Results of Directional Survey

API number:	30-025-40982			
OGRID:		Operator:	MEWBOURNE OIL CO	
		Property:	MAD DOG 35 CN STATE COM	# 1H

surface	ULSTR:	C	35	T	23S	R	34E
				150	FNL	1980	FWL

BH Loc	ULSTR:	N	35	T	23S	R	34E
16100	MD	11363.7	TVD	342	FSL	2332	FWL
				4938	FNL		

Top Perf/OH	ULSTR:	C	35	T	23S	R	34E
11816	MD	11431.8	TVD	673	FNL	2011	FWL

Bot Perf/OH	ULSTR:	N	35	T	23S	R	34E
16069	MD	11364.6	TVD	373	FSL	2332	FWL
				4907	FNL		

	MD	N/S	E/W	VD
	11786	-492.50	31.40	11430.7
TOP PERFS/OH	**11816**	-522.50	31.12	11431.83
	11818	-524.50	31.10	11431.90
	16050	-4738.00	352.40	11365.20
BOT PERFS/OH	**16069**	-4757.00	352.13	11364.63
	16100	-4788.00	351.70	11363.70

NEXT TO LAST	16050	-4738.00	352.40	11365.20
LAST READING	16100	-4788.00	351.70	11363.70
TD	**16100**	-4788.00	351.70	11363.70

Surface Location	150	FN	1980	FW
Projected BHL	4938	FN	2332	FW
Location of				
Top Perfs/OH	673	FN	2011	FW
Bottom Perfs/OH	4907	FN	2332	FW

SUMMARY of Subsurface Locations

Surface Location	C-35-23S-34E	150	FN	1980	FW	Vert. Depth
Top Perfs/OH	C-35-23S-34E	673	FN	2011	FW	11431.83
Bottom Perfs/OH	N-35-23S-34E	4907	FN	2332	FW	11364.63
Projected TD	N-35-23S-34E	4938	FN	2332	FW	11363.70

Company: Mewbourne Oil Company
Lease/Well: Mad Dog 35 CN State Com/No. 001H
Location: S35 T23s R34e
Rig Name: Trinidad 110
State/County: New Mexico/Lea
Latitude: 32.27, Longitude: -103.44
GRID North is 0.48 Degrees East of True North
VS-Azi: 0.00 Degrees

RKB : 17 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS
Filename: ... state com #1h gyro survey.ut
Minimum Curvature Method
Report Date/Time: 6/7/2013 / 13:34

Vaughn Energy Services
Gardendale, TX 79758
(432) 563-5444
Surveyor: Dustin Wedel
Mad Dog 35 CN State Com No. 001H / API 30-025-40982

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	0.22	158.29	100.00	-0.18	0.07	-0.18	0.19	158.29	0.22
200.00	0.47	285.99	200.00	-0.24	-0.26	-0.24	0.35	227.51	0.63
300.00	0.68	250.55	299.99	-0.32	-1.22	-0.32	1.26	255.23	0.40
400.00	1.13	287.26	399.98	-0.23	-2.72	-0.23	2.73	265.24	0.71
500.00	1.62	265.75	499.95	-0.04	-5.08	-0.04	5.08	269.57	0.71
600.00	1.68	274.32	599.91	-0.03	-7.96	-0.03	7.96	269.76	0.25
700.00	2.29	265.42	699.85	-0.08	-11.41	-0.08	11.41	269.59	0.68
800.00	2.28	267.04	799.77	-0.34	-15.39	-0.34	15.39	268.72	0.07
900.00	2.17	275.59	899.70	-0.26	-19.27	-0.26	19.27	269.22	0.35
1000.00	1.61	276.32	999.64	0.08	-22.55	0.08	22.55	270.20	0.57
1100.00	1.56	282.78	1099.60	0.53	-25.27	0.53	25.27	271.21	0.18
1200.00	1.30	281.76	1199.57	1.06	-27.70	1.06	27.72	272.20	0.26
1300.00	1.34	290.93	1299.55	1.71	-29.91	1.71	29.95	273.28	0.21
1400.00	1.09	304.65	1399.52	2.67	-31.78	2.67	31.89	274.81	0.38
1500.00	1.05	311.45	1499.51	3.82	-33.25	3.82	33.47	276.56	0.13
1600.00	1.34	302.72	1599.48	5.06	-34.92	5.06	35.29	278.25	0.34
1700.00	0.71	301.48	1699.47	6.02	-36.44	6.02	36.93	279.38	0.63
1800.00	1.40	303.68	1799.45	7.02	-37.98	7.02	38.63	280.47	0.69

VES Survey Date: 06/04/2013

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
1900.00	1.56	322.73	1899.42	8.78	-39.82	8.78	40.78	282.43	0.51
2000.00	1.54	330.14	1999.38	11.03	-41.32	11.03	42.76	284.95	0.20
2100.00	1.63	335.25	2099.34	13.49	-42.58	13.49	44.67	287.58	0.16
2200.00	2.21	336.68	2199.29	16.55	-43.94	16.55	46.95	290.64	0.58
2300.00	2.52	347.83	2299.20	20.46	-45.17	20.46	49.59	294.38	0.55
2400.00	2.77	347.00	2399.10	24.97	-46.17	24.97	52.49	298.40	0.25
2500.00	2.87	352.90	2498.97	29.80	-47.02	29.80	55.67	302.36	0.31
2600.00	2.79	353.52	2598.85	34.70	-47.61	34.70	58.91	306.09	0.08
2700.00	2.87	2.25	2698.73	39.63	-47.78	39.63	62.08	309.67	0.44
2800.00	2.85	11.69	2798.61	44.57	-47.18	44.57	64.91	313.37	0.47
2900.00	2.81	5.98	2898.48	49.45	-46.42	49.45	67.82	316.81	0.29
3000.00	3.04	14.33	2998.35	54.45	-45.51	54.45	70.97	320.11	0.48
3100.00	3.06	24.54	3098.21	59.44	-43.75	59.44	73.81	323.65	0.54
3200.00	3.18	24.63	3198.07	64.39	-41.48	64.39	76.60	327.21	0.13
3300.00	3.44	21.22	3297.90	69.72	-39.24	69.72	80.00	330.63	0.33
3400.00	3.64	30.72	3397.71	75.25	-36.53	75.25	83.64	334.10	0.62
3500.00	2.97	20.50	3497.54	80.41	-34.00	80.41	87.30	337.08	0.89
3600.00	2.41	28.05	3597.43	84.69	-32.10	84.69	90.57	339.24	0.66
3700.00	2.04	27.84	3697.36	88.12	-30.28	88.12	93.18	341.04	0.37
3800.00	2.39	38.68	3797.28	91.33	-28.14	91.33	95.57	342.87	0.55
3900.00	3.67	44.28	3897.14	95.25	-24.60	95.25	98.38	345.52	1.31
4000.00	3.85	54.57	3996.93	99.49	-19.63	99.49	101.41	348.84	0.70
4100.00	4.14	54.59	4096.68	103.53	-13.96	103.53	104.46	352.32	0.29
4200.00	3.75	53.84	4196.45	107.55	-8.37	107.55	107.87	355.55	0.39
4300.00	3.88	59.98	4296.22	111.17	-2.81	111.17	111.20	358.55	0.43
4400.00	4.90	59.95	4395.93	115.00	3.82	115.00	115.06	1.90	1.02
4500.00	5.74	61.16	4495.50	119.55	11.90	119.55	120.14	5.68	0.85
4600.00	6.22	68.80	4594.96	123.92	21.33	123.92	125.74	9.76	0.93
4700.00	6.32	74.43	4694.36	127.36	31.68	127.36	131.24	13.97	0.62
4800.00	6.27	67.88	4793.76	130.89	42.04	130.89	137.48	17.81	0.72
4900.00	5.29	64.19	4893.25	134.96	51.25	134.96	144.36	20.80	1.05
5000.00	3.37	61.09	4992.96	138.39	57.98	138.39	150.04	22.73	1.93
5100.00	2.16	56.57	5092.84	140.85	62.12	140.85	153.94	23.80	1.23
5200.00	1.92	47.66	5192.78	143.01	64.93	143.01	157.06	24.42	0.40
5300.00	1.74	52.85	5292.72	145.06	67.38	145.06	159.94	24.92	0.24
5400.00	1.61	39.00	5392.68	147.07	69.48	147.07	162.65	25.29	0.43
5500.00	1.57	41.20	5492.64	149.19	71.26	149.19	165.34	25.53	0.07
5600.00	1.67	35.95	5592.60	151.40	73.02	151.40	168.09	25.75	0.18
5700.00	1.15	35.60	5692.57	153.39	74.46	153.39	170.51	25.89	0.52

VES Survey Date: 06/04/2013

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
5800.00	0.50	10.06	5792.56	154.63	75.12	154.63	171.91	25.91	0.73
5900.00	0.51	316.37	5892.56	155.38	74.89	155.38	172.49	25.73	0.46
6000.00	0.93	335.69	5992.55	156.45	74.24	156.45	173.17	25.39	0.48
6100.00	0.90	342.75	6092.54	157.94	73.67	157.94	174.28	25.01	0.12
6200.00	1.05	322.82	6192.52	159.42	72.89	159.42	175.29	24.57	0.37
6300.00	0.80	348.07	6292.51	160.83	72.19	160.83	176.29	24.17	0.47
6400.00	0.73	348.80	6392.50	162.15	71.92	162.15	177.38	23.92	0.07
6500.00	0.74	338.51	6492.49	163.38	71.56	163.38	178.36	23.65	0.13
6600.00	0.80	359.46	6592.49	164.67	71.32	164.67	179.46	23.42	0.29
6700.00	0.66	345.79	6692.48	165.93	71.17	165.93	180.55	23.22	0.22
6800.00	0.75	335.52	6792.47	167.09	70.76	167.09	181.45	22.95	0.16
6900.00	0.64	299.15	6892.46	167.96	70.00	167.96	181.96	22.62	0.45
7000.00	0.54	306.84	6992.46	168.51	69.13	168.51	182.14	22.31	0.12
7100.00	0.95	286.21	7092.45	169.03	67.95	169.03	182.18	21.90	0.48
7200.00	0.77	318.86	7192.44	169.77	66.72	169.77	182.41	21.45	0.51
7300.00	0.88	280.04	7292.43	170.41	65.52	170.41	182.57	21.03	0.56
7400.00	0.52	231.54	7392.42	170.26	64.40	170.26	182.03	20.72	0.66
7500.00	0.77	268.51	7492.42	169.95	63.37	169.95	181.38	20.45	0.48
7600.00	1.26	233.62	7592.40	169.29	61.81	169.29	180.22	20.06	0.76
7700.00	1.27	228.70	7692.38	167.91	60.10	167.91	178.34	19.69	0.11
7800.00	1.34	230.45	7792.35	166.43	58.37	166.43	176.37	19.32	0.08
7900.00	0.72	229.92	7892.33	165.28	56.98	165.28	174.83	19.02	0.62
8000.00	1.27	274.77	7992.32	164.97	55.40	164.97	174.02	18.56	0.91
8100.00	1.38	270.97	8092.29	165.08	53.09	165.08	173.41	17.83	0.14
8200.00	1.31	277.93	8192.27	165.26	50.76	165.26	172.88	17.07	0.18
8300.00	1.22	275.59	8292.24	165.52	48.57	165.52	172.50	16.35	0.10
8400.00	1.61	272.58	8392.21	165.69	46.11	165.69	171.98	15.55	0.39
8500.00	1.14	259.37	8492.18	165.57	43.73	165.57	171.24	14.80	0.56
8600.00	1.16	248.83	8592.16	165.02	41.81	165.02	170.23	14.22	0.21
8700.00	1.50	247.08	8692.13	164.15	39.67	164.15	168.87	13.59	0.35
8800.00	1.30	245.73	8792.10	163.17	37.43	163.17	167.41	12.92	0.21
8900.00	1.16	212.63	8892.08	161.85	35.85	161.85	165.77	12.49	0.71
9000.00	1.02	203.53	8992.07	160.18	34.95	160.18	163.95	12.31	0.22
9100.00	1.00	178.42	9092.05	158.49	34.61	158.49	162.23	12.32	0.44
9200.00	0.67	189.88	9192.04	157.04	34.54	157.04	160.79	12.40	0.38
9300.00	1.66	193.22	9292.02	155.06	34.11	155.06	158.77	12.41	0.99
9400.00	2.07	212.85	9391.97	152.14	32.80	152.14	155.63	12.17	0.75
9500.00	1.94	226.44	9491.90	149.45	30.59	149.45	152.55	11.57	0.49
9600.00	1.11	242.65	9591.87	147.84	28.50	147.84	150.56	10.91	0.93

VES Survey Date: 06/04/2013

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
9700.00	2.00	250.48	9691.83	146.81	26.00	146.81	149.09	10.04	0.92
9800.00	1.08	257.09	9791.79	146.02	23.43	146.02	147.88	9.12	0.94
9900.00	1.11	257.77	9891.78	145.60	21.57	145.60	147.19	8.43	0.03
10000.00	1.07	244.93	9991.76	145.00	19.78	145.00	146.34	7.77	0.25
10100.00	2.13	245.48	10091.72	143.83	17.24	143.83	144.86	6.83	1.06
10200.00	3.01	254.79	10191.62	142.37	13.01	142.37	142.97	5.22	0.97
10300.00	3.41	244.07	10291.46	140.38	7.81	140.38	140.60	3.18	0.72
10400.00	3.32	235.53	10391.29	137.44	2.74	137.44	137.47	1.14	0.51
10500.00	3.42	222.49	10491.12	133.60	-1.66	133.60	133.61	359.29	0.77
10600.00	2.26	211.09	10590.99	129.71	-4.70	129.71	129.80	357.93	1.28
10700.00	2.65	210.57	10690.90	126.03	-6.89	126.03	126.22	356.87	0.40
10793.00	3.03	227.39	10783.79	122.52	-9.79	122.52	122.91	355.43	0.98

Mewbourne Oil Co

Lea County, NM
Sec 35, T23S, R34E
Mad Dog 35 CN State Com 1H

Wellbore #1

Design: Wellbore #1

DDC Survey Report

24 June, 2013

The DIRECTIONAL DRILLING COMPANY

DDC
Survey Report

Company:	Mewbourne Oil Co	**Local Co-ordinate Reference:**	Well Mad Dog 35 CN State Com 1H
Project:	Lea County, NM	**TVD Reference:**	WELL @ 3469.0usft (Trinidad #110)
Site:	Sec 35, T23S, R34E	**MD Reference:**	WELL @ 3469.0usft (Trinidad #110)
Well:	Mad Dog 35 CN State Com 1H	**North Reference:**	Grid
Wellbore:	Wellbore #1	**Survey Calculation Method:**	Minimum Curvature
Design:	Wellbore #1	**Database:**	EDM 5000.1 Single User Db

HOBBS OCD

AUG 0 3 2013

RECEIVED

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 35, T23S, R34E				
Site Position:		**Northing:**	462,286.45 usft	**Latitude:**	32° 16' 4.082 N
From:	Map	**Easting:**	775,358.83 usft	**Longitude:**	103° 26' 32.929 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.48 °

Well	Mad Dog 35 CN State Com 1H					
Well Position	**+N/-S**	0.0 usft	**Northing:**	462,286.45 usft	**Latitude:**	32° 16' 4.082 N
	+E/-W	0.0 usft	**Easting:**	775,358.83 usft	**Longitude:**	103° 26' 32.929 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,449.0 usft

Wellbore	Wellbore #1				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	5/24/2013	7.29	60.20	48,462

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	175.57

Survey Program **Date** 6/24/2013

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	10,793.0	Gyro (Wellbore #1)	Good_gyro	Good Gyro
10,873.0	16,100.0	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	0.22	158.29	100.0	-0.2	0.1	0.2	0.22	0.22	0.00
200.0	0.47	285.99	200.0	-0.2	-0.3	0.2	0.63	0.25	127.70
300.0	0.68	250.55	300.0	-0.3	-1.2	0.2	0.40	0.21	-35.44
400.0	1.13	287.26	400.0	-0.2	-2.7	0.0	0.71	0.45	36.71
500.0	1.62	265.75	500.0	0.0	-5.1	-0.3	0.70	0.49	-21.51
600.0	1.68	274.32	599.9	0.0	-7.9	-0.6	0.25	0.06	8.57
700.0	2.29	265.42	699.9	-0.1	-11.4	-0.8	0.68	0.61	-8.90
800.0	2.28	267.04	799.8	-0.4	-15.4	-0.8	0.07	-0.01	1.62
900.0	2.17	275.59	899.7	-0.3	-19.2	-1.2	0.35	-0.11	8.55

Company:	Mewbourne Oil Co	**Local Co-ordinate Reference:**	Well Mad Dog 35 CN State Com 1H
Project:	Lea County, NM	**TVD Reference:**	WELL @ 3469.0usft (Trinidad #110)
Site:	Sec 35, T23S, R34E	**MD Reference:**	WELL @ 3469.0usft (Trinidad #110)
Well:	Mad Dog 35 CN State 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)
1,000.0	1.61	276.32	999.6	0.1	-22.5	-1.8	0.56	-0.56	0.73
1,100.0	1.56	282.78	1,099.6	0.5	-25.2	-2.5	0.19	-0.05	6.46
1,200.0	1.30	281.76	1,199.6	1.1	-27.7	-3.2	0.26	-0.26	-1.02
1,300.0	1.34	290.93	1,299.5	1.7	-29.9	-4.0	0.21	0.04	9.17
1,400.0	1.09	304.65	1,399.5	2.7	-31.8	-5.1	0.38	-0.25	13.72
1,500.0	1.05	311.45	1,499.5	3.8	-33.2	-6.4	0.13	-0.04	6.80
1,600.0	1.34	302.72	1,599.5	5.1	-34.9	-7.7	0.34	0.29	-8.73
1,700.0	0.71	301.48	1,699.5	6.0	-36.4	-8.8	0.63	-0.63	-1.24
1,800.0	1.40	303.68	1,799.5	7.0	-37.9	-9.9	0.69	0.69	2.20
1,900.0	1.56	322.73	1,899.4	8.8	-39.8	-11.8	0.51	0.16	19.05
2,000.0	1.54	330.14	1,999.4	11.0	-41.3	-14.2	0.20	-0.02	7.41
2,100.0	1.63	335.25	2,099.3	13.5	-42.5	-16.7	0.17	0.09	5.11
2,200.0	2.21	336.68	2,199.3	16.5	-43.9	-19.9	0.58	0.58	1.43
2,300.0	2.52	347.83	2,299.2	20.5	-45.1	-23.9	0.55	0.31	11.15
2,400.0	2.77	347.00	2,399.1	25.0	-46.1	-28.4	0.25	0.25	-0.83
2,500.0	2.87	352.90	2,499.0	29.8	-47.0	-33.3	0.31	0.10	5.90
2,600.0	2.79	353.52	2,598.9	34.7	-47.6	-38.3	0.09	-0.08	0.62
2,700.0	2.87	2.25	2,698.7	39.6	-47.8	-43.2	0.44	0.08	8.73
2,800.0	2.85	11.69	2,798.6	44.6	-47.2	-48.1	0.47	-0.02	9.44
2,900.0	2.81	5.98	2,898.5	49.4	-46.4	-52.9	0.28	-0.04	-5.71
3,000.0	3.04	14.33	2,998.4	54.4	-45.5	-57.8	0.48	0.23	8.35
3,100.0	3.06	24.54	3,098.2	59.4	-43.7	-62.6	0.54	0.02	10.21
3,200.0	3.18	24.63	3,198.1	64.4	-41.5	-67.4	0.12	0.12	0.09
3,300.0	3.44	21.22	3,297.9	69.7	-39.2	-72.5	0.33	0.26	-3.41
3,400.0	3.64	30.72	3,397.7	75.2	-36.5	-77.8	0.62	0.20	9.50
3,500.0	2.97	20.50	3,497.5	80.4	-34.0	-82.8	0.89	-0.67	-10.22
3,600.0	2.41	28.05	3,597.4	84.7	-32.1	-86.9	0.66	-0.56	7.55
3,700.0	2.04	27.84	3,697.4	88.1	-30.3	-90.2	0.37	-0.37	-0.21
3,800.0	2.39	38.68	3,797.3	91.3	-28.1	-93.2	0.54	0.35	10.84
3,900.0	3.67	44.28	3,897.1	95.2	-24.6	-96.8	1.31	1.28	5.60
4,000.0	3.85	54.57	3,996.9	99.5	-19.6	-100.7	0.70	0.18	10.29
4,100.0	4.14	54.59	4,096.7	103.5	-13.9	-104.3	0.29	0.29	0.02
4,200.0	3.75	53.84	4,196.4	107.5	-8.4	-107.8	0.39	-0.39	-0.75
4,300.0	3.88	59.98	4,296.2	111.1	-2.8	-111.0	0.43	0.13	6.14
4,400.0	4.90	59.95	4,395.9	115.0	3.8	-114.3	1.02	1.02	-0.03
4,500.0	5.74	61.16	4,495.5	119.5	11.9	-118.2	0.85	0.84	1.21
4,600.0	6.22	68.80	4,595.0	123.9	21.4	-121.9	0.93	0.48	7.64
4,700.0	6.32	74.43	4,694.4	127.3	31.7	-124.5	0.62	0.10	5.63
4,800.0	6.27	67.88	4,793.8	130.9	42.1	-127.2	0.72	-0.05	-6.55
4,900.0	5.29	64.19	4,893.2	134.9	51.3	-130.6	1.05	-0.98	-3.69
5,000.0	3.37	61.09	4,993.0	138.3	58.0	-133.5	1.93	-1.92	-3.10
5,100.0	2.16	56.57	5,092.8	140.8	62.1	-135.6	1.23	-1.21	-4.52
5,200.0	1.92	47.66	5,192.8	143.0	65.0	-137.5	0.40	-0.24	-8.91

Company:	Mewbourne Oil Co	**Local Co-ordinate Reference:**	Well Mad Dog 35 CN State Com 1H
Project:	Lea County, NM	**TVD Reference:**	WELL @ 3469.0usft (Trinidad #110)
Site:	Sec 35, T23S, R34E	**MD Reference:**	WELL @ 3469.0usft (Trinidad #110)
Well:	Mad Dog 35 CN State 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)
5,300.0	1.74	52.85	5,292.7	145.0	67.4	-139.4	0.24	-0.18	5.19
5,400.0	1.61	39.00	5,392.7	147.0	69.5	-141.2	0.42	-0.13	-13.85
5,500.0	1.57	41.20	5,492.6	149.1	71.3	-143.2	0.07	-0.04	2.20
5,600.0	1.67	35.95	5,592.6	151.4	73.0	-145.3	0.18	0.10	-5.25
5,700.0	1.15	35.60	5,692.6	153.4	74.5	-147.1	0.52	-0.52	-0.35
5,800.0	0.50	10.06	5,792.6	154.6	75.1	-148.3	0.73	-0.65	-25.54
5,900.0	0.51	316.37	5,892.6	155.4	74.9	-149.1	0.46	0.01	-53.69
6,000.0	0.93	335.69	5,992.6	156.4	74.3	-150.2	0.48	0.42	19.32
6,100.0	0.90	342.75	6,092.5	157.9	73.7	-151.7	0.12	-0.03	7.06
6,200.0	1.05	322.82	6,192.5	159.4	72.9	-153.3	0.37	0.15	-19.93
6,300.0	0.80	348.07	6,292.5	160.8	72.2	-154.7	0.47	-0.25	25.25
6,400.0	0.73	348.80	6,392.5	162.1	71.9	-156.1	0.07	-0.07	0.73
6,500.0	0.74	338.51	6,492.5	163.3	71.6	-157.3	0.13	0.01	-10.29
6,600.0	0.80	359.46	6,592.5	164.6	71.3	-158.6	0.29	0.06	20.95
6,700.0	0.66	345.79	6,692.5	165.9	71.2	-159.9	0.22	-0.14	-13.67
6,800.0	0.75	335.52	6,792.5	167.0	70.8	-161.1	0.15	0.09	-10.27
6,900.0	0.64	299.15	6,892.5	167.9	70.0	-162.0	0.45	-0.11	-36.37
7,000.0	0.54	306.84	6,992.5	168.5	69.2	-162.6	0.13	-0.10	7.69
7,100.0	0.95	286.21	7,092.5	169.0	68.0	-163.2	0.48	0.41	-20.63
7,200.0	0.77	318.86	7,192.4	169.7	66.7	-164.1	0.51	-0.18	32.65
7,300.0	0.88	280.04	7,292.4	170.4	65.6	-164.8	0.56	0.11	-38.82
7,400.0	0.52	231.54	7,392.4	170.2	64.4	-164.7	0.66	-0.36	-48.50
7,500.0	0.77	268.51	7,492.4	169.9	63.4	-164.5	0.47	0.25	36.97
7,600.0	1.26	233.62	7,592.4	169.2	61.9	-164.0	0.77	0.49	-34.89
7,700.0	1.27	228.70	7,692.4	167.9	60.1	-162.7	0.11	0.01	-4.92
7,800.0	1.34	230.45	7,792.4	166.4	58.4	-161.4	0.08	0.07	1.75
7,900.0	0.72	229.92	7,892.3	165.2	57.0	-160.3	0.62	-0.62	-0.53
8,000.0	1.27	274.77	7,992.3	164.9	55.4	-160.1	0.91	0.55	44.85
8,100.0	1.38	270.97	8,092.3	165.0	53.1	-160.4	0.14	0.11	-3.80
8,200.0	1.31	277.93	8,192.3	165.2	50.8	-160.8	0.18	-0.07	6.96
8,300.0	1.22	275.59	8,292.2	165.5	48.6	-161.2	0.10	-0.09	-2.34
8,400.0	1.61	272.58	8,392.2	165.6	46.1	-161.6	0.40	0.39	-3.01
8,500.0	1.14	259.37	8,492.2	165.5	43.8	-161.6	0.56	-0.47	-13.21
8,600.0	1.16	248.83	8,592.2	165.0	41.8	-161.2	0.21	0.02	-10.54
8,700.0	1.50	247.08	8,692.1	164.1	39.7	-160.5	0.34	0.34	-1.75
8,800.0	1.30	245.73	8,792.1	163.1	37.4	-159.7	0.20	-0.20	-1.35
8,900.0	1.16	212.63	8,892.1	161.8	35.9	-158.5	0.71	-0.14	-33.10
9,000.0	1.02	203.53	8,992.1	160.1	35.0	-156.9	0.22	-0.14	-9.10
9,100.0	1.00	178.42	9,092.1	158.4	34.6	-155.3	0.44	-0.02	-25.11
9,200.0	0.67	189.88	9,192.0	157.0	34.6	-153.9	0.37	-0.33	11.46
9,300.0	1.66	193.22	9,292.0	155.0	34.1	-151.9	0.99	0.99	3.34
9,400.0	2.07	212.85	9,392.0	152.1	32.8	-149.1	0.75	0.41	19.63
9,500.0	1.94	226.44	9,491.9	149.4	30.6	-146.6	0.49	-0.13	13.59

Company:	Mewbourne Oil Co	**Local Co-ordinate Reference:**	Well Mad Dog 35 CN State Com 1H
Project:	Lea County, NM	**TVD Reference:**	WELL @ 3469.0usft (Trinidad #110)
Site:	Sec 35, T23S, R34E	**MD Reference:**	WELL @ 3469.0usft (Trinidad #110)
Well:	Mad Dog 35 CN State 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)
9,600.0	1.11	242.65	9,591.9	147.8	28.5	-145.1	0.93	-0.83	16.21
9,700.0	2.00	250.48	9,691.8	146.8	26.0	-144.3	0.91	0.89	7.83
9,800.0	1.08	257.09	9,791.8	146.0	23.5	-143.7	0.94	-0.92	6.61
9,900.0	1.11	257.77	9,891.8	145.5	21.6	-143.4	0.03	0.03	0.68
10,000.0	1.07	244.93	9,991.8	144.9	19.8	-143.0	0.25	-0.04	-12.84
10,100.0	2.13	245.48	10,091.7	143.8	17.3	-142.0	1.06	1.06	0.55
10,200.0	3.01	254.79	10,191.6	142.3	13.0	-140.9	0.97	0.88	9.31
10,300.0	3.41	244.07	10,291.5	140.3	7.8	-139.3	0.72	0.40	-10.72
10,400.0	3.32	235.53	10,391.3	137.4	2.8	-136.8	0.51	-0.09	-8.54
10,500.0	3.42	222.49	10,491.1	133.5	-1.6	-133.3	0.77	0.10	-13.04
10,600.0	2.26	211.09	10,591.0	129.7	-4.7	-129.6	1.28	-1.16	-11.40
10,700.0	2.65	210.57	10,690.9	126.0	-6.9	-126.1	0.39	0.39	-0.52
TIE ON @ 10793' MD / 10784' TVD									
10,793.0	3.03	227.39	10,783.8	122.5	-9.8	-122.9	0.98	0.41	18.09
10,873.0	5.40	181.20	10,863.6	117.3	-11.4	-117.8	4.95	2.96	-57.74
10,918.0	10.20	170.80	10,908.2	111.2	-10.8	-111.7	11.08	10.67	-23.11
10,963.0	14.90	164.70	10,952.1	101.7	-8.6	-102.1	10.84	10.44	-13.56
11,008.0	18.60	168.00	10,995.2	89.1	-5.6	-89.3	8.49	8.22	7.33
11,053.0	22.90	167.10	11,037.2	73.5	-2.2	-73.5	9.58	9.56	-2.00
11,099.0	26.80	168.00	11,079.0	54.7	2.0	-54.3	8.52	8.48	1.96
11,144.0	30.60	167.50	11,118.4	33.5	6.6	-32.9	8.46	8.44	-1.11
11,189.0	34.30	167.10	11,156.4	10.0	11.9	-9.0	8.24	8.22	-0.89
11,234.0	37.70	170.60	11,192.8	-16.0	17.0	17.2	8.83	7.56	7.78
11,279.0	41.40	172.20	11,227.5	-44.3	21.2	45.8	8.53	8.22	3.56
11,324.0	45.80	175.40	11,260.1	-75.1	24.5	76.8	10.94	9.78	7.11
11,368.0	50.40	177.90	11,289.5	-107.8	26.4	109.5	11.28	10.45	5.68
11,413.0	54.20	176.40	11,317.0	-143.4	28.2	145.1	8.85	8.44	-3.33
CROSSED HARDLINE @ 11458' MD / 11341.8' TVD									
11,458.0	58.70	176.60	11,341.8	-180.8	30.5	182.6	10.01	10.00	0.44
11,503.0	62.70	177.70	11,363.9	-220.0	32.4	221.8	9.14	8.89	2.44
11,548.0	67.00	180.10	11,383.0	-260.7	33.2	262.5	10.70	9.56	5.33
11,593.0	71.60	180.50	11,398.9	-302.8	33.0	304.4	10.26	10.22	0.89
11,639.0	76.20	180.50	11,411.6	-346.9	32.6	348.4	10.00	10.00	0.00
11,685.0	81.50	180.50	11,420.5	-392.1	32.2	393.4	11.52	11.52	0.00
11,754.0	85.20	180.30	11,428.5	-460.6	31.7	461.7	5.37	5.36	-0.29
11,786.0	86.90	181.00	11,430.7	-492.5	31.4	493.4	5.74	5.31	2.19
11,818.0	88.80	179.90	11,431.9	-524.5	31.1	525.3	6.86	5.94	-3.44
11,849.0	89.50	180.10	11,432.4	-555.5	31.1	556.2	2.35	2.26	0.65
11,881.0	89.30	179.40	11,432.7	-587.5	31.3	588.1	2.27	-0.63	-2.19
11,913.0	91.40	179.10	11,432.5	-619.5	31.7	620.1	6.63	6.56	-0.94
12,006.0	91.40	177.70	11,430.2	-712.4	34.3	712.9	1.50	0.00	-1.51
12,102.0	90.80	177.10	11,428.4	-808.3	38.6	808.8	0.88	-0.63	-0.63
12,198.0	93.10	177.50	11,425.1	-904.1	43.1	904.7	2.43	2.40	0.42
12,291.0	93.60	178.00	11,419.7	-996.9	46.8	997.5	0.76	0.54	0.54

Company:	Mewbourne Oil Co	**Local Co-ordinate Reference:**	Well Mad Dog 35 CN State Com 1H
Project:	Lea County, NM	**TVD Reference:**	WELL @ 3469.0usft (Trinidad #110)
Site:	Sec 35, T23S, R34E	**MD Reference:**	WELL @ 3469.0usft (Trinidad #110)
Well:	Mad Dog 35 CN State 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)
12,386.0	93.10	177.10	11,414.1	-1,091.6	50.8	1,092.3	1.08	-0.53	-0.95
12,480.0	89.90	175.40	11,411.7	-1,185.4	57.0	1,186.2	3.85	-3.40	-1.81
12,575.0	90.00	175.90	11,411.8	-1,280.1	64.2	1,281.2	0.54	0.11	0.53
12,670.0	91.90	177.70	11,410.2	-1,374.9	69.5	1,376.2	2.75	2.00	1.89
12,764.0	89.80	176.40	11,408.8	-1,468.8	74.3	1,470.1	2.63	-2.23	-1.38
12,857.0	91.30	176.30	11,407.9	-1,561.6	80.3	1,563.1	1.62	1.61	-0.11
12,952.0	89.40	174.50	11,407.3	-1,656.3	87.9	1,658.1	2.75	-2.00	-1.89
13,046.0	89.30	175.00	11,408.4	-1,749.9	96.5	1,752.1	0.54	-0.11	0.53
13,141.0	90.30	174.70	11,408.7	-1,844.5	105.0	1,847.1	1.10	1.05	-0.32
13,235.0	92.50	174.50	11,406.4	-1,938.0	113.8	1,941.0	2.35	2.34	-0.21
13,329.0	90.00	173.80	11,404.4	-2,031.5	123.4	2,035.0	2.76	-2.66	-0.74
13,424.0	90.20	173.60	11,404.2	-2,125.9	133.8	2,129.9	0.30	0.21	-0.21
13,519.0	90.50	174.70	11,403.6	-2,220.5	143.5	2,224.9	1.20	0.32	1.16
13,613.0	90.80	172.60	11,402.6	-2,313.9	153.9	2,318.8	2.26	0.32	-2.23
13,708.0	91.00	171.30	11,401.1	-2,407.9	167.2	2,413.6	1.38	0.21	-1.37
13,803.0	89.70	170.10	11,400.5	-2,501.7	182.6	2,508.3	1.86	-1.37	-1.26
13,898.0	90.40	169.40	11,400.4	-2,595.1	199.5	2,602.8	1.04	0.74	-0.74
13,993.0	89.90	170.50	11,400.2	-2,688.7	216.1	2,697.3	1.27	-0.53	1.16
14,088.0	91.80	172.60	11,398.8	-2,782.6	230.0	2,792.1	2.98	2.00	2.21
14,183.0	92.20	171.90	11,395.4	-2,876.7	242.8	2,886.9	0.85	0.42	-0.74
14,278.0	93.70	175.00	11,390.5	-2,970.9	253.6	2,981.7	3.62	1.58	3.26
14,374.0	92.50	174.70	11,385.4	-3,066.4	262.2	3,077.5	1.29	-1.25	-0.31
14,468.0	92.80	174.30	11,381.0	-3,159.9	271.2	3,171.4	0.53	0.32	-0.43
14,564.0	90.30	175.40	11,378.4	-3,255.5	279.9	3,267.3	2.84	-2.60	1.15
14,659.0	88.90	175.70	11,379.1	-3,350.2	287.2	3,362.3	1.51	-1.47	0.32
14,754.0	88.60	175.70	11,381.1	-3,444.9	294.4	3,457.3	0.32	-0.32	0.00
14,849.0	89.90	176.40	11,382.4	-3,539.6	300.9	3,552.3	1.55	1.37	0.74
14,945.0	89.30	175.90	11,383.1	-3,635.4	307.3	3,648.3	0.81	-0.63	-0.52
15,040.0	91.40	175.90	11,382.5	-3,730.2	314.1	3,743.3	2.21	2.21	0.00
15,135.0	91.80	175.90	11,379.8	-3,824.9	320.9	3,838.2	0.42	0.42	0.00
15,230.0	90.70	175.60	11,377.8	-3,919.6	328.0	3,933.2	1.20	-1.16	-0.32
15,325.0	91.60	174.50	11,375.8	-4,014.2	336.2	4,028.2	1.50	0.95	-1.16
15,420.0	91.60	174.10	11,373.2	-4,108.7	345.6	4,123.1	0.42	0.00	-0.42
15,515.0	91.30	176.80	11,370.8	-4,203.4	353.1	4,218.1	2.86	-0.32	2.84
15,578.0	89.60	177.00	11,370.3	-4,266.3	356.5	4,281.1	2.72	-2.70	0.32
15,610.0	90.00	178.70	11,370.4	-4,298.3	357.7	4,313.0	5.46	1.25	5.31
15,641.0	90.80	179.60	11,370.2	-4,329.3	358.2	4,344.0	3.88	2.58	2.90
15,705.0	89.30	179.10	11,370.1	-4,393.2	358.9	4,407.8	2.47	-2.34	-0.78
15,736.0	89.20	179.30	11,370.5	-4,424.2	359.3	4,438.8	0.72	-0.32	0.65
15,768.0	89.60	179.90	11,370.9	-4,456.2	359.6	4,470.7	2.25	1.25	1.88
15,800.0	89.60	179.90	11,371.1	-4,488.2	359.6	4,502.6	0.00	0.00	0.00
15,831.0	90.40	180.80	11,371.1	-4,519.2	359.4	4,533.5	3.88	2.58	2.90
15,863.0	90.80	181.90	11,370.8	-4,551.2	358.7	4,565.3	3.66	1.25	3.44

Company:	Mewbourne Oil Co	**Local Co-ordinate Reference:**	Well Mad Dog 35 CN State Com 1H
Project:	Lea County, NM	**TVD Reference:**	WELL @ 3469.0usft (Trinidad #110)
Site:	Sec 35, T23S, R34E	**MD Reference:**	WELL @ 3469.0usft (Trinidad #110)
Well:	Mad Dog 35 CN State 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)
15,895.0	91.30	181.90	11,370.2	-4,583.2	357.6	4,597.1	1.56	1.56	0.00
15,926.0	91.60	181.90	11,369.4	-4,614.2	356.6	4,627.9	0.97	0.97	0.00
15,958.0	92.10	182.40	11,368.4	-4,646.1	355.4	4,659.7	2.21	1.56	1.56
15,990.0	92.00	182.40	11,367.2	-4,678.1	354.1	4,691.5	0.31	-0.31	0.00
16,050.0	91.80	180.80	11,365.2	-4,738.0	352.4	4,751.1	2.69	-0.33	-2.67
TD @ 16100' MD / 11363.7' TVD									
16,100.0	91.80	180.80	11,363.7	-4,788.0	351.7	4,800.9	0.00	0.00	0.00

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
10,793.0	10,783.8	122.5	-9.8	TIE ON @ 10793' MD / 10784' TVD
11,458.0	11,341.8	-180.8	30.5	CROSSED HARDLINE @ 11458' MD / 11341.8' TVD
16,100.0	11,363.7	-4,788.0	351.7	TD @ 16100' MD / 11363.7' TVD

Checked By: _____ Approved By: _____ Date: _____

Company Name: Mewbourne Oil Co
Mad Dog 35 CN State Com 1H
Lea County, NM
Rig: Trinidad #110
Created By: TIFFANI MIZELL
Date: 6/25/2013

Mad Dog 35 CN State Com 1H
Lea County, NM
Q130104 & WT-13423
Design #2 (Tie-In)

Mewbourne Oil Company

QDC
The DIRECTIONAL DRILLING COMPANY

T G M

Azimuths to Grid North

Magnetic North: 6.81°

Magnetic Field
Strength: 48462.4snT
Dip Angle: 60.20°
Date: 5/24/2013
Model: IGRF2010

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: Mad Dog 35 CN State Com 1H
Ground Level: 3449.0

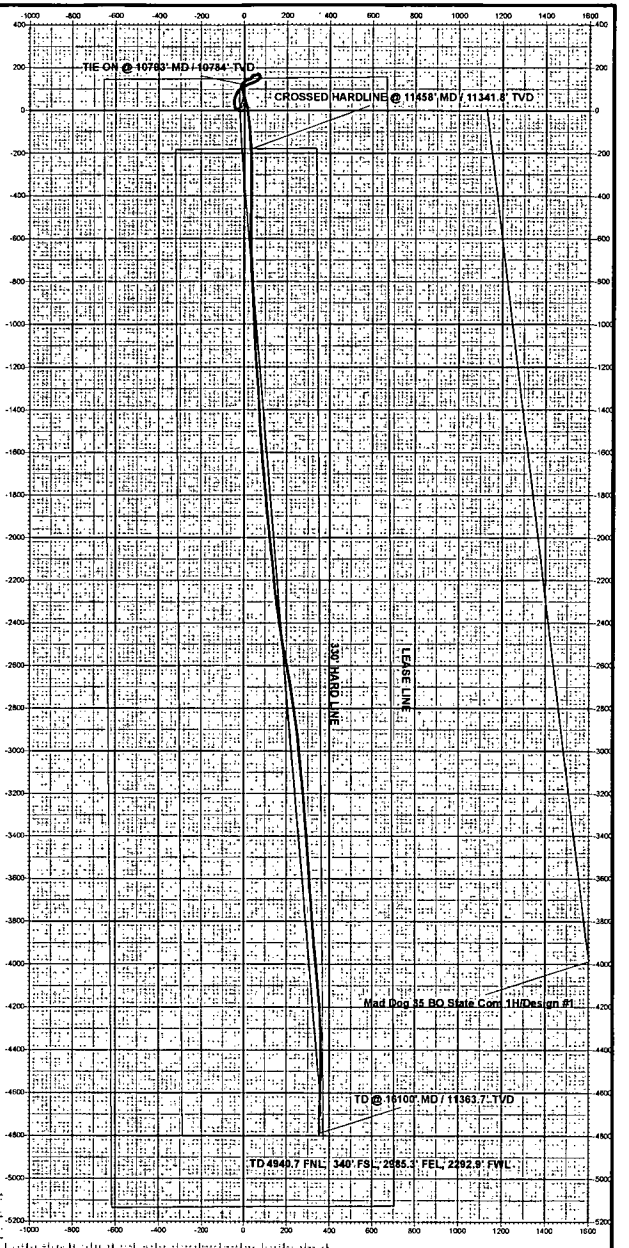
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.0	0.0	462286.45	775358.83	32° 16' 4.082 N	103° 29' 32.929 W

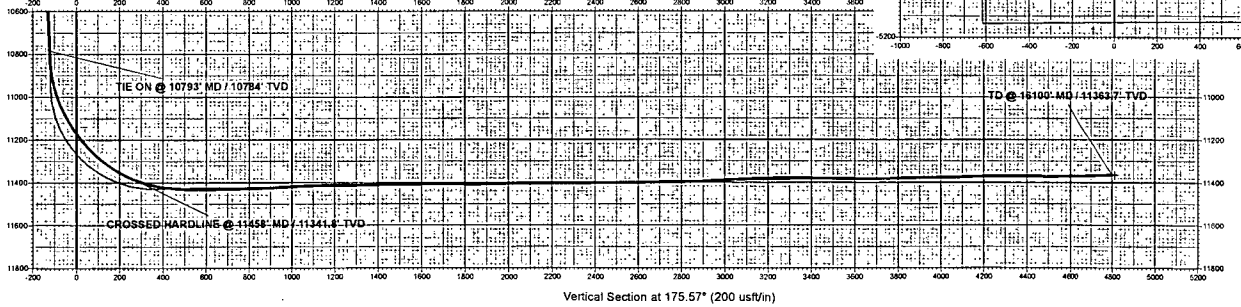
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
BHL Mad Dog 35 CN State Com 1H Design #1 - plan hits target center	11364.0	-4797.9	371.8	457488.55	775730.66	32° 15' 16.575 N	103° 29' 29.064 W

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
10793.0	3.03	227.39	10783.8	122.5	-9.8	-122.9	371.7	TIE ON @ 10793' MD / 10784' TVD
11458.0	58.70	176.60	11341.8	-180.8	30.5	182.6	679.4	CROSSED HARDLINE @ 11458' MD / 11341.8' TVD
16100.0	91.80	180.80	11363.7	-4788.0	351.7	4800.9	5303.7	TD @ 16100' MD / 11363.7' TVD





Vertical Section at 175.57° (200 usft/in)

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RECEIVED

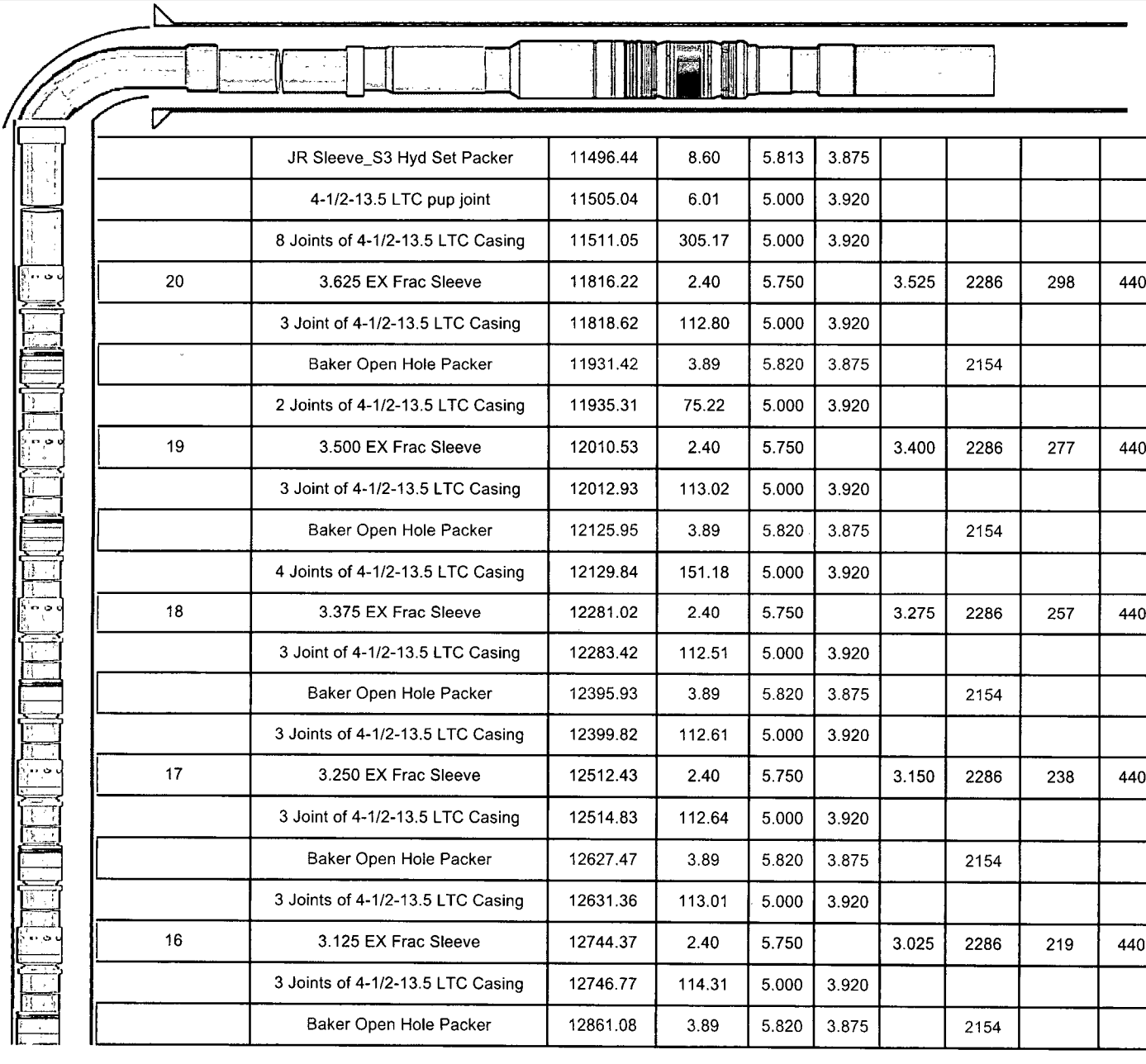
Operating Company	Mewbourne	**Company Rep**	Larry Sutton
Well Name & Number	Mad Dog 35 CN State Com 1H	**Field**	
Sales Ticket Number	0005597615-1	**BOT Service Rep**	John Davis
Date	6/22/2013	**District Location**	Odessa, Texas, USA

BAKER HUGHES

	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	P-110	6.276	6.151	LT&C	0.03826	11,738.00	9,960	6,230
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,583.56	4,525	10,680
Bott Liner										

TVD	11,365.00	KOP	10,845.00	Open Hole	6.125	Casing Vol. (bbl)	439.9
Carry Fluid Weight (ppg)	9.1	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	11496.44							



Zone Length										
		JR Sleeve_S3 Hyd Set Packer	11496.44	8.60	5.813	3.875				
		4-1/2-13.5 LTC pup joint	11505.04	6.01	5.000	3.920				
		8 Joints of 4-1/2-13.5 LTC Casing	11511.05	305.17	5.000	3.920				
20	20	3.625 EX Frac Sleeve	11816.22	2.40	5.750		3.525	2286	298	440
438.9		3 Joint of 4-1/2-13.5 LTC Casing	11818.62	112.80	5.000	3.920				
		Baker Open Hole Packer	11931.42	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11935.31	75.22	5.000	3.920				
19	19	3.500 EX Frac Sleeve	12010.53	2.40	5.750		3.400	2286	277	440
		3 Joint of 4-1/2-13.5 LTC Casing	12012.93	113.02	5.000	3.920				
198.4		Baker Open Hole Packer	12125.95	3.89	5.820	3.875		2154		
		4 Joints of 4-1/2-13.5 LTC Casing	12129.84	151.18	5.000	3.920				
18	18	3.375 EX Frac Sleeve	12281.02	2.40	5.750		3.275	2286	257	440
		3 Joint of 4-1/2-13.5 LTC Casing	12283.42	112.51	5.000	3.920				
273.9		Baker Open Hole Packer	12395.93	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	12399.82	112.61	5.000	3.920				
17	17	3.250 EX Frac Sleeve	12512.43	2.40	5.750		3.150	2286	238	440
		3 Joint of 4-1/2-13.5 LTC Casing	12514.83	112.64	5.000	3.920				
235.4		Baker Open Hole Packer	12627.47	3.89	5.820	3.875		2154		
		3 Joints of 4-1/2-13.5 LTC Casing	12631.36	113.01	5.000	3.920				
16	16	3.125 EX Frac Sleeve	12744.37	2.40	5.750		3.025	2286	219	440
		3 Joints of 4-1/2-13.5 LTC Casing	12746.77	114.31	5.000	3.920				
237.5		Baker Open Hole Packer	12861.08	3.89	5.820	3.875		2154		

Operating Company	Mewbourne	**Company Rep**	Larry Sutton
Well Name & Number	Mad Dog 35 CN State Com 1H	**Field**	
Sales Ticket Number	0005597615-1	**BOT Service Rep**	John Davis
Date	6/22/2013	**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	LT&C	0.03826	11,738.00	9,960	6,230
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,583.56	4,525	10,680
Bott Liner										

TVD	11,365.00	KOP	10,845.00	Open Hole	6.125	Casing Vol. (bbl)	439.9
Carry Fluid Weight (ppg)	9.1	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	12864.97	115.63	5.000	3.920				
15		15	3.000 EX Frac sleeve	12980.60	2.40	5.750		2.900	2286	202	440
			3 Joint of 4-1/2-13.5 LTC Casing	12983.00	115.68	5.000	3.920				
241.5			Baker Open Hole Packer	13098.68	3.89	5.820	3.875		2154		
			2 Joints of 4-1/2-13.5 LTC Casing	13102.57	76.90	5.000	3.920				
14		14	2.875 EX Frac Sleeve	13179.47	2.40	5.750		2.775	2286	185	440
			3 Joints of 4-1/2-13.5 LTC Casing	13181.87	114.49	5.000	3.920				
201.6			Baker Open Hole Packer	13296.36	3.89	5.820	3.875		2154		
			3 Joints of 4-1/2-13.5 LTC Casing	13300.25	115.69	5.000	3.920				
13		13	2.750 EX Frac Sleeve	13415.94	2.40	5.750		2.650	2286	168	440
			3 Joint of 4-1/2-13.5 LTC Casing	13418.34	115.56	5.000	3.920				
241.4			Baker Open Hole Packer	13533.90	3.89	5.820	3.875		2154		
			2 Joints of 4-1/2-13.5 LTC Casing	13537.79	77.10	5.000	3.920				
12		12	2.625 EX Frac Sleeve	13614.89	2.40	5.750		2.525	2286	153	440
			3 Joints of 4-1/2-13.5 LTC Casing	13617.29	115.63	5.000	3.920				
202.9			Baker Open Hole Packer	13732.92	3.89	5.820	3.875		2154		
			2 Joints of 4-1/2-13.5 LTC Casing	13736.81	76.86	5.000	3.920				
11		11	2.500 EX Frac Sleeve	13813.67	2.40	5.750		2.400	2286	138	440
			3 Joint of 4-1/2-13.5 LTC Casing	13816.07	115.44	5.000	3.920				
202.5			Baker Open Hole Packer	13931.51	3.89	5.820	3.875		2154		
			2 Joints of 4-1/2-13.5 LTC Casing	13935.40	77.05	5.000	3.920				
10		10	2.375 EX Frac Sleeve	14012.45	2.40	5.750		2.275	2286	124	440
			3 Joints of 4-1/2-13.5 LTC Casing	14014.85	115.25	5.000	3.920				
202.5			Baker Open Hole Packer	14130.10	3.89	5.820	3.875		2154		
			2 Joint of 4-1/2-13.5 LTC Casing	14133.99	76.93	5.000	3.920				
9		9	2.250 EX Frac Sleeve	14210.92	2.40	5.750		2.150	2286	111	440

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Operating Company	Mewbourne	**Company Rep**	Larry Sutton
Well Name & Number	Mad Dog 35 CN State Com 1H	**Field**	
Sales Ticket Number	0005597615-1	**BOT Service Rep**	John Davis
Date	6/22/2013	**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	LT&C	0.03826	11,738.00	9,960	6,230
Top Liner	4.500	13.50	338000	3.920	3.795	LT&C	0.01492	4,583.56	4,525	10,680
Bott Liner										

TVD	11,365.00	KOP	10,845.00	Open Hole	6.125	Casing Vol. (bbl)	439.9
Carry Fluid Weight (ppg)	9.1	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	14213.32	115.71	5.000	3.920				
202.8			Baker Open Hole Packer	14329.03	3.89	5.820	3.875		2154		
			3 Joint of 4-1/2-13.5 LTC Casing	14332.92	115.70	5.000	3.920				
8		8	2.125 EX Frac Sleeve	14448.62	2.40	5.750		2.025	2286	98	440
			3 Joints of 4-1/2-13.5 LTC Casing	14451.02	115.26	5.000	3.920				
241.1			Baker Open Hole Packer	14566.28	3.89	5.820	3.875		2154		
			3 Joint of 4-1/2-13.5 LTC Casing	14570.17	115.38	5.000	3.920				
7		7	2.000 EX Frac Sleeve	14685.55	2.40	5.750		1.900	2286	87	440
			3 Joints of 4-1/2-13.5 LTC Casing	14687.95	115.27	5.000	3.920				
240.8			Baker Open Hole Packer	14803.22	3.89	5.820	3.875		2154		
			2 Joint of 4-1/2-13.5 LTC Casing	14807.11	76.65	5.000	3.920				
6		6	1.875 EX Frac Sleeve	14883.76	2.40	5.750		1.775	2286	76	440
			3 Joints of 4-1/2-13.5 LTC Casing	14886.16	115.76	5.000	3.920				
202.6			Baker Open Hole Packer	15001.92	3.89	5.820	3.875		2154		
			3 Joints of 4-1/2-13.5 LTC Casing	15005.81	115.46	5.000	3.920				
5		5	1.750 EX Frac Sleeve	15121.27	2.40	5.750		1.650	2286	65	440
			4 Joint of 4-1/2-13.5 LTC Casing	15123.67	154.00	5.000	3.920				
279.6			Baker Open Hole Packer	15277.67	3.89	5.820	3.875		2154		
			3 Joints of 4-1/2-13.5 LTC Casing	15281.56	115.47	5.000	3.920				
4		4	1.625 EX Frac Sleeve	15397.03	2.40	5.750		1.525	2286	56	440
			3 Joints of 4-1/2-13.5 LTC Casing	15399.43	115.49	5.000	3.920				
241.1			Baker Open Hole Packer	15514.92	3.89	5.820	3.875		2154		
			2 Joints of 4-1/2-13.5 LTC Casing	15518.81	76.92	5.000	3.920				
3		3	1.500 DBL Ball Frac Sleeve	15595.73	2.40	5.750		1.400	2286	47	440
			3 Joint of 4-1/2-13.5 LTC Casing	15598.13	115.62	5.000	3.920				
202.7			Baker Open Hole Packer	15713.75	3.89	5.820	3.875		2154		

Operating Company	Mewbourne	**Company Rep**	Larry Sutton
Well Name & Number	Mad Dog 35 CN State Com 1H	**Field**	
Sales Ticket Number	0005597615-1	**BOT Service Rep**	John Davis
Date	6/22/2013	**District Location**	Odessa, Texas, USA

BAKER HUGHES

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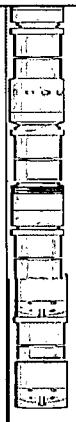
Bott Liner										

TVD	11,365.00	KOP	10,845.00	Open Hole	6.125	Casing Vol. (bbl)	439.9
Carry Fluid Weight (ppg)	9.1	Propant Content (ppa)				Max Drill Out Size	0



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121.8

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	15717.64	115.18	5.000	3.920				
2	1.375 DBL Ball Frac Sleeve	15832.82	2.40	5.750		1.275	2286	39	440
	3 Joints of 4-1/2-13.5 LTC Casing	15835.22	114.62	5.000	3.920				
	Baker Open Hole Packer	15949.84	3.89	5.820	3.875		2154		
	3 Joints of 4-1/2-13.5 LTC Casing	15953.73	115.55	5.000	3.920				
1	1.250 Ball Seat	16069.28	2.39	5.000	3.920		3048		
	Pup Joint	16071.67	6.03	5.000	3.920				
	Float Shoe	16077.70	2.30						
		16080.00							