

BONANZA CREEK ENERGY INC.

WELD COUNTY, COLORADO (NAD 83)

NE NW SEC. 5 T4N R62W 6th P.M.

STATE SEVENTY HOLES 11-5-17XRLNB

ORIGINAL WELLBORE

11 November, 2015

Plan: PROPOSAL #1





Project: WELD COUNTY, COLORADO (NAD 83)
Site: NE NW SEC. 5 T4N R62W 6th P.M.
Well: STATE SEVENTY HOLES 11-5-17XRLNB
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Dep	Annotation
600.0	600.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1295.8	1302.8	14.06	284.14	21.0	-83.2	-17.7	85.8	EOB TO 14.06° INC
5012.9	5134.6	14.06	284.14	248.3	-985.5	-209.2	1016.3	END OF TANGENT
5708.6	5837.4	0.00	0.00	269.3	-1068.7	-226.9	1102.1	EOD TO VERTICAL
5738.6	5867.4	0.00	0.00	269.3	-1068.7	-226.9	1102.1	KOP (12°/100ft BUR)
6199.8	6492.4	75.00	176.16	-83.8	-1045.0	125.0	1456.0	START OF TANGENT
6225.7	6592.4	75.00	176.16	-180.2	-1038.5	221.1	1552.6	END OF TANGENT
6241.9	6717.4	90.00	176.16	-303.5	-1030.3	344.0	1676.2	7" ICP *NEW* - SSH 11-5-17XRLNB
6241.9	12118.1	90.00	176.16	-5692.1	-668.8	5714.1	7076.9	MID-LAT TARGET @ 725ft FWL
6241.9	12166.1	90.00	177.60	-5740.0	-666.2	5761.9	7124.9	EOT TO 177.6° AZ
6241.9	17569.5	90.00	177.60	-11138.7	-440.3	11147.4	12528.3	BHL - SSH 11-5-17XRLNB

PROPOSED LOCAL COORDINATES:

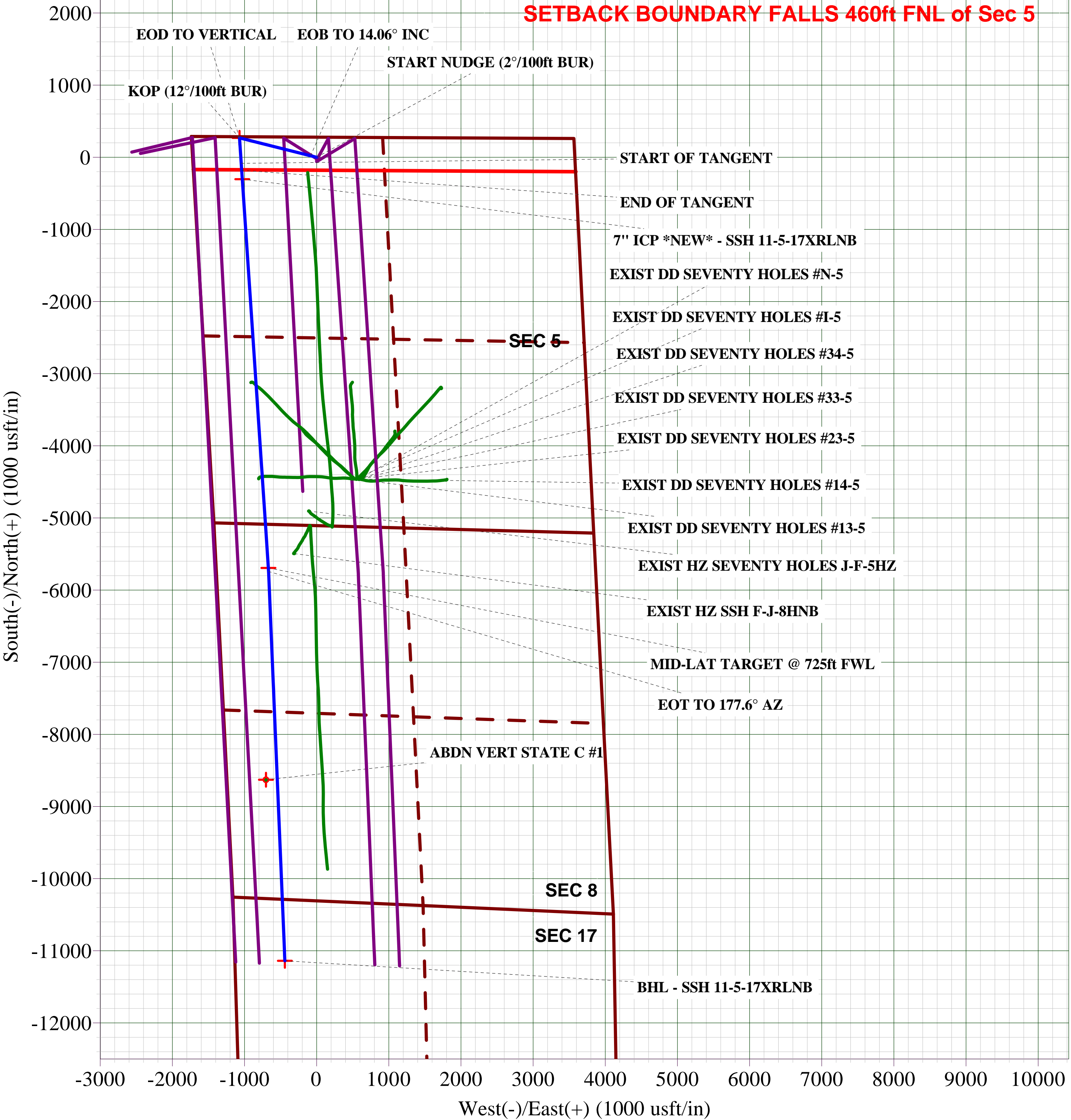
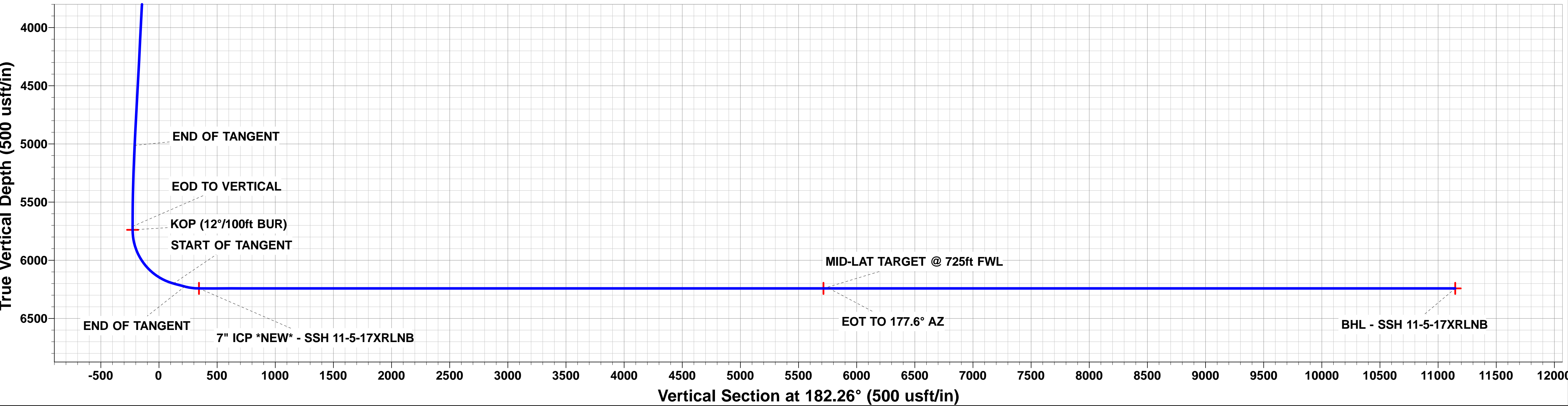
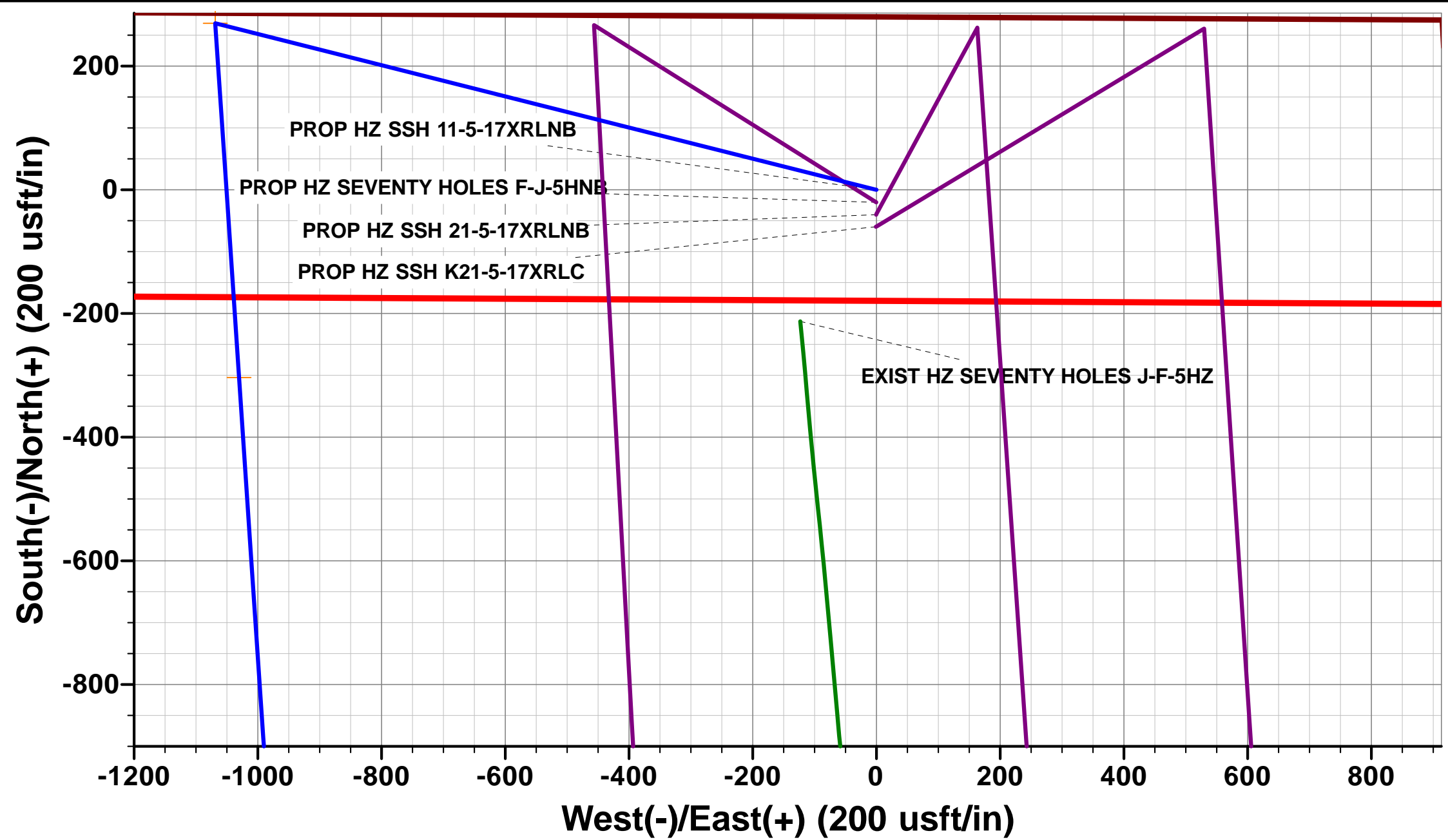
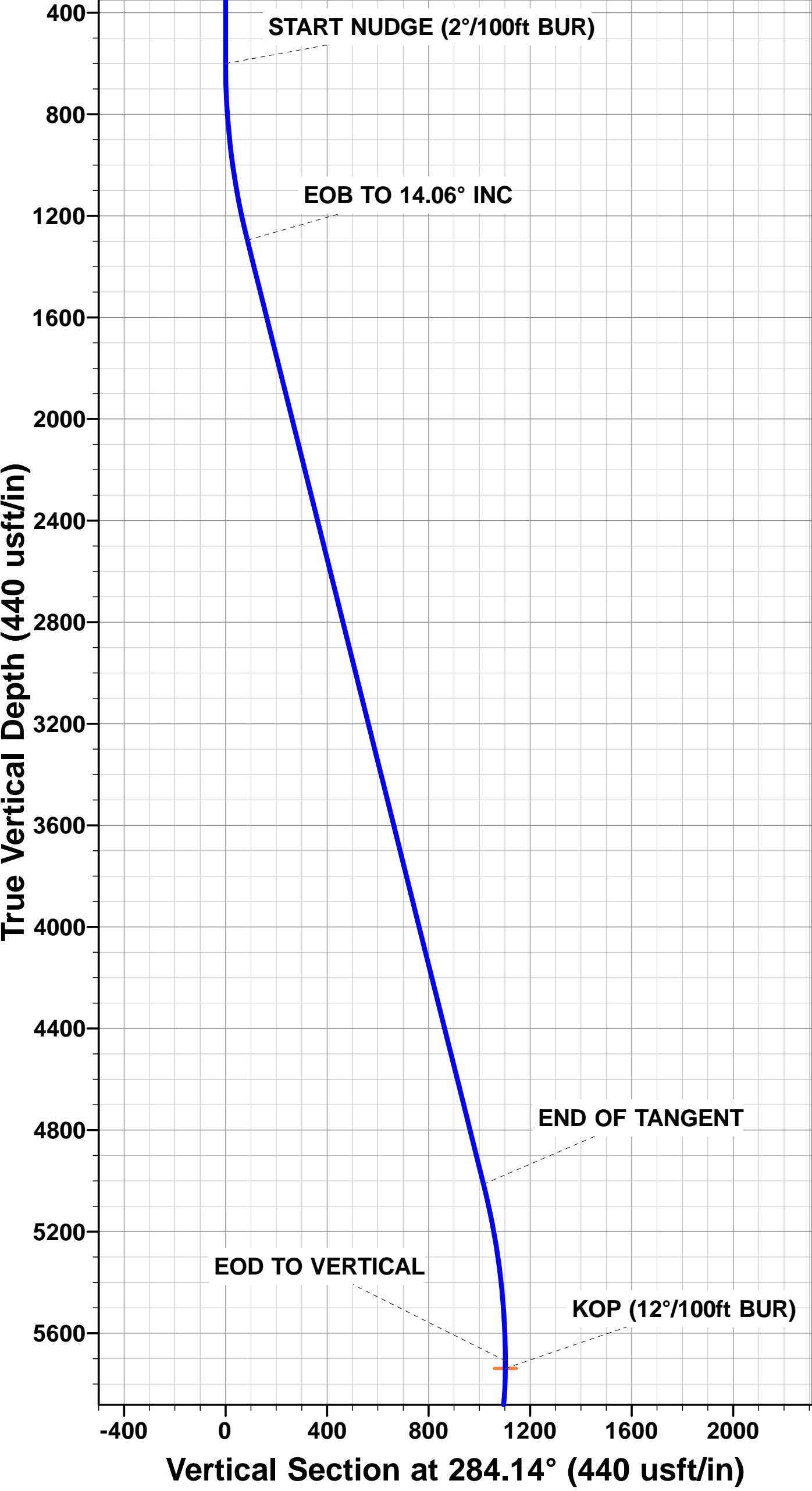
SHL: 280ft FNL & 1717ft FWL Sec 5

7" ICP *NEW*: 589ft FNL & 670ft FWL Sec 5

BHL: 850ft FNL & 693ft FWL Sec 17

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - SSH 11-5-17XRLNB	5738.6	269.3	-1068.7	40.348981	-104.357561
MID-LAT TARGET @ 725ft FWL	6241.9	-5692.1	-668.8	40.332618	-104.356126
BHL - SSH 11-5-17XRLNB	6241.9	-11138.7	-440.3	40.317667	-104.355306
7" ICP *NEW* - SSH 11-5-17XRLNB	6241.9	-303.5	-1030.3	40.347409	-104.357423



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES 11-5-17XRLNB
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4561.9usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4561.9usft (Original Well Elev)
Site:	NE NW SEC. 5 T4N R62W 6th P.M.	North Reference:	True
Well:	STATE SEVENTY HOLES 11-5-17XRLNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Project	WELD COUNTY, COLORADO (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	NE NW SEC. 5 T4N R62W 6th P.M.		
Site Position:		Northing:	1,371,770.18 usft
From:	Lat/Long	Easting:	3,319,483.74 usft
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft
		Latitude:	40.348242
		Longitude:	-104.353727
		Grid Convergence:	0.74 °

Well	STATE SEVENTY HOLES 11-5-17XRLNB		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	40.348242
		Longitude:	-104.353727
		Ground Level:	4,544.9 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/11/2015	8.16	66.92	52,593

Design	PROPOSAL #1				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	182.26	

Plan Sections											
MD (usft)	Inc (°)	Azi (°)	Vertical Depth	SS (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100usf)	Turn Rate (°/100usf)	TFO (°)	Target
0.0	0.00	0.00	0.0	-4,561.9	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	-3,961.9	0.0	0.0	0.00	0.00	0.00	0.00	
1,302.8	14.06	284.14	1,295.7	-3,266.2	21.0	-83.2	2.00	2.00	0.00	284.14	
5,134.6	14.06	284.14	5,012.9	451.0	248.3	-985.5	0.00	0.00	0.00	0.00	
5,837.4	0.00	0.00	5,708.6	1,146.7	269.3	-1,068.7	2.00	-2.00	0.00	180.00	
5,867.4	0.00	0.00	5,738.6	1,176.7	269.3	-1,068.7	0.00	0.00	0.00	0.00	KOP - SSH 11-5-17
6,492.4	75.00	176.16	6,199.8	1,637.9	-83.8	-1,045.0	12.00	12.00	0.00	176.16	
6,592.4	75.00	176.16	6,225.7	1,663.8	-180.2	-1,038.5	0.00	0.00	0.00	0.00	
6,717.4	90.00	176.16	6,241.9	1,680.0	-303.5	-1,030.3	12.00	12.00	0.00	0.00	
12,118.1	90.00	176.16	6,241.9	1,680.0	-5,692.1	-668.8	0.00	0.00	0.00	78.76	MID-LAT TARGET
12,166.1	90.00	177.60	6,241.9	1,680.0	-5,740.0	-666.2	3.00	0.00	3.00	90.04	
17,569.5	90.00	177.60	6,241.9	1,680.0	-11,138.7	-440.3	0.00	0.00	0.00	0.00	BHL - SSH 11-5-17

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Well:	STATE SEVENTY HOLES 11-5-17XRLNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	4,561.90	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,461.90	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,361.90	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,261.90	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,161.90	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,061.90	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
600.0	0.00	0.00	600.0	3,961.90	0.0	0.0	0.0	0.00	0.00	0.00
700.0	2.00	284.14	700.0	3,861.92	0.4	-1.7	-0.4	2.00	2.00	0.00
800.0	4.00	284.14	799.8	3,762.06	1.7	-6.8	-1.4	2.00	2.00	0.00
900.0	6.00	284.14	899.5	3,662.45	3.8	-15.2	-3.2	2.00	2.00	0.00
1,000.0	8.00	284.14	998.7	3,563.20	6.8	-27.0	-5.7	2.00	2.00	0.00
1,100.0	10.00	284.14	1,097.5	3,464.43	10.6	-42.2	-9.0	2.00	2.00	0.00
1,200.0	12.00	284.14	1,195.6	3,366.28	15.3	-60.7	-12.9	2.00	2.00	0.00
1,300.0	14.00	284.14	1,293.1	3,268.84	20.8	-82.5	-17.5	2.00	2.00	0.00
EOB TO 14.06° INC										
1,302.8	14.06	284.14	1,295.8	3,266.13	21.0	-83.2	-17.7	1.96	1.96	0.00
1,400.0	14.06	284.14	1,390.1	3,171.84	26.7	-106.1	-22.5	0.00	0.00	0.00
1,500.0	14.06	284.14	1,487.1	3,074.83	32.7	-129.6	-27.5	0.00	0.00	0.00
1,600.0	14.06	284.14	1,584.1	2,977.83	38.6	-153.2	-32.5	0.00	0.00	0.00
1,700.0	14.06	284.14	1,681.1	2,880.82	44.5	-176.7	-37.5	0.00	0.00	0.00
1,800.0	14.06	284.14	1,778.1	2,783.81	50.5	-200.3	-42.5	0.00	0.00	0.00
1,900.0	14.06	284.14	1,875.1	2,686.81	56.4	-223.8	-47.5	0.00	0.00	0.00
2,000.0	14.06	284.14	1,972.1	2,589.80	62.3	-247.4	-52.5	0.00	0.00	0.00
2,100.0	14.06	284.14	2,069.1	2,492.79	68.3	-270.9	-57.5	0.00	0.00	0.00
2,200.0	14.06	284.14	2,166.1	2,395.79	74.2	-294.5	-62.5	0.00	0.00	0.00
2,300.0	14.06	284.14	2,263.1	2,298.78	80.1	-318.0	-67.5	0.00	0.00	0.00
2,400.0	14.06	284.14	2,360.1	2,201.78	86.1	-341.6	-72.5	0.00	0.00	0.00
2,500.0	14.06	284.14	2,457.1	2,104.77	92.0	-365.1	-77.5	0.00	0.00	0.00
2,600.0	14.06	284.14	2,554.1	2,007.76	97.9	-388.7	-82.5	0.00	0.00	0.00
2,700.0	14.06	284.14	2,651.1	1,910.76	103.9	-412.2	-87.5	0.00	0.00	0.00
2,800.0	14.06	284.14	2,748.2	1,813.75	109.8	-435.8	-92.5	0.00	0.00	0.00
2,900.0	14.06	284.14	2,845.2	1,716.74	115.7	-459.3	-97.5	0.00	0.00	0.00
3,000.0	14.06	284.14	2,942.2	1,619.74	121.7	-482.9	-102.5	0.00	0.00	0.00
3,100.0	14.06	284.14	3,039.2	1,522.73	127.6	-506.4	-107.5	0.00	0.00	0.00
3,200.0	14.06	284.14	3,136.2	1,425.72	133.5	-530.0	-112.5	0.00	0.00	0.00
3,300.0	14.06	284.14	3,233.2	1,328.72	139.5	-553.5	-117.5	0.00	0.00	0.00
3,400.0	14.06	284.14	3,330.2	1,231.71	145.4	-577.0	-122.5	0.00	0.00	0.00
3,500.0	14.06	284.14	3,427.2	1,134.71	151.3	-600.6	-127.5	0.00	0.00	0.00
3,600.0	14.06	284.14	3,524.2	1,037.70	157.3	-624.1	-132.5	0.00	0.00	0.00
3,700.0	14.06	284.14	3,621.2	940.69	163.2	-647.7	-137.5	0.00	0.00	0.00
3,800.0	14.06	284.14	3,718.2	843.69	169.1	-671.2	-142.5	0.00	0.00	0.00
3,900.0	14.06	284.14	3,815.2	746.68	175.1	-694.8	-147.5	0.00	0.00	0.00
4,000.0	14.06	284.14	3,912.2	649.67	181.0	-718.3	-152.5	0.00	0.00	0.00
4,100.0	14.06	284.14	4,009.2	552.67	186.9	-741.9	-157.5	0.00	0.00	0.00
4,200.0	14.06	284.14	4,106.2	455.66	192.9	-765.4	-162.5	0.00	0.00	0.00
4,300.0	14.06	284.14	4,203.2	358.66	198.8	-789.0	-167.5	0.00	0.00	0.00
4,400.0	14.06	284.14	4,300.3	261.65	204.8	-812.5	-172.5	0.00	0.00	0.00
4,500.0	14.06	284.14	4,397.3	164.64	210.7	-836.1	-177.5	0.00	0.00	0.00
4,600.0	14.06	284.14	4,494.3	67.64	216.6	-859.6	-182.5	0.00	0.00	0.00
4,700.0	14.06	284.14	4,591.3	-29.37	222.6	-883.2	-187.5	0.00	0.00	0.00
4,800.0	14.06	284.14	4,688.3	-126.38	228.5	-906.7	-192.5	0.00	0.00	0.00

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Well:	STATE SEVENTY HOLES 11-5-17XRLNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,900.0	14.06	284.14	4,785.3	-223.38	234.4	-930.3	-197.5	0.00	0.00	0.00
5,000.0	14.06	284.14	4,882.3	-320.39	240.4	-953.8	-202.5	0.00	0.00	0.00
5,100.0	14.06	284.14	4,979.3	-417.39	246.3	-977.4	-207.5	0.00	0.00	0.00
END OF TANGENT										
5,134.6	14.06	284.14	5,012.9	-450.96	248.3	-985.5	-209.2	0.00	0.00	0.00
5,200.0	12.75	284.14	5,076.5	-514.58	252.0	-1,000.2	-212.3	2.00	-2.00	0.00
5,300.0	10.75	284.14	5,174.4	-612.48	257.0	-1,020.0	-216.5	2.00	-2.00	0.00
5,400.0	8.75	284.14	5,272.9	-711.03	261.2	-1,036.4	-220.0	2.00	-2.00	0.00
5,500.0	6.75	284.14	5,372.0	-810.11	264.5	-1,049.5	-222.8	2.00	-2.00	0.00
5,600.0	4.75	284.14	5,471.5	-909.60	266.9	-1,059.2	-224.9	2.00	-2.00	0.00
5,700.0	2.75	284.14	5,571.3	-1,009.38	268.5	-1,065.5	-226.2	2.00	-2.00	0.00
5,800.0	0.75	284.14	5,671.2	-1,109.33	269.2	-1,068.5	-226.8	2.00	-2.00	0.00
EOD TO VERTICAL										
5,837.4	0.00	0.00	5,708.6	-1,146.73	269.3	-1,068.7	-226.9	2.00	-2.00	0.00
KOP (12°/100ft BUR)										
5,867.4	0.00	0.00	5,738.6	-1,176.73	269.3	-1,068.7	-226.9	0.00	0.00	0.00
5,900.0	3.92	176.16	5,771.2	-1,209.31	268.2	-1,068.6	-225.8	12.01	12.01	0.00
6,000.0	15.92	176.16	5,869.5	-1,307.63	251.0	-1,067.5	-208.7	12.00	12.00	0.00
6,100.0	27.92	176.16	5,962.1	-1,400.24	213.9	-1,065.0	-171.6	12.00	12.00	0.00
6,200.0	39.92	176.16	6,045.0	-1,483.07	158.3	-1,061.2	-116.3	12.00	12.00	0.00
6,300.0	51.92	176.16	6,114.4	-1,552.52	86.8	-1,056.4	-45.0	12.00	12.00	0.00
6,400.0	63.92	176.16	6,167.4	-1,605.53	2.4	-1,050.8	39.1	12.00	12.00	0.00
START OF TANGENT										
6,492.4	75.00	176.16	6,199.8	-1,637.90	-83.8	-1,045.0	125.0	12.00	12.00	0.00
6,500.0	75.00	176.16	6,201.8	-1,639.87	-91.1	-1,044.5	132.3	0.00	0.00	0.00
END OF TANGENT										
6,592.4	75.00	176.16	6,225.7	-1,663.79	-180.2	-1,038.5	221.1	0.00	0.00	0.00
6,600.0	75.92	176.16	6,227.6	-1,665.69	-187.5	-1,038.0	228.4	12.05	12.05	0.00
6,700.0	87.92	176.16	6,241.6	-1,679.73	-286.1	-1,031.4	326.7	12.00	12.00	0.00
7" ICP *NEW* - SSH 11-5-17XRLNB										
6,717.4	90.00	176.16	6,241.9	-1,680.05	-303.5	-1,030.3	344.0	11.98	11.98	0.00
6,800.0	90.00	176.16	6,241.9	-1,680.05	-385.9	-1,024.7	426.1	0.00	0.00	0.00
6,900.0	90.00	176.16	6,241.9	-1,680.05	-485.7	-1,018.0	525.5	0.00	0.00	0.00
7,000.0	90.00	176.16	6,241.9	-1,680.05	-585.5	-1,011.3	625.0	0.00	0.00	0.00
7,100.0	90.00	176.16	6,241.9	-1,680.05	-685.2	-1,004.6	724.4	0.00	0.00	0.00
7,200.0	90.00	176.16	6,241.9	-1,680.05	-785.0	-997.9	823.8	0.00	0.00	0.00
7,300.0	90.00	176.16	6,241.9	-1,680.05	-884.8	-991.2	923.3	0.00	0.00	0.00
7,400.0	90.00	176.16	6,241.9	-1,680.05	-984.6	-984.5	1,022.7	0.00	0.00	0.00
7,500.0	90.00	176.16	6,241.9	-1,680.05	-1,084.3	-977.8	1,122.1	0.00	0.00	0.00
7,600.0	90.00	176.16	6,241.9	-1,680.05	-1,184.1	-971.2	1,221.6	0.00	0.00	0.00
7,700.0	90.00	176.16	6,241.9	-1,680.05	-1,283.9	-964.5	1,321.0	0.00	0.00	0.00
7,800.0	90.00	176.16	6,241.9	-1,680.04	-1,383.7	-957.8	1,420.4	0.00	0.00	0.00
7,900.0	90.00	176.16	6,241.9	-1,680.04	-1,483.4	-951.1	1,519.9	0.00	0.00	0.00
8,000.0	90.00	176.16	6,241.9	-1,680.04	-1,583.2	-944.4	1,619.3	0.00	0.00	0.00
8,100.0	90.00	176.16	6,241.9	-1,680.04	-1,683.0	-937.7	1,718.7	0.00	0.00	0.00
8,200.0	90.00	176.16	6,241.9	-1,680.04	-1,782.8	-931.0	1,818.2	0.00	0.00	0.00
8,300.0	90.00	176.16	6,241.9	-1,680.04	-1,882.5	-924.3	1,917.6	0.00	0.00	0.00
8,400.0	90.00	176.16	6,241.9	-1,680.04	-1,982.3	-917.6	2,017.0	0.00	0.00	0.00
8,500.0	90.00	176.16	6,241.9	-1,680.04	-2,082.1	-910.9	2,116.5	0.00	0.00	0.00
8,600.0	90.00	176.16	6,241.9	-1,680.04	-2,181.9	-904.2	2,215.9	0.00	0.00	0.00
8,700.0	90.00	176.16	6,241.9	-1,680.04	-2,281.7	-897.5	2,315.3	0.00	0.00	0.00
8,800.0	90.00	176.16	6,241.9	-1,680.04	-2,381.4	-890.8	2,414.8	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES 11-5-17XRLNB
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4561.9usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4561.9usft (Original Well Elev)
Site:	NE NW SEC. 5 T4N R62W 6th P.M.	North Reference:	True
Well:	STATE SEVENTY HOLES 11-5-17XRLNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,900.0	90.00	176.16	6,241.9	-1,680.04	-2,481.2	-884.1	2,514.2	0.00	0.00	0.00
9,000.0	90.00	176.16	6,241.9	-1,680.04	-2,581.0	-877.4	2,613.6	0.00	0.00	0.00
9,100.0	90.00	176.16	6,241.9	-1,680.04	-2,680.8	-870.7	2,713.1	0.00	0.00	0.00
9,200.0	90.00	176.16	6,241.9	-1,680.04	-2,780.5	-864.0	2,812.5	0.00	0.00	0.00
9,300.0	90.00	176.16	6,241.9	-1,680.04	-2,880.3	-857.3	2,911.9	0.00	0.00	0.00
9,400.0	90.00	176.16	6,241.9	-1,680.04	-2,980.1	-850.7	3,011.4	0.00	0.00	0.00
9,500.0	90.00	176.16	6,241.9	-1,680.03	-3,079.9	-844.0	3,110.8	0.00	0.00	0.00
9,600.0	90.00	176.16	6,241.9	-1,680.03	-3,179.6	-837.3	3,210.2	0.00	0.00	0.00
9,700.0	90.00	176.16	6,241.9	-1,680.03	-3,279.4	-830.6	3,309.7	0.00	0.00	0.00
9,800.0	90.00	176.16	6,241.9	-1,680.03	-3,379.2	-823.9	3,409.1	0.00	0.00	0.00
9,900.0	90.00	176.16	6,241.9	-1,680.03	-3,479.0	-817.2	3,508.5	0.00	0.00	0.00
10,000.0	90.00	176.16	6,241.9	-1,680.03	-3,578.7	-810.5	3,608.0	0.00	0.00	0.00
10,100.0	90.00	176.16	6,241.9	-1,680.03	-3,678.5	-803.8	3,707.4	0.00	0.00	0.00
10,200.0	90.00	176.16	6,241.9	-1,680.03	-3,778.3	-797.1	3,806.8	0.00	0.00	0.00
10,300.0	90.00	176.16	6,241.9	-1,680.03	-3,878.1	-790.4	3,906.3	0.00	0.00	0.00
10,400.0	90.00	176.16	6,241.9	-1,680.03	-3,977.8	-783.7	4,005.7	0.00	0.00	0.00
10,500.0	90.00	176.16	6,241.9	-1,680.02	-4,077.6	-777.0	4,105.1	0.00	0.00	0.00
10,600.0	90.00	176.16	6,241.9	-1,680.02	-4,177.4	-770.4	4,204.6	0.00	0.00	0.00
10,700.0	90.00	176.16	6,241.9	-1,680.02	-4,277.2	-763.7	4,304.0	0.00	0.00	0.00
10,800.0	90.00	176.16	6,241.9	-1,680.02	-4,376.9	-757.0	4,403.4	0.00	0.00	0.00
10,900.0	90.00	176.16	6,241.9	-1,680.02	-4,476.7	-750.3	4,502.9	0.00	0.00	0.00
11,000.0	90.00	176.16	6,241.9	-1,680.02	-4,576.5	-743.6	4,602.3	0.00	0.00	0.00
11,100.0	90.00	176.16	6,241.9	-1,680.02	-4,676.3	-736.9	4,701.7	0.00	0.00	0.00
11,200.0	90.00	176.16	6,241.9	-1,680.01	-4,776.0	-730.2	4,801.2	0.00	0.00	0.00
11,300.0	90.00	176.16	6,241.9	-1,680.01	-4,875.8	-723.5	4,900.6	0.00	0.00	0.00
11,400.0	90.00	176.16	6,241.9	-1,680.01	-4,975.6	-716.8	5,000.0	0.00	0.00	0.00
11,500.0	90.00	176.16	6,241.9	-1,680.01	-5,075.4	-710.1	5,099.5	0.00	0.00	0.00
11,600.0	90.00	176.16	6,241.9	-1,680.01	-5,175.2	-703.5	5,198.9	0.00	0.00	0.00
11,700.0	90.00	176.16	6,241.9	-1,680.01	-5,274.9	-696.8	5,298.3	0.00	0.00	0.00
11,800.0	90.00	176.16	6,241.9	-1,680.01	-5,374.7	-690.1	5,397.8	0.00	0.00	0.00
11,900.0	90.00	176.16	6,241.9	-1,680.00	-5,474.5	-683.4	5,497.2	0.00	0.00	0.00
12,000.0	90.00	176.16	6,241.9	-1,680.00	-5,574.3	-676.7	5,596.6	0.00	0.00	0.00
12,100.0	90.00	176.16	6,241.9	-1,680.00	-5,674.0	-670.0	5,696.1	0.00	0.00	0.00
MID-LAT TARGET @ 725ft FWL										
12,118.1	90.00	176.16	6,241.9	-1,680.00	-5,692.1	-668.8	5,714.1	0.00	0.00	0.00
EOT TO 177.6° AZ										
12,166.1	90.00	177.60	6,241.9	-1,680.00	-5,740.0	-666.2	5,761.9	3.00	0.00	3.00
12,200.0	90.00	177.60	6,241.9	-1,680.00	-5,773.9	-664.8	5,795.6	0.00	0.00	0.00
12,300.0	90.00	177.60	6,241.9	-1,680.00	-5,873.8	-660.6	5,895.3	0.00	0.00	0.00
12,400.0	90.00	177.60	6,241.9	-1,680.00	-5,973.7	-656.4	5,995.0	0.00	0.00	0.00
12,500.0	90.00	177.60	6,241.9	-1,680.00	-6,073.6	-652.2	6,094.7	0.00	0.00	0.00
12,600.0	90.00	177.60	6,241.9	-1,680.00	-6,173.5	-648.1	6,194.3	0.00	0.00	0.00
12,700.0	90.00	177.60	6,241.9	-1,680.00	-6,273.5	-643.9	6,294.0	0.00	0.00	0.00
12,800.0	90.00	177.60	6,241.9	-1,680.00	-6,373.4	-639.7	6,393.7	0.00	0.00	0.00
12,900.0	90.00	177.60	6,241.9	-1,680.00	-6,473.3	-635.5	6,493.3	0.00	0.00	0.00
13,000.0	90.00	177.60	6,241.9	-1,680.00	-6,573.2	-631.3	6,593.0	0.00	0.00	0.00
13,100.0	90.00	177.60	6,241.9	-1,680.00	-6,673.1	-627.2	6,692.7	0.00	0.00	0.00
13,200.0	90.00	177.60	6,241.9	-1,680.00	-6,773.0	-623.0	6,792.3	0.00	0.00	0.00
13,300.0	90.00	177.60	6,241.9	-1,680.00	-6,872.9	-618.8	6,892.0	0.00	0.00	0.00
13,400.0	90.00	177.60	6,241.9	-1,680.00	-6,972.8	-614.6	6,991.7	0.00	0.00	0.00
13,500.0	90.00	177.60	6,241.9	-1,680.00	-7,072.8	-610.4	7,091.3	0.00	0.00	0.00
13,600.0	90.00	177.60	6,241.9	-1,680.00	-7,172.7	-606.3	7,191.0	0.00	0.00	0.00
13,700.0	90.00	177.60	6,241.9	-1,680.00	-7,272.6	-602.1	7,290.7	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES 11-5-17XRLNB
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4561.9usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4561.9usft (Original Well Elev)
Site:	NE NW SEC. 5 T4N R62W 6th P.M.	North Reference:	True
Well:	STATE SEVENTY HOLES 11-5-17XRLNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,800.0	90.00	177.60	6,241.9	-1,680.00	-7,372.5	-597.9	7,390.4	0.00	0.00	0.00
13,900.0	90.00	177.60	6,241.9	-1,680.00	-7,472.4	-593.7	7,490.0	0.00	0.00	0.00
14,000.0	90.00	177.60	6,241.9	-1,680.00	-7,572.3	-589.5	7,589.7	0.00	0.00	0.00
14,100.0	90.00	177.60	6,241.9	-1,680.00	-7,672.2	-585.4	7,689.4	0.00	0.00	0.00
14,200.0	90.00	177.60	6,241.9	-1,680.00	-7,772.1	-581.2	7,789.0	0.00	0.00	0.00
14,300.0	90.00	177.60	6,241.9	-1,680.00	-7,872.1	-577.0	7,888.7	0.00	0.00	0.00
14,400.0	90.00	177.60	6,241.9	-1,680.00	-7,972.0	-572.8	7,988.4	0.00	0.00	0.00
14,500.0	90.00	177.60	6,241.9	-1,680.00	-8,071.9	-568.6	8,088.0	0.00	0.00	0.00
14,600.0	90.00	177.60	6,241.9	-1,680.00	-8,171.8	-564.5	8,187.7	0.00	0.00	0.00
14,700.0	90.00	177.60	6,241.9	-1,680.00	-8,271.7	-560.3	8,287.4	0.00	0.00	0.00
14,800.0	90.00	177.60	6,241.9	-1,680.00	-8,371.6	-556.1	8,387.0	0.00	0.00	0.00
14,900.0	90.00	177.60	6,241.9	-1,680.00	-8,471.5	-551.9	8,486.7	0.00	0.00	0.00
15,000.0	90.00	177.60	6,241.9	-1,680.00	-8,571.4	-547.7	8,586.4	0.00	0.00	0.00
15,100.0	90.00	177.60	6,241.9	-1,680.00	-8,671.4	-543.5	8,686.1	0.00	0.00	0.00
15,200.0	90.00	177.60	6,241.9	-1,680.00	-8,771.3	-539.4	8,785.7	0.00	0.00	0.00
15,300.0	90.00	177.60	6,241.9	-1,680.00	-8,871.2	-535.2	8,885.4	0.00	0.00	0.00
15,400.0	90.00	177.60	6,241.9	-1,680.00	-8,971.1	-531.0	8,985.1	0.00	0.00	0.00
15,500.0	90.00	177.60	6,241.9	-1,680.00	-9,071.0	-526.8	9,084.7	0.00	0.00	0.00
15,600.0	90.00	177.60	6,241.9	-1,680.00	-9,170.9	-522.6	9,184.4	0.00	0.00	0.00
15,700.0	90.00	177.60	6,241.9	-1,680.00	-9,270.8	-518.5	9,284.1	0.00	0.00	0.00
15,800.0	90.00	177.60	6,241.9	-1,680.00	-9,370.7	-514.3	9,383.7	0.00	0.00	0.00
15,900.0	90.00	177.60	6,241.9	-1,680.00	-9,470.7	-510.1	9,483.4	0.00	0.00	0.00
16,000.0	90.00	177.60	6,241.9	-1,680.00	-9,570.6	-505.9	9,583.1	0.00	0.00	0.00
16,100.0	90.00	177.60	6,241.9	-1,680.00	-9,670.5	-501.7	9,682.8	0.00	0.00	0.00
16,200.0	90.00	177.60	6,241.9	-1,680.00	-9,770.4	-497.6	9,782.4	0.00	0.00	0.00
16,300.0	90.00	177.60	6,241.9	-1,680.00	-9,870.3	-493.4	9,882.1	0.00	0.00	0.00
16,400.0	90.00	177.60	6,241.9	-1,680.00	-9,970.2	-489.2	9,981.8	0.00	0.00	0.00
16,500.0	90.00	177.60	6,241.9	-1,680.00	-10,070.1	-485.0	10,081.4	0.00	0.00	0.00
16,600.0	90.00	177.60	6,241.9	-1,680.00	-10,170.0	-480.8	10,181.1	0.00	0.00	0.00
16,700.0	90.00	177.60	6,241.9	-1,680.00	-10,270.0	-476.7	10,280.8	0.00	0.00	0.00
16,800.0	90.00	177.60	6,241.9	-1,680.00	-10,369.9	-472.5	10,380.4	0.00	0.00	0.00
16,900.0	90.00	177.60	6,241.9	-1,680.00	-10,469.8	-468.3	10,480.1	0.00	0.00	0.00
17,000.0	90.00	177.60	6,241.9	-1,680.00	-10,569.7	-464.1	10,579.8	0.00	0.00	0.00
17,100.0	90.00	177.60	6,241.9	-1,680.00	-10,669.6	-459.9	10,679.4	0.00	0.00	0.00
17,200.0	90.00	177.60	6,241.9	-1,680.00	-10,769.5	-455.8	10,779.1	0.00	0.00	0.00
17,300.0	90.00	177.60	6,241.9	-1,680.00	-10,869.4	-451.6	10,878.8	0.00	0.00	0.00
17,400.0	90.00	177.60	6,241.9	-1,680.00	-10,969.3	-447.4	10,978.5	0.00	0.00	0.00
17,500.0	90.00	177.60	6,241.9	-1,680.00	-11,069.3	-443.2	11,078.1	0.00	0.00	0.00
BHL - SSH 11-5-17XRLNB										
17,569.5	90.00	177.60	6,241.9	-1,680.00	-11,138.7	-440.3	11,147.4	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well STATE SEVENTY HOLES 11-5-17XRLNB
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4561.9usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4561.9usft (Original Well Elev)
Site:	NE NW SEC. 5 T4N R62W 6th P.M.	North Reference:	True
Well:	STATE SEVENTY HOLES 11-5-17XRLNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
600.0	600.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1,302.8	1,295.8	21.0	-83.2	EOB TO 14.06° INC
5,134.6	5,012.9	248.3	-985.5	END OF TANGENT
5,837.4	5,708.6	269.3	-1,068.7	EOD TO VERTICAL
5,867.4	5,738.6	269.3	-1,068.7	KOP (12°/100ft BUR)
6,492.4	6,199.8	-83.8	-1,045.0	START OF TANGENT
6,592.4	6,225.7	-180.2	-1,038.5	END OF TANGENT
6,717.4	6,241.9	-303.5	-1,030.3	7" ICP *NEW* - SSH 11-5-17XRLNB
12,118.1	6,241.9	-5,692.1	-668.8	MID-LAT TARGET @ 725ft FWL
12,166.1	6,241.9	-5,740.0	-666.2	EOT TO 177.6° AZ
17,569.5	6,241.9	-11,138.7	-440.3	BHL - SSH 11-5-17XRLNB