

30-025-43276

**PHOENIX****TECHNOLOGY SERVICES USA INC.***Celebrating 20 Years of Focused Solutions*

3610 Elkins Road, Midland, Texas 79705 T. 432.684.0057 F. 432.686.7964 www.phxtech.com

September 23, 2016

Oil Conservation Division
 State of New Mexico
 1625 N. French Drive
 Hobbs, New Mexico 88240

Dear District 1 - Hobbs

Attention: Regulatory Department

Re: Mewbourne Oil
 Bilbrey 34/27 B2NC Fed Com 1H
 Lea County, New Mexico
 API #30-025-43276
 Job No. 60356

Enclosed please find the Survey Data Certification, and the original Plat and one copy of the Survey Report performed on the above referenced Well by Phoenix Technology Services, Inc. (P-5 No. 664171). Other information required by your office is as follows:

Name & Title of Surveyor	Drain Hole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Andy Askew	1H	0	10000	09/18/16	09/18/16	Gyro

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Best Regards,

Claudia Carreon
 Operations Administrator

SURVEY CERTIFICATION FORM

3610 Elkins Road Midland, TX 79705 t:432-684-0057 f: 432-686-7964



PHOENIX
TECHNOLOGY SERVICES

Company: Mewbourne Oil

Job #: 60356

Well Name: Bilbrey 34/27 B2NC Fed Com 1H

County/State: Lea/ NM

Survey Instrument Type: North Seek Rate Gyro

API # 30-025-43276

TIE-IN DATA

Measure Depth (ft)	Vertical Depth (ft)	Inclination (°)	Azimuth (°)	N-S Coordinates	E-W Coordinates	Data Source
0	0	0	0	0	0	Surface

First Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
2016-09-18	0	0	0

Last Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
2016-09-18	10000	1.7	116.13

Projected TD Survey

Date	Depth (ft)	Inclination (°)	Azimuth (°)
0	0	0	0

Grid Correction
-0.36

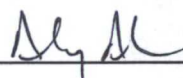
Gyro Operator: Phoenix Technology Services USA Ltd.

Gyro Supervisor: Jaime Stephenson

To the best of my knowledge I certify this survey data to be correct and true

Date: 9-18-16

Print Name: Andy Askew

Signature: 



Company: Mewbourne Oil
 Well: Bilbrey 34/27 B2NC Fed Com 1H
 Location: Lea Co., NM
 Rig: Patterson 231

Job Number: 60356
 Grid Corr.: -0.36
 Lat: 32.42
 Long: -103.66

Date: 09-18-16
 Calculation Method: Minimum Curvature
 Proposed Azimuth:
 RKB - MSL in feet: 26.5
 Tie Into: Surface

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
Enter Tie-In Survey on Line 10													
FIELD COPY, NON-DEFINITIVE													
TIE IN	0			0	0	0	0	0					
Gyro	100.00	0.66	138.73	100	100.00	-0.43	0.43 S	0.38 E	0.58	138.73	0.66	0.66	138.73
	200.00	0.25	137.57	100	199.99	-1.03	1.03 S	0.91 E	1.37	138.55	0.41	-0.41	-1.16
	300.00	0.54	250.51	100	299.99	-1.35	1.35 S	0.61 E	1.48	155.61	0.68	0.29	112.94
	400.00	0.05	247.25	100	399.99	-1.52	1.52 S	0.13 E	1.52	175.28	0.49	-0.49	-3.26
	500.00	0.63	239.23	100	499.99	-1.82	1.82 S	0.39 W	1.86	192.03	0.58	0.58	-8.02
	600.00	0.78	222.29	100	599.98	-2.60	2.60 S	1.32 W	2.92	206.85	0.26	0.15	-16.94
	700.00	0.93	192.50	100	699.97	-3.90	3.90 S	1.95 W	4.36	206.59	0.46	0.15	-29.79
	800.00	1.96	220.93	100	799.94	-5.98	5.98 S	3.25 W	6.81	208.49	1.22	1.03	28.43
	900.00	2.17	218.73	100	899.87	-8.75	8.75 S	5.55 W	10.36	212.39	0.22	0.21	-2.20
	1000.00	1.73	292.94	100	999.83	-9.64	9.64 S	8.13 W	12.61	220.13	2.38	-0.44	74.21
	1100.00	0.77	84.14	100	1099.82	-8.98	8.98 S	8.85 W	12.61	224.57	2.43	-0.96	-208.80
	1200.00	0.88	73.55	100	1199.81	-8.70	8.70 S	7.44 W	11.45	220.56	0.19	0.11	-10.59
	1300.00	1.01	82.84	100	1299.79	-8.37	8.37 S	5.83 W	10.20	214.87	0.20	0.13	9.29
	1400.00	1.03	101.89	100	1399.78	-8.44	8.44 S	4.08 W	9.38	205.78	0.34	0.02	19.05
	1500.00	0.86	125.01	100	1499.76	-9.06	9.06 S	2.58 W	9.42	195.92	0.41	-0.17	23.12
	1600.00	0.95	142.60	100	1599.75	-10.15	10.15 S	1.47 W	10.26	188.22	0.29	0.09	17.59
	1700.00	0.90	122.05	100	1699.74	-11.22	11.22 S	0.30 W	11.23	181.52	0.33	-0.05	-20.55
	1800.00	1.00	113.48	100	1799.73	-11.99	11.99 S	1.17 E	12.05	174.43	0.17	0.10	-8.57
	1900.00	0.74	89.51	100	1899.71	-12.33	12.33 S	2.61 E	12.61	168.03	0.44	-0.26	-23.97
	2000.00	0.93	122.73	100	1999.70	-12.76	12.76 S	3.94 E	13.36	162.83	0.51	0.19	33.22
	2100.00	0.96	140.06	100	2099.69	-13.85	13.85 S	5.16 E	14.78	159.55	0.29	0.03	17.33
	2200.00	1.20	109.94	100	2199.67	-14.85	14.85 S	6.69 E	16.28	155.75	0.61	0.24	-30.12
	2300.00	1.76	97.24	100	2299.64	-15.40	15.40 S	9.19 E	17.93	149.16	0.65	0.56	-12.70
	2400.00	2.31	95.13	100	2399.58	-15.77	15.77 S	12.72 E	20.26	141.10	0.55	0.55	-2.11
	2500.00	2.58	88.52	100	2499.49	-15.89	15.89 S	16.98 E	23.26	133.10	0.39	0.27	-6.61
	2600.00	0.36	193.50	100	2599.45	-16.14	16.14 S	19.16 E	25.05	130.11	2.70	-2.22	104.98
	2700.00	0.41	158.84	100	2699.45	-16.78	16.78 S	19.21 E	25.51	131.13	0.23	0.05	-34.66



Company: Mewbourne Oil
Well: Bilbrey 34/27 B2NC Fed Com 1H
Location: Lea Co., NM
Rig: Patterson 231

Job Number: 60356
Grid Corr.: -0.36
Lat: 32.42
Long: -103.66

Calculation Method: Minimum Curvature
Proposed Azimuth: _____
RKB - MSL in feet: 26.5
Tie Into: Surface

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
	2800.00	1.42	84.48	100	2799.44	-16.99	16.99 S	20.58 E	26.69	129.55	1.37	1.01	-74.36
	2900.00	2.36	83.90	100	2899.38	-16.65	16.65 S	23.86 E	29.10	124.92	0.94	0.94	-0.58
	3000.00	2.64	102.95	100	2999.29	-16.95	16.95 S	28.15 E	32.86	121.06	0.87	0.28	19.05
	3100.00	1.05	157.14	100	3099.24	-18.31	18.31 S	30.75 E	35.79	120.78	2.20	-1.59	54.19
	3200.00	1.04	147.44	100	3199.22	-19.92	19.92 S	31.59 E	37.35	122.23	0.18	-0.01	-9.70
	3300.00	1.80	143.74	100	3299.19	-21.95	21.95 S	33.01 E	39.64	123.62	0.77	0.76	-3.70
	3400.00	2.68	127.40	100	3399.12	-24.64	24.64 S	35.80 E	43.46	124.54	1.08	0.88	-16.34
	3500.00	1.66	116.70	100	3499.04	-26.71	26.71 S	38.95 E	47.23	124.44	1.09	-1.02	-10.70
	3600.00	1.06	74.04	100	3599.02	-27.11	27.11 S	41.13 E	49.26	123.39	1.14	-0.60	-42.66
	3700.00	2.68	76.85	100	3698.96	-26.32	26.32 S	44.30 E	51.53	120.72	1.62	1.62	2.81
	3800.00	2.70	81.90	100	3798.85	-25.46	25.46 S	48.91 E	55.14	117.50	0.24	0.02	5.05
	3900.00	2.52	92.63	100	3898.75	-25.23	25.23 S	53.44 E	59.09	115.27	0.52	-0.18	10.73
	4000.00	1.75	132.14	100	3998.68	-26.35	26.35 S	56.76 E	62.58	114.90	1.61	-0.77	39.51
	4100.00	1.70	141.15	100	4098.64	-28.53	28.53 S	58.83 E	65.38	115.87	0.28	-0.05	9.01
	4200.00	3.62	103.93	100	4198.53	-30.45	30.45 S	62.82 E	69.81	115.86	2.49	1.92	-37.22
	4300.00	1.80	64.78	100	4298.42	-30.54	30.54 S	67.31 E	73.91	114.40	2.50	-1.82	-39.15
	4400.00	1.91	49.01	100	4398.37	-28.78	28.78 S	69.99 E	75.67	112.35	0.52	0.11	-15.77
	4500.00	0.96	55.76	100	4498.34	-27.21	27.21 S	71.94 E	76.91	110.72	0.96	-0.95	6.75
	4600.00	1.01	70.23	100	4598.32	-26.44	26.44 S	73.46 E	78.07	109.80	0.25	0.05	14.47
	4700.00	1.22	42.14	100	4698.30	-25.35	25.35 S	75.00 E	79.17	108.68	0.58	0.21	-28.09
	4800.00	1.16	40.27	100	4798.28	-23.79	23.79 S	76.37 E	79.99	107.30	0.07	-0.06	-1.87
	4900.00	0.77	317.06	100	4898.27	-22.53	22.53 S	76.57 E	79.81	106.39	1.31	-0.39	276.79
	5000.00	0.55	321.83	100	4998.27	-21.66	21.66 S	75.81 E	78.85	105.94	0.23	-0.22	4.77
	5100.00	0.47	245.06	100	5098.26	-21.45	21.45 S	75.14 E	78.15	105.93	0.64	-0.08	-76.77
	5200.00	0.36	309.00	100	5198.26	-21.43	21.43 S	74.53 E	77.55	106.04	0.45	-0.11	63.94
	5300.00	0.19	107.45	100	5298.26	-21.28	21.28 S	74.44 E	77.42	105.95	0.54	-0.17	-201.55
	5400.00	0.03	298.81	100	5398.26	-21.32	21.32 S	74.58 E	77.56	105.95	0.22	-0.16	191.36
	5500.00	0.04	143.86	100	5498.26	-21.33	21.33 S	74.58 E	77.57	105.96	0.07	0.01	-154.95
	5600.00	0.32	41.78	100	5598.26	-21.15	21.15 S	74.78 E	77.72	105.79	0.33	0.28	-102.08
	5700.00	0.23	235.83	100	5698.26	-21.06	21.06 S	74.80 E	77.71	105.72	0.55	-0.09	194.05



Company: Mewbourne Oil
Well: Bilbrey 34/27 B2NC Fed Com 1H
Location: Lea Co., NM
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Job Number: 60356
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Long: -103.66

Calculation Method: Minimum Curvature
Proposed Azimuth:
RKB - MSL in feet: 26.5
Tie Into: Surface

Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
	5800.00	0.28	270.12	100	5798.26	-21.17	21.17 S	74.39 E	77.35	105.89	0.16	0.05	34.29
	5900.00	0.44	305.63	100	5898.26	-20.95	20.95 S	73.83 E	76.75	105.84	0.27	0.16	35.51
	6000.00	0.83	304.53	100	5998.25	-20.31	20.31 S	72.93 E	75.70	105.56	0.39	0.39	-1.10
	6100.00	0.77	39.79	100	6098.24	-19.39	19.39 S	72.76 E	75.30	104.92	1.18	-0.06	-264.74
	6200.00	0.82	324.49	100	6198.24	-18.29	18.29 S	72.77 E	75.04	104.11	0.97	0.05	284.70
	6300.00	0.69	329.24	100	6298.23	-17.19	17.19 S	72.05 E	74.07	103.42	0.14	-0.13	4.75
	6400.00	0.43	324.43	100	6398.22	-16.36	16.36 S	71.52 E	73.37	102.89	0.26	-0.26	-4.81
	6500.00	0.51	260.15	100	6498.22	-16.13	16.13 S	70.87 E	72.68	102.83	0.50	0.08	-64.28
	6600.00	0.28	158.14	100	6598.22	-16.44	16.44 S	70.52 E	72.41	103.12	0.63	-0.23	-102.01
	6700.00	0.32	203.12	100	6698.22	-16.92	16.92 S	70.50 E	72.50	103.50	0.23	0.04	44.98
	6800.00	0.52	336.54	100	6798.22	-16.76	16.76 S	70.21 E	72.18	103.43	0.78	0.20	133.42
	6900.00	0.44	313.44	100	6898.21	-16.08	16.08 S	69.75 E	71.58	102.98	0.21	-0.08	-23.10
	7000.00	0.56	276.75	100	6998.21	-15.76	15.76 S	68.99 E	70.76	102.87	0.33	0.12	-36.69
	7100.00	0.58	271.82	100	7098.20	-15.69	15.69 S	68.00 E	69.78	102.99	0.05	0.02	-4.93
	7200.00	0.26	192.16	100	7198.20	-15.89	15.89 S	67.44 E	69.29	103.26	0.59	-0.32	-79.66
	7300.00	0.83	102.63	100	7298.20	-16.27	16.27 S	68.10 E	70.02	103.44	0.87	0.57	-89.53
	7400.00	0.53	355.42	100	7398.19	-15.97	15.97 S	68.77 E	70.60	103.07	1.11	-0.30	252.79
	7500.00	0.75	59.72	100	7498.19	-15.18	15.18 S	69.30 E	70.94	102.35	0.71	0.22	-295.70
	7600.00	0.36	190.38	100	7598.19	-15.16	15.16 S	69.81 E	71.43	102.25	1.02	-0.39	130.66
	7700.00	0.52	186.56	100	7698.18	-15.92	15.92 S	69.70 E	71.49	102.86	0.16	0.16	-3.82
	7800.00	0.63	31.63	100	7798.18	-15.90	15.90 S	69.94 E	71.72	102.81	1.12	0.11	-154.93
	7900.00	0.31	73.85	100	7898.18	-15.36	15.36 S	70.48 E	72.14	102.29	0.45	-0.32	42.22
	8000.00	0.11	35.27	100	7998.18	-15.20	15.20 S	70.80 E	72.41	102.12	0.23	-0.20	-38.58
	8100.00	0.36	22.61	100	8098.18	-14.83	14.83 S	70.98 E	72.51	101.81	0.25	0.25	-12.66
	8200.00	0.17	178.41	100	8198.18	-14.69	14.69 S	71.10 E	72.60	101.68	0.52	-0.19	155.80
	8300.00	0.34	170.09	100	8298.17	-15.13	15.13 S	71.16 E	72.75	102.01	0.17	0.17	-8.32
	8400.00	0.35	170.32	100	8398.17	-15.73	15.73 S	71.26 E	72.97	102.45	0.01	0.01	0.23
	8500.00	0.41	331.14	100	8498.17	-15.71	15.71 S	71.14 E	72.85	102.46	0.75	0.06	160.82
	8600.00	0.93	110.83	100	8598.17	-15.69	15.69 S	71.72 E	73.42	102.34	1.27	0.52	-220.31
	8700.00	0.35	154.12	100	8698.16	-16.25	16.25 S	72.61 E	74.41	102.62	0.72	-0.58	43.29



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 Proposed Azimuth:
 RKB - MSL in feet: 26.5
 Tie Into: Surface

Survey Tool Type	Survey Depth (ft)	Inclina- tion (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)			
	8800.00	0.30	315.91	100	8798.16	-16.34	16.34 S	72.57 E	74.38	102.69	0.64	-0.05	161.79
	8900.00	0.46	30.60	100	8898.16	-15.81	15.81 S	72.59 E	74.29	102.28	0.48	0.16	-285.31
	9000.00	0.51	165.62	100	8998.16	-15.89	15.89 S	72.90 E	74.61	102.30	0.90	0.05	135.02
	9100.00	0.75	188.78	100	9098.15	-16.97	16.97 S	72.91 E	74.86	103.10	0.35	0.24	23.16
	9200.00	1.92	200.40	100	9198.12	-19.19	19.19 S	72.23 E	74.73	104.88	1.19	1.17	11.62
	9300.00	2.63	238.03	100	9298.05	-21.97	21.97 S	69.70 E	73.08	107.50	1.61	0.71	37.63
	9400.00	3.14	207.10	100	9397.93	-25.63	25.63 S	66.50 E	71.27	111.07	1.61	0.51	-30.93
	9500.00	4.09	215.17	100	9497.73	-30.98	30.98 S	63.20 E	70.39	116.11	1.08	0.95	8.07
	9600.00	4.48	222.35	100	9597.45	-36.78	36.78 S	58.52 E	69.12	122.15	0.66	0.39	7.18
	9700.00	3.04	214.92	100	9697.23	-41.84	41.84 S	54.37 E	68.61	127.58	1.52	-1.44	-7.43
	9800.00	1.76	180.29	100	9797.15	-45.55	45.55 S	52.84 E	69.77	130.76	1.88	-1.28	-34.63
	9900.00	1.20	160.42	100	9897.11	-48.07	48.07 S	53.19 E	71.69	132.11	0.75	-0.56	-19.87
	10000.00	1.70	116.13	100	9997.08	-49.71	49.71 S	54.87 E	74.04	132.18	1.19	0.50	-44.29