

BONANZA CREEK ENERGY INC.

WELD COUNTY, COLORADO (NAD 83)

NE SE SEC. 1 T4N R63W 6th P.M.

LATHAM S-1-12MRLC

ORIGINAL WELLBORE

27 October, 2015

Plan: PROPOSAL #1





Project: WELD COUNTY, COLORADO (NAD 83)
Site: NE SE SEC. 1 T4N R63W 6th P.M.
Well: LATHAM S-1-12MRLC
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

ANNOTATIONS

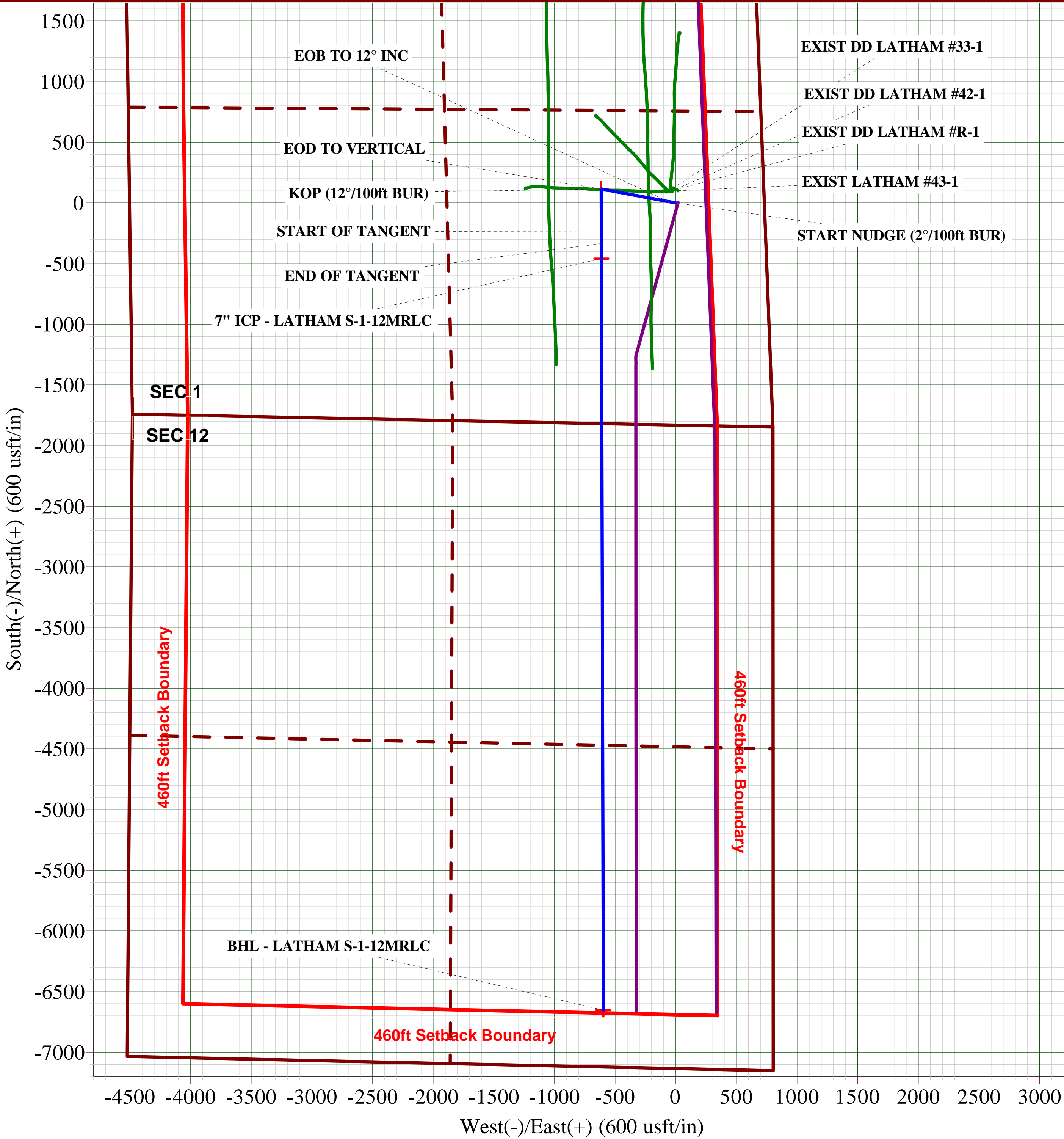
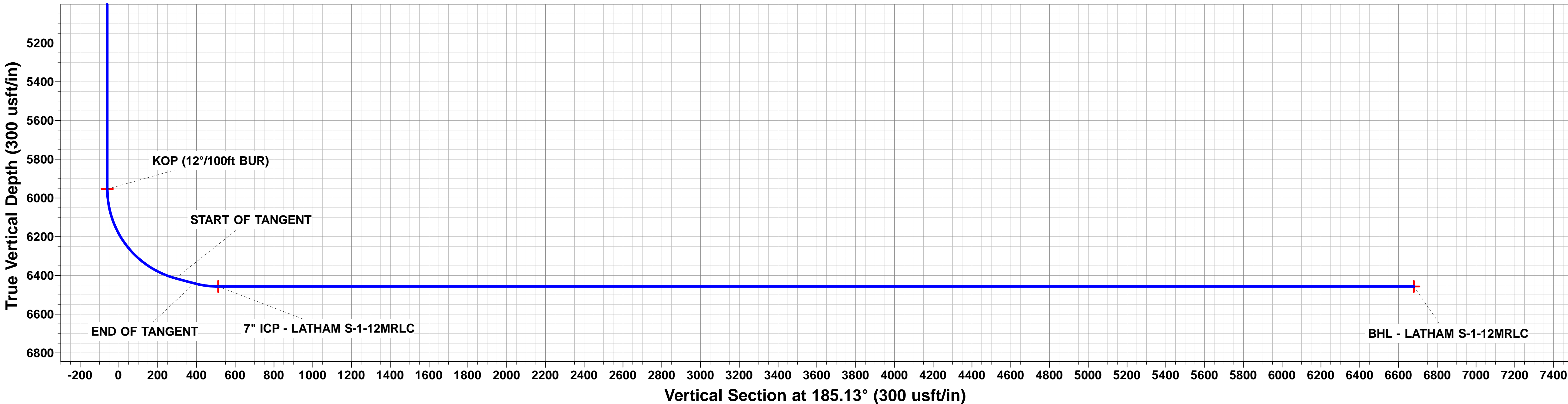
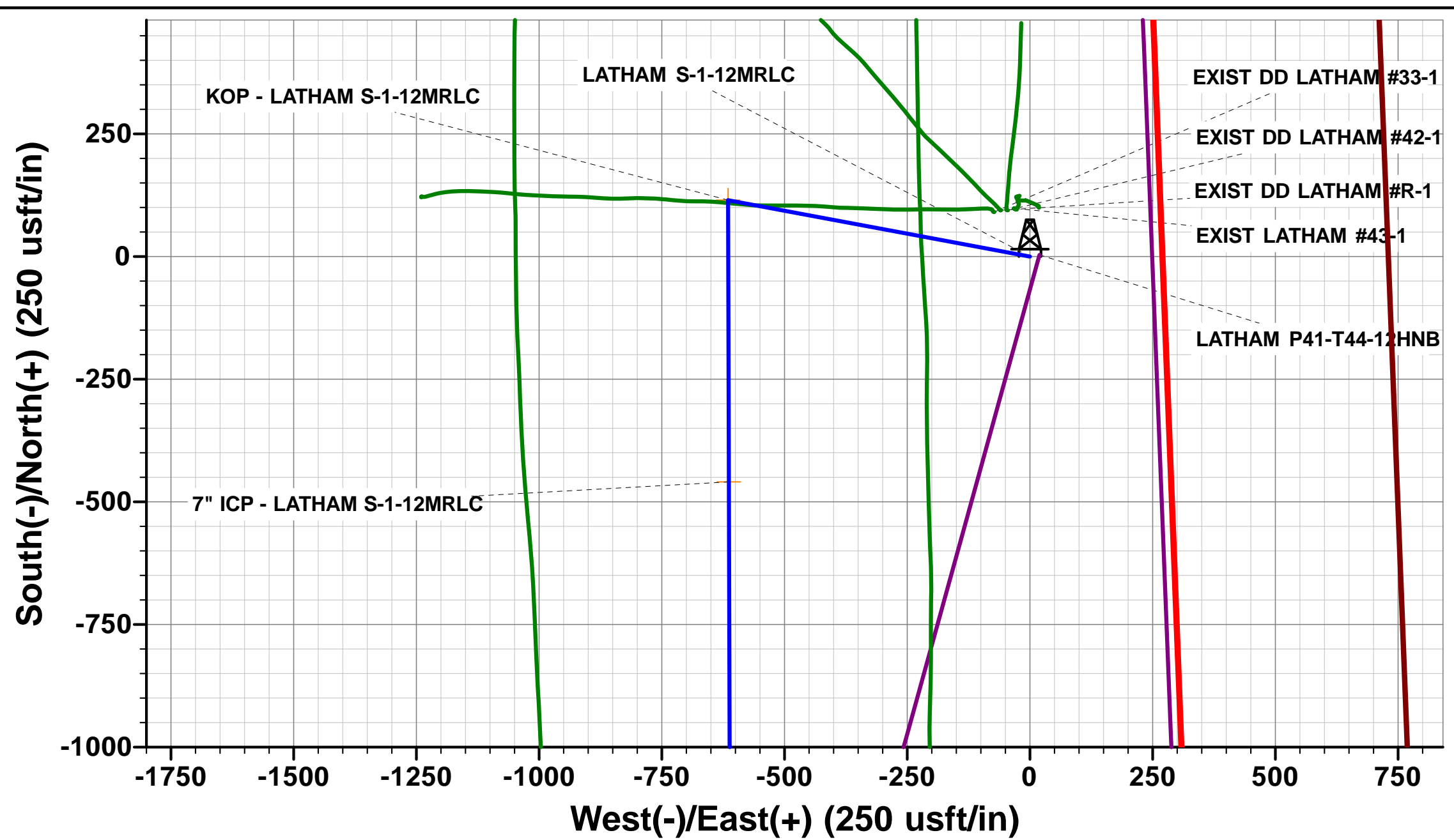
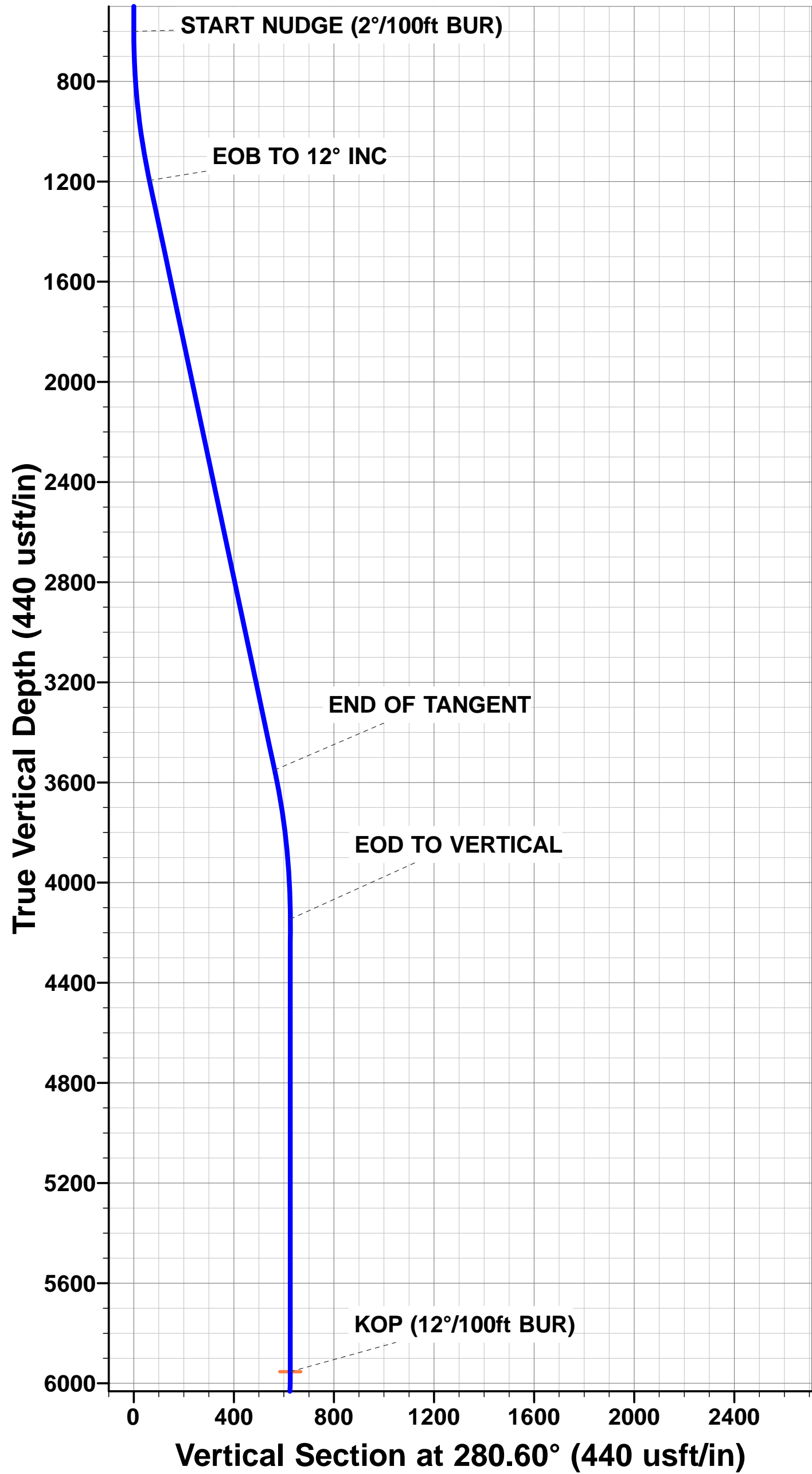
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Dep	Annotation
600.0	600.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1195.4	1199.8	12.00	280.60	11.5	-61.5	-6.0	62.6	EOB TO 12° INC
3550.3	3607.2	12.00	280.60	103.6	-553.3	-53.7	562.9	END OF TANGENT
4145.7	4207.0	0.00	0.00	115.1	-614.8	-59.7	625.5	EOD TO VERTICAL
5953.7	6015.0	0.00	0.00	115.1	-614.8	-59.7	625.5	KOP (12°/100ft BUR)
6414.9	6640.0	75.00	179.85	-238.8	-613.9	292.7	979.4	START OF TANGENT
6440.8	6740.0	75.00	179.85	-335.4	-613.6	388.9	1076.0	END OF TANGENT
6457.0	6865.0	90.00	179.85	-459.0	-613.3	511.9	1199.5	7" ICP - LATHAM S-1-12MRLC
6457.0	13058.3	90.00	179.84	-6652.2	-596.7	6678.9	7392.8	BHL - LATHAM S-1-12MRLC

PROPOSED LOCAL COORDINATES:

SHL: 1831ft FSL & 729ft FEL Sec 1
7" ICP: 1360ft FSL & 1360ft FEL Sec 1
BHL: 470ft FSL & 1400ft FEL Sec 12

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - LATHAM S-1-12MRLC	5953.7	115.1	-614.8	40.339646	-104.381865
BHL - LATHAM S-1-12MRLC	6457.0	-6652.2	-596.7	40.321070	-104.381800
7" ICP - LATHAM S-1-12MRLC	6457.0	-459.0	-613.3	40.338070	-104.381860



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well LATHAM S-1-12MRLC
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4562.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4562.0usft (Original Well Elev)
Site:	NE SE SEC. 1 T4N R63W 6th P.M.	North Reference:	True
Well:	LATHAM S-1-12MRLC	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 SE SEC. 1 T4N R63W 6th P.M.		
Site Position:		Northing:	1,368,431.49 usft
From:	Lat/Long	Easting:	3,312,297.22 usft
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft
		Latitude:	40.339330
		Longitude:	-104.379660
		Grid Convergence:	0.72 °

Well	LATHAM S-1-12MRLC		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	40.339330
		Longitude:	-104.379660
		Ground Level:	4,545.0 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	27/10/2015	8.17	66.91	52,590

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 (°)
	6,457.0	0.0	0.0	185.13

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	-4,562.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	-3,962.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,199.8	12.00	280.60	1,195.4	-3,366.6	11.5	-61.5	2.00	2.00	0.00	280.60	
3,607.2	12.00	280.60	3,550.3	-1,011.7	103.6	-553.3	0.00	0.00	0.00	0.00	
4,207.0	0.00	0.00	4,145.7	-416.3	115.1	-614.8	2.00	-2.00	0.00	180.00	
6,015.0	0.00	0.00	5,953.7	1,391.7	115.1	-614.8	0.00	0.00	0.00	0.00	KOP - LATHAM S-1
6,640.0	75.00	179.85	6,414.9	1,852.9	-238.8	-613.9	12.00	12.00	0.00	179.85	
6,740.0	75.00	179.85	6,440.8	1,878.8	-335.4	-613.6	0.00	0.00	0.00	0.00	
6,865.0	90.00	179.85	6,457.0	1,895.0	-459.0	-613.3	12.00	12.00	0.00	0.00	
13,058.3	90.00	179.84	6,457.0	1,895.0	-6,652.2	-596.7	0.00	0.00	0.00	-82.44	BHL - LATHAM S-1

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Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4562.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4562.0usft (Original Well Elev)
Site:	NE SE SEC. 1 T4N R63W 6th P.M.	North Reference:	True
Well:	LATHAM S-1-12MRLC	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	4,562.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,462.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,362.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,262.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,162.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,062.00	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	3,962.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	2.00	280.60	700.0	3,862.02	0.3	-1.7	-0.2	2.00	2.00	0.00
800.0	4.00	280.60	799.8	3,762.16	1.3	-6.9	-0.7	2.00	2.00	0.00
900.0	6.00	280.60	899.5	3,662.55	2.9	-15.4	-1.5	2.00	2.00	0.00
1,000.0	8.00	280.60	998.7	3,563.30	5.1	-27.4	-2.7	2.00	2.00	0.00
1,100.0	10.00	280.60	1,097.5	3,464.53	8.0	-42.8	-4.2	2.00	2.00	0.00
EOB TO 12° INC										
1,199.8	12.00	280.60	1,195.4	3,366.58	11.5	-61.5	-6.0	2.00	2.00	0.00
1,200.0	12.00	280.60	1,195.6	3,366.38	11.5	-61.5	-6.0	0.00	0.00	0.00
1,300.0	12.00	280.60	1,293.4	3,268.56	15.3	-82.0	-8.0	0.00	0.00	0.00
1,400.0	12.00	280.60	1,391.3	3,170.74	19.2	-102.4	-9.9	0.00	0.00	0.00
1,500.0	12.00	280.60	1,489.1	3,072.93	23.0	-122.8	-11.9	0.00	0.00	0.00
1,600.0	12.00	280.60	1,586.9	2,975.11	26.8	-143.3	-13.9	0.00	0.00	0.00
1,700.0	12.00	280.60	1,684.7	2,877.30	30.6	-163.7	-15.9	0.00	0.00	0.00
1,800.0	12.00	280.60	1,782.5	2,779.48	34.5	-184.1	-17.9	0.00	0.00	0.00
1,900.0	12.00	280.60	1,880.3	2,681.66	38.3	-204.5	-19.9	0.00	0.00	0.00
2,000.0	12.00	280.60	1,978.2	2,583.85	42.1	-225.0	-21.8	0.00	0.00	0.00
2,100.0	12.00	280.60	2,076.0	2,486.03	45.9	-245.4	-23.8	0.00	0.00	0.00
2,200.0	12.00	280.60	2,173.8	2,388.21	49.8	-265.8	-25.8	0.00	0.00	0.00
2,300.0	12.00	280.60	2,271.6	2,290.40	53.6	-286.3	-27.8	0.00	0.00	0.00
2,400.0	12.00	280.60	2,369.4	2,192.58	57.4	-306.7	-29.8	0.00	0.00	0.00
2,500.0	12.00	280.60	2,467.2	2,094.77	61.2	-327.1	-31.8	0.00	0.00	0.00
2,600.0	12.00	280.60	2,565.1	1,996.95	65.1	-347.5	-33.8	0.00	0.00	0.00
2,700.0	12.00	280.60	2,662.9	1,899.13	68.9	-368.0	-35.7	0.00	0.00	0.00
2,800.0	12.00	280.60	2,760.7	1,801.32	72.7	-388.4	-37.7	0.00	0.00	0.00
2,900.0	12.00	280.60	2,858.5	1,703.50	76.5	-408.8	-39.7	0.00	0.00	0.00
3,000.0	12.00	280.60	2,956.3	1,605.68	80.4	-429.3	-41.7	0.00	0.00	0.00
3,100.0	12.00	280.60	3,054.1	1,507.87	84.2	-449.7	-43.7	0.00	0.00	0.00
3,200.0	12.00	280.60	3,151.9	1,410.05	88.0	-470.1	-45.7	0.00	0.00	0.00
3,300.0	12.00	280.60	3,249.8	1,312.24	91.8	-490.5	-47.6	0.00	0.00	0.00
3,400.0	12.00	280.60	3,347.6	1,214.42	95.7	-511.0	-49.6	0.00	0.00	0.00
3,500.0	12.00	280.60	3,445.4	1,116.60	99.5	-531.4	-51.6	0.00	0.00	0.00
3,600.0	12.00	280.60	3,543.2	1,018.79	103.3	-551.8	-53.6	0.00	0.00	0.00
END OF TANGENT										
3,607.2	12.00	280.60	3,550.3	1,011.72	103.6	-553.3	-53.7	0.00	0.00	0.00
3,700.0	10.14	280.60	3,641.3	920.67	106.9	-570.8	-55.4	2.00	-2.00	0.00
3,800.0	8.14	280.60	3,740.1	821.95	109.8	-586.4	-57.0	2.00	-2.00	0.00
3,900.0	6.14	280.60	3,839.3	722.73	112.1	-598.6	-58.1	2.00	-2.00	0.00
4,000.0	4.14	280.60	3,938.9	623.14	113.7	-607.5	-59.0	2.00	-2.00	0.00
4,100.0	2.14	280.60	4,038.7	523.29	114.7	-612.8	-59.5	2.00	-2.00	0.00
4,200.0	0.14	280.60	4,138.7	423.32	115.1	-614.8	-59.7	2.00	-2.00	0.00
EOD TO VERTICAL										
4,207.0	0.00	0.00	4,145.7	416.30	115.1	-614.8	-59.7	2.00	-2.00	0.00
4,300.0	0.00	0.00	4,238.7	323.32	115.1	-614.8	-59.7	0.00	0.00	0.00
4,400.0	0.00	0.00	4,338.7	223.32	115.1	-614.8	-59.7	0.00	0.00	0.00
4,500.0	0.00	0.00	4,438.7	123.32	115.1	-614.8	-59.7	0.00	0.00	0.00
4,600.0	0.00	0.00	4,538.7	23.32	115.1	-614.8	-59.7	0.00	0.00	0.00

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Well:	LATHAM S-1-12MRLC	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)
4,700.0	0.00	0.00	4,638.7	-76.68	115.1	-614.8	-59.7	0.00	0.00	0.00
4,800.0	0.00	0.00	4,738.7	-176.68	115.1	-614.8	-59.7	0.00	0.00	0.00
4,900.0	0.00	0.00	4,838.7	-276.68	115.1	-614.8	-59.7	0.00	0.00	0.00
5,000.0	0.00	0.00	4,938.7	-376.68	115.1	-614.8	-59.7	0.00	0.00	0.00
5,100.0	0.00	0.00	5,038.7	-476.68	115.1	-614.8	-59.7	0.00	0.00	0.00
5,200.0	0.00	0.00	5,138.7	-576.68	115.1	-614.8	-59.7	0.00	0.00	0.00
5,300.0	0.00	0.00	5,238.7	-676.68	115.1	-614.8	-59.7	0.00	0.00	0.00
5,400.0	0.00	0.00	5,338.7	-776.68	115.1	-614.8	-59.7	0.00	0.00	0.00
5,500.0	0.00	0.00	5,438.7	-876.68	115.1	-614.8	-59.7	0.00	0.00	0.00
5,600.0	0.00	0.00	5,538.7	-976.68	115.1	-614.8	-59.7	0.00	0.00	0.00
5,700.0	0.00	0.00	5,638.7	-1,076.68	115.1	-614.8	-59.7	0.00	0.00	0.00
5,800.0	0.00	0.00	5,738.7	-1,176.68	115.1	-614.8	-59.7	0.00	0.00	0.00
5,900.0	0.00	0.00	5,838.7	-1,276.68	115.1	-614.8	-59.7	0.00	0.00	0.00
6,000.0	0.00	0.00	5,938.7	-1,376.68	115.1	-614.8	-59.7	0.00	0.00	0.00
KOP (12°/100ft BUR)										
6,015.0	0.00	0.00	5,953.7	-1,391.70	115.1	-614.8	-59.7	0.00	0.00	0.00
6,100.0	10.20	179.85	6,038.2	-1,476.24	107.6	-614.8	-52.2	12.00	12.00	0.00
6,200.0	22.20	179.85	6,134.1	-1,572.09	79.7	-614.7	-24.5	12.00	12.00	0.00
6,300.0	34.20	179.85	6,222.1	-1,660.06	32.5	-614.6	22.5	12.00	12.00	0.00
6,400.0	46.20	179.85	6,298.3	-1,736.30	-31.9	-614.4	86.6	12.00	12.00	0.00
6,500.0	58.20	179.85	6,359.5	-1,797.49	-110.7	-614.2	165.2	12.00	12.00	0.00
6,600.0	70.20	179.85	6,402.9	-1,840.93	-200.6	-614.0	254.7	12.00	12.00	0.00
START OF TANGENT										
6,640.0	75.00	179.85	6,414.9	-1,852.90	-238.8	-613.9	292.7	12.00	12.00	0.00
6,700.0	75.00	179.85	6,430.4	-1,868.42	-296.7	-613.7	350.4	0.00	0.00	0.00
END OF TANGENT										
6,740.0	75.00	179.85	6,440.8	-1,878.78	-335.4	-613.6	388.9	0.00	0.00	0.00
6,800.0	82.20	179.85	6,452.6	-1,890.63	-394.1	-613.5	447.4	12.00	12.00	0.00
7" ICP - LATHAM S-1-12MRLC										
6,865.0	90.00	179.85	6,457.0	-1,895.05	-459.0	-613.3	511.9	12.00	12.00	0.00
6,900.0	90.00	179.85	6,457.0	-1,895.05	-493.9	-613.2	546.8	0.00	0.00	0.00
7,000.0	90.00	179.85	6,457.0	-1,895.05	-593.9	-612.9	646.3	0.00	0.00	0.00
7,100.0	90.00	179.85	6,457.0	-1,895.05	-693.9	-612.7	745.9	0.00	0.00	0.00
7,200.0	90.00	179.85	6,457.0	-1,895.05	-793.9	-612.4	845.5	0.00	0.00	0.00
7,300.0	90.00	179.85	6,457.0	-1,895.05	-893.9	-612.2	945.1	0.00	0.00	0.00
7,400.0	90.00	179.85	6,457.0	-1,895.05	-993.9	-611.9	1,044.6	0.00	0.00	0.00
7,500.0	90.00	179.85	6,457.0	-1,895.05	-1,093.9	-611.6	1,144.2	0.00	0.00	0.00
7,600.0	90.00	179.85	6,457.0	-1,895.05	-1,193.9	-611.4	1,243.8	0.00	0.00	0.00
7,700.0	90.00	179.85	6,457.0	-1,895.05	-1,293.9	-611.1	1,343.4	0.00	0.00	0.00
7,800.0	90.00	179.85	6,457.0	-1,895.05	-1,393.9	-610.8	1,442.9	0.00	0.00	0.00
7,900.0	90.00	179.85	6,457.0	-1,895.05	-1,493.9	-610.6	1,542.5	0.00	0.00	0.00
8,000.0	90.00	179.85	6,457.0	-1,895.05	-1,593.9	-610.3	1,642.1	0.00	0.00	0.00
8,100.0	90.00	179.85	6,457.0	-1,895.04	-1,693.9	-610.0	1,741.7	0.00	0.00	0.00
8,200.0	90.00	179.85	6,457.0	-1,895.04	-1,793.9	-609.8	1,841.2	0.00	0.00	0.00
8,300.0	90.00	179.85	6,457.0	-1,895.04	-1,893.9	-609.5	1,940.8	0.00	0.00	0.00
8,400.0	90.00	179.85	6,457.0	-1,895.04	-1,993.9	-609.3	2,040.4	0.00	0.00	0.00
8,500.0	90.00	179.85	6,457.0	-1,895.04	-2,093.9	-609.0	2,140.0	0.00	0.00	0.00
8,600.0	90.00	179.85	6,457.0	-1,895.04	-2,193.9	-608.7	2,239.5	0.00	0.00	0.00
8,700.0	90.00	179.85	6,457.0	-1,895.04	-2,293.9	-608.5	2,339.1	0.00	0.00	0.00
8,800.0	90.00	179.85	6,457.0	-1,895.04	-2,393.9	-608.2	2,438.7	0.00	0.00	0.00
8,900.0	90.00	179.85	6,457.0	-1,895.04	-2,493.9	-607.9	2,538.3	0.00	0.00	0.00
9,000.0	90.00	179.85	6,457.0	-1,895.04	-2,593.9	-607.7	2,637.8	0.00	0.00	0.00
9,100.0	90.00	179.85	6,457.0	-1,895.04	-2,693.9	-607.4	2,737.4	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well LATHAM S-1-12MRLC
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4562.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4562.0usft (Original Well Elev)
Site:	NE SE SEC. 1 T4N R63W 6th P.M.	North Reference:	True
Well:	LATHAM S-1-12MRLC	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)
9,200.0	90.00	179.85	6,457.0	-1,895.04	-2,793.9	-607.1	2,837.0	0.00	0.00	0.00
9,300.0	90.00	179.85	6,457.0	-1,895.04	-2,893.9	-606.9	2,936.6	0.00	0.00	0.00
9,400.0	90.00	179.85	6,457.0	-1,895.04	-2,993.9	-606.6	3,036.2	0.00	0.00	0.00
9,500.0	90.00	179.85	6,457.0	-1,895.04	-3,093.9	-606.3	3,135.7	0.00	0.00	0.00
9,600.0	90.00	179.85	6,457.0	-1,895.04	-3,193.9	-606.1	3,235.3	0.00	0.00	0.00
9,700.0	90.00	179.85	6,457.0	-1,895.04	-3,293.9	-605.8	3,334.9	0.00	0.00	0.00
9,800.0	90.00	179.85	6,457.0	-1,895.04	-3,393.9	-605.5	3,434.5	0.00	0.00	0.00
9,900.0	90.00	179.85	6,457.0	-1,895.04	-3,493.9	-605.3	3,534.0	0.00	0.00	0.00
10,000.0	90.00	179.85	6,457.0	-1,895.03	-3,593.9	-605.0	3,633.6	0.00	0.00	0.00
10,100.0	90.00	179.85	6,457.0	-1,895.03	-3,693.9	-604.7	3,733.2	0.00	0.00	0.00
10,200.0	90.00	179.85	6,457.0	-1,895.03	-3,793.9	-604.5	3,832.8	0.00	0.00	0.00
10,300.0	90.00	179.85	6,457.0	-1,895.03	-3,893.9	-604.2	3,932.3	0.00	0.00	0.00
10,400.0	90.00	179.85	6,457.0	-1,895.03	-3,993.9	-603.9	4,031.9	0.00	0.00	0.00
10,500.0	90.00	179.85	6,457.0	-1,895.03	-4,093.9	-603.7	4,131.5	0.00	0.00	0.00
10,600.0	90.00	179.85	6,457.0	-1,895.03	-4,193.9	-603.4	4,231.1	0.00	0.00	0.00
10,700.0	90.00	179.85	6,457.0	-1,895.03	-4,293.9	-603.1	4,330.6	0.00	0.00	0.00
10,800.0	90.00	179.85	6,457.0	-1,895.03	-4,393.9	-602.9	4,430.2	0.00	0.00	0.00
10,900.0	90.00	179.85	6,457.0	-1,895.03	-4,493.9	-602.6	4,529.8	0.00	0.00	0.00
11,000.0	90.00	179.85	6,457.0	-1,895.03	-4,593.9	-602.3	4,629.4	0.00	0.00	0.00
11,100.0	90.00	179.85	6,457.0	-1,895.02	-4,693.9	-602.0	4,728.9	0.00	0.00	0.00
11,200.0	90.00	179.85	6,457.0	-1,895.02	-4,793.9	-601.8	4,828.5	0.00	0.00	0.00
11,300.0	90.00	179.85	6,457.0	-1,895.02	-4,893.9	-601.5	4,928.1	0.00	0.00	0.00
11,400.0	90.00	179.85	6,457.0	-1,895.02	-4,993.9	-601.2	5,027.7	0.00	0.00	0.00
11,500.0	90.00	179.85	6,457.0	-1,895.02	-5,093.9	-601.0	5,127.2	0.00	0.00	0.00
11,600.0	90.00	179.85	6,457.0	-1,895.02	-5,193.9	-600.7	5,226.8	0.00	0.00	0.00
11,700.0	90.00	179.84	6,457.0	-1,895.02	-5,293.9	-600.4	5,326.4	0.00	0.00	0.00
11,800.0	90.00	179.84	6,457.0	-1,895.02	-5,393.9	-600.2	5,426.0	0.00	0.00	0.00
11,900.0	90.00	179.84	6,457.0	-1,895.02	-5,493.9	-599.9	5,525.5	0.00	0.00	0.00
12,000.0	90.00	179.84	6,457.0	-1,895.01	-5,593.9	-599.6	5,625.1	0.00	0.00	0.00
12,100.0	90.00	179.84	6,457.0	-1,895.01	-5,693.9	-599.3	5,724.7	0.00	0.00	0.00
12,200.0	90.00	179.84	6,457.0	-1,895.01	-5,793.9	-599.1	5,824.3	0.00	0.00	0.00
12,300.0	90.00	179.84	6,457.0	-1,895.01	-5,893.9	-598.8	5,923.8	0.00	0.00	0.00
12,400.0	90.00	179.84	6,457.0	-1,895.01	-5,993.9	-598.5	6,023.4	0.00	0.00	0.00
12,500.0	90.00	179.84	6,457.0	-1,895.01	-6,093.9	-598.3	6,123.0	0.00	0.00	0.00
12,600.0	90.00	179.84	6,457.0	-1,895.01	-6,193.9	-598.0	6,222.6	0.00	0.00	0.00
12,700.0	90.00	179.84	6,457.0	-1,895.01	-6,293.9	-597.7	6,322.1	0.00	0.00	0.00
12,800.0	90.00	179.84	6,457.0	-1,895.00	-6,393.9	-597.4	6,421.7	0.00	0.00	0.00
12,900.0	90.00	179.84	6,457.0	-1,895.00	-6,493.9	-597.2	6,521.3	0.00	0.00	0.00
13,000.0	90.00	179.84	6,457.0	-1,895.00	-6,593.9	-596.9	6,620.9	0.00	0.00	0.00
BHL - LATHAM S-1-12MRLC										
13,058.3	90.00	179.84	6,457.0	-1,895.00	-6,652.2	-596.7	6,678.9	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well LATHAM S-1-12MRLC
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4562.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4562.0usft (Original Well Elev)
Site:	NE SE SEC. 1 T4N R63W 6th P.M.	North Reference:	True
Well:	LATHAM S-1-12MRLC	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)
1,199.8	1,195.4	11.5	-61.5	EOB TO 12° INC
3,607.2	3,550.3	103.6	-553.3	END OF TANGENT
4,207.0	4,145.7	115.1	-614.8	EOD TO VERTICAL
6,015.0	5,953.7	115.1	-614.8	KOP (12°/100ft BUR)
6,640.0	6,414.9	-238.8	-613.9	START OF TANGENT
6,740.0	6,440.8	-335.4	-613.6	END OF TANGENT
6,865.0	6,457.0	-459.0	-613.3	7" ICP - LATHAM S-1-12MRLC
13,058.3	6,457.0	-6,652.2	-596.7	BHL - LATHAM S-1-12MRLC