

OPERATOR MEWBOURNE OIL COMPANY
WELL/LEASE AVALON RIDGE 33 FED COM 2H
COUNTY EDDY

045-0082

STATE OF NEW MEXICO
DEVIATION REPORT

15-39415

213	0.91
437	0.70
849	0.61
1,262	0.91
1,643	0.50
2,053	0.81
2,468	1.09
2,798	0.27
2,925	0.67
3,236	0.43
3,452	0.40
3,845	0.77
4,258	0.23
4,658	0.56
5,052	0.49
5,463	0.42

STATE OF TEXAS

COUNTY OF MIDLAND

BY: Kyle Hollingsworth

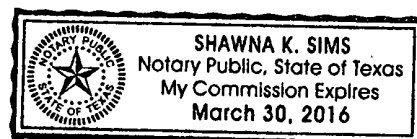
Received

The foregoing instrument was acknowledged before me on
Kyle Hollingsworth on behalf of Patterson-UTi Drilling Company LLC.

4/30/12, MAY 03 2012

Mewbourne Oil Company
Hobbs

Shawna K Sims
Notary Public for Midland County, Texas
My Commission Expires:





Company: Mewbourne Oil Company
Lease/Well: Avalon Ridge 33 Federal Com/No. 002H
Location: 13 Miles NE Of Carlsbad
Rig Name: Patterson 45
State/County: New Mexico/Eddy
Latitude: 32.54
GRID North is 0.08 Degrees East of True North
VS-Azi: 0.00 Degrees



Depth Reference : RKB=17 Feet

DRILLOG HA GYRO SURVEY CALCULATIONS

Filename: avalon ridge 33_ed.ut

Minimum Curvature Method

Report Date/Time: 4/5/2012 / 10:42

Vaughn Energy Services

Fort Worth, Texas

817-741-3610

Surveyor: Mark Havens

Avalon Ridge 33 Federal Com No. 002H / API# 30-015-39415

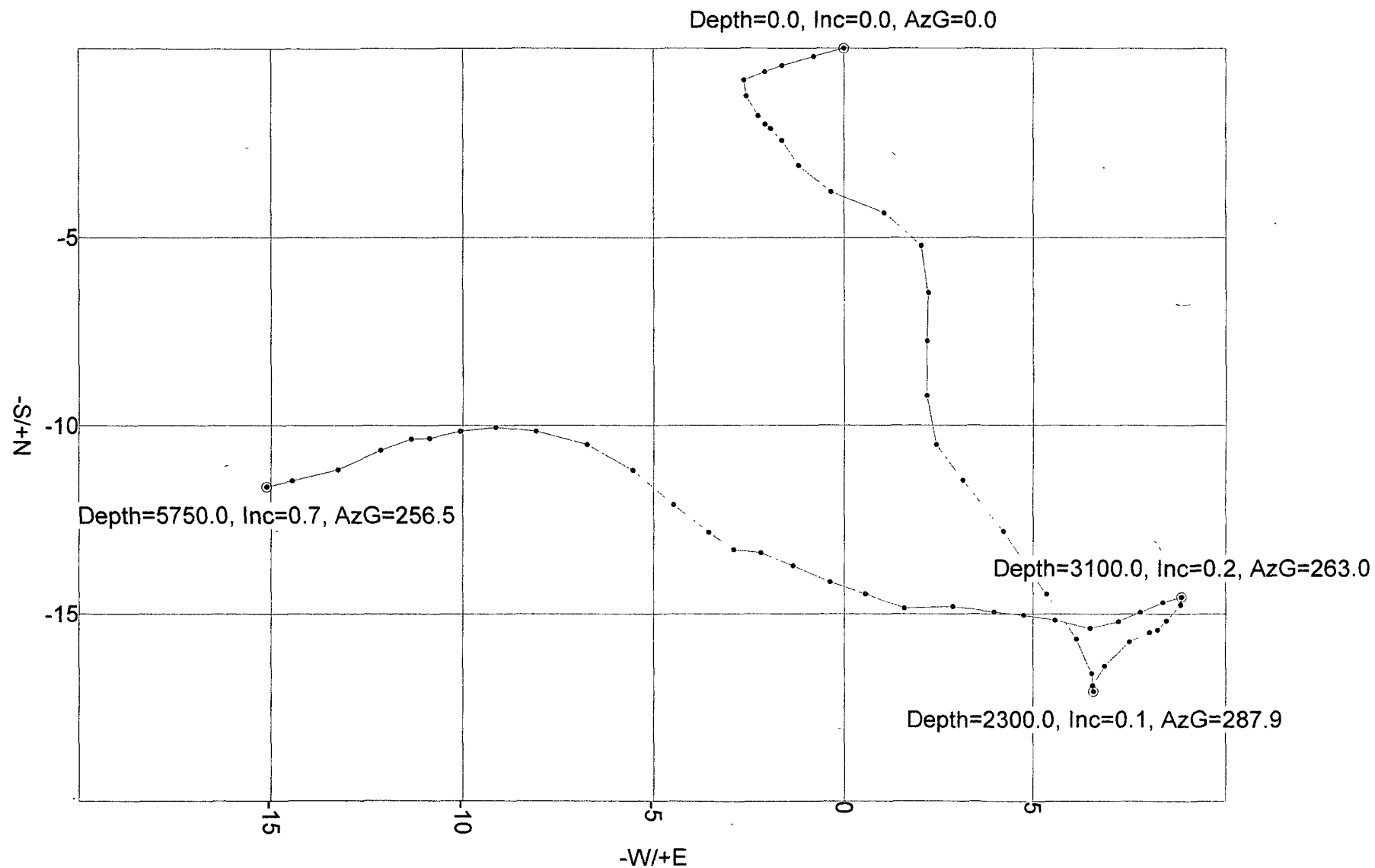
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Dogleg Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	****
100.00	0.94	254.73	100.00	-0.22	-0.80	-0.22	0.82	254.73	0.94
200.00	0.08	248.22	199.99	-0.46	-1.65	-0.46	1.71	254.48	0.87
300.00	0.47	249.47	299.99	-0.63	-2.10	-0.63	2.19	253.35	0.40
400.00	0.19	244.63	399.99	-0.84	-2.64	-0.84	2.77	252.25	0.28
500.00	0.47	148.96	499.99	-1.27	-2.58	-1.27	2.87	243.80	0.53
600.00	0.22	149.70	599.98	-1.79	-2.27	-1.79	2.89	231.73	0.25
700.00	0.12	126.00	699.98	-2.02	-2.08	-2.02	2.90	225.90	0.12
800.00	0.09	130.45	799.98	-2.13	-1.94	-2.13	2.88	222.21	0.03
900.00	0.39	139.54	899.98	-2.45	-1.65	-2.45	2.95	214.01	0.30
1000.00	0.52	150.02	999.98	-3.10	-1.20	-3.10	3.32	201.23	0.15
1100.00	0.80	115.03	1099.97	-3.79	-0.34	-3.79	3.80	185.17	0.48
1200.00	0.93	108.74	1199.96	-4.35	1.06	-4.35	4.47	166.23	0.16
1300.00	0.73	161.29	1299.95	-5.21	2.04	-5.21	5.60	158.62	0.76
1400.00	0.75	181.46	1399.94	-6.47	2.23	-6.47	6.84	161.00	0.26
1500.00	0.72	180.43	1499.94	-7.76	2.21	-7.76	8.06	164.12	0.04
1600.00	0.95	180.87	1599.93	-9.21	2.19	-9.21	9.47	166.62	0.23
1700.00	0.63	151.37	1699.92	-10.52	2.44	-10.52	10.80	166.94	0.50
1800.00	0.74	136.26	1799.91	-11.46	3.15	-11.46	11.89	164.64	0.21

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	1.23	144.91	1899.89	-12.81	4.21	-12.81	13.48	161.79	0.51
2000.00	1.08	146.17	1999.87	-14.47	5.35	-14.47	15.43	159.69	0.16
2100.00	0.57	148.17	2099.86	-15.67	6.14	-15.67	16.83	158.61	0.51
2200.00	0.60	165.94	2199.86	-16.60	6.53	-16.60	17.84	158.53	0.18
2300.00	0.09	287.90	2299.86	-17.08	6.58	-17.08	18.30	158.95	0.65
2400.00	0.16	22.66	2399.86	-16.92	6.55	-16.92	18.15	158.84	0.20
2500.00	0.55	33.21	2499.85	-16.39	6.87	-16.39	17.77	157.27	0.38
2600.00	0.52	57.50	2599.85	-15.75	7.51	-15.75	17.45	154.50	0.23
2700.00	0.17	84.98	2699.85	-15.49	8.04	-15.49	17.46	152.57	0.38
2800.00	0.09	51.43	2799.85	-15.43	8.25	-15.43	17.50	151.88	0.10
2900.00	0.30	40.93	2899.85	-15.19	8.48	-15.19	17.39	150.82	0.21
3000.00	0.34	39.54	2999.85	-14.76	8.84	-14.76	17.20	149.07	0.05
3100.00	0.19	263.04	3099.84	-14.55	8.86	-14.55	17.03	148.64	0.50
3200.00	0.39	247.62	3199.84	-14.70	8.38	-14.70	16.92	150.30	0.21
3300.00	0.35	244.26	3299.84	-14.96	7.79	-14.96	16.87	152.48	0.05
3400.00	0.37	248.81	3399.84	-15.21	7.22	-15.21	16.83	154.59	0.03
3500.00	0.50	262.34	3499.84	-15.38	6.49	-15.38	16.69	157.11	0.17
3600.00	0.63	298.77	3599.83	-15.17	5.58	-15.17	16.16	159.81	0.38
3700.00	0.43	249.64	3699.83	-15.03	4.75	-15.03	15.77	162.48	0.48
3800.00	0.55	296.66	3799.82	-14.95	3.96	-14.95	15.46	165.15	0.41
3900.00	0.75	263.43	3899.82	-14.81	2.88	-14.81	15.08	169.00	0.42
4000.00	0.73	273.18	3999.81	-14.85	1.59	-14.85	14.93	173.90	0.13
4100.00	0.61	309.78	4099.80	-14.47	0.54	-14.47	14.48	177.87	0.44
4200.00	0.57	267.36	4199.80	-14.15	-0.37	-14.15	14.15	181.49	0.43
4300.00	0.76	312.54	4299.79	-13.72	-1.35	-13.72	13.79	185.63	0.54
4400.00	0.44	254.14	4399.79	-13.38	-2.21	-13.38	13.56	189.37	0.65
4500.00	0.44	299.46	4499.79	-13.29	-2.91	-13.29	13.61	192.33	0.34
4600.00	0.48	310.22	4599.78	-12.84	-3.56	-12.84	13.32	195.49	0.10
4700.00	0.86	308.14	4699.78	-12.10	-4.47	-12.10	12.90	200.27	0.38
4800.00	0.75	312.66	4799.77	-11.19	-5.54	-11.19	12.49	206.33	0.13
4900.00	0.87	288.40	4899.76	-10.51	-6.74	-10.51	12.49	212.66	0.36
5000.00	0.73	280.87	4999.75	-10.15	-8.09	-10.15	12.98	218.54	0.17
5100.00	0.50	266.57	5099.74	-10.06	-9.15	-10.06	13.60	222.29	0.28
5200.00	0.57	261.77	5199.74	-10.16	-10.08	-10.16	14.31	224.77	0.09
5300.00	0.38	249.00	5299.73	-10.35	-10.88	-10.35	15.01	226.44	0.22
5400.00	0.22	300.10	5399.73	-10.37	-11.35	-10.37	15.37	227.60	0.29
5500.00	0.84	237.97	5499.73	-10.66	-12.14	-10.66	16.16	228.72	0.77
5600.00	0.57	255.48	5599.72	-11.17	-13.25	-11.17	17.33	229.85	0.35
5700.00	0.85	256.60	5699.71	-11.47	-14.44	-11.47	18.44	231.55	0.28

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
5750.00	0.72	256.52	5749.71	-11.63	-15.11	-11.63	19.06	232.42	0.26



Vaughn Energy Services
Fort Worth, Texas
817-741-3610
Surveyor: Mark Havens
Avalon Ridge 33 Federal Com No. 002H / API# 30-015-39415



VES Survey Date: 03/29/2012



Mewbourne Oil Company

Mewbourne Oil Company

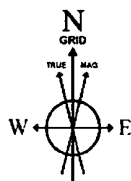
Location: Eddy County, NM
Field (Avalon) Sec 33, T20S, R28E
Facility Avalon Ridge 33 Fed Com No 2H

Slot No 2H SHL
Well No 2H
Wellbore No 2H PWB



Well Profile Data								
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	5750.00	0.720	256.520	5749.71	-11.64	-15.11	0.00	11.45
Est KOP	5921.00	0.720	256.520	5920.69	-12.15	-17.20	0.00	11.92
EOC	6667.00	89.931	179.370	6396.00	-407.15	10.12	12.03	-467.24
Target Line	6836.15	89.931	179.370	6396.20	-655.49	16.92	2.00	655.65
No 2H PBHL	10810.84	89.931	179.370	6401.00	-4629.93	60.63	0.00	4630.33

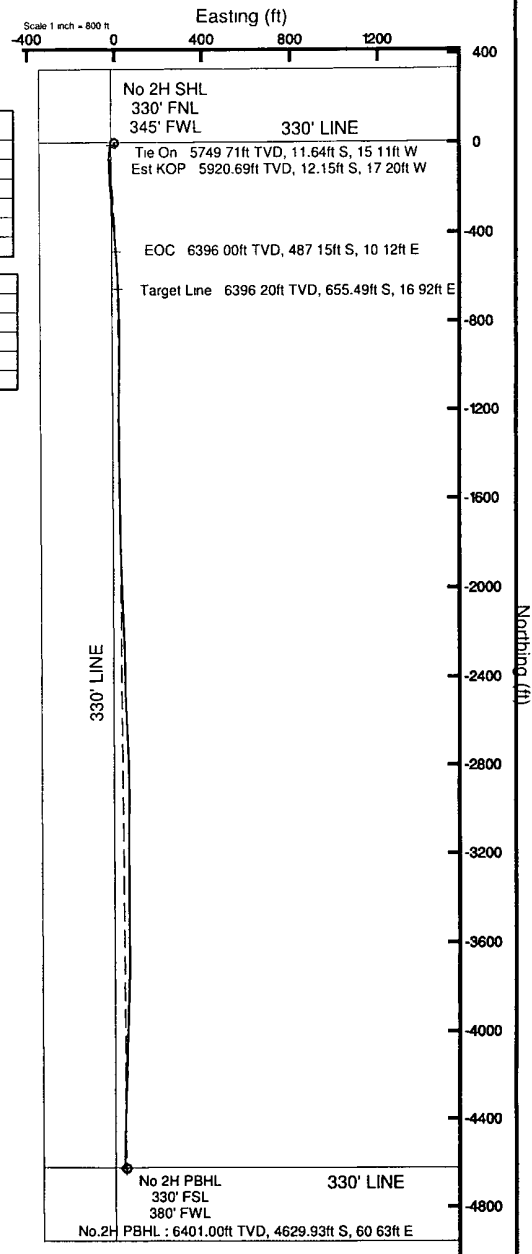
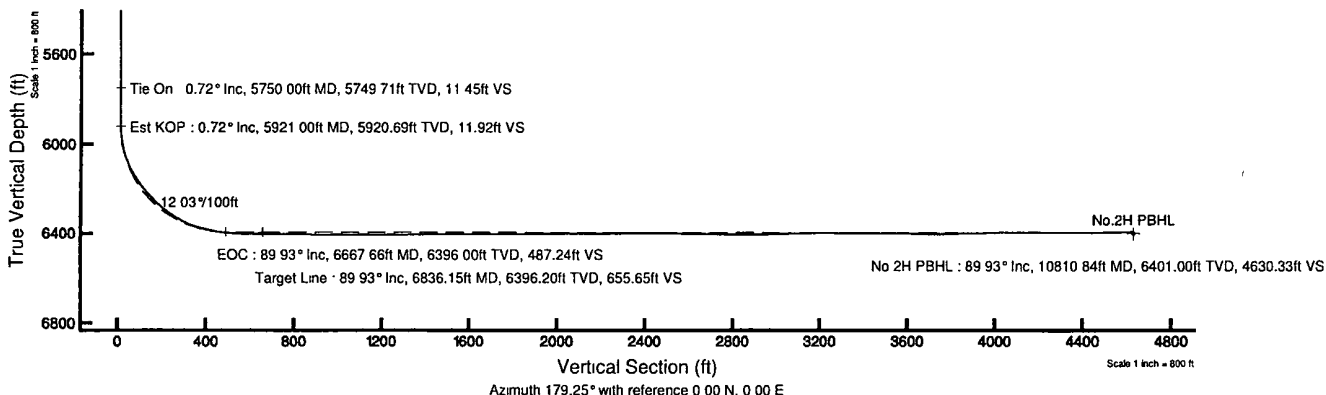
Plot reference wellpath is Rev-A 0	
True vertical depths are referenced to Rig on No 2H SHL (KB)	Grid System NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on No 2H SHL (KB)	North Reference Grid north
Rig on No 2H SHL (KB) to Mean Sea Level 3233 feet	Scale True distance
Mean Sea Level to Mud line (At Slot No 2H SHL) -3216 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by gentbry on 3/29/2012



BGGM (1945 0 to 2013 0) Dip 60.32° Field 48676.6 nT
Magnetic North is 7.90 degrees East of True North (at 1/30/2012)
Grid North is 0.08 degrees East of True North

To correct azimuth from True to Grid subtract 0.08 degrees
To correct azimuth from Magnetic to Grid add 7.82 degrees

For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.82 = 97.82



☒ No Operator logo

Actual Wellpath Report

No.2H AWP

Page 1 of 5



REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No.2H SHL
Area	Eddy County, NM	Well	No.2H
Field	(Avalon) Sec 33, T20S, R28E	Wellbore	No.2H AWB
Facility	Avalon Ridge 33 Fed Com No.2H		

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	Harrkol
Scale	0.999911	Report Generated	4/9/2012 at 8:22:43 AM
Convergence at slot	0.08° East	Database/Source file	WA Midland/No.2H_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	544180.11	558806.41	32°32'10.269"N	104°11'23.906"W
Facility Reference Pt			544180.11	558806.41	32°32'10.269"N	104°11'23.906"W
Field Reference Pt			544180.11	558806.41	32°32'10.269"N	104°11'23.906"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No.2H SHL (KB) to Facility Vertical Datum	17.00ft
Horizontal Reference Pt	Slot	Rig on No.2H SHL (KB) to Mean Sea Level	3233.00ft
Vertical Reference Pt	Rig on No.2H SHL (KB)	Rig on No.2H SHL (KB) to Mud Line at Slot (No.2H SHL)	17.00ft
MD Reference Pt	Rig on No.2H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	179.25°

☒ No Operator logo

Actual Wellpath Report

No.2H AWP

Page 2 of 5



REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No.2H SHL
Area	Eddy County, NM	Well	No.2H
Field	(Avalon) Sec 33, T20S, R28E	Wellbore	No.2H AWP
Facility	Avalon Ridge 33 Fed Com No.2H		

WELLPATH DATA (154 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	254.730	0.00	0.00	0.00	0.00	544180.11	558806.41	32°32'10.269"N	104°11'23.906"W	0.00	
100.00	0.940	254.730	100.00	0.21	-0.22	-0.79	544179.32	558806.19	32°32'10.267"N	104°11'23.916"W	0.94	
200.00	0.080	248.220	199.99	0.44	-0.46	-1.65	544178.46	558805.95	32°32'10.265"N	104°11'23.926"W	0.86	
300.00	0.470	249.470	299.99	0.60	-0.63	-2.10	544178.01	558805.78	32°32'10.263"N	104°11'23.931"W	0.39	
400.00	0.190	244.630	399.99	0.81	-0.84	-2.63	544177.48	558805.57	32°32'10.261"N	104°11'23.937"W	0.28	
500.00	0.470	148.960	499.99	1.23	-1.27	-2.57	544177.54	558805.15	32°32'10.257"N	104°11'23.936"W	0.52	
600.00	0.220	149.700	599.98	1.75	-1.78	-2.26	544177.85	558804.63	32°32'10.251"N	104°11'23.933"W	0.25	
700.00	0.120	126.000	699.98	1.98	-2.01	-2.08	544178.03	558804.40	32°32'10.249"N	104°11'23.931"W	0.12	
800.00	0.090	130.450	799.98	2.10	-2.12	-1.93	544178.18	558804.29	32°32'10.248"N	104°11'23.929"W	0.03	
900.00	0.390	139.540	899.98	2.41	-2.43	-1.65	544178.46	558803.98	32°32'10.245"N	104°11'23.926"W	0.30	
1000.00	0.520	150.020	999.98	3.07	-3.08	-1.21	544178.90	558803.33	32°32'10.239"N	104°11'23.920"W	0.15	
1100.00	0.800	115.030	1099.97	3.77	-3.77	-0.35	544179.76	558802.64	32°32'10.232"N	104°11'23.910"W	0.48	
1200.00	0.930	108.740	1199.96	4.34	-4.33	1.05	544181.16	558802.08	32°32'10.226"N	104°11'23.894"W	0.16	
1300.00	0.730	161.290	1299.95	5.22	-5.19	2.03	544182.14	558801.22	32°32'10.218"N	104°11'23.883"W	0.76	
1400.00	0.750	181.460	1399.94	6.48	-6.45	2.21	544182.32	558799.96	32°32'10.205"N	104°11'23.881"W	0.26	
1500.00	0.720	180.430	1499.94	7.76	-7.73	2.19	544182.30	558798.68	32°32'10.193"N	104°11'23.881"W	0.03	
1600.00	0.950	180.870	1599.93	9.22	-9.19	2.18	544182.29	558797.22	32°32'10.178"N	104°11'23.881"W	0.23	
1700.00	0.630	151.370	1699.92	10.53	-10.50	2.43	544182.54	558795.91	32°32'10.165"N	104°11'23.878"W	0.51	
1800.00	0.740	136.260	1799.91	11.49	-11.45	3.14	544183.25	558794.96	32°32'10.156"N	104°11'23.870"W	0.21	
1900.00	1.230	144.910	1899.89	12.85	-12.80	4.20	544184.31	558793.62	32°32'10.142"N	104°11'23.857"W	0.51	
2000.00	1.080	146.170	1999.87	14.53	-14.46	5.34	544185.45	558791.95	32°32'10.126"N	104°11'23.844"W	0.15	
2100.00	0.570	148.170	2099.86	15.74	-15.66	6.13	544186.24	558790.75	32°32'10.114"N	104°11'23.835"W	0.51	
2200.00	0.600	165.940	2199.86	16.68	-16.59	6.52	544186.63	558789.82	32°32'10.105"N	104°11'23.830"W	0.18	
2300.00	0.090	287.900	2299.86	17.16	-17.08	6.57	544186.68	558789.34	32°32'10.100"N	104°11'23.830"W	0.65	
2400.00	0.160	22.660	2399.86	17.01	-16.92	6.55	544186.66	558789.49	32°32'10.102"N	104°11'23.830"W	0.19	
2500.00	0.550	33.210	2499.85	16.48	-16.39	6.87	544186.98	558790.02	32°32'10.107"N	104°11'23.826"W	0.39	
2600.00	0.520	57.500	2599.85	15.84	-15.75	7.51	544187.62	558790.66	32°32'10.113"N	104°11'23.819"W	0.23	
2700.00	0.170	84.980	2699.85	15.59	-15.49	8.04	544188.15	558790.92	32°32'10.116"N	104°11'23.813"W	0.38	
2800.00	0.090	51.430	2799.85	15.54	-15.43	8.25	544188.36	558790.98	32°32'10.116"N	104°11'23.810"W	0.11	
2900.00	0.300	40.930	2899.85	15.29	-15.18	8.49	544188.59	558791.23	32°32'10.119"N	104°11'23.807"W	0.21	
3000.00	0.340	39.540	2999.85	14.87	-14.76	8.85	544188.95	558791.66	32°32'10.123"N	104°11'23.803"W	0.04	
3100.00	0.190	263.040	3099.84	14.66	-14.55	8.87	544188.98	558791.86	32°32'10.125"N	104°11'23.803"W	0.50	
3200.00	0.390	247.620	3199.84	14.80	-14.70	8.39	544188.50	558791.72	32°32'10.124"N	104°11'23.809"W	0.21	
3300.00	0.350	244.260	3299.84	15.06	-14.96	7.80	544187.91	558791.45	32°32'10.121"N	104°11'23.815"W	0.05	
3400.00	0.370	248.810	3399.84	15.30	-15.21	7.22	544187.33	558791.20	32°32'10.118"N	104°11'23.822"W	0.03	
3500.00	0.500	262.340	3499.84	15.47	-15.38	6.49	544186.60	558791.03	32°32'10.117"N	104°11'23.831"W	0.16	
3600.00	0.630	298.770	3599.83	15.25	-15.18	5.58	544185.69	558791.24	32°32'10.119"N	104°11'23.841"W	0.37	
3700.00	0.430	249.640	3699.83	15.10	-15.04	4.74	544184.85	558791.37	32°32'10.120"N	104°11'23.851"W	0.48	
3800.00	0.550	296.660	3799.82	15.01	-14.96	3.96	544184.07	558791.45	32°32'10.121"N	104°11'23.860"W	0.41	
3900.00	0.570	263.430	3899.82	14.85	-14.82	2.88	544182.99	558791.59	32°32'10.122"N	104°11'23.873"W	0.42	
4000.00	0.730	273.180	3999.81	14.88	-14.86	1.60	544181.71	558791.55	32°32'10.122"N	104°11'23.888"W	0.13	
4100.00	0.610	309.780	4099.80	14.49	-14.48	0.55	544180.66	558791.93	32°32'10.126"N	104°11'23.900"W	0.44	
4200.00	0.570	267.360	4199.80	14.16	-14.16	-0.35	544179.76	558792.25	32°32'10.129"N	104°11'23.911"W	0.43	
4300.00	0.760	312.540	4299.79	13.72	-13.74	-1.34	544178.77	558792.67	32°32'10.133"N	104°11'23.922"W	0.54	
4400.00	0.440	254.140	4399.79	13.36	-13.39	-2.20	544177.91	558793.02	32°32'10.137"N	104°11'23.932"W	0.65	

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Actual Wellpath Report

No.2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No.2H SHL
Area	Eddy County, NM	Well	No.2H
Field	(Avalon) Sec 33, T20S, R28E	Wellbore	No.2H AWP
Facility	Avalon Ridge 33 Fed Com No.2H		

WELLPATH DATA (154 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	0.440	299.460	4499.79	13.27	-13.31	-2.90	544177.21	558793.10	32°32'10.137"N	104°11'23.940"W	0.34	
4600.00	0.480	310.220	4599.78	12.80	-12.85	-3.56	544176.55	558793.56	32°32'10.142"N	104°11'23.948"W	0.10	
4700.00	0.860	308.140	4699.78	12.06	-12.12	-4.47	544175.64	558794.29	32°32'10.149"N	104°11'23.959"W	0.38	
4800.00	0.750	312.660	4799.77	11.14	-11.21	-5.54	544174.57	558795.20	32°32'10.158"N	104°11'23.971"W	0.13	
4900.00	0.870	288.400	4899.76	10.44	-10.53	-6.74	544173.37	558795.88	32°32'10.165"N	104°11'23.985"W	0.36	
5000.00	0.730	280.870	4999.75	10.06	-10.17	-8.08	544172.03	558796.24	32°32'10.169"N	104°11'24.001"W	0.17	
5100.00	0.500	266.570	5099.74	9.95	-10.07	-9.15	544170.96	558796.34	32°32'10.170"N	104°11'24.013"W	0.27	
5200.00	0.570	261.770	5199.74	10.04	-10.17	-10.07	544170.04	558796.24	32°32'10.169"N	104°11'24.024"W	0.08	
5300.00	0.380	249.000	5299.73	10.22	-10.36	-10.88	544169.24	558796.05	32°32'10.167"N	104°11'24.033"W	0.22	
5400.00	0.220	230.100	5399.73	10.23	-10.38	-10.35	544168.76	558796.03	32°32'10.166"N	104°11'24.039"W	0.30	
5500.00	0.840	237.970	5499.73	10.52	-10.68	-12.14	544167.97	558795.74	32°32'10.164"N	104°11'24.048"W	0.76	
5600.00	0.570	255.480	5599.72	11.01	-11.19	-13.24	544166.87	558795.22	32°32'10.159"N	104°11'24.061"W	0.34	
5700.00	0.850	256.600	5699.71	11.30	-11.49	-14.45	544165.67	558794.93	32°32'10.156"N	104°11'24.075"W	0.28	
5750.00	0.720	256.520	5749.71	11.45	-11.64	-15.11	544165.00	558794.77	32°32'10.154"N	104°11'24.083"W	0.26	
5855.00	0.500	278.700	5854.70	11.52	-11.73	-16.21	544163.91	558794.68	32°32'10.153"N	104°11'24.096"W	0.80	
5878.00	0.600	274.600	5877.70	11.49	-11.70	-16.42	544163.69	558794.71	32°32'10.153"N	104°11'24.098"W	0.47	
5910.00	1.500	259.500	5909.69	11.54	-11.77	-17.00	544163.11	558794.64	32°32'10.153"N	104°11'24.105"W	2.92	
5942.00	3.800	206.900	5941.66	12.55	-12.79	-17.90	544162.22	558793.62	32°32'10.143"N	104°11'24.116"W	9.76	
5973.00	7.300	193.800	5972.51	15.37	-15.62	-18.83	544161.28	558790.79	32°32'10.115"N	104°11'24.126"W	11.94	
6005.00	11.200	190.800	6004.09	20.39	-20.65	-19.90	544160.21	558785.76	32°32'10.065"N	104°11'24.139"W	12.28	
6037.00	15.600	189.000	6035.21	27.67	-27.95	-21.15	544158.96	558778.46	32°32'09.993"N	104°11'24.154"W	13.81	
6069.00	20.500	187.400	6065.63	37.47	-37.77	-22.55	544157.56	558768.65	32°32'09.896"N	104°11'24.170"W	15.39	
6100.00	24.800	184.200	6094.23	49.32	-49.64	-23.73	544156.39	558756.77	32°32'09.778"N	104°11'24.184"W	14.42	
6132.00	29.400	181.700	6122.71	63.87	-64.19	-24.45	544155.66	558742.22	32°32'09.634"N	104°11'24.193"W	14.81	
6164.00	33.600	179.100	6149.99	80.58	-80.90	-24.54	544155.57	558725.51	32°32'09.469"N	104°11'24.194"W	13.79	
6196.00	36.300	178.600	6176.22	98.91	-99.23	-24.17	544155.94	558707.19	32°32'09.287"N	104°11'24.190"W	8.48	
6228.00	38.900	177.500	6201.57	118.42	-118.74	-23.50	544156.61	558687.68	32°32'09.094"N	104°11'24.183"W	8.39	
6259.00	41.700	176.700	6225.21	138.46	-138.76	-22.49	544157.63	558667.66	32°32'08.896"N	104°11'24.171"W	9.19	
6291.00	44.500	176.100	6248.57	160.29	-160.58	-21.11	544159.00	558645.84	32°32'08.680"N	104°11'24.155"W	8.84	
6323.00	48.100	175.600	6270.68	183.38	-183.65	-19.43	544160.68	558622.77	32°32'08.452"N	104°11'24.136"W	11.31	
6355.00	51.200	175.400	6291.39	207.71	-207.96	-17.52	544162.59	558598.47	32°32'08.212"N	104°11'24.114"W	9.70	
6387.00	54.400	175.300	6310.74	233.14	-233.36	-15.45	544164.66	558573.07	32°32'07.960"N	104°11'24.090"W	10.00	
6418.00	58.400	175.300	6327.89	258.90	-259.09	-13.34	544166.77	558547.34	32°32'07.706"N	104°11'24.066"W	12.90	
6450.00	62.900	174.900	6343.57	286.71	-286.88	-10.95	544169.16	558519.56	32°32'07.431"N	104°11'24.039"W	14.10	
6482.00	68.000	174.500	6356.86	315.71	-315.85	-8.26	544171.85	558490.59	32°32'07.144"N	104°11'24.008"W	15.98	
6514.00	72.200	174.600	6367.75	345.69	-345.79	-5.41	544174.70	558460.65	32°32'06.848"N	104°11'23.975"W	13.13	
6545.00	74.800	174.400	6376.55	375.31	-375.38	-2.56	544177.55	558431.07	32°32'06.555"N	104°11'23.942"W	8.41	
6577.00	76.800	175.200	6384.40	406.24	-406.27	0.25	544180.36	558400.18	32°32'06.249"N	104°11'23.910"W	6.70	
6609.00	79.700	175.300	6390.92	437.49	-437.49	2.85	544182.96	558368.96	32°32'05.940"N	104°11'23.880"W	9.07	
6641.00	82.700	175.300	6395.82	469.03	-469.00	5.44	544185.55	558337.45	32°32'05.628"N	104°11'23.850"W	9.37	
6673.00	84.700	175.600	6399.33	500.77	-500.71	7.96	544188.07	558305.75	32°32'05.314"N	104°11'23.821"W	6.32	
6704.00	87.000	175.300	6401.57	531.62	-531.53	10.41	544190.52	558274.93	32°32'05.009"N	104°11'23.793"W	7.48	
6779.00	90.200	176.600	6403.40	606.46	-606.31	15.71	544195.82	558200.16	32°32'04.269"N	104°11'23.732"W	4.61	
6811.00	90.400	177.400	6403.23	638.43	-638.26	17.38	544197.49	558168.21	32°32'03.953"N	104°11'23.713"W	2.58	
6842.00	90.000	177.400	6403.13	669.42	-669.23	18.79	544198.90	558137.24	32°32'03.647"N	104°11'23.697"W	1.29	

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Actual Wellpath Report

No.2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No.2H SHL
Area	Eddy County, NM	Well	No.2H
Field	(Avalon) Sec 33, T20S, R28E	Wellbore	No.2H AWB
Facility	Avalon Ridge 33 Fed Com No.2H		

WELLPATH DATA (154 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
6874.00	89.400	178.500	6403.29	701.41	-701.21	19.93	544200.04	558105.27	32°32'03.330"N	104°11'23.684"W	3.92	
6905.00	89.000	178.700	6403.73	732.40	-732.20	20.69	544200.80	558074.28	32°32'03.024"N	104°11'23.676"W	1.44	
6969.00	89.300	178.200	6404.68	796.39	-796.17	22.42	544202.53	558010.32	32°32'02.391"N	104°11'23.657"W	0.91	
7032.00	89.300	178.900	6405.45	859.38	-859.14	24.02	544204.12	557947.35	32°32'01.768"N	104°11'23.639"W	1.11	
7096.00	89.500	180.300	6406.42	923.37	-923.13	24.46	544204.57	557883.36	32°32'01.134"N	104°11'23.635"W	2.21	
7159.00	90.400	181.100	6406.17	986.35	-986.13	23.69	544203.80	557820.37	32°32'00.511"N	104°11'23.645"W	1.91	
7223.00	90.300	181.200	6405.78	1050.32	-1050.11	22.41	544202.52	557756.39	32°31'59.878"N	104°11'23.661"W	0.22	
7287.00	89.700	180.800	6405.78	1114.29	-1114.10	21.29	544201.40	557692.41	32°31'59.245"N	104°11'23.675"W	1.13	
7351.00	89.200	180.500	6406.39	1178.26	-1178.10	20.56	544200.67	557628.42	32°31'58.612"N	104°11'23.685"W	0.91	
7414.00	90.300	180.200	6406.67	1241.25	-1241.09	20.18	544200.29	557565.43	32°31'57.988"N	104°11'23.690"W	1.81	
7477.00	91.200	179.200	6405.84	1304.24	-1304.09	20.51	544200.62	557502.44	32°31'57.365"N	104°11'23.687"W	2.14	
7541.00	90.900	179.200	6404.67	1368.23	-1368.07	21.40	544201.51	557438.47	32°31'56.732"N	104°11'23.678"W	0.47	
7604.00	90.600	179.200	6403.85	1431.23	-1431.06	22.28	544202.39	557375.48	32°31'56.109"N	104°11'23.669"W	0.48	
7668.00	90.100	179.200	6403.46	1495.22	-1495.05	23.18	544203.28	557311.50	32°31'55.475"N	104°11'23.659"W	0.78	
7732.00	89.800	179.000	6403.51	1559.22	-1559.04	24.18	544204.29	557247.51	32°31'54.842"N	104°11'23.648"W	0.56	
7795.00	89.300	178.800	6404.01	1622.22	-1622.03	25.39	544205.50	557184.53	32°31'54.219"N	104°11'23.635"W	0.85	
7859.00	90.800	179.100	6403.95	1686.22	-1686.01	26.56	544206.67	557120.55	32°31'53.586"N	104°11'23.623"W	2.39	
7923.00	90.100	179.100	6403.45	1750.21	-1750.00	27.57	544207.68	557056.56	32°31'52.952"N	104°11'23.612"W	1.09	
7986.00	89.200	178.500	6403.83	1813.21	-1812.99	28.89	544209.00	556993.59	32°31'52.329"N	104°11'23.597"W	1.72	
8050.00	90.700	178.200	6403.89	1877.20	-1876.96	30.73	544210.84	556929.62	32°31'51.696"N	104°11'23.577"W	2.39	
8113.00	91.000	177.500	6402.95	1940.17	-1939.91	33.09	544213.20	556866.68	32°31'51.073"N	104°11'23.550"W	1.21	
8177.00	90.800	177.600	6401.95	2004.14	-2003.84	35.83	544215.94	556802.75	32°31'50.441"N	104°11'23.519"W	0.35	
8240.00	90.600	177.200	6401.18	2067.10	-2066.77	38.69	544218.79	556739.83	32°31'49.818"N	104°11'23.487"W	0.71	
8303.00	90.300	177.500	6400.68	2130.06	-2129.70	41.60	544221.71	556676.90	32°31'49.195"N	104°11'23.454"W	0.67	
8367.00	90.100	177.600	6400.46	2194.04	-2193.64	44.34	544224.44	556612.97	32°31'48.562"N	104°11'23.423"W	0.55	
8431.00	89.900	177.500	6400.46	2258.01	-2257.58	47.07	544227.18	556549.03	32°31'47.930"N	104°11'23.392"W	0.35	
8495.00	91.100	179.500	6399.90	2322.00	-2321.56	48.75	544228.85	556485.06	32°31'47.297"N	104°11'23.373"W	3.64	
8558.00	90.200	178.400	6399.19	2384.99	-2384.54	49.90	544230.01	556422.09	32°31'46.673"N	104°11'23.361"W	2.26	
8622.00	90.300	178.500	6398.91	2448.98	-2448.52	51.63	544231.74	556358.12	32°31'46.040"N	104°11'23.342"W	0.22	
8686.00	88.800	179.200	6399.21	2512.96	-2512.47	53.98	544234.08	556294.17	32°31'45.408"N	104°11'23.315"W	3.00	
8748.00	88.300	177.500	6400.98	2574.91	-2574.38	56.79	544236.89	556232.26	32°31'44.795"N	104°11'23.283"W	0.87	
8811.00	89.100	176.700	6402.41	2637.85	-2637.29	59.98	544240.08	556169.36	32°31'44.172"N	104°11'23.247"W	1.80	
8875.00	89.300	178.000	6403.30	2701.80	-2701.21	62.93	544243.04	556105.45	32°31'43.540"N	104°11'23.214"W	2.05	
8938.00	88.900	177.200	6404.29	2764.77	-2764.15	65.57	544245.68	556042.51	32°31'42.917"N	104°11'23.184"W	1.42	
9002.00	89.900	179.000	6404.96	2828.75	-2828.10	67.69	544247.80	555978.56	32°31'42.284"N	104°11'23.160"W	3.22	
9065.00	90.000	178.900	6405.02	2891.75	-2891.09	68.85	544248.95	555915.58	32°31'41.661"N	104°11'23.148"W	0.22	
9127.00	91.200	180.100	6404.37	2953.74	-2953.09	69.39	544249.49	555853.59	32°31'41.047"N	104°11'23.142"W	2.74	
9191.00	91.500	180.400	6402.86	3017.71	-3017.07	69.11	544249.21	555789.62	32°31'40.414"N	104°11'23.147"W	0.66	
9254.00	91.400	180.100	6401.27	3080.68	-3080.05	68.84	544248.94	555726.64	32°31'39.791"N	104°11'23.151"W	0.50	
9317.00	91.600	180.200	6399.62	3143.65	-3143.02	68.67	544248.77	555663.67	32°31'39.168"N	104°11'23.154"W	0.35	
9380.00	90.000	179.700	6398.74	3206.64	-3206.02	68.73	544248.83	555600.68	32°31'38.545"N	104°11'23.154"W	2.66	
9444.00	89.700	179.500	6398.91	3270.64	-3270.01	69.17	544249.28	555536.69	32°31'37.911"N	104°11'23.150"W	0.56	
9507.00	89.800	179.600	6399.18	3333.64	-3333.01	69.67	544249.77	555473.70	32°31'37.288"N	104°11'23.145"W	0.22	
9571.00	89.700	179.900	6399.46	3397.63	-3397.01	69.95	544250.05	555409.71	32°31'36.655"N	104°11'23.143"W	0.49	
9635.00	89.400	179.300	6399.96	3461.63	-3461.01	70.39	544250.50	555345.72	32°31'36.022"N	104°11'23.139"W	1.05	

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Actual Wellpath Report

No.2H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Mewbourne Oil Company	Slot	No.2H SHL
Area	Eddy County, NM	Well	No.2H
Field	(Avalon) Sec 33, T20S, R28E	Wellbore	No.2H AWB
Facility	Avalon Ridge 33 Fed Com No.2H		

WELLPATH DATA (154 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
9698.00	89.500	179.700	6400.57	3524.63	-3524.00	70.94	544251.05	555282.73	32°31'35.398"N	104°11'23.133"W	0.65	
9762.00	89.200	179.400	6401.29	3588.62	-3587.99	71.45	544251.55	555218.74	32°31'34.765"N	104°11'23.128"W	0.66	
9825.00	88.700	179.200	6402.45	3651.61	-3650.98	72.21	544252.32	555155.76	32°31'34.142"N	104°11'23.120"W	0.85	
9889.00	89.800	180.400	6403.29	3715.60	-3714.97	72.44	544252.54	555091.78	32°31'33.509"N	104°11'23.119"W	2.54	
9952.00	91.100	181.200	6402.79	3778.57	-3777.96	71.56	544251.66	555028.79	32°31'32.885"N	104°11'23.130"W	2.42	
10016.00	91.500	181.500	6401.34	3842.51	-3841.93	70.05	544250.15	554964.83	32°31'32.252"N	104°11'23.149"W	0.78	
10080.00	90.900	181.000	6400.00	3906.46	-3905.90	68.66	544248.76	554900.87	32°31'31.619"N	104°11'23.166"W	1.22	
10144.00	91.400	182.200	6398.71	3970.39	-3969.86	66.87	544246.97	554836.91	32°31'30.987"N	104°11'23.188"W	2.03	
10207.00	91.500	182.000	6397.12	4033.29	-4032.80	64.56	544244.67	554773.98	32°31'30.364"N	104°11'23.216"W	0.35	
10271.00	89.600	180.700	6396.51	4097.24	-4096.77	63.05	544243.16	554710.01	32°31'29.731"N	104°11'23.234"W	3.60	
10334.00	89.300	180.800	6397.11	4160.22	-4159.76	62.23	544242.33	554647.03	32°31'29.108"N	104°11'23.245"W	0.50	
10398.00	89.500	181.300	6397.78	4224.18	-4223.75	61.06	544241.16	554583.05	32°31'28.474"N	104°11'23.260"W	0.84	
10461.00	89.100	181.300	6398.55	4287.14	-4286.73	59.63	544239.73	554520.07	32°31'27.851"N	104°11'23.277"W	0.63	
10524.00	90.500	181.900	6398.77	4350.08	-4349.70	57.87	544237.97	554457.10	32°31'27.228"N	104°11'23.299"W	2.42	
10588.00	90.800	182.000	6398.04	4414.01	-4413.66	55.69	544235.80	554393.15	32°31'26.595"N	104°11'23.325"W	0.49	
10652.00	91.700	181.000	6396.65	4477.94	-4477.62	54.02	544234.12	554329.20	32°31'25.962"N	104°11'23.346"W	2.10	
10715.00	91.300	180.600	6395.00	4540.90	-4540.59	53.14	544233.24	554266.23	32°31'25.339"N	104°11'23.357"W	0.90	
10746.00	91.100	180.900	6394.35	4571.88	-4571.58	52.73	544232.84	554235.24	32°31'25.033"N	104°11'23.362"W	1.16	
10797.00	91.100	180.900	6393.37	4622.85	-4622.57	51.93	544232.03	554184.26	32°31'24.528"N	104°11'23.372"W	0.00	Projection to bit

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No.2H PBHL		6401.00	-4629.93	60.63	544240.73	554176.90	32°31'24.455"N	104°11'23.271"W	point

WELLPATH COMPOSITION - Ref Wellbore: No.2H AWB - Ref Wellpath: No.2H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	5750.00	Generic gyro - northseeking (Standard)	VES Gyro <100-5750>	No.2H AWB
5750.00	10746.00	NaviTrak (Standard)	BHI MWD NaviTrak <5855-XXXX>	No.2H AWB
10746.00	10797.00	Blind Drilling (std)	Projection to bit	No.2H AWB



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Completion
Final

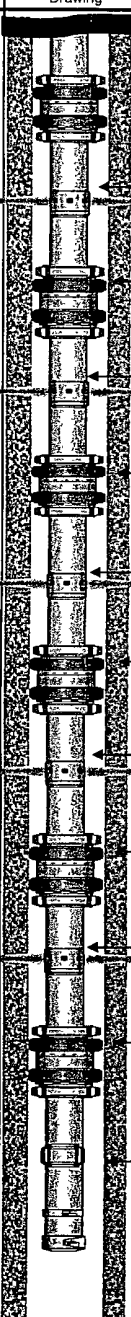
Prepared for Mr. Mickey Young		Company Mewbourne Oil Company		Date 11-Apr-12	
Well Name Avalon Ridge -33- Federal Com #2H		Type of Installation 19-Stage 4-1/2" StackFRAC® HD		Location Eddy County, NM	
Depth	Drawing	Description	OD(in)	ID(in)	Length
REV_			Page 1 of 3		
KOP 5900					
TOL 6492.32 249 BBLs		***Drillable FracPORT's to be shipped without handling pups***			
		Latched Seal Assembly 7" 23-32 ppf x 3.875" Lower Bore x 4.75" Upper Bore SF Liner Hanger Packer PN: 108425-000004 (Shear Pins: 2 @ 482 plus 1 @ 241 : 1,205 psi setting pressure) SF Bottom Guide SNU0008827	5.875"	4.750	9.47
			5.850"	3.875	
				3.850	
7" Shoe 6755		7" 26# P-110 LT&C Casing			
EA1026283 Stage 19 6803.38 254 BBLs		4-1/2" 13.50# P-110 LTC LINER JOINTS: 8 Packers Plus 4-1/2" Drillable FracPORT™ with 3.500" Seat for 3.625" High Pressure Ball PN: 121332-000023 (5 shear pins at 314 psi each: 1,570 psi opening pressure)	4.500"	3.92"	301.59
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint	5.630"	3.500	2.65
				3.840	
6926.17		4-1/2" 13.50# P-110 LTC LINER JOINTS: 3 Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)	4.500"	3.92"	114.06
		3' x 4-1/2" 13.50# P-110 LTC Pup Joint Serial # SNU0008200	4.500"	3.92"	6.08
EA1028406 Stage 18 7047.98 257 BBLs		4-1/2" 13.50# P-110 LTC LINER JOINTS: 3 Packers Plus 4-1/2" Drillable FracPORT™ with 3.375" Seat for 3.500" High Pressure Ball PN: 121332-000022 (5 shear pins at 314 psi each: 1,570 psi opening pressure)	5.750"	3.875	5.25
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint	4.500"	3.92"	3.04
7170.18		4-1/2" 13.50# P-110 LTC LINER JOINTS: 3 Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)	4.500"	3.92"	113.52
		3' x 4-1/2" 13.50# P-110 LTC Pup Joint Serial # SNU0008176	5.630"	3.375	2.65
EA3020917 Stage 17 7254.19 260 BBLs		4-1/2" 13.50# P-110 LTC LINER JOINTS: 2 Packers Plus 4-1/2" Drillable FracPORT™ with 3.250" Seat for 3.375" High Pressure Ball PN: 121332-000021 (5 shear pins at 314 psi each: 1,570 psi opening pressure)	4.500"	3.92"	113.47
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint	5.630"	3.250	2.65
7376.72		4-1/2" 13.50# P-110 LTC LINER JOINTS: 3 Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)	4.500"	3.92"	113.78
		3' x 4-1/2" 13.50# P-110 LTC Pup Joint Serial # SNU0008625	5.750"	3.875	5.25
EA3020820 Stage 16 7460.68 263 BBLs		4-1/2" 13.50# P-110 LTC LINER JOINTS: 2 Packers Plus 4-1/2" Drillable FracPORT™ with 3.125" Seat for 3.250" High Pressure Ball PN: 121332-000020 (5 shear pins at 314 psi each: 1,570 psi opening pressure)	4.500"	3.92"	75.62
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint	5.630"	3.125	2.65
7583.53		4-1/2" 13.50# P-110 LTC LINER JOINTS: 3 Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)	4.500"	3.92"	114.11
		3' x 4-1/2" 13.50# P-110 LTC Pup Joint Serial # SNU0008667	5.750"	3.875	5.25
EA1028705 Stage 15 7704.28 267 BBLs		4-1/2" 13.50# P-110 LTC LINER JOINTS: 3 Packers Plus 4-1/2" Drillable FracPORT™ with 3.000" Seat for 3.125" High Pressure Ball PN: 121332-000019 (5 shear pins at 314 psi each: 1,570 psi opening pressure)	4.500"	3.92"	112.43
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint	5.630"	3.000	2.65
7826.47		4-1/2" 13.50# P-110 LTC LINER JOINTS: 3 Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)	4.500"	3.92"	113.48
		3' x 4-1/2" 13.50# P-110 LTC Pup Joint Serial # SNU0008690	5.750"	3.875	5.25
		4-1/2" 13.50# P-110 LTC LINER JOINTS: 2	4.500"	3.92"	75.32
Service Center Midland, TX 432-563-8024		Contact Scott Mabry	Telephone Chad Williams 405-255-3223		



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Completion
Final

Prepared for Mr. Mickey Young		Company Mewbourne Oil Company		Date 11-Apr-12		
Well Name Avalon Ridge -33- Federal Com #2H		Type of Installation 19-Stage 4-1/2" StackFRAC® HD		Location Eddy County, NM		
Depth	Drawing	Description		OD(in)	ID(in)	Length
REV_				Page 3 of 3		
.9540.02		6' x 4-1/2" 13.50# P-110 LTC Pup Joint		4 500"	3 92"	6 11
		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer		5.750"	3.875	5 25
		PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)				
		3' x 4-1/2" 13.50# P-110 LTC Pup Joint Serial # SNU0008670		4 500"	3 92"	3 09
EA1027661		4-1/2" 13.50# P-110 LTC LINER JOINTS: 2		4 500"	3 92"	75 33
Stage 6		Packers Plus 4-1/2" Drillable FracPORT™ with 1.875" Seat for 2.000" High Pressure Ball		5 630"	1.875	2.65
9623.69		PN: 121332-000010 (5 shear pins at 314 psi each: 1,570 psi opening pressure)			3.840	
296 BBLs		4-1/2" 13.50# P-110 LTC LINER JOINTS: 1		4 500"	3 92"	37 58
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint		4 500"	3 92"	6 1
9670.02		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer		5.750"	3.875	5 25
		PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)				
		3' x 4-1/2" 13.50# P-110 LTC Pup Joint Serial # SNU0008730		4 500"	3 92"	3 05
EA1027865		4-1/2" 13.50# P-110 LTC LINER JOINTS: 2		4 500"	3 92"	76 09
Stage 5		Packers Plus 4-1/2" Drillable FracPORT™ with 1.750" Seat for 1.875" High Pressure Ball		5 630"	1.750	2.65
9754.41		PN: 121332-000009 (5 shear pins at 314 psi each: 1,570 psi opening pressure)			3.840	
298 BBLs		4-1/2" 13.50# P-110 LTC LINER JOINTS: 4		4 500"	3 92"	151 82
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint		4 500"	3 92"	6 09
9914.97		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer		5 750"	3.875	5 25
		PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)				
		3' x 4-1/2" 13.50# P-110 LTC Pup Joint Serial # SNU0008806		4 500"	3 92"	3 1
EA3020120		4-1/2" 13.50# P-110 LTC LINER JOINTS: 3		4 500"	3 92"	113 15
Stage 4		Packers Plus 4-1/2" Drillable FracPORT™ with 1.625" Seat for 1.750" High Pressure Ball		5 630"	1.625	2.65
10036.47		PN: 121332-000008 (5 shear pins at 314 psi each: 1,570 psi opening pressure)			3.840	
302 BBLs		4-1/2" 13.50# P-110 LTC LINER JOINTS: 3		4 500"	3 92"	111 19
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint		4 500"	3 92"	6 1
10156.41		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer		5 750"	3.875	5 25
		PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)				
		3' x 4-1/2" 13.50# P-110 LTC Pup Joint Serial # SNU0008705		4 500"	3 92"	3 02
EA1027916		4-1/2" 13.50# P-110 LTC LINER JOINTS: 3		4 500"	3 92"	113 15
Stage 3		Packers Plus 4-1/2" Drillable FracPORT™ with 1.500" Seat for 1.625" High Pressure Ball		5 630"	1.500	2.65
10277.83		PN: 121332-000007 (5 shear pins at 314 psi each: 1,570 psi opening pressure)			3.840	
305 BBLs		4-1/2" 13.50# P-110 LTC LINER JOINTS: 3		4 500"	3 92"	113 51
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint		4 500"	3 92"	6 07
10400.06		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer		5 750"	3.875	5 25
		PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)				
		3' x 4-1/2" 13.50# P-110 LTC Pup Joint Serial # SNU0008689		4 500"	3 92"	3 02
EA1027995		4-1/2" 13.50# P-110 LTC LINER JOINTS: 3		4 500"	3 92"	112 97
Stage 2		Packers Plus 4-1/2" Drillable FracPORT™ with 1.375" Seat for 1.500" High Pressure Ball		5 630"	1.375	2.65
10521.3		PN: 121332-000006 (5 shear pins at 314 psi each: 1,570 psi opening pressure)			3.840	
309 BBLs		4-1/2" 13.50# P-110 LTC LINER JOINTS: 3		4 500"	3 92"	113 85
		6' x 4-1/2" 13.50# P-110 LTC Pup Joint		4 500"	3 92"	6 09
10643.89		Packers Plus 7" x 4-1/2" RockSEAL® II 10K Centralized Hydraulic Set Open Hole Packer		5.750"	3.875	5 25
		PN: 124929-000004 (4 shear pins at 522 psi each: 2,088 psi setting pressure)				
		3' x 4-1/2" 13.50# P-110 LTC Pup Joint Serial # SNU0008746		4 500"	3 92"	3 09
		4-1/2" 13.50# P-110 LTC LINER JOINTS: 2		4 500"	3 92"	74 88
Stage 1		6' x 4-1/2" 13.50# P-110 LTC Pup Joint				
10730		Customer 4-1/2" Pump Off Sub				2.89
312 BBLs		(Pinned above 4000 PSI)				
TMD						
10797						
Service Center Midland, TX		Telephone 432-563-8024		Contact Scott Mabry		
				Telephone Chad Williams 405-255-3223		