



Mewbourne Oil Company

Location: Eddy County, NM

Slot: Forty Niner Ridge Unit No. 103H SHL

Field: (49er Ridge Unit) Sec 22, TS 23-S, R 30-E

Well: Forty Niner Ridge Unit No. 103H

Facility: 49er Ridge Unit No. 103H

Wellbore: No. 103H AWB



Plot reference wellpath is No. 103H AWP

True vertical depths are referenced to Rig on No. 103H SHL (KB).

Measured depths are referenced to Rig on No. 103H SHL (K8).

Rig on No. 103H SHL (KB) to Mean Sea Level, 3291.5 feet

Mean Sea Level to Mud line (At Slot, Earth Nearer Bridge) (Lind No. 103H SHL) - 3261 inches

Coordinates are in feet referenced to State

Grid System: NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet

North Reference Grid north

Scale	True distance
1:100,000	100 km
1:250,000	250 km
1:500,000	500 km
1:1,000,000	1,000 km
1:2,000,000	2,000 km
1:5,000,000	5,000 km
1:10,000,000	10,000 km
1:20,000,000	20,000 km
1:50,000,000	50,000 km
1:100,000,000	100,000 km
1:200,000,000	200,000 km
1:500,000,000	500,000 km
1:1,000,000,000	1,000,000 km
1:2,000,000,000	2,000,000 km
1:5,000,000,000	5,000,000 km
1:10,000,000,000	10,000,000 km
1:20,000,000,000	20,000,000 km
1:50,000,000,000	50,000,000 km
1:100,000,000,000	100,000,000 km
1:200,000,000,000	200,000,000 km
1:500,000,000,000	500,000,000 km
1:1,000,000,000,000	1,000,000,000 km
1:2,000,000,000,000	2,000,000,000 km
1:5,000,000,000,000	5,000,000,000 km
1:10,000,000,000,000	10,000,000,000 km
1:20,000,000,000,000	20,000,000,000 km
1:50,000,000,000,000	50,000,000,000 km
1:100,000,000,000,000	100,000,000,000 km
1:200,000,000,000,000	200,000,000,000 km
1:500,000,000,000,000	500,000,000,000 km
1:1,000,000,000,000,000	1,000,000,000,000 km
1:2,000,000,000,000,000	2,000,000,000,000 km
1:5,000,000,000,000,000	5,000,000,000,000 km
1:10,000,000,000,000,000	10,000,000,000,000 km
1:20,000,000,000,000,000	20,000,000,000,000 km
1:50,000,000,000,000,000	50,000,000,000,000 km
1:100,000,000,000,000,000	100,000,000,000,000 km
1:200,000,000,000,000,000	200,000,000,000,000 km
1:500,000,000,000,000,000	500,000,000,000,000 km
1:1,000,000,000,000,000,000	1,000,000,000,000,000 km
1:2,000,000,000,000,000,000	2,000,000,000,000,000 km
1:5,000,000,000,000,000,000	5,000,000,000,000,000 km
1:10,000,000,000,000,000,000	10,000,000,000,000,000 km
1:20,000,000,000,000,000,000	20,000,000,000,000,000 km
1:50,000,000,000,000,000,000	50,000,000,000,000,000 km
1:100,000,000,000,000,000,000	100,000,000,000,000,000 km
1:200,000,000,000,000,000,000	200,000,000,000,000,000 km
1:500,000,000,000,000,000,000	500,000,000,000,000,000 km
1:1,000,000,000,000,000,000,000	1,000,000,000,000,000,000 km
1:2,000,000,000,000,000,000,000	2,000,000,000,000,000,000 km
1:5,000,000,000,000,000,000,000	5,000,000,000,000,000,000 km
1:10,000,000,000,000,000,000,000	10,000,000,000,000,000,000 km
1:20,000,000,000,000,000,000,000	20,000,000,000,000,000,000 km
1:50,000,000,000,000,000,000,000	50,000,000,000,000,000,000 km
1:100,000,000,000,000,000,000,000	100,000,000,000,000,000,000 km
1:200,000,000,000,000,000,000,000	200,000,000,000,000,000,000 km
1:500,000,000,000,000,000,000,000	500,000,000,000,000,000,000 km
1:1,000,000,000,000,000,000,000,000	1,000,000,000,000,000,000,000 km
1:2,000,000,000,000,000,000,000,000	2,000,000,000,000,000,000,000 km
1:5,000,000,000,000,000,000,000,000	5,000,000,000,000,000,000,000 km
1:10,000,000,000,000,000,000,000,000	10,000,000,000,000,000,000,000 km
1:20,000,000,000,000,000,000,000,000	20,000,000,000,000,000,000,000 km
1:50,000,000,000,000,000,000,000,000	50,000,000,000,000,000,000,000 km
1:100,000,000,000,000,000,000,000,000	100,000,000,000,000,000,000,000 km
1:200,000,000,000,000,000,000,000,000	200,000,000,000,000,000,000,000 km
1:500,000,000,000,000,000,000,000,000	500,000,000,000,000,000,000,000 km
1:1,000,000,000,000,000,000,000,000,000	1,000,

Depths are in feet

Depths are in feet

Location Information

Facility Name	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
40th Ridge Unit No 103H	664575 300	467646 400	32 17'05.300"N	103 51'53.684"W
Slot	Local N (ft)	Local E (ft)	Latitude	Longitude
Forty Niner Ridge Unit No 103H SHL	0.00	0.00	664575 300	467646 400
Rig on No 103H SHL (KB) to Mud line (At Slot, Forty Niner Ridge Unit No 103H SHL)				30.5H
Mean Sea Level to Mud line (At Slot, Forty Niner Ridge Unit No 103H SHL)				-300H
Rig on No 103H SHL (KB) to Mean Sea Level				3261.5H

Wellpath Composition

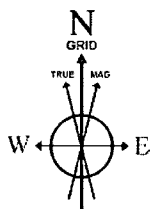
Start MD (t)	End MD (t)	Tool	Model	Log Name/Comment	Wellbore
30.50	9005.00	Generic gyro - northseeking	Generic gyro - northseeking (Standard)	VES Gyro <100-9005>	No 103H AW
9005.00	16286.00	NewTrak	AT Curve (Short Spaced)	BH AT Curve <9005-16286>	No 103H AW
16286.00	18336.00	Blind Dollie	Blind Drilling (Std)	Precession to bit	No 103H AW

Bottom Hole Location

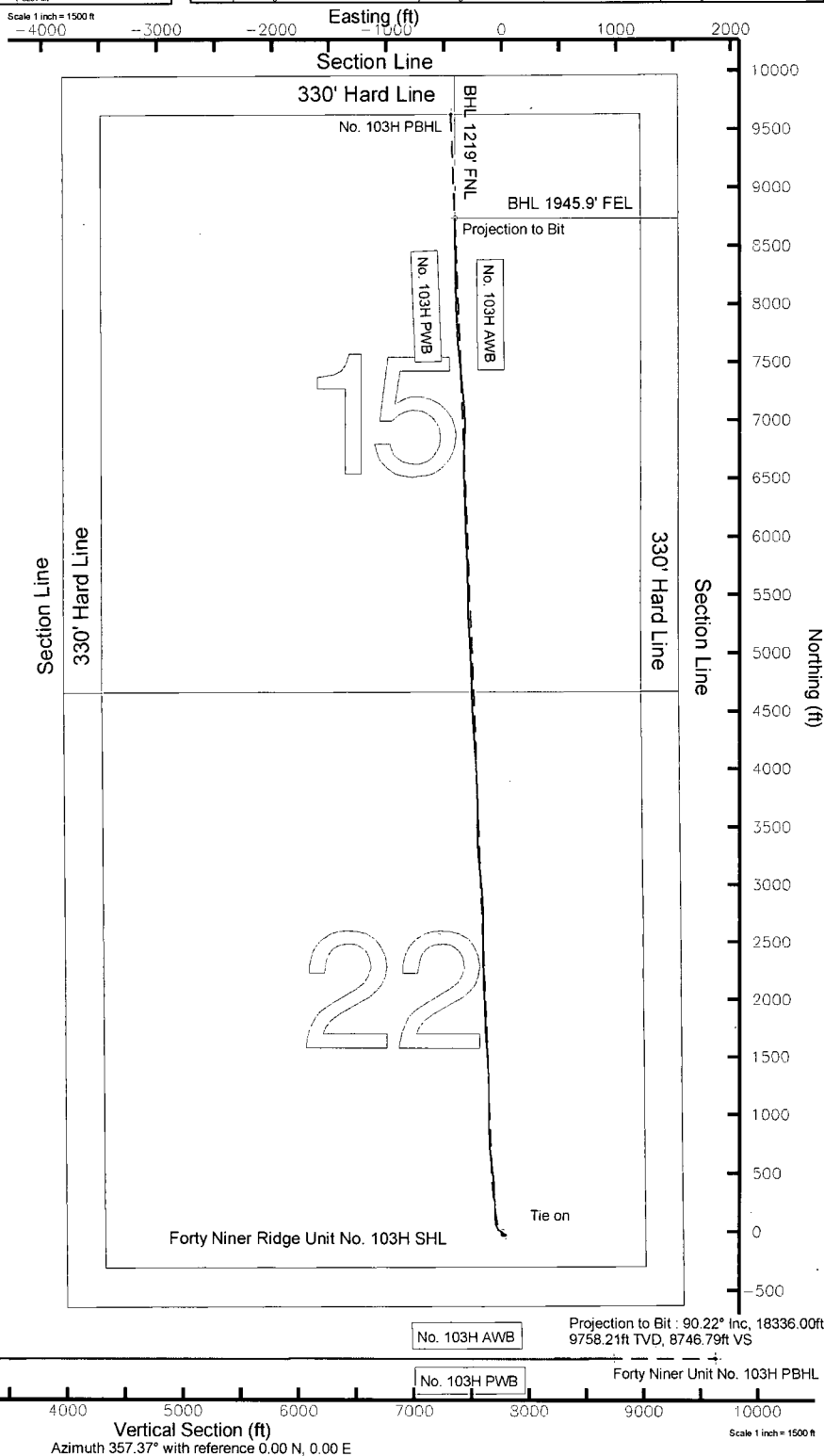
MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
18538.00	00.000	360.440	2786.54	0.737 77	400.00	814340.33	432680.07	23°13'N 78°24'W	106°15'15.000000

Well Data

Slot	Well	Wellbore	Wellpath
Forty Niner Ridge Unit No. 103H SHL	Forty Niner Ridge Unit No. 103H	No. 103H AWB	No. 103H AWP
Forty Niner Ridge Unit No. 103H SHL	Forty Niner Ridge Unit No. 103H	No. 103H PWB	Forty Niner Ridge Unit No. 103H Rev D 0



BGGM (1945.0 to 2016.0) Dip: 60.09° Field: 48210.2 nT
Magnetic North is 7.46 degrees East of True North (at 1/24/2015)
Grid North is 0.25 degrees East of True North
To correct azimuth from True to Grid subtract 0.25 degrees
To correct azimuth from Magnetic to Grid add 7.21 degrees



Actual Wellpath Report

No. 103H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Mewbourne Oil Company	Slot	Forty Niner Ridge Unit No. 103H SHL
Area	Eddy County, NM	Well	Forty Niner Ridge Unit No. 103H
Field	(49er Ridge Unit) Sec 22, TS 23-S, R 30-E	Wellbore	No. 103H AWB
Facility	49er Ridge Unit No. 103H		

REPORT SETUP INFORMATION			
Projection System	NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 4.0.0
North Reference	Grid	User	Abraall
Scale	0.999933	Report Generated	2/13/2015 at 9:59:29 AM
Convergence at slot	0.25° East	Database/Source file	WA_Midland/No._103H_AWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	644757.30	467646.40	32°17'05.308"N	103°51'53.694"W
Facility Reference Pt			644757.30	467646.40	32°17'05.308"N	103°51'53.694"W
Field Reference Pt			152400.30	0.00	30°59'42.846"N	105°26'33.659"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rig on No. 103H SHL (KB) to Facility Vertical Datum	30.50ft
Horizontal Reference Pt	Slot	Rig on No. 103H SHL (KB) to Mean Sea Level	3291.50ft
Vertical Reference Pt	Rig on No. 103H SHL (KB)	Rig on No. 103H SHL (KB) to Mud Line at Slot (Forty Niner Ridge Unit No. 103H SHL)	30.50ft
MD Reference Pt	Rig on No. 103H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	357.37°

Actual Wellpath Report

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REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	Forty Niner Ridge Unit No. 103H SHL
Area	Eddy County, NM	Well	Forty Niner Ridge Unit No. 103H
Field	(49er Ridge Unit) Sec 22, TS 23-S, R 30-E	Wellbore	No. 103H AWP
Facility	49er Ridge Unit No. 103H		

WELLPATH DATA (214 stations) † = interpolated/extrapolated station

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	86.410	0.00	0.00	0.00	0.00	644757.30	467646.40	32°17'05.308"N	103°51'53.694"W	0.00	
30.50	0.000	86.410	30.50	0.00	0.00	0.00	644757.30	467646.40	32°17'05.308"N	103°51'53.694"W	0.00	
100.00	1.120	86.410	100.00	0.01	0.04	0.68	644757.98	467646.44	32°17'05.308"N	103°51'53.686"W	1.61	
200.00	0.570	93.540	199.98	-0.03	0.07	2.15	644759.45	467646.47	32°17'05.309"N	103°51'53.669"W	0.56	
300.00	0.040	118.620	299.98	-0.10	0.03	2.68	644759.98	467646.43	32°17'05.308"N	103°51'53.662"W	0.53	
400.00	0.060	242.450	399.98	-0.14	-0.02	2.66	644759.96	467646.38	32°17'05.308"N	103°51'53.663"W	0.09	
500.00	0.390	249.600	499.98	-0.26	-0.16	2.30	644759.60	467646.24	32°17'05.306"N	103°51'53.667"W	0.33	
600.00	0.770	273.210	599.98	-0.30	-0.24	1.31	644758.61	467646.16	32°17'05.306"N	103°51'53.678"W	0.44	
700.00	1.200	232.700	699.96	-0.83	-0.84	-0.20	644757.10	467645.56	32°17'05.300"N	103°51'53.696"W	0.79	
800.00	1.400	196.480	799.94	-2.58	-2.64	-1.38	644755.92	467643.76	32°17'05.282"N	103°51'53.710"W	0.83	
900.00	1.700	181.150	899.90	-5.21	-5.30	-1.75	644755.55	467641.10	32°17'05.256"N	103°51'53.714"W	0.51	
1000.00	1.400	150.370	999.87	-7.78	-7.84	-1.18	644756.12	467638.56	32°17'05.230"N	103°51'53.708"W	0.87	
1100.00	1.140	125.110	1099.84	-9.48	-9.48	0.24	644757.54	467636.93	32°17'05.214"N	103°51'53.691"W	0.61	
1200.00	0.920	96.210	1199.83	-10.21	-10.13	1.85	644759.15	467636.27	32°17'05.208"N	103°51'53.673"W	0.56	
1300.00	0.630	37.590	1299.82	-9.91	-9.79	2.98	644760.28	467636.61	32°17'05.211"N	103°51'53.659"W	0.80	
1400.00	0.480	357.870	1399.82	-9.07	-8.93	3.30	644760.60	467637.47	32°17'05.220"N	103°51'53.656"W	0.40	
1500.00	0.760	277.500	1499.81	-8.54	-8.43	2.63	644759.93	467637.97	32°17'05.225"N	103°51'53.663"W	0.83	
1600.00	0.990	246.780	1599.80	-8.73	-8.68	1.18	644758.48	467637.72	32°17'05.222"N	103°51'53.680"W	0.51	
1700.00	1.210	219.780	1699.78	-9.81	-9.83	-0.29	644757.01	467636.57	32°17'05.211"N	103°51'53.697"W	0.56	
1800.00	1.500	230.510	1799.75	-11.37	-11.48	-1.98	644755.32	467634.92	32°17'05.195"N	103°51'53.717"W	0.38	
1900.00	1.840	199.580	1899.71	-13.64	-13.82	-3.52	644753.78	467632.58	32°17'05.171"N	103°51'53.735"W	0.95	
2000.00	1.430	168.730	1999.67	-16.36	-16.56	-3.82	644753.48	467629.84	32°17'05.144"N	103°51'53.739"W	0.96	
2100.00	1.580	137.980	2099.64	-18.66	-18.81	-2.65	644754.65	467627.60	32°17'05.122"N	103°51'53.725"W	0.81	
2200.00	1.660	127.910	2199.60	-20.67	-20.72	-0.59	644756.71	467625.68	32°17'05.103"N	103°51'53.701"W	0.30	
2300.00	1.610	105.360	2299.56	-22.05	-21.98	1.91	644759.21	467624.42	32°17'05.090"N	103°51'53.672"W	0.64	
2400.00	1.120	86.890	2399.53	-22.47	-22.30	4.24	644761.54	467624.10	32°17'05.087"N	103°51'53.645"W	0.65	
2500.00	0.930	56.330	2499.52	-22.05	-21.80	5.89	644763.19	467624.60	32°17'05.092"N	103°51'53.626"W	0.57	
2600.00	0.640	22.390	2599.51	-21.12	-20.83	6.78	644764.08	467625.57	32°17'05.102"N	103°51'53.616"W	0.54	
2700.00	0.620	332.230	2699.50	-20.13	-19.84	6.74	644764.04	467626.56	32°17'05.111"N	103°51'53.616"W	0.53	
2800.00	0.610	291.380	2799.50	-19.42	-19.16	5.99	644763.29	467627.24	32°17'05.118"N	103°51'53.625"W	0.43	
2900.00	0.740	212.960	2899.49	-19.73	-19.51	5.15	644762.45	467626.89	32°17'05.115"N	103°51'53.635"W	0.86	
3000.00	1.240	160.470	2999.48	-21.29	-21.07	5.16	644762.46	467625.33	32°17'05.099"N	103°51'53.635"W	0.98	
3100.00	1.880	134.630	3099.44	-23.53	-23.25	6.69	644763.99	467623.16	32°17'05.078"N	103°51'53.617"W	0.94	
3200.00	1.840	122.670	3199.39	-25.66	-25.26	9.21	644766.50	467621.14	32°17'05.058"N	103°51'53.588"W	0.39	
3300.00	1.700	110.880	3299.34	-27.18	-26.66	11.94	644769.24	467619.74	32°17'05.044"N	103°51'53.556"W	0.39	
3400.00	1.680	99.900	3399.30	-28.09	-27.44	14.77	644772.07	467618.96	32°17'05.036"N	103°51'53.523"W	0.32	
3500.00	1.710	105.770	3499.26	-28.88	-28.10	17.65	644774.95	467618.30	32°17'05.029"N	103°51'53.489"W	0.18	
3600.00	1.890	108.080	3599.21	-29.93	-29.01	20.66	644777.95	467617.39	32°17'05.020"N	103°51'53.454"W	0.19	
3700.00	1.730	102.360	3699.16	-30.91	-29.85	23.70	644781.00	467616.55	32°17'05.012"N	103°51'53.419"W	0.24	
3800.00	1.760	105.520	3799.11	-31.78	-30.58	26.65	644783.95	467615.82	32°17'05.004"N	103°51'53.385"W	0.10	
3900.00	1.340	108.870	3899.08	-32.68	-31.37	29.24	644786.54	467615.03	32°17'04.996"N	103°51'53.355"W	0.43	
4000.00	0.680	93.150	3999.06	-33.17	-31.78	30.94	644788.23	467614.62	32°17'04.992"N	103°51'53.335"W	0.71	
4100.00	0.110	75.740	4099.06	-33.21	-31.79	31.62	644788.92	467614.61	32°17'04.992"N	103°51'53.327"W	0.58	
4200.00	0.100	24.310	4199.06	-33.11	-31.69	31.75	644789.05	467614.71	32°17'04.993"N	103°51'53.325"W	0.09	
4300.00	0.070	25.250	4299.06	-32.98	-31.55	31.81	644789.11	467614.85	32°17'04.994"N	103°51'53.325"W	0.03	

JUL 14 2015

Actual Wellpath Report

No. 103H AWP

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Mewbourne Oil Company

BAKER
HUGHES

REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	Forty Niner Ridge Unit No. 103H SHL
Area	Eddy County, NM	Well	Forty Niner Ridge Unit No. 103H
Field	(49er Ridge Unit) Sec 22, TS 23-S, R 30-E	Wellbore	No. 103H AWP
Facility	49er Ridge Unit No. 103H		

WELLPATH DATA (214 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
4400.00	0.030	9.570	4399.06	-32.90	-31.47	31.84	644789.14	467614.93	32°17'04.995"N	103°51'53.324"W	0.04	
4500.00	0.010	325.260	4499.06	-32.87	-31.44	31.84	644789.14	467614.96	32°17'04.996"N	103°51'53.324"W	0.02	
4600.00	0.020	41.060	4599.06	-32.85	-31.42	31.85	644789.15	467614.98	32°17'04.996"N	103°51'53.324"W	0.02	
4700.00	0.020	258.920	4699.06	-32.84	-31.41	31.84	644789.14	467614.99	32°17'04.996"N	103°51'53.324"W	0.04	
4800.00	0.020	326.290	4799.06	-32.83	-31.40	31.82	644789.12	467615.00	32°17'04.996"N	103°51'53.325"W	0.02	
4900.00	0.020	261.690	4899.06	-32.81	-31.39	31.79	644789.09	467615.01	32°17'04.996"N	103°51'53.325"W	0.02	
5000.00	0.040	337.010	4999.06	-32.78	-31.36	31.76	644789.06	467615.04	32°17'04.996"N	103°51'53.325"W	0.04	
5100.00	0.050	155.660	5099.06	-32.79	-31.37	31.76	644789.06	467615.04	32°17'04.996"N	103°51'53.325"W	0.09	
5200.00	0.060	334.690	5199.06	-32.78	-31.36	31.76	644789.06	467615.04	32°17'04.996"N	103°51'53.325"W	0.11	
5300.00	0.050	311.910	5299.06	-32.70	-31.28	31.70	644789.00	467615.12	32°17'04.997"N	103°51'53.326"W	0.02	
5400.00	0.050	230.440	5399.06	-32.70	-31.28	31.64	644788.94	467615.12	32°17'04.997"N	103°51'53.327"W	0.07	
5500.00	0.050	91.350	5499.06	-32.73	-31.31	31.65	644788.95	467615.09	32°17'04.997"N	103°51'53.327"W	0.09	
5600.00	0.050	316.370	5599.06	-32.70	-31.28	31.66	644788.96	467615.12	32°17'04.997"N	103°51'53.326"W	0.09	
5700.00	0.040	343.350	5699.06	-32.63	-31.21	31.62	644788.92	467615.19	32°17'04.998"N	103°51'53.327"W	0.02	
5800.00	0.060	118.850	5799.06	-32.63	-31.21	31.66	644788.96	467615.20	32°17'04.998"N	103°51'53.326"W	0.09	
5900.00	0.080	177.780	5899.06	-32.72	-31.30	31.71	644789.00	467615.10	32°17'04.997"N	103°51'53.326"W	0.07	
6000.00	0.040	149.920	5999.06	-32.82	-31.40	31.73	644789.02	467615.00	32°17'04.996"N	103°51'53.326"W	0.05	
6100.00	0.060	221.630	6099.06	-32.89	-31.47	31.71	644789.01	467614.93	32°17'04.995"N	103°51'53.326"W	0.06	
6200.00	0.060	197.100	6199.06	-32.98	-31.56	31.66	644788.96	467614.84	32°17'04.994"N	103°51'53.326"W	0.03	
6300.00	0.070	150.340	6299.06	-33.08	-31.66	31.67	644788.97	467614.74	32°17'04.993"N	103°51'53.326"W	0.05	
6400.00	0.120	143.890	6399.06	-33.23	-31.80	31.77	644789.06	467614.60	32°17'04.992"N	103°51'53.325"W	0.05	
6500.00	0.070	147.890	6499.06	-33.37	-31.94	31.86	644789.16	467614.47	32°17'04.991"N	103°51'53.324"W	0.05	
6600.00	0.040	143.660	6599.06	-33.45	-32.02	31.91	644789.21	467614.39	32°17'04.990"N	103°51'53.323"W	0.03	
6700.00	0.020	139.080	6699.06	-33.49	-32.06	31.95	644789.24	467614.35	32°17'04.989"N	103°51'53.323"W	0.02	
6800.00	0.070	118.890	6799.06	-33.54	-32.10	32.01	644789.31	467614.30	32°17'04.989"N	103°51'53.322"W	0.05	
6900.00	0.030	181.020	6899.06	-33.59	-32.16	32.06	644789.36	467614.25	32°17'04.988"N	103°51'53.322"W	0.06	
7000.00	0.030	105.260	6999.06	-33.63	-32.19	32.09	644789.39	467614.21	32°17'04.988"N	103°51'53.321"W	0.04	
7100.00	0.060	164.080	7099.06	-33.69	-32.25	32.13	644789.43	467614.16	32°17'04.988"N	103°51'53.321"W	0.05	
7200.00	0.060	16.750	7199.06	-33.69	-32.25	32.16	644789.45	467614.16	32°17'04.988"N	103°51'53.321"W	0.12	
7300.00	0.060	44.920	7299.06	-33.60	-32.16	32.21	644789.51	467614.24	32°17'04.988"N	103°51'53.320"W	0.03	
7400.00	0.060	256.880	7399.06	-33.58	-32.13	32.20	644789.49	467614.27	32°17'04.989"N	103°51'53.320"W	0.12	
7500.00	0.060	1.430	7499.06	-33.54	-32.09	32.15	644789.44	467614.31	32°17'04.989"N	103°51'53.321"W	0.09	
7600.00	0.040	55.570	7599.06	-33.47	-32.02	32.18	644789.47	467614.38	32°17'04.990"N	103°51'53.320"W	0.05	
7700.00	0.050	3.660	7699.06	-33.40	-31.96	32.21	644789.50	467614.44	32°17'04.990"N	103°51'53.320"W	0.04	
7800.00	0.430	277.070	7799.05	-33.30	-31.87	31.84	644789.14	467614.53	32°17'04.991"N	103°51'53.324"W	0.43	
7900.00	1.320	272.620	7899.04	-33.13	-31.77	30.31	644787.61	467614.63	32°17'04.992"N	103°51'53.342"W	0.89	
8000.00	1.080	291.140	7999.02	-32.64	-31.38	28.28	644785.58	467615.03	32°17'04.996"N	103°51'53.366"W	0.45	
8100.00	1.320	334.040	8099.00	-31.21	-30.00	26.90	644784.20	467616.40	32°17'05.010"N	103°51'53.382"W	0.91	
8200.00	0.710	17.190	8198.98	-29.56	-28.37	26.58	644783.88	467618.03	32°17'05.026"N	103°51'53.385"W	0.94	
8300.00	1.520	49.250	8298.97	-28.16	-26.92	27.77	644785.07	467619.49	32°17'05.040"N	103°51'53.371"W	0.99	
8400.00	0.540	61.130	8398.95	-27.14	-25.82	29.19	644786.48	467620.58	32°17'05.051"N	103°51'53.355"W	1.00	
8500.00	0.200	183.450	8498.95	-27.10	-25.77	29.59	644786.89	467620.63	32°17'05.052"N	103°51'53.350"W	0.67	
8600.00	0.480	208.910	8598.95	-27.63	-26.31	29.38	644786.67	467620.09	32°17'05.046"N	103°51'53.353"W	0.31	
8700.00	1.050	171.050	8698.94	-28.90	-27.58	29.32	644786.61	467618.82	32°17'05.034"N	103°51'53.354"W	0.73	
8800.00	1.380	172.070	8798.91	-31.01	-29.68	29.62	644786.92	467616.72	32°17'05.013"N	103°51'53.350"W	0.33	

Actual Wellpath Report

No. 103H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	Forty Niner Ridge Unit No. 103H SHL
Area	Eddy County, NM	Well	Forty Niner Ridge Unit No. 103H
Field	(49er Ridge Unit) Sec 22, TS 23-S, R 30-E	Wellbore	No. 103H AWP
Facility	49er Ridge Unit No. 103H		

WELLPATH DATA (214 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
8900.00	1.410	209.290	8898.89	-33.25	-31.95	29.19	644786.49	467614.46	32°17'04.991"N	103°51'53.355"W	0.89	
9005.00	1.890	241.810	9003.84	-35.10	-33.89	27.03	644784.33	467612.51	32°17'04.972"N	103°51'53.380"W	0.98	Tie on
9058.00	1.750	262.870	9056.82	-35.54	-34.40	25.46	644782.75	467612.00	32°17'04.967"N	103°51'53.399"W	1.28	
9091.00	2.270	284.360	9089.80	-35.38	-34.30	24.32	644781.62	467612.10	32°17'04.968"N	103°51'53.412"W	2.75	
9123.00	4.200	321.010	9121.75	-34.26	-33.24	22.97	644780.27	467613.17	32°17'04.978"N	103°51'53.428"W	8.55	
9155.00	6.750	327.440	9153.60	-31.68	-30.74	21.22	644778.52	467615.66	32°17'05.003"N	103°51'53.448"W	8.18	
9186.00	10.400	319.990	9184.25	-27.88	-27.06	18.44	644775.74	467619.34	32°17'05.039"N	103°51'53.480"W	12.28	
9218.00	12.190	314.860	9215.63	-23.09	-22.46	14.19	644771.49	467623.94	32°17'05.085"N	103°51'53.529"W	6.41	
9250.00	13.470	311.680	9246.83	-18.00	-17.60	9.01	644766.31	467628.80	32°17'05.133"N	103°51'53.590"W	4.57	
9282.00	15.990	309.090	9277.78	-12.46	-12.34	2.81	644760.11	467634.06	32°17'05.186"N	103°51'53.662"W	8.14	
9313.00	17.590	308.760	9307.45	-6.52	-6.72	-4.16	644753.14	467639.68	32°17'05.242"N	103°51'53.742"W	5.17	
9345.00	16.980	308.640	9338.01	-0.24	-0.77	-11.58	644745.72	467645.63	32°17'05.301"N	103°51'53.829"W	1.91	
9377.00	17.050	310.970	9368.61	6.08	5.22	-18.77	644738.53	467651.62	32°17'05.361"N	103°51'53.912"W	2.14	
9409.00	19.060	318.090	9399.04	13.36	12.19	-25.81	644731.49	467658.59	32°17'05.430"N	103°51'53.994"W	9.32	
9440.00	20.670	325.200	9428.19	21.91	20.45	-32.31	644724.99	467666.85	32°17'05.512"N	103°51'54.069"W	9.36	
9472.00	24.380	332.360	9457.75	32.68	30.94	-38.60	644718.70	467677.34	32°17'05.616"N	103°51'54.142"W	14.40	
9504.00	26.250	336.890	9486.68	45.30	43.30	-44.45	644712.86	467689.70	32°17'05.738"N	103°51'54.209"W	8.41	
9535.00	26.080	340.390	9514.51	58.24	56.03	-49.42	644707.88	467702.42	32°17'05.865"N	103°51'54.266"W	5.01	
9567.00	28.630	345.570	9542.93	72.48	70.08	-53.70	644703.61	467716.48	32°17'06.004"N	103°51'54.315"W	10.89	
9599.00	32.920	350.500	9570.42	88.62	86.09	-57.04	644700.26	467732.49	32°17'06.162"N	103°51'54.354"W	15.54	
9631.00	37.620	354.170	9596.54	107.02	104.40	-59.47	644697.83	467750.79	32°17'06.344"N	103°51'54.381"W	16.11	
9662.00	42.300	356.310	9620.30	126.91	124.23	-61.11	644696.20	467770.63	32°17'06.540"N	103°51'54.399"W	15.73	
9694.00	46.130	357.610	9643.23	149.22	146.51	-62.28	644695.02	467792.90	32°17'06.761"N	103°51'54.412"W	12.30	
9726.00	48.810	358.340	9664.86	172.80	170.08	-63.11	644694.19	467816.47	32°17'06.994"N	103°51'54.420"W	8.54	
9757.00	52.520	359.110	9684.51	196.76	194.04	-63.64	644693.66	467840.43	32°17'07.231"N	103°51'54.425"W	12.12	
9789.00	54.520	359.620	9703.53	222.48	219.77	-63.92	644693.38	467866.16	32°17'07.485"N	103°51'54.427"W	6.38	
9821.00	57.540	359.620	9721.41	248.99	246.31	-64.10	644693.20	467892.69	32°17'07.748"N	103°51'54.428"W	9.44	
9853.00	62.590	359.080	9737.37	276.70	274.03	-64.42	644692.89	467920.41	32°17'08.022"N	103°51'54.430"W	15.85	
9884.00	66.900	358.470	9750.60	304.72	302.05	-65.02	644692.29	467948.43	32°17'08.300"N	103°51'54.436"W	14.02	
9915.00	71.180	356.740	9761.68	333.66	330.97	-66.23	644691.07	467977.34	32°17'08.586"N	103°51'54.448"W	14.76	
9947.00	75.120	355.690	9770.96	364.27	361.52	-68.26	644689.05	468007.89	32°17'08.888"N	103°51'54.470"W	12.71	
9979.00	79.070	354.830	9778.10	395.44	392.60	-70.84	644686.47	468038.97	32°17'09.196"N	103°51'54.499"W	12.62	
10010.00	83.050	354.010	9782.92	426.01	423.07	-73.82	644683.49	468069.44	32°17'09.498"N	103°51'54.532"W	13.10	
10042.00	87.870	353.430	9785.45	457.84	454.77	-77.51	644680.00	468101.14	32°17'09.811"N	103°51'54.571"W	15.17	
10074.00	90.800	352.730	9785.82	489.74	486.53	-81.16	644676.15	468132.89	32°17'10.126"N	103°51'54.614"W	9.41	
10105.00	90.920	352.620	9785.36	520.64	517.27	-85.11	644672.19	468163.64	32°17'10.430"N	103°51'54.659"W	0.53	
10120.00	90.900	352.900	9785.12	535.58	532.15	-87.00	644670.30	468178.51	32°17'10.578"N	103°51'54.680"W	1.87	
10201.00	90.860	354.110	9783.88	616.39	612.62	-96.16	644661.14	468258.98	32°17'11.374"N	103°51'54.783"W	1.49	
10296.00	90.920	354.580	9782.40	711.25	707.14	-105.52	644651.78	468353.50	32°17'12.310"N	103°51'54.887"W	0.50	
10391.00	90.860	356.460	9780.92	806.18	801.84	-112.94	644644.37	468448.18	32°17'13.247"N	103°51'54.968"W	1.98	
10486.00	91.080	359.200	9779.32	901.15	896.75	-116.54	644640.77	468543.09	32°17'14.187"N	103°51'55.005"W	2.89	
10581.00	90.920	0.440	9777.66	996.05	991.73	-116.84	644640.47	468638.06	32°17'15.127"N	103°51'55.004"W	1.32	
10676.00	90.890	0.160	9776.16	1090.92	1086.72	-116.34	644640.97	468733.04	32°17'16.066"N	103°51'54.993"W	0.30	
10771.00	90.830	0.540	9774.73	1185.78	1181.71	-115.76	644641.55	468828.02	32°17'17.006"N	103°51'54.982"W	0.40	
10866.00	90.280	358.480	9773.81	1280.70	1276.69	-116.57	644640.74	468923.00	32°17'17.946"N	103°51'54.987"W	2.24	

Actual Wellpath Report

No. 103H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	Forty Niner Ridge Unit No. 103H SHL
Area	Eddy County, NM	Well	Forty Niner Ridge Unit No. 103H
Field	(49er Ridge Unit) Sec 22, TS 23-S, R 30-E	Wellbore	No. 103H AWP
Facility	49er Ridge Unit No. 103H		

WELLPATH DATA (214 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
10962.00	90.280	356.050	9773.34	1376.69	1372.57	-121.15	644636.16	469018.88	32°17'18.895"N	103°51'55.035"W	2.53	
11057.00	90.000	356.050	9773.11	1471.67	1467.35	-127.70	644629.61	469113.65	32°17'19.833"N	103°51'55.106"W	0.29	
11152.00	90.000	356.090	9773.11	1566.64	1562.12	-134.21	644623.10	469208.42	32°17'20.771"N	103°51'55.177"W	0.04	
11247.00	90.000	355.910	9773.11	1661.61	1656.89	-140.83	644616.48	469303.18	32°17'21.710"N	103°51'55.250"W	0.19	
11342.00	90.090	358.050	9773.03	1756.61	1751.76	-145.84	644611.47	469398.04	32°17'22.648"N	103°51'55.303"W	2.25	
11437.00	90.030	358.070	9772.94	1851.60	1846.70	-149.06	644608.25	469492.97	32°17'23.588"N	103°51'55.336"W	0.07	
11533.00	90.060	357.640	9772.86	1947.60	1942.63	-152.65	644604.66	469588.90	32°17'24.538"N	103°51'55.373"W	0.45	
11628.00	90.030	356.810	9772.79	2042.59	2037.52	-157.25	644600.06	469683.78	32°17'25.477"N	103°51'55.422"W	0.87	
11723.00	90.000	358.070	9772.76	2137.59	2132.42	-161.49	644595.82	469778.68	32°17'26.416"N	103°51'55.466"W	1.33	
11819.00	89.970	359.230	9772.79	2233.57	2228.40	-163.75	644593.56	469874.64	32°17'27.366"N	103°51'55.488"W	1.21	
11914.00	90.000	359.760	9772.81	2328.50	2323.39	-164.59	644592.72	469969.63	32°17'28.306"N	103°51'55.493"W	0.56	
12009.00	90.030	359.920	9772.79	2423.41	2418.39	-164.86	644592.46	470064.63	32°17'29.246"N	103°51'55.491"W	0.17	
12104.00	90.340	0.250	9772.48	2518.30	2513.39	-164.71	644592.60	470159.62	32°17'30.186"N	103°51'55.484"W	0.48	
12199.00	90.250	359.720	9771.99	2613.20	2608.39	-164.74	644592.57	470254.61	32°17'31.126"N	103°51'55.480"W	0.57	
12294.00	90.250	358.980	9771.58	2708.15	2703.38	-165.82	644591.49	470349.60	32°17'32.066"N	103°51'55.488"W	0.78	
12389.00	90.310	357.720	9771.11	2803.13	2798.34	-168.55	644588.76	470444.55	32°17'33.006"N	103°51'55.515"W	1.33	
12484.00	90.430	355.750	9770.50	2898.12	2893.18	-173.96	644583.35	470539.38	32°17'33.944"N	103°51'55.573"W	2.08	
12580.00	90.310	355.030	9769.88	2994.06	2988.87	-181.68	644575.63	470635.06	32°17'34.892"N	103°51'55.658"W	0.76	
12675.00	90.090	354.500	9769.55	3088.96	3083.47	-190.35	644566.97	470729.66	32°17'35.828"N	103°51'55.754"W	0.60	
12770.00	90.060	354.720	9769.42	3183.85	3178.05	-199.27	644558.04	470824.23	32°17'36.764"N	103°51'55.853"W	0.23	
12865.00	90.460	355.830	9768.99	3278.78	3272.72	-207.09	644550.22	470918.90	32°17'37.701"N	103°51'55.940"W	1.24	
12960.00	90.000	358.030	9768.61	3373.77	3367.58	-212.18	644545.13	471013.75	32°17'38.640"N	103°51'55.994"W	2.37	
13055.00	90.000	359.360	9768.61	3468.74	3462.55	-214.35	644542.97	471108.71	32°17'39.580"N	103°51'56.014"W	1.40	
13150.00	89.970	1.210	9768.63	3563.62	3557.55	-213.87	644543.44	471203.70	32°17'40.520"N	103°51'56.004"W	1.95	
13245.00	90.000	359.930	9768.66	3658.47	3652.54	-212.93	644544.39	471298.69	32°17'41.460"N	103°51'55.988"W	1.35	
13341.00	90.000	358.160	9768.66	3754.42	3748.52	-214.53	644542.79	471394.67	32°17'42.410"N	103°51'56.002"W	1.84	
13436.00	90.060	357.300	9768.61	3849.42	3843.45	-218.29	644539.02	471489.58	32°17'43.349"N	103°51'56.041"W	0.91	
13531.00	90.120	356.760	9768.46	3944.42	3938.32	-223.21	644534.10	471584.45	32°17'44.288"N	103°51'56.094"W	0.57	
13626.00	90.520	356.290	9767.93	4039.40	4033.14	-228.97	644528.34	471679.27	32°17'45.227"N	103°51'56.156"W	0.65	
13721.00	90.280	355.660	9767.27	4134.37	4127.91	-235.64	644521.68	471774.02	32°17'46.165"N	103°51'56.229"W	0.71	
13817.00	90.220	355.440	9766.85	4230.32	4223.62	-243.09	644514.23	471869.72	32°17'47.112"N	103°51'56.311"W	0.24	
13912.00	89.940	356.050	9766.71	4325.29	4318.35	-250.14	644507.18	471964.46	32°17'48.050"N	103°51'56.388"W	0.71	
14007.00	89.940	357.170	9766.81	4420.28	4413.19	-255.75	644501.56	472059.28	32°17'48.989"N	103°51'56.448"W	1.18	
14102.00	90.060	356.930	9766.81	4515.27	4508.06	-260.64	644496.68	472154.15	32°17'49.928"N	103°51'56.501"W	0.28	
14197.00	89.970	358.530	9766.79	4610.27	4602.98	-264.41	644492.91	472249.06	32°17'50.867"N	103°51'56.540"W	1.69	
14292.00	90.030	358.500	9766.79	4705.25	4697.95	-266.87	644490.45	472344.03	32°17'51.807"N	103°51'56.563"W	0.07	
14387.00	90.030	358.150	9766.74	4800.24	4792.91	-269.64	644487.67	472438.98	32°17'52.747"N	103°51'56.591"W	0.37	
14482.00	90.090	357.870	9766.64	4895.23	4887.85	-272.94	644484.38	472533.91	32°17'53.686"N	103°51'56.625"W	0.30	
14576.00	90.000	357.510	9766.57	4989.23	4981.78	-276.73	644480.59	472627.83	32°17'54.616"N	103°51'56.664"W	0.39	
14671.00	90.000	356.500	9766.57	5084.23	5076.64	-281.70	644475.62	472722.69	32°17'55.555"N	103°51'56.717"W	1.06	
14766.00	90.030	356.220	9766.54	5179.21	5171.45	-287.73	644469.59	472817.50	32°17'56.493"N	103°51'56.782"W	0.30	
14861.00	90.090	356.820	9766.44	5274.20	5266.28	-293.49	644463.83	472912.31	32°17'57.432"N	103°51'56.845"W	0.63	
14956.00	90.030	358.510	9766.34	5369.19	5361.19	-297.36	644459.96	473007.22	32°17'58.371"N	103°51'56.885"W	1.78	
15051.00	90.220	359.610	9766.13	5464.15	5456.18	-298.92	644458.40	473102.20	32°17'59.311"N	103°51'56.898"W	1.18	
15146.00	90.120	0.040	9765.85	5559.06	5551.18	-299.21	644458.11	473197.20	32°18'00.251"N	103°51'56.897"W	0.46	

Actual Wellpath Report

No. 103H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	Forty Niner Ridge Unit No. 103H SHL
Area	Eddy County, NM	Well	Forty Niner Ridge Unit No. 103H
Field	(49er Ridge Unit) Sec 22, TS 23-S, R 30-E	Wellbore	No. 103H AWB
Facility	49er Ridge Unit No. 103H		

WELLPATH DATA (214 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
15242.00	90.280	359.280	9765.52	5654.99	5647.18	-299.78	644457.54	473293.19	32°18'01.201"N	103°51'56.899"W	0.81	
15337.00	90.370	358.050	9764.98	5749.96	5742.15	-302.00	644455.33	473388.15	32°18'02.141"N	103°51'56.920"W	1.30	
15432.00	90.250	357.340	9764.46	5844.95	5837.07	-305.82	644451.51	473483.07	32°18'03.081"N	103°51'56.959"W	0.76	
15527.00	90.250	357.320	9764.05	5939.95	5931.96	-310.24	644447.08	473577.95	32°18'04.020"N	103°51'57.006"W	0.02	
15622.00	90.650	357.340	9763.30	6034.95	6026.86	-314.67	644442.66	473672.84	32°18'04.959"N	103°51'57.053"W	0.42	
15718.00	89.910	358.390	9762.84	6130.94	6122.79	-318.24	644439.08	473768.77	32°18'05.908"N	103°51'57.090"W	1.34	
15813.00	89.910	358.480	9762.98	6225.93	6217.75	-320.84	644436.48	473863.72	32°18'06.848"N	103°51'57.115"W	0.09	
15908.00	89.880	358.140	9763.16	6320.91	6312.71	-323.64	644433.68	473958.68	32°18'07.788"N	103°51'57.143"W	0.36	
16003.00	89.970	357.880	9763.28	6415.91	6407.65	-326.94	644430.38	474053.61	32°18'08.728"N	103°51'57.176"W	0.29	
16098.00	90.280	358.430	9763.08	6510.90	6502.60	-330.00	644427.33	474148.55	32°18'09.667"N	103°51'57.207"W	0.66	
16193.00	90.220	359.120	9762.66	6605.87	6597.58	-332.03	644425.30	474243.53	32°18'10.607"N	103°51'57.226"W	0.73	
16288.00	90.180	1.760	9762.33	6700.72	6692.57	-331.30	644426.02	474338.51	32°18'11.547"N	103°51'57.213"W	2.78	
16383.00	89.970	2.820	9762.20	6795.37	6787.49	-327.50	644429.82	474433.42	32°18'12.486"N	103°51'57.164"W	1.14	
16478.00	89.970	0.960	9762.25	6890.07	6882.43	-324.37	644432.95	474528.36	32°18'13.426"N	103°51'57.122"W	1.96	
16574.00	90.000	0.000	9762.28	6985.93	6978.43	-323.56	644433.76	474624.35	32°18'14.375"N	103°51'57.108"W	1.00	
16669.00	89.970	356.530	9762.30	7080.90	7073.37	-326.44	644430.88	474719.28	32°18'15.315"N	103°51'57.137"W	3.65	
16764.00	89.940	354.520	9762.38	7175.85	7168.08	-333.85	644423.47	474813.98	32°18'16.252"N	103°51'57.218"W	2.12	
16860.00	89.940	353.700	9762.48	7271.69	7263.57	-343.70	644413.62	474909.47	32°18'17.198"N	103°51'57.328"W	0.85	
16955.00	90.220	355.670	9762.35	7366.58	7358.16	-352.50	644404.82	475004.05	32°18'18.134"N	103°51'57.426"W	2.09	
17050.00	90.220	354.370	9761.98	7461.50	7452.80	-360.75	644396.57	475098.68	32°18'19.071"N	103°51'57.517"W	1.37	
17145.00	90.060	353.670	9761.75	7556.34	7547.28	-370.65	644386.68	475193.16	32°18'20.006"N	103°51'57.628"W	0.76	
17241.00	90.120	355.110	9761.60	7652.20	7642.82	-380.03	644377.29	475288.69	32°18'20.952"N	103°51'57.732"W	1.50	
17336.00	90.120	356.800	9761.40	7747.17	7737.57	-386.73	644370.59	475383.44	32°18'21.890"N	103°51'57.806"W	1.78	
17431.00	90.250	358.020	9761.09	7842.17	7832.48	-391.03	644366.30	475478.34	32°18'22.829"N	103°51'57.851"W	1.29	
17526.00	90.340	358.040	9760.60	7937.16	7927.42	-394.29	644363.04	475573.27	32°18'23.769"N	103°51'57.884"W	0.10	
17621.00	89.940	357.990	9760.37	8032.16	8022.36	-397.58	644359.75	475668.21	32°18'24.709"N	103°51'57.917"W	0.42	
17717.00	90.220	359.340	9760.24	8128.13	8118.33	-399.82	644357.51	475764.17	32°18'25.658"N	103°51'57.939"W	1.44	
17812.00	90.150	359.660	9759.93	8223.06	8213.33	-400.65	644356.68	475859.16	32°18'26.598"N	103°51'57.943"W	0.34	
17907.00	90.000	359.260	9759.81	8318.00	8308.32	-401.54	644355.79	475954.15	32°18'27.538"N	103°51'57.949"W	0.45	
18002.00	90.180	358.870	9759.66	8412.96	8403.31	-403.09	644354.23	476049.13	32°18'28.478"N	103°51'57.962"W	0.45	
18097.00	90.280	358.890	9759.28	8507.92	8498.29	-404.95	644352.38	476144.11	32°18'29.418"N	103°51'57.979"W	0.11	
18192.00	90.280	359.280	9758.81	8602.88	8593.28	-406.47	644350.86	476239.09	32°18'30.358"N	103°51'57.992"W	0.41	
18288.00	90.220	359.440	9758.39	8698.82	8689.27	-407.54	644349.79	476335.07	32°18'31.308"N	103°51'58.000"W	0.18	
18336.00	90.220	359.440	9758.21	8746.79	8737.27	-408.01	644349.32	476383.07	32°18'31.783"N	103°51'58.003"W	0.00	Projection to Bit

Actual Wellpath Report

No. 103H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	Forty Niner Ridge Unit No. 103H SHL
Area	Eddy County, NM	Well	Forty Niner Ridge Unit No. 103H
Field	(49er Ridge Unit) Sec 22, TS 23-S, R 30-E	Wellbore	No. 103H AWB
Facility	49er Ridge Unit No. 103H		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
Forty Niner Unit No. 103H PBHL		9756.00	9626.21	-442.70	644314.63	477271.95	32°18'40.581"N	103°51'58.362"W	point

WELLPATH COMPOSITION - Ref Wellbore: No. 103H AWB Ref Wellpath: No. 103H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.50	9005.00	Generic gyro - northseeking (Standard)	VES Gyro <100-9005>	No. 103H AWB
9005.00	18288.00	AT Curve (Short Spaced)	BHI AT Curve <9005'-18288'>	No. 103H AWB
18288.00	18336.00	Blind Drilling (std)	Projection to bit	No. 103H AWB