388.00	1,388.00	4.79	4.75	90.93	-28.60	1,761.90	1,762.13	1,752.59	9.55	184.592	
1,500.00	1,500.00	1,488.00	1,488.00	5.15	5.11	90.93	-28.60	1,761.90	1,762.13	1,751.87	10.26	171.697	
1,600.00	1,600.00	1,588.00	1,588.00	5.51	5.47	90.93	-28.60	1,761.90	1,762.13	1,751.15	10.98	160.486	
1,700.00	1,700.00	1,688.00	1,688.00	5.87	5.83	90.93	-28.60	1,761.90	1,762.13	1,750.44	11.70	150.649	
1,800.00	1,800.00	1,788.00	1,788.00	6.23	6.19	90.93	-28.60	1,761.90	1,762.13	1,749.72	12.41	141.949	
1,900.00	1,900.00	1,888.00	1,888.00	6.59	6.54	90.93	-28.60	1,761.90	1,762.13	1,749.00	13.13	134.198	
2,000.00	2,000.00	1,988.00	1,988.00	6.95	6.90	90.93	-28.60	1,761.90	1,762.13	1,748.28	13.85	127.250	
2,100.00	2,100.00	2,088.00	2,088.00	7.30	7.26	90.93	-28.60	1,761.90	1,762.13	1,747.57	14.56	120.987	
2,200.00	2,200.00	2,188.00	2,188.00	7.66	7.62	90.93	-28.60	1,761.90	1,762.13	1,746.85	15.28	115.310	
2,300.00	2,300.00	2,288.00	2,288.00	8.02	7.98	90.93	-28.60	1,761.90	1,762.13	1,746.13	16.00	110.143	
2,400.00	2,400.00	2,388.00	2,388.00	8.38	8.34	90.93	-28.60	1,761.90	1,762.13	1,745.42	16.72	105.419	
2,500.00	2,500.00	2,488.00	2,488.00	8.74	8.69	90.93	-28.60	1,761.90	1,762.13	1,744.70	17.43	101.083	
2,600.00	2,600.00	2,588.00	2,588.00	9.10	9.05	90.93	-28.60	1,761.90	1,762.13	1,743.98	18.15	97.090	
2,700.00	2,700.00	2,688.00	2,688.00	9.45	9.41	90.93	-28.60	1,761.90	1,762.13	1,743.27	18.87	93.401	
2,800.00	2,800.00	2,788.00	2,788.00	9.81	9.77	90.93	-28.60	1,761.90	1,762.13	1,742.55	19.58	89.981	
2,900.00	2,900.00	2,888.00	2,888.00	10.17	10.13	90.93	-28.60	1,761.90	1,762.13	1,741.83	20.30	86.803	
3,000.00	3,000.00	2,988.00	2,988.00	10.53	10.49	90.93	-28.60	1,761.90	1,762.13	1,741.11	21.02	83.842	
3,100.00	3,100.00	3,088.00	3,088.00	10.89	10.85	90.93	-28.60	1,761.90	1,762.13	1,740.40	21.73	81.077	
3,200.00	3,200.00	3,188.00	3,188.00	11.25	11.20	90.93	-28.60	1,761.90	1,762.13	1,739.68	22.45	78.488	
3,300.00	3,300.00	3,288.00	3,288.00	11.61	11.56	90.93	-28.60	1,761.90	1,762.13	1,738.96	23.17	76.059	
3,400.00	3,400.00	3,388.00	3,388.00	11.96	11.92	90.93	-28.60	1,761.90	1,762.13	1,738.25	23.88	73.776	
3,500.00	3,500.00	3,488.00	3,488.00	12.32	12.28	90.93	-28.60	1,761.90	1,762.13	1,737.53	24.60	71.626	
3,600.00	3,600.00	3,588.00	3,588.00	12.68	12.64	90.93	-28.60	1,761.90	1,762.13	1,736.81	25.32	69.598	
3,700.00	3,700.00	3,688.00	3,688.00	13.04	13.00	90.93	-28.60	1,761.90	1,762.13	1,736.10	26.04	67.681	
3,800.00	3,800.00	3,788.00	3,788.00	13.40	13.35	90.93	-28.60	1,761.90	1,762.13	1,735.38	26.75	65.867	
3,900.00	3,900.00	3,888.00	3,888.00	13.76	13.71	90.93	-28.60	1,761.90	1,762.13	1,734.66	27.47	64.148	
4,000.00	4,000.00	3,988.00	3,988.00	14.11	14.07	90.93	-28.60	1,761.90	1,762.13	1,733.95	28.19	62.517	
4,100.00	4,100.00	4,088.00	4,088.00	14.47	14.43	90.93	-28.60	1,761.90	1,762.13	1,733.23	28.90	60.966	
4,200.00	4,200.00	4,188.00	4,188.00	14.83	14.79	90.93	-28.60	1,761.90	1,762.13	1,732.51	29.62	59.490	
4,300.00	4,300.00	4,288.00	4,288.00	15.19	15.15	90.93	-28.60	1,761.90	1,762.13	1,731.79	30.34	58.084	
4,400.00	4,400.00	4,388.00	4,388.00	15.55	15.51	90.93	-28.60	1,761.90	1,762.13	1,731.08	31.05	56.743	
4,500.00	4,500.00	4,488.00	4,488.00	15.91	15.86	90.93	-28.60	1,761.90	1,762.13	1,730.36	31.77	55.463	
4,600.00	4,600.00	4,588.00	4,588.00	16.27	16.22	90.93	-28.60	1,761.90	1,762.13	1,729.64	32.49	54.239	
4,700.00	4,700.00	4,688.00	4,688.00	16.62	16.58	90.93	-28.60	1,761.90	1,762.13	1,728.93	33.21	53.068	
4,800.00	4,800.00	4,788.00	4,788.00	16.98	16.94	90.93	-28.60	1,761.90	1,762.13	1,728.21	33.92	51.946	
4,900.00	4,900.00	4,888.00	4,888.00	17.34	17.30	90.93	-28.60	1,761.90	1,762.13	1,727.49	34.64	50.871	
5,000.00	5,000.00	4,988.00	4,988.00	17.70	17.66	90.93	-28.60	1,761.90	1,762.13	1,726.78	35.36	49.840	
5,100.00	5,100.00	5,088.00	5,088.00	18.06	18.01	90.93	-28.60	1,761.90	1,762.13	1,726.06	36.07	48.849	

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

Aim Directional Services, LLC

Anticollision Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #6H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	EDMRESTORED
Reference Design:	Lateral 1r0	Offset TVD Reference:	Offset Datum

Offset Design: Loco Dinero 36 State Com 3U #7H - 3U #7H - Planning - Lateral 1r0													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Rule Assigned:		Distance	Minimum	Separation	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor	
5,200.00	5,200.00	5,188.00	5,188.00	18.42	18.37	90.93	-28.60	1,761.90	1,762.13	1,725.34	36.79	47.897	
5,300.00	5,300.00	5,288.00	5,288.00	18.77	18.73	90.93	-28.60	1,761.90	1,762.13	1,724.63	37.51	46.982	
5,350.00	5,350.00	5,338.00	5,338.00	18.95	18.91	90.93	-28.60	1,761.90	1,762.13	1,724.27	37.87	46.537	
5,400.00	5,400.00	5,388.54	5,388.54	19.13	19.09	91.37	-28.34	1,761.90	1,762.14	1,723.91	38.23	46.098	
5,426.39	5,426.38	5,415.31	5,415.31	19.23	19.19	91.38	-27.86	1,761.90	1,762.14	1,723.72	38.42	45.870	
5,500.00	5,499.96	5,489.43	5,489.39	19.49	19.45	91.36	-25.46	1,761.88	1,762.13	1,723.19	38.94	45.248	
5,600.00	5,599.93	5,589.43	5,589.32	19.85	19.81	91.33	-21.91	1,761.86	1,762.11	1,722.46	39.66	44.432	
5,700.00	5,699.89	5,689.43	5,689.25	20.21	20.17	91.31	-18.36	1,761.83	1,762.10	1,721.72	40.37	43.645	
5,800.00	5,799.86	5,789.42	5,789.19	20.57	20.53	91.28	-14.81	1,761.81	1,762.08	1,720.99	41.09	42.885	
5,900.00	5,899.82	5,889.42	5,889.12	20.92	20.89	91.25	-11.26	1,761.79	1,762.07	1,720.26	41.80	42.150	
6,000.00	5,999.79	5,989.41	5,989.05	21.28	21.24	91.22	-7.72	1,761.76	1,762.05	1,719.53	42.52	41.441	
6,100.00	6,099.75	6,089.41	6,088.99	21.64	21.60	91.19	-4.17	1,761.74	1,762.04	1,718.80	43.24	40.754	
6,200.00	6,199.72	6,189.41	6,188.92	22.00	21.96	91.16	-0.62	1,761.71	1,762.02	1,718.07	43.95	40.090	
6,300.00	6,299.68	6,289.40	6,288.85	22.36	22.32	91.13	2.93	1,761.69	1,762.01	1,717.34	44.67	39.447	
6,400.00	6,399.64	6,389.40	6,388.79	22.72	22.68	91.11	6.48	1,761.67	1,761.99	1,716.61	45.38	38.825	
6,500.00	6,499.61	6,489.39	6,488.72	23.08	23.04	91.08	10.02	1,761.64	1,761.98	1,715.88	46.10	38.221	
6,600.00	6,599.57	6,589.39	6,588.65	23.43	23.39	91.05	13.57	1,761.62	1,761.97	1,715.15	46.82	37.636	
6,700.00	6,699.54	6,689.39	6,688.59	23.79	23.75	91.02	17.12	1,761.60	1,761.96	1,714.42	47.53	37.069	
6,800.00	6,799.50	6,789.38	6,788.52	24.15	24.11	90.99	20.67	1,761.57	1,761.94	1,713.70	48.25	36.518	
6,900.00	6,899.47	6,889.38	6,888.45	24.51	24.47	90.96	24.22	1,761.55	1,761.93	1,712.97	48.97	35.983	
7,000.00	6,999.43	6,989.37	6,988.39	24.87	24.83	90.93	27.76	1,761.53	1,761.92	1,712.24	49.68	35.464	
7,100.00	7,099.40	7,089.37	7,088.32	25.23	25.19	90.90	31.31	1,761.50	1,761.91	1,711.51	50.40	34.959	
7,200.00	7,199.36	7,189.37	7,188.25	25.58	25.55	90.88	34.86	1,761.48	1,761.90	1,710.79	51.12	34.469	
7,300.00	7,299.33	7,289.36	7,288.18	25.94	25.90	90.85	38.41	1,761.46	1,761.89	1,710.06	51.83	33.992	
7,400.00	7,399.29	7,389.36	7,388.12	26.30	26.26	90.82	41.95	1,761.43	1,761.88	1,709.33	52.55	33.528	
7,500.00	7,499.25	7,489.36	7,488.05	26.66	26.62	90.79	45.50	1,761.41	1,761.87	1,708.61	53.27	33.076	
7,600.00	7,599.22	7,589.35	7,587.98	27.02	26.98	90.76	49.05	1,761.39	1,761.87	1,707.88	53.98	32.637	
7,700.00	7,699.18	7,689.35	7,687.92	27.38	27.34	90.73	52.60	1,761.36	1,761.86	1,707.16	54.70	32.208	
7,800.00	7,799.15	7,789.34	7,787.85	27.74	27.70	90.70	56.15	1,761.34	1,761.85	1,706.43	55.42	31.791	
7,900.00	7,899.11	7,889.34	7,887.78	28.09	28.06	90.67	59.69	1,761.32	1,761.84	1,705.71	56.14	31.385	
8,000.00	7,999.08	7,989.34	7,987.72	28.45	28.41	90.65	63.24	1,761.29	1,761.84	1,704.98	56.85	30.989	
8,100.00	8,099.04	8,089.33	8,087.65	28.81	28.77	90.62	66.79	1,761.27	1,761.83	1,704.26	57.57	30.602	
8,200.00	8,199.01	8,189.33	8,187.58	29.17	29.13	90.59	70.34	1,761.25	1,761.82	1,703.54	58.29	30.225	
8,300.00	8,298.97	8,289.32	8,287.52	29.53	29.49	90.56	73.89	1,761.22	1,761.82	1,702.81	59.01	29.858	
8,400.00	8,398.93	8,389.32	8,387.45	29.89	29.85	90.53	77.43	1,761.20	1,761.81	1,702.09	59.72	29.499	
8,500.00	8,498.90	8,489.32	8,487.38	30.25	30.21	90.50	80.98	1,761.18	1,761.81	1,701.37	60.44	29.148	
8,600.00	8,598.86	8,589.31	8,587.32	30.60	30.57	90.47	84.53	1,761.15	1,761.81	1,700.65	61.16	28.806	
8,700.00	8,698.83	8,689.31	8,687.25	30.96	30.93	90.45	88.08	1,761.13	1,761.80	1,699.92	61.88	28.472	
8,800.00	8,798.79	8,789.30	8,787.18	31.32	31.29	90.42	91.63	1,761.10	1,761.80	1,699.20	62.60	28.145	
8,900.00	8,898.76	8,889.30	8,887.12	31.68	31.64	90.39	95.17	1,761.08	1,761.80	1,698.48	63.31	27.826	
9,000.00	8,998.72	8,989.30	8,987.05	32.04	32.00	90.36	98.72	1,761.06	1,761.80	1,697.76	64.03	27.514	
9,100.00	9,098.69	9,089.29	9,086.98	32.40	32.36	90.33	102.27	1,761.03	1,761.79	1,697.04	64.75	27.209	
9,200.00	9,198.65	9,189.29	9,186.91	32.76	32.72	90.30	105.82	1,761.01	1,761.79	1,696.32	65.47	26.910	
9,300.00	9,298.61	9,289.29	9,286.85	33.12	33.08	90.27	109.37	1,760.99	1,761.79	1,695.61	66.19	26.618	
9,400.00	9,398.58	9,389.28	9,386.78	33.47	33.44	90.24	112.91	1,760.96	1,761.79	1,694.89	66.91	26.333	
9,424.66	9,423.23	9,413.94	9,411.42	33.56	33.53	90.24	113.79	1,760.96	1,761.79	1,694.71	67.08	26.263	
9,500.00	9,498.54	9,489.28	9,486.71	33.83	33.80	90.22	116.46	1,760.94	1,761.79	1,694.17	67.62	26.053	
9,600.00	9,598.51	9,589.27	9,586.65	34.19	34.16	90.19	120.01	1,760.92	1,761.79	1,693.45	68.34	25.779	
9,700.00	9,698.47	9,689.27	9,686.58	34.55	34.52	90.16	123.56	1,760.89	1,761.79	1,692.73	69.06	25.511	
9,800.00	9,798.44	9,789.27	9,786.51	34.91	34.88	90.13	127.11	1,760.87	1,761.79	1,692.02	69.78	25.248	
9,900.00	9,898.40	9,889.26	9,886.45	35.27	35.24	90.10	130.65	1,760.85	1,761.80	1,691.30	70.50	24.991	
10,000.00	9,998.37	9,989.26	9,986.38	35.63	35.60	90.07	134.20	1,760.82	1,761.80	1,690.58	71.22	24.739	

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

Aim Directional Services, LLC

Anticollision Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #6H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	EDMRESTORED
Reference Design:	Lateral 1r0	Offset TVD Reference:	Offset Datum

Offset Design: Loco Dinero 36 State Com 3U #7H - 3U #7H - Planning - Lateral 1r0													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Distance	Rule Assigned:							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,100.00	10,098.33	10,089.25	10,086.31	35.99	35.96	90.04	137.75	1,760.80	1,761.80	1,689.87	71.93	24.492	
10,200.00	10,198.29	10,189.25	10,186.25	36.34	36.32	90.01	141.30	1,760.78	1,761.81	1,689.15	72.65	24.250	
10,300.00	10,298.26	10,289.25	10,286.18	36.70	36.68	89.99	144.85	1,760.75	1,761.81	1,688.44	73.37	24.012	
10,400.00	10,398.22	10,389.25	10,386.12	37.06	37.04	89.96	148.36	1,760.73	1,761.81	1,687.72	74.09	23.780	
10,500.00	10,498.19	11,450.00	11,255.93	37.42	40.31	102.58	-173.01	1,531.45	1,742.61	1,670.30	72.31	24.099	
10,562.07	10,560.24	11,450.00	11,255.93	37.64	40.31	102.58	-173.01	1,531.45	1,716.42	1,643.19	73.23	23.438	
10,600.00	10,598.16	11,457.82	11,258.29	37.78	40.33	102.69	-180.02	1,528.92	1,701.26	1,627.48	73.77	23.061	
10,700.00	10,698.15	11,475.00	11,263.20	38.14	40.37	102.90	-195.63	1,523.67	1,664.46	1,589.30	75.16	22.146	
10,714.85	10,713.00	11,475.00	11,263.20	38.19	40.37	102.41	-195.63	1,523.67	1,659.37	1,584.01	75.36	22.019	
10,800.00	10,798.15	11,475.00	11,263.20	38.50	40.37	102.41	-195.63	1,523.67	1,632.49	1,556.04	76.46	21.352	
10,815.35	10,813.50	11,475.00	11,263.20	38.55	40.37	102.41	-195.63	1,523.67	1,628.07	1,551.43	76.65	21.242	
10,825.00	10,823.15	11,475.00	11,263.20	38.58	40.37	-77.46	-195.63	1,523.67	1,625.34	1,548.58	76.76	21.174	
10,850.00	10,848.12	11,483.25	11,265.43	38.66	40.39	-78.03	-203.20	1,521.29	1,618.26	1,541.22	77.05	21.003	
10,875.00	10,872.99	11,486.24	11,266.22	38.74	40.40	-78.78	-205.97	1,520.46	1,611.30	1,533.97	77.32	20.838	
10,900.00	10,897.70	11,489.57	11,267.08	38.82	40.41	-79.51	-209.05	1,519.54	1,604.42	1,526.83	77.59	20.679	
10,925.00	10,922.19	11,500.00	11,269.68	38.90	40.43	-80.00	-218.77	1,516.78	1,597.70	1,519.86	77.85	20.524	
10,950.00	10,946.37	11,500.00	11,269.68	38.98	40.43	-80.82	-218.77	1,516.78	1,591.02	1,512.94	78.08	20.377	
10,975.00	10,970.19	11,500.00	11,269.68	39.05	40.43	-81.62	-218.77	1,516.78	1,584.51	1,506.21	78.30	20.236	
11,000.00	10,993.58	11,500.00	11,269.68	39.12	40.43	-82.40	-218.77	1,516.78	1,578.18	1,499.67	78.51	20.103	
11,025.00	11,016.48	11,510.63	11,272.19	39.19	40.46	-82.84	-228.75	1,514.12	1,571.94	1,493.23	78.71	19.971	
11,050.00	11,038.82	11,515.63	11,273.32	39.25	40.47	-83.44	-233.48	1,512.93	1,565.90	1,487.01	78.90	19.848	
11,075.00	11,060.54	11,525.00	11,275.34	39.32	40.49	-83.90	-242.37	1,510.80	1,560.06	1,480.99	79.07	19.729	
11,100.00	11,081.58	11,525.00	11,275.34	39.38	40.49	-84.60	-242.37	1,510.80	1,554.38	1,475.15	79.22	19.620	
11,125.00	11,101.89	11,525.00	11,275.34	39.43	40.49	-85.26	-242.37	1,510.80	1,548.95	1,469.59	79.36	19.518	
11,150.00	11,121.41	11,537.90	11,277.94	39.49	40.52	-85.59	-254.71	1,508.08	1,543.64	1,464.13	79.51	19.415	
11,175.00	11,140.09	11,550.00	11,280.18	39.55	40.55	-85.93	-266.37	1,505.76	1,538.62	1,458.98	79.65	19.318	
11,200.00	11,157.87	11,550.00	11,280.18	39.60	40.55	-86.52	-266.37	1,505.76	1,533.76	1,454.01	79.75	19.233	
11,225.00	11,174.71	11,550.00	11,280.18	39.66	40.55	-87.08	-266.37	1,505.76	1,529.21	1,449.37	79.84	19.154	
11,250.00	11,190.55	11,563.19	11,282.39	39.71	40.58	-87.36	-279.17	1,503.47	1,524.80	1,444.86	79.95	19.073	
11,275.00	11,205.37	11,575.00	11,284.17	39.77	40.60	-87.65	-290.70	1,501.66	1,520.72	1,440.67	80.05	18.998	
11,300.00	11,219.11	11,575.00	11,284.17	39.82	40.60	-88.12	-290.70	1,501.66	1,516.83	1,436.71	80.11	18.934	
11,325.00	11,231.74	11,583.71	11,285.36	39.87	40.62	-88.43	-299.25	1,500.45	1,513.22	1,433.02	80.19	18.870	
11,350.00	11,243.22	11,590.78	11,286.25	39.92	40.63	-88.74	-306.21	1,499.56	1,509.87	1,429.61	80.26	18.812	
11,375.00	11,253.52	11,600.00	11,287.30	39.97	40.65	-89.01	-315.30	1,498.51	1,506.80	1,426.47	80.33	18.757	
11,400.00	11,262.62	11,600.00	11,287.30	40.02	40.65	-89.35	-315.30	1,498.51	1,504.02	1,423.64	80.38	18.712	
11,425.00	11,270.48	11,612.55	11,288.55	40.07	40.67	-89.54	-327.73	1,497.30	1,501.46	1,421.02	80.45	18.664	
11,450.00	11,277.10	11,625.00	11,289.58	40.12	40.70	-89.73	-340.10	1,496.33	1,499.25	1,418.74	80.51	18.621	
11,475.00	11,282.44	11,625.00	11,289.58	40.17	40.70	-89.97	-340.10	1,496.33	1,497.27	1,416.72	80.55	18.589	
11,500.00	11,286.50	11,634.89	11,290.24	40.21	40.72	-90.13	-349.95	1,495.74	1,495.60	1,414.99	80.60	18.555	
11,525.00	11,289.26	11,650.00	11,290.98	40.26	40.74	-90.27	-365.03	1,495.12	1,494.29	1,413.62	80.67	18.523	
11,550.00	11,290.72	11,650.00	11,290.98	40.30	40.74	-90.40	-365.03	1,495.12	1,493.15	1,412.45	80.70	18.502	
11,562.44	11,290.96	11,650.00	11,290.98	40.33	40.74	-90.45	-365.03	1,495.12	1,492.74	1,412.03	80.72	18.494	
11,600.00	11,291.18	11,665.04	11,291.41	40.40	40.77	-90.46	-380.06	1,494.86	1,491.89	1,411.10	80.80	18.465	
11,648.89	11,291.48	11,694.52	11,291.64	40.50	40.82	-90.47	-409.53	1,495.03	1,491.69	1,410.75	80.94	18.430	
11,700.00	11,291.79	11,745.63	11,291.95	40.62	40.91	-90.47	-460.64	1,495.42	1,491.67	1,410.52	81.15	18.381	
11,800.00	11,292.40	11,845.63	11,292.55	40.89	41.12	-90.47	-560.64	1,496.19	1,491.63	1,409.99	81.65	18.270	
11,900.00	11,293.01	11,945.63	11,293.16	41.21	41.37	-90.47	-660.63	1,496.95	1,491.60	1,409.36	82.24	18.138	
12,000.00	11,293.62	12,045.63	11,293.77	41.58	41.67	-90.47	-760.63	1,497.72	1,491.56	1,408.63	82.93	17.986	
12,100.00	11,294.23	12,145.63	11,294.37	41.99	42.02	-90.47	-860.62	1,498.48	1,491.52	1,407.80	83.71	17.817	
12,200.00	11,294.84	12,245.63	11,294.98	42.46	42.42	-90.47	-960.62	1,499.24	1,491.48	1,406.89	84.59	17.631	
12,300.00	11,295.45	12,345.63	11,295.58	42.96	42.86	-90.47	-1,060.61	1,500.01	1,491.44	1,405.88	85.56	17.431	
12,400.00	11,296.06	12,445.63	11,296.19	43.51	43.36	-90.47	-1,160.61	1,500.77	1,491.40	1,404.78	86.62	17.218	

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

Aim Directional Services, LLC

Anticollision Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #6H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	EDMRESTORED
Reference Design:	Lateral 1r0	Offset TVD Reference:	Offset Datum

Offset Design: Loco Dinero 36 State Com 3U #7H - 3U #7H - Planning - Lateral 1r0													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Distance	Rule Assigned:							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
12,500.00	11,296.67	12,545.63	11,296.79	44.10	43.89	-90.47	-1,260.60	1,501.54	1,491.36	1,403.61	87.76	16.994	
12,600.00	11,297.28	12,645.63	11,297.40	44.73	44.47	-90.47	-1,360.60	1,502.30	1,491.32	1,402.35	88.98	16.761	
12,700.00	11,297.89	12,745.63	11,298.01	45.40	45.09	-90.47	-1,460.59	1,503.06	1,491.28	1,401.01	90.27	16.520	
12,800.00	11,298.50	12,845.63	11,298.61	46.10	45.74	-90.47	-1,560.59	1,503.83	1,491.24	1,399.60	91.64	16.272	
12,900.00	11,299.11	12,945.63	11,299.22	46.84	46.44	-90.47	-1,660.58	1,504.59	1,491.21	1,398.12	93.08	16.020	
13,000.00	11,299.72	13,045.63	11,299.82	47.61	47.17	-90.47	-1,760.58	1,505.36	1,491.17	1,396.57	94.59	15.764	
13,100.00	11,300.33	13,145.63	11,300.43	48.42	47.93	-90.46	-1,860.57	1,506.12	1,491.13	1,394.96	96.17	15.506	
13,200.00	11,300.94	13,245.63	11,301.04	49.25	48.72	-90.46	-1,960.57	1,506.88	1,491.09	1,393.29	97.80	15.246	
13,300.00	11,301.55	13,345.63	11,301.64	50.11	49.55	-90.46	-2,060.56	1,507.65	1,491.05	1,391.56	99.49	14.986	
13,400.00	11,302.16	13,445.63	11,302.25	51.00	50.40	-90.46	-2,160.56	1,508.41	1,491.01	1,389.77	101.24	14.727	
13,500.00	11,302.77	13,545.63	11,302.85	51.91	51.28	-90.46	-2,260.56	1,509.18	1,490.97	1,387.93	103.04	14.470	
13,600.00	11,303.37	13,645.63	11,303.46	52.85	52.19	-90.46	-2,360.55	1,509.94	1,490.93	1,386.04	104.89	14.214	
13,700.00	11,303.98	13,745.63	11,304.06	53.81	53.12	-90.46	-2,460.55	1,510.70	1,490.89	1,384.11	106.79	13.961	
13,800.00	11,304.59	13,845.63	11,304.67	54.79	54.08	-90.46	-2,560.54	1,511.47	1,490.85	1,382.12	108.73	13.712	
13,900.00	11,305.20	13,945.63	11,305.28	55.80	55.05	-90.46	-2,660.54	1,512.23	1,490.82	1,380.10	110.71	13.465	
14,000.00	11,305.81	14,045.63	11,305.88	56.82	56.05	-90.46	-2,760.53	1,513.00	1,490.78	1,378.04	112.74	13.223	
14,100.00	11,306.42	14,145.63	11,306.49	57.86	57.07	-90.46	-2,860.53	1,513.76	1,490.74	1,375.94	114.80	12.985	
14,200.00	11,307.03	14,245.63	11,307.09	58.92	58.10	-90.46	-2,960.52	1,514.52	1,490.70	1,373.80	116.90	12.752	
14,300.00	11,307.64	14,345.63	11,307.70	59.99	59.16	-90.46	-3,060.52	1,515.29	1,490.66	1,371.63	119.03	12.523	
14,400.00	11,308.25	14,445.63	11,308.30	61.08	60.23	-90.46	-3,160.51	1,516.05	1,490.62	1,369.42	121.20	12.299	
14,500.00	11,308.86	14,545.63	11,308.91	62.19	61.31	-90.46	-3,260.51	1,516.82	1,490.58	1,367.19	123.39	12.080	
14,600.00	11,309.47	14,645.63	11,309.52	63.31	62.41	-90.46	-3,360.50	1,517.58	1,490.54	1,364.93	125.62	11.866	
14,700.00	11,310.08	14,745.63	11,310.12	64.44	63.53	-90.46	-3,460.50	1,518.34	1,490.50	1,362.64	127.87	11.657	
14,800.00	11,310.69	14,845.63	11,310.73	65.59	64.66	-90.46	-3,560.49	1,519.11	1,490.47	1,360.32	130.15	11.452	
14,900.00	11,311.30	14,945.63	11,311.33	66.75	65.80	-90.46	-3,660.49	1,519.87	1,490.43	1,357.98	132.45	11.253	
15,000.00	11,311.91	15,045.63	11,311.94	67.92	66.96	-90.46	-3,760.48	1,520.64	1,490.39	1,355.61	134.77	11.058	
15,100.00	11,312.52	15,145.63	11,312.55	69.10	68.12	-90.46	-3,860.48	1,521.40	1,490.35	1,353.23	137.12	10.869	
15,200.00	11,313.13	15,245.63	11,313.15	70.29	69.30	-90.46	-3,960.47	1,522.16	1,490.31	1,350.82	139.49	10.684	
15,300.00	11,313.74	15,345.63	11,313.76	71.49	70.48	-90.46	-4,060.47	1,522.93	1,490.27	1,348.39	141.88	10.504	
15,400.00	11,314.35	15,445.63	11,314.36	72.70	71.68	-90.46	-4,160.47	1,523.69	1,490.23	1,345.94	144.29	10.328	
15,500.00	11,314.96	15,545.63	11,314.97	73.91	72.89	-90.46	-4,260.46	1,524.45	1,490.19	1,343.48	146.71	10.157	
15,600.00	11,315.57	15,645.63	11,315.57	75.14	74.10	-90.46	-4,360.46	1,525.22	1,490.15	1,341.00	149.16	9.990	
15,700.00	11,316.17	15,745.63	11,316.18	76.38	75.33	-90.46	-4,460.45	1,525.98	1,490.11	1,338.50	151.62	9.828	
15,800.00	11,316.78	15,845.63	11,316.79	77.62	76.56	-90.46	-4,560.45	1,526.75	1,490.08	1,335.98	154.09	9.670	
15,900.00	11,317.39	15,945.63	11,317.39	78.87	77.80	-90.46	-4,660.44	1,527.51	1,490.04	1,333.45	156.58	9.516	
16,000.00	11,318.00	16,045.63	11,318.00	80.12	79.04	-90.46	-4,760.44	1,528.27	1,490.00	1,330.91	159.09	9.366	
16,100.00	11,318.61	16,145.63	11,318.60	81.39	80.30	-90.46	-4,860.43	1,529.04	1,489.96	1,328.35	161.61	9.220	
16,200.00	11,319.22	16,245.63	11,319.21	82.66	81.56	-90.46	-4,960.43	1,529.80	1,489.92	1,325.78	164.14	9.077	
16,300.00	11,319.83	16,345.63	11,319.82	83.93	82.82	-90.46	-5,060.42	1,530.57	1,489.88	1,323.20	166.68	8.938	
16,327.63	11,320.00	16,373.25	11,319.98	84.23	83.17	-90.46	-5,088.05	1,530.78	1,489.87	1,322.54	167.33	8.904	
16,328.12	11,320.00	16,373.75	11,319.99	84.23	83.18	-90.46	-5,088.54	1,530.78	1,489.87	1,322.53	167.34	8.903 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:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #6H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	EDMRESTORED
Reference Design:	Lateral 1r0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to Updated @ 3682.00usft (25' KB)

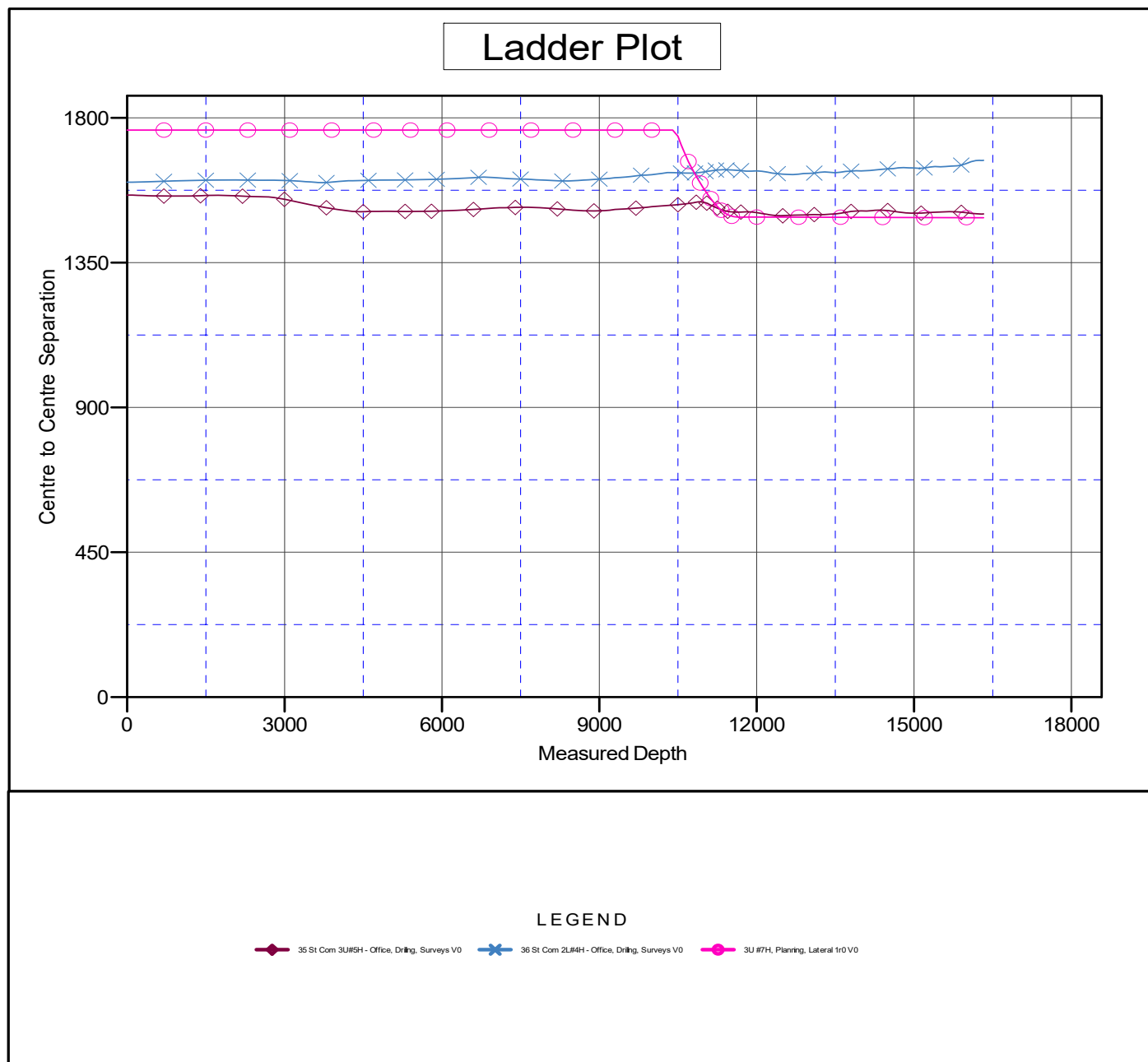
Offset Depths are relative to Offset Datum

Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 3U #6H

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

Grid Convergence at Surface is: 0.43°



Aim Directional Services, LLC

Anticollision Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #6H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Planning	Database:	EDMRESTORED
Reference Design:	Lateral 1r0	Offset TVD Reference:	Offset Datum

Reference Depths are relative to Updated @ 3682.00usft (25' KB)

Offset Depths are relative to Offset Datum

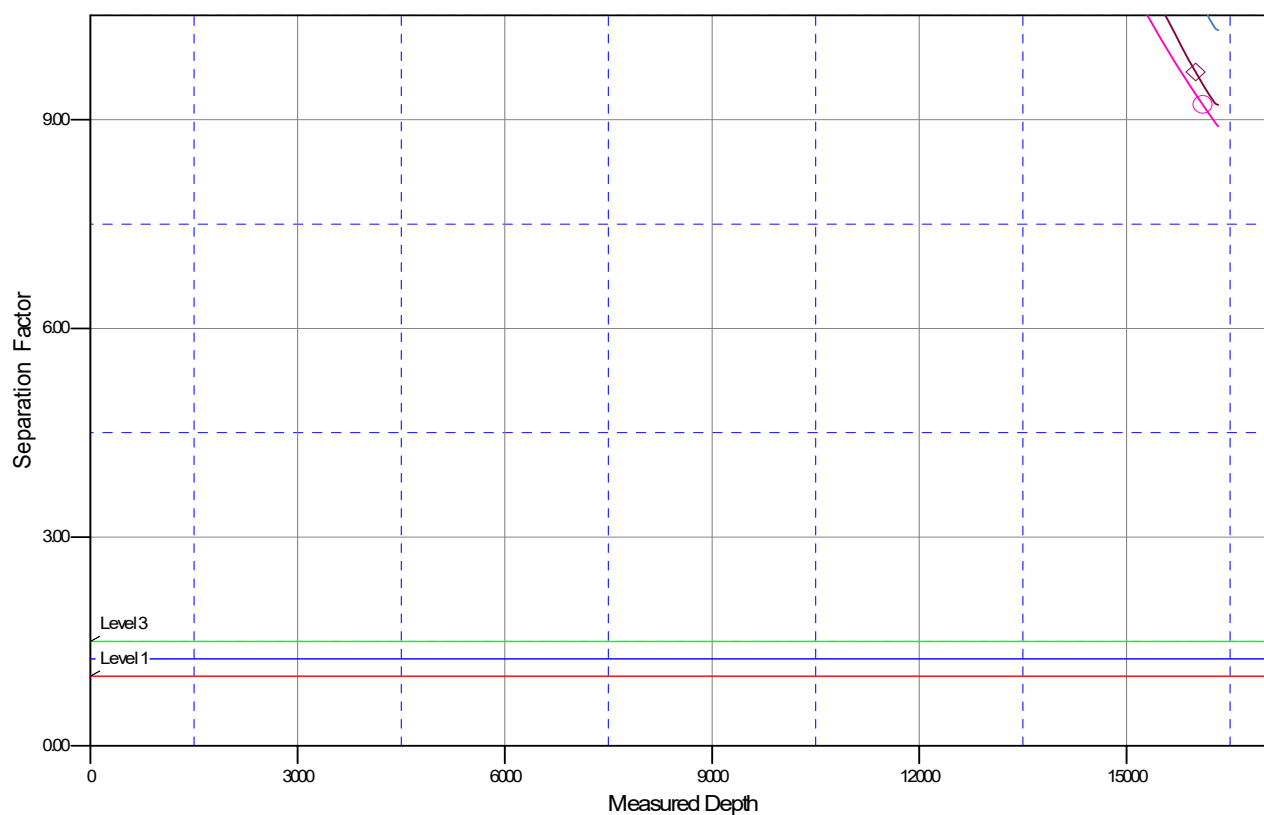
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 3U #6H

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

Grid Convergence at Surface is: 0.43°

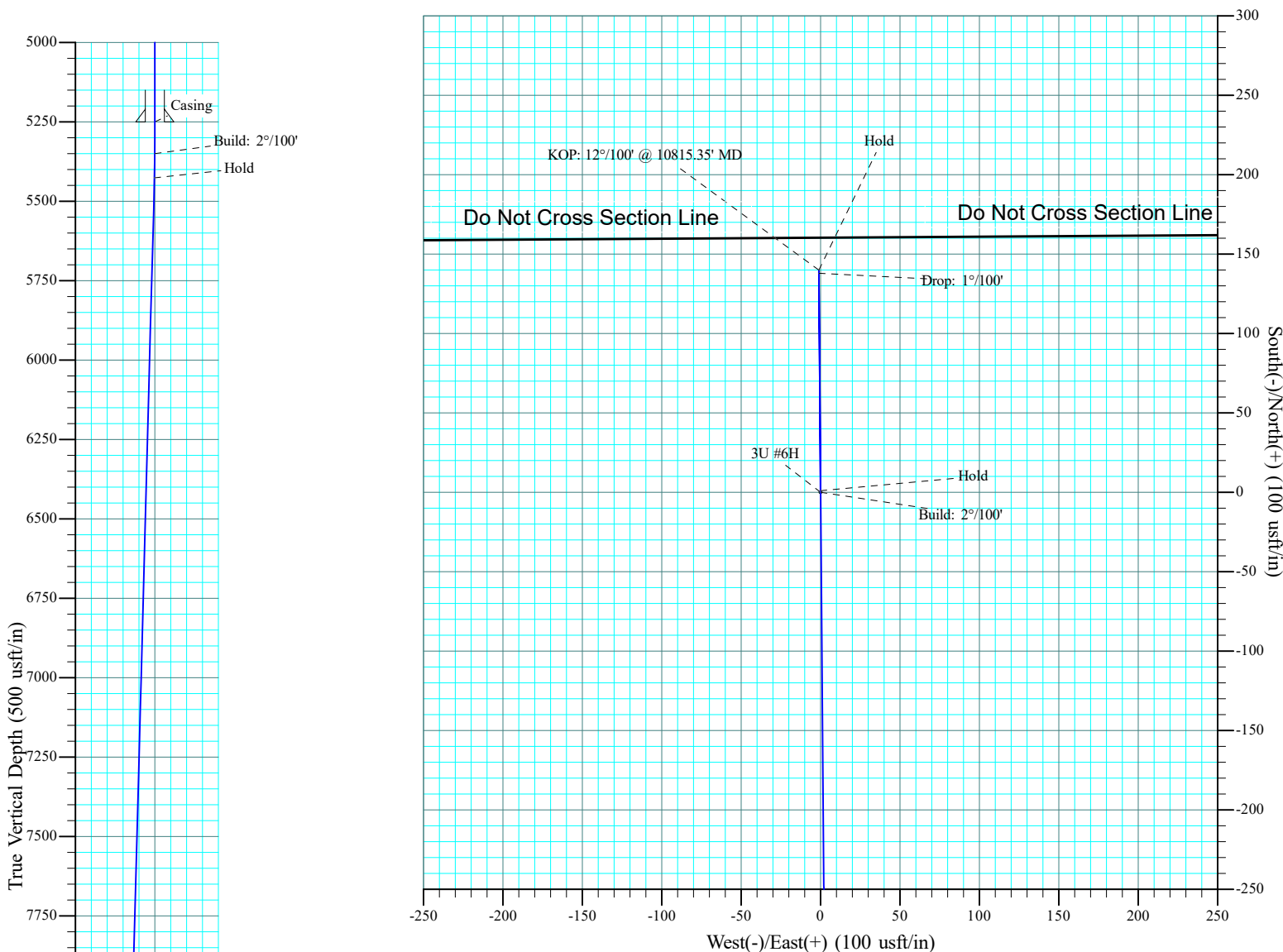
Separation Factor Plot



LEGEND

—●— 35 St Com 3U#6H - Office, Drilling, Surveys V0
 —✕— 36 St Com 2L#4H - Office, Drilling, Surveys V0
 —○— 3U #7H, Planning, Lateral 1r0 V0

Loco Dinero 36 State Com 3U #6H
Lea County, NM (NAD83 NME)
Job No. WT-22-***
Lateral 1r0



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	5350.00	0.00	0.00	5350.00	0.00	0.00	0.00	0.00	0.00	Build: 2°/100'
3	5426.39	1.53	359.56	5426.38	1.02	-0.01	2.000	359.56	-1.02	Hold
4	10562.07	1.53	359.56	10560.24	137.94	-1.05	0.000	0.00	-137.95	Drop: 1°/100'
5	10714.85	0.00	0.00	10713.00	139.98	-1.07	1.000	180.00	-139.98	Hold
6	10815.35	0.00	0.00	10813.50	139.98	-1.07	0.000	0.00	-139.98	KOP: 12°/100' @ 10815.35' MD
7	11562.44	89.65	179.54	11290.96	-334.56	2.74	12.000	179.54	334.57	Hold: 89.65° Inc, 179.54° Azm
8	16327.62	89.65	179.54	11320.00	-5099.50	41.00	0.000	0.00	5099.66	PBHL

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
FTP - LD 36 St #6H	11291.00	-302.00	2.30	525193.70	789687.80	32° 26' 28.499 N	103° 31' 41.896 W
LTP - LD 36 St #6H	11319.00	-5019.50	40.30	520476.20	789725.80	32° 25' 41.818 N	103° 31' 41.868 W
PBHL - LD 36 St #6H	11320.00	-5099.50	41.00	520396.20	789726.50	32° 25' 41.026 N	103° 31' 41.867 W

T G M

Azimuths to Grid North
True North: -0.43°
Magnetic North: 5.93°

Magnetic Field
Strength: 47819.7nT
Dip Angle: 60.14°
Date: 1/1/2022
Model: MVHD

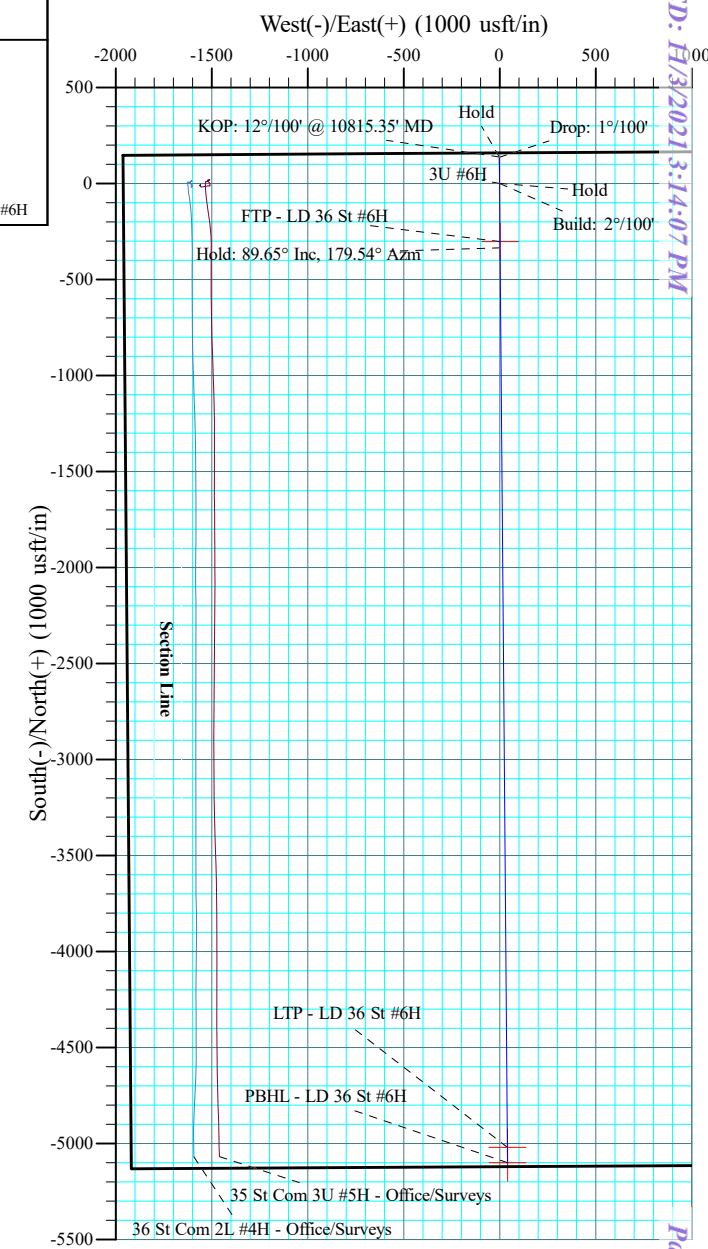
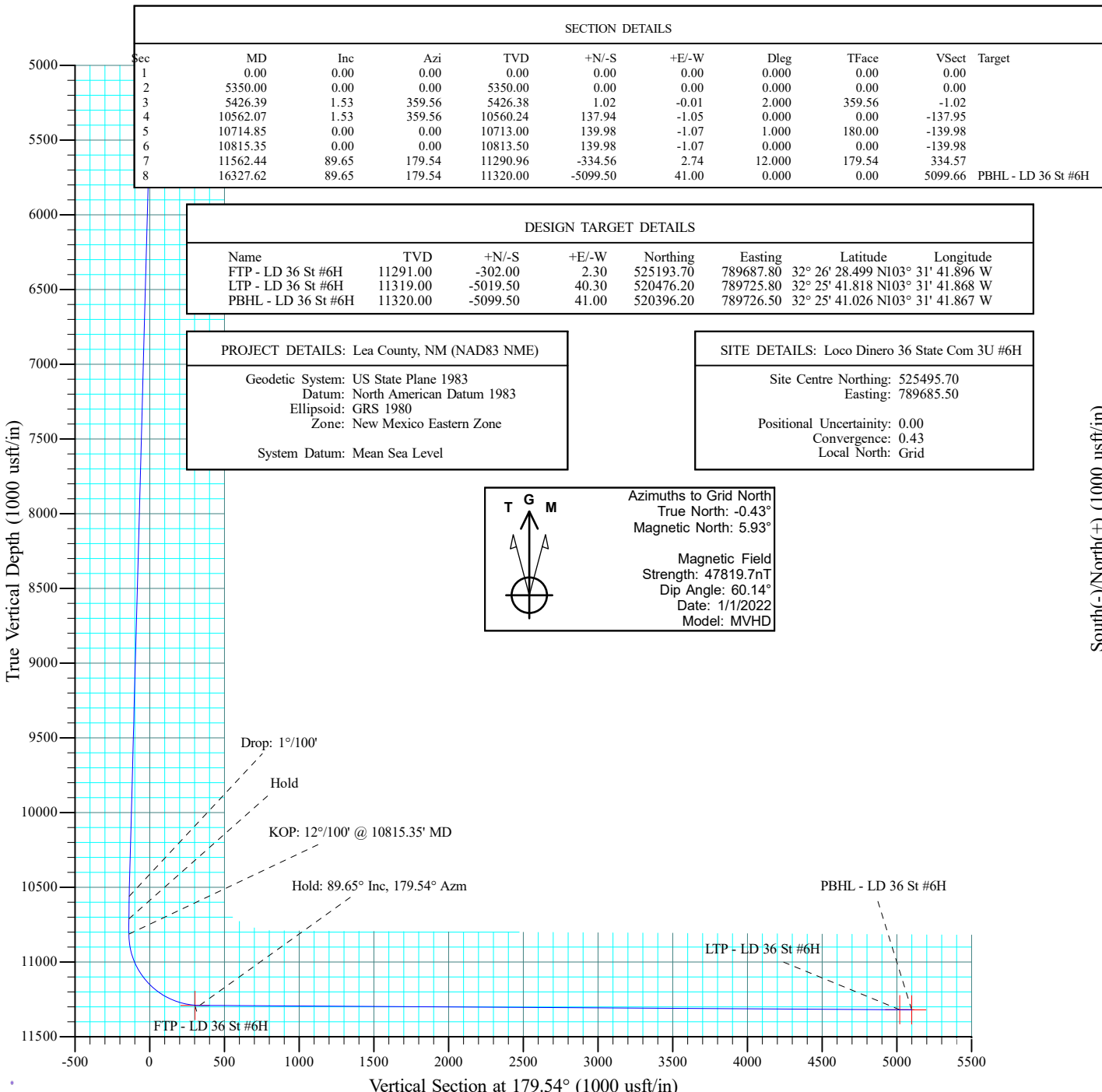
PROJECT DETAILS: Lea County, NM (NAD83 NME)			
Geodetic System:	US State Plane 1983		
Datum:	North American Datum 1983		
Ellipsoid:	GRS 1980		
Zone:	New Mexico Eastern Zone		
System Datum:	Mean Sea Level		

SITE DETAILS: Loco Dinero 36 State Com 3U #6H	
Site Centre Northing:	525495.70
Easting:	789685.50
Positional Uncertainty:	0.00
Convergence:	0.43
Local North:	Grid

Loco Dinero 36 State Com 3U #6H
Lea County, NM (NAD83 NME)
Job No. WT-22-***
Lateral 1r0



Received by OCD: H/3/2021 3:14:07 PM



Page 22 of 28

Aim Directional Services, LLC

Survey Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Well:	3U #6H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r0	Database:	EDMRESTORED

Project	Lea County, NM (NAD83 NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Loco Dinero 36 State Com 3U #6H		
Site Position:		Northing:	525,495.70 usft
From:	Map	Easting:	789,685.50 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 26' 31.488 N
		Longitude:	103° 31' 41.897 W
		Grid Convergence:	0.43 °

Well	3U #6H		
Well Position	+N/-S	0.00 usft	Northing: 525,495.70 usft
	+E/-W	0.00 usft	Easting: 789,685.50 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 26' 31.488 N
		Longitude:	103° 31' 41.897 W
		Ground Level:	3,657.00 usft

Wellbore	Planning		
Magnetics	Model Name	Sample Date	Declination (°)
	MVHD	1/1/2022	6.36
			Dip Angle (°) 60.14
			Field Strength (nT) 47,819.666

Design	Lateral 1r0		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.00	0.00	0.00
			Direction (°) 179.54

Survey Tool Program	Date	10/26/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	16,327.13	Lateral 1r0 (Planning)	MWD+HDGM	OWSG MWD + HDGM

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

Aim Directional Services, LLC

Survey Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Well:	3U #6H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r0	Database:	EDMRESTORED

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)
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

Survey Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Well:	3U #6H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r0	Database:	EDMRESTORED

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)
5,350.00	0.00	0.00	5,350.00	0.00	0.00	0.00	0.000	0.000	0.000
Build: 2°/100'									
5,400.00	1.00	359.56	5,400.00	0.44	0.00	-0.44	2.000	2.000	0.000
5,426.39	1.53	359.56	5,426.38	1.02	-0.01	-1.02	2.000	2.000	0.000
Hold									
5,500.00	1.53	359.56	5,499.96	2.98	-0.02	-2.98	0.000	0.000	0.000
5,600.00	1.53	359.56	5,599.93	5.65	-0.04	-5.65	0.000	0.000	0.000
5,700.00	1.53	359.56	5,699.89	8.31	-0.06	-8.31	0.000	0.000	0.000
5,800.00	1.53	359.56	5,799.86	10.98	-0.08	-10.98	0.000	0.000	0.000
5,900.00	1.53	359.56	5,899.82	13.65	-0.10	-13.65	0.000	0.000	0.000
6,000.00	1.53	359.56	5,999.79	16.31	-0.12	-16.31	0.000	0.000	0.000
6,100.00	1.53	359.56	6,099.75	18.98	-0.15	-18.98	0.000	0.000	0.000
6,200.00	1.53	359.56	6,199.72	21.64	-0.17	-21.64	0.000	0.000	0.000
6,300.00	1.53	359.56	6,299.68	24.31	-0.19	-24.31	0.000	0.000	0.000
6,400.00	1.53	359.56	6,399.64	26.98	-0.21	-26.98	0.000	0.000	0.000
6,500.00	1.53	359.56	6,499.61	29.64	-0.23	-29.64	0.000	0.000	0.000
6,600.00	1.53	359.56	6,599.57	32.31	-0.25	-32.31	0.000	0.000	0.000
6,700.00	1.53	359.56	6,699.54	34.97	-0.27	-34.98	0.000	0.000	0.000
6,800.00	1.53	359.56	6,799.50	37.64	-0.29	-37.64	0.000	0.000	0.000
6,900.00	1.53	359.56	6,899.47	40.31	-0.31	-40.31	0.000	0.000	0.000
7,000.00	1.53	359.56	6,999.43	42.97	-0.33	-42.97	0.000	0.000	0.000
7,100.00	1.53	359.56	7,099.40	45.64	-0.35	-45.64	0.000	0.000	0.000
7,200.00	1.53	359.56	7,199.36	48.31	-0.37	-48.31	0.000	0.000	0.000
7,300.00	1.53	359.56	7,299.33	50.97	-0.39	-50.97	0.000	0.000	0.000
7,400.00	1.53	359.56	7,399.29	53.64	-0.41	-53.64	0.000	0.000	0.000
7,500.00	1.53	359.56	7,499.25	56.30	-0.43	-56.31	0.000	0.000	0.000
7,600.00	1.53	359.56	7,599.22	58.97	-0.45	-58.97	0.000	0.000	0.000
7,700.00	1.53	359.56	7,699.18	61.64	-0.47	-61.64	0.000	0.000	0.000
7,800.00	1.53	359.56	7,799.15	64.30	-0.49	-64.30	0.000	0.000	0.000
7,900.00	1.53	359.56	7,899.11	66.97	-0.51	-66.97	0.000	0.000	0.000
8,000.00	1.53	359.56	7,999.08	69.63	-0.53	-69.64	0.000	0.000	0.000
8,100.00	1.53	359.56	8,099.04	72.30	-0.55	-72.30	0.000	0.000	0.000
8,200.00	1.53	359.56	8,199.01	74.97	-0.57	-74.97	0.000	0.000	0.000
8,300.00	1.53	359.56	8,298.97	77.63	-0.59	-77.64	0.000	0.000	0.000
8,400.00	1.53	359.56	8,398.93	80.30	-0.61	-80.30	0.000	0.000	0.000
8,500.00	1.53	359.56	8,498.90	82.97	-0.63	-82.97	0.000	0.000	0.000
8,600.00	1.53	359.56	8,598.86	85.63	-0.65	-85.63	0.000	0.000	0.000
8,700.00	1.53	359.56	8,698.83	88.30	-0.67	-88.30	0.000	0.000	0.000
8,800.00	1.53	359.56	8,798.79	90.96	-0.70	-90.97	0.000	0.000	0.000
8,900.00	1.53	359.56	8,898.76	93.63	-0.72	-93.63	0.000	0.000	0.000
9,000.00	1.53	359.56	8,998.72	96.30	-0.74	-96.30	0.000	0.000	0.000
9,100.00	1.53	359.56	9,098.69	98.96	-0.76	-98.97	0.000	0.000	0.000
9,200.00	1.53	359.56	9,198.65	101.63	-0.78	-101.63	0.000	0.000	0.000

Aim Directional Services, LLC

Survey Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Well:	3U #6H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r0	Database:	EDMRESTORED

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)
9,300.00	1.53	359.56	9,298.61	104.29	-0.80	-104.30	0.000	0.000	0.000
9,400.00	1.53	359.56	9,398.58	106.96	-0.82	-106.96	0.000	0.000	0.000
9,500.00	1.53	359.56	9,498.54	109.63	-0.84	-109.63	0.000	0.000	0.000
9,600.00	1.53	359.56	9,598.51	112.29	-0.86	-112.30	0.000	0.000	0.000
9,700.00	1.53	359.56	9,698.47	114.96	-0.88	-114.96	0.000	0.000	0.000
9,800.00	1.53	359.56	9,798.44	117.63	-0.90	-117.63	0.000	0.000	0.000
9,900.00	1.53	359.56	9,898.40	120.29	-0.92	-120.29	0.000	0.000	0.000
10,000.00	1.53	359.56	9,998.37	122.96	-0.94	-122.96	0.000	0.000	0.000
10,100.00	1.53	359.56	10,098.33	125.62	-0.96	-125.63	0.000	0.000	0.000
10,200.00	1.53	359.56	10,198.29	128.29	-0.98	-128.29	0.000	0.000	0.000
10,300.00	1.53	359.56	10,298.26	130.96	-1.00	-130.96	0.000	0.000	0.000
10,400.00	1.53	359.56	10,398.22	133.62	-1.02	-133.63	0.000	0.000	0.000
10,500.00	1.53	359.56	10,498.19	136.29	-1.04	-136.29	0.000	0.000	0.000
10,562.07	1.53	359.56	10,560.24	137.94	-1.05	-137.95	0.000	0.000	0.000
Drop: 1°/100'									
10,600.00	1.15	359.56	10,598.16	138.83	-1.06	-138.83	1.000	-1.000	0.000
10,700.00	0.15	359.56	10,698.15	139.96	-1.07	-139.96	1.000	-1.000	0.000
10,714.85	0.00	0.00	10,713.00	139.98	-1.07	-139.98	1.000	-1.000	2.949
Hold									
10,800.00	0.00	0.00	10,798.15	139.98	-1.07	-139.98	0.000	0.000	0.000
10,815.35	0.00	0.00	10,813.50	139.98	-1.07	-139.98	0.000	0.000	0.000
KOP: 12°/100' @ 10815.35' MD									
10,825.00	1.16	179.54	10,823.15	139.88	-1.07	-139.89	11.996	11.996	0.000
10,850.00	4.16	179.54	10,848.12	138.72	-1.06	-138.73	12.000	12.000	0.000
10,875.00	7.16	179.54	10,872.99	136.26	-1.04	-136.26	12.000	12.000	0.000
10,900.00	10.16	179.54	10,897.70	132.50	-1.01	-132.50	12.000	12.000	0.000
10,925.00	13.16	179.54	10,922.19	127.45	-0.97	-127.45	12.000	12.000	0.000
10,950.00	16.16	179.54	10,946.37	121.12	-0.92	-121.12	12.000	12.000	0.000
10,975.00	19.16	179.54	10,970.19	113.54	-0.86	-113.54	12.000	12.000	0.000
11,000.00	22.16	179.54	10,993.58	104.72	-0.79	-104.72	12.000	12.000	0.000
11,025.00	25.16	179.54	11,016.48	94.69	-0.71	-94.69	12.000	12.000	0.000
11,050.00	28.16	179.54	11,038.82	83.47	-0.62	-83.48	12.000	12.000	0.000
11,075.00	31.16	179.54	11,060.54	71.11	-0.52	-71.11	12.000	12.000	0.000
11,100.00	34.16	179.54	11,081.58	57.62	-0.41	-57.62	12.000	12.000	0.000
11,125.00	37.16	179.54	11,101.89	43.05	-0.29	-43.05	12.000	12.000	0.000
11,150.00	40.16	179.54	11,121.41	27.43	-0.17	-27.43	12.000	12.000	0.000
11,175.00	43.16	179.54	11,140.09	10.82	-0.03	-10.82	12.000	12.000	0.000
11,200.00	46.16	179.54	11,157.87	-6.75	0.11	6.75	12.000	12.000	0.000
11,225.00	49.16	179.54	11,174.71	-25.23	0.26	25.23	12.000	12.000	0.000
11,250.00	52.16	179.54	11,190.55	-44.56	0.41	44.56	12.000	12.000	0.000
11,275.00	55.16	179.54	11,205.37	-64.69	0.57	64.70	12.000	12.000	0.000
11,300.00	58.16	179.54	11,219.11	-85.58	0.74	85.58	12.000	12.000	0.000
11,325.00	61.16	179.54	11,231.74	-107.15	0.91	107.15	12.000	12.000	0.000
11,350.00	64.16	179.54	11,243.22	-129.35	1.09	129.36	12.000	12.000	0.000

Aim Directional Services, LLC

Survey Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Well:	3U #6H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r0	Database:	EDMRESTORED

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)
11,375.00	67.16	179.54	11,253.52	-152.13	1.28	152.13	12.000	12.000	0.000
11,400.00	70.16	179.54	11,262.62	-175.41	1.46	175.41	12.000	12.000	0.000
11,425.00	73.16	179.54	11,270.48	-199.13	1.65	199.14	12.000	12.000	0.000
11,450.00	76.16	179.54	11,277.10	-223.24	1.85	223.25	12.000	12.000	0.000
11,475.00	79.16	179.54	11,282.44	-247.66	2.04	247.67	12.000	12.000	0.000
11,500.00	82.16	179.54	11,286.50	-272.32	2.24	272.33	12.000	12.000	0.000
11,525.00	85.16	179.54	11,289.26	-297.17	2.44	297.18	12.000	12.000	0.000
11,550.00	88.16	179.54	11,290.72	-322.12	2.64	322.13	12.000	12.000	0.000
11,562.44	89.65	179.54	11,290.96	-334.56	2.74	334.57	12.000	12.000	0.000
Hold: 89.65° Inc, 179.54° Azm									
11,600.00	89.65	179.54	11,291.18	-372.12	3.04	372.13	0.000	0.000	0.000
11,700.00	89.65	179.54	11,291.79	-472.11	3.84	472.13	0.000	0.000	0.000
11,800.00	89.65	179.54	11,292.40	-572.11	4.65	572.12	0.000	0.000	0.000
11,900.00	89.65	179.54	11,293.01	-672.10	5.45	672.12	0.000	0.000	0.000
12,000.00	89.65	179.54	11,293.62	-772.09	6.25	772.12	0.000	0.000	0.000
12,100.00	89.65	179.54	11,294.23	-872.09	7.06	872.12	0.000	0.000	0.000
12,200.00	89.65	179.54	11,294.84	-972.08	7.86	972.12	0.000	0.000	0.000
12,300.00	89.65	179.54	11,295.45	-1,072.08	8.66	1,072.11	0.000	0.000	0.000
12,400.00	89.65	179.54	11,296.06	-1,172.07	9.47	1,172.11	0.000	0.000	0.000
12,500.00	89.65	179.54	11,296.67	-1,272.07	10.27	1,272.11	0.000	0.000	0.000
12,600.00	89.65	179.54	11,297.28	-1,372.06	11.07	1,372.11	0.000	0.000	0.000
12,700.00	89.65	179.54	11,297.89	-1,472.06	11.87	1,472.11	0.000	0.000	0.000
12,800.00	89.65	179.54	11,298.50	-1,572.05	12.68	1,572.11	0.000	0.000	0.000
12,900.00	89.65	179.54	11,299.11	-1,672.05	13.48	1,672.10	0.000	0.000	0.000
13,000.00	89.65	179.54	11,299.72	-1,772.04	14.28	1,772.10	0.000	0.000	0.000
13,100.00	89.65	179.54	11,300.33	-1,872.04	15.09	1,872.10	0.000	0.000	0.000
13,200.00	89.65	179.54	11,300.94	-1,972.03	15.89	1,972.10	0.000	0.000	0.000
13,300.00	89.65	179.54	11,301.55	-2,072.03	16.69	2,072.10	0.000	0.000	0.000
13,400.00	89.65	179.54	11,302.16	-2,172.02	17.49	2,172.09	0.000	0.000	0.000
13,500.00	89.65	179.54	11,302.77	-2,272.02	18.30	2,272.09	0.000	0.000	0.000
13,600.00	89.65	179.54	11,303.37	-2,372.01	19.10	2,372.09	0.000	0.000	0.000
13,700.00	89.65	179.54	11,303.98	-2,472.01	19.90	2,472.09	0.000	0.000	0.000
13,800.00	89.65	179.54	11,304.59	-2,572.00	20.71	2,572.09	0.000	0.000	0.000
13,900.00	89.65	179.54	11,305.20	-2,672.00	21.51	2,672.09	0.000	0.000	0.000
14,000.00	89.65	179.54	11,305.81	-2,771.99	22.31	2,772.08	0.000	0.000	0.000
14,100.00	89.65	179.54	11,306.42	-2,871.99	23.11	2,872.08	0.000	0.000	0.000
14,200.00	89.65	179.54	11,307.03	-2,971.98	23.92	2,972.08	0.000	0.000	0.000
14,300.00	89.65	179.54	11,307.64	-3,071.98	24.72	3,072.08	0.000	0.000	0.000
14,400.00	89.65	179.54	11,308.25	-3,171.97	25.52	3,172.08	0.000	0.000	0.000
14,500.00	89.65	179.54	11,308.86	-3,271.97	26.33	3,272.07	0.000	0.000	0.000
14,600.00	89.65	179.54	11,309.47	-3,371.96	27.13	3,372.07	0.000	0.000	0.000
14,700.00	89.65	179.54	11,310.08	-3,471.96	27.93	3,472.07	0.000	0.000	0.000
14,800.00	89.65	179.54	11,310.69	-3,571.95	28.73	3,572.07	0.000	0.000	0.000
14,900.00	89.65	179.54	11,311.30	-3,671.95	29.54	3,672.07	0.000	0.000	0.000

Aim Directional Services, LLC

Survey Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Well:	3U #6H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r0	Database:	EDMRESTORED

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)
15,000.00	89.65	179.54	11,311.91	-3,771.94	30.34	3,772.06	0.000	0.000	0.000
15,100.00	89.65	179.54	11,312.52	-3,871.94	31.14	3,872.06	0.000	0.000	0.000
15,200.00	89.65	179.54	11,313.13	-3,971.93	31.95	3,972.06	0.000	0.000	0.000
15,300.00	89.65	179.54	11,313.74	-4,071.93	32.75	4,072.06	0.000	0.000	0.000
15,400.00	89.65	179.54	11,314.35	-4,171.92	33.55	4,172.06	0.000	0.000	0.000
15,500.00	89.65	179.54	11,314.96	-4,271.92	34.35	4,272.06	0.000	0.000	0.000
15,600.00	89.65	179.54	11,315.57	-4,371.91	35.16	4,372.05	0.000	0.000	0.000
15,700.00	89.65	179.54	11,316.17	-4,471.91	35.96	4,472.05	0.000	0.000	0.000
15,800.00	89.65	179.54	11,316.78	-4,571.90	36.76	4,572.05	0.000	0.000	0.000
15,900.00	89.65	179.54	11,317.39	-4,671.90	37.57	4,672.05	0.000	0.000	0.000
16,000.00	89.65	179.54	11,318.00	-4,771.89	38.37	4,772.05	0.000	0.000	0.000
16,100.00	89.65	179.54	11,318.61	-4,871.89	39.17	4,872.04	0.000	0.000	0.000
16,200.00	89.65	179.54	11,319.22	-4,971.88	39.98	4,972.04	0.000	0.000	0.000
16,300.00	89.65	179.54	11,319.83	-5,071.88	40.78	5,072.04	0.000	0.000	0.000
16,327.62	89.65	179.54	11,320.00	-5,099.50	41.00	5,099.66	0.000	0.000	0.000
PBHL									

Design Targets

Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FTP - LD 36 St #6H - plan misses target center by 1.36usft at 11529.93usft MD (11289.65 TVD, -302.08 N, 2.48 E) - Point	0.00	0.00	11,291.00	-302.00	2.30	525,193.70	789,687.80	32° 26' 28.499 N	103° 31' 41.896 W
LTP - LD 36 St #6H - plan misses target center by 0.52usft at 16247.62usft MD (11319.51 TVD, -5019.50 N, 40.36 E) - Point	0.00	0.00	11,319.00	-5,019.50	40.30	520,476.20	789,725.80	32° 25' 41.818 N	103° 31' 41.868 W
PBHL - LD 36 St #6H - plan hits target center - Point	0.00	0.00	11,320.00	-5,099.50	41.00	520,396.20	789,726.50	32° 25' 41.026 N	103° 31' 41.867 W

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,800.00	1,800.00	Casing	13-3/8	17-1/4
5,250.00	5,250.00	Casing	9-5/8	12-1/4

Aim Directional Services, LLC

Survey Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #6H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3682.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #6H	MD Reference:	Updated @ 3682.00usft (25' KB)
Well:	3U #6H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r0	Database:	EDMRESTORED

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
5350	5350	0	0	Build: 2°/100'
5426	5426	1	0	Hold
10,562	10,560	138	-1	Drop: 1°/100'
10,715	10,713	140	-1	Hold
10,815	10,813	140	-1	KOP: 12°/100' @ 10815.35' MD
11,562	11,291	-335	3	Hold: 89.65° Inc, 179.54° Azm
16,328	11,320	-5099	41	PBHL

Checked By: _____ Approved By: _____ Date: _____

Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

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

First Take Point (FTP)

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

Last Take Point (LTP)

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

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

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

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Marshall & Winston, Inc. OGRID: 14187 Date: 11 / 2 / 2021

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Loco Dinero 36 State Com 6H		UL:C, Sec 36, T21S, R33E	160' FNL 1960' FWL	800	950	500

IV. Central Delivery Point Name: Loco Dinero CTB [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Loco Dinero 36 State Com 6H		2/5/21	2/25/21	5/10/21	6/1/21	6/1/21 Estimated

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☐ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

Marshall & Winston, Inc.

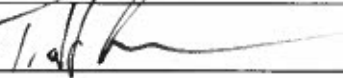
Natural Gas Management Plan ~ Attachment

- VI. Marshall & Winston, Inc. (M&W) engineering staff will utilize separation equipment based on capacities suggested by the manufacturer in conjunction with anticipated daily production rates. Engineered design of the VRU system along with pipe sizing will be verified by COMM Engineering Services to ensure maximum efficiency for anticipated volumes.

- VII. M&W will take the following actions to comply with the regulations listed in 19.15.28.8:
 - A. M&W plans to efficiently recover natural gas by minimizing waste gas as defined in 19.15.2 NMAC. M&W will ensure each new well drilled and completed is connected to a natural gas gathering system before the well is on line. If the natural gas gathering infrastructure is not in place the well will be delayed or shut in until the gathering system is available.
 - B. Drilling operations are equipped with a flare located at least 100 ft from the wellbore. The flare will be used to combust any gas the is circulated to surface during drilling operations. Estimated volumes will be reported appropriately.
 - C. During completion operations and natural gas brought to surface will be flared. Following completion operations all fluids and gases flowed/pumped from the well will be directed to designed separation equipment at the central tank battery. All natural gas will be sent directly to the sales line. If the initial gas production does not meet gathering sales line specifications it will be flared for no more than 60 days. Gas analysis will be ran twice a week and once gas meets sales specifications the gas will be sent to the sales line. Flared volumes will be reported accordingly.
 - D. M&W will not flare natural gas unless it follows the provisions and exceptions list in 19.15.27.8. If the gas gathering system is unavailable each well(s) will be shut in the gathering system is back in service.
 - E. M&W will comply with required standards listed in 19.5.27.8 A-F.
 - F. The volume of natural gas that is vented or flared as a result of a malfunction or emergency during operations will be estimated and reported accordingly. The volume of natural gas that is vented, flared or used beneficially during production operations will measured or estimated. M&W will install meters to measure the volume of natural gas flared from the facility. Measuring devices will conform to industry stands as well as NMOCD regulations.

- VIII. During maintenance operations that involve separation equipment venting will controlled by shutting in well(s). During VRU maintenance operations natural gas will be diverted to the flare to avoid venting the natural gas.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: 
Printed Name: Todd Passmore
Title: Operations Manager
E-mail Address: tpassmore@mar-win.com
Date: 11/3/2021
Phone: 432-684-6373
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval: