

BONANZA CREEK ENERGY INC.

WELD COUNTY, COLORADO (NAD 83)

NE NE SEC. 21 T7N R62W 6th P.M.

CROW VALLEY STATE 41-21-20XRLNB

ORIGINAL WELLBORE

24 December, 2014

Plan: PROPOSAL #2





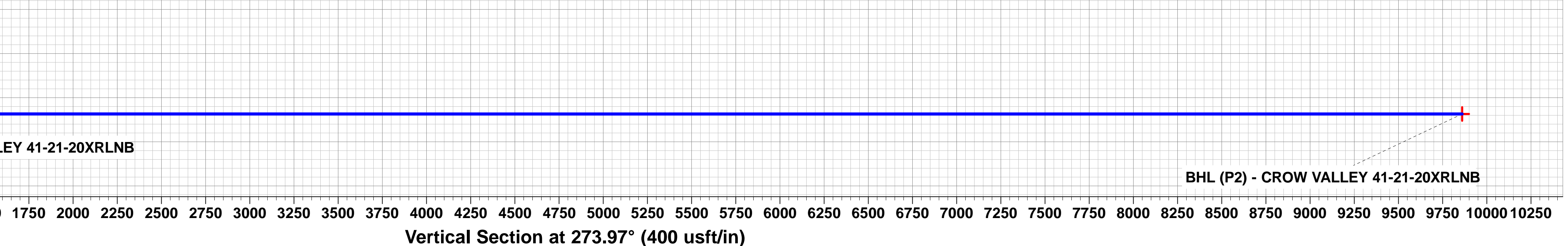
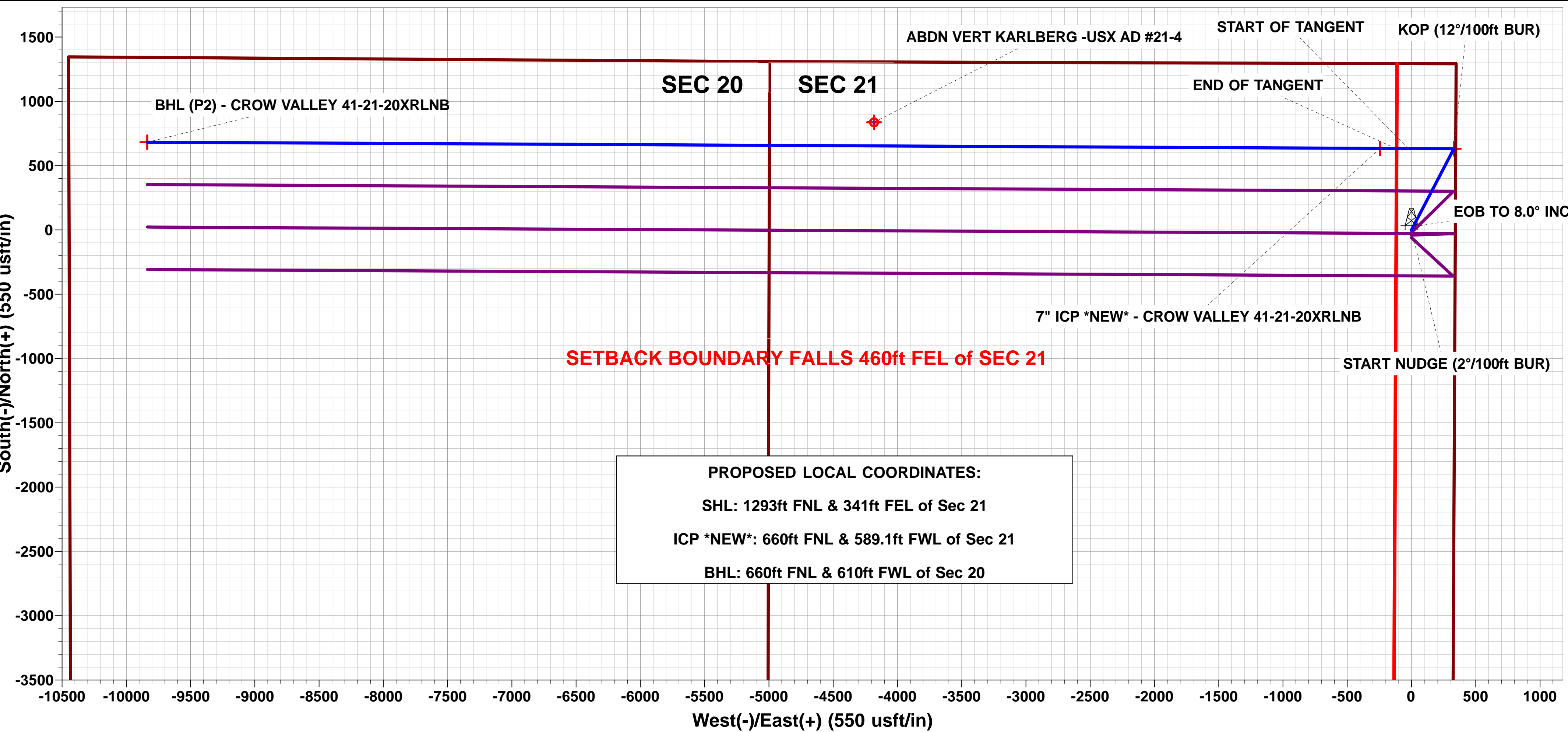
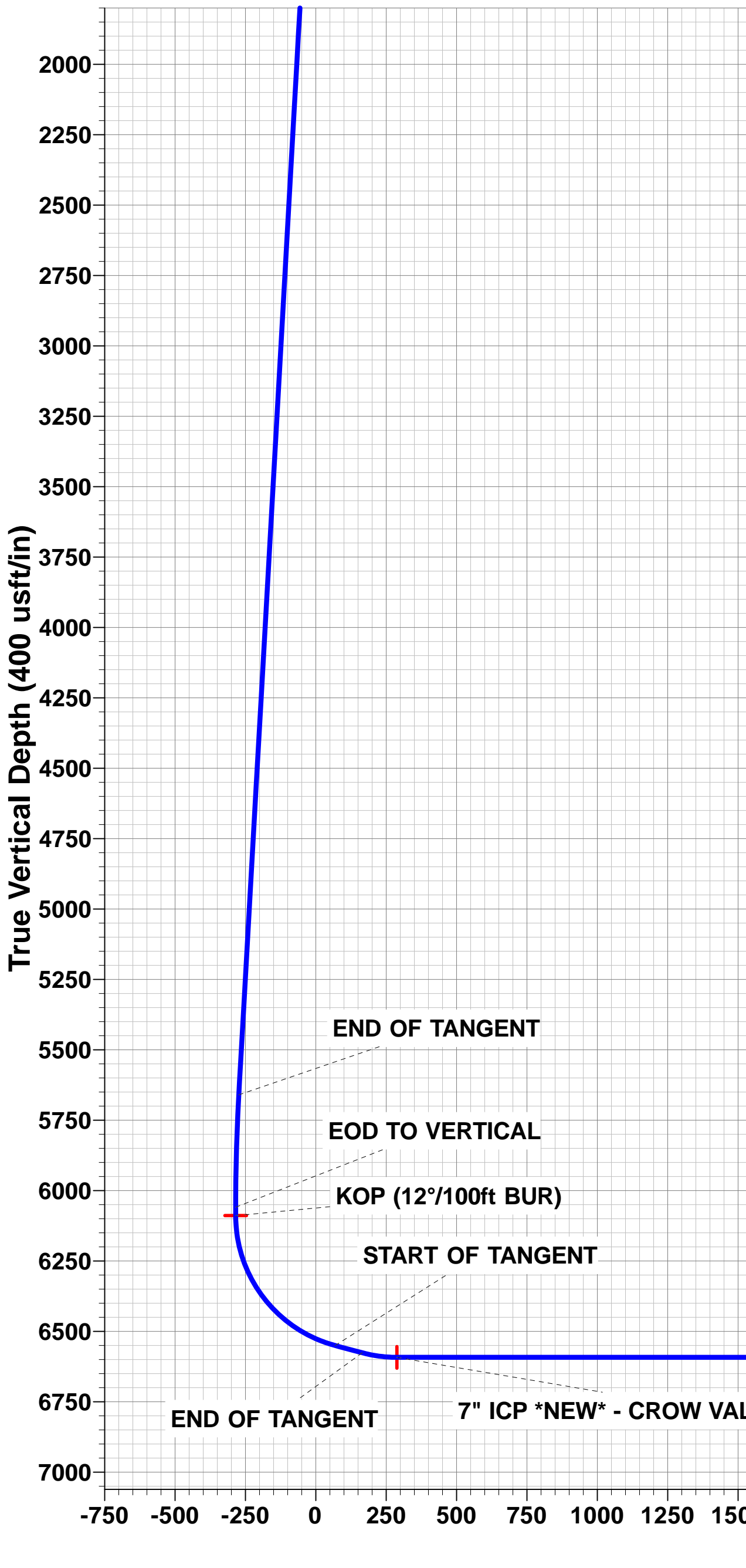
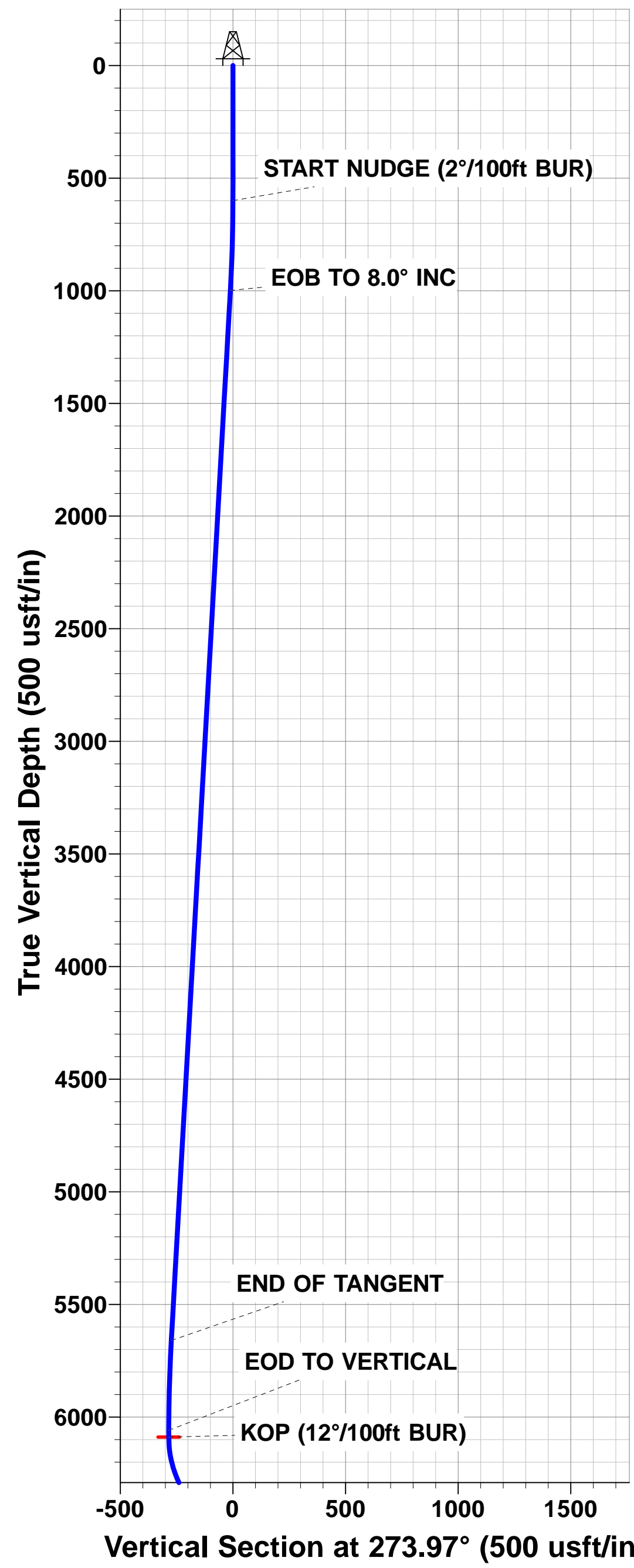
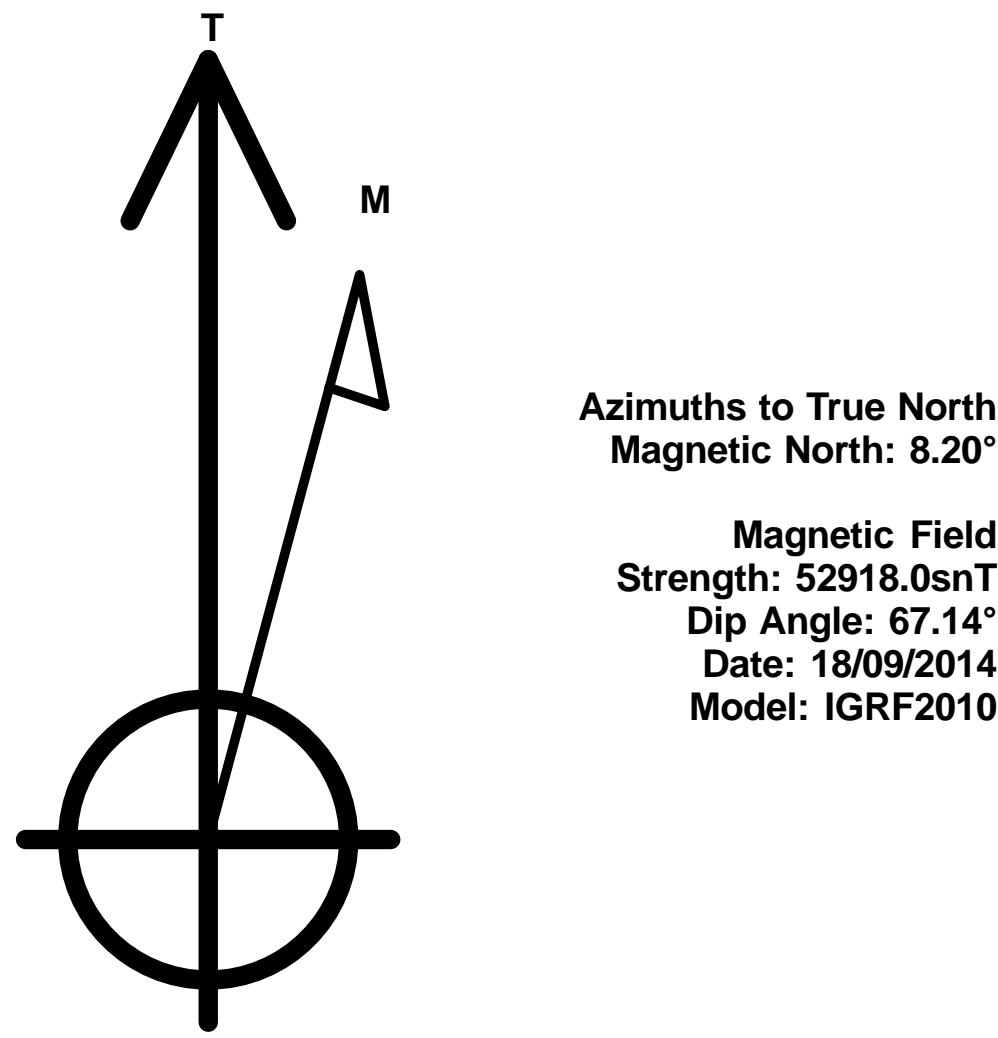
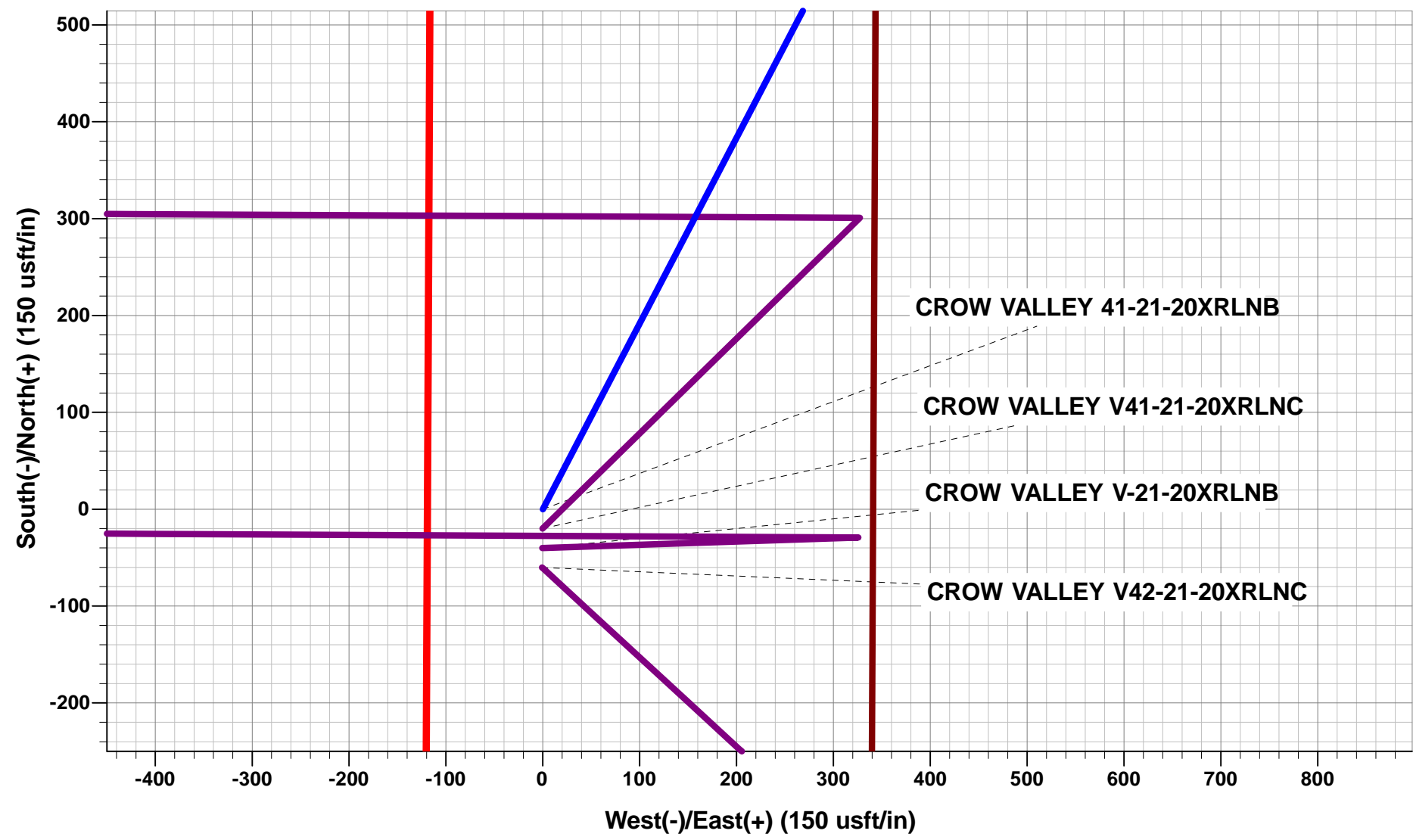
Project: WELD COUNTY, COLORADO (NAD 83)
Site: NE NE SEC. 21 T7N R62W 6th P.M.
Well: CROW VALLEY STATE 41-21-20XRLNB
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #2

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation
600.0	600.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
998.9	1000.2	8.00	27.55	24.7	12.9	-11.2	27.9	EOB TO 8.0° INC
5660.3	5707.5	8.00	27.55	605.9	316.1	-273.4	683.4	END OF TANGENT
6059.2	6107.7	0.00	0.00	630.6	329.0	-284.6	711.3	EOD TO VERTICAL
6089.2	6137.7	0.00	0.00	630.6	329.0	-284.6	711.3	KOP (12°/100ft BUR)
6550.4	6762.7	75.00	270.29	632.4	-24.9	68.6	1065.2	START OF TANGENT
6576.3	6862.7	75.00	270.29	632.9	-121.5	165.0	1161.8	END OF TANGENT
6592.5	6987.7	90.00	270.29	633.5	-245.1	288.3	1285.4	7" ICP *NEW* - CROW VALLEY 41-21-20XRLNB
6592.5	16579.7	90.00	270.29	682.1	-9837.0	9860.6	10877.4	BHL (P2) - CROW VALLEY 41-21-20XRLNB

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - CROW VALLEY 41-21-20XRLNB	6089.2	630.6	329.0	40.564965	-104.317520
BHL (P2) - CROW VALLEY 41-21-20XRLNB	6592.5	682.1	-9837.0	40.565101	-104.354109
7" ICP *NEW* - CROW VALLEY 41-21-20XRLNB	6592.5	633.5	-245.1	40.564973	-104.319586



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well CROW VALLEY STATE 41-21-20XRLNB
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4912.5usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4912.5usft (Original Well Elev)
Site:	NE NE SEC. 21 T7N R62W 6th P.M.	North Reference:	True
Well:	CROW VALLEY STATE 41-21-20XRLNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

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 NE SEC. 21 T7N R62W 6th P.M.		
Site Position:		Northing:	1,450,213.30 usft
From:	Lat/Long	Easting:	3,328,201.27 usft
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft
		Latitude:	40.563234
		Longitude:	-104.318704
		Grid Convergence:	0.76 °

Well	CROW VALLEY STATE 41-21-20XRLNB		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	40.563234
		Longitude:	-104.318704
		Ground Level:	4,895.5 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	18/09/2014	8.19	67.14	52,918

Design	PROPOSAL #2			
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	273.97

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	-4,912.5	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	-4,312.5	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.2	8.00	27.55	998.9	-3,913.6	24.7	12.9	2.00	2.00	0.00	27.55	
5,707.5	8.00	27.55	5,660.3	747.8	605.9	316.1	0.00	0.00	0.00	0.00	
6,107.7	0.00	0.00	6,059.2	1,146.7	630.6	329.0	2.00	-2.00	0.00	180.00	
6,137.7	0.00	0.00	6,089.2	1,176.7	630.6	329.0	0.00	0.00	0.00	0.00	KOP - CROW VALL
6,762.7	75.00	270.29	6,550.4	1,637.9	632.4	-24.9	12.00	12.00	0.00	270.29	
6,862.7	75.00	270.29	6,576.3	1,663.8	632.9	-121.5	0.00	0.00	0.00	0.00	
6,987.7	90.00	270.29	6,592.5	1,680.0	633.5	-245.0	12.00	12.00	0.00	0.00	
16,579.7	90.00	270.29	6,592.5	1,680.0	682.1	-9,837.0	0.00	0.00	0.00	0.00	BHL (P2) - CROW V

Planning Report



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Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4912.5usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4912.5usft (Original Well Elev)
Site:	NE NE SEC. 21 T7N R62W 6th P.M.	North Reference:	True
Well:	CROW VALLEY STATE 41-21-20XRLNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

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	4,912.50	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,812.50	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,712.50	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,612.50	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,512.50	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,412.50	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	4,312.50	0.0	0.0	0.0	0.00	0.00	0.00
700.0	2.00	27.55	700.0	4,212.52	1.5	0.8	-0.7	2.00	2.00	0.00
800.0	4.00	27.55	799.8	4,112.66	6.2	3.2	-2.8	2.00	2.00	0.00
900.0	6.00	27.55	899.5	4,013.05	13.9	7.3	-6.3	2.00	2.00	0.00
1,000.0	8.00	27.55	998.7	3,913.80	24.7	12.9	-11.2	2.00	2.00	0.00
EOB TO 8.0° INC										
1,000.2	8.00	27.55	998.9	3,913.60	24.7	12.9	-11.2	2.00	2.00	0.00
1,100.0	8.00	27.55	1,097.7	3,814.77	37.1	19.3	-16.7	0.00	0.00	0.00
1,200.0	8.00	27.55	1,196.8	3,715.75	49.4	25.8	-22.3	0.00	0.00	0.00
1,300.0	8.00	27.55	1,295.8	3,616.72	61.8	32.2	-27.9	0.00	0.00	0.00
1,400.0	8.00	27.55	1,394.8	3,517.70	74.1	38.7	-33.4	0.00	0.00	0.00
1,500.0	8.00	27.55	1,493.8	3,418.67	86.4	45.1	-39.0	0.00	0.00	0.00
1,600.0	8.00	27.55	1,592.9	3,319.64	98.8	51.5	-44.6	0.00	0.00	0.00
1,700.0	8.00	27.55	1,691.9	3,220.62	111.1	58.0	-50.2	0.00	0.00	0.00
1,800.0	8.00	27.55	1,790.9	3,121.59	123.5	64.4	-55.7	0.00	0.00	0.00
1,900.0	8.00	27.55	1,889.9	3,022.57	135.8	70.9	-61.3	0.00	0.00	0.00
2,000.0	8.00	27.55	1,989.0	2,923.54	148.2	77.3	-66.9	0.00	0.00	0.00
2,100.0	8.00	27.55	2,088.0	2,824.51	160.5	83.7	-72.4	0.00	0.00	0.00
2,200.0	8.00	27.55	2,187.0	2,725.49	172.9	90.2	-78.0	0.00	0.00	0.00
2,300.0	8.00	27.55	2,286.0	2,626.46	185.2	96.6	-83.6	0.00	0.00	0.00
2,400.0	8.00	27.55	2,385.1	2,527.44	197.6	103.1	-89.2	0.00	0.00	0.00
2,500.0	8.00	27.55	2,484.1	2,428.41	209.9	109.5	-94.7	0.00	0.00	0.00
2,600.0	8.00	27.55	2,583.1	2,329.39	222.2	115.9	-100.3	0.00	0.00	0.00
2,700.0	8.00	27.55	2,682.1	2,230.36	234.6	122.4	-105.9	0.00	0.00	0.00
2,800.0	8.00	27.55	2,781.2	2,131.33	246.9	128.8	-111.4	0.00	0.00	0.00
2,900.0	8.00	27.55	2,880.2	2,032.31	259.3	135.3	-117.0	0.00	0.00	0.00
3,000.0	8.00	27.55	2,979.2	1,933.28	271.6	141.7	-122.6	0.00	0.00	0.00
3,100.0	8.00	27.55	3,078.2	1,834.26	284.0	148.2	-128.2	0.00	0.00	0.00
3,200.0	8.00	27.55	3,177.3	1,735.23	296.3	154.6	-133.7	0.00	0.00	0.00
3,300.0	8.00	27.55	3,276.3	1,636.21	308.7	161.0	-139.3	0.00	0.00	0.00
3,400.0	8.00	27.55	3,375.3	1,537.18	321.0	167.5	-144.9	0.00	0.00	0.00
3,500.0	8.00	27.55	3,474.3	1,438.15	333.4	173.9	-150.4	0.00	0.00	0.00
3,600.0	8.00	27.55	3,573.4	1,339.13	345.7	180.4	-156.0	0.00	0.00	0.00
3,700.0	8.00	27.55	3,672.4	1,240.10	358.0	186.8	-161.6	0.00	0.00	0.00
3,800.0	8.00	27.55	3,771.4	1,141.08	370.4	193.2	-167.2	0.00	0.00	0.00
3,900.0	8.00	27.55	3,870.4	1,042.05	382.7	199.7	-172.7	0.00	0.00	0.00
4,000.0	8.00	27.55	3,969.5	943.02	395.1	206.1	-178.3	0.00	0.00	0.00
4,100.0	8.00	27.55	4,068.5	844.00	407.4	212.6	-183.9	0.00	0.00	0.00
4,200.0	8.00	27.55	4,167.5	744.97	419.8	219.0	-189.4	0.00	0.00	0.00
4,300.0	8.00	27.55	4,266.6	645.95	432.1	225.4	-195.0	0.00	0.00	0.00
4,400.0	8.00	27.55	4,365.6	546.92	444.5	231.9	-200.6	0.00	0.00	0.00
4,500.0	8.00	27.55	4,464.6	447.90	456.8	238.3	-206.2	0.00	0.00	0.00
4,600.0	8.00	27.55	4,563.6	348.87	469.1	244.8	-211.7	0.00	0.00	0.00
4,700.0	8.00	27.55	4,662.7	249.84	481.5	251.2	-217.3	0.00	0.00	0.00
4,800.0	8.00	27.55	4,761.7	150.82	493.8	257.6	-222.9	0.00	0.00	0.00
4,900.0	8.00	27.55	4,860.7	51.79	506.2	264.1	-228.4	0.00	0.00	0.00
5,000.0	8.00	27.55	4,959.7	-47.23	518.5	270.5	-234.0	0.00	0.00	0.00

Planning Report



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Well:	CROW VALLEY STATE 41-21-20XRLNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

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)
5,100.0	8.00	27.55	5,058.8	-146.26	530.9	277.0	-239.6	0.00	0.00	0.00
5,200.0	8.00	27.55	5,157.8	-245.29	543.2	283.4	-245.2	0.00	0.00	0.00
5,300.0	8.00	27.55	5,256.8	-344.31	555.6	289.9	-250.7	0.00	0.00	0.00
5,400.0	8.00	27.55	5,355.8	-443.34	567.9	296.3	-256.3	0.00	0.00	0.00
5,500.0	8.00	27.55	5,454.9	-542.36	580.3	302.7	-261.9	0.00	0.00	0.00
5,600.0	8.00	27.55	5,553.9	-641.39	592.6	309.2	-267.4	0.00	0.00	0.00
5,700.0	8.00	27.55	5,652.9	-740.41	604.9	315.6	-273.0	0.00	0.00	0.00
END OF TANGENT										
5,707.5	8.00	27.55	5,660.3	-747.84	605.9	316.1	-273.4	0.00	0.00	0.00
5,800.0	6.15	27.55	5,752.1	-839.63	616.0	321.4	-278.0	2.00	-2.00	0.00
5,900.0	4.15	27.55	5,851.7	-939.22	623.9	325.5	-281.6	2.00	-2.00	0.00
6,000.0	2.15	27.55	5,951.6	-1,039.07	628.8	328.1	-283.8	2.00	-2.00	0.00
6,100.0	0.15	27.55	6,051.5	-1,139.04	630.6	329.0	-284.6	2.00	-2.00	0.00
EOD TO VERTICAL										
6,107.7	0.00	0.00	6,059.2	-1,146.74	630.6	329.0	-284.6	1.99	-1.99	0.00
KOP (12°/100ft BUR)										
6,137.7	0.00	0.00	6,089.2	-1,176.74	630.6	329.0	-284.6	0.00	0.00	0.00
6,200.0	7.48	270.29	6,151.4	-1,238.86	630.6	324.9	-280.5	12.01	12.01	0.00
6,300.0	19.48	270.29	6,248.4	-1,335.93	630.7	301.7	-257.3	12.00	12.00	0.00
6,400.0	31.48	270.29	6,338.5	-1,426.04	631.0	258.7	-214.5	12.00	12.00	0.00
6,500.0	43.48	270.29	6,417.7	-1,505.25	631.3	198.0	-153.8	12.00	12.00	0.00
6,600.0	55.48	270.29	6,482.6	-1,570.10	631.7	122.1	-78.1	12.00	12.00	0.00
6,700.0	67.48	270.29	6,530.3	-1,617.76	632.1	34.4	9.4	12.00	12.00	0.00
START OF TANGENT										
6,762.7	75.00	270.29	6,550.4	-1,637.91	632.4	-24.9	68.6	11.99	11.99	0.00
6,800.0	75.00	270.29	6,560.1	-1,647.56	632.6	-60.9	104.6	0.00	0.00	0.00
END OF TANGENT										
6,862.7	75.00	270.29	6,576.3	-1,663.79	632.9	-121.5	165.0	0.00	0.00	0.00
6,900.0	79.48	270.29	6,584.5	-1,672.02	633.1	-157.9	201.3	12.01	12.01	0.00
7" ICP *NEW* - CROW VALLEY 41-21-20XRLNB										
6,987.7	90.00	270.29	6,592.5	-1,680.05	633.5	-245.1	288.3	11.99	11.99	0.00
7,000.0	90.00	270.29	6,592.5	-1,680.05	633.6	-257.4	300.6	0.00	0.00	0.00
7,100.0	90.00	270.29	6,592.5	-1,680.05	634.1	-357.4	400.4	0.00	0.00	0.00
7,200.0	90.00	270.29	6,592.5	-1,680.05	634.6	-457.4	500.2	0.00	0.00	0.00
7,300.0	90.00	270.29	6,592.5	-1,680.05	635.1	-557.4	600.0	0.00	0.00	0.00
7,400.0	90.00	270.29	6,592.5	-1,680.05	635.6	-657.4	699.8	0.00	0.00	0.00
7,500.0	90.00	270.29	6,592.5	-1,680.05	636.1	-757.4	799.6	0.00	0.00	0.00
7,600.0	90.00	270.29	6,592.5	-1,680.05	636.6	-857.4	899.4	0.00	0.00	0.00
7,700.0	90.00	270.29	6,592.5	-1,680.05	637.1	-957.4	999.2	0.00	0.00	0.00
7,800.0	90.00	270.29	6,592.5	-1,680.05	637.6	-1,057.4	1,099.0	0.00	0.00	0.00
7,900.0	90.00	270.29	6,592.5	-1,680.05	638.1	-1,157.4	1,198.7	0.00	0.00	0.00
8,000.0	90.00	270.29	6,592.5	-1,680.05	638.6	-1,257.4	1,298.5	0.00	0.00	0.00
8,100.0	90.00	270.29	6,592.5	-1,680.05	639.1	-1,357.4	1,398.3	0.00	0.00	0.00
8,200.0	90.00	270.29	6,592.5	-1,680.05	639.7	-1,457.4	1,498.1	0.00	0.00	0.00
8,300.0	90.00	270.29	6,592.5	-1,680.05	640.2	-1,557.4	1,597.9	0.00	0.00	0.00
8,400.0	90.00	270.29	6,592.5	-1,680.05	640.7	-1,657.4	1,697.7	0.00	0.00	0.00
8,500.0	90.00	270.29	6,592.5	-1,680.05	641.2	-1,757.4	1,797.5	0.00	0.00	0.00
8,600.0	90.00	270.29	6,592.5	-1,680.05	641.7	-1,857.4	1,897.3	0.00	0.00	0.00
8,700.0	90.00	270.29	6,592.5	-1,680.05	642.2	-1,957.4	1,997.1	0.00	0.00	0.00
8,800.0	90.00	270.29	6,592.5	-1,680.05	642.7	-2,057.4	2,096.9	0.00	0.00	0.00
8,900.0	90.00	270.29	6,592.5	-1,680.05	643.2	-2,157.4	2,196.7	0.00	0.00	0.00
9,000.0	90.00	270.29	6,592.5	-1,680.05	643.7	-2,257.4	2,296.5	0.00	0.00	0.00
9,100.0	90.00	270.29	6,592.5	-1,680.05	644.2	-2,357.4	2,396.3	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well CROW VALLEY STATE 41-21-20XRLNB
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4912.5usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4912.5usft (Original Well Elev)
Site:	NE NE SEC. 21 T7N R62W 6th P.M.	North Reference:	True
Well:	CROW VALLEY STATE 41-21-20XRLNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

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	270.29	6,592.5	-1,680.05	644.7	-2,457.4	2,496.1	0.00	0.00	0.00
9,300.0	90.00	270.29	6,592.5	-1,680.05	645.2	-2,557.4	2,595.9	0.00	0.00	0.00
9,400.0	90.00	270.29	6,592.5	-1,680.05	645.7	-2,657.4	2,695.7	0.00	0.00	0.00
9,500.0	90.00	270.29	6,592.5	-1,680.05	646.2	-2,757.4	2,795.5	0.00	0.00	0.00
9,600.0	90.00	270.29	6,592.5	-1,680.05	646.7	-2,857.4	2,895.2	0.00	0.00	0.00
9,700.0	90.00	270.29	6,592.5	-1,680.05	647.2	-2,957.4	2,995.0	0.00	0.00	0.00
9,800.0	90.00	270.29	6,592.5	-1,680.05	647.8	-3,057.4	3,094.8	0.00	0.00	0.00
9,900.0	90.00	270.29	6,592.5	-1,680.05	648.3	-3,157.4	3,194.6	0.00	0.00	0.00
10,000.0	90.00	270.29	6,592.5	-1,680.05	648.8	-3,257.3	3,294.4	0.00	0.00	0.00
10,100.0	90.00	270.29	6,592.5	-1,680.05	649.3	-3,357.3	3,394.2	0.00	0.00	0.00
10,200.0	90.00	270.29	6,592.5	-1,680.05	649.8	-3,457.3	3,494.0	0.00	0.00	0.00
10,300.0	90.00	270.29	6,592.5	-1,680.05	650.3	-3,557.3	3,593.8	0.00	0.00	0.00
10,400.0	90.00	270.29	6,592.5	-1,680.05	650.8	-3,657.3	3,693.6	0.00	0.00	0.00
10,500.0	90.00	270.29	6,592.5	-1,680.05	651.3	-3,757.3	3,793.4	0.00	0.00	0.00
10,600.0	90.00	270.29	6,592.5	-1,680.05	651.8	-3,857.3	3,893.2	0.00	0.00	0.00
10,700.0	90.00	270.29	6,592.5	-1,680.05	652.3	-3,957.3	3,993.0	0.00	0.00	0.00
10,800.0	90.00	270.29	6,592.5	-1,680.05	652.8	-4,057.3	4,092.8	0.00	0.00	0.00
10,900.0	90.00	270.29	6,592.5	-1,680.05	653.3	-4,157.3	4,192.6	0.00	0.00	0.00
11,000.0	90.00	270.29	6,592.5	-1,680.05	653.8	-4,257.3	4,292.4	0.00	0.00	0.00
11,100.0	90.00	270.29	6,592.5	-1,680.05	654.3	-4,357.3	4,392.2	0.00	0.00	0.00
11,200.0	90.00	270.29	6,592.5	-1,680.05	654.8	-4,457.3	4,492.0	0.00	0.00	0.00
11,300.0	90.00	270.29	6,592.5	-1,680.05	655.3	-4,557.3	4,591.7	0.00	0.00	0.00
11,400.0	90.00	270.29	6,592.5	-1,680.05	655.9	-4,657.3	4,691.5	0.00	0.00	0.00
11,500.0	90.00	270.29	6,592.5	-1,680.05	656.4	-4,757.3	4,791.3	0.00	0.00	0.00
11,600.0	90.00	270.29	6,592.5	-1,680.05	656.9	-4,857.3	4,891.1	0.00	0.00	0.00
11,700.0	90.00	270.29	6,592.5	-1,680.05	657.4	-4,957.3	4,990.9	0.00	0.00	0.00
11,800.0	90.00	270.29	6,592.5	-1,680.05	657.9	-5,057.3	5,090.7	0.00	0.00	0.00
11,900.0	90.00	270.29	6,592.5	-1,680.05	658.4	-5,157.3	5,190.5	0.00	0.00	0.00
12,000.0	90.00	270.29	6,592.5	-1,680.05	658.9	-5,257.3	5,290.3	0.00	0.00	0.00
12,100.0	90.00	270.29	6,592.5	-1,680.05	659.4	-5,357.3	5,390.1	0.00	0.00	0.00
12,200.0	90.00	270.29	6,592.5	-1,680.05	659.9	-5,457.3	5,489.9	0.00	0.00	0.00
12,300.0	90.00	270.29	6,592.5	-1,680.05	660.4	-5,557.3	5,589.7	0.00	0.00	0.00
12,400.0	90.00	270.29	6,592.5	-1,680.05	660.9	-5,657.3	5,689.5	0.00	0.00	0.00
12,500.0	90.00	270.29	6,592.5	-1,680.05	661.4	-5,757.3	5,789.3	0.00	0.00	0.00
12,600.0	90.00	270.29	6,592.5	-1,680.05	661.9	-5,857.3	5,889.1	0.00	0.00	0.00
12,700.0	90.00	270.29	6,592.5	-1,680.05	662.4	-5,957.3	5,988.9	0.00	0.00	0.00
12,800.0	90.00	270.29	6,592.5	-1,680.05	662.9	-6,057.3	6,088.7	0.00	0.00	0.00
12,900.0	90.00	270.29	6,592.5	-1,680.05	663.4	-6,157.3	6,188.5	0.00	0.00	0.00
13,000.0	90.00	270.29	6,592.5	-1,680.05	663.9	-6,257.3	6,288.3	0.00	0.00	0.00
13,100.0	90.00	270.29	6,592.5	-1,680.05	664.5	-6,357.3	6,388.0	0.00	0.00	0.00
13,200.0	90.00	270.29	6,592.5	-1,680.05	665.0	-6,457.3	6,487.8	0.00	0.00	0.00
13,300.0	90.00	270.29	6,592.5	-1,680.05	665.5	-6,557.3	6,587.6	0.00	0.00	0.00
13,400.0	90.00	270.29	6,592.5	-1,680.05	666.0	-6,657.3	6,687.4	0.00	0.00	0.00
13,500.0	90.00	270.29	6,592.5	-1,680.05	666.5	-6,757.3	6,787.2	0.00	0.00	0.00
13,600.0	90.00	270.29	6,592.5	-1,680.05	667.0	-6,857.3	6,887.0	0.00	0.00	0.00
13,700.0	90.00	270.29	6,592.5	-1,680.05	667.5	-6,957.3	6,986.8	0.00	0.00	0.00
13,800.0	90.00	270.29	6,592.5	-1,680.05	668.0	-7,057.3	7,086.6	0.00	0.00	0.00
13,900.0	90.00	270.29	6,592.5	-1,680.05	668.5	-7,157.3	7,186.4	0.00	0.00	0.00
14,000.0	90.00	270.29	6,592.5	-1,680.05	669.0	-7,257.3	7,286.2	0.00	0.00	0.00
14,100.0	90.00	270.29	6,592.5	-1,680.05	669.5	-7,357.3	7,386.0	0.00	0.00	0.00
14,200.0	90.00	270.29	6,592.5	-1,680.05	670.0	-7,457.3	7,485.8	0.00	0.00	0.00
14,300.0	90.00	270.29	6,592.5	-1,680.05	670.5	-7,557.3	7,585.6	0.00	0.00	0.00
14,400.0	90.00	270.29	6,592.5	-1,680.05	671.0	-7,657.3	7,685.4	0.00	0.00	0.00
14,500.0	90.00	270.29	6,592.5	-1,680.05	671.5	-7,757.3	7,785.2	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well CROW VALLEY STATE 41-21-20XRLNB
Company:	BONANZA CREEK ENERGY INC.	TVD Reference:	KB-EST @ 4912.5usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4912.5usft (Original Well Elev)
Site:	NE NE SEC. 21 T7N R62W 6th P.M.	North Reference:	True
Well:	CROW VALLEY STATE 41-21-20XRLNB	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

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)
14,600.0	90.00	270.29	6,592.5	-1,680.05	672.0	-7,857.3	7,885.0	0.00	0.00	0.00
14,700.0	90.00	270.29	6,592.5	-1,680.05	672.6	-7,957.3	7,984.8	0.00	0.00	0.00
14,800.0	90.00	270.29	6,592.5	-1,680.05	673.1	-8,057.3	8,084.5	0.00	0.00	0.00
14,900.0	90.00	270.29	6,592.5	-1,680.05	673.6	-8,157.3	8,184.3	0.00	0.00	0.00
15,000.0	90.00	270.29	6,592.5	-1,680.05	674.1	-8,257.3	8,284.1	0.00	0.00	0.00
15,100.0	90.00	270.29	6,592.5	-1,680.05	674.6	-8,357.3	8,383.9	0.00	0.00	0.00
15,200.0	90.00	270.29	6,592.5	-1,680.05	675.1	-8,457.3	8,483.7	0.00	0.00	0.00
15,300.0	90.00	270.29	6,592.5	-1,680.05	675.6	-8,557.3	8,583.5	0.00	0.00	0.00
15,400.0	90.00	270.29	6,592.5	-1,680.05	676.1	-8,657.3	8,683.3	0.00	0.00	0.00
15,500.0	90.00	270.29	6,592.5	-1,680.05	676.6	-8,757.3	8,783.1	0.00	0.00	0.00
15,600.0	90.00	270.29	6,592.5	-1,680.05	677.1	-8,857.3	8,882.9	0.00	0.00	0.00
15,700.0	90.00	270.29	6,592.5	-1,680.05	677.6	-8,957.3	8,982.7	0.00	0.00	0.00
15,800.0	90.00	270.29	6,592.5	-1,680.05	678.1	-9,057.3	9,082.5	0.00	0.00	0.00
15,900.0	90.00	270.29	6,592.5	-1,680.05	678.6	-9,157.3	9,182.3	0.00	0.00	0.00
16,000.0	90.00	270.29	6,592.5	-1,680.05	679.1	-9,257.3	9,282.1	0.00	0.00	0.00
16,100.0	90.00	270.29	6,592.5	-1,680.05	679.6	-9,357.3	9,381.9	0.00	0.00	0.00
16,200.0	90.00	270.29	6,592.5	-1,680.05	680.1	-9,457.3	9,481.7	0.00	0.00	0.00
16,300.0	90.00	270.29	6,592.5	-1,680.05	680.7	-9,557.3	9,581.5	0.00	0.00	0.00
16,400.0	90.00	270.29	6,592.5	-1,680.05	681.2	-9,657.3	9,681.3	0.00	0.00	0.00
16,500.0	90.00	270.29	6,592.5	-1,680.05	681.7	-9,757.3	9,781.0	0.00	0.00	0.00
BHL (P2) - CROW VALLEY 41-21-20XRLNB										
16,579.7	90.00	270.29	6,592.5	-1,680.05	682.1	-9,837.0	9,860.6	0.00	0.00	0.00

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)
1,000.2	998.9	24.7	12.9	EOB TO 8.0° INC
5,707.5	5,660.3	605.9	316.1	END OF TANGENT
6,107.7	6,059.2	630.6	329.0	EOD TO VERTICAL
6,137.7	6,089.2	630.6	329.0	KOP (12°/100ft BUR)
6,762.7	6,550.4	632.4	-24.9	START OF TANGENT
6,862.7	6,576.3	632.9	-121.5	END OF TANGENT
6,987.7	6,592.5	633.5	-245.1	7" ICP *NEW* - CROW VALLEY 41-21-20XRLNB
16,579.7	6,592.5	682.1	-9,837.0	BHL (P2) - CROW VALLEY 41-21-20XRLNB