

Submit 1 Copy To Appropriate District Office
 District I – (575) 393-6161
 1625 N. French Dr., Hobbs, NM 88240
 District II – (575) 748-1283
 811 S. First St., Artesia, NM 88210
 District III – (505) 334-6178
 1000 Rio Brazos Rd., Aztec, NM 87410
 District IV – (505) 476-3460
 1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
 Energy, Minerals and Natural Resources

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

Form C-103
 Revised July 18, 2013

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) 1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐		WELL API NO. 30-025-49506
2. Name of Operator Marshall & Winston, Inc.		5. Indicate Type of Lease STATE ☒ FEE ☐
3. Address of Operator P. O. Box 50880 – Midland, TX 79710		6. State Oil & Gas Lease No.
4. Well Location Unit Letter <u>B</u> ; <u>200</u> feet from the <u>North</u> line and <u>1560</u> feet from the <u>East</u> line Section <u>36</u> Township <u>21S</u> Range <u>33E</u> NMPM Lea County		7. Lease Name or Unit Agreement Name Loco Dinero 36 State Com
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3645.2' GR		8. Well Number 7H 9. OGRID Number 14187 10. Pool name or Wildcat WC025; G-06; S332126D; Bone Spring

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☒
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
 DOWNHOLE COMMINGLE ☐
 CLOSED-LOOP SYSTEM ☐
 OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
 COMMENCE DRILLING OPNS. ☐ P AND A ☐
 CASING/CEMENT JOB ☐
 OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Marshall & Winston, Inc. respectfully requests to change the Bottom Hole Location (BHL) as follows:

FROM: 20' FSL & 1830' FEL (Unit O, SWSE) of Section 36-T21S-R33E
 TO: 20' FSL & 2055' FEL (Unit O, SWSE) of Section 36-T21S-R33E

Attached are new directional drilling plans and an updated C102.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

Rusty Klein

TITLE Agent for Marshall & Winston, Inc. DATE January 24, 2022

Type or print name
For State Use Only

Rusty Klein

E-mail address: rustyklein4@gmail.com

PHONE: 575-703-6412

APPROVED BY:

TITLE

DATE

DISTRICT I
1025 N. FRENCH DR., BOBBS, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-6720

DISTRICT II
511 S. FIRST ST., ARTESIA, NM 88210
Phone: (505) 748-1383 Fax: (505) 748-6720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6176 Fax: (505) 334-6170

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3490 Fax: (505) 476-3488

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 30-025-49506	Pool Code 97929	Pool Name WC 025 GDL 53321260; Bone Spring
Property Code 39736	Property Name LOCO DINERO 36 STATE COM	
OGRID No. 14187	Operator Name MARSHALL & WINSTON, INC.	Well Number 7H
		Elevation 3645.2'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	36	21-S	33-E		200	NORTH	1560	EAST	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
0	36	21-S	33-E		20	SOUTH	2055	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

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

NAD 83 NME <u>SURFACE LOCATION</u> Y=525467.1 N X=791447.4 E LAT.=32.441965' N LONG.=103.522594' W	Y=525659.9 N X=790364.0 E ETP 462' FNL & 2055' FEL Y=525237.8 N X=790954.0 E LAT.=32.441345' N LONG.=103.524199' W GRID AZ. TO ETP 245°04'40"		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.N.K.</i> 1/21/22 Signature Date Todd Passmore Printed Name tpassmore@mar-win.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. Harcrow 1/20/22 Certificate No. CHAD HARCROW 17777 W.O. #22-65 DRAWN BY: AH
NAD 83 NME <u>PROPOSED BOTTOM HOLE LOCATION</u> Y=520403.5 N X=790991.3 E LAT.=32.428057' N LONG.=103.524197' W	LTP 100' FSL & 2055' FEL Y=520483.5 N X=790990.7 E LAT.=32.428276' N LONG.=103.524197' W Y=520380.2 N X=790408.1 E	20' B.H.	

Marshall & Winston, Inc.

Lea County, NM (NAD83 NME)

Loco Dinero 36 State Com 3U #7H

3U #7H

Planning

Lateral 1r1

Anticollision Report

24 January, 2022

Aim Directional Services, LLC

Anticollision Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #7H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3670.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #7H	MD Reference:	Updated @ 3670.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #7H	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 1r1	Offset TVD Reference:	Offset Datum

Reference	Lateral 1r1
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	MD Interval 100.00usft
Depth Range:	Unlimited
Results Limited by:	Maximum centre distance of 10,000.00usft
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	1/24/2022		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	16,105.13	Lateral 1r1 (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
Offset Well - Wellbore - Design						
Loco Dinero 36 State Com 3U #8H						
3U #8H - Planning - Lateral 1r1	5,300.00	5,298.00	40.00	2.46	1.065	Level 3, CC
3U #8H - Planning - Lateral 1r1	5,400.00	5,398.00	40.21	1.95	1.051	Level 3, ES, SF

Offset Design:	Loco Dinero 36 State Com 3U #8H - 3U #8H - Planning - Lateral 1r1												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:	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		
0.00	0.00	0.00	0.00	0.00	0.00	89.71	0.20	40.00	40.05					
100.00	100.00	98.00	98.00	0.13	0.13	89.71	0.20	40.00	40.00	39.73	0.27	150.284		
200.00	200.00	198.00	198.00	0.49	0.49	89.71	0.20	40.00	40.00	39.02	0.98	40.874		
300.00	300.00	298.00	298.00	0.85	0.84	89.71	0.20	40.00	40.00	38.30	1.70	23.591		
400.00	400.00	398.00	398.00	1.21	1.20	89.71	0.20	40.00	40.00	37.59	2.41	16.580		
500.00	500.00	498.00	498.00	1.57	1.56	89.71	0.20	40.00	40.00	36.87	3.13	12.782		
600.00	600.00	598.00	598.00	1.93	1.92	89.71	0.20	40.00	40.00	36.15	3.85	10.399		
700.00	700.00	698.00	698.00	2.29	2.28	89.71	0.20	40.00	40.00	35.44	4.56	8.766		
800.00	800.00	798.00	798.00	2.64	2.64	89.71	0.20	40.00	40.00	34.72	5.28	7.575		
900.00	900.00	898.00	898.00	3.00	3.00	89.71	0.20	40.00	40.00	34.00	6.00	6.670		
1,000.00	1,000.00	998.00	998.00	3.36	3.35	89.71	0.20	40.00	40.00	33.29	6.71	5.958		
1,100.00	1,100.00	1,098.00	1,098.00	3.72	3.71	89.71	0.20	40.00	40.00	32.57	7.43	5.383		
1,200.00	1,200.00	1,198.00	1,198.00	4.08	4.07	89.71	0.20	40.00	40.00	31.85	8.15	4.909		
1,300.00	1,300.00	1,298.00	1,298.00	4.44	4.43	89.71	0.20	40.00	40.00	31.14	8.87	4.512		
1,400.00	1,400.00	1,398.00	1,398.00	4.79	4.79	89.71	0.20	40.00	40.00	30.42	9.58	4.175		
1,500.00	1,500.00	1,498.00	1,498.00	5.15	5.15	89.71	0.20	40.00	40.00	29.70	10.30	3.884		
1,600.00	1,600.00	1,598.00	1,598.00	5.51	5.50	89.71	0.20	40.00	40.00	28.98	11.02	3.631		
1,700.00	1,700.00	1,698.00	1,698.00	5.87	5.86	89.71	0.20	40.00	40.00	28.27	11.73	3.409		
1,800.00	1,800.00	1,798.00	1,798.00	6.23	6.22	89.71	0.20	40.00	40.00	27.55	12.45	3.213		
1,900.00	1,900.00	1,898.00	1,898.00	6.59	6.58	89.71	0.20	40.00	40.00	26.83	13.17	3.038		
2,000.00	2,000.00	1,998.00	1,998.00	6.95	6.94	89.71	0.20	40.00	40.00	26.12	13.88	2.881		
2,100.00	2,100.00	2,098.00	2,098.00	7.30	7.30	89.71	0.20	40.00	40.00	25.40	14.60	2.740		
2,200.00	2,200.00	2,198.00	2,198.00	7.66	7.66	89.71	0.20	40.00	40.00	24.68	15.32	2.611		
2,300.00	2,300.00	2,298.00	2,298.00	8.02	8.01	89.71	0.20	40.00	40.00	23.97	16.03	2.495		
2,400.00	2,400.00	2,398.00	2,398.00	8.38	8.37	89.71	0.20	40.00	40.00	23.25	16.75	2.388		

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 #7H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3670.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #7H	MD Reference:	Updated @ 3670.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #7H	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 1r1	Offset TVD Reference:	Offset Datum

Offset Design: Loco Dinero 36 State Com 3U #8H - 3U #8H - Planning - Lateral 1r1													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	
2,500.00	2,500.00	2,498.00	2,498.00	8.74	8.73	89.71	0.20	40.00	40.00	22.53	17.47	2.290	
2,600.00	2,600.00	2,598.00	2,598.00	9.10	9.09	89.71	0.20	40.00	40.00	21.82	18.19	2.200	
2,700.00	2,700.00	2,698.00	2,698.00	9.45	9.45	89.71	0.20	40.00	40.00	21.10	18.90	2.116	
2,800.00	2,800.00	2,798.00	2,798.00	9.81	9.81	89.71	0.20	40.00	40.00	20.38	19.62	2.039	
2,900.00	2,900.00	2,898.00	2,898.00	10.17	10.16	89.71	0.20	40.00	40.00	19.66	20.34	1.967	
3,000.00	3,000.00	2,998.00	2,998.00	10.53	10.52	89.71	0.20	40.00	40.00	18.95	21.05	1.900	
3,100.00	3,100.00	3,098.00	3,098.00	10.89	10.88	89.71	0.20	40.00	40.00	18.23	21.77	1.837	
3,200.00	3,200.00	3,198.00	3,198.00	11.25	11.24	89.71	0.20	40.00	40.00	17.51	22.49	1.779	
3,300.00	3,300.00	3,298.00	3,298.00	11.61	11.60	89.71	0.20	40.00	40.00	16.80	23.20	1.724	
3,400.00	3,400.00	3,398.00	3,398.00	11.96	11.96	89.71	0.20	40.00	40.00	16.08	23.92	1.672	
3,500.00	3,500.00	3,498.00	3,498.00	12.32	12.32	89.71	0.20	40.00	40.00	15.36	24.64	1.624	
3,600.00	3,600.00	3,598.00	3,598.00	12.68	12.67	89.71	0.20	40.00	40.00	14.65	25.35	1.578	
3,700.00	3,700.00	3,698.00	3,698.00	13.04	13.03	89.71	0.20	40.00	40.00	13.93	26.07	1.534	
3,800.00	3,800.00	3,798.00	3,798.00	13.40	13.39	89.71	0.20	40.00	40.00	13.21	26.79	1.493	Level 3
3,900.00	3,900.00	3,898.00	3,898.00	13.76	13.75	89.71	0.20	40.00	40.00	12.49	27.51	1.454	Level 3
4,000.00	4,000.00	3,998.00	3,998.00	14.11	14.11	89.71	0.20	40.00	40.00	11.78	28.22	1.417	Level 3
4,100.00	4,100.00	4,098.00	4,098.00	14.47	14.47	89.71	0.20	40.00	40.00	11.06	28.94	1.382	Level 3
4,200.00	4,200.00	4,198.00	4,198.00	14.83	14.82	89.71	0.20	40.00	40.00	10.34	29.66	1.349	Level 3
4,300.00	4,300.00	4,298.00	4,298.00	15.19	15.18	89.71	0.20	40.00	40.00	9.63	30.37	1.317	Level 3
4,400.00	4,400.00	4,398.00	4,398.00	15.55	15.54	89.71	0.20	40.00	40.00	8.91	31.09	1.287	Level 3
4,500.00	4,500.00	4,498.00	4,498.00	15.91	15.90	89.71	0.20	40.00	40.00	8.19	31.81	1.258	Level 3
4,600.00	4,600.00	4,598.00	4,598.00	16.27	16.26	89.71	0.20	40.00	40.00	7.48	32.52	1.230	Level 3
4,700.00	4,700.00	4,698.00	4,698.00	16.62	16.62	89.71	0.20	40.00	40.00	6.76	33.24	1.203	Level 3
4,800.00	4,800.00	4,798.00	4,798.00	16.98	16.98	89.71	0.20	40.00	40.00	6.04	33.96	1.178	Level 3
4,900.00	4,900.00	4,898.00	4,898.00	17.34	17.33	89.71	0.20	40.00	40.00	5.33	34.67	1.154	Level 3
5,000.00	5,000.00	4,998.00	4,998.00	17.70	17.69	89.71	0.20	40.00	40.00	4.61	35.39	1.130	Level 3
5,100.00	5,100.00	5,098.00	5,098.00	18.06	18.05	89.71	0.20	40.00	40.00	3.89	36.11	1.108	Level 3
5,200.00	5,200.00	5,198.00	5,198.00	18.42	18.41	89.71	0.20	40.00	40.00	3.17	36.83	1.086	Level 3
5,300.00	5,300.00	5,298.00	5,298.00	18.77	18.77	89.71	0.20	40.00	40.00	2.46	37.54	1.065	Level 3, CC
5,300.01	5,300.01	5,298.01	5,298.01	18.77	18.77	89.71	0.20	40.00	40.00	2.46	37.54	1.065	Level 3
5,400.00	5,400.00	5,398.00	5,398.00	19.13	19.13	119.12	0.60	40.00	40.21	1.95	38.26	1.051	Level 3, ES, SF
5,500.00	5,499.94	5,497.99	5,497.93	19.49	19.48	118.94	3.70	39.98	41.87	2.90	38.97	1.074	Level 3
5,600.00	5,599.83	5,597.96	5,597.84	19.85	19.84	119.29	7.38	39.95	44.06	4.38	39.68	1.110	Level 3
5,700.00	5,699.73	5,697.94	5,697.75	20.20	20.20	119.61	11.06	39.93	46.26	5.86	40.40	1.145	Level 3
5,800.00	5,799.63	5,797.91	5,797.66	20.56	20.56	119.91	14.73	39.90	48.45	7.35	41.11	1.179	Level 3
5,900.00	5,899.53	5,897.89	5,897.56	20.91	20.92	120.17	18.41	39.88	50.65	8.83	41.82	1.211	Level 3
6,000.00	5,999.43	5,997.86	5,997.47	21.27	21.27	120.42	22.08	39.86	52.85	10.31	42.54	1.242	Level 3
6,100.00	6,099.32	6,097.84	6,097.38	21.63	21.63	120.64	25.76	39.83	55.05	11.80	43.25	1.273	Level 3
6,200.00	6,199.22	6,197.81	6,197.29	21.99	21.99	120.85	29.44	39.81	57.25	13.29	43.96	1.302	Level 3
6,300.00	6,299.12	6,297.79	6,297.20	22.34	22.35	121.05	33.11	39.78	59.45	14.77	44.68	1.331	Level 3
6,400.00	6,399.02	6,397.77	6,397.10	22.70	22.71	121.22	36.79	39.76	61.65	16.26	45.39	1.358	Level 3
6,500.00	6,498.92	6,497.74	6,497.01	23.06	23.07	121.39	40.46	39.73	63.85	17.74	46.11	1.385	Level 3
6,600.00	6,598.81	6,597.72	6,596.92	23.42	23.42	121.55	44.14	39.71	66.05	19.23	46.82	1.411	Level 3
6,700.00	6,698.71	6,697.69	6,696.83	23.77	23.78	121.69	47.82	39.69	68.26	20.72	47.54	1.436	Level 3
6,800.00	6,798.61	6,797.67	6,796.74	24.13	24.14	121.83	51.49	39.66	70.46	22.21	48.25	1.460	Level 3
6,900.00	6,898.51	6,897.64	6,896.64	24.49	24.50	121.96	55.17	39.64	72.66	23.69	48.97	1.484	Level 3
7,000.00	6,998.41	6,997.62	6,996.55	24.85	24.86	122.08	58.84	39.61	74.86	25.18	49.68	1.507	
7,100.00	7,098.30	7,097.59	7,096.46	25.21	25.22	122.19	62.52	39.59	77.07	26.67	50.40	1.529	
7,200.00	7,198.20	7,197.57	7,196.37	25.57	25.57	122.30	66.20	39.56	79.27	28.16	51.11	1.551	
7,300.00	7,298.10	7,297.55	7,296.28	25.92	25.93	122.40	69.87	39.54	81.48	29.65	51.83	1.572	
7,400.00	7,398.00	7,397.52	7,396.18	26.28	26.29	122.50	73.55	39.52	83.68	31.13	52.55	1.593	
7,500.00	7,497.90	7,497.50	7,496.09	26.64	26.65	122.59	77.22	39.49	85.89	32.62	53.26	1.612	

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 #7H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3670.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #7H	MD Reference:	Updated @ 3670.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #7H	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 1r1	Offset TVD Reference:	Offset Datum

Offset Design: Loco Dinero 36 State Com 3U #8H - 3U #8H - Planning - Lateral 1r1													Offset Site Error: 0.00 usft
Survey Program:	0-MWD+HDGM		Offset	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned:		Offset Well Error: 0.00 usft		Warning
Reference	Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Reference	Offset		+N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
7,600.00	7,597.79	7,597.47	7,596.00	27.00	27.01	122.67	80.90	39.47	88.09	34.11	53.98	1.632	
7,700.00	7,697.69	7,697.45	7,695.91	27.36	27.37	122.76	84.57	39.44	90.30	35.60	54.70	1.651	
7,800.00	7,797.59	7,797.42	7,795.82	27.72	27.73	122.84	88.25	39.42	92.50	37.09	55.41	1.669	
7,900.00	7,897.49	7,897.40	7,895.72	28.08	28.08	122.91	91.93	39.39	94.71	38.58	56.13	1.687	
8,000.00	7,997.39	7,997.38	7,995.63	28.44	28.44	122.98	95.60	39.37	96.91	40.07	56.85	1.705	
8,100.00	8,097.29	8,097.35	8,095.54	28.80	28.80	123.05	99.28	39.34	99.12	41.55	57.57	1.722	
8,200.00	8,197.18	8,197.33	8,195.45	29.16	29.16	123.12	102.95	39.32	101.33	43.04	58.28	1.739	
8,300.00	8,297.08	8,297.30	8,295.36	29.52	29.52	123.18	106.63	39.30	103.53	44.53	59.00	1.755	
8,400.00	8,396.98	8,397.28	8,395.26	29.87	29.88	123.24	110.31	39.27	105.74	46.02	59.72	1.771	
8,500.00	8,496.88	8,497.25	8,495.17	30.23	30.24	123.30	113.98	39.25	107.95	47.51	60.44	1.786	
8,600.00	8,596.78	8,597.23	8,595.08	30.59	30.60	123.35	117.66	39.22	110.15	49.00	61.15	1.801	
8,700.00	8,696.67	8,697.20	8,694.99	30.95	30.96	123.40	121.33	39.20	112.36	50.49	61.87	1.816	
8,800.00	8,796.57	8,797.18	8,794.90	31.31	31.31	123.46	125.01	39.17	114.57	51.98	62.59	1.830	
8,900.00	8,896.47	8,897.16	8,894.80	31.67	31.67	123.50	128.69	39.15	116.77	53.46	63.31	1.845	
9,000.00	8,996.37	8,997.13	8,994.71	32.03	32.03	123.55	132.36	39.13	118.98	54.95	64.03	1.858	
9,100.00	9,096.27	9,097.11	9,094.62	32.39	32.39	123.60	136.04	39.10	121.19	56.44	64.74	1.872	
9,200.00	9,196.16	9,197.08	9,194.53	32.75	32.75	123.64	139.71	39.08	123.39	57.93	65.46	1.885	
9,300.00	9,296.06	9,297.06	9,294.44	33.11	33.11	123.68	143.39	39.05	125.60	59.42	66.18	1.898	
9,400.00	9,395.96	9,397.03	9,394.34	33.47	33.47	123.72	147.07	39.03	127.81	60.91	66.90	1.910	
9,500.00	9,495.86	9,497.01	9,494.25	33.83	33.83	123.76	150.74	39.00	130.01	62.40	67.62	1.923	
9,600.00	9,595.76	9,596.98	9,594.16	34.19	34.19	123.80	154.42	38.98	132.22	63.89	68.34	1.935	
9,700.00	9,695.65	9,696.96	9,694.07	34.55	34.55	123.84	158.09	38.96	134.43	65.37	69.06	1.947	
9,800.00	9,795.55	9,796.94	9,793.98	34.91	34.91	123.87	161.77	38.93	136.64	66.86	69.77	1.958	
9,900.00	9,895.46	9,896.91	9,893.89	35.27	35.27	123.83	165.45	38.91	138.70	68.21	70.49	1.968	
10,000.00	9,995.42	9,996.90	9,993.80	35.63	35.63	123.26	169.12	38.88	139.91	68.69	71.21	1.965	
10,100.00	10,095.42	10,096.85	10,093.69	35.99	35.99	122.09	172.80	38.86	140.19	68.26	71.93	1.949	
10,200.00	10,195.42	10,196.78	10,193.55	36.35	36.35	91.15	176.47	38.83	140.04	67.39	72.65	1.928	
10,300.00	10,295.42	10,296.70	10,293.44	36.71	36.70	90.03	179.20	38.82	140.00	66.63	73.37	1.908	
10,371.84	10,367.26	10,368.53	10,365.26	36.96	36.96	89.67	180.08	38.81	139.99	66.11	73.88	1.895	
10,400.00	10,395.42	10,396.69	10,393.42	37.06	37.06	89.63	180.19	38.81	139.99	65.91	74.08	1.890	
10,400.00	10,395.42	10,396.69	10,393.42	37.06	37.06	89.63	180.19	38.81	139.99	65.91	74.08	1.890	
10,500.00	10,494.91	10,496.19	10,492.91	37.40	37.42	-146.73	180.19	38.81	146.77	72.00	74.77	1.963	
10,600.00	10,590.57	10,591.84	10,588.57	37.72	37.76	-150.43	180.19	38.81	171.44	96.01	75.43	2.273	
10,700.00	10,678.21	10,679.61	10,676.33	38.03	38.07	-154.18	180.19	38.81	214.92	138.91	76.02	2.827	
10,800.00	10,753.99	10,830.75	10,824.95	38.34	38.56	-159.03	163.24	22.06	265.55	190.83	74.73	3.554	
10,900.00	10,814.61	11,026.63	10,993.51	38.67	39.11	-159.56	94.20	-46.14	305.96	238.25	67.71	4.519	
11,000.00	10,862.18	11,213.19	11,106.00	39.06	39.64	-151.85	-11.48	-149.00	321.20	260.31	60.90	5.275	
11,100.00	10,901.97	11,309.86	11,147.44	39.44	39.93	-146.12	-83.07	-198.68	326.68	265.00	61.68	5.296	
11,200.00	10,932.31	11,406.13	11,179.23	39.79	40.20	-141.98	-165.85	-235.75	331.41	269.02	62.39	5.312	
11,300.00	10,951.89	11,502.15	11,200.22	40.08	40.44	-139.38	-256.48	-258.88	335.18	272.22	62.95	5.324	
11,400.00	10,959.84	11,598.08	11,209.65	40.29	40.63	-138.26	-351.41	-267.26	337.81	274.47	63.34	5.333	
11,500.00	10,960.00	11,697.63	11,212.05	40.47	40.80	-138.44	-450.93	-266.58	339.58	276.00	63.57	5.341	
11,600.00	10,960.00	11,797.60	11,214.39	40.67	41.01	-138.70	-550.87	-265.81	341.33	277.46	63.87	5.344	
11,700.00	10,960.00	11,897.57	11,216.73	40.92	41.27	-138.96	-650.81	-265.04	343.09	278.84	64.24	5.340	
11,800.00	10,960.00	11,997.54	11,219.07	41.21	41.57	-139.21	-750.76	-264.27	344.85	280.16	64.69	5.331	
11,900.00	10,960.00	12,097.52	11,221.41	41.54	41.93	-139.47	-850.70	-263.50	346.62	281.42	65.21	5.316	
12,000.00	10,960.00	12,197.49	11,223.74	41.92	42.33	-139.72	-950.64	-262.73	348.40	282.61	65.79	5.296	
12,100.00	10,960.00	12,297.46	11,226.08	42.35	42.78	-139.97	-1,050.58	-261.96	350.19	283.75	66.44	5.271	
12,200.00	10,960.00	12,397.44	11,228.42	42.82	43.28	-140.21	-1,150.52	-261.19	351.98	284.83	67.15	5.241	
12,300.00	10,960.00	12,497.41	11,230.76	43.35	43.82	-140.45	-1,250.47	-260.43	353.78	285.85	67.93	5.208	
12,400.00	10,960.00	12,597.38	11,233.10	43.91	44.41	-140.70	-1,350.41	-259.66	355.58	286.83	68.75	5.172	
12,500.00	10,960.00	12,697.35	11,235.44	44.52	45.03	-140.93	-1,450.35	-258.89	357.39	287.76	69.63	5.132	

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 #7H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3670.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #7H	MD Reference:	Updated @ 3670.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #7H	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 1r1	Offset TVD Reference:	Offset Datum

Offset Design: Loco Dinero 36 State Com 3U #8H - 3U #8H - Planning - Lateral 1r1													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:							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
12,600.00	10,960.00	12,797.33	11,237.78	45.17	45.70	-141.17	-1,550.29	-258.12	359.21	288.65	70.57	5.090	
12,700.00	10,960.00	12,897.30	11,240.12	45.86	46.40	-141.40	-1,650.24	-257.35	361.03	289.49	71.54	5.046	
12,800.00	10,960.00	12,997.27	11,242.46	46.59	47.14	-141.63	-1,750.18	-256.58	362.86	290.29	72.57	5.000	
12,900.00	10,960.00	13,097.24	11,244.80	47.35	47.91	-141.86	-1,850.12	-255.81	364.70	291.06	73.63	4.953	
13,000.00	10,960.00	13,197.22	11,247.14	48.14	48.71	-142.09	-1,950.06	-255.04	366.54	291.80	74.74	4.904	
13,100.00	10,960.00	13,297.19	11,249.48	48.97	49.54	-142.31	-2,050.01	-254.27	368.38	292.50	75.88	4.855	
13,200.00	10,960.00	13,397.16	11,251.82	49.82	50.40	-142.54	-2,149.95	-253.51	370.24	293.18	77.06	4.805	
13,300.00	10,960.00	13,497.13	11,254.16	50.71	51.29	-142.76	-2,249.89	-252.74	372.09	293.82	78.27	4.754	
13,400.00	10,960.00	13,597.11	11,256.50	51.62	52.20	-142.97	-2,349.83	-251.97	373.96	294.45	79.51	4.703	
13,500.00	10,960.00	13,697.08	11,258.84	52.55	53.14	-143.19	-2,449.77	-251.20	375.82	295.05	80.78	4.653	
13,600.00	10,960.00	13,797.05	11,261.18	53.51	54.10	-143.40	-2,549.72	-250.43	377.70	295.63	82.07	4.602	
13,700.00	10,960.00	13,897.02	11,263.52	54.50	55.09	-143.61	-2,649.66	-249.66	379.58	296.19	83.39	4.552	
13,800.00	10,960.00	13,997.00	11,265.86	55.50	56.09	-143.82	-2,749.60	-248.89	381.46	296.73	84.73	4.502	
13,900.00	10,960.00	14,096.97	11,268.20	56.52	57.12	-144.03	-2,849.54	-248.12	383.35	297.25	86.10	4.453	
14,000.00	10,960.00	14,196.94	11,270.54	57.56	58.16	-144.24	-2,949.49	-247.35	385.24	297.76	87.48	4.404	
14,100.00	10,960.00	14,296.92	11,272.88	58.62	59.22	-144.44	-3,049.43	-246.59	387.14	298.26	88.88	4.356	
14,200.00	10,960.00	14,396.89	11,275.22	59.70	60.29	-144.64	-3,149.37	-245.82	389.04	298.74	90.30	4.308	
14,300.00	10,960.00	14,496.86	11,277.56	60.79	61.39	-144.84	-3,249.31	-245.05	390.95	299.22	91.73	4.262	
14,400.00	10,960.00	14,596.83	11,279.90	61.90	62.49	-145.04	-3,349.25	-244.28	392.86	299.68	93.18	4.216	
14,500.00	10,960.00	14,696.81	11,282.24	63.02	63.61	-145.23	-3,449.20	-243.51	394.78	300.14	94.64	4.171	
14,600.00	10,960.00	14,796.78	11,284.58	64.16	64.75	-145.42	-3,549.14	-242.74	396.70	300.58	96.12	4.127	
14,700.00	10,960.00	14,896.75	11,286.91	65.31	65.89	-145.62	-3,649.08	-241.97	398.63	301.02	97.61	4.084	
14,800.00	10,960.00	14,996.72	11,289.25	66.47	67.05	-145.81	-3,749.02	-241.20	400.56	301.45	99.10	4.042	
14,900.00	10,960.00	15,096.70	11,291.59	67.64	68.22	-145.99	-3,848.97	-240.44	402.49	301.88	100.61	4.000	
15,000.00	10,960.00	15,196.67	11,293.93	68.82	69.40	-146.18	-3,948.91	-239.67	404.43	302.30	102.13	3.960	
15,100.00	10,960.00	15,296.64	11,296.27	70.01	70.59	-146.36	-4,048.85	-238.90	406.38	302.72	103.65	3.920	
15,200.00	10,960.00	15,396.61	11,298.61	71.22	71.79	-146.55	-4,148.79	-238.13	408.32	303.14	105.19	3.882	
15,300.00	10,960.00	15,496.59	11,300.95	72.43	73.00	-146.73	-4,248.74	-237.36	410.28	303.55	106.73	3.844	
15,400.00	10,960.00	15,596.56	11,303.29	73.65	74.22	-146.91	-4,348.68	-236.59	412.23	303.96	108.28	3.807	
15,500.00	10,960.00	15,696.53	11,305.63	74.88	75.45	-147.08	-4,448.62	-235.82	414.19	304.36	109.83	3.771	
15,600.00	10,960.00	15,796.50	11,307.97	76.12	76.69	-147.26	-4,548.56	-235.05	416.16	304.77	111.39	3.736	
15,700.00	10,960.00	15,896.48	11,310.31	77.36	77.93	-147.43	-4,648.50	-234.28	418.12	305.17	112.95	3.702	
15,800.00	10,960.00	15,996.45	11,312.65	78.61	79.18	-147.61	-4,748.45	-233.52	420.09	305.57	114.52	3.668	
15,900.00	10,960.00	16,096.42	11,314.99	79.87	80.43	-147.78	-4,848.39	-232.75	422.07	305.98	116.09	3.636	
16,000.00	10,960.00	16,196.39	11,317.33	81.14	81.70	-147.95	-4,948.33	-231.98	424.05	306.38	117.67	3.604	
16,100.00	10,960.00	16,296.37	11,319.67	82.41	82.97	-148.11	-5,048.27	-231.21	426.03	306.78	119.25	3.573	
16,105.13	10,960.00	16,301.50	11,319.79	82.48	83.03	-148.12	-5,053.40	-231.17	426.13	306.79	119.34	3.571	

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

1/24/2022 10:00:18AM

Page 5

COMPASS 5000.15 Build 93A

Aim Directional Services, LLC

Anticollision Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #7H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3670.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #7H	MD Reference:	Updated @ 3670.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #7H	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 1r1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to Updated @ 3670.00usft (25' KB)

Offset Depths are relative to Offset Datum

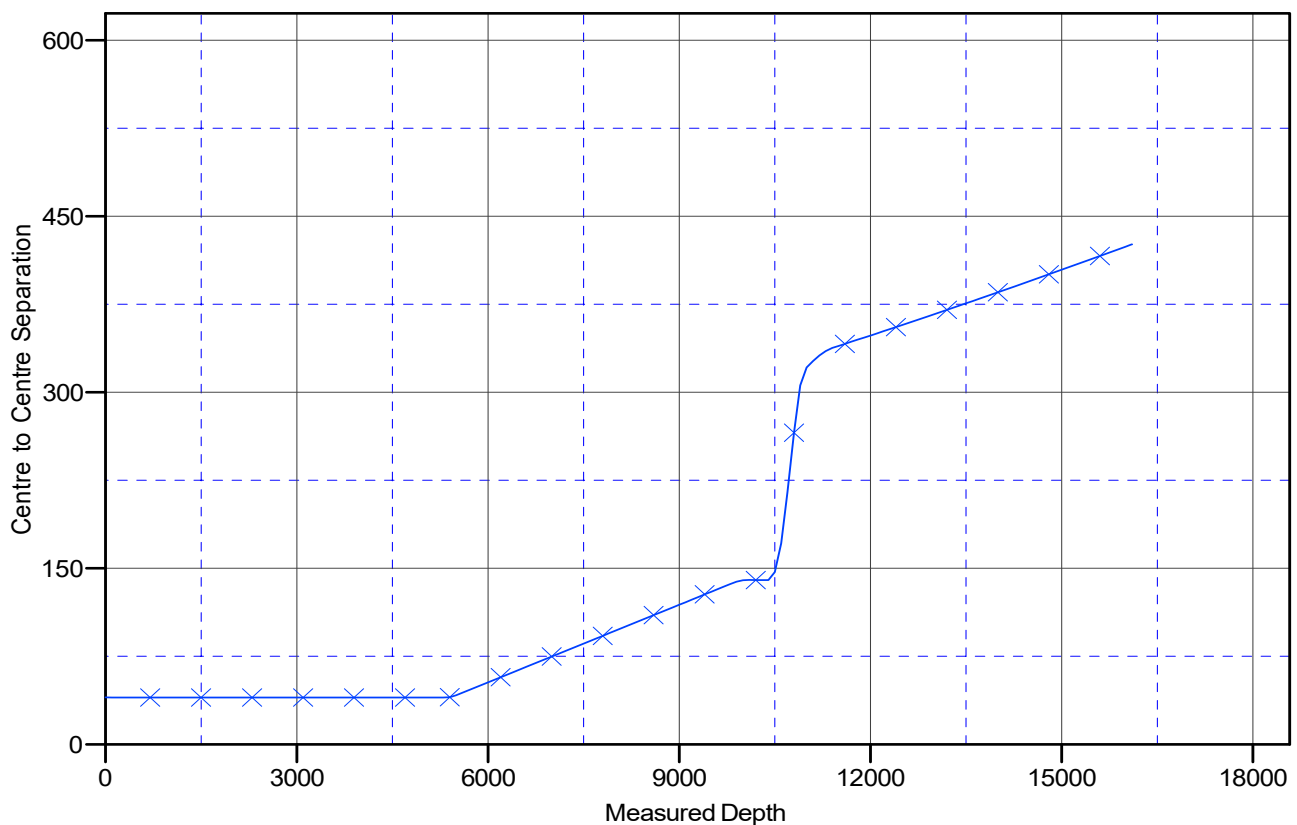
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 3U #7H

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

Grid Convergence at Surface is: 0.43°

Ladder Plot



LEGEND

—x— 3U #8H, Planning, Lateral 1r1 V0

Aim Directional Services, LLC

Anticollision Report

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #7H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3670.00usft (25' KB)
Reference Site:	Loco Dinero 36 State Com 3U #7H	MD Reference:	Updated @ 3670.00usft (25' KB)
Site Error:	0.00 usft	North Reference:	Grid
Reference Well:	3U #7H	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 1r1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to Updated @ 3670.00usft (25' KB)

Offset Depths are relative to Offset Datum

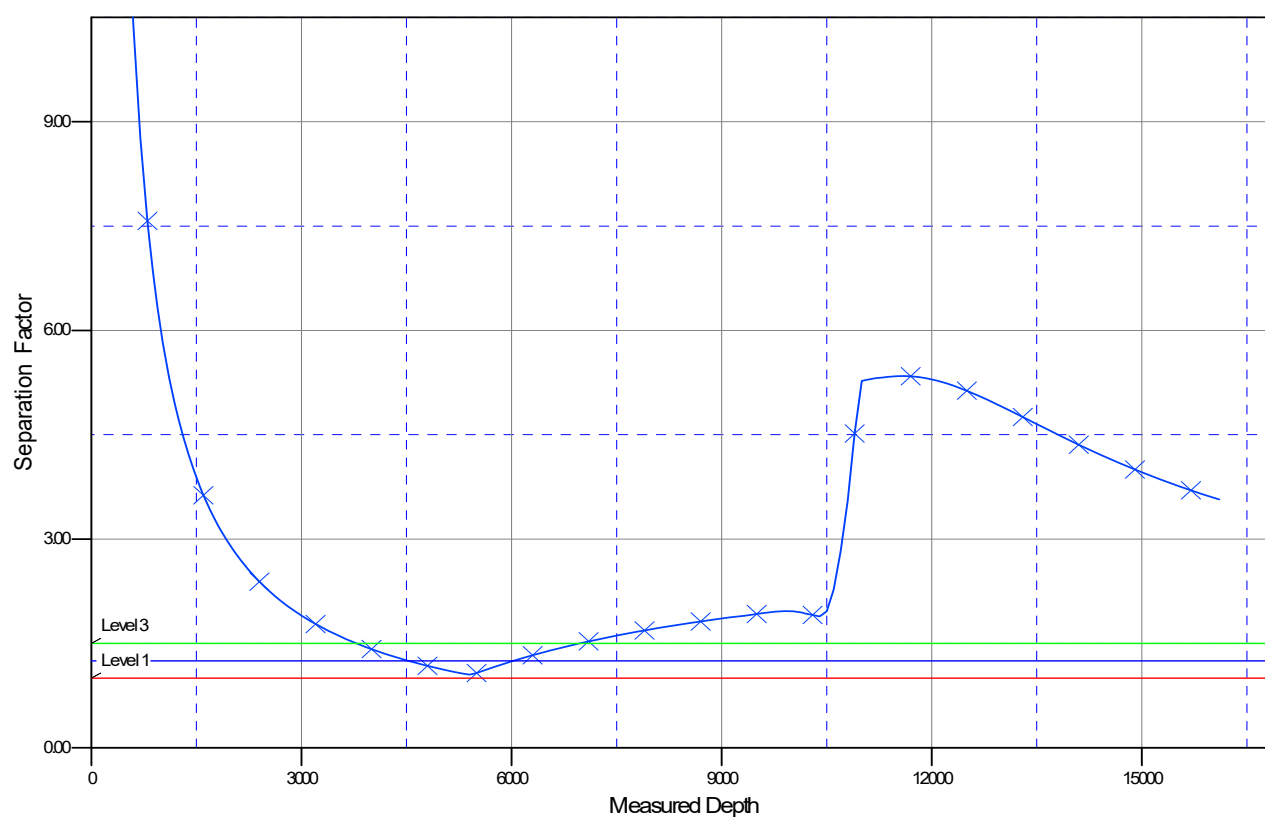
Central Meridian is 104° 20' 0.000 W

Coordinates are relative to: 3U #7H

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

Grid Convergence at Surface is: 0.43°

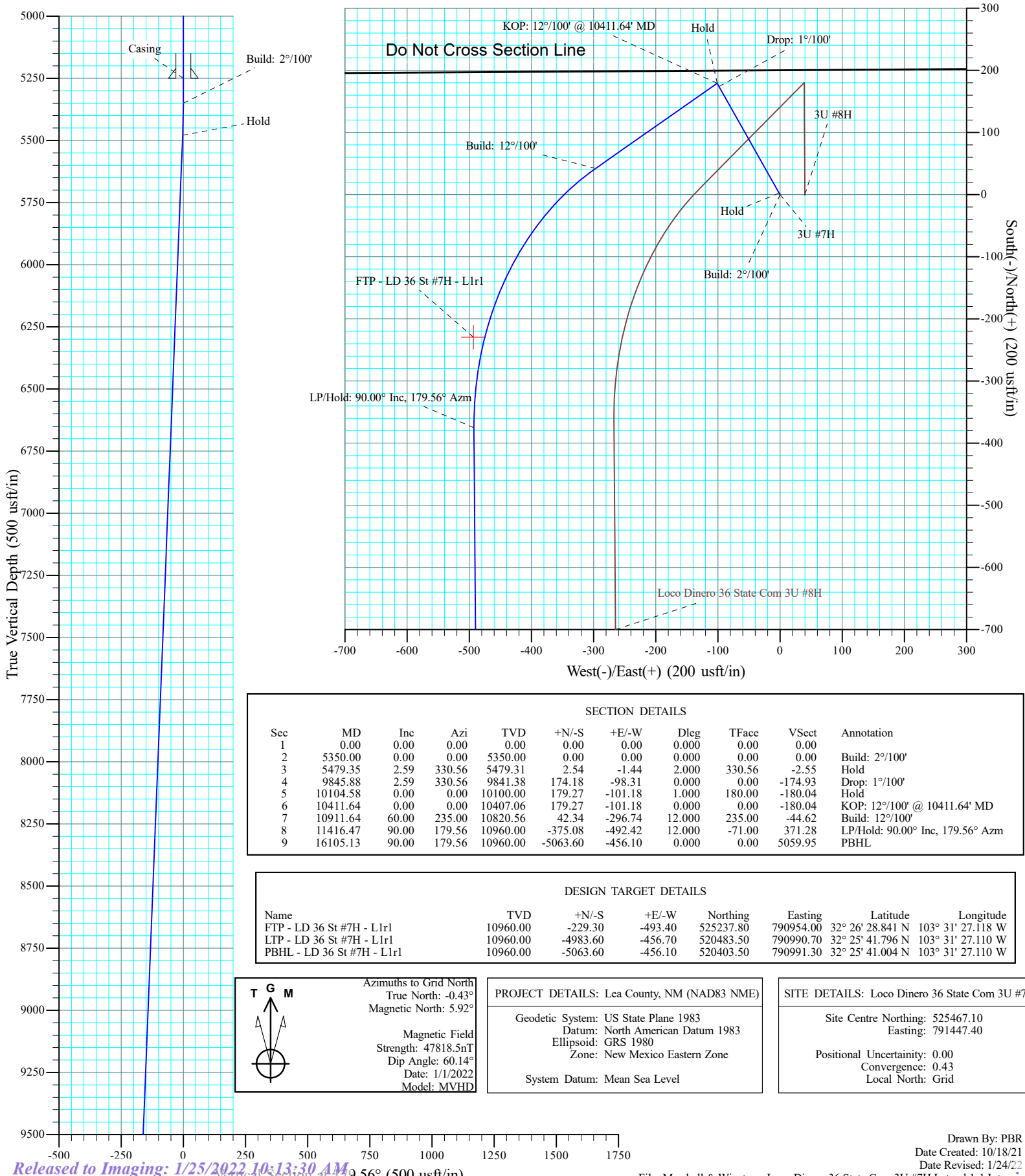
Separation Factor Plot



LEGEND

3U #8H, Planning, Lateral 1r1 V0

Loco Dinero 36 State Com 3U #7H
Lea County, NM (NAD83 NME)
Job No. WT-22-***
Lateral 1r1



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	
2	5350.00	0.00	0.00	5350.00	0.00	0.00	0.000	0.00	0.00	Build: 2°/100'
3	5479.35	2.59	330.56	5479.31	2.54	-1.44	2.000	330.56	-2.55	Hold
4	9845.88	2.59	330.56	9841.38	174.18	-98.31	0.000	0.00	-174.93	Drop: 1°/100'
5	10104.58	0.00	0.00	10100.00	179.27	-101.18	1.000	180.00	-180.04	Hold
6	10411.64	0.00	0.00	10407.06	179.27	-101.18	0.000	0.00	-180.04	KOP: 12°/100' @ 10411.64' MD
7	10911.64	60.00	235.00	10820.56	42.34	-296.74	12.000	235.00	-44.62	Build: 12°/100'
8	11416.47	90.00	179.56	10960.00	-375.08	-492.42	12.000	-71.00	371.28	LP/Hold: 90.00° Inc, 179.56° Azm
9	16105.13	90.00	179.56	10960.00	-5063.60	-456.10	0.000	0.00	5059.95	PBHL

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
FTP - LD 36 St #7H - L1r1	10960.00	-229.30	-493.40	525237.80	790954.00	32° 26' 28.841 N	103° 31' 27.118 W
LTP - LD 36 St #7H - L1r1	10960.00	-4983.60	-456.70	520483.50	790990.70	32° 25' 41.796 N	103° 31' 27.110 W
PBHL - LD 36 St #7H - L1r1	10960.00	-5063.60	-456.10	520403.50	790991.30	32° 25' 41.004 N	103° 31' 27.110 W

T G M

Azimuths to Grid North
True North: -0.43°
Magnetic North: 5.92°

Magnetic Field
Strength: 47818.5nT
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 #7H

Site Centre Northing: 525467.10
Easting: 791447.40

Positional Uncertainty: 0.00
Convergence: 0.43
Local North: Grid

Loco Dinero 36 State Com 3U #7H
Lea County, NM (NAD83 NME)
Job No. WT-22-***
Lateral 1r1



Received by OCD: 1/25/2022 10:13:30 AM

Page 11 of 11

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	
2	5350.00	0.00	0.00	5350.00	0.00	0.00	0.000	0.00	0.00	
3	5479.35	2.59	330.56	5479.31	2.54	-1.44	2.000	330.56	-2.55	
4	9845.88	2.59	330.56	9841.38	174.18	-98.31	0.000	0.00	-174.93	
5	10104.58	0.00	0.00	10100.00	179.27	-101.18	1.000	180.00	-180.04	
6	10411.64	0.00	0.00	10407.06	179.27	-101.18	0.000	0.00	-180.04	
7	10911.64	60.00	235.00	10820.56	42.34	-296.74	12.000	235.00	-44.62	
8	11416.47	90.00	179.56	10960.00	-375.08	-492.42	12.000	-71.00	371.28	
9	16105.13	90.00	179.56	10960.00	-5063.60	-456.10	0.000	0.00	5059.95	PBHL - LD 36 St #7H - L1r1

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
FTP - LD 36 St #7H - L1r1	10960.00	-229.30	-493.40	525237.80	790954.00	32° 26' 28.841 N	103° 31' 27.118 W
LTP - LD 36 St #7H - L1r1	10960.00	-4983.60	-456.70	520483.50	790990.70	32° 25' 41.796 N	103° 31' 27.110 W
PBHL - LD 36 St #7H - L1r1	10960.00	-5063.60	-456.10	520403.50	790991.30	32° 25' 41.004 N	103° 31' 27.110 W

PROJECT DETAILS: Lea County, NM (NAD83 NME)

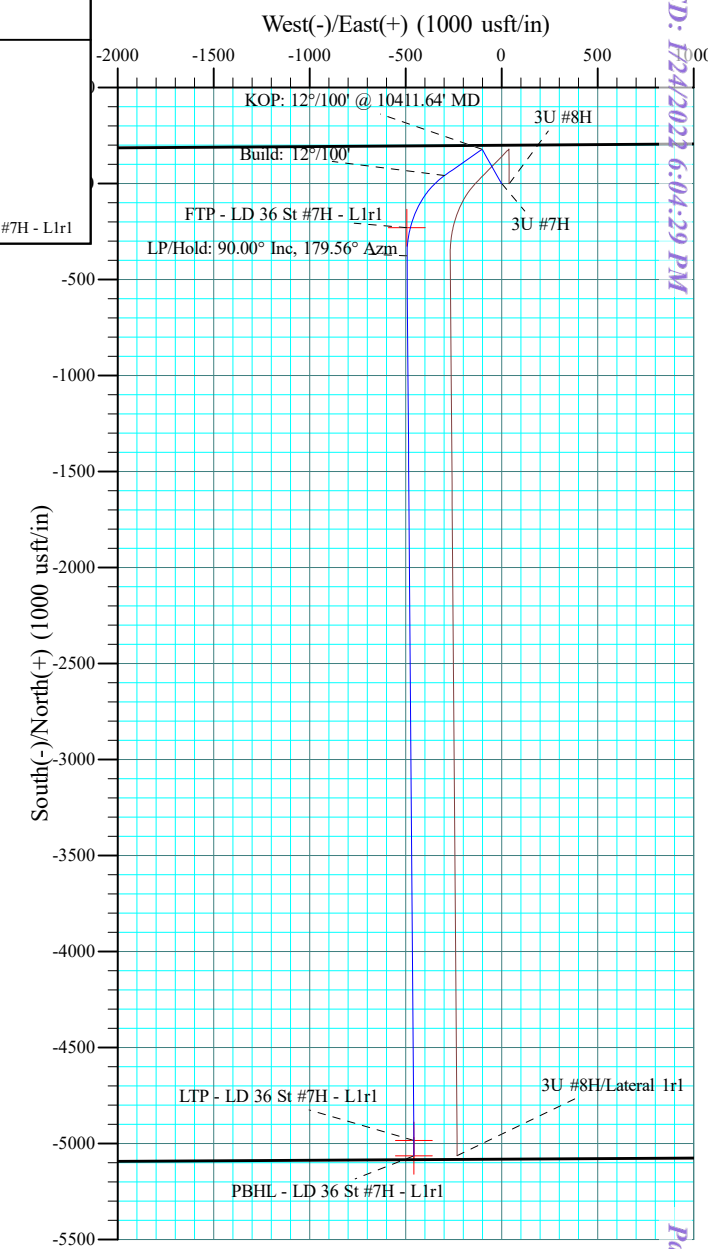
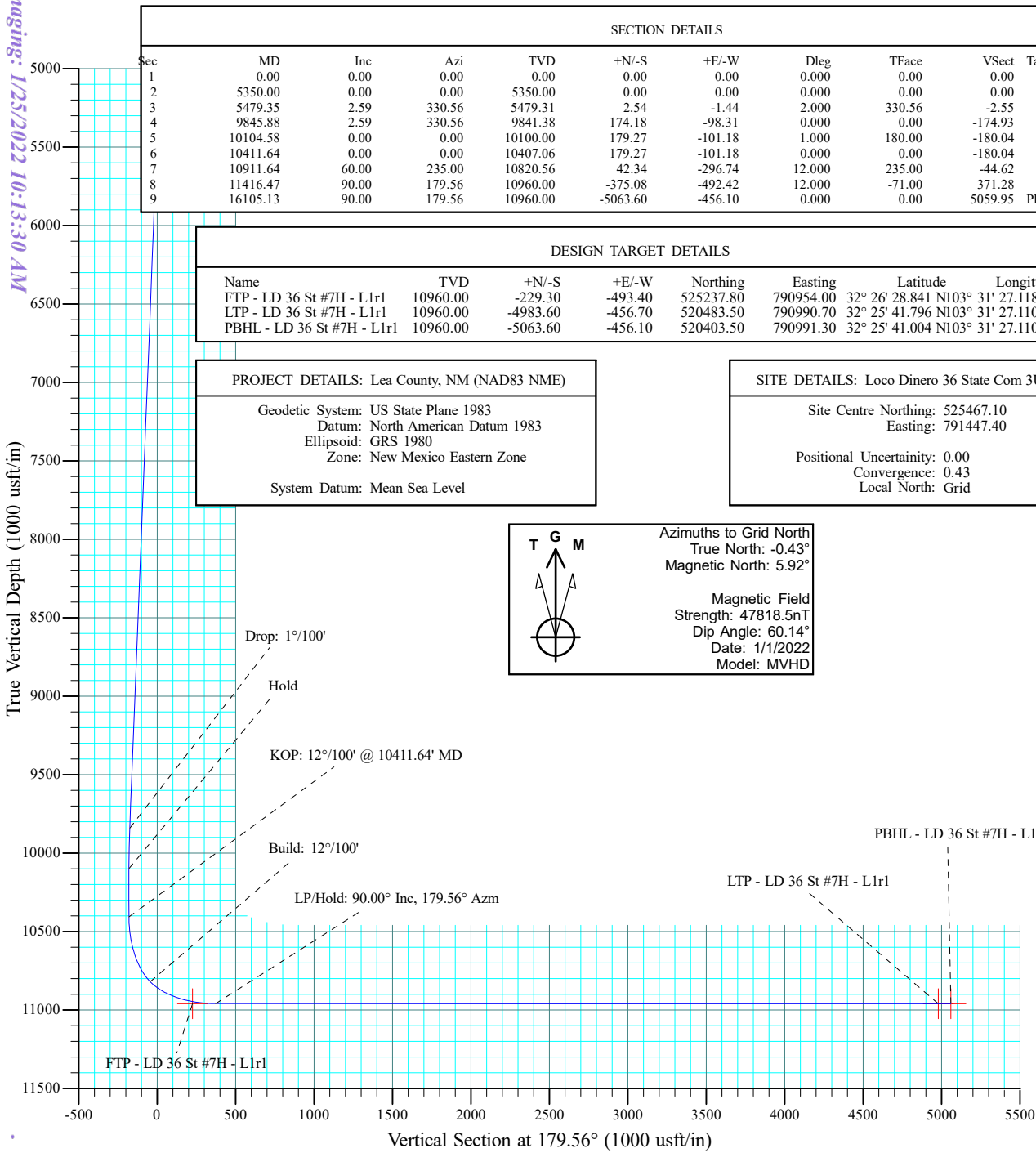
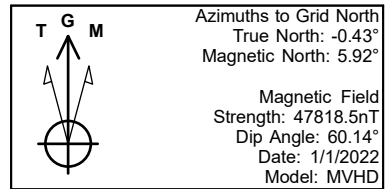
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

SITE DETAILS: Loco Dinero 36 State Com 3U #7H

Site Centre Northing: 525467.10
Easting: 791447.40

Positional Uncertainty: 0.00
Convergence: 0.43
Local North: Grid



Aim Directional Services, LLC

Planning Report

Database:	EDMRESTORED	Local Co-ordinate Reference:	Well 3U #7H
Company:	Marshall & Winston, Inc.	TVD Reference:	Updated @ 3670.00usft (25' KB)
Project:	Lea County, NM (NAD83 NME)	MD Reference:	Updated @ 3670.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #7H	North Reference:	Grid
Well:	3U #7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Planning		
Design:	Lateral 1r1		

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 #7H		
Site Position:		Northing:	525,467.10 usft
From:	Map	Easting:	791,447.40 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 26' 31.073 N
		Longitude:	103° 31' 21.341 W
		Grid Convergence:	0.43 °

Well	3U #7H		
Well Position	+N/-S	0.00 usft	Northing: 525,467.10 usft
	+E/-W	0.00 usft	Easting: 791,447.40 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	Latitude: 32° 26' 31.073 N
			Longitude: 103° 31' 21.341 W
			Ground Level: 3,645.00 usft

Wellbore	Planning				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	MVHD	1/1/2022	6.36	60.14	47,818.523

Design	Lateral 1r1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	179.56

Plan Survey Tool Program	Date	1/24/2022		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	16,105.13	Lateral 1r1 (Planning)	MWD+HDGM
				OWSG MWD + HDGM

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.00	
5,350.00	0.00	0.00	5,350.00	0.00	0.00	0.000	0.000	0.000	0.00	
5,479.35	2.59	330.56	5,479.31	2.54	-1.44	2.000	2.000	0.000	330.56	
9,845.88	2.59	330.56	9,841.38	174.18	-98.31	0.000	0.000	0.000	0.00	
10,104.58	0.00	0.00	10,100.00	179.27	-101.18	1.000	-1.000	0.000	180.00	
10,411.64	0.00	0.00	10,407.06	179.27	-101.18	0.000	0.000	0.000	0.00	
10,911.64	60.00	235.00	10,820.56	42.34	-296.74	12.000	12.000	0.000	235.00	
11,416.47	90.00	179.56	10,960.00	-375.08	-492.42	12.000	5.943	-10.983	-71.00	
16,105.13	90.00	179.56	10,960.00	-5,063.60	-456.10	0.000	0.000	0.000	0.00	PBHL - LD 36 St #7

Aim Directional Services, LLC

Planning Report

Database:	EDMRESTORED	Local Co-ordinate Reference:	Well 3U #7H
Company:	Marshall & Winston, Inc.	TVD Reference:	Updated @ 3670.00usft (25' KB)
Project:	Lea County, NM (NAD83 NME)	MD Reference:	Updated @ 3670.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #7H	North Reference:	Grid
Well:	3U #7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Planning		
Design:	Lateral 1r1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.000	0.000	0.000
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.000	0.000	0.000
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.000	0.000	0.000
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.000	0.000	0.000
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.000	0.000	0.000
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.000	0.000	0.000
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.000	0.000	0.000
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.000	0.000	0.000
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.000	0.000	0.000
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.000	0.000	0.000
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.000	0.000	0.000
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.000	0.000	0.000
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.000	0.000	0.000
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.000	0.000	0.000
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.000	0.000	0.000
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.000	0.000	0.000
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.000	0.000	0.000
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.000	0.000	0.000
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.000	0.000	0.000
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.000	0.000	0.000
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.000	0.000	0.000
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.000	0.000	0.000
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.000	0.000	0.000
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.000	0.000	0.000
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.000	0.000	0.000
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.000	0.000	0.000
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.000	0.000	0.000
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.000	0.000	0.000
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.000	0.000	0.000
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.000	0.000	0.000
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.000	0.000	0.000
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.000	0.000	0.000
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.000	0.000	0.000
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.000	0.000	0.000
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.000	0.000	0.000
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.000	0.000	0.000
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.000	0.000	0.000
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.000	0.000	0.000
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.000	0.000	0.000
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.000	0.000	0.000
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.000	0.000	0.000
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.000	0.000	0.000
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.000	0.000	0.000
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.000	0.000	0.000
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.000	0.000	0.000
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.000	0.000	0.000
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.000	0.000	0.000
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.000	0.000	0.000
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.000	0.000	0.000
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.000	0.000	0.000
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.000	0.000	0.000
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.000	0.000	0.000
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.000	0.000	0.000

Aim Directional Services, LLC

Planning Report

Database:	EDMRESTORED	Local Co-ordinate Reference:	Well 3U #7H
Company:	Marshall & Winston, Inc.	TVD Reference:	Updated @ 3670.00usft (25' KB)
Project:	Lea County, NM (NAD83 NME)	MD Reference:	Updated @ 3670.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #7H	North Reference:	Grid
Well:	3U #7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Planning		
Design:	Lateral 1r1		

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	330.56	5,400.00	0.38	-0.21	-0.38	2.000	2.000	0.000	
5,479.35	2.59	330.56	5,479.31	2.54	-1.44	-2.55	2.000	2.000	0.000	
Hold										
5,500.00	2.59	330.56	5,499.94	3.35	-1.89	-3.37	0.000	0.000	0.000	
5,600.00	2.59	330.56	5,599.83	7.29	-4.11	-7.32	0.000	0.000	0.000	
5,700.00	2.59	330.56	5,699.73	11.22	-6.33	-11.26	0.000	0.000	0.000	
5,800.00	2.59	330.56	5,799.63	15.15	-8.55	-15.21	0.000	0.000	0.000	
5,900.00	2.59	330.56	5,899.53	19.08	-10.77	-19.16	0.000	0.000	0.000	
6,000.00	2.59	330.56	5,999.43	23.01	-12.99	-23.11	0.000	0.000	0.000	
6,100.00	2.59	330.56	6,099.32	26.94	-15.20	-27.06	0.000	0.000	0.000	
6,200.00	2.59	330.56	6,199.22	30.87	-17.42	-31.00	0.000	0.000	0.000	
6,300.00	2.59	330.56	6,299.12	34.80	-19.64	-34.95	0.000	0.000	0.000	
6,400.00	2.59	330.56	6,399.02	38.73	-21.86	-38.90	0.000	0.000	0.000	
6,500.00	2.59	330.56	6,498.92	42.66	-24.08	-42.85	0.000	0.000	0.000	
6,600.00	2.59	330.56	6,598.81	46.59	-26.30	-46.79	0.000	0.000	0.000	
6,700.00	2.59	330.56	6,698.71	50.52	-28.52	-50.74	0.000	0.000	0.000	
6,800.00	2.59	330.56	6,798.61	54.46	-30.73	-54.69	0.000	0.000	0.000	
6,900.00	2.59	330.56	6,898.51	58.39	-32.95	-58.64	0.000	0.000	0.000	
7,000.00	2.59	330.56	6,998.41	62.32	-35.17	-62.59	0.000	0.000	0.000	
7,100.00	2.59	330.56	7,098.30	66.25	-37.39	-66.53	0.000	0.000	0.000	
7,200.00	2.59	330.56	7,198.20	70.18	-39.61	-70.48	0.000	0.000	0.000	
7,300.00	2.59	330.56	7,298.10	74.11	-41.83	-74.43	0.000	0.000	0.000	
7,400.00	2.59	330.56	7,398.00	78.04	-44.05	-78.38	0.000	0.000	0.000	
7,500.00	2.59	330.56	7,497.90	81.97	-46.26	-82.32	0.000	0.000	0.000	
7,600.00	2.59	330.56	7,597.79	85.90	-48.48	-86.27	0.000	0.000	0.000	
7,700.00	2.59	330.56	7,697.69	89.83	-50.70	-90.22	0.000	0.000	0.000	
7,800.00	2.59	330.56	7,797.59	93.76	-52.92	-94.17	0.000	0.000	0.000	
7,900.00	2.59	330.56	7,897.49	97.69	-55.14	-98.12	0.000	0.000	0.000	
8,000.00	2.59	330.56	7,997.39	101.63	-57.36	-102.06	0.000	0.000	0.000	
8,100.00	2.59	330.56	8,097.29	105.56	-59.58	-106.01	0.000	0.000	0.000	
8,200.00	2.59	330.56	8,197.18	109.49	-61.79	-109.96	0.000	0.000	0.000	
8,300.00	2.59	330.56	8,297.08	113.42	-64.01	-113.91	0.000	0.000	0.000	
8,400.00	2.59	330.56	8,396.98	117.35	-66.23	-117.85	0.000	0.000	0.000	
8,500.00	2.59	330.56	8,496.88	121.28	-68.45	-121.80	0.000	0.000	0.000	
8,600.00	2.59	330.56	8,596.78	125.21	-70.67	-125.75	0.000	0.000	0.000	
8,700.00	2.59	330.56	8,696.67	129.14	-72.89	-129.70	0.000	0.000	0.000	
8,800.00	2.59	330.56	8,796.57	133.07	-75.11	-133.65	0.000	0.000	0.000	
8,900.00	2.59	330.56	8,896.47	137.00	-77.32	-137.59	0.000	0.000	0.000	
9,000.00	2.59	330.56	8,996.37	140.93	-79.54	-141.54	0.000	0.000	0.000	
9,100.00	2.59	330.56	9,096.27	144.87	-81.76	-145.49	0.000	0.000	0.000	
9,200.00	2.59	330.56	9,196.16	148.80	-83.98	-149.44	0.000	0.000	0.000	
9,300.00	2.59	330.56	9,296.06	152.73	-86.20	-153.38	0.000	0.000	0.000	
9,400.00	2.59	330.56	9,395.96	156.66	-88.42	-157.33	0.000	0.000	0.000	
9,500.00	2.59	330.56	9,495.86	160.59	-90.64	-161.28	0.000	0.000	0.000	
9,600.00	2.59	330.56	9,595.76	164.52	-92.85	-165.23	0.000	0.000	0.000	
9,700.00	2.59	330.56	9,695.65	168.45	-95.07	-169.18	0.000	0.000	0.000	
9,800.00	2.59	330.56	9,795.55	172.38	-97.29	-173.12	0.000	0.000	0.000	
9,845.88	2.59	330.56	9,841.39	174.18	-98.31	-174.93	0.000	0.000	0.000	
Drop: 1°/100'										
9,900.00	2.05	330.56	9,895.46	176.09	-99.38	-176.85	1.000	-1.000	0.000	
10,000.00	1.05	330.56	9,995.42	178.44	-100.71	-179.21	1.000	-1.000	0.000	

Aim Directional Services, LLC

Planning Report

Database:	EDMRESTORED	Local Co-ordinate Reference:	Well 3U #7H
Company:	Marshall & Winston, Inc.	TVD Reference:	Updated @ 3670.00usft (25' KB)
Project:	Lea County, NM (NAD83 NME)	MD Reference:	Updated @ 3670.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #7H	North Reference:	Grid
Well:	3U #7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Planning		
Design:	Lateral 1r1		

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)	
10,104.58	0.00	0.00	10,100.00	179.27	-101.18	-180.04	1.000	-1.000	28.151	
Hold										
10,200.00	0.00	0.00	10,195.42	179.27	-101.18	-180.04	0.000	0.000	0.000	
10,300.00	0.00	0.00	10,295.42	179.27	-101.18	-180.04	0.000	0.000	0.000	
10,400.00	0.00	0.00	10,395.42	179.27	-101.18	-180.04	0.000	0.000	0.000	
10,411.64	0.00	0.00	10,407.06	179.27	-101.18	-180.04	0.000	0.000	0.000	
KOP: 12°/100' @ 10411.64' MD										
10,425.00	1.60	235.00	10,420.42	179.16	-101.33	-179.94	11.998	11.998	0.000	
10,450.00	4.60	235.00	10,445.38	178.39	-102.44	-179.17	12.000	12.000	0.000	
10,475.00	7.60	235.00	10,470.23	176.86	-104.62	-177.66	12.000	12.000	0.000	
10,500.00	10.60	235.00	10,494.91	174.59	-107.86	-175.42	12.000	12.000	0.000	
10,525.00	13.60	235.00	10,519.36	171.59	-112.15	-172.44	12.000	12.000	0.000	
10,550.00	16.60	235.00	10,543.49	167.85	-117.49	-168.75	12.000	12.000	0.000	
10,575.00	19.60	235.00	10,567.25	163.40	-123.85	-164.34	12.000	12.000	0.000	
10,600.00	22.60	235.00	10,590.57	158.23	-131.22	-159.24	12.000	12.000	0.000	
10,625.00	25.60	235.00	10,613.39	152.38	-139.58	-153.45	12.000	12.000	0.000	
10,650.00	28.60	235.00	10,635.64	145.85	-148.91	-146.99	12.000	12.000	0.000	
10,675.00	31.60	235.00	10,657.27	138.66	-159.18	-139.87	12.000	12.000	0.000	
10,700.00	34.60	235.00	10,678.21	130.83	-170.37	-132.13	12.000	12.000	0.000	
10,725.00	37.60	235.00	10,698.40	122.38	-182.43	-123.77	12.000	12.000	0.000	
10,750.00	40.60	235.00	10,717.80	113.33	-195.35	-114.83	12.000	12.000	0.000	
10,775.00	43.60	235.00	10,736.35	103.72	-209.07	-105.32	12.000	12.000	0.000	
10,800.00	46.60	235.00	10,753.99	93.56	-223.58	-95.28	12.000	12.000	0.000	
10,825.00	49.60	235.00	10,770.68	82.89	-238.82	-84.72	12.000	12.000	0.000	
10,850.00	52.60	235.00	10,786.38	71.73	-254.76	-73.69	12.000	12.000	0.000	
10,875.00	55.60	235.00	10,801.04	60.12	-271.35	-62.20	12.000	12.000	0.000	
10,900.00	58.60	235.00	10,814.61	48.08	-288.54	-50.29	12.000	12.000	0.000	
10,911.64	60.00	235.00	10,820.56	42.34	-296.74	-44.62	12.000	12.000	0.000	
Build: 12°/100'										
10,925.00	60.53	233.26	10,827.18	35.54	-306.14	-37.89	11.999	3.994	-13.031	
10,950.00	61.59	230.05	10,839.28	21.97	-323.29	-24.45	12.000	4.231	-12.832	
10,975.00	62.72	226.91	10,850.96	7.32	-339.84	-9.93	12.000	4.526	-12.570	
11,000.00	63.92	223.83	10,862.18	-8.38	-355.73	5.64	12.000	4.801	-12.309	
11,025.00	65.19	220.82	10,872.93	-25.07	-370.92	22.22	12.000	5.057	-12.052	
11,050.00	66.51	217.87	10,883.16	-42.71	-385.38	39.75	12.000	5.293	-11.803	
11,075.00	67.89	214.98	10,892.85	-61.25	-399.06	58.18	12.000	5.511	-11.564	
11,100.00	69.32	212.14	10,901.97	-80.65	-411.92	77.48	12.000	5.710	-11.336	
11,125.00	70.79	209.36	10,910.50	-100.84	-423.94	97.58	12.000	5.892	-11.122	
11,150.00	72.30	206.63	10,918.42	-121.78	-435.06	118.43	12.000	6.057	-10.922	
11,175.00	73.85	203.95	10,925.69	-143.40	-445.28	139.98	12.000	6.205	-10.737	
11,200.00	75.44	201.31	10,932.31	-165.65	-454.55	162.16	12.000	6.337	-10.568	
11,225.00	77.05	198.70	10,938.26	-188.47	-462.85	184.91	12.000	6.454	-10.416	
11,250.00	78.69	196.13	10,943.51	-211.79	-470.17	208.17	12.000	6.556	-10.281	
11,275.00	80.35	193.59	10,948.06	-235.54	-476.47	231.88	12.000	6.644	-10.163	
11,300.00	82.03	191.07	10,951.89	-259.68	-481.74	255.97	12.000	6.717	-10.063	
11,325.00	83.73	188.58	10,954.99	-284.12	-485.98	280.38	12.000	6.777	-9.980	
11,350.00	85.43	186.10	10,957.35	-308.80	-489.16	305.03	12.000	6.824	-9.915	
11,375.00	87.15	183.63	10,958.97	-333.65	-491.27	329.87	12.000	6.858	-9.868	
11,400.00	88.87	181.17	10,959.84	-358.61	-492.32	354.82	12.000	6.879	-9.839	
11,416.47	90.00	179.56	10,960.00	-375.08	-492.42	371.29	11.997	6.886	-9.825	
LP/Hold: 90.00° Inc, 179.56° Azm										
11,500.00	90.00	179.56	10,960.00	-458.61	-491.78	454.82	0.000	0.000	0.000	
11,600.00	90.00	179.56	10,960.00	-558.61	-491.00	554.82	0.000	0.000	0.000	

Aim Directional Services, LLC

Planning Report

Database:	EDMRESTORED	Local Co-ordinate Reference:	Well 3U #7H
Company:	Marshall & Winston, Inc.	TVD Reference:	Updated @ 3670.00usft (25' KB)
Project:	Lea County, NM (NAD83 NME)	MD Reference:	Updated @ 3670.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #7H	North Reference:	Grid
Well:	3U #7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Planning		
Design:	Lateral 1r1		

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)
11,700.00	90.00	179.56	10,960.00	-658.60	-490.23	654.82	0.000	0.000	0.000
11,800.00	90.00	179.56	10,960.00	-758.60	-489.45	754.82	0.000	0.000	0.000
11,900.00	90.00	179.56	10,960.00	-858.60	-488.68	854.82	0.000	0.000	0.000
12,000.00	90.00	179.56	10,960.00	-958.59	-487.90	954.82	0.000	0.000	0.000
12,100.00	90.00	179.56	10,960.00	-1,058.59	-487.13	1,054.82	0.000	0.000	0.000
12,200.00	90.00	179.56	10,960.00	-1,158.59	-486.35	1,154.82	0.000	0.000	0.000
12,300.00	90.00	179.56	10,960.00	-1,258.58	-485.58	1,254.82	0.000	0.000	0.000
12,400.00	90.00	179.56	10,960.00	-1,358.58	-484.80	1,354.82	0.000	0.000	0.000
12,500.00	90.00	179.56	10,960.00	-1,458.58	-484.03	1,454.82	0.000	0.000	0.000
12,600.00	90.00	179.56	10,960.00	-1,558.58	-483.26	1,554.82	0.000	0.000	0.000
12,700.00	90.00	179.56	10,960.00	-1,658.57	-482.48	1,654.82	0.000	0.000	0.000
12,800.00	90.00	179.56	10,960.00	-1,758.57	-481.71	1,754.82	0.000	0.000	0.000
12,900.00	90.00	179.56	10,960.00	-1,858.57	-480.93	1,854.82	0.000	0.000	0.000
13,000.00	90.00	179.56	10,960.00	-1,958.56	-480.16	1,954.82	0.000	0.000	0.000
13,100.00	90.00	179.56	10,960.00	-2,058.56	-479.38	2,054.82	0.000	0.000	0.000
13,200.00	90.00	179.56	10,960.00	-2,158.56	-478.61	2,154.82	0.000	0.000	0.000
13,300.00	90.00	179.56	10,960.00	-2,258.55	-477.83	2,254.82	0.000	0.000	0.000
13,400.00	90.00	179.56	10,960.00	-2,358.55	-477.06	2,354.82	0.000	0.000	0.000
13,500.00	90.00	179.56	10,960.00	-2,458.55	-476.28	2,454.82	0.000	0.000	0.000
13,600.00	90.00	179.56	10,960.00	-2,558.55	-475.51	2,554.82	0.000	0.000	0.000
13,700.00	90.00	179.56	10,960.00	-2,658.54	-474.73	2,654.82	0.000	0.000	0.000
13,800.00	90.00	179.56	10,960.00	-2,758.54	-473.96	2,754.82	0.000	0.000	0.000
13,900.00	90.00	179.56	10,960.00	-2,858.54	-473.18	2,854.82	0.000	0.000	0.000
14,000.00	90.00	179.56	10,960.00	-2,958.53	-472.41	2,954.82	0.000	0.000	0.000
14,100.00	90.00	179.56	10,960.00	-3,058.53	-471.63	3,054.82	0.000	0.000	0.000
14,200.00	90.00	179.56	10,960.00	-3,158.53	-470.86	3,154.82	0.000	0.000	0.000
14,300.00	90.00	179.56	10,960.00	-3,258.52	-470.08	3,254.82	0.000	0.000	0.000
14,400.00	90.00	179.56	10,960.00	-3,358.52	-469.31	3,354.82	0.000	0.000	0.000
14,500.00	90.00	179.56	10,960.00	-3,458.52	-468.54	3,454.82	0.000	0.000	0.000
14,600.00	90.00	179.56	10,960.00	-3,558.52	-467.76	3,554.82	0.000	0.000	0.000
14,700.00	90.00	179.56	10,960.00	-3,658.51	-466.99	3,654.82	0.000	0.000	0.000
14,800.00	90.00	179.56	10,960.00	-3,758.51	-466.21	3,754.82	0.000	0.000	0.000
14,900.00	90.00	179.56	10,960.00	-3,858.51	-465.44	3,854.82	0.000	0.000	0.000
15,000.00	90.00	179.56	10,960.00	-3,958.50	-464.66	3,954.82	0.000	0.000	0.000
15,100.00	90.00	179.56	10,960.00	-4,058.50	-463.89	4,054.82	0.000	0.000	0.000
15,200.00	90.00	179.56	10,960.00	-4,158.50	-463.11	4,154.82	0.000	0.000	0.000
15,300.00	90.00	179.56	10,960.00	-4,258.49	-462.34	4,254.82	0.000	0.000	0.000
15,400.00	90.00	179.56	10,960.00	-4,358.49	-461.56	4,354.82	0.000	0.000	0.000
15,500.00	90.00	179.56	10,960.00	-4,458.49	-460.79	4,454.82	0.000	0.000	0.000
15,600.00	90.00	179.56	10,960.00	-4,558.49	-460.01	4,554.82	0.000	0.000	0.000
15,700.00	90.00	179.56	10,960.00	-4,658.48	-459.24	4,654.82	0.000	0.000	0.000
15,800.00	90.00	179.56	10,960.00	-4,758.48	-458.46	4,754.82	0.000	0.000	0.000
15,900.00	90.00	179.56	10,960.00	-4,858.48	-457.69	4,854.82	0.000	0.000	0.000
16,000.00	90.00	179.56	10,960.00	-4,958.47	-456.91	4,954.82	0.000	0.000	0.000
16,105.13	90.00	179.56	10,960.00	-5,063.60	-456.10	5,059.95	0.000	0.000	0.000
PBHL									

Aim Directional Services, LLC

Planning Report

Database:	EDMRESTORED	Local Co-ordinate Reference:	Well 3U #7H
Company:	Marshall & Winston, Inc.	TVD Reference:	Updated @ 3670.00usft (25' KB)
Project:	Lea County, NM (NAD83 NME)	MD Reference:	Updated @ 3670.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #7H	North Reference:	Grid
Well:	3U #7H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Planning		
Design:	Lateral 1r1		

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,800.00	1,800.00	Casing	13-3/8	17-1/2
5,250.00	5,250.00	Casing	9-5/8	12-1/4

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
5,350.00	5,350.00	0.00	0.00	Build: 2°/100'
5,479.35	5,479.31	2.54	-1.44	Hold
9,845.88	9,841.39	174.18	-98.31	Drop: 1°/100'
10,104.58	10,100.00	179.27	-101.18	Hold
10,411.64	10,407.06	179.27	-101.18	KOP: 12°/100' @ 10411.64' MD
10,911.64	10,820.56	42.34	-296.74	Build: 12°/100'
11,416.47	10,960.00	-375.08	-492.42	LP/Hold: 90.00° Inc, 179.56° Azm
16,105.13	10,960.00	-5,063.60	-456.10	PBHL

Aim Directional Services, LLC

Survey Report - Geographic

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #7H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3670.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #7H	MD Reference:	Updated @ 3670.00usft (25' KB)
Well:	3U #7H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r1	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 #7H			
Site Position:		Northing:	525,467.10 usft	Latitude:	32° 26' 31.073 N
From:	Map	Easting:	791,447.40 usft	Longitude:	103° 31' 21.341 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.43 °

Well	3U #7H					
Well Position	+N/-S	0.00 usft	Northing:	525,467.10 usft	Latitude:	32° 26' 31.073 N
	+E/-W	0.00 usft	Easting:	791,447.40 usft	Longitude:	103° 31' 21.341 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,645.00 usft

Wellbore	Planning				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	MVHD	1/1/2022	6.36	60.14	47,818.523

Design	Lateral 1r1				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	179.56	

Survey Tool Program	Date	1/24/2022			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	16,105.13	Lateral 1r1 (Planning)	MWD+HDGM	OWSG MWD + HDGM	

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
100.00	0.00	0.00	100.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
200.00	0.00	0.00	200.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
300.00	0.00	0.00	300.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
400.00	0.00	0.00	400.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
500.00	0.00	0.00	500.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
600.00	0.00	0.00	600.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
700.00	0.00	0.00	700.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
800.00	0.00	0.00	800.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
900.00	0.00	0.00	900.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
1,000.00	0.00	0.00	1,000.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
1,100.00	0.00	0.00	1,100.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W

Aim Directional Services, LLC

Survey Report - Geographic

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #7H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3670.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #7H	MD Reference:	Updated @ 3670.00usft (25' KB)
Well:	3U #7H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r1	Database:	EDMRESTORED

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,200.00	0.00	0.00	1,200.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
1,300.00	0.00	0.00	1,300.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
1,400.00	0.00	0.00	1,400.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
1,500.00	0.00	0.00	1,500.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
1,600.00	0.00	0.00	1,600.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
1,700.00	0.00	0.00	1,700.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
1,800.00	0.00	0.00	1,800.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
1,900.00	0.00	0.00	1,900.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
2,000.00	0.00	0.00	2,000.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
2,100.00	0.00	0.00	2,100.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
2,200.00	0.00	0.00	2,200.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
2,300.00	0.00	0.00	2,300.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
2,400.00	0.00	0.00	2,400.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
2,500.00	0.00	0.00	2,500.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
2,600.00	0.00	0.00	2,600.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
2,700.00	0.00	0.00	2,700.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
2,800.00	0.00	0.00	2,800.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
2,900.00	0.00	0.00	2,900.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
3,000.00	0.00	0.00	3,000.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
3,100.00	0.00	0.00	3,100.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
3,200.00	0.00	0.00	3,200.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
3,300.00	0.00	0.00	3,300.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
3,400.00	0.00	0.00	3,400.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
3,500.00	0.00	0.00	3,500.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
3,600.00	0.00	0.00	3,600.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
3,700.00	0.00	0.00	3,700.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
3,800.00	0.00	0.00	3,800.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
3,900.00	0.00	0.00	3,900.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
4,000.00	0.00	0.00	4,000.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
4,100.00	0.00	0.00	4,100.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
4,200.00	0.00	0.00	4,200.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
4,300.00	0.00	0.00	4,300.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
4,400.00	0.00	0.00	4,400.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
4,500.00	0.00	0.00	4,500.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
4,600.00	0.00	0.00	4,600.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
4,700.00	0.00	0.00	4,700.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
4,800.00	0.00	0.00	4,800.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
4,900.00	0.00	0.00	4,900.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
5,000.00	0.00	0.00	5,000.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
5,100.00	0.00	0.00	5,100.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
5,200.00	0.00	0.00	5,200.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
5,300.00	0.00	0.00	5,300.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
5,350.00	0.00	0.00	5,350.00	0.00	0.00	525,467.10	791,447.40	32° 26' 31.073 N	103° 31' 21.341 W
Build: 2°/100'									
5,400.00	1.00	330.56	5,400.00	0.38	-0.21	525,467.48	791,447.18	32° 26' 31.077 N	103° 31' 21.343 W
5,479.35	2.59	330.56	5,479.31	2.54	-1.44	525,469.64	791,445.96	32° 26' 31.098 N	103° 31' 21.357 W
Hold									
5,500.00	2.59	330.56	5,499.94	3.35	-1.89	525,470.46	791,445.50	32° 26' 31.106 N	103° 31' 21.362 W
5,600.00	2.59	330.56	5,599.83	7.29	-4.11	525,474.39	791,443.29	32° 26' 31.145 N	103° 31' 21.388 W
5,700.00	2.59	330.56	5,699.73	11.22	-6.33	525,478.32	791,441.07	32° 26' 31.184 N	103° 31' 21.413 W
5,800.00	2.59	330.56	5,799.63	15.15	-8.55	525,482.25	791,438.85	32° 26' 31.223 N	103° 31' 21.439 W
5,900.00	2.59	330.56	5,899.53	19.08	-10.77	525,486.18	791,436.63	32° 26' 31.263 N	103° 31' 21.464 W
6,000.00	2.59	330.56	5,999.43	23.01	-12.99	525,490.11	791,434.41	32° 26' 31.302 N	103° 31' 21.490 W
6,100.00	2.59	330.56	6,099.32	26.94	-15.20	525,494.04	791,432.19	32° 26' 31.341 N	103° 31' 21.516 W
6,200.00	2.59	330.56	6,199.22	30.87	-17.42	525,497.97	791,429.97	32° 26' 31.380 N	103° 31' 21.541 W

Aim Directional Services, LLC

Survey Report - Geographic

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #7H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3670.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #7H	MD Reference:	Updated @ 3670.00usft (25' KB)
Well:	3U #7H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r1	Database:	EDMRESTORED

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,300.00	2.59	330.56	6,299.12	34.80	-19.64	525,501.90	791,427.76	32° 26' 31.419 N	103° 31' 21.567 W
6,400.00	2.59	330.56	6,399.02	38.73	-21.86	525,505.83	791,425.54	32° 26' 31.458 N	103° 31' 21.592 W
6,500.00	2.59	330.56	6,498.92	42.66	-24.08	525,509.76	791,423.32	32° 26' 31.497 N	103° 31' 21.618 W
6,600.00	2.59	330.56	6,598.81	46.59	-26.30	525,513.70	791,421.10	32° 26' 31.536 N	103° 31' 21.643 W
6,700.00	2.59	330.56	6,698.71	50.52	-28.52	525,517.63	791,418.88	32° 26' 31.575 N	103° 31' 21.669 W
6,800.00	2.59	330.56	6,798.61	54.46	-30.73	525,521.56	791,416.66	32° 26' 31.614 N	103° 31' 21.694 W
6,900.00	2.59	330.56	6,898.51	58.39	-32.95	525,525.49	791,414.44	32° 26' 31.653 N	103° 31' 21.720 W
7,000.00	2.59	330.56	6,998.41	62.32	-35.17	525,529.42	791,412.23	32° 26' 31.692 N	103° 31' 21.745 W
7,100.00	2.59	330.56	7,098.30	66.25	-37.39	525,533.35	791,410.01	32° 26' 31.731 N	103° 31' 21.771 W
7,200.00	2.59	330.56	7,198.20	70.18	-39.61	525,537.28	791,407.79	32° 26' 31.770 N	103° 31' 21.796 W
7,300.00	2.59	330.56	7,298.10	74.11	-41.83	525,541.21	791,405.57	32° 26' 31.809 N	103° 31' 21.822 W
7,400.00	2.59	330.56	7,398.00	78.04	-44.05	525,545.14	791,403.35	32° 26' 31.848 N	103° 31' 21.848 W
7,500.00	2.59	330.56	7,497.90	81.97	-46.26	525,549.07	791,401.13	32° 26' 31.888 N	103° 31' 21.873 W
7,600.00	2.59	330.56	7,597.79	85.90	-48.48	525,553.00	791,398.91	32° 26' 31.927 N	103° 31' 21.899 W
7,700.00	2.59	330.56	7,697.69	89.83	-50.70	525,556.93	791,396.70	32° 26' 31.966 N	103° 31' 21.924 W
7,800.00	2.59	330.56	7,797.59	93.76	-52.92	525,560.87	791,394.48	32° 26' 32.005 N	103° 31' 21.950 W
7,900.00	2.59	330.56	7,897.49	97.69	-55.14	525,564.80	791,392.26	32° 26' 32.044 N	103° 31' 21.975 W
8,000.00	2.59	330.56	7,997.39	101.63	-57.36	525,568.73	791,390.04	32° 26' 32.083 N	103° 31' 22.001 W
8,100.00	2.59	330.56	8,097.29	105.56	-59.58	525,572.66	791,387.82	32° 26' 32.122 N	103° 31' 22.026 W
8,200.00	2.59	330.56	8,197.18	109.49	-61.79	525,576.59	791,385.60	32° 26' 32.161 N	103° 31' 22.052 W
8,300.00	2.59	330.56	8,297.08	113.42	-64.01	525,580.52	791,383.38	32° 26' 32.200 N	103° 31' 22.077 W
8,400.00	2.59	330.56	8,396.98	117.35	-66.23	525,584.45	791,381.17	32° 26' 32.239 N	103° 31' 22.103 W
8,500.00	2.59	330.56	8,496.88	121.28	-68.45	525,588.38	791,378.95	32° 26' 32.278 N	103° 31' 22.128 W
8,600.00	2.59	330.56	8,596.78	125.21	-70.67	525,592.31	791,376.73	32° 26' 32.317 N	103° 31' 22.154 W
8,700.00	2.59	330.56	8,696.67	129.14	-72.89	525,596.24	791,374.51	32° 26' 32.356 N	103° 31' 22.180 W
8,800.00	2.59	330.56	8,796.57	133.07	-75.11	525,600.17	791,372.29	32° 26' 32.395 N	103° 31' 22.205 W
8,900.00	2.59	330.56	8,896.47	137.00	-77.32	525,604.11	791,370.07	32° 26' 32.434 N	103° 31' 22.231 W
9,000.00	2.59	330.56	8,996.37	140.93	-79.54	525,608.04	791,367.85	32° 26' 32.473 N	103° 31' 22.256 W
9,100.00	2.59	330.56	9,096.27	144.87	-81.76	525,611.97	791,365.64	32° 26' 32.513 N	103° 31' 22.282 W
9,200.00	2.59	330.56	9,196.16	148.80	-83.98	525,615.90	791,363.42	32° 26' 32.552 N	103° 31' 22.307 W
9,300.00	2.59	330.56	9,296.06	152.73	-86.20	525,619.83	791,361.20	32° 26' 32.591 N	103° 31' 22.333 W
9,400.00	2.59	330.56	9,395.96	156.66	-88.42	525,623.76	791,358.98	32° 26' 32.630 N	103° 31' 22.358 W
9,500.00	2.59	330.56	9,495.86	160.59	-90.64	525,627.69	791,356.76	32° 26' 32.669 N	103° 31' 22.384 W
9,600.00	2.59	330.56	9,595.76	164.52	-92.85	525,631.62	791,354.54	32° 26' 32.708 N	103° 31' 22.409 W
9,700.00	2.59	330.56	9,695.65	168.45	-95.07	525,635.55	791,352.32	32° 26' 32.747 N	103° 31' 22.435 W
9,800.00	2.59	330.56	9,795.55	172.38	-97.29	525,639.48	791,350.11	32° 26' 32.786 N	103° 31' 22.460 W
9,845.88	2.59	330.56	9,841.39	174.18	-98.31	525,641.29	791,349.09	32° 26' 32.804 N	103° 31' 22.472 W
Drop: 1°/100'									
9,900.00	2.05	330.56	9,895.46	176.09	-99.38	525,643.19	791,348.01	32° 26' 32.823 N	103° 31' 22.485 W
10,000.00	1.05	330.56	9,995.42	178.44	-100.71	525,645.54	791,346.69	32° 26' 32.846 N	103° 31' 22.500 W
10,104.58	0.00	0.00	10,100.00	179.27	-101.18	525,646.37	791,346.22	32° 26' 32.854 N	103° 31' 22.505 W
Hold									
10,200.00	0.00	0.00	10,195.42	179.27	-101.18	525,646.37	791,346.22	32° 26' 32.854 N	103° 31' 22.505 W
10,300.00	0.00	0.00	10,295.42	179.27	-101.18	525,646.37	791,346.22	32° 26' 32.854 N	103° 31' 22.505 W
10,400.00	0.00	0.00	10,395.42	179.27	-101.18	525,646.37	791,346.22	32° 26' 32.854 N	103° 31' 22.505 W
10,411.64	0.00	0.00	10,407.06	179.27	-101.18	525,646.37	791,346.22	32° 26' 32.854 N	103° 31' 22.505 W
KOP: 12°/100' @ 10411.64' MD									
10,425.00	1.60	235.00	10,420.42	179.16	-101.33	525,646.26	791,346.06	32° 26' 32.853 N	103° 31' 22.507 W
10,450.00	4.60	235.00	10,445.38	178.39	-102.44	525,645.49	791,344.96	32° 26' 32.846 N	103° 31' 22.520 W
10,475.00	7.60	235.00	10,470.23	176.86	-104.62	525,643.96	791,342.78	32° 26' 32.831 N	103° 31' 22.546 W
10,500.00	10.60	235.00	10,494.91	174.59	-107.86	525,641.70	791,339.54	32° 26' 32.809 N	103° 31' 22.584 W
10,525.00	13.60	235.00	10,519.36	171.59	-112.15	525,638.69	791,335.25	32° 26' 32.779 N	103° 31' 22.634 W
10,550.00	16.60	235.00	10,543.49	167.85	-117.49	525,634.95	791,329.91	32° 26' 32.743 N	103° 31' 22.697 W
10,575.00	19.60	235.00	10,567.25	163.40	-123.85	525,630.50	791,323.55	32° 26' 32.699 N	103° 31' 22.771 W
10,600.00	22.60	235.00	10,590.57	158.23	-131.22	525,625.34	791,316.18	32° 26' 32.649 N	103° 31' 22.858 W

Aim Directional Services, LLC

Survey Report - Geographic

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #7H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3670.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #7H	MD Reference:	Updated @ 3670.00usft (25' KB)
Well:	3U #7H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r1	Database:	EDMRESTORED

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,625.00	25.60	235.00	10,613.39	152.38	-139.58	525,619.48	791,307.81	32° 26' 32.591 N	103° 31' 22.956 W
10,650.00	28.60	235.00	10,635.64	145.85	-148.91	525,612.95	791,298.49	32° 26' 32.527 N	103° 31' 23.065 W
10,675.00	31.60	235.00	10,657.27	138.66	-159.18	525,605.76	791,288.22	32° 26' 32.457 N	103° 31' 23.186 W
10,700.00	34.60	235.00	10,678.21	130.83	-170.37	525,597.93	791,277.03	32° 26' 32.380 N	103° 31' 23.317 W
10,725.00	37.60	235.00	10,698.40	122.38	-182.43	525,589.48	791,264.97	32° 26' 32.298 N	103° 31' 23.458 W
10,750.00	40.60	235.00	10,717.80	113.33	-195.35	525,580.44	791,252.05	32° 26' 32.209 N	103° 31' 23.610 W
10,775.00	43.60	235.00	10,736.35	103.72	-209.07	525,570.82	791,238.32	32° 26' 32.115 N	103° 31' 23.771 W
10,800.00	46.60	235.00	10,753.99	93.56	-223.58	525,560.67	791,223.82	32° 26' 32.016 N	103° 31' 23.941 W
10,825.00	49.60	235.00	10,770.68	82.89	-238.82	525,549.99	791,208.58	32° 26' 31.911 N	103° 31' 24.120 W
10,850.00	52.60	235.00	10,786.38	71.73	-254.76	525,538.84	791,192.64	32° 26' 31.802 N	103° 31' 24.307 W
10,875.00	55.60	235.00	10,801.04	60.12	-271.35	525,527.22	791,176.05	32° 26' 31.688 N	103° 31' 24.501 W
10,900.00	58.60	235.00	10,814.61	48.08	-288.54	525,515.18	791,158.86	32° 26' 31.570 N	103° 31' 24.703 W
10,911.64	60.00	235.00	10,820.56	42.34	-296.74	525,509.44	791,150.66	32° 26' 31.514 N	103° 31' 24.799 W
Build: 12°/100'									
10,925.00	60.53	233.26	10,827.18	35.54	-306.14	525,502.64	791,141.26	32° 26' 31.448 N	103° 31' 24.910 W
10,950.00	61.59	230.05	10,839.28	21.97	-323.29	525,489.07	791,124.11	32° 26' 31.315 N	103° 31' 25.111 W
10,975.00	62.72	226.91	10,850.96	7.32	-339.84	525,474.42	791,107.56	32° 26' 31.171 N	103° 31' 25.305 W
11,000.00	63.92	223.83	10,862.18	-8.38	-355.73	525,458.72	791,091.67	32° 26' 31.017 N	103° 31' 25.492 W
11,025.00	65.19	220.82	10,872.93	-25.07	-370.92	525,442.04	791,076.47	32° 26' 30.853 N	103° 31' 25.671 W
11,050.00	66.51	217.87	10,883.16	-42.71	-385.38	525,424.39	791,062.02	32° 26' 30.679 N	103° 31' 25.841 W
11,075.00	67.89	214.98	10,892.85	-61.25	-399.06	525,405.85	791,048.34	32° 26' 30.497 N	103° 31' 26.002 W
11,100.00	69.32	212.14	10,901.97	-80.65	-411.92	525,386.46	791,035.47	32° 26' 30.306 N	103° 31' 26.154 W
11,125.00	70.79	209.36	10,910.50	-100.84	-423.94	525,366.26	791,023.46	32° 26' 30.107 N	103° 31' 26.296 W
11,150.00	72.30	206.63	10,918.42	-121.78	-435.06	525,345.32	791,012.33	32° 26' 29.901 N	103° 31' 26.428 W
11,175.00	73.85	203.95	10,925.69	-143.40	-445.28	525,323.70	791,002.12	32° 26' 29.687 N	103° 31' 26.549 W
11,200.00	75.44	201.31	10,932.31	-165.65	-454.55	525,301.45	790,992.85	32° 26' 29.468 N	103° 31' 26.659 W
11,225.00	77.05	198.70	10,938.26	-188.47	-462.85	525,278.64	790,984.54	32° 26' 29.243 N	103° 31' 26.758 W
11,250.00	78.69	196.13	10,943.51	-211.79	-470.17	525,255.32	790,977.23	32° 26' 29.013 N	103° 31' 26.845 W
11,275.00	80.35	193.59	10,948.06	-235.54	-476.47	525,231.56	790,970.93	32° 26' 28.778 N	103° 31' 26.921 W
11,300.00	82.03	191.07	10,951.89	-259.68	-481.74	525,207.43	790,965.65	32° 26' 28.540 N	103° 31' 26.985 W
11,325.00	83.73	188.58	10,954.99	-284.12	-485.98	525,182.99	790,961.42	32° 26' 28.298 N	103° 31' 27.036 W
11,350.00	85.43	186.10	10,957.35	-308.80	-489.16	525,158.30	790,958.24	32° 26' 28.054 N	103° 31' 27.076 W
11,375.00	87.15	183.63	10,958.97	-333.65	-491.27	525,133.45	790,956.13	32° 26' 27.808 N	103° 31' 27.102 W
11,400.00	88.87	181.17	10,959.84	-358.61	-492.32	525,108.49	790,955.08	32° 26' 27.562 N	103° 31' 27.117 W
11,416.47	90.00	179.56	10,960.00	-375.08	-492.42	525,092.02	790,954.97	32° 26' 27.399 N	103° 31' 27.120 W
LP/Hold: 90.00° Inc, 179.56° Azm									
11,500.00	90.00	179.56	10,960.00	-458.61	-491.78	525,008.49	790,955.62	32° 26' 26.572 N	103° 31' 27.119 W
11,600.00	90.00	179.56	10,960.00	-558.61	-491.00	524,908.50	790,956.40	32° 26' 25.583 N	103° 31' 27.119 W
11,700.00	90.00	179.56	10,960.00	-658.60	-490.23	524,808.50	790,957.17	32° 26' 24.593 N	103° 31' 27.119 W
11,800.00	90.00	179.56	10,960.00	-758.60	-489.45	524,708.50	790,957.94	32° 26' 23.604 N	103° 31' 27.119 W
11,900.00	90.00	179.56	10,960.00	-858.60	-488.68	524,608.51	790,958.72	32° 26' 22.614 N	103° 31' 27.119 W
12,000.00	90.00	179.56	10,960.00	-958.59	-487.90	524,508.51	790,959.49	32° 26' 21.625 N	103° 31' 27.118 W
12,100.00	90.00	179.56	10,960.00	-1,058.59	-487.13	524,408.51	790,960.27	32° 26' 20.635 N	103° 31' 27.118 W
12,200.00	90.00	179.56	10,960.00	-1,158.59	-486.35	524,308.51	790,961.04	32° 26' 19.646 N	103° 31' 27.118 W
12,300.00	90.00	179.56	10,960.00	-1,258.58	-485.58	524,208.52	790,961.82	32° 26' 18.656 N	103° 31' 27.118 W
12,400.00	90.00	179.56	10,960.00	-1,358.58	-484.80	524,108.52	790,962.59	32° 26' 17.667 N	103° 31' 27.118 W
12,500.00	90.00	179.56	10,960.00	-1,458.58	-484.03	524,008.52	790,963.37	32° 26' 16.677 N	103° 31' 27.117 W
12,600.00	90.00	179.56	10,960.00	-1,558.58	-483.26	523,908.53	790,964.14	32° 26' 15.688 N	103° 31' 27.117 W
12,700.00	90.00	179.56	10,960.00	-1,658.57	-482.48	523,808.53	790,964.92	32° 26' 14.698 N	103° 31' 27.117 W
12,800.00	90.00	179.56	10,960.00	-1,758.57	-481.71	523,708.53	790,965.69	32° 26' 13.709 N	103° 31' 27.117 W
12,900.00	90.00	179.56	10,960.00	-1,858.57	-480.93	523,608.54	790,966.47	32° 26' 12.719 N	103° 31' 27.117 W
13,000.00	90.00	179.56	10,960.00	-1,958.56	-480.16	523,508.54	790,967.24	32° 26' 11.730 N	103° 31' 27.116 W
13,100.00	90.00	179.56	10,960.00	-2,058.56	-479.38	523,408.54	790,968.02	32° 26' 10.740 N	103° 31' 27.116 W
13,200.00	90.00	179.56	10,960.00	-2,158.56	-478.61	523,308.54	790,968.79	32° 26' 9.751 N	103° 31' 27.116 W
13,300.00	90.00	179.56	10,960.00	-2,258.55	-477.83	523,208.55	790,969.57	32° 26' 8.761 N	103° 31' 27.116 W

Aim Directional Services, LLC

Survey Report - Geographic

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #7H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3670.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #7H	MD Reference:	Updated @ 3670.00usft (25' KB)
Well:	3U #7H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r1	Database:	EDMRESTORED

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
13,400.00	90.00	179.56	10,960.00	-2,358.55	-477.06	523,108.55	790,970.34	32° 26' 7.772 N	103° 31' 27.116 W
13,500.00	90.00	179.56	10,960.00	-2,458.55	-476.28	523,008.55	790,971.12	32° 26' 6.782 N	103° 31' 27.115 W
13,600.00	90.00	179.56	10,960.00	-2,558.55	-475.51	522,908.56	790,971.89	32° 26' 5.793 N	103° 31' 27.115 W
13,700.00	90.00	179.56	10,960.00	-2,658.54	-474.73	522,808.56	790,972.66	32° 26' 4.803 N	103° 31' 27.115 W
13,800.00	90.00	179.56	10,960.00	-2,758.54	-473.96	522,708.56	790,973.44	32° 26' 3.814 N	103° 31' 27.115 W
13,900.00	90.00	179.56	10,960.00	-2,858.54	-473.18	522,608.57	790,974.21	32° 26' 2.824 N	103° 31' 27.115 W
14,000.00	90.00	179.56	10,960.00	-2,958.53	-472.41	522,508.57	790,974.99	32° 26' 1.835 N	103° 31' 27.114 W
14,100.00	90.00	179.56	10,960.00	-3,058.53	-471.63	522,408.57	790,975.76	32° 26' 0.845 N	103° 31' 27.114 W
14,200.00	90.00	179.56	10,960.00	-3,158.53	-470.86	522,308.57	790,976.54	32° 25' 59.855 N	103° 31' 27.114 W
14,300.00	90.00	179.56	10,960.00	-3,258.52	-470.08	522,208.58	790,977.31	32° 25' 58.866 N	103° 31' 27.114 W
14,400.00	90.00	179.56	10,960.00	-3,358.52	-469.31	522,108.58	790,978.09	32° 25' 57.876 N	103° 31' 27.114 W
14,500.00	90.00	179.56	10,960.00	-3,458.52	-468.54	522,008.58	790,978.86	32° 25' 56.887 N	103° 31' 27.113 W
14,600.00	90.00	179.56	10,960.00	-3,558.52	-467.76	521,908.59	790,979.64	32° 25' 55.897 N	103° 31' 27.113 W
14,700.00	90.00	179.56	10,960.00	-3,658.51	-466.99	521,808.59	790,980.41	32° 25' 54.908 N	103° 31' 27.113 W
14,800.00	90.00	179.56	10,960.00	-3,758.51	-466.21	521,708.59	790,981.19	32° 25' 53.918 N	103° 31' 27.113 W
14,900.00	90.00	179.56	10,960.00	-3,858.51	-465.44	521,608.60	790,981.96	32° 25' 52.929 N	103° 31' 27.113 W
15,000.00	90.00	179.56	10,960.00	-3,958.50	-464.66	521,508.60	790,982.74	32° 25' 51.939 N	103° 31' 27.112 W
15,100.00	90.00	179.56	10,960.00	-4,058.50	-463.89	521,408.60	790,983.51	32° 25' 50.950 N	103° 31' 27.112 W
15,200.00	90.00	179.56	10,960.00	-4,158.50	-463.11	521,308.60	790,984.29	32° 25' 49.960 N	103° 31' 27.112 W
15,300.00	90.00	179.56	10,960.00	-4,258.49	-462.34	521,208.61	790,985.06	32° 25' 48.971 N	103° 31' 27.112 W
15,400.00	90.00	179.56	10,960.00	-4,358.49	-461.56	521,108.61	790,985.83	32° 25' 47.981 N	103° 31' 27.111 W
15,500.00	90.00	179.56	10,960.00	-4,458.49	-460.79	521,008.61	790,986.61	32° 25' 46.992 N	103° 31' 27.111 W
15,600.00	90.00	179.56	10,960.00	-4,558.49	-460.01	520,908.62	790,987.38	32° 25' 46.002 N	103° 31' 27.111 W
15,700.00	90.00	179.56	10,960.00	-4,658.48	-459.24	520,808.62	790,988.16	32° 25' 45.013 N	103° 31' 27.111 W
15,800.00	90.00	179.56	10,960.00	-4,758.48	-458.46	520,708.62	790,988.93	32° 25' 44.023 N	103° 31' 27.111 W
15,900.00	90.00	179.56	10,960.00	-4,858.48	-457.69	520,608.63	790,989.71	32° 25' 43.034 N	103° 31' 27.110 W
16,000.00	90.00	179.56	10,960.00	-4,958.47	-456.91	520,508.63	790,990.48	32° 25' 42.044 N	103° 31' 27.110 W
16,105.13	90.00	179.56	10,960.00	-5,063.60	-456.10	520,403.50	790,991.30	32° 25' 41.004 N	103° 31' 27.110 W
PBHL									

Aim Directional Services, LLC

Survey Report - Geographic

Company:	Marshall & Winston, Inc.	Local Co-ordinate Reference:	Well 3U #7H
Project:	Lea County, NM (NAD83 NME)	TVD Reference:	Updated @ 3670.00usft (25' KB)
Site:	Loco Dinero 36 State Com 3U #7H	MD Reference:	Updated @ 3670.00usft (25' KB)
Well:	3U #7H	North Reference:	Grid
Wellbore:	Planning	Survey Calculation Method:	Minimum Curvature
Design:	Lateral 1r1	Database:	EDMRESTORED

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
PBHL - LD 36 St #7H - plan hits target center - Point	0.00	0.00	10,960.0 0	-5,063.60	-456.10	520,403.50	790,991.30	32° 25' 41.004 N	103° 31' 27.110 W
LTP - LD 36 St #7H - I - plan misses target center by 25.13usft at 16000.00usft MD (10960.00 TVD, -4958.47 N, -456.91 E) - Point	0.00	0.00	10,960.0 0	-4,983.60	-456.70	520,483.50	790,990.70	32° 25' 41.796 N	103° 31' 27.110 W
FTP - LD 36 St #7H - - plan misses target center by 21.64usft at 11275.00usft MD (10948.06 TVD, -235.54 N, -476.47 E) - Point	0.00	0.00	10,960.0 0	-229.30	-493.40	525,237.80	790,954.00	32° 26' 28.841 N	103° 31' 27.118 W
FTP - LD 36 St #7H - plan misses target center by 400.69usft at 11309.91usft MD (10953.20 TVD, -269.33 N, -483.55 E) - Point	0.00	0.00	11,291.00	-263.80	-268.10	525,203.30	791,179.30	32° 26' 28.483 N	103° 31' 24.492 W
LTP - LD 36 St #7H - plan misses target center by 424.47usft at 16000.00usft MD (10960.00 TVD, -4958.47 N, -456.91 E) - Point	0.00	0.00	11,319.00	-4,982.40	-231.70	520,484.70	791,215.70	32° 25' 41.791 N	103° 31' 24.485 W
PBHL - LD 36 St #7H - plan misses target center by 424.53usft at 16105.13usft MD (10960.00 TVD, -5063.60 N, -456.10 E) - Point	0.00	0.00	11,320.00	-5,062.40	-231.10	520,404.70	791,216.30	32° 25' 40.999 N	103° 31' 24.485 W

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,800.00	1,800.00	Casing	13-3/8	17-1/2
5,250.00	5,250.00	Casing	9-5/8	12-1/4

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
5350	5350	0	0	Build: 2°/100'
5479	5479	3	-1	Hold
9846	9841	174	-98	Drop: 1°/100'
10,105	10,100	179	-101	Hold
10,412	10,407	179	-101	KOP: 12°/100' @ 10411.64' MD
10,912	10,821	42	-297	Build: 12°/100'
11,416	10,960	-375	-492	LP/Hold: 90.00° Inc, 179.56° Azm
16,105	10,960	-5064	-456	PBHL

Checked By: _____ Approved By: _____ Date: _____

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

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

CONDITIONS

Action 74835

CONDITIONS

Operator: MARSHALL & WINSTON INC P.O. Box 50880 Midland, TX 79710	OGRID: 14187
	Action Number: 74835
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	1/25/2022