



Cimarex Energy Co. of Colorado

Location: Eddy County, NM
Field: (Cottonwood) Sec 22, T25S, R26E
Facility: Cottonwood Draw 22 FED COM No. 1H

Slot: No. 1H SHL
Well: No. 1H
Wellbore: No. 1H ST PWB

This reference wellpath is Plan view

True vertical depths are referenced to Rig on No. 1H SHL (RT)

Measured depths are referenced to Rig on No. 1H SHL (RT)

Rig on No. 1H SHL (RT) is Mean Sea Level 3307 feet

Mean Sea Level is used for Facility Cottonwood Draw 22 FED COM No. 1H 3309 feet

Coordinates are in feet referenced to Facility Center

GCS System: NAD83 / TM New Mexico State Plane, Eastern Zone (2011, US Nat)

North Reference: Grid north

Scale: True distance

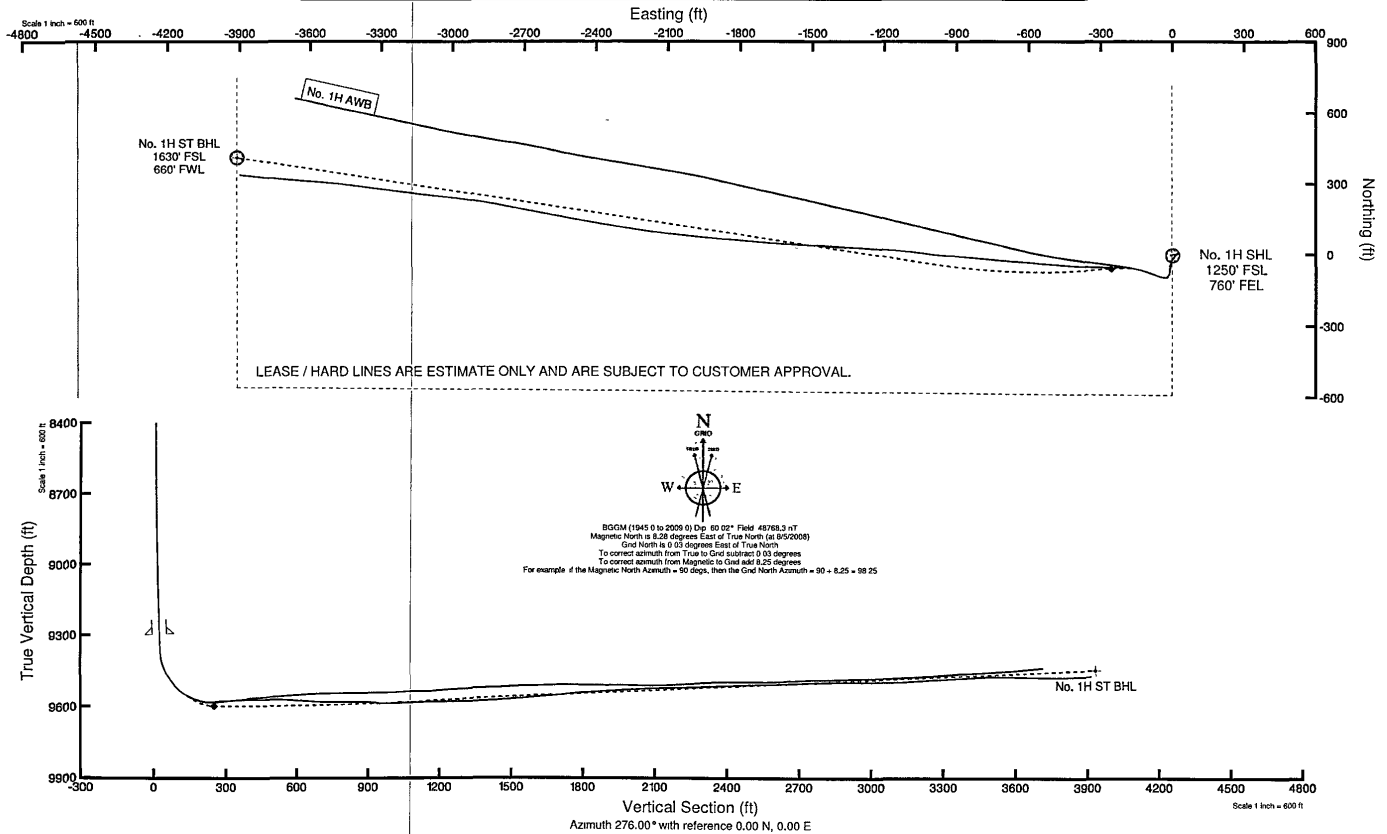
Depths are in feet

Created by: Victor Hernandez on 12/10/2008



Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	9591.00	57.200	284.800	9552.33	-63.70	-137.49	28.50	130.08
EST. KOP	9620.00	56.500	277.000	9568.21	-59.11	-161.30	22.64	154.24
END OF HOLD	9630.00	56.500	277.000	9573.73	-58.09	-169.58	0.00	162.58
END OF CURVE	9722.16	90.000	265.000	9600.00	-57.40	-256.40	38.35	248.99
END OF HOLD	9772.16	90.000	265.000	9600.00	-61.76	-306.20	0.00	298.07
END OF BUILD	10473.95	92.607	278.796	9583.96	-38.62	-1005.67	2.00	996.12
No. 1H ST BHL	13419.48	92.607	278.796	9450.00	411.35	-3913.54	0.00	3935.10





Actual Wellpath Report

No. 1H ST AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H ST AWP
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1H AWP at 9591.00 MD

REPORT SETUP INFORMATION

Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Victor Hernandez
Scale	0.999909	Report Generated	12/10/2008 at 4:40:21 PM
Convergence at slot	0.03° East	Database/Source file	WA_Midland/No._1H_ST_AWP.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	559574.40	404301.30	32°06'41.363"N	104°16'27.952"W
Facility Reference Pt			559574.40	404301.30	32°06'41.363"N	104°16'27.952"W
Field Reference Pt			559574.40	404301.30	32°06'41.363"N	104°16'27.952"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 1H SHL (RT) to Facility Vertical Datum	18.00ft
Horizontal Reference Pt	Facility Center	Rig on No. 1H SHL (RT) to Mean Sea Level	3307.00ft
Vertical Reference Pt	Rig on No. 1H SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 1H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	276.00°



Actual Wellpath Report

No. 1H ST AWP

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REFERENCE WELLPATH IDENTIFICATION					
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Field	(Cottonwood) Sec 22, T25S, R26E			Wellbore	No. 1H ST AWP
Facility	Cottonwood Draw 22 FED COM No. 1H			Sidetrack from	No. 1H AWP at 9591.00 MD

WELLPATH DATA (220 stations)													
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
0.00	0.000	198.310	0.00	0.00	0.00	0.00	559574.40	404301.30	32°06'41.363"N	104°16'27.952"W	0.00	0.000	0.00
100.00	0.450	198.310	100.00	0.08	-0.37	-0.12	559574.28	404300.93	32°06'41.360"N	104°16'27.953"W	0.39	198.310	0.45
200.00	0.680	198.170	199.99	0.29	-1.31	-0.43	559573.97	404299.99	32°06'41.350"N	104°16'27.957"W	1.38	198.250	0.23
300.00	0.580	228.890	299.99	0.76	-2.21	-1.00	559573.40	404299.09	32°06'41.341"N	104°16'27.963"W	2.42	204.346	0.35
400.00	0.570	238.990	399.98	1.50	-2.80	-1.81	559572.59	404298.51	32°06'41.336"N	104°16'27.973"W	3.33	212.866	0.10
500.00	0.580	266.320	499.98	2.40	-3.08	-2.74	559571.66	404298.22	32°06'41.333"N	104°16'27.983"W	4.12	221.593	0.27
600.00	0.630	280.210	599.97	3.45	-3.02	-3.78	559570.62	404298.28	32°06'41.333"N	104°16'27.996"W	4.84	231.413	0.15
700.00	0.580	290.930	699.97	4.48	-2.74	-4.80	559569.60	404298.56	32°06'41.336"N	104°16'28.007"W	5.52	240.261	0.12
800.00	0.440	305.260	799.96	5.31	-2.34	-5.58	559568.82	404298.96	32°06'41.340"N	104°16'28.016"W	6.05	247.278	0.19
900.00	0.400	297.770	899.96	5.97	-1.95	-6.21	559568.19	404299.35	32°06'41.344"N	104°16'28.024"W	6.51	252.524	0.07
1000.00	0.120	317.840	999.96	6.37	-1.71	-6.59	559567.82	404299.59	32°06'41.346"N	104°16'28.028"W	6.80	255.414	0.29
1100.00	0.840	71.060	1099.96	5.78	-1.40	-5.96	559568.44	404299.90	32°06'41.349"N	104°16'28.021"W	6.12	256.803	0.89
1200.00	1.830	74.260	1199.93	3.64	-0.73	-3.73	559570.67	404300.57	32°06'41.356"N	104°16'27.995"W	3.80	258.977	0.99
1300.00	1.620	77.740	1299.88	0.81	0.01	-0.81	559573.59	404301.31	32°06'41.363"N	104°16'27.961"W	0.81	270.447	0.23
1400.00	2.350	82.670	1399.82	-2.53	-0.57	-2.60	559577.00	404301.87	32°06'41.369"N	104°16'27.921"W	2.66	277.680	0.75
1500.00	3.370	81.170	1499.70	-7.36	1.28	7.54	559581.94	404302.58	32°06'41.376"N	104°16'27.864"W	7.65	80.358	1.02
1600.00	3.790	77.740	1599.50	-13.34	2.43	13.67	559588.07	404303.73	32°06'41.387"N	104°16'27.793"W	13.89	79.907	0.47
1700.00	3.190	79.430	1699.31	-19.15	3.65	19.64	559594.04	404304.95	32°06'41.399"N	104°16'27.723"W	19.97	79.482	0.61
1800.00	1.860	82.670	1799.22	-23.40	4.36	23.98	559598.38	404305.66	32°06'41.406"N	104°16'27.673"W	24.38	79.688	1.34
1900.00	0.660	86.920	1899.19	-25.54	4.60	26.17	559600.57	404305.90	32°06'41.409"N	104°16'27.647"W	26.57	80.027	1.20
2000.00	0.580	83.990	1999.18	-26.61	4.69	27.25	559601.64	404305.99	32°06'41.409"N	104°16'27.635"W	27.65	80.242	0.09
2100.00	0.420	75.390	2099.18	-27.45	4.83	28.10	559602.50	404306.13	32°06'41.411"N	104°16'27.625"W	28.52	80.247	0.18
2200.00	0.330	45.000	2199.18	-27.97	5.13	28.66	559603.06	404306.43	32°06'41.414"N	104°16'27.618"W	29.12	79.858	0.21
2300.00	0.430	3.920	2299.18	-28.14	5.70	28.89	559603.29	404307.00	32°06'41.420"N	104°16'27.616"W	29.45	78.830	0.28
2400.00	-0.280	349.990	2399.17	-28.06	6.32	28.87	559603.27	404307.62	32°06'41.426"N	104°16'27.616"W	29.56	77.654	0.17
2500.00	0.360	329.300	2499.17	-27.80	6.83	28.67	559603.07	404308.13	32°06'41.431"N	104°16'27.618"W	29.47	76.600	0.14
2600.00	0.300	310.430	2599.17	-27.40	7.27	28.31	559602.71	404308.57	32°06'41.435"N	104°16'27.622"W	29.23	75.598	0.12
2700.00	0.190	282.900	2699.17	-27.02	7.48	27.95	559602.35	404308.78	32°06'41.437"N	104°16'27.626"W	28.93	75.023	0.16
2800.00	0.250	256.810	2799.17	-26.65	7.46	27.58	559601.97	404308.76	32°06'41.437"N	104°16'27.631"W	28.57	74.854	0.12
2900.00	0.200	281.100	2899.17	-26.27	7.45	27.19	559601.59	404308.75	32°06'41.437"N	104°16'27.635"W	28.20	74.682	0.11



Actual Wellpath Report

No. 1H ST AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H ST AWB
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1H AWB at 9591.00 MD

WELLPATH DATA (220 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
3000.00	0.210	244.420	2999.17	-25.94	7.40	26.86	559601.25	404308.70	32°06'41.436"N	104°16'27.639"W	27.86	74.590	0.13
3100.00	0.350	232.880	3099.17	-25.56	7.14	26.45	559600.85	404308.44	32°06'41.434"N	104°16'27.644"W	27.40	74.894	0.15
3200.00	0.460	247.160	3199.16	-24.98	6.80	25.83	559600.23	404308.10	32°06'41.430"N	104°16'27.651"W	26.71	75.255	0.15
3300.00	0.510	238.150	3299.16	-24.28	6.41	25.09	559599.48	404307.71	32°06'41.427"N	104°16'27.660"W	25.89	75.670	0.09
3400.00	0.700	231.830	3399.15	-23.49	5.80	24.23	559598.63	404307.10	32°06'41.420"N	104°16'27.670"W	24.91	76.546	0.20
3500.00	0.700	242.180	3499.15	-22.54	5.13	23.21	559597.61	404306.43	32°06'41.414"N	104°16'27.682"W	23.77	77.527	0.13
3600.00	0.720	237.010	3599.14	-21.55	4.51	22.14	559596.54	404305.81	32°06'41.408"N	104°16'27.694"W	22.59	78.495	0.07
3700.00	0.740	237.750	3699.13	-20.55	3.82	21.07	559595.47	404305.12	32°06'41.401"N	104°16'27.707"W	21.41	79.723	0.02
3800.00	0.750	234.390	3799.12	-19.56	3.09	19.99	559594.39	404304.39	32°06'41.394"N	104°16'27.719"W	20.23	81.201	0.04
3900.00	0.910	228.120	3899.11	-18.53	2.18	18.87	559593.26	404303.48	32°06'41.385"N	104°16'27.732"W	18.99	83.400	0.18
4000.00	0.840	230.720	3999.10	-17.49	1.19	17.71	559592.11	404302.49	32°06'41.375"N	104°16'27.746"W	17.75	86.159	0.08
4100.00	0.680	223.850	4099.09	-16.61	0.30	16.73	559591.13	404301.60	32°06'41.366"N	104°16'27.757"W	16.73	88.983	0.18
4200.00	0.710	222.780	4199.08	-15.87	-0.59	15.90	559590.30	404300.71	32°06'41.357"N	104°16'27.767"W	15.91	92.111	0.03
4300.00	0.750	218.990	4299.08	-15.14	-1.55	15.06	559589.46	404299.75	32°06'41.348"N	104°16'27.776"W	15.14	95.872	0.06
4400.00	0.790	222.500	4399.07	-14.38	-2.57	14.19	559588.59	404298.73	32°06'41.338"N	104°16'27.787"W	14.42	100.253	0.06
4500.00	0.740	213.490	4499.06	-13.67	-3.61	13.36	559587.76	404297.69	32°06'41.327"N	104°16'27.796"W	13.84	105.128	0.13
4600.00	0.690	203.630	4599.05	-13.19	-4.70	12.77	559587.17	404296.60	32°06'41.317"N	104°16'27.803"W	13.61	110.223	0.13
4700.00	0.680	209.610	4699.04	-12.77	-5.77	12.23	559586.63	404295.53	32°06'41.306"N	104°16'27.809"W	13.53	115.256	0.07
4800.00	0.890	211.560	4799.03	-12.20	-6.95	11.53	559585.93	404294.35	32°06'41.294"N	104°16'27.817"W	13.46	121.068	0.21
4900.00	0.980	210.560	4899.02	-11.51	-8.35	10.69	559585.09	404292.95	32°06'41.281"N	104°16'27.827"W	13.56	127.978	0.09
5000.00	1.090	207.290	4999.00	-10.80	-9.93	9.82	559584.22	404291.37	32°06'41.265"N	104°16'27.837"W	13.96	135.312	0.12
5100.00	1.060	206.310	5098.99	-10.14	-11.60	8.97	559583.37	404289.70	32°06'41.248"N	104°16'27.847"W	14.67	142.278	0.04
5200.00	0.910	218.350	5198.97	-9.39	-13.05	8.07	559582.47	404288.25	32°06'41.234"N	104°16'27.858"W	15.35	148.270	0.25
5300.00	0.810	221.380	5298.96	-8.56	-14.21	7.11	559581.51	404287.09	32°06'41.223"N	104°16'27.869"W	15.89	153.408	0.11
5400.00	0.970	227.200	5398.95	-7.59	-15.31	6.02	559580.42	404285.99	32°06'41.212"N	104°16'27.882"W	16.46	158.527	0.18
5500.00	0.770	244.010	5498.94	-6.46	-16.18	4.80	559579.20	404285.12	32°06'41.203"N	104°16'27.896"W	16.88	163.483	0.32
5600.00	0.520	249.680	5598.93	-5.49	-16.63	3.77	559578.17	404284.67	32°06'41.199"N	104°16'27.908"W	17.06	167.233	0.26
5700.00	0.730	230.860	5698.93	-4.63	-17.19	2.85	559577.25	404284.11	32°06'41.193"N	104°16'27.918"W	17.43	170.590	0.29
5800.00	0.890	206.490	5798.92	-3.91	-18.29	2.01	559576.41	404283.01	32°06'41.182"N	104°16'27.928"W	18.40	173.732	0.38
5900.00	1.450	197.830	5898.89	-3.38	-20.19	1.28	559575.68	404281.11	32°06'41.163"N	104°16'27.937"W	20.23	176.386	0.59



Actual Wellpath Report

No. 1H ST AWP

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REFERENCE WELLPATH IDENTIFICATION

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Area	Eddy County, NM	Well	No. 1H
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6000.00	2.810	198.720	5998.82	-2.58	-23.72	0.10	559574.50	404277.58	32°06'41.129"N	104°16'27.950"W	23.72	179.756	1.36
6100.00	3.200	196.350	6098.69	-1.54	-28.72	-1.47	559572.93	404272.59	32°06'41.079"N	104°16'27.969"W	28.75	182.933	0.41
6200.00	2.580	192.240	6198.56	-0.79	-33.60	-2.73	559571.67	404267.71	32°06'41.031"N	104°16'27.984"W	33.71	184.653	0.65
6300.00	2.410	201.210	6298.46	0.00	-37.75	-3.97	559570.43	404263.55	32°06'40.990"N	104°16'27.998"W	37.96	186.006	0.43
6400.00	1.690	205.580	6398.40	-1.05	-41.04	-5.37	559569.03	404260.26	32°06'40.957"N	104°16'28.014"W	41.39	187.453	0.74
6500.00	1.230	203.650	6498.37	1.87	-43.36	-6.44	559567.96	404257.95	32°06'40.934"N	104°16'28.027"W	43.83	188.444	0.46
6600.00	1.140	213.960	6598.34	2.66	-45.17	-7.42	559566.98	404256.14	32°06'40.916"N	104°16'28.038"W	45.77	189.333	0.23
6700.00	1.340	198.200	6698.32	3.37	-47.10	-8.34	559566.06	404254.20	32°06'40.897"N	104°16'28.049"W	47.84	190.045	0.39
6800.00	1.490	199.630	6798.29	3.93	-49.44	-9.15	559565.26	404251.87	32°06'40.874"N	104°16'28.058"W	50.28	190.481	0.15
6900.00	1.330	163.830	6898.26	3.80	-51.78	-9.26	559565.14	404249.53	32°06'40.851"N	104°16'28.059"W	52.60	190.139	0.88
7000.00	1.490	155.210	6998.23	2.69	-54.07	-8.39	559566.01	404247.23	32°06'40.828"N	104°16'28.049"W	54.72	188.821	0.27
7100.00	0.900	177.010	7098.21	1.90	-56.04	-7.80	559566.60	404245.27	32°06'40.809"N	104°16'28.043"W	56.58	187.929	0.73
7200.00	1.410	217.890	7198.19	2.43	-57.79	-8.52	559565.88	404243.51	32°06'40.791"N	104°16'28.051"W	58.42	188.386	0.94
7300.00	1.760	219.960	7298.15	3.94	-59.94	-10.26	559564.14	404241.37	32°06'40.770"N	104°16'28.071"W	60.81	189.715	0.35
7400.00	-0.830	213.910	7398.13	-5.14	-61.72	-11.65	559562.75	404239.59	32°06'40.753"N	104°16'28.087"W	62.81	190.691	0.94
7500.00	0.410	184.800	7498.12	5.47	-62.68	-12.09	559562.32	404238.63	32°06'40.743"N	104°16'28.092"W	63.83	190.914	0.51
7600.00	0.460	164.450	7598.12	5.31	-63.42	-12.01	559562.39	404237.89	32°06'40.736"N	104°16'28.092"W	64.55	190.722	0.16
7700.00	1.680	166.570	7698.10	4.68	-65.23	-11.56	559562.84	404236.07	32°06'40.718"N	104°16'28.086"W	66.25	190.049	1.22
7800.00	1.720	168.710	7798.05	3.74	-68.13	-10.93	559563.48	404233.18	32°06'40.689"N	104°16'28.079"W	69.00	189.111	0.08
7900.00	1.950	188.680	7898.00	3.38	-71.28	-10.89	559563.51	404230.02	32°06'40.658"N	104°16'28.079"W	72.11	188.685	0.68
8000.00	2.070	182.810	7997.94	3.36	-74.77	-11.23	559563.17	404226.54	32°06'40.623"N	104°16'28.083"W	75.61	188.545	0.24
8100.00	2.150	192.230	8097.88	3.46	-78.41	-11.72	559562.68	404222.90	32°06'40.587"N	104°16'28.088"W	79.28	188.501	0.36
8200.00	1.830	205.000	8197.82	4.18	-81.69	-12.79	559561.61	404219.62	32°06'40.555"N	104°16'28.101"W	82.68	188.900	0.54
8300.00	1.740	209.570	8297.77	5.31	-84.45	-14.22	559560.19	404216.85	32°06'40.528"N	104°16'28.117"W	85.64	189.555	0.17
8400.00	-1.540	213.360	8397.73	-6.53	-86.90	-15.70	559558.70	404214.41	32°06'40.503"N	104°16'28.135"W	88.30	190.244	0.23
8500.00	1.370	212.410	8497.69	7.68	-89.03	-17.08	559557.32	404212.28	32°06'40.482"N	104°16'28.151"W	90.65	190.863	0.17
8600.00	1.260	207.700	8597.67	8.62	-91.01	-18.24	559556.17	404210.30	32°06'40.463"N	104°16'28.164"W	92.82	191.330	0.15
8700.00	1.430	217.100	8697.64	9.67	-92.98	-19.50	559554.90	404208.33	32°06'40.443"N	104°16'28.179"W	95.00	191.844	0.28
8800.00	1.510	220.320	8797.61	11.06	-94.98	-21.10	559553.30	404206.33	32°06'40.424"N	104°16'28.197"W	97.30	192.528	0.11
8900.00	1.070	258.000	8897.58	12.69	-96.18	-22.87	559551.53	404205.13	32°06'40.412"N	104°16'28.218"W	98.86	193.376	0.93



Actual Wellpath Report

No. 1H ST AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H ST AWP
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1H AWP at 9591.00 MD

WELLPATH DATA (220 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
9000.00	1.320	276.280	8997.56	14.73	-96.25	-24.93	559549.47	404205.06	32°06'40.411"N	104°16'28.242"W	99.42	194.521	0.45
9100.00	1.710	273.300	9097.53	17.37	-96.03	-27.56	559546.84	404205.28	32°06'40.413"N	104°16'28.273"W	99.91	196.014	0.40
9200.00	1.780	279.900	9197.48	20.41	-95.68	-30.58	559543.82	404205.63	32°06'40.417"N	104°16'28.308"W	100.45	197.726	0.21
9300.00	2.210	281.130	9297.42	23.88	-95.04	-34.00	559540.40	404206.27	32°06'40.423"N	104°16'28.347"W	100.94	199.686	0.43
9367.00	2.210	281.130	9364.37	26.46	-94.54	-36.54	559537.86	404206.77	32°06'40.428"N	104°16'28.377"W	101.36	201.131	0.00
9403.00	11.700	266.400	9400.07	30.76	-94.64	-40.87	559533.53	404206.67	32°06'40.427"N	104°16'28.427"W	103.09	203.359	26.61
9435.00	18.000	289.800	9431.01	38.77	-93.16	-48.78	559525.63	404208.14	32°06'40.442"N	104°16'28.519"W	105.16	207.635	26.81
9467.00	26.900	290.300	9460.55	50.61	-88.97	-60.24	559514.16	404212.34	32°06'40.483"N	104°16'28.652"W	107.45	214.103	27.82
9498.00	34.200	289.600	9487.23	65.90	-83.61	-75.05	559499.36	404217.70	32°06'40.536"N	104°16'28.825"W	112.35	221.912	23.58
9527.00	40.900	289.300	9510.21	83.08	-77.73	-91.70	559482.70	404223.58	32°06'40.595"N	104°16'29.018"W	120.21	229.716	23.11
9559.00	48.300	287.300	9532.98	105.02	-70.70	-113.03	559461.38	404230.60	32°06'40.664"N	104°16'29.266"W	133.32	237.973	23.54
9591.00	57.200	284.800	9552.33	130.08	-63.70	-137.49	559436.92	404237.61	32°06'40.734"N	104°16'29.550"W	151.53	245.141	28.50
9622.00	65.800	282.100	9567.11	157.06	-57.40	-163.96	559410.45	404243.91	32°06'40.796"N	104°16'29.858"W	173.72	250.707	28.77
9654.00	76.000	275.300	9577.58	187.21	-52.89	-193.80	559380.62	404248.42	32°06'40.841"N	104°16'30.205"W	200.89	254.736	37.65
9704.00	93.400	264.500	9582.20	236.44	-53.04	-243.32	559331.10	404248.27	32°06'40.840"N	104°16'30.781"W	249.04	257.703	40.87
9735.00	94.500	272.800	9580.06	267.09	-53.77	-274.21	559300.21	404247.54	32°06'40.833"N	104°16'31.140"W	279.43	258.906	26.94
9767.00	93.900	269.900	9577.71	298.89	-53.02	-306.11	559268.32	404248.29	32°06'40.840"N	104°16'31.511"W	310.67	260.174	9.23
9799.00	93.800	274.600	9575.56	330.74	-51.76	-338.01	559236.42	404249.54	32°06'40.853"N	104°16'31.882"W	341.95	261.293	14.66
9830.00	92.600	272.100	9573.83	361.66	-49.96	-368.90	559205.53	404251.35	32°06'40.871"N	104°16'32.241"W	372.27	262.288	8.93
9861.00	92.100	273.300	9572.56	392.58	-48.50	-399.84	559174.60	404252.81	32°06'40.886"N	104°16'32.601"W	402.77	263.084	4.19
9893.00	90.100	273.800	9571.95	424.54	-46.52	-431.77	559142.67	404254.79	32°06'40.905"N	104°16'32.972"W	434.27	263.851	6.44
9922.00	90.600	273.900	9571.77	453.52	-44.57	-460.71	559113.74	404256.74	32°06'40.925"N	104°16'33.308"W	462.86	264.474	1.76
9953.00	90.300	274.500	9571.53	484.51	-42.30	-491.62	559082.82	404259.01	32°06'40.947"N	104°16'33.668"W	493.44	265.082	2.16
9985.00	89.900	275.000	9571.47	516.50	-39.65	-523.51	559050.94	404261.66	32°06'40.974"N	104°16'34.038"W	525.01	265.669	2.00
10020.00	87.500	275.000	9572.26	551.48	-36.60	-558.37	559016.08	404264.70	32°06'41.004"N	104°16'34.444"W	559.57	266.250	6.86
10049.00	86.600	274.600	9573.76	580.44	-34.18	-587.23	558987.23	404267.13	32°06'41.028"N	104°16'34.779"W	588.22	266.669	3.40
10081.00	87.400	274.700	9575.43	612.38	-31.58	-619.08	558955.38	404269.72	32°06'41.054"N	104°16'35.149"W	619.88	267.079	2.52
10113.00	86.500	273.900	9577.13	644.32	-29.19	-650.94	558923.52	404272.11	32°06'41.078"N	104°16'35.520"W	651.60	267.433	3.76
10145.00	87.100	273.800	9578.92	676.25	-27.04	-682.82	558891.64	404274.26	32°06'41.099"N	104°16'35.890"W	683.36	267.732	1.90
10176.00	89.600	275.300	9579.81	707.23	-24.59	-713.71	558860.76	404276.72	32°06'41.124"N	104°16'36.249"W	714.13	268.027	9.40



Actual Wellpath Report

No. 1H ST AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION					
Operator	Cimarex Energy Co. of Colorado			Slot	No. 1H SHL
Area	Eddy County, NM			Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E			Wellbore	No. 1H ST AWP
Facility	Cottonwood Draw 22 FED COM No. 1H			Sidetrack from	No. 1H AWP at 9591.00 MD

WELLPATH DATA (220 stations)													
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
10208.00	89.400	274.700	9580.09	739.22	-21.80	-745.58	558828.89	404279.51	32°06'41.152"N	104°16'36.620"W	745.90	268.325	1.98
10238.00	89.300	274.700	9580.43	769.21	-19.34	-775.48	558798.99	404281.96	32°06'41.176"N	104°16'36.968"W	775.72	268.571	0.33
10270.00	90.000	274.900	9580.63	801.20	-16.66	-807.37	558767.11	404284.64	32°06'41.203"N	104°16'37.338"W	807.54	268.818	2.28
10302.00	89.700	274.900	9580.71	833.20	-13.93	-839.25	558735.23	404287.37	32°06'41.230"N	104°16'37.709"W	839.37	269.049	0.94
10334.00	90.300	275.400	9580.71	865.19	-11.06	-871.12	558703.36	404290.25	32°06'41.258"N	104°16'38.080"W	871.19	269.273	2.44
10365.00	89.100	275.500	9580.87	896.19	-8.11	-901.98	558672.50	404293.19	32°06'41.288"N	104°16'38.438"W	902.02	269.485	3.88
10397.00	83.600	272.900	9582.91	928.09	-5.77	-933.81	558640.67	404295.53	32°06'41.311"N	104°16'38.808"W	933.83	269.646	19.00
10429.00	87.600	274.800	9585.36	959.97	-3.63	-965.64	558608.85	404297.67	32°06'41.332"N	104°16'39.178"W	965.65	269.785	13.83
10461.00	91.500	277.200	9585.62	991.96	-0.28	-997.45	558577.04	404301.02	32°06'41.366"N	104°16'39.548"W	997.45	269.984	14.31
10493.00	92.600	277.900	9584.47	1023.93	3.92	-1029.16	558545.34	404305.22	32°06'41.407"N	104°16'39.917"W	1029.16	270.218	4.07
10529.00	92.200	276.900	9582.96	1059.88	8.55	-1064.82	558509.67	404309.85	32°06'41.453"N	104°16'40.331"W	1064.86	270.460	2.99
10571.00	91.500	276.300	9581.61	1101.86	13.38	-1106.52	558467.98	404314.67	32°06'41.501"N	104°16'40.816"W	1106.60	270.693	2.19
10604.00	91.700	275.400	9580.69	1134.85	16.74	-1139.34	558435.17	404318.04	32°06'41.535"N	104°16'41.198"W	1139.46	270.842	2.79
10636.00	90.300	274.000	9580.13	1166.83	19.36	-1171.22	558403.28	404320.66	32°06'41.561"N	104°16'41.568"W	1171.38	270.947	6.19
10665.00	91.800	273.900	9579.60	1195.81	21.36	-1200.15	558374.36	404322.65	32°06'41.581"N	104°16'41.905"W	1200.34	271.019	5.18
10696.00	90.400	273.600	9579.00	1226.78	23.38	-1231.08	558343.44	404324.68	32°06'41.601"N	104°16'42.264"W	1231.30	271.088	4.62
10728.00	89.600	272.800	9579.00	1258.74	25.17	-1263.03	558311.49	404326.47	32°06'41.619"N	104°16'42.636"W	1263.28	271.142	3.54
10760.00	91.300	273.500	9578.75	1290.70	26.93	-1294.98	558279.54	404328.22	32°06'41.636"N	104°16'43.007"W	1295.26	271.191	5.75
10791.00	90.500	273.000	9578.26	1321.66	28.68	-1325.92	558248.60	404329.98	32°06'41.654"N	104°16'43.367"W	1326.23	271.239	3.04
10823.00	90.800	272.800	9577.90	1353.61	30.30	-1357.88	558216.65	404331.60	32°06'41.670"N	104°16'43.739"W	1358.22	271.278	1.13
10853.00	92.000	273.300	9577.17	1383.56	31.90	-1387.83	558186.70	404333.20	32°06'41.686"N	104°16'44.087"W	1388.19	271.317	4.33
10886.00	92.900	273.600	9575.76	1416.49	33.88	-1420.74	558153.79	404335.18	32°06'41.706"N	104°16'44.469"W	1421.14	271.366	2.87
10918.00	93.800	273.700	9573.89	1448.41	35.92	-1452.62	558121.92	404337.21	32°06'41.726"N	104°16'44.840"W	1453.06	271.416	2.83
10948.00	94.300	273.800	9571.77	1478.32	37.87	-1482.48	558092.06	404339.17	32°06'41.746"N	104°16'45.187"W	1482.96	271.463	1.70
10980.00	94.100	272.800	9569.42	1510.19	39.71	-1514.34	558060.20	404341.01	32°06'41.764"N	104°16'45.558"W	1514.86	271.502	3.18
11012.00	94.200	273.100	9567.11	1542.06	41.35	-1546.21	558028.33	404342.65	32°06'41.780"N	104°16'45.928"W	1546.77	271.532	0.99
11043.00	95.100	273.000	9564.60	1572.92	43.00	-1577.07	557997.48	404344.29	32°06'41.797"N	104°16'46.287"W	1577.65	271.562	2.92
11075.00	95.800	274.200	9561.56	1604.75	45.00	-1608.86	557965.69	404346.29	32°06'41.817"N	104°16'46.656"W	1609.49	271.602	4.33
11107.00	95.800	274.000	9558.32	1636.57	47.27	-1640.61	557933.94	404348.57	32°06'41.840"N	104°16'47.026"W	1641.29	271.651	0.62
11138.00	95.700	274.400	9555.22	1667.39	49.53	-1671.37	557903.18	404350.83	32°06'41.862"N	104°16'47.383"W	1672.11	271.698	1.32



Actual Wellpath Report

No. 1H ST AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION					
Operator	Cimarex Energy Co. of Colorado			Slot	No. 1H SHL
Area	Eddy County, NM			Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E			Wellbore	No. 1H ST AWB
Facility	Cottonwood Draw 22 FED COM No. 1H			Sidetrack from	No. 1H AWB at 9591.00 MD

WELLPATH DATA (220 stations)													
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [%/100ft]
11170.00	96.000	274.500	9551.95	1699.22	52.00	-1703.11	557871.45	404353.30	32°06'41.887"N	104°16'47.752"W	1703.90	271.749	0.99
11202.00	96.200	274.900	9548.55	1731.03	54.61	-1734.82	557839.74	404355.90	32°06'41.913"N	104°16'48.121"W	1735.68	271.803	1.39
11234.00	96.000	274.700	9545.15	1762.84	57.27	-1766.53	557808.03	404358.57	32°06'41.939"N	104°16'48.490"W	1767.46	271.857	0.88
11265.00	94.200	274.800	9542.40	1793.71	59.83	-1797.30	557777.27	404361.12	32°06'41.965"N	104°16'48.847"W	1798.30	271.907	5.82
11297.00	94.000	274.500	9540.11	1825.62	62.42	-1829.11	557745.46	404363.71	32°06'41.990"N	104°16'49.217"W	1830.18	271.954	1.12
11328.00	94.200	274.400	9537.89	1856.53	64.82	-1859.94	557714.63	404366.11	32°06'42.014"N	104°16'49.575"W	1861.07	271.996	0.72
11360.00	94.000	275.100	9535.61	1888.44	67.46	-1891.75	557682.83	404368.75	32°06'42.041"N	104°16'49.945"W	1892.95	272.042	2.27
11391.00	94.100	275.500	9533.42	1919.36	70.32	-1922.54	557652.04	404371.61	32°06'42.069"N	104°16'50.303"W	1923.82	272.095	1.33
11423.00	93.400	275.600	9531.32	1951.29	73.40	-1954.32	557620.26	404374.70	32°06'42.100"N	104°16'50.673"W	1955.70	272.151	2.21
11455.00	93.100	275.400	9529.51	1983.23	76.47	-1986.12	557588.46	404377.76	32°06'42.130"N	104°16'51.042"W	1987.59	272.205	1.13
11487.00	92.600	276.000	9527.92	2015.19	79.64	-2017.92	557556.66	404380.93	32°06'42.162"N	104°16'51.412"W	2019.49	272.260	2.44
11519.00	93.000	276.100	9526.36	2047.16	83.01	-2049.71	557524.88	404384.30	32°06'42.195"N	104°16'51.782"W	2051.39	272.319	1.29
11551.00	92.300	276.400	9524.88	2079.12	86.49	-2081.48	557493.11	404387.78	32°06'42.230"N	104°16'52.151"W	2083.28	272.379	2.38
11583.00	91.400	276.800	9523.84	2111.10	90.16	-2113.25	557461.34	404391.46	32°06'42.266"N	104°16'52.520"W	2115.18	272.443	3.08
11615.00	91.100	278.200	9523.14	2143.08	94.34	-2144.97	557429.63	404395.63	32°06'42.308"N	104°16'52.889"W	2147.05	272.518	4.47
11646.00	90.500	278.000	9522.71	2174.06	98.71	-2175.66	557398.94	404400.00	32°06'42.351"N	104°16'53.246"W	2177.90	272.598	2.04
11675.00	91.000	278.400	9522.33	2203.03	102.84	-2204.36	557370.24	404404.13	32°06'42.392"N	104°16'53.580"W	2206.76	272.671	2.21
11707.00	91.600	278.500	9521.61	2235.00	107.54	-2236.00	557338.60	404408.83	32°06'42.439"N	104°16'53.948"W	2238.59	272.754	1.90
11738.00	91.900	278.800	9520.66	2265.95	112.20	-2266.64	557307.97	404413.49	32°06'42.485"N	104°16'54.304"W	2269.41	272.834	1.37
11769.00	91.900	278.900	9519.63	2296.89	116.97	-2297.25	557277.36	404418.26	32°06'42.532"N	104°16'54.660"W	2300.23	272.915	0.32
11801.00	92.100	279.400	9518.51	2328.83	122.06	-2328.83	557245.79	404423.35	32°06'42.583"N	104°16'55.027"W	2332.02	273.000	1.68
11832.00	92.000	279.400	9517.41	2359.75	127.12	-2359.39	557215.23	404428.41	32°06'42.633"N	104°16'55.382"W	2362.81	273.084	0.32
11864.00	92.500	279.800	9516.15	2391.66	132.45	-2390.92	557183.70	404433.74	32°06'42.686"N	104°16'55.748"W	2394.58	273.171	2.00
11896.00	92.800	280.100	9514.67	2423.55	137.97	-2422.40	557152.22	404439.26	32°06'42.741"N	104°16'56.114"W	2426.33	273.260	1.33
11948.00	91.100	280.000	9512.90	2475.39	147.04	-2473.57	557101.06	404448.33	32°06'42.831"N	104°16'56.709"W	2477.94	273.402	3.27
11979.00	91.600	281.000	9512.17	2506.29	152.69	-2504.04	557070.59	404453.97	32°06'42.887"N	104°16'57.064"W	2508.70	273.489	3.61
12011.00	91.500	280.800	9511.30	2538.16	158.74	-2535.46	557039.18	404460.02	32°06'42.947"N	104°16'57.429"W	2540.42	273.582	0.70
12043.00	91.600	280.800	9510.44	2570.03	164.73	-2566.88	557007.76	404466.02	32°06'43.006"N	104°16'57.794"W	2572.16	273.672	0.31
12074.00	91.900	281.300	9509.49	2600.90	170.67	-2597.29	556977.35	404471.95	32°06'43.065"N	104°16'58.148"W	2602.89	273.760	1.88
12106.00	91.900	281.000	9508.43	2632.75	176.86	-2628.67	556945.98	404478.14	32°06'43.127"N	104°16'58.512"W	2634.61	273.849	0.94



Actual Wellpath Report

No. 1H ST AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H ST AWP
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1H AWP at 9591.00 MD

WELLPATH DATA (220 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
12138.00	91.600	280.700	9507.45	2664.62	182.88	-2660.08	556914.57	404484.16	32°06'43.186"N	104°16'58.878"W	2666.36	273.933	1.33
12169.00	91.900	280.800	9506.51	2695.50	188.66	-2690.52	556884.13	404489.94	32°06'43.244"N	104°16'59.231"W	2697.13	274.011	1.02
12201.00	92.700	281.300	9505.22	2727.35	194.78	-2721.90	556852.75	404496.07	32°06'43.304"N	104°16'59.596"W	2728.86	274.093	2.95
12232.00	92.000	280.900	9503.95	2758.20	200.75	-2752.30	556822.36	404502.03	32°06'43.363"N	104°16'59.950"W	2759.61	274.172	2.60
12264.00	91.300	280.500	9503.03	2790.08	206.69	-2783.73	556790.93	404507.97	32°06'43.422"N	104°17'00.315"W	2791.39	274.246	2.52
12295.00	91.700	280.600	9502.22	2820.97	212.36	-2814.19	556760.47	404513.64	32°06'43.479"N	104°17'00.669"W	2822.19	274.315	1.33
12327.00	91.200	279.600	9501.41	2852.88	217.97	-2845.69	556728.98	404519.25	32°06'43.534"N	104°17'01.035"W	2854.02	274.380	3.49
12359.00	89.400	279.400	9501.24	2884.82	223.25	-2877.25	556697.42	404524.53	32°06'43.587"N	104°17'01.402"W	2885.89	274.437	5.66
12389.00	90.300	279.200	9501.32	2914.77	228.10	-2906.85	556667.82	404529.38	32°06'43.635"N	104°17'01.746"W	2915.79	274.487	3.07
12419.00	90.400	278.200	9501.14	2944.74	232.64	-2936.51	556638.17	404533.92	32°06'43.680"N	104°17'02.091"W	2945.71	274.530	3.35
12452.00	89.800	277.500	9501.08	2977.72	237.14	-2969.20	556605.48	404538.42	32°06'43.725"N	104°17'02.471"W	2978.65	274.566	2.79
12483.00	91.100	277.300	9500.84	3008.71	241.14	-2999.94	556574.74	404542.41	32°06'43.764"N	104°17'02.829"W	3009.61	274.596	4.24
12520.00	89.600	276.600	9500.61	3045.70	245.61	-3036.66	556538.02	404546.89	32°06'43.809"N	104°17'03.256"W	3046.58	274.624	4.47
12549.00	89.600	276.100	9500.81	3074.70	248.82	-3065.48	556509.20	404550.10	32°06'43.841"N	104°17'03.591"W	3075.56	274.640	1.72
12582.00	91.400	276.200	9500.52	3107.70	252.36	-3098.29	556476.40	404553.63	32°06'43.876"N	104°17'03.972"W	3108.55	274.656	5.46
12614.00	93.400	276.600	9499.18	3139.67	255.92	-3130.06	556444.63	404557.20	32°06'43.911"N	104°17'04.341"W	3140.51	274.674	6.37
12645.00	93.600	276.900	9497.29	3170.60	259.56	-3160.79	556413.90	404560.83	32°06'43.947"N	104°17'04.699"W	3171.43	274.694	1.16
12676.00	93.600	276.700	9495.35	3201.54	263.22	-3191.51	556383.18	404564.49	32°06'43.984"N	104°17'05.056"W	3202.35	274.715	0.64
12708.00	93.700	277.100	9493.31	3233.47	267.06	-3223.21	556351.48	404568.33	32°06'44.022"N	104°17'05.424"W	3234.26	274.736	1.29
12739.00	93.600	277.300	9491.34	3264.40	270.93	-3253.91	556320.79	404572.21	32°06'44.060"N	104°17'05.781"W	3265.17	274.760	0.72
12771.00	93.600	277.400	9489.33	3296.33	275.02	-3285.58	556289.12	404576.29	32°06'44.101"N	104°17'06.149"W	3297.07	274.785	0.31
12802.00	93.600	277.000	9487.38	3327.26	278.90	-3316.28	556258.43	404580.17	32°06'44.139"N	104°17'06.506"W	3327.98	274.807	1.29
12833.00	93.900	276.600	9485.35	3358.19	282.56	-3346.99	556227.72	404583.83	32°06'44.176"N	104°17'06.863"W	3358.90	274.826	1.61
12865.00	93.900	277.400	9483.18	3390.11	286.45	-3378.68	556196.03	404587.72	32°06'44.214"N	104°17'07.232"W	3390.80	274.846	2.49
12899.00	93.900	277.700	9480.86	3424.02	290.91	-3412.31	556162.41	404592.18	32°06'44.259"N	104°17'07.623"W	3424.68	274.873	0.88
12930.00	93.900	277.400	9478.75	3454.94	294.97	-3442.97	556131.75	404596.24	32°06'44.299"N	104°17'07.979"W	3455.58	274.897	0.97
12968.00	92.200	277.100	9476.73	3492.87	299.76	-3480.61	556094.11	404601.03	32°06'44.347"N	104°17'08.417"W	3493.49	274.922	4.54
13001.00	88.100	274.900	9476.65	3525.87	303.21	-3513.42	556061.31	404604.48	32°06'44.381"N	104°17'08.798"W	3526.48	274.932	14.10
13031.00	89.300	274.800	9477.33	3555.85	305.74	-3543.30	556031.42	404607.01	32°06'44.406"N	104°17'09.146"W	3556.47	274.932	4.01
13063.00	89.900	274.600	9477.55	3587.84	308.37	-3575.19	555999.54	404609.64	32°06'44.432"N	104°17'09.516"W	3588.47	274.930	1.98



Actual Wellpath Report

No. 1H ST AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H ST AWB
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1H AWB at 9591.00 MD

WELLPATH DATA (220 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
13095.00	88.700	273.500	9477.94	3619.82	310.63	-3607.11	555967.62	404611.90	32°06'44.455"N	104°17'09.888"W	3620.46	274.922	5.09
13126.00	88.700	274.300	9478.64	3650.79	312.73	-3638.03	555936.71	404614.00	32°06'44.476"N	104°17'10.247"W	3651.45	274.913	2.58
13158.00	89.000	274.900	9479.29	3682.77	315.30	-3669.92	555904.82	404616.57	32°06'44.501"N	104°17'10.618"W	3683.44	274.910	2.10
13189.00	89.000	274.900	9479.83	3713.76	317.95	-3700.80	555873.94	404619.22	32°06'44.527"N	104°17'10.977"W	3714.44	274.910	0.00
13220.00	90.600	275.700	9479.94	3744.76	320.81	-3731.67	555843.08	404622.08	32°06'44.556"N	104°17'11.336"W	3745.43	274.914	5.77
13252.00	89.100	274.200	9480.02	3776.75	323.57	-3763.55	555811.20	404624.84	32°06'44.583"N	104°17'11.706"W	3777.43	274.914	6.63
13283.00	91.100	275.700	9479.97	3807.75	326.25	-3794.43	555780.32	404627.52	32°06'44.610"N	104°17'12.065"W	3808.43	274.914	8.06
13314.00	93.200	276.700	9478.80	3838.72	329.59	-3825.22	555749.53	404630.86	32°06'44.643"N	104°17'12.423"W	3839.40	274.925	7.50
13338.00	92.300	275.600	9477.65	3862.69	332.16	-3849.06	555725.70	404633.43	32°06'44.669"N	104°17'12.700"W	3863.36	274.932	5.92
13392.00†	92.300	275.600	9475.48	3916.65	337.42	-3902.76	555672.00	404638.69	32°06'44.721"N	104°17'13.325"W	3917.32	274.941	0.00

HOLE & CASING SECTIONS · Ref Wellbore: No. 1H ST AWB · Ref Wellpath: No. 1H ST AWP

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
7in Casing	0.00	9300.00	9300.00	0.00	9297.42	0.00	0.00	-95.04	-34.00
6.125in Open Hole	9300.00	9591.00	291.00	9297.42	9552.33	-95.04	-34.00	-63.70	-137.49
6.125in Open Hole	9591.00	13392.00	3801.00	9552.33	9475.48	-63.70	-137.49	337.42	-3902.76



Actual Wellpath Report

No. 1H ST AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION					
Operator	Cimarex Energy Co. of Colorado			Slot	No. 1H SHL
Area	Eddy County, NM			Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E			Wellbore	No. 1H ST AWB
Facility	Cottonwood Draw 22 FED COM No. 1H			Sidetrack from	No. 1H AWB at 9591.00 MD

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
No. 1H ST BHL		9450.00	411.35	-3913.54	555661.22	404712.61	32°06'45.453"N	104°17'13.450"W	point

WELLPATH COMPOSITION						Ref Wellbore: No. 1H ST AWB	Ref Wellpath: No. 1H ST AWP
Start MD [ft]	End MD [ft]	Positional Uncertainty Model		Log Name/Comment		Wellbore	
0.00	9300.00	Gyrodata relative depth - Continuous gyro		GYRO		No. 1 AWB	
9300.00	9622.00	NaviTrak (Standard)		MWD		No. 1H AWB	
9622.00	13338.00	NaviTrak (Standard)		MWD ST		No. 1H ST AWB	
13338.00	13392.00	Blind Drilling (std)		Projection to bit		No. 1H ST AWB	



Cimarex Energy Co. of Colorado

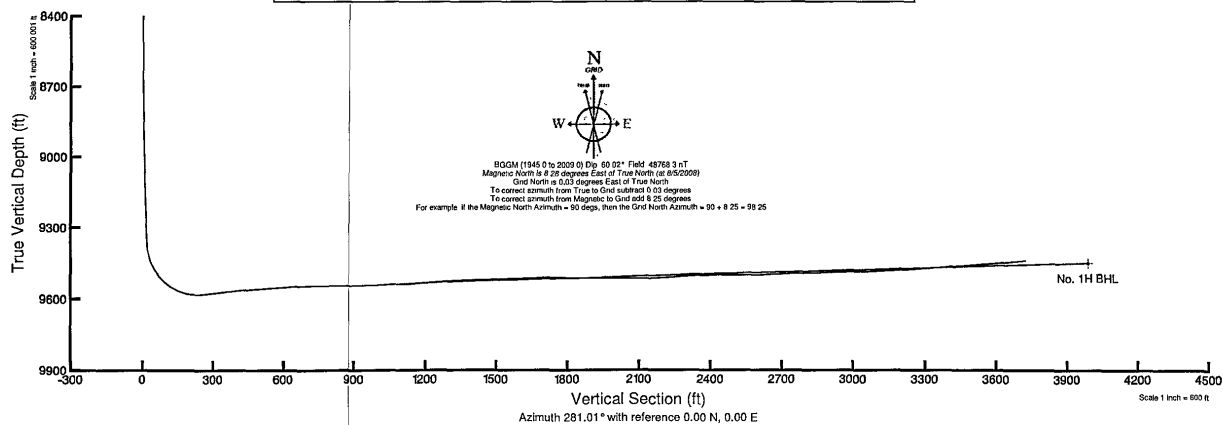
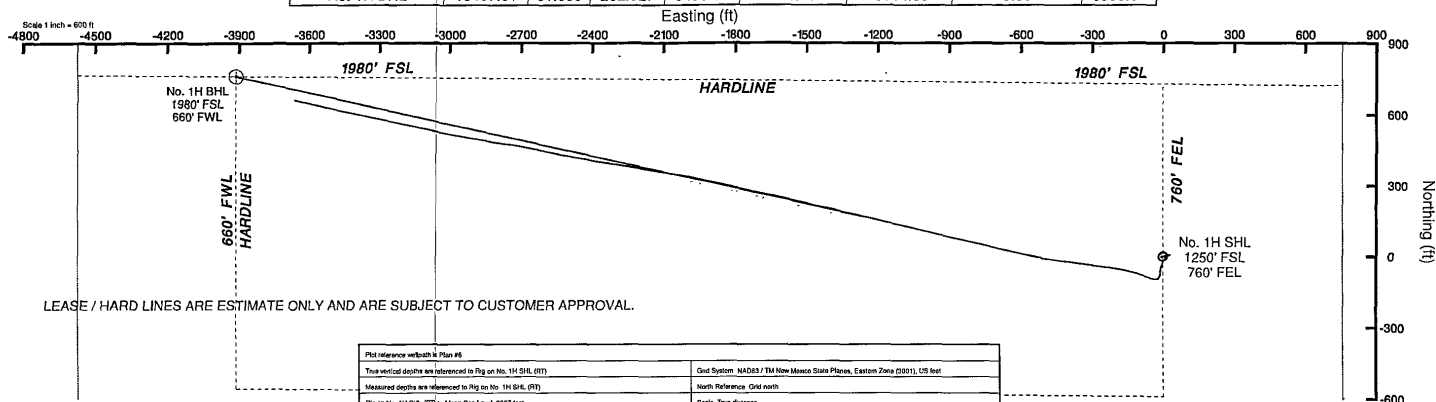
Location: Eddy County, NM
Field: Cottonwood Sec 22, T25S, R26E
Facility: Cottonwood Draw 22 FED COM No. 1H

Slot: No. 1H SHL
Well: No. 1H
Wellbore: No. 1H.PWB



Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	10478.00	93.100	284.100	9540.94	105.27	-999.44	6.52	1001.15
PROJ. TO BIT	10530.00	93.100	284.100	9538.13	117.92	-1049.80	0.00	1053.00
EOB	10658.26	91.688	282.627	9532.77	147.54	-1174.47	1.59	1181.03
No. 1H BHL	13467.61	91.688	282.627	9450.00	761.40	-3914.68	0.00	3988.04





Actual Wellpath Report

No. 1H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H AWB
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1 AWB at 9300.00 MD

REPORT SETUP INFORMATION

Projection System	NAD83 / TM New Mexico State Planes, Eastern Zone (3001), US feet	Software System	WellArchitect® 2.0
North Reference	Grid	User	Victor Hernandez
Scale	0.999909	Report Generated	11/11/2008 at 11:44:37 AM
Convergence at slot	0.03° East	Database/Source file	WA_Midland/No. 1H_AWB.xml

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[USft]	Northing[USft]	Latitude	Longitude
Slot Location	0.00	0.00	559574.40	404301.30	32°06'41.363"N	104°16'27.952"W
Facility Reference Pt			559574.40	404301.30	32°06'41.363"N	104°16'27.952"W
Field Reference Pt			559574.40	404301.30	32°06'41.363"N	104°16'27.952"W

WELLPATH DATUM

Calculation method	Minimum curvature	Rig on No. 1H SHL (RT) to Facility Vertical Datum	18.00ft
Horizontal Reference Pt	Facility Center	Rig on No. 1H SHL (RT) to Mean Sea Level	3307.00ft
Vertical Reference Pt	Rig on No. 1H SHL (RT)	Facility Vertical Datum to Mud Line (Facility)	0.00ft
MD Reference Pt	Rig on No. 1H SHL (RT)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	281.01°



Actual Wellpath Report

No. 1H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H AWB
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1 AWB at 9300.00 MD

WELLPATH DATA (216 stations)													
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
0.00	0.000	198.310	0.00	0.00	0.00	0.00	559574.40	404301.30	32°06'41.363"N	104°16'27.952"W	0.00	0.000	0.00
100.00	0.450	198.310	100.00	0.05	-0.37	-0.12	559574.28	404300.93	32°06'41.360"N	104°16'27.953"W	0.39	198.310	0.45
200.00	0.680	198.170	199.99	0.17	-1.31	-0.43	559573.97	404299.99	32°06'41.350"N	104°16'27.957"W	1.38	198.250	0.23
300.00	0.580	228.890	299.99	0.56	-2.21	-1.00	559573.40	404299.09	32°06'41.341"N	104°16'27.963"W	2.42	204.346	0.35
400.00	0.570	238.990	399.98	1.24	-2.80	-1.81	559572.59	404298.51	32°06'41.336"N	104°16'27.973"W	3.33	212.866	0.10
500.00	0.580	266.320	499.98	2.10	-3.08	-2.74	559571.66	404298.22	32°06'41.333"N	104°16'27.983"W	4.12	221.593	0.27
600.00	0.630	280.210	599.97	3.14	-3.02	-3.78	559570.62	404298.28	32°06'41.333"N	104°16'27.996"W	4.84	231.413	0.15
700.00	0.580	290.930	699.97	4.19	-2.74	-4.80	559569.60	404298.56	32°06'41.336"N	104°16'28.007"W	5.52	240.261	0.12
800.00	0.440	305.260	799.96	5.03	-2.34	-5.58	559568.82	404298.96	32°06'41.340"N	104°16'28.016"W	6.05	247.278	0.19
900.00	0.400	297.770	899.96	5.72	-1.95	-6.21	559568.19	404299.35	32°06'41.344"N	104°16'28.024"W	6.51	252.524	0.07
1000.00	0.120	317.840	999.96	6.14	-1.71	-6.59	559567.82	404299.59	32°06'41.346"N	104°16'28.028"W	6.80	255.414	0.29
1100.00	0.840	71.060	1099.96	5.59	-1.40	-5.96	559568.44	404299.90	32°06'41.349"N	104°16'28.021"W	6.12	256.803	0.89
1200.00	1.830	74.260	1199.93	3.52	-0.73	-3.73	559570.67	404300.57	32°06'41.356"N	104°16'27.995"W	3.80	258.977	0.99
1300.00	1.620	77.740	1299.88	0.80	0.01	-0.81	559573.59	404301.31	32°06'41.363"N	104°16'27.961"W	0.81	270.447	0.23
1400.00	2.350	82.670	1399.82	-2.44	0.57	2.60	559577.00	404301.87	32°06'41.369"N	104°16'27.921"W	2.66	77.680	0.75
1500.00	3.370	81.170	1499.70	-7.16	1.28	7.54	559581.94	404302.58	32°06'41.376"N	104°16'27.864"W	7.65	80.358	1.02
1600.00	3.790	77.740	1599.50	-12.96	2.43	13.67	559588.07	404303.73	32°06'41.387"N	104°16'27.793"W	13.89	79.907	0.47
1700.00	3.190	79.430	1699.31	-18.58	3.65	19.64	559594.04	404304.95	32°06'41.399"N	104°16'27.723"W	19.97	79.482	0.61
1800.00	1.860	82.670	1799.22	-22.71	4.36	23.98	559598.38	404305.66	32°06'41.406"N	104°16'27.673"W	24.38	79.688	1.34
1900.00	0.660	86.920	1899.19	-24.81	4.60	26.17	559600.57	404305.90	32°06'41.409"N	104°16'27.647"W	26.57	80.027	1.20
2000.00	0.580	83.990	1999.18	-25.85	4.69	27.25	559601.64	404305.99	32°06'41.409"N	104°16'27.635"W	27.65	80.242	0.09
2100.00	0.420	75.390	2099.18	-26.66	4.83	28.10	559602.50	404306.13	32°06'41.411"N	104°16'27.625"W	28.52	80.247	0.18
2200.00	0.330	45.000	2199.18	-27.16	5.13	28.66	559603.06	404306.43	32°06'41.414"N	104°16'27.618"W	29.12	79.858	0.21
2300.00	0.430	3.920	2299.18	-27.27	5.70	28.89	559603.29	404307.00	32°06'41.420"N	104°16'27.616"W	29.45	78.830	0.28
2400.00	0.280	349.990	2399.17	-27.14	6.32	28.87	559603.27	404307.62	32°06'41.426"N	104°16'27.616"W	29.56	77.654	0.17
2500.00	0.360	329.300	2499.17	-26.84	6.83	28.67	559603.07	404308.13	32°06'41.431"N	104°16'27.618"W	29.47	76.600	0.14
2600.00	0.300	310.430	2599.17	-26.40	7.27	28.31	559602.71	404308.57	32°06'41.435"N	104°16'27.622"W	29.23	75.598	0.12
2700.00	0.190	282.900	2699.17	-26.01	7.48	27.95	559602.35	404308.78	32°06'41.437"N	104°16'27.626"W	28.93	75.023	0.16
2800.00	0.250	256.810	2799.17	-25.64	7.46	27.58	559601.97	404308.76	32°06'41.437"N	104°16'27.631"W	28.57	74.854	0.12
2900.00	0.200	281.100	2899.17	-25.27	7.45	27.19	559601.59	404308.75	32°06'41.437"N	104°16'27.635"W	28.20	74.682	0.11



Actual Wellpath Report

No. 1H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H AWB
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1 AWB at 9300.00 MD

WELLPATH DATA (216 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
3000.00	0.210	244.420	2999.17	-24.95	7.40	26.86	559601.25	404308.70	32°06'41.436"N	104°16'27.639"W	27.86	74.590	0.13
3100.00	0.350	232.880	3099.17	-24.60	7.14	26.45	559600.85	404308.44	32°06'41.434"N	104°16'27.644"W	27.40	74.894	0.15
3200.00	0.460	247.160	3199.16	-24.06	6.80	25.83	559600.23	404308.10	32°06'41.430"N	104°16'27.651"W	26.71	75.255	0.15
3300.00	0.510	238.150	3299.16	-23.40	6.41	25.09	559599.48	404307.71	32°06'41.427"N	104°16'27.660"W	25.89	75.670	0.09
3400.00	0.700	231.830	3399.15	-22.68	5.80	24.23	559598.63	404307.10	32°06'41.420"N	104°16'27.670"W	24.91	76.546	0.20
3500.00	0.700	242.180	3499.15	-21.80	5.13	23.21	559597.61	404306.43	32°06'41.414"N	104°16'27.682"W	23.77	77.527	0.13
3600.00	0.720	237.010	3599.14	-20.87	4.51	22.14	559596.54	404305.81	32°06'41.408"N	104°16'27.694"W	22.59	78.495	0.07
3700.00	0.740	237.750	3699.13	-19.95	3.82	21.07	559595.47	404305.12	32°06'41.401"N	104°16'27.707"W	21.41	79.723	0.02
3800.00	0.750	234.390	3799.12	-19.03	3.09	19.99	559594.39	404304.39	32°06'41.394"N	104°16'27.719"W	20.23	81.201	0.04
3900.00	0.910	228.120	3899.11	-18.10	2.18	18.87	559593.26	404303.48	32°06'41.385"N	104°16'27.732"W	18.99	83.400	0.18
4000.00	0.840	230.720	3999.10	-17.15	1.19	17.71	559592.11	404302.49	32°06'41.375"N	104°16'27.746"W	17.75	86.159	0.08
4100.00	0.680	223.850	4099.09	-16.36	0.30	16.73	559591.13	404301.60	32°06'41.366"N	104°16'27.757"W	16.73	88.983	0.18
4200.00	0.710	222.780	4199.08	-15.72	-0.59	15.90	559590.30	404300.71	32°06'41.357"N	104°16'27.767"W	15.91	92.111	0.03
4300.00	0.750	218.990	4299.08	-15.08	-1.55	15.06	559589.46	404299.75	32°06'41.348"N	104°16'27.776"W	15.14	95.872	0.06
4400.00	0.790	222.500	4399.07	-14.42	-2.57	14.19	559588.59	404298.73	32°06'41.338"N	104°16'27.787"W	14.42	100.253	0.06
4500.00	0.740	213.490	4499.06	-13.81	-3.61	13.36	559587.76	404297.69	32°06'41.327"N	104°16'27.796"W	13.84	105.128	0.13
4600.00	0.690	203.630	4599.05	-13.43	-4.70	12.77	559587.17	404296.60	32°06'41.317"N	104°16'27.803"W	13.61	110.223	0.13
4700.00	0.680	209.610	4699.04	-13.11	-5.77	12.23	559586.63	404295.53	32°06'41.306"N	104°16'27.809"W	13.53	115.256	0.07
4800.00	0.890	211.560	4799.03	-12.65	-6.95	11.53	559585.93	404294.35	32°06'41.294"N	104°16'27.817"W	13.46	121.068	0.21
4900.00	0.980	210.560	4899.02	-12.09	-8.35	10.69	559585.09	404292.95	32°06'41.281"N	104°16'27.827"W	13.56	127.978	0.09
5000.00	1.090	207.290	4999.00	-11.54	-9.93	9.82	559584.22	404291.37	32°06'41.265"N	104°16'27.837"W	13.96	135.312	0.12
5100.00	1.060	206.310	5098.99	-11.02	-11.60	8.97	559583.37	404289.70	32°06'41.248"N	104°16'27.847"W	14.67	142.278	0.04
5200.00	0.910	218.350	5198.97	-10.42	-13.05	8.07	559582.47	404288.25	32°06'41.234"N	104°16'27.858"W	15.35	148.270	0.25
5300.00	0.810	221.380	5298.96	-9.69	-14.21	7.11	559581.51	404287.09	32°06'41.223"N	104°16'27.869"W	15.89	153.408	0.11
5400.00	0.970	227.200	5398.95	-8.84	-15.31	6.02	559580.42	404285.99	32°06'41.212"N	104°16'27.882"W	16.46	158.527	0.18
5500.00	0.770	244.010	5498.94	-7.80	-16.18	4.80	559579.20	404285.12	32°06'41.203"N	104°16'27.896"W	16.88	163.483	0.32
5600.00	0.520	249.680	5598.93	-6.88	-16.63	3.77	559578.17	404284.67	32°06'41.199"N	104°16'27.908"W	17.06	167.233	0.26
5700.00	0.730	230.860	5698.93	-6.08	-17.19	2.85	559577.25	404284.11	32°06'41.193"N	104°16'27.918"W	17.43	170.590	0.29
5800.00	0.890	206.490	5798.92	-5.46	-18.29	2.01	559576.41	404283.01	32°06'41.182"N	104°16'27.928"W	18.40	173.732	0.38
5900.00	1.450	197.830	5898.89	-5.11	-20.19	1.28	559575.68	404281.11	32°06'41.163"N	104°16'27.937"W	20.23	176.386	0.59



Actual Wellpath Report

No. 1H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION					
Operator	Cimarex Energy Co. of Colorado			Slot	No. 1H SHL
Area	Eddy County, NM			Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E			Wellbore	No. 1H AWB
Facility	Cottonwood Draw 22 FED COM No. 1H			Sidetrack from	No. 1 AWB at 9300.00 MD

WELLPATH DATA (216 stations)													
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
6000.00	2.810	198.720	5998.82	-4.63	-23.72	0.10	559574.50	404277.58	32°06'41.129"N	104°16'27.950"W	23.72	179.756	1.36
6100.00	3.200	196.350	6098.69	-4.04	-28.72	-1.47	559572.93	404272.59	32°06'41.079"N	104°16'27.969"W	28.75	182.933	0.41
6200.00	2.580	192.240	6198.56	-3.73	-33.60	-2.73	559571.67	404267.71	32°06'41.031"N	104°16'27.984"W	33.71	184.653	0.65
6300.00	2.410	201.210	6298.46	-3.31	-37.75	-3.97	559570.43	404263.55	32°06'40.990"N	104°16'27.998"W	37.96	186.006	0.43
6400.00	1.690	205.580	6398.40	-2.57	-41.04	-5.37	559569.03	404260.26	32°06'40.957"N	104°16'28.014"W	41.39	187.453	0.74
6500.00	1.230	203.650	6498.37	-1.96	-43.36	-6.44	559567.96	404257.95	32°06'40.934"N	104°16'28.027"W	43.83	188.444	0.46
6600.00	1.140	213.960	6598.34	-1.34	-45.17	-7.42	559566.98	404256.14	32°06'40.916"N	104°16'28.038"W	45.77	189.333	0.23
6700.00	1.340	198.200	6698.32	-0.80	-47.10	-8.34	559566.06	404254.20	32°06'40.897"N	104°16'28.049"W	47.84	190.045	0.39
6800.00	1.490	199.630	6798.29	-0.46	-49.44	-9.15	559565.26	404251.87	32°06'40.874"N	104°16'28.058"W	50.28	190.481	0.15
6900.00	1.330	163.830	6898.26	-0.80	-51.78	-9.26	559565.14	404249.53	32°06'40.851"N	104°16'28.059"W	52.60	190.139	0.88
7000.00	1.490	155.210	6998.23	-2.09	-54.07	-8.39	559566.01	404247.23	32°06'40.828"N	104°16'28.049"W	54.72	188.821	0.27
7100.00	0.900	177.010	7098.21	-3.04	-56.04	-7.80	559566.60	404245.27	32°06'40.809"N	104°16'28.043"W	56.58	187.929	0.73
7200.00	1.410	217.890	7198.19	-2.67	-57.79	-8.52	559565.88	404243.51	32°06'40.791"N	104°16'28.051"W	58.42	188.386	0.94
7300.00	1.760	219.960	7298.15	-1.37	-59.94	-10.26	559564.14	404241.37	32°06'40.770"N	104°16'28.071"W	60.81	189.715	0.35
7400.00	0.830	213.910	7398.13	-0.35	-61.72	-11.65	559562.75	404239.59	32°06'40.753"N	104°16'28.087"W	62.81	190.691	0.94
7500.00	0.410	184.800	7498.12	-0.10	-62.68	-12.09	559562.32	404238.63	32°06'40.743"N	104°16'28.092"W	63.83	190.914	0.51
7600.00	0.460	164.450	7598.12	-0.32	-63.42	-12.01	559562.39	404237.89	32°06'40.736"N	104°16'28.092"W	64.55	190.722	0.16
7700.00	1.680	166.570	7698.10	-1.11	-65.23	-11.56	559562.84	404236.07	32°06'40.718"N	104°16'28.086"W	66.25	190.049	1.22
7800.00	1.720	168.710	7798.05	-2.28	-68.13	-10.93	559563.48	404233.18	32°06'40.689"N	104°16'28.079"W	69.00	189.111	0.08
7900.00	1.950	188.680	7898.00	-2.92	-71.28	-10.89	559563.51	404230.02	32°06'40.658"N	104°16'28.079"W	72.11	188.685	0.68
8000.00	2.070	182.810	7997.94	-3.25	-74.77	-11.23	559563.17	404226.54	32°06'40.623"N	104°16'28.083"W	75.61	188.545	0.24
8100.00	2.150	192.230	8097.88	-3.46	-78.41	-11.72	559562.68	404222.90	32°06'40.587"N	104°16'28.088"W	79.28	188.501	0.36
8200.00	1.830	205.000	8197.82	-3.04	-81.69	-12.79	559561.61	404219.62	32°06'40.555"N	104°16'28.101"W	82.68	188.900	0.54
8300.00	1.740	209.570	8297.77	-2.17	-84.45	-14.22	559560.19	404216.85	32°06'40.528"N	104°16'28.117"W	85.64	189.555	0.17
8400.00	1.540	213.360	8397.73	-1.17	-86.90	-15.70	559558.70	404214.41	32°06'40.503"N	104°16'28.135"W	88.30	190.244	0.23
8500.00	1.370	212.410	8497.69	-0.23	-89.03	-17.08	559557.32	404212.28	32°06'40.482"N	104°16'28.151"W	90.65	190.863	0.17
8600.00	1.260	207.700	8597.67	0.52	-91.01	-18.24	559556.17	404210.30	32°06'40.463"N	104°16'28.164"W	92.82	191.330	0.15
8700.00	1.430	217.100	8697.64	1.39	-92.98	-19.50	559554.90	404208.33	32°06'40.443"N	104°16'28.179"W	95.00	191.844	0.28
8800.00	1.510	220.320	8797.61	2.58	-94.98	-21.10	559553.30	404206.33	32°06'40.424"N	104°16'28.197"W	97.30	192.528	0.11
8900.00	1.070	258.000	8897.58	4.09	-96.18	-22.87	559551.53	404205.13	32°06'40.412"N	104°16'28.218"W	98.86	193.376	0.93



Actual Wellpath Report

No. 1H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H AWP
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1 AWP at 9300.00 MD

WELLPATH DATA (216 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
9000.00	1.320	276.280	8997.56	6.09	-96.25	-24.93	559549.47	404205.06	32°06'40.411"N	104°16'28.242"W	99.42	194.521	0.45
9100.00	1.710	273.300	9097.53	8.72	-96.03	-27.56	559546.84	404205.28	32°06'40.413"N	104°16'28.273"W	99.91	196.014	0.40
9200.00	1.780	279.900	9197.48	11.75	-95.68	-30.58	559543.82	404205.63	32°06'40.417"N	104°16'28.308"W	100.45	197.726	0.21
9300.00	2.210	281.130	9297.42	15.23	-95.04	-34.00	559540.40	404206.27	32°06'40.423"N	104°16'28.347"W	100.94	199.686	0.43
9367.00	2.210	281.130	9364.37	17.82	-94.54	-36.54	559537.86	404206.77	32°06'40.428"N	104°16'28.377"W	101.36	201.131	0.00
9403.00	11.700	266.400	9400.07	22.05	-94.64	-40.87	559533.53	404206.67	32°06'40.427"N	104°16'28.427"W	103.09	203.359	26.61
9435.00	18.000	289.800	9431.01	30.09	-93.16	-48.78	559525.63	404208.14	32°06'40.442"N	104°16'28.519"W	105.16	207.635	26.81
9467.00	26.900	290.300	9460.55	42.15	-88.97	-60.24	559514.16	404212.34	32°06'40.483"N	104°16'28.652"W	107.45	214.103	27.82
9498.00	34.200	289.600	9487.23	57.70	-83.61	-75.05	559499.36	404217.70	32°06'40.536"N	104°16'28.825"W	112.35	221.912	23.58
9527.00	40.900	289.300	9510.21	75.18	-77.73	-91.70	559482.70	404223.58	32°06'40.595"N	104°16'29.018"W	120.21	229.716	23.11
9559.00	48.300	287.300	9532.98	97.45	-70.70	-113.03	559461.38	404230.60	32°06'40.664"N	104°16'29.266"W	133.32	237.973	23.54
9591.00	57.200	284.800	9552.33	122.80	-63.70	-137.49	559436.92	404237.61	32°06'40.734"N	104°16'29.550"W	151.53	245.141	28.50
9622.00	65.800	282.100	9567.11	149.99	-57.40	-163.96	559410.45	404243.91	32°06'40.796"N	104°16'29.858"W	173.72	250.707	28.77
9654.00	75.300	279.800	9577.76	180.13	-51.69	-193.55	559380.86	404249.62	32°06'40.853"N	104°16'30.202"W	200.34	255.048	30.45
9684.00	85.100	278.100	9582.86	209.63	-47.10	-222.72	559351.70	404254.20	32°06'40.898"N	104°16'30.541"W	227.65	258.059	33.14
9719.00	94.700	277.300	9582.92	244.53	-42.42	-257.36	559317.06	404258.89	32°06'40.945"N	104°16'30.944"W	260.84	260.641	27.52
9751.00	95.400	277.400	9580.10	276.34	-38.34	-288.98	559285.45	404262.96	32°06'40.985"N	104°16'31.312"W	291.51	262.442	2.21
9782.00	95.300	277.200	9577.21	307.14	-34.42	-319.59	559254.84	404266.88	32°06'41.024"N	104°16'31.667"W	321.44	263.853	0.72
9814.00	95.600	277.400	9574.17	338.93	-30.37	-351.19	559223.24	404270.93	32°06'41.065"N	104°16'32.035"W	352.50	265.057	1.13
9846.00	95.700	277.900	9571.02	370.72	-26.13	-382.75	559191.68	404275.17	32°06'41.107"N	104°16'32.402"W	383.64	266.094	1.59
9877.00	96.100	278.300	9567.84	401.52	-21.79	-413.28	559161.16	404279.52	32°06'41.150"N	104°16'32.757"W	413.85	266.982	1.82
9908.00	94.900	277.800	9564.86	432.33	-17.47	-443.83	559130.61	404283.84	32°06'41.193"N	104°16'33.112"W	444.17	267.746	4.19
9940.00	94.200	278.300	9562.33	464.19	-13.00	-475.42	559099.03	404288.30	32°06'41.237"N	104°16'33.479"W	475.59	268.434	2.69
9972.00	94.200	280.800	9559.98	496.09	-7.70	-506.89	559067.56	404293.60	32°06'41.290"N	104°16'33.845"W	506.94	269.129	7.79
10003.00	93.800	281.000	9557.82	527.01	-1.86	-537.25	559037.20	404299.44	32°06'41.348"N	104°16'34.198"W	537.25	269.802	1.44
10035.00	94.400	281.600	9555.53	558.93	4.40	-568.55	559005.90	404305.70	32°06'41.410"N	104°16'34.562"W	568.57	270.443	2.65
10067.00	94.000	282.500	9553.19	590.84	11.06	-599.76	558974.69	404312.36	32°06'41.476"N	104°16'34.924"W	599.86	271.056	3.07
10098.00	94.500	283.000	9550.89	621.74	17.88	-629.91	558944.54	404319.18	32°06'41.544"N	104°16'35.275"W	630.17	271.626	2.28
10130.00	92.900	283.200	9548.83	653.65	25.12	-661.01	558913.45	404326.42	32°06'41.615"N	104°16'35.637"W	661.49	272.176	5.04
10161.00	93.000	283.900	9547.23	684.58	32.37	-691.11	558883.35	404333.67	32°06'41.687"N	104°16'35.986"W	691.87	272.682	2.28



Actual Wellpath Report

No. 1H AWP

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BAKER
HUGHES

INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H AWB
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1 AWB at 9300.00 MD

WELLPATH DATA (216 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
10193.00	91.500	284.000	9545.97	716.51	40.08	-722.14	558852.32	404341.38	32°06'41.764"N	104°16'36.347"W	723.25	273.177	4.70
10224.00	90.800	282.900	9545.35	747.48	47.29	-752.29	558822.18	404348.59	32°06'41.835"N	104°16'36.698"W	753.77	273.597	4.21
10256.00	90.800	283.400	9544.90	779.45	54.57	-783.44	558791.03	404355.86	32°06'41.907"N	104°16'37.060"W	785.34	273.984	1.56
10288.00	90.300	282.700	9544.60	811.43	61.80	-814.62	558759.86	404363.09	32°06'41.979"N	104°16'37.422"W	816.96	274.338	2.69
10319.00	90.200	282.700	9544.46	842.42	68.61	-844.86	558729.62	404369.90	32°06'42.047"N	104°16'37.774"W	847.64	274.643	0.32
10351.00	91.200	283.300	9544.07	874.39	75.81	-876.03	558698.45	404377.10	32°06'42.118"N	104°16'38.136"W	879.31	274.946	3.64
10382.00	91.500	283.300	9543.34	905.36	82.94	-906.19	558668.29	404384.23	32°06'42.189"N	104°16'38.487"W	909.98	275.229	0.97
10414.00	91.000	283.300	9542.64	937.33	90.30	-937.33	558637.16	404391.59	32°06'42.262"N	104°16'38.849"W	941.67	275.503	1.56
10446.00	91.100	283.500	9542.06	969.29	97.71	-968.45	558606.04	404399.00	32°06'42.335"N	104°16'39.211"W	973.37	275.761	0.70
10478.00	93.100	284.100	9540.88	1001.23	105.34	-999.51	558574.99	404406.63	32°06'42.411"N	104°16'39.571"W	1005.04	276.016	6.52
10509.00	93.900	283.700	9538.99	1032.13	112.77	-1029.54	558544.95	404414.06	32°06'42.485"N	104°16'39.921"W	1035.70	276.251	2.88
10541.00	93.300	283.200	9536.98	1064.04	120.20	-1060.60	558513.90	404421.49	32°06'42.558"N	104°16'40.282"W	1067.39	276.466	2.44
10573.00	89.600	283.000	9536.17	1096.00	127.45	-1091.75	558482.75	404428.74	32°06'42.630"N	104°16'40.644"W	1099.17	276.659	11.58
10605.00	90.200	282.900	9536.23	1127.99	134.62	-1122.94	558451.56	404435.91	32°06'42.701"N	104°16'41.006"W	1130.98	276.836	1.90
10636.00	94.300	284.400	9535.01	1158.92	141.93	-1153.03	558421.47	404443.22	32°06'42.774"N	104°16'41.356"W	1161.74	277.017	14.08
10668.00	94.100	284.000	9532.67	1190.79	149.76	-1183.97	558390.54	404451.04	32°06'42.851"N	104°16'41.716"W	1193.41	277.209	1.39
10700.00	93.300	283.800	9530.60	1222.68	157.43	-1214.97	558359.54	404458.71	32°06'42.927"N	104°16'42.076"W	1225.13	277.383	2.58
10732.00	93.100	283.600	9528.82	1254.59	165.00	-1246.01	558328.50	404466.28	32°06'43.002"N	104°16'42.437"W	1256.89	277.543	0.88
10763.00	92.700	283.400	9527.25	1285.52	172.22	-1276.12	558298.40	404473.51	32°06'43.074"N	104°16'42.787"W	1287.69	277.686	1.44
10795.00	92.800	283.000	9525.71	1317.46	179.52	-1307.24	558267.29	404480.81	32°06'43.147"N	104°16'43.149"W	1319.50	277.820	1.29
10827.00	92.900	282.500	9524.12	1349.41	186.58	-1338.41	558236.12	404487.86	32°06'43.216"N	104°16'43.511"W	1351.35	277.936	1.59
10859.00	92.100	282.800	9522.73	1381.37	193.58	-1369.60	558204.93	404494.86	32°06'43.286"N	104°16'43.874"W	1383.21	278.045	2.67
10890.00	91.100	282.600	9521.86	1412.34	200.39	-1399.83	558174.70	404501.67	32°06'43.353"N	104°16'44.225"W	1414.10	278.147	3.29
10922.00	91.600	283.100	9521.11	1444.31	207.50	-1431.02	558143.51	404508.78	32°06'43.424"N	104°16'44.588"W	1445.99	278.251	2.21
10954.00	92.800	282.900	9519.88	1476.27	214.70	-1462.18	558112.36	404515.98	32°06'43.495"N	104°16'44.950"W	1477.85	278.353	3.80
10985.00	93.300	283.200	9518.23	1507.21	221.69	-1492.33	558082.21	404522.97	32°06'43.565"N	104°16'45.301"W	1508.71	278.450	1.88
11017.00	92.600	283.100	9516.58	1539.14	228.96	-1523.45	558051.09	404530.24	32°06'43.637"N	104°16'45.662"W	1540.56	278.547	2.21
11049.00	91.200	282.800	9515.52	1571.10	236.12	-1554.62	558019.92	404537.40	32°06'43.708"N	104°16'46.025"W	1572.45	278.636	4.47
11080.00	91.400	282.800	9514.82	1602.08	242.99	-1584.84	557989.70	404544.27	32°06'43.776"N	104°16'46.376"W	1603.36	278.717	0.65
11112.00	91.900	282.700	9513.90	1634.05	250.05	-1616.04	557958.51	404551.33	32°06'43.846"N	104°16'46.739"W	1635.27	278.796	1.59



Actual Wellpath Report

No. 1H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H AWB
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1 AWB at 9300.00 MD

WELLPATH DATA (216 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
11144.00	92.000	282.500	9512.81	1666.02	257.03	-1647.25	557927.30	404558.30	32°06'43.915"N	104°16'47.102"W	1667.18	278.869	0.70
11175.00	92.600	282.100	9511.56	1696.99	263.63	-1677.51	557897.04	404564.90	32°06'43.981"N	104°16'47.453"W	1698.10	278.931	2.33
11207.00	90.300	281.600	9510.75	1728.97	270.19	-1708.82	557865.74	404571.47	32°06'44.046"N	104°16'47.817"W	1730.05	278.985	7.36
11239.00	88.800	283.000	9511.00	1760.96	277.01	-1740.08	557834.48	404578.28	32°06'44.113"N	104°16'48.181"W	1761.99	279.045	6.41
11270.00	88.800	282.900	9511.65	1791.94	283.96	-1770.29	557804.28	404585.23	32°06'44.182"N	104°16'48.532"W	1792.92	279.113	0.32
11302.00	89.400	283.100	9512.16	1823.91	291.15	-1801.46	557773.10	404592.43	32°06'44.254"N	104°16'48.894"W	1824.84	279.181	1.98
11334.00	89.600	283.400	9512.44	1855.89	298.49	-1832.61	557741.96	404599.76	32°06'44.326"N	104°16'49.256"W	1856.76	279.251	1.13
11365.00	89.700	283.100	9512.62	1886.86	305.59	-1862.79	557711.79	404606.86	32°06'44.397"N	104°16'49.607"W	1887.69	279.316	1.02
11397.00	90.300	283.300	9512.62	1918.84	312.90	-1893.94	557680.64	404614.17	32°06'44.469"N	104°16'49.969"W	1919.61	279.381	1.98
11429.00	90.700	283.000	9512.35	1950.82	320.18	-1925.10	557649.48	404621.45	32°06'44.541"N	104°16'50.332"W	1951.54	279.443	1.56
11460.00	88.600	281.200	9512.54	1981.81	326.68	-1955.41	557619.17	404627.95	32°06'44.606"N	104°16'50.684"W	1982.51	279.484	8.92
11492.00	88.300	281.000	9513.40	2013.80	332.84	-1986.80	557587.79	404634.10	32°06'44.667"N	104°16'51.049"W	2014.48	279.510	1.13
11524.00	89.200	281.300	9514.10	2045.79	339.02	-2018.18	557556.40	404640.29	32°06'44.728"N	104°16'51.414"W	2046.46	279.536	2.96
11555.00	89.400	280.300	9514.48	2076.78	344.83	-2048.63	557525.96	404646.10	32°06'44.786"N	104°16'51.768"W	2077.45	279.555	3.29
11587.00	90.000	279.800	9514.65	2108.78	350.41	-2080.14	557494.45	404651.68	32°06'44.841"N	104°16'52.134"W	2109.45	279.562	2.44
11619.00	91.300	280.100	9514.28	2140.77	355.94	-2111.66	557462.94	404657.21	32°06'44.896"N	104°16'52.500"W	2141.45	279.568	4.17
11651.00	93.000	280.300	9513.08	2172.74	361.61	-2143.13	557431.47	404662.87	32°06'44.952"N	104°16'52.866"W	2173.42	279.577	5.35
11683.00	93.400	280.100	9511.30	2204.69	367.26	-2174.57	557400.03	404668.53	32°06'45.009"N	104°16'53.232"W	2205.37	279.586	1.40
11714.00	93.300	279.900	9509.48	2235.63	372.64	-2205.05	557369.55	404673.90	32°06'45.062"N	104°16'53.586"W	2236.32	279.592	0.72
11746.00	93.700	279.700	9507.53	2267.57	378.07	-2236.52	557338.08	404679.34	32°06'45.116"N	104°16'53.952"W	2268.26	279.595	1.40
11777.00	94.000	279.800	9505.45	2298.49	383.31	-2267.01	557307.60	404684.58	32°06'45.168"N	104°16'54.306"W	2299.19	279.597	1.02
11809.00	91.900	278.800	9503.80	2330.43	388.48	-2298.54	557276.07	404689.74	32°06'45.219"N	104°16'54.673"W	2331.14	279.593	7.27
11841.00	91.300	279.000	9502.91	2362.40	393.42	-2330.15	557244.47	404694.69	32°06'45.268"N	104°16'55.040"W	2363.13	279.584	1.98
11873.00	92.700	279.700	9501.79	2394.36	398.62	-2361.70	557212.92	404699.88	32°06'45.320"N	104°16'55.407"W	2395.10	279.580	4.89
11905.00	91.000	279.600	9500.76	2426.34	403.98	-2393.23	557181.39	404705.24	32°06'45.373"N	104°16'55.774"W	2427.09	279.581	5.32
11936.00	88.600	279.600	9500.87	2457.32	409.15	-2423.79	557150.83	404710.41	32°06'45.424"N	104°16'56.129"W	2458.08	279.582	7.74
11968.00	89.400	279.900	9501.43	2489.31	414.57	-2455.33	557119.30	404715.83	32°06'45.478"N	104°16'56.496"W	2490.08	279.584	2.67
11999.00	90.300	281.600	9501.51	2520.31	420.35	-2485.78	557088.85	404721.61	32°06'45.535"N	104°16'56.850"W	2521.07	279.598	6.20
12031.00	89.400	281.100	9501.59	2552.31	426.65	-2517.15	557057.48	404727.91	32°06'45.598"N	104°16'57.215"W	2553.06	279.620	3.22
12063.00	91.300	281.800	9501.39	2584.30	433.00	-2548.51	557026.12	404734.26	32°06'45.661"N	104°16'57.579"W	2585.04	279.643	6.33



Actual Wellpath Report

No. 1H AWP

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INTEQ

REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H AWB
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1 AWB at 9300.00 MD

WELLPATH DATA (216 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
12095.00	93.100	282.800	9500.17	2616.27	439.81	-2579.76	556994.88	404741.07	32°06'45.728"N	104°16'57.942"W	2616.98	279.675	6.43
12126.00	93.600	282.600	9498.35	2647.20	446.62	-2609.95	556964.70	404747.87	32°06'45.796"N	104°16'58.293"W	2647.88	279.710	1.74
12158.00	91.400	280.300	9496.96	2679.17	452.96	-2641.27	556933.37	404754.22	32°06'45.859"N	104°16'58.657"W	2679.83	279.731	9.94
12190.00	93.400	281.800	9495.62	2711.14	459.09	-2672.65	556902.00	404760.34	32°06'45.919"N	104°16'59.022"W	2711.79	279.747	7.81
12221.00	92.300	280.800	9494.08	2742.10	465.15	-2703.01	556871.64	404766.41	32°06'45.980"N	104°16'59.375"W	2742.74	279.764	4.79
12253.00	91.200	279.100	9493.10	2774.08	470.68	-2734.51	556840.14	404771.94	32°06'46.034"N	104°16'59.741"W	2774.73	279.766	6.33
12285.00	90.300	277.700	9492.68	2806.04	475.35	-2766.17	556808.49	404776.61	32°06'46.081"N	104°17'00.109"W	2806.71	279.751	5.20
12316.00	91.500	277.900	9492.19	2836.99	479.56	-2796.88	556777.78	404780.82	32°06'46.123"N	104°17'00.466"W	2837.69	279.729	3.92
12348.00	94.000	280.300	9490.66	2868.93	484.61	-2828.43	556746.23	404785.87	32°06'46.173"N	104°17'00.833"W	2869.65	279.722	10.82
12379.00	92.400	279.900	9488.93	2899.87	490.04	-2858.90	556715.76	404791.30	32°06'46.227"N	104°17'01.188"W	2900.60	279.726	5.32
12411.00	91.100	280.100	9487.95	2931.85	495.60	-2890.40	556684.27	404796.85	32°06'46.282"N	104°17'01.554"W	2932.58	279.729	4.11
12442.00	91.700	281.100	9487.19	2962.84	501.30	-2920.86	556653.81	404802.55	32°06'46.338"N	104°17'01.908"W	2963.57	279.739	3.76
12474.00	91.700	281.200	9486.24	2994.83	507.48	-2952.25	556622.43	404808.74	32°06'46.400"N	104°17'02.273"W	2995.55	279.754	0.31
12506.00	90.900	280.800	9485.52	3026.82	513.59	-2983.65	556591.03	404814.84	32°06'46.460"N	104°17'02.638"W	3027.53	279.767	2.79
12538.00	91.000	281.200	9484.99	3058.82	519.69	-3015.06	556559.62	404820.94	32°06'46.521"N	104°17'03.003"W	3059.52	279.780	1.29
12569.00	93.000	281.900	9483.91	3089.79	525.89	-3045.41	556529.27	404827.15	32°06'46.582"N	104°17'03.356"W	3090.48	279.797	6.83
12601.00	93.700	283.200	9482.04	3121.73	532.84	-3076.59	556498.09	404834.09	32°06'46.651"N	104°17'03.718"W	3122.39	279.826	4.61
12633.00	91.100	282.100	9480.70	3153.68	539.84	-3107.78	556466.90	404841.09	32°06'46.720"N	104°17'04.081"W	3154.32	279.854	8.82
12664.00	93.000	282.300	9479.59	3184.65	546.38	-3138.06	556436.63	404847.63	32°06'46.785"N	104°17'04.433"W	3185.27	279.877	6.16
12696.00	94.000	283.200	9477.63	3216.58	553.43	-3169.21	556405.48	404854.68	32°06'46.855"N	104°17'04.795"W	3217.17	279.906	4.20
12712.00	93.600	282.000	9476.57	3232.54	556.91	-3184.79	556389.90	404858.16	32°06'46.890"N	104°17'04.976"W	3233.12	279.919	7.89
12743.00	93.700	281.700	9474.60	3263.47	563.27	-3215.07	556359.63	404864.51	32°06'46.953"N	104°17'05.328"W	3264.04	279.937	1.02
12775.00	93.600	281.700	9472.56	3295.40	569.74	-3246.34	556328.36	404870.99	32°06'47.017"N	104°17'05.692"W	3295.96	279.954	0.31
12806.00	94.300	282.000	9470.43	3326.33	576.09	-3276.61	556298.09	404877.34	32°06'47.080"N	104°17'06.044"W	3326.87	279.972	2.46
12838.00	94.100	282.400	9468.08	3358.23	582.84	-3307.80	556266.90	404884.08	32°06'47.147"N	104°17'06.406"W	3358.76	279.993	1.39
12870.00	93.700	282.100	9465.91	3390.15	589.61	-3339.00	556235.71	404890.86	32°06'47.214"N	104°17'06.769"W	3390.66	280.014	1.56
12901.00	93.300	281.900	9464.01	3421.09	596.04	-3369.27	556205.44	404897.29	32°06'47.278"N	104°17'07.121"W	3421.58	280.032	1.44
12933.00	93.100	281.800	9462.23	3453.04	602.61	-3400.54	556174.18	404903.85	32°06'47.343"N	104°17'07.484"W	3453.52	280.049	0.70
12965.00	93.600	281.900	9460.36	3484.98	609.17	-3431.80	556142.92	404910.41	32°06'47.408"N	104°17'07.848"W	3485.45	280.066	1.59
12996.00	94.500	282.700	9458.17	3515.89	615.75	-3462.01	556112.71	404917.00	32°06'47.473"N	104°17'08.199"W	3516.35	280.085	3.88



Actual Wellpath Report

No. 1H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No. 1H SHL
Area	Eddy County, NM	Well	No. 1H
Field	(Cottonwood) Sec 22, T25S, R26E	Wellbore	No. 1H AWB
Facility	Cottonwood Draw 22 FED COM No. 1H	Sidetrack from	No. 1 AWB at 9300.00 MD

WELLPATH DATA (216 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Closure Dist [ft]	Closure Dir [°]	DLS [°/100ft]
13028.00	93.200	282.500	9456.02	3547.81	622.72	-3493.17	556081.55	404923.96	32°06'47.542"N	104°17'08.561"W	3548.24	280.108	4.11
13075.00	94.100	282.300	9453.03	3594.70	632.79	-3538.98	556035.75	404934.03	32°06'47.642"N	104°17'09.094"W	3595.11	280.138	1.96
13106.00	96.200	282.700	9450.25	3625.56	639.47	-3569.12	556005.61	404940.71	32°06'47.708"N	104°17'09.444"W	3625.96	280.158	6.90
13123.00	95.800	282.700	9448.47	3642.46	643.19	-3585.62	555989.12	404944.43	32°06'47.745"N	104°17'09.636"W	3642.85	280.170	2.35
13155.00	95.500	282.700	9445.32	3674.29	650.19	-3616.68	555958.05	404951.43	32°06'47.815"N	104°17'09.997"W	3674.66	280.191	0.94
13207.00†	95.500	282.700	9440.33	3726.03	661.57	-3667.18	555907.56	404962.81	32°06'47.928"N	104°17'10.584"W	3726.37	280.226	0.00

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	Shape
No. 1H BHL		9450.00	761.40	-3914.68	555660.08	405062.63	32°06'48.916"N	104°17'13.461"W	point

WELLPATH COMPOSITION . Ref Wellbore: No. 1H AWB Ref Wellpath: No. 1H AWP

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
0.00	9300.00	Gyrodata relative depth - Continuous gyro	GYRO	No. 1 AWB
9300.00	13155.00	NaviTrak (Standard)	MWD	No. 1H AWB
13155.00	13207.00	Blind Drilling (std)	Projection to bit	No. 1H AWB