

OPERATOR Mewbourne Oil Company
WELL/LEASE Paduca 7/6 A2ED Fed Com 1H
COUNTY LEA

444-0032

STATE OF NEW MEXICO
DEVIATION REPORT

241	0.30
739	0.70
1,383	0.90
1,572	1.30
1,762	1.30
2,138	2.20
2,325	2.30
2,514	1.50
2,704	0.40
2,892	1.50
3,082	1.30
3,272	1.10
3,365	1.30
3,554	0.50
3,743	0.60
3,932	1.30
4,122	1.30
4,405	0.70
4,593	0.60
4,783	0.20
4,971	0.40
5,161	0.20
5,537	0.20
5,914	0.50
6,103	0.50
6,293	1.00
6,857	0.70
7,141	0.90
7,329	0.70
7,520	0.80
7,613	0.70
7,801	0.60

HOBBS OCD

AUG 17 2015

RECEIVED

STATE OF TEXAS

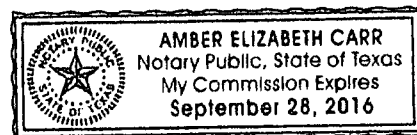
COUNTY OF MIDLAND

BY: Briana Welch

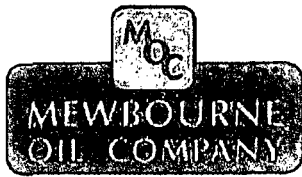
The foregoing instrument was acknowledged before me on
Briana Welch on behalf of Patterson-UTI Drilling Company LLC.

2/23/15 by

Amber Elizabeth Carr
Notary Public for Midland County, Texas
My Commission Expires:



SEP 09 2015



Mewbourne Oil Company

Lea County, New Mexico (NAD 27)

Paduca 7-6 A2ED Federal Com

#1H

Wellbore #1

HOBBS OCD

AUG 17 2015

Survey: VES Gyro

RECEIVED

Standard Survey Report

26 January, 2015



MS Energy Services Survey Report

MS Energy Services.
WWW.MSENERGYSERVICES.COM

Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well #1H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3269.00usft (Patterson 444)
Site:	Paduca 7-6 A2ED Federal Com	MD Reference:	WELL @ 3269.00usft (Patterson 444)
Well:	#1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Database:	EDM 5000.1 Conroe DB

Project:	Lea County, New Mexico (NAD 27)		
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		

Well:	#1H					
Well Position	+N/-S	0.00 usft	Northing:	385,368.20 usft	Latitude:	32° 3' 28.820 N
	+E/-W	0.00 usft	Easting:	690,198.40 usft	Longitude:	103° 43' 9.833 W
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,249.00 usft	

Wellbore: Wellbore #1

Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	WMM_2010	12/26/14	(°)	(°)	(nT)
			7.24	59.92	48,142

Design: Surveys

Audit Notes:

Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
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Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.00	0.00	0.00	359.86

Survey/Program	Date	01/26/15		
From	To	Survey (Wellbore)	Tool Name	Description
(usft)	(usft)			
100.00	8,070.00	VES Gyro (Wellbore #1)	NS-GYRO-MS	North sensing gyrocompassing m/s
8,154.00	16,000.00	MS MWD (Wellbore #1)	MWD	MWD - Standard

Survey	Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Vertical	Dogleg	Build	Turn
	Depth	(°)	(°)	Depth	(usft)	(usft)	Section	Rate	Rate	Rate
	(usft)			(usft)			(usft)	(°/100usft)	(°/100usft)	(°/100usft)
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	100.00	0.66	267.76	100.00	-0.02	-0.58	-0.02	0.66	0.66	0.00
	200.00	0.66	252.02	199.99	-0.22	-1.70	-0.22	0.18	0.00	-15.74
	300.00	0.54	274.54	299.99	-0.36	-2.72	-0.36	0.26	-0.12	22.52
	400.00	0.85	286.48	399.98	-0.12	-3.90	-0.11	0.34	0.31	11.94
	500.00	1.15	306.48	499.96	0.69	-5.42	0.70	0.46	0.30	20.00
	600.00	1.38	325.48	599.94	2.28	-6.90	2.30	0.48	0.23	19.00
	700.00	0.92	322.05	699.92	3.91	-8.08	3.93	0.46	-0.46	-3.43
	800.00	0.70	325.59	799.91	5.04	-8.92	5.06	0.23	-0.22	3.54
	900.00	0.15	35.57	899.91	5.65	-9.19	5.68	0.66	-0.55	69.98
	1,000.00	0.38	50.97	999.91	5.97	-8.86	5.99	-0.24	0.23	15.40
	1,100.00	0.41	109.81	1,099.90	6.06	-8.26	6.08	0.39	0.03	58.84
	1,200.00	0.80	134.18	1,199.90	5.45	-7.42	5.47	0.46	0.39	24.37
	1,300.00	0.79	160.30	1,299.89	4.31	-6.69	4.33	0.36	-0.01	26.12
	1,400.00	0.65	119.23	1,399.88	3.39	-5.96	3.40	0.52	-0.14	-41.07



MS Energy Services Survey Report



Company: Mewbourne Oil Company
Project: Lea County, New Mexico (NAD 27)
Site: Paduca 7-6 A2ED Federal Com
Well: #1H
Wellbore: Wellbore #1
Design: Surveys

Local Co-ordinate Reference: Well #1H
TVD Reference: WELL @ 3269.00usft (Patterson 444)
WID Reference: WELL @ 3269.00usft (Patterson 444)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Conroe DB

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)
1,500.00	0.80	83.42	1,499.87	3.19	-4.77	3.20	0.47	0.15	-35.81
1,600.00	1.02	118.83	1,599.86	2.84	-3.30	2.85	0.59	0.22	35.41
1,700.00	1.16	103.57	1,699.84	2.17	-1.54	2.18	0.32	0.14	-15.26
1,800.00	1.38	122.37	1,799.82	1.29	0.46	1.29	0.47	0.22	18.80
1,900.00	1.52	148.96	1,899.79	-0.49	2.16	-0.50	0.68	0.14	26.59
2,000.00	1.54	147.22	1,999.75	-2.76	3.58	-2.76	0.05	0.02	-1.74
2,100.00	2.05	154.75	2,099.70	-5.50	5.07	-5.52	0.56	0.51	7.53
2,200.00	2.11	135.86	2,199.64	-8.44	7.11	-8.46	0.69	0.06	-18.89
2,300.00	2.39	129.82	2,299.56	-11.10	9.99	-11.12	0.37	0.28	-6.04
2,400.00	1.99	153.83	2,399.49	-13.99	12.36	-14.02	0.99	-0.40	24.01
2,500.00	1.49	135.61	2,499.44	-16.48	14.04	-16.51	0.74	-0.50	-18.22
2,600.00	0.90	149.79	2,599.42	-18.09	15.34	-18.12	0.66	-0.59	14.18
2,700.00	0.70	165.86	2,699.41	-19.36	15.89	-19.40	0.30	-0.20	16.07
2,800.00	0.95	146.68	2,799.40	-20.64	16.49	-20.68	0.37	0.25	-19.18
2,900.00	1.18	182.91	2,899.39	-22.36	16.89	-22.41	0.70	0.23	36.23
3,000.00	1.37	183.30	2,999.36	-24.59	16.77	-24.63	0.19	0.19	0.39
3,100.00	1.21	177.63	3,099.34	-26.83	16.75	-26.88	0.20	-0.16	-5.67
3,200.00	1.01	164.03	3,199.32	-28.74	17.03	-28.78	0.33	-0.20	-13.60
3,300.00	0.66	104.24	3,299.31	-29.73	17.83	-29.77	0.89	-0.35	-59.79
3,400.00	1.07	50.77	3,399.30	-29.28	19.12	-29.32	0.86	0.41	-53.47
3,500.00	0.58	39.45	3,499.29	-28.30	20.16	-28.34	0.51	-0.49	-11.32
3,600.00	0.43	32.00	3,599.28	-27.59	20.68	-27.64	0.16	-0.15	-7.45
3,700.00	0.11	12.42	3,699.28	-27.17	20.90	-27.23	0.33	-0.32	-19.58
3,800.00	0.23	73.79	3,799.28	-27.03	21.11	-27.08	0.20	0.12	61.37
3,900.00	0.23	6.64	3,899.28	-26.77	21.33	-26.82	0.25	0.00	-67.15
4,000.00	1.36	180.57	3,999.27	-27.76	21.34	-27.81	1.59	1.13	173.93
4,100.00	0.85	143.30	4,099.26	-29.54	21.77	-29.59	0.86	-0.51	-37.27
4,200.00	0.54	80.76	4,199.25	-30.06	22.68	-30.11	0.77	-0.31	-62.54
4,300.00	0.43	325.57	4,299.25	-29.67	22.93	-29.73	0.82	-0.11	-115.19
4,400.00	0.71	334.50	4,399.24	-28.80	22.46	-28.86	0.29	0.28	8.93
4,500.00	0.39	269.69	4,499.24	-28.25	21.85	-28.30	0.65	-0.32	-64.81
4,600.00	0.32	228.18	4,599.24	-28.43	21.30	-28.49	0.26	-0.07	-41.51
4,700.00	0.11	150.23	4,699.24	-28.70	21.14	-28.76	0.32	-0.21	-77.95
4,800.00	0.18	98.20	4,799.24	-28.81	21.34	-28.86	0.14	0.07	-52.03
4,900.00	0.13	184.71	4,899.24	-28.94	21.49	-29.00	0.22	-0.05	86.51
5,000.00	0.17	127.95	4,999.24	-29.15	21.60	-29.20	0.15	0.04	-56.76
5,100.00	0.15	52.92	5,099.24	-29.16	21.82	-29.21	0.20	-0.02	-75.03
5,200.00	0.18	349.16	5,199.24	-28.93	21.89	-28.98	0.18	0.03	-63.76
5,300.00	0.16	343.75	5,299.23	-28.64	21.82	-28.69	0.03	-0.02	-5.41
5,400.00	0.17	130.41	5,399.23	-28.60	21.90	-28.66	0.32	0.01	146.66
5,500.00	0.14	356.48	5,499.23	-28.58	22.00	-28.63	0.29	-0.03	-133.93
5,600.00	0.13	107.57	5,599.23	-28.49	22.10	-28.54	0.22	-0.01	111.09
5,700.00	0.15	308.06	5,699.23	-28.44	22.11	-28.50	0.28	0.02	-159.51



MS Energy Services

Survey Report



Company: Mewbourne Oil Company
Project: Lea County, New Mexico (NAD 27)
Site: Paduca 7-6 A2ED Federal Com
Well: #1H
Wellbore: Wellbore #1
Design: Surveys

Local Co-ordinate Reference:
TVD Reference: WELL @ 3269.00usft (Patterson 444)
MD Reference: WELL @ 3269.00usft (Patterson 444)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Conroe DB

Well #1H

WELL @ 3269.00usft (Patterson 444)

WELL @ 3269.00usft (Patterson 444)

Grid

Minimum Curvature

EDM 5000.1 Conroe DB

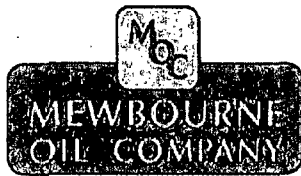
Survey

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)
5,800.00	0.35	292.73	5,799.23	-28.24	21.72	-28.30	0.21	0.20	-15.33
5,900.00	0.20	89.54	5,899.23	-28.12	21.62	-28.18	0.54	-0.15	156.81
6,000.00	0.42	358.09	5,999.23	-27.76	21.78	-27.81	0.47	0.22	-91.45
6,100.00	0.21	207.62	6,099.23	-27.55	21.88	-27.61	0.61	-0.21	-150.47
6,200.00	0.60	180.21	6,199.23	-28.24	21.60	-28.29	0.42	0.39	-27.41
6,300.00	0.68	94.72	6,299.22	-28.81	22.19	-28.86	0.87	0.08	-85.49
6,400.00	0.96	26.79	6,399.22	-28.11	23.15	-28.17	0.95	0.28	-67.93
6,500.00	0.44	313.52	6,499.21	-27.10	23.25	-27.16	0.93	-0.52	-73.27
6,600.00	0.73	246.27	6,599.21	-27.09	22.39	-27.15	0.69	0.29	-67.25
6,700.00	0.64	162.62	6,699.20	-27.88	21.98	-27.93	0.92	-0.09	-83.65
6,800.00	0.54	113.02	6,799.20	-28.60	22.58	-28.65	0.50	-0.10	-49.60
6,900.00	0.38	63.17	6,899.19	-28.63	23.31	-28.69	0.41	-0.16	-49.85
7,000.00	0.41	336.46	6,999.19	-28.16	23.46	-28.21	0.54	0.03	-86.71
7,100.00	0.55	254.12	7,099.19	-27.96	22.85	-28.01	0.64	0.14	-82.34
7,200.00	0.65	183.01	7,199.18	-28.66	22.36	-28.71	0.70	0.10	-71.11
7,300.00	0.72	92.49	7,299.18	-29.25	22.96	-29.31	0.97	0.07	-90.52
7,400.00	0.60	4.42	7,399.17	-28.76	23.63	-28.81	0.92	-0.12	-88.07
7,500.00	0.83	280.63	7,499.17	-28.10	22.96	-28.16	0.97	0.23	-83.79
7,600.00	0.84	214.30	7,599.16	-28.57	21.83	-28.62	0.91	0.01	-66.33
7,700.00	0.64	136.22	7,699.15	-29.58	21.81	-29.63	0.95	-0.20	-78.08
7,800.00	0.48	44.22	7,799.15	-29.68	22.48	-29.74	0.81	-0.16	-92.00
7,900.00	0.42	278.08	7,899.15	-29.33	22.41	-29.39	0.80	-0.06	-126.14
8,000.00	0.69	181.78	7,999.15	-29.88	22.03	-29.94	0.85	0.27	-96.30
8,070.00	0.70	124.82	8,069.14	-30.55	22.37	-30.60	0.95	0.01	-81.37

Final VES Gyro-8070.00' MD

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates	Comment
8,070.00	8,069.14	-30.55 22.37	Final VES Gyro-8070.00' MD



Mewbourne Oil Company

Lea County, New Mexico (NAD 27)

Paduca 7-6 A2ED Federal Com

#1H

Wellbore #1

HOBBS OCD

AUG 17 2015

Survey: MS MWD

RECEIVED

Standard Survey Report

26 January, 2015

MS Energy Services.
WWW.MSENERGYSERVICES.COM



MS Energy Services

Survey Report



WWW.MSENERGYSERVICES.COM

Company: Mewbourne Oil Company
Project: Lea County, New Mexico (NAD 27)
Site: Paduca 7-6 A2ED Federal Com
Well: #1H
Wellbore: Wellbore #1
Design: Surveys

Local Co-ordinate Reference: Well #1H
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MD Reference: WELL @ 3269.00usft (Patterson 444)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Conroe DB

Project: Lea County, New Mexico (NAD 27)

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

Well: #1H

Well Position +N/-S 0.00 usft Northing: 385,368.20 usft Latitude: 32° 3' 28.820 N
+E/-W 0.00 usft Easting: 690,198.40 usft Longitude: 103° 43' 9.833 W
Position Uncertainty 0.00 usft Wellhead Elevation: usft Ground Level: 3,249.00 usft

Wellbore: Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	WMM_2010	12/26/14	7.24	59.92	48,142

Design: Surveys

Audit Notes:

Version: 1.0 Phase: ACTUAL Tie On Depth: 0.00

Vertical Section	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	359.86

Survey Program: Date 01/26/15

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.00	8,070.00	VES Gyro (Wellbore #1)	NS-GYRO-MS	North sensing gyrocompassing m/s
8,154.00	16,000.00	MS MWD (Wellbore #1)	MWD	MWD - Standard

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)
8,070.00	0.70	124.82	8,069.14	-30.55	22.37	-30.60	0.00	0.00	0.00
Tie-in to VES Gyro - 8070.00' MD									
8,154.00	3.30	1.60	8,153.10	-28.42	22.86	-28.48	4.44	3.10	-146.69
8,186.00	7.30	1.30	8,184.96	-25.47	22.93	-25.52	12.50	12.50	-0.94
8,218.00	10.10	3.60	8,216.58	-20.63	23.15	-20.69	8.82	8.75	7.19
8,249.00	13.60	0.60	8,246.92	-14.28	23.36	-14.33	11.46	11.29	-9.68
8,280.00	18.40	355.90	8,276.71	-5.75	23.05	-5.80	16.03	15.48	-15.16
8,312.00	22.50	356.30	8,306.69	5.41	22.29	5.35	12.82	12.81	1.25
8,343.00	24.70	356.70	8,335.09	17.79	21.54	17.74	7.12	7.10	1.29
8,375.00	24.90	356.70	8,364.14	31.19	20.76	31.14	0.63	0.63	0.00
8,406.00	24.40	355.20	8,392.32	44.09	19.85	44.04	2.58	-1.61	-4.84
8,437.00	25.70	353.60	8,420.40	57.15	18.57	57.11	4.73	4.19	-5.16
8,469.00	28.30	355.20	8,448.91	71.61	17.16	71.57	8.44	8.13	5.00
8,500.00	31.30	357.20	8,475.81	86.98	16.15	86.94	10.19	9.68	6.45
8,532.00	33.80	358.70	8,502.78	104.18	15.54	104.14	8.21	7.81	4.69



MS Energy Services Survey Report



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Project: Lea County, New Mexico (NAD 27)
Site: Paduca 7-6 A2ED Federal Com
Well: #1H
Wellbore: Wellbore #1
Design: Surveys

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MD Reference: WELL @ 3269.00usft (Patterson 444)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Conroe DB

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)
8,563.00	36.40	0.80	8,528.14	122.00	15.48	121.96	9.25	8.39	6.77
8,595.00	38.90	1.90	8,553.48	141.54	15.94	141.50	8.09	7.81	3.44
8,626.00	41.60	1.80	8,577.14	161.56	16.59	161.52	8.71	8.71	-0.32
8,658.00	43.60	0.70	8,600.69	183.21	17.06	183.17	6.67	6.25	-3.44
8,689.00	43.80	0.00	8,623.10	204.63	17.19	204.59	1.69	0.65	-2.26
8,721.00	45.80	359.10	8,645.81	227.18	17.01	227.13	6.56	6.25	-2.81
8,752.00	48.50	357.40	8,666.89	249.89	16.31	249.85	9.59	8.71	-5.48
8,784.00	51.40	355.80	8,687.48	274.34	14.85	274.30	9.84	9.06	-5.00
8,815.00	54.40	355.80	8,706.18	298.99	13.04	298.96	9.68	9.68	0.00
8,846.00	57.40	357.00	8,723.55	324.61	11.43	324.58	10.19	9.68	3.87
8,878.00	61.00	358.80	8,739.94	352.07	10.43	352.04	12.24	11.25	5.63
8,909.00	64.10	359.30	8,754.23	379.57	9.98	379.55	10.10	10.00	1.61
8,940.00	68.50	358.40	8,766.68	407.94	9.40	407.92	14.44	14.19	-2.90
8,972.00	70.90	357.50	8,777.78	437.94	8.33	437.91	7.95	7.50	-2.81
9,003.00	71.80	357.30	8,787.70	467.28	6.99	467.26	2.97	2.90	-0.65
9,034.00	74.50	357.10	8,796.68	496.91	5.54	496.89	8.73	8.71	-0.65
9,066.00	76.80	357.60	8,804.61	527.87	4.11	527.86	7.35	7.19	1.56
9,097.00	78.30	358.10	8,811.30	558.12	2.98	558.11	5.09	4.84	1.61
9,128.00	80.70	358.20	8,816.95	588.59	1.99	588.58	7.75	7.74	0.32
9,160.00	83.90	358.80	8,821.23	620.28	1.16	620.28	10.17	10.00	1.88
9,190.00	87.30	358.50	8,823.53	650.18	0.46	650.18	11.38	11.33	-1.00
9,285.00	89.70	358.00	8,826.02	745.10	-2.44	745.10	2.58	2.53	-0.53
9,380.00	90.50	359.50	8,825.85	840.07	-4.51	840.08	1.79	0.84	1.58
9,474.00	87.60	359.80	8,827.41	934.05	-5.09	934.06	3.10	-3.09	0.32
9,569.00	87.90	0.00	8,831.14	1,028.97	-5.25	1,028.98	0.38	0.32	0.21
9,663.00	89.30	0.10	8,833.44	1,122.94	-5.17	1,122.95	1.49	1.49	0.11
9,758.00	90.50	0.60	8,833.61	1,217.94	-4.59	1,217.95	1.37	1.26	0.53
9,854.00	89.50	0.70	8,833.61	1,313.93	-3.50	1,313.93	1.05	-1.04	0.10
9,949.00	90.50	0.80	8,833.61	1,408.92	-2.26	1,408.92	1.06	1.05	0.11
10,044.00	88.00	359.90	8,834.85	1,503.90	-1.68	1,503.90	2.80	-2.63	-0.95
10,138.00	88.50	358.90	8,837.72	1,597.85	-2.66	1,597.85	1.19	0.53	-1.06
10,233.00	89.30	358.80	8,839.54	1,692.81	-4.57	1,692.82	0.85	0.84	-0.11
10,328.00	89.70	358.70	8,840.37	1,787.79	-6.64	1,787.80	0.43	0.42	-0.11
10,423.00	90.90	358.00	8,839.87	1,882.75	-9.38	1,882.76	1.46	1.26	-0.74
10,518.00	90.30	359.50	8,838.88	1,977.71	-11.45	1,977.74	1.70	-0.63	1.58
10,612.00	90.50	0.50	8,838.22	2,071.71	-11.45	2,071.73	1.08	0.21	1.06
10,706.00	90.40	0.70	8,837.49	2,165.70	-10.46	2,165.72	0.24	-0.11	0.21
10,801.00	89.50	1.30	8,837.57	2,260.69	-8.81	2,260.70	1.14	-0.95	0.63
10,896.00	86.90	359.10	8,840.55	2,355.63	-8.47	2,355.64	3.58	-2.74	-2.32
10,991.00	87.60	358.60	8,845.11	2,450.50	-10.38	2,450.51	0.91	0.74	-0.53
11,085.00	88.70	358.70	8,848.14	2,544.42	-12.59	2,544.44	1.18	1.17	0.11
11,180.00	89.10	359.80	8,849.97	2,639.39	-13.83	2,639.42	1.23	0.42	1.16
11,274.00	89.30	358.50	8,851.28	2,733.37	-15.23	2,733.40	1.40	0.21	-1.38



MS Energy Services Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well #1H
Project:	Lea County, New Mexico (NAD 27)	TVD Reference:	WELL @ 3269.00usft (Patterson 444)
Site:	Paduca 7-6 A2ED Federal Com	MD Reference:	WELL @ 3269.00usft (Patterson 444)
Well:	#1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Surveys	Databse:	EDM 5000.1 Conroe DB

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)
11,369.00	92.40	359.40	8,849.87	2,828.33	-16.97	2,828.36	3.40	3.26	0.95
11,464.00	92.60	0.20	8,845.73	2,923.24	-17.30	2,923.27	0.87	0.21	0.84
11,559.00	89.60	0.20	8,843.90	3,018.21	-16.97	3,018.24	3.16	-3.16	0.00
11,654.00	89.70	359.30	8,844.48	3,113.21	-17.38	3,113.24	0.95	0.11	-0.95
11,748.00	91.70	359.60	8,843.34	3,207.19	-18.29	3,207.23	2.15	2.13	0.32
11,842.00	89.60	359.20	8,842.27	3,301.17	-19.27	3,301.21	2.27	-2.23	-0.43
11,937.00	89.50	358.80	8,843.02	3,396.16	-20.93	3,396.20	0.43	-0.11	-0.42
12,032.00	91.00	358.70	8,842.60	3,491.13	-23.00	3,491.18	1.58	1.58	-0.11
12,127.00	90.20	359.10	8,841.61	3,586.11	-24.82	3,586.16	0.94	-0.84	0.42
12,222.00	89.70	0.40	8,841.69	3,681.10	-25.24	3,681.15	1.47	-0.53	1.37
12,316.00	91.00	2.30	8,841.12	3,775.07	-23.02	3,775.11	2.45	1.38	2.02
12,411.00	90.30	2.10	8,840.04	3,869.99	-19.38	3,870.03	0.77	-0.74	-0.21
12,506.00	88.30	0.90	8,841.20	3,964.95	-16.89	3,964.98	2.46	-2.11	-1.26
12,601.00	89.70	2.00	8,842.86	4,059.90	-14.49	4,059.92	1.87	1.47	1.16
12,696.00	89.40	2.00	8,843.60	4,154.84	-11.17	4,154.85	0.32	-0.32	0.00
12,791.00	88.30	1.20	8,845.51	4,249.78	-8.52	4,249.79	1.43	-1.16	-0.84
12,886.00	89.50	1.30	8,847.33	4,344.74	-6.45	4,344.74	1.27	1.26	0.11
12,981.00	89.80	0.20	8,847.91	4,439.72	-5.21	4,439.72	1.20	0.32	-1.16
13,075.00	88.10	358.60	8,849.64	4,533.70	-6.19	4,533.70	2.48	-1.81	-1.70
13,171.00	88.90	358.50	8,852.15	4,629.63	-8.62	4,629.64	0.84	0.83	-0.10
13,266.00	90.20	358.70	8,852.89	4,724.60	-10.94	4,724.61	1.38	1.37	0.21
13,361.00	91.00	357.70	8,851.90	4,819.55	-13.92	4,819.57	1.35	0.84	-1.05
13,456.00	89.10	357.00	8,851.82	4,914.44	-18.31	4,914.47	2.13	-2.00	-0.74
13,551.00	88.00	358.00	8,854.22	5,009.32	-22.46	5,009.36	1.56	-1.16	1.05
13,645.00	88.50	357.60	8,857.09	5,103.20	-26.06	5,103.25	0.68	0.53	-0.43
13,740.00	88.60	357.00	8,859.50	5,198.07	-30.54	5,198.12	0.64	0.11	-0.63
13,835.00	89.40	358.90	8,861.15	5,292.99	-33.93	5,293.05	2.17	0.84	2.00
13,930.00	90.80	359.20	8,860.99	5,387.97	-35.51	5,388.04	1.51	1.47	0.32
14,025.00	90.40	1.30	8,859.99	5,482.96	-35.09	5,483.03	2.25	-0.42	2.21
14,120.00	89.50	1.90	8,860.08	5,577.92	-32.44	5,577.98	1.14	-0.95	0.63
14,215.00	90.70	1.40	8,859.91	5,672.88	-29.71	5,672.93	1.37	1.26	-0.53
14,309.00	88.40	359.10	8,860.65	5,766.86	-29.30	5,766.92	3.46	-2.45	-2.45
14,404.00	88.90	359.30	8,862.89	5,861.83	-30.62	5,861.88	0.57	0.53	0.21
14,499.00	90.10	359.20	8,863.72	5,956.81	-31.87	5,956.87	1.27	1.26	-0.11
14,594.00	90.90	358.80	8,862.89	6,051.79	-33.52	6,051.86	0.94	0.84	-0.42
14,689.00	91.70	358.80	8,860.73	6,146.75	-35.51	6,146.82	0.84	0.84	0.00
14,784.00	91.20	359.80	8,858.33	6,241.71	-36.67	6,241.78	1.18	-0.53	1.05
14,878.00	90.70	0.00	8,856.77	6,335.69	-36.84	6,335.77	0.57	-0.53	0.21
14,973.00	91.60	359.20	8,854.86	6,430.67	-37.50	6,430.74	1.27	0.95	-0.84
15,068.00	91.00	0.80	8,852.71	6,525.64	-37.50	6,525.72	1.80	-0.63	1.68
15,162.00	90.10	2.80	8,851.80	6,619.59	-34.55	6,619.65	2.33	-0.96	2.13
15,258.00	90.20	4.80	8,851.55	6,715.37	-28.19	6,715.42	2.09	0.10	2.08
15,353.00	90.30	5.10	8,851.14	6,810.02	-19.99	6,810.04	0.33	0.11	0.32



MS Energy Services Survey Report

MS Energy Services.
www.msonenergydrilling.com

Company: Mewbourne Oil Company
Project: Lea County, New Mexico (NAD 27)
Site: Paduca 7-6 A2ED Federal Com
Well: #1H
Wellbore: Wellbore #1
Design: Surveys

Local Co-ordinate Reference: Well #1H
N/D Reference: WELL @ 3269.00usft (Patterson 444)
MO Reference: WELL @ 3269.00usft (Patterson 444)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Conroe DB

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)
15,447.00	88.90	4.50	8,851.79	6,903.68	-12.12	6,903.69	1.62	-1.49	-0.64
15,542.00	88.70	3.60	8,853.78	6,998.42	-5.42	6,998.41	0.97	-0.21	-0.95
15,637.00	88.40	3.30	8,856.19	7,093.22	0.30	7,093.20	0.45	-0.32	-0.32
15,731.00	88.30	1.50	8,858.90	7,187.09	4.23	7,187.06	1.92	-0.11	-1.91
15,826.00	88.70	1.10	8,861.38	7,282.04	6.39	7,282.00	0.60	0.42	-0.42
15,922.00	89.90	1.70	8,862.55	7,378.00	8.73	7,377.95	1.40	1.25	0.63
16,000.00	89.90	1.70	8,862.69	7,455.96	11.05	7,455.91	0.00	0.00	0.00

Projection to TD - 16000.00' MD

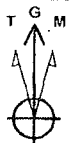
Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
8,070.00	8,069.14	-30.55	22.37	Tie-in to VES Gyro - 8070.00' MD
16,000.00	8,862.69	7,455.96	11.05	Projection to TD - 16000.00' MD



Company: Mewbourne Oil Company
 Site: Paduca 7-6 A2ED Federal Com
 Well: #1H
 Project: Lea County, New Mexico (NAD 27)
 Rig: Patterson 444

M&S Energy Services.
 WWW.MSENERGYSERVICES.COM



Azimuths to Grid North
 True North: -0.33°
 Magnetic North: 6.92°
 Magnetic Field
 Strength: 48141.9 nT
 Dip Angle: 59.92°
 Date: 12/28/2014
 Model: WMM_2010

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
8626.00	41.80	1.60	8577.13	161.56	16.59	161.52	0.00	Last Survey, Begin 7.55°/100' Build & Turn
8941.57	55.00	355.90	8764.51	412.54	9.18	412.52	251.19	Continue 7.55°/100' Build & Turn
9274.37	89.83	359.86	8836.48	734.54	-2.18	734.54	573.45	Begin 89.83° Lateral
16002.09	89.83	359.86	8856.14	7462.21	-18.30	7462.23	7301.14	PBHL

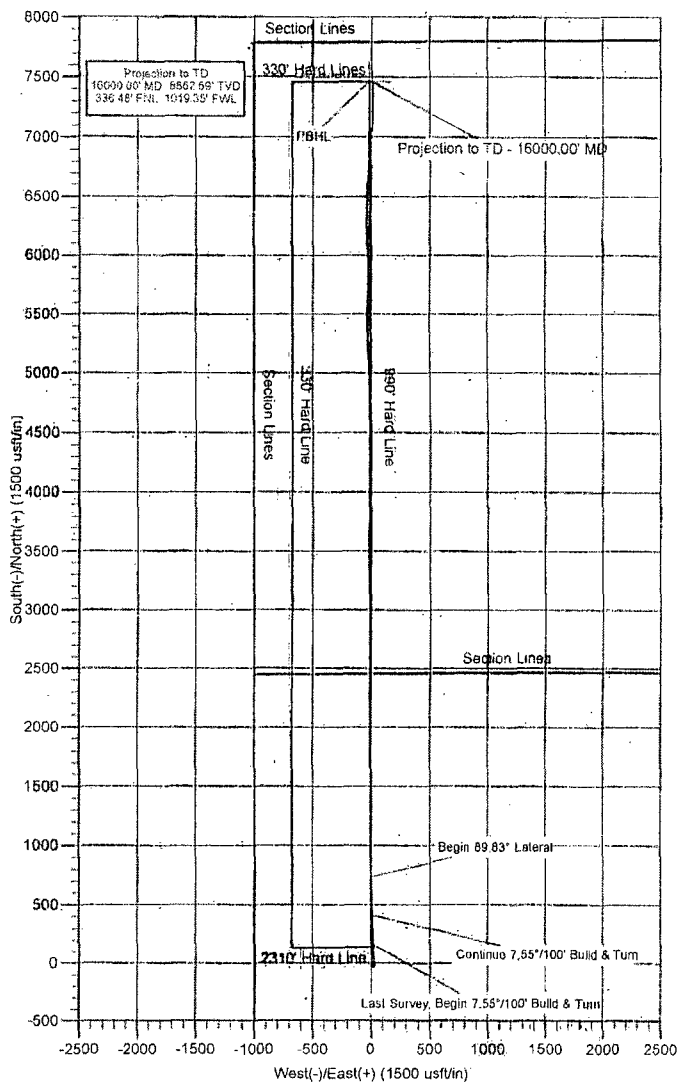
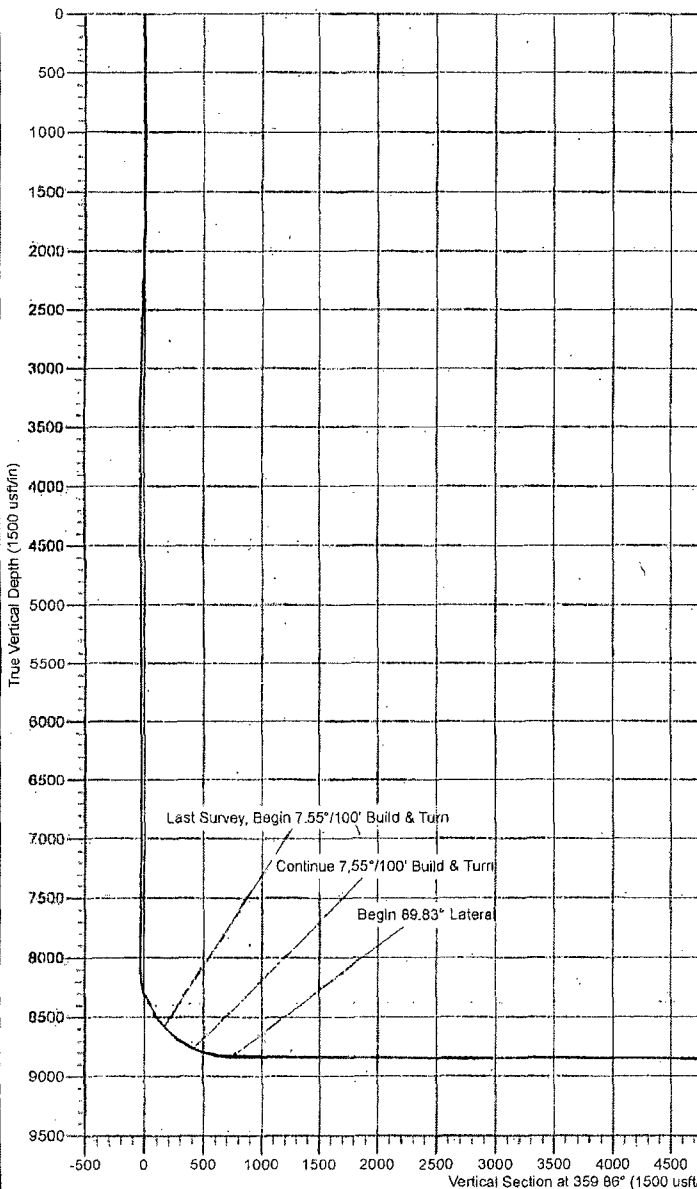
US State Plane 1927 (Exact solution)
 New Mexico East 3001

Created By: CJH
 Date: 16/26, February 03 2015
 Plan: Design #4

HOBBS OCD

AUG 17 2015

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