

OPERATOR
WELL/LEASE
COUNTY

MEWBOURNE OIL COMPANY
Tamano 11 MD Fed Com 1H
EDDY

041-0126

STATE OF NEW MEXICO
DEVIATION REPORT

15.41349

345	0.96
794	1.36
1,235	0.36
1,582	0.52
1,929	2.01
2,103	2.25
2,460	0.97
2,850	0.35
3,248	1.29
3,647	0.43
4,036	1.00
4,478	0.21
4,825	0.52
5,330	1.23
5,741	1.18
5,816	1.00
6,119	0.85
6,529	2.40
7,194	1.53
7,673	1.50

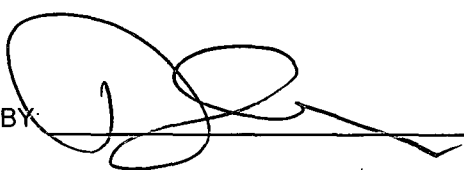
NM OIL CONSERVATION
ARTESIA DISTRICT

AUG 19 2014

RECEIVED

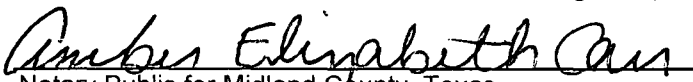
STATE OF TEXAS

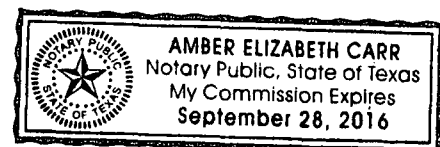
COUNTY OF MIDLAND

BY: 

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

7/18/14, by


Notary Public for Midland County, Texas
My Commission Expires:





COMPANY: Mewbourne Oil Company
WELL: Tamano 11 MD Fed Com #1H
COUNTY: Eddy County, N.M. Nad (83)
DATUM: North American Datum 1983
RIG: Patterson #41



GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.12°

OFFICE: 936.582.7296

GEODETTIC ZONE: New Mexico Eastern Zone
3719 + 20 @ 3739.0usft (Patterson #41)
GROUND ELEVATION: 3719.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	638858.20	691204.40	32° 45' 19.112 N	103° 50' 45.013 W

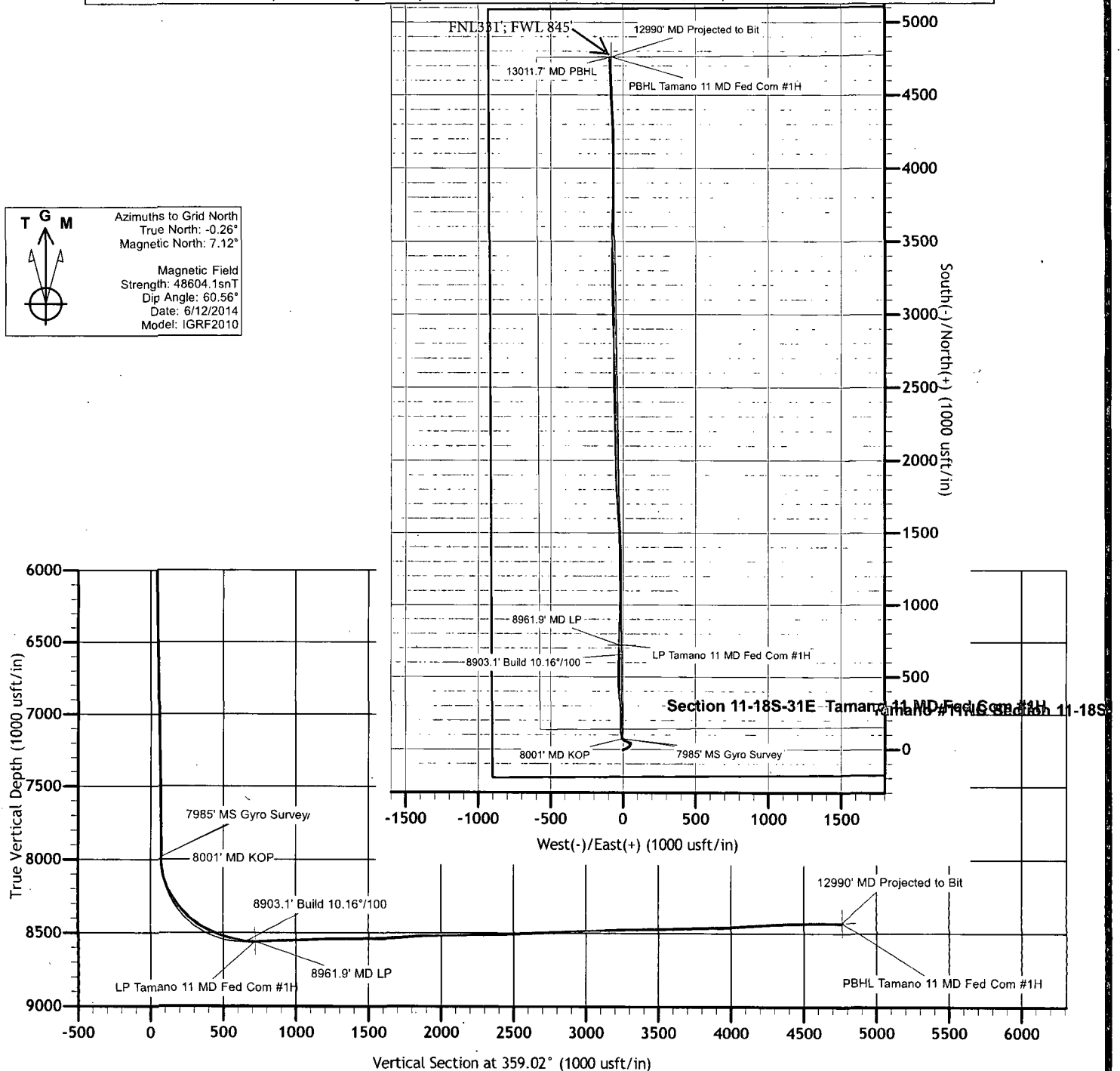
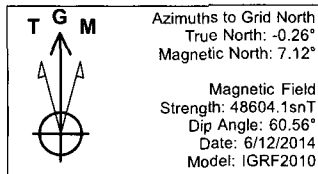
Slot

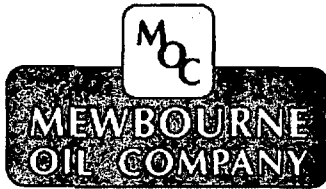
PLAN SECTIONS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Target
1	7985.0	0.51	291.73	7983.1	74.5	-3.8	0.00	0.00	74.5	
2	8001.0	0.51	291.73	7999.1	74.5	-4.0	0.00	0.00	74.6	
3	8903.1	91.84	0.08	8560.9	656.5	-7.9	10.16	68.34	656.6	
4	8961.9	91.84	358.97	8559.0	715.3	-8.4	1.90	-90.00	715.4	
5	13011.7	91.84	358.97	8429.0	4762.4	-81.5	0.00	0.00	4763.1	PBHL Tamano 11 MD Fed Com #1H

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL Tamano 11 MD Fed Com #1H	8429.0	4762.4	-81.5	643620.60	691122.90	32° 46' 6.239 N	103° 50' 45.711 W	Point
- plan hits target center								
LP Tamano 11 MD Fed Com #1H	8559.0	720.0	-8.0	639578.20	691196.44	32° 45' 26.237 N	103° 50' 45.067 W	Point
- plan misses target center by 0.5usft at 8966.6usft MD (8558.9 TVD, 720.0 N, -8.5 E)								





Mewbourne Oil Company .

Eddy County, N.M. Nad (83)

Section 11-18S-31E Tamano 11 MD Fed Com #1H

Tamano 11 MD Fed Com #1H

Original Hole

Design: Original Hole

Standard Survey Report

14 July, 2014





Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Tamano 11 MD Fed Com #1H
Project:	Eddy County, N.M. Nad (83)	TVD Reference:	3719 + 20 @ 3739.0usft (Patterson #41)
Site:	Section 11-18S-31E Tamano 11 MD Fed Com #1H	MD Reference:	3719 + 20 @ 3739.0usft (Patterson #41)
Well:	Tamano 11 MD Fed Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

Project	Eddy County, N.M. Nad (83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Section 11-18S-31E Tamano 11 MD Fed Com #1H		
Site Position:	Northing:	638,858.20 usft	Latitude: 32° 45' 19.112 N
From: Map	Easting:	691,204.40 usft	Longitude: 103° 50' 45.013 W
Position Uncertainty:	0.0 usft	Slot Radius: 13-3/16 "	Grid Convergence: 0.26 °

Well	Tamano 11 MD Fed Com #1H		
Well Position	+N/-S	0.0 usft	Northing: 638,858.20 usft
	+E/-W	0.0 usft	Easting: 691,204.40 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft
			Ground Level: 3,719.0 usft

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/12/2014	7.38	60.56	48,604

Design	Original Hole			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	359.02

Survey Program	Date 7/14/2014			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	7,985.0	MS Gyro Survey (Original Hole)	SRG-GYRO-MS	surface readout gyro multishot
7,998.0	12,990.0	Stryker MWD Survey (Original Hole)	MWD	MWD v3:standard declination

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
100.0	0.43	242.56	100.0	-0.2	-0.3	-0.2	0.43	0.43	0.00
200.0	0.56	210.79	200.0	-0.8	-0.9	-0.7	0.30	0.13	-31.77
300.0	0.58	174.59	300.0	-1.7	-1.1	-1.7	0.35	0.02	-36.20
400.0	0.57	182.12	400.0	-2.7	-1.1	-2.7	0.08	-0.01	7.53
500.0	0.46	153.28	500.0	-3.5	-0.9	-3.5	0.28	-0.11	-28.84
600.0	0.34	67.30	600.0	-3.8	-0.5	-3.8	0.55	-0.12	-85.98
700.0	0.33	20.67	700.0	-3.4	-0.1	-3.4	0.27	-0.01	-46.63
800.0	0.08	338.09	800.0	-3.1	0.0	-3.1	0.28	-0.25	-42.58



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Tamano 11 MD Fed Com #1H
Project:	Eddy County, N.M. Nad (83)	TVD Reference:	3719 + 20 @ 3739.0usft (Patterson #41)
Site:	Section 11-18S-31E Tamano 11 MD Fed Com #1H	MD Reference:	3719 + 20 @ 3739.0usft (Patterson #41)
Well:	Tamano 11 MD Fed Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)
900.0	0.54	109.37	900.0	-3.2	0.4	-3.2	0.60	0.46	131.28
1,000.0	0.95	75.27	1,000.0	-3.1	1.6	-3.1	0.59	0.41	-34.10
1,100.0	0.86	49.88	1,100.0	-2.4	3.0	-2.5	0.41	-0.09	-25.39
1,200.0	0.83	31.17	1,199.9	-1.3	4.0	-1.4	0.28	-0.03	-18.71
1,300.0	0.65	38.83	1,299.9	-0.2	4.7	-0.3	0.21	-0.18	7.66
1,400.0	0.71	61.21	1,399.9	0.5	5.6	0.4	0.27	0.06	22.38
1,500.0	0.95	65.58	1,499.9	1.1	6.9	1.0	0.25	0.24	4.37
1,600.0	1.16	70.61	1,599.9	1.8	8.6	1.7	0.23	0.21	5.03
1,700.0	1.30	73.18	1,699.9	2.5	10.6	2.3	0.15	0.14	2.57
1,800.0	1.35	71.36	1,799.9	3.2	12.8	3.0	0.07	0.05	-1.82
1,900.0	2.08	64.20	1,899.8	4.3	15.6	4.1	0.76	0.73	-7.16
2,000.0	2.87	61.05	1,999.7	6.3	19.4	6.0	0.80	0.79	-3.15
2,100.0	2.95	63.07	2,099.6	8.7	23.9	8.3	0.13	0.08	2.02
2,200.0	2.45	54.73	2,199.5	11.1	27.9	10.6	0.63	-0.50	-8.34
2,300.0	2.08	55.50	2,299.4	13.4	31.2	12.9	0.37	-0.37	0.77
2,400.0	1.55	52.30	2,399.3	15.2	33.8	14.7	0.54	-0.53	-3.20
2,500.0	1.44	52.14	2,499.3	16.8	35.8	16.2	0.11	-0.11	-0.16
2,600.0	1.24	55.31	2,599.3	18.2	37.7	17.6	0.21	-0.20	3.17
2,700.0	1.07	58.04	2,699.3	19.3	39.4	18.7	0.18	-0.17	2.73
2,800.0	1.25	63.43	2,799.2	20.3	41.1	19.6	0.21	0.18	5.39
2,900.0	1.27	53.30	2,899.2	21.5	43.0	20.7	0.22	0.02	-10.13
3,000.0	1.27	43.36	2,999.2	22.9	44.7	22.2	0.22	0.00	-9.94
3,100.0	0.99	19.82	3,099.2	24.6	45.7	23.8	0.54	-0.28	-23.54
3,200.0	0.79	10.20	3,199.2	26.0	46.1	25.3	0.25	-0.20	-9.62
3,300.0	0.55	20.41	3,299.2	27.2	46.4	26.4	0.27	-0.24	10.21
3,400.0	0.59	39.02	3,399.2	28.0	46.9	27.2	0.19	0.04	18.61
3,500.0	0.61	35.11	3,499.1	28.9	47.5	28.0	0.05	0.02	-3.91
3,600.0	0.66	35.56	3,599.1	29.8	48.2	28.9	0.05	0.05	0.45
3,700.0	0.80	30.70	3,699.1	30.8	48.9	30.0	0.15	0.14	-4.86
3,800.0	0.84	8.71	3,799.1	32.2	49.3	31.3	0.32	0.04	-21.99
3,900.0	0.53	355.34	3,899.1	33.3	49.4	32.5	0.35	-0.31	-13.37
4,000.0	0.47	358.22	3,999.1	34.2	49.4	33.4	0.07	-0.06	2.88
4,100.0	0.36	4.17	4,099.1	34.9	49.4	34.1	0.12	-0.11	5.95
4,200.0	0.32	23.87	4,199.1	35.5	49.5	34.7	0.12	-0.04	19.70
4,300.0	0.39	39.46	4,299.1	36.0	49.8	35.2	0.12	0.07	15.59
4,400.0	0.63	44.97	4,399.1	36.7	50.4	35.8	0.24	0.24	5.51
4,500.0	0.65	39.39	4,499.1	37.5	51.2	36.6	0.07	0.02	-5.58
4,600.0	0.81	355.82	4,599.1	38.6	51.5	37.8	0.56	0.16	-43.57
4,700.0	0.71	336.01	4,699.1	39.9	51.2	39.0	0.28	-0.10	-19.81
4,800.0	0.42	330.92	4,799.1	40.8	50.8	39.9	0.29	-0.29	-5.09
4,900.0	0.26	14.11	4,899.1	41.3	50.6	40.5	0.29	-0.16	43.19
5,000.0	0.45	44.13	4,999.1	41.8	51.0	41.0	0.26	0.19	30.02



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Tamano 11 MD Fed Com #1H
Project:	Eddy County, N.M. Nad (83)	TVD Reference:	3719 + 20 @ 3739.0usft (Patterson #41)
Site:	Section 11-18S-31E Tamano 11 MD Fed Com #1H	MD Reference:	3719 + 20 @ 3739.0usft (Patterson #41)
Well:	Tamano 11 MD Fed Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)
5,100.0	0.65	34.15	5,099.1	42.6	51.6	41.7	0.22	0.20	-9.98
5,200.0	0.66	20.16	5,199.1	43.6	52.1	42.7	0.16	0.01	-13.99
5,300.0	0.75	348.04	5,299.1	44.8	52.1	43.9	0.40	0.09	-32.12
5,400.0	0.85	324.79	5,399.0	46.0	51.6	45.1	0.34	0.10	-23.25
5,500.0	1.05	294.66	5,499.0	47.0	50.3	46.2	0.53	0.20	-30.13
5,600.0	1.24	282.57	5,599.0	47.6	48.4	46.8	0.31	0.19	-12.09
5,700.0	1.22	266.86	5,699.0	47.8	46.3	47.0	0.34	-0.02	-15.71
5,800.0	1.48	265.41	5,799.0	47.7	44.0	46.9	0.26	0.26	-1.45
5,900.0	1.40	264.12	5,898.9	47.4	41.5	46.7	0.09	-0.08	-1.29
6,000.0	0.92	273.36	5,998.9	47.4	39.4	46.7	0.51	-0.48	9.24
6,100.0	0.83	277.33	6,098.9	47.5	37.9	46.8	0.11	-0.09	3.97
6,200.0	0.89	287.49	6,198.9	47.8	36.5	47.2	0.16	0.06	10.16
6,300.0	1.18	311.80	6,298.9	48.7	35.0	48.1	0.52	0.29	24.31
6,400.0	1.53	313.35	6,398.8	50.3	33.2	49.8	0.35	0.35	1.55
6,500.0	2.17	309.69	6,498.8	52.5	30.8	51.9	0.65	0.64	-3.66
6,600.0	2.22	293.78	6,598.7	54.5	27.6	54.0	0.61	0.05	-15.91
6,700.0	2.22	286.30	6,698.6	55.8	23.9	55.4	0.29	0.00	-7.48
6,800.0	2.30	285.20	6,798.6	56.8	20.1	56.5	0.09	0.08	-1.10
6,900.0	2.15	288.51	6,898.5	58.0	16.4	57.7	0.20	-0.15	3.31
7,000.0	2.10	292.10	6,998.4	59.3	12.9	59.0	0.14	-0.05	3.59
7,100.0	1.97	294.28	7,098.4	60.7	9.7	60.5	0.15	-0.13	2.18
7,200.0	1.55	305.30	7,198.3	62.1	7.0	62.0	0.54	-0.42	11.02
7,300.0	1.03	321.67	7,298.3	63.6	5.3	63.5	0.63	-0.52	16.37
7,400.0	1.24	340.34	7,398.3	65.3	4.4	65.3	0.42	0.21	18.67
7,500.0	1.44	325.59	7,498.2	67.4	3.3	67.3	0.40	0.20	-14.75
7,600.0	1.63	314.68	7,598.2	69.4	1.6	69.4	0.35	0.19	-10.91
7,700.0	1.44	315.54	7,698.2	71.3	-0.3	71.3	0.19	-0.19	0.86
7,800.0	1.12	313.88	7,798.1	72.9	-1.8	72.9	0.32	-0.32	-1.66
7,900.0	0.73	307.70	7,898.1	74.0	-3.1	74.0	0.40	-0.39	-6.18
7,985.0	0.51	291.73	7,983.1	74.5	-3.8	74.5	0.33	-0.26	-18.79
7985' MS Gyro Survey									
7,998.0	1.50	328.40	7,996.1	74.6	-4.0	74.7	8.71	7.62	282.08
8,030.0	4.40	344.30	8,028.1	76.2	-4.5	76.2	9.33	9.06	49.69
8,061.0	7.70	348.00	8,058.9	79.3	-5.3	79.4	10.71	10.65	11.94
8,093.0	11.30	350.20	8,090.5	84.5	-6.3	84.6	11.31	11.25	6.88
8,124.0	14.90	351.50	8,120.6	91.5	-7.4	91.6	11.65	11.61	4.19
8,156.0	18.80	351.10	8,151.3	100.6	-8.8	100.8	12.19	12.19	-1.25
8,188.0	22.80	350.90	8,181.2	111.8	-10.6	112.0	12.50	12.50	-0.63
8,219.0	26.60	354.30	8,209.3	124.7	-12.2	124.9	13.08	12.26	10.97
8,251.0	30.00	357.50	8,237.5	139.8	-13.3	140.0	11.63	10.63	10.00
8,282.0	33.60	359.70	8,263.8	156.1	-13.6	156.4	12.20	11.61	7.10
8,314.0	36.90	0.40	8,290.0	174.6	-13.6	174.8	10.39	10.31	2.19
8,345.0	39.00	0.60	8,314.4	193.7	-13.5	193.9	6.79	6.77	0.65



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Tamano 11 MD Fed Com #1H
Project:	Eddy County, N.M. Nad (83)	TVD Reference:	3719 + 20 @ 3739.0usft (Patterson #41)
Site:	Section 11-18S-31E Tamano 11 MD Fed Com #1H	MD Reference:	3719 + 20 @ 3739.0usft (Patterson #41)
Well:	Tamano 11 MD Fed Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)
8,377.0	41.20	1.70	8,338.9	214.3	-13.0	214.5	7.22	6.88	3.44
8,408.0	43.80	0.40	8,361.7	235.2	-12.7	235.4	8.85	8.39	-4.19
8,440.0	46.80	358.30	8,384.3	258.0	-12.9	258.1	10.47	9.38	-6.56
8,471.0	50.50	357.30	8,404.7	281.2	-13.8	281.4	12.18	11.94	-3.23
8,503.0	54.20	356.00	8,424.3	306.5	-15.3	306.7	12.00	11.56	-4.06
8,535.0	56.90	355.20	8,442.4	332.8	-17.3	333.0	8.69	8.44	-2.50
8,566.0	59.40	354.60	8,458.7	359.0	-19.7	359.3	8.23	8.06	-1.94
8,598.0	63.40	355.70	8,474.0	387.0	-22.1	387.3	12.86	12.50	3.44
8,629.0	65.30	356.20	8,487.5	414.9	-24.0	415.2	6.30	6.13	1.61
8,661.0	67.30	357.10	8,500.3	444.1	-25.7	444.5	6.76	6.25	2.81
8,692.0	69.20	357.80	8,511.8	472.9	-27.0	473.3	6.48	6.13	2.26
8,724.0	71.10	358.70	8,522.7	503.0	-27.9	503.4	6.50	5.94	2.81
8,755.0	73.10	359.70	8,532.2	532.5	-28.3	532.9	7.14	6.45	3.23
8,787.0	75.10	0.80	8,541.0	563.2	-28.2	563.6	7.07	6.25	3.44
8,819.0	77.20	1.70	8,548.6	594.3	-27.5	594.7	7.11	6.56	2.81
8,850.0	81.30	2.20	8,554.4	624.7	-26.5	625.1	13.32	13.23	1.61
8,882.0	84.20	2.50	8,558.5	656.5	-25.2	656.8	9.11	9.06	0.94
8,910.0	89.10	2.40	8,560.1	684.4	-24.0	684.7	17.50	17.50	-0.36
8,946.2	91.30	2.18	8,560.0	720.6	-22.5	720.9	6.09	6.06	-0.61
LP Tamano 11 MD Fed Com #1H									
8,976.0	93.10	2.00	8,558.8	750.3	-21.5	750.6	6.09	6.06	-0.61
9,008.0	93.10	1.80	8,557.1	782.2	-20.4	782.5	0.62	0.00	-0.63
9,039.0	93.00	1.50	8,555.4	813.2	-19.5	813.4	1.02	-0.32	-0.97
9,071.0	91.60	1.10	8,554.2	845.1	-18.8	845.3	4.55	-4.38	-1.25
9,103.0	91.40	0.80	8,553.3	877.1	-18.3	877.3	1.13	-0.63	-0.94
9,134.0	91.40	0.80	8,552.6	908.1	-17.8	908.3	0.00	0.00	0.00
9,166.0	92.20	1.00	8,551.6	940.1	-17.3	940.3	2.58	2.50	0.63
9,229.0	92.20	1.00	8,549.1	1,003.0	-16.2	1,003.2	0.00	0.00	0.00
9,292.0	91.50	359.20	8,547.1	1,066.0	-16.1	1,066.1	3.06	-1.11	-2.86
9,355.0	92.90	359.70	8,544.7	1,128.9	-16.7	1,129.1	2.36	2.22	0.79
9,449.0	91.00	359.40	8,541.5	1,222.9	-17.5	1,223.0	2.05	-2.02	-0.32
9,544.0	90.30	359.70	8,540.4	1,317.9	-18.2	1,318.0	0.80	-0.74	0.32
9,639.0	91.00	358.50	8,539.3	1,412.9	-19.7	1,413.0	1.46	0.74	-1.26
9,734.0	90.00	357.30	8,538.5	1,507.8	-23.2	1,508.0	1.64	-1.05	-1.26
9,829.0	90.40	356.60	8,538.2	1,602.7	-28.2	1,602.9	0.85	0.42	-0.74
9,924.0	95.20	356.40	8,533.5	1,697.3	-34.0	1,697.7	5.06	5.05	-0.21
9,955.0	95.20	356.20	8,530.7	1,728.1	-36.0	1,728.5	0.64	0.00	-0.65
9,987.0	95.20	355.90	8,527.8	1,759.9	-38.2	1,760.3	0.93	0.00	-0.94
10,019.0	94.10	356.60	8,525.2	1,791.8	-40.3	1,792.2	4.07	-3.44	2.19
10,050.0	94.20	356.70	8,523.0	1,822.6	-42.1	1,823.1	0.46	0.32	0.32
10,082.0	93.30	357.50	8,520.9	1,854.5	-43.7	1,855.0	3.76	-2.81	2.50
10,113.0	92.80	358.20	8,519.2	1,885.4	-44.9	1,885.9	2.77	-1.61	2.26
10,145.0	91.10	359.20	8,518.2	1,917.4	-45.6	1,917.9	6.16	-5.31	3.13



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Tamano 11 MD Fed Com #1H
Project:	Eddy County, N.M. Nad (83)	TVD Reference:	3719 + 20 @ 3739.0usft (Patterson #41)
Site:	Section 11-18S-31E Tamano 11 MD Fed Com #1H	MD Reference:	3719 + 20 @ 3739.0usft (Patterson #41)
Well:	Tamano 11 MD Fed Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)
10,208.0	91.60	359.40	8,516.7	1,980.4	-46.4	1,980.9	0.85	0.79	0.32
10,271.0	92.00	359.20	8,514.7	2,043.4	-47.1	2,043.9	0.71	0.63	-0.32
10,334.0	91.90	359.40	8,512.5	2,106.3	-47.9	2,106.8	0.35	-0.16	0.32
10,397.0	90.10	358.30	8,511.5	2,169.3	-49.2	2,169.8	3.35	-2.86	-1.75
10,460.0	90.30	357.60	8,511.2	2,232.3	-51.4	2,232.8	1.16	0.32	-1.11
10,524.0	90.60	357.80	8,510.7	2,296.2	-54.0	2,296.8	0.56	0.47	0.31
10,587.0	92.00	358.70	8,509.3	2,359.2	-55.9	2,359.8	2.64	2.22	1.43
10,650.0	91.80	358.20	8,507.2	2,422.1	-57.6	2,422.7	0.85	-0.32	-0.79
10,714.0	92.10	358.70	8,505.0	2,486.0	-59.4	2,486.7	0.91	0.47	0.78
10,777.0	92.20	0.30	8,502.7	2,549.0	-59.9	2,549.6	2.54	0.16	2.54
10,840.0	92.50	0.10	8,500.1	2,611.9	-59.7	2,612.6	0.57	0.48	-0.32
10,903.0	92.60	359.60	8,497.3	2,674.9	-59.8	2,675.5	0.81	0.16	-0.79
10,967.0	92.20	359.60	8,494.6	2,738.8	-60.3	2,739.4	0.63	-0.63	0.00
11,030.0	92.20	359.00	8,492.2	2,801.8	-61.1	2,802.4	0.95	0.00	-0.95
11,093.0	91.70	358.20	8,490.0	2,864.7	-62.6	2,865.4	1.50	-0.79	-1.27
11,156.0	91.00	357.30	8,488.6	2,927.6	-65.1	2,928.3	1.81	-1.11	-1.43
11,219.0	91.90	358.50	8,487.0	2,990.6	-67.4	2,991.3	2.38	1.43	1.90
11,283.0	92.20	358.70	8,484.7	3,054.5	-68.9	3,055.2	0.56	0.47	0.31
11,346.0	93.10	358.50	8,481.8	3,117.4	-70.5	3,118.2	1.46	1.43	-0.32
11,410.0	92.60	358.70	8,478.6	3,181.3	-72.0	3,182.1	0.84	-0.78	0.31
11,473.0	92.00	358.50	8,476.0	3,244.3	-73.6	3,245.0	1.00	-0.95	-0.32
11,536.0	90.50	359.90	8,474.7	3,307.2	-74.5	3,308.0	3.26	-2.38	2.22
11,599.0	90.10	359.90	8,474.3	3,370.2	-74.6	3,371.0	0.63	-0.63	0.00
11,662.0	91.30	1.30	8,473.6	3,433.2	-73.9	3,434.0	2.93	1.90	2.22
11,725.0	91.00	1.30	8,472.3	3,496.2	-72.5	3,496.9	0.48	-0.48	0.00
11,788.0	92.30	2.40	8,470.5	3,559.1	-70.4	3,559.8	2.70	2.06	1.75
11,851.0	91.70	1.50	8,468.3	3,622.1	-68.3	3,622.7	1.72	-0.95	-1.43
11,914.0	90.70	1.00	8,467.0	3,685.0	-66.9	3,685.6	1.77	-1.59	-0.79
11,978.0	92.10	0.80	8,465.4	3,749.0	-65.9	3,749.6	2.21	2.19	-0.31
12,041.0	91.80	359.60	8,463.3	3,812.0	-65.7	3,812.5	1.96	-0.48	-1.90
12,104.0	91.10	0.10	8,461.7	3,874.9	-65.9	3,875.5	1.37	-1.11	0.79
12,167.0	91.00	359.40	8,460.5	3,937.9	-66.1	3,938.5	1.12	-0.16	-1.11
12,231.0	92.80	359.90	8,458.4	4,001.9	-66.5	4,002.4	2.92	2.81	0.78
12,294.0	95.20	0.10	8,454.0	4,064.7	-66.5	4,065.3	3.82	3.81	0.32
12,357.0	94.40	359.70	8,448.7	4,127.5	-66.6	4,128.0	1.42	-1.27	-0.63
12,420.0	94.00	359.40	8,444.1	4,190.3	-67.1	4,190.9	0.79	-0.63	-0.48
12,484.0	92.70	358.20	8,440.4	4,254.2	-68.5	4,254.8	2.76	-2.03	-1.88
12,547.0	91.70	357.30	8,438.0	4,317.1	-71.0	4,317.7	2.13	-1.59	-1.43
12,610.0	91.70	356.70	8,436.1	4,380.0	-74.2	4,380.6	0.95	0.00	-0.95
12,673.0	92.40	356.40	8,433.8	4,442.8	-78.0	4,443.5	1.21	1.11	-0.48
12,736.0	90.70	359.00	8,432.1	4,505.8	-80.6	4,506.5	4.93	-2.70	4.13
12,799.0	90.80	358.00	8,431.3	4,568.7	-82.2	4,569.5	1.60	0.16	-1.59



Stryker Directional Survey Report



Company:	Mewbourne Oil Company	Local Co-ordinate Reference:	Well Tamano 11 MD Fed Com #1H
Project:	Eddy County, N.M. Nad (83)	TVD Reference:	3719 + 20 @ 3739.0usft (Patterson #41)
Site:	Section 11-18S-31E Tamano 11 MD Fed Com #1H	MD Reference:	3719 + 20 @ 3739.0usft (Patterson #41)
Well:	Tamano 11 MD Fed Com #1H	North Reference:	Grid
Wellbore:	Original Hole	Survey Calculation Method:	Minimum Curvature
Design:	Original Hole	Database:	Stryker_EDM

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)
12,862.0	89.80	358.00	8,431.0	4,631.7	-84.4	4,632.5	1.59	-1.59	0.00
12,925.0	89.50	357.90	8,431.4	4,694.7	-86.7	4,695.4	0.50	-0.48	-0.16
12,947.0	88.80	356.80	8,431.7	4,716.6	-87.7	4,717.4	5.93	-3.18	-5.00
12,990.0	88.80	356.80	8,432.6	4,759.5	-90.1	4,760.4	0.00	0.00	0.00
12990' MD Projected to Bit - PBHL Tamano 11 MD Fed Com #1H									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,985.0	7,983.1	74.5	-3.8	7985' MS Gyro Survey
12,990.0	8,432.6	4,759.5	-90.1	12990' MD Projected to Bit



August 13, 2014

New Mexico Energy, Minerals and Natural Resources Department
Attn: Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Attn: Jackie Lathan

Re: Mewbourne Oil Company
Tamano 11 MD Federal Com #001H
Tamano; Bone Spring
Eddy County, New Mexico
API# 30-015-41349

Enclosed please find the original and one (1) copy of the survey performed on the reference well by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C. Other information required by your office is as follows:

<u>Name & Title</u>	<u>Drainhole No.</u>	<u>Survey Depths</u>	<u>Dates Performed</u>	<u>Type Survey</u>
Noah Townsend	Original Hole	7,998 ft. to 12,947 ft.	06-30-14 to 07-13-14	MWD Survey

A certified plat on which the bottom-hole location is oriented to both surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.


Todd Estes

Enclosures

CC:

Mewbourne Oil Company
Attn: Frosty Lathan
P.O. Box 5720
Hobbs, NM 88241

Mewbourne Oil Company
Attn: Robin Terrell
P.O. Box 5720
Hobbs, NM 88241

\\NMEMaNRD\Mewbourne Oil Company\Tamano 11 MD Federal Com #1H\141144

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.
P.O. Box 1250
Montgomery, TX 77356
Office (936) 582-7296 * Fax (936)-588-4163



August 13, 2014

Survey Certification Report

STATE OF TEXAS

COUNTY OF Montgomery

I, Todd Estes, certify that I am employed by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C., and that I did on the day(s) of June 30, 2014 thru July 13, 2014, conduct or supervise the taking of a SEDS MWD Survey from a depth of 7,998 feet to 12,947 feet; that I am authorized and qualified to make this report; that this survey was conducted at the request of Mewbourne Oil Company, for the Tamano 11 MD Federal Com #001H well, API # **30-015-41349** in Eddy County, New Mexico; and that I have reviewed this report and find that it conforms to the principles as set forth by STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

Todd Estes

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

STRYKER ENERGY DIRECTIONAL SERVICES, L.L.C.

P.O. Box 1250

Montgomery, TX 77356

Office (936) 582-7296 * Fax (936)-588-4163



Job Number: M141144

Company: Mewbourne Oil Company

Lease/Well: tamano 11 MD Federal Com # 1H

Location: Eddy County

Rig Name: Patterson Rig # 41

RKB: N/A

G.L. or M.S.L.: N/A

State/Country: New Mexico / USA

Declination: 7.12° Corrected To Grid

Grid: 7.12°

File name: C:\WINSERVE\DOCS\M141144.SVY

Date/Time: 13-Aug-14 / 10:21

Curve Name: SES MWD SURVEY RAN ON 6-30-14

Styker Energy Directional Services, LLC.

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 359.02
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

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								
Tie-In Data Provided by MS Gyro Survey									
7985.00	.51	291.73	7983.12	74.45	-3.84	74.50	74.55	357.05	.00
7998.00	1.50	328.40	7996.12	74.62	-3.98	74.67	74.72	356.94	8.71
8030.00	4.40	344.30	8028.07	76.16	-4.53	76.22	76.29	356.59	9.33
8061.00	7.70	348.00	8058.90	79.33	-5.29	79.41	79.51	356.19	10.71
8093.00	11.30	350.20	8090.45	84.52	-6.27	84.62	84.75	355.76	11.31
8124.00	14.90	351.50	8120.64	91.46	-7.37	91.57	91.75	355.39	11.65
8156.00	18.80	351.10	8151.26	100.62	-8.78	100.76	101.01	355.01	12.19
8188.00	22.80	350.90	8181.17	111.84	-10.56	112.01	112.34	354.61	12.50
8219.00	26.60	354.30	8209.33	124.69	-12.20	124.88	125.28	354.41	13.08
8251.00	30.00	357.50	8237.50	139.81	-13.26	140.02	140.44	354.58	11.63
8282.00	33.60	359.70	8263.84	156.14	-13.64	156.35	156.73	355.01	12.20
8314.00	36.90	.40	8289.97	174.61	-13.62	174.81	175.14	355.54	10.39
8345.00	39.00	.60	8314.42	193.67	-13.46	193.87	194.13	356.03	6.79
8377.00	41.20	1.70	8338.89	214.27	-13.04	214.46	214.67	356.52	7.22
8408.00	43.80	.40	8361.75	235.21	-12.66	235.39	235.55	356.92	8.85
8440.00	46.80	358.30	8384.26	257.95	-12.93	258.13	258.27	357.13	10.47
8471.00	50.50	357.30	8404.73	281.20	-13.83	281.39	281.54	357.18	12.18
8503.00	54.20	356.00	8424.28	306.49	-15.32	306.70	306.87	357.14	12.00
8535.00	56.90	355.20	8442.38	332.79	-17.34	333.04	333.24	357.02	8.69
8566.00	59.40	354.60	8458.73	359.02	-19.68	359.30	359.56	356.86	8.23
8598.00	63.40	355.70	8474.05	387.01	-22.05	387.33	387.64	356.74	12.86
8629.00	65.30	356.20	8487.47	414.88	-24.03	415.23	415.58	356.69	6.30
8661.00	67.30	357.10	8500.33	444.13	-25.74	444.51	444.88	356.68	6.76
8692.00	69.20	357.80	8511.82	472.89	-27.02	473.29	473.67	356.73	6.48

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	
8724.00	71.10	358.70	8522.68	502.98	-27.94	503.38	503.75	356.82	6.50
8755.00	73.10	359.70	8532.21	532.47	-28.35	532.88	533.23	356.95	7.14
8787.00	75.10	.80	8540.98	563.24	-28.21	563.65	563.95	357.13	7.07
8819.00	77.20	1.70	8548.64	594.31	-27.53	594.69	594.94	357.35	7.11
8850.00	81.30	2.20	8554.42	624.74	-26.49	625.10	625.30	357.57	13.32
8882.00	84.20	2.50	8558.46	656.45	-25.19	656.79	656.93	357.80	9.11
8910.00	89.10	2.40	8560.09	684.37	-24.00	684.68	684.79	357.99	17.50
8976.00	93.10	2.00	8558.82	750.29	-21.46	750.55	750.60	358.36	6.09
9008.00	93.10	1.80	8557.09	782.23	-20.41	782.46	782.50	358.51	.62
9039.00	93.00	1.50	8555.44	813.17	-19.51	813.39	813.41	358.63	1.02
9071.00	91.60	1.10	8554.16	845.14	-18.79	845.34	845.35	358.73	4.55
9103.00	91.40	.80	8553.32	877.12	-18.26	877.31	877.31	358.81	1.13
9134.00	91.40	.80	8552.57	908.11	-17.83	908.28	908.29	358.88	.00
9166.00	92.20	1.00	8551.56	940.09	-17.32	940.25	940.25	358.94	2.58
9229.00	92.20	1.00	8549.14	1003.03	-16.22	1003.17	1003.17	359.07	.00
9292.00	91.50	359.20	8547.11	1066.00	-16.11	1066.12	1066.12	359.13	3.06
9355.00	92.90	359.70	8544.69	1128.95	-16.72	1129.07	1129.07	359.15	2.36
9449.00	91.00	359.40	8541.49	1222.89	-17.46	1223.01	1223.01	359.18	2.05
9544.00	90.30	359.70	8540.41	1317.88	-18.20	1317.99	1318.00	359.21	.80
9639.00	91.00	358.50	8539.34	1412.86	-19.70	1412.99	1412.99	359.20	1.46
9734.00	90.00	357.30	8538.51	1507.79	-23.18	1507.96	1507.96	359.12	1.64
9829.00	90.40	356.60	8538.17	1602.65	-28.23	1602.90	1602.90	358.99	.85
9924.00	95.20	356.40	8533.54	1697.33	-34.02	1697.67	1697.67	358.85	5.06
9955.00	95.20	356.20	8530.73	1728.14	-36.01	1728.50	1728.51	358.81	.64
9987.00	95.20	355.90	8527.83	1759.93	-38.21	1760.33	1760.35	358.76	.93
10019.00	94.10	356.60	8525.23	1791.76	-40.29	1792.19	1792.21	358.71	4.07
10050.00	94.20	356.70	8522.99	1822.62	-42.10	1823.08	1823.11	358.68	.46
10082.00	93.30	357.50	8520.89	1854.51	-43.72	1854.99	1855.03	358.65	3.76
10113.00	92.80	358.20	8519.25	1885.45	-44.88	1885.94	1885.98	358.64	2.77
10145.00	91.10	359.20	8518.16	1917.42	-45.60	1917.92	1917.96	358.64	6.16
10208.00	91.60	359.40	8516.67	1980.40	-46.37	1980.90	1980.94	358.66	.85
10271.00	92.00	359.20	8514.69	2043.36	-47.14	2043.87	2043.90	358.68	.71
10334.00	91.90	359.40	8512.55	2106.32	-47.91	2106.83	2106.86	358.70	.35
10397.00	90.10	358.30	8511.45	2169.29	-49.18	2169.82	2169.85	358.70	3.35
10460.00	90.30	357.60	8511.23	2232.25	-51.43	2232.81	2232.85	358.68	1.16
10524.00	90.60	357.80	8510.73	2296.20	-54.00	2296.79	2296.83	358.65	.56
10587.00	92.00	358.70	8509.30	2359.15	-55.92	2359.76	2359.81	358.64	2.64
10650.00	91.80	358.20	8507.21	2422.09	-57.62	2422.72	2422.78	358.64	.85
10714.00	92.10	358.70	8505.03	2486.03	-59.35	2486.68	2486.74	358.63	.91
10777.00	92.20	.30	8502.67	2548.98	-59.90	2549.64	2549.69	358.65	2.54
10840.00	92.50	.10	8500.08	2611.93	-59.68	2612.57	2612.61	358.69	.57
10903.00	92.60	359.60	8497.28	2674.87	-59.85	2675.50	2675.54	358.72	.81
10967.00	92.20	359.60	8494.60	2738.81	-60.30	2739.44	2739.47	358.74	.62
11030.00	92.20	359.00	8492.18	2801.76	-61.06	2802.39	2802.42	358.75	.95
11093.00	91.70	358.20	8490.04	2864.70	-62.60	2865.35	2865.39	358.75	1.50

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	
11156.00	91.00	357.30	8488.56	2927.64	-65.08	2928.32	2928.36	358.73	1.81
11219.00	91.90	358.50	8486.96	2990.57	-67.38	2991.29	2991.33	358.71	2.38
11283.00	92.20	358.70	8484.67	3054.51	-68.95	3055.24	3055.29	358.71	.56
11346.00	93.10	358.50	8481.76	3117.42	-70.48	3118.17	3118.22	358.70	1.46
11410.00	92.60	358.47	8478.58	3181.32	-72.17	3182.09	3182.14	358.70	.78
11473.00	92.00	358.50	8476.05	3244.25	-73.84	3245.04	3245.09	358.70	.95
11536.00	90.50	359.90	8474.67	3307.22	-74.72	3308.02	3308.07	358.71	3.26
11599.00	90.10	359.90	8474.34	3370.22	-74.83	3371.01	3371.05	358.73	.63
11662.00	91.30	1.30	8473.57	3433.21	-74.17	3433.98	3434.01	358.76	2.93
11725.00	91.00	1.30	8472.31	3496.18	-72.74	3496.92	3496.94	358.81	.48
11788.00	92.30	2.40	8470.50	3559.12	-70.71	3559.81	3559.83	358.86	2.70
11851.00	91.70	1.50	8468.30	3622.05	-68.56	3622.69	3622.70	358.92	1.72
11914.00	90.70	1.00	8466.98	3685.02	-67.19	3685.63	3685.63	358.96	1.77
11978.00	92.10	.80	8465.41	3748.99	-66.18	3749.57	3749.57	358.99	2.21
12041.00	91.80	359.60	8463.27	3811.95	-65.96	3812.52	3812.52	359.01	1.96
12104.00	91.10	.10	8461.68	3874.93	-66.13	3875.49	3875.49	359.02	1.37
12167.00	91.00	359.40	8460.52	3937.92	-66.40	3938.48	3938.48	359.03	1.12
12231.00	92.80	359.90	8458.40	4001.88	-66.80	4002.44	4002.44	359.04	2.92
12294.00	95.20	.10	8454.01	4064.72	-66.80	4065.27	4065.27	359.06	3.82
12357.00	94.40	359.70	8448.73	4127.50	-66.91	4128.04	4128.04	359.07	1.42
12420.00	94.00	359.40	8444.12	4190.33	-67.40	4190.87	4190.87	359.08	.79
12484.00	92.70	358.20	8440.38	4254.20	-68.74	4254.76	4254.76	359.07	2.76
12547.00	91.70	357.30	8437.96	4317.11	-71.21	4317.69	4317.69	359.06	2.13
12610.00	91.70	356.70	8436.09	4379.99	-74.50	4380.62	4380.62	359.03	.95
12673.00	92.40	356.40	8433.84	4442.84	-78.29	4443.53	4443.53	358.99	1.21
12736.00	90.70	359.00	8432.13	4505.75	-80.82	4506.48	4506.48	358.97	4.93
12799.00	90.80	358.00	8431.31	4568.73	-82.47	4569.47	4569.47	358.97	1.60
12862.00	89.80	358.00	8430.98	4631.69	-84.67	4632.46	4632.46	358.95	1.59
12925.00	89.50	357.90	8431.37	4694.65	-86.92	4695.45	4695.45	358.94	.50
12947.00	88.80	356.80	8431.69	4716.62	-87.94	4717.43	4717.44	358.93	5.93
Projection to Bit									
12990.00	88.80	356.80	8432.59	4759.54	-90.34	4760.39	4760.40	358.91	.00



COMPANY: Mewbourne Oil Company
WELL: Tamano 11 MD Fed Com #1H
COUNTY: Eddy County, N.M. Nad (83)
DATUM: North American Datum 1983
RIG: Patterson #41

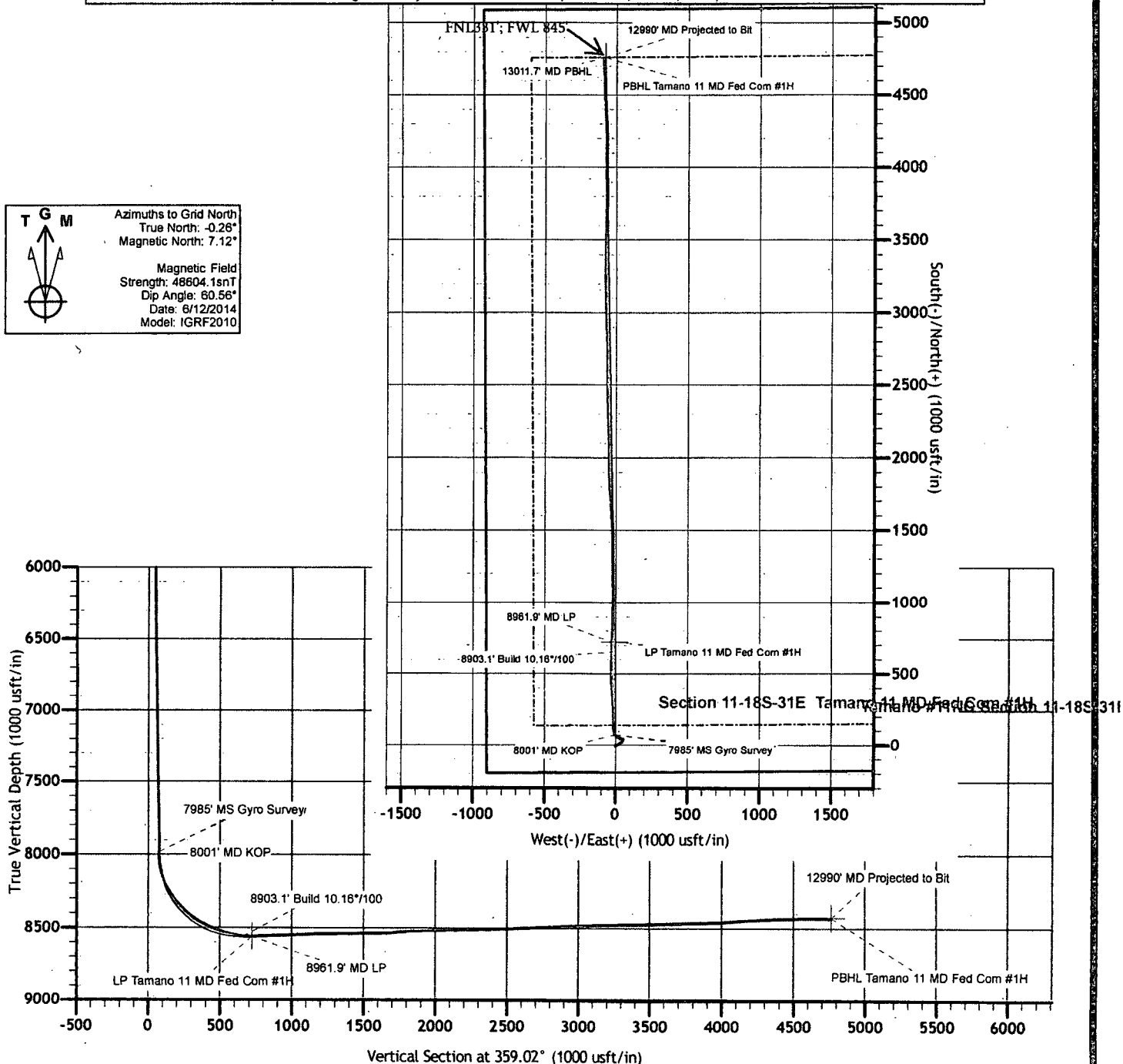
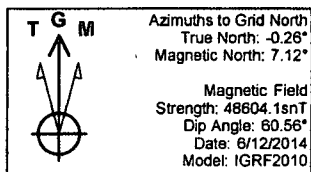


GRID CORRECTION: To convert a Magnetic Direction to a Grid Direction, Add 7.12°

OFFICE: 936.582.7296

GEODETIC ZONE: New Mexico Eastern Zone										
3719 + 20 @ 3739.0usft (Patterson #41)										
GROUND ELEVATION: 3719.0										
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot				
0.0	0.0	638858.20	691204.40	32° 45' 19.112 N	103° 50' 45.013 W					
PLAN SECTIONS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Target
1	7985.0	0.51	291.73	7983.1	74.5	-3.8	0.00	0.00	74.5	
2	8001.0	0.51	291.73	7999.1	74.5	-4.0	0.00	0.00	74.6	
3	8903.1	91.84	0.08	8560.9	656.5	-7.9	10.16	68.34	656.6	
4	8961.9	91.84	358.97	8559.0	715.3	-8.4	1.90	-90.00	715.4	
5	13011.7	91.84	358.97	8429.0	4762.4	-81.5	0.00	0.00	4763.1	PBHL Tamano 11 MD Fed Com #1H

DESIGN TARGET DETAILS									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	Point
PBHL Tamano 11 MD Fed Com #1H	8429.0	4762.4	-81.5	643620.60	691122.90	32° 46' 6.239 N	103° 50' 45.711 W	Point	
- plan hits target center									
LP Tamano 11 MD Fed Com #1H	8559.0	720.0	-8.0	639578.20	691196.44	32° 45' 26.237 N	103° 50' 45.067 W	Point	
- plan misses target center by 0.5usft at 8966.9usft MD (8558.9 TVD, 720.0 N, -8.5 E)									



Operating Company Mewbourne Oil Co.
Well Name & Number Tamano 11MD Fed Com #1H
Sales Ticket Number 6572743

Company Rep Josh Proisie
Field 0
BOT Service Rep Zach Blenkinsopp



Date 7/12/2014

District Location Odessa, TX

	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	110000	6.276	6.151	BTC / BUTT	0.03826	8,955.00	9,960	6,230
Top Liner	4.500	13.50	110000	3.920	3.795	LTC / 8RD	0.01493	4,228.66	12,410	10,690
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-

TVD	8432.00	KOP	7998.00	Open Hole	6.125	Casing Vol. (bbl)	332.4
-----	---------	-----	---------	-----------	-------	-------------------	-------

Carry Fluid Weight (ppg)	8.4	Propant Content (ppa)		Max Drill Out Size	0
--------------------------	-----	-----------------------	--	--------------------	---

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press	Max Rate (BPM)	Displ (BBL)
Liner Top	1	10292414	JR Slv w 4.750" Alt Seal Bore ID	8687.34	4.00	5.750	3.913			

Zone
Length

H4090400008	S-3 Casing Hanger Packer	8691.34	4.64	5.875	3.875				
H299900281	Combo Collar (4-1/2 LT&C)	8695.98	0.59	5.000	4.500				
H299710014	4-1/2" 13.5# LT&C Spacer Nipple	8696.57	7.51	4.500	3.938				
	7 Jnts 4-1/2" 13.5# LT&C csg	8704.08	315.94	3.920					
H810090200	3.500" EXPress Sleeve (Zone 20)	9020.02	2.40	5.630		3.448	2286		
	3 Jnts 4-1/2" 13.5# LT&C csg	9022.42	135.00	4.500	3.920				
H409360008	582 OH PACKER #19	9157.42	3.89	5.820	3.875		2154		
	2 Jnts 4-1/2" 13.5# LT&C csg	9161.31	89.70	4.500	3.920				
H810090199	3.438" EXPress Sleeve (Zone 19)	9251.01	2.40	5.630		3.385	2286		
	2 Jnts 4-1/2" 13.5# LT&C csg	9253.41	90.59	4.500	3.920				
H409360008	582 OH PACKER #18	9344.00	3.89	5.820	3.875		2154		
	2 Jnts 4-1/2" 13.5# LT&C csg	9347.89	89.72	4.500	3.920				
H810090198	3.375" EXPress Sleeve (Zone 18)	9437.61	2.40	5.630		3.323	2286		
	2 Jnts 4-1/2" 13.5# LT&C csg	9440.01	89.65	4.500	3.920				
H409360008	582 OH PACKER #17	9529.66	3.89	5.820	3.875		2154		
	2 Jnts 4-1/2" 13.5# LT&C csg	9533.55	88.94	4.500	3.920				
H810090197	3.313" EXPress Sleeve (Zone 17)	9622.49	2.40	5.630		3.260	2286		
	3 Jnts 4-1/2" 13.5# LT&C csg	9624.89	135.94	4.500	3.920				
H409360008	582 OH PACKER #16	9760.83	3.89	5.820	3.875		2154		
	2 Jnts 4-1/2" 13.5# LT&C csg	9764.72	90.67	4.500	3.920				
H810090196	3.250" EXPress Sleeve (Zone 16)	9855.39	2.40	5.630		3.198	2286		
	2 Jnts 4-1/2" 13.5# LT&C csg	9857.79	89.67	4.500	3.920				

Operating Company Mewbourne Oil Co.
Well Name & Number Tamano 11MD Fed Com #1H
Sales Ticket Number 6572743
Date 7/12/2014

Company Rep Josh Prorise
Field 0
BOT Service Rep Zach Blenkinsopp
District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	110000	6.276	6.151	BTC / BUTT	0.03826	8,955.00	9,960	6,230
Top Liner	4.500	13.50	110000	3.920	3.795	LTC / 8RD	0.01493	4,228.66	12,410	10,690
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-

TVD	8432.00	KOP	7998.00	Open Hole	6.125	Casing Vol. (bbl)	332.4
-----	---------	-----	---------	-----------	-------	-------------------	-------

Carry Fluid Weight (ppg)	8.4	Propan Content (ppa)		Max Drill Out Size	0
--------------------------	-----	----------------------	--	--------------------	---

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press	Max Rate (BPM)	Displ. (BBL)
	H409360008	582 OH PACKER #15	9947.46	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	9951.35	89.69	4.500	3.920				
	H810090195	3.188" EXPress Sleeve (Zone 15)	10041.04	2.40	5.630		3.135	2286		
		3 Jnts 4-1/2" 13.5# LT&C csg	10043.44	134.11	4.500	3.920				
	H409360008	582 OH PACKER #14	10177.55	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	10181.44	90.68	4.500	3.920				
	H810090194	3.125" EXPress Sleeve (Zone 14)	10272.12	2.40	5.630		3.073	2286		
		2 Jnts 4-1/2" 13.5# LT&C csg	10274.52	90.28	4.500	3.920				
	H409360008	582 OH PACKER #13	10364.80	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	10368.69	90.64	4.500	3.920				
	H810090193	3.063" EXPress Sleeve (Zone 13)	10459.33	2.40	5.630		3.010	2286		
		2 Jnts 4-1/2" 13.5# LT&C csg	10461.73	89.60	4.500	3.920				
	H409360008	582 OH PACKER #12	10551.33	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	10555.22	90.67	4.500	3.920				
	H810090192	3.00" EXPress Sleeve (Zone 12)	10645.89	2.40	5.630		2.948	2286		
		3 Jnts 4-1/2" 13.5# LT&C csg	10648.29	136.00	4.500	3.920				
	H409360008	582 OH PACKER #11	10784.29	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	10788.18	89.69	4.500	3.920				
	H810090191	2.938" EXPress Sleeve (Zone 11)	10877.87	2.40	5.630		2.885	2286		
		2 Jnts 4-1/2" 13.5# LT&C csg	10880.27	90.63	4.500	3.920				
	H409360008	582 OH PACKER #10	10970.90	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	10974.79	90.65	4.500	3.920				
	H810090190	2.875" EXPress Sleeve (Zone 10)	11065.44	2.40	5.630		2.823	2286		
		2 Jnts 4-1/2" 13.5# LT&C csg	11067.84	89.70	4.500	3.920				
	H409360008	582 OH PACKER #9	11157.54	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	11161.43	90.68	4.500	3.920				

Operating Company Mewbourne Oil Co.
Well Name & Number Tamano 11MD Fed Com #1H
Sales Ticket Number 6572743
Date 7/12/2014

Company Rep Josh Prosize
Field 0
BOT Service Rep Zach Blenkinsopp
District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	110000	6.276	6.151	BTC / BUTT	0.03826	8,955.00	9,960	6,230	
Top Liner	4.500	13.50	110000	3.920	3.795	LTC / 8RD	0.01493	4,228.66	12,410	10,690	
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-	
TVD		8432.00		KOP		7998.00	Open Hole		6.125	Casing Vol. (bbl)	332.4
Carry Fluid Weight (ppg)			8.4		Propant Content (ppa)				Max Drill Out Size		0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press	Max Rate (BPM)	Displ (BBL)
	H810090189	2.813" EXPress Sleeve (Zone 9)	11252.11	2.40	5.630		2.760	2286		
		3 Jnts 4-1/2" 13.5# LT&C csg	11254.51	136.00	4.500	3.920				
	H409360008	582 OH PACKER #8	11390.51	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	11394.40	90.65	4.500	3.920				
	H810090188	2.750" EXPress Sleeve (Zone 8)	11485.05	2.40	5.630		2.698	2286		
		2 Jnts 4-1/2" 13.5# LT&C csg	11487.45	89.67	4.500	3.920				
	H409360008	582 OH PACKER #7	11577.12	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	11581.01	90.64	4.500	3.920				
	H810090187	2.688" EXPress Sleeve (Zone 7)	11671.65	2.40	5.630		2.635	2286		
		2 Jnts 4-1/2" 13.5# LT&C csg	11674.05	89.71	4.500	3.920				
	H409360008	582 OH PACKER #6	11763.76	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	11767.65	90.67	4.500	3.920				
	H810090186	2.625" EXPress Sleeve (Zone 6)	11858.32	2.40	5.630		2.573	2286		
		3 Jnts 4-1/2" 13.5# LT&C csg	11860.72	135.96	4.500	3.920				
	H409360008	582 OH PACKER #5	11996.68	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	12000.57	90.62	4.500	3.920				
	H810090185	2.563" EXPress Sleeve (Zone 5)	12091.19	2.40	5.630		2.510	2286		
		2 Jnts 4-1/2" 13.5# LT&C csg	12093.59	90.66	4.500	3.920				
	H409360008	582 OH PACKER #4	12184.25	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	12188.14	90.69	4.500	3.920				
	H810090184	2.500" EXPress Sleeve (Zone 4)	12278.83	2.40	5.630		2.448	2286		
		2 Jnts 4-1/2" 13.5# LT&C csg	12281.23	90.63	4.500	3.920				
	H409360008	582 OH PACKER #3	12371.86	3.89	5.820	3.875		2154		
		2 Jnts 4-1/2" 13.5# LT&C csg	12375.75	90.65	4.500	3.920				
	H810090183	2.438" EXPress Sleeve (Zone 3)	12466.40	2.40	5.630		2.385	2286		
		3 Jnts 4-1/2" 13.5# LT&C csg	12468.80	135.97	4.500	3.920				

Company Rep	Josh Prorise
Field	0
BOT Service Rep	Zach Blenkinsopp
District Location	Odessa, TX

[illegible]