



NM OIL CONSERVATION
ARTESIA DISTRICT
FEB 26 2018
RECEIVED

5D Survey Report

30-015-42168

Cimarex Energy

Field Name: *Cimarex Nad 83 NMEZ*
Site Name: *Hornsby 35 Federal Com 7H,8H Pad*
Well Name: *Hornsby 35 Federal Com 7H*
Survey: *Definitive survey*

29 August 2017

**Provide Signature Page for
Directional Survey**





Weatherford



Hornsby 35 Federal Com 7H

Field Name: Cimarex Nad 83 NMEZ

Map Units: US ft

Company Name: Cimarex Energy

Vertical Reference Datum (VRD): Mean Sea Level

Projected Coordinate System: NAD83 / New Mexico East (ftUS)

Comment:

Site: Hornsby 35 Federal Com 7H,8H Pad

Units: US ft

North Reference: Grid

Convergence Angle: 0.09

Position:

Northing: 364072.12 US ft

Latitude: 32° 0' 2.86"

Easting: 595424.85 US ft

Longitude: -104° 9' 31.86"

Elevation above MSL: 3241.00 US ft

Comment: Eddy Co, NM

Slot: Hornsby 35 Federal Com 7H

Position (Relative to Site Centre)

+N/-S: 0.00 US ft

Northing: 364072.12 US ft

Latitude: 32°0'2.86"

+E/-W: 0.00 US ft

Easting: 595424.85 US ft

Longitude: -104°9'31.86"

Elevation above MSL: 3241.00 US ft

Comment: Eddy Co, NM

Well: Hornsby 35 Federal Com 7H

Type: Main well

UWI:

File Number:

Comment:

Closure Distance: 6827.82 US ft

Closure Azimuth: 354.39°

Vertical Section: Position of Origin (Relative to Slot centre)

+N/-S: 0.00 US ft

+E/-W: 0.00 US ft

Az: 359.59°

Drill floor: Survey Name: Definitive Survey

Rig Height (Drill Floor): 25.00 US ft

Elevation above MSL: 3266.00 US ft

Inclination: 0.00°

Azimuth: 0.00°

Survey Name: Definitive Survey

Date: 29/Jun/2017

Survey Tool: See Survey Tool Ranges below.

Comment:

Company:

Magnetic Model:

Model Name: bggm2017

Date: 10/Jul/2017

Field Strength: 47809.7 nT

Declination: 7.29°

Dip: 59.72°

Tie Point:

MD: 0.00 US ft

Inclination: 0.00°

Azimuth: 0.00°

TVD: 0.00 US ft

North Offset: 0.00 US ft

East Offset: 0.00 US ft

Survey Tool Ranges:

Name	Start MD(usft)	End MD(usft)	Source Survey
MWD	0.00	322.00	MWD
MWD	322.00	2141.00	MWD 2
MWD	2141.00	7040.00	MWD 3
MWD	7040.00	7579.00	MWD 4
MWD	7579.00	12725.00	MWD 5
MWD	12725.00	14411.00	MWD 6

5D Survey Report

Casing Points: (Relative to Slot centre)(TVD relative to Drill Floor)								
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	N. Offset (US ft)	E. Offset (US ft)	Northing (US ft)	Easting (US ft)	Name
406.00	1.00	279.63	405.97	0.90	1.81	364073.02	595426.66	13 3/8 in
2223.00	0.95	174.65	2222.58	-5.75	-5.09	364066.37	595419.76	9 5/8 in

Wellpath created using minimum curvature.

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N. Offset (US ft)	E. Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (°/100US ft)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	364072.12	595424.85	0.00	
175.00	1.10	82.20	174.99	0.22	0.23	1.66	364072.35	595426.51	0.63	
202.00	1.41	80.79	201.98	0.30	0.32	2.25	364072.44	595427.10	1.15	
295.00	0.40	293.99	294.97	0.61	0.63	3.08	364072.75	595427.93	1.89	
322.00	0.49	283.02	321.97	0.68	0.70	2.88	364072.82	595427.73	0.46	
406.00	1.00	279.63	405.97	0.89	0.90	1.81	364073.02	595426.66	0.61	13 3/8 in
452.00	1.28	278.92	451.96	1.04	1.05	0.91	364073.17	595425.76	0.61	
483.00	1.19	283.19	482.95	1.17	1.17	0.25	364073.29	595425.10	0.42	
573.00	1.59	286.72	572.92	1.76	1.75	-1.85	364073.87	595423.00	0.45	
665.00	1.50	280.11	664.89	2.35	2.32	-4.26	364074.44	595420.59	0.22	
757.00	1.59	285.09	756.86	2.92	2.87	-6.68	364074.99	595418.17	0.18	
847.00	1.59	282.80	846.82	3.53	3.47	-9.10	364075.59	595415.75	0.07	
942.00	1.50	280.11	941.79	4.06	3.98	-11.61	364076.10	595413.24	0.12	
1037.00	0.49	319.59	1036.77	4.60	4.51	-13.10	364076.63	595411.75	1.23	
1131.00	0.50	293.80	1130.77	5.08	4.98	-13.74	364077.10	595411.11	0.24	
1225.00	0.31	267.90	1224.77	5.24	5.14	-14.36	364077.26	595410.49	0.28	
1319.00	0.80	103.71	1318.76	5.07	4.97	-13.98	364077.09	595410.87	1.17	
1414.00	0.80	98.11	1413.76	4.81	4.72	-12.68	364076.84	595412.17	0.08	
1507.00	0.88	92.91	1506.75	4.67	4.59	-11.32	364076.71	595413.53	0.12	
1602.00	1.41	92.21	1601.73	4.58	4.51	-9.43	364076.63	595415.42	0.56	
1697.00	1.68	112.30	1696.69	3.99	3.94	-6.97	364076.06	595417.88	0.63	
1791.00	1.50	167.21	1790.66	2.25	2.21	-5.42	364074.33	595419.43	1.57	
1886.00	1.28	196.29	1885.63	0.02	-0.02	-5.45	364072.10	595419.40	0.77	
1981.00	1.10	170.78	1980.61	-1.90	-1.94	-5.60	364070.18	595419.25	0.58	
2076.00	0.88	171.48	2075.60	-3.52	-3.56	-5.34	364068.56	595419.51	0.23	
2141.00	0.80	173.69	2140.59	-4.46	-4.50	-5.22	364067.62	595419.63	0.13	
2223.00	0.95	174.65	2222.58	-5.71	-5.75	-5.09	364066.37	595419.76	0.18	9 5/8 in
2262.00	1.02	175.01	2261.58	-6.38	-6.41	-5.03	364065.71	595419.82	0.18	
2356.00	1.19	171.88	2355.56	-8.18	-8.21	-4.82	364063.91	595420.03	0.19	
2451.00	1.28	190.92	2450.54	-10.20	-10.23	-4.88	364061.89	595419.97	0.44	
2545.00	2.12	221.90	2544.50	-12.51	-12.56	-6.24	364059.56	595418.61	1.29	
2639.00	2.61	238.51	2638.42	-14.90	-14.97	-9.23	364057.15	595415.62	0.89	
2734.00	3.80	254.02	2733.27	-16.87	-16.97	-14.10	364055.15	595410.75	1.54	
2828.00	4.91	257.19	2827.00	-18.57	-18.72	-21.02	364053.40	595403.83	1.21	
2922.00	6.19	260.01	2920.56	-20.27	-20.49	-29.93	364051.63	595394.92	1.39	
3016.00	6.89	260.59	3013.94	-22.00	-22.29	-40.49	364049.83	595384.36	0.75	
3111.00	6.89	260.41	3108.26	-23.80	-24.17	-51.73	364047.95	595373.12	0.02	
3205.00	7.11	260.28	3201.56	-25.64	-26.09	-63.02	364046.03	595361.83	0.23	
3300.00	8.00	260.81	3295.73	-27.60	-28.14	-75.34	364043.98	595349.51	0.94	
3395.00	8.31	262.09	3389.77	-29.50	-30.14	-88.67	364041.98	595336.18	0.38	
3490.00	8.48	260.81	3483.75	-31.47	-32.20	-102.38	364039.92	595322.47	0.27	
3585.00	8.62	261.29	3577.70	-33.57	-34.40	-116.33	364037.72	595308.52	0.17	
3679.00	8.22	262.09	3670.68	-35.46	-36.39	-129.95	364035.73	595294.90	0.44	
3774.00	7.51	263.01	3764.79	-37.06	-38.08	-142.84	364034.04	595282.01	0.76	
3868.00	7.29	262.09	3858.01	-38.54	-39.65	-154.85	364032.47	595270.00	0.27	
3963.00	6.41	260.81	3952.33	-40.14	-41.33	-166.05	364030.79	595258.80	0.94	
4056.00	6.32	259.00	4044.75	-41.87	-43.13	-176.20	364028.99	595248.65	0.24	
4150.00	6.19	259.09	4138.19	-43.74	-45.08	-186.26	364027.04	595238.59	0.14	
4244.00	6.19	259.79	4231.65	-45.53	-46.94	-196.22	364025.18	595228.63	0.08	
4338.00	5.92	256.00	4325.12	-47.53	-49.01	-205.91	364023.11	595218.94	0.51	

5D Survey Report

Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N. Offset (US ft)	E. Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (°/100US ft)	Comment
4432.00	6.41	252.61	4418.58	-50.20	-51.75	-215.62	364020.37	595209.23	0.65	
4527.00	6.72	252.21	4512.96	-53.41	-55.03	-225.97	364017.09	595198.88	0.33	
4621.00	7.38	253.32	4606.24	-56.75	-58.44	-236.99	364013.68	595187.86	0.72	
4715.00	8.62	255.92	4699.33	-60.10	-61.89	-249.61	364010.23	595175.24	1.37	
4810.00	7.82	255.92	4793.35	-63.31	-65.20	-262.79	364006.92	595162.06	0.84	
4905.00	7.38	256.80	4887.52	-66.19	-68.16	-274.99	364003.96	595149.86	0.48	
5000.00	6.98	256.09	4981.77	-68.89	-70.94	-286.54	364001.18	595138.31	0.43	
5094.00	7.20	257.99	5075.05	-71.41	-73.54	-297.84	363998.58	595127.01	0.34	
5189.00	7.20	258.21	5169.30	-73.78	-76.00	-309.49	363996.12	595115.36	0.03	
5283.00	6.98	254.68	5262.59	-76.41	-78.71	-320.77	363993.41	595104.08	0.52	
5378.00	7.51	258.91	5356.83	-79.05	-81.43	-332.43	363990.69	595092.42	0.79	
5473.00	8.00	257.90	5450.96	-81.54	-84.01	-344.99	363988.11	595079.86	0.54	
5567.00	7.29	257.28	5544.12	-84.13	-86.69	-357.20	363985.43	595067.65	0.76	
5662.00	6.72	254.51	5638.41	-86.87	-89.50	-368.43	363982.62	595056.42	0.70	
5757.00	6.89	254.68	5732.74	-89.78	-92.49	-379.29	363979.63	595045.56	0.18	
5852.00	7.91	260.72	5826.95	-92.25	-95.05	-391.23	363977.07	595033.62	1.35	
5946.00	7.60	263.41	5920.09	-93.92	-96.81	-403.79	363975.31	595021.06	0.51	
6041.00	6.81	264.29	6014.34	-95.11	-98.09	-415.64	363974.03	595009.21	0.84	
6136.00	5.61	261.38	6108.78	-96.30	-99.35	-425.83	363972.77	594999.02	1.31	
6231.00	5.21	264.42	6203.36	-97.35	-100.46	-434.72	363971.66	594990.13	0.52	
6326.00	4.99	261.29	6297.98	-98.34	-101.51	-443.10	363970.61	594981.75	0.37	
6420.00	5.39	251.51	6391.60	-100.30	-103.53	-451.32	363968.59	594973.53	1.03	
6515.00	5.08	248.12	6486.20	-103.22	-106.51	-459.46	363965.61	594965.39	0.46	
6610.00	4.29	234.50	6580.89	-106.80	-110.14	-466.25	363961.98	594958.60	1.43	
6705.00	3.31	230.80	6675.68	-110.56	-113.94	-471.27	363958.18	594953.58	1.06	
6800.00	2.52	217.49	6770.56	-113.93	-117.33	-474.67	363954.79	594950.18	1.09	
6894.00	2.12	205.42	6864.48	-117.12	-120.54	-476.67	363951.58	594948.18	0.67	
6988.00	1.59	199.42	6958.43	-119.92	-123.34	-477.85	363948.78	594947.00	0.60	
7040.00	1.68	202.90	7010.41	-121.30	-124.72	-478.39	363947.40	594946.46	0.26	WFT MWD Tie-In
7106.00	1.28	211.27	7076.39	-122.81	-126.24	-479.15	363945.88	594945.70	0.69	
7138.00	3.58	292.50	7108.36	-122.73	-126.17	-480.26	363945.95	594944.59	11.29	
7169.00	7.60	297.49	7139.21	-121.39	-124.85	-482.97	363947.27	594941.88	13.05	
7200.00	10.44	303.60	7169.82	-118.86	-122.35	-487.13	363949.77	594937.72	9.66	
7231.00	13.74	301.65	7200.13	-115.33	-118.86	-492.60	363953.26	594932.25	10.72	
7263.00	16.96	300.93	7230.99	-110.89	-114.47	-499.85	363957.65	594925.00	10.08	
7295.00	18.72	302.47	7261.45	-105.67	-109.31	-508.18	363962.81	594916.67	5.69	
7326.00	19.52	309.53	7290.74	-99.64	-103.34	-516.37	363968.78	594908.48	7.89	
7358.00	21.51	318.65	7320.72	-91.78	-95.53	-524.38	363976.59	594900.47	11.75	
7390.00	24.64	326.56	7350.16	-81.75	-85.56	-531.93	363986.56	594892.92	13.75	
7422.00	28.33	332.90	7378.80	-69.37	-73.23	-539.07	363998.89	594885.78	14.51	
7453.00	31.79	338.19	7405.63	-55.18	-59.09	-545.46	364013.03	594879.39	14.05	
7485.00	34.32	341.70	7432.45	-38.75	-42.69	-551.42	364029.43	594873.43	9.91	
7516.00	37.71	343.51	7457.53	-21.32	-25.30	-556.86	364046.82	594867.99	11.46	
7548.00	41.17	344.29	7482.24	-1.75	-5.77	-562.49	364066.35	594862.36	10.92	
7579.00	43.34	344.75	7505.18	18.38	14.32	-568.05	364086.44	594856.80	7.07	
7611.00	46.68	344.93	7527.80	40.26	36.16	-573.97	364108.28	594850.88	10.45	
7643.00	50.13	346.52	7549.04	63.50	59.35	-579.86	364131.47	594844.99	11.40	
7674.00	53.35	345.99	7568.23	87.18	82.99	-585.65	364155.11	594839.20	10.47	
7677.00	53.65	346.02	7570.02	89.52	85.33	-586.23	364157.45	594838.62	9.90	FTP (7677' MD)
7706.00	56.51	346.26	7586.62	112.64	108.41	-591.93	364180.53	594832.92	9.90	
7738.00	60.60	348.66	7603.31	139.33	135.05	-597.84	364207.17	594827.01	14.29	
7769.00	63.45	351.38	7617.85	166.32	162.01	-602.57	364234.13	594822.28	12.02	
7801.00	67.45	353.12	7631.15	195.18	190.85	-606.49	364262.97	594818.36	13.44	
7833.00	72.08	354.38	7642.21	225.04	220.69	-609.75	364292.81	594815.10	14.93	
7864.00	76.30	355.22	7650.66	254.76	250.38	-612.45	364322.50	594812.40	13.86	
7896.00	81.22	356.18	7656.89	286.06	281.67	-614.81	364353.79	594810.04	15.65	
7928.00	86.43	356.52	7660.33	317.82	313.41	-616.83	364385.53	594808.02	16.32	

5D Survey Report

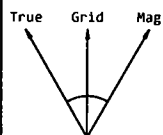
Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N. Offset (US ft)	E. Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (°/100US ft)	Comment
7959.00	88.95	357.08	7661.58	348.75	344.33	-618.56	364416.45	594806.29	8.33	
7998.00	89.23	357.27	7662.20	387.71	383.28	-620.48	364455.40	594804.37	0.87	
8092.00	89.37	357.32	7663.35	481.63	477.17	-624.92	364549.29	594799.93	0.16	
8132.50	89.49	358.13	7663.75	522.11	517.64	-626.52	364589.76	594798.33	2.02	Cross lot 3 line (8132.50' MD)
8187.00	89.65	359.22	7664.16	576.60	572.12	-627.78	364644.24	594797.07	2.02	
8282.00	89.65	359.05	7664.74	671.59	667.11	-629.22	364739.23	594795.63	0.18	
8377.00	89.93	359.28	7665.09	766.59	762.10	-630.60	364834.22	594794.25	0.38	
8472.00	89.79	359.59	7665.32	861.59	857.09	-631.54	364929.21	594793.31	0.36	
8567.00	89.65	359.51	7665.79	956.59	952.09	-632.29	365024.21	594792.56	0.17	
8662.00	89.86	359.59	7666.19	1051.59	1047.08	-633.03	365119.20	594791.82	0.24	
8757.00	89.93	359.84	7666.37	1146.59	1142.08	-633.50	365214.20	594791.35	0.27	
8851.00	90.07	359.92	7666.37	1240.58	1236.08	-633.70	365308.20	594791.15	0.17	
8945.00	90.70	0.49	7665.74	1334.58	1330.08	-633.36	365402.20	594791.49	0.90	
9039.00	89.51	0.01	7665.56	1428.57	1424.07	-632.95	365496.19	594791.90	1.37	
9134.00	89.44	359.55	7666.43	1523.56	1519.07	-633.32	365591.19	594791.53	0.49	
9228.00	89.51	359.99	7667.30	1617.56	1613.06	-633.70	365685.18	594791.15	0.47	
9323.00	89.58	0.00	7668.05	1712.55	1708.06	-633.70	365780.18	594791.15	0.07	
9417.00	89.58	0.04	7668.74	1806.55	1802.06	-633.67	365874.18	594791.18	0.04	
9511.00	89.30	0.25	7669.66	1900.54	1896.05	-633.43	365968.17	594791.42	0.37	
9606.00	89.51	359.81	7670.64	1995.53	1991.05	-633.38	366063.17	594791.47	0.51	
9700.00	89.58	359.86	7671.39	2089.53	2085.05	-633.65	366157.17	594791.20	0.09	
9795.00	90.00	359.81	7671.74	2184.52	2180.04	-633.93	366252.16	594790.92	0.45	
9889.00	90.14	359.66	7671.62	2278.52	2274.04	-634.36	366346.16	594790.49	0.22	
9984.00	90.70	359.24	7670.93	2373.52	2369.04	-635.28	366441.16	594789.57	0.74	
10078.00	89.58	359.02	7670.70	2467.52	2463.02	-636.70	366535.14	594788.15	1.21	
10173.00	90.56	359.30	7670.58	2562.51	2558.01	-638.09	366630.13	594786.76	1.07	
10268.00	89.37	359.50	7670.64	2657.51	2653.00	-639.09	366725.12	594785.76	1.27	
10363.00	89.79	359.93	7671.34	2752.51	2748.00	-639.56	366820.12	594785.29	0.63	
10459.00	90.70	359.93	7670.93	2848.50	2844.00	-639.68	366916.12	594785.17	0.95	
10553.00	89.02	359.44	7671.16	2942.50	2937.99	-640.20	367010.11	594784.65	1.86	
10647.00	88.60	359.46	7673.11	3036.48	3031.97	-641.10	367104.09	594783.75	0.45	
10742.00	88.04	359.64	7675.89	3131.44	3126.92	-641.84	367199.04	594783.01	0.62	
10836.00	89.23	358.98	7678.13	3225.41	3220.89	-642.98	367293.01	594781.87	1.45	
10930.00	90.14	358.98	7678.65	3319.40	3314.87	-644.65	367386.99	594780.20	0.97	
11025.00	90.28	358.72	7678.30	3414.39	3409.85	-646.56	367481.97	594778.29	0.31	
11119.00	89.37	0.14	7678.59	3508.39	3503.84	-647.49	367575.96	594777.36	1.79	
11214.00	89.65	0.07	7679.40	3603.38	3598.84	-647.32	367670.96	594777.53	0.30	
11309.00	89.79	0.20	7679.86	3698.37	3693.84	-647.09	367765.96	594777.76	0.20	
11404.00	90.00	0.50	7680.04	3793.36	3788.84	-646.51	367860.96	594778.34	0.39	
11498.00	90.28	0.26	7679.81	3887.36	3882.83	-645.89	367954.95	594778.96	0.39	
11592.00	88.74	359.22	7680.61	3981.35	3976.82	-646.32	368048.94	594778.53	1.98	
11687.00	88.32	359.58	7683.05	4076.32	4071.79	-647.31	368143.91	594777.54	0.58	
11782.00	88.25	359.33	7685.89	4171.27	4166.74	-648.21	368238.86	594776.64	0.27	
11876.00	87.48	359.84	7689.39	4265.21	4260.67	-648.89	368332.79	594775.96	0.98	
11971.00	90.14	359.67	7691.37	4360.18	4355.64	-649.30	368427.76	594775.55	2.81	
12065.00	90.21	359.46	7691.08	4454.18	4449.64	-650.01	368521.76	594774.84	0.24	
12159.00	90.28	359.97	7690.68	4548.17	4543.64	-650.48	368615.76	594774.37	0.55	
12253.00	90.28	0.02	7690.22	4642.17	4637.64	-650.49	368709.76	594774.36	0.05	
12347.00	90.14	359.95	7689.87	4736.17	4731.63	-650.51	368803.75	594774.34	0.17	
12442.00	90.56	0.69	7689.29	4831.16	4826.63	-649.98	368898.75	594774.87	0.90	
12536.00	89.23	359.92	7689.47	4925.15	4920.63	-649.48	368992.75	594775.37	1.63	
12630.00	89.72	0.03	7690.33	5019.14	5014.62	-649.52	369086.74	594775.33	0.53	
12725.00	89.93	0.36	7690.62	5114.14	5109.62	-649.20	369181.74	594775.65	0.41	
12826.00	90.14	358.91	7690.56	5215.13	5210.62	-649.84	369282.74	594775.01	1.45	
12921.00	89.65	358.91	7690.73	5310.13	5305.60	-651.65	369377.72	594773.20	0.52	
13015.00	88.95	358.90	7691.88	5404.11	5399.57	-653.45	369471.69	594771.40	0.74	
13108.00	88.60	358.90	7693.87	5497.08	5492.53	-655.23	369564.65	594769.62	0.38	

5D Survey Report

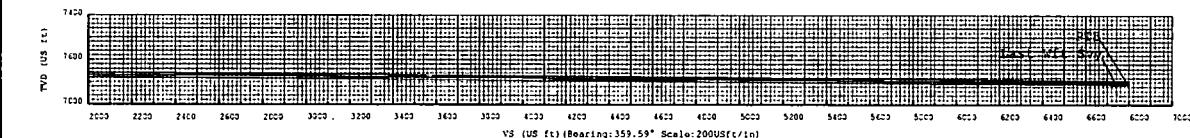
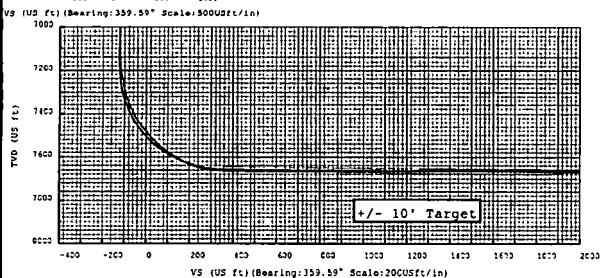
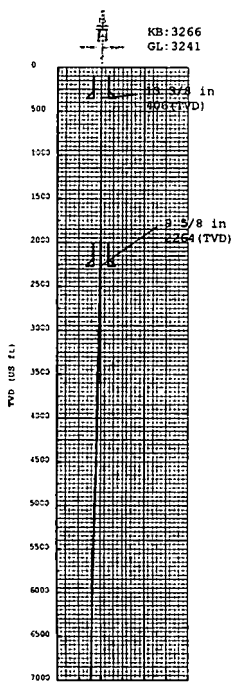
Survey Points: (Relative to Slot centre)(TVD relative to Drill Floor)										
MD (US ft)	Inc (°)	Az (°)	TVD (US ft)	VS (US ft)	N.Offset (US ft)	E.Offset (US ft)	Northing (US ft)	Easting (US ft)	DLS (°/100US ft)	Comment
13204.00	89.58	358.35	7695.39	5593.06	5588.49	-657.54	369660.61	594767.31	1.17	
13298.00	89.58	357.94	7696.08	5687.02	5682.44	-660.58	369754.56	594764.27	0.44	
13392.00	89.65	358.24	7696.71	5780.99	5776.39	-663.71	369848.51	594761.14	0.33	
13486.00	89.16	358.62	7697.69	5874.96	5870.35	-666.29	369942.47	594758.56	0.66	
13581.00	88.67	358.95	7699.49	5969.94	5965.31	-668.30	370037.43	594756.55	0.62	
13676.00	89.44	359.37	7701.05	6064.92	6060.28	-669.69	370132.40	594755.16	0.92	
13770.00	89.02	359.65	7702.32	6158.91	6154.27	-670.50	370226.39	594754.35	0.54	
13865.00	88.67	0.19	7704.23	6253.89	6249.25	-670.63	370321.37	594754.22	0.68	
13959.00	90.14	359.68	7705.21	6347.88	6343.24	-670.74	370415.36	594754.11	1.66	
14054.00	89.93	359.64	7705.15	6442.88	6438.24	-671.30	370510.36	594753.55	0.23	
14148.00	89.58	0.16	7705.55	6536.88	6532.24	-671.46	370604.36	594753.39	0.67	
14243.00	89.09	0.99	7706.65	6631.86	6627.23	-670.51	370699.35	594754.34	1.01	
14338.00	88.60	1.11	7708.57	6726.81	6722.19	-668.77	370794.31	594756.08	0.53	
14354.00	88.53	1.33	7708.97	6742.79	6738.18	-668.43	370810.30	594756.42	1.44	Last Wft Svy
14411.00	88.53	1.33	7710.43	6799.75	6795.15	-667.11	370867.27	594757.74	0.00	PTB



Hornsby 35 Federal Com 7H Eddy County, NM



Grid Convergence: 0.09°
Mag Declination: 7.29°
Bearing:
True = Mag + 7.29°
Grid = True - 0.09°
Total Correction 7.20°



Plan Data for Hornsby 35 Federal Com 7H

Plan Point Information:
Dogleg Severity Unit: */100.00ft Position offsets from Slot centre
MD Inc Az TVD +N/-S +E/-W VSec DLS Comments
(USft) (°) (°) (USft) (USft) (USft) (USft) (DLSU)
7040.00 1.68 202.90 7010.41 -124.72 -478.39 -121.30 0.26 WFT MWD Tie-In
7133.66 1.68 202.90 7104.03 -127.25 -479.46 -123.82 0.00 Curve KOP
7279.16 17.46 290.05 7247.25 -121.69 -500.96 -118.10 12.00 Build/Turn
7975.67 89.59 359.58 7657.42 348.95 -624.38 353.41 12.00 LP
14422.61 89.59 359.58 7703.96 6795.56 -671.16 6800.19 0.00 PBHL 7H

Plan Data for Hornsby 35 Federal Com 7H

Field: Cimarex Nad 83 NMEZ
Map Unit: USFt Vertical Reference Datum (VRD): Mean Sea Level
Projected Coordinate System: NAD83 / New Mexico East (ftUS)

Site: Hornsby 35 Federal Com 7H, 8H Pad
Unit: USFt TVD Reference:
Company Name: Cimarex Energy
Position: Northing: 364072.12USft Latitude: 32.000794°
Easting: 595424.85USft Longitude: -104.158850°
North Reference: Grid Grid Convergence: 0.09°
Elevation Above VRD: 3241.00USft
Comment: Eddy Co, NM

Slot: Hornsby 35 Federal Com 7H
Position:
Offset is from Site centre
+N/-S: 0.00USft Northing: 364072.12USft Latitude: 32.000794°
+E/-W: 0.00USft Easting: 595424.85USft Longitude: -104.158850°
Elevation Above VRD: 3241.00USft
Comment: Eddy Co, NM

Well: Hornsby 35 Federal Com 7H
Type: Main-Well
File Number:
Plan Folder: P2 Plan: P2:V1
Vertical Section: Position offset of origin from Slot centre:
+N/-S: 0.00USft Azimuth: 359.59°
+E/-W: 0.00USft
Magnetic Parameters:
Model: Field Strength: Declination: Dip: Date:
bgm2017 47809(nT) 7.29° 59.72° 2017-07-10

Plan Data for Hornsby 35 Federal Com 7H

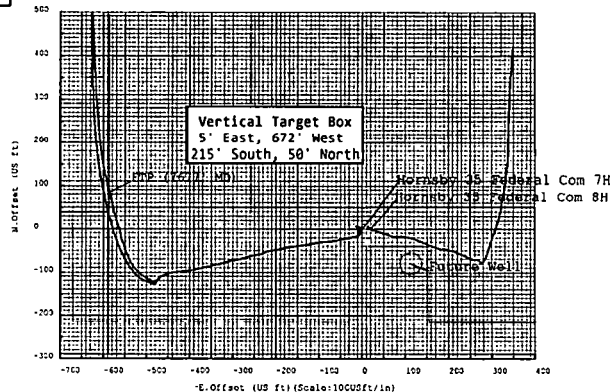
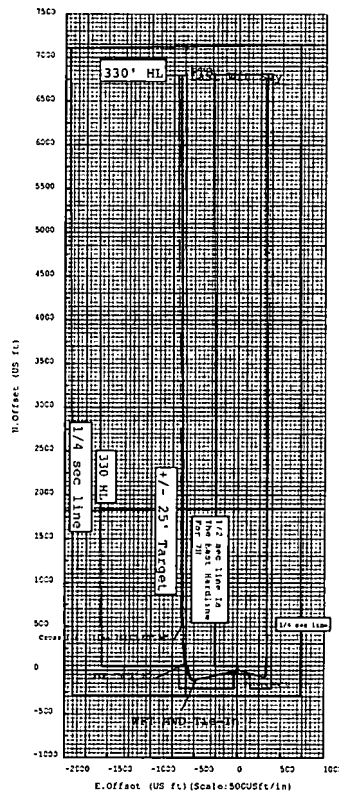
Target Set Information:
Name: Hornsby 35 Federal Com 7H
Position offsets from Slot centre
Name TVD SS +N/-S +E/-W Northing Easting
(USft) (USft) (USft) (USft) (USft) (USft)
Plat LP 7658.23 -4392.23 599.54 -626.53 364671.66 594798.32
LP Tgt 7658.23 -4392.23 405.78 -625.13 364477.90 594799.72
PBHL 7703.96 -4437.96 6795.56 -671.16 370867.68 594753.69

Hornsby 35 Federal Com 7H
Hornsby 35 Federal Com 8H
Hornsby 35 Federal Com 7H

Plan vs Actual



Weatherford



Drawing By: RMJ Date: 6/30/2017
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