

5D Survey Report

NM OIL CONSERVATION

ARTESIA DISTRICT

APR 28 2017

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**MEWBOURNE**
OIL COMPANY**5D Survey Report**

3001543846

Mewbourn Oil Company**Field Name:** *Mewbourne Eddy Co, NM (Nad 27 NMEZ)***Site Name:** *Journey 12 WOMP Fee Com 3H***Well Name:** *Journey 12 WOMP Fee Com 3H***Survey:** *Definitive survey*

18 January 2017

**Weatherford®**


Weatherford

**MEWBOURNE
OIL COMPANY**
Journey 12 WOMP Fee Com 3H

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: Journey 12 WOMP Fee Com 3H	Units: US ft	North Reference: Grid	Convergence Angle: 0.15	
	Position:	Northing: 445899.40 US ft	Latitude: 32° 13' 32.06"	
		Easting: 588126.60 US ft	Longitude: -104° 2' 54.06"	
	Elevation above MSL: 2975.00 US ft		Comment:	
Slot: Journey 12 WOMP Fee Com 3H	Position (Relative to Site Centre)			
	+N/-S: 0.00 US ft	Northing: 445899.40 US ft	Latitude: 32°13'32.06"	
	+E/-W: 0.00 US ft	Easting: 588126.60 US ft	Longitude: -104°2'54.06"	
	Slot TVD Reference: Ground Elevation			
	Elevation above MSL: 2975.00 US ft			
	Comment:			
Well: Journey 12 WOMP Fee Com 3H	Type: Main well		UWI:	
	File Number:	Comment:		
	Closure Distance: 4792.76 US ft	Closure Azimuth: 88.94°		
	Vertical Section: Position of Origin (Relative to Slot centre)			
	+N/-S: 0.00 US ft	+E/-W: -0.00 US ft	Az: 88.84°	

Drill floor: Survey Name: Definitive Survey

Rig Height (Drill Floor): 27.00 US ft	Elevation above MSL: 3002.00 US ft	Inclination: 0.00°	Azimuth: 0.00°
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Survey Name: Definitive Survey

Date: 16/Nov/2016	Survey Tool: See Survey Tool Ranges below.	Comment:	Company:
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Magnetic Model:

Model Name: bggm2016	Date: 15/Dec/2016	Field Strength: 48045.9 nT	Declination: 7.28°	Dip: 59.99°
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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
MWD	0.00	445.37	Teledrift Svy
MWD	445.37	2548.00	WFT MWD Svy 1

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Survey Tool Ranges:			
Name	Start MD(USFt)	End MD(USFt)	Source Survey
MWD	2548.00	8650.00	WFT MWD Svy 2
MWD	8650.00	9239.00	WFT MWD Svy 3
MWD	9239.00	9799.00	WFT MWD Svy 4
MWD	9799.00	10066.00	WFT MWD Svy 5
MWD	10066.00	13214.00	WFT MWD Svy 6
MWD	13214.00	14251.00	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
0.00	0.00	0.00	0.00	0.00	0.00	-0.00	445899.40	588126.60	0.00	
27.00	0.00	0.00	27.00	0.00	0.00	-0.00	445899.40	588126.60	0.00	
169.37	0.20	214.00	169.37	-0.14	-0.21	-0.14	445899.19	588126.46	0.14	First Teledrift Svy
304.37	0.20	135.00	304.37	-0.12	-0.57	-0.10	445898.83	588126.50	0.19	
445.37	1.00	79.00	445.36	1.27	-0.51	1.28	445898.89	588127.88	0.64	Tie-on Teledrift
778.00	1.51	84.71	777.91	8.50	0.45	8.49	445899.85	588135.09	0.16	First WFT Svy
968.00	1.13	81.84	967.86	12.85	0.95	12.84	445900.35	588139.44	0.20	
1159.00	0.82	82.96	1158.83	16.08	1.38	16.06	445900.78	588142.66	0.16	
1349.00	0.51	111.65	1348.82	18.22	1.24	18.19	445900.64	588144.79	0.23	
1540.00	0.49	133.65	1539.81	19.58	0.36	19.58	445899.76	588146.18	0.10	
1732.00	0.28	201.79	1731.81	19.98	-0.64	20.00	445898.76	588146.60	0.24	
1920.00	0.29	159.93	1919.81	19.95	-1.52	19.99	445897.88	588146.59	0.11	
2107.00	0.49	118.02	2106.80	20.80	-2.34	20.86	445897.06	588147.46	0.18	
2294.00	1.01	113.83	2293.79	23.00	-3.38	23.07	445896.02	588149.67	0.28	
2480.00	1.26	122.20	2479.75	26.19	-5.13	26.30	445894.27	588152.90	0.16	
2548.00	0.99	124.65	2547.74	27.29	-5.86	27.42	445893.54	588154.02	0.40	
2756.00	0.88	142.20	2755.71	29.70	-8.15	29.87	445891.25	588156.47	0.15	
2942.00	1.57	105.97	2941.67	32.99	-9.98	33.20	445889.42	588159.80	0.54	
3129.00	0.80	162.44	3128.63	35.81	-11.93	36.05	445887.47	588162.65	0.70	
3222.00	0.88	163.71	3221.62	36.18	-13.23	36.45	445886.17	588163.05	0.09	
3409.00	0.84	164.96	3408.60	36.88	-15.93	37.21	445883.47	588163.81	0.02	
3596.00	0.80	178.23	3595.58	37.22	-18.56	37.61	445880.84	588164.21	0.10	
3783.00	0.82	172.60	3782.56	37.38	-21.19	37.82	445878.21	588164.42	0.04	
3971.00	0.75	173.75	3970.54	37.64	-23.75	38.13	445875.65	588164.73	0.04	
4156.00	0.70	185.88	4155.53	37.61	-26.08	38.14	445873.32	588164.74	0.09	
4343.00	0.70	191.72	4342.52	37.21	-28.33	37.79	445871.07	588164.39	0.04	
4531.00	0.71	192.45	4530.50	36.68	-30.59	37.31	445868.81	588163.91	0.01	
4718.00	0.78	193.83	4717.49	36.08	-32.96	36.75	445866.44	588163.35	0.04	
4905.00	0.98	193.75	4904.46	35.34	-35.75	36.07	445863.65	588162.67	0.11	
5092.00	1.21	203.96	5091.43	34.09	-39.11	34.89	445860.29	588161.49	0.16	
5279.00	1.39	206.52	5278.38	32.20	-42.94	33.07	445856.46	588159.67	0.10	
5372.00	1.38	205.03	5371.35	31.18	-44.97	32.10	445854.43	588158.70	0.04	
5466.00	1.47	208.01	5465.33	30.09	-47.06	31.05	445852.34	588157.65	0.12	
5653.00	1.61	203.40	5652.26	27.83	-51.58	28.88	445847.82	588155.48	0.10	
5840.00	1.70	202.85	5839.18	25.61	-56.55	26.76	445842.85	588153.36	0.05	
6028.00	1.55	203.59	6027.10	23.41	-61.45	24.66	445837.95	588151.26	0.08	
6216.00	1.10	191.48	6215.05	21.95	-65.55	23.28	445833.85	588149.88	0.28	
6403.00	1.34	192.57	6402.01	21.04	-69.44	22.45	445829.96	588149.05	0.13	
6591.00	1.32	198.06	6589.96	19.81	-73.65	21.30	445825.75	588147.90	0.07	
6778.00	2.13	224.03	6776.88	16.63	-78.19	18.22	445821.21	588144.82	0.59	
6965.00	1.51	263.77	6963.79	11.71	-80.96	13.35	445818.44	588139.95	0.73	
7151.00	0.70	310.94	7149.76	8.43	-80.48	10.06	445818.92	588136.66	0.62	
7338.00	1.86	237.99	7336.71	4.97	-81.34	6.62	445818.06	588133.22	0.95	
7526.00	1.01	264.39	7524.66	0.70	-83.12	2.39	445816.28	588128.99	0.56	
7713.00	1.22	296.66	7711.62	-2.70	-82.39	-1.03	445817.01	588125.57	0.35	

5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										Comment
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)	
7900.00	0.43	300.98	7898.60	-5.06	-81.13	-3.41	445818.27	588123.19	0.42	
8087.00	2.34	338.69	8085.54	-6.97	-77.22	-5.40	445822.18	588121.20	1.08	
8275.00	1.38	297.10	8273.45	-10.28	-72.61	-8.81	445826.79	588117.79	0.85	
8650.00	0.93	220.21	8648.39	-16.27	-72.88	-14.80	445826.52	588111.80	0.39	
8744.00	1.85	185.31	8742.36	-16.95	-74.97	-15.43	445824.43	588111.17	1.29	
8930.00	1.39	180.40	8928.29	-17.35	-80.21	-15.73	445819.19	588110.87	0.26	
9020.00	1.67	175.42	9018.25	-17.30	-82.61	-15.63	445816.79	588110.97	0.34	
9051.00	1.69	145.47	9049.24	-17.02	-83.44	-15.33	445815.96	588111.27	2.80	
9083.00	3.01	60.54	9081.22	-16.02	-83.42	-14.33	445815.98	588112.27	10.37	
9114.00	5.87	54.78	9112.13	-13.99	-82.10	-12.33	445817.30	588114.27	9.33	
9146.00	8.80	51.83	9143.86	-10.68	-79.64	-9.07	445819.76	588117.53	9.23	
9177.00	12.01	49.76	9174.35	-6.28	-76.09	-4.74	445823.31	588121.86	10.42	
9208.00	15.43	51.93	9204.46	-0.48	-71.47	0.97	445827.93	588127.57	11.15	
9239.00	19.14	54.91	9234.05	7.04	-66.00	8.38	445833.40	588134.98	12.30	
9270.00	22.80	56.79	9263.00	16.35	-59.79	17.56	445839.61	588144.16	12.00	
9302.00	25.13	55.40	9292.24	27.28	-52.53	28.35	445846.87	588154.95	7.49	
9333.00	28.55	52.72	9319.89	38.76	-44.30	39.66	445855.10	588166.26	11.70	
9364.00	32.45	52.14	9346.60	51.41	-34.71	52.13	445864.69	588178.73	12.62	
9395.00	36.22	49.88	9372.19	65.21	-23.70	65.70	445875.70	588192.30	12.84	
9427.00	40.73	49.67	9397.24	80.66	-10.84	80.90	445888.56	588207.50	14.10	
9458.00	45.12	49.90	9419.93	97.06	2.78	97.02	445902.18	588223.62	14.17	
9489.00	48.89	50.98	9441.07	114.82	17.22	114.50	445916.62	588241.10	12.43	
9520.00	53.04	53.07	9460.59	134.10	32.02	133.48	445931.42	588260.08	14.37	
9551.00	57.64	53.25	9478.21	154.81	47.30	153.89	445946.70	588280.49	14.85	
9582.00	61.14	53.34	9494.00	176.52	63.25	175.27	445962.65	588301.87	11.29	
9614.00	65.23	53.97	9508.43	199.85	80.16	198.27	445979.56	588324.87	12.90	
9645.00	67.00	58.18	9520.99	223.69	95.97	221.79	445995.37	588348.39	13.67	
9676.00	68.46	61.80	9532.74	248.81	110.31	246.63	446009.71	588373.23	11.79	
9707.00	69.92	66.54	9543.76	275.13	122.93	272.70	446022.33	588399.30	15.05	
9738.00	70.52	70.99	9554.25	302.52	133.49	299.88	446032.89	588426.48	13.65	
9770.00	71.20	75.34	9564.75	331.62	142.24	328.81	446041.64	588455.41	13.02	
9799.00	71.86	78.80	9573.94	358.55	148.39	355.62	446047.79	588482.22	11.54	
9910.00	76.74	87.50	9604.02	464.74	161.02	461.57	446060.42	588588.17	8.73	
9941.00	78.38	88.79	9610.70	495.01	162.00	491.83	446061.40	588618.43	6.67	
9972.00	80.58	90.07	9616.36	525.48	162.30	522.30	446061.70	588648.90	8.18	
10003.00	81.22	91.03	9621.26	556.08	162.01	552.91	446061.41	588679.51	3.69	
10034.00	81.08	91.08	9626.03	586.69	161.45	583.54	446060.85	588710.14	0.48	
10066.00	81.86	91.25	9630.78	618.31	160.80	615.18	446060.20	588741.78	2.49	
10097.00	81.86	91.27	9635.16	648.97	160.13	645.86	446059.53	588772.46	0.06	
10128.00	82.22	91.49	9639.46	679.64	159.39	676.55	446058.79	588803.15	1.36	
10159.00	82.56	91.39	9643.56	710.33	158.62	707.27	446058.02	588833.87	1.14	
10190.00	83.06	91.37	9647.44	741.06	157.88	738.01	446057.28	588864.61	1.61	
10222.00	83.90	91.24	9651.08	772.82	157.15	769.80	446056.55	588896.40	2.66	
10253.00	83.97	91.29	9654.35	803.62	156.47	800.62	446055.87	588927.22	0.28	
10284.00	84.25	91.34	9657.53	834.43	155.76	831.45	446055.16	588958.05	0.92	
10315.00	84.61	92.71	9660.54	865.23	154.67	862.28	446054.07	588988.88	4.55	
10346.00	85.17	93.26	9663.30	896.03	153.06	893.11	446052.46	589019.71	2.53	
10377.00	85.31	93.36	9665.88	926.83	151.28	923.96	446050.68	589050.56	0.55	
10408.00	85.94	94.10	9668.24	957.63	149.27	954.80	446048.67	589081.40	3.13	
10440.00	85.94	94.43	9670.51	989.40	146.90	986.63	446046.30	589113.23	1.03	
10471.00	85.94	94.76	9672.70	1020.17	144.42	1017.45	446043.82	589144.05	1.06	
10502.00	85.73	94.63	9674.95	1050.92	141.89	1048.27	446041.29	589174.87	0.80	
10533.00	85.80	94.85	9677.24	1081.68	139.33	1079.08	446038.73	589205.68	0.74	
10564.00	85.45	94.79	9679.61	1112.42	136.74	1109.88	446036.14	589236.48	1.15	
10595.00	84.67	94.81	9682.28	1143.14	134.15	1140.65	446033.55	589267.25	2.52	
10627.00	84.75	94.66	9685.23	1174.83	131.52	1172.41	446030.92	589299.01	0.53	
10689.00	87.34	95.50	9689.50	1236.31	126.04	1234.01	446025.44	589360.61	4.39	
10783.00	88.88	94.49	9692.60	1329.71	117.87	1327.60	446017.27	589454.20	1.96	
10876.00	88.32	93.61	9694.87	1422.30	111.30	1420.34	446010.70	589546.94	1.12	

5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										Comment
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)	
10970.00	89.37	92.11	9696.77	1516.05	106.61	1514.20	446006.01	589640.80	1.95	
11063.00	89.58	91.08	9697.62	1608.93	104.02	1607.16	446003.42	589733.76	1.13	
11156.00	89.09	89.07	9698.70	1701.90	103.90	1700.15	446003.30	589826.75	2.22	
11250.00	87.69	87.11	9701.34	1795.85	107.03	1794.05	446006.43	589920.65	2.56	
11344.00	88.95	88.34	9704.10	1889.79	110.76	1887.93	446010.16	590014.53	1.87	
11437.00	88.60	88.40	9706.09	1982.76	113.41	1980.87	446012.81	590107.47	0.38	
11531.00	88.04	90.23	9708.84	2076.71	114.53	2074.82	446013.93	590201.42	2.04	
11624.00	87.90	90.83	9712.14	2169.62	113.67	2167.76	446013.07	590294.36	0.66	
11718.00	87.48	90.56	9715.93	2263.49	112.53	2261.67	446011.93	590388.27	0.53	
11812.00	88.39	90.63	9719.31	2357.38	111.55	2355.61	446010.95	590482.21	0.97	
11905.00	87.55	90.78	9722.61	2450.27	110.41	2448.54	446009.81	590575.14	0.92	
11999.00	90.14	91.78	9724.50	2544.16	108.31	2542.49	446007.71	590669.09	2.95	
12092.00	90.42	90.95	9724.05	2637.07	106.10	2635.46	446005.50	590762.06	0.94	
12185.00	88.88	90.63	9724.62	2730.01	104.81	2728.45	446004.21	590855.05	1.69	
12279.00	88.25	91.06	9726.97	2823.92	103.43	2822.41	446002.83	590949.01	0.81	
12372.00	87.27	89.90	9730.60	2916.81	102.65	2915.33	446002.05	591041.93	1.63	
12466.00	87.41	89.67	9734.97	3010.70	103.00	3009.23	446002.40	591135.83	0.29	
12560.00	91.19	91.77	9736.11	3104.62	101.82	3103.19	446001.22	591229.79	4.60	
12653.00	88.88	89.11	9736.06	3197.57	101.11	3196.17	446000.51	591322.77	3.79	
12746.00	87.13	88.32	9739.30	3290.50	103.19	3289.09	446002.59	591415.69	2.06	
12840.00	87.06	88.22	9744.06	3384.38	106.02	3382.93	446005.42	591509.53	0.13	
12933.00	87.20	87.82	9748.72	3477.25	109.23	3475.75	446008.63	591602.35	0.46	
13027.00	87.97	87.98	9752.68	3571.16	112.67	3569.61	446012.07	591696.21	0.84	
13121.00	86.78	86.55	9756.98	3665.02	117.15	3663.40	446016.55	591790.00	1.98	
13214.00	88.81	88.87	9760.56	3757.92	120.87	3756.24	446020.27	591882.84	3.31	
13307.00	88.32	89.27	9762.89	3850.89	122.37	3849.20	446021.77	591975.80	0.68	
13400.00	89.23	90.72	9764.88	3943.85	122.38	3942.18	446021.78	592068.78	1.84	
13494.00	91.47	91.32	9764.30	4037.77	120.71	4036.15	446020.11	592162.75	2.47	
13587.00	90.63	90.76	9762.60	4130.68	119.02	4129.12	446018.42	592255.72	1.09	
13681.00	91.61	91.08	9760.76	4224.60	117.51	4223.09	446016.91	592349.69	1.10	
13774.00	89.51	91.56	9759.85	4317.51	115.37	4316.06	446014.77	592442.66	2.32	
13868.00	89.93	92.85	9760.31	4411.34	111.75	4409.98	446011.15	592536.58	1.44	
13961.00	87.27	92.95	9762.58	4504.07	107.05	4502.83	446006.45	592629.43	2.86	
14055.00	87.90	94.22	9766.55	4597.66	101.18	4596.56	446000.58	592723.16	1.51	
14148.00	87.07	93.33	9770.63	4690.23	95.06	4689.26	445994.46	592815.86	1.31	
14170.00	87.55	93.83	9771.66	4712.13	93.69	4711.20	445993.09	592837.80	3.15	Last Svy
14251.00	87.55	93.83	9775.12	4792.75	88.28	4791.94	445987.68	592918.54	0.00	Proj to TD