



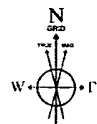
BOPCO, L.P.

Location Eddy County, NM
Field Poker Lake Unit
Facility Poker Lake Unit No. 343H

Slot No. 343H SHL
Well No. 343H
Wellbore No. 343H PWB

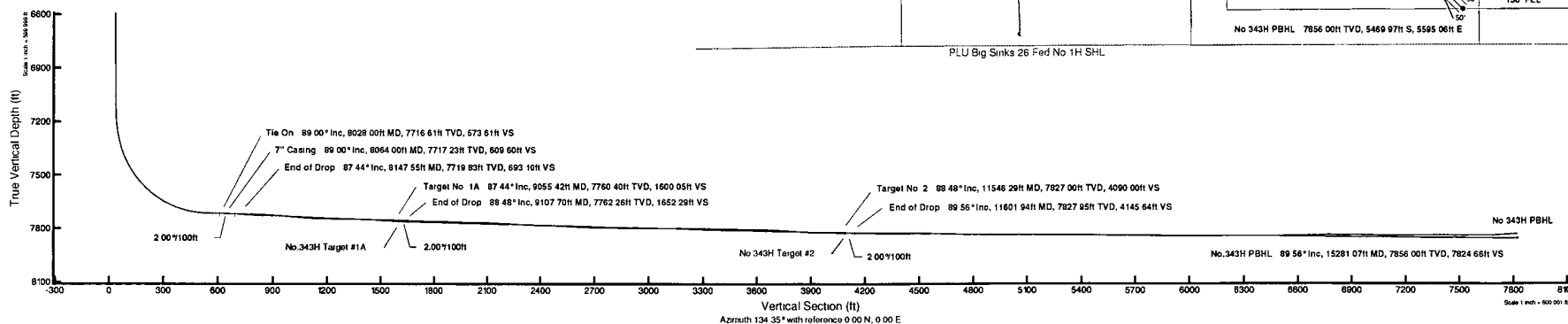
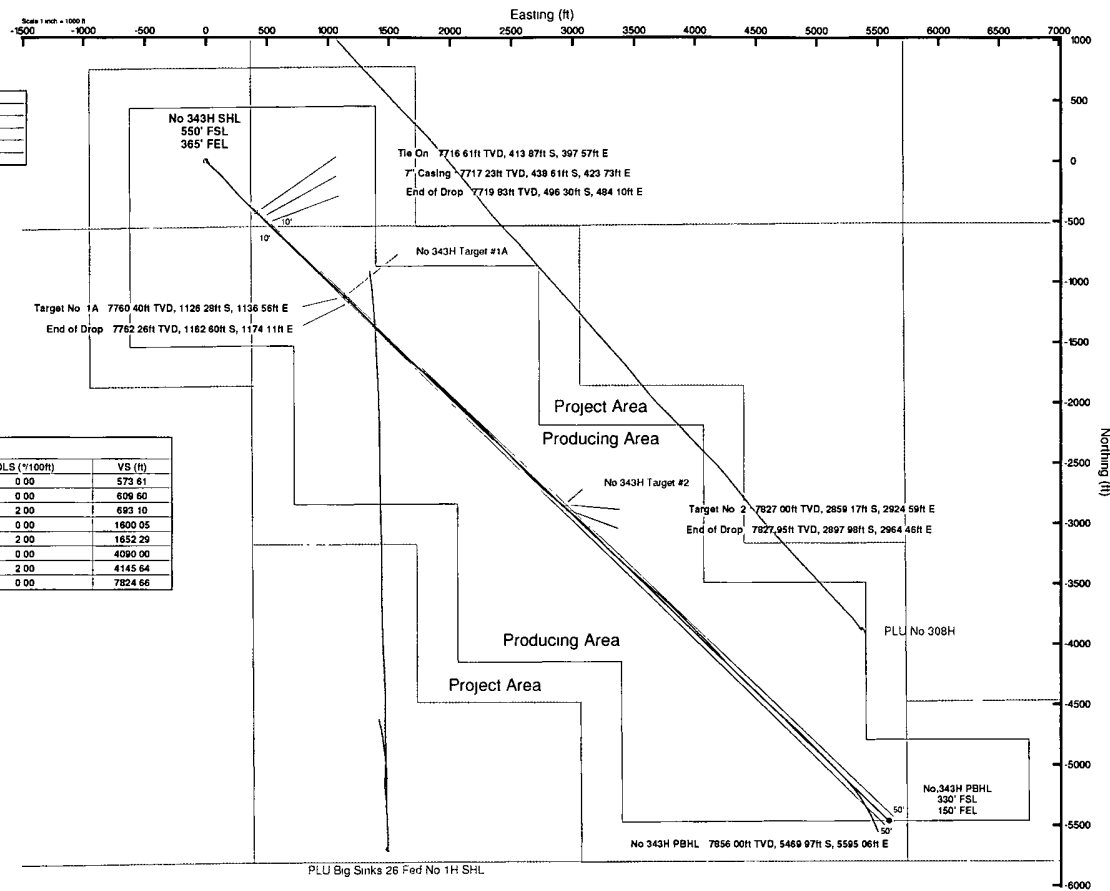


Plot reference wellpath a Plan, 0	
True vertical depths are referenced to Rig on No. 343H SHL (KB)	Grid System: NAD2011 TM New Mexico SP, Eastern Zone (2001), US feet
Measured depths are referenced to Rig on No. 343H SHL (KB)	North Reference: Grid north
Rig on No. 343H SHL (KB) to Mean Sea Level: 3418.4 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot No. 343H SHL): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: cal/hkh on 8/10/2011



BGGM (1945.0 to 2012.0) Dip 60.11° Field 48589.4 mT
Magnetic North is 7.78 degrees East of True North (at 7/1/2011)
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 7.50 degrees
For example: if the Magnetic North Azimuth is 90 degrees, then the Grid North Azimuth = 90 - 7.50 = 82.50

Well Profile Data							
Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	VS (ft)
Tie On	8028.00	89.000	133.400	7716.61	-413.87	397.57	573.61
7" Casing	8064.00	89.000	133.400	7717.23	-438.61	423.73	609.60
End of Drop	8147.55	87.439	133.996	7719.93	-485.30	484.10	693.10
Target No. 1A	9055.42	87.439	133.996	7760.40	-1126.28	1138.56	1600.05
End of Drop	9107.70	89.479	134.104	7762.26	-1162.60	1174.11	1652.29
Target No. 2	11546.29	88.479	134.104	7827.00	-2859.17	2924.59	4090.00
End of Drop	11601.94	89.563	134.355	7827.95	-2897.98	2964.46	4145.64
No. 343H PBHL	15281.07	89.563	134.355	7856.00	-5469.97	5595.06	7824.66



343-015-381627



Actual Wellpath Report

No. 343H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.343H SHL
Area	Eddy County, NM	Well	No.343H
Field	Poker Lake Unit	Wellbore	No. 343H AWB
Facility	Poker Lake Unit No. 343H		

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	0.999934	Report Generated	9/26/2011 at 8:23:27 AM
Convergence at slot	0.25° East	Database/Source file	WA Midland/No._343H_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	646110.12	435896.70	32°11'51.054"N	103°51'39.561"W
Facility Reference Pt			646110.12	435896.70	32°11'51.054"N	103°51'39.561"W
Field Reference Pt			630272.49	405347.85	32°06'49.387"N	103°54'45.266"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No.343H SHL (KB) to Facility Vertical Datum	3418.40ft
Horizontal Reference Pt	Slot	Rig on No.343H SHL (KB) to Mean Sea Level	3418.40ft
Vertical Reference Pt	Rig on No.343H SHL (KB)	Rig on No.343H SHL (KB) to Mud Line at Slot (No.343H SHL)	3418.40ft
MD Reference Pt	Rig on No.343H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	134.35°



Actual Wellpath Report

No. 343H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.343H SHL
Area	Eddy County, NM	Well	No.343H
Field	Poker Lake Unit	Wellbore	No. 343H AWB
Facility	Poker Lake Unit No. 343H		

WELLPATH DATA (220 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	269.330	0.00	0.00	0.00	0.00	646110.12	435896.70	32°11'51.054"N	103°51'39.561"W	0.00	
22.90	0.000	269.330	22.90	0.00	0.00	0.00	646110.12	435896.70	32°11'51.054"N	103°51'39.561"W	0.00	
100.00	0.170	269.330	100.00	-0.08	0.00	-0.11	646110.01	435896.70	32°11'51.054"N	103°51'39.563"W	0.22	
200.00	0.110	266.580	200.00	-0.25	-0.01	-0.36	646109.76	435896.69	32°11'51.054"N	103°51'39.566"W	0.06	
300.00	0.050	293.520	300.00	-0.36	0.00	-0.49	646109.63	435896.70	32°11'51.054"N	103°51'39.567"W	0.07	
400.00	0.170	312.210	400.00	-0.54	0.12	-0.64	646109.48	435896.82	32°11'51.055"N	103°51'39.569"W	0.12	
500.00	0.440	319.540	500.00	-1.08	0.51	-1.00	646109.12	435897.21	32°11'51.059"N	103°51'39.573"W	0.27	
600.00	0.380	327.830	600.00	-1.78	1.08	-1.43	646108.69	435897.78	32°11'51.064"N	103°51'39.578"W	0.08	
700.00	0.400	329.650	699.99	-2.44	1.67	-1.78	646108.34	435898.37	32°11'51.070"N	103°51'39.582"W	0.02	
800.00	0.190	9.070	799.99	-2.87	2.13	-1.93	646108.19	435898.83	32°11'51.075"N	103°51'39.584"W	0.28	
900.00	0.090	90.350	899.99	-2.91	2.29	-1.83	646108.29	435898.99	32°11'51.076"N	103°51'39.583"W	0.20	
1000.00	0.320	63.170	999.99	-2.76	2.42	-1.50	646108.62	435899.12	32°11'51.078"N	103°51'39.579"W	0.24	
1100.00	0.770	77.460	1099.99	-2.31	2.69	-0.59	646109.53	435899.39	32°11'51.080"N	103°51'39.568"W	0.47	
1200.00	1.050	81.910	1199.97	-1.38	2.97	0.97	646111.09	435899.67	32°11'51.083"N	103°51'39.550"W	0.29	
1300.00	1.070	83.050	1299.96	-0.24	3.21	2.80	646112.92	435899.91	32°11'51.085"N	103°51'39.529"W	0.03	
1400.00	1.200	79.830	1399.94	0.95	3.51	4.76	646114.88	435900.21	32°11'51.088"N	103°51'39.506"W	0.14	
1500.00	0.570	123.100	1499.93	2.05	3.42	6.21	646116.33	435900.12	32°11'51.087"N	103°51'39.489"W	0.88	
1600.00	0.690	147.440	1599.92	3.12	2.64	6.95	646117.07	435899.34	32°11'51.080"N	103°51'39.480"W	0.29	
1700.00	1.100	154.790	1699.91	4.61	1.27	7.68	646117.80	435897.96	32°11'51.066"N	103°51'39.472"W	0.42	
1800.00	1.000	151.170	1799.89	6.34	-0.37	8.51	646118.63	435896.33	32°11'51.050"N	103°51'39.462"W	0.12	
1900.00	0.990	157.180	1899.87	7.97	-1.93	9.27	646119.39	435894.77	32°11'51.034"N	103°51'39.454"W	0.10	
2000.00	0.800	158.790	1999.86	9.41	-3.38	9.85	646119.97	435893.32	32°11'51.020"N	103°51'39.447"W	0.19	
2100.00	1.040	178.150	2099.85	10.70	-4.93	10.14	646120.26	435891.77	32°11'51.004"N	103°51'39.444"W	0.39	
2200.00	1.170	179.960	2199.83	12.07	-6.86	10.17	646120.29	435889.84	32°11'50.985"N	103°51'39.443"W	0.13	
2300.00	0.170	221.700	2299.82	12.79	-7.99	10.07	646120.19	435888.71	32°11'50.974"N	103°51'39.445"W	1.05	
2400.00	0.020	55.380	2399.82	12.80	-8.09	9.98	646120.10	435888.61	32°11'50.973"N	103°51'39.446"W	0.19	
2500.00	0.050	206.670	2499.82	12.81	-8.12	9.98	646120.10	435888.58	32°11'50.973"N	103°51'39.446"W	0.07	
2600.00	0.190	253.510	2599.82	12.75	-8.21	9.80	646119.92	435888.49	32°11'50.972"N	103°51'39.448"W	0.16	
2700.00	0.100	244.910	2699.82	12.63	-8.29	9.56	646119.68	435888.41	32°11'50.971"N	103°51'39.451"W	0.09	
2800.00	0.180	165.850	2799.82	12.74	-8.48	9.52	646119.64	435888.22	32°11'50.969"N	103°51'39.451"W	0.19	
2900.00	0.220	147.110	2899.82	13.06	-8.80	9.66	646119.78	435887.90	32°11'50.966"N	103°51'39.449"W	0.08	
3000.00	0.300	148.280	2999.82	13.50	-9.18	9.91	646120.02	435887.52	32°11'50.962"N	103°51'39.447"W	0.08	
3100.00	0.540	144.550	3099.82	14.22	-9.79	10.32	646120.44	435886.91	32°11'50.956"N	103°51'39.442"W	0.24	
3200.00	0.800	140.040	3199.81	15.38	-10.71	11.04	646121.16	435886.00	32°11'50.947"N	103°51'39.433"W	0.27	
3300.00	0.970	138.610	3299.80	16.92	-11.88	12.05	646122.17	435884.83	32°11'50.936"N	103°51'39.422"W	0.17	
3400.00	0.650	127.650	3399.79	18.32	-12.86	13.06	646123.17	435883.84	32°11'50.926"N	103°51'39.410"W	0.35	
3526.80	0.650	128.070	3526.58	19.75	-13.74	14.19	646124.31	435882.96	32°11'50.917"N	103°51'39.397"W	0.00	
3620.10	0.680	135.150	3619.87	20.83	-14.46	15.00	646125.12	435882.24	32°11'50.910"N	103°51'39.388"W	0.09	
3713.40	0.950	143.280	3713.17	22.15	-15.47	15.85	646125.97	435881.23	32°11'50.900"N	103°51'39.378"W	0.31	
3806.70	1.070	146.450	3806.45	23.77	-16.82	16.79	646126.91	435879.88	32°11'50.887"N	103°51'39.367"W	0.14	
3900.00	0.790	144.240	3899.74	25.25	-18.07	17.65	646127.77	435878.64	32°11'50.874"N	103°51'39.357"W	0.30	
3993.30	0.450	134.140	3993.03	26.25	-18.84	18.29	646128.41	435877.86	32°11'50.866"N	103°51'39.350"W	0.38	
4086.60	0.380	132.750	4086.33	26.93	-19.31	18.78	646128.90	435877.39	32°11'50.862"N	103°51'39.344"W	0.08	
4179.80	0.400	128.560	4179.53	27.56	-19.72	19.26	646129.38	435876.98	32°11'50.858"N	103°51'39.338"W	0.04	
4273.10	0.370	125.220	4272.83	28.18	-20.10	19.76	646129.88	435876.60	32°11'50.854"N	103°51'39.332"W	0.04	



Actual Wellpath Report

No. 343H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.343H SHL
Area	Eddy County, NM	Well	No.343H
Field	Poker Lake Unit	Wellbore	No. 343H AWB
Facility	Poker Lake Unit No. 343H		

WELLPATH DATA (220 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
4366.40	0.350	123.780	4366.12	28.76	-20.43	20.25	646130.36	435876.27	32°11'50.851"N	103°51'39.327"W	0.02	
4459.70	0.290	124.750	4459.42	29.27	-20.72	20.68	646130.80	435875.98	32°11'50.848"N	103°51'39.322"W	0.06	
4553.00	0.170	127.190	4552.72	29.64	-20.94	20.98	646131.10	435875.76	32°11'50.846"N	103°51'39.318"W	0.13	
4646.30	0.140	103.510	4646.02	29.88	-21.05	21.20	646131.32	435875.65	32°11'50.844"N	103°51'39.316"W	0.08	
4739.60	0.220	79.250	4739.32	30.08	-21.04	21.49	646131.61	435875.66	32°11'50.845"N	103°51'39.312"W	0.12	
4832.90	0.430	62.080	4832.62	30.29	-20.85	21.97	646132.09	435875.85	32°11'50.846"N	103°51'39.307"W	0.25	
4926.20	0.440	60.570	4925.92	30.49	-20.51	22.60	646132.71	435876.19	32°11'50.850"N	103°51'39.300"W	0.02	
5019.50	0.420	59.070	5019.21	30.68	-20.15	23.20	646133.32	435876.55	32°11'50.853"N	103°51'39.292"W	0.02	
5112.70	0.360	50.490	5112.41	30.80	-19.79	23.72	646133.84	435876.91	32°11'50.857"N	103°51'39.286"W	0.09	
5206.00	0.290	41.910	5205.71	30.82	-19.43	24.10	646134.22	435877.27	32°11'50.860"N	103°51'39.282"W	0.09	
5299.30	0.270	35.190	5299.01	30.77	-19.08	24.39	646134.51	435877.63	32°11'50.864"N	103°51'39.279"W	0.04	
5392.60	0.270	32.470	5392.31	30.69	-18.71	24.63	646134.75	435877.99	32°11'50.867"N	103°51'39.276"W	0.01	
5485.90	0.260	33.730	5485.61	30.61	-18.35	24.87	646134.99	435878.35	32°11'50.871"N	103°51'39.273"W	0.01	
5579.20	0.200	28.100	5578.91	30.52	-18.03	25.06	646135.18	435878.67	32°11'50.874"N	103°51'39.271"W	0.07	
5672.50	0.120	14.890	5672.21	30.43	-17.79	25.16	646135.28	435878.91	32°11'50.877"N	103°51'39.269"W	0.09	
5765.80	0.080	356.830	5765.51	30.34	-17.63	25.19	646135.30	435879.07	32°11'50.878"N	103°51'39.269"W	0.05	
5859.10	0.060	48.750	5858.81	30.29	-17.53	25.22	646135.34	435879.17	32°11'50.879"N	103°51'39.269"W	0.07	
5952.40	0.130	104.310	5952.11	30.39	-17.53	25.36	646135.48	435879.17	32°11'50.879"N	103°51'39.267"W	0.12	
6045.60	0.220	129.350	6045.31	30.66	-17.67	25.60	646135.72	435879.03	32°11'50.878"N	103°51'39.264"W	0.12	
6138.90	0.340	163.200	6138.60	31.08	-18.05	25.82	646135.94	435878.65	32°11'50.874"N	103°51'39.262"W	0.21	
6232.20	0.430	180.900	6231.90	31.56	-18.66	25.89	646136.01	435878.04	32°11'50.868"N	103°51'39.261"W	0.16	
6325.50	0.550	189.190	6325.20	32.06	-19.45	25.82	646135.93	435877.25	32°11'50.860"N	103°51'39.262"W	0.15	
6418.80	0.580	204.260	6418.49	32.48	-20.33	25.55	646135.67	435876.38	32°11'50.851"N	103°51'39.265"W	0.16	
6512.10	0.640	211.720	6511.79	32.75	-21.20	25.08	646135.20	435875.50	32°11'50.843"N	103°51'39.271"W	0.11	
6605.40	0.660	212.510	6605.08	32.98	-22.10	24.52	646134.64	435874.61	32°11'50.834"N	103°51'39.277"W	0.02	
6698.70	0.850	215.500	6698.38	33.20	-23.11	23.83	646133.95	435873.59	32°11'50.824"N	103°51'39.285"W	0.21	
6792.00	0.840	213.380	6791.67	33.43	-24.25	23.05	646133.17	435872.45	32°11'50.813"N	103°51'39.294"W	0.04	
6885.30	0.940	212.590	6884.95	33.72	-25.46	22.26	646132.38	435871.24	32°11'50.801"N	103°51'39.304"W	0.11	
6978.50	1.000	202.390	6978.14	34.18	-26.86	21.54	646131.66	435869.84	32°11'50.787"N	103°51'39.312"W	0.20	
7071.80	0.930	189.250	7071.43	34.92	-28.36	21.11	646131.23	435868.34	32°11'50.772"N	103°51'39.317"W	0.25	
7102.80	0.930	186.040	7102.42	35.22	-28.86	21.04	646131.16	435867.84	32°11'50.767"N	103°51'39.318"W	0.17	
7158.00	1.300	133.500	7157.61	36.12	-29.73	21.45	646131.57	435866.97	32°11'50.759"N	103°51'39.313"W	1.89	
7189.00	3.800	137.800	7188.58	37.50	-30.74	22.39	646132.51	435865.96	32°11'50.749"N	103°51'39.302"W	8.08	
7220.00	5.900	134.900	7219.47	40.12	-32.62	24.21	646134.33	435864.08	32°11'50.730"N	103°51'39.281"W	6.82	
7251.00	8.100	132.500	7250.24	43.90	-35.22	26.95	646137.07	435861.48	32°11'50.704"N	103°51'39.250"W	7.16	
7283.00	10.700	130.900	7281.80	49.12	-38.69	30.86	646140.98	435858.01	32°11'50.669"N	103°51'39.204"W	8.17	
7314.00	13.600	130.900	7312.11	55.63	-42.96	35.79	646145.91	435853.74	32°11'50.627"N	103°51'39.147"W	9.35	
7345.00	16.500	130.800	7342.04	63.66	-48.23	41.88	646152.00	435848.48	32°11'50.575"N	103°51'39.077"W	9.36	
7376.00	19.500	130.800	7371.52	73.22	-54.49	49.13	646159.25	435842.22	32°11'50.512"N	103°51'38.992"W	9.68	
7407.00	22.900	130.700	7400.42	84.41	-61.80	57.62	646167.74	435834.90	32°11'50.440"N	103°51'38.894"W	10.97	
7439.00	26.100	130.700	7429.53	97.65	-70.46	67.68	646177.80	435826.25	32°11'50.354"N	103°51'38.777"W	10.00	
7470.00	29.500	132.200	7456.95	112.09	-80.03	78.51	646188.62	435816.67	32°11'50.258"N	103°51'38.652"W	11.20	
7501.00	32.700	133.600	7483.49	128.09	-90.94	90.23	646200.34	435805.77	32°11'50.150"N	103°51'38.516"W	10.58	
7533.00	36.100	134.900	7509.89	146.17	-103.56	103.17	646213.28	435793.15	32°11'50.024"N	103°51'38.366"W	10.87	
7564.00	39.400	135.400	7534.40	165.14	-117.01	116.55	646226.66	435779.70	32°11'49.891"N	103°51'38.211"W	10.69	



Actual Wellpath Report

No. 343H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.343H SHL
Area	Eddy County, NM	Well	No.343H
Field	Poker Lake Unit	Wellbore	No. 343H AWB
Facility	Poker Lake Unit No. 343H		

WELLPATH DATA (220 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
7594.00	42.900	135.600	7556.98	184.87	-131.09	130.39	646240.50	435765.62	32°11'49.751"N	103°51'38.051"W	11.67	
7625.00	46.600	136.300	7579.00	206.69	-146.78	145.55	646255.66	435749.93	32°11'49.595"N	103°51'37.875"W	12.04	
7656.00	49.900	137.500	7599.64	229.79	-163.66	161.35	646271.46	435733.05	32°11'49.427"N	103°51'37.692"W	11.03	
7687.00	53.500	138.900	7618.85	254.05	-181.80	177.56	646287.66	435714.91	32°11'49.247"N	103°51'37.504"W	12.14	
7718.00	56.900	139.600	7636.54	279.41	-201.08	194.17	646304.27	435695.63	32°11'49.055"N	103°51'37.312"W	11.12	
7749.00	60.400	139.500	7652.66	305.77	-221.23	211.34	646321.45	435675.49	32°11'48.855"N	103°51'37.113"W	11.29	
7781.00	64.400	138.800	7667.49	334.03	-242.67	229.89	646339.99	435654.04	32°11'48.642"N	103°51'36.899"W	12.65	
7812.00	68.400	138.600	7679.89	362.35	-264.01	248.63	646358.74	435632.71	32°11'48.430"N	103°51'36.682"W	12.92	
7843.00	71.800	137.800	7690.44	391.43	-285.73	268.06	646378.16	435610.99	32°11'48.215"N	103°51'36.457"W	11.23	
7873.00	75.000	136.200	7699.01	420.14	-306.75	287.67	646397.77	435589.97	32°11'48.006"N	103°51'36.230"W	11.83	
7905.00	78.400	134.800	7706.38	451.27	-328.96	309.49	646419.59	435567.76	32°11'47.785"N	103°51'35.977"W	11.45	
7936.00	82.300	133.800	7711.57	481.82	-350.30	331.36	646441.46	435546.43	32°11'47.573"N	103°51'35.723"W	12.98	
7967.00	85.900	134.300	7714.76	512.66	-371.74	353.52	646463.62	435524.99	32°11'47.360"N	103°51'35.467"W	11.72	
7998.00	89.100	133.600	7716.11	543.62	-393.23	375.82	646485.91	435503.50	32°11'47.146"N	103°51'35.208"W	10.57	
8028.00	89.000	133.400	7716.61	573.61	-413.87	397.57	646507.67	435482.85	32°11'46.941"N	103°51'34.956"W	0.75	
8081.00	89.000	133.400	7717.53	626.60	-450.28	436.08	646546.17	435446.45	32°11'46.579"N	103°51'34.510"W	0.00	
8107.00	87.800	135.100	7718.26	652.59	-468.42	454.69	646564.78	435428.31	32°11'46.399"N	103°51'34.294"W	8.00	
8138.00	88.100	135.700	7719.37	683.56	-490.48	476.44	646586.53	435406.26	32°11'46.179"N	103°51'34.042"W	2.16	
8233.00	89.600	135.300	7721.27	778.52	-558.22	543.02	646653.10	435338.52	32°11'45.506"N	103°51'33.271"W	1.63	
8297.00	85.800	135.200	7723.84	842.45	-603.63	588.03	646698.11	435293.11	32°11'45.055"N	103°51'32.750"W	5.94	
8359.00	86.200	134.900	7728.17	904.29	-647.40	631.72	646741.80	435249.35	32°11'44.620"N	103°51'32.243"W	0.81	
8423.00	84.900	135.800	7733.13	968.09	-692.79	676.56	646786.64	435203.96	32°11'44.169"N	103°51'31.724"W	2.47	
8486.00	84.500	134.700	7738.95	1030.81	-737.34	720.73	646830.80	435159.41	32°11'43.726"N	103°51'31.212"W	1.85	
8550.00	86.300	133.600	7744.08	1094.60	-781.77	766.50	646876.57	435114.98	32°11'43.284"N	103°51'30.682"W	3.29	
8614.00	89.900	133.800	7746.20	1158.55	-825.96	812.73	646922.80	435070.80	32°11'42.845"N	103°51'30.146"W	5.63	
8677.00	87.300	132.200	7747.74	1221.51	-868.91	858.79	646968.85	435027.85	32°11'42.418"N	103°51'29.612"W	4.85	
8740.00	90.100	133.300	7749.17	1284.46	-911.65	905.03	647015.09	434985.11	32°11'41.993"N	103°51'29.076"W	4.77	
8804.00	88.600	132.600	7749.90	1348.43	-955.26	951.87	647061.93	434941.51	32°11'41.560"N	103°51'28.534"W	2.59	
8868.00	87.900	132.600	7751.85	1412.37	-998.56	998.96	647109.01	434898.21	32°11'41.129"N	103°51'27.988"W	1.09	
8930.00	89.900	133.300	7753.04	1474.34	-1040.79	1044.33	647154.38	434855.98	32°11'40.709"N	103°51'27.462"W	3.42	
8994.00	89.000	132.800	7753.66	1538.32	-1084.48	1091.10	647201.14	434812.30	32°11'40.275"N	103°51'26.920"W	1.61	
9059.00	87.400	134.200	7755.70	1603.28	-1129.20	1138.22	647248.26	434767.58	32°11'39.830"N	103°51'26.374"W	3.27	
9122.00	87.500	134.500	7758.50	1666.21	-1173.19	1183.23	647293.27	434723.59	32°11'39.393"N	103°51'25.853"W	0.50	
9186.00	88.500	135.100	7760.74	1730.17	-1218.26	1228.61	647338.65	434678.52	32°11'38.945"N	103°51'25.327"W	1.82	
9249.00	89.600	134.300	7761.78	1793.16	-1262.57	1273.38	647383.42	434634.22	32°11'38.504"N	103°51'24.808"W	2.16	
9313.00	87.800	135.300	7763.23	1857.14	-1307.65	1318.78	647428.81	434589.14	32°11'38.056"N	103°51'24.282"W	3.22	
9375.00	88.100	135.900	7765.45	1919.08	-1351.92	1362.13	647472.16	434544.88	32°11'37.616"N	103°51'23.780"W	1.08	
9439.00	88.900	136.700	7767.13	1983.02	-1398.17	1406.33	647516.36	434498.63	32°11'37.157"N	103°51'23.268"W	1.77	
9502.00	89.900	136.500	7767.79	2045.97	-1443.94	1449.62	647559.64	434452.86	32°11'36.702"N	103°51'22.767"W	1.62	
9566.00	86.400	134.500	7769.85	2109.91	-1489.56	1494.44	647604.46	434407.24	32°11'36.249"N	103°51'22.248"W	6.30	
9629.00	87.100	134.800	7773.42	2172.81	-1533.76	1539.19	647649.20	434363.04	32°11'35.809"N	103°51'21.729"W	1.21	
9693.00	86.300	133.500	7777.11	2236.70	-1578.26	1585.03	647695.04	434318.54	32°11'35.367"N	103°51'21.198"W	2.38	
9756.00	86.900	132.900	7780.84	2299.58	-1621.31	1630.88	647740.89	434275.50	32°11'34.939"N	103°51'20.667"W	1.35	
9820.00	87.800	131.400	7783.80	2363.46	-1664.21	1678.27	647788.28	434232.60	32°11'34.512"N	103°51'20.118"W	2.73	
9883.00	88.800	129.600	7785.67	2426.28	-1705.11	1726.16	647836.16	434191.71	32°11'34.105"N	103°51'19.562"W	3.27	



Actual Wellpath Report

No. 343H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.343H SHL
Area	Eddy County, NM	Well	No.343H
Field	Poker Lake Unit	Wellbore	No. 343H AWB
Facility	Poker Lake Unit No. 343H		

WELLPATH DATA (220 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
9948.00	87.900	129.500	7787.54	2491.03	-1746.48	1776.25	647886.25	434150.34	32°11'33.694"N	103°51'18.982"W	1.39	
10011.00	86.300	131.100	7790.73	2553.79	-1787.17	1824.24	647934.23	434109.65	32°11'33.289"N	103°51'18.425"W	3.59	
10074.00	87.100	133.500	7794.36	2616.64	-1829.50	1870.75	647980.75	434067.33	32°11'32.868"N	103°51'17.886"W	4.01	
10139.00	88.500	134.200	7796.85	2681.58	-1874.50	1917.59	648027.58	434022.33	32°11'32.421"N	103°51'17.344"W	2.41	
10204.00	88.700	133.800	7798.44	2746.56	-1919.63	1964.34	648074.32	433977.20	32°11'31.972"N	103°51'16.802"W	0.69	
10266.00	89.300	133.600	7799.52	2808.55	-1962.46	2009.15	648119.13	433934.37	32°11'31.546"N	103°51'16.283"W	1.02	
10331.00	89.000	132.800	7800.49	2873.53	-2006.95	2056.53	648166.51	433889.88	32°11'31.104"N	103°51'15.734"W	1.31	
10396.00	89.700	134.300	7801.23	2938.52	-2051.73	2103.64	648213.61	433845.11	32°11'30.659"N	103°51'15.188"W	2.55	
10458.00	88.700	134.400	7802.09	3000.51	-2095.07	2147.97	648257.94	433801.77	32°11'30.228"N	103°51'14.674"W	1.62	
10521.00	91.100	134.900	7802.20	3063.50	-2139.34	2192.78	648302.75	433757.51	32°11'29.788"N	103°51'14.155"W	3.89	
10585.00	90.900	134.100	7801.08	3127.49	-2184.19	2238.42	648348.39	433712.66	32°11'29.342"N	103°51'13.626"W	1.29	
10649.00	89.500	136.000	7800.86	3191.48	-2229.48	2283.63	648393.60	433667.37	32°11'28.892"N	103°51'13.103"W	3.69	
10713.00	89.300	136.200	7801.53	3255.45	-2275.59	2328.01	648437.97	433621.26	32°11'28.434"N	103°51'12.589"W	0.44	
10777.00	87.400	135.600	7803.37	3319.40	-2321.53	2372.53	648482.48	433575.33	32°11'27.977"N	103°51'12.073"W	3.11	
10840.00	90.300	135.100	7804.64	3382.37	-2366.34	2416.79	648526.74	433530.52	32°11'27.532"N	103°51'11.560"W	4.67	
10904.00	88.800	136.500	7805.14	3446.34	-2412.22	2461.40	648571.35	433484.65	32°11'27.076"N	103°51'11.044"W	3.21	
10968.00	90.000	137.600	7805.81	3510.27	-2459.06	2505.01	648614.95	433437.81	32°11'26.610"N	103°51'10.539"W	2.54	
11031.00	89.600	136.300	7806.03	3573.20	-2505.09	2548.01	648657.96	433391.78	32°11'26.153"N	103°51'10.041"W	2.16	
11095.00	87.600	137.300	7807.59	3637.12	-2551.73	2591.81	648701.75	433345.14	32°11'25.690"N	103°51'09.534"W	3.49	
11160.00	86.000	136.100	7811.22	3701.96	-2598.96	2636.31	648746.25	433297.92	32°11'25.220"N	103°51'09.018"W	3.08	
11223.00	86.100	133.600	7815.56	3764.80	-2643.28	2680.87	648790.80	433253.60	32°11'24.780"N	103°51'08.502"W	3.96	
11286.00	85.300	133.600	7820.29	3827.62	-2686.61	2726.36	648836.29	433210.28	32°11'24.349"N	103°51'07.975"W	1.27	
11350.00	87.400	131.600	7824.36	3891.45	-2729.83	2773.37	648883.30	433167.06	32°11'23.919"N	103°51'07.430"W	4.53	
11414.00	90.200	131.200	7825.70	3955.35	-2772.14	2821.36	648931.29	433124.75	32°11'23.498"N	103°51'06.874"W	4.42	
11477.00	90.700	131.800	7825.21	4018.27	-2813.89	2868.54	648978.47	433083.01	32°11'23.083"N	103°51'06.327"W	1.24	
11542.00	88.300	131.700	7825.77	4083.19	-2857.16	2917.03	649026.95	433039.73	32°11'22.653"N	103°51'05.765"W	3.70	
11604.00	90.300	131.900	7826.53	4145.12	-2898.48	2963.25	649073.16	432998.42	32°11'22.242"N	103°51'05.229"W	3.24	
11667.00	88.700	130.400	7827.08	4208.02	-2939.93	3010.68	649120.59	432956.97	32°11'21.830"N	103°51'04.680"W	3.48	
11731.00	90.100	132.100	7827.75	4271.92	-2982.13	3058.79	649168.70	432914.78	32°11'21.410"N	103°51'04.122"W	3.44	
11794.00	90.000	132.900	7827.70	4334.88	-3024.69	3105.24	649215.15	432872.22	32°11'20.987"N	103°51'03.584"W	1.28	
11857.00	89.800	138.400	7827.81	4397.84	-3069.72	3149.26	649259.17	432827.19	32°11'20.539"N	103°51'03.074"W	8.74	
11921.00	88.600	137.100	7828.70	4461.72	-3117.09	3192.29	649302.19	432779.82	32°11'20.069"N	103°51'02.576"W	2.76	
11985.00	89.000	137.300	7830.04	4525.63	-3164.04	3235.76	649345.66	432732.88	32°11'19.602"N	103°51'02.072"W	0.70	
12049.00	88.700	135.500	7831.33	4589.57	-3210.37	3279.89	649389.78	432686.55	32°11'19.142"N	103°51'01.561"W	2.85	
12112.00	88.700	133.300	7832.75	4652.55	-3254.44	3324.89	649434.78	432642.48	32°11'18.704"N	103°51'01.040"W	3.49	
12176.00	88.600	132.600	7834.26	4716.51	-3298.03	3371.72	649481.61	432598.89	32°11'18.270"N	103°51'00.497"W	1.10	
12240.00	88.900	132.900	7835.66	4780.47	-3341.47	3418.70	649528.59	432555.46	32°11'17.838"N	103°50'59.953"W	0.66	
12304.00	89.300	132.500	7836.66	4844.44	-3384.86	3465.73	649575.61	432512.07	32°11'17.407"N	103°50'59.408"W	0.88	
12365.00	89.900	131.600	7837.09	4905.39	-3425.72	3511.03	649620.90	432471.22	32°11'17.000"N	103°50'58.883"W	1.77	
12429.00	89.400	131.300	7837.48	4969.30	-3468.08	3558.99	649668.87	432428.85	32°11'16.579"N	103°50'58.327"W	0.91	
12492.00	90.500	132.400	7837.54	5032.24	-3510.11	3605.92	649715.79	432386.83	32°11'16.161"N	103°50'57.783"W	2.47	
12556.00	89.800	131.700	7837.37	5096.19	-3552.98	3653.44	649763.31	432343.96	32°11'15.735"N	103°50'57.233"W	1.55	
12619.00	88.700	131.700	7838.19	5159.11	-3594.88	3700.48	649810.34	432302.06	32°11'15.318"N	103°50'56.688"W	1.75	
12682.00	89.900	133.400	7838.96	5222.08	-3637.48	3746.88	649856.75	432259.47	32°11'14.894"N	103°50'56.150"W	3.30	
12745.00	89.600	134.300	7839.24	5285.07	-3681.13	3792.31	649902.18	432215.83	32°11'14.460"N	103°50'55.624"W	1.51	



Actual Wellpath Report

No. 343H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.343H SHL
Area	Eddy County, NM	Well	No.343H
Field	Poker Lake Unit	Wellbore	No. 343H AWB
Facility	Poker Lake Unit No. 343H		

WELLPATH DATA (220 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
12810.00	89.700	134.000	7839.63	5350.07	-3726.40	3838.95	649948.81	432170.56	32°11'14.010"N	103°50'55.083"W	0.49	
12873.00	90.300	135.200	7839.63	5413.07	-3770.63	3883.81	649993.66	432126.32	32°11'13.571"N	103°50'54.564"W	2.13	
12937.00	89.000	135.700	7840.03	5477.05	-3816.24	3928.71	650038.56	432080.72	32°11'13.117"N	103°50'54.044"W	2.18	
13000.00	89.300	135.900	7840.96	5540.03	-3861.40	3972.62	650082.47	432035.56	32°11'12.669"N	103°50'53.535"W	0.57	
13063.00	90.500	135.400	7841.07	5603.01	-3906.45	4016.66	650126.51	431990.52	32°11'12.221"N	103°50'53.025"W	2.06	
13127.00	87.200	133.900	7842.35	5666.98	-3951.41	4062.17	650172.02	431945.56	32°11'11.774"N	103°50'52.498"W	5.66	
13191.00	90.100	137.900	7843.86	5730.92	-3997.35	4106.68	650216.52	431899.63	32°11'11.317"N	103°50'51.982"W	7.72	
13254.00	87.900	137.400	7844.96	5793.81	-4043.90	4149.12	650258.95	431853.08	32°11'10.855"N	103°50'51.491"W	3.58	
13317.00	89.400	138.700	7846.45	5856.65	-4090.74	4191.22	650301.05	431806.24	32°11'10.389"N	103°50'51.004"W	3.15	
13381.00	89.700	138.300	7846.95	5920.48	-4138.67	4233.62	650343.45	431758.32	32°11'09.913"N	103°50'50.513"W	0.78	
13445.00	88.700	135.100	7847.84	5984.41	-4185.23	4277.50	650387.33	431711.75	32°11'09.450"N	103°50'50.005"W	5.24	
13509.00	91.400	135.600	7847.79	6048.40	-4230.76	4322.48	650432.30	431666.23	32°11'08.998"N	103°50'49.484"W	4.29	
13572.00	90.200	134.500	7846.91	6111.39	-4275.34	4366.98	650476.80	431621.65	32°11'08.555"N	103°50'48.968"W	2.58	
13635.00	91.400	134.400	7846.03	6174.38	-4319.45	4411.95	650521.77	431577.54	32°11'08.116"N	103°50'48.447"W	1.91	
13695.00	90.400	133.000	7845.09	6234.36	-4360.90	4455.32	650565.13	431536.10	32°11'07.704"N	103°50'47.945"W	2.87	
13759.00	89.600	134.600	7845.09	6298.36	-4405.19	4501.51	650611.32	431491.81	32°11'07.264"N	103°50'47.410"W	2.80	
13823.00	90.400	134.300	7845.09	6362.36	-4450.01	4547.20	650657.01	431446.99	32°11'06.818"N	103°50'46.881"W	1.33	
13886.00	89.100	134.400	7845.36	6425.36	-4494.05	4592.25	650702.05	431402.96	32°11'06.381"N	103°50'46.359"W	2.07	
13949.00	90.900	134.200	7845.36	6488.35	-4538.05	4637.33	650747.14	431358.96	32°11'05.943"N	103°50'45.836"W	2.87	
14012.00	91.900	131.000	7843.82	6551.30	-4580.67	4683.69	650793.49	431316.34	32°11'05.519"N	103°50'45.299"W	5.32	
14075.00	89.700	133.300	7842.94	6614.24	-4622.94	4730.38	650840.18	431274.07	32°11'05.099"N	103°50'44.758"W	5.05	
14139.00	90.900	134.200	7842.61	6678.23	-4667.20	4776.61	650886.41	431229.82	32°11'04.659"N	103°50'44.223"W	2.34	
14203.00	92.800	130.200	7840.54	6742.14	-4710.16	4823.99	650933.78	431186.87	32°11'04.232"N	103°50'43.674"W	6.92	
14266.00	88.500	135.100	7839.82	6805.07	-4752.81	4870.29	650980.08	431144.21	32°11'03.807"N	103°50'43.137"W	10.35	
14330.00	90.300	135.700	7840.49	6869.05	-4798.38	4915.23	651025.01	431098.65	32°11'03.355"N	103°50'42.617"W	2.96	
14393.00	89.400	136.000	7840.66	6932.03	-4843.58	4959.11	651068.89	431053.45	32°11'02.905"N	103°50'42.109"W	1.51	
14456.00	88.600	135.800	7841.76	6995.00	-4888.82	5002.94	651112.72	431008.22	32°11'02.456"N	103°50'41.601"W	1.31	
14519.00	89.300	134.900	7842.91	7057.98	-4933.63	5047.21	651156.99	430963.41	32°11'02.010"N	103°50'41.088"W	1.81	
14585.00	89.200	135.200	7843.78	7123.96	-4980.33	5093.84	651203.61	430916.71	32°11'01.546"N	103°50'40.548"W	0.48	
14648.00	90.800	135.300	7843.78	7186.96	-5025.07	5138.19	651247.96	430871.97	32°11'01.101"N	103°50'40.035"W	2.54	
14712.00	91.000	135.000	7842.77	7250.94	-5070.44	5183.32	651293.08	430826.61	32°11'00.650"N	103°50'39.512"W	0.56	
14776.00	89.800	137.000	7842.32	7314.91	-5116.47	5227.77	651337.53	430780.58	32°11'00.193"N	103°50'38.997"W	3.64	
14839.00	90.400	139.100	7842.21	7377.77	-5163.33	5269.88	651379.64	430733.73	32°10'59.727"N	103°50'38.510"W	3.47	
14903.00	88.700	141.200	7842.72	7441.44	-5212.45	5310.89	651420.64	430684.60	32°10'59.239"N	103°50'38.035"W	4.22	
14965.00	90.500	145.200	7843.15	7502.68	-5262.09	5348.02	651457.77	430634.97	32°10'58.747"N	103°50'37.606"W	7.07	
15030.00	90.200	148.700	7842.75	7566.11	-5316.56	5383.46	651493.21	430580.50	32°10'58.206"N	103°50'37.196"W	5.40	
15094.00	89.900	150.000	7842.70	7627.93	-5371.62	5416.09	651525.84	430525.45	32°10'57.660"N	103°50'36.820"W	2.08	
15189.00	92.800	155.700	7840.46	7717.95	-5456.08	5459.40	651569.15	430440.99	32°10'56.822"N	103°50'36.320"W	6.73	
15252.00	93.400	156.500	7837.05	7776.38	-5513.59	5484.89	651594.64	430383.48	32°10'56.252"N	103°50'36.027"W	1.59	
15303.00	93.400	156.500	7834.03	7823.53	-5560.28	5505.19	651614.93	430336.80	32°10'55.789"N	103°50'35.793"W	0.00	Proj to Bit



Actual Wellpath Report

No. 343H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	BOPCO, L.P.	Slot	No.343H SHL
Area	Eddy County, NM	Well	No.343H
Field	Poker Lake Unit	Wellbore	No. 343H AWB
Facility	Poker Lake Unit No. 343H		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No.343H Target #1A		7760.40	-1126.28	1136.56	647246.60	434770.50	32°11'39.859"N	103°51'26.393"W	point
No.343H Target #2		7827.00	-2859.17	2924.59	649034.51	433037.72	32°11'22.633"N	103°51'05.677"W	point
No.343H PBHL		7856.00	-5469.97	5595.06	651704.80	430427.10	32°10'56.678"N	103°50'34.742"W	point

WELLPATH COMPOSITION - Ref Wellbore: No. 343H AWB Ref Wellpath: No. 343H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
22.90	7102.80	Generic gyro - northseeking (Standard)	GyroData Gyro <100-7102.8>	No. 343H AWB
7102.80	15303.00	NaviTrak (Standard)	MWD NaviTrak <7158-XXXX>	No. 343H AWB