

OPERATOR
WELL/LEASE
COUNTY

MEWBOURNE OIL COMPANY
ARIES 20 FED COM #3H
EDDY

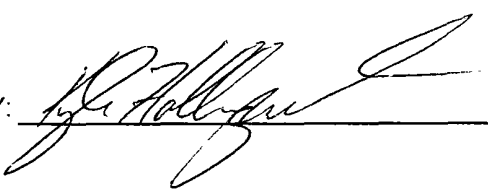
STATE OF NEW MEXICO
DEVIATION REPORT

30-015-39432

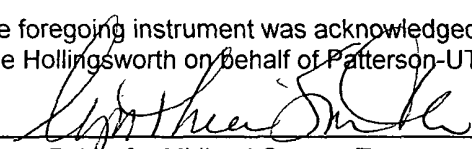
238	1.05
719	1.00
1,390	1.13
1,600	0.97
1,850	0.66
2,241	1.35
2,490	0.94
2,908	0.63
3,321	0.54
3,733	1.17
4,146	0.96
4,490	0.84
4,940	1.74
5,291	2.15
5,480	2.36
5,702	2.42
5,989	2.82
6,115	3.61
6,242	3.19
6,369	3.18
6,496	3.23
6,623	2.23
6,750	2.38
6,878	2.70
7,000	1.98
7,132	1.89

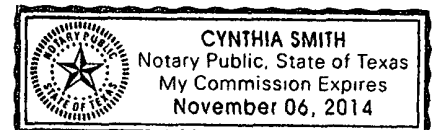
STATE OF TEXAS

COUNTY OF MIDLAND

BY: 

The foregoing instrument was acknowledged before me on February 9, 2012, by
Kyle Hollingsworth on behalf of Patterson-UTI Drilling Company LLC.


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





Company: Mewbourne Oil
Lease/Well: Aries 20 Federal Com/3H
Location: 28 Miles NE of Carlsbad
Rig Name: Patterson 45
State/County: New Mexico/Eddy
Latitude: 32.73
GRID North is 0.18 Degrees East of True North
VS-Azi: 87.42 Degrees



Depth Reference : RKB=17.5 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: arie 20 federal com #3h_ed.ut

Minimum Curvature Method

Report Date/Time: 1/31/2012 / 10:51

Vaughn Energy Services

Gardendale, Texas

432-563-5444

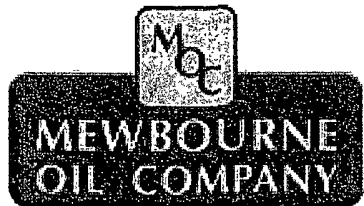
Surveyor: Seth Hardin

Aries 20 Federal Com 3H / API 30-015-39432

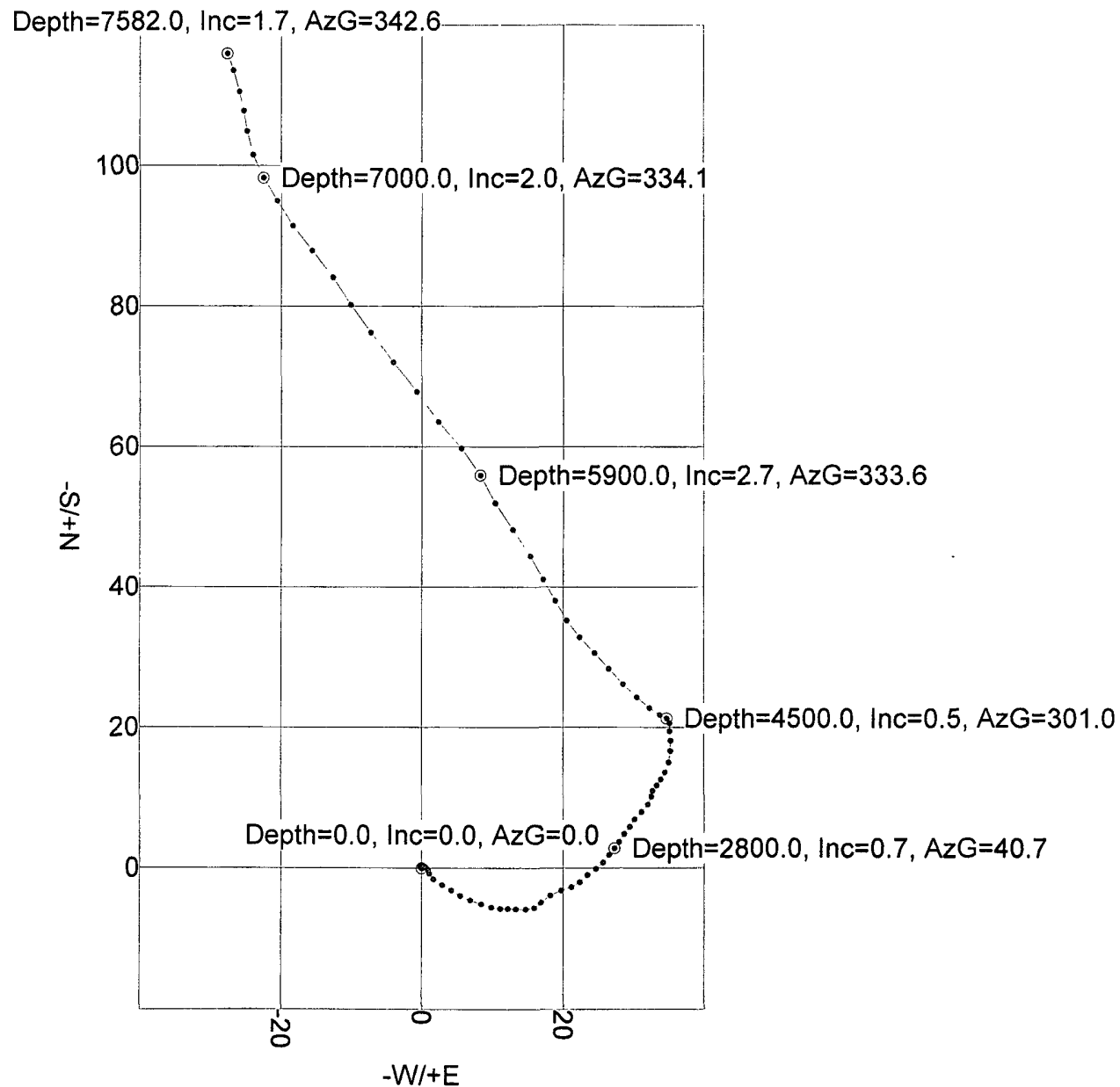
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.25	324.78	100.00	0.18	-0.13	-0.12	0.22	324.78	0.25
200.00	0.11	159.63	200.00	0.27	-0.22	-0.21	0.35	320.82	0.36
300.00	0.34	83.32	300.00	0.22	0.11	0.12	0.24	25.96	0.33
400.00	0.23	124.50	400.00	0.14	0.57	0.57	0.59	76.53	0.22
500.00	0.32	147.59	500.00	-0.22	0.89	0.88	0.92	103.79	0.14
600.00	0.38	175.22	599.99	-0.78	1.07	1.03	1.33	126.26	0.17
700.00	0.83	129.73	699.99	-1.58	1.66	1.58	2.29	133.58	0.63
800.00	0.87	116.75	799.98	-2.38	2.89	2.78	3.75	129.47	0.20
900.00	0.86	121.83	899.97	-3.12	4.21	4.06	5.24	126.55	0.08
1000.00	0.81	120.44	999.96	-3.87	5.45	5.27	6.68	125.38	0.06
1100.00	0.97	109.97	1099.94	-4.51	6.85	6.64	8.20	123.39	0.23
1200.00	0.93	109.82	1199.93	-5.08	8.40	8.17	9.82	121.13	0.04
1300.00	0.79	105.80	1299.92	-5.54	9.83	9.57	11.29	119.40	0.15
1400.00	0.68	89.40	1399.91	-5.72	11.09	10.82	12.48	117.30	0.24
1500.00	0.56	90.33	1499.91	-5.72	12.17	11.90	13.44	115.17	0.12
1600.00	0.71	93.51	1599.90	-5.76	13.28	13.00	14.47	113.45	0.15
1700.00	0.91	90.26	1699.89	-5.80	14.69	14.42	15.80	111.54	0.21
1800.00	0.50	64.20	1799.88	-5.61	15.88	15.61	16.84	109.47	0.51

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	0.92	44.35	1899.87	-4.85	16.83	16.59	17.52	106.08	0.48
2000.00	1.01	59.99	1999.86	-3.84	18.16	17.97	18.56	101.93	0.28
2100.00	0.92	72.53	2099.85	-3.15	19.69	19.52	19.94	99.10	0.23
2200.00	0.83	70.18	2199.83	-2.67	21.13	20.99	21.30	97.20	0.10
2300.00	0.75	47.77	2299.82	-1.98	22.29	22.18	22.38	95.09	0.32
2400.00	0.96	48.06	2399.81	-0.98	23.40	23.33	23.42	92.41	0.21
2500.00	0.74	59.81	2499.80	-0.10	24.58	24.55	24.58	90.23	0.28
2600.00	0.81	39.39	2599.79	0.77	25.59	25.59	25.60	88.27	0.28
2700.00	0.74	37.83	2699.78	1.83	26.43	26.49	26.50	86.04	0.07
2800.00	0.67	40.74	2799.78	2.79	27.21	27.31	27.36	84.15	0.08
2900.00	0.65	25.98	2899.77	3.74	27.85	27.99	28.10	82.34	0.17
3000.00	0.90	39.25	2999.76	4.86	28.59	28.78	29.00	80.35	0.31
3100.00	0.53	36.86	3099.75	5.84	29.36	29.60	29.94	78.76	0.37
3200.00	0.91	30.84	3199.75	6.89	30.05	30.33	30.83	77.09	0.38
3300.00	0.76	55.81	3299.74	7.94	31.00	31.33	32.00	75.64	0.39
3400.00	0.88	27.39	3399.73	8.99	31.90	32.27	33.14	74.26	0.42
3500.00	0.54	14.20	3499.72	10.13	32.37	32.79	33.92	72.63	0.38
3600.00	0.47	21.73	3599.71	10.96	32.64	33.10	34.43	71.43	0.09
3700.00	0.66	49.00	3699.71	11.72	33.22	33.72	35.23	70.56	0.32
3800.00	0.57	16.88	3799.70	12.58	33.80	34.33	36.06	69.59	0.35
3900.00	0.78	40.49	3899.70	13.57	34.39	34.96	36.97	68.46	0.34
4000.00	1.03	4.47	3999.68	14.99	34.90	35.54	37.98	66.76	0.61
4100.00	0.89	13.87	4099.67	16.64	35.16	35.87	38.90	64.67	0.21
4200.00	0.83	346.56	4199.66	18.11	35.17	35.95	39.56	62.76	0.41
4300.00	0.75	1.74	4299.65	19.47	35.02	35.87	40.07	60.93	0.22
4400.00	0.54	357.45	4399.64	20.59	35.02	35.92	40.63	59.55	0.22
4500.00	0.49	301.05	4499.64	21.28	34.63	35.56	40.65	58.43	0.49
4600.00	0.79	295.62	4599.63	21.80	33.64	34.59	40.09	57.06	0.30
4700.00	1.24	307.86	4699.62	22.77	32.17	33.16	39.41	54.71	0.50
4800.00	1.44	312.65	4799.59	24.28	30.39	31.45	38.90	51.37	0.22
4900.00	1.70	315.18	4899.55	26.19	28.42	29.57	38.64	47.34	0.27
5000.00	1.70	317.73	4999.51	28.34	26.38	27.62	38.71	42.95	0.08
5100.00	1.73	319.80	5099.46	30.59	24.40	25.75	39.13	38.58	0.07
5200.00	1.81	313.25	5199.42	32.83	22.27	23.73	39.67	34.16	0.22
5300.00	1.67	333.14	5299.37	35.21	20.46	22.03	40.73	30.16	0.62
5400.00	2.08	327.07	5399.32	38.04	18.82	20.51	42.44	26.32	0.45
5500.00	1.90	334.57	5499.26	41.05	17.12	18.95	44.48	22.64	0.32
5600.00	2.44	329.25	5599.19	44.38	15.32	17.30	46.95	19.05	0.58
5700.00	2.78	324.41	5699.08	48.17	12.82	14.98	49.85	14.91	0.40

measured Depth FT	measured Angle Deg	Drill 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	2.42	330.24	5798.98	51.97	10.37	12.70	53.00	11.28	0.45
5900.00	2.67	333.62	5898.88	55.89	8.29	10.79	56.50	8.43	0.29
6000.00	2.80	316.62	5998.77	59.75	5.58	8.26	60.01	5.33	0.82
6100.00	2.88	321.75	6098.65	63.49	2.35	5.20	63.54	2.12	0.27
6200.00	3.16	325.80	6198.51	67.74	-0.76	2.29	67.75	359.36	0.35
6300.00	2.97	318.47	6298.37	71.96	-4.02	-0.78	72.07	356.80	0.43
6400.00	3.13	326.40	6398.22	76.18	-7.25	-3.82	76.52	354.56	0.45
6500.00	2.51	322.71	6498.10	80.19	-10.09	-6.47	80.82	352.83	0.65
6600.00	2.85	329.80	6597.99	84.08	-12.67	-8.87	85.03	351.43	0.47
6700.00	2.73	314.14	6697.88	87.89	-15.63	-11.65	89.27	349.92	0.77
6800.00	2.45	330.79	6797.78	91.41	-18.37	-14.24	93.24	348.63	0.80
6900.00	2.39	324.50	6897.69	94.97	-20.63	-16.33	97.18	347.75	0.27
7000.00	2.00	334.08	6997.61	98.23	-22.60	-18.15	100.80	347.04	0.53
7100.00	2.07	338.79	7097.55	101.49	-24.02	-19.42	104.29	346.69	0.18
7200.00	1.95	352.92	7197.49	104.86	-24.88	-20.13	107.77	346.65	0.51
7300.00	1.43	346.80	7297.45	107.75	-25.37	-20.50	110.70	346.75	0.55
7400.00	1.76	348.53	7397.41	110.47	-25.96	-20.96	113.48	346.77	0.33
7500.00	1.87	339.22	7497.36	113.50	-26.85	-21.71	116.63	346.69	0.32
7582.00	1.68	342.57	7579.32	115.90	-27.68	-22.44	119.16	346.57	0.26



Vaughn Energy Services
Gardendale, Texas
432-563-5444
Surveyor: Seth Hardin
Aries 20 Federal Com 3H / API 30-015-39432



VES Survey Date: 01/14/2012

Actual Wellpath Report

No.3H AWP

Page 1 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No. 3H SHL
Area	Eddy County, NM	Well	No. 3H
Field	(Aries) Sec 20, T18S, R30E	Wellbore	No.3H AWB
Facility	Aries 20 Fed Com		

REPORT SETUP INFORMATION

Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 3.0.0
North Reference	Grid	User	Gentbry
Scale	0.999921	Report Generated	1/30/2012 at 6:51:03 AM
Convergence at slot	0.18° East	Database/Source file	WA Midland/No.3H_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-2909.94	-100.14	602038.25	629625.92	32°43'49.793"N	104°00'05.455"W
Facility Reference Pt			602138.38	632535.63	32°44'18.583"N	104°00'04.176"W
Field Reference Pt			602138.38	632535.63	32°44'18.583"N	104°00'04.176"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 3H SHL (RT) to GL	3490.00ft
Horizontal Reference Pt	Slot	Rig on No. 3H SHL (RT) to Mean Sea Level	3490.00ft
Vertical Reference Pt	Rig on No. 3H SHL (RT)	Rig on No. 3H SHL (RT) to Mud Line at Slot (No. 3H SHL)	3490.00ft
MD Reference Pt	Rig on No. 3H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	87.42°

Actual Wellpath Report

No.3H AWP

Page 2 of 6



REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No. 3H SHL
Area	Eddy County, NM	Well	No. 3H
Field	(Aries) Sec 20, T18S, R30E	Wellbore	No.3H AWB
Facility	Aries 20 Fed Com		

WELLPATH DATA (170 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	324.780	0.00	0.00	0.00	0.00	602038.25	629625.92	32°43'49.793"N	104°00'05.455"W	0.00	
100.00	0.250	324.780	100.00	-0.12	0.18	-0.13	602038.12	629626.10	32°43'49.795"N	104°00'05.456"W	0.25	
200.00	0.110	159.630	200.00	-0.21	0.27	-0.22	602038.03	629626.19	32°43'49.796"N	104°00'05.457"W	0.36	
300.00	0.340	83.320	300.00	0.12	0.21	0.11	602038.36	629626.13	32°43'49.795"N	104°00'05.454"W	0.33	
400.00	0.230	124.500	400.00	0.58	0.13	0.57	602038.82	629626.05	32°43'49.795"N	104°00'05.448"W	0.23	
500.00	0.320	147.590	500.00	0.87	-0.22	0.89	602039.13	629625.70	32°43'49.791"N	104°00'05.445"W	0.14	
600.00	0.380	175.220	599.99	1.03	-0.78	1.06	602039.31	629625.14	32°43'49.785"N	104°00'05.442"W	0.18	
700.00	0.830	129.730	699.99	1.57	-1.58	1.65	602039.90	629624.34	32°43'49.778"N	104°00'05.436"W	0.63	
800.00	0.870	116.750	799.98	2.77	-2.38	2.88	602041.13	629623.54	32°43'49.770"N	104°00'05.421"W	0.20	
900.00	0.860	121.830	899.97	4.05	3.12	4.20	602042.45	629622.80	32°43'49.762"N	104°00'05.406"W	0.08	
1000.00	0.810	120.440	999.96	5.26	-3.87	5.44	602043.69	629622.05	32°43'49.755"N	104°00'05.391"W	0.05	
1100.00	0.970	109.970	1099.94	6.64	-4.52	6.85	602045.10	629621.40	32°43'49.748"N	104°00'05.375"W	0.23	
1200.00	0.930	109.820	1199.93	8.17	-5.08	8.41	602046.66	629620.84	32°43'49.743"N	104°00'05.357"W	0.04	
1300.00	0.790	105.800	1299.92	9.58	-5.55	9.84	602048.08	629620.37	32°43'49.738"N	104°00'05.340"W	0.15	
1400.00	0.680	89.400	1399.91	10.82	5.73	11.09	602049.34	629620.19	32°43'49.736"N	104°00'05.325"W	0.24	
1500.00	0.560	90.330	1499.91	11.90	-5.73	12.17	602050.42	629620.20	32°43'49.736"N	104°00'05.313"W	0.12	
1600.00	0.710	93.510	1599.90	13.01	-5.77	13.28	602051.53	629620.16	32°43'49.736"N	104°00'05.300"W	0.15	
1700.00	0.910	90.260	1699.89	14.42	-5.81	14.69	602052.94	629620.11	32°43'49.735"N	104°00'05.283"W	0.21	
1800.00	0.500	64.200	1799.88	15.61	-5.62	15.88	602054.13	629620.30	32°43'49.737"N	104°00'05.269"W	0.51	
1900.00	0.920	44.350	1899.87	16.60	4.86	16.83	602055.08	629621.06	32°43'49.745"N	104°00'05.258"W	0.48	
2000.00	1.010	59.990	1999.86	17.97	-3.84	18.16	602056.41	629622.08	32°43'49.755"N	104°00'05.242"W	0.28	
2100.00	0.920	72.530	2099.85	19.53	-3.16	19.69	602057.94	629622.76	32°43'49.761"N	104°00'05.225"W	0.23	
2200.00	0.830	70.180	2199.83	20.99	-2.67	21.14	602059.38	629623.25	32°43'49.766"N	104°00'05.208"W	0.10	
2300.00	0.750	47.770	2299.82	22.19	-1.99	22.30	602060.55	629623.93	32°43'49.773"N	104°00'05.194"W	0.32	
2400.00	0.960	48.060	2399.81	23.34	0.99	23.41	602061.66	629624.93	32°43'49.783"N	104°00'05.181"W	0.21	
2500.00	0.740	59.810	2499.80	24.56	-0.10	24.59	602062.84	629625.82	32°43'49.791"N	104°00'05.167"W	0.28	
2600.00	0.810	39.390	2599.79	25.61	0.77	25.60	602063.84	629626.69	32°43'49.800"N	104°00'05.155"W	0.28	
2700.00	0.740	37.830	2699.78	26.50	1.82	26.44	602064.69	629627.74	32°43'49.810"N	104°00'05.145"W	0.07	
2800.00	0.670	40.740	2799.78	27.32	2.78	27.22	602065.47	629628.70	32°43'49.820"N	104°00'05.136"W	0.08	
2900.00	0.650	25.980	2899.77	27.99	3.73	27.85	602066.10	629629.65	32°43'49.829"N	104°00'05.129"W	0.17	
3000.00	0.900	39.250	2999.76	28.78	4.85	28.59	602066.84	629630.77	32°43'49.840"N	104°00'05.120"W	0.31	
3100.00	0.530	36.860	3099.75	29.60	5.83	29.37	602067.62	629631.75	32°43'49.850"N	104°00'05.111"W	0.37	
3200.00	0.910	30.840	3199.75	30.33	6.88	30.05	602068.30	629632.80	32°43'49.860"N	104°00'05.103"W	0.39	
3300.00	0.760	55.810	3299.73	31.34	7.93	31.01	602069.26	629633.85	32°43'49.871"N	104°00'05.092"W	0.39	
3400.00	0.880	27.390	3399.72	32.28	8.99	31.91	602070.16	629634.91	32°43'49.881"N	104°00'05.081"W	0.42	
3500.00	0.540	14.200	3499.72	32.80	10.12	32.38	602070.63	629636.04	32°43'49.892"N	104°00'05.075"W	0.38	
3600.00	0.470	21.730	3599.71	33.11	10.96	32.65	602070.89	629636.88	32°43'49.901"N	104°00'05.072"W	0.10	
3700.00	0.660	49.000	3699.71	33.73	11.72	33.23	602071.48	629637.64	32°43'49.908"N	104°00'05.065"W	0.32	
3800.00	0.570	16.880	3799.70	34.35	12.58	33.81	602072.06	629638.50	32°43'49.917"N	104°00'05.059"W	0.35	
3900.00	0.780	40.490	3899.70	34.98	13.57	34.40	602072.65	629639.49	32°43'49.926"N	104°00'05.052"W	0.34	
4000.00	1.030	4.470	3999.68	35.55	14.98	34.91	602073.16	629640.90	32°43'49.940"N	104°00'05.046"W	0.61	
4100.00	0.890	13.870	4099.67	35.88	16.63	35.17	602073.41	629642.55	32°43'49.957"N	104°00'05.043"W	0.21	
4200.00	0.830	346.560	4199.66	35.97	18.09	35.19	602073.43	629644.01	32°43'49.971"N	104°00'05.042"W	0.41	
4300.00	0.750	1.740	4299.65	35.88	19.45	35.04	602073.28	629645.37	32°43'49.985"N	104°00'05.044"W	0.22	
4400.00	0.540	357.450	4399.64	35.93	20.57	35.04	602073.28	629646.49	32°43'49.996"N	104°00'05.044"W	0.22	

Actual Wellpath Report

No.3H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No. 3H SHL
Area	Eddy County, NM	Well	No. 3H
Field	(Aries) Sec 20, T18S, R30E	Wellbore	No.3H AWB
Facility	Aries 20 Fed Com		

WELLPATH DATA (170 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4500.00	0.490	301.050	4499.64	35.57	21.27	34.65	602072.89	629647.19	32°43'50.003"N	104°00'05.049"W	0.49	
4600.00	0.790	295.620	4599.63	34.61	21.78	33.66	602071.91	629647.70	32°43'50.008"N	104°00'05.060"W	0.31	
4700.00	1.240	307.860	4699.62	33.18	22.75	32.18	602070.43	629648.67	32°43'50.017"N	104°00'05.077"W	0.50	
4800.00	1.440	312.650	4799.59	31.47	24.26	30.41	602068.65	629650.18	32°43'50.032"N	104°00'05.098"W	0.23	
4900.00	1.700	315.180	4899.55	29.59	26.17	28.44	602066.68	629652.08	32°43'50.051"N	104°00'05.121"W	0.27	
5000.00	1.700	317.730	4999.51	27.64	28.32	26.39	602064.64	629654.23	32°43'50.073"N	104°00'05.145"W	0.08	
5100.00	1.730	319.800	5099.46	25.77	30.57	24.42	602062.67	629656.48	32°43'50.095"N	104°00'05.168"W	0.07	
5200.00	1.810	313.250	5199.42	23.75	32.80	22.30	602060.54	629658.72	32°43'50.117"N	104°00'05.193"W	0.22	
5300.00	1.670	333.140	5299.37	22.05	35.18	20.49	602058.74	629661.10	32°43'50.141"N	104°00'05.214"W	0.62	
5400.00	2.080	327.070	5399.32	20.54	38.01	18.84	602057.09	629663.92	32°43'50.169"N	104°00'05.233"W	0.46	
5500.00	1.900	334.570	5499.26	18.98	41.03	17.14	602055.39	629666.94	32°43'50.199"N	104°00'05.253"W	0.32	
5600.00	2.440	329.250	5599.19	17.33	44.35	15.34	602053.59	629670.27	32°43'50.232"N	104°00'05.274"W	0.58	
5700.00	2.780	324.410	5699.08	15.00	48.15	12.84	602051.09	629674.07	32°43'50.269"N	104°00'05.303"W	0.40	
5800.00	2.420	330.240	5798.98	12.72	51.96	10.39	602048.63	629677.88	32°43'50.307"N	104°00'05.331"W	0.45	
5900.00	2.670	333.620	5898.88	10.81	55.88	8.30	602046.55	629681.80	32°43'50.346"N	104°00'05.356"W	0.29	
6000.00	2.800	316.620	5998.77	8.28	59.74	5.59	602043.84	629685.66	32°43'50.384"N	104°00'05.387"W	0.82	
6100.00	2.880	321.750	6098.65	5.22	63.49	2.36	602040.61	629689.40	32°43'50.421"N	104°00'05.425"W	0.27	
6200.00	3.160	325.800	6198.51	2.31	67.74	-0.75	602037.50	629693.66	32°43'50.464"N	104°00'05.461"W	0.35	
6300.00	2.970	318.470	6298.36	-0.77	71.96	-4.01	602034.24	629697.88	32°43'50.505"N	104°00'05.499"W	0.44	
6400.00	3.130	326.400	6398.22	-3.80	76.17	-7.24	602031.01	629702.09	32°43'50.547"N	104°00'05.537"W	0.45	
6500.00	2.510	322.710	6498.10	-6.45	80.19	-10.08	602028.17	629706.10	32°43'50.587"N	104°00'05.570"W	0.65	
6600.00	2.850	329.800	6597.99	-8.85	84.08	-12.66	602025.59	629709.99	32°43'50.626"N	104°00'05.600"W	0.47	
6700.00	2.730	314.140	6697.87	-11.64	87.89	-15.62	602022.63	629713.80	32°43'50.663"N	104°00'05.634"W	0.77	
6800.00	2.450	330.790	6797.77	-14.23	91.41	-18.37	602019.88	629717.33	32°43'50.698"N	104°00'05.667"W	0.80	
6900.00	2.390	324.500	6897.69	-16.82	94.97	-20.62	602017.63	629720.89	32°43'50.734"N	104°00'05.693"W	0.27	
7000.00	2.000	334.080	6997.61	-18.14	98.24	-22.60	602015.65	629724.15	32°43'50.766"N	104°00'05.716"W	0.53	
7100.00	2.070	338.790	7097.55	-19.41	101.49	-24.01	602014.24	629727.41	32°43'50.798"N	104°00'05.732"W	0.18	
7200.00	1.950	352.920	7197.49	-20.12	104.87	-24.88	602013.38	629730.78	32°43'50.832"N	104°00'05.742"W	0.51	
7300.00	1.430	346.800	7297.44	-20.49	107.77	-25.37	602012.88	629733.68	32°43'50.860"N	104°00'05.748"W	0.55	
7400.00	1.760	348.530	7397.41	-20.95	110.49	-25.96	602012.29	629736.40	32°43'50.887"N	104°00'05.755"W	0.33	
7500.00	1.870	339.220	7497.36	-21.70	113.52	-26.84	602011.41	629739.43	32°43'50.917"N	104°00'05.765"W	0.31	
7582.00	1.680	342.570	7579.32	-22.42	115.92	-27.68	602010.57	629741.83	32°43'50.941"N	104°00'05.775"W	0.26	
7672.00	2.000	56.300	7669.28	-21.42	118.05	-26.77	602011.48	629743.96	32°43'50.962"N	104°00'05.764"W	2.47	
7703.00	5.000	81.200	7700.22	-19.61	118.56	-24.98	602013.27	629744.47	32°43'50.967"N	104°00'05.743"W	10.63	
7735.00	8.800	83.900	7731.98	-15.78	119.03	-21.17	602017.08	629744.94	32°43'50.972"N	104°00'05.698"W	11.91	
7767.00	12.800	79.500	7763.41	-9.82	119.94	-15.25	602023.00	629745.85	32°43'50.980"N	104°00'05.629"W	12.75	
7799.00	16.700	79.400	7794.35	-1.76	121.43	-7.24	602031.01	629747.34	32°43'50.995"N	104°00'05.535"W	12.19	
7830.00	20.500	79.400	7823.73	8.03	123.25	2.48	602040.73	629749.16	32°43'51.013"N	104°00'05.421"W	12.26	
7862.00	23.600	79.500	7853.38	19.93	125.44	14.29	602052.53	629751.36	32°43'51.034"N	104°00'05.283"W	9.69	
7894.00	27.000	79.700	7882.31	33.48	127.91	27.74	602065.98	629753.82	32°43'51.058"N	104°00'05.126"W	10.63	
7926.00	29.800	80.900	7910.45	48.58	130.47	42.74	602080.98	629756.38	32°43'51.083"N	104°00'04.950"W	8.93	
7957.00	31.900	82.500	7937.07	64.39	132.76	58.47	602096.71	629758.67	32°43'51.105"N	104°00'04.766"W	7.27	
7989.00	34.600	84.500	7963.83	81.89	134.73	75.90	602114.14	629760.64	32°43'51.124"N	104°00'04.562"W	9.11	
8021.00	38.600	84.600	7989.51	100.95	136.54	94.89	602133.13	629762.45	32°43'51.141"N	104°00'04.339"W	12.50	
8052.00	42.900	84.100	8012.99	121.15	138.54	115.02	602153.26	629764.45	32°43'51.160"N	104°00'04.103"W	13.91	

Actual Wellpath Report

No.3H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No. 3H SHL
Area	Eddy County, NM	Well	No. 3H
Field	(Aries) Sec 20, T18S, R30E	Wellbore	No.3H AWB
Facility	Aries 20 Fed Com		

WELLPATH DATA (170 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8084.00	45.900	85.500	8035.85	143.51	140.56	137.31	602175.55	629766.47	32°43'51.180"N	104°00'03.842"W	9.86	
8116.00	48.800	86.900	8057.53	167.04	142.11	160.79	602199.03	629768.02	32°43'51.194"N	104°00'03.567"W	9.62	
8148.00	51.600	88.200	8078.01	191.62	143.16	185.35	602223.59	629769.07	32°43'51.204"N	104°00'03.280"W	9.29	
8179.00	55.600	89.400	8096.40	216.56	143.67	210.29	602248.52	629769.58	32°43'51.208"N	104°00'02.988"W	13.27	
8214.00	60.100	88.300	8113.43	243.63	144.22	237.37	602275.60	629770.13	32°43'51.213"N	104°00'02.671"W	14.36	
8243.00	63.400	88.300	8128.57	271.82	145.06	265.54	602303.77	629770.97	32°43'51.220"N	104°00'02.341"W	10.31	
8275.00	66.400	88.900	8142.15	300.78	145.77	294.51	602332.74	629771.67	32°43'51.226"N	104°00'02.002"W	9.53	
8306.00	69.300	90.000	8153.83	329.47	146.04	323.22	602361.44	629771.95	32°43'51.228"N	104°00'01.666"W	9.92	
8338.00	73.500	90.400	8164.04	359.76	145.93	353.54	602391.76	629771.84	32°43'51.226"N	104°00'01.311"W	13.18	
8370.00	78.400	90.800	8171.80	390.75	145.60	384.57	602422.79	629771.51	32°43'51.222"N	104°00'00.948"W	15.36	
8402.00	83.700	91.300	8176.78	422.28	145.02	416.16	602454.38	629770.93	32°43'51.215"N	104°00'00.578"W	16.63	
8415.00	85.600	91.400	8177.99	435.19	144.72	429.10	602467.32	629770.63	32°43'51.212"N	104°00'00.427"W	14.64	
8518.00	89.200	93.000	8182.66	537.71	140.77	531.90	602570.11	629766.68	32°43'51.170"N	103°59'59.223"W	3.82	
8550.00	89.100	92.800	8183.14	569.56	139.15	563.86	602602.06	629765.06	32°43'51.153"N	103°59'58.849"W	0.70	
8582.00	89.000	92.600	8183.67	601.42	137.64	595.82	602634.02	629763.55	32°43'51.137"N	103°59'58.475"W	0.70	
8645.00	89.100	92.700	8184.71	664.15	134.73	658.74	602696.94	629760.64	32°43'51.106"N	103°59'57.739"W	0.22	
8709.00	89.900	92.000	8185.27	727.91	132.11	722.68	602760.87	629758.02	32°43'51.078"N	103°59'56.990"W	1.66	
8771.00	89.800	92.400	8185.44	789.69	129.73	784.64	602822.82	629755.64	32°43'51.052"N	103°59'56.265"W	0.67	
8835.00	89.700	91.000	8185.71	853.51	127.83	848.61	602886.79	629753.74	32°43'51.032"N	103°59'55.517"W	2.19	
8899.00	89.300	89.200	8186.27	917.43	127.72	912.60	602930.78	629753.63	32°43'51.029"N	103°59'54.767"W	2.88	
8963.00	88.800	88.600	8187.33	981.40	128.94	976.58	603014.75	629754.85	32°43'51.039"N	103°59'54.019"W	1.22	
9027.00	89.300	88.700	8188.40	1045.38	130.45	1040.55	603078.72	629756.36	32°43'51.052"N	103°59'53.270"W	0.80	
9090.00	88.700	89.000	8189.49	1108.35	131.72	1103.53	603141.69	629757.63	32°43'51.062"N	103°59'52.532"W	1.06	
9154.00	89.000	88.000	8190.78	1172.32	133.39	1167.50	603205.65	629759.30	32°43'51.077"N	103°59'51.784"W	1.63	
9217.00	89.500	87.700	8191.60	1235.32	135.75	1230.45	603268.60	629761.66	32°43'51.098"N	103°59'51.047"W	0.93	
9281.00	89.300	87.600	8192.27	1299.31	138.38	1294.39	603332.53	629764.29	32°43'51.122"N	103°59'50.298"W	0.35	
9344.00	88.800	87.900	8193.32	1362.30	140.85	1357.33	603395.47	629766.76	32°43'51.145"N	103°59'49.561"W	0.93	
9407.00	89.700	88.000	8194.14	1425.29	143.10	1420.28	603458.42	629769.01	32°43'51.165"N	103°59'48.824"W	1.44	
9471.00	89.700	88.100	8194.48	1489.29	145.28	1484.25	603522.38	629771.19	32°43'51.184"N	103°59'48.075"W	0.16	
9534.00	89.500	87.800	8194.92	1552.28	147.54	1547.20	603585.33	629773.45	32°43'51.205"N	103°59'47.338"W	0.57	
9598.00	89.100	88.100	8195.70	1616.28	149.83	1611.16	603649.28	629775.73	32°43'51.225"N	103°59'46.590"W	0.78	
9661.00	88.300	89.700	8197.13	1679.24	151.03	1674.13	603712.24	629776.94	32°43'51.235"N	103°59'45.852"W	2.84	
9724.00	88.500	87.900	8198.89	1742.19	152.35	1737.09	603775.20	629778.26	32°43'51.246"N	103°59'45.115"W	2.87	
9788.00	90.000	87.200	8199.73	1806.18	155.09	1801.02	603839.12	629781.00	32°43'51.271"N	103°59'44.367"W	2.59	
9852.00	90.200	86.500	8199.61	1870.18	158.61	1864.92	603903.02	629784.51	32°43'51.304"N	103°59'43.619"W	1.14	
9916.00	90.500	86.300	8199.22	1934.17	162.62	1928.80	603966.89	629788.53	32°43'51.342"N	103°59'42.871"W	0.56	
9979.00	89.700	86.700	8199.11	1997.16	166.47	1991.68	604029.77	629792.38	32°43'51.378"N	103°59'42.135"W	1.42	
10043.00	88.400	87.200	8200.17	2061.15	169.88	2055.58	604093.66	629795.78	32°43'51.410"N	103°59'41.387"W	2.18	
10107.00	87.900	87.000	8202.24	2125.11	173.11	2119.46	604157.54	629799.02	32°43'51.440"N	103°59'40.639"W	0.84	
10170.00	89.200	86.800	8203.84	2188.09	176.52	2182.35	604220.42	629802.42	32°43'51.471"N	103°59'39.902"W	2.09	
10231.00	89.900	88.100	8204.31	2249.08	179.23	2243.28	604281.35	629805.14	32°43'51.496"N	103°59'39.189"W	2.42	
10295.00	89.300	89.500	8204.76	2313.06	180.57	2307.27	604345.33	629806.48	32°43'51.508"N	103°59'38.440"W	2.38	
10358.00	89.600	89.300	8205.37	2376.02	181.23	2370.26	604408.32	629807.14	32°43'51.512"N	103°59'37.702"W	0.57	
10422.00	90.000	89.100	8205.59	2439.99	182.12	2434.25	604472.31	629808.03	32°43'51.519"N	103°59'36.953"W	0.70	
10484.00	89.600	89.400	8205.81	2501.96	182.94	2496.25	604534.29	629808.84	32°43'51.525"N	103°59'36.228"W	0.81	

Actual Wellpath Report

No.3H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No. 3H SHL
Area	Eddy County, NM	Well	No. 3H
Field	(Aries) Sec 20, T18S, R30E	Wellbore	No.3H AWP
Facility	Aries 20 Fed Com		

WELLPATH DATA (170 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10550.00	89.700	89.700	8206.21	2567.91	183.45	2562.24	604600.29	629809.36	32°43'51.528"N	103°59'35.455"W	0.48	
10613.00	89.500	88.900	8206.65	2630.87	184.22	2625.24	604663.27	629810.13	32°43'51.534"N	103°59'34.718"W	1.31	
10676.00	90.200	89.000	8206.81	2693.85	185.38	2688.23	604726.26	629811.28	32°43'51.543"N	103°59'33.980"W	1.12	
10740.00	89.100	89.500	8207.20	2757.82	186.22	2752.22	604790.24	629812.12	32°43'51.549"N	103°59'33.231"W	1.89	
10804.00	89.200	89.400	8208.15	2821.77	186.83	2816.21	604854.23	629812.74	32°43'51.553"N	103°59'32.482"W	0.22	
10867.00	89.400	89.300	8208.92	2884.73	187.55	2879.20	604917.22	629813.45	32°43'51.558"N	103°59'31.745"W	0.35	
10930.00	89.300	89.700	8209.64	2947.68	188.09	2942.19	604980.20	629814.00	32°43'51.562"N	103°59'31.007"W	0.65	
10993.00	89.900	88.800	8210.08	3010.65	188.92	3005.19	605043.19	629814.83	32°43'51.568"N	103°59'30.270"W	1.72	
11057.00	89.900	89.200	8210.19	3074.62	190.04	3069.18	605107.18	629815.94	32°43'51.577"N	103°59'29.521"W	0.62	
11121.00	89.800	88.800	8210.36	3138.60	191.15	3133.16	605171.16	629817.06	32°43'51.586"N	103°59'28.772"W	0.64	
11184.00	88.700	88.800	8211.18	3201.57	192.47	3196.14	605234.13	629818.38	32°43'51.597"N	103°59'28.034"W	1.75	
11248.00	88.700	89.300	8212.63	3265.53	193.53	3260.12	605298.10	629819.44	32°43'51.606"N	103°59'27.286"W	0.78	
11312.00	89.000	88.900	8213.92	3329.49	194.54	3324.10	605362.08	629820.44	32°43'51.613"N	103°59'26.537"W	0.78	
11376.00	89.300	89.200	8214.87	3393.46	195.60	3388.08	605426.06	629821.50	32°43'51.622"N	103°59'25.788"W	0.66	
11440.00	89.800	88.700	8215.37	3457.43	196.77	3452.07	605490.04	629822.68	32°43'51.631"N	103°59'25.038"W	1.10	
11504.00	88.600	90.200	8216.26	3521.38	197.39	3516.06	605554.02	629823.29	32°43'51.635"N	103°59'24.289"W	3.00	
11567.00	88.300	90.300	8217.97	3584.28	197.11	3579.03	605616.99	629823.02	32°43'51.631"N	103°59'23.552"W	0.50	
11631.00	89.800	90.300	8219.03	3648.19	196.78	3643.02	605680.98	629822.68	32°43'51.625"N	103°59'22.803"W	2.34	
11695.00	90.300	90.700	8218.97	3712.10	196.22	3707.02	605744.97	629822.12	32°43'51.618"N	103°59'22.054"W	1.00	
11758.00	90.400	89.400	8218.59	3775.03	196.16	3770.02	605807.96	629822.07	32°43'51.615"N	103°59'21.317"W	2.07	
11822.00	90.000	89.800	8218.37	3838.98	196.61	3834.01	605871.95	629822.52	32°43'51.618"N	103°59'20.568"W	0.88	
11885.00	89.200	89.300	8218.81	3901.93	197.10	3897.01	605934.94	629823.01	32°43'51.620"N	103°59'19.830"W	1.50	
11949.00	89.300	89.300	8219.64	3965.89	197.89	3961.00	605998.93	629823.79	32°43'51.626"N	103°59'19.081"W	0.16	
12013.00	89.600	89.500	8220.26	4029.85	198.56	4024.99	606062.92	629824.46	32°43'51.631"N	103°59'18.332"W	0.56	
12076.00	89.600	90.000	8220.70	4092.80	198.83	4087.99	606125.91	629824.74	32°43'51.631"N	103°59'17.594"W	0.79	
12139.00	89.700	90.200	8221.08	4155.73	198.72	4150.99	606188.90	629824.63	32°43'51.628"N	103°59'16.857"W	0.35	
12203.00	89.000	90.300	8221.81	4219.65	198.44	4214.98	606252.89	629824.35	32°43'51.623"N	103°59'16.108"W	1.10	
12267.00	88.200	90.600	8223.37	4283.54	197.94	4278.96	606316.87	629823.85	32°43'51.616"N	103°59'15.359"W	1.33	
12330.00	87.800	89.000	8225.57	4346.44	198.16	4341.92	606379.82	629824.06	32°43'51.617"N	103°59'14.622"W	2.62	
12394.00	87.600	89.100	8228.14	4410.36	199.22	4405.86	606443.75	629825.12	32°43'51.625"N	103°59'13.874"W	0.35	
12458.00	87.800	88.400	8230.71	4474.29	200.62	4469.79	606507.68	629826.52	32°43'51.637"N	103°59'13.125"W	1.14	
12522.00	88.600	88.000	8232.72	4538.26	202.62	4533.73	606571.61	629828.53	32°43'51.655"N	103°59'12.377"W	1.40	
12585.00	88.500	88.100	8234.31	4601.23	204.77	4596.67	606634.55	629830.67	32°43'51.674"N	103°59'11.640"W	0.22	
12649.00	89.000	87.700	8235.71	4665.21	207.11	4660.62	606698.49	629833.02	32°43'51.695"N	103°59'10.891"W	1.00	
12699.00	89.000	87.700	8236.58	4715.21	209.12	4710.57	606748.43	629835.02	32°43'51.713"N	103°59'10.306"W	0.00	Proj to Bit

Actual Wellpath Report

No.3H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No. 3H SHL
Area	Eddy County, NM	Well	No. 3H
Field	(Aries) Sec 20, T18S, R30E	Wellbore	No.3H AWB
Facility	Aries 20 Fed Com		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No. 3H PBHL		8235.00	213.50	4729.93	606767.80	629839.40	32°43'51.756"N	103°59'10.079"W	point

WELLPATH COMPOSITION - Ref Wellbore: No.3H AWB Ref Wellpath: No.3H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	7582.00	Generic gyro - northseeking (Standard)	VES Gyro <100-7582>	No.3H AWB
7582.00	12699.00	NaviTrak (Standard)	MWD NaviTrak <7672-XXXX>	No.3H AWB



Mewbourne Oil Company

Mewbourne Oil Company

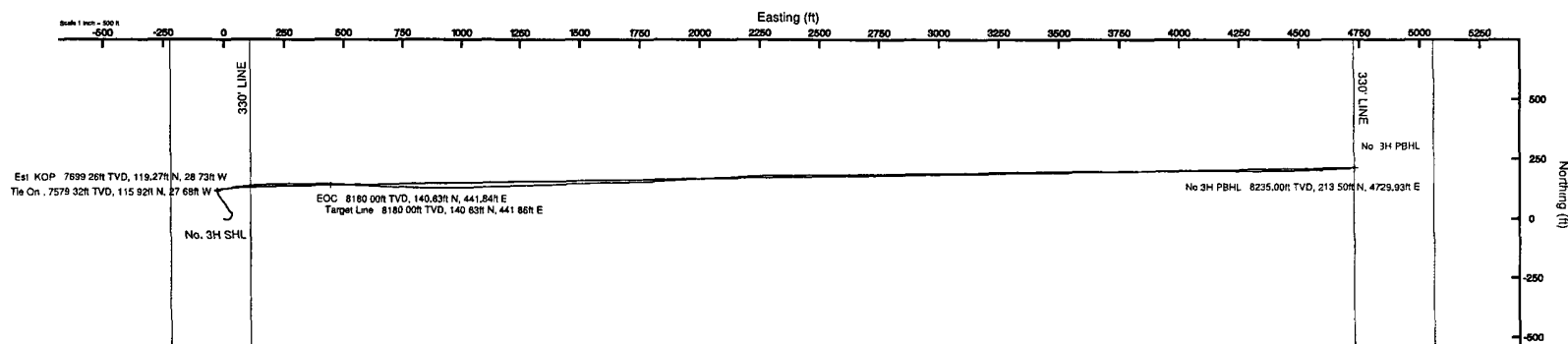
Location Eddy County, NM
Field (Aries) Sec 20, T18S, R30E
Facility Aries 20 Fed Com

Slot No 3H SHL
Well No 3H
Wellbore No 3H PWB

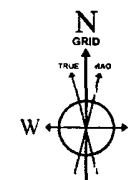


Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	7582.00	1.680	342.570	7579.32	115.92	-27.68	0.00	-22.42
Est. KOP	7702.00	1.680	342.570	7699.26	119.27	-28.73	0.00	-23.33
EOC	8449.11	89.265	89.026	8180.00	140.63	441.84	12.01	447.73
Target Line	8449.14	89.265	89.026	8180.00	140.63	441.86	2.00	447.76
No.3H PBHL	12738.18	89.265	89.026	8235.00	213.50	4729.93	0.00	4734.75



Plot reference wellpath is Plan #1	
True vertical depths are referenced to Rig on No. 3H SHL (RT)	Grid System NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No. 3H SHL (RT)	North Reference Grid north
Rig on No. 3H SHL (RT) to Mean Sea Level 3480 feet	Scale True distance
Mean Sea Level to Mud line (At Slot No. 3H SHL) 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by gentry on 1/15/2012



BGGM (1945.0 to 2012.0) Dip: 60.60° Field 48928.1 nT
Magnetic North is 7.87 degrees East of True North (at 7/5/2011)
Grid North is 0.18 degrees East of True North
To correct azimuth from True to Grid subtract 0.18 degrees
To correct azimuth from Magnetic to Grid add 7.69 degrees
For example if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.69 = 97.69

