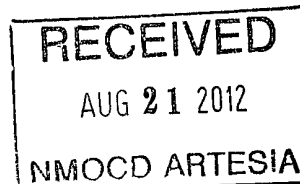


OPERATOR
WELL/LEASE
COUNTY

MEWBOURNE OIL COMPANY
TAMANO 10 FED COM 8H
EDDY



046-0079

STATE OF NEW MEXICO
DEVIATION REPORT

30-015-40109

733	0.61
948	0.51
1,225	0.82
1,515	0.55
1,804	0.68
2,092	0.58
2,395	0.43
2,681	0.56
3,060	0.96
3,472	0.66
3,758	0.55
4,170	0.53
4,487	0.38
4,866	0.60
5,246	1.67
5,405	1.58
5,659	2.42
5,817	1.91
5,996	1.10
6,198	1.14
6,419	1.25
6,641	2.11
6,865	2.32
7,309	3.26
7,467	3.61
7,625	3.47

STATE OF TEXAS

COUNTY OF MIDLAND

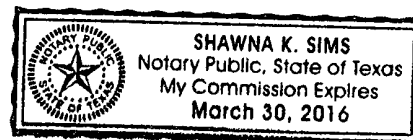
BY

Kyle Hollingsworth

The foregoing instrument was acknowledged before me on
Kyle Hollingsworth on behalf of Patterson-Edwards Drilling Company LLC

7/30/12, by

Shawna Sims JUL 31 2012
Notary Public for Midland County, Texas
My Commission Expires: Mewbourne Oil Company
Hobbs





Rig Name: PATTERSON 46
State/County: NEW MEXICO/EDDY
Latitude: 32.76

GRID North is 0.25 Degrees East of True North
VS-Azi: 0.00 Degrees



Depth Reference : RKB = 22 FT.

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: ha gyro_final.ut

Minimum Curvature Method

Report Date/Time: 7/10/2012 / 09:31

Vaughn Energy Services

Fort Worth, Texas

817-741-3610

Surveyor: Dustin Skoruppa

Tomano 10 Federal Com 8H / API 30-015-40109

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.10	350.42	100.00	0.08	-0.01	0.08	0.08	350.42	0.10
200.00	0.19	340.85	200.00	0.32	-0.08	0.32	0.33	345.64	0.10
300.00	0.21	313.03	300.00	0.61	-0.27	0.61	0.66	335.91	0.10
400.00	0.23	285.21	400.00	0.78	-0.59	0.78	0.98	322.79	0.11
500.00	0.25	279.78	500.00	0.87	-1.00	0.87	1.32	311.17	0.03
600.00	0.27	274.36	600.00	0.92	-1.44	0.92	1.71	302.72	0.03
700.00	0.34	276.55	700.00	0.98	-1.96	0.98	2.19	296.42	0.07
800.00	0.41	278.75	799.99	1.06	-2.61	1.06	2.82	292.19	0.07
900.00	0.48	292.95	899.99	1.28	-3.35	1.28	3.58	290.96	0.13
1000.00	0.56	307.15	999.99	1.74	-4.12	1.74	4.48	292.89	0.15
1100.00	0.48	314.95	1099.98	2.33	-4.81	2.33	5.35	295.87	0.10
1200.00	0.41	322.75	1199.98	2.91	-5.32	2.91	6.07	298.68	0.10
1300.00	0.52	305.64	1299.98	3.46	-5.91	3.46	6.84	300.35	0.18
1400.00	0.63	288.53	1399.97	3.90	-6.80	3.90	7.83	299.83	0.20
1500.00	0.64	288.90	1499.96	4.25	-7.85	4.25	8.93	298.46	0.01
1600.00	0.64	289.27	1599.96	4.62	-8.90	4.62	10.03	297.42	0.01
1700.00	0.52	301.74	1699.95	5.04	-9.82	5.04	11.04	297.18	0.18
1800.00	0.40	314.22	1799.95	5.52	-10.46	5.52	11.82	297.85	0.16
1900.00	0.45	320.14	1899.95	6.07	-10.96	6.07	12.52	298.97	0.07
2000.00	0.51	326.06	1999.94	6.73	-11.45	6.73	13.29	300.45	0.07

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
2100.00	0.51	333.19	2099.94	7.50	-11.90	7.50	14.07	302.21	0.06
2200.00	0.52	340.32	2199.94	8.32	-12.26	8.32	14.82	304.19	0.06
2300.00	0.55	336.28	2299.93	9.19	-12.60	9.19	15.59	306.10	0.05
2400.00	0.58	332.25	2399.93	10.07	-13.03	10.07	16.47	307.71	0.05
2500.00	0.59	332.93	2499.92	10.97	-13.49	10.97	17.39	309.11	0.01
2600.00	0.60	333.61	2599.92	11.89	-13.96	11.89	18.34	310.43	0.01
2700.00	0.67	321.19	2699.91	12.82	-14.56	12.82	19.39	311.36	0.16
2800.00	0.75	308.77	2799.90	13.68	-15.43	13.68	20.63	311.56	0.17
2900.00	0.80	309.17	2899.89	14.53	-16.48	14.53	21.97	311.40	0.05
3000.00	0.84	309.58	2999.88	15.44	-17.59	15.44	23.40	311.27	0.05
3100.00	0.92	305.55	3099.87	16.37	-18.81	16.37	24.94	311.04	0.10
3200.00	0.99	301.53	3199.86	17.30	-20.20	17.30	26.59	310.57	0.10
3300.00	0.93	303.83	3299.84	18.20	-21.62	18.20	28.26	310.10	0.08
3400.00	0.87	306.13	3399.83	19.10	-22.90	19.10	29.82	309.83	0.07
3500.00	0.75	305.65	3499.82	19.92	-24.04	19.92	31.22	309.65	0.12
3600.00	0.63	305.17	3599.81	20.62	-25.01	20.62	32.41	309.49	0.12
3700.00	0.67	306.33	3699.81	21.28	-25.93	21.28	33.54	309.37	0.05
3800.00	0.72	307.50	3799.80	22.00	-26.90	22.00	34.75	309.28	0.05
3900.00	0.58	310.97	3899.79	22.71	-27.77	22.71	35.88	309.28	0.14
4000.00	0.44	314.44	3999.79	23.32	-28.43	23.32	36.77	309.35	0.14
4100.00	0.41	318.37	4099.79	23.86	-28.95	23.86	37.51	309.49	0.04
4200.00	0.38	322.30	4199.78	24.39	-29.39	24.39	38.19	309.69	0.04
4300.00	0.44	314.03	4299.78	24.92	-29.87	24.92	38.90	309.84	0.08
4400.00	0.50	305.76	4399.78	25.44	-30.50	25.44	39.72	309.84	0.09
4500.00	0.86	300.72	4499.77	26.08	-31.50	26.08	40.90	309.63	0.37
4600.00	1.23	295.68	4599.75	26.93	-33.12	26.93	42.69	309.12	0.38
4700.00	1.05	298.53	4699.73	27.84	-34.89	27.84	44.64	308.58	0.19
4800.00	0.87	301.38	4799.72	28.67	-36.34	28.67	46.29	308.27	0.19
4900.00	1.06	330.26	4899.71	29.87	-37.45	29.87	47.90	308.57	0.52
5000.00	1.26	359.15	4999.69	31.77	-37.93	31.77	49.47	309.95	0.61
5100.00	1.42	349.79	5099.66	34.08	-38.16	34.08	51.17	311.77	0.27
5200.00	1.59	340.43	5199.63	36.61	-38.85	36.61	53.38	313.30	0.30
5300.00	1.67	335.89	5299.59	39.24	-39.90	39.24	55.96	314.52	0.15
5400.00	1.74	331.34	5399.54	41.90	-41.23	41.90	58.78	315.47	0.16
5500.00	2.08	321.20	5499.49	44.65	-43.09	44.65	62.06	316.02	0.48
5600.00	2.42	311.07	5599.41	47.46	-45.83	47.46	65.97	316.00	0.52
5700.00	2.13	314.22	5699.33	50.14	-48.75	50.14	69.94	315.81	0.32
5800.00	1.84	317.36	5799.27	52.62	-51.17	52.62	73.40	315.80	0.31
5900.00	1.50	337.73	5899.23	55.01	-52.75	55.01	76.22	316.20	0.68
6000.00	1.16	358.09	5999.20	57.23	-53.28	57.23	78.20	317.05	0.58
6100.00	1.13	358.13	6099.18	59.23	-53.35	59.23	79.71	317.99	0.03
6200.00	1.09	358.17	6199.16	61.16	-53.41	61.16	81.20	318.87	0.03

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
6300.00	1.23	357.76	6299.14	63.19	-53.48	63.19	82.79	319.76	0.13
6400.00	1.36	357.35	6399.12	65.45	-53.58	65.45	84.58	320.69	0.13
6500.00	1.70	358.61	6499.08	68.12	-53.67	68.12	86.72	321.76	0.33
6600.00	2.03	359.87	6599.03	71.36	-53.71	71.36	89.32	323.03	0.33
6700.00	2.19	354.96	6698.96	75.03	-53.88	75.03	92.38	324.32	0.24
6800.00	2.35	350.06	6798.88	78.95	-54.40	78.95	95.88	325.43	0.25
6900.00	2.70	349.15	6898.78	83.29	-55.20	83.29	99.92	326.46	0.36
7000.00	3.06	348.25	6998.66	88.21	-56.19	88.21	104.59	327.50	0.36
7100.00	3.61	345.02	7098.49	93.86	-57.55	93.86	110.10	328.49	0.58
7200.00	4.16	341.79	7198.26	100.36	-59.49	100.36	116.67	329.34	0.59
7300.00	3.95	338.64	7298.01	107.01	-61.88	107.01	123.62	329.96	0.31
7400.00	3.73	335.50	7397.78	113.18	-64.49	113.18	130.26	330.33	0.30
7500.00	3.51	336.23	7497.58	118.94	-67.07	118.94	136.54	330.58	0.23
7600.00	3.28	336.96	7597.41	124.37	-69.42	124.37	142.43	330.83	0.23
7700.00	3.23	335.70	7697.25	129.56	-71.70	129.56	148.08	331.04	0.09
7800.00	3.17	334.45	7797.09	134.62	-74.05	134.62	153.65	331.19	0.09
7836.00	3.03	333.66	7833.04	136.38	-74.90	136.38	155.59	331.22	0.41

Mewbourne Oil Co

Lea County, NM

Sec 10-18S-31E

Tamano 10 Fed Com #8H

Wellbore #1

Survey: MWD

DDC Survey Report

16 July, 2012



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Tamano 10 Fed Com #8H
Project:	Lea County, NM	TVD Reference:	WELL @ 3722.0usft (Patterson 47/45)
Site:	Sec 10-18S-31E	MD Reference:	WELL @ 3722.0usft (Patterson 47/45)
Well:	Tamano 10 Fed Com #8H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project:	Lea County, NM		
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: Sec 10-18S-31E

Site Position:	Northing:	640,304.16 usft	Latitude:	32° 45' 33.885 N
From: Map	Easting:	644,094.59 usft	Longitude:	103° 51' 52.567 W
Position Uncertainty: 0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.25 °

Well	Tamano 10 Fed Com #8H				
Well Position	+N/-S	0.0 usft	Northing:	640,304.16 usft	Latitude: 32° 45' 33.885 N
	+E/-W	0.0 usft	Easting:	644,094.59 usft	Longitude: 103° 51' 52.567 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,704.0 usft

Wellbore		Wellbore #1			
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/26/2012	7.64	60.61	48,801

Design:	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	88.84	

Survey Program		Date	7/16/2012	
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	7,836.0	Gyro Survey (Wellbore #1)	Good_gyro	Good Gyro
7,889.0	13,030.0	MWD (Wellbore #1)	MWD default	MWD - Standard

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)
7,836.0	3.03	333.66	7,833.0	136.4	-74.9	-72.2	0.00	0.00	0.00
TIE IN @ 7836' MD / 7833' TVD									
7,836.1	3.03	333.66	7,833.1	136.4	-74.9	-72.2	0.00	0.00	0.00
7,889.0	3.00	333.80	7,886.0	138.9	-76.2	-73.3	0.06	-0.06	0.26
7,920.0	2.90	329.90	7,916.9	140.3	-76.9	-74.1	0.72	-0.32	-12.58
7,951.0	2.50	334.50	7,947.9	141.6	-77.6	-74.7	1.47	-1.29	14.84
7,983.0	3.00	28.20	7,979.9	143.0	-77.5	-74.6	7.88	1.56	167.81
8,016.0	6.10	58.40	8,012.8	144.7	-75.6	-72.7	11.57	9.39	91.52
8,047.0	9.40	67.90	8,043.5	146.5	-71.9	-68.9	11.38	10.65	30.65
8,079.0	13.10	71.50	8,074.8	148.6	-66.0	-63.0	11.76	11.56	11.25

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Tamano 10 Fed Com #8H
Project:	Lea County, NM	TVD Reference:	WELL @ 3722.0usft (Patterson 47/45)
Site:	Sec 10-18S-31E	MD Reference:	WELL @ 3722.0usft (Patterson 47/45)
Well:	Tamano 10 Fed Com #8H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User 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)
8,110.0	16.80	75.60	8,104.8	150.9	-58.3	-55.3	12.41	11.94	13.23
8,142.0	20.00	79.20	8,135.2	153.0	-48.5	-45.4	10.61	10.00	11.25
8,173.0	22.50	81.60	8,164.0	154.9	-37.4	-34.3	8.54	8.06	7.74
8,205.0	25.40	83.00	8,193.3	156.6	-24.5	-21.3	9.23	9.06	4.38
8,237.0	28.60	83.70	8,221.8	158.3	-10.1	-6.9	10.05	10.00	2.19
8,268.0	32.00	84.90	8,248.6	159.9	5.5	8.7	11.14	10.97	3.87
8,300.0	35.00	86.60	8,275.2	161.2	23.1	26.3	9.82	9.38	5.31
8,332.0	38.50	88.00	8,300.9	162.0	42.2	45.5	11.25	10.94	4.38
8,363.0	42.10	89.90	8,324.5	162.4	62.2	65.5	12.27	11.61	6.13
CROSSED HARD LINE @ 8371' MD / 8330' TVD									
8,371.0	42.90	90.19	8,330.4	162.4	67.6	70.9	10.28	9.99	3.59
8,395.0	45.30	91.00	8,347.6	162.2	84.3	87.6	10.28	10.00	3.39
8,427.0	49.00	90.60	8,369.4	161.9	107.8	111.1	11.60	11.56	-1.25
8,458.0	52.40	90.00	8,389.0	161.8	131.8	135.0	11.07	10.97	-1.94
8,490.0	56.70	89.10	8,407.6	162.0	157.8	161.1	13.63	13.44	-2.81
8,522.0	59.80	89.40	8,424.4	162.3	185.0	188.3	9.72	9.69	0.94
8,554.0	63.20	90.40	8,439.7	162.4	213.2	216.4	10.97	10.63	3.13
8,586.0	67.30	91.30	8,453.1	161.9	242.2	245.4	13.06	12.81	2.81
8,617.0	71.90	91.70	8,463.9	161.2	271.3	274.5	14.89	14.84	1.29
8,649.0	75.30	91.50	8,472.9	160.3	301.9	305.1	10.64	10.63	-0.63
8,681.0	78.90	91.00	8,480.1	159.6	333.1	336.3	11.35	11.25	-1.56
8,707.0	82.40	89.90	8,484.3	159.4	358.8	361.9	14.09	13.46	-4.23
8,787.0	88.20	91.20	8,490.8	158.7	438.5	441.6	7.43	7.25	1.63
8,819.0	89.20	91.10	8,491.6	158.0	470.4	473.5	3.14	3.13	-0.31
8,850.0	90.50	91.00	8,491.7	157.5	501.4	504.5	4.21	4.19	-0.32
8,882.0	90.00	90.80	8,491.5	157.0	533.4	536.5	1.68	-1.56	-0.63
8,914.0	89.50	90.20	8,491.7	156.7	565.4	568.5	2.44	-1.56	-1.88
8,946.0	89.10	90.20	8,492.0	156.6	597.4	600.5	1.25	-1.25	0.00
8,977.0	90.10	90.30	8,492.3	156.4	628.4	631.5	3.24	3.23	0.32
9,041.0	89.80	89.70	8,492.3	156.4	692.4	695.5	1.05	-0.47	-0.94
9,105.0	90.20	90.40	8,492.3	156.4	756.4	759.4	1.26	0.63	1.09
9,169.0	89.60	91.10	8,492.4	155.5	820.4	823.4	1.44	-0.94	1.09
9,232.0	91.10	91.30	8,492.0	154.2	883.4	886.3	2.40	2.38	0.32
9,296.0	91.30	92.50	8,490.7	152.1	947.4	950.2	1.90	0.31	1.88
9,359.0	90.90	92.10	8,489.5	149.6	1,010.3	1,013.1	0.90	-0.63	-0.63
9,422.0	90.50	91.10	8,488.7	147.8	1,073.3	1,076.0	1.71	-0.63	-1.59
9,486.0	89.70	90.60	8,488.6	146.9	1,137.3	1,140.0	1.47	-1.25	-0.78
9,550.0	89.30	90.10	8,489.2	146.5	1,201.2	1,204.0	1.00	-0.63	-0.78
9,613.0	90.50	90.20	8,489.3	146.3	1,264.2	1,266.9	1.91	1.90	0.16
9,677.0	90.70	89.70	8,488.6	146.4	1,328.2	1,330.9	0.84	0.31	-0.78
9,740.0	90.10	89.90	8,488.2	146.6	1,391.2	1,393.9	1.00	-0.95	0.32
9,804.0	90.00	90.10	8,488.1	146.6	1,455.2	1,457.9	0.35	-0.16	0.31
9,867.0	89.80	90.10	8,488.2	146.5	1,518.2	1,520.9	0.32	-0.32	0.00

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Tamano 10 Fed Com #8H
Project:	Lea County, NM	TVD Reference:	WELL @ 3722 0usft (Patterson 47/45)
Site:	Sec 10-18S-31E	MD Reference:	WELL @ 3722.0usft (Patterson 47/45)
Well:	Tamano 10 Fed Com #8H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User 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)
9,931.0	90 20	91.40	8,488.2	145 6	1,582.2	1,584.9	2.13	0.63	2 03
9,995.0	89 90	91 00	8,488.2	144 3	1,646 2	1,648.8	0.78	-0.47	-0.63
10,058.0	90 80	91.10	8,487.8	143.1	1,709 2	1,711 8	1.44	1.43	0.16
10,122.0	91 70	90 60	8,486.4	142.2	1,773 2	1,775.7	1.61	1 41	-0.78
10,185 0	91.90	90.80	8,484.4	141.4	1,836 1	1,838.6	0 45	0.32	0 32
10,249 0	90.90	91.70	8,482 8	140 0	1,900.1	1,902.6	2 10	-1 56	1 41
10,313.0	89 10	91.80	8,482.8	138.1	1,964.1	1,966.5	2.82	-2 81	0.16
10,376.0	88 60	91 80	8,484.1	136.1	2,027.0	2,029 4	0.79	-0.79	0.00
10,440 0	89 50	90 10	8,485.2	135 0	2,091.0	2,093 3	3 01	1 41	-2 66
10,503 0	89.60	90.00	8,485.7	135.0	2,154.0	2,156.3	0.22	0 16	-0.16
10,567 0	89 90	90 90	8,485.9	134 5	2,218.0	2,220 3	1 48	0 47	1.41
10,630.0	90 10	91.30	8,485.9	133.3	2,281.0	2,283.2	0.71	0 32	0 63
10,694 0	91.10	91 60	8,485.3	131.7	2,345 0	2,347 2	1.63	1 56	0 47
10,757 0	91 50	91.40	8,483.8	130 0	2,407.9	2,410 1	0.71	0.63	-0.32
10,821.0	92 00	91 70	8,481.9	128.3	2,471 9	2,474.0	0 91	0 78	0 47
10,885.0	91.50	90.40	8,479.9	127.1	2,535.8	2,537 9	2.18	-0.78	-2 03
10,948 0	90 50	89.40	8,478.8	127.2	2,598.8	2,600.9	2.24	-1 59	-1.59
11,012 0	90 10	89 60	8,478.5	127.8	2,662.8	2,664.9	0.70	-0 63	0 31
11,075.0	89.10	89 20	8,478.9	128.4	2,725 8	2,727.9	1.71	-1.59	-0 63
11,139 0	88 60	89.30	8,480.2	129 3	2,789.8	2,791.8	0 80	-0.78	0.16
11,203.0	88.90	89.30	8,481.6	130.0	2,853 8	2,855.8	0 47	0.47	0.00
11,267.0	89 10	88.90	8,482 7	131.1	2,917.8	2,919 8	0.70	0.31	-0.63
11,331.0	88 60	88.70	8,484.0	132.4	2,981.7	2,983.8	0.84	-0 78	-0.31
11,394 0	88.90	89.50	8,485.4	133.4	3,044 7	3,046.8	1.36	0.48	1.27
11,458 0	90.40	89 20	8,485.8	134.1	3,108.7	3,110.8	2.39	2.34	-0 47
11,522.0	91 20	89 70	8,484.9	134.7	3,172.7	3,174.8	1.47	1.25	0.78
11,585.0	90.70	90.60	8,483.9	134 6	3,235.7	3,237 7	1 63	-0.79	1.43
11,648 0	90.70	90.90	8,483.1	133.7	3,298.7	3,300 7	0 48	0.00	0.48
11,712.0	90.90	91.10	8,482.2	132.6	3,362.7	3,364.7	0.44	0.31	0 31
11,775 0	91.30	90.20	8,481.0	131 9	3,425.6	3,427 6	1.56	0.63	-1.43
11,839 0	90.50	90.90	8,480.0	131.3	3,489.6	3,491 6	1.66	-1.25	1.09
11,902.0	90 70	90 80	8,479.3	130 4	3,552.6	3,554.5	0.35	0.32	-0 16
11,965 0	89 80	90.70	8,479.0	129.5	3,615 6	3,617.5	1.44	-1 43	-0.16
12,029.0	89 40	90.60	8,479.5	128 8	3,679.6	3,681 5	0.64	-0.63	-0 16
12,092.0	89.80	90 10	8,479.9	128.4	3,742.6	3,744.4	1 02	0 63	-0.79
12,155 0	88.90	91.30	8,480 6	127.6	3,805.6	3,807 4	2.38	-1.43	1.90
12,219 0	88.30	90.90	8,482 2	126.4	3,869.6	3,871.3	1.13	-0 94	-0.63
12,283 0	89.40	91 20	8,483.5	125 2	3,933 5	3,935.3	1 78	1.72	0.47
12,345.0	89.40	91.00	8,484.1	124.1	3,995.5	3,997.2	0.32	0 00	-0.32
12,409.0	90 30	91.80	8,484.3	122.5	4,059 5	4,061.1	1.88	1.41	1.25
12,473 0	90.10	91.10	8,484 1	120 9	4,123.5	4,125.1	1 14	-0.31	-1.09
12,537 0	91.10	91.10	8,483.4	119.6	4,187.5	4,189.0	1 56	1.56	0 00
12,598 0	91.80	91.20	8,481.9	118.4	4,248.4	4,250.0	1.16	1.15	0.16
12,662.0	92.00	90 80	8,479.7	117.3	4,312.4	4,313.9	0 70	0.31	-0.63

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Tamano 10 Fed Com #8H
Project:	Lea County, NM	TVD Reference:	WELL @ 3722.0usft (Patterson 47/45)
Site:	Sec 10-18S-31E	MD Reference:	WELL @ 3722.0usft (Patterson 47/45)
Well:	Tamano 10 Fed Com #8H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User 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)
12,726.0	92.30	91.00	8,477.3	116.3	4,376.3	4,377.8	0.56	0.47	0.31
12,789.0	91.30	90.20	8,475.4	115.6	4,439.3	4,440.7	2.03	-1.59	-1.27
12,853.0	89.90	90.30	8,474.7	115.4	4,503.3	4,504.7	2.19	-2.19	0.16
12,917.0	89.80	90.20	8,474.9	115.1	4,567.3	4,568.7	0.22	-0.16	-0.16
12,980.0	90.00	89.70	8,475.0	115.1	4,630.3	4,631.7	0.85	0.32	-0.79
TD @ 13030' MD / 8475' TVD									
13,030.0	90.00	89.70	8,475.0	115.4	4,680.3	4,681.7	0.00	0.00	0.00

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,836.1	7,833.1	136.4	-74.9	TIE IN @ 7836' MD / 7833' TVD
8,371.0	8,330.4	162.4	67.6	CROSSED HARD LINE @ 8371' MD / 8330' TVD
13,030.0	8,475.0	115.4	4,680.3	TD @ 13030' MD / 8475' TVD

Checked By: _____ Approved By: _____ Date: _____

Company Name: Mewbourne Oil Co
 Tamano 10 Fed Com #8H
 Lea County, NM
 Rig: Patterson 47/45
 Created By: Timothy Wojcik
 Date: 07/01/2012
 Design #2 - Tied to Gyro

Tamano 10 Fed Com #8H
 Lea County, NM
 Q120010 & WT-12466



Mewbourne Oil Company

PROJECT DETAILS: Lea County, NM

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

WELL DETAILS Tamano 10 Fed Com #8H

Ground Level		3704 0	
+N-S	+E-W	North	East
0 0	0 0	640304 16	644034 58
		32° 45' 33.885 N	103° 51' 52.567 W

ANNOTATIONS

MD	Inc	Azi	TVD	+N-S	+E-W	Vsect	Departure	Annotation
7856 0	5 03	333 66	7833 0	136 4	-74 9	-72 2	0 0	Tie-In to VES Gyro
8006 9	3 03	333 66	8003 7	144 8	-79 0	-76 0	9 0	Build @ 12°/100'
8769 6	90 14	80 87	8492 2	160 3	399 8	463 0	490 4	End of Curve @ 8770' MD / 90 14° Inc / 8492' TVD
13058 6	90 14	80 87	8462 0	94 9	4658 3	4659 3	4779 4	PBHL @ 13058' MD / 8462' TVD

DESIGN TARGET DETAILS

Name	TVD	+N-S	+E-W	North	East	Latitude	Longitude
PBHL Tamano 10 Fed Com #8H D#2	8462 0	94 9	4658 3	640399 10	648782 90	32° 45' 34.616 N	103° 50' 57.661 W

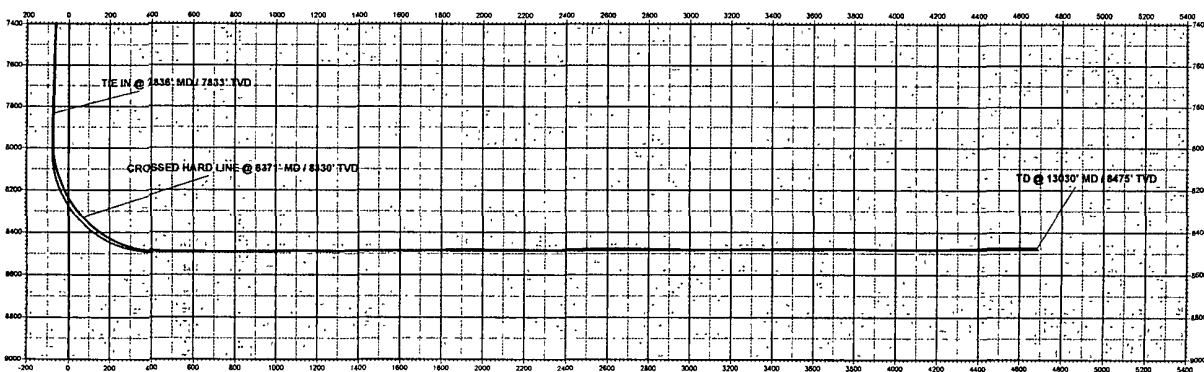
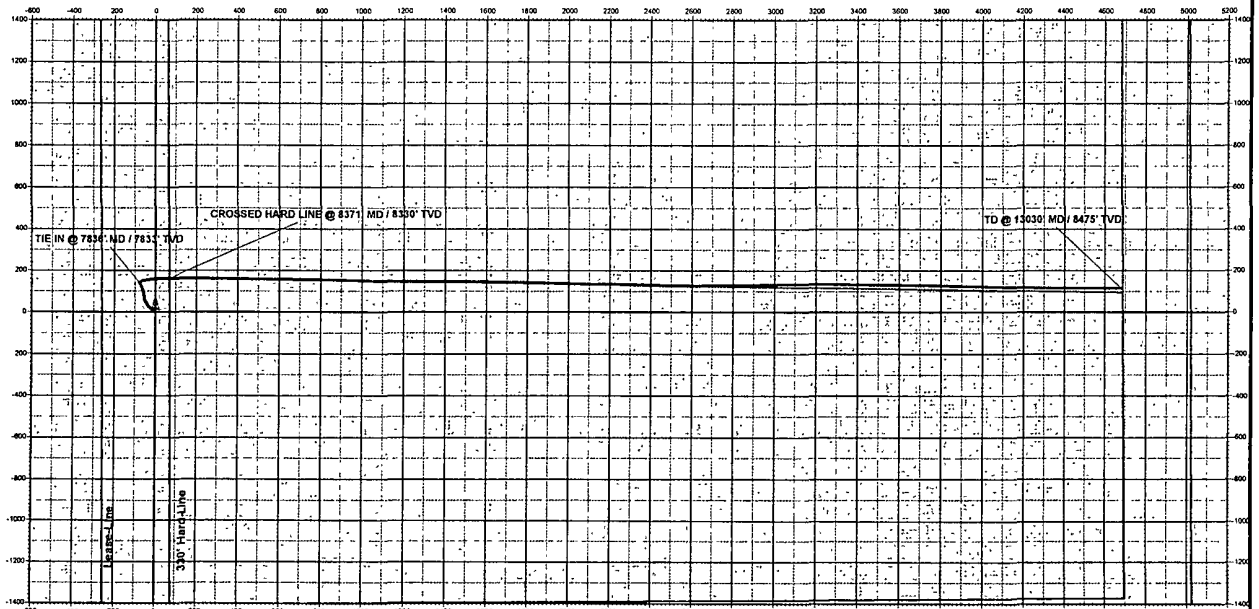
- plan hits target center



Azimuths to Grid North

Magnetic North: 7.38°

Magnetic Field
 Strength: 48801.2snT
 Dip Angle: 60.61°
 Date: 6/26/2012
 Model: IGRF2010



Vertical Section at 88.84° (200 usf/in)



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse			
Casing	7 000	26 00	P-110	6 276	6 151		0 03826	8,760 00	9,960	6,230			
Top Liner	4 500	13 50	P-110	3 920	3 795	LT&C	0 01492	4,450 56	12,410	10,680			
Botl Liner													
TVD	8,481.00		KOP		7,993 00		Open Hole	6 125	Casing Vol (bb)	326 0			
Carry Fluid Weight (ppg)	8 4		Propan Content (ppa)					Max Drill Out Size		0			
	Comm Number	Description				Depth	Length	OD	ID	Ball Seal ID	Shear Press	Max Rate (BPM)	Displ (BB)
Liner Top	1	JR Setting Sleeve_RH Profile				8519.44	4.00	5.750	4.000				

Operating Company Mewbourne
Well Name & Number TAMANO 10 FED COM #8H
Sales Ticket Number 4707060

Company Rep Levie Jackson
Field Santo Nino
BOT Service Rep John Davis
Date 7/14/2012
District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7 000	26 00	P-110	6 276	6 151		0 03826	8,760 00	9,960	6,230	
Top Liner	4 500	13 50	P-110	3 920	3 795	LT&C	0 01492	4,450 56	12,410	10,680	
Bott Liner											
TVD		8,481 00		KOP		7,993 00		Open Hole	6 125	Casing Vol (bbl)	326 0
Carry Fluid Weight (ppg)			8 4		Propan Content (ppa)				Max Drill Out Size		0
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)
10		Baker Open Hole Packer	11010 80	3.89	5 820	3 875		2154		
		2 Joints of 4-1/2-13 5 LTC Casing	11014 69	87 53	5 000	3 920				
	10	2.625 Frac Sleeve	11102 22	3.90	5.750		2 525	2286	159	326
		2 Joints of 4-1/2-13 5 LTC Casing	11106 12	87 75	5 000	3 920				
9		Baker Open Hole Packer	11193 87	3.89	5 820	3 875		2154		
		2 Joints of 4-1/2-13 5 LTC Casing	11197 76	87 59	5 000	3 920				
	9	2.500 Frac Sleeve	11285 35	3.90	5.750		2 400	2286	144	326
		3 Joints of 4-1/2-13 5 LTC Casing	11289 25	131 40	5 000	3 920				
8		Baker Open Hole Packer	11420 65	3.89	5 820	3 875		2154		
		2 Joints of 4-1/2-13 5 LTC Casing	11424 54	87 52	5 000	3 920				
	8	2.375 Frac Sleeve	11512 06	3.90	5.750		2 275	2286	129	326
		2 Joints of 4-1/2-13 5 LTC Casing	11515 96	87 57	5 000	3 920				
7		Baker Open Hole Packer	11603 53	3.89	5 820	3 875		2154		
		2 Joints of 4-1/2-13 5 LTC Casing	11607 42	87 56	5 000	3 920				
	7	2.250 Frac Sleeve	11694 98	3.90	5.750		2 150	2286	115	326
		3 Joints of 4-1/2-13 5 LTC Casing	11698 88	130 70	5 000	3 920				
6		Baker Open Hole Packer	11829 58	3.89	5 820	3 875		2154		
		2 Joints of 4-1/2-13 5 LTC Casing	11833 47	87 62	5 000	3 920				
	6	2.125 Frac Sleeve	11921 09	3.90	5.750		2 025	2286	102	326
		2 Joints of 4-1/2-13 5 LTC Casing	11924 99	87 53	5 000	3 920				
5		Baker Open Hole Packer	12012 52	3.89	5 820	3 875		2154		
		3 Joints of 4-1/2-13 5 LTC Casing	12016 41	131 35	5 000	3 920				
	5	2.000 Frac Sleeve	12147 76	3.90	5.750		1 900	2286	90	326
		2 Joints of 4-1/2-13 5 LTC Casing	12151 66	87 54	5 000	3 920				
4		Baker Open Hole Packer	12239 20	3.89	5 820	3 875		2154		
		2 Joints of 4-1/2-13 5 LTC Casing	12243 09	87 65	5 000	3 920				
	4	1.875 Frac Sleeve	12330 74	3.90	5.750		1 775	2286	79	326
		3 Joints of 4-1/2-13 5 LTC Casing	12334 64	131 29	5 000	3 920				
3		Baker Open Hole Packer	12465 93	3.89	5 820	3 875		2154		
		2 Joints of 4-1/2-13 5 LTC Casing	12469 82	87 52	5 000	3 920				
	3	1.750 Frac Sleeve	12557 34	3.90	5.750		1 650	2286	68	326
		2 Joints of 4-1/2-13 5 LTC Casing	12561 24	87 63	5 000	3 920				
2		Baker Open Hole Packer	12648 87	3.89	5 820	3 875		2154		
		2 Joints of 4-1/2-13 5 LTC Casing	12652 76	87 59	5 000	3 920				
	2	1.625 Frac Sleeve	12740 35	3.90	5.750		1 525	2286	58	326
		3 Joints of 4-1/2-13 5 LTC Casing	12744 25	131 34	5 000	3 920				
1		Baker Open Hole Packer	12875 59	3.89	5 820	3 875		2154		
		2 Joints of 4-1/2-13 5 LTC Casing	12879 48	87 52	5 000	3 920				
		Customers Pump Off Sub	12967 00	3.00	5.000	N/A				
		Bottom Depth Of Liner	12970 00							