



Weatherford

Evaluation, Drilling & Intervention
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Tel. (432) 561-8892 Fax (432) 561-8895

Mewbourne Oil Co.
701 S Cecil St.
Hobbs, NM 88240

Date: December 9, 2016

Attention: Shane Heinze

Re: Mewbourne Oil Co.
Well: West Loving 12 W2EH State Com 1H
Eddy County, New Mexico

30.015-42852

Enclosed, please find the original survey performed on the referenced well by Precision Energy Services, Inc. (P-5 No. 676004), a Weatherford company. Other information required by your office is as follows:

<u>Name & Title Of Surveyor</u>	<u>Well Number</u>	<u>Surveyed Depths</u>	<u>Dates Performed</u>	<u>Type of Survey</u>
Tyler Brenton	1H	9153 MD	11/17/2016	Measurement
MWD Supervisor		18433 MD	12/05/2016	While Drilling

A notarized plan vs. actual is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Jonathan Leger
MWD Ops Coordinator

On this, the _____ day of _____, 20____, before me a notary public, the undersigned officer, personally appeared _____, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he executed the same for the purposes therein contained.

In witness hereof, I hereunto set my hand and official seal.

Notary Public

Provide signature page for survey



MEWBOURNE
OIL COMPANY

5D Survey Report

Mewbourn Oil Company

Field Name: *Mewbourne Eddy Co, NM (Nad 27 NMEZ)*
Site Name: *West Loving 12 W2EH State Com 1H*
Well Name: *West Loving 12 W2EH State Com 1H*
Survey: *Definitive survey*

9 December 2016



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**MEWBOURNE
OIL COMPANY**

West Loving 12 W2EH State Com 1H

Field Name: Mewbourne Eddy Co, NM (Nad 27 NMEZ)	Map Units: US ft		Company Name: Mewbourn Oil Company	
	Vertical Reference Datum (VRD): Mean Sea Level			
	Projected Coordinate System: NAD27 / New Mexico East			
	Comment:			
Site: West Loving 12 W2EH State Com 1H	Units: US ft	North Reference: Grid	Convergence Angle: 0.10	
	Position:	Northing: 448557.80 US ft	Latitude: 32° 13' 59.06"	
		Easting: 556183.40 US ft	Longitude: -104° 9' 5.88"	
	Elevation above MSL: 3110.00 US ft		Comment:	
Slot: West Loving 12 W2EH State Com 1H	Position (Relative to Site Centre)			
	+N/-S: 0.00 US ft	Northing: 448557.80 US ft	Latitude: 32°13'59.06"	
	+E/-W: 0.00 US ft	Easting: 556183.40 US ft	Longitude: -104°9'5.88"	
	Slot TVD Reference: Ground Elevation			
	Elevation above MSL: 3110.00 US ft			
Well: West Loving 12 W2EH State Com 1H	Type: Main well		UWI:	
	File Number:	Comment:		
	Closure Distance: 4805.11 US ft		Closure Azimuth: 89.39°	
	Vertical Section: Position of Origin (Relative to Slot centre)			
	+N/-S: 0.00 US ft	+E/-W: 0.00 US ft	Az: 89.62°	

Drill floor: Survey Name: Definitive Survey			
Rig Height (Drill Floor): 27.00us ft	Elevation above MSL: 3137.00us ft	Inclination: 0.00°	Azimuth: 0.00°

Survey Name: Definitive Survey

Date: 28/Sep/2016	Survey Tool: See Survey Tool Ranges below.	Comment:	Company:
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Magnetic Model:

Model Name: bggm2016	Date: 07/Nov/2016	Field Strength: 48051.4nT	Declination: 7.34°	Dip: 59.98°
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Tie Point:

MD: 0.00 US ft	Inclination: 0.00°	Azimuth: 0.00°	TVD: 0.00 US ft	North Offset: 0.00 US ft	East Offset: 0.00 US ft
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Survey Tool Ranges:

Name	Start MD(usft)	End MD(usft)	Source Survey
GYRO-NS_OW	0.00	8740.00	Phoenix Gyro Svys
MWD	8740.00	9481.00	WFT MWD Svy 2

Survey Tool Ranges:

Name	Start MD(USFt)	End MD(USFt)	Source Survey
MWD	9481.00	10048.00	WFT MWD Svy 3
MWD	10048.00	10172.00	WFT MWD Svy 4
MWD	10172.00	10546.00	WFT MWD Svy 5
MWD	10546.00	12978.00	WFT MWD Svy 6
MWD	12978.00	14410.00	WFT MWD Svy 7

Wellpath created using minimum curvature.

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)

MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (°/100US ft)	Comment
8740.00	0.82	122.08	8737.11	-49.43	-33.94	-49.21	448523.86	556134.19	0.78	Last Gyro Svy
9153.00	1.26	72.83	9150.05	-42.59	-34.17	-42.36	448523.63	556141.04	0.23	First WFT Svy
9201.00	1.05	66.77	9198.04	-41.68	-33.84	-41.46	448523.96	556141.94	0.51	
9232.00	4.07	82.20	9229.00	-40.33	-33.57	-40.10	448524.23	556143.30	9.91	
9263.00	9.50	84.03	9259.77	-36.69	-33.16	-36.47	448524.64	556146.93	17.53	
9294.00	14.30	84.52	9290.10	-30.32	-32.53	-30.11	448525.27	556153.29	15.49	
9325.00	17.43	81.69	9319.92	-21.91	-31.49	-21.70	448526.31	556161.70	10.40	
9357.00	19.43	75.99	9350.28	-11.99	-29.51	-11.79	448528.29	556171.61	8.41	
9388.00	21.04	71.87	9379.36	-1.68	-26.53	-1.50	448531.27	556181.90	6.93	
9419.00	22.75	71.10	9408.13	9.31	-22.85	9.46	448534.95	556192.86	5.59	
9450.00	24.67	70.71	9436.51	21.11	-18.78	21.24	448539.02	556204.64	6.21	
9481.00	26.94	70.68	9464.41	33.88	-14.31	33.97	448543.49	556217.37	7.32	
9512.00	29.53	72.04	9491.72	47.80	-9.63	47.87	448548.17	556231.27	8.61	
9543.00	30.84	75.80	9518.52	62.81	-5.33	62.84	448552.47	556246.24	7.42	
9575.00	32.33	78.10	9545.78	79.16	-1.55	79.17	448556.25	556262.57	5.99	
9606.00	34.56	80.32	9571.65	95.96	1.64	95.95	448559.44	556279.35	8.20	
9637.00	36.87	82.00	9596.82	113.86	4.41	113.83	448562.21	556297.23	8.09	
9668.00	39.48	82.73	9621.18	132.86	6.95	132.82	448564.75	556316.22	8.54	
9699.00	42.25	82.75	9644.63	153.00	9.51	152.94	448567.31	556336.34	8.94	
9731.00	45.08	83.08	9667.77	174.94	12.24	174.86	448570.04	556358.26	8.87	
9762.00	47.61	83.88	9689.17	197.24	14.78	197.14	448572.58	556380.54	8.37	
9793.00	51.07	84.35	9709.37	220.64	17.19	220.53	448574.99	556403.93	11.22	
9824.00	54.71	85.01	9728.07	245.27	19.48	245.14	448577.28	556428.54	11.86	
9855.00	58.57	85.41	9745.11	271.08	21.64	270.94	448579.44	556454.34	12.50	
9887.00	62.64	86.48	9760.81	298.89	23.60	298.74	448581.40	556482.14	13.05	
9918.00	66.07	87.20	9774.23	326.80	25.14	326.64	448582.94	556510.04	11.26	
9949.00	67.68	88.28	9786.40	355.29	26.26	355.13	448584.06	556538.53	6.10	
9980.00	67.73	89.89	9798.17	383.97	26.72	383.81	448584.52	556567.21	4.81	
10011.00	71.27	90.45	9809.02	413.01	26.63	412.84	448584.43	556596.24	11.54	
10048.00	75.96	91.06	9819.45	448.49	26.16	448.32	448583.96	556631.72	12.77	
10139.00	80.51	87.64	9838.01	537.53	27.20	537.37	448585.00	556720.77	6.21	
10172.00	81.15	86.45	9843.27	570.08	28.88	569.90	448586.68	556753.30	4.05	
10203.00	82.99	84.74	9847.55	600.70	31.23	600.51	448589.03	556783.91	8.07	
10234.00	86.29	83.05	9850.44	631.41	34.52	631.19	448592.32	556814.59	11.95	
10265.00	88.74	81.63	9851.79	662.13	38.65	661.89	448596.45	556845.29	9.13	
10359.00	93.15	88.47	9850.23	755.74	46.75	755.44	448604.55	556938.84	8.66	
10453.00	90.14	91.59	9847.53	849.67	46.70	849.38	448604.50	557032.78	4.61	
10546.00	87.48	90.49	9849.47	942.62	45.01	942.34	448602.81	557125.74	3.09	
10640.00	88.53	89.17	9852.74	1036.55	45.29	1036.28	448603.09	557219.68	1.79	
10733.00	88.39	89.73	9855.24	1129.52	46.18	1129.24	448603.98	557312.64	0.62	
10827.00	89.79	88.48	9856.73	1223.50	47.65	1223.21	448605.45	557406.61	2.00	
10920.00	89.58	88.01	9857.24	1316.47	50.50	1316.17	448608.30	557499.57	0.55	
11014.00	90.91	89.35	9856.84	1410.45	52.67	1410.14	448610.47	557593.54	2.01	
11107.00	90.28	89.14	9855.87	1503.45	53.89	1503.12	448611.69	557686.52	0.71	
11201.00	91.12	90.17	9854.73	1597.44	54.46	1597.11	448612.26	557780.51	1.41	
11295.00	90.07	93.04	9853.75	1691.36	51.83	1691.06	448609.63	557874.46	3.25	
11389.00	90.21	94.11	9853.52	1785.14	45.96	1784.87	448603.76	557968.27	1.15	

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (°/100US ft)	Comment
11482.00	87.55	90.04	9855.34	1878.01	42.60	1877.77	448600.40	558061.17	5.23	
11576.00	88.53	90.51	9858.55	1971.95	42.15	1971.71	448599.95	558155.11	1.16	
11669.00	88.74	90.32	9860.77	2064.91	41.47	2064.68	448599.27	558248.08	0.30	
11762.00	91.33	91.17	9860.71	2157.88	40.26	2157.66	448598.06	558341.06	2.93	
11856.00	90.56	91.67	9859.16	2251.82	37.93	2251.62	448595.73	558435.02	0.98	
11949.00	90.35	89.85	9858.42	2344.80	36.70	2344.61	448594.50	558528.01	1.97	
12043.00	89.23	89.45	9858.77	2438.80	37.27	2438.60	448595.07	558622.00	1.27	
12136.00	90.63	90.37	9858.88	2531.79	37.42	2531.60	448595.22	558715.00	1.80	
12230.00	90.00	90.13	9858.36	2625.78	37.01	2625.60	448594.81	558809.00	0.72	
12323.00	89.37	89.74	9858.88	2718.78	37.12	2718.59	448594.92	558901.99	0.80	
12416.00	88.53	90.37	9860.58	2811.76	37.03	2811.58	448594.83	558994.98	1.13	
12510.00	89.51	89.81	9862.19	2905.74	36.88	2905.56	448594.68	559088.96	1.20	
12603.00	89.09	89.88	9863.32	2998.73	37.13	2998.55	448594.93	559181.95	0.46	
12697.00	87.76	86.82	9865.91	3092.66	39.84	3092.47	448597.64	559275.87	3.55	
12790.00	88.18	88.24	9869.20	3185.54	43.84	3185.32	448601.64	559368.72	1.59	
12884.00	89.65	89.57	9870.98	3279.51	45.64	3279.28	448603.44	559462.68	2.11	
12978.00	87.76	89.33	9873.11	3373.48	46.54	3373.25	448604.34	559556.65	2.03	
13097.00	91.47	90.07	9873.91	3492.46	47.16	3492.22	448604.96	559675.62	3.18	
13190.00	90.63	89.39	9872.20	3585.44	47.60	3585.20	448605.40	559768.60	1.16	
13284.00	90.00	89.13	9871.69	3679.44	48.81	3679.19	448606.61	559862.59	0.73	
13378.00	90.07	88.84	9871.63	3773.43	50.48	3773.18	448608.28	559956.58	0.32	
13472.00	89.93	90.55	9871.63	3867.43	50.98	3867.17	448608.78	560050.57	1.83	
13566.00	89.93	90.58	9871.74	3961.41	50.05	3961.17	448607.85	560144.57	0.03	
13659.00	89.79	90.84	9871.97	4054.40	48.90	4054.16	448606.70	560237.56	0.32	
13753.00	88.95	90.96	9873.00	4148.37	47.42	4148.14	448605.22	560331.54	0.90	
13846.00	88.60	90.06	9874.99	4241.33	46.60	4241.12	448604.40	560424.52	1.04	
13940.00	89.02	91.48	9876.94	4335.29	45.33	4335.09	448603.13	560518.49	1.58	
14033.00	88.11	91.25	9879.27	4428.22	43.12	4428.03	448600.92	560611.43	1.01	
14126.00	88.88	88.88	9881.72	4521.18	43.01	4520.99	448600.81	560704.39	2.68	
14220.00	89.72	89.46	9882.86	4615.16	44.37	4614.97	448602.17	560798.37	1.09	
14333.00	90.84	87.44	9882.31	4728.13	47.43	4727.92	448605.23	560911.32	2.04	Last Svy
14410.00	90.84	87.44	9881.18	4805.07	50.87	4804.84	448608.67	560988.24	0.00	Proj to Bit