

Synergy Resources

Well Name: **SRC Cannon 24-16NHZ**

Surface Location: SRC Cannon Pad Sec.16-T4N-R68W

North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4930.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1355824.01	3139483.63	40.309057	-104.999848	

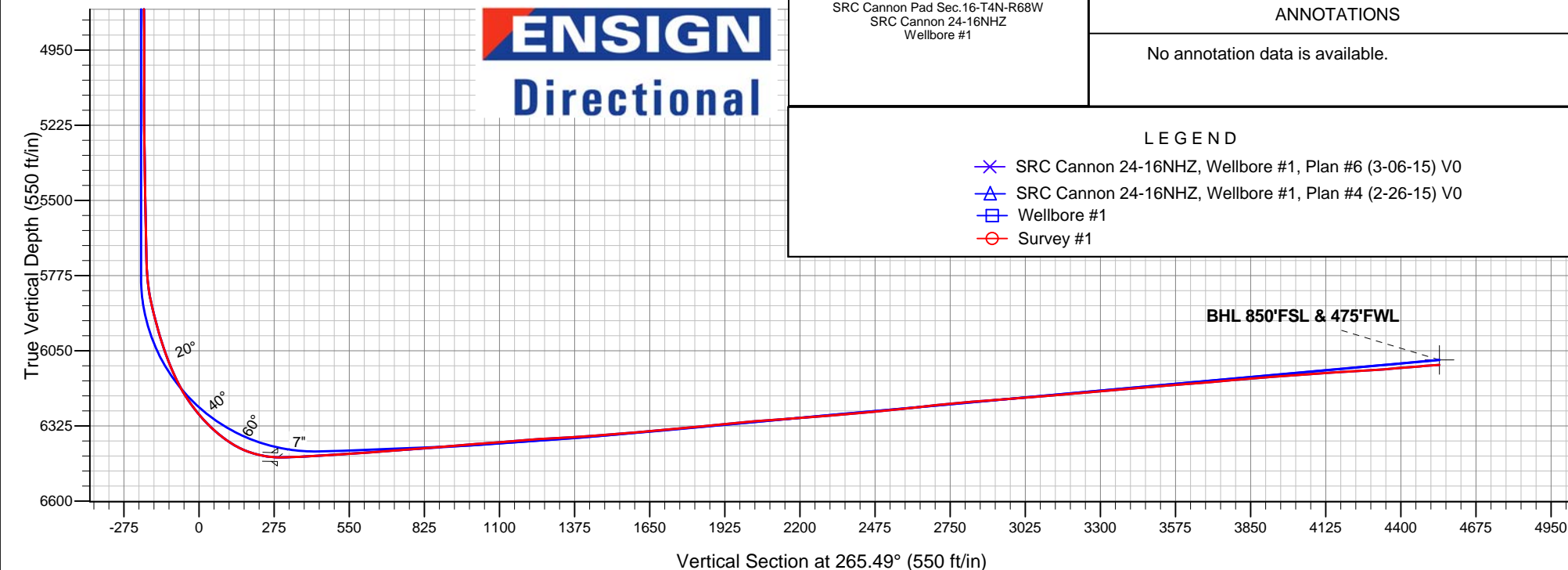
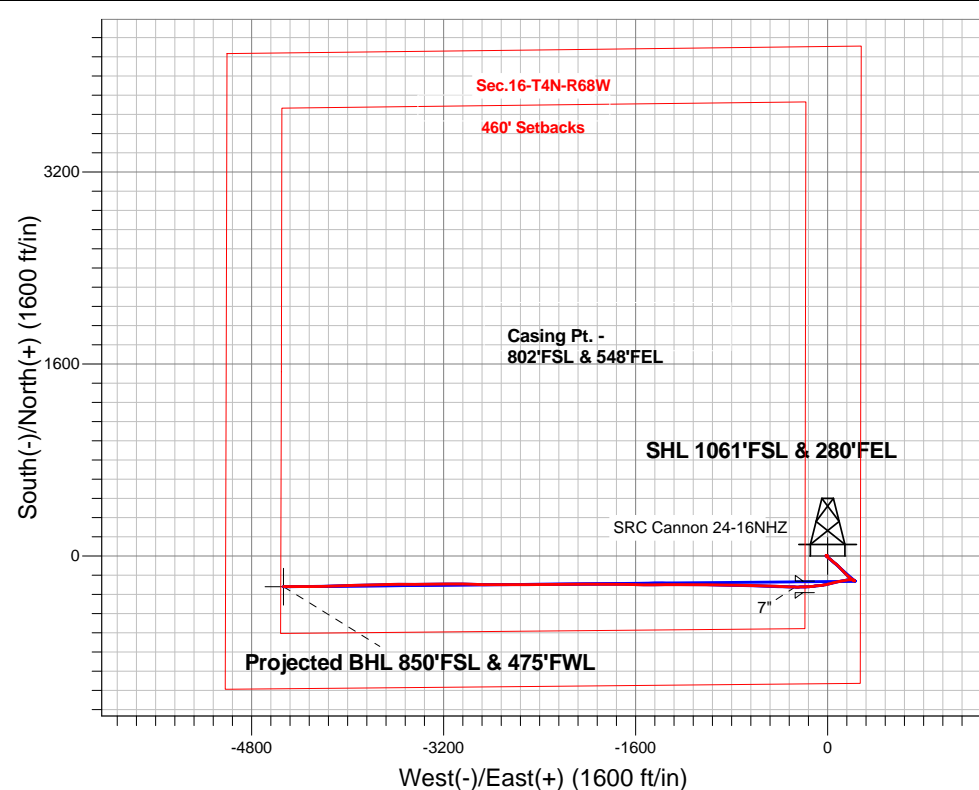
Ensign Rig #131 - RKB - 13.5' WELL @ 4943.5ft (Ensign Rig #131 - RKB - 13.5')

FINAL SURVEY

Projected Bottom Hole Location

10968'MD 6101'TVD 255'S & 4535'W of SHL

94.4 degree Incl @ 270.1 degree AZM



ENSIGN
Directional

SRC Cannon Pad Sec.16-T4N-R68W
SRC Cannon 24-16NHZ
Wellbore #1

ANNOTATIONS

No annotation data is available.

LEGEND

- ✕ SRC Cannon 24-16NHZ, Wellbore #1, Plan #6 (3-06-15) V0
- △ SRC Cannon 24-16NHZ, Wellbore #1, Plan #4 (2-26-15) V0
- Wellbore #1
- Survey #1



Synergy Resources

SEC.16-T4N-R68W

SRC Cannon Pad Sec.16-T4N-R68W

SRC Cannon 24-16NHZ

Wellbore #1

Survey: Survey #1

Standard Survey Report

13 March, 2015

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
1.0	0.01	291.90	1.0	0.0	0.0	0.0	1.03	1.03	0.00
SHL 1061'FSL & 280'FEL									
107.0	1.10	291.90	107.0	0.4	-1.0	0.9	1.03	1.03	0.00
201.0	1.50	286.20	201.0	1.1	-3.0	2.9	0.45	0.43	-6.06
295.0	1.40	274.60	294.9	1.5	-5.3	5.2	0.33	-0.11	-12.34
389.0	1.10	244.90	388.9	1.2	-7.3	7.1	0.75	-0.32	-31.60
482.0	0.90	196.80	481.9	0.1	-8.3	8.2	0.90	-0.22	-51.72
550.0	0.50	192.70	549.9	-0.7	-8.5	8.5	0.59	-0.59	-6.03
727.0	0.90	295.70	726.9	-0.8	-9.9	10.0	0.63	0.23	58.19
821.0	1.00	106.10	820.9	-0.7	-9.8	9.8	2.01	0.11	181.28

Company:	Synergy Resources	Local Co-ordinate Reference:	Well SRC Cannon 24-16NHZ
Project:	SEC.16-T4N-R68W	TVD Reference:	WELL @ 4943.5ft (Ensign Rig #131 - RKB - 13.5')
Site:	SRC Cannon Pad Sec.16-T4N-R68W	MD Reference:	WELL @ 4943.5ft (Ensign Rig #131 - RKB - 13.5')
Well:	SRC Cannon 24-16NHZ	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
916.0	0.40	118.40	915.9	-1.1	-8.7	8.8	0.65	-0.63	12.95
1,011.0	0.20	344.10	1,010.9	-1.1	-8.5	8.5	0.59	-0.21	-141.37
1,106.0	0.60	301.40	1,105.9	-0.7	-8.9	9.0	0.50	0.42	-44.95
1,198.0	1.40	312.10	1,197.9	0.3	-10.2	10.1	0.89	0.87	11.63
1,290.0	1.70	231.40	1,289.8	0.2	-12.1	12.0	2.20	0.33	-87.72
1,382.0	1.20	19.40	1,381.8	0.3	-12.8	12.8	3.03	-0.54	160.87
1,474.0	1.80	1.60	1,473.8	2.6	-12.5	12.2	0.82	0.65	-19.35
1,566.0	1.60	76.40	1,565.8	4.4	-11.2	10.8	2.25	-0.22	81.30
1,658.0	0.40	113.40	1,657.7	4.5	-9.6	9.2	1.42	-1.30	40.22
1,750.0	1.40	169.90	1,749.7	3.3	-9.1	8.9	1.33	1.09	61.41
1,842.0	2.00	147.50	1,841.7	0.8	-8.1	8.0	0.96	0.65	-24.35
1,935.0	3.40	148.10	1,934.6	-2.9	-5.8	6.0	1.51	1.51	0.65
2,027.0	4.40	137.50	2,026.4	-7.8	-1.9	2.5	1.34	1.09	-11.52
2,120.0	5.40	137.00	2,119.0	-13.6	3.5	-2.4	1.08	1.08	-0.54
2,213.0	5.80	125.70	2,211.6	-19.6	10.3	-8.7	1.26	0.43	-12.15
2,304.0	6.20	123.80	2,302.1	-25.0	18.1	-16.1	0.49	0.44	-2.09
2,394.0	7.20	127.90	2,391.5	-31.1	26.6	-24.0	1.23	1.11	4.56
2,489.0	7.50	133.50	2,485.7	-39.1	35.8	-32.6	0.82	0.32	5.89
2,578.0	8.40	133.30	2,573.8	-47.5	44.7	-40.8	1.01	1.01	-0.22
2,667.0	8.80	128.30	2,661.8	-56.2	54.8	-50.2	0.95	0.45	-5.62
2,756.0	7.90	124.90	2,749.9	-63.9	65.1	-59.9	1.15	-1.01	-3.82
2,845.0	7.20	130.80	2,838.1	-71.1	74.4	-68.6	1.17	-0.79	6.63
2,935.0	8.10	133.30	2,927.3	-79.1	83.3	-76.8	1.07	1.00	2.78
3,024.0	10.00	137.00	3,015.2	-89.0	93.1	-85.8	2.23	2.13	4.16
3,113.0	9.90	136.10	3,102.9	-100.2	103.7	-95.5	0.21	-0.11	-1.01
3,214.0	9.50	135.20	3,202.4	-112.4	115.6	-106.4	0.42	-0.40	-0.89
3,303.0	10.20	139.80	3,290.1	-123.6	125.8	-115.7	1.18	0.79	5.17
3,392.0	8.60	138.60	3,377.9	-134.6	135.3	-124.3	1.81	-1.80	-1.35
3,482.0	9.50	136.50	3,466.8	-145.1	144.9	-133.0	1.07	1.00	-2.33
3,572.0	9.70	133.10	3,555.5	-155.6	155.5	-142.8	0.67	0.22	-3.78
3,660.0	9.80	130.80	3,642.3	-165.6	166.6	-153.1	0.46	0.11	-2.61
3,749.0	9.60	126.30	3,730.0	-174.9	178.3	-164.0	0.88	-0.22	-5.06
3,838.0	8.00	129.60	3,818.0	-183.3	189.1	-174.1	1.88	-1.80	3.71
3,928.0	7.70	128.90	3,907.1	-191.1	198.6	-182.9	0.35	-0.33	-0.78
4,017.0	7.10	127.50	3,995.4	-198.1	207.6	-191.4	0.70	-0.67	-1.57
4,106.0	5.20	119.10	4,083.9	-203.5	215.5	-198.8	2.36	-2.13	-9.44
4,195.0	3.80	119.20	4,172.6	-206.9	221.6	-204.6	1.57	-1.57	0.11
4,284.0	0.90	94.10	4,261.5	-208.3	224.9	-207.8	3.38	-3.26	-28.20
4,373.0	0.50	9.40	4,350.5	-208.0	225.6	-208.6	1.11	-0.45	-95.17
4,462.0	1.10	324.90	4,439.5	-206.9	225.2	-208.2	0.92	0.67	-50.00
4,551.0	1.10	260.70	4,528.5	-206.4	223.9	-206.9	1.31	0.00	-72.13
4,640.0	1.70	273.60	4,617.4	-206.4	221.7	-204.8	0.76	0.67	14.49
4,729.0	1.10	320.70	4,706.4	-205.7	219.8	-203.0	1.40	-0.67	52.92
4,818.0	1.10	246.90	4,795.4	-205.4	218.5	-201.7	1.48	0.00	-82.92
4,907.0	0.50	358.80	4,884.4	-205.3	217.7	-200.9	1.54	-0.67	125.73
4,996.0	1.10	328.60	4,973.4	-204.2	217.3	-200.5	0.80	0.67	-33.93
5,086.0	0.70	65.60	5,063.4	-203.2	217.3	-200.7	1.53	-0.44	107.78
5,175.0	0.60	355.70	5,152.4	-202.5	217.8	-201.2	0.84	-0.11	-78.54
5,264.0	1.00	306.60	5,241.4	-201.6	217.1	-200.6	0.85	0.45	-55.17
5,353.0	0.80	261.80	5,330.4	-201.2	215.9	-199.4	0.80	-0.22	-50.34
5,443.0	1.30	276.70	5,420.3	-201.2	214.3	-197.7	0.63	0.56	16.56
5,532.0	0.90	303.30	5,509.3	-200.7	212.7	-196.2	0.72	-0.45	29.89
5,622.0	1.10	292.00	5,599.3	-200.0	211.3	-194.9	0.31	0.22	-12.56

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5,711.0	1.50	303.10	5,688.3	-199.0	209.5	-193.2	0.53	0.45	12.47
5,800.0	3.90	274.80	5,777.2	-198.1	205.5	-189.3	3.01	2.70	-31.80
5,889.0	12.00	268.00	5,865.3	-198.2	193.2	-177.0	9.15	9.10	-7.64
5,978.0	15.20	263.00	5,951.8	-200.0	172.4	-156.1	3.83	3.60	-5.62
6,067.0	18.60	260.70	6,036.9	-203.7	146.8	-130.3	3.89	3.82	-2.58
6,156.0	23.20	258.80	6,120.0	-209.4	115.6	-98.7	5.22	5.17	-2.13
6,201.0	26.50	259.70	6,160.9	-212.9	97.0	-79.9	7.38	7.33	2.00
6,245.0	30.80	257.40	6,199.5	-217.1	76.3	-59.0	10.09	9.77	-5.23
6,290.0	34.90	256.70	6,237.3	-222.6	52.6	-34.9	9.15	9.11	-1.56
6,334.0	38.90	255.30	6,272.4	-229.0	26.9	-8.8	9.29	9.09	-3.18
6,379.0	43.40	256.70	6,306.3	-236.1	-1.8	20.4	10.21	10.00	3.11
6,424.0	47.70	260.60	6,337.8	-242.4	-33.3	52.3	11.38	9.56	8.67
6,468.0	52.80	263.70	6,366.0	-247.0	-66.8	86.0	12.79	11.59	7.05
6,513.0	58.10	263.40	6,391.5	-251.2	-103.6	123.0	11.79	11.78	-0.67
6,558.0	67.00	265.00	6,412.2	-255.2	-143.3	162.9	20.03	19.78	3.56
6,602.0	74.00	267.30	6,426.9	-257.9	-184.6	204.4	16.65	15.91	5.23
6,647.0	81.60	269.50	6,436.4	-259.1	-228.6	248.3	17.55	16.89	4.89
6,663.0	84.80	269.90	6,438.3	-259.2	-244.5	264.1	20.15	20.00	2.50
6,687.0	88.11	270.38	6,439.8	-259.2	-268.4	288.0	13.94	13.80	2.00
7"									
6,713.0	91.70	270.90	6,439.8	-258.9	-294.4	313.9	13.94	13.80	2.00
6,788.0	92.90	273.20	6,436.8	-256.2	-369.3	388.3	3.46	1.60	3.07
6,880.0	93.60	272.00	6,431.6	-252.0	-461.0	479.4	1.51	0.76	-1.30
6,973.0	94.00	272.20	6,425.4	-248.6	-553.8	571.6	0.48	0.43	0.22
7,061.0	93.90	271.10	6,419.3	-246.1	-641.5	658.9	1.25	-0.11	-1.25
7,151.0	94.70	271.10	6,412.6	-244.4	-731.3	748.2	0.89	0.89	0.00
7,240.0	94.40	270.80	6,405.5	-242.9	-820.0	836.5	0.48	-0.34	-0.34
7,329.0	94.90	270.20	6,398.3	-242.1	-908.7	924.9	0.88	0.56	-0.67
7,419.0	94.40	270.80	6,391.0	-241.4	-998.4	1,014.3	0.87	-0.56	0.67
7,508.0	94.40	270.80	6,384.2	-240.1	-1,087.1	1,102.6	0.00	0.00	0.00
7,597.0	94.70	270.60	6,377.1	-239.0	-1,175.8	1,191.0	0.40	0.34	-0.22
7,686.0	92.90	269.50	6,371.2	-239.0	-1,264.6	1,279.5	2.37	-2.02	-1.24
7,775.0	93.50	269.30	6,366.3	-239.9	-1,353.5	1,368.1	0.71	0.67	-0.22
7,865.0	94.30	270.10	6,360.1	-240.4	-1,443.2	1,457.7	1.26	0.89	0.89
7,867.2	94.32	270.10	6,360.0	-240.4	-1,445.4	1,459.8	0.93	0.90	-0.22
WP #2 (24-16NHZ)									
7,954.0	95.10	269.90	6,352.9	-240.4	-1,531.9	1,546.1	0.93	0.90	-0.22
8,044.0	94.80	270.40	6,345.1	-240.1	-1,621.6	1,635.5	0.65	-0.33	0.56
8,133.0	95.30	270.60	6,337.3	-239.3	-1,710.3	1,723.8	0.60	0.56	0.22
8,222.0	95.10	271.10	6,329.2	-238.0	-1,798.9	1,812.0	0.60	-0.22	0.56
8,311.0	95.90	271.30	6,320.7	-236.2	-1,887.5	1,900.2	0.93	0.90	0.22
8,400.0	95.30	270.40	6,312.0	-234.9	-1,976.0	1,988.4	1.21	-0.67	-1.01
8,489.0	94.20	270.10	6,304.6	-234.5	-2,064.7	2,076.8	1.28	-1.24	-0.34
8,578.0	94.30	269.50	6,298.0	-234.8	-2,153.5	2,165.3	0.68	0.11	-0.67
8,667.0	94.20	269.30	6,291.4	-235.7	-2,242.2	2,253.8	0.25	-0.11	-0.22
8,757.0	94.50	268.80	6,284.6	-237.2	-2,331.9	2,343.4	0.65	0.33	-0.56
8,846.0	95.40	269.50	6,276.9	-238.5	-2,420.6	2,431.9	1.28	1.01	0.79
8,935.0	96.00	269.00	6,268.1	-239.7	-2,509.2	2,520.2	0.88	0.67	-0.56
9,024.0	96.40	269.70	6,258.5	-240.7	-2,597.6	2,608.5	0.90	0.45	0.79
9,114.0	95.60	270.40	6,249.0	-240.6	-2,687.1	2,697.7	1.18	-0.89	0.78
9,202.0	95.40	270.40	6,240.6	-240.0	-2,774.7	2,785.0	0.23	-0.23	0.00
9,292.0	94.30	271.50	6,233.0	-238.5	-2,864.4	2,874.3	1.73	-1.22	1.22

