



Job Number: SVCO-111590
 Company: Mewbourne Oil & Gas
 Lease/Well: Pine Box 17 AP Federal 1H
 Location: Eddy County, NM
 Rig Name: Patterson #101
 RKB: 19'
 G.L. or M.S.L.: GL

State/Country: New Mexico/USA
 Declination: 8.07°
 Grid: East To Grid
 File name: F:\SURVEY\2011SU~1\MEWBOU~1\PINEB1H.SVY
 Date/Time: 27-Dec-11 / 09:16
 Curve Name: Surface - 1840' M.D. (Gyroscopic)

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 178.00
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

We hereby certify that our survey data from
 Surface MD to 1840' MD is, to the best of
 our knowledge a true and accurate account of the
 well bore.
 Dana Jutte 11/6/12
 MS Energy Services Date

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
100.00	.25	223.92	100.00	-.16	-.15	.15	.22	223.92	.25
200.00	.50	252.18	200.00	-.45	-.72	.42	.85	238.05	.30
300.00	.25	111.45	300.00	-.66	-.93	.63	1.14	234.60	.71
400.00	.25	149.92	400.00	-.93	-.62	.91	1.12	213.61	.16
500.00	.75	229.23	499.99	-1.55	-1.00	1.51	1.84	213.01	.75
600.00	.75	193.46	599.98	-2.61	-1.65	2.55	3.09	212.34	.46
700.00	.25	216.72	699.98	-3.42	-1.94	3.35	3.93	209.49	.53
800.00	.75	205.99	799.98	-4.18	-2.35	4.10	4.80	209.34	.51
900.00	.75	189.11	899.97	-5.42	-2.74	5.32	6.07	206.85	.22

30-015-39545

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
1000.00	.75	149.38	999.96	-6.63	-2.51	6.54	7.09	200.76	.51
1100.00	1.00	168.60	1099.95	-8.05	-2.01	7.97	8.29	194.01	.38
1200.00	1.25	169.87	1199.93	-9.98	-1.64	9.91	10.11	189.35	.25
1300.00	1.50	164.16	1299.90	-12.31	-1.09	12.26	12.36	185.08	.28
1400.00	1.50	168.61	1399.87	-14.85	-.48	14.83	14.86	181.84	.12
1500.00	1.50	183.21	1499.83	-17.44	-.29	17.42	17.44	180.96	.38
1600.00	1.25	200.66	1599.80	-19.77	-.75	19.73	19.78	182.18	.48
1700.00	1.25	199.05	1699.78	-21.82	-1.49	21.75	21.87	183.91	.04
1800.00	1.25	213.38	1799.76	-23.76	-2.45	23.66	23.89	185.88	.31
Last Survey Depth Recorded									
1840.00	1.50	214.79	1839.74	-24.56	-2.99	24.44	24.74	186.93	.63

Mewbourne Oil Co

Eddy County, New Mexico

Sec 17-20S-25E

Pine Box 17 AP Fed #1H

Wellbore #1

Survey: MWD

DDC Survey Report

04 January, 2012



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Pine.Box 17.AP Fed #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3498.0usft (Patterson UTI #101)
Site:	Sec 17-20S-25E	MD Reference:	WELL @ 3498.0usft (Patterson UTI #101)
Well:	Pine.Box 17.AP Fed #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 17-20S-25E		
Site Position:		Northing:	574,694.25 usft
From:	Map	Easting:	448,901.26 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 34' 47.393 N
		Longitude:	104° 29' 57.203 W
		Grid Convergence:	-0.09 °

Well:	Pine.Box 17.AP Fed #1H		
Well Position	+N/-S	0.0 usft	Northing: 574,694.25 usft
	+E/-W	0.0 usft	Easting: 448,901.26 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 34' 47.393 N
		Longitude:	104° 29' 57.203 W
		Ground Level:	3,479.0 usft

Wellbore:	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010	12/14/2011	7.97
			Dip Angle
			60.34
			Field Strength
			48,675

Design:	Wellbore #1		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0

Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	186.93

Survey Program:	Date: 1/4/2012		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
100.0	1,840.0	GYRO (Wellbore #1)	Good_gyro
1,904.0	6,815.0	MWD (Wellbore #1)	MWD default
			Description
			Good Gyro
			MWD - Standard

Survey										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate	
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	
Tie In										
1,840.0	1.50	214.79	1,839.7	-24.6	-3.0	24.7	0.00	0.00	0.00	
1,904.0	1.60	220.10	1,903.7	-25.9	-4.0	26.2	0.27	0.16	8.30	
1,934.0	1.60	221.00	1,933.7	-26.6	-4.6	26.9	0.08	0.00	3.00	
1,966.0	3.80	202.80	1,965.7	-27.9	-5.3	28.3	7.29	6.88	-56.88	
1,997.0	7.20	198.50	1,996.5	-30.7	-6.3	31.2	11.04	10.97	-13.87	
2,029.0	11.00	196.10	2,028.1	-35.5	-7.8	36.2	11.93	11.88	-7.50	
2,060.0	14.50	192.80	2,058.3	-42.1	-9.5	43.0	11.53	11.29	-10.65	
2,091.0	17.90	186.20	2,088.1	-50.7	-10.8	51.6	12.46	10.97	-21.29	
2,122.0	21.90	184.50	2,117.3	-61.2	-11.8	62.1	13.04	12.90	-5.48	

DDC Survey Report



Company:	Mewbourne Oil Co.	Local Co-ordinate Reference:	Well Pine Box 17 AP Fed #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3498.0usft (Patterson UTI #101)
Site:	Sec 17-20S-25E	MD Reference:	WELL @ 3498.0usft (Patterson UTI #101)
Well:	Pine Box 17 AP Fed #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)	
2,154.0	25.10	184.70	2,146.6	-73.9	-12.8	74.9	10.00	10.00	0.63	
2,185.0	28.00	184.40	2,174.3	-87.7	-13.9	88.7	9.36	9.35	-0.97	
2,217.0	30.60	182.60	2,202.2	-103.3	-14.9	104.4	8.58	8.13	-5.63	
2,248.0	33.00	180.30	2,228.6	-119.6	-15.3	120.6	8.67	7.74	-7.42	
2,280.0	35.80	178.80	2,255.0	-137.7	-15.1	138.5	9.14	8.75	-4.69	
2,311.0	38.90	178.60	2,279.6	-156.5	-14.7	157.2	10.01	10.00	-0.65	
2,343.0	41.50	176.60	2,304.1	-177.2	-13.8	177.5	9.07	8.13	-6.25	
2,374.0	43.70	178.80	2,326.9	-198.1	-13.0	198.2	8.57	7.10	7.10	
2,405.0	45.50	179.50	2,349.0	-219.9	-12.7	219.8	6.02	5.81	2.26	
2,436.0	47.50	179.80	2,370.3	-242.4	-12.5	242.1	6.49	6.45	0.97	
2,467.0	50.20	180.10	2,390.7	-265.7	-12.5	265.3	8.74	8.71	0.97	
2,498.0	53.50	179.80	2,409.8	-290.1	-12.5	289.5	10.67	10.65	-0.97	
2,529.0	57.20	179.40	2,427.5	-315.6	-12.3	314.8	11.98	11.94	-1.29	
2,561.0	60.50	178.30	2,444.0	-343.0	-11.8	341.9	10.72	10.31	-3.44	
2,592.0	63.80	178.00	2,458.5	-370.3	-10.9	368.9	10.68	10.65	-0.97	
2,624.0	67.00	178.60	2,471.8	-399.4	-10.0	397.7	10.14	10.00	1.88	
2,655.0	70.30	179.60	2,483.1	-428.3	-9.6	426.3	11.06	10.65	3.23	
2,686.0	73.70	180.30	2,492.7	-457.8	-9.5	455.6	11.18	10.97	2.26	
2,717.0	77.10	180.20	2,500.5	-487.8	-9.7	485.4	10.97	10.97	-0.32	
2,748.0	79.70	180.10	2,506.7	-518.1	-9.8	515.5	8.39	8.39	-0.32	
2,780.0	82.30	179.60	2,511.7	-549.7	-9.7	546.9	8.27	8.13	-1.56	
2,816.0	86.20	177.70	2,515.3	-585.5	-8.8	582.3	12.04	10.83	-5.28	
2,884.0	89.10	178.60	2,518.1	-653.4	-6.6	649.4	4.46	4.26	1.32	
2,915.0	89.40	178.50	2,518.5	-684.4	-5.8	680.1	1.02	0.97	-0.32	
2,947.0	90.70	177.30	2,518.5	-716.4	-4.7	711.7	5.53	4.06	-3.75	
2,979.0	90.90	177.50	2,518.0	-748.4	-3.2	743.3	0.88	0.63	0.63	
3,010.0	90.90	177.00	2,517.6	-779.3	-1.7	773.8	1.61	0.00	-1.61	
3,042.0	90.70	176.60	2,517.1	-811.3	0.1	805.3	1.40	-0.63	-1.25	
3,074.0	90.60	177.90	2,516.7	-843.2	1.6	836.9	4.07	-0.31	4.06	
3,106.0	90.60	178.10	2,516.4	-875.2	2.7	868.5	0.62	0.00	0.63	
3,138.0	90.80	176.30	2,516.0	-907.2	4.3	900.0	5.66	0.63	-5.63	
3,169.0	90.80	175.90	2,515.6	-938.1	6.4	930.5	1.29	0.00	-1.29	
3,201.0	90.80	178.10	2,515.1	-970.0	8.1	962.0	6.87	0.00	6.88	
3,233.0	90.90	176.90	2,514.7	-1,002.0	9.4	993.5	3.76	0.31	-3.75	
3,265.0	90.90	178.20	2,514.2	-1,034.0	10.8	1,025.1	4.06	0.00	4.06	
3,297.0	90.90	178.20	2,513.7	-1,065.9	11.8	1,056.7	0.00	0.00	0.00	
3,329.0	91.20	178.50	2,513.1	-1,097.9	12.7	1,088.4	1.33	0.94	0.94	
3,360.0	90.10	179.80	2,512.7	-1,128.9	13.2	1,119.1	5.49	-3.55	4.19	
3,392.0	89.80	177.70	2,512.8	-1,160.9	13.9	1,150.7	6.63	-0.94	-6.56	
3,455.0	89.70	179.00	2,513.0	-1,223.9	15.7	1,213.0	2.07	-0.16	2.06	
3,518.0	90.00	178.90	2,513.2	-1,286.9	16.9	1,275.4	0.50	0.48	-0.16	
3,582.0	90.20	179.00	2,513.1	-1,350.9	18.0	1,338.8	0.35	0.31	0.16	
3,646.0	90.20	180.80	2,512.9	-1,414.9	18.2	1,402.3	2.81	0.00	2.81	

DDC
Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well: Pine Box 17 AP Fed #1H
Project:	Eddy County New Mexico	TVD Reference:	WELL @ 3498.0usft (Patterson UTI #101)
Site:	Sec.17-20S-25E	MD Reference:	WELL @ 3498.0usft (Patterson UTI #101)
Well:	Pine Box 17 AP Fed #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)
3,710.0	89.90	178.70	2,512.8	-1,478.9	18.4	1,465.8	3.31	-0.47	-3.28
3,773.0	89.40	180.20	2,513.2	-1,541.8	19.0	1,528.3	2.51	-0.79	2.38
3,837.0	89.40	180.00	2,513.9	-1,605.8	18.9	1,591.8	0.31	0.00	-0.31
3,901.0	90.90	179.90	2,513.7	-1,669.8	19.0	1,655.3	2.35	2.34	-0.16
3,964.0	91.30	180.90	2,512.5	-1,732.8	18.5	1,717.9	1.71	0.63	1.59
4,028.0	91.10	182.20	2,511.1	-1,796.8	16.8	1,781.6	2.05	-0.31	2.03
4,092.0	90.90	180.30	2,510.0	-1,860.8	15.4	1,845.3	2.98	-0.31	-2.97
4,155.0	91.00	182.50	2,509.0	-1,923.7	13.9	1,908.0	3.50	0.16	3.49
4,218.0	90.90	183.00	2,507.9	-1,986.6	10.9	1,970.8	0.81	-0.16	0.79
4,281.0	90.70	181.30	2,507.1	-2,049.6	8.5	2,033.6	2.72	-0.32	-2.70
4,345.0	90.60	181.30	2,506.3	-2,113.6	7.0	2,097.3	0.16	-0.16	0.00
4,409.0	90.60	183.40	2,505.7	-2,177.5	4.4	2,161.1	3.28	0.00	3.28
4,471.0	89.90	182.10	2,505.4	-2,239.4	1.4	2,222.9	2.38	-1.13	-2.10
4,535.0	89.80	180.30	2,505.6	-2,303.4	0.1	2,286.6	2.82	-0.16	-2.81
4,598.0	88.70	179.80	2,506.4	-2,366.4	0.0	2,349.1	1.92	-1.75	-0.79
4,661.0	89.20	180.80	2,507.5	-2,429.4	-0.3	2,411.7	1.77	0.79	1.59
4,725.0	90.90	179.60	2,507.5	-2,493.4	-0.5	2,475.2	3.25	2.66	-1.88
4,788.0	90.00	181.00	2,507.0	-2,556.4	-0.8	2,537.8	2.64	-1.43	2.22
4,851.0	91.90	179.20	2,505.9	-2,619.4	-1.0	2,600.3	4.15	3.02	-2.86
4,915.0	91.60	176.50	2,504.0	-2,683.3	1.4	2,663.5	4.24	-0.47	-4.22
4,979.0	89.20	176.40	2,503.5	-2,747.2	5.4	2,726.4	3.75	-3.75	-0.16
5,039.0	88.00	177.00	2,505.0	-2,807.1	8.9	2,785.4	2.24	-2.00	1.00
5,101.0	86.50	176.50	2,508.0	-2,868.9	12.4	2,846.4	2.55	-2.42	-0.81
5,163.0	86.60	177.80	2,511.7	-2,930.7	15.5	2,907.4	2.10	0.16	2.10
5,223.0	87.30	178.10	2,514.9	-2,990.6	17.6	2,966.6	1.27	1.17	0.50
5,284.0	87.50	177.80	2,517.7	-3,051.5	19.8	3,026.8	0.59	0.33	-0.49
5,345.0	87.20	178.20	2,520.5	-3,112.4	21.9	3,086.9	0.82	-0.49	0.66
5,405.0	87.20	178.30	2,523.4	-3,172.3	23.7	3,146.2	0.17	0.00	0.17
5,466.0	87.10	176.80	2,526.5	-3,233.1	26.3	3,206.3	2.46	-0.16	-2.46
5,527.0	87.20	178.70	2,529.5	-3,294.0	28.7	3,266.4	3.12	0.16	3.11
5,587.0	87.10	178.20	2,532.5	-3,353.9	30.3	3,325.7	0.85	-0.17	-0.83
5,650.0	86.70	177.80	2,535.9	-3,416.8	32.5	3,387.9	0.90	-0.63	-0.63
5,713.0	87.60	178.50	2,539.0	-3,479.7	34.6	3,450.0	1.81	1.43	1.11
5,777.0	87.60	176.90	2,541.7	-3,543.6	37.1	3,513.1	2.50	0.00	-2.50
5,841.0	87.20	179.20	2,544.6	-3,607.4	39.3	3,576.3	3.64	-0.63	3.59
5,904.0	88.30	177.80	2,547.1	-3,670.4	41.0	3,638.6	2.82	1.75	-2.22
5,968.0	88.30	176.00	2,549.0	-3,734.3	44.4	3,701.6	2.81	0.00	-2.81
6,031.0	88.50	175.90	2,550.7	-3,797.1	48.9	3,763.4	0.35	0.32	-0.16
6,095.0	88.30	176.70	2,552.5	-3,860.9	53.0	3,826.3	1.29	-0.31	1.25
6,159.0	87.90	176.60	2,554.6	-3,924.8	56.7	3,889.2	0.64	-0.63	-0.16
6,221.0	87.80	178.10	2,557.0	-3,986.7	59.6	3,950.3	2.42	-0.16	2.42
6,285.0	87.70	177.60	2,559.5	-4,050.6	62.0	4,013.4	0.80	-0.16	-0.78
6,349.0	87.30	178.40	2,562.3	-4,114.5	64.2	4,076.6	1.40	-0.63	1.25

DDC
Survey Report



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Site:	Sec 17-20S-25E	MD Reference:	WELL @ 3498.0usft (Patterson UTI #101)
Well:	Pine Box 17 AP Fed #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)	
6,413.0	87.10	177.80	2,565.4	-4,178.3	66.4	4,139.8	0.99	-0.31	-0.94	
6,477.0	87.80	177.00	2,568.2	-4,242.2	69.3	4,202.8	1.66	1.09	-1.25	
6,540.0	87.30	175.80	2,570.9	-4,305.0	73.2	4,264.7	2.06	-0.79	-1.90	
6,604.0	87.30	176.50	2,573.9	-4,368.8	77.5	4,327.5	1.09	0.00	1.09	
6,667.0	88.20	176.50	2,576.4	-4,431.7	81.3	4,389.4	1.43	1.43	0.00	
6,731.0	87.90	176.60	2,578.6	-4,495.5	85.2	4,452.3	0.49	-0.47	0.16	
6,770.0	87.50	174.40	2,580.2	-4,534.3	88.2	4,490.5	5.73	-1.03	-5.64	
TD @ 6815' MD / 2582' TVD										
6,815.0	87.50	175.00	2,582.1	-4,579.1	92.4	4,534.5	1.33	0.00	1.33	

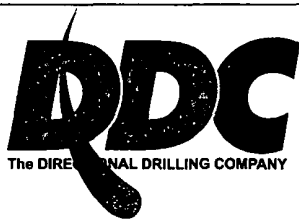
Survey Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
1,840.0	1,839.7	-24.6	-3.0	Tie In	
6,815.0	2,582.1	-4,579.1	92.4	TD @ 6815' MD / 2582' TVD	

Checked By: _____ Approved By: _____ Date: _____

Company Name: Mewbourne Oil Co
Pine Box 17 AP Fed #1H
Eddy County, New Mexico
Rlg: Patterson UT1 #101
Created By: Dina Chance
Date: 1/4/2012

Pine Box 17 AP Fed #1H
Eddy County, New Mexico
Q110374 & WT-11734

Mewbourne Oil Company



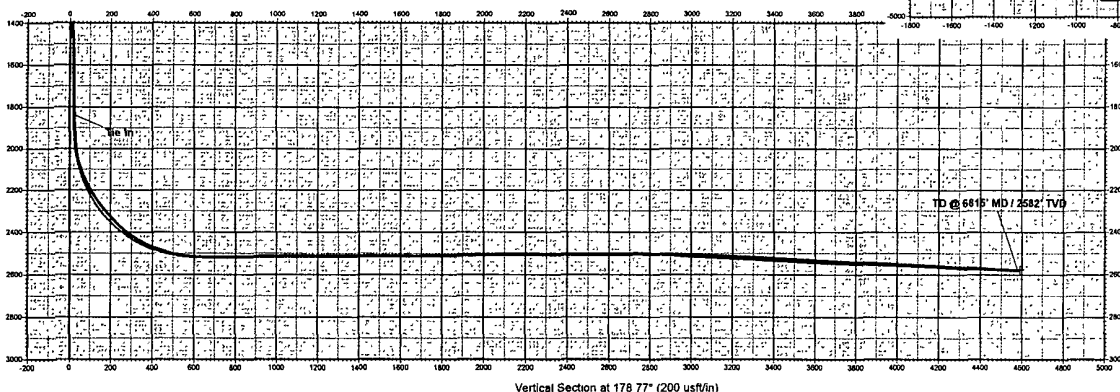
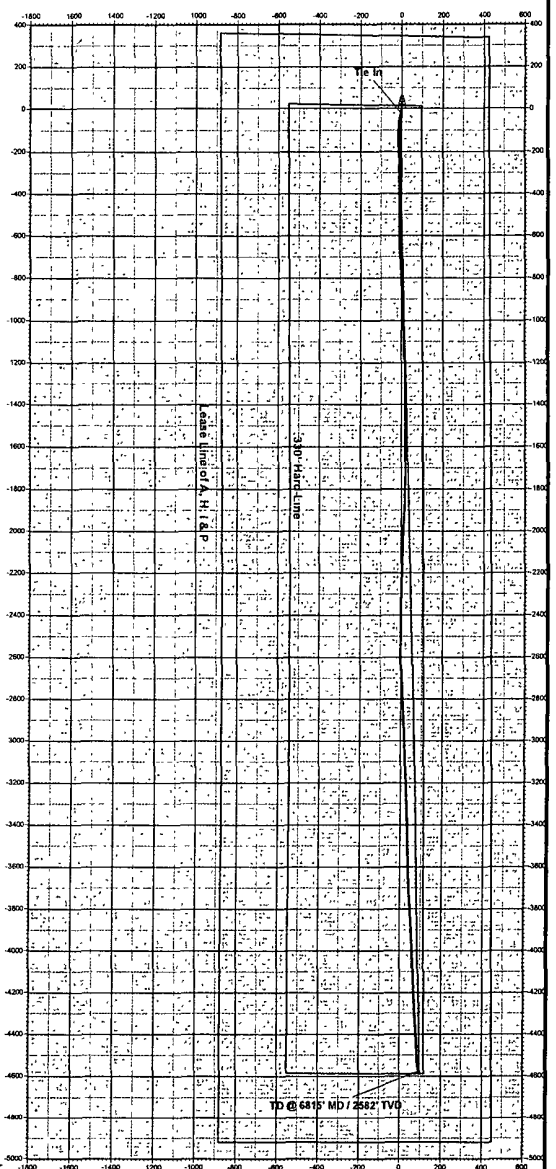
Azimuths to Grid North
Magnetic North: 8.06°
Magnetic Field
Strength: 48675.4nT
Dip Angle: 60.34°
Date: 12/14/2011
Model: IGRF2010

WELL DETAILS Pine Box 17 AP Fed #1H					
	Ground Level	3479.0			
+N-S	+E-W	North	East	Latitude	Longitude
0.0	0.0	574538.24	448301.25	32° 34' 47.353 N	104° 29' 57.503 W

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

DESIGN TARGET DETAILS						
Name	TVD	+N-S	+E-W	North	East	Latitude
Mid Lateral Target Pine Box 17 AP FED #1H	2504.0	-2939.4	63.1	571754.84	448364.36	32° 34' 18.306 N
- plan hits target center						104° 29' 55.412 W
Bottom Pine Box 17 AP Fed #1H	2578.0	-4589.3	88.6	570104.92	448399.75	32° 34' 1.979 N
- plan hits target center						104° 29' 55.968 W

ANNOTATIONS									
MD	Inc	Azi	TVD	+N-S	+E-W	V-Sect	Departure	Annotation	
1840.0	1.60	214.78	1839.7	-24.6	-3.0	24.5	0.0	Tie Into MS GYRO / Hold 1.8" Inc., 214.78" Azm	
1855.5	1.50	214.78	1955.2	-27.1	-4.7	27.0	0.0	KOP Build 10"/100' @ 1856.5' MD	
2847.6	90.32	178.49	2517.0	-601.1	1.7	603.0	579.5	EOC 2844' MD, 90.32" Inc., 178.49" Azm, 2517' TVD	
5184.7	90.32	178.49	2504.0	-2939.4	63.1	2940.1	2916.4	Target @ 2504' TVD / Drop/Turn 2"/100'	
6334.7	87.29	178.76	2507.2	-3091.3	66.7	3592.0	3088.6	EOC 6337' MD, 87.29" Inc., 178.76" Azm	
6336.8	87.29	178.76	2578.0	-4589.3	88.6	4690.4	4568.8	TD @ 6337' MD/2578' TVD	



Vertical Section at 178.77° (200 usf/in)

		Do It Once. Do It Right		Confidential Information - not to be disclosed outside Mewbourne Oil Company		Final Drawing	
Prepared for Mr. Mickey Young		Company Mewbourne Oil Company		Date 6-Dec-11			
Well Name Pine Box -17- "AP" Fed Com #1H		Type of Installation 19-Stage 4-1/2" StackFRAC® HD		Location Eddy County, NM			
Depth	Drawing	Description	OD(in)	ID(in)	Length		
Page 1 of 3							
REV_							
TD 6,815							
TVD 2,582							
KOP 1,966							
TOL 2,610							
100bbbls		***Drillable FracPORT's to be shipped without handling pups*** Latched Seal Assembly 7" 23-32 ppf x 3.875" Lower Bore x 4.75" Upper Bore SF Liner Hanger Packer PN: 108425-000004 (Shear Pins: 2 @ 482 plus 1 @ 241 : 1,205 psi setting pressure) SF Bottom Guide S# SNU0005491	5.875"	4.750	3 28		
7" Shoe 2,865		7" 26# L-80 LT&C Casing					
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 7	4.500"	4 000	296.28		
Stage 19 2,916		Packers Plus 4-1/2" Drillable FracPORT™ with 3.625" Seat for 3.750" High Pressure Ball PN: 121332-000024 (5 shear pins at 314 psi each: 1,570 psi opening pressure)S# EA1005437 4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	5 630"	3.625	2.65		
104bbbls		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	4 500"	4 000	85 4		
RSII 3,010		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2088 psi setting pressure)S# EA3015607 3' x 4-1/2" 11 60# L-80 LTC Pup Joint	4 500"	4 000	6.06		
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	5 750"	3.875	5 25		
Stage 18 3,104		Packers Plus 4-1/2" Drillable FracPORT™ with 3.500" Seat for 3.625" High Pressure Ball PN: 121332-000023 (5 shear pins at 314 psi each: 1,570 psi opening pressure)S# EA3011505 4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4 000	3.07		
107bbbls		6' x 4-1/2" 11.60# L-80 LTC Pup Joint	4 500"	4 000	85 23		
RSII 3,196		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2088 psi setting pressure)S# EA3015599 3' x 4-1/2" 11.60# L-80 LTC Pup Joint	5 630"	3.500	2.65		
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4 000	83.86		
Stage 17 3,289		Packers Plus 4-1/2" Drillable FracPORT™ with 3.375" Seat for 3.500" High Pressure Ball PN: 108481-000020 (5 shear pins at 315 psi each: 1,575 psi opening pressure)S# EM0046433 4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	4 500"	4 000	6.05		
110bbbls		6' x 4-1/2" 11.60# L-80 LTC Pup Joint	4 500"	4 000	128		
RSII 3,426		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2088 psi setting pressure)S# EA3015600 3' x 4-1/2" 11 60# L-80 LTC Pup Joint	5 750"	3.875	5 25		
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4 000	3.03		
Stage 16 3,519		Packers Plus 4-1/2" Drillable FracPORT™ with 3.250" Seat for 3.375" High Pressure Ball PN: 108481-000019 (5 shear pins at 315 psi each: 1,575 psi opening pressure)S# EM0050794 4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	4 500"	4 000	84.92		
114bbbls		6' x 4-1/2" 11.60# L-80 LTC Pup Joint	5 630"	3.250	2.65		
RSII 3,656		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2088 psi setting pressure)S# EA3015601 3' x 4-1/2" 11.60# L-80 LTC Pup Joint	4 500"	4 000	3.720		
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4 000	128.6		
Stage 15 3,750		Packers Plus 4-1/2" Drillable FracPORT™ with 3.125" Seat for 3.250" High Pressure Ball PN: 108481-000018 (5 shear pins at 315 psi each: 1,575 psi opening pressure)S# EM0046432 4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	4 500"	4 000	6 06		
117bbbls		6' x 4-1/2" 11.60# L-80 LTC Pup Joint	4 500"	4 000	5 25		
RSII 3,886		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2088 psi setting pressure)S# EA3014384 3' x 4-1/2" 11 60# L-80 LTC Pup Joint	5 750"	3.875	5 25		
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4 000	3		
Service Center	Midland, TX	Contact	432-563-8024	Scott Mabry		Telephone	Chad Williams 405-255-3223

Do It Once. Do It Right		Confidential Information - not to be disclosed outside Mewbourne Oil Company		Final Drawing	
Prepared for Mr. Mickey Young		Company Mewbourne Oil Company		Date 6-Dec-11	
Well Name Pine Box -17- "AP" Fed Com #1H		Type of Installation 19-Stage 4-1/2" StackFRAC® HD		Location Eddy County, NM	
Depth	Drawing	Description	OD(in)	ID(in)	Length
REV_			Page 2 of 3		
Stage 14 3,979 121bbbls		4-1/2" 11.60# L-80 LTC LINER JOINTS: 2 Packers Plus 4-1/2" Drillable FracPORT™ with 3.000" Seat for 3.125" High Pressure Ball PN: 108481-000017 (5 shear pins at 315 psi each: 1,575 psi opening pressure)S# EM0054930 4-1/2" 11.60# J-55 LTC LINER JOINTS: 2 6' x 4-1/2" 11.60# L-80 LTC Pup Joint Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2088 psi setting pressure)S# EA3014383 3' x 4-1/2" 11.60# L-80 LTC Pup Joint 4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4.000	85 21
RSII 4,073		4 500"	3.000	2.65	
Stage 13 4,167 124bbbls		4.500"	4 000	85 41	
RSII 4,303		4.500"	4.000	6.07	
Stage 12 4,397 127bbbls		5.750"	3.875	5 25	
RSII 4,491		4.500"	4.000	3 03	
Stage 11 4,584 130bbbls		4 500"	4 000	85 32	
RSII 4,764		5.630"	2.875	2 65	
Stage 10 4,943 136bbbls		3.720	4 500"	4 000	127 49
RSII 5,079		4 500"	4 000	6 03	
Stage 9 5,172 139bbbls		5 750"	3.875	5 25	
RSII 5,266		4 500"	4 000	3 02	
Stage 8 5,360 142bbbls		4.500"	4.000	85 35	
RSII 5,453		5.630"	2.750	2 65	
Stage 7 5,547 145bbbls	3.720	4 500"	4 000	85 29	
	4 500"	4 000	6 04		
	5 750"	3.875	5 25		
	4 500"	4.000	3 03		
	4.500"	4.000	85 29		
	5.630"	2.625	2 65		
	3.720	4 500"	4 000	170 58	
	4 500"	4 000	6 07		
	5 750"	3.875	5 25		
	4 500"	4 000	3		
	4.500"	4 000	170 96		
	5.630"	2.500	2 65		
	3.720	4 500"	4 000	127 46	
	4 500"	4.000	6 07		
	5 750"	3.875	5 25		
	4 500"	4.000	3 07		
	4.500"	4 000	84 92		
	5.630"	2.375	2 65		
	3.720	4 500"	4 000	85 1	
	4 500"	4.000	6 07		
	5 750"	3.875	5 25		
	4 500"	4.000	3 06		
	4.500"	4.000	85 3		
	5.630"	2.250	2 65		
	3.720	4 500"	4.000	85 18	
	4 500"	4.000	6 02		
	5 750"	3.875	5 25		
	4 500"	4 000	3 08		
	4.500"	4 000	84 97		
	5.630"	2.125	2.65		
	3.720				

Service Center	Telephone	Contact	Telephone
Midland, TX	432-563-8024	Scott Mabry	Chad Williams 405-255-3223



Do It Once.
Do It Right

Confidential Information - not to be disclosed
outside Mewbourne Oil Company

Final
Drawing

Prepared for Mr. Mickey Young		Company Mewbourne Oil Company	Date 6-Dec-11		
Well Name Pine Box -17- "AP" Fed Com #1H		Type of Installation 19-Stage 4-1/2" StackFRAC® HD	Location Eddy County, NM		
Depth	Drawing	Description	OD(in)	ID(in)	Length
Page 3 of 3					
REV_					
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	4 500"	4.000	128 16
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	4 500"	4 000	6.07
RSII 5,684		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2088 psi setting pressure)S# EA3014386	5 750"	3.875	5 25
		3' x 4-1/2" 11 60# L-80 LTC Pup Joint	4,500"	4 000	3 08
Stage 6 5,777 147bbbls		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4 000	85 37
		Packers Plus 4-1/2" Drillable FracPORT™ with 2.000" Seat for 2.125" High Pressure Ball PN: 124929-000009 (4 shear pins at 315 psi each: 1,575 psi opening pressure)S# EM0052908	5 630"	2.000	2 65
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4 000	85.33
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	4 500"	4 000	6 07
RSII 5,871		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2088 psi setting pressure)S# EA3014377	5 750"	3.875	5.25
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint	4,500"	4 000	3 07
Stage 5 5,965 150bbbls		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4 000	85 28
		Packers Plus 4-1/2" Drillable FracPORT™ with 1.875" Seat for 2.000" High Pressure Ball PN: 108481-000008 (5 shear pins at 315 psi each: 1,575 psi opening pressure)S# EM0046402	5 630"	1.875	2 65
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	4 500"	4.000	127 91
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	4,500"	4 000	6 06
RSII 6,102		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2088 psi setting pressure)S# EA3014378	5 750"	3.875	5 25
		3' x 4-1/2" 11 60# L-80 LTC Pup Joint	4 500"	4 000	3 05
Stage 4 6,195 153bbbls		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4 000	85 24
		Packers Plus 4-1/2" Drillable FracPORT™ with 1.750" Seat for 1.875" High Pressure Ball PN: 108481-000007 (5 shear pins at 315 psi each: 1,575 psi opening pressure)S# EM0052896	5 630"	1.750	2 65
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4.000	85 21
		6' x 4-1/2" 11.60# L-80 LTC Pup Joint	4 500"	4 000	6 09
RSII 6,289		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2088 psi setting pressure)S# EA3014379	5 750"	3.875	5 25
		3' x 4-1/2" 11 60# L-80 LTC Pup Joint	4 500"	4 000	3 07
Stage 3 6,382 156bbbls		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4 500"	4 000	84 63
		Packers Plus 4-1/2" Drillable FracPORT™ with 1.625" Seat for 1.750" High Pressure Ball PN: 108481-000006 (5 shear pins at 315 psi each: 1,575 psi opening pressure)S# EM0050542	5 630"	1.625	2 65
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 3	4 500"	4 000	128 46
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint	4 500"	4 000	6 07
RSII 6,519		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2088 psi setting pressure)S# EA3014373	5 750"	3.875	5 25
		3' x 4-1/2" 11 60# L-80 LTC Pup Joint	4,500"	4 000	3 07
Stage 2 6,614 160bbbls		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4,500"	4 000	85 99
		Packers Plus 4-1/2" Drillable FracPORT™ with 1.500" Seat for 1.625" High Pressure Ball PN: 108481-000005 (5 shear pins at 315 psi each: 1,575 psi opening pressure)S# EM0052889	5,630"	1.500	2.65
		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4,500"	4.000	85 26
		6' x 4-1/2" 11.60# L-80 LTC Pup Joint	4,500"	4 000	6 07
RSII 6,708		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2088 psi setting pressure)S# EA3014375	5 750"	3.875	5 25
		3' x 4-1/2" 11.60# L-80 LTC Pup Joint	4 500"	4.000	3 06
Stage 1 6,805 163bbbls		4-1/2" 11.60# J-55 LTC LINER JOINTS: 2	4,500"	4 000	85 19
		6' x 4-1/2" 11 60# L-80 LTC Pup Joint			3 50
		Customer 4-1/2" Pump Off Sub (Pinned above 4000 PSI)			
Service Center Midland, TX			Telephone Chad Williams 405-255-3223		
Telephone 432-563-8024			Contact Scott Mabry		

OPERATOR MEWBOURNE OIL CO.
WELL/LEASE PINE BOX 17 AP FED COM #1H
COUNTY EDDY

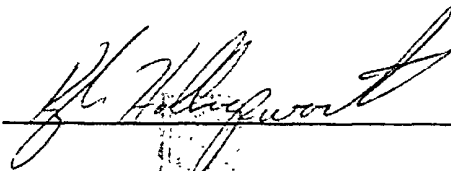
STATE OF NEW MEXICO
DEVIATION REPORT

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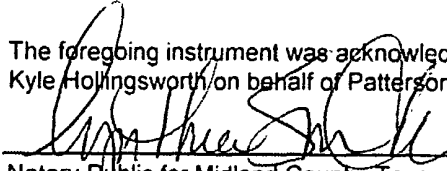
STATE OF TEXAS

COUNTY OF MIDLAND

BY



The foregoing instrument was acknowledged before me on January 11, 2012 by
Kyle Holingsworth on behalf of Patterson-UTL Drilling Company LLC


Notary Public for Midland County, Texas
My Commission Expires: November 6, 2014

