

BONANZA CREEK ENERGY INC.

WELD COUNTY, COLORADO (NAD 83)

SE SE SEC. 36 T5N R63W 6th P.M.

LATHAM U41-1-12XRLNC

ORIGINAL WELLBORE

10 October, 2015

Plan: PROPOSAL #1





Project: WELD COUNTY, COLORADO (NAD 83)
Site: SE SE SEC. 36 T5N R63W 6th P.M.
Well: LATHAM U41-1-12XRLNC
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Dep	Annotation
3192.0	3192.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
3441.6	3441.9	5.00	154.27	-9.8	4.7	10.0	10.9	EOB TO 5° INC
5570.7	5579.1	5.00	154.27	-177.6	85.6	180.1	197.1	END OF TANGENT
5820.3	5829.1	0.00	0.00	-187.4	90.3	190.0	208.0	EOD TO VERTICAL
5850.3	5859.1	0.00	0.00	-187.4	90.3	190.0	208.0	KOP (12°/100ft BUR)
6311.5	6484.1	75.00	177.77	-541.0	104.1	543.9	561.9	START OF TANGENT
6337.4	6584.1	75.00	177.77	-637.5	107.8	640.5	658.5	END OF TANGENT
6353.6	6709.1	90.00	177.77	-761.0	112.6	764.1	782.1	7" ICP - LATHAM U41-1-12XRLNC
6353.6	11584.1	90.00	177.77	-5632.3	302.3	5638.9	5657.1	MID-POINT
6353.6	11689.8	90.00	179.88	-5738.0	304.5	5744.6	5762.8	EOT TO 179.88° AZ
6353.6	16402.3	90.00	179.88	-10450.5	314.0	10455.2	10475.3	BHL - LATHAM U41-1-12XRLNC

PROPOSED LOCAL COORDINATES:

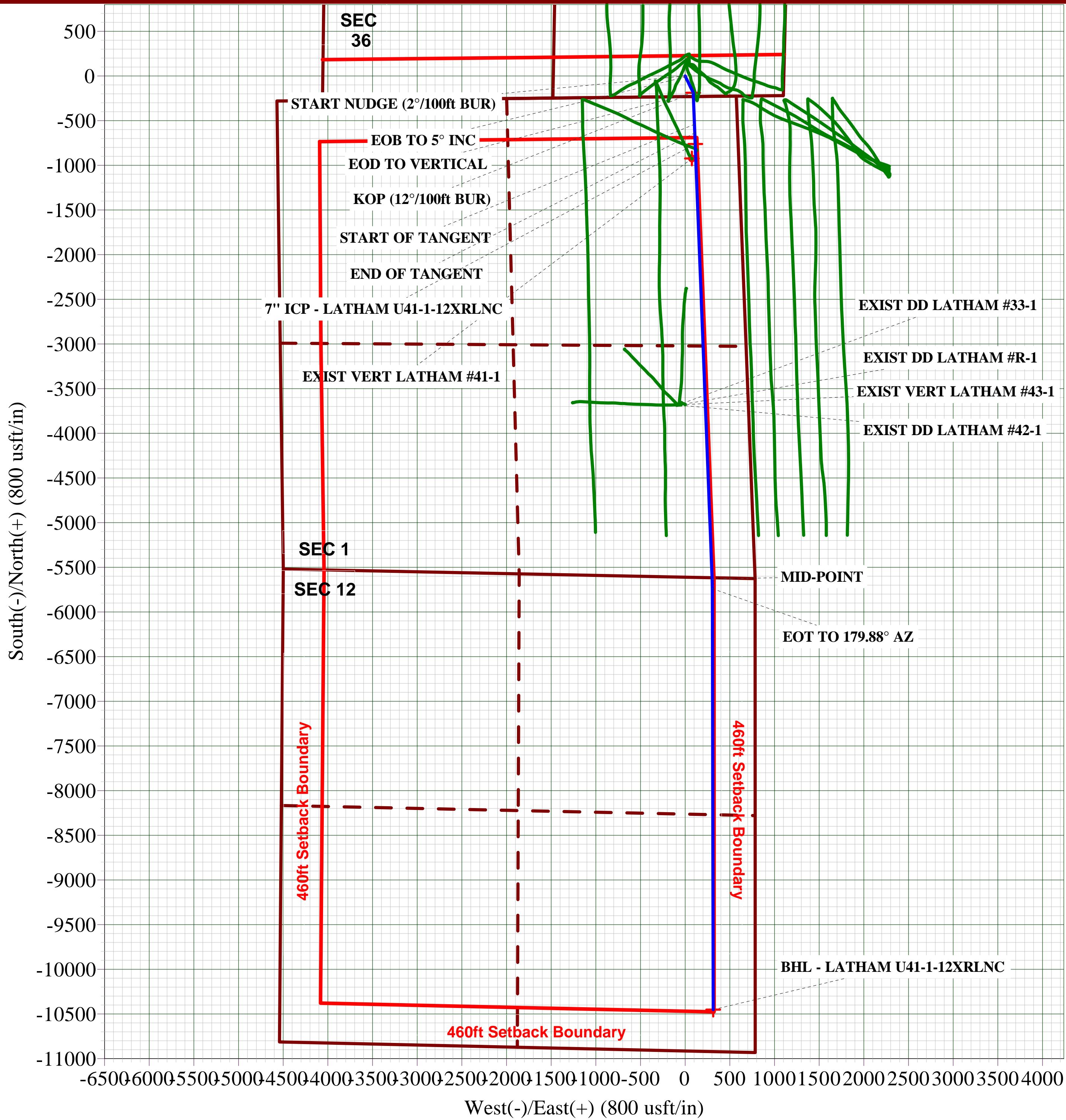
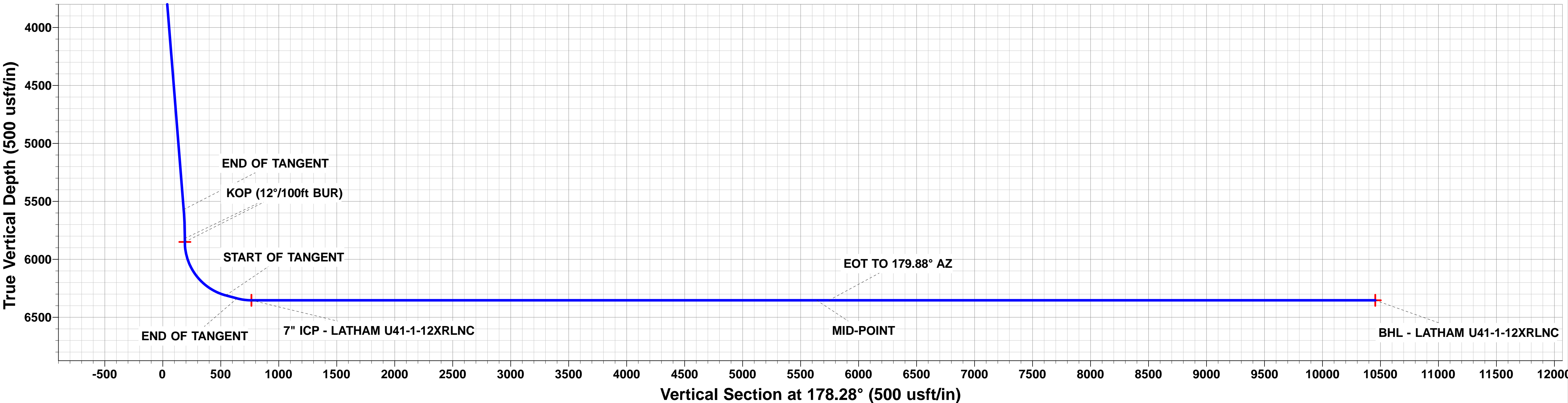
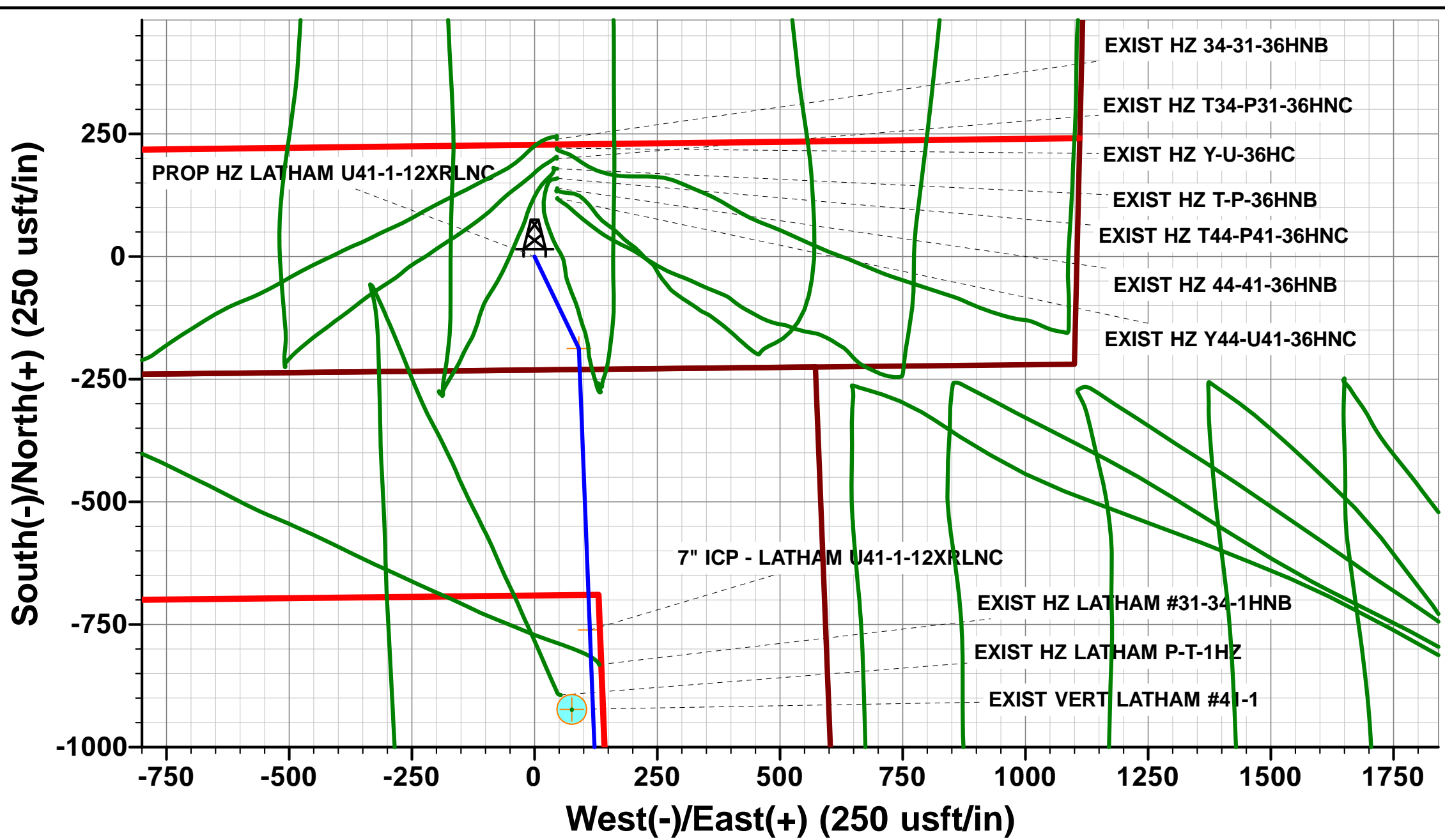
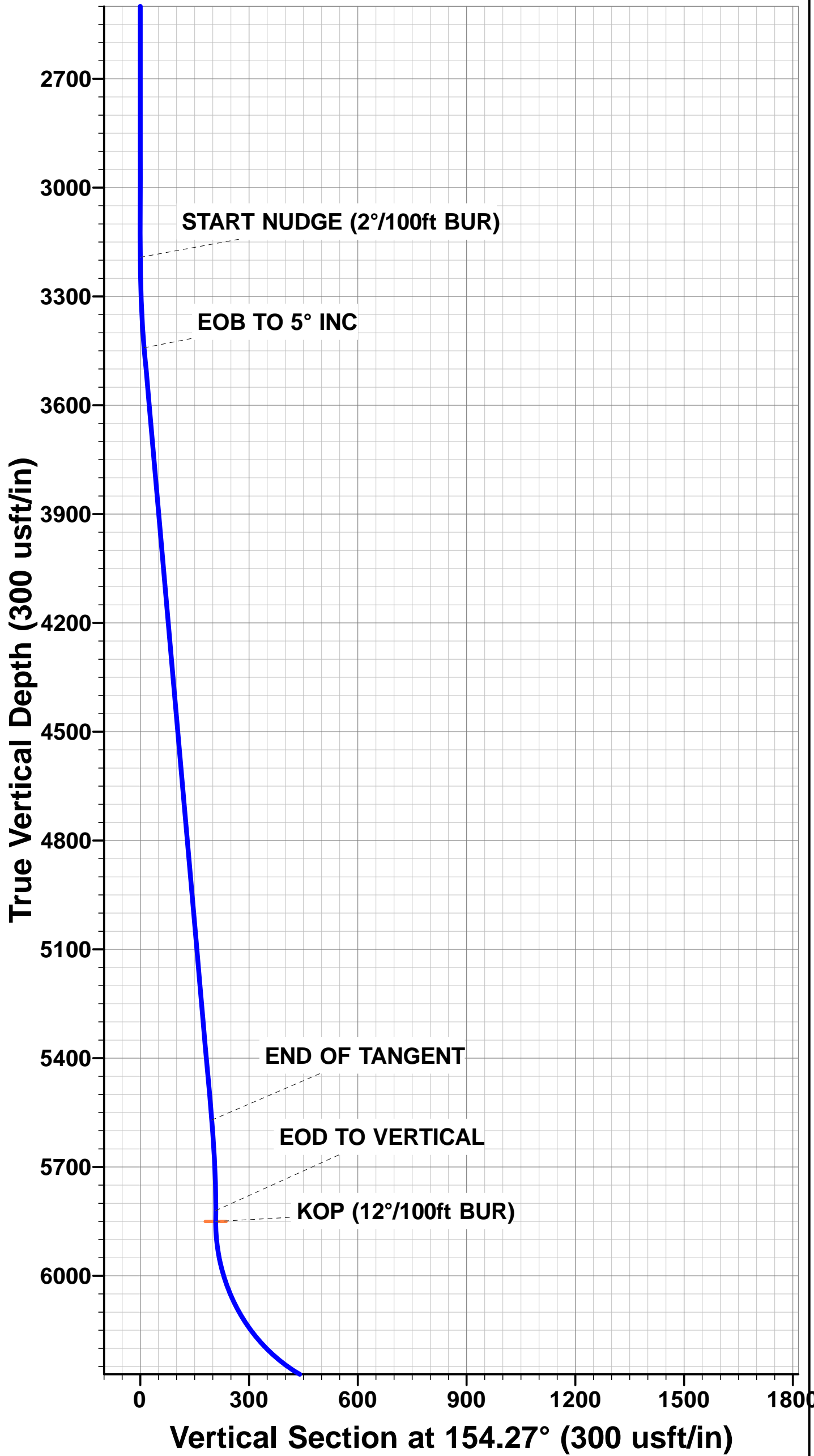
SHL: 231ft FSL & 1105ft FEL Sec 36

7" ICP: 531ft FNL & 480ft FeL Sec 1

BHL: 470ft FSL & 470ft FEL Sec 12

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - LATHAM U41-1-12XRLNC	5850.3	-187.4	90.3	40.349189	-104.379268
BHL - LATHAM U41-1-12XRLNC	6353.6	-10450.5	314.0	40.321017	-104.378466
7" ICP - LATHAM U41-1-12XRLNC	6353.6	-761.0	112.9	40.347614	-104.379187



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well LATHAM U41-1-12XRLNC
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4573.6usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4573.6usft (Original Well Elev)
Site:	SE SE SEC. 36 T5N R63W 6th P.M.	North Reference:	True
Well:	LATHAM U41-1-12XRLNC	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	SE SE SEC. 36 T5N R63W 6th P.M.		
Site Position:		Northing:	1,372,410.06 usft
From:	Lat/Long	Easting:	3,312,311.34 usft
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft
		Latitude:	40.350250
		Longitude:	-104.379429
		Grid Convergence:	0.72 °

Well	LATHAM U41-1-12XRLNC		
Well Position	+N-S	-199.3 usft	Northing:
	+E-W	-45.4 usft	Easting:
Position Uncertainty		0.0 usft	Wellhead Elevation:
			usft
			Latitude:
			Longitude:
			Ground Level:

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/10/2015	8.18	66.92	52,601

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 (°)
	6,353.6	0.0	0.0	178.28

Plan Sections											
MD (usft)	Inc (°)	Azi (°)	Vertical Depth	SS (usft)	+N-S (usft)	+E-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	-4,573.6	0.0	0.0	0.00	0.00	0.00	0.00	
3,192.0	0.00	0.00	3,192.0	-1,381.6	0.0	0.0	0.00	0.00	0.00	0.00	
3,441.9	5.00	154.27	3,441.6	-1,132.0	-9.8	4.7	2.00	2.00	0.00	154.27	
5,579.1	5.00	154.27	5,570.7	997.1	-177.6	85.6	0.00	0.00	0.00	0.00	
5,829.1	0.00	0.00	5,820.3	1,246.7	-187.4	90.3	2.00	-2.00	0.00	180.00	
5,859.1	0.00	0.00	5,850.3	1,276.7	-187.4	90.3	0.00	0.00	0.00	0.00	KOP - LATHAM U4
6,484.1	75.00	177.77	6,311.5	1,737.9	-541.0	104.1	12.00	12.00	0.00	177.77	
6,584.1	75.00	177.77	6,337.4	1,763.8	-637.5	107.8	0.00	0.00	0.00	0.00	
6,709.1	90.00	177.77	6,353.6	1,780.0	-761.0	112.6	12.00	12.00	0.00	0.00	
11,584.1	90.00	177.77	6,353.6	1,780.0	-5,632.3	302.3	0.00	0.00	0.00	0.00	
11,689.8	90.00	179.88	6,353.6	1,780.0	-5,738.0	304.5	2.00	0.00	2.00	89.98	
16,402.3	90.00	179.88	6,353.6	1,780.0	-10,450.5	314.0	0.00	0.00	0.00	0.00	BHL - LATHAM U4

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Site:	SE SE SEC. 36 T5N R63W 6th P.M.	North Reference:	True
Well:	LATHAM U41-1-12XRLNC	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	4,573.60	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,473.60	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,373.60	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,273.60	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,173.60	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,073.60	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	3,973.60	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	3,873.60	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	3,773.60	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	3,673.60	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,573.60	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,473.60	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	3,373.60	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	3,273.60	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	3,173.60	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	3,073.60	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	2,973.60	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	2,873.60	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	2,773.60	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	2,673.60	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	2,573.60	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	2,473.60	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	2,373.60	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	2,273.60	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	2,173.60	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	2,073.60	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	1,973.60	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	1,873.60	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	1,773.60	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	1,673.60	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	1,573.60	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	1,473.60	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
3,192.0	0.00	0.00	3,192.0	1,381.60	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.16	154.27	3,200.0	1,373.60	0.0	0.0	0.0	2.00	2.00	0.00
3,300.0	2.16	154.27	3,300.0	1,273.63	-1.8	0.9	1.9	2.00	2.00	0.00
3,400.0	4.16	154.27	3,399.8	1,173.78	-6.8	3.3	6.9	2.00	2.00	0.00
EOB TO 5° INC										
3,441.9	5.00	154.27	3,441.6	1,131.97	-9.8	4.7	10.0	2.00	2.00	0.00
3,500.0	5.00	154.27	3,499.5	1,074.14	-14.4	6.9	14.6	0.00	0.00	0.00
3,600.0	5.00	154.27	3,599.1	974.52	-22.2	10.7	22.5	0.00	0.00	0.00
3,700.0	5.00	154.27	3,698.7	874.90	-30.1	14.5	30.5	0.00	0.00	0.00
3,800.0	5.00	154.27	3,798.3	775.28	-37.9	18.3	38.5	0.00	0.00	0.00
3,900.0	5.00	154.27	3,897.9	675.66	-45.8	22.1	46.4	0.00	0.00	0.00
4,000.0	5.00	154.27	3,997.6	576.04	-53.6	25.8	54.4	0.00	0.00	0.00
4,100.0	5.00	154.27	4,097.2	476.42	-61.5	29.6	62.3	0.00	0.00	0.00
4,200.0	5.00	154.27	4,196.8	376.80	-69.3	33.4	70.3	0.00	0.00	0.00
4,300.0	5.00	154.27	4,296.4	277.18	-77.2	37.2	78.3	0.00	0.00	0.00
4,400.0	5.00	154.27	4,396.0	177.56	-85.0	41.0	86.2	0.00	0.00	0.00
4,500.0	5.00	154.27	4,495.7	77.94	-92.9	44.8	94.2	0.00	0.00	0.00
4,600.0	5.00	154.27	4,595.3	-21.68	-100.7	48.5	102.1	0.00	0.00	0.00
4,700.0	5.00	154.27	4,694.9	-121.30	-108.6	52.3	110.1	0.00	0.00	0.00
4,800.0	5.00	154.27	4,794.5	-220.92	-116.4	56.1	118.1	0.00	0.00	0.00
4,900.0	5.00	154.27	4,894.1	-320.54	-124.3	59.9	126.0	0.00	0.00	0.00

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Well:	LATHAM U41-1-12XRLNC	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)
5,000.0	5.00	154.27	4,993.8	-420.16	-132.1	63.7	134.0	0.00	0.00	0.00
5,100.0	5.00	154.27	5,093.4	-519.78	-140.0	67.4	141.9	0.00	0.00	0.00
5,200.0	5.00	154.27	5,193.0	-619.40	-147.8	71.2	149.9	0.00	0.00	0.00
5,300.0	5.00	154.27	5,292.6	-719.02	-155.7	75.0	157.9	0.00	0.00	0.00
5,400.0	5.00	154.27	5,392.2	-818.64	-163.5	78.8	165.8	0.00	0.00	0.00
5,500.0	5.00	154.27	5,491.9	-918.25	-171.4	82.6	173.8	0.00	0.00	0.00
END OF TANGENT										
5,579.1	5.00	154.27	5,570.7	-997.07	-177.6	85.6	180.1	0.00	0.00	0.00
5,600.0	4.58	154.27	5,591.5	-1,017.88	-179.2	86.3	181.7	2.00	-2.00	0.00
5,700.0	2.58	154.27	5,691.3	-1,117.68	-184.8	89.0	187.4	2.00	-2.00	0.00
5,800.0	0.58	154.27	5,791.2	-1,217.64	-187.3	90.2	189.9	2.00	-2.00	0.00
EOD TO VERTICAL										
5,829.1	0.00	0.00	5,820.3	-1,246.70	-187.4	90.3	190.0	2.00	-2.00	0.00
KOP (12°/100ft BUR)										
5,859.1	0.00	0.00	5,850.3	-1,276.70	-187.4	90.3	190.0	0.00	0.00	0.00
5,900.0	4.91	177.77	5,891.2	-1,317.59	-189.2	90.4	191.8	12.00	12.00	0.00
6,000.0	16.91	177.77	5,989.2	-1,415.60	-208.0	91.1	210.7	12.00	12.00	0.00
6,100.0	28.91	177.77	6,081.1	-1,507.54	-246.9	92.6	249.5	12.00	12.00	0.00
6,200.0	40.91	177.77	6,163.0	-1,589.39	-304.0	94.8	306.7	12.00	12.00	0.00
6,300.0	52.91	177.77	6,231.2	-1,657.58	-376.8	97.7	379.6	12.00	12.00	0.00
6,400.0	64.91	177.77	6,282.7	-1,709.12	-462.2	101.0	465.0	12.00	12.00	0.00
START OF TANGENT										
6,484.1	75.00	177.77	6,311.5	-1,737.90	-541.0	104.1	543.9	12.00	12.00	0.00
6,500.0	75.00	177.77	6,315.6	-1,742.02	-556.4	104.7	559.3	0.00	0.00	0.00
END OF TANGENT										
6,584.1	75.00	177.77	6,337.4	-1,763.78	-637.5	107.8	640.5	0.00	0.00	0.00
6,600.0	76.91	177.77	6,341.2	-1,767.64	-653.0	108.4	655.9	12.00	12.00	0.00
6,700.0	88.91	177.77	6,353.6	-1,779.96	-752.0	112.3	755.0	12.00	12.00	0.00
7" ICP - LATHAM U41-1-12XRLNC										
6,709.1	90.00	177.77	6,353.6	-1,780.05	-761.0	112.6	764.1	12.00	12.00	0.00
6,800.0	90.00	177.77	6,353.6	-1,780.05	-851.9	116.2	855.0	0.00	0.00	0.00
6,900.0	90.00	177.77	6,353.6	-1,780.05	-951.8	120.1	955.0	0.00	0.00	0.00
7,000.0	90.00	177.77	6,353.6	-1,780.05	-1,051.7	124.0	1,055.0	0.00	0.00	0.00
7,100.0	90.00	177.77	6,353.6	-1,780.05	-1,151.7	127.8	1,155.0	0.00	0.00	0.00
7,200.0	90.00	177.77	6,353.6	-1,780.05	-1,251.6	131.7	1,255.0	0.00	0.00	0.00
7,300.0	90.00	177.77	6,353.6	-1,780.05	-1,351.5	135.6	1,355.0	0.00	0.00	0.00
7,400.0	90.00	177.77	6,353.6	-1,780.05	-1,451.4	139.5	1,455.0	0.00	0.00	0.00
7,500.0	90.00	177.77	6,353.6	-1,780.05	-1,551.4	143.4	1,555.0	0.00	0.00	0.00
7,600.0	90.00	177.77	6,353.6	-1,780.05	-1,651.3	147.3	1,655.0	0.00	0.00	0.00
7,700.0	90.00	177.77	6,353.6	-1,780.05	-1,751.2	151.2	1,755.0	0.00	0.00	0.00
7,800.0	90.00	177.77	6,353.6	-1,780.05	-1,851.1	155.1	1,855.0	0.00	0.00	0.00
7,900.0	90.00	177.77	6,353.6	-1,780.05	-1,951.1	159.0	1,955.0	0.00	0.00	0.00
8,000.0	90.00	177.77	6,353.6	-1,780.05	-2,051.0	162.9	2,054.9	0.00	0.00	0.00
8,100.0	90.00	177.77	6,353.6	-1,780.05	-2,150.9	166.8	2,154.9	0.00	0.00	0.00
8,200.0	90.00	177.77	6,353.6	-1,780.05	-2,250.8	170.7	2,254.9	0.00	0.00	0.00
8,300.0	90.00	177.77	6,353.6	-1,780.05	-2,350.8	174.5	2,354.9	0.00	0.00	0.00
8,400.0	90.00	177.77	6,353.6	-1,780.05	-2,450.7	178.4	2,454.9	0.00	0.00	0.00
8,500.0	90.00	177.77	6,353.6	-1,780.05	-2,550.6	182.3	2,554.9	0.00	0.00	0.00
8,600.0	90.00	177.77	6,353.6	-1,780.05	-2,650.5	186.2	2,654.9	0.00	0.00	0.00
8,700.0	90.00	177.77	6,353.6	-1,780.05	-2,750.5	190.1	2,754.9	0.00	0.00	0.00
8,800.0	90.00	177.77	6,353.6	-1,780.05	-2,850.4	194.0	2,854.9	0.00	0.00	0.00
8,900.0	90.00	177.77	6,353.6	-1,780.05	-2,950.3	197.9	2,954.9	0.00	0.00	0.00
9,000.0	90.00	177.77	6,353.6	-1,780.05	-3,050.2	201.8	3,054.9	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well LATHAM U41-1-12XRLNC
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4573.6usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4573.6usft (Original Well Elev)
Site:	SE SE SEC. 36 T5N R63W 6th P.M.	North Reference:	True
Well:	LATHAM U41-1-12XRLNC	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)
9,100.0	90.00	177.77	6,353.6	-1,780.05	-3,150.1	205.7	3,154.9	0.00	0.00	0.00
9,200.0	90.00	177.77	6,353.6	-1,780.05	-3,250.1	209.6	3,254.9	0.00	0.00	0.00
9,300.0	90.00	177.77	6,353.6	-1,780.05	-3,350.0	213.5	3,354.9	0.00	0.00	0.00
9,400.0	90.00	177.77	6,353.6	-1,780.05	-3,449.9	217.3	3,454.9	0.00	0.00	0.00
9,500.0	90.00	177.77	6,353.6	-1,780.05	-3,549.8	221.2	3,554.9	0.00	0.00	0.00
9,600.0	90.00	177.77	6,353.6	-1,780.05	-3,649.8	225.1	3,654.9	0.00	0.00	0.00
9,700.0	90.00	177.77	6,353.6	-1,780.05	-3,749.7	229.0	3,754.9	0.00	0.00	0.00
9,800.0	90.00	177.77	6,353.6	-1,780.05	-3,849.6	232.9	3,854.9	0.00	0.00	0.00
9,900.0	90.00	177.77	6,353.6	-1,780.05	-3,949.5	236.8	3,954.9	0.00	0.00	0.00
10,000.0	90.00	177.77	6,353.6	-1,780.05	-4,049.5	240.7	4,054.9	0.00	0.00	0.00
10,100.0	90.00	177.77	6,353.6	-1,780.05	-4,149.4	244.6	4,154.9	0.00	0.00	0.00
10,200.0	90.00	177.77	6,353.6	-1,780.05	-4,249.3	248.5	4,254.9	0.00	0.00	0.00
10,300.0	90.00	177.77	6,353.6	-1,780.05	-4,349.2	252.4	4,354.9	0.00	0.00	0.00
10,400.0	90.00	177.77	6,353.6	-1,780.05	-4,449.2	256.3	4,454.9	0.00	0.00	0.00
10,500.0	90.00	177.77	6,353.6	-1,780.05	-4,549.1	260.1	4,554.8	0.00	0.00	0.00
10,600.0	90.00	177.77	6,353.6	-1,780.05	-4,649.0	264.0	4,654.8	0.00	0.00	0.00
10,700.0	90.00	177.77	6,353.6	-1,780.05	-4,748.9	267.9	4,754.8	0.00	0.00	0.00
10,800.0	90.00	177.77	6,353.6	-1,780.05	-4,848.9	271.8	4,854.8	0.00	0.00	0.00
10,900.0	90.00	177.77	6,353.6	-1,780.05	-4,948.8	275.7	4,954.8	0.00	0.00	0.00
11,000.0	90.00	177.77	6,353.6	-1,780.05	-5,048.7	279.6	5,054.8	0.00	0.00	0.00
11,100.0	90.00	177.77	6,353.6	-1,780.05	-5,148.6	283.5	5,154.8	0.00	0.00	0.00
11,200.0	90.00	177.77	6,353.6	-1,780.05	-5,248.6	287.4	5,254.8	0.00	0.00	0.00
11,300.0	90.00	177.77	6,353.6	-1,780.05	-5,348.5	291.3	5,354.8	0.00	0.00	0.00
11,400.0	90.00	177.77	6,353.6	-1,780.05	-5,448.4	295.2	5,454.8	0.00	0.00	0.00
11,500.0	90.00	177.77	6,353.6	-1,780.05	-5,548.3	299.1	5,554.8	0.00	0.00	0.00
MID-POINT										
11,584.1	90.00	177.77	6,353.6	-1,780.05	-5,632.3	302.3	5,638.9	0.00	0.00	0.00
11,600.0	90.00	178.09	6,353.6	-1,780.05	-5,648.3	302.9	5,654.8	2.00	0.00	2.00
EOT TO 179.88° AZ										
11,689.8	90.00	179.88	6,353.6	-1,780.05	-5,738.0	304.5	5,744.6	2.00	0.00	2.00
11,700.0	90.00	179.88	6,353.6	-1,780.05	-5,748.2	304.5	5,754.8	0.00	0.00	0.00
11,800.0	90.00	179.88	6,353.6	-1,780.05	-5,848.2	304.7	5,854.8	0.00	0.00	0.00
11,900.0	90.00	179.88	6,353.6	-1,780.04	-5,948.2	304.9	5,954.7	0.00	0.00	0.00
12,000.0	90.00	179.88	6,353.6	-1,780.04	-6,048.2	305.1	6,054.7	0.00	0.00	0.00
12,100.0	90.00	179.88	6,353.6	-1,780.04	-6,148.2	305.3	6,154.6	0.00	0.00	0.00
12,200.0	90.00	179.88	6,353.6	-1,780.04	-6,248.2	305.5	6,254.6	0.00	0.00	0.00
12,300.0	90.00	179.88	6,353.6	-1,780.04	-6,348.2	305.7	6,354.6	0.00	0.00	0.00
12,400.0	90.00	179.88	6,353.6	-1,780.04	-6,448.2	305.9	6,454.5	0.00	0.00	0.00
12,500.0	90.00	179.88	6,353.6	-1,780.04	-6,548.2	306.1	6,554.5	0.00	0.00	0.00
12,600.0	90.00	179.88	6,353.6	-1,780.04	-6,648.2	306.3	6,654.4	0.00	0.00	0.00
12,700.0	90.00	179.88	6,353.6	-1,780.04	-6,748.2	306.5	6,754.4	0.00	0.00	0.00
12,800.0	90.00	179.88	6,353.6	-1,780.04	-6,848.2	306.7	6,854.4	0.00	0.00	0.00
12,900.0	90.00	179.88	6,353.6	-1,780.03	-6,948.2	306.9	6,954.3	0.00	0.00	0.00
13,000.0	90.00	179.88	6,353.6	-1,780.03	-7,048.2	307.1	7,054.3	0.00	0.00	0.00
13,100.0	90.00	179.88	6,353.6	-1,780.03	-7,148.2	307.3	7,154.2	0.00	0.00	0.00
13,200.0	90.00	179.88	6,353.6	-1,780.03	-7,248.2	307.5	7,254.2	0.00	0.00	0.00
13,300.0	90.00	179.88	6,353.6	-1,780.03	-7,348.2	307.7	7,354.2	0.00	0.00	0.00
13,400.0	90.00	179.88	6,353.6	-1,780.03	-7,448.2	307.9	7,454.1	0.00	0.00	0.00
13,500.0	90.00	179.88	6,353.6	-1,780.03	-7,548.2	308.1	7,554.1	0.00	0.00	0.00
13,600.0	90.00	179.88	6,353.6	-1,780.03	-7,648.2	308.3	7,654.0	0.00	0.00	0.00
13,700.0	90.00	179.88	6,353.6	-1,780.03	-7,748.2	308.5	7,754.0	0.00	0.00	0.00
13,800.0	90.00	179.88	6,353.6	-1,780.03	-7,848.2	308.7	7,854.0	0.00	0.00	0.00
13,900.0	90.00	179.88	6,353.6	-1,780.02	-7,948.2	308.9	7,953.9	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well LATHAM U41-1-12XRLNC
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4573.6usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4573.6usft (Original Well Elev)
Site:	SE SE SEC. 36 T5N R63W 6th P.M.	North Reference:	True
Well:	LATHAM U41-1-12XRLNC	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)
14,000.0	90.00	179.88	6,353.6	-1,780.02	-8,048.2	309.1	8,053.9	0.00	0.00	0.00
14,100.0	90.00	179.88	6,353.6	-1,780.02	-8,148.2	309.3	8,153.8	0.00	0.00	0.00
14,200.0	90.00	179.88	6,353.6	-1,780.02	-8,248.2	309.5	8,253.8	0.00	0.00	0.00
14,300.0	90.00	179.88	6,353.6	-1,780.02	-8,348.2	309.7	8,353.8	0.00	0.00	0.00
14,400.0	90.00	179.88	6,353.6	-1,780.02	-8,448.2	309.9	8,453.7	0.00	0.00	0.00
14,500.0	90.00	179.88	6,353.6	-1,780.02	-8,548.2	310.2	8,553.7	0.00	0.00	0.00
14,600.0	90.00	179.88	6,353.6	-1,780.02	-8,648.2	310.4	8,653.7	0.00	0.00	0.00
14,700.0	90.00	179.88	6,353.6	-1,780.02	-8,748.2	310.6	8,753.6	0.00	0.00	0.00
14,800.0	90.00	179.88	6,353.6	-1,780.02	-8,848.2	310.8	8,853.6	0.00	0.00	0.00
14,900.0	90.00	179.88	6,353.6	-1,780.01	-8,948.2	311.0	8,953.5	0.00	0.00	0.00
15,000.0	90.00	179.88	6,353.6	-1,780.01	-9,048.2	311.2	9,053.5	0.00	0.00	0.00
15,100.0	90.00	179.88	6,353.6	-1,780.01	-9,148.2	311.4	9,153.5	0.00	0.00	0.00
15,200.0	90.00	179.88	6,353.6	-1,780.01	-9,248.2	311.6	9,253.4	0.00	0.00	0.00
15,300.0	90.00	179.88	6,353.6	-1,780.01	-9,348.2	311.8	9,353.4	0.00	0.00	0.00
15,400.0	90.00	179.88	6,353.6	-1,780.01	-9,448.2	312.0	9,453.3	0.00	0.00	0.00
15,500.0	90.00	179.88	6,353.6	-1,780.01	-9,548.2	312.2	9,553.3	0.00	0.00	0.00
15,600.0	90.00	179.88	6,353.6	-1,780.01	-9,648.2	312.4	9,653.3	0.00	0.00	0.00
15,700.0	90.00	179.88	6,353.6	-1,780.01	-9,748.2	312.6	9,753.2	0.00	0.00	0.00
15,800.0	90.00	179.88	6,353.6	-1,780.01	-9,848.2	312.8	9,853.2	0.00	0.00	0.00
15,900.0	90.00	179.88	6,353.6	-1,780.00	-9,948.2	313.0	9,953.1	0.00	0.00	0.00
16,000.0	90.00	179.88	6,353.6	-1,780.00	-10,048.2	313.2	10,053.1	0.00	0.00	0.00
16,100.0	90.00	179.88	6,353.6	-1,780.00	-10,148.2	313.4	10,153.1	0.00	0.00	0.00
16,200.0	90.00	179.88	6,353.6	-1,780.00	-10,248.2	313.6	10,253.0	0.00	0.00	0.00
16,300.0	90.00	179.88	6,353.6	-1,780.00	-10,348.2	313.8	10,353.0	0.00	0.00	0.00
16,400.0	90.00	179.88	6,353.6	-1,780.00	-10,448.2	314.0	10,452.9	0.00	0.00	0.00
BHL - LATHAM U41-1-12XRLNC										
16,402.3	90.00	179.88	6,353.6	-1,780.00	-10,450.5	314.0	10,455.2	0.00	0.00	0.00

Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
3,192.0	3,192.0	0.0	0.0	START NUDGE (2°/100ft BUR)
3,441.9	3,441.6	-9.8	4.7	EOB TO 5° INC
5,579.1	5,570.7	-177.6	85.6	END OF TANGENT
5,829.1	5,820.3	-187.4	90.3	EOD TO VERTICAL
5,859.1	5,850.3	-187.4	90.3	KOP (12°/100ft BUR)
6,484.1	6,311.5	-541.0	104.1	START OF TANGENT
6,584.1	6,337.4	-637.5	107.8	END OF TANGENT
6,709.1	6,353.6	-761.0	112.6	7" ICP - LATHAM U41-1-12XRLNC
11,584.1	6,353.6	-5,632.3	302.3	MID-POINT
11,689.8	6,353.6	-5,738.0	304.5	EOT TO 179.88° AZ
16,402.3	6,353.6	-10,450.5	314.0	BHL - LATHAM U41-1-12XRLNC