

OPERATOR Mewbourne Oil Company
WELL/LEASE Malaga 30 LI Fed Com 1H
COUNTY EDDY

444-0027

STATE OF NEW MEXICO
DEVIATION REPORT

30 015 42193

299	1
457	0.80
946	1.30
1,260	1.70
1,668	1.40
2,166	1.50
2,644	1.80

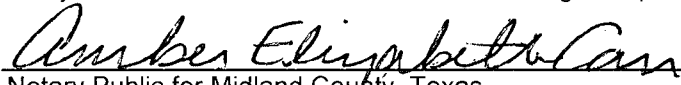
BY: 

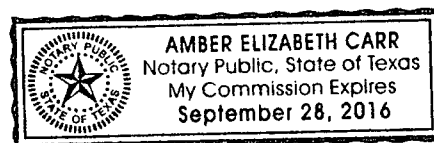
STATE OF TEXAS

COUNTY OF MIDLAND

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

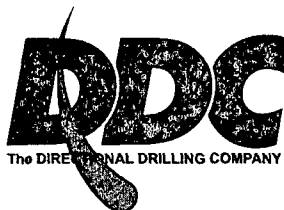
7/16/14, by


Notary Public for Midland County, Texas
My Commission Expires:



Company Name: Mewbourne Oil Co
 Malaga 30 LI Fed Com #1H
 Eddy County, New Mexico
 Rig: Patterson #444
 Created By: Sam Hays
 Date: 6/18/2014

Mewbourne Oil Company



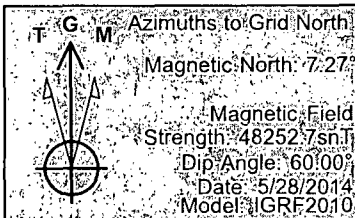
Malaga 30 LI Fed Com #1H
 Eddy County, New Mexico
Q140556 & WT-140514
 Design #2 - Tied to Gyro

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 LI Fed Com #1H

Ground Level: 2917.0
 +N/-S +E/-W Northing Easting Latitude Longitude
 0.0 0.0 431797.79 593658.30 32° 11' 12.361 N 104° 1' 30.124 W



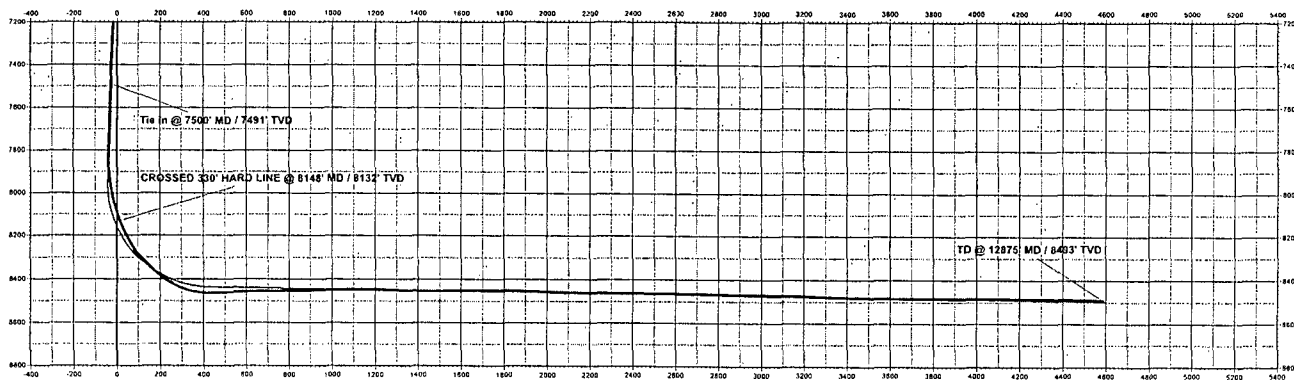
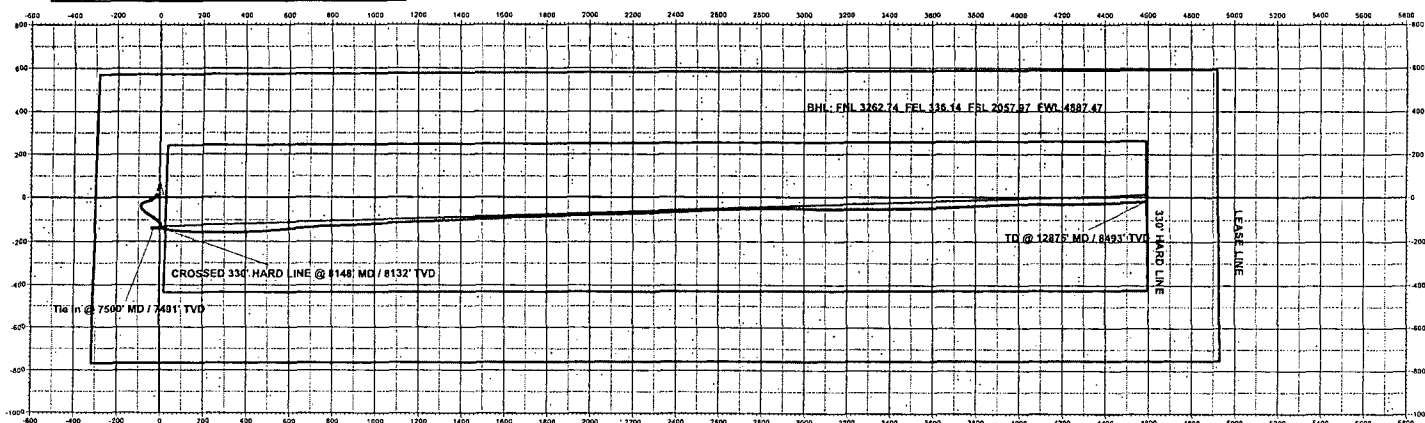
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL Malaga 30 LI FED COM #1H D#2	8497.0	13.1	4592.7	431810.85	598250.99	32° 11' 12.359 N	104° 0' 56.680 W

- plan hits target center

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Vsect	Departure	Annotation
7500.1	1.77	277.81	7490.6	-134.9	-27.9	-28.3	277.0	Tie in @ 7500' MD / 7491' TVD
8148.3	21.17	97.96	8132.0	-141.3	15.0	14.6	342.7	CROSSED 330' HARD LINE @ 8148' MD / 8132' TVD
12875.0	88.40	87.30	8492.8	-19.0	4586.8	4586.7	4318.7	TD @ 12875' MD / 8493' TVD



Vertical Section at 89.84° (200 usft/in)

NM OIL CONSERVATION
ARTESIA DISTRICT

AUG 12 2014

RECEIVED

Mewbourne Oil Co

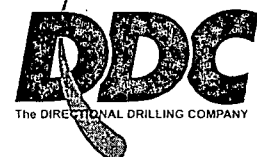
Eddy County, New Mexico
Sec 30, T24S, R29E
Malaga 30 LI Fed Com #1H

Wellbore #1

Design: Wellbore #1

DDC Survey Report

18 June, 2014



DDC
Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Malaga 30 LI Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 2937.0usft (Patterson #444)
Site:	Sec 30, T24S, R29E	MD Reference:	WELL @ 2937.0usft (Patterson #444)
Well:	Malaga 30 LI 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
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Site Position:	Map	Northing:	431,477.97 usft	Latitude:	32° 11' 7.610 N
From:		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 LI Fed Com #1H						
Well Position	+N/-S	0.0 usft	Northing:	431,797.79 usft	Latitude:	32° 11' 12.361 N
	+E/-W	0.0 usft	Easting:	593,658.30 usft	Longitude:	104° 1' 50.124 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	2,917.0 usft

Wellbore:	Wellbore #1
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/28/2014	7.43	60.00	48,253

Design:	Wellbore #1
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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	89.84

Survey Program	Date	From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
	6/18/2014	100.0	7,500.0	Gyro Survey (Wellbore #1)	Good_gyro	Good Gyro
		7,600.0	12,875.0	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)
	0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	100.0	0.25	333.19	100.0	0.2	-0.1	-0.1	0.25	0.25	0.00
	200.0	0.73	341.88	200.0	1.0	-0.4	-0.4	0.48	0.48	8.69
	300.0	0.48	311.55	300.0	1.9	-0.9	-0.9	0.40	-0.25	-30.33
	400.0	0.51	317.15	400.0	2.5	-1.5	-1.5	0.06	0.03	5.60
	500.0	0.29	320.91	500.0	3.0	-2.0	-2.0	0.22	-0.22	3.76
	600.0	0.84	301.97	600.0	3.6	-2.8	-2.8	0.57	0.55	-18.94
	700.0	0.89	291.47	700.0	4.3	-4.1	-4.1	0.17	0.05	-10.50
	800.0	1.88	279.86	799.9	4.8	-6.4	-6.4	1.02	0.99	-11.61
	900.0	3.24	263.51	899.8	4.8	-10.9	-10.9	1.53	1.36	-16.35

DDC
Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Malaga 30 LI Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 2937.0usft (Patterson #444)
Site:	Sec 30, T24S, R29E	MD Reference:	WELL @ 2937.0usft (Patterson #444)
Well:	Malaga 30 LI Fed Com #1H	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)
1,000.0	5.11	247.92	999.6	2.8	-17.8	-17.8	2.17	1.87	-15.59
1,100.0	5.25	229.43	1,099.2	-1.9	-25.4	-25.4	1.67	0.14	-18.49
1,200.0	5.54	235.15	1,198.7	-7.6	-32.8	-32.9	0.61	0.29	5.72
1,300.0	5.52	244.86	1,298.3	-12.4	-41.2	-41.2	0.93	-0.02	9.71
1,400.0	5.76	251.27	1,397.8	-16.0	-50.3	-50.3	0.67	0.24	6.41
1,500.0	5.22	258.43	1,497.3	-18.6	-59.5	-59.5	0.87	-0.54	7.16
1,600.0	3.76	253.91	1,597.0	-20.4	-67.1	-67.1	1.50	-1.46	-4.52
1,700.0	3.13	249.22	1,696.8	-22.3	-72.8	-72.9	0.69	-0.63	-4.69
1,800.0	3.63	241.59	1,796.7	-24.7	-78.1	-78.2	0.67	0.50	-7.63
1,900.0	2.92	231.93	1,896.5	-27.8	-82.9	-83.0	0.90	-0.71	-9.66
2,000.0	2.43	216.12	1,996.4	-31.1	-86.2	-86.3	0.88	-0.49	-15.81
2,100.0	5.31	178.38	2,096.2	-37.4	-87.3	-87.4	3.70	2.88	-37.74
2,200.0	3.89	161.85	2,195.8	-45.3	-86.1	-86.2	1.93	-1.42	-16.53
2,300.0	5.92	142.45	2,295.5	-52.6	-81.9	-82.0	2.59	2.03	-19.40
2,400.0	9.10	127.74	2,394.6	-61.5	-72.5	-72.7	3.69	3.18	-14.71
2,500.0	9.21	122.74	2,493.3	-70.7	-59.5	-59.7	0.80	0.11	-5.00
2,600.0	6.02	121.47	2,592.4	-77.8	-48.3	-48.5	3.19	-3.19	-1.27
2,700.0	3.65	126.03	2,692.1	-82.4	-41.3	-41.5	2.40	-2.37	4.56
2,800.0	3.29	125.93	2,791.9	-85.9	-36.4	-36.6	0.36	-0.36	-0.10
2,900.0	2.97	119.14	2,891.8	-88.9	-31.8	-32.0	0.49	-0.32	-6.79
3,000.0	2.55	122.98	2,991.6	-91.4	-27.7	-27.9	0.46	-0.42	3.84
3,100.0	2.47	130.62	3,091.5	-94.0	-24.1	-24.4	0.34	-0.08	7.64
3,200.0	2.38	126.84	3,191.5	-96.6	-20.9	-21.1	0.18	-0.09	-3.78
3,300.0	2.01	133.69	3,291.4	-99.1	-17.9	-18.2	0.45	-0.37	6.85
3,400.0	2.11	122.05	3,391.3	-101.3	-15.1	-15.4	0.43	0.10	-11.64
3,500.0	1.66	127.33	3,491.3	-103.1	-12.4	-12.7	0.48	-0.45	5.28
3,600.0	1.31	131.37	3,591.2	-104.8	-10.4	-10.7	0.37	-0.35	4.04
3,700.0	1.22	138.39	3,691.2	-106.3	-8.8	-9.1	0.18	-0.09	7.02
3,800.0	1.14	131.08	3,791.2	-107.8	-7.4	-7.7	0.17	-0.08	-7.31
3,900.0	0.99	134.54	3,891.2	-109.0	-6.0	-6.3	0.16	-0.15	3.46
4,000.0	0.74	131.30	3,991.2	-110.0	-4.9	-5.2	0.25	-0.25	-3.24
4,100.0	1.00	134.95	4,091.1	-111.1	-3.8	-4.1	0.27	0.26	3.65
4,200.0	0.94	128.80	4,191.1	-112.2	-2.5	-2.8	0.12	-0.06	-6.15
4,300.0	0.65	123.33	4,291.1	-113.0	-1.4	-1.7	0.30	-0.29	-5.47
4,400.0	0.48	117.12	4,391.1	-113.5	-0.6	-0.9	0.18	-0.17	-6.21
4,500.0	0.85	120.24	4,491.1	-114.1	0.4	0.1	0.37	0.37	3.12
4,600.0	0.80	124.79	4,591.1	-114.9	1.7	1.3	0.08	-0.05	4.55
4,700.0	0.91	125.38	4,691.1	-115.7	2.9	2.6	0.11	0.11	0.59
4,800.0	0.63	125.35	4,791.1	-116.5	4.0	3.7	0.28	-0.28	-0.03
4,900.0	0.58	129.38	4,891.1	-117.2	4.8	4.5	0.07	-0.05	4.03
5,000.0	0.77	163.06	4,991.1	-118.1	5.4	5.1	0.43	0.19	33.68
5,100.0	0.66	191.48	5,091.1	-119.3	5.5	5.2	0.37	-0.11	28.42
5,200.0	0.66	210.68	5,191.0	-120.4	5.1	4.7	0.22	0.00	19.20

DDC
Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Malaga 30 LI Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 2937.0usft (Patterson #444)
Site:	Sec 30, T24S, R29E	MD Reference:	WELL @ 2937.0usft (Patterson #444)
Well:	Malaga 30 LI Fed Com #1H	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)
5,300.0	0.42	205.19	5,291.0	-121.2	4.6	4.3	0.25	-0.24	-5.49
5,400.0	0.77	208.72	5,391.0	-122.1	4.2	3.8	0.35	0.35	3.53
5,500.0	0.64	211.76	5,491.0	-123.2	3.5	3.2	0.14	-0.13	3.04
5,600.0	0.63	193.81	5,591.0	-124.2	3.1	2.8	0.20	-0.01	-17.95
5,700.0	0.71	193.32	5,691.0	-125.3	2.8	2.5	0.08	0.08	-0.49
5,800.0	0.55	191.37	5,791.0	-126.4	2.6	2.2	0.16	-0.16	-1.95
5,900.0	0.80	198.66	5,891.0	-127.6	2.3	1.9	0.26	0.25	7.29
6,000.0	0.87	192.25	5,991.0	-129.0	1.9	1.5	0.12	0.07	-6.41
6,100.0	1.14	205.49	6,091.0	-130.6	1.3	0.9	0.35	0.27	13.24
6,200.0	1.17	203.06	6,191.0	-132.4	0.5	0.1	0.06	0.03	-2.43
6,300.0	0.69	200.86	6,290.9	-133.9	-0.1	-0.5	0.48	-0.48	-2.20
6,400.0	0.96	248.99	6,390.9	-134.8	-1.1	-1.5	0.72	0.27	48.13
6,500.0	1.32	248.85	6,490.9	-135.5	-3.0	-3.4	0.36	0.36	-0.14
6,600.0	0.96	250.10	6,590.9	-136.2	-4.9	-5.2	0.36	-0.36	1.25
6,700.0	1.52	258.63	6,690.9	-136.8	-6.9	-7.3	0.59	0.56	8.53
6,800.0	1.15	259.40	6,790.8	-137.2	-9.2	-9.6	0.37	-0.37	0.77
6,900.0	0.11	266.39	6,890.8	-137.4	-10.3	-10.7	1.04	-1.04	6.99
7,000.0	0.86	290.45	6,990.8	-137.1	-11.1	-11.5	0.76	0.75	24.06
7,100.0	1.95	287.23	7,090.8	-136.4	-13.4	-13.8	1.09	1.09	-3.22
7,200.0	2.53	272.82	7,190.7	-135.8	-17.3	-17.6	0.80	0.58	-14.41
7,300.0	2.37	277.30	7,290.6	-135.4	-21.5	-21.9	0.25	-0.16	4.48
7,400.0	1.62	271.11	7,390.6	-135.1	-25.0	-25.4	0.78	-0.75	-6.19
7,500.0	1.77	277.81	7,490.5	-134.9	-27.9	-28.3	0.25	0.15	6.70
Tie in @ 7500' MD / 7491' TVD									
7,500.1	1.77	277.81	7,490.6	-134.9	-27.9	-28.3	0.00	0.00	0.00
7,600.0	1.80	272.50	7,590.5	-134.6	-31.0	-31.4	0.17	0.03	-5.32
7,700.0	1.20	234.70	7,690.4	-135.1	-33.5	-33.8	1.13	-0.60	-37.80
7,810.0	2.50	231.00	7,800.4	-137.3	-36.3	-36.6	1.19	1.18	-3.36
7,841.0	2.30	231.40	7,831.4	-138.1	-37.3	-37.7	0.65	-0.65	1.29
7,872.0	1.80	183.20	7,862.3	-139.0	-37.8	-38.2	5.60	-1.61	-155.48
7,904.0	3.90	117.80	7,894.3	-140.0	-36.8	-37.2	11.09	6.56	-204.38
7,935.0	6.40	101.70	7,925.2	-140.8	-34.2	-34.6	9.24	8.06	-51.94
7,967.0	7.70	94.60	7,956.9	-141.4	-30.3	-30.7	4.88	4.06	-22.19
7,999.0	10.20	90.60	7,988.5	-141.6	-25.4	-25.8	8.05	7.81	-12.50
8,030.0	13.30	84.80	8,018.9	-141.3	-19.1	-19.5	10.69	10.00	-18.71
8,061.0	14.90	83.00	8,049.0	-140.5	-11.6	-12.0	5.35	5.16	-5.81
8,093.0	17.10	88.70	8,079.7	-139.9	-2.8	-3.2	8.44	6.88	17.81
8,124.0	18.90	95.70	8,109.2	-140.3	6.8	6.4	9.07	5.81	22.58
CROSSED 330° HARD LINE @ 8148' MD / 8132' TVD									
8,148.3	21.17	97.96	8,132.0	-141.3	15.0	14.6	9.87	9.34	9.29
8,155.0	21.80	98.50	8,138.3	-141.6	17.5	17.1	9.87	9.41	8.10
8,187.0	24.80	101.00	8,167.7	-143.8	29.9	29.5	9.87	9.38	7.81
8,218.0	27.40	98.80	8,195.5	-146.1	43.4	43.0	8.95	8.39	-7.10
8,249.0	30.20	96.90	8,222.7	-148.1	58.2	57.8	9.50	9.03	-6.13

DDC
Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate/Reference:	Well Malaga 30 LI Fed Com #1H
Project:	Eddy County, New Mexico	TVD/Reference:	WELL @ 2937.0usft (Patterson #444)
Site:	Sec 30, T24S, R29E	MD/Reference:	WELL @ 2937.0usft (Patterson #444)
Well:	Malaga 30 LI Fed Com #1H	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)
8,281.0	33.80	95.00	8,249.8	-149.9	75.0	74.6	11.68	11.25	-5.94
8,313.0	37.10	94.80	8,275.9	-151.5	93.5	93.1	10.32	10.31	-0.63
8,344.0	39.90	94.30	8,300.1	-153.0	112.8	112.3	9.09	9.03	-1.61
8,375.0	43.30	93.90	8,323.3	-154.5	133.3	132.8	11.00	10.97	-1.29
8,407.0	46.40	92.20	8,346.0	-155.6	155.8	155.4	10.39	9.69	-5.31
8,438.0	49.30	92.20	8,366.8	-156.5	178.8	178.3	9.35	9.35	0.00
8,470.0	52.60	93.10	8,386.9	-157.7	203.6	203.2	10.54	10.31	2.81
8,501.0	56.70	92.20	8,404.9	-158.8	228.8	228.4	13.44	13.23	-2.90
8,533.0	61.60	90.40	8,421.3	-159.5	256.3	255.9	16.06	15.31	-5.63
8,564.0	66.70	89.90	8,434.8	-159.5	284.2	283.7	16.52	16.45	-1.61
8,596.0	71.80	89.70	8,446.1	-159.4	314.1	313.7	15.95	15.94	-0.63
8,627.0	76.70	89.00	8,454.5	-159.1	343.9	343.5	15.96	15.81	-2.26
8,658.0	81.40	87.90	8,460.4	-158.3	374.3	373.9	15.56	15.16	-3.55
8,684.0	85.80	87.60	8,463.3	-157.2	400.2	399.7	16.96	16.92	-1.15
8,743.0	92.90	87.60	8,464.0	-154.8	459.1	458.6	12.03	12.03	0.00
8,775.0	92.70	85.70	8,462.4	-152.9	491.0	490.5	5.96	-0.63	-5.94
8,807.0	93.00	85.10	8,460.8	-150.3	522.8	522.4	2.09	0.94	-1.88
8,838.0	93.20	85.00	8,459.2	-147.7	553.7	553.3	0.72	0.65	-0.32
8,902.0	92.20	84.10	8,456.1	-141.6	617.3	616.9	2.10	-1.56	-1.41
8,965.0	90.00	85.00	8,454.9	-135.6	680.0	679.6	3.77	-3.49	1.43
9,028.0	90.70	86.70	8,454.5	-131.1	742.8	742.5	2.92	1.11	2.70
9,091.0	91.10	87.90	8,453.6	-128.1	805.8	805.4	2.01	0.63	1.90
9,155.0	91.20	87.60	8,452.3	-125.6	869.7	869.3	0.49	0.16	-0.47
9,281.0	91.40	86.90	8,449.4	-119.5	995.5	995.2	0.58	0.16	-0.56
9,376.0	92.00	86.90	8,446.6	-114.4	1,090.3	1,090.0	0.63	0.63	0.00
9,471.0	88.00	87.80	8,446.6	-110.0	1,185.2	1,184.9	4.32	-4.21	0.95
9,566.0	88.00	87.30	8,449.9	-105.9	1,280.1	1,279.8	0.53	0.00	-0.53
9,660.0	88.00	87.30	8,453.2	-101.5	1,373.9	1,373.6	0.00	0.00	0.00
9,755.0	90.90	87.30	8,454.1	-97.0	1,468.8	1,468.5	3.05	3.05	0.00
9,850.0	91.20	87.30	8,452.4	-92.6	1,563.7	1,563.4	0.32	0.32	0.00
9,945.0	89.90	88.10	8,451.4	-88.8	1,658.6	1,658.3	1.61	-1.37	0.84
10,040.0	89.80	88.10	8,451.7	-85.6	1,753.5	1,753.3	0.11	-0.11	0.00
10,135.0	88.40	88.30	8,453.2	-82.6	1,848.5	1,848.2	1.49	-1.47	0.21
10,229.0	88.20	87.80	8,456.0	-79.4	1,942.4	1,942.1	0.57	-0.21	-0.53
10,324.0	88.90	88.80	8,458.4	-76.6	2,037.3	2,037.1	1.28	0.74	1.05
10,419.0	88.70	87.80	8,460.4	-73.8	2,132.2	2,132.0	1.07	-0.21	-1.05
10,514.0	89.30	88.30	8,462.0	-70.6	2,227.2	2,227.0	0.82	0.63	0.53
10,609.0	89.70	88.30	8,462.9	-67.7	2,322.1	2,321.9	0.42	0.42	0.00
10,704.0	89.60	88.10	8,463.4	-64.8	2,417.1	2,416.9	0.24	-0.11	-0.21
10,798.0	89.60	87.30	8,464.1	-61.0	2,511.0	2,510.8	0.85	0.00	-0.85
10,893.0	89.50	86.70	8,464.8	-56.0	2,605.9	2,605.7	0.64	-0.11	-0.63
10,989.0	89.20	89.20	8,465.9	-52.6	2,701.8	2,701.6	2.62	-0.31	2.60
11,082.0	88.80	89.50	8,467.6	-51.5	2,794.8	2,794.6	0.54	-0.43	0.32

DDC
Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Malaga 30 LI Fed Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 2937.0usft (Patterson #444)
Site:	Sec 30, T24S, R29E	MD Reference:	WELL @ 2937.0usft (Patterson #444)
Well:	Malaga 30 LI 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)	
11,177.0	89.10	89.70	8,469.3	-50.9	2,889.7	2,889.6	0.38	0.32	0.21	
11,272.0	90.00	91.10	8,470.0	-51.5	2,984.7	2,984.6	1.75	0.95	1.47	
11,367.0	88.10	90.40	8,471.6	-52.8	3,079.7	3,079.5	2.13	-2.00	-0.74	
11,462.0	87.80	90.10	8,475.0	-53.2	3,174.6	3,174.5	0.45	-0.32	-0.32	
11,557.0	88.10	89.70	8,478.4	-53.0	3,269.6	3,269.4	0.53	0.32	-0.42	
11,652.0	88.50	89.40	8,481.2	-52.3	3,364.5	3,364.4	0.53	0.42	-0.32	
11,747.0	89.40	89.20	8,483.0	-51.1	3,459.5	3,459.4	0.97	0.95	-0.21	
11,842.0	89.30	88.50	8,484.0	-49.2	3,554.5	3,554.3	0.74	-0.11	-0.74	
11,937.0	89.40	87.80	8,485.1	-46.1	3,649.4	3,649.3	0.74	0.11	-0.74	
12,032.0	90.00	87.80	8,485.6	-42.5	3,744.4	3,744.2	0.63	0.63	0.00	
12,127.0	89.90	87.10	8,485.7	-38.3	3,839.3	3,839.1	0.74	-0.11	-0.74	
12,221.0	90.00	86.60	8,485.8	-33.1	3,933.1	3,933.0	0.54	0.11	-0.53	
12,316.0	89.80	90.20	8,486.0	-30.4	4,028.1	4,028.0	3.80	-0.21	3.79	
12,411.0	90.00	89.90	8,486.1	-30.5	4,123.1	4,123.0	0.38	0.21	-0.32	
12,506.0	89.70	89.40	8,486.4	-30.0	4,218.1	4,218.0	0.61	-0.32	-0.53	
12,601.0	89.30	89.20	8,487.2	-28.8	4,313.1	4,313.0	0.47	-0.42	-0.21	
12,695.0	89.10	88.10	8,488.5	-26.6	4,407.0	4,406.9	1.19	-0.21	-1.17	
12,823.0	88.40	87.30	8,491.3	-21.4	4,534.9	4,534.8	0.83	-0.55	-0.63	
TD @ 12875' MD / 8493' TVD										
12,875.0	88.40	87.30	8,492.8	-19.0	4,586.8	4,586.7	0.00	0.00	0.00	

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
7,500.1	7,490.6	-134.9	-27.9	Tie In @ 7500' MD / 7491' TVD
8,148.3	8,132.0	-141.3	15.0	CROSSED 330' HARD LINE @ 8148' MD / 8132' TVD
12,875.0	8,492.8	-19.0	4,586.8	TD @ 12875' MD / 8493' TVD

Checked By: _____ Approved By: _____ Date: _____

Operating Company Mewbourne Oil Co.
Well Name & Number MALAGA 30 LFED COM 1H
Sales Ticket Number 0
0.17 6/17/2014

Company Rep REY CANTU
Field 0
BOT Service Rep MIKE MARTINEZ
District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse		
Casing	7.000	26.00	80000	6.276	6.151	0	0.03826	8,728.00	7,240	5,410		
Top Liner	4.500	13.50	55000	4.000	3.875	LTC / 8RD	0.01554	4,287.09	5,350	4,960		
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-		
TVD		8495.00		KOP		7859.00		Open Hole		6.125	Casing Vol. (bbl)	326.0
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 with 4-750 ALT seal bore ID	8519.91	4.00	5.750	3.938			

Zone 20 398	H409400008	S-3 CASING HANGER	8523.91	4.68	5.875	3.875		1670		
	H299900281	COMBO COLLAR LT&C	8528.59	0.58	5.000	3.938				
	H299710014	SPACER NIPPLE LT&C	8529.17	7.50	4.500	3.938				
Zone 19 175.8		6 Joints of 4-1/2-13.5 LTC Casing	8536.67	262.56	4.500	3.920				
	H810090200	3.500 Express Frac Slv zone 20	8799.23	2.40	5.630		3.448	2286		
		2 Joints of 4-1/2-13.5 LTC Casing	8801.63	120.38	4.500	3.920				
Zone 18 216.9	H409360008	Baker Open Hole Packer 19	8922.01	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	8925.90	86.23	4.500	3.920				
	H810090199	3.438 Express Frac Sleeve zone 19	9012.13	2.40	5.630		3.385	2286		
Zone 17 217.7		3 Joints of 4-1/2-13.5 LTC Casing	9014.53	87.15	4.500	3.920				
	H409360008	Baker Open Hole Packer 18	9101.68	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	9105.57	84.94	4.500	3.920				
Zone 16 215	H810090198	3.375 Express Frac Sleeve zone 18	9190.51	2.40	5.630		3.323	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	9192.91	129.57	4.500	3.920				
	H409360008	Baker Open Hole Packer 17	9322.48	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	9326.37	86.60	4.500	3.920				
	H810090197	3.313 Express Frac Sleeve zone 17	9412.97	2.40	5.630		3.260	2286		
		2 Joints of 4-1/2-13.5 LTC Casing	9415.37	128.68	4.500	3.920				
	H409360008	Baker Open Hole Packer 16	9544.05	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	9547.94	85.85	4.500	3.920				
	H810090196	3.250 Express Frac Sleeve zone 16	9633.79	2.40	5.630		3.198	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	9636.19	126.73	4.500	3.920				

Operating Company Mewbourne Oil Co.
 Well Name & Number MALAGA 30 IL FED COM 1H
 Sales Ticket Number 0
 0.17 6/17/2014

Company Rep REY CANTU
 Field 0
 BOT Service Rep MIKE MARTINEZ
 District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	80000	6.276	6.151	0	0.03826	8,728.00	7,240	5,410
Top Liner	4.500	13.50	55000	4.000	3.875	LTC / 8RD	0.01554	4,287.09	5,350	4,960
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-
TVD	8495.00		KOP		7859.00		Open Hole	6.125	Casing Vol. (bbl)	326.0
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)
Zone 15 175.1	H409360008	Baker Open Hole Packer 15	9762.92	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	9766.81	86.49	4.500	3.920				
	H810090195	3.188 Express Frac sleeve zone 15	9853.30	2.40	5.630		3.135	2286		
Zone 14 217.5		3 Joints of 4-1/2-13.5 LTC Casing	9855.70	86.17	4.500	3.920				
	H409360008	Baker Open Hole Packer 14	9941.87	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	9945.76	85.43	4.500	3.920				
Zone 13 215	H810090194	3.125 Express Frac Sleeve zone 14	10031.19	2.40	5.630		3.073	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	10033.59	129.67	4.500	3.920				
	H409360008	Baker Open Hole Packer 13	10163.26	3.89	5.820	3.875		2154		
Zone 12 174.1		2 Joints of 4-1/2-13.5 LTC Casing	10167.15	85.54	4.500	3.920				
	H810090193	3.063 Express Frac Sleeve zone 13	10252.69	2.40	5.630		3.010	2286		
		2 Joints of 4-1/2-13.5 LTC Casing	10255.09	127.01	4.500	3.920				
Zone 11 219	H409360008	Baker Open Hole Packer 12	10382.10	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	10385.99	85.22	4.500	3.920				
	H810090192	3.000 Express Frac Sleeve zone 12	10471.21	2.40	5.630		2.948	2286		
Zone 10 217.7		3 Joints of 4-1/2-13.5 LTC Casing	10473.61	86.50	4.500	3.920				
	H409360008	Baker Open Hole Packer 11	10560.11	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	10564.00	86.15	4.500	3.920				
Zone 9	H810090191	2.938 Express Frac Sleeve zone 11	10650.15	2.40	5.630		2.885	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	10652.55	130.45	4.500	3.920				
	H409360008	Baker Open Hole Packer 10	10783.00	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	10786.89	85.55	4.500	3.920				
	H810090190	2.875 Express Frac Sleeve zone 10	10872.44	2.40	5.630		2.823	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	10874.84	129.70	4.500	3.920				
	H409360008	Baker Open Hole Packer 9	11004.54	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11008.43	86.29	4.500	3.920				

Operating Company Mewbourne Oil Co.
 Well Name & Number MALAGA 30 IL FED COM 1H
 Sales Ticket Number 0
 0.17 6/17/2014

Company Rep REY CANTU
 Field 0
 BOT Service Rep MIKE MARTINEZ
 District Location Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	80000	6.276	6.151	0	0.03826	8,728.00	7,240	5,410
Top Liner	4.500	13.50	55000	4.000	3.875	LTC / 8RD	0.01554	4,287.09	5,350	4,960
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-
TVD		8495.00	KOP		7859.00	Open Hole		6.125	Casing Vol. (bbl)	326.0
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)
174.6	H810090189	2.813 Express Frac Sleeve zone 9	11094.72	2.40	5.630		2.760	2286		
		2 Joints of 4-1/2-13.5 LTC Casing	11097.12	85.92	4.500	3.920				
	H409360008	Baker Open Hole Packer 8	11183.04	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11186.93	85.56	4.500	3.920				
Zone 8										
216.9	H810090188	2.750 Express Frac Sleeve zone 8	11272.49	2.40	5.630		2.698	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	11274.89	128.90	4.500	3.920				
	H409360008	Baker Open Hole Packer 7	11403.79	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11407.68	87.57	4.500	3.920				
Zone 7										
221.2	H810090187	2.688 Express Frac Sleeve zone 7	11495.25	2.40	5.630		2.635	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	11497.65	131.21	4.500	3.920				
	H409360008	Baker Open Hole Packer 6	11628.86	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11632.75	85.52	4.500	3.920				
Zone 6										
212.8	H810090186	2.625 Express Frac Sleeve zone 6	11718.27	2.40	5.630		2.573	2286		
		2 Joints of 4-1/2-13.5 LTC Casing	11720.67	124.88	4.500	3.920				
	H409360008	Baker Open Hole Packer 5	11845.55	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11849.44	84.76	4.500	3.920				
Zone 5										
217.8	H810090185	2.563 Express Frac Sleeve zone 5	11934.20	2.40	5.630		2.510	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	11936.60	130.69	4.500	3.920				
	H409360008	Baker Open Hole Packer 4	12067.29	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	12071.18	86.37	4.500	3.920				
Zone 4										
215.4	H810090184	2.500 Express Frac Sleeve zone 4	12157.55	2.40	5.630		2.448	2286		
		3 Joints of 4-1/2-13.5 LTC Casing	12159.95	126.67	4.500	3.920				
	H409360008	Baker Open Hole Packer 3	12286.62	3.89	5.820	3.875		2154		
ZONE 3		2 Joints of 4-1/2-13.5 LTC Casing	12290.51	86.55	4.500	3.920				

Company Rep	REY CANTU
Field	0
BOT Service Rep	MIKE MARTINEZ
District Location	Odessa, TX



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	80000	6.276	6.151	0	0.03826	8,728.00	7,240	5,410
Top Liner	4.500	13.50	55000	4.000	3.875	LTC / 8RD	0.01554	4,287.09	5,350	4,960
Bott Liner	0.000	0.00	0	0.000	0.000	0	0.00000	-	-	-
TVD		8495.00	KOP		7859.00	Open Hole		6.125	Casing Vol. (bbl)	326.0
Carry Fluid Weight (ppg)			8.4	Propan Content (ppa)				Max Drill Out Size		0

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