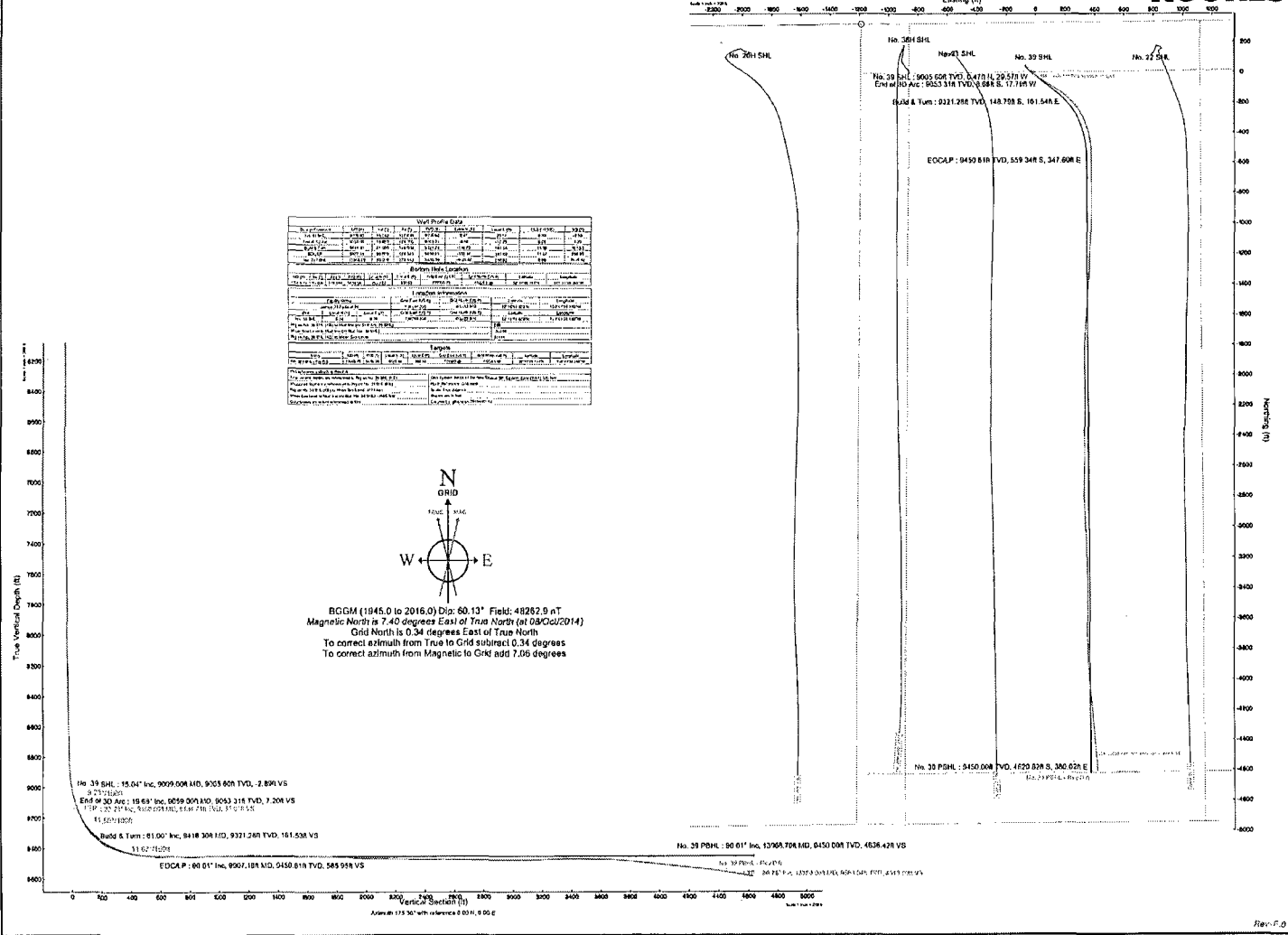


HOBBS OCD
MAY 27 2015
RECEIVED

30-025-42091



Cimarex Energy Co.
Location: Lea County, NM
Field: (James Federal) Sec 29, T5 23 S, R 32 E
Facility: James 29 Federal 39
Slot: No. 39 SHL
Well: No. 39
Wellbore: No. 39 PWB



MAY 29 2015



Actual Wellpath Report

No. 39 AWB

Page 6 of 8



REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 39 SHL
Area	Lea County, NM	Well	No. 39
Field	(James Federal) Sec 29, TS 23 S, R 32 E	Wellbore	No. 39 AWB
Facility	James 29 Federal 39		

WELLPATH DATA (172 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
9668.00	74.520	153.380	9414.81	329.88	-304.23	325.44	739605.62	466579.69	32°16'51.859"N	103°41'30.390"W	445.49	133.070	13.58
9699.00	76.320	157.320	9422.62	358.07	-331.49	337.95	739618.13	466552.43	32°16'51.589"N	103°41'30.246"W	473.38	134.447	13.60
9730.00	78.490	160.280	9429.38	387.08	-359.69	348.88	739629.06	466524.23	32°16'51.309"N	103°41'30.121"W	501.09	135.874	11.65
9761.00	80.680	163.770	9434.98	416.74	-388.69	358.29	739638.47	466495.23	32°16'51.022"N	103°41'30.013"W	528.63	137.331	13.13
9793.00	82.900	167.620	9439.56	447.97	-419.37	366.14	739646.29	466464.55	32°16'50.718"N	103°41'29.925"W	556.69	138.879	13.78
9824.00	84.850	170.860	9442.86	478.61	-449.64	371.86	739652.04	466434.28	32°16'50.418"N	103°41'29.860"W	583.49	140.409	12.15
9856.00	85.870	174.610	9445.45	510.47	-481.28	375.89	739656.07	466402.65	32°16'50.104"N	103°41'29.815"W	610.67	142.009	12.11
9920.00	89.720	179.690	9447.92	574.35	-545.12	379.06	739659.25	466338.81	32°16'49.473"N	103°41'29.782"W	663.96	145.186	9.95
10015.00	89.140	179.360	9448.86	669.09	-640.11	379.85	739660.03	466243.82	32°16'48.533"N	103°41'29.780"W	744.33	149.314	0.70
10110.00	87.750	178.150	9451.44	763.88	-735.05	381.91	739662.10	466148.89	32°16'47.593"N	103°41'29.762"W	828.34	152.545	1.94
10205.00	91.720	180.100	9451.88	858.64	-830.01	383.36	739663.55	466053.93	32°16'46.653"N	103°41'29.752"W	914.27	155.209	4.66
10300.00	90.990	181.090	9449.63	953.21	-924.98	382.38	739662.56	465958.97	32°16'45.714"N	103°41'29.770"W	1000.90	157.540	1.29
10394.00	90.740	182.240	9448.21	1046.62	-1018.93	379.65	739659.83	465865.02	32°16'44.784"N	103°41'29.809"W	1087.36	159.565	1.25
10488.00	92.780	182.590	9445.33	1139.84	-1112.79	375.69	739655.87	465771.16	32°16'43.856"N	103°41'29.861"W	1174.50	161.345	2.20
10583.00	89.040	181.870	9443.82	1234.12	-1207.69	371.99	739652.18	465676.27	32°16'42.917"N	103°41'29.911"W	1263.69	162.880	4.01
10678.00	88.800	181.830	9445.61	1328.48	-1302.63	368.93	739649.11	465581.34	32°16'41.978"N	103°41'29.953"W	1353.86	164.187	0.26
10773.00	90.150	184.150	9446.48	1422.61	-1397.48	363.97	739644.16	465486.48	32°16'41.039"N	103°41'30.018"W	1444.10	165.402	2.83
10867.00	89.480	185.110	9446.78	1515.37	-1491.18	356.39	739636.57	465392.80	32°16'40.113"N	103°41'30.112"W	1533.17	166.559	1.25
10962.00	88.550	183.280	9448.42	1609.21	-1585.90	349.44	739629.62	465298.07	32°16'39.176"N	103°41'30.200"W	1623.94	167.574	2.16
11058.00	88.270	183.840	9451.08	1704.17	-1681.68	343.48	739623.66	465202.30	32°16'38.229"N	103°41'30.276"W	1716.40	168.456	0.65
11153.00	88.180	182.720	9454.02	1798.21	-1776.48	338.05	739618.23	465107.51	32°16'37.291"N	103°41'30.346"W	1808.35	169.226	1.18
11248.00	87.470	179.560	9457.63	1892.63	-1871.38	336.16	739616.34	465012.61	32°16'36.352"N	103°41'30.375"W	1901.33	169.817	3.41
11342.00	87.970	179.240	9461.37	1986.32	-1965.30	337.14	739617.32	464918.70	32°16'35.423"N	103°41'30.370"W	1994.00	170.266	0.63
11437.00	88.890	179.450	9463.97	2081.04	-2060.25	338.23	739618.41	464823.75	32°16'34.483"N	103°41'30.364"W	2087.83	170.677	0.99
11533.00	88.700	179.870	9465.99	2176.74	-2156.23	338.80	739618.98	464727.77	32°16'33.533"N	103°41'30.364"W	2182.68	171.070	0.48
11628.00	88.700	180.840	9468.15	2271.35	-2251.20	338.21	739618.39	464632.80	32°16'32.593"N	103°41'30.377"W	2276.47	171.456	1.02
11723.00	89.320	179.790	9469.79	2365.97	-2346.19	337.68	739617.87	464537.83	32°16'31.654"N	103°41'30.390"W	2370.36	171.810	1.28
11817.00	90.310	179.590	9470.09	2459.69	-2440.18	338.19	739618.38	464443.83	32°16'30.724"N	103°41'30.390"W	2463.51	172.109	1.07
11912.00	89.780	180.460	9470.02	2554.37	-2535.18	338.15	739618.34	464348.84	32°16'29.784"N	103°41'30.398"W	2557.63	172.403	1.07
12007.00	89.110	181.500	9470.94	2648.89	-2630.16	336.53	739616.71	464253.87	32°16'28.844"N	103°41'30.423"W	2651.60	172.709	1.30



Actual Wellpath Report

No. 39 AWB

Page 7 of 8



REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co.	Slot	No. 39 SHL
Area	Lea County, NM	Well	No. 39
Field	(James Federal) Sec 29, TS 23 S, R 32 E	Wellbore	No. 39 AWB
Facility	James 29 Federal 39		

WELLPATH DATA (172 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
12102.00	88.400	181.130	9473.00	2743.35	-2725.11	334.35	739614.53	464158.92	32°16'27.904"N	103°41'30.455"W	2745.55	173.005	0.84
12197.00	90.060	178.280	9474.28	2838.05	-2820.09	334.84	739615.02	464063.95	32°16'26.965"N	103°41'30.456"W	2839.90	173.229	3.47
12291.00	89.690	177.490	9474.48	2931.95	-2914.02	338.31	739618.49	463970.02	32°16'26.035"N	103°41'30.422"W	2933.60	173.378	0.93
12386.00	90.060	176.910	9474.69	3026.90	-3008.91	342.95	739623.13	463875.13	32°16'25.096"N	103°41'30.375"W	3028.39	173.498	0.72
12481.00	90.520	177.340	9474.21	3121.85	-3103.79	347.71	739627.89	463780.26	32°16'24.157"N	103°41'30.326"W	3123.21	173.608	0.66
12576.00	91.720	178.370	9472.35	3216.73	-3198.70	351.27	739631.45	463685.35	32°16'23.217"N	103°41'30.291"W	3217.93	173.733	1.66
12671.00	92.280	178.820	9469.04	3311.51	-3293.61	353.59	739633.78	463590.44	32°16'22.278"N	103°41'30.270"W	3312.54	173.872	0.76
12772.00	89.600	179.470	9467.38	3412.26	-3394.58	355.10	739635.28	463489.48	32°16'21.279"N	103°41'30.260"W	3413.10	174.028	2.73
12867.00	89.080	178.920	9468.47	3507.04	-3489.56	356.44	739636.62	463394.50	32°16'20.339"N	103°41'30.251"W	3507.72	174.168	0.80
12962.00	88.580	179.950	9470.41	3601.77	-3584.54	357.37	739637.56	463299.53	32°16'19.399"N	103°41'30.247"W	3602.31	174.307	1.20
13058.00	87.100	179.920	9474.03	3697.38	-3680.47	357.48	739637.66	463203.61	32°16'18.450"N	103°41'30.252"W	3697.79	174.452	1.54
13153.00	84.540	178.370	9480.96	3791.91	-3775.19	358.89	739639.08	463108.89	32°16'17.513"N	103°41'30.242"W	3792.21	174.569	3.15
13248.00	84.230	177.230	9490.25	3886.36	-3869.67	362.52	739642.70	463014.42	32°16'16.578"N	103°41'30.207"W	3886.61	174.648	1.24
13343.00	84.320	176.220	9499.73	3980.85	-3964.04	367.92	739648.10	462920.05	32°16'15.643"N	103°41'30.150"W	3981.07	174.697	1.06
13437.00	84.250	174.410	9509.09	4074.38	-4057.25	375.56	739655.74	462826.84	32°16'14.721"N	103°41'30.068"W	4074.60	174.711	1.92
13532.00	83.630	174.100	9519.12	4168.84	-4151.25	385.02	739665.20	462732.85	32°16'13.790"N	103°41'29.964"W	4169.06	174.701	0.73
13628.00	84.120	174.660	9529.36	4264.28	-4246.24	394.36	739674.55	462637.86	32°16'12.849"N	103°41'29.862"W	4264.51	174.694	0.77
13723.00	82.300	175.610	9540.59	4358.60	-4340.23	402.37	739682.55	462543.88	32°16'11.919"N	103°41'29.775"W	4358.84	174.703	2.16
13817.00	81.500	174.300	9553.84	4451.66	-4432.93	410.55	739690.73	462451.19	32°16'11.001"N	103°41'29.687"W	4451.90	174.709	1.62
13912.00	80.420	175.310	9568.77	4545.48	-4526.36	419.04	739699.22	462357.76	32°16'10.076"N	103°41'29.594"W	4545.71	174.711	1.55
13942.00	79.740	175.300	9573.93	4575.03	-4555.81	421.46	739701.64	462328.31	32°16'09.785"N	103°41'29.568"W	4575.26	174.715	2.27
13997.00	79.740	175.300	9583.73	4629.15	-4609.75	425.90	739706.08	462274.37	32°16'09.251"N	103°41'29.520"W	4629.38	174.721	0.00