



A GYRO TECHNOLOGIES INC. COMPANY

30-015-37970

PO Box 261021
Corpus Christi, Texas 78426
(361) 767-0602 • (800) 606-GYRO • Fax (361) 767-0612

October 5, 2011

Cimarex Energy Company
600 N. Marienfeld St., Ste. 600
Midland, TX 79701

Attn: Carolyn Larson

Re: Parkway St Corn 6

Please find enclosed a copy of the survey from 0' to 7632' ran on the above referenced well.

If I can be of any further service, please do not hesitate to call me at 800-606-4976.

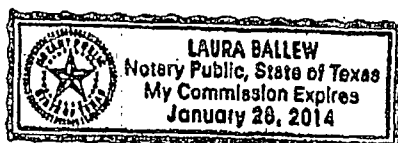
Sincerely,

Keith Havelka
Operations

State of Texas §

County of Nueces §

This instrument was acknowledged before me on the 5th day of October, 2011, by Keith Havelka.



Notary Public in and for the State of Texas.



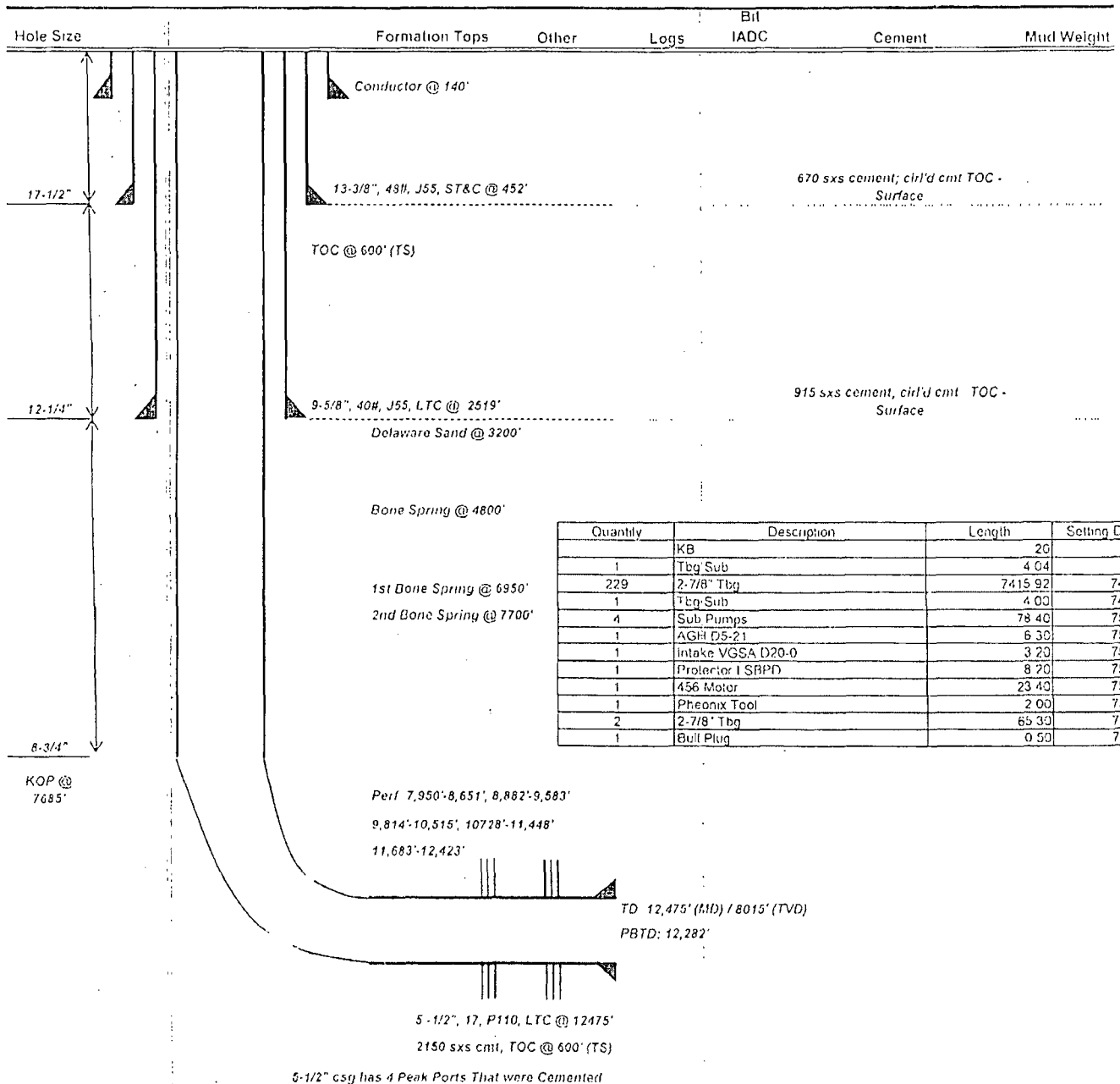
Cimarex Energy Company

5/26/2011

Well: Parkway State Com 6H
 Location: Sec 15, T19S-R29E
 County, State: Eddy
 Surface Location: 330' FNL 260' FEL
 Bottomhole Loc: 330' FSL 660' FEL
 E-Mail: wellsite@cimarex.com
 Wellhead: SEC A. 11" 5M x 9-5/8" SOW
 SEC B. 11" 5M x 7-1/16" 10M

Co. Well ID: 250099
 AFE No.: 30-015-37970
 API No.:
 Lse Serial #:
 Field: Parkway
 Objective: 2nd Bone Spring
 TVD/MD: 8015' / 12475'
 Cementing: Halliburton
 Mud: MI
 Motors: Baker
 OH Logs
 Rig: Key 881
 Offset Wells:

Xmas Tree
 Tubing: 2-7/8" L80 EUE
 Superintendent: Dee Smith
 Engineer: Mark Audas



30-DIS-37970



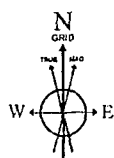
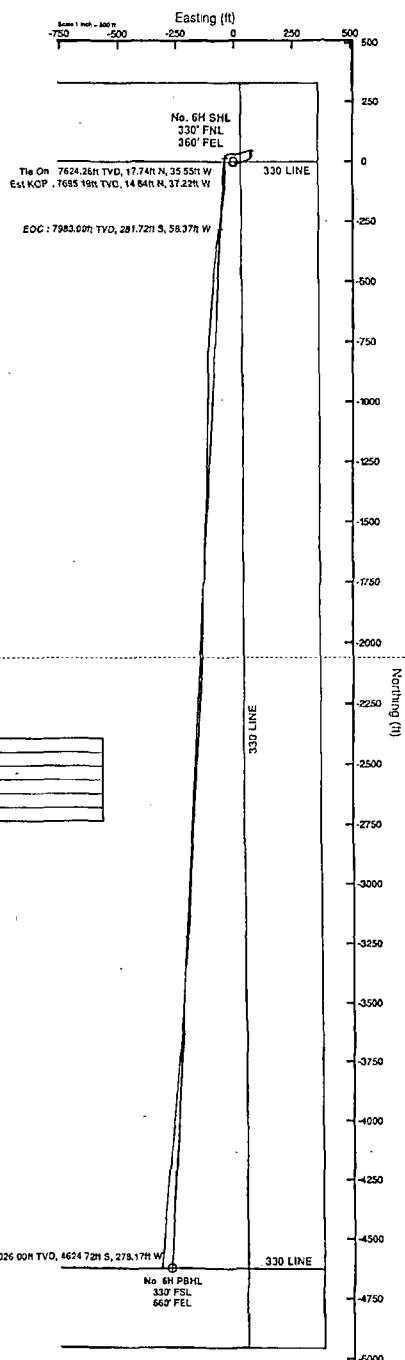
Cimarex Energy Co.



Location: Eddy County, NM
 Field: Parkway
 Facility: Parkway State Com No. 6H
 Slot: No. 6H SHL
 Well: No. 6H
 Wellbore: No. 6H PWB

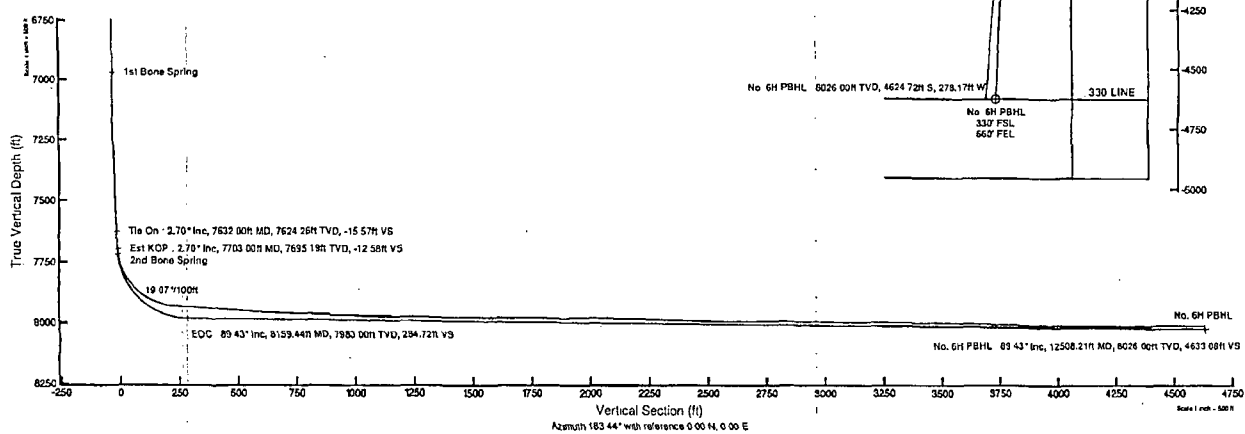
Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (*100ft)	VS (ft)
Tie On	7632.00	2.700	210.040	7624.26	17.74	-35.55	0.00	-15.57
Est KOP	7703.00	2.700	210.040	7695.19	14.84	-37.22	0.00	-12.58
EOC	8159.44	89.433	182.897	7983.00	-281.72	-58.37	19.07	284.72
No. 6H PBHL	12508.21	89.433	182.897	8026.00	-4624.72	-278.17	0.00	4633.08



BGGM (1945.0 to 2012.0) Dip 60.52° Field 48878 nT
 Magnetic North is 7.92 degrees East of True North (at 4/12/2011)
 Grid North is 0.15 degrees East of True North
 To correct azimuth from True to Grid subtract 0.15 degrees
 To correct azimuth from Magnetic to Grid add 7.77 degrees
 For example if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.77 = 97.77

Plot reference wellpath is Plan 1, Row 1	Grid System: NAD83 / TM New Mexico SP, Eastern Zone (2001), US feet
True vertical depths are referenced to Rig on No. 6H SHL (KB)	North Reference: Grid north
Measured depths are referenced to Rig on No. 6H SHL (KB)	Scale: True distance
Rig on No. 6H SHL (KB) to Mean Sea Level: 3367 feet	Depths are in feet
Mean Sea Level to Mud Line (At Slot No. 6H SHL): -3249 feet	Created by: calphex on 4/23/2011
Coordinates are in feet referenced to Slot	





Actual Wellpath Report

No. 6H AWP

Page 1 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 6H SHL
Area	Eddy County, NM	Well	No. 6H
Field	Parkway	Wellbore	No. 6H AWP
Facility	Parkway State Com No. 6H		

REPORT SETUP INFORMATION

Projection System	NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet	Software System	WellArchitect® 3.0.0
North Reference	Grid	User	Calhphik
Scale	0.999917	Report Generated	4/29/2011 at 9:33:57 AM
Convergence at slot	0.15° East	Database/Source file	WA Midland/No. 6H_AWP.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	626908.90	606519.50	32°40'01.415"N	104°03'18.916"W
Facility Reference Pt			626908.90	606519.50	32°40'01.415"N	104°03'18.916"W
Field Reference Pt			623994.14	604893.77	32°39'45.403"N	104°03'53.063"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 6H SHL (KB) to GL	18.00ft
Horizontal Reference Pt	Slot	Rig on No. 6H SHL (KB) to Mean Sea Level	3367.00ft
Vertical Reference Pt	Rig on No. 6H SHL (KB)	Rig on No. 6H SHL (KB) to Mud Line at Slot (No. 6H SHL)	18.00ft
MD Reference Pt	Rig on No. 6H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	183.44°



Actual Wellpath Report

No. 6H AWP

Page 2 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 6H SHL
Area	Eddy County, NM	Well	No. 6H
Field	Parkway	Wellbore	No. 6H AWB
Facility	Parkway State Com No. 6H		

WELLPATH DATA (212 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]
0.00†	0.000	121.740	0.00	0.00	0.00	0.00	626908.90	606519.50	32°40'01.415"N	104°03'18.916"W	0.00
18.00	0.000	121.740	18.00	0.00	0.00	0.00	626908.90	606519.50	32°40'01.415"N	104°03'18.916"W	0.00
106.44	0.930	121.740	106.44	0.34	-0.38	0.61	626909.51	606519.12	32°40'01.412"N	104°03'18.908"W	1.05
169.68	1.390	126.000	169.66	1.00	-1.10	1.67	626910.57	606518.40	32°40'01.404"N	104°03'18.896"W	0.74
232.92	1.790	118.830	232.88	1.83	-2.03	3.15	626912.05	606517.47	32°40'01.395"N	104°03'18.879"W	0.71
296.16	2.180	117.040	296.08	2.74	-3.05	5.09	626913.99	606516.45	32°40'01.385"N	104°03'18.856"W	0.62
359.40	2.250	118.330	359.27	3.74	-4.18	7.25	626916.15	606515.32	32°40'01.374"N	104°03'18.831"W	0.14
422.64	2.380	115.130	422.46	4.75	-5.33	9.54	626918.43	606514.17	32°40'01.362"N	104°03'18.804"W	0.29
485.88	2.470	101.310	485.65	5.42	-6.16	12.06	626920.96	606513.34	32°40'01.354"N	104°03'18.775"W	0.93
549.12	2.310	94.050	548.83	5.62	-6.51	14.67	626923.57	606512.99	32°40'01.351"N	104°03'18.744"W	0.54
612.36	2.290	95.090	612.02	5.67	-6.72	17.20	626926.10	606512.79	32°40'01.348"N	104°03'18.715"W	0.07
675.60	2.320	85.300	675.21	5.53	-6.72	19.73	626928.63	606512.78	32°40'01.348"N	104°03'18.685"W	0.62
738.84	2.310	87.120	738.40	5.20	-6.55	22.28	626931.18	606512.95	32°40'01.350"N	104°03'18.655"W	0.12
802.08	2.320	83.800	801.59	4.85	-6.35	24.83	626933.72	606513.15	32°40'01.352"N	104°03'18.625"W	0.21
865.32	2.450	77.840	864.77	4.27	-5.93	27.42	626936.32	606513.57	32°40'01.356"N	104°03'18.595"W	0.44
928.56	3.370	70.950	927.93	3.20	-5.04	30.50	626939.40	606514.46	32°40'01.365"N	104°03'18.559"W	1.55
991.80	3.850	70.790	991.04	1.67	-3.73	34.26	626943.16	606515.77	32°40'01.378"N	104°03'18.515"W	0.76
1055.04	3.990	62.160	1054.14	-0.29	-2.01	38.21	626947.11	606517.49	32°40'01.395"N	104°03'18.469"W	0.96
1118.28	4.040	57.100	1117.22	-2.75	0.23	42.03	626950.92	606519.73	32°40'01.417"N	104°03'18.424"W	0.57
1181.52	3.910	63.790	1180.31	-5.14	2.39	45.83	626954.73	606521.89	32°40'01.438"N	104°03'18.379"W	0.76
1244.76	3.040	65.740	1243.43	-6.99	4.04	49.29	626958.19	606523.54	32°40'01.454"N	104°03'18.339"W	1.39
1308.00	2.980	71.060	1306.59	-8.39	5.26	52.38	626961.27	606524.76	32°40'01.466"N	104°03'18.303"W	0.45
1371.24	2.630	81.580	1369.75	-9.32	6.00	55.37	626964.26	606525.50	32°40'01.473"N	104°03'18.268"W	0.98
1434.48	2.250	80.910	1432.93	-9.89	6.41	58.03	626966.92	606525.91	32°40'01.477"N	104°03'18.237"W	0.60
1497.72	1.980	76.100	1496.13	-10.48	6.87	60.32	626969.21	606526.37	32°40'01.482"N	104°03'18.210"W	0.51
1560.96	1.940	67.240	1559.33	-11.28	7.55	62.36	626971.26	606527.05	32°40'01.488"N	104°03'18.186"W	0.48
1624.20	1.990	65.040	1622.54	-12.27	8.43	64.35	626973.24	606527.92	32°40'01.497"N	104°03'18.163"W	0.14
1687.44	2.150	51.850	1685.73	-13.58	9.62	66.27	626975.17	606529.12	32°40'01.509"N	104°03'18.140"W	0.79
1750.68	2.040	48.910	1748.93	-15.16	11.09	68.06	626976.95	606530.59	32°40'01.523"N	104°03'18.119"W	0.24
1813.92	2.280	47.050	1812.13	-16.86	12.69	69.82	626978.72	606532.19	32°40'01.539"N	104°03'18.098"W	0.40
1877.16	2.390	43.950	1875.31	-18.77	14.50	71.66	626980.55	606534.00	32°40'01.557"N	104°03'18.077"W	0.26
1940.40	2.400	36.550	1938.50	-20.89	16.51	73.36	626982.26	606536.01	32°40'01.577"N	104°03'18.057"W	0.49
2003.64	2.400	32.250	2001.68	-23.15	18.69	74.86	626983.75	606538.19	32°40'01.598"N	104°03'18.039"W	0.28
2066.88	2.210	32.100	2064.87	-25.38	20.85	76.21	626985.11	606540.34	32°40'01.620"N	104°03'18.023"W	0.30
2130.12	2.090	24.050	2128.07	-27.53	22.93	77.33	626986.23	606542.43	32°40'01.640"N	104°03'18.010"W	0.51
2193.36	1.990	7.640	2191.27	-29.71	25.07	77.95	626986.84	606544.57	32°40'01.661"N	104°03'18.003"W	0.93
2256.60	1.780	350.460	2254.47	-31.76	27.13	77.93	626986.82	606546.63	32°40'01.682"N	104°03'18.003"W	0.95
2319.84	1.640	342.580	2317.69	-33.56	28.96	77.50	626986.39	606548.46	32°40'01.700"N	104°03'18.008"W	0.43
2383.08	1.540	337.350	2380.90	-35.17	30.61	76.90	626985.79	606550.11	32°40'01.716"N	104°03'18.015"W	0.28
2446.32	1.360	331.550	2444.12	-36.57	32.05	76.21	626985.11	606551.55	32°40'01.731"N	104°03'18.023"W	0.37
2509.56	1.250	318.110	2507.35	-37.69	33.23	75.40	626984.29	606552.73	32°40'01.742"N	104°03'18.033"W	0.51
2572.80	1.030	290.680	2570.57	-38.35	33.94	74.40	626983.30	606553.44	32°40'01.749"N	104°03'18.044"W	0.92
2636.04	1.120	274.860	2633.80	-38.53	34.20	73.26	626982.15	606553.69	32°40'01.752"N	104°03'18.058"W	0.49
2699.28	1.050	248.590	2697.03	-38.30	34.04	72.10	626980.99	606553.53	32°40'01.750"N	104°03'18.071"W	0.79
2762.52	0.600	220.610	2760.27	-37.80	33.57	71.35	626980.24	606553.07	32°40'01.746"N	104°03'18.080"W	0.94



Actual Wellpath Report

No. 6H AWP

Page 3 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 6H SHL
Area	Eddy County, NM	Well	No. 6H
Field	Parkway	Wellbore	No. 6H AWB
Facility	Parkway State Com No. 6H		

WELLPATH DATA (212 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]
2825.76	0.760	173.530	2823.50	-37.12	32.90	71.18	626980.07	606552.40	32°40'01.739"N	104°03'18.082"W	0.89
2889.00	0.610	166.330	2886.74	-36.38	32.16	71.30	626980.20	606551.66	32°40'01.732"N	104°03'18.080"W	0.27
2952.24	0.540	122.000	2949.97	-35.92	31.68	71.64	626980.53	606551.17	32°40'01.727"N	104°03'18.077"W	0.69
3015.48	0.220	138.070	3013.21	-35.69	31.43	71.97	626980.86	606550.93	32°40'01.724"N	104°03'18.073"W	0.53
3078.72	0.670	161.450	3076.45	-35.26	30.99	72.17	626981.06	606550.48	32°40'01.720"N	104°03'18.070"W	0.75
3141.96	0.640	175.530	3139.69	-34.57	30.28	72.31	626981.21	606549.78	32°40'01.713"N	104°03'18.069"W	0.26
3205.20	0.930	180.580	3202.92	-33.71	29.42	72.34	626981.23	606548.92	32°40'01.705"N	104°03'18.068"W	0.47
3268.44	1.200	210.810	3266.15	-32.61	28.34	71.99	626980.89	606547.83	32°40'01.694"N	104°03'18.073"W	0.97
3331.68	0.810	239.300	3329.38	-31.77	27.54	71.27	626980.16	606547.04	32°40'01.686"N	104°03'18.081"W	0.98
3394.92	0.750	285.990	3392.62	-31.61	27.43	70.49	626979.38	606546.92	32°40'01.685"N	104°03'18.090"W	0.98
3458.16	0.670	335.590	3455.85	-32.03	27.88	69.94	626978.83	606547.37	32°40'01.689"N	104°03'18.097"W	0.95
3521.40	0.830	6.100	3519.09	-32.81	28.67	69.83	626978.73	606548.17	32°40'01.697"N	104°03'18.098"W	0.67
3584.64	0.720	2.700	3582.32	-33.66	29.52	69.90	626978.79	606549.02	32°40'01.706"N	104°03'18.097"W	0.19
3647.88	0.820	6.150	3645.55	-34.51	30.37	69.97	626978.86	606549.87	32°40'01.714"N	104°03'18.096"W	0.17
3711.12	0.680	8.840	3708.79	-35.34	31.19	70.07	626978.97	606550.69	32°40'01.722"N	104°03'18.095"W	0.23
3774.36	0.970	12.870	3772.02	-36.24	32.08	70.25	626979.14	606551.58	32°40'01.731"N	104°03'18.093"W	0.47
3837.60	0.920	19.460	3835.25	-37.26	33.08	70.54	626979.43	606552.58	32°40'01.741"N	104°03'18.089"W	0.19
3900.84	1.040	7.230	3898.48	-38.32	34.13	70.78	626979.67	606553.63	32°40'01.751"N	104°03'18.087"W	0.38
3964.08	1.010	4.640	3961.71	-39.45	35.25	70.90	626979.79	606554.75	32°40'01.762"N	104°03'18.085"W	0.09
4027.32	1.160	10.720	4024.94	-40.64	36.44	71.06	626979.95	606555.94	32°40'01.774"N	104°03'18.083"W	0.30
4090.56	1.120	28.510	4088.17	-41.83	37.61	71.47	626980.37	606557.11	32°40'01.786"N	104°03'18.078"W	0.56
4153.80	1.040	35.030	4151.40	-42.88	38.62	72.10	626980.99	606558.12	32°40'01.796"N	104°03'18.071"W	0.23
4217.04	0.970	50.390	4214.63	-43.74	39.44	72.84	626981.73	606558.93	32°40'01.804"N	104°03'18.062"W	0.44
4280.28	1.320	69.110	4277.86	-44.40	40.04	73.93	626982.83	606559.53	32°40'01.810"N	104°03'18.049"W	0.80
4343.52	1.360	56.540	4341.08	-45.15	40.71	75.24	626984.13	606560.21	32°40'01.816"N	104°03'18.034"W	0.47
4406.76	1.280	50.050	4404.30	-46.09	41.58	76.41	626985.30	606561.07	32°40'01.825"N	104°03'18.020"W	0.27
4470.00	1.040	71.990	4467.53	-46.79	42.21	77.50	626986.39	606561.70	32°40'01.831"N	104°03'18.008"W	0.79
4533.24	0.870	58.890	4530.76	-47.27	42.63	78.45	626987.35	606562.13	32°40'01.835"N	104°03'17.997"W	0.44
4596.48	0.760	56.580	4594.00	-47.79	43.11	79.21	626988.11	606562.61	32°40'01.840"N	104°03'17.988"W	0.18
4659.72	0.420	61.530	4657.23	-48.17	43.45	79.77	626988.66	606562.95	32°40'01.843"N	104°03'17.981"W	0.54
4722.96	0.480	77.400	4720.47	-48.36	43.62	80.23	626989.12	606563.12	32°40'01.845"N	104°03'17.976"W	0.22
4786.20	0.310	79.900	4783.71	-48.47	43.71	80.66	626989.55	606563.21	32°40'01.846"N	104°03'17.971"W	0.27
4849.44	0.360	183.240	4846.95	-48.32	43.54	80.81	626989.71	606563.04	32°40'01.844"N	104°03'17.969"W	0.83
4912.68	0.680	240.680	4910.19	-47.91	43.16	80.48	626989.37	606562.66	32°40'01.840"N	104°03'17.973"W	0.91
4975.92	0.670	290.860	4973.42	-47.82	43.11	79.80	626988.70	606562.60	32°40'01.840"N	104°03'17.981"W	0.91
5039.16	0.920	323.410	5036.66	-48.32	43.65	79.15	626988.05	606563.14	32°40'01.845"N	104°03'17.988"W	0.80
5102.40	1.010	313.340	5099.89	-49.07	44.44	78.45	626987.34	606563.93	32°40'01.853"N	104°03'17.997"W	0.30
5165.64	0.990	296.560	5163.12	-49.64	45.06	77.55	626986.45	606564.56	32°40'01.859"N	104°03'18.007"W	0.46
5228.88	0.940	324.610	5226.35	-50.26	45.73	76.76	626985.66	606565.23	32°40'01.866"N	104°03'18.016"W	0.74
5292.12	1.110	307.510	5289.58	-51.01	46.53	75.98	626984.87	606566.02	32°40'01.874"N	104°03'18.025"W	0.55
5355.36	0.780	287.170	5352.81	-51.45	47.03	75.08	626983.97	606566.52	32°40'01.879"N	104°03'18.036"W	0.74
5418.60	1.070	256.810	5416.04	-51.38	47.02	74.09	626982.99	606566.52	32°40'01.879"N	104°03'18.047"W	0.88
5481.84	1.670	250.780	5479.26	-50.86	46.58	72.65	626981.54	606566.08	32°40'01.874"N	104°03'18.064"W	0.97
5545.08	2.150	247.250	5542.47	-49.98	45.82	70.68	626979.58	606565.32	32°40'01.867"N	104°03'18.087"W	0.78
5608.32	2.640	256.750	5605.65	-49.04	45.03	68.17	626977.07	606564.52	32°40'01.859"N	104°03'18.117"W	0.99



Actual Wellpath Report

No. 6H AWP

Page 4 of 7



REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co.	Slot	No. 6H SHL
Area	Eddy County, NM	Well	No. 6H
Field	Parkway	Wellbore	No. 6H AWB
Facility	Parkway State Com No. 6H		

WELLPATH DATA (212 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]
5671.56	4.470	259.480	5668.77	-48.03	44.24	64.33	626973.23	606563.74	32°40'01.851"N	104°03'18.162"W	2.91
5734.80	5.750	252.450	5731.76	-46.30	42.84	58.89	626967.78	606562.33	32°40'01.838"N	104°03'18.225"W	2.25
5798.04	6.740	252.300	5794.62	-43.82	40.75	52.33	626961.23	606560.25	32°40'01.817"N	104°03'18.302"W	1.57
5861.28	7.370	255.810	5857.38	-41.26	38.63	44.86	626953.76	606558.13	32°40'01.796"N	104°03'18.390"W	1.21
5924.52	7.770	257.490	5920.07	-38.85	36.71	36.76	626945.66	606556.21	32°40'01.778"N	104°03'18.484"W	0.72
5987.76	8.250	256.910	5982.69	-36.39	34.76	28.17	626937.06	606554.25	32°40'01.759"N	104°03'18.585"W	0.77
6051.00	7.760	256.650	6045.32	-33.86	32.74	19.59	626928.49	606552.24	32°40'01.739"N	104°03'18.685"W	0.78
6114.24	6.090	258.000	6108.09	-31.73	31.06	12.16	626921.06	606550.56	32°40'01.722"N	104°03'18.772"W	2.65
6177.48	5.620	267.680	6171.01	-30.53	30.24	5.78	626914.68	606549.74	32°40'01.714"N	104°03'18.847"W	1.73
6240.72	5.110	270.210	6233.97	-30.06	30.12	-0.13	626908.77	606549.62	32°40'01.713"N	104°03'18.916"W	0.89
6303.96	4.560	272.760	6296.98	-29.87	30.25	-5.46	626903.44	606549.75	32°40'01.715"N	104°03'18.978"W	0.93
6367.20	3.710	273.960	6360.06	-29.86	30.52	-10.01	626898.89	606550.01	32°40'01.718"N	104°03'19.032"W	1.35
6430.44	3.000	274.490	6423.19	-29.91	30.79	-13.70	626895.20	606550.29	32°40'01.720"N	104°03'19.075"W	1.12
6493.68	2.990	273.100	6486.34	-29.93	31.01	-17.00	626891.90	606550.50	32°40'01.723"N	104°03'19.113"W	0.12
6556.92	1.490	281.810	6549.53	-30.04	31.26	-19.45	626889.45	606550.76	32°40'01.725"N	104°03'19.142"W	2.43
6620.16	1.130	284.930	6612.76	-30.28	31.59	-20.86	626888.05	606551.09	32°40'01.729"N	104°03'19.159"W	0.58
6683.40	0.990	293.530	6675.99	-30.60	31.97	-21.96	626886.94	606551.47	32°40'01.732"N	104°03'19.171"W	0.33
6746.64	1.010	291.030	6739.22	-30.95	32.39	-22.98	626885.92	606551.89	32°40'01.736"N	104°03'19.183"W	0.08
6809.88	0.780	300.720	6802.45	-31.32	32.81	-23.87	626885.03	606552.31	32°40'01.741"N	104°03'19.194"W	0.43
6873.12	0.640	255.550	6865.68	-31.41	32.94	-24.58	626884.32	606552.44	32°40'01.742"N	104°03'19.202"W	0.89
6999.60	0.640	243.600	6992.16	-30.84	32.45	-25.90	626883.00	606551.95	32°40'01.737"N	104°03'19.217"W	0.11
7062.84	0.500	214.530	7055.39	-30.43	32.07	-26.37	626882.53	606551.56	32°40'01.733"N	104°03'19.223"W	0.50
7126.08	0.850	198.010	7118.63	-29.74	31.39	-26.67	626882.23	606550.89	32°40'01.727"N	104°03'19.227"W	0.63
7189.32	1.230	200.380	7181.86	-28.63	30.31	-27.06	626881.85	606549.81	32°40'01.716"N	104°03'19.231"W	0.60
7252.56	1.590	215.480	7245.08	-27.24	28.96	-27.80	626881.10	606548.46	32°40'01.703"N	104°03'19.240"W	0.81
7315.80	1.800	217.260	7308.29	-25.67	27.46	-28.91	626879.99	606546.95	32°40'01.688"N	104°03'19.253"W	0.34
7379.04	1.550	216.030	7371.50	-24.12	25.97	-30.02	626878.89	606545.47	32°40'01.673"N	104°03'19.266"W	0.40
7442.28	1.940	214.680	7434.71	-22.49	24.40	-31.13	626877.77	606543.90	32°40'01.658"N	104°03'19.279"W	0.62
7505.52	2.380	213.930	7497.91	-20.44	22.43	-32.47	626876.43	606541.93	32°40'01.638"N	104°03'19.295"W	0.70
7568.76	2.550	214.630	7561.09	-18.11	20.18	-34.00	626874.90	606539.68	32°40'01.616"N	104°03'19.313"W	0.27
7632.00	2.700	210.040	7624.26	-15.57	17.74	-35.55	626873.36	606537.24	32°40'01.592"N	104°03'19.331"W	0.41
7683.00	2.600	202.100	7675.21	-13.40	15.63	-36.58	626872.32	606535.12	32°40'01.571"N	104°03'19.343"W	0.75
7715.00	7.400	182.100	7707.08	-10.65	12.89	-36.93	626871.97	606532.39	32°40'01.544"N	104°03'19.347"W	15.74
7746.00	14.200	180.000	7737.51	-4.85	7.09	-37.01	626871.90	606526.59	32°40'01.486"N	104°03'19.348"W	21.97
7778.00	21.000	178.200	7768.00	-4.79	-2.58	-36.83	626872.08	606516.92	32°40'01.391"N	104°03'19.346"W	21.32
7810.00	28.500	178.400	7797.04	18.12	-15.96	-36.43	626872.47	606503.54	32°40'01.258"N	104°03'19.342"W	23.44
7842.00	35.100	180.600	7824.22	34.93	-32.81	-36.32	626872.59	606486.69	32°40'01.092"N	104°03'19.341"W	20.94
7873.00	42.600	181.700	7848.35	54.35	-52.24	-36.72	626872.18	606467.27	32°40'00.899"N	104°03'19.347"W	24.29
7905.00	49.200	183.300	7870.60	77.31	-75.18	-37.74	626871.16	606444.32	32°40'00.672"N	104°03'19.359"W	20.93
7937.00	57.000	185.200	7889.80	-102.88	-100.68	-39.66	626869.25	606418.83	32°40'00.420"N	104°03'19.382"W	24.83
7969.00	63.600	186.700	7905.65	130.63	-128.31	-42.55	626866.36	606391.20	32°40'00.147"N	104°03'19.417"W	21.02
8001.00	71.600	188.400	7917.84	160.11	-157.61	-46.44	626862.46	606361.90	32°39'59.857"N	104°03'19.464"W	25.48
8033.00	77.800	187.800	7926.28	190.86	-188.15	-50.79	626858.12	606331.36	32°39'59.555"N	104°03'19.515"W	19.46
8065.00	85.900	186.800	7930.81	222.44	-219.55	-54.81	626854.10	606299.97	32°39'59.245"N	104°03'19.563"W	25.50
8097.00	86.800	187.200	7932.85	254.31	-251.24	-58.70	626850.21	606268.28	32°39'58.931"N	104°03'19.610"W	3.08



Actual Wellpath Report

No. 6H AWP

Page 5 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 6H SHL
Area	Eddy County, NM	Well	No. 6H
Field	Parkway	Wellbore	No. 6H AWB
Facility	Parkway State Com No. 6H		

WELLPATH DATA (212 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]
8129.00	86.800	187.200	7934.63	286.19	-282.94	-62.70	626846.20	606236.58	32°39'58.617"N	104°03'19.658"W	0.00
8161.00	86.800	187.500	7936.42	318.07	-314.63	-66.79	626842.11	606204.90	32°39'58.304"N	104°03'19.706"W	0.94
8192.00	86.800	187.200	7938.15	348.95	-345.33	-70.75	626838.15	606174.20	32°39'58.000"N	104°03'19.754"W	0.97
8224.00	86.800	187.400	7939.93	380.83	-377.02	-74.81	626834.10	606142.52	32°39'57.687"N	104°03'19.802"W	0.62
8256.00	86.600	187.600	7941.78	412.69	-408.69	-78.98	626829.93	606110.84	32°39'57.374"N	104°03'19.852"W	0.88
8288.00	86.000	186.500	7943.84	444.56	-440.38	-82.90	626826.01	606079.16	32°39'57.060"N	104°03'19.899"W	3.91
8320.00	85.700	186.400	7946.16	476.44	-472.10	-86.49	626822.42	606047.44	32°39'56.746"N	104°03'19.942"W	0.99
8352.00	85.300	185.300	7948.67	508.31	-503.83	-89.74	626819.17	606015.71	32°39'56.433"N	104°03'19.981"W	3.65
8383.00	85.100	185.000	7951.26	539.19	-534.60	-92.51	626816.40	605984.95	32°39'56.128"N	104°03'20.014"W	1.16
8415.00	85.700	184.900	7953.83	571.07	-566.37	-95.26	626813.65	605953.17	32°39'55.814"N	104°03'20.047"W	1.90
8447.00	85.900	185.000	7956.17	602.98	-598.17	-98.02	626810.89	605921.38	32°39'55.499"N	104°03'20.080"W	0.70
8478.00	86.500	184.900	7958.23	633.90	-628.99	-100.68	626808.22	605890.57	32°39'55.195"N	104°03'20.113"W	1.96
8510.00	87.300	184.300	7959.96	665.84	-660.84	-103.25	626805.66	605858.72	32°39'54.879"N	104°03'20.144"W	3.12
8542.00	88.100	184.600	7961.24	697.81	-692.71	-105.73	626803.18	605826.85	32°39'54.564"N	104°03'20.174"W	2.67
8606.00	88.100	182.600	7963.36	761.77	-756.55	-109.74	626799.16	605763.02	32°39'53.933"N	104°03'20.222"W	3.12
8669.00	87.900	181.300	7965.56	824.71	-819.47	-111.89	626797.02	605700.10	32°39'53.310"N	104°03'20.249"W	2.09
8732.00	87.800	181.000	7967.93	887.62	-882.42	-113.15	626795.76	605637.16	32°39'52.687"N	104°03'20.266"W	0.50
8796.00	88.300	181.100	7970.10	951.52	-946.37	-114.32	626794.59	605573.21	32°39'52.055"N	104°03'20.282"W	0.80
8860.00	88.600	181.200	7971.84	1015.45	-1010.33	-115.61	626793.30	605509.25	32°39'51.422"N	104°03'20.299"W	0.49
8924.00	88.900	180.900	7973.23	1079.38	-1074.30	-116.78	626792.13	605445.29	32°39'50.789"N	104°03'20.314"W	0.66
8987.00	89.100	180.200	7974.33	1142.29	-1137.29	-117.38	626791.53	605382.30	32°39'50.166"N	104°03'20.323"W	1.16
9051.00	89.000	180.200	7975.39	1206.18	-1201.28	-117.61	626791.30	605318.32	32°39'49.532"N	104°03'20.328"W	0.16
9115.00	89.100	179.700	7976.45	1270.05	-1265.27	-117.55	626791.36	605254.33	32°39'48.899"N	104°03'20.329"W	0.80
9178.00	89.200	180.300	7977.39	1332.93	-1328.27	-117.55	626791.36	605191.35	32°39'48.276"N	104°03'20.331"W	0.97
9242.00	89.400	181.600	7978.17	1396.86	-1392.25	-118.61	626790.30	605127.37	32°39'47.643"N	104°03'20.346"W	2.05
9306.00	89.400	183.200	7978.84	1460.84	-1456.19	-121.29	626787.62	605063.43	32°39'47.010"N	104°03'20.379"W	2.50
9370.00	89.400	183.000	7979.51	1524.84	-1520.09	-124.75	626784.16	604999.54	32°39'46.378"N	104°03'20.421"W	0.31
9433.00	89.600	182.300	7980.06	1587.83	-1583.02	-127.67	626781.25	604936.61	32°39'45.756"N	104°03'20.457"W	1.16
9497.00	89.700	182.200	7980.45	1651.82	-1646.97	-130.18	626778.73	604872.67	32°39'45.123"N	104°03'20.489"W	0.22
9560.00	89.800	181.600	7980.73	1714.79	-1709.94	-132.27	626776.64	604809.71	32°39'44.500"N	104°03'20.515"W	0.97
9624.00	89.500	181.300	7981.12	1778.75	-1773.91	-133.89	626775.03	604745.74	32°39'43.867"N	104°03'20.536"W	0.66
9688.00	89.900	181.100	7981.45	1842.70	-1837.90	-135.23	626773.68	604681.76	32°39'43.234"N	104°03'20.554"W	0.70
9752.00	90.300	181.300	7981.34	1906.65	-1901.88	-136.57	626772.34	604617.78	32°39'42.601"N	104°03'20.571"W	0.70
9815.00	90.200	181.000	7981.07	1969.60	-1964.87	-137.83	626771.08	604554.79	32°39'41.978"N	104°03'20.588"W	0.50
9879.00	89.500	181.500	7981.23	2033.55	-2028.86	-139.23	626769.68	604490.82	32°39'41.345"N	104°03'20.606"W	1.34
9943.00	88.900	182.200	7982.13	2097.52	-2092.82	-141.29	626767.62	604426.86	32°39'40.712"N	104°03'20.632"W	1.44
10006.00	88.800	182.300	7983.39	2160.50	-2155.75	-143.77	626765.15	604363.93	32°39'40.089"N	104°03'20.663"W	0.22
10070.00	88.200	182.900	7985.07	2224.47	-2219.67	-146.67	626762.24	604300.02	32°39'39.457"N	104°03'20.699"W	1.33
10133.00	87.900	182.900	7987.21	2287.43	-2282.55	-149.85	626759.06	604237.14	32°39'38.835"N	104°03'20.738"W	0.48
10197.00	88.000	183.200	7989.50	2351.39	-2346.42	-153.26	626755.66	604173.28	32°39'38.203"N	104°03'20.780"W	0.49
10260.00	88.400	183.100	7991.48	2414.35	-2409.29	-156.72	626752.20	604110.41	32°39'37.581"N	104°03'20.822"W	0.65
10324.00	88.800	183.500	7993.04	2478.33	-2473.16	-160.40	626748.51	604046.54	32°39'36.949"N	104°03'20.867"W	0.88
10388.00	89.500	183.500	7993.99	2542.33	-2537.04	-164.31	626744.61	603982.68	32°39'36.317"N	104°03'20.915"W	1.09
10451.00	89.600	183.400	7994.49	2605.32	-2599.92	-168.10	626740.82	603919.80	32°39'35.695"N	104°03'20.961"W	0.22
10515.00	89.700	183.600	7994.88	2669.32	-2663.80	-172.00	626736.91	603855.92	32°39'35.063"N	104°03'21.009"W	0.35



Actual Wellpath Report

No. 6H AWP

Page 6 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 6H SHL
Area	Eddy County, NM	Well	No. 6H
Field	Parkway	Wellbore	No. 6H AWB
Facility	Parkway State Com No. 6H		

WELLPATH DATA (212 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]
10579.00	89.900	183.600	7995.10	2733.32	-2727.67	-176.02	626732.89	603792.06	32°39'34.431"N	104°03'21.058"W	0.31
10642.00	89.700	182.800	7995.32	2796.32	-2790.58	-179.54	626729.38	603729.16	32°39'33.809"N	104°03'21.101"W	1.31
10706.00	89.800	183.300	7995.60	2860.32	-2854.48	-182.95	626725.97	603665.26	32°39'33.177"N	104°03'21.143"W	0.80
10770.00	89.700	183.500	7995.88	2924.32	-2918.37	-186.74	626722.18	603601.38	32°39'32.545"N	104°03'21.189"W	0.35
10832.00	89.200	182.700	7996.47	2986.31	-2980.28	-190.09	626718.82	603539.48	32°39'31.932"N	104°03'21.230"W	1.52
10895.00	89.000	182.500	7997.46	3049.30	-3043.20	-192.95	626715.97	603476.55	32°39'31.310"N	104°03'21.266"W	0.45
10959.00	89.100	182.700	7998.52	3113.28	-3107.13	-195.85	626713.06	603412.63	32°39'30.677"N	104°03'21.302"W	0.35
11023.00	89.500	183.900	7999.31	3177.28	-3171.02	-199.54	626709.38	603348.75	32°39'30.045"N	104°03'21.347"W	1.98
11086.00	89.300	184.300	7999.97	3240.27	-3233.85	-204.04	626704.88	603285.92	32°39'29.424"N	104°03'21.401"W	0.71
11150.00	89.200	183.600	8000.80	3304.26	-3297.69	-208.45	626700.47	603222.08	32°39'28.792"N	104°03'21.455"W	1.10
11213.00	89.900	184.300	8001.30	3367.26	-3360.54	-212.79	626696.13	603159.24	32°39'28.170"N	104°03'21.507"W	1.57
11277.00	89.900	184.200	8001.41	3431.25	-3424.37	-217.53	626691.39	603095.42	32°39'27.539"N	104°03'21.565"W	0.16
11340.00	89.500	184.300	8001.74	3494.24	-3487.19	-222.20	626686.72	603032.60	32°39'26.917"N	104°03'21.621"W	0.65
11404.00	88.900	184.100	8002.63	3558.23	-3551.01	-226.89	626682.03	602968.79	32°39'26.286"N	104°03'21.678"W	0.99
11467.00	88.200	184.000	8004.23	3621.21	-3613.84	-231.34	626677.58	602905.97	32°39'25.665"N	104°03'21.732"W	1.12
11531.00	87.600	184.700	8006.57	3685.15	-3677.61	-236.19	626672.73	602842.20	32°39'25.034"N	104°03'21.791"W	1.44
11594.00	87.900	184.600	8009.05	3748.09	-3740.35	-241.29	626667.63	602779.46	32°39'24.413"N	104°03'21.852"W	0.50
11658.00	88.800	185.000	8010.89	3812.05	-3804.10	-246.64	626662.28	602715.72	32°39'23.782"N	104°03'21.917"W	1.54
11722.00	88.700	185.300	8012.29	3876.00	-3867.83	-252.39	626656.53	602652.00	32°39'23.152"N	104°03'21.986"W	0.49
11785.00	89.600	184.900	8013.22	3938.97	-3930.57	-257.99	626650.94	602589.26	32°39'22.531"N	104°03'22.053"W	1.56
11849.00	89.500	185.100	8013.72	4002.94	-3994.32	-263.56	626645.36	602525.51	32°39'21.901"N	104°03'22.121"W	0.35
11912.00	89.600	185.900	8014.22	4065.90	-4057.03	-269.60	626639.32	602462.81	32°39'21.280"N	104°03'22.193"W	1.28
11976.00	89.200	187.000	8014.89	4129.81	-4120.62	-276.79	626632.13	602399.23	32°39'20.651"N	104°03'22.279"W	1.83
12039.00	89.300	186.200	8015.71	4192.70	-4183.20	-284.03	626624.89	602336.66	32°39'20.032"N	104°03'22.366"W	1.28
12102.00	89.000	185.000	8016.65	4255.65	-4245.89	-290.18	626618.75	602273.97	32°39'19.412"N	104°03'22.440"W	1.96
12166.00	90.300	184.300	8017.04	4319.63	-4309.68	-295.37	626613.56	602210.19	32°39'18.781"N	104°03'22.502"W	2.31
12230.00	90.800	184.800	8016.42	4383.62	-4373.47	-300.44	626608.48	602146.40	32°39'18.150"N	104°03'22.564"W	1.10
12293.00	90.300	184.800	8015.82	4446.60	-4436.25	-305.72	626603.21	602083.63	32°39'17.529"N	104°03'22.627"W	0.79
12357.00	90.200	184.800	8015.54	4510.58	-4500.02	-311.07	626597.86	602019.86	32°39'16.898"N	104°03'22.692"W	0.16
12420.00	90.600	184.700	8015.10	4573.56	-4562.80	-316.29	626592.64	601957.08	32°39'16.277"N	104°03'22.755"W	0.65
12429.00	90.500	184.600	8015.01	4582.56	-4571.77	-317.02	626591.91	601948.11	32°39'16.188"N	104°03'22.763"W	1.57
12475.00	90.500	184.600	8014.61	4628.55	-4617.62	-320.71	626588.22	601902.27	32°39'15.735"N	104°03'22.808"W	0.00



Actual Wellpath Report

No. 6H AWP

Page 7 of 7



REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 6H SHL
Area	Eddy County, NM	Well	No. 6H
Field	Parkway	Wellbore	No. 6H AWB
Facility	Parkway State Com No. 6H		

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No. 6H PBHL		8026.00	-4624.72	-278.17	626630.75	601895.17	32°39'15.664"N	104°03'22.311"W	point

WELLPATH COMPOSITION - Ref Wellbore: No. 6H AWB Ref Wellpath: No. 6H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
18.00	7568.76	Generic gyro - northseeking (Standard)	Gyro	No. 6H AWB
7568.76	12475.00	NaviTrak (Standard)	MWD	No. 6H AWB



Company: Cimarex Energy
 Lease/Well: Parkway State Com/#6H
 Location: 17 Miles Northeast Of Carlsbad
 Rig Name: Key 881
 State/County: New Mexico/Eddy
 Latitude: 32.67
 GRID North is 0.15 Degrees East of True North
 VS-Azi: 355.52 Degrees



Depth Reference : RKB=18 Feet

DRILLOG MS GYRO SURVEY CALCULATIONS

Filename: parkwaycom6h-01_ed.ut
 Minimum Curvature Method
 Report Date/Time: 5/4/2011 / 14:24

Vaughn Energy Services
 Fort Worth, TX
 817-741-3610
 Surveyor: James Proulx
 Parkway State Com #6H

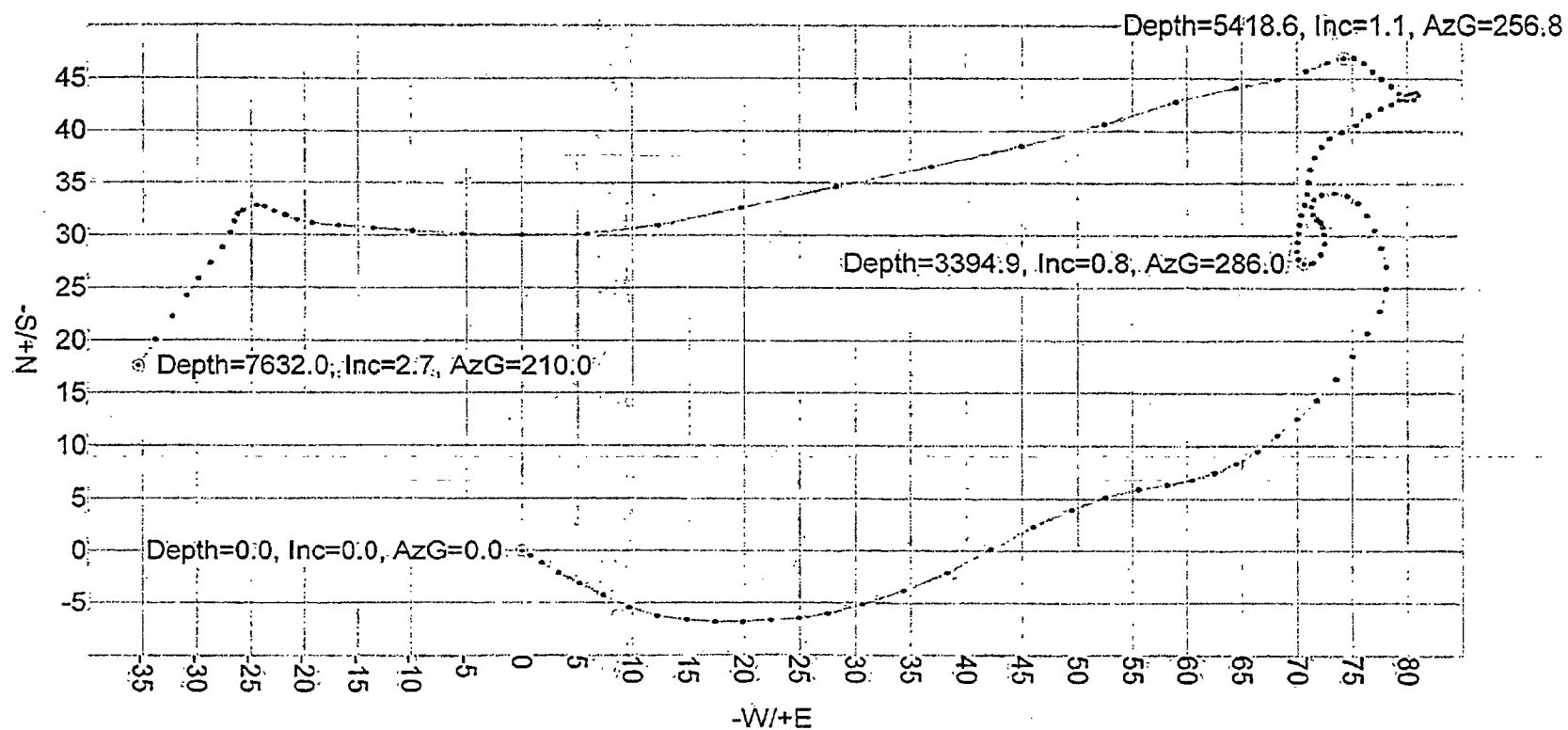
Measured Depth FT	Incl Angle Deg	Drift Direction Deg	TVD FT	+N/-S FT	+E/-W FT	Vertical Section FT	Closure Distance FT	Closure Direction Deg	Doglog Severity Deg/100
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
106.44	0.93	121.74	106.44	-0.46	0.74	-0.51	0.87	121.74	0.88
169.68	1.39	125.00	169.66	-1.18	1.79	-1.31	2.15	123.26	0.73
232.92	1.79	118.83	232.88	-2.10	3.28	-2.35	3.90	122.67	0.71
296.16	2.18	117.04	296.08	-3.13	5.22	-3.52	6.08	120.94	0.62
359.40	2.25	118.33	359.27	-4.26	7.38	-4.83	8.52	120.01	0.14
422.64	2.38	115.13	422.46	-5.41	9.66	-6.15	11.07	119.24	0.28
485.88	2.47	101.31	485.64	-6.23	12.19	-7.17	13.69	117.09	0.93
549.12	2.31	94.05	548.83	-6.59	14.80	-7.73	16.20	114.01	0.54
612.36	2.29	95.09	612.02	-6.79	17.33	-8.13	18.61	111.41	0.07
675.60	2.32	85.30	675.21	-6.80	19.86	-8.33	20.99	108.91	0.62
738.84	2.31	87.12	738.40	-6.63	22.41	-8.36	23.37	106.49	0.12
802.08	2.32	83.80	801.58	-6.43	24.96	-8.36	25.77	104.45	0.21
865.32	2.45	77.84	864.77	-6.01	27.55	-8.14	28.20	102.30	0.44
928.56	3.37	70.95	927.93	-5.11	30.63	-7.49	31.06	99.48	1.55
991.80	3.85	70.79	991.04	-3.81	34.40	-6.48	34.61	96.32	0.76
1055.04	3.99	62.16	1054.13	-2.08	38.35	-5.07	38.40	93.11	0.96
1118.28	4.04	57.10	1117.22	0.15	42.16	-3.14	42.16	89.79	0.57
1181.52	3.91	63.79	1180.31	2.32	45.97	-1.28	46.03	87.11	0.76

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
1244.76	3.04	65.74	1243.43	3.96	49.43	0.09	49.59	85.42	1.39
1308.00	2.98	71.06	1306.58	5.18	52.52	1.07	52.77	84.36	0.45
1371.24	2.63	81.58	1369.75	5.93	55.51	1.58	55.83	83.90	0.99
1434.48	2.25	80.91	1432.93	6.34	58.17	1.78	58.51	83.78	0.61
1497.72	1.98	76.10	1496.13	6.80	60.46	2.05	60.84	83.59	0.50
1560.96	1.94	67.24	1559.33	7.47	62.51	2.57	62.95	83.18	0.48
1624.20	1.99	65.04	1622.53	8.35	64.49	3.29	65.03	82.62	0.14
1687.44	2.15	51.85	1685.73	9.55	66.42	4.33	67.10	81.82	0.79
1750.68	2.04	48.91	1748.93	11.02	68.20	5.66	69.09	80.82	0.24
1813.92	2.28	47.05	1812.12	12.62	69.97	7.12	71.10	79.77	0.40
1877.16	2.39	43.95	1875.31	14.43	71.81	8.78	73.25	78.64	0.26
1940.40	2.40	36.55	1938.50	16.44	73.51	10.65	75.33	77.39	0.49
2003.64	2.40	32.25	2001.68	18.63	75.01	12.71	77.29	76.05	0.28
2066.88	2.21	32.10	2064.87	20.78	76.36	14.75	79.14	74.78	0.31
2130.12	2.09	24.05	2128.07	22.87	77.48	16.74	80.78	73.56	0.51
2193.36	1.99	7.63	2191.27	25.01	78.10	18.83	82.00	72.25	0.93
2256.60	1.78	350.46	2254.47	27.06	78.08	20.88	82.64	70.58	0.95
2319.84	1.64	342.58	2317.68	28.89	77.65	22.74	82.85	69.59	0.43
2383.08	1.54	337.35	2380.90	30.54	77.05	24.43	82.88	68.38	0.28
2446.32	1.36	331.55	2444.12	31.99	76.36	25.93	82.79	67.27	0.37
2509.56	1.25	318.11	2507.34	33.16	75.54	27.16	82.50	66.30	0.52
2572.80	1.03	290.68	2570.57	33.87	74.56	27.95	81.89	65.57	0.92
2636.04	1.12	274.86	2633.80	34.13	73.41	28.29	80.95	65.07	0.49
2699.28	1.05	248.59	2697.03	33.97	72.25	28.22	79.84	64.82	0.79
2762.52	0.60	220.61	2760.26	33.50	71.50	27.82	78.96	64.89	0.93
2825.76	0.76	173.53	2823.50	32.83	71.33	27.16	78.52	65.28	0.89
2889.00	0.61	166.33	2886.74	32.08	71.46	26.40	78.33	65.82	0.27
2952.24	0.54	122.00	2949.97	31.60	71.79	25.89	78.44	66.24	0.70
3015.48	0.22	138.07	3013.21	31.35	72.12	25.62	78.64	66.50	0.53
3078.72	0.67	161.45	3076.45	30.91	72.32	25.17	78.65	66.86	0.76
3141.96	0.64	175.53	3139.68	30.20	72.46	24.45	78.51	67.37	0.26
3205.20	0.93	180.58	3202.92	29.34	72.49	23.59	78.20	67.96	0.46
3268.44	1.20	210.81	3266.15	28.26	72.14	22.54	77.48	68.61	0.97
3331.68	0.81	239.30	3329.38	27.47	71.42	21.80	76.52	68.97	0.98
3394.92	0.75	285.99	3392.61	27.35	70.63	21.75	75.74	68.83	0.99
3458.16	0.67	335.59	3455.85	27.80	70.08	22.24	75.39	68.36	0.95
3521.40	0.83	6.10	3519.08	28.59	69.98	23.03	75.59	67.78	0.67
3584.64	0.72	2.70	3582.32	29.44	70.05	23.88	75.98	67.20	0.18
3647.88	0.82	6.15	3645.55	30.29	70.11	24.72	76.37	66.64	0.18

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
3711.12	0.68	8.84	3708.79	31.11	70.22	25.53	76.80	66.10	0.23
3774.36	0.97	12.87	3772.02	32.01	70.40	26.41	77.33	65.55	0.46
3837.60	0.92	19.46	3835.25	33.01	70.69	27.38	78.01	64.97	0.19
3900.84	1.04	7.23	3898.48	34.05	70.93	28.41	78.68	64.35	0.38
3964.08	1.01	4.64	3961.71	35.17	71.04	29.52	79.27	63.66	0.09
4027.32	1.16	10.72	4024.94	36.36	71.21	30.69	79.95	62.95	0.31
4090.56	1.12	28.51	4088.17	37.53	71.62	31.82	80.86	62.34	0.56
4153.80	1.04	35.03	4151.40	38.55	72.25	32.79	81.89	61.92	0.23
4217.04	0.97	50.39	4214.63	39.36	72.99	33.54	82.93	61.66	0.44
4280.28	1.32	69.11	4277.86	39.96	74.08	34.05	84.17	61.66	0.80
4343.52	1.36	56.54	4341.08	40.63	75.39	34.62	85.64	61.68	0.47
4406.76	1.28	50.05	4404.30	41.50	76.55	35.39	87.08	61.54	0.27
4470.00	1.04	71.99	4467.53	42.13	77.64	35.94	88.33	61.51	0.79
4533.24	0.87	58.89	4530.76	42.55	78.59	36.28	89.37	61.57	0.43
4596.48	0.76	56.58	4593.99	43.03	79.35	36.70	90.27	61.53	0.18
4659.72	0.42	61.53	4657.23	43.37	79.90	37.00	90.91	61.51	0.54
4722.96	0.48	77.40	4720.47	43.54	80.37	37.13	91.40	61.55	0.22
4786.20	0.31	79.90	4783.71	43.63	80.80	37.19	91.83	61.63	0.27
4849.44	0.36	183.24	4846.95	43.46	80.96	37.00	91.89	61.77	0.84
4912.68	0.68	240.68	4910.18	43.07	80.62	36.65	91.40	61.88	0.91
4975.92	0.67	290.86	4973.42	43.02	79.94	36.64	90.79	61.71	0.91
5039.16	0.92	323.41	5036.65	43.56	79.30	37.23	90.48	61.22	0.80
5102.40	1.01	313.34	5099.89	44.34	78.59	38.07	90.24	60.57	0.30
5165.64	0.99	296.56	5163.12	44.97	77.70	38.76	89.78	59.94	0.46
5228.88	0.94	324.61	5226.35	45.64	76.91	39.49	89.43	59.31	0.75
5292.12	1.11	307.51	5289.58	46.44	76.12	40.35	89.17	58.61	0.55
5355.36	0.78	287.17	5352.81	46.94	75.22	40.92	88.67	58.03	0.73
5418.60	1.07	256.81	5416.04	46.93	74.23	40.99	87.82	57.70	0.89
5481.84	1.67	250.78	5479.26	46.49	72.78	40.67	86.37	57.43	0.96
5545.08	2.15	247.25	5542.47	45.73	70.82	40.06	84.30	57.15	0.79
5608.32	2.64	256.75	5605.65	44.94	68.30	39.47	81.76	56.66	0.99
5671.56	4.47	259.48	5668.77	44.15	64.46	38.98	78.13	55.59	2.90
5734.80	5.75	252.45	5731.76	42.75	59.02	38.01	72.87	54.08	2.25
5798.04	6.74	252.30	5794.62	40.66	52.46	36.44	66.37	52.22	1.56
5861.28	7.37	255.81	5857.38	38.54	44.99	34.91	59.24	49.41	1.22
5924.52	7.77	257.49	5920.07	36.62	36.88	33.63	51.98	45.21	0.71
5987.76	8.25	256.91	5982.69	34.67	28.29	32.35	44.75	39.22	0.78
6051.00	7.76	256.65	6045.32	32.65	19.72	31.01	38.15	31.13	0.79
6114.24	6.09	258.00	6108.09	30.97	12.28	29.92	33.32	21.64	2.65



Vaughn Energy Services
Fort Worth, TX
817-741-3610
Surveyor: James Proulx
Parkway State Com #6H



VES