



Job Number: SVMO-141618
Company: OXY USA, Inc.
Lease/Well: Misty 35 Federal Com 4H
Location: Eddy County, NM
Rig Name: H&P #621
RKB: 21'
G.L. or M.S.L.: GL

State/Country: New Mexico/USA
Declination: 7.72°
Grid: East To Grid North
File name: Y:\WINSER~1\2014SU~1\OXY\MO\MISTY3~1\4H.SVY
Date/Time: 03-Dec-14 / 12:08
Curve Name: Surface - 506' M.D. (Rate Gyro) (API 30-015-41413)

MS Survey

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane .00
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

We hereby certify that our survey data from
Surface MD to 506' MD is, to the best of
our knowledge a true and accurate account of the
well bore.

Daniel West
MS Energy Services

12-3-14
Date

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
138.00	.96	308.85	137.99	.73	-.90	.73	1.16	308.85	.70
230.00	.98	312.63	229.98	1.74	-2.08	1.74	2.71	309.95	.07
322.00	.92	313.34	321.97	2.78	-3.20	2.78	4.24	311.04	.07
414.00	1.06	320.36	413.95	3.94	-4.28	3.94	5.82	312.69	.20

Last Survey Depth Recorded

506.00	1.12	319.24	505.94	5.28	-5.41	5.28	7.56	314.33	.07
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NM OIL CONSERVATION
ARTESIA DISTRICT

APR 16 2015

RECEIVED

OXY

Eddy County, NM (NAD 27 NME)

Misty 35 Fed 4H

M35 F 4H

Sidetrack #1

Design: Sidetrack #1

Standard Survey Report

08 January, 2015

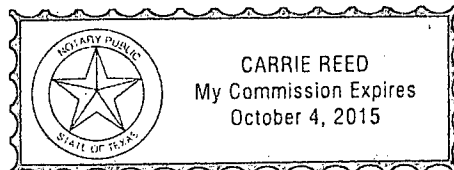
This survey is correct to the best of my knowledge and is supported by actual field data.

Richard

Notarized this date 4th of March, 2015.

Carrie Reed

Notary Signature
County of Midland
State of Texas



www.scientificdrilling.com

Survey Report

Company:	OXY	Local Co-ordinate Reference:	Well M35 F 4H.
Project:	Eddy County, NM (NAD 27 NME)	TVD Reference:	KB @ 3536.7usft
Site:	Misty 35 Fed 4H	MD Reference:	KB @ 3536.7usft
Well:	M35 F 4H	North Reference:	Grid
Wellbore:	Sidetrack #1	Survey Calculation Method:	Minimum Curvature
Design:	Sidetrack #1	Database:	Midland District

Project	Eddy County, NM (NAD 27 NME), New Mexico		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Misty 35 Fed 4H				
Site Position:		Northing:	618,565.90 usft	Latitude:	32° 41' 59.649 N
From:	Map	Easting:	622,589.80 usft	Longitude:	103° 56' 5.353 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.22 °

Well:	M35 F 4H					
Well Position	+N/-S	0.0 usft	Northing:	618,565.90 usft	Latitude:	32° 41' 59.649 N
	+E/-W	0.0 usft	Easting:	622,589.80 usft	Longitude:	103° 56' 5.353 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,511.7 usft

Wellbore	Sidetrack #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	BGGM2014	12/18/2014	7.53	60.47	48,462

Design:	Sidetrack #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	506.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	279.02	

Survey Program	Date: 1/8/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
138.0	506.0	MS Gyro (OH)	Generic Gyro	Generic Gyro
598.0	13,232.0	SDI MWD (Sidetrack #1)	SDI MWD	SDI MWD - Standard ver 1.0.1

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
138.0	0.96	308.85	138.0	0.7	-0.9	1.0	0.70	0.70	0.00	
230.0	0.98	312.63	230.0	1.7	-2.1	2.3	0.07	0.02	4.11	
322.0	0.92	313.34	322.0	2.8	-3.2	3.6	0.07	-0.07	0.77	
414.0	1.06	320.36	414.0	3.9	-4.3	4.8	0.20	0.15	7.63	
506.0	1.12	319.24	505.9	5.3	-5.4	6.2	0.07	0.07	-1.22	
598.0	1.44	310.70	597.9	6.7	-6.9	7.8	0.40	0.35	-9.28	
690.0	0.11	5.51	689.9	7.6	-7.7	8.8	1.50	-1.45	59.58	
782.0	0.09	230.54	781.9	7.6	-7.8	8.9	0.20	-0.02	-146.71	
875.0	0.53	213.02	874.9	7.2	-8.1	9.1	0.48	0.47	-18.84	

Survey Report

Company:	OXY	Local Co-ordinate Reference:	Well M35 F 4H
Project:	Eddy County, NM (NAD 27-NME)	TVD Reference:	KB @ 3536.7usft
Site:	Misty 35 Fed 4H	MD Reference:	KB @ 3536.7usft
Well:	M35 F 4H	North Reference:	Grid
Wellbore:	Sidetrack #1	Survey Calculation Method:	Minimum Curvature
Design:	Sidetrack #1	Database:	Midland District

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
967.0	0.34	206.31	966.9	6.6	-8.4	9.4	0.21	-0.21	-7.29	
1,061.0	0.23	190.06	1,060.9	6.2	-8.6	9.4	0.14	-0.12	-17.29	
1,156.0	0.08	353.72	1,155.9	6.0	-8.6	9.5	0.32	-0.16	172.27	
1,250.0	0.43	334.53	1,249.9	6.4	-8.8	9.7	0.38	0.37	-20.41	
1,345.0	0.09	140.01	1,344.9	6.7	-8.9	9.8	0.54	-0.36	174.19	
1,439.0	0.51	75.28	1,438.9	6.7	-8.4	9.4	0.51	0.45	-68.86	
1,534.0	0.60	84.86	1,533.9	6.9	-7.5	8.5	0.14	0.09	10.08	
1,628.0	0.41	40.56	1,627.9	7.2	-6.8	7.9	0.45	-0.20	-47.13	
1,723.0	0.68	95.27	1,722.9	7.4	-6.0	7.1	0.58	0.28	57.59	
1,817.0	0.68	59.32	1,816.9	7.6	-5.0	6.1	0.45	0.00	-38.24	
1,912.0	0.98	71.48	1,911.9	8.2	-3.8	5.0	0.36	0.32	12.80	
2,006.0	0.66	63.64	2,005.9	8.7	-2.5	3.8	0.36	-0.34	-8.34	
2,101.0	0.66	51.96	2,100.9	9.2	-1.6	3.0	0.14	0.00	-12.29	
2,195.0	0.64	19.31	2,194.8	10.1	-1.0	2.5	0.39	-0.02	-34.73	
2,290.0	1.02	356.75	2,289.8	11.4	-0.9	2.6	0.52	0.40	-23.75	
2,384.0	0.53	53.95	2,383.8	12.5	-0.6	2.5	0.91	-0.52	60.85	
2,479.0	0.61	71.29	2,478.8	12.9	0.3	1.7	0.20	0.08	18.25	
2,573.0	0.14	206.91	2,572.8	13.0	0.7	1.3	0.76	-0.50	144.28	
2,668.0	0.43	182.16	2,667.8	12.5	0.6	1.3	0.32	0.31	-26.05	
2,762.0	0.54	186.09	2,761.8	11.7	0.6	1.3	0.12	0.12	4.18	
2,856.0	0.39	229.30	2,855.8	11.1	0.3	1.5	0.39	-0.16	45.97	
2,951.0	0.41	201.62	2,950.8	10.6	-0.1	1.7	0.20	0.02	-29.14	
3,045.0	0.33	201.80	3,044.8	10.0	-0.3	1.9	0.09	-0.09	0.19	
3,140.0	0.48	215.61	3,139.8	9.4	-0.6	2.1	0.19	0.16	14.54	
3,234.0	0.45	225.78	3,233.8	8.8	-1.1	2.5	0.09	-0.03	10.82	
3,329.0	0.50	199.00	3,328.8	8.2	-1.5	2.8	0.24	0.05	-28.19	
3,423.0	0.47	232.52	3,422.8	7.6	-2.0	3.1	0.30	-0.03	35.66	
3,518.0	0.59	213.79	3,517.8	6.9	-2.6	3.6	0.22	0.13	-19.72	
3,613.0	0.30	230.15	3,612.8	6.4	-3.0	4.0	0.33	-0.31	17.22	
3,670.0	0.42	202.04	3,669.8	6.1	-3.2	4.1	0.37	0.21	-49.32	
3,798.0	0.50	214.01	3,797.8	5.2	-3.7	4.5	0.10	0.06	9.35	
3,892.0	0.53	214.47	3,891.8	4.5	-4.2	4.8	0.03	0.03	0.49	
3,987.0	0.57	207.91	3,986.8	3.7	-4.6	5.2	0.08	0.04	-6.91	
4,081.0	1.28	179.30	4,080.8	2.2	-4.9	5.1	0.88	0.76	-30.44	
4,176.0	1.51	178.71	4,175.7	-0.1	-4.8	4.7	0.24	0.24	-0.62	
4,270.0	1.23	134.94	4,269.7	-2.0	-4.1	3.7	1.12	-0.30	-46.56	
4,365.0	1.10	116.22	4,364.7	-3.2	-2.5	2.0	0.42	-0.14	-19.71	
4,459.0	0.40	216.04	4,458.7	-3.8	-1.9	1.3	1.31	-0.74	106.19	
4,554.0	1.57	17.26	4,553.7	-2.8	-1.7	1.3	2.06	1.23	169.71	
4,648.0	4.29	23.80	4,647.5	1.6	0.1	0.2	2.91	2.89	6.96	
4,742.0	6.96	23.51	4,741.1	10.0	3.8	-2.2	2.84	2.84	-0.31	
4,837.0	8.21	27.84	4,835.3	21.3	9.2	-5.8	1.45	1.32	4.56	
4,931.0	8.45	42.10	4,928.3	32.4	17.0	-11.7	2.21	0.26	15.17	

Survey Report

Company:	OXY	Local Co-ordinate Reference:	Well M35 F 4H
Project:	Eddy County, NM (NAD 27 NME)	TVD Reference:	KB @ 3536.7usft
Site:	Misty 35 Fed 4H	MD Reference:	KB @ 3536.7usft
Well:	M35 F 4H	North Reference:	Grid
Wellbore:	Sidetrack #1	Survey Calculation Method:	Minimum Curvature
Design:	Sidetrack #1	Database:	Midland District

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,026.0	7.52	41.59	5,022.3	42.2	25.8	-18.9	0.98	-0.98	-0.54
5,120.0	8.12	30.05	5,115.5	52.6	33.2	-24.6	1.78	0.64	-12.28
5,215.0	9.28	30.68	5,209.4	64.9	40.5	-29.8	1.23	1.22	0.66
5,309.0	8.20	29.63	5,302.3	77.3	47.7	-35.0	1.16	-1.15	-1.12
5,404.0	7.75	29.70	5,396.4	88.7	54.2	-39.6	0.47	-0.47	0.07
5,498.0	9.47	33.38	5,489.3	100.7	61.6	-45.0	1.92	1.83	3.91
5,593.0	9.28	34.04	5,583.0	113.6	70.2	-51.5	0.23	-0.20	0.69
5,687.0	8.75	34.04	5,675.9	125.8	78.4	-57.7	0.56	-0.56	0.00
5,782.0	8.61	32.53	5,769.8	137.8	86.3	-63.6	0.28	-0.15	-1.59
5,877.0	8.10	32.77	5,863.8	149.4	93.7	-69.2	0.54	-0.54	0.25
5,971.0	7.57	29.24	5,956.9	160.4	100.3	-74.0	0.76	-0.56	-3.76
6,065.0	8.75	36.02	6,050.0	171.6	107.6	-79.4	1.62	1.26	7.21
6,162.0	10.83	21.17	6,145.6	186.0	115.2	-84.6	3.36	2.14	-15.31
6,256.0	14.17	16.98	6,237.3	205.3	121.8	-88.1	3.68	3.55	-4.46
6,351.0	13.62	8.42	6,329.5	227.5	126.8	-89.6	2.24	-0.58	-9.01
6,445.0	12.48	8.05	6,421.1	248.5	129.8	-89.3	1.22	-1.21	-0.39
6,540.0	11.56	8.12	6,514.0	268.0	132.6	-89.0	0.97	-0.97	0.07
6,634.0	12.08	356.52	6,606.1	287.2	133.3	-86.7	2.58	0.55	-12.31
6,729.0	10.94	356.33	6,699.1	306.1	132.2	-82.6	1.20	-1.20	-0.20
6,823.0	9.73	355.80	6,791.6	322.9	131.0	-78.8	1.29	-1.29	-0.56
6,918.0	6.35	3.93	6,885.7	336.2	130.8	-76.5	3.75	-3.56	8.56
7,012.0	5.95	3.36	6,979.1	346.2	131.4	-75.5	0.43	-0.43	-0.61
7,107.0	5.42	357.60	7,073.7	355.6	131.5	-74.2	0.82	-0.56	-6.06
7,201.0	6.86	358.36	7,167.1	365.7	131.2	-72.2	1.53	1.53	0.81
7,296.0	5.90	357.47	7,261.5	376.2	130.8	-70.2	1.02	-1.01	-0.94
7,390.0	5.63	358.45	7,355.1	385.7	130.5	-68.4	0.31	-0.29	1.04
7,484.0	6.15	359.04	7,448.6	395.3	130.3	-66.7	0.56	0.55	0.63
7,579.0	7.39	6.10	7,542.9	406.5	130.8	-65.5	1.57	1.31	7.43
7,673.0	6.15	0.68	7,636.2	417.5	131.5	-64.5	1.48	-1.32	-5.77
7,768.0	5.66	359.36	7,730.7	427.3	131.5	-62.9	0.54	-0.52	-1.39
7,863.0	7.18	3.98	7,825.1	437.9	131.9	-61.6	1.69	1.60	4.86
7,957.0	6.81	1.57	7,918.4	449.3	132.5	-60.4	0.50	-0.39	-2.56
8,038.0	6.28	1.02	7,998.9	458.6	132.7	-59.2	0.66	-0.65	-0.68
8,052.0	6.54	353.22	8,012.8	460.1	132.6	-58.8	6.51	1.89	-55.80
M35 F 4H KOP									
8,151.0	10.68	318.73	8,110.7	472.6	125.9	-50.2	6.51	4.18	-34.83
8,182.0	14.95	308.86	8,141.0	477.3	120.8	-44.5	15.43	13.77	-31.84
8,214.0	19.71	303.09	8,171.5	482.8	113.1	-36.0	15.80	14.88	-18.03
8,245.0	23.41	298.94	8,200.3	488.7	103.3	-25.5	12.90	11.94	-13.39
8,277.0	25.64	295.22	8,229.4	494.7	91.5	-12.8	8.47	6.97	-11.63
8,308.0	28.09	288.56	8,257.1	499.9	78.5	0.8	12.51	7.90	-21.48
8,340.0	29.91	282.42	8,285.1	504.0	63.6	16.2	10.90	5.69	-19.19
8,371.0	31.00	277.61	8,311.8	506.7	48.1	31.9	8.61	3.52	-15.52

Survey Report

Company:	OXY	Local Co-ordinate Reference:	Well M35 F 4H
Project:	Eddy County, NM (NAD 27 NME)	TVD Reference:	KB @ 3536.7usft
Site:	Misty 35 Fed 4H	MD Reference:	KB @ 3536.7usft
Well:	M35 F 4H	North Reference:	Grid
Wellbore:	Sidetrack #1	Survey Calculation Method:	Minimum Curvature
Design:	Sidetrack #1	Database:	Midland District

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,403.0	33.48	276.32	8,338.9	508.8	31.2	49.0	8.04	7.75	-4.03
8,434.0	36.15	276.39	8,364.3	510.7	13.6	66.6	8.61	8.61	0.23
8,466.0	39.07	275.79	8,389.7	512.8	-5.8	86.1	9.20	9.13	-1.88
8,497.0	41.19	275.26	8,413.4	514.7	-25.7	106.1	6.93	6.84	-1.71
8,528.8	43.27	273.93	8,436.9	516.4	-47.0	127.4	7.14	6.56	-4.19
M35 F 4H FTP									
8,529.0	43.29	273.92	8,437.1	516.5	-47.2	127.5	7.14	6.59	-4.02
8,560.0	45.02	273.90	8,459.3	517.9	-68.7	149.0	5.58	5.58	-0.06
8,592.0	47.34	274.70	8,481.5	519.7	-91.7	172.0	7.47	7.25	2.50
8,623.0	50.11	272.72	8,501.9	521.2	-115.0	195.2	10.14	8.94	-6.39
8,655.0	53.73	272.79	8,521.7	522.4	-140.1	220.3	11.31	11.31	0.22
8,686.0	58.28	273.44	8,539.0	523.8	-165.8	245.8	14.78	14.68	2.10
8,718.0	61.95	273.97	8,554.9	525.6	-193.5	273.5	11.56	11.47	1.66
8,749.0	64.63	274.84	8,568.9	527.7	-221.1	301.1	9.00	8.65	2.81
8,781.0	67.03	276.19	8,582.0	530.5	-250.1	330.2	8.43	7.50	4.22
8,812.0	69.80	277.02	8,593.4	533.8	-278.8	359.0	9.28	8.94	2.68
8,844.0	73.69	277.29	8,603.4	537.6	-308.9	389.4	12.18	12.16	0.84
8,875.0	77.26	276.84	8,611.2	541.3	-338.7	419.3	11.60	11.52	-1.45
8,907.0	80.19	275.57	8,617.4	544.7	-369.9	450.7	9.95	9.16	-3.97
8,938.0	83.17	275.30	8,621.9	547.6	-400.4	481.3	9.65	9.61	-0.87
8,969.0	85.58	275.95	8,624.9	550.6	-431.1	512.1	8.05	7.77	2.10
8,995.0	87.99	276.32	8,626.4	553.4	-456.9	538.0	9.38	9.27	1.42
9,090.0	91.48	274.87	8,626.8	562.6	-551.5	632.8	3.98	3.67	-1.53
9,184.0	91.95	273.14	8,624.0	569.2	-645.2	726.4	1.91	0.50	-1.84
9,279.0	90.91	271.91	8,621.7	573.4	-740.1	820.8	1.70	-1.09	-1.29
9,373.0	89.77	271.63	8,621.1	576.3	-834.0	914.0	1.25	-1.21	-0.30
9,468.0	89.43	271.85	8,621.8	579.2	-929.0	1,008.3	0.43	-0.36	0.23
9,562.0	89.30	272.32	8,622.8	582.6	-1,022.9	1,101.6	0.52	-0.14	0.50
9,657.0	89.06	270.55	8,624.2	585.0	-1,117.8	1,195.7	1.88	-0.25	-1.86
9,751.0	89.40	270.76	8,625.4	586.1	-1,211.8	1,288.7	0.43	0.36	0.22
9,845.0	89.40	270.72	8,626.4	587.3	-1,305.8	1,381.7	0.04	0.00	-0.04
9,940.0	89.06	270.45	8,627.7	588.2	-1,400.8	1,475.7	0.46	-0.36	-0.28
10,034.0	88.22	270.63	8,629.9	589.1	-1,494.8	1,568.6	0.91	-0.89	0.19
10,129.0	87.18	270.91	8,633.7	590.4	-1,589.7	1,662.6	1.13	-1.09	0.29
10,223.0	90.54	271.71	8,635.6	592.5	-1,683.6	1,755.7	3.67	3.57	0.85
10,317.0	91.11	271.79	8,634.2	595.4	-1,777.6	1,848.9	0.61	0.61	0.09
10,412.0	91.51	271.89	8,632.1	598.5	-1,872.5	1,943.2	0.43	0.42	0.11
10,506.0	91.01	270.99	8,630.0	600.8	-1,966.4	2,036.3	1.10	-0.53	-0.96
10,601.0	91.21	271.00	8,628.2	602.5	-2,061.4	2,130.4	0.21	0.21	0.01
10,695.0	91.58	271.39	8,625.9	604.4	-2,155.4	2,223.5	0.57	0.39	0.41
10,790.0	91.75	271.41	8,623.1	606.8	-2,250.3	2,317.6	0.18	0.18	0.02
10,884.0	90.94	271.76	8,620.9	609.4	-2,344.2	2,410.8	0.94	-0.86	0.37
10,979.0	91.48	272.03	8,618.9	612.5	-2,439.2	2,505.0	0.64	0.57	0.28
11,073.0	90.97	273.79	8,616.9	617.3	-2,533.0	2,598.5	1.95	-0.54	1.87

Survey Report

Company:	OXY	Local Co-ordinate Reference:	Well M35 F 4H
Project:	Eddy County, NM (NAD 27 NME)	TVD Reference:	KB @ 3536.7usft
Site:	Misty 35 Fed 4H	MD Reference:	KB @ 3536.7usft
Well:	M35 F 4H	North Reference:	Grid
Wellbore:	Sidetrack #1	Survey Calculation Method:	Minimum Curvature
Design:	Sidetrack #1	Database:	Midland District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,167.0	91.44	273.77	8,614.9	623.5	-2,626.8	2,692.0	0.50	0.50	-0.02
11,262.0	91.68	273.77	8,612.3	629.7	-2,721.6	2,786.6	0.25	0.25	0.00
11,356.0	89.26	273.76	8,611.6	635.9	-2,815.3	2,880.2	2.57	-2.57	-0.01
11,457.0	89.60	274.01	8,612.6	642.7	-2,916.1	2,980.8	0.42	0.34	0.25
11,545.0	89.16	274.16	8,613.5	649.0	-3,003.9	3,068.5	0.53	-0.50	0.17
11,640.0	89.33	274.46	8,614.8	656.1	-3,098.6	3,163.1	0.36	0.18	0.32
11,734.0	89.30	274.55	8,615.9	663.5	-3,192.3	3,256.8	0.10	-0.03	0.10
11,829.0	89.63	274.55	8,616.8	671.0	-3,287.0	3,351.5	0.35	0.35	0.00
11,923.0	89.76	274.81	8,617.3	678.7	-3,380.7	3,445.3	0.31	0.14	0.28
12,018.0	90.40	275.83	8,617.1	687.5	-3,475.3	3,540.1	1.27	0.67	1.07
12,113.0	90.77	275.00	8,616.2	696.5	-3,569.8	3,634.9	0.96	0.39	-0.87
12,208.0	90.64	275.29	8,615.0	705.0	-3,664.4	3,729.7	0.33	-0.14	0.31
12,302.0	89.33	273.43	8,615.0	712.2	-3,758.2	3,823.3	2.42	-1.39	-1.98
12,397.0	89.50	273.82	8,616.0	718.2	-3,853.0	3,917.9	0.45	0.18	0.41
12,491.0	89.70	271.53	8,616.7	722.5	-3,946.9	4,011.3	2.45	0.21	-2.44
12,586.0	89.80	271.13	8,617.1	724.8	-4,041.8	4,105.5	0.43	0.11	-0.42
12,680.0	89.70	271.17	8,617.5	726.6	-4,135.8	4,198.6	0.11	-0.11	0.04
12,775.0	89.50	270.90	8,618.1	728.4	-4,230.8	4,292.7	0.35	-0.21	-0.28
12,869.0	90.70	271.52	8,618.0	730.3	-4,324.8	4,385.8	1.44	1.28	0.66
12,964.0	90.97	271.26	8,616.6	732.6	-4,419.7	4,479.9	0.39	0.28	-0.27
13,058.0	91.24	271.37	8,614.8	734.8	-4,513.7	4,573.1	0.31	0.29	0.12
13,109.6	91.29	271.29	8,613.6	736.0	-4,565.2	4,624.2	0.18	0.11	-0.15
M35 F 4H LTP									
13,152.0	91.34	271.23	8,612.7	736.9	-4,607.6	4,666.2	0.18	0.11	-0.15
13,184.0	91.34	271.29	8,611.9	737.6	-4,639.6	4,697.9	0.19	0.00	0.19
MWD Survey									
13,232.0	91.34	271.29	8,610.8	738.7	-4,687.6	4,745.5	0.00	0.00	0.00
Projection to Bit/TD - M35 F 4H BHL									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates	Comment
+N/-S (usft)	+E/-W (usft)		
13,184.0	8,611.9	737.6	-4,639.6 MWD Survey
13,232.0	8,610.8	738.7	-4,687.6 Projection to Bit/TD

Checked By: _____ Approved By: _____ Date: _____



M35 F 4H
Eddy County, NM (NAD 27 NME)
Northing: 618565.90
Easting: 622589.80
ST1 Plan #5



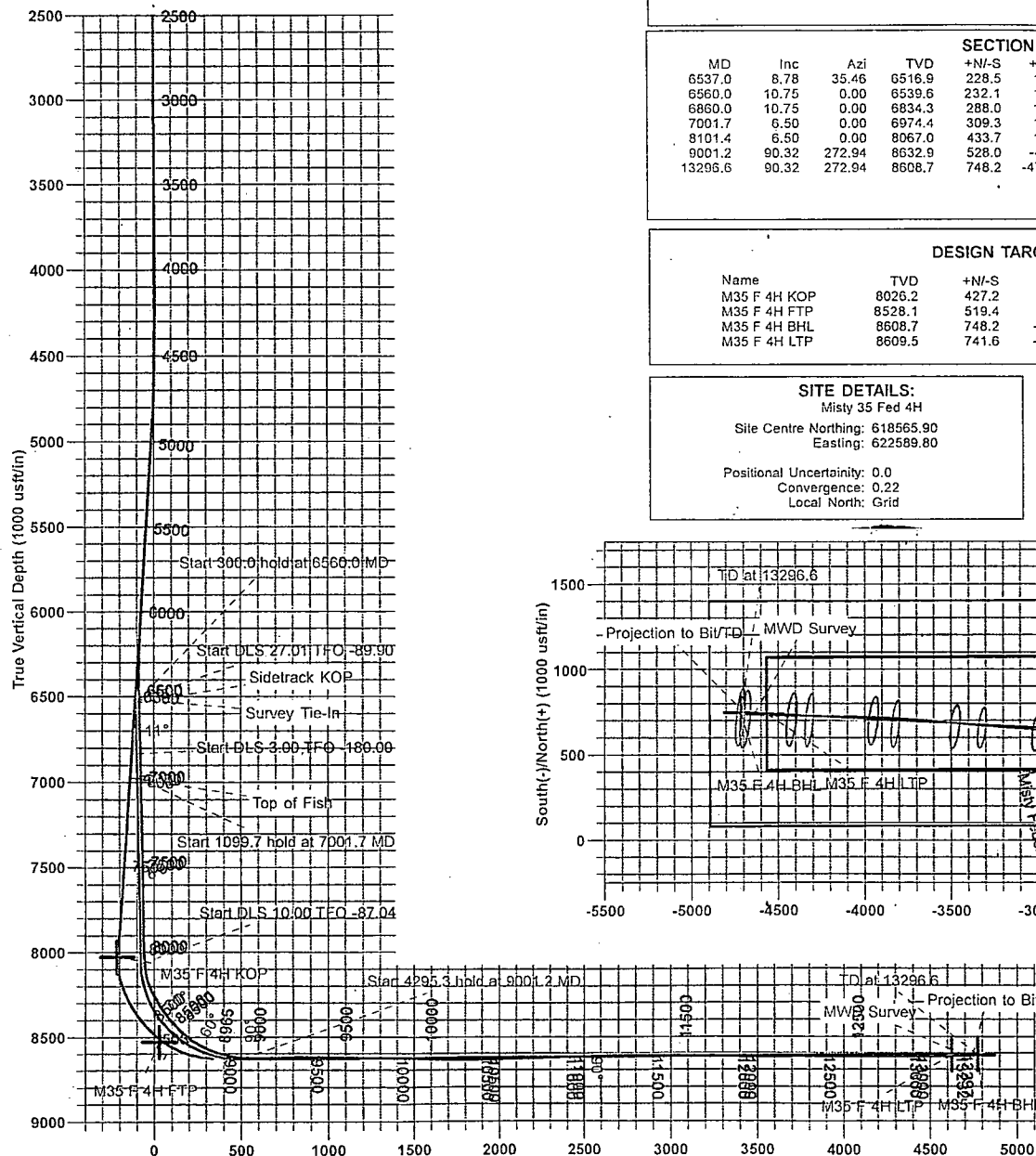
To convert Magnetic North to Grid, Add 7.32°
To convert True North to Grid, Subtract 0.22°

Azimuths to Grid North
True North: -0.22°
Magnetic North: 7.32°

Magnetic Field
Strength: 48461.95uT
Dip Angle: 60.47°
Date: 12/18/2014
Model: BGGM2014



KB @ 3536.7usft
Gr @ 3511.7



WELL DETAILS M35 F 4H

+N/-S	+E/-W	Northing	Ground Level: 3511.7	Easting	Latitude	Longitude
0.0	0.0	618565.90		622589.80	32° 41' 59.649 N	103° 56' 5.353 W

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
6537.0	8.78	35.46	6516.9	228.5	145.8	0.00	0.00	-108.2	
6560.0	10.75	0.00	6539.6	232.1	146.8	27.01	-89.90	-108.6	
6860.0	10.75	0.00	6834.3	288.0	146.8	0.00	0.00	-99.8	
7001.7	6.50	0.00	6974.4	309.3	146.8	3.00	-180.00	-96.5	
8101.4	6.50	0.00	8067.0	433.7	146.8	0.00	0.00	-77.0	
9001.2	90.32	272.94	8632.9	528.0	-425.3	10.00	-87.04	502.8	
13295.6	90.32	272.94	8608.7	748.2	-4714.9	0.00	0.00	4773.9	M35 F 4H BHL

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting
M35 F 4H KOP	8026.2	427.2	284.5	618993.10	622874.30
M35 F 4H FTP	8528.1	519.4	54.0	619085.30	622643.80
M35 F 4H BHL	8608.7	748.2	-4714.9	619314.10	617874.90
M35 F 4H LTP	8609.5	741.6	-4565.0	619307.50	618024.80

SITE DETAILS:

Misty 35 Fed 4H
Site Centre Northing: 618565.90
Easting: 622589.80
Positional Uncertainty: 0.0
Convergence: 0.22
Local North: Grid

PROJECT DETAILS:

Eddy County, NM (NAD 27 NME)
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

