



BC Operating, Inc.

Eddy County, New Mexico (NAD27)

Chicken Fry Federal Com

1H

30-015-42882

OH / Job #60992

Survey: Phoenix MWD Surveys

Standard Survey Report

03 April, 2017



Company: BC Operating, Inc.
Project: Eddy County, New Mexico (NAD27)
Site: Chicken Fry Federal Com
Well: 1H
Wellbore: OH / Job #60992
Design: Surveys (Patterson 244)

Local Co-ordinate Reference: Well 1H
TVD Reference: GL + KB @ 3027.50usft (Patterson 244)
MD Reference: GL + KB @ 3027.50usft (Patterson 244)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Compass 5000 GCR

Project	Eddy County, New Mexico (NAD27)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site Chicken Fry Federal Com

Site Position: **From:** Map **Northings:** 439,972.50 usft **Latitude:** 32° 12' 33.55702 N
Eastings: 582,311.70 usft **Longitude:** 104° 4' 1.92440 W
Position Uncertainty: 0.00 usft **Slot Radius:** 13-3/16 " **Grid Convergence:** 0.14 °

Well 1H
Well Position **+N/-S** 0.00 usft **Northings:** 439,972.50 usft **Latitude:** 32° 12' 33.55702 N
+E/-W 0.00 usft **Eastings:** 582,311.70 usft **Longitude:** 104° 4' 1.92440 W
Position Uncertainty 0.00 usft **Wellhead Elevation:** 0.00 usft **Ground Level:** 2,999.00 usft

Wellbore OH / Job #60992

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	3/31/2017	7.30	60.05	48,133

Design Surveys (Patterson 244)

Audit Notes:

Version: 1.0 **Phase:** ACTUAL **Tie On Depth:** 0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	9,600.00	0.00	0.00	181.34

Survey Program Date 4/3/2017

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
447.00	14,415.00	Phoenix MWD Surveys (OH / Job #60992)	MWD+HDGM	OWSG Rev.2 MWD + HDGM

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
402.00	1.30	146.28	401.99	-0.15	0.50	0.14	0.00	0.00	0.00
Tie In									
447.00	1.61	123.98	446.98	-0.93	1.31	0.90	1.42	0.69	-49.56
First Phoenix MWD Survey									
508.00	1.58	126.35	507.95	-1.91	2.70	1.84	0.12	-0.05	3.89
599.00	0.60	27.73	598.94	-2.23	3.93	2.13	1.95	-1.08	-108.37
689.00	1.21	339.80	688.93	-0.92	3.82	0.83	1.03	0.68	-53.26
781.00	1.60	307.10	780.90	0.77	2.46	-0.83	0.95	0.42	-35.54
873.00	1.71	302.56	872.86	2.28	0.28	-2.29	0.19	0.12	-4.93
965.00	1.75	296.58	964.82	3.65	-2.14	-3.60	0.20	0.04	-6.50

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Survey Calculation Method: Minimum Curvature
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Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,058.00	1.83	287.34	1,057.78	4.73	-4.82	-4.61	0.32	0.09	-9.94
1,149.00	1.80	275.80	1,148.73	5.30	-7.63	-5.12	0.40	-0.03	-12.68
1,241.00	1.59	274.78	1,240.69	5.56	-10.34	-5.31	0.23	-0.23	-1.11
1,332.00	1.58	279.32	1,331.66	5.87	-12.84	-5.56	0.14	-0.01	4.99
1,424.00	1.89	273.96	1,423.61	6.18	-15.60	-5.81	0.38	0.34	-5.83
1,516.00	2.72	316.18	1,515.55	7.86	-18.63	-7.42	1.99	0.90	45.89
1,610.00	2.97	322.96	1,609.43	11.41	-21.64	-10.90	0.45	0.27	7.21
1,704.00	3.22	321.86	1,703.29	15.43	-24.74	-14.85	0.27	0.27	-1.17
1,798.00	3.13	318.20	1,797.15	19.42	-28.08	-18.76	0.24	-0.10	-3.89
1,893.00	2.37	339.51	1,892.04	23.19	-30.49	-22.47	1.33	-0.80	22.43
1,987.00	2.30	41.16	1,985.98	26.43	-29.93	-25.73	2.55	-0.07	65.59
2,081.00	1.98	58.74	2,079.91	28.70	-27.30	-28.05	0.77	-0.34	18.70
2,175.00	2.44	78.98	2,173.84	29.92	-23.95	-29.35	0.96	0.49	21.53
2,269.00	2.88	93.84	2,267.74	30.15	-19.63	-29.68	0.87	0.47	15.81
2,364.00	3.33	102.23	2,362.60	29.40	-14.55	-29.05	0.67	0.47	8.83
2,458.00	3.80	102.39	2,456.42	28.15	-8.84	-27.94	0.50	0.50	0.17
2,545.00	2.38	104.88	2,543.29	27.07	-4.28	-26.96	1.64	-1.63	2.86
2,641.00	1.44	97.70	2,639.24	26.40	-1.16	-26.36	1.01	-0.98	-7.48
2,735.00	1.15	61.64	2,733.22	26.69	0.84	-26.70	0.90	-0.31	-38.36
2,829.00	1.44	25.47	2,827.19	28.20	2.18	-28.25	0.90	0.31	-38.48
2,923.00	2.13	4.66	2,921.15	31.01	2.83	-31.07	1.00	0.73	-22.14
3,019.00	2.71	0.78	3,017.06	35.06	3.01	-35.12	0.63	0.60	-4.04
3,113.00	3.51	357.50	3,110.92	40.15	2.91	-40.21	0.87	0.85	-3.49
3,207.00	4.29	352.08	3,204.70	46.51	2.30	-46.55	0.92	0.83	-5.77
3,301.00	4.42	341.49	3,298.43	53.43	0.67	-53.43	0.87	0.14	-11.27
3,395.00	4.81	336.26	3,392.13	60.47	-2.07	-60.41	0.61	0.41	-5.56
3,490.00	5.27	331.66	3,486.76	67.96	-5.74	-67.80	0.64	0.48	-4.84
3,584.00	5.19	332.32	3,580.37	75.52	-9.77	-75.27	0.11	-0.09	0.70
3,678.00	4.85	331.09	3,674.01	82.76	-13.66	-82.42	0.38	-0.36	-1.31
3,772.00	4.51	332.67	3,767.70	89.53	-17.28	-89.10	0.39	-0.36	1.68
3,867.00	4.41	332.25	3,862.41	96.08	-20.70	-95.57	0.11	-0.11	-0.44
3,962.00	4.68	332.77	3,957.11	102.76	-24.17	-102.16	0.29	0.28	0.55
4,056.00	4.67	333.41	4,050.80	109.59	-27.64	-108.91	0.06	-0.01	0.68
4,151.00	3.98	334.04	4,145.53	116.01	-30.81	-115.26	0.73	-0.73	0.66
4,245.00	4.44	333.52	4,239.27	122.20	-33.86	-121.37	0.49	0.49	-0.55
4,340.00	4.84	337.84	4,333.96	129.20	-37.02	-128.30	0.56	0.42	4.55
4,435.00	4.69	338.89	4,428.63	136.54	-39.93	-135.57	0.18	-0.16	1.11
4,529.00	4.57	341.18	4,522.33	143.67	-42.52	-142.63	0.23	-0.13	2.44
4,623.00	4.71	336.20	4,616.02	150.74	-45.28	-149.64	0.45	0.15	-5.30
4,717.00	4.39	329.35	4,709.72	157.37	-48.68	-156.19	0.67	-0.34	-7.29
4,812.00	4.57	328.54	4,804.43	163.73	-52.50	-162.45	0.20	0.19	-0.85
4,906.00	4.75	330.88	4,898.12	170.32	-56.35	-168.96	0.28	0.19	2.49
5,000.00	5.10	327.32	4,991.78	177.24	-60.50	-175.77	0.49	0.37	-3.79

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Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,094.00	4.60	321.58	5,085.44	183.71	-65.10	-182.13	0.74	-0.53	-6.11
5,188.00	4.83	325.43	5,179.12	189.92	-69.69	-188.24	0.42	0.24	4.10
5,283.00	4.75	327.18	5,273.79	196.52	-74.09	-194.73	0.18	-0.08	1.84
5,377.00	3.83	324.30	5,367.53	202.34	-78.03	-200.48	1.00	-0.98	-3.08
5,471.00	3.89	325.33	5,461.31	207.51	-81.68	-205.54	0.10	0.06	1.10
5,566.00	4.68	329.69	5,556.05	213.51	-85.47	-211.45	0.90	0.83	4.59
5,660.00	4.11	327.26	5,649.77	219.65	-89.22	-217.50	0.64	-0.61	-2.59
5,755.00	5.04	325.96	5,744.47	225.97	-93.40	-223.73	0.98	0.98	-1.37
5,849.00	5.45	325.73	5,838.07	233.08	-98.23	-230.72	0.44	0.44	-0.24
5,943.00	4.71	325.11	5,931.70	239.94	-102.95	-237.46	0.79	-0.79	-0.66
6,038.00	4.13	325.09	6,026.42	245.94	-107.14	-243.37	0.61	-0.61	-0.02
6,132.00	4.13	326.61	6,120.18	251.54	-110.94	-248.88	0.12	0.00	1.62
6,226.00	4.72	332.98	6,213.90	257.81	-114.56	-255.07	0.82	0.63	6.78
6,320.00	4.45	345.35	6,307.60	264.79	-117.23	-261.98	1.09	-0.29	13.18
6,415.00	3.30	349.89	6,402.38	271.05	-118.65	-268.20	1.25	-1.21	4.78
6,509.00	4.76	321.80	6,496.15	276.78	-121.53	-273.86	2.57	1.55	-29.88
6,603.00	4.21	306.21	6,589.87	281.88	-126.73	-278.84	1.42	-0.59	-16.59
6,697.00	2.94	285.01	6,683.69	284.54	-131.84	-281.38	1.93	-1.35	-22.55
6,791.00	4.31	312.16	6,777.50	287.54	-136.79	-284.26	2.30	1.46	28.88
6,885.00	5.51	313.97	6,871.16	293.04	-142.66	-289.63	1.29	1.28	1.93
6,979.00	4.90	292.16	6,964.78	297.69	-149.62	-294.11	2.19	-0.65	-23.20
7,073.00	4.44	332.94	7,058.49	302.45	-155.00	-298.74	3.49	-0.49	43.38
7,168.00	6.01	344.26	7,153.09	310.51	-158.02	-306.73	1.97	1.65	11.92
7,262.00	5.92	344.18	7,246.59	319.91	-160.68	-316.06	0.10	-0.10	-0.09
7,356.00	5.04	343.02	7,340.16	328.52	-163.20	-324.62	0.94	-0.94	-1.23
7,451.00	4.23	336.04	7,434.84	335.71	-165.85	-331.75	1.04	-0.85	-7.35
7,545.00	3.19	327.73	7,528.65	341.09	-168.65	-337.06	1.24	-1.11	-8.84
7,640.00	3.46	328.90	7,623.49	345.78	-171.54	-341.68	0.29	0.28	1.23
7,734.00	3.50	334.90	7,717.31	350.81	-174.22	-346.64	0.39	0.04	6.38
7,829.00	2.83	330.10	7,812.17	355.47	-176.62	-351.24	0.76	-0.71	-5.05
7,923.00	3.85	331.29	7,906.01	360.25	-179.30	-355.96	1.09	1.09	1.27
8,017.00	3.17	324.69	7,999.83	365.14	-182.31	-360.78	0.84	-0.72	-7.02
8,112.00	2.72	317.46	8,094.71	368.94	-185.36	-364.51	0.61	-0.47	-7.61
8,206.00	3.05	327.38	8,188.59	372.69	-188.21	-368.19	0.64	0.35	10.55
8,300.00	3.87	338.66	8,282.42	377.75	-190.72	-373.19	1.13	0.87	12.00
8,395.00	2.96	333.76	8,377.25	382.94	-192.97	-378.32	1.01	-0.96	-5.16
8,489.00	3.30	337.89	8,471.11	387.62	-195.06	-382.96	0.43	0.36	4.39
8,584.00	2.86	348.13	8,565.97	392.48	-196.57	-387.77	0.74	-0.46	10.78
8,678.00	1.70	1.97	8,659.89	396.16	-197.01	-391.45	1.36	-1.23	14.72
8,773.00	3.20	355.40	8,754.81	400.22	-197.17	-395.50	1.60	1.58	-6.92
8,867.00	2.98	353.21	8,848.67	405.26	-197.67	-400.53	0.27	-0.23	-2.33
8,911.00	2.91	346.79	8,892.61	407.48	-198.06	-402.74	0.77	-0.16	-14.59
8,935.00	2.89	347.23	8,916.58	408.66	-198.34	-403.92	0.12	-0.08	1.83
9,013.00	0.50	280.10	8,994.54	410.64	-199.11	-405.88	3.51	-3.06	-86.06

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9,060.00	5.52	186.95	9,041.47	408.43	-199.58	-403.65	11.85	10.68	-198.19
9,107.00	11.23	181.81	9,087.95	401.61	-200.00	-396.82	12.24	12.15	-10.94
9,154.00	16.79	181.17	9,133.53	390.24	-200.28	-385.45	11.83	11.83	-1.36
9,201.00	21.20	179.48	9,177.96	374.94	-200.35	-370.16	9.45	9.38	-3.60
9,248.00	25.35	180.50	9,221.13	356.38	-200.36	-351.60	8.87	8.83	2.17
9,295.00	29.76	181.74	9,262.79	334.65	-200.80	-329.86	9.46	9.38	2.64
9,343.00	33.68	184.15	9,303.61	309.45	-202.12	-304.65	8.58	8.17	5.02
9,390.00	36.98	184.99	9,341.95	282.37	-204.30	-277.51	7.10	7.02	1.79
9,437.00	40.95	184.09	9,378.49	252.91	-206.63	-248.01	8.53	8.45	-1.91
9,484.00	45.39	181.22	9,412.76	220.80	-208.08	-215.88	10.33	9.45	-6.11
9,532.00	50.04	177.07	9,445.06	185.32	-207.50	-180.42	11.60	9.69	-8.65
9,579.00	55.10	177.01	9,473.61	148.06	-205.58	-143.21	10.77	10.77	-0.13
9,627.00	59.02	176.33	9,499.71	107.85	-203.23	-103.07	8.25	8.17	-1.42
9,674.00	62.18	176.29	9,522.78	66.99	-200.60	-62.29	6.72	6.72	-0.09
9,721.00	66.51	175.66	9,543.12	24.74	-197.62	-20.12	9.29	9.21	-1.34
9,768.00	72.16	177.12	9,559.00	-17.26	-194.98	21.81	12.92	12.56	3.24
9,816.00	77.68	180.31	9,572.00	-65.50	-193.92	70.02	12.64	11.04	6.38
9,863.00	82.52	182.21	9,580.08	-111.77	-194.94	116.30	11.04	10.30	4.04
9,879.00	83.15	182.35	9,582.08	-127.64	-195.57	132.17	4.03	3.94	0.88
9,990.00	89.64	181.06	9,589.05	-238.31	-198.86	242.89	5.96	5.85	-1.16
10,084.00	89.24	180.53	9,589.97	-332.29	-200.16	336.88	0.71	-0.43	-0.56
10,177.00	88.99	180.10	9,591.41	-425.28	-200.68	429.85	0.53	-0.27	-0.46
10,272.00	91.87	181.01	9,590.70	-520.26	-201.60	524.83	3.18	3.03	0.96
10,364.00	91.80	180.90	9,587.75	-612.20	-203.13	616.78	0.14	-0.08	-0.12
10,458.00	90.00	180.41	9,586.27	-706.18	-204.20	710.76	1.98	-1.91	-0.52
10,551.00	88.23	179.54	9,587.71	-799.16	-204.16	803.72	2.12	-1.90	-0.94
10,646.00	88.96	179.47	9,590.04	-894.13	-203.34	898.64	0.77	0.77	-0.07
10,740.00	89.36	179.28	9,591.42	-988.11	-202.32	992.57	0.47	0.43	-0.20
10,834.00	89.47	179.21	9,592.38	-1,082.10	-201.08	1,086.51	0.14	0.12	-0.07
10,928.00	91.34	179.82	9,591.71	-1,176.09	-200.28	1,180.45	2.09	1.99	0.65
11,022.00	90.17	179.13	9,590.48	-1,270.08	-199.42	1,274.39	1.44	-1.24	-0.73
11,116.00	89.83	177.82	9,590.48	-1,364.04	-196.92	1,368.27	1.44	-0.36	-1.39
11,210.00	91.99	176.30	9,588.98	-1,457.90	-192.10	1,461.99	2.81	2.30	-1.62
11,304.00	89.66	175.89	9,587.63	-1,551.66	-185.70	1,555.58	2.52	-2.48	-0.44
11,398.00	88.85	174.88	9,588.85	-1,645.35	-178.14	1,649.06	1.38	-0.86	-1.07
11,492.00	93.25	174.80	9,587.13	-1,738.93	-169.69	1,742.42	4.68	4.68	-0.09
11,586.00	88.40	173.80	9,585.78	-1,832.43	-160.35	1,835.67	5.27	-5.16	-1.06
11,681.00	90.64	175.89	9,586.57	-1,927.03	-151.82	1,930.05	3.22	2.36	2.20
11,775.00	87.73	175.01	9,587.91	-2,020.71	-144.36	2,023.53	3.23	-3.10	-0.94
11,869.00	92.55	177.78	9,587.68	-2,114.49	-138.46	2,117.15	5.91	5.13	2.95
11,964.00	93.31	178.62	9,582.82	-2,209.31	-135.48	2,211.88	1.19	0.80	0.88
12,058.00	93.33	178.40	9,577.38	-2,303.12	-133.03	2,305.60	0.23	0.02	-0.23
12,152.00	93.00	177.69	9,572.19	-2,396.93	-129.83	2,399.31	0.83	-0.35	-0.76

Company: BC Operating, Inc.
Project: Eddy County, New Mexico (NAD27)
Site: Chicken Fry Federal Com
Well: 1H
Wellbore: OH / Job #60992
Design: Surveys (Patterson 244)

Local Co-ordinate Reference: Well 1H
TVD Reference: GL + KB @ 3027.50usft (Patterson 244)
MD Reference: GL + KB @ 3027.50usft (Patterson 244)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Compass 5000 GCR

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,247.00	92.13	180.72	9,567.94	-2,491.81	-128.52	2,494.13	3.32	-0.92	3.19
12,341.00	88.07	180.64	9,567.77	-2,585.78	-129.63	2,588.11	4.32	-4.32	-0.09
12,436.00	88.91	179.27	9,570.28	-2,680.75	-129.56	2,683.04	1.69	0.88	-1.44
12,529.00	91.26	179.49	9,570.14	-2,773.73	-128.55	2,775.98	2.54	2.53	0.24
12,623.00	92.18	179.02	9,567.32	-2,867.68	-127.33	2,869.88	1.10	0.98	-0.50
12,718.00	89.52	179.19	9,565.91	-2,962.85	-125.85	2,964.78	2.81	-2.80	0.18
12,812.00	86.47	179.85	9,569.20	-3,058.58	-125.08	3,058.67	3.32	-3.24	0.70
12,907.00	87.42	179.79	9,574.26	-3,151.44	-124.76	3,153.50	1.00	1.00	-0.06
13,001.00	88.30	179.80	9,577.77	-3,245.38	-124.42	3,247.40	0.94	0.94	0.01
13,095.00	88.54	178.52	9,580.36	-3,339.33	-123.05	3,341.29	1.38	0.26	-1.36
13,189.00	91.40	178.00	9,580.41	-3,433.28	-120.19	3,435.15	3.09	3.04	-0.55
13,283.00	92.66	178.82	9,577.08	-3,527.18	-117.59	3,528.96	1.60	1.34	0.87
13,378.00	92.18	178.00	9,573.07	-3,622.05	-114.95	3,623.75	1.00	-0.51	-0.86
13,472.00	91.57	176.73	9,569.99	-3,715.90	-110.63	3,717.47	1.50	-0.65	-1.35
13,566.00	87.71	178.21	9,570.58	-3,809.79	-106.48	3,811.24	4.40	-4.11	1.57
13,660.00	90.45	179.28	9,572.09	-3,903.74	-104.43	3,905.12	3.13	2.91	1.14
13,755.00	90.36	178.35	9,571.42	-3,998.72	-102.46	4,000.02	0.98	-0.09	-0.98
13,849.00	89.33	179.27	9,571.68	-4,092.70	-100.51	4,093.93	1.47	-1.10	0.98
13,943.00	92.30	179.85	9,570.34	-4,186.67	-99.79	4,187.86	3.22	3.16	0.62
14,038.00	94.76	181.92	9,564.49	-4,281.47	-101.25	4,282.67	3.38	2.59	2.18
14,132.00	93.08	181.79	9,558.06	-4,375.20	-104.29	4,376.44	1.79	-1.79	-0.14
14,225.00	89.58	180.65	9,555.91	-4,468.14	-106.26	4,469.40	3.96	-3.76	-1.23
14,309.00	88.61	179.18	9,557.23	-4,552.12	-106.14	4,553.36	2.10	-1.15	-1.76
Hardline Crossing									
14,319.00	88.50	179.00	9,557.48	-4,562.12	-105.98	4,563.35	2.10	-1.15	-1.76
14,359.00	88.20	179.10	9,558.63	-4,602.10	-105.31	4,603.30	0.79	-0.75	0.25
Final Phoenix MWD Survey									
14,415.00	88.20	179.10	9,560.39	-4,658.06	-104.44	4,659.23	0.00	0.00	0.00
Projection to TD									

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
402.00	401.99	-0.15	0.50	Tie In
447.00	446.98	-0.93	1.31	First Phoenix MWD Survey
14,309.00	9,557.23	-4,552.12	-106.14	Hardline Crossing
14,359.00	9,558.63	-4,602.10	-105.31	Final Phoenix MWD Survey
14,415.00	9,560.39	-4,658.06	-104.44	Projection to TD

WELL DETAILS

			Ground Level	2999.00		
NA-S	EAW	North	East	Latitude	Longitude	
0.00	0.00	439972.50	582311.70	32° 12' 33.55701 N	104° 4' 1.92440 W	

SECTION DETAILS

MD	Inc	AD	TVD	-NA-S	-EAW	Diag	TFace	VSecl	Target	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2600.00	0.00	0.00	2600.00	0.00	0.00	0.00	0.00	0.00	0.00	KOP, Begin 1.00°/100' Build
3031.52	4.32	335.13	3031.11	14.74	-8.83	1.00	335.13	-14.57		Hold 4.32° Inc at 335.13° Azm
8025.17	4.32	335.13	8027.82	422.54	-185.86	0.00	0.00	-417.84		Begin 10.00°/100' Build & Turn
8544.70	80.00	178.76	8600.00	-148.33	-301.96	10.00	-158.31	154.81		LP, Hold 90.00° Inc at 178.76° Azm
14348.70	80.00	178.76	8600.00	-4552.29	-108.43	0.00	0.00	4553.53	BHL - Chicken Fry Federal Com 1H	TD at 14348.70

DESIGN TARGET DETAILS

Name	TVD	-NA-S	-EAW	North	East	Latitude	Longitude
BHL - Chicken Fry Federal Com 1H	8600.00	-4552.29	-108.43	435420.21	582203.27	32° 11' 40.50874 N	104° 4' 3.29415 W

LEGEND

- 1H, OH / Job #60992, Surveys (Patterson 244) VO
- Plan 1 03-01-17

Map System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone Name: New Mexico East 3001

Local Origin: Well 1H, Grid North

Latitude: 32° 12' 33.55701 N

Longitude: 104° 4' 1.92440 W

Grid East: 582311.70

Grid North: 439972.50

Scale Factor: 1.000

Geomagnetic Model: HDGM

Sample Date: 31-Mar-17

Magnetic Declination: 7.30°

Dip Angle from Horizontal: 66.05°

Magnetic Field Strength: 48133

To convert a Magnetic Direction to a Grid Direction, Add 7.16°
 To convert a Magnetic Direction to a True Direction, Add 7.30° East
 To convert a True Direction to a Grid Direction, Subtract 0.14°

