

Results of Directional Survey

API number:	30-025-40342			
OGRID:		Operator:	CIMAREX ENERGY CO. OF COLORADO	
		Property:	BERRY 16 STATE	# 1H

surface	ULSTR:	O	16	T	21S	R	34E
				330	FSL	2095	FEL

BH Loc	ULSTR:	B	16	T	21S	R	34E
15309	MD	10871.9	TVD	338	FNL	2052	FEL
				4942	FSL		

Top Perf/OH	ULSTR:			T		R	

Bot Perf/OH	ULSTR:			T		R	

	MD	N/S	E/W	VD
TOP PERFS/OH				
BOT PERFS/OH				

NEXT TO LAST	15249	4552.47	41.75	10872.51
LAST READING	15309	4612.46	42.69	10871.88
TD	15309	4612.46	42.69	10871.88

Surface Location	330	FS	2095	FE
Projected BHL	4942	FS	2052	FE
Location of				
Top Perfs/OH	330	FS	2095	FE
Bottom Perfs/OH	330	FS	2095	FE

SUMMARY of Subsurface Locations

Surface Location	O-16-21S-34E	330	FS	2095	FE	Vert. Depth
Top Perfs/OH						
Bottom Perfs/OH						
Projected TD	B-16-21S-34E	4942	FS	2052	FE	10871.88

MAR 05 2014



Cimarex Energy Co. of Colorado

Location: Lea County, NM
Field: (Berry) Sec 16, T21S, R34E,
Facility: Berry 16 State Com No.1H

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



HOBBS OCD

FEB 07 2014

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Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	10334.10	0.110	177.730	10333.64	-19.09	-11.92	0.00	-19.29
Est. KOP	10419.00	0.110	177.730	10418.54	-19.26	-11.91	0.00	-19.45
EOC	11143.36	90.000	0.937	10880.00	441.26	-4.33	12.44	441.13
TL	11151.27	90.000	1.095	10880.00	449.16	-4.19	2.00	449.04
No. 1H PBHL	15325.72	90.000	1.095	10880.00	4622.86	75.59	0.00	4623.47

Plot reference wellpath is Rev-C.0

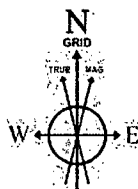
True vertical depths are referenced to Rig on No.1H SHL (KB) Grid System: NAD83 / TM New Mexico SP, Eastern Zone (3001), US feet

Measured depths are referenced to Rig on No.1H SHL (KB) North Reference: Grid north

Rig on No.1H SHL (KB) to Mean Sea Level: 3749 feet Scale: True distance

Mean Sea Level to Mud line (At Slot: No.1H SHL): -3728 feet Depths are in feet

Coordinates are in feet referenced to Slot Created by: hankol on 6/14/2012



BGGM (1945.0 to 2013.0) Dip: 60.37° Field: 48678.1 nT
Magnetic North is 7.52 degrees East of True North (at 6/14/2012)

Grid North is 0.46 degrees East of True North

To correct azimuth from True to Grid subtract 0.46 degrees

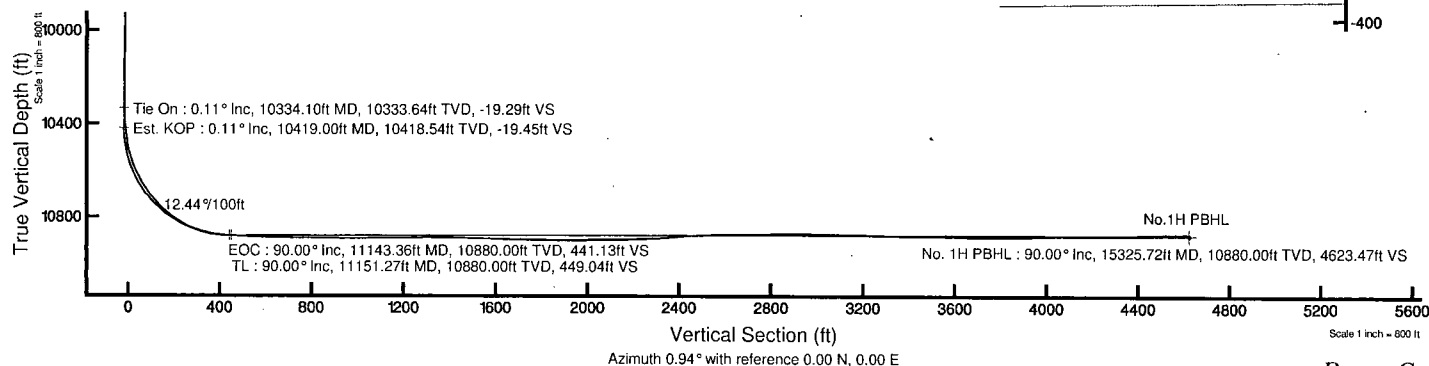
To correct azimuth from Magnetic to Grid add 7.06 degrees

For example: if the Magnetic North Azimuth = 90 degs, then the Grid North Azimuth = 90 + 7.06 = 97.06

TL : 10880.00ft TVD, 449.16ft N, 4.19ft W
EOC : 10880.00ft TVD, 441.26ft N, 4.33ft W

Est. KOP : 10418.54ft TVD, 19.26ft S, 11.91ft W
Tie On : 10333.64ft TVD, 19.09ft S, 11.92ft W

No.1H SHL
330' FSL
2095' FEL



Rev-C.0



Actual Wellpath Report

No. 1H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co. of Colorado	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(Berry) Sec 16, T21S, R34E,	Wellbore	No. 1H AWB
Facility	Berry 16 State Com No.1H		

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	Gentbry
Scale	0.99999	Report Generated	12/21/2012 at 3:31:54 PM
Convergence at slot	0.46° East	Database/Source file	WA Midland/No. 1H_AWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	806615.20	536720.70	32°28'21.249"N	103°28'23.298"W
Facility Reference Pt			806615.20	536720.70	32°28'21.249"N	103°28'23.298"W
Field Reference Pt			808379.60	536740.80	32°28'21.306"N	103°28'02.702"W

WELLPATH DATUM			
Calculation method	Minimum curvature	Rig on No.1H SHL (KB) to Facility Vertical Datum	21.00ft
Horizontal Reference Pt	Slot	Rig on No.1H SHL (KB) to Mean Sea Level	3749.00ft
Vertical Reference Pt	Rig on No.1H SHL (KB)	Rig on No.1H SHL (KB) to Mud Line at Slot (No.1H SHL)	21.00ft
MD Reference Pt	Rig on No.1H SHL (KB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	0.94°



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Field	(Berry) Sec 16, T21S, R34E,	Wellbore	No. 1H AWB
Facility	Berry 16 State Com No.1H		

WELLPATH DATA (122 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00	0.000	109.490	0.00	0.00	0.00	0.00	806615.20	536720.70	32°28'21.249"N	103°28'23.298"W	0.00	
200.00	0.350	109.490	200.00	-0.19	-0.20	0.58	806615.78	536720.50	32°28'21.247"N	103°28'23.292"W	0.17	
400.00	0.540	112.450	399.99	-0.73	-0.77	2.02	806617.22	536719.93	32°28'21.241"N	103°28'23.275"W	0.10	
468.70	0.500	117.650	468.69	-0.99	-1.03	2.59	806617.79	536719.67	32°28'21.238"N	103°28'23.268"W	0.09	
658.40	0.420	91.700	658.38	-1.37	-1.44	4.02	806619.22	536719.27	32°28'21.234"N	103°28'23.252"W	0.12	
848.10	0.430	78.740	848.08	-1.23	-1.32	5.41	806620.61	536719.38	32°28'21.235"N	103°28'23.235"W	0.05	
1037.80	0.420	63.100	1037.77	-0.75	-0.86	6.73	806621.93	536719.84	32°28'21.240"N	103°28'23.220"W	0.06	
1227.60	0.950	129.450	1227.56	-1.41	-1.55	8.56	806623.76	536719.15	32°28'21.233"N	103°28'23.199"W	0.46	
1417.30	0.650	111.330	1417.24	-2.76	-2.94	10.78	806625.98	536717.76	32°28'21.219"N	103°28'23.173"W	0.21	
1607.00	0.250	128.870	1606.94	-3.39	-3.59	12.10	806627.30	536717.11	32°28'21.212"N	103°28'23.157"W	0.22	
1796.70	0.150	148.910	1796.64	-3.86	-4.06	12.55	806627.75	536716.64	32°28'21.208"N	103°28'23.152"W	0.06	
1986.40	0.170	234.620	1986.34	-4.23	-4.44	12.45	806627.65	536716.26	32°28'21.204"N	103°28'23.153"W	0.11	
2176.20	0.380	229.730	2176.13	-4.82	-5.01	11.74	806626.94	536715.69	32°28'21.198"N	103°28'23.162"W	0.11	
2365.90	0.150	158.700	2365.83	-5.46	-5.65	11.35	806626.55	536715.05	32°28'21.192"N	103°28'23.166"W	0.19	
2555.60	0.150	81.890	2555.53	-5.65	-5.84	11.69	806626.89	536714.86	32°28'21.190"N	103°28'23.162"W	0.10	
2745.30	0.330	3.480	2745.23	-5.07	-5.26	11.97	806627.17	536715.44	32°28'21.196"N	103°28'23.159"W	0.18	
2935.00	0.160	358.730	2934.93	-4.25	-4.45	12.00	806627.20	536716.25	32°28'21.204"N	103°28'23.159"W	0.09	
3124.80	0.550	84.150	3124.72	-3.88	-4.09	12.90	806628.10	536716.61	32°28'21.207"N	103°28'23.148"W	0.30	
3314.50	0.440	71.930	3314.42	-3.54	-3.78	14.49	806629.69	536716.93	32°28'21.210"N	103°28'23.130"W	0.08	
3504.20	0.210	68.380	3504.11	-3.17	-3.42	15.51	806630.71	536717.28	32°28'21.214"N	103°28'23.118"W	0.12	
3693.90	0.470	161.400	3693.81	-3.77	-4.03	16.08	806631.28	536716.67	32°28'21.208"N	103°28'23.111"W	0.28	
3883.60	0.240	200.050	3883.51	-4.88	-5.14	16.19	806631.39	536715.56	32°28'21.197"N	103°28'23.110"W	0.17	
4073.40	0.320	162.820	4073.31	-5.75	-6.02	16.21	806631.41	536714.68	32°28'21.188"N	103°28'23.110"W	0.10	
4263.10	0.110	110.570	4263.00	-6.32	-6.59	16.54	806631.74	536714.11	32°28'21.182"N	103°28'23.106"W	0.14	
4452.80	0.330	251.720	4452.70	-6.56	-6.83	16.19	806631.39	536713.87	32°28'21.180"N	103°28'23.110"W	0.22	
4642.50	0.870	220.540	4642.39	-7.85	-8.09	14.74	806629.94	536712.61	32°28'21.168"N	103°28'23.127"W	0.32	
4832.20	1.710	246.470	4832.04	-10.13	-10.32	11.21	806626.41	536710.38	32°28'21.146"N	103°28'23.169"W	0.53	
5022.00	1.070	259.200	5021.79	-11.67	-11.78	6.87	806622.07	536708.92	32°28'21.132"N	103°28'23.219"W	0.37	
5211.70	0.740	265.960	5211.46	-12.13	-12.20	3.91	806619.11	536708.50	32°28'21.128"N	103°28'23.254"W	0.18	
5401.40	1.170	248.260	5401.14	-12.98	-13.00	0.89	806616.09	536707.70	32°28'21.120"N	103°28'23.289"W	0.27	
5591.10	1.070	249.490	5590.80	-14.38	-14.34	-2.57	806612.63	536706.36	32°28'21.107"N	103°28'23.330"W	0.05	
5780.80	0.390	256.930	5780.49	-15.18	-15.11	-4.86	806610.34	536705.59	32°28'21.100"N	103°28'23.356"W	0.36	
5970.60	0.050	212.120	5970.28	-15.41	-15.32	-5.53	806609.67	536705.38	32°28'21.098"N	103°28'23.364"W	0.19	
6160.30	0.120	270.910	6159.98	-15.48	-15.39	-5.78	806609.42	536705.31	32°28'21.097"N	103°28'23.367"W	0.05	
6350.00	0.020	202.220	6349.68	-15.51	-15.42	-5.99	806609.21	536705.28	32°28'21.097"N	103°28'23.370"W	0.06	
6539.70	0.100	39.040	6539.38	-15.41	-15.32	-5.90	806609.30	536705.38	32°28'21.098"N	103°28'23.369"W	0.06	
6729.40	0.140	8.960	6729.08	-15.05	-14.96	-5.75	806609.45	536705.74	32°28'21.101"N	103°28'23.367"W	0.04	
6919.20	0.210	16.660	6918.88	-14.49	-14.40	-5.62	806609.58	536706.30	32°28'21.107"N	103°28'23.365"W	0.04	
7108.90	0.320	6.280	7108.58	-13.63	-13.54	-5.46	806609.74	536707.16	32°28'21.115"N	103°28'23.363"W	0.06	
7298.60	0.240	326.890	7298.28	-12.77	-12.68	-5.62	806609.58	536708.02	32°28'21.124"N	103°28'23.365"W	0.11	
7488.30	0.260	276.040	7487.98	-12.40	-12.30	-6.27	806608.93	536708.40	32°28'21.128"N	103°28'23.373"W	0.11	
7678.00	0.210	258.470	7677.67	-12.44	-12.33	-7.03	806608.17	536708.37	32°28'21.127"N	103°28'23.382"W	0.05	
7867.80	0.170	314.590	7867.47	-12.32	-12.20	-7.58	806607.62	536708.50	32°28'21.129"N	103°28'23.388"W	0.10	
8057.50	0.410	311.290	8057.17	-11.69	-11.55	-8.29	806606.91	536709.15	32°28'21.135"N	103°28'23.396"W	0.13	
8247.20	0.700	318.080	8246.86	-10.40	-10.24	-9.57	806605.63	536710.46	32°28'21.148"N	103°28'23.411"W	0.16	



Actual Wellpath Report

No. 1H AWP

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Area	Lea County, NM	Well	No.1H
Field	(Berry) Sec 16, T21S, R34E,	Wellbore	No. 1H AWB
Facility	Berry 16 State Com No.1H		

WELLPATH DATA (122 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
8436.90	1.070	332.020	8436.54	-8.00	-7.82	-11.18	806604.02	536712.88	32°28'21.172"N	103°28'23.430"W	0.22	
8626.60	0.290	218.380	8626.23	-6.83	-6.63	-12.30	806602.90	536714.07	32°28'21.184"N	103°28'23.443"W	0.64	
8816.40	0.350	148.490	8816.03	-7.70	-7.50	-12.30	806602.90	536713.20	32°28'21.176"N	103°28'23.443"W	0.19	
9006.10	0.680	112.870	9005.72	-8.61	-8.43	-10.96	806604.24	536712.27	32°28'21.166"N	103°28'23.427"W	0.23	
9195.80	0.370	204.730	9195.41	-9.59	-9.42	-10.18	806605.02	536711.28	32°28'21.156"N	103°28'23.418"W	0.41	
9385.50	0.840	149.540	9385.10	-11.34	-11.18	-9.73	806605.47	536709.52	32°28'21.139"N	103°28'23.413"W	0.37	
9575.20	0.450	98.490	9574.79	-12.62	-12.49	-8.29	806606.91	536708.21	32°28'21.126"N	103°28'23.396"W	0.35	
9765.00	1.030	221.490	9764.58	-14.02	-13.88	-8.68	806606.52	536706.82	32°28'21.112"N	103°28'23.401"W	0.70	
9954.70	1.010	221.470	9954.25	-16.58	-16.41	-10.92	806604.28	536704.29	32°28'21.087"N	103°28'23.427"W	0.01	
10144.40	0.380	175.480	10143.94	-18.48	-18.29	-11.98	806603.22	536702.42	32°28'21.069"N	103°28'23.440"W	0.42	
10334.10	0.110	177.730	10333.64	-19.29	-19.09	-11.92	806603.28	536701.61	32°28'21.061"N	103°28'23.439"W	0.14	
10470.00	8.700	12.300	10469.02	-9.32	-9.16	-9.72	806605.48	536711.54	32°28'21.159"N	103°28'23.413"W	6.48	
10502.00	12.500	15.500	10500.47	-3.59	-3.46	-8.28	806606.92	536717.24	32°28'21.215"N	103°28'23.395"W	12.01	
10533.00	16.600	15.100	10530.47	3.95	4.05	-6.23	806608.97	536724.75	32°28'21.289"N	103°28'23.371"W	13.23	
10565.00	20.400	14.200	10560.84	13.74	13.80	-3.69	806611.51	536734.50	32°28'21.386"N	103°28'23.340"W	10.97	
10597.00	23.700	12.500	10590.52	25.39	25.41	-0.95	806614.25	536746.11	32°28'21.500"N	103°28'23.307"W	11.42	
10628.00	27.500	10.100	10618.48	38.57	38.55	1.66	806616.86	536759.25	32°28'21.630"N	103°28'23.275"W	12.70	
10660.00	31.000	9.200	10646.39	54.02	53.96	4.27	806619.47	536774.66	32°28'21.782"N	103°28'23.243"W	11.02	
10692.00	34.200	7.400	10673.35	71.12	71.02	6.75	806621.95	536791.72	32°28'21.951"N	103°28'23.213"W	10.45	
10723.00	37.600	5.600	10698.46	89.21	89.07	8.80	806624.00	536809.77	32°28'22.129"N	103°28'23.187"W	11.48	
10755.00	41.300	5.000	10723.16	109.48	109.32	10.67	806625.87	536830.02	32°28'22.330"N	103°28'23.164"W	11.62	
10787.00	44.900	4.600	10746.52	131.29	131.10	12.50	806627.70	536851.80	32°28'22.545"N	103°28'23.140"W	11.28	
10818.00	48.800	3.800	10767.72	153.86	153.65	14.15	806629.35	536874.35	32°28'22.768"N	103°28'23.119"W	12.72	
10850.00	52.600	3.200	10787.98	178.60	178.37	15.65	806630.85	536899.06	32°28'23.012"N	103°28'23.099"W	11.96	
10881.00	55.600	3.500	10806.16	203.68	203.43	17.12	806632.32	536924.13	32°28'23.260"N	103°28'23.079"W	9.71	
10911.00	59.400	3.600	10822.28	228.95	228.68	18.69	806633.89	536949.38	32°28'23.510"N	103°28'23.059"W	12.67	
10943.00	63.600	4.000	10837.54	257.04	256.73	20.56	806635.76	536977.43	32°28'23.787"N	103°28'23.034"W	13.17	
10974.00	68.700	4.400	10850.07	285.33	285.00	22.63	806637.83	537005.70	32°28'24.067"N	103°28'23.007"W	16.49	
11006.00	74.500	4.800	10860.17	315.62	315.25	25.07	806640.27	537035.95	32°28'24.366"N	103°28'22.976"W	18.16	
11034.00	78.900	3.200	10866.61	342.82	342.43	26.97	806642.17	537063.12	32°28'24.635"N	103°28'22.951"W	16.67	
11044.00	80.500	2.700	10868.40	352.66	352.25	27.47	806642.67	537072.95	32°28'24.732"N	103°28'22.945"W	16.74	
11123.00	86.600	358.000	10877.27	431.09	430.69	27.93	806643.13	537151.39	32°28'25.508"N	103°28'22.932"W	9.72	
11218.00	87.700	357.800	10882.00	525.84	525.51	24.46	806639.65	537246.20	32°28'26.446"N	103°28'22.963"W	1.18	
11286.00	88.300	358.500	10884.37	593.72	593.43	22.26	806637.46	537314.13	32°28'27.119"N	103°28'22.983"W	1.36	
11384.00	89.000	358.700	10886.68	691.61	691.38	19.87	806635.07	537412.07	32°28'28.088"N	103°28'23.001"W	0.74	
11479.00	89.500	358.600	10887.92	786.52	786.34	17.63	806632.83	537507.03	32°28'29.028"N	103°28'23.019"W	0.54	
11573.00	89.200	358.900	10888.99	880.45	880.31	15.58	806630.78	537601.00	32°28'29.958"N	103°28'23.034"W	0.45	
11668.00	89.900	359.100	10889.73	975.39	975.29	13.92	806629.12	537695.98	32°28'30.898"N	103°28'23.044"W	0.77	
11763.00	90.900	359.100	10889.07	1070.34	1070.28	12.43	806627.63	537790.97	32°28'31.838"N	103°28'23.053"W	1.05	
11858.00	90.700	358.700	10887.74	1165.27	1165.25	10.61	806625.81	537885.94	32°28'32.777"N	103°28'23.065"W	0.47	
11953.00	90.400	358.600	10886.83	1260.19	1260.22	8.37	806623.57	537980.91	32°28'33.717"N	103°28'23.082"W	0.33	
12047.00	89.300	358.200	10887.08	1354.10	1354.18	5.74	806620.94	538074.87	32°28'34.647"N	103°28'23.104"W	1.25	
12142.00	88.800	358.800	10888.65	1449.00	1449.14	3.26	806618.46	538169.82	32°28'35.587"N	103°28'23.124"W	0.82	
12237.00	88.100	359.400	10891.22	1543.91	1544.09	1.76	806616.96	538264.77	32°28'36.527"N	103°28'23.132"W	0.97	
12332.00	88.400	0.900	10894.12	1638.86	1639.04	-2.01	806617.21	538359.72	32°28'37.466"N	103°28'23.121"W	1.61	



Actual Wellpath Report

No. 1H AWP

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REFERENCE WELLPATH IDENTIFICATION

Operator	Cimarex Energy Co. of Colorado	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(Berry) Sec 16, T21S, R34E,	Wellbore	No. 1H AWB
Facility	Berry 16 State Com No.1H		

WELLPATH DATA (122 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Comments
12427.00	89.100	0.900	10896.20	1733.83	1734.01	3.51	806618.71	538454.69	32°28'38.406"N	103°28'23.094"W	0.74	
12521.00	89.300	2.300	10897.51	1827.81	1827.96	6.13	806621.33	538548.64	32°28'39.335"N	103°28'23.055"W	1.50	
12616.00	90.300	2.400	10897.84	1922.78	1922.88	10.02	806625.22	538643.55	32°28'40.274"N	103°28'23.000"W	1.06	
12711.00	90.300	1.800	10897.34	2017.76	2017.81	13.51	806628.71	538738.49	32°28'41.213"N	103°28'22.951"W	0.63	
12806.00	90.900	2.000	10896.35	2112.74	2112.75	16.66	806631.86	538833.43	32°28'42.152"N	103°28'22.905"W	0.67	
12901.00	91.900	3.400	10894.03	2207.67	2207.62	21.13	806636.33	538928.29	32°28'43.090"N	103°28'22.844"W	1.81	
12995.00	93.200	3.600	10889.85	2301.48	2301.35	26.86	806642.06	539022.02	32°28'44.017"N	103°28'22.768"W	1.40	
13090.00	94.400	3.000	10883.55	2396.19	2395.98	32.32	806647.52	539116.65	32°28'44.953"N	103°28'22.696"W	1.41	
13185.00	93.400	2.600	10877.09	2490.91	2490.64	36.95	806652.15	539211.31	32°28'45.889"N	103°28'22.633"W	1.13	
13280.00	92.100	1.200	10872.53	2585.79	2585.48	40.09	806655.29	539306.14	32°28'46.827"N	103°28'22.587"W	2.01	
13375.00	89.800	359.900	10870.96	2680.76	2680.45	41.00	806656.20	539401.12	32°28'47.767"N	103°28'22.567"W	2.78	
13470.00	90.300	358.600	10870.87	2775.72	2775.44	39.76	806654.96	539496.11	32°28'48.707"N	103°28'22.573"W	1.47	
13565.00	90.300	358.000	10870.37	2870.62	2870.40	36.94	806652.14	539591.06	32°28'49.647"N	103°28'22.597"W	0.63	
13660.00	89.300	357.900	10870.71	2965.49	2965.33	33.54	806648.74	539686.00	32°28'50.586"N	103°28'22.628"W	1.06	
13755.00	88.700	357.900	10872.36	3060.34	3060.26	30.06	806645.26	539780.92	32°28'51.526"N	103°28'22.659"W	0.63	
13850.00	88.900	358.000	10874.35	3155.19	3155.17	26.67	806641.87	539875.84	32°28'52.465"N	103°28'22.690"W	0.24	
13945.00	87.900	357.700	10877.01	3250.01	3250.07	23.10	806638.30	539970.73	32°28'53.405"N	103°28'22.723"W	1.10	
14040.00	88.800	357.100	10879.74	3344.79	3344.93	18.80	806634.00	540065.59	32°28'54.343"N	103°28'22.764"W	1.14	
14135.00	89.900	357.300	10880.82	3439.58	3439.81	14.16	806629.36	540160.47	32°28'55.283"N	103°28'22.809"W	1.18	
14230.00	89.500	356.900	10881.32	3534.37	3534.69	9.35	806624.55	540255.34	32°28'56.222"N	103°28'22.857"W	0.60	
14325.00	87.800	358.700	10883.56	3629.19	3629.58	5.70	806620.90	540350.24	32°28'57.161"N	103°28'22.890"W	2.61	
14420.00	90.100	0.600	10885.30	3724.14	3724.55	5.12	806620.32	540445.21	32°28'58.101"N	103°28'22.888"W	3.14	
14515.00	90.500	1.500	10884.80	3819.14	3819.54	6.87	806622.06	540540.19	32°28'59.040"N	103°28'22.859"W	1.04	
14610.00	91.400	1.900	10883.22	3914.11	3914.48	9.68	806624.88	540635.13	32°28'59.980"N	103°28'22.817"W	1.04	
14705.00	91.500	2.700	10880.82	4009.06	4009.37	13.49	806628.69	540730.02	32°29'00.918"N	103°28'22.763"W	0.85	
14799.00	90.900	3.300	10878.85	4102.97	4103.22	18.41	806633.61	540823.87	32°29'01.846"N	103°28'22.697"W	0.90	
14894.00	90.200	4.200	10877.94	4197.85	4198.01	24.63	806639.83	540918.66	32°29'02.784"N	103°28'22.616"W	1.20	
14989.00	90.000	4.000	10877.77	4292.71	4292.77	31.42	806646.62	541013.42	32°29'03.721"N	103°28'22.528"W	0.30	
15084.00	92.000	2.600	10876.12	4387.61	4387.59	36.89	806652.09	541108.24	32°29'04.659"N	103°28'22.455"W	2.57	
15179.00	91.100	1.500	10873.55	4482.55	4482.49	40.28	806655.48	541203.14	32°29'05.597"N	103°28'22.406"W	1.50	
15249.00	90.600	0.900	10872.51	4552.54	4552.47	41.75	806656.95	541273.11	32°29'06.289"N	103°28'22.383"W	1.12	
15309.00	90.600	0.900	10871.88	4612.54	4612.46	42.69	806657.89	541333.10	32°29'06.883"N	103°28'22.366"W	0.00	Proj to Bit



Actual Wellpath Report

No. 1H AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	Cimarex Energy Co. of Colorado	Slot	No.1H SHL
Area	Lea County, NM	Well	No.1H
Field	(Berry) Sec 16, T21S, R34E,	Wellbore	No. 1H AWB
Facility	Berry 16 State Com No.1H		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
No.1H PBHL		10880.00	4622.86	75.59	806690.79	541343.50	32°29'06.983"N	103°28'21.981"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	10334.10	Generic gyro - northseeking (Standard)			Gyrodata / Gyros <200-11029.8>			No. 1H AWB	
10334.10	15249.00	NaviTrak (Standard)			BHI MWD NaviTrak <10470 - 10881>			No. 1H AWB	
15249.00	15309.00	Blind Drilling (std)			Projection to bit			No. 1H AWB	