OPERATOR MEWBOURNE OIL COMPANY 075-0088
WELL/LEASE MALAGA 30 FEDERAL COM 1H
COUNTY EDDY

STATE OF NEW MEXICO
DEVIATION REPORT 15-40287

419	0.59	8,762	2.91
756	0.96	9,006	3.14
1,106	1.51	9,165	1.02
1,360	3.22	9,452	2.28
1,487	2.88	9,723	1.48
1,614	3.67		
1,805	3.19		
1,900	3.28		
1,995	2.79		
2,090	3.34		
2,185	3.07		
2,281	2.99		
2,377	2.64		
2,536	3.08		
2,642	2.23		
2,813	1.52		
3,099	0.84		
3,543	0.24		
3,889	0.33		
4,466	0.42		
4,911	0.49		
5,389	1.17		
5,834	1.35		
6,184	0.65		
6,630	0.67		
7,074	1.06		
7,516	2.51		
7,678	1.95		
7,837	3.57		
7,965	4.96		
8,061	4.08		
8,189	2.34		
8,285	2.15		
8,379	2.40		
8,475	1.62		
8,635	0.70		

Rec'd NMOCD 10-16-12

Received
SEP 25 2012

BY: _____
Mewbourne Oil Company
Hobbs

STATE OF TEXAS

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on 9/14/12, by Kyle Hollingsworth on behalf of Patterson-UTI Drilling Company LLC.

Shawna Sims
Notary Public for Midland County, Texas
My Commission Expires:

SHAWNA K. SIMS
Notary Public, State of Texo
My Commission Expires
March 30, 2016

Company: Mewbourne Oil Company
Lease/Well: Malaga 30 Federal Com/1H
Location: 5 Miles SE from Malaga
Rig Name: Patterson 75
State/County: New Mexico/Eddy
Latitude: 32.00
GRID North is 0.13 Degrees East of True North
VS-Azi: 0.00 Degrees

RKB : 23 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS
Filename: ...30 fed com 1hb gyro survey.ut
Minimum Curvature Method
Report Date/Time: 8/22/2012 / 15:25

Vaughn Energy Services
Gardendale, Texas
432-563-5444
Surveyor: Chris Tallant
Malaga 30 Federal Com 1H / API 30-015-40287

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	0.27	198.46	100.00	-0.22	-0.07	-0.22	0.23	198.46	0.27
200.00	0.52	206.33	200.00	-0.85	-0.35	-0.85	0.92	202.32	0.25
300.00	0.77	181.83	299.99	-1.93	-0.57	-1.93	2.01	196.47	0.37
400.00	1.03	157.33	399.98	-3.43	-0.24	-3.43	3.44	184.08	0.46
500.00	1.35	156.08	499.96	-5.34	0.58	-5.34	5.37	173.81	0.32
600.00	1.66	154.83	599.92	-7.73	1.67	-7.73	7.90	167.78	0.32
700.00	1.65	159.02	699.88	-10.39	2.81	-10.39	10.76	164.88	0.12
800.00	1.64	163.21	799.84	-13.10	3.74	-13.10	13.62	164.08	0.12
900.00	1.80	162.89	899.79	-15.97	4.61	-15.97	16.62	163.90	0.16
1000.00	1.96	162.58	999.74	-19.10	5.58	-19.10	19.90	163.70	0.16
1100.00	2.27	163.11	1099.67	-22.63	6.67	-22.63	23.59	163.57	0.31
1200.00	2.57	163.64	1199.58	-26.67	7.88	-26.67	27.81	163.54	0.31
1300.00	2.63	164.26	1299.48	-31.03	9.13	-31.03	32.34	163.60	0.06
1400.00	2.68	164.88	1399.37	-35.49	10.36	-35.49	36.97	163.72	0.06
1500.00	2.95	168.31	1499.25	-40.26	11.49	-40.26	41.87	164.07	0.31
1600.00	3.21	171.74	1599.11	-45.55	12.42	-45.55	47.21	164.75	0.32
1700.00	3.35	175.48	1698.94	-51.24	13.05	-51.24	52.87	165.71	0.26
1800.00	3.49	179.22	1798.77	-57.20	13.32	-57.20	58.73	166.89	0.26
1900.00	3.30	176.34	1898.59	-63.12	13.55	-63.12	64.55	167.89	0.26
2000.00	3.11	173.46	1998.43	-68.68	14.04	-68.68	70.10	168.45	0.25

VES Survey Date: 08/19/2012

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	3.02	175.87	2098.29	-74.00	14.54	-74.00	75.41	168.89	0.16
2200.00	2.93	178.29	2198.16	-79.18	14.80	-79.18	80.55	169.41	0.15
2300.00	2.75	168.22	2298.03	-84.09	15.37	-84.09	85.48	169.64	0.53
2400.00	2.56	158.15	2397.93	-88.51	16.69	-88.51	90.07	169.32	0.50
2500.00	2.64	152.20	2497.82	-92.62	18.60	-92.62	94.47	168.65	0.28
2600.00	2.71	146.25	2597.72	-96.62	20.98	-96.62	98.88	167.75	0.29
2700.00	2.34	150.72	2697.62	-100.37	23.30	-100.37	103.04	166.93	0.42
2800.00	1.96	155.19	2797.55	-103.70	25.01	-103.70	106.68	166.44	0.41
2900.00	1.66	161.57	2897.50	-106.63	26.19	-106.63	109.80	166.20	0.37
3000.00	1.35	167.95	2997.46	-109.15	26.89	-109.15	112.42	166.16	0.35
3100.00	1.17	166.72	3097.44	-111.30	27.37	-111.30	114.62	166.18	0.18
3200.00	0.99	165.49	3197.42	-113.14	27.83	-113.14	116.51	166.18	0.18
3300.00	1.01	161.39	3297.41	-114.82	28.33	-114.82	118.26	166.14	0.07
3400.00	1.03	157.30	3397.39	-116.48	28.95	-116.48	120.03	166.04	0.07
3500.00	0.95	156.05	3497.38	-118.07	29.64	-118.07	121.74	165.91	0.08
3600.00	0.88	154.80	3597.36	-119.53	30.30	-119.53	123.31	165.77	0.08
3700.00	0.85	168.79	3697.35	-120.95	30.77	-120.95	124.80	165.72	0.21
3800.00	0.81	182.78	3797.34	-122.38	30.88	-122.38	126.22	165.84	0.20
3900.00	0.60	178.32	3897.33	-123.61	30.86	-123.61	127.41	165.98	0.22
4000.00	0.39	173.86	3997.33	-124.47	30.92	-124.47	128.25	166.05	0.21
4100.00	0.43	180.14	4097.33	-125.19	30.95	-125.19	128.96	166.11	0.06
4200.00	0.48	186.41	4197.32	-125.98	30.90	-125.98	129.71	166.22	0.07
4300.00	0.40	173.57	4297.32	-126.74	30.90	-126.74	130.45	166.30	0.12
4400.00	0.32	160.74	4397.32	-127.35	31.03	-127.35	131.08	166.31	0.11
4500.00	0.32	167.16	4497.32	-127.89	31.19	-127.89	131.64	166.30	0.04
4600.00	0.32	173.57	4597.32	-128.45	31.28	-128.45	132.20	166.31	0.04
4700.00	0.37	172.12	4697.31	-129.04	31.35	-129.04	132.80	166.34	0.04
4800.00	0.41	170.67	4797.31	-129.71	31.46	-129.71	133.47	166.37	0.04
4900.00	0.46	173.65	4897.31	-130.46	31.56	-130.46	134.22	166.40	0.06
5000.00	0.51	176.63	4997.31	-131.30	31.63	-131.30	135.06	166.46	0.06
5100.00	0.60	180.94	5097.30	-132.28	31.65	-132.28	136.01	166.55	0.10
5200.00	0.70	185.25	5197.29	-133.41	31.58	-133.41	137.10	166.68	0.10
5300.00	0.69	200.81	5297.29	-134.58	31.31	-134.58	138.17	166.90	0.19
5400.00	0.68	216.36	5397.28	-135.61	30.75	-135.61	139.05	167.22	0.18
5500.00	0.65	202.86	5497.27	-136.61	30.18	-136.61	139.90	167.54	0.16
5600.00	0.62	189.36	5597.27	-137.67	29.87	-137.67	140.87	167.76	0.15
5700.00	0.74	185.09	5697.26	-138.85	29.73	-138.85	142.00	167.92	0.13
5800.00	0.87	180.81	5797.25	-140.25	29.66	-140.25	143.36	168.06	0.13
5900.00	0.85	170.92	5897.24	-141.75	29.76	-141.75	144.84	168.14	0.15
6000.00	0.84	161.03	5997.23	-143.18	30.12	-143.18	146.31	168.12	0.15
6100.00	0.94	167.73	6097.22	-144.68	30.53	-144.68	147.86	168.08	0.14
6200.00	1.03	174.43	6197.20	-146.37	30.80	-146.37	149.58	168.12	0.15

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	0.93	173.79	6297.19	-148.07	30.97	-148.07	151.28	168.19	0.11
6400.00	0.82	173.15	6397.17	-149.59	31.14	-149.59	152.79	168.24	0.11
6500.00	0.53	220.97	6497.17	-150.64	30.93	-150.64	153.79	168.40	0.61
6600.00	0.23	268.80	6597.17	-151.00	30.42	-151.00	154.03	168.61	0.41
6700.00	0.23	273.59	6697.17	-150.99	30.01	-150.99	153.94	168.76	0.02
6800.00	0.23	278.37	6797.16	-150.95	29.61	-150.95	153.82	168.90	0.02
6900.00	0.74	270.23	6897.16	-150.91	28.77	-150.91	153.63	169.21	0.51
7000.00	1.24	262.09	6997.15	-151.06	27.05	-151.06	153.46	169.85	0.52
7100.00	1.42	258.98	7097.12	-151.45	24.76	-151.45	153.46	170.71	0.19
7200.00	1.60	255.88	7197.08	-152.02	22.20	-152.02	153.63	171.69	0.19
7300.00	1.82	256.63	7297.04	-152.73	19.30	-152.73	153.94	172.80	0.23
7400.00	2.05	257.39	7396.98	-153.49	16.00	-153.49	154.32	174.05	0.23
7500.00	2.05	265.39	7496.92	-154.02	12.47	-154.02	154.53	175.37	0.29
7600.00	2.05	273.39	7596.85	-154.06	8.90	-154.06	154.32	176.69	0.29
7700.00	2.68	265.42	7696.77	-154.14	4.79	-154.14	154.22	178.22	0.71
7800.00	3.31	257.46	7796.63	-154.96	-0.36	-154.96	154.96	180.13	0.76
7900.00	3.82	247.73	7896.44	-156.85	-6.26	-156.85	156.97	182.29	0.79
8000.00	4.32	238.00	7996.19	-160.10	-12.54	-160.10	160.59	184.48	0.85
8100.00	3.30	234.43	8095.97	-163.77	-18.07	-163.77	164.76	186.30	1.05
8200.00	2.28	230.87	8195.85	-166.70	-21.95	-166.70	168.14	187.50	1.04
8300.00	2.23	234.07	8295.77	-169.09	-25.07	-169.09	170.94	188.43	0.13
8400.00	2.19	237.27	8395.70	-171.27	-28.25	-171.27	173.58	189.37	0.13
8500.00	1.54	230.57	8495.64	-173.15	-30.89	-173.15	175.89	190.12	0.68
8600.00	0.89	223.86	8595.62	-174.57	-32.47	-174.57	177.56	190.54	0.66
8700.00	1.84	233.38	8695.59	-176.08	-34.29	-176.08	179.39	191.02	0.97
8800.00	2.78	242.91	8795.51	-178.15	-37.74	-178.15	182.10	191.96	1.02
8900.00	2.77	240.54	8895.39	-180.44	-42.01	-180.44	185.27	193.11	0.12
9000.00	2.75	238.17	8995.27	-182.89	-46.15	-182.89	188.63	194.16	0.12
9100.00	2.30	232.10	9095.18	-185.39	-49.77	-185.39	191.96	195.03	0.53
9200.00	1.84	226.02	9195.11	-187.74	-52.51	-187.74	194.94	195.63	0.51
9300.00	1.91	216.82	9295.06	-190.19	-54.66	-190.19	197.88	196.04	0.31
9400.00	1.98	207.61	9395.00	-193.06	-56.46	-193.06	201.14	196.30	0.32
9500.00	1.93	212.65	9494.94	-196.01	-58.18	-196.01	204.46	196.53	0.18
9600.00	1.89	217.68	9594.89	-198.73	-60.09	-198.73	207.62	196.82	0.17
9700.00	1.78	213.32	9694.84	-201.33	-61.95	-201.33	210.65	197.10	0.18
9800.00	1.67	208.95	9794.79	-203.90	-63.51	-203.90	213.56	197.30	0.17
9900.00	1.63	216.24	9894.75	-206.32	-65.05	-206.32	216.34	197.50	0.21
10000.00	1.59	223.52	9994.71	-208.48	-66.85	-208.48	218.93	197.78	0.21
10039.00	1.21	230.34	10033.70	-209.13	-67.54	-209.13	219.77	197.90	1.06

VES Survey Date: 08/19/2012

Mewbourne Oil Co

Eddy County, New Mexico
Sec 30, T24S, R29E
Malaga 30 Fed Com #1H

Wellbore #1

Survey: MWD

DDC Survey Report

12 September, 2012

DDC
Survey Report

Company:	Mewbourne Oil Co	**Local Co-ordinate Reference:**	Well Malaga 30 Fed Com #1H
Project:	Eddy County, New Mexico	**TVD Reference:**	WELL @ 2962.0usft (Patterson #75)
Site:	Sec 30, T24S, R29E	**MD Reference:**	WELL @ 2962.0usft (Patterson #75)
Well:	Malaga 30 Fed Com #1H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	EDM 5000.1 Single User Db

Project Eddy County, 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 Sec 30, T24S, R29E

Site Position:		**Northing:**	431,477.97 usft	**Latitude:**	32° 11' 7.610 N
From:	Map	**Easting:**	639,417.95 usft	**Longitude:**	103° 52' 57 659 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.24 °

Well Malaga 30 Fed Com #1H

Well Position	**+N/-S**	0.0 usft	**Northing:**	431,477 97 usft	**Latitude:**	32° 11' 7.610 N
	+E/-W	0.0 usft	**Easting:**	639,417 95 usft	**Longitude:**	103° 52' 57 659 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	2,942.0 usft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/6/2012	7 59	60.07	48,448

Design Wellbore #1

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	269.17

Survey Program **Date** 9/12/2012

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	10,039.0	GYRO (Wellbore #1)	Good_gyro	Good Gyro
10,114.0	14,670.0	MWD (Wellbore #1)	MWD default	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)
TIE IN @ 10039' MD / 10033' TVD									
10,039.0	1.21	230.34	10,033.4	-208.8	-72.8	75 8	0.00	0.00	0.00
10,114.0	1.10	240.60	10,108.4	-209.7	-74 0	77.0	0.31	-0.15	13 68
10,145.0	1.20	240.30	10,139.4	-210.0	-74.6	77.6	0.32	0.32	-0.97
10,177.0	2.50	267.10	10,171.4	-210 2	-75.5	78.6	4.77	4.06	83.75
10,209.0	6.70	274.40	10,203.3	-210.1	-78.1	81.1	13.23	13.13	22.81
10,241.0	11.00	272.80	10,234.9	-209 8	-83.0	86.0	13.46	13.44	-5.00
10,273.0	14.20	273.10	10,266.1	-209 4	-90.0	93.0	10.00	10.00	0.94
10,305.0	16.40	274 20	10,297.0	-208.9	-98 4	101.4	6.93	6.88	3.44
10,337.0	17.90	276.30	10,327.5	-208.0	-107.8	110.8	5.07	4.69	6.56

DDC
Survey Report

Company:	Mewbourne Oil Co	**Local Co-ordinate Reference:**	Well Malaga 30 Fed Com #1H
Project:	Eddy County, New Mexico	**TVD Reference:**	WELL @ 2962.0usft (Patterson #75)
Site:	Sec 30, T24S, R29E	**MD Reference:**	WELL @ 2962.0usft (Patterson #75)
Well:	Malaga 30 Fed Com #1H	**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)
10,368.0	19.30	278 00	10,356.9	-206.8	-117.6	120.6	4 84	4 52	5.48
10,400 0	21.50	275.90	10,386 9	-205 4	-128 7	131 6	7.24	6.88	-6 56
10,432.0	24.40	274 00	10,416 4	-204 4	-141.1	144 1	9.35	9.06	-5.94
10,464 0	28.00	272.40	10,445.1	-203.6	-155.2	158.2	11.46	11.25	-5.00
10,496.0	31.00	272.40	10,472.9	-202 9	-171 0	173 9	9.38	9.38	0.00
10,527.0	33.40	269.60	10,499.2	-202.7	-187.5	190.4	9.11	7.74	-9.03
10,559.0	37.10	269.80	10,525.3	-202.7	-205.9	208.9	11.57	11 56	0.63
10,591.0	40.70	271.20	10,550.2	-202.6	-226.0	228.9	11.58	11.25	4 38
10,623.0	44.10	272.60	10,573.8	-201.8	-247.6	250.5	11.03	10.63	4 38
10,655.0	48.00	272 80	10,596 0	-200 8	-270.6	273.5	12.20	12.19	0 63
10,687.0	52.20	272.30	10,616 5	-199 7	-295.1	298.0	13.18	13.13	-1.56
10,719.0	56.60	272 30	10,635.2	-198 6	-321.1	324.0	13.75	13 75	0.00
10,750 0	60.80	273.70	10,651.3	-197.2	-347 6	350 4	14.09	13 55	4.52
10,782.0	64.00	275.10	10,666 1	-195.0	-375.8	378.6	10.72	10.00	4.38
10,793.0	64.30	275.20	10,670 9	-194.2	-385 7	388.5	2.85	2.73	0.91
10,840.0	67.90	275.00	10,689 9	-190.3	-428.5	431.2	7.67	7.66	-0 43
10,872.0	68.70	273 80	10,701.8	-188.1	-458.1	460.8	4.29	2.50	-3.75
10,904.0	71.20	276.80	10,712 7	-185.3	-488.0	490.7	11.77	7.81	9 38
10,935.0	74.20	278.20	10,722 0	-181.4	-517.4	520.0	10.59	9.68	4.52
10,967.0	77.30	278.40	10,729 8	-176.9	-548.1	550.6	9.71	9.69	0.63
10,999.0	81.50	279 50	10,735.7	-172.0	-579.1	581.6	13.55	13.13	3.44
11,031.0	86.40	280.90	10,739.1	-166.4	-610.4	612.8	15.92	15.31	4.38
11,062.0	90.40	280 90	10,740.0	-160.5	-640.9	643 1	12.90	12.90	0.00
11,094.0	91.60	281.20	10,739.4	-154.4	-672.3	674.4	3.87	3.75	0.94
11,126.0	89.40	279.30	10,739.1	-148.7	-703.7	705.8	9.08	-6.88	-5 94
11,158.0	89.20	278.20	10,739.5	-143.9	-735.4	737.4	3.49	-0.63	-3.44
11,189.0	90.80	278.60	10,739.5	-139.3	-766.0	768.0	5.32	5.16	1.29
11,221.0	91.60	278 80	10,738.8	-134.5	-797.7	799.5	2.58	2.50	0.63
11,253.0	92.60	278.90	10,737.7	-129.6	-829.3	831.1	3.14	3.13	0.31
11,284.0	91.10	277.20	10,736 7	-125 2	-859.9	861.7	7.31	-4 84	-5 48
11,316.0	89.60	276.10	10,736 5	-121.5	-891.7	893.4	5 81	-4.69	-3.44
11,348 0	92.10	276 30	10,736.0	-118 1	-923.5	925.1	7 84	7.81	0.63
11,380.0	93.10	277 20	10,734.5	-114.3	-955.3	956.8	4.20	3.13	2.81
11,412.0	91.50	275.10	10,733.3	-110.9	-987 1	988.6	8.25	-5.00	-6.56
11,444.0	92.20	275.20	10,732 2	-108.0	-1,018.9	1,020.4	2.21	2.19	0.31
11,476.0	92 60	274.20	10,730.9	-105 4	-1,050.8	1,052.2	3.36	1.25	-3.13
11,508.0	90.30	272.30	10,730.1	-103 6	-1,082.7	1,084.1	9 32	-7.19	-5.94
11,539.0	91.60	272.60	10,729.6	-102 3	-1,113.7	1,115.0	4 30	4 19	0.97
11,571.0	91.00	271.20	10,728.8	-101 2	-1,145.7	1,147 0	4.76	-1.88	-4.38
11,603.0	90.30	269 60	10,728.5	-101.0	-1,177.6	1,179.0	5.46	-2.19	-5.00
11,635.0	90.80	271.20	10,728.2	-100 7	-1,209.6	1,211 0	5.24	1.56	5.00
11,666.0	91.60	273.30	10,727.5	-99.5	-1,240.6	1,241.9	7.25	2.58	6 77
11,698.0	93.40	274.70	10,726.1	-97 3	-1,272 5	1,273 8	7.12	5.63	4 38

Company:	Mewbourne Oil Co	**Local Co-ordinate Reference:**	Well Malaga 30 Fed Com #1H
Project:	Eddy County, New Mexico	**TVD Reference:**	WELL @ 2962.0usft (Patterson #75)
Site:	Sec 30, T24S, R29E	**MD Reference:**	WELL @ 2962.0usft (Patterson #75)
Well:	Malaga 30 Fed Com #1H	**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)
11,730.0	93 30	274.70	10,724 2	-94.7	-1,304.3	1,305.6	0.31	-0.31	0.00
11,762.0	92 50	273 80	10,722 6	-92 3	-1,336.2	1,337.4	3.76	-2.50	-2 81
11,793.0	91 70	273.70	10,721.5	-90 3	-1,367.1	1,368.3	2.60	-2.58	-0 32
11,825 0	92 20	273.30	10,720.4	-88.3	-1,399.0	1,400.2	2.00	1.56	-1.25
11,856.0	92 20	273.30	10,719.2	-86 6	-1,430.0	1,431.1	0.00	0 00	0 00
11,888.0	91 70	272 80	10,718.1	-84 9	-1,461.9	1,463.0	2.21	-1.56	-1.56
11,920.0	92 20	272.40	10,717.0	-83.4	-1,493.9	1,494.9	2.00	1 56	-1.25
11,952.0	94.30	273.50	10,715.2	-81.8	-1,525.8	1,526.8	7.41	6.56	3.44
11,983 0	95.80	274.00	10,712.5	-79.7	-1,556.6	1,557.6	5.10	4 84	1.61
12,015 0	96.20	274.20	10,709.1	-77.5	-1,588.3	1,589.3	1.40	1.25	0.63
12,047.0	96.60	273.70	10,705.6	-75.3	-1,620.0	1,621.0	1.99	1 25	-1 56
12,079.0	93.70	273.50	10,702 7	-73 3	-1,651 8	1,652.7	9 08	-9 06	-0.63
12,111.0	94 00	274.20	10,700.6	-71.1	-1,683.7	1,684.6	2.38	0 94	2.19
12,143 0	90.60	273.00	10,699.3	-69.1	-1,715.6	1,716.4	11 27	-10.63	-3 75
12,175 0	88 80	273.00	10,699.4	-67.4	-1,747 6	1,748 4	5 63	-5.63	0 00
12,206.0	90 90	275.10	10,699.5	-65 3	-1,778.5	1,779.2	9.58	6.77	6.77
12,238 0	94.00	275 90	10,698.2	-62 2	-1,810.3	1,811.0	10.00	9.69	2.50
12,270.0	94.20	276.10	10,695.9	-58.9	-1,842 0	1,842.7	0.88	0 63	0 63
12,302.0	94.20	276.10	10,693.5	-55.5	-1,873.8	1,874.4	0.00	0.00	0.00
12,333.0	92.70	276.10	10,691 7	-52.2	-1,904.5	1,905.1	4.84	-4.84	0.00
12,365.0	92.00	275.80	10,690.3	-48.9	-1,936.3	1,936.8	2.38	-2.19	-0.94
12,397.0	88.60	274 50	10,690.2	-46.0	-1,968.2	1,968.7	11.37	-10.63	-4 06
12,429.0	88.10	274.40	10,691.1	-43.5	-2,000.1	2,000.5	1.59	-1 56	-0.31
12,460.0	87.90	274.40	10,692.2	-41.1	-2,031.0	2,031.4	0.65	-0 65	0 00
12,492.0	87.80	274 50	10,693.4	-38.7	-2,062.9	2,063.2	0.44	-0.31	0.31
12,524.0	88.30	273 80	10,694 5	-36.3	-2,094.8	2,095.1	2.69	1.56	-2.19
12,556.0	88.70	274.20	10,695.3	-34.1	-2,126.7	2,126 9	1.77	1.25	1.25
12,587.0	91.50	275.20	10,695 3	-31.6	-2,157.6	2,157.8	9 59	9.03	3 23
12,619.0	91.40	274.50	10,694.4	-28.9	-2,189.4	2,189.6	2.21	-0.31	-2.19
12,651.0	91.10	273.50	10,693.7	-26.6	-2,221.4	2,221.5	3.26	-0.94	-3.13
12,683.0	92.10	272.60	10,692.9	-24.9	-2,253.3	2,253.4	4.20	3 13	-2.81
12,715 0	92.10	271.50	10,691.7	-23.8	-2,285.3	2,285.4	3 44	0 00	-3.44
12,747.0	92.40	271.50	10,690.4	-22.9	-2,317.2	2,317.3	0.94	0.94	0.00
12,779.0	94 50	272.40	10,688.5	-21.9	-2,349.1	2,349 2	7.14	6.56	2.81
12,810.0	93.70	271.50	10,686.3	-20.8	-2,380.0	2,380.1	3.88	-2.58	-2.90
12,842.0	92.20	270.70	10,684.6	-20.2	-2,412.0	2,412.0	5 31	-4.69	-2.50
12,874.0	93.50	271.20	10,683.0	-19.7	-2,444.0	2,444.0	4 35	4.06	1.56
12,906.0	92.90	270.30	10,681.3	-19.2	-2,475.9	2,475.9	3 38	-1 88	-2.81
12,938.0	91.40	269.40	10,680.1	-19.3	-2,507.9	2,507.9	5.47	-4.69	-2 81
12,970.0	90.90	268.20	10,679.4	-20 0	-2,539.9	2,539.9	4.06	-1.56	-3 75
13,002.0	90.80	268.20	10,678.9	-21.0	-2,571.8	2,571.9	0.31	-0.31	0.00
13,034.0	89.20	267.90	10,678.9	-22.1	-2,603.8	2,603.9	5 09	-5.00	-0 94
13,066 0	90.50	270 30	10,679 0	-22 6	-2,635.8	2,635.9	8.53	4 06	7 50

DDC
Survey Report

Company:	Mewbourne Oil Co	**Local Co-ordinate Reference:**	Well Malaga 30 Fed Com #1H
Project:	Eddy County, New Mexico	**TVD Reference:**	WELL @ 2962.0usft (Patterson #75)
Site:	Sec 30, T24S, R29E	**MD Reference:**	WELL @ 2962.0usft (Patterson #75)
Well:	Malaga 30 Fed Com #1H	**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)
13,097.0	91.90	271.90	10,678.4	-22.0	-2,666 8	2,666.8	6.86	4 52	5.16
13,129 0	91.10	273.00	10,677.5	-20.6	-2,698 8	2,698.8	4.25	-2 50	3.44
13,160 0	89.90	273.00	10,677.3	-19.0	-2,729 7	2,729.7	3.87	-3.87	0.00
13,192 0	88.30	272.10	10,677.8	-17.6	-2,761 7	2,761 6	5.74	-5.00	-2 81
13,223.0	85 80	271.40	10,679.4	-16.6	-2,792 6	2,792.6	8.37	-8.06	-2.26
13,255.0	85 30	270.50	10,681.8	-16.1	-2,824.5	2,824.5	3.21	-1.56	-2.81
13,287.0	85.30	270.10	10,684.5	-15.9	-2,856 4	2,856.3	1.25	0.00	-1.25
13,319 0	86.90	269.60	10,686.6	-16.0	-2,888 3	2,888.3	5.24	5.00	-1.56
13,351.0	87.80	268.70	10,688 1	-16.5	-2,920 3	2,920 2	3 98	2.81	-2.81
13,382.0	88 60	269.60	10,689 1	-17.0	-2,951.3	2,951.2	3.88	2.58	2.90
13,414 0	87 80	269.40	10,690.1	-17.2	-2,983.3	2,983.2	2 58	-2 50	-0 63
13,446 0	87.40	269 40	10,691.4	-17 6	-3,015.2	3,015 2	1.25	-1.25	0.00
13,478.0	88 70	268.60	10,692.5	-18.1	-3,047 2	3,047.1	4 77	4.06	-2.50
13,510 0	89.00	268.40	10,693.2	-19.0	-3,079.2	3,079.1	1.13	0 94	-0.63
13,541 0	90.00	268.00	10,693.4	-19.9	-3,110.2	3,110.1	3.47	3 23	-1.29
13,573.0	89.90	267.90	10,693.5	-21.1	-3,142.2	3,142.1	0.44	-0 31	-0.31
13,605.0	89 70	268.60	10,693.6	-22.1	-3,174.1	3,174 1	2.28	-0.63	2.19
13,637.0	90.70	268.70	10,693.5	-22.8	-3,206 1	3,206.1	3.14	3 13	0 31
13,669.0	90.80	269.30	10,693.1	-23.4	-3,238 1	3,238.1	1.90	0.31	1.88
13,701 0	91.00	269.80	10,692.6	-23 6	-3,270.1	3,270 1	1.68	0.63	1.56
13,732.0	91.30	269.60	10,691.9	-23.8	-3,301.1	3,301.1	1.16	0.97	-0.65
13,764.0	91.80	269.60	10,691.1	-24.0	-3,333.1	3,333 1	1.56	1.56	0.00
13,796 0	90.00	269.60	10,690.6	-24.2	-3,365.1	3,365 1	5.63	-5.63	0.00
13,828.0	89.20	270.10	10,690.8	-24.3	-3,397.1	3,397.1	2 95	-2.50	1.56
13,860.0	90.00	270.10	10,691.0	-24.3	-3,429.1	3,429.1	2.50	2.50	0.00
13,891.0	90.60	270.90	10,690.8	-24.0	-3,460.1	3,460.1	3.23	1.94	2.58
13,923.0	91.30	271.00	10,690.3	-23.5	-3,492.1	3,492.0	2 21	2.19	0.31
13,955.0	91.60	271 50	10,689.5	-22.8	-3,524 1	3,524.0	1.82	0.94	1.56
13,987.0	91.60	272.10	10,688.6	-21.8	-3,556.0	3,556.0	1.87	0.00	1.88
14,019.0	91.40	272.10	10,687.8	-20.6	-3,588.0	3,587 9	0.63	-0 63	0.00
14,051.0	91.60	273.00	10,686.9	-19.2	-3,620.0	3,619.9	2.88	0.63	2.81
14,082.0	91.70	273.00	10,686.0	-17 6	-3,650.9	3,650.8	0.32	0.32	0.00
14,114.0	91.20	273.80	10,685.2	-15.7	-3,682.8	3,682.7	2.95	-1.56	2.50
14,145.0	91.60	274.20	10,684.5	-13.5	-3,713 7	3,713.6	1.82	1.29	1.29
14,177.0	90.30	273.80	10,683.9	-11.3	-3,745.7	3,745 4	4.25	-4.06	-1.25
14,209 0	89.20	273.00	10,684 1	-9 4	-3,777 6	3,777.3	4.25	-3.44	-2.50
14,241.0	88.50	272.80	10,684.7	-7.7	-3,809.6	3,809.3	2.27	-2.19	-0.63
14,273.0	88.40	272.40	10,685.6	-6.3	-3,841.5	3,841.2	1.29	-0.31	-1.25
14,305.0	88.50	272.40	10,686.5	-5.0	-3,873 5	3,873.1	0.31	0.31	0.00
14,337 0	90.30	273.70	10,686.8	-3.3	-3,905.4	3,905 1	6.94	5 63	4.06
14,368.0	91.10	274 20	10,686.4	-1 1	-3,936.3	3,936.0	3 04	2.58	1.61
14,400 0	91.50	274.20	10,685 7	1 2	-3,968.3	3,967 8	1.25	1.25	0.00
14,432.0	91 40	272.80	10,684.9	3.2	-4,000.2	3,999 7	4.38	-0.31	-4.38
14,464 0	90.80	271.90	10,684.3	4.5	-4,032.1	4,031 7	3 38	-1 88	-2.81

DDC
Survey Report

Company:	Mewbourne Oil Co	**Local Co-ordinate Reference:**	Well Malaga 30 Fed Com #1H
Project:	Eddy County, New Mexico	**TVD Reference:**	WELL @ 2962.0usft (Patterson #75)
Site:	Sec 30, T24S, R29E	**MD Reference:**	WELL @ 2962.0usft (Patterson #75)
Well:	Malaga 30 Fed Com #1H	**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)
14,496.0	90.00	271 20	10,684.0	5 4	-4,064 1	4,063 6	3.32	-2.50	-2.19
14,528.0	90.00	270 90	10,684.0	5 9	-4,096.1	4,095.6	0 94	0 00	-0.94
14,560.0	90.10	271 70	10,684.0	6 7	-4,128 1	4,127.6	2 52	0 31	2.50
14,592.0	90.10	272 10	10,684 0	7.7	-4,160.1	4,159 6	1.25	0 00	1.25
14,620 0	90.50	271 90	10,683.8	8 7	-4,188.1	4,187.5	1 60	1 43	-0.71
TD @ 14670' MD / 10683' TVD									
14,670.0	90.50	271.90	10,683 4	10.4	-4,238.1	4,237 5	0.00	0 00	0.00

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
10,039.0	10,033.4	-208.8	-72 8	TIE IN @ 10039' MD / 10033' TVD
14,670.0	10,683.4	10.4	-4,238.1	TD @ 14670' MD / 10683' TVD

Checked By: _____ Approved By: _____ Date: _____

Mewbourne Oil Company

Malaga 30 Fed Com #1H
Eddy County, New Mexico
Q120465 & WT-12587
Design #2

RDC
The DIRECTIONAL DRILLING COMPANY

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
10039.0	1 21	230 34	10033.4	-208.8	-72.8	76 8	282.6	TIE IN @ 10039' MD / 10033' TVD
14670 0	90 60	271 90	10683.4	10.4	-4238 1	4237 5	4469.4	TD @ 14670' MD / 10683' TVD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL Malaga 30 Fed Com #1H - plan hits target center	10637.0	-61.7	-4259.6	431416.30	635158.34	32° 11' 7.173 N	103° 53' 47.227 W

Company Name: Mewbourne Oil Co
Malaga 30 Fed Com #1H
Eddy County, New Mexico
Rig: Patterson #75
Created By: DINA CHANCE
Date: 9/13/2012

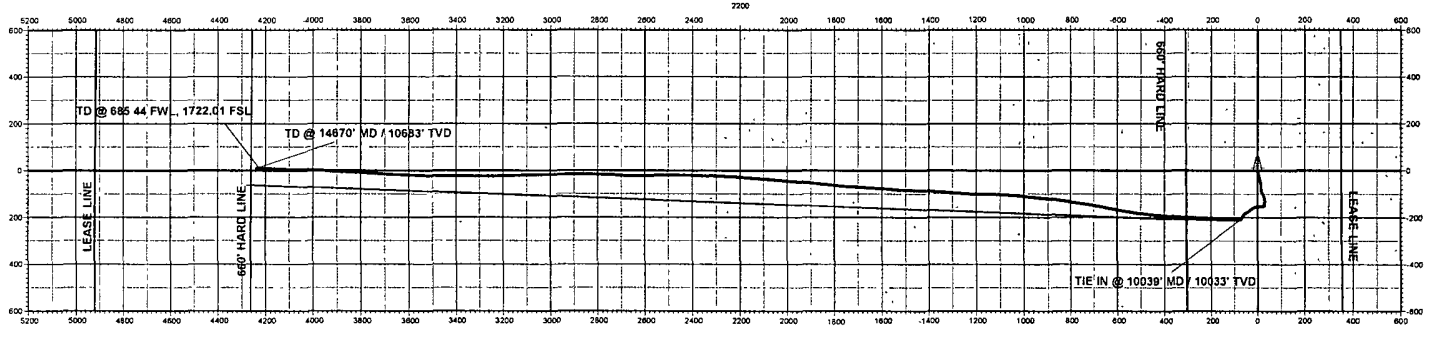
PROJECT DETAILS. Eddy County, New Mexico

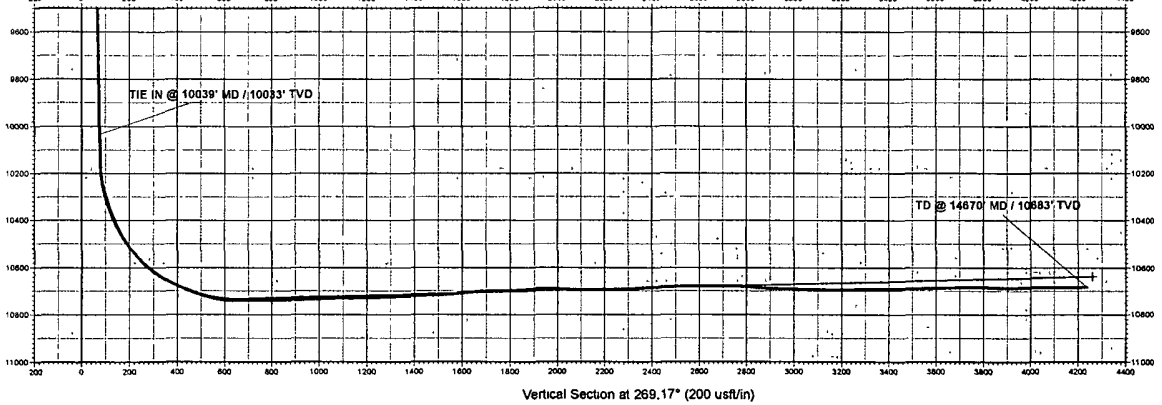
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone. New Mexico East 3001
System Datum: Mean Sea Level

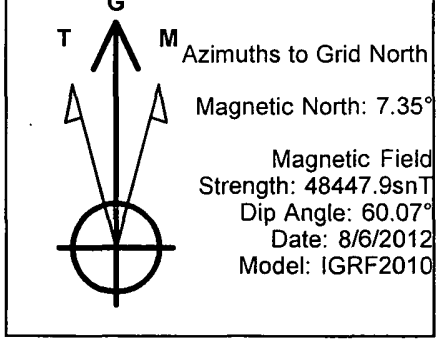
WELL DETAILS. Malaga 30 Fed Com #1H

Ground Level: 2942 0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	431477.97	639417.85	32° 11' 7.610 N	103° 52' 67.659 W





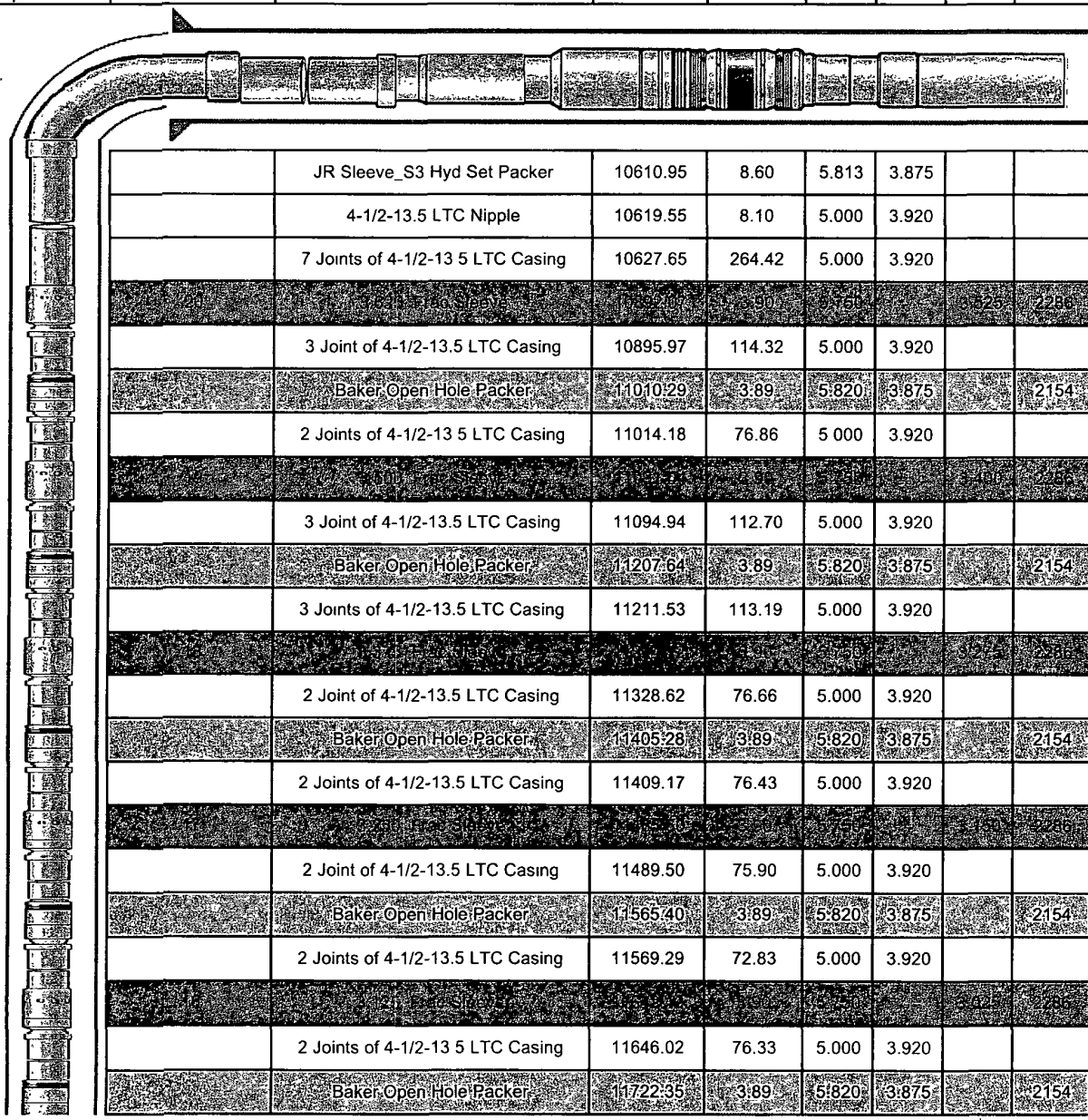


Operating Company	Mewbourne	**Company Rep**	Wesly Noseff		
Well Name & Number	Malaga 30 Fed Com # 1H	**Field**			
Sales Ticket Number	4849535	**BOT Service Rep**	John Davis		
Date	9/9/2012	**District Location**	Odessa, Texas, USA		

	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	P-110	6.276	6.151		0.03826	10,845.00	9,960	6,230
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	3,989.05	12,410	10,680
Bott Liner										

TVD	10,684.00	KOP	10,121.00	Open Hole	6.125	Casing Vol. (bbl)	406.0
Carry Fluid Weight (ppg)	13.1	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		JR Setting Sleeve_RH Profile	10610.95							



Zone Length										
	JR Sleeve_S3 Hyd Set Packer	10610.95	8.60	5.813	3.875				
	4-1/2-13.5 LTC Nipple	10619.55	8.10	5.000	3.920				
	7 Joints of 4-1/2-13 5 LTC Casing	10627.65	264.42	5.000	3.920				
20	4.640" Frac Sleeve	10892.07	3.90	5.750		3.625	2286	248	406
	3 Joint of 4-1/2-13.5 LTC Casing	10895.97	114.32	5.000	3.920				
	Baker Open Hole Packer	11010.29	3.89	5.820	3.875		2154		
	2 Joints of 4-1/2-13 5 LTC Casing	11014.18	76.86	5 000	3.920				
19	4.640" Frac Sleeve	11091.04	3.90	5.750		3.625	2286	231	406
	3 Joint of 4-1/2-13.5 LTC Casing	11094.94	112.70	5.000	3.920				
	Baker Open Hole Packer	11207.64	3.89	5.820	3.875		2154		
	3 Joints of 4-1/2-13.5 LTC Casing	11211.53	113.19	5.000	3.920				
18	4.640" Frac Sleeve	11324.72	3.90	5.750		3.625	2286	214	406
	2 Joint of 4-1/2-13.5 LTC Casing	11328.62	76.66	5.000	3.920				
	Baker Open Hole Packer	11405.28	3.89	5.820	3.875		2154		
	2 Joints of 4-1/2-13.5 LTC Casing	11409.17	76.43	5.000	3.920				
17	4.640" Frac Sleeve	11485.60	3.90	5.750		3.625	2286	198	406
	2 Joint of 4-1/2-13.5 LTC Casing	11489.50	75.90	5.000	3.920				
	Baker Open Hole Packer	11565.40	3.89	5.820	3.875		2154		
	2 Joints of 4-1/2-13.5 LTC Casing	11569.29	72.83	5.000	3.920				
16	4.640" Frac Sleeve	11642.12	3.90	5.750		3.625	2286	183	406
	2 Joints of 4-1/2-13 5 LTC Casing	11646.02	76.33	5.000	3.920				
	Baker Open Hole Packer	11722.35	3.89	5.820	3.875		2154		

Operating Company	Mewbourne	**Company Rep**	Wesly Noseff		
Well Name & Number	Malaga 30 Fed Com # 1H	**Field**			
Sales Ticket Number	4849535	**BOT Service Rep**	John Davis		
Date	9/9/2012	**District Location**	Odessa, Texas, USA		

BAKER HUGHES

	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	P-110	6.276	6.151		0.03826	10,845.00	9,960	6,230
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	3,989 05	12,410	10,680
Bott Liner										

TVD	10,684.00	KOP	10,121.00	Open Hole	6.125	Casing Vol. (bbl)	406.0
Carry Fluid Weight (ppg)	13.1	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)
			3 Joints of 4-1/2-13 5 LTC Casing	11726.24	112.95	5.000	3 920				
15			4.000" Frac Sleeve	11839.19	4.90	6.750		2.900	2286	168	406
			2 Joint of 4-1/2-13.5 LTC Casing	11843.09	76.40	5.000	3.920				
			Baker Open Hole Packer	11919.49	3.89	5.820	3.875		2154		
			2 Joints of 4-1/2-13.5 LTC Casing	11923.38	75 25	5.000	3 920				
14			4.000" Frac Sleeve	11998.63	4.90	6.750		2.775	2286	154	406
			2 Joints of 4-1/2-13 5 LTC Casing	12002 53	74.73	5.000	3.920				
			Baker Open Hole Packer	12077.26	3.89	5.820	3.875		2154		
			2 Joints of 4-1/2-13.5 LTC Casing	12081.15	75.89	5.000	3 920				
13			4.000" Frac Sleeve	12157.04	4.90	6.750		2.650	2286	140	406
			2 Joint of 4-1/2-13.5 LTC Casing	12160.94	75.30	5.000	3 920				
			Baker Open Hole Packer	12236.24	3.89	5.820	3.875		2154		
			2 Joints of 4-1/2-13.5 LTC Casing	12240.13	74.21	5 000	3.920				
12			4.000" Frac Sleeve	12314.34	3.90	6.750		2.525	2286	127	406
			3 Joints of 4-1/2-13.5 LTC Casing	12318.24	113 18	5 000	3 920				
			Baker Open Hole Packer	12431.42	3.89	5.820	3.875		2154		
			3 Joints of 4-1/2-13.5 LTC Casing	12435.31	114 25	5 000	3.920				
11			4.000" Frac Sleeve	12549.56	3.90	6.750		2.400	2286	115	406
			2 Joint of 4-1/2-13.5 LTC Casing	12553.46	77.12	5 000	3 920				
			Baker Open Hole Packer	12630.58	3.89	5.820	3.875		2154		
			2 Joints of 4-1/2-13.5 LTC Casing	12634.47	75.67	5 000	3.920				
10			4.000" Frac Sleeve	12710.14	3.90	6.750		2.275	2286	103	406
			3 Joints of 4-1/2-13.5 LTC Casing	12714.04	112 99	5 000	3.920				
			Baker Open Hole Packer	12827.03	3.89	5.820	3.875		2154		
			2 Joint of 4-1/2-13.5 LTC Casing	12830.92	75.66	5.000	3 920				
9			4.000" Frac Sleeve	12906.58	4.90	6.750		2.150	2286	92	406

Operating Company	Mewbourne	**Company Rep**	Wesly Noseff		
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Date	9/9/2012	**District Location**	Odessa, Texas, USA		

BAKER HUGHES

	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	P-110	6.276	6.151		0.03826	10,845.00	9,960	6,230
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	3,989.05	12,410	10,680
Bott Liner										

TVD	10,684.00	KOP	10,121.00	Open Hole	6.125	Casing Vol (bbl)	406.0
Carry Fluid Weight (ppg)	13.1	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)
		3 Joints of 4-1/2-13.5 LTC Casing	12910.48	113.46	5.000	3.920				
		Baker Open Hole Packer	13023.94	3.89	5.820	3.875		2154		
		2 Joint of 4-1/2-13.5 LTC Casing	13027.83	75.10	5.000	3.920				
8		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2026	2286	82	406
		3 Joints of 4-1/2-13.5 LTC Casing	13106.83	114.80	5.000	3.920				
		Baker Open Hole Packer	13221.63	3.89	5.820	3.875		2154		
		3 Joint of 4-1/2-13.5 LTC Casing	13225.52	114.17	5.000	3.920				
7		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1900	2286	72	406
		3 Joints of 4-1/2-13.5 LTC Casing	13343.59	111.19	5.000	3.920				
		Baker Open Hole Packer	13454.78	3.89	5.820	3.875		2154		
		3 Joint of 4-1/2-13.5 LTC Casing	13458.67	114.55	5.000	3.920				
6		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1772	2286	68	406
		3 Joints of 4-1/2-13.5 LTC Casing	13577.12	113.74	5.000	3.920				
		Baker Open Hole Packer	13690.86	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	13694.75	114.91	5.000	3.920				
5		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1650	2286	64	406
		2 Joint of 4-1/2-13.5 LTC Casing	13813.56	75.18	5.000	3.920				
		Baker Open Hole Packer	13888.74	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	13892.63	112.85	5.000	3.920				
4		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1525	2286	46	406
		3 Joints of 4-1/2-13.5 LTC Casing	14009.38	114.29	5.000	3.920				
		Baker Open Hole Packer	14123.67	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	14127.56	115.08	5.000	3.920				
3		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1400	2286	39	406
		2 Joint of 4-1/2-13.5 LTC Casing	14246.54	76.11	5.000	3.920				
		Baker Open Hole Packer	14322.65	3.89	5.820	3.875		2154		

Operating Company	Mewbourne	**Company Rep**	Wesly Noseff		
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BAKER HUGHES

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Bott Liner										

TVD	10,684.00	KOP	10,121.00	Open Hole	6.125	Casing Vol. (bbl)	406.0
Carry Fluid Weight (ppg)	13.1	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)
			2 Joints of 4-1/2-13 5 LTC Casing	14326.54	75.56	5.000	3 920				
2			2 Joints of 4-1/2-13.5 LTC Casing	14406 00	75.54	5.000	3.920				
			Baker Open Hole Packer	14481.54	3.89	5.820	3.875		2154		
			3 Joints of 4-1/2-13.5 LTC Casing	14485.43	111.57	5.000	3.920				
1				14600.00		5.000	3.920				