



BISON IV OPERATING

WELD COUNTY, COLORADO (NAD 83)

NE NE SEC. 34 T12N R63W 6th P.M.

FOX CREEK 12-63 34-23-2

ORIGINAL WELLBORE

PROPOSAL #1

Anticollision Report

24 August, 2024



Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Reference	PROPOSAL #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 100.00usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 3,280.83usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	2024-08-24		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	19,117.88	PROPOSAL #1 (ORIGINAL WELLBORE)	OWSG (Rev2) MWD	OWSG MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
NE NE SEC. 34 T12N R63W 6th P.M.						
ABDN HZ FOX CREEK 223-3422H - Wellbore #1 - Wellb	1,652.65	1,647.82	141.50	130.28	12.609 CC	
ABDN HZ FOX CREEK 223-3422H - Wellbore #1 - Wellb	1,700.00	1,694.41	141.62	130.07	12.258 ES	
ABDN HZ FOX CREEK 223-3422H - Wellbore #1 - Wellb	2,400.00	2,387.70	162.12	145.69	9.868 SF	
EXIST HZ CRITTER CREEK 1-2H - Wellbore #1 - Wellb						Out of range
EXIST HZ CRITTER CREEK 29-2H - Wellbore #1 - Wellb						Out of range
EXIST HZ FOX CREEK 222-3422H - Wellbore #1 - Wellb	0.00	0.00	159.88			
EXIST HZ FOX CREEK 222-3422H - Wellbore #1 - Wellb	100.00	93.79	160.16	159.87	537.150 ES	
EXIST HZ FOX CREEK 222-3422H - Wellbore #1 - Wellb	1,300.00	1,248.15	285.32	276.42	32.077 SF	
EXIST HZ FOX CREEK 501-3403H - Wellbore #1 - Wellb	2,778.02	2,771.28	26.30	7.18	1.375 Level 3, CC	
EXIST HZ FOX CREEK 501-3403H - Wellbore #1 - Wellb	2,800.00	2,793.23	26.32	7.05	1.366 Level 3, ES, SF	
FOX CREEK 12-63 34-2-3 - ORIGINAL WELLBORE - PR	305.17	305.17	20.00	18.24	11.385 CC	
FOX CREEK 12-63 34-2-3 - ORIGINAL WELLBORE - PR	2,700.00	2,700.56	36.26	17.51	1.935 ES	
FOX CREEK 12-63 34-2-3 - ORIGINAL WELLBORE - PR	2,800.00	2,800.00	37.35	17.90	1.921 SF	
FOX CREEK 12-63 34-23-1 - ORIGINAL WELLBORE - P	3,000.00	3,000.00	19.99	-1.09	0.948 Level 3, CC, ES, SF	
SW SE SEC. 25 T12N R63W 6th P.M.						
ABDN VERT PORTER CREEK #1 - Wellbore #1 - Desig						Out of range
EXIST HZ FOX CREEK 1-35H - Wellbore #1 - Wellbore #	6,569.36	5,966.84	286.11	223.09	4.540 CC, ES	
EXIST HZ FOX CREEK 1-35H - Wellbore #1 - Wellbore #	6,600.00	5,988.43	286.94	223.45	4.519 SF	
EXIST HZ FOX CREEK 3-26H - Wellbore #1 - Wellbore #	12,491.07	10,951.05	6.51	-73.53	0.081 Level 3, CC	
EXIST HZ FOX CREEK 3-26H - Wellbore #1 - Wellbore #	12,500.00	10,958.16	8.45	-96.71	0.080 Level 3, ES, SF	
FOX CREEK 12-63 25-2-1 - ORIGINAL WELLBORE - PR	8,866.40	10,250.00	671.87	582.31	7.502 CC	
FOX CREEK 12-63 25-2-1 - ORIGINAL WELLBORE - PR	8,900.00	10,234.11	673.06	580.12	7.242 ES	
FOX CREEK 12-63 25-2-1 - ORIGINAL WELLBORE - PR	9,500.00	9,975.48	880.34	727.46	5.759 SF	
FOX CREEK 12-63 25-2-2 - ORIGINAL WELLBORE - PR	8,920.51	9,150.00	2,365.24	2,287.62	30.475 CC, ES	
FOX CREEK 12-63 25-2-2 - ORIGINAL WELLBORE - PR	10,900.00	8,800.00	3,054.14	2,903.70	20.301 SF	
FOX CREEK 12-63 25-23-4 - ORIGINAL WELLBORE - P	9,169.27	9,609.21	2,241.54	2,168.48	30.680 CC	
FOX CREEK 12-63 25-23-4 - ORIGINAL WELLBORE - P	19,000.00	19,415.97	2,288.00	1,924.31	6.291 ES	
FOX CREEK 12-63 25-23-4 - ORIGINAL WELLBORE - P	19,100.00	19,415.97	2,291.09	1,926.69	6.287 SF	

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Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - ABDN HZ FOX CREEK 223-3422H - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 151-OWSG (Rev2) MWD													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	-1.58	150.52	-4.14	150.66				
100.00	100.00	96.12	96.12	0.14	0.16	-1.45	150.17	-3.81	150.23	149.92	0.30	497.120	
200.00	200.00	197.01	197.00	0.50	0.41	-1.06	149.10	-2.76	149.14	148.22	0.92	162.827	
300.00	300.00	296.90	296.86	0.86	0.77	-0.43	147.71	-1.11	147.73	146.10	1.63	90.477	
400.00	400.00	396.78	396.72	1.22	1.13	0.26	146.58	0.66	146.59	144.24	2.35	62.376	
500.00	500.00	497.09	497.01	1.58	1.50	0.91	145.28	2.30	145.31	142.25	3.07	47.346	
600.00	600.00	596.65	596.55	1.94	1.86	1.57	143.95	3.95	144.02	140.23	3.79	38.043	
700.00	700.00	696.05	695.92	2.29	2.21	2.32	143.04	5.81	143.16	138.66	4.50	31.806	
800.00	800.00	795.98	795.84	2.65	2.57	3.04	142.37	7.57	142.57	137.35	5.22	27.319	
900.00	900.00	895.82	895.66	3.01	2.93	3.68	141.74	9.13	142.04	136.10	5.94	23.930	
999.15	999.15	894.31	894.15	3.37	3.28	3.93	141.47	9.72	141.80	135.16	6.64	21.347	
1,000.00	1,000.00	995.15	994.99	3.37	3.29	3.93	141.47	9.72	141.80	135.15	6.65	21.328	
1,100.00	1,100.00	1,094.31	1,094.15	3.73	3.62	3.83	141.86	9.50	142.18	134.84	7.34	19.363	
1,200.00	1,200.00	1,194.99	1,194.82	4.09	3.95	3.53	142.17	8.77	142.44	134.41	8.03	17.733	
1,300.00	1,300.00	1,294.63	1,294.46	4.45	4.29	3.40	142.54	8.46	142.79	134.06	8.73	16.362	
1,400.00	1,400.00	1,395.48	1,395.31	4.80	4.64	3.43	142.65	8.55	142.91	133.47	9.44	15.144	
1,500.00	1,500.00	1,496.19	1,496.03	5.16	4.99	3.40	142.09	8.44	142.35	132.20	10.15	14.029	
1,600.00	1,600.00	1,595.88	1,595.71	5.52	5.34	3.29	141.40	8.12	141.63	130.78	10.85	13.052	
1,652.65	1,652.65	1,647.82	1,647.65	5.71	5.52	3.36	141.26	8.29	141.50	130.28	11.22	12.609 CC	
1,700.00	1,700.00	1,694.41	1,694.24	5.88	5.68	3.51	141.35	8.67	141.62	130.07	11.55	12.258 ES	
1,800.00	1,800.00	1,792.86	1,792.67	6.24	6.02	3.24	142.54	8.08	142.78	130.54	12.25	11.657	
1,900.00	1,900.00	1,892.37	1,892.15	6.60	6.35	2.40	144.49	6.05	144.65	131.71	12.94	11.176	
2,000.00	2,000.00	1,991.72	1,991.38	6.95	6.69	0.77	146.67	1.97	146.73	133.09	13.64	10.759	
2,100.00	2,100.00	2,090.31	2,089.76	7.31	7.03	-1.43	149.62	-3.75	149.76	135.43	14.33	10.451	
2,200.00	2,200.00	2,190.23	2,189.37	7.67	7.37	-4.10	153.01	-10.96	153.50	138.47	15.03	10.212	
2,300.00	2,300.00	2,289.84	2,288.48	8.03	7.72	-7.47	155.78	-20.44	157.25	141.52	15.73	9.994	
2,400.00	2,400.00	2,387.70	2,385.61	8.39	8.07	-11.39	158.66	-31.97	162.12	145.69	16.43	9.868 SF	
2,500.00	2,500.00	2,482.85	2,479.62	8.75	8.42	-15.89	162.24	-46.19	169.38	152.29	17.09	9.909	
2,600.00	2,600.00	2,580.78	2,576.02	9.11	8.79	-20.55	167.19	-62.66	179.55	161.76	17.79	10.094	
2,700.00	2,700.00	2,677.88	2,671.62	9.46	9.16	-24.66	172.11	-79.01	190.82	172.35	18.47	10.330	
2,800.00	2,800.00	2,775.59	2,767.66	9.82	9.55	-28.43	177.56	-96.12	203.75	184.58	19.16	10.631	
2,900.00	2,900.00	2,875.97	2,866.31	10.18	9.95	-31.96	182.60	-113.94	217.13	197.24	19.90	10.914	
3,000.00	3,000.00	2,977.62	2,966.31	10.54	10.37	-35.29	186.26	-131.85	230.00	209.36	20.64	11.143	
3,100.00	3,099.98	3,071.50	3,058.66	10.89	10.75	-126.43	189.87	-148.34	244.70	223.41	21.28	11.497	
3,200.00	3,199.84	3,165.64	3,151.03	11.23	11.15	-129.46	194.33	-165.95	263.65	241.72	21.92	12.027	
3,300.00	3,299.45	3,262.67	3,246.14	11.58	11.57	-132.69	198.97	-184.54	286.07	263.47	22.60	12.656	
3,400.00	3,398.70	3,358.15	3,339.78	11.93	11.99	-135.80	203.39	-202.72	311.64	288.37	23.27	13.391	
3,500.00	3,497.47	3,455.48	3,435.32	12.29	12.41	-138.88	207.23	-220.88	339.99	316.02	23.97	14.183	
3,600.00	3,595.62	3,546.78	3,524.97	12.66	12.81	-141.59	210.69	-237.83	371.75	347.14	24.61	15.108	
3,700.00	3,693.06	3,637.21	3,613.70	13.05	13.22	-144.10	214.18	-254.92	407.37	382.13	25.24	16.138	
3,800.00	3,789.64	3,725.23	3,700.02	13.45	13.61	-146.30	217.99	-271.67	446.86	421.00	25.86	17.278	
3,900.00	3,885.27	3,812.81	3,785.89	13.87	14.01	-148.26	222.14	-288.39	490.04	463.55	26.49	18.497	
4,000.00	3,979.82	3,895.68	3,867.08	14.33	14.39	-149.91	226.29	-304.48	536.93	509.85	27.08	19.824	
4,100.00	4,073.17	3,977.71	3,947.36	14.81	14.77	-151.35	230.86	-320.69	587.57	559.88	27.68	21.225	
4,200.00	4,165.21	4,062.89	4,030.72	15.34	15.16	-152.70	235.92	-337.48	641.42	613.09	28.33	22.642	
4,300.00	4,255.84	4,150.59	4,116.68	15.92	15.57	-153.94	241.15	-354.02	697.67	668.66	29.01	24.048	
4,400.00	4,344.94	4,239.75	4,204.28	16.54	15.97	-155.10	246.08	-369.88	755.95	726.24	29.71	25.443	
4,500.00	4,432.39	4,321.71	4,284.97	17.23	16.34	-156.11	249.30	-383.91	816.23	785.88	30.35	26.894	
4,600.00	4,518.11	4,393.95	4,356.07	17.98	16.67	-156.84	252.20	-396.32	879.46	848.55	30.91	28.452	
4,700.00	4,601.97	4,461.27	4,422.27	18.81	16.98	-157.36	255.59	-408.08	945.86	914.42	31.44	30.086	
4,800.00	4,683.88	4,520.90	4,480.81	19.71	17.25	-157.63	259.27	-418.80	1,015.46	983.55	31.91	31.823	
4,900.00	4,763.74	4,579.04	4,537.76	20.68	17.52	-157.79	263.41	-429.75	1,088.27	1,055.89	32.38	33.612	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

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Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

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Survey Program:		151-OWSG (Rev2) MWD					Rule Assigned:						Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			Minimum Separation (usft)	
5,000.00	4,841.45	4,641.33	4,598.73	21.75	17.82	-157.97	267.89	-441.74	1,163.71	1,130.82	32.90	35.376		
5,100.00	4,916.92	4,704.68	4,660.73	22.90	18.12	-158.13	272.15	-454.01	1,241.43	1,208.00	33.43	37.131		
5,200.00	4,990.05	4,766.96	4,721.72	24.13	18.42	-158.26	275.81	-466.03	1,321.16	1,287.19	33.97	38.894		
5,266.73	5,037.50	4,807.77	4,761.72	25.01	18.61	-158.31	278.11	-473.82	1,375.41	1,341.09	34.32	40.072		
5,300.00	5,060.89	4,827.89	4,781.44	25.46	18.71	-158.66	279.25	-477.62	1,402.67	1,368.17	34.50	40.659		
5,400.00	5,131.19	4,884.80	4,837.25	26.83	18.98	-159.60	282.48	-488.30	1,484.60	1,449.60	34.99	42.427		
5,500.00	5,201.49	4,941.51	4,892.86	28.24	19.24	-160.43	285.72	-498.92	1,566.63	1,531.15	35.49	44.147		
5,600.00	5,271.78	5,006.87	4,957.00	29.68	19.55	-161.30	289.32	-510.97	1,648.58	1,612.52	36.06	45.720		
5,700.00	5,342.08	5,057.94	5,007.15	31.15	19.79	-161.93	291.95	-520.26	1,730.45	1,693.93	36.51	47.395		
5,800.00	5,412.38	5,101.13	5,049.51	32.64	20.00	-162.42	294.04	-528.42	1,812.75	1,775.85	36.90	49.128		
5,900.00	5,482.67	5,160.27	5,107.47	34.15	20.28	-163.07	296.68	-539.88	1,895.38	1,857.95	37.42	50.646		
6,000.00	5,552.97	5,226.39	5,172.36	35.67	20.59	-163.74	299.29	-552.29	1,977.68	1,939.67	38.01	52.031		
6,100.00	5,623.27	5,273.17	5,218.27	37.21	20.81	-164.18	301.06	-561.12	2,060.08	2,021.64	38.44	53.599		
6,200.00	5,693.56	5,320.69	5,264.86	38.77	21.04	-164.60	302.85	-570.29	2,142.78	2,103.91	38.87	55.128		
6,300.00	5,763.86	5,371.47	5,314.62	40.33	21.28	-165.02	304.74	-580.22	2,225.66	2,186.33	39.33	56.584		
6,400.00	5,834.16	5,436.35	5,378.20	41.91	21.59	-165.52	307.09	-592.94	2,308.62	2,268.70	39.92	57.832		
6,500.00	5,904.45	5,513.87	5,454.30	43.49	21.96	-166.08	309.68	-607.47	2,391.09	2,350.48	40.61	58.878		
6,600.00	5,974.75	5,576.52	5,515.87	45.09	22.26	-166.48	311.87	-618.88	2,473.32	2,432.14	41.18	60.060		
6,700.00	6,045.05	5,657.56	5,595.59	46.69	22.63	-166.96	314.79	-633.16	2,555.26	2,513.36	41.90	60.979		
6,800.00	6,115.34	5,725.59	5,662.60	48.30	22.94	-167.33	317.19	-644.62	2,636.75	2,594.23	42.52	62.011		
6,900.00	6,185.64	5,790.26	5,726.32	49.91	23.24	-167.65	319.79	-655.32	2,718.15	2,675.03	43.11	63.045		
7,000.00	6,255.94	5,862.06	5,797.11	51.53	23.56	-167.96	323.03	-666.88	2,799.32	2,755.55	43.77	63.956		
7,100.00	6,326.23	5,915.95	5,850.25	53.15	23.81	-168.18	325.63	-675.43	2,880.40	2,836.12	44.28	65.046		
7,200.00	6,396.53	6,137.92	6,069.90	54.78	24.77	-169.00	334.65	-705.89	2,960.92	2,914.82	46.10	64.233		
7,300.00	6,466.83	6,402.55	6,333.76	56.41	25.74	-169.90	340.29	-724.51	3,035.77	2,987.71	48.06	63.166		
7,400.00	6,537.12	6,534.60	6,465.75	58.05	26.18	-170.33	341.09	-728.49	3,108.44	3,059.36	49.08	63.339		
7,500.00	6,607.42	6,606.22	6,537.34	59.69	26.41	-170.54	341.62	-729.94	3,180.54	3,130.82	49.72	63.973		
7,600.00	6,677.72	6,692.47	6,623.55	61.33	26.69	-170.74	343.82	-731.31	3,252.46	3,202.00	50.46	64.461		

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 222-3422H - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 150-OWSG (Rev2) MWD													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	-20.01	150.16	-54.68	159.88				
100.00	100.00	93.79	93.79	0.14	0.15	-20.03	150.47	-54.85	160.16	159.87	0.30	537.150 ES	
200.00	200.00	191.26	191.25	0.50	0.40	-20.13	151.58	-55.55	161.48	160.58	0.90	179.609	
300.00	300.00	287.33	287.25	0.86	0.75	-20.64	154.29	-58.12	165.05	163.45	1.61	102.647	
400.00	400.00	384.62	384.31	1.22	1.10	-21.85	158.11	-63.40	170.68	168.36	2.32	73.534	
500.00	500.00	483.10	482.35	1.58	1.48	-23.95	161.73	-71.84	177.41	174.37	3.04	58.296	
600.00	600.00	580.17	578.58	1.94	1.87	-27.20	164.12	-84.34	185.25	181.47	3.77	49.098	
700.00	700.00	676.77	673.93	2.29	2.28	-30.88	166.52	-99.60	195.17	190.66	4.51	43.281	
800.00	800.00	774.46	770.19	2.65	2.71	-34.45	169.15	-116.03	206.62	201.36	5.25	39.319	
900.00	900.00	871.40	865.33	3.01	3.16	-38.27	170.64	-134.59	219.35	213.34	6.00	36.541	
1,000.00	1,000.00	969.00	960.86	3.37	3.63	-41.99	171.69	-154.52	233.50	226.75	6.75	34.576	
1,100.00	1,100.00	1,066.61	1,056.36	3.73	4.11	-45.35	172.58	-174.68	248.58	241.08	7.50	33.141	
1,200.00	1,200.00	1,158.85	1,146.43	4.09	4.58	-48.23	173.77	-194.56	265.35	257.13	8.21	32.314	
1,300.00	1,300.00	1,248.15	1,233.18	4.45	5.05	-50.72	176.35	-215.60	285.32	276.42	8.89	32.077 SF	
1,400.00	1,400.00	1,337.73	1,319.72	4.80	5.55	-52.82	180.74	-238.30	308.42	298.85	9.57	32.214	
1,500.00	1,500.00	1,429.71	1,408.06	5.16	6.09	-54.84	185.59	-263.45	333.78	323.51	10.27	32.490	
1,600.00	1,600.00	1,524.33	1,498.57	5.52	6.67	-56.85	189.85	-290.71	360.36	349.36	10.99	32.778	
1,700.00	1,700.00	1,617.08	1,587.16	5.88	7.24	-58.67	193.49	-317.92	387.48	375.78	11.70	33.119	
1,800.00	1,800.00	1,705.56	1,671.44	6.24	7.80	-60.07	198.26	-344.43	416.19	403.82	12.37	33.655	
1,900.00	1,900.00	1,793.59	1,754.93	6.60	8.38	-61.15	204.73	-371.57	446.77	433.74	13.03	34.288	
2,000.00	2,000.00	1,878.39	1,834.89	6.95	8.96	-62.13	211.07	-399.07	479.01	465.34	13.67	35.052	
2,100.00	2,100.00	1,963.73	1,914.49	7.31	9.58	-63.24	216.50	-429.33	513.60	499.29	14.31	35.895	
2,200.00	2,200.00	2,059.58	2,003.69	7.67	10.29	-64.48	221.56	-464.06	548.68	533.61	15.06	36.422	
2,300.00	2,300.00	2,155.93	2,093.47	8.03	11.01	-65.69	225.36	-498.81	583.28	567.45	15.82	36.858	
2,400.00	2,400.00	2,254.38	2,185.23	8.39	11.73	-66.87	228.29	-534.37	617.79	601.19	16.60	37.207	
2,500.00	2,500.00	2,356.41	2,280.92	8.75	12.48	-67.92	231.12	-569.65	650.96	633.55	17.41	37.380	
2,600.00	2,600.00	2,462.05	2,380.27	9.11	13.23	-68.94	233.20	-605.50	683.46	665.21	18.25	37.449	
2,700.00	2,700.00	2,567.56	2,480.23	9.46	13.95	-69.84	234.63	-639.21	713.98	694.91	19.07	37.432	
2,800.00	2,800.00	2,669.69	2,577.50	9.82	14.62	-70.47	237.72	-670.23	743.66	723.79	19.87	37.435	
2,900.00	2,900.00	2,763.14	2,666.63	10.18	15.24	-70.98	240.67	-698.13	772.96	752.37	20.58	37.552	
3,000.00	3,000.00	2,860.67	2,759.65	10.54	15.87	-71.42	244.39	-727.22	802.47	781.14	21.34	37.612	
3,100.00	3,099.98	2,951.01	2,845.85	10.89	16.46	-159.93	248.60	-753.89	833.57	811.54	22.02	37.852	
3,200.00	3,199.84	3,037.02	2,927.79	11.23	17.03	-159.97	254.19	-779.47	868.52	845.85	22.67	38.316	
3,300.00	3,299.45	3,118.38	3,005.05	11.58	17.58	-159.97	260.44	-804.18	907.48	884.21	23.28	38.986	
3,400.00	3,398.70	3,199.51	3,081.74	11.93	18.14	-160.09	265.58	-830.14	950.58	926.69	23.89	39.794	
3,500.00	3,497.47	3,289.78	3,166.85	12.29	18.78	-160.37	269.84	-859.90	997.15	972.57	24.58	40.568	
3,600.00	3,595.62	3,390.81	3,262.35	12.66	19.48	-160.88	272.10	-892.78	1,045.72	1,020.36	25.36	41.234	
3,700.00	3,693.06	3,487.09	3,353.70	13.05	20.14	-161.35	273.81	-923.15	1,096.32	1,070.22	26.10	42.007	
3,800.00	3,789.64	3,567.54	3,430.26	13.45	20.68	-161.62	275.97	-947.78	1,149.29	1,122.58	26.71	43.022	
3,900.00	3,885.27	3,631.00	3,490.39	13.87	21.11	-161.72	278.18	-967.93	1,206.24	1,179.04	27.20	44.350	
4,000.00	3,979.82	3,713.33	3,568.24	14.33	21.69	-161.97	280.84	-994.61	1,266.50	1,238.66	27.84	45.490	
4,100.00	4,073.17	3,800.75	3,651.02	14.81	22.29	-162.29	282.87	-1,022.60	1,329.04	1,300.51	28.53	46.588	
4,200.00	4,165.21	3,868.58	3,715.33	15.34	22.76	-162.43	284.20	-1,044.16	1,394.02	1,364.95	29.06	47.964	
4,300.00	4,255.84	3,931.74	3,775.03	15.92	23.20	-162.50	285.38	-1,064.75	1,462.19	1,432.62	29.57	49.450	
4,400.00	4,344.94	4,003.20	3,842.53	16.54	23.70	-162.63	286.64	-1,088.15	1,532.99	1,502.84	30.15	50.851	
4,500.00	4,432.39	4,067.63	3,903.40	17.23	24.15	-162.68	287.62	-1,109.27	1,606.21	1,575.53	30.67	52.363	
4,600.00	4,518.11	4,137.79	3,969.65	17.98	24.64	-162.77	288.38	-1,132.35	1,681.80	1,650.55	31.25	53.813	
4,700.00	4,601.97	4,215.53	4,043.26	18.81	25.18	-162.92	289.11	-1,157.33	1,759.13	1,727.24	31.89	55.157	
4,800.00	4,683.88	4,286.05	4,110.21	19.71	25.66	-162.95	289.97	-1,179.47	1,838.20	1,805.72	32.48	56.596	
4,900.00	4,763.74	4,341.85	4,163.23	20.68	26.04	-162.77	290.85	-1,196.80	1,919.20	1,886.24	32.96	58.232	
5,000.00	4,841.45	4,401.24	4,219.67	21.75	26.44	-162.58	291.95	-1,215.28	2,002.24	1,968.77	33.47	59.827	
5,100.00	4,916.92	4,468.17	4,283.51	22.90	26.88	-162.46	292.81	-1,235.37	2,086.43	2,052.40	34.03	61.305	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 222-3422H - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 150-OWSG (Rev2) MWD													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Rule Assigned:				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,200.00	4,990.05	4,542.32	4,354.38	24.13	27.35	-162.41	293.30	-1,257.16	2,172.08	2,137.43	34.65	62.682	
5,266.73	5,037.50	4,575.11	4,385.74	25.01	27.56	-162.14	293.33	-1,266.74	2,230.19	2,195.25	34.94	63.820	
5,300.00	5,060.89	4,599.67	4,409.24	25.46	27.72	-162.47	293.41	-1,273.86	2,259.32	2,224.18	35.15	64.278	
5,400.00	5,131.19	4,676.31	4,482.80	26.83	28.20	-163.39	294.65	-1,295.34	2,346.53	2,310.75	35.78	65.580	
5,500.00	5,201.49	4,711.75	4,516.84	28.24	28.42	-163.75	295.75	-1,305.14	2,433.66	2,397.53	36.12	67.368	
5,600.00	5,271.78	4,750.97	4,554.48	29.68	28.66	-164.12	297.36	-1,316.04	2,520.99	2,484.49	36.50	69.070	
5,700.00	5,342.08	4,786.72	4,588.74	31.15	28.89	-164.42	299.18	-1,326.07	2,608.53	2,571.68	36.85	70.785	
5,800.00	5,412.38	4,820.71	4,621.27	32.64	29.11	-164.68	301.19	-1,335.74	2,696.34	2,659.15	37.19	72.493	
5,900.00	5,482.67	4,856.00	4,654.98	34.15	29.33	-164.92	303.56	-1,345.92	2,784.40	2,746.85	37.55	74.153	
6,000.00	5,552.97	4,880.87	4,678.69	35.67	29.50	-165.09	305.32	-1,353.22	2,872.75	2,834.92	37.83	75.939	
6,100.00	5,623.27	4,906.51	4,703.08	37.21	29.67	-165.25	307.10	-1,360.92	2,961.44	2,923.32	38.12	77.695	
6,200.00	5,693.56	4,951.00	4,745.27	38.77	29.97	-165.53	310.13	-1,374.69	3,050.57	3,012.02	38.55	79.130	
6,300.00	5,763.86	4,978.89	4,771.71	40.33	30.16	-165.70	311.89	-1,383.41	3,139.74	3,100.89	38.86	80.799	
6,400.00	5,834.16	5,066.34	4,854.94	41.91	30.74	-166.25	316.03	-1,409.89	3,228.41	3,188.78	39.63	81.462	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 501-3403H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 212-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	89.49	0.41	45.84	46.37				
100.00	100.00	93.13	93.13	0.14	0.16	89.42	0.46	45.71	45.71	45.41	0.30	152.249	
200.00	200.00	193.27	193.27	0.50	0.33	89.20	0.64	45.27	45.28	44.45	0.83	54.737	
300.00	300.00	293.29	293.28	0.86	0.65	89.11	0.69	44.64	44.64	43.13	1.51	29.631	
400.00	400.00	393.06	393.05	1.22	1.00	88.76	0.95	44.22	44.23	42.02	2.22	19.962	
500.00	500.00	493.38	493.37	1.58	1.35	87.95	1.57	43.74	43.77	40.84	2.93	14.944	
600.00	600.00	593.39	593.38	1.94	1.71	87.77	1.67	42.88	42.91	39.27	3.65	11.772	
700.00	700.00	693.47	693.45	2.29	2.07	87.65	1.72	41.90	41.93	37.57	4.36	9.614	
800.00	800.00	793.52	793.50	2.65	2.43	87.89	1.50	40.76	40.79	35.71	5.08	8.034	
900.00	900.00	893.49	893.45	3.01	2.78	88.44	1.08	39.51	39.52	33.73	5.79	6.824	
1,000.00	1,000.00	993.36	993.33	3.37	3.14	89.14	0.58	38.63	38.64	32.13	6.51	5.939	
1,100.00	1,100.00	1,093.46	1,093.42	3.73	3.50	90.10	-0.07	37.65	37.65	30.43	7.22	5.214	
1,200.00	1,200.00	1,193.57	1,193.51	4.09	3.85	91.22	-0.78	36.40	36.41	28.47	7.94	4.588	
1,300.00	1,300.00	1,293.63	1,293.56	4.45	4.21	92.91	-1.77	34.82	34.86	26.21	8.65	4.030	
1,400.00	1,400.00	1,393.18	1,393.09	4.80	4.56	94.09	-2.40	33.59	33.67	24.31	9.36	3.598	
1,413.07	1,413.07	1,406.15	1,406.07	4.85	4.61	94.05	-2.38	33.57	33.65	24.20	9.45	3.561	
1,500.00	1,500.00	1,493.04	1,492.95	5.16	4.90	93.26	-1.93	33.88	33.94	23.88	10.06	3.375	
1,600.00	1,600.00	1,593.35	1,593.27	5.52	5.25	92.65	-1.55	33.46	33.49	22.73	10.76	3.112	
1,700.00	1,700.00	1,693.36	1,693.27	5.88	5.61	92.52	-1.44	32.71	32.74	21.26	11.48	2.852	
1,800.00	1,800.00	1,793.37	1,793.27	6.24	5.96	92.47	-1.37	31.78	31.81	19.61	12.19	2.608	
1,900.00	1,900.00	1,893.36	1,893.26	6.60	6.32	93.74	-2.02	30.99	31.06	18.15	12.91	2.406	
2,000.00	2,000.00	1,993.42	1,993.31	6.95	6.68	95.26	-2.76	29.98	30.11	16.48	13.62	2.210	
2,100.00	2,100.00	2,093.45	2,093.33	7.31	7.03	96.97	-3.52	28.82	29.04	14.70	14.34	2.025	
2,200.00	2,200.00	2,193.14	2,193.01	7.67	7.38	98.06	-3.98	28.09	28.37	13.32	15.05	1.885	
2,300.00	2,300.00	2,293.29	2,293.17	8.03	7.74	98.44	-4.11	27.73	28.03	12.27	15.76	1.778	
2,371.74	2,371.74	2,364.87	2,364.74	8.29	7.99	98.70	-4.21	27.49	27.81	11.54	16.27	1.709	
2,400.00	2,400.00	2,393.10	2,392.97	8.39	8.09	98.77	-4.24	27.51	27.83	11.36	16.47	1.690	
2,500.00	2,500.00	2,493.15	2,493.02	8.75	8.42	98.12	-3.95	27.68	27.96	10.80	17.17	1.629	
2,600.00	2,600.00	2,593.36	2,593.23	9.11	8.77	96.24	-2.98	27.28	27.45	9.58	17.87	1.536	
2,700.00	2,700.00	2,693.36	2,693.18	9.46	9.12	90.57	-0.26	26.56	26.56	7.99	18.57	1.430 Level 3	
2,778.02	2,778.02	2,771.28	2,771.02	9.74	9.39	82.75	3.32	26.09	26.30	7.18	19.12	1.375 Level 3, CC	
2,800.00	2,800.00	2,793.23	2,792.94	9.82	9.46	80.17	4.49	25.94	26.32	7.05	19.28	1.366 Level 3, ES, SF	
2,900.00	2,900.00	2,892.98	2,892.49	10.18	9.81	66.78	10.75	25.07	27.28	7.30	19.98	1.366 Level 3	
3,000.00	3,000.00	2,992.39	2,991.56	10.54	10.15	51.64	18.89	23.87	30.47	9.81	20.67	1.474 Level 3	
3,100.00	3,099.98	3,091.62	3,090.29	10.89	10.50	-52.15	28.64	22.60	35.49	14.16	21.33	1.664	
3,200.00	3,199.84	3,191.23	3,189.40	11.23	10.85	-68.09	38.53	20.93	40.94	18.92	22.02	1.859	
3,300.00	3,299.45	3,290.22	3,287.89	11.58	11.21	-84.74	48.11	18.24	47.95	25.25	22.70	2.113	
3,400.00	3,398.70	3,388.50	3,385.64	11.93	11.56	-100.35	57.70	14.82	58.69	35.32	23.38	2.511	
3,500.00	3,497.47	3,486.43	3,483.04	12.29	11.92	-113.54	67.02	10.80	73.83	49.75	24.08	3.066	
3,600.00	3,595.62	3,583.59	3,579.74	12.66	12.28	-124.09	75.44	6.52	92.98	68.20	24.79	3.751	
3,700.00	3,693.06	3,679.31	3,675.00	13.05	12.63	-132.15	83.64	2.01	116.68	91.20	25.48	4.579	
3,800.00	3,789.64	3,773.46	3,768.67	13.45	12.98	-138.19	91.94	-2.64	144.82	118.66	26.16	5.536	
3,900.00	3,885.27	3,867.55	3,862.22	13.87	13.33	-142.71	100.79	-7.28	177.09	150.23	26.86	6.593	
4,000.00	3,979.82	3,961.22	3,955.40	14.33	13.68	-146.23	109.50	-11.42	212.44	184.88	27.56	7.708	
4,100.00	4,073.17	4,054.15	4,047.85	14.81	14.02	-148.98	118.22	-14.92	250.71	222.45	28.26	8.871	
4,200.00	4,165.21	4,146.00	4,139.29	15.34	14.36	-151.34	126.24	-18.09	291.77	262.82	28.96	10.076	
4,300.00	4,255.84	4,237.29	4,230.25	15.92	14.70	-153.42	133.47	-20.98	335.57	305.92	29.65	11.318	
4,400.00	4,344.94	4,327.16	4,319.84	16.54	15.03	-155.17	140.34	-23.28	382.00	351.66	30.34	12.592	
4,500.00	4,432.39	4,417.86	4,410.26	17.23	15.37	-156.66	147.20	-24.87	430.89	399.86	31.03	13.886	
4,600.00	4,518.11	4,501.75	4,493.90	17.98	15.68	-157.82	153.55	-25.89	482.43	450.75	31.68	15.228	
4,700.00	4,601.97	4,583.07	4,574.97	18.81	15.98	-158.78	159.84	-27.12	537.25	504.93	32.32	16.625	
4,800.00	4,683.88	4,662.84	4,654.45	19.71	16.27	-159.54	166.57	-28.40	595.18	562.23	32.95	18.063	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 501-3403H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 212-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
4,900.00	4,763.74	4,742.25	4,733.51	20.68	16.57	-160.14	173.87	-29.56	655.98	622.39	33.59	19.530	
5,000.00	4,841.45	4,818.39	4,809.32	21.75	16.86	-160.63	180.87	-30.57	719.39	685.18	34.21	21.029	
5,100.00	4,916.92	4,890.70	4,881.30	22.90	17.13	-161.00	187.62	-31.74	785.66	750.85	34.81	22.572	
5,200.00	4,990.05	4,964.08	4,954.38	24.13	17.40	-161.36	194.15	-32.97	854.48	819.06	35.42	24.125	
5,266.73	5,037.50	5,010.63	5,000.76	25.01	17.57	-161.56	198.06	-33.76	901.74	865.93	35.81	25.182	
5,300.00	5,060.89	5,033.55	5,023.60	25.46	17.66	-161.87	199.93	-34.16	925.59	889.58	36.00	25.709	
5,400.00	5,131.19	5,107.09	5,096.92	26.83	17.93	-162.79	205.40	-35.42	997.21	960.60	36.61	27.237	
5,500.00	5,201.49	5,179.35	5,169.07	28.24	18.20	-163.67	209.39	-36.54	1,068.59	1,031.38	37.21	28.717	
5,600.00	5,271.78	5,248.38	5,238.03	29.68	18.45	-164.50	212.03	-37.74	1,140.02	1,102.24	37.78	30.173	
5,700.00	5,342.08	5,316.05	5,305.66	31.15	18.69	-165.25	214.01	-39.06	1,211.61	1,173.27	38.35	31.597	
5,800.00	5,412.38	5,383.54	5,373.11	32.64	18.93	-165.95	215.66	-40.51	1,283.38	1,244.47	38.91	32.985	
5,900.00	5,482.67	5,452.50	5,442.04	34.15	19.18	-166.60	217.12	-42.06	1,355.27	1,315.79	39.48	34.325	
6,000.00	5,552.97	5,524.84	5,514.36	35.67	19.44	-167.23	218.38	-43.65	1,427.18	1,387.09	40.09	35.603	
6,100.00	5,623.27	5,600.38	5,589.88	37.21	19.70	-167.84	219.27	-45.02	1,498.84	1,458.13	40.71	36.814	
6,200.00	5,693.56	5,669.06	5,658.55	38.77	19.95	-168.35	219.92	-46.17	1,570.46	1,529.16	41.29	38.031	
6,300.00	5,763.86	5,750.67	5,740.14	40.33	20.23	-168.92	220.44	-47.29	1,641.91	1,599.94	41.97	39.121	
6,400.00	5,834.16	5,822.86	5,812.33	41.91	20.49	-169.38	220.58	-47.91	1,713.02	1,670.44	42.58	40.232	
6,500.00	5,904.45	5,890.13	5,879.60	43.49	20.72	-169.79	220.61	-48.52	1,784.20	1,741.04	43.16	41.343	
6,600.00	5,974.75	5,957.52	5,946.98	45.09	20.96	-170.16	220.79	-49.25	1,855.56	1,811.83	43.74	42.424	
6,700.00	6,045.05	6,036.31	6,025.77	46.69	21.23	-170.55	221.19	-49.91	1,926.81	1,882.40	44.41	43.389	
6,800.00	6,115.34	6,111.74	6,101.20	48.30	21.50	-170.89	221.60	-50.26	1,997.82	1,952.76	45.06	44.339	
6,900.00	6,185.64	6,187.05	6,176.51	49.91	21.76	-171.21	221.91	-50.40	2,068.68	2,022.97	45.71	45.259	
7,000.00	6,255.94	6,263.20	6,252.66	51.53	22.03	-171.51	222.22	-50.36	2,139.37	2,093.01	46.36	46.142	
7,100.00	6,326.23	6,336.93	6,326.38	53.15	22.28	-171.78	222.60	-50.12	2,209.92	2,162.91	47.00	47.015	
7,200.00	6,396.53	6,405.35	6,394.80	54.78	22.51	-172.02	222.76	-49.89	2,280.46	2,232.86	47.61	47.903	
7,300.00	6,466.83	6,466.41	6,455.87	56.41	22.72	-172.23	222.87	-49.86	2,351.23	2,303.07	48.16	48.822	
7,400.00	6,537.12	6,531.20	6,520.65	58.05	22.95	-172.43	222.97	-50.05	2,422.25	2,373.50	48.74	49.693	
7,500.00	6,607.42	6,599.40	6,588.86	59.69	23.18	-172.65	222.88	-50.37	2,493.39	2,444.04	49.35	50.520	
7,600.00	6,677.72	6,670.84	6,660.29	61.33	23.43	-172.86	222.58	-50.70	2,564.54	2,514.55	49.99	51.303	
7,700.00	6,748.01	6,740.69	6,730.14	62.98	23.67	-173.06	222.29	-51.00	2,635.68	2,585.07	50.61	52.076	
7,800.00	6,818.31	6,841.93	6,831.34	64.63	24.01	-173.38	220.40	-50.80	2,706.31	2,654.85	51.46	52.589	
7,900.00	6,888.61	6,990.28	6,978.54	66.28	24.46	-174.17	204.12	-47.54	2,774.77	2,722.22	52.55	52.798	
8,000.00	6,958.90	7,046.56	7,033.39	67.93	24.62	-174.63	191.60	-46.32	2,843.44	2,790.42	53.03	53.624	
8,078.15	7,013.84	7,125.21	7,109.01	69.23	24.84	-175.35	170.07	-44.65	2,897.12	2,843.54	53.58	54.067	
8,100.00	7,029.19	7,146.75	7,129.53	69.59	24.90	-171.37	163.54	-44.10	2,912.05	2,858.32	53.74	54.191	
8,150.00	7,064.14	7,164.18	7,146.10	70.41	24.95	-162.12	158.15	-43.72	2,946.13	2,892.22	53.91	54.652	
8,200.00	7,098.63	7,190.00	7,170.58	71.21	25.03	-153.35	149.95	-43.23	2,979.89	2,925.76	54.12	55.059	
8,250.00	7,132.41	7,204.45	7,184.26	71.98	25.07	-144.89	145.31	-42.99	3,013.13	2,958.87	54.27	55.523	
8,300.00	7,165.21	7,221.07	7,200.00	72.72	25.11	-137.05	139.98	-42.77	3,045.71	2,991.29	54.42	55.965	
8,350.00	7,196.78	7,240.00	7,217.94	73.42	25.17	-129.91	133.94	-42.58	3,077.42	3,022.84	54.58	56.380	
8,400.00	7,226.88	7,240.00	7,217.94	74.08	25.17	-123.07	133.94	-42.58	3,108.11	3,053.49	54.62	56.906	
8,450.00	7,255.29	7,257.09	7,234.04	74.68	25.22	-117.26	128.21	-42.47	3,137.58	3,082.82	54.75	57.303	
8,500.00	7,281.79	7,263.87	7,240.37	75.22	25.23	-111.91	125.77	-42.45	3,165.72	3,110.90	54.82	57.751	
8,550.00	7,306.18	7,268.55	7,244.72	75.72	25.25	-107.15	124.04	-42.44	3,192.36	3,137.50	54.86	58.192	
8,600.00	7,328.26	7,271.33	7,247.29	76.15	25.26	-102.96	123.00	-42.43	3,217.35	3,162.47	54.88	58.621	
8,650.00	7,347.88	7,272.43	7,248.31	76.53	25.26	-99.31	122.58	-42.43	3,240.56	3,185.66	54.90	59.031	
8,700.00	7,364.89	7,285.00	7,259.87	76.86	25.29	-96.42	117.64	-42.44	3,261.91	3,206.92	54.99	59.316	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - FOX CREEK 12-63 34-2-3 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	89.99	0.00	20.00	20.00				
100.00	100.00	100.00	100.00	0.14	0.14	89.99	0.00	20.00	20.00	19.71	0.29	69.746	
200.00	200.00	200.00	200.00	0.50	0.50	89.99	0.00	20.00	20.00	19.00	1.00	19.927	
300.00	300.00	300.00	300.00	0.86	0.86	89.99	0.00	20.00	20.00	18.28	1.72	11.624	
305.17	305.17	305.17	305.17	0.88	0.88	90.00	0.00	20.00	20.00	18.24	1.76	11.385 CC	
400.00	400.00	399.96	399.94	1.22	1.20	94.97	-1.74	20.00	20.08	17.66	2.42	8.292	
500.00	500.00	499.79	499.66	1.58	1.55	108.07	-6.53	20.00	21.04	17.92	3.12	6.745	
600.00	600.00	599.66	599.38	1.94	1.89	120.44	-11.75	20.00	23.21	19.38	3.83	6.063	
700.00	700.00	699.52	699.11	2.29	2.25	130.33	-16.98	20.00	26.25	21.71	4.54	5.783	
800.00	800.00	799.38	798.84	2.65	2.61	137.99	-22.21	20.00	29.91	24.66	5.25	5.695	
900.00	900.00	899.50	898.82	3.01	2.98	143.80	-27.33	20.00	33.88	27.92	5.97	5.679	
1,000.00	1,000.00	1,000.48	999.76	3.37	3.34	146.22	-29.91	20.00	35.98	29.30	6.68	5.383	
1,100.00	1,100.00	1,100.72	1,100.00	3.73	3.68	146.30	-30.00	20.00	36.05	28.67	7.38	4.883	
1,200.00	1,200.00	1,200.72	1,200.00	4.09	4.02	146.30	-30.00	20.00	36.05	27.97	8.08	4.460	
1,300.00	1,300.00	1,300.72	1,300.00	4.45	4.36	146.30	-30.00	20.00	36.05	27.27	8.79	4.103	
1,400.00	1,400.00	1,400.72	1,400.00	4.80	4.71	146.30	-30.00	20.00	36.05	26.56	9.49	3.798	
1,500.00	1,500.00	1,500.72	1,500.00	5.16	5.05	146.30	-30.00	20.00	36.05	25.85	10.20	3.535	
1,600.00	1,600.00	1,600.72	1,600.00	5.52	5.40	146.30	-30.00	20.00	36.05	25.14	10.91	3.305	
1,700.00	1,700.00	1,700.72	1,700.00	5.88	5.75	146.30	-30.00	20.00	36.05	24.43	11.62	3.103	
1,800.00	1,800.00	1,800.72	1,800.00	6.24	6.10	146.30	-30.00	20.00	36.05	23.72	12.33	2.924	
1,900.00	1,900.00	1,900.72	1,900.00	6.60	6.45	146.30	-30.00	20.00	36.05	23.01	13.04	2.765	
2,000.00	2,000.00	2,000.72	2,000.00	6.95	6.81	146.30	-30.00	20.00	36.05	22.30	13.75	2.622	
2,100.00	2,100.00	2,100.72	2,100.00	7.31	7.16	146.30	-30.00	20.00	36.05	21.59	14.46	2.493	
2,200.00	2,200.00	2,200.72	2,200.00	7.67	7.51	146.30	-30.00	20.00	36.05	20.88	15.18	2.376	
2,300.00	2,300.00	2,300.72	2,300.00	8.03	7.87	146.30	-30.00	20.00	36.05	20.16	15.89	2.269	
2,400.00	2,400.00	2,400.72	2,400.00	8.39	8.22	146.30	-30.00	20.00	36.05	19.45	16.60	2.172	
2,500.00	2,500.00	2,500.72	2,500.00	8.75	8.58	146.30	-30.00	20.00	36.05	18.74	17.32	2.082	
2,516.43	2,516.43	2,517.14	2,516.43	8.81	8.63	146.30	-30.00	20.00	36.05	18.62	17.43	2.068	
2,600.00	2,600.00	2,600.72	2,600.00	9.11	8.93	146.30	-30.00	20.00	36.05	18.02	18.03	2.000	
2,700.00	2,700.00	2,700.56	2,699.82	9.46	9.28	143.53	-29.15	21.55	36.26	17.51	18.74	1.935 ES	
2,800.00	2,800.00	2,800.00	2,799.12	9.82	9.63	135.58	-26.67	26.13	37.35	17.90	19.44	1.921 SF	
2,900.00	2,900.00	2,899.28	2,898.02	10.18	9.98	123.76	-22.54	33.73	40.61	20.48	20.14	2.017	
3,000.00	3,000.00	2,997.69	2,995.69	10.54	10.33	110.85	-16.84	44.22	47.51	26.72	20.79	2.286	
3,100.00	3,099.98	3,095.40	3,092.22	10.89	10.68	11.41	-9.60	57.55	57.16	35.77	21.39	2.673	
3,200.00	3,199.84	3,192.58	3,187.64	11.23	11.04	2.51	-0.85	73.66	67.80	45.87	21.94	3.091	
3,300.00	3,299.45	3,289.19	3,281.85	11.58	11.41	-4.90	9.38	92.50	79.31	56.85	22.45	3.532	
3,400.00	3,398.70	3,385.22	3,374.71	11.93	11.79	-11.28	21.05	113.97	91.65	68.71	22.94	3.994	
3,500.00	3,497.47	3,480.64	3,466.12	12.29	12.19	-16.87	34.10	138.01	104.85	81.43	23.42	4.478	
3,600.00	3,595.62	3,575.44	3,555.98	12.66	12.61	-21.84	48.51	164.52	118.94	95.06	23.88	4.981	
3,700.00	3,693.06	3,669.60	3,644.20	13.05	13.06	-26.30	64.21	193.43	133.96	109.62	24.34	5.503	
3,800.00	3,789.64	3,763.10	3,730.69	13.45	13.54	-30.33	81.16	224.64	149.96	125.13	24.82	6.041	
3,900.00	3,885.27	3,855.93	3,815.36	13.87	14.05	-33.99	99.32	258.07	166.95	141.61	25.34	6.590	
4,000.00	3,979.82	3,948.08	3,898.16	14.33	14.60	-37.31	118.63	293.62	184.96	159.07	25.89	7.144	
4,100.00	4,073.17	4,039.56	3,979.02	14.81	15.19	-40.34	139.04	331.20	204.02	177.51	26.51	7.696	
4,200.00	4,165.21	4,134.66	4,061.93	15.34	15.85	-43.30	161.27	372.13	223.50	196.08	27.42	8.151	
4,300.00	4,255.84	4,232.11	4,146.81	15.92	16.56	-46.38	184.13	414.21	241.41	212.86	28.55	8.455	
4,400.00	4,344.94	4,329.61	4,231.72	16.54	17.29	-49.59	207.00	456.31	257.79	227.97	29.82	8.645	
4,500.00	4,432.39	4,427.03	4,316.56	17.23	18.05	-52.95	229.85	498.38	272.91	241.67	31.24	8.736	
4,600.00	4,518.11	4,524.25	4,401.24	17.98	18.83	-56.49	252.66	540.37	287.10	254.27	32.83	8.745	
4,700.00	4,601.97	4,621.17	4,485.64	18.81	19.62	-60.21	275.39	582.22	300.71	266.10	34.61	8.689	
4,800.00	4,683.88	4,717.65	4,569.67	19.71	20.43	-64.11	298.02	623.88	314.16	277.58	36.58	8.589	
4,900.00	4,763.74	4,813.58	4,653.22	20.68	21.25	-68.16	320.52	665.31	327.87	289.14	38.73	8.466	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design:		NE NE SEC. 34 T12N R63W 6th P.M. - FOX CREEK 12-63 34-2-3 - ORIGINAL WELLBORE - PROPOSAL #1											Offset Site Error:		0.00 usft	
Survey Program:		0-OWSG (Rev2) MWD						Rule Assigned:				Offset Well Error:		0.00 usft		
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance			Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		Separation Factor			
5,000.00	4,841.45	4,908.84	4,736.18	21.75	22.07	-72.34	342.87	706.44	342.32	301.27	41.04	8.341				
5,100.00	4,916.92	5,003.33	4,818.47	22.90	22.90	-76.59	365.03	747.25	357.97	314.48	43.48	8.233				
5,200.00	4,990.05	5,096.91	4,899.98	24.13	23.72	-80.87	386.98	787.66	375.28	329.29	46.00	8.159				
5,266.73	5,037.50	5,158.81	4,953.88	25.01	24.28	-83.72	401.50	814.39	387.99	340.30	47.69	8.135				
5,300.00	5,060.89	5,189.55	4,980.66	25.46	24.55	-85.24	408.71	827.66	394.73	346.20	48.53	8.133				
5,400.00	5,131.19	5,281.95	5,061.13	26.83	25.39	-89.53	430.38	867.56	416.67	365.69	50.99	8.172				
5,500.00	5,201.49	5,374.35	5,141.61	28.24	26.23	-93.42	452.06	907.47	440.84	387.51	53.33	8.266				
5,600.00	5,271.78	5,466.75	5,222.08	29.68	27.08	-96.93	473.73	947.37	466.90	411.32	55.58	8.400				
5,700.00	5,342.08	5,559.15	5,302.55	31.15	27.93	-100.08	495.41	987.27	494.54	436.80	57.74	8.565				
5,800.00	5,412.38	5,651.55	5,383.03	32.64	28.79	-102.91	517.08	1,027.17	523.52	463.70	59.82	8.751				
5,900.00	5,482.67	5,743.95	5,463.50	34.15	29.65	-105.46	538.75	1,067.07	553.62	491.78	61.84	8.952				
6,000.00	5,552.97	5,836.36	5,543.97	35.67	30.52	-107.76	560.43	1,106.97	584.68	520.87	63.81	9.163				
6,100.00	5,623.27	5,928.76	5,624.45	37.21	31.39	-109.83	582.10	1,146.87	616.54	550.80	65.74	9.379				
6,200.00	5,693.56	6,021.16	5,704.92	38.77	32.26	-111.71	603.77	1,186.77	649.09	581.46	67.63	9.597				
6,300.00	5,763.86	6,113.56	5,785.40	40.33	33.14	-113.42	625.45	1,226.68	682.23	612.73	69.50	9.816				
6,400.00	5,834.16	6,205.96	5,865.87	41.91	34.02	-114.97	647.12	1,266.58	715.88	644.53	71.35	10.033				
6,500.00	5,904.45	6,298.36	5,946.34	43.49	34.90	-116.38	668.80	1,306.48	749.97	676.79	73.18	10.248				
6,600.00	5,974.75	6,390.76	6,026.82	45.09	35.79	-117.68	690.47	1,346.38	784.44	709.44	75.00	10.459				
6,700.00	6,045.05	6,483.16	6,107.29	46.69	36.68	-118.87	712.14	1,386.28	819.25	742.44	76.81	10.666				
6,800.00	6,115.34	6,575.56	6,187.76	48.30	37.57	-119.96	733.82	1,426.18	854.35	775.74	78.61	10.868				
6,900.00	6,185.64	6,667.96	6,268.24	49.91	38.46	-120.98	755.49	1,466.08	889.71	809.30	80.41	11.065				
7,000.00	6,255.94	6,760.36	6,348.71	51.53	39.36	-121.91	777.16	1,505.99	925.30	843.10	82.20	11.257				
7,100.00	6,326.23	6,852.76	6,429.18	53.15	40.25	-122.78	798.84	1,545.89	961.09	877.10	83.99	11.443				
7,200.00	6,396.53	6,945.16	6,509.66	54.78	41.15	-123.58	820.51	1,585.79	997.06	911.29	85.77	11.624				
7,300.00	6,466.83	7,037.56	6,590.16	56.41	42.04	-124.35	842.18	1,625.68	1,032.95	945.58	87.54	11.800				
7,400.00	6,537.12	7,129.96	6,670.66	58.05	42.93	-125.08	863.85	1,665.56	1,068.84	979.87	89.29	11.971				
7,500.00	6,607.42	7,222.36	6,750.16	59.69	43.82	-125.77	885.52	1,705.44	1,104.71	1,010.74	91.04	12.137				
7,600.00	6,677.72	7,314.76	6,829.66	61.33	44.71	-126.43	907.19	1,745.32	1,140.58	1,046.61	92.79	12.300				
7,700.00	6,748.01	7,407.16	6,909.16	62.98	45.60	-127.06	928.86	1,785.19	1,176.45	1,082.48	94.54	12.459				
7,766.05	6,794.45	7,453.60	6,949.60	64.07	46.48	-127.47	940.53	1,825.06	1,212.32	1,118.35	96.29	12.614				
7,800.00	6,818.31	7,477.00	6,973.00	64.63	46.49	-127.41	952.20	1,864.93	1,248.19	1,154.22	98.04	12.766				
7,900.00	6,888.61	7,564.40	7,043.10	66.28	46.49	-127.23	973.87	1,904.80	1,284.06	1,189.09	100.00	12.914				
8,000.00	6,958.90	7,651.50	7,113.20	67.93	46.49	-127.05	995.54	1,944.67	1,319.93	1,224.96	102.00	13.058				
8,078.15	7,013.84	7,738.60	7,183.10	69.23	46.50	-127.91	1,016.28	1,984.54	1,355.80	1,260.83	104.00	13.200				
8,100.00	7,029.19	7,762.00	7,207.00	69.59	46.50	-127.87	1,028.02	2,000.40	1,367.64	1,272.67	104.00	13.242				
8,150.00	7,064.14	7,807.50	7,242.50	70.41	46.51	-127.59	1,040.76	2,021.72	1,379.76	1,284.79	104.00	13.284				
8,200.00	7,098.63	7,853.00	7,278.00	71.21	46.52	-127.99	1,053.00	2,041.62	1,391.88	1,296.91	104.00	13.326				
8,250.00	7,132.41	7,898.50	7,313.50	71.98	46.54	-128.21	1,065.24	2,061.94	1,403.99	1,309.02	104.00	13.368				
8,300.00	7,165.21	7,943.00	7,349.00	72.72	46.57	-128.45	1,077.48	2,082.11	1,416.10	1,321.13	104.00	13.410				
8,350.00	7,196.78	7,988.50	7,384.50	73.42	46.61	-128.66	1,089.72	2,102.32	1,428.21	1,333.24	104.00	13.452				
8,400.00	7,226.88	8,033.00	7,420.00	74.08	46.65	-128.59	1,101.96	2,122.56	1,440.32	1,345.35	104.00	13.494				
8,450.00	7,255.29	8,078.50	7,455.50	74.68	46.71	-127.79	1,114.20	2,142.83	1,452.43	1,357.46	104.00	13.536				
8,500.00	7,281.79	8,124.00	7,491.00	75.22	46.77	-116.56	1,126.44	2,163.14	1,464.54	1,369.57	104.00	13.578				
8,550.00	7,306.18	8,169.50	7,526.50	75.72	46.85	-110.96	1,138.68	2,183.48	1,476.65	1,381.68	104.00	13.620				
8,600.00	7,328.26	8,215.00	7,562.00	76.15	46.94	-106.04	1,150.92	2,203.84	1,488.76	1,393.79	104.00	13.662				
8,650.00	7,347.88	8,260.50	7,597.50	76.53	47.00	-102.11	1,163.16	2,223.96	1,500.87	1,405.90	104.00	13.704				
8,700.00	7,364.89	8,306.00	7,633.00	76.86	47.03	-98.99	1,175.40	2,244.81	1,512.98	1,418.01	104.00	13.746				
8,750.00	7,379.14	8,351.50	7,668.50	77.13	47.10	-95.99	1,187.64	2,265.69	1,525.09	1,430.12	104.00	13.788				
8,800.00	7,390.55	8,397.00	7,704.00	77.35	47.14	-93.74	1,199.88	2,286.56	1,537.20	1,442.23	104.00	13.830				
8,850.00	7,399.01	8,442.50	7,739.50	77.53	47.19	-91.75	1,212.12	2,307.44	1,549.31	1,454.34	104.00	13.872				
8,900.00	7,404.46	8,488.00	7,775.00	77.67	47.23	-90.33	1,224.36	2,328.37	1,561.42	1,466.45	104.00	13.914				
8,950.00	7,406.87	8,533.50	7,810.50	77.77	47.27	-89.23	1,236.60	2,349.35	1,573.53	1,478.56	104.00	13.956				

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - FOX CREEK 12-63 34-2-3 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
8,964.31	7,407.00	8,116.72	7,385.57	77.79	47.28	-89.01	495.30	2,014.87	1,245.15	1,185.37	59.78	20.828	
9,000.00	7,407.00	8,100.00	7,381.08	77.84	47.31	-88.80	511.27	2,012.80	1,250.11	1,190.46	59.65	20.958	
9,100.00	7,407.00	8,050.00	7,365.18	77.99	47.38	-88.07	558.08	2,005.39	1,266.96	1,207.58	59.38	21.336	
9,200.00	7,407.00	8,000.00	7,345.68	78.16	47.42	-87.20	603.17	1,996.20	1,288.33	1,229.08	59.24	21.747	
9,300.00	7,407.00	7,973.19	7,333.80	78.34	47.43	-86.67	626.53	1,990.55	1,313.94	1,254.29	59.65	22.027	
9,400.00	7,407.00	7,950.00	7,322.74	78.54	47.44	-86.19	646.22	1,985.28	1,344.38	1,283.87	60.51	22.216	
9,500.00	7,407.00	7,900.00	7,296.54	78.75	47.44	-85.06	686.89	1,972.73	1,379.03	1,318.11	60.92	22.638	
9,600.00	7,407.00	7,872.63	7,280.88	78.98	47.42	-84.39	708.04	1,965.20	1,418.22	1,356.12	62.11	22.835	
9,700.00	7,407.00	7,850.00	7,267.26	79.23	47.40	-83.83	724.88	1,958.64	1,461.73	1,398.11	63.62	22.975	
9,800.00	7,407.00	7,818.86	7,247.57	79.49	47.36	-83.02	747.04	1,949.14	1,509.28	1,444.34	64.94	23.240	
9,900.00	7,407.00	7,800.00	7,235.13	79.78	47.34	-82.51	759.88	1,943.12	1,560.75	1,493.99	66.76	23.378	
10,000.00	7,407.00	7,773.90	7,217.32	80.08	47.29	-81.80	776.88	1,934.49	1,615.81	1,547.49	68.32	23.650	
10,100.00	7,407.00	7,750.00	7,200.41	80.41	47.24	-81.13	791.65	1,926.28	1,674.30	1,604.36	69.93	23.941	
10,200.00	7,407.00	7,750.00	7,200.41	80.75	47.24	-81.13	791.65	1,926.28	1,736.07	1,663.67	72.40	23.979	
10,300.00	7,407.00	7,719.61	7,178.14	81.12	47.16	-80.27	809.27	1,915.46	1,800.38	1,726.74	73.64	24.448	
10,400.00	7,407.00	7,700.00	7,163.34	81.52	47.11	-79.71	819.93	1,908.26	1,867.55	1,792.35	75.20	24.833	
10,500.00	7,407.00	7,700.00	7,163.34	81.94	47.11	-79.71	819.93	1,908.26	1,937.21	1,859.84	77.37	25.040	
10,600.00	7,407.00	7,677.27	7,145.80	82.38	47.03	-79.06	831.57	1,899.72	2,008.92	1,930.31	78.61	25.554	
10,700.00	7,407.00	7,650.00	7,124.22	82.85	46.94	-78.27	844.51	1,889.19	2,082.99	2,003.37	79.62	26.160	
10,800.00	7,407.00	7,650.00	7,124.22	83.35	46.94	-78.27	844.51	1,889.19	2,158.47	2,077.03	81.44	26.505	
10,900.00	7,407.00	7,650.00	7,124.22	83.88	46.94	-78.27	844.51	1,889.19	2,235.87	2,152.75	83.12	26.898	
11,000.00	7,407.00	7,650.00	7,124.22	84.43	46.94	-78.27	844.51	1,889.19	2,315.01	2,230.31	84.69	27.334	
11,100.00	7,407.00	7,624.99	7,103.97	85.02	46.83	-77.54	855.36	1,879.30	2,395.09	2,309.67	85.41	28.041	
11,200.00	7,407.00	7,600.00	7,083.34	85.64	46.73	-76.82	865.20	1,869.22	2,476.98	2,390.90	86.07	28.777	
11,300.00	7,407.00	7,600.00	7,083.34	86.30	46.73	-76.82	865.20	1,869.22	2,559.58	2,472.21	87.37	29.296	
11,400.00	7,407.00	7,600.00	7,083.34	86.98	46.73	-76.82	865.20	1,869.22	2,643.38	2,554.81	88.57	29.845	
11,500.00	7,407.00	7,600.00	7,083.34	87.70	46.73	-76.82	865.20	1,869.22	2,728.27	2,638.58	89.69	30.419	
11,600.00	7,407.00	7,600.00	7,083.34	88.46	46.73	-76.82	865.20	1,869.22	2,814.16	2,723.43	90.73	31.017	
11,700.00	7,407.00	7,600.00	7,083.34	89.25	46.73	-76.82	865.20	1,869.22	2,900.95	2,809.25	91.70	31.636	
11,800.00	7,407.00	7,575.71	7,062.94	90.07	46.60	-76.11	873.81	1,859.23	2,987.99	2,895.97	92.02	32.471	
11,900.00	7,407.00	7,550.00	7,041.01	90.93	46.47	-75.38	881.86	1,848.49	3,076.47	2,984.19	92.28	33.338	
12,000.00	7,407.00	7,550.00	7,041.01	91.82	46.47	-75.38	881.86	1,848.49	3,165.02	3,071.93	93.10	33.998	
12,100.00	7,407.00	7,550.00	7,041.01	92.75	46.47	-75.38	881.86	1,848.49	3,254.24	3,160.38	93.86	34.672	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - FOX CREEK 12-63 34-23-1 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	-90.02	-0.01	-19.99	19.99				
100.00	100.00	100.00	100.00	0.14	0.14	-90.02	-0.01	-19.99	19.99	19.70	0.29	69.711	
200.00	200.00	200.00	200.00	0.50	0.50	-90.02	-0.01	-19.99	19.99	18.99	1.00	19.917	
300.00	300.00	300.00	300.00	0.86	0.86	-90.02	-0.01	-19.99	19.99	18.27	1.72	11.619	
400.00	400.00	400.00	400.00	1.22	1.22	-90.02	-0.01	-19.99	19.99	17.55	2.44	8.201	
500.00	500.00	500.00	500.00	1.58	1.58	-90.02	-0.01	-19.99	19.99	16.84	3.15	6.337	
600.00	600.00	600.00	600.00	1.94	1.94	-90.02	-0.01	-19.99	19.99	16.12	3.87	5.164	
700.00	700.00	700.00	700.00	2.29	2.29	-90.02	-0.01	-19.99	19.99	15.40	4.59	4.357	
800.00	800.00	800.00	800.00	2.65	2.65	-90.02	-0.01	-19.99	19.99	14.69	5.31	3.768	
900.00	900.00	900.00	900.00	3.01	3.01	-90.02	-0.01	-19.99	19.99	13.97	6.02	3.320	
1,000.00	1,000.00	1,000.00	1,000.00	3.37	3.37	-90.02	-0.01	-19.99	19.99	13.25	6.74	2.966	
1,100.00	1,100.00	1,100.00	1,100.00	3.73	3.73	-90.02	-0.01	-19.99	19.99	12.54	7.46	2.681	
1,200.00	1,200.00	1,200.00	1,200.00	4.09	4.09	-90.02	-0.01	-19.99	19.99	11.82	8.17	2.446	
1,300.00	1,300.00	1,300.00	1,300.00	4.45	4.45	-90.02	-0.01	-19.99	19.99	11.10	8.89	2.249	
1,400.00	1,400.00	1,400.00	1,400.00	4.80	4.80	-90.02	-0.01	-19.99	19.99	10.38	9.61	2.081	
1,500.00	1,500.00	1,500.00	1,500.00	5.16	5.16	-90.02	-0.01	-19.99	19.99	9.67	10.32	1.936	
1,600.00	1,600.00	1,600.00	1,600.00	5.52	5.52	-90.02	-0.01	-19.99	19.99	8.95	11.04	1.811	
1,700.00	1,700.00	1,700.00	1,700.00	5.88	5.88	-90.02	-0.01	-19.99	19.99	8.23	11.76	1.700	
1,800.00	1,800.00	1,800.00	1,800.00	6.24	6.24	-90.02	-0.01	-19.99	19.99	7.52	12.47	1.603	
1,900.00	1,900.00	1,900.00	1,900.00	6.60	6.60	-90.02	-0.01	-19.99	19.99	6.80	13.19	1.515	
2,000.00	2,000.00	2,000.00	2,000.00	6.95	6.95	-90.02	-0.01	-19.99	19.99	6.08	13.91	1.437 Level 3	
2,100.00	2,100.00	2,100.00	2,100.00	7.31	7.31	-90.02	-0.01	-19.99	19.99	5.37	14.63	1.367 Level 3	
2,200.00	2,200.00	2,200.00	2,200.00	7.67	7.67	-90.02	-0.01	-19.99	19.99	4.65	15.34	1.303 Level 3	
2,300.00	2,300.00	2,300.00	2,300.00	8.03	8.03	-90.02	-0.01	-19.99	19.99	3.93	16.06	1.245 Level 3	
2,400.00	2,400.00	2,400.00	2,400.00	8.39	8.39	-90.02	-0.01	-19.99	19.99	3.22	16.78	1.192 Level 3	
2,500.00	2,500.00	2,500.00	2,500.00	8.75	8.75	-90.02	-0.01	-19.99	19.99	2.50	17.49	1.143 Level 3	
2,600.00	2,600.00	2,600.00	2,600.00	9.11	9.11	-90.02	-0.01	-19.99	19.99	1.78	18.21	1.098 Level 3	
2,700.00	2,700.00	2,700.00	2,700.00	9.46	9.46	-90.02	-0.01	-19.99	19.99	1.06	18.93	1.056 Level 3	
2,800.00	2,800.00	2,800.00	2,800.00	9.82	9.82	-90.02	-0.01	-19.99	19.99	0.35	19.64	1.018 Level 3	
2,900.00	2,900.00	2,900.00	2,900.00	10.18	10.18	-90.02	-0.01	-19.99	19.99	-0.37	20.36	0.982 Level 3	
3,000.00	3,000.00	3,000.00	3,000.00	10.54	10.54	-90.02	-0.01	-19.99	19.99	-1.09	21.08	0.948 Level 3, CC, ES, SF	
3,100.00	3,099.98	3,099.98	3,099.98	10.89	10.90	-178.51	-0.01	-19.99	21.74	-0.05	21.79	0.998 Level 3	
3,200.00	3,199.84	3,199.84	3,199.84	11.23	11.26	-178.80	-0.01	-19.99	26.97	4.48	22.49	1.199 Level 3	
3,300.00	3,299.45	3,300.66	3,300.64	11.58	11.61	-178.99	0.07	-18.23	33.94	10.77	23.17	1.465 Level 3	
3,400.00	3,398.70	3,401.74	3,401.58	11.93	11.96	-179.03	0.32	-12.90	40.87	17.05	23.82	1.716	
3,500.00	3,497.47	3,503.07	3,502.51	12.29	12.31	-178.98	0.74	-3.99	47.77	23.32	24.45	1.954	
3,600.00	3,595.62	3,604.65	3,603.31	12.66	12.67	-178.87	1.32	8.51	54.61	29.56	25.05	2.180	
3,700.00	3,693.06	3,706.48	3,703.85	13.05	13.03	-178.72	2.07	24.62	61.40	35.78	25.63	2.396	
3,800.00	3,789.64	3,808.56	3,803.99	13.45	13.41	-178.55	2.99	44.33	68.13	41.95	26.18	2.602	
3,900.00	3,885.27	3,910.89	3,903.61	13.87	13.80	-178.36	4.08	67.66	74.78	48.07	26.71	2.800	
4,000.00	3,979.82	4,011.95	4,001.25	14.33	14.21	-178.17	5.29	93.73	81.82	54.51	27.31	2.996	
4,100.00	4,073.17	4,111.43	4,097.25	14.81	14.62	-178.07	6.51	119.79	91.93	63.92	28.01	3.282	
4,200.00	4,165.21	4,210.50	4,192.85	15.34	15.04	-178.05	7.72	145.75	105.51	76.80	28.71	3.675	
4,300.00	4,255.84	4,309.04	4,287.94	15.92	15.47	-178.09	8.92	171.57	122.53	93.11	29.42	4.165	
4,400.00	4,344.94	4,406.92	4,382.39	16.54	15.91	-178.16	10.12	197.21	142.98	112.85	30.12	4.746	
4,500.00	4,432.39	4,504.03	4,476.10	17.23	16.35	-178.25	11.30	222.65	166.83	136.00	30.83	5.411	
4,600.00	4,518.11	4,600.25	4,568.95	17.98	16.79	-178.34	12.48	247.86	194.05	162.51	31.54	6.152	
4,700.00	4,601.97	4,695.46	4,660.83	18.81	17.24	-178.43	13.64	272.80	224.62	192.36	32.25	6.964	
4,800.00	4,683.88	4,789.54	4,751.62	19.71	17.69	-178.51	14.79	297.45	258.48	225.52	32.96	7.841	
4,900.00	4,763.74	4,882.38	4,841.21	20.68	18.14	-178.59	15.93	321.78	295.62	261.94	33.67	8.779	
5,000.00	4,841.45	4,973.88	4,929.50	21.75	18.59	-178.66	17.04	345.75	335.96	301.58	34.38	9.772	
5,100.00	4,916.92	5,063.90	5,016.38	22.90	19.04	-178.72	18.14	369.33	379.48	344.39	35.09	10.816	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - FOX CREEK 12-63 34-23-1 - ORIGINAL WELLBORE - PROPOSAL #1													Offset Site Error: 0.00 usft
Survey Program: 0-OWSG (Rev2) MWD							Rule Assigned:						Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,200.00	4,990.05	5,152.36	5,101.74	24.13	19.48	-178.78	19.22	392.51	426.11	390.32	35.79	11.907	
5,266.73	5,037.50	5,210.45	5,157.80	25.01	19.77	-178.81	19.93	407.73	458.93	422.68	36.25	12.660	
5,300.00	5,060.89	5,239.23	5,185.57	25.46	19.92	-178.83	20.29	415.27	475.63	439.15	36.48	13.037	
5,400.00	5,131.19	5,325.72	5,269.02	26.83	20.35	-178.89	21.34	437.92	525.83	488.65	37.18	14.143	
5,500.00	5,201.49	5,412.20	5,352.48	28.24	20.80	-178.94	22.40	460.58	576.03	538.14	37.89	15.204	
5,600.00	5,271.78	5,498.69	5,435.94	29.68	21.24	-178.98	23.46	483.24	626.23	587.63	38.60	16.223	
5,700.00	5,342.08	5,585.18	5,519.40	31.15	21.69	-179.02	24.51	505.90	676.43	637.10	39.33	17.201	
5,800.00	5,412.38	5,671.66	5,602.86	32.64	22.14	-179.05	25.57	528.56	726.63	686.57	40.06	18.140	
5,900.00	5,482.67	5,758.15	5,686.32	34.15	22.60	-179.08	26.62	551.22	776.83	736.04	40.79	19.043	
6,000.00	5,552.97	5,844.64	5,769.78	35.67	23.05	-179.10	27.68	573.88	827.03	785.49	41.54	19.910	
6,100.00	5,623.27	5,931.12	5,853.24	37.21	23.51	-179.12	28.74	596.54	877.23	834.94	42.29	20.744	
6,200.00	5,693.56	6,017.61	5,936.69	38.77	23.97	-179.14	29.79	619.19	927.43	884.39	43.04	21.546	
6,300.00	5,763.86	6,104.09	6,020.15	40.33	24.44	-179.16	30.85	641.85	977.63	933.82	43.81	22.317	
6,400.00	5,834.16	6,190.58	6,103.61	41.91	24.90	-179.17	31.91	664.51	1,027.83	983.26	44.57	23.060	
6,500.00	5,904.45	6,277.07	6,187.07	43.49	25.37	-179.18	32.96	687.17	1,078.03	1,032.68	45.34	23.774	
6,600.00	5,974.75	6,363.55	6,270.53	45.09	25.84	-179.20	34.02	709.83	1,128.23	1,082.11	46.12	24.462	
6,700.00	6,045.05	6,450.04	6,353.99	46.69	26.31	-179.21	35.08	732.49	1,178.43	1,131.53	46.90	25.125	
6,800.00	6,115.34	6,536.53	6,437.45	48.30	26.78	-179.22	36.13	755.15	1,228.63	1,180.94	47.69	25.764	
6,900.00	6,185.64	6,623.01	6,520.91	49.91	27.25	-179.23	37.19	777.80	1,278.83	1,230.35	48.48	26.380	
7,000.00	6,255.94	6,709.50	6,604.36	51.53	27.72	-179.24	38.25	800.46	1,329.03	1,279.76	49.27	26.974	
7,100.00	6,326.23	6,795.99	6,687.82	53.15	28.20	-179.24	39.30	823.12	1,379.23	1,329.16	50.07	27.547	
7,200.00	6,396.53	6,882.47	6,771.28	54.78	28.68	-179.25	40.36	845.78	1,429.43	1,378.56	50.87	28.100	
7,300.00	6,466.83	6,968.96	6,854.74	56.41	29.15	-179.26	41.42	868.44	1,479.63	1,427.96	51.67	28.634	
7,400.00	6,537.12	7,058.61	6,940.90	58.05	29.65	-179.00	48.56	891.83	1,529.75	1,477.25	52.50	29.139	
7,500.00	6,607.42	7,144.92	7,021.87	59.69	30.11	-178.23	68.46	913.82	1,579.81	1,526.49	53.32	29.628	
7,600.00	6,677.72	7,224.29	7,093.01	61.33	30.51	-177.10	97.70	933.14	1,630.24	1,576.10	54.15	30.107	
7,700.00	6,748.01	7,294.90	7,152.49	62.98	30.85	-175.82	132.05	949.30	1,681.59	1,626.61	54.98	30.587	
7,800.00	6,818.31	7,356.34	7,200.60	64.63	31.13	-174.50	167.91	962.36	1,734.37	1,678.58	55.79	31.086	
7,900.00	6,888.61	7,409.13	7,238.77	66.28	31.36	-173.24	202.84	972.74	1,788.98	1,732.41	56.57	31.624	
8,000.00	6,958.90	7,450.00	7,266.10	67.93	31.53	-172.20	232.30	980.16	1,845.72	1,788.50	57.22	32.256	
8,078.15	7,013.84	7,484.91	7,287.79	69.23	31.67	-171.26	259.01	986.06	1,891.63	1,833.85	57.78	32.739	
8,100.00	7,029.19	7,500.00	7,296.67	69.59	31.73	-167.09	270.96	988.47	1,904.69	1,846.68	58.02	32.829	
8,150.00	7,064.14	7,512.21	7,303.63	70.41	31.78	-158.30	280.81	990.36	1,934.48	1,876.28	58.20	33.236	
8,200.00	7,098.63	7,532.07	7,314.52	71.21	31.86	-149.65	297.16	993.32	1,964.01	1,905.52	58.49	33.580	
8,250.00	7,132.41	7,550.00	7,323.87	71.98	31.93	-141.51	312.24	995.87	1,992.99	1,934.28	58.71	33.944	
8,300.00	7,165.21	7,573.64	7,335.50	72.72	32.02	-133.87	332.58	999.03	2,021.16	1,962.14	59.02	34.245	
8,350.00	7,196.78	7,600.00	7,347.50	73.42	32.13	-126.85	355.82	1,002.29	2,048.30	1,988.95	59.35	34.512	
8,400.00	7,226.88	7,617.31	7,354.81	74.08	32.20	-120.63	371.38	1,004.28	2,074.17	2,014.68	59.49	34.866	
8,450.00	7,255.29	7,650.00	7,367.37	74.68	32.33	-114.93	401.37	1,007.69	2,098.64	2,038.74	59.90	35.039	
8,500.00	7,281.79	7,662.72	7,371.80	75.22	32.37	-110.09	413.23	1,008.90	2,121.38	2,061.49	59.89	35.424	
8,550.00	7,306.18	7,685.98	7,379.25	75.72	32.46	-105.78	435.16	1,010.93	2,142.36	2,082.31	60.05	35.674	
8,600.00	7,328.26	7,700.00	7,383.33	76.15	32.52	-102.12	448.53	1,012.04	2,161.44	2,101.42	60.01	36.017	
8,650.00	7,347.88	7,733.40	7,391.76	76.53	32.65	-98.91	480.76	1,014.33	2,178.35	2,118.02	60.33	36.107	
8,700.00	7,364.89	7,750.00	7,395.27	76.86	32.72	-96.30	496.96	1,015.29	2,193.15	2,132.85	60.29	36.374	
8,750.00	7,379.14	7,781.78	7,400.71	77.13	32.85	-94.13	528.23	1,016.78	2,205.60	2,145.06	60.54	36.430	
8,800.00	7,390.55	7,800.00	7,403.08	77.35	32.92	-92.47	546.28	1,017.42	2,215.73	2,155.21	60.51	36.616	
8,850.00	7,399.01	7,830.81	7,405.82	77.53	33.05	-91.23	576.96	1,018.17	2,223.39	2,162.67	60.72	36.617	
8,900.00	7,404.46	7,855.47	7,406.86	77.67	33.16	-90.42	601.59	1,018.46	2,228.58	2,167.77	60.81	36.650	
8,950.00	7,406.87	7,892.35	7,407.00	77.77	33.32	-90.03	638.47	1,018.51	2,231.19	2,170.06	61.13	36.498	
8,964.31	7,407.00	7,906.66	7,407.00	77.79	33.38	-90.00	652.78	1,018.51	2,231.39	2,170.09	61.30	36.399	
9,000.00	7,407.00	7,942.34	7,407.00	77.84	33.55	-90.00	688.47	1,018.52	2,231.58	2,169.82	61.75	36.138	
9,100.00	7,407.00	8,042.34	7,407.00	77.99	34.09	-90.00	788.47	1,018.54	2,232.08	2,168.97	63.11	35.367	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - FOX CREEK 12-63 34-23-1 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		
9,200.00	7,407.00	8,142.34	7,407.00	78.16	34.72	-90.00	888.47	1,018.56	2,232.59	2,167.95	64.64	34.539	
9,300.00	7,407.00	8,242.34	7,407.00	78.34	35.43	-90.00	988.46	1,018.59	2,233.10	2,166.78	66.32	33.669	
9,400.00	7,407.00	8,342.34	7,407.00	78.54	36.22	-90.00	1,088.46	1,018.61	2,233.61	2,165.45	68.15	32.773	
9,500.00	7,407.00	8,442.34	7,407.00	78.75	37.09	-90.00	1,188.46	1,018.63	2,234.12	2,164.00	70.12	31.862	
9,600.00	7,407.00	8,542.34	7,407.00	78.98	38.03	-90.00	1,288.46	1,018.65	2,234.63	2,162.42	72.21	30.948	
9,700.00	7,407.00	8,642.34	7,407.00	79.23	39.04	-90.00	1,388.46	1,018.68	2,235.14	2,160.73	74.41	30.040	
9,800.00	7,407.00	8,742.33	7,407.00	79.49	40.11	-90.00	1,488.46	1,018.70	2,235.64	2,158.94	76.71	29.145	
9,900.00	7,407.00	8,842.33	7,407.00	79.78	41.23	-90.00	1,588.46	1,018.72	2,236.15	2,157.05	79.10	28.268	
10,000.00	7,407.00	8,942.33	7,407.00	80.08	42.41	-90.00	1,688.45	1,018.74	2,236.66	2,155.07	81.59	27.415	
10,100.00	7,407.00	9,042.33	7,407.00	80.41	43.63	-90.00	1,788.45	1,018.77	2,237.17	2,153.02	84.15	26.587	
10,200.00	7,407.00	9,142.33	7,407.00	80.75	44.89	-90.00	1,888.45	1,018.79	2,237.68	2,150.90	86.78	25.786	
10,300.00	7,407.00	9,242.33	7,407.00	81.12	46.18	-90.00	1,988.45	1,018.81	2,238.19	2,148.71	89.47	25.015	
10,400.00	7,407.00	9,342.33	7,407.00	81.52	47.52	-90.00	2,088.45	1,018.83	2,238.69	2,146.47	92.23	24.273	
10,500.00	7,407.00	9,442.33	7,407.00	81.94	48.88	-90.00	2,188.45	1,018.86	2,239.20	2,144.16	95.04	23.561	
10,600.00	7,407.00	9,542.32	7,407.00	82.38	50.27	-90.00	2,288.45	1,018.88	2,239.71	2,141.81	97.90	22.878	
10,700.00	7,407.00	9,642.32	7,407.00	82.85	51.69	-90.00	2,388.45	1,018.90	2,240.22	2,139.42	100.80	22.224	
10,800.00	7,407.00	9,742.32	7,407.00	83.35	53.13	-90.00	2,488.44	1,018.92	2,240.73	2,136.98	103.75	21.598	
10,900.00	7,407.00	9,842.32	7,407.00	83.88	54.59	-90.00	2,588.44	1,018.95	2,241.24	2,134.51	106.73	20.999	
11,000.00	7,407.00	9,942.32	7,407.00	84.43	56.07	-90.00	2,688.44	1,018.97	2,241.75	2,132.00	109.75	20.426	
11,100.00	7,407.00	10,042.32	7,407.00	85.02	57.57	-90.00	2,788.44	1,018.99	2,242.25	2,129.46	112.80	19.878	
11,200.00	7,407.00	10,142.32	7,407.00	85.64	59.09	-90.00	2,888.44	1,019.01	2,242.76	2,126.88	115.88	19.354	
11,300.00	7,407.00	10,242.32	7,407.00	86.30	60.62	-90.00	2,988.44	1,019.04	2,243.27	2,124.28	118.99	18.853	
11,400.00	7,407.00	10,342.31	7,407.00	86.98	62.16	-90.00	3,088.44	1,019.06	2,243.78	2,121.66	122.12	18.374	
11,500.00	7,407.00	10,442.31	7,407.00	87.70	63.72	-90.00	3,188.44	1,019.08	2,244.29	2,119.01	125.28	17.915	
11,600.00	7,407.00	10,542.31	7,407.00	88.46	65.29	-90.00	3,288.43	1,019.10	2,244.80	2,116.34	128.45	17.476	
11,700.00	7,407.00	10,642.31	7,407.00	89.25	66.87	-90.00	3,388.43	1,019.13	2,245.30	2,113.65	131.65	17.055	
11,800.00	7,407.00	10,742.31	7,407.00	90.07	68.46	-90.00	3,488.43	1,019.15	2,245.81	2,110.95	134.87	16.652	
11,900.00	7,407.00	10,842.31	7,407.00	90.93	70.07	-90.00	3,588.43	1,019.17	2,246.32	2,108.22	138.10	16.266	
12,000.00	7,407.00	10,942.31	7,407.00	91.82	71.68	-90.00	3,688.43	1,019.20	2,246.83	2,105.48	141.35	15.895	
12,100.00	7,407.00	11,042.30	7,407.00	92.75	73.29	-90.00	3,788.43	1,019.22	2,247.34	2,102.72	144.62	15.540	
12,200.00	7,407.00	11,142.30	7,407.00	93.71	74.92	-90.00	3,888.43	1,019.24	2,247.85	2,099.95	147.89	15.199	
12,300.00	7,407.00	11,242.30	7,407.00	94.70	76.55	-90.00	3,988.43	1,019.26	2,248.36	2,097.17	151.19	14.871	
12,400.00	7,407.00	11,342.30	7,407.00	95.73	78.19	-90.00	4,088.42	1,019.29	2,248.86	2,094.37	154.49	14.557	
12,500.00	7,407.00	11,442.30	7,407.00	96.78	79.84	-90.00	4,188.42	1,019.31	2,249.37	2,091.57	157.81	14.254	
12,600.00	7,407.00	11,542.30	7,407.00	97.87	81.49	-90.00	4,288.42	1,019.33	2,249.88	2,088.75	161.13	13.963	
12,700.00	7,407.00	11,642.30	7,407.00	98.99	83.15	-90.00	4,388.42	1,019.35	2,250.39	2,085.92	164.47	13.683	
12,800.00	7,407.00	11,742.30	7,407.00	100.14	84.82	-90.00	4,488.42	1,019.38	2,250.90	2,083.08	167.82	13.413	
12,900.00	7,407.00	11,842.29	7,407.00	101.31	86.48	-90.00	4,588.42	1,019.40	2,251.41	2,080.23	171.17	13.153	
13,000.00	7,407.00	11,942.29	7,407.00	102.52	88.16	-90.00	4,688.42	1,019.42	2,251.92	2,077.38	174.54	12.902	
13,100.00	7,407.00	12,042.29	7,407.00	103.74	89.83	-90.00	4,788.41	1,019.44	2,252.42	2,074.51	177.91	12.660	
13,200.00	7,407.00	12,142.29	7,407.00	105.00	91.52	-90.00	4,888.41	1,019.47	2,252.93	2,071.64	181.29	12.427	
13,300.00	7,407.00	12,242.29	7,407.00	106.27	93.20	-90.00	4,988.41	1,019.49	2,253.44	2,068.76	184.68	12.202	
13,400.00	7,407.00	12,342.29	7,407.00	107.57	94.89	-90.00	5,088.41	1,019.51	2,253.95	2,065.88	188.07	11.985	
13,500.00	7,407.00	12,442.29	7,407.00	108.89	96.58	-90.00	5,188.41	1,019.53	2,254.46	2,062.99	191.47	11.774	
13,600.00	7,407.00	12,542.29	7,407.00	110.23	98.28	-90.00	5,288.41	1,019.56	2,254.97	2,060.09	194.88	11.571	
13,700.00	7,407.00	12,642.28	7,407.00	111.59	99.98	-90.00	5,388.41	1,019.58	2,255.47	2,057.19	198.29	11.375	
13,800.00	7,407.00	12,742.28	7,407.00	112.97	101.68	-90.00	5,488.41	1,019.60	2,255.98	2,054.28	201.71	11.185	
13,900.00	7,407.00	12,842.28	7,407.00	114.36	103.39	-90.00	5,588.40	1,019.62	2,256.49	2,051.36	205.13	11.000	
14,000.00	7,407.00	12,942.28	7,407.00	115.77	105.09	-90.00	5,688.40	1,019.65	2,257.00	2,048.44	208.56	10.822	
14,100.00	7,407.00	13,042.28	7,407.00	117.20	106.80	-90.00	5,788.40	1,019.67	2,257.51	2,045.52	211.99	10.649	
14,200.00	7,407.00	13,142.28	7,407.00	118.64	108.52	-90.00	5,888.40	1,019.69	2,258.02	2,042.59	215.42	10.482	
14,300.00	7,407.00	13,242.28	7,407.00	120.10	110.23	-90.00	5,988.40	1,019.71	2,258.53	2,039.66	218.87	10.319	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - FOX CREEK 12-63 34-23-1 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
14,400.00	7,407.00	13,342.28	7,407.00	121.56	111.95	-90.00	6,088.40	1,019.74	2,259.03	2,036.72	222.31	10.162	
14,500.00	7,407.00	13,442.27	7,407.00	123.05	113.67	-90.00	6,188.40	1,019.76	2,259.54	2,033.78	225.76	10.009	
14,600.00	7,407.00	13,542.27	7,407.00	124.54	115.39	-90.00	6,288.40	1,019.78	2,260.05	2,030.84	229.21	9.860	
14,700.00	7,407.00	13,642.27	7,407.00	126.04	117.11	-90.00	6,388.39	1,019.80	2,260.56	2,027.89	232.67	9.716	
14,800.00	7,407.00	13,742.27	7,407.00	127.56	118.84	-90.00	6,488.39	1,019.83	2,261.07	2,024.94	236.13	9.576	
14,900.00	7,407.00	13,842.27	7,407.00	129.08	120.57	-90.00	6,588.39	1,019.85	2,261.58	2,021.99	239.59	9.439	
15,000.00	7,407.00	13,942.27	7,407.00	130.62	122.30	-90.00	6,688.39	1,019.87	2,262.08	2,019.03	243.06	9.307	
15,100.00	7,407.00	14,042.27	7,407.00	132.16	124.03	-90.00	6,788.39	1,019.89	2,262.59	2,016.07	246.52	9.178	
15,200.00	7,407.00	14,142.26	7,407.00	133.71	125.76	-90.00	6,888.39	1,019.92	2,263.10	2,013.11	250.00	9.053	
15,300.00	7,407.00	14,242.26	7,407.00	135.28	127.49	-90.00	6,988.39	1,019.94	2,263.61	2,010.14	253.47	8.930	
15,400.00	7,407.00	14,342.26	7,407.00	136.84	129.23	-90.00	7,088.39	1,019.96	2,264.12	2,007.17	256.95	8.812	
15,500.00	7,407.00	14,442.26	7,407.00	138.42	130.96	-90.00	7,188.38	1,019.98	2,264.63	2,004.20	260.43	8.696	
15,600.00	7,407.00	14,542.26	7,407.00	140.00	132.70	-90.00	7,288.38	1,020.01	2,265.14	2,001.23	263.91	8.583	
15,700.00	7,407.00	14,642.26	7,407.00	141.59	134.44	-90.00	7,388.38	1,020.03	2,265.64	1,998.25	267.39	8.473	
15,800.00	7,407.00	14,742.26	7,407.00	143.19	136.18	-90.00	7,488.38	1,020.05	2,266.15	1,995.27	270.88	8.366	
15,900.00	7,407.00	14,842.26	7,407.00	144.79	137.92	-90.00	7,588.38	1,020.07	2,266.66	1,992.29	274.37	8.261	
16,000.00	7,407.00	14,942.25	7,407.00	146.40	139.66	-90.00	7,688.38	1,020.10	2,267.17	1,989.31	277.86	8.159	
16,100.00	7,407.00	15,042.25	7,407.00	148.02	141.41	-90.00	7,788.38	1,020.12	2,267.68	1,986.33	281.35	8.060	
16,200.00	7,407.00	15,142.25	7,407.00	149.63	143.15	-90.00	7,888.37	1,020.14	2,268.19	1,983.34	284.84	7.963	
16,300.00	7,407.00	15,242.25	7,407.00	151.26	144.90	-90.00	7,988.37	1,020.16	2,268.70	1,980.35	288.34	7.868	
16,400.00	7,407.00	15,342.25	7,407.00	152.89	146.64	-90.00	8,088.37	1,020.19	2,269.20	1,977.36	291.84	7.776	
16,500.00	7,407.00	15,442.25	7,407.00	154.52	148.39	-90.00	8,188.37	1,020.21	2,269.71	1,974.37	295.34	7.685	
16,600.00	7,407.00	15,542.25	7,407.00	156.16	150.14	-90.00	8,288.37	1,020.23	2,270.22	1,971.38	298.84	7.597	
16,700.00	7,407.00	15,642.25	7,407.00	157.80	151.89	-90.00	8,388.37	1,020.26	2,270.73	1,968.39	302.34	7.510	
16,800.00	7,407.00	15,742.24	7,407.00	159.45	153.64	-90.00	8,488.37	1,020.28	2,271.24	1,965.39	305.85	7.426	
16,900.00	7,407.00	15,842.24	7,407.00	161.10	155.39	-90.00	8,588.37	1,020.30	2,271.75	1,962.39	309.35	7.344	
17,000.00	7,407.00	15,942.24	7,407.00	162.75	157.14	-90.00	8,688.36	1,020.32	2,272.25	1,959.39	312.86	7.263	
17,100.00	7,407.00	16,042.24	7,407.00	164.41	158.89	-90.00	8,788.36	1,020.35	2,272.76	1,956.39	316.37	7.184	
17,200.00	7,407.00	16,142.24	7,407.00	166.07	160.65	-90.00	8,888.36	1,020.37	2,273.27	1,953.39	319.88	7.107	
17,300.00	7,407.00	16,242.24	7,407.00	167.74	162.40	-90.00	8,988.36	1,020.39	2,273.78	1,950.39	323.39	7.031	
17,400.00	7,407.00	16,342.24	7,407.00	169.41	164.16	-90.00	9,088.36	1,020.41	2,274.29	1,947.38	326.91	6.957	
17,500.00	7,407.00	16,442.24	7,407.00	171.08	165.91	-90.00	9,188.36	1,020.44	2,274.80	1,944.38	330.42	6.885	
17,600.00	7,407.00	16,542.23	7,407.00	172.75	167.67	-90.00	9,288.36	1,020.46	2,275.31	1,941.37	333.94	6.814	
17,700.00	7,407.00	16,642.23	7,407.00	174.43	169.42	-90.00	9,388.36	1,020.48	2,275.81	1,938.36	337.45	6.744	
17,800.00	7,407.00	16,742.23	7,407.00	176.11	171.18	-90.00	9,488.35	1,020.50	2,276.32	1,935.35	340.97	6.676	
17,900.00	7,407.00	16,842.23	7,407.00	177.79	172.94	-90.00	9,588.35	1,020.53	2,276.83	1,932.34	344.49	6.609	
18,000.00	7,407.00	16,942.23	7,407.00	179.47	174.70	-90.00	9,688.35	1,020.55	2,277.34	1,929.33	348.01	6.544	
18,100.00	7,407.00	17,042.23	7,407.00	181.16	176.46	-90.00	9,788.35	1,020.57	2,277.85	1,926.32	351.53	6.480	
18,200.00	7,407.00	17,142.23	7,407.00	182.85	178.21	-90.00	9,888.35	1,020.59	2,278.36	1,923.31	355.05	6.417	
18,300.00	7,407.00	17,242.22	7,407.00	184.54	179.97	-90.00	9,988.35	1,020.62	2,278.86	1,920.29	358.57	6.355	
18,400.00	7,407.00	17,342.22	7,407.00	186.23	181.73	-90.00	10,088.35	1,020.64	2,279.37	1,917.28	362.10	6.295	
18,500.00	7,407.00	17,442.22	7,407.00	187.93	183.50	-90.00	10,188.34	1,020.66	2,279.88	1,914.26	365.62	6.236	
18,600.00	7,407.00	17,542.22	7,407.00	189.63	185.26	-90.00	10,288.34	1,020.68	2,280.39	1,911.24	369.15	6.177	
18,700.00	7,407.00	17,642.22	7,407.00	191.33	187.02	-90.00	10,388.34	1,020.71	2,280.90	1,908.23	372.67	6.120	
18,800.00	7,407.00	17,742.22	7,407.00	193.03	188.78	-90.00	10,488.34	1,020.73	2,281.41	1,905.21	376.20	6.064	
18,900.00	7,407.00	17,842.22	7,407.00	194.73	190.54	-90.00	10,588.34	1,020.75	2,281.92	1,902.19	379.73	6.009	
19,000.00	7,407.00	17,942.22	7,407.00	196.44	192.31	-90.00	10,688.34	1,020.77	2,282.42	1,899.17	383.25	5.955	
19,017.90	7,407.00	17,960.11	7,407.00	196.74	192.62	-90.00	10,706.24	1,020.78	2,282.52	1,898.63	383.89	5.946	
19,100.00	7,407.00	18,042.35	7,407.00	198.14	194.07	-90.00	10,788.48	1,020.80	2,282.93	1,896.14	386.79	5.902	
19,117.88	7,407.00	18,060.11	7,407.00	198.45	194.39	-90.00	10,806.23	1,020.80	2,283.02	1,895.60	387.41	5.893	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 1-35H - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 1524-OWSG (Rev2) MWD							Rule Assigned:						Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	12.00	12.00	0.00	0.02	98.62	-271.71	1,792.58	1,813.05				
100.00	100.00	112.00	112.00	0.14	0.20	98.62	-271.71	1,792.58	1,813.05	1,812.71	0.34	5,311.159	
200.00	200.00	212.00	212.00	0.50	0.37	98.62	-271.71	1,792.58	1,813.05	1,812.18	0.88	2,068.269	
300.00	300.00	312.00	312.00	0.86	0.55	98.62	-271.71	1,792.58	1,813.05	1,811.64	1.41	1,284.176	
400.00	400.00	412.00	412.00	1.22	0.73	98.62	-271.71	1,792.58	1,813.05	1,811.11	1.95	931.165	
500.00	500.00	512.00	512.00	1.58	0.91	98.62	-271.71	1,792.58	1,813.05	1,810.57	2.48	730.387	
600.00	600.00	612.00	612.00	1.94	1.08	98.62	-271.71	1,792.58	1,813.05	1,810.04	3.02	600.835	
700.00	700.00	712.00	712.00	2.29	1.26	98.62	-271.71	1,792.58	1,813.05	1,809.50	3.55	510.318	
800.00	800.00	812.00	812.00	2.65	1.44	98.62	-271.71	1,792.58	1,813.05	1,808.96	4.09	443.503	
900.00	900.00	912.00	912.00	3.01	1.61	98.62	-271.71	1,792.58	1,813.05	1,808.43	4.62	392.158	
1,000.00	1,000.00	1,012.00	1,012.00	3.37	1.79	98.62	-271.71	1,792.58	1,813.05	1,807.89	5.16	351.469	
1,100.00	1,100.00	1,112.00	1,112.00	3.73	1.97	98.62	-271.71	1,792.58	1,813.05	1,807.36	5.69	318.429	
1,200.00	1,200.00	1,212.00	1,212.00	4.09	2.14	98.62	-271.71	1,792.58	1,813.05	1,806.82	6.23	291.067	
1,300.00	1,300.00	1,312.00	1,312.00	4.45	2.32	98.62	-271.71	1,792.58	1,813.05	1,806.29	6.76	268.036	
1,400.00	1,400.00	1,412.00	1,412.00	4.80	2.50	98.62	-271.71	1,792.58	1,813.05	1,805.75	7.30	248.382	
1,500.00	1,500.00	1,512.00	1,512.00	5.16	2.67	98.62	-271.71	1,792.58	1,813.05	1,805.22	7.83	231.413	
1,600.00	1,600.00	1,612.06	1,612.06	5.52	3.01	98.62	-271.69	1,792.58	1,813.05	1,804.53	8.53	212.661	
1,700.00	1,700.00	1,712.14	1,712.14	5.88	3.36	98.62	-271.62	1,792.59	1,813.05	1,803.81	9.24	196.264	
1,800.00	1,800.00	1,812.22	1,812.22	6.24	3.71	98.61	-271.48	1,792.60	1,813.04	1,803.09	9.95	182.213	
1,827.82	1,827.82	1,839.82	1,839.82	6.34	3.81	98.61	-271.43	1,792.60	1,813.03	1,802.89	10.15	178.687	
1,900.00	1,900.00	1,911.14	1,911.14	6.60	4.06	98.61	-271.34	1,792.63	1,813.05	1,802.40	10.65	170.177	
2,000.00	2,000.00	2,009.95	2,009.95	6.95	4.40	98.60	-271.26	1,792.72	1,813.13	1,801.77	11.36	159.649	
2,100.00	2,100.00	2,108.87	2,108.87	7.31	4.75	98.60	-271.25	1,792.87	1,813.28	1,801.22	12.06	150.349	
2,200.00	2,200.00	2,209.31	2,209.31	7.67	5.10	98.60	-271.24	1,793.04	1,813.44	1,800.67	12.77	142.011	
2,300.00	2,300.00	2,309.76	2,309.76	8.03	5.45	98.60	-271.18	1,793.18	1,813.57	1,800.10	13.48	134.549	
2,400.00	2,400.00	2,408.93	2,408.93	8.39	5.80	98.60	-271.07	1,793.32	1,813.69	1,799.51	14.18	127.860	
2,500.00	2,500.00	2,504.27	2,504.27	8.75	6.14	98.59	-270.88	1,793.64	1,813.99	1,799.11	14.88	121.896	
2,600.00	2,600.00	2,599.62	2,599.61	9.11	6.47	98.58	-270.59	1,794.21	1,814.55	1,798.97	15.58	116.483	
2,700.00	2,700.00	2,696.71	2,696.70	9.46	6.82	98.56	-270.20	1,795.06	1,815.35	1,799.06	16.28	111.504	
2,800.00	2,800.00	2,799.33	2,799.32	9.82	7.18	98.54	-269.76	1,795.93	1,816.12	1,799.11	17.00	106.807	
2,900.00	2,900.00	2,901.95	2,901.94	10.18	7.55	98.53	-269.31	1,796.64	1,816.74	1,799.02	17.73	102.486	
3,000.00	3,000.00	3,004.78	3,004.76	10.54	7.91	98.51	-268.86	1,797.21	1,817.22	1,798.77	18.45	98.487	
3,100.00	3,099.98	3,107.82	3,107.79	10.89	8.28	10.15	-268.39	1,797.61	1,815.82	1,796.65	19.17	94.728	
3,200.00	3,199.84	3,210.73	3,210.70	11.23	8.65	10.18	-267.88	1,797.83	1,810.81	1,790.93	19.88	91.099	
3,300.00	3,299.45	3,310.95	3,310.93	11.58	9.01	10.24	-267.29	1,797.95	1,802.26	1,781.68	20.58	87.585	
3,400.00	3,398.70	3,409.78	3,409.75	11.93	9.36	10.32	-266.44	1,798.12	1,790.31	1,769.03	21.27	84.163	
3,500.00	3,497.47	3,508.14	3,508.10	12.29	9.71	10.43	-265.30	1,798.36	1,774.98	1,753.01	21.96	80.811	
3,600.00	3,595.62	3,607.28	3,607.24	12.66	10.07	10.57	-263.93	1,798.62	1,756.26	1,733.60	22.66	77.507	
3,700.00	3,693.06	3,706.02	3,705.97	13.05	10.42	10.74	-262.49	1,798.83	1,734.12	1,710.77	23.35	74.260	
3,800.00	3,789.64	3,803.89	3,803.82	13.45	10.77	10.95	-260.99	1,798.97	1,708.59	1,684.55	24.04	71.071	
3,900.00	3,885.27	3,900.98	3,900.90	13.87	11.12	11.21	-259.47	1,799.04	1,679.69	1,654.96	24.73	67.933	
4,000.00	3,979.82	3,996.94	3,996.85	14.33	11.46	11.51	-257.97	1,799.03	1,647.46	1,622.05	25.41	64.845	
4,100.00	4,073.17	4,091.64	4,091.54	14.81	11.80	11.87	-256.49	1,798.94	1,611.94	1,585.86	26.08	61.802	
4,200.00	4,165.21	4,185.14	4,185.02	15.34	12.13	12.29	-255.01	1,798.76	1,573.20	1,546.44	26.75	58.802	
4,300.00	4,255.84	4,277.13	4,277.00	15.92	12.46	12.78	-253.52	1,798.51	1,531.27	1,503.85	27.42	55.843	
4,400.00	4,344.94	4,367.47	4,367.33	16.54	12.78	13.34	-252.01	1,798.18	1,486.23	1,458.14	28.08	52.920	
4,500.00	4,432.39	4,453.35	4,453.19	17.23	13.09	13.97	-250.58	1,797.85	1,438.21	1,409.47	28.74	50.047	
4,600.00	4,518.11	4,536.99	4,536.82	17.98	13.39	14.71	-249.27	1,797.63	1,387.42	1,358.04	29.39	47.212	
4,700.00	4,601.97	4,618.94	4,618.77	18.81	13.68	15.56	-248.04	1,797.52	1,333.95	1,303.91	30.04	44.409	
4,800.00	4,683.88	4,700.02	4,699.84	19.71	13.97	16.56	-246.90	1,797.49	1,277.86	1,247.17	30.69	41.634	
4,900.00	4,763.74	4,780.50	4,780.32	20.68	14.25	17.74	-245.82	1,797.44	1,219.15	1,187.79	31.36	38.879	
5,000.00	4,841.45	4,858.75	4,858.55	21.75	14.53	19.12	-244.81	1,797.35	1,157.90	1,125.87	32.03	36.150	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 1-35H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 1524-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,100.00	4,916.92	4,934.64	4,934.44	22.90	14.81	20.75	-243.87	1,797.20	1,094.24	1,061.52	32.72	33.444	
5,200.00	4,990.05	5,009.66	5,009.45	24.13	15.07	22.70	-242.98	1,796.97	1,028.30	994.87	33.43	30.758	
5,266.73	5,037.50	5,058.50	5,058.29	25.01	15.24	24.22	-242.44	1,796.71	983.06	949.13	33.93	28.975	
5,300.00	5,060.89	5,082.50	5,082.29	25.46	15.33	24.77	-242.18	1,796.55	960.29	926.10	34.18	28.092	
5,400.00	5,131.19	5,154.37	5,154.15	26.83	15.58	26.61	-241.45	1,795.95	892.05	857.06	35.00	25.490	
5,500.00	5,201.49	5,225.85	5,225.62	28.24	15.83	28.72	-240.77	1,795.15	824.25	788.35	35.90	22.961	
5,600.00	5,271.78	5,297.17	5,296.94	29.68	16.08	31.17	-240.10	1,794.18	757.04	720.13	36.92	20.507	
5,700.00	5,342.08	5,368.22	5,367.97	31.15	16.33	34.02	-239.35	1,793.05	690.63	652.54	38.09	18.130	
5,800.00	5,412.38	5,438.93	5,438.66	32.64	16.58	37.37	-238.50	1,791.77	625.33	585.84	39.49	15.836	
5,900.00	5,482.67	5,509.31	5,509.02	34.15	16.83	41.34	-237.57	1,790.33	561.58	520.40	41.18	13.637	
6,000.00	5,552.97	5,576.88	5,576.57	35.67	17.06	45.87	-236.68	1,788.90	500.19	456.90	43.29	11.555	
6,100.00	5,623.27	5,643.98	5,643.66	37.21	17.29	51.23	-236.03	1,787.62	442.45	396.52	45.93	9.633	
6,200.00	5,693.56	5,711.40	5,711.06	38.77	17.53	57.60	-235.61	1,786.49	389.95	340.73	49.22	7.922	
6,300.00	5,763.86	5,779.13	5,778.79	40.33	17.76	65.09	-235.43	1,785.51	344.97	291.80	53.17	6.488	
6,400.00	5,834.16	5,848.06	5,847.72	41.91	18.00	73.76	-235.42	1,784.68	310.65	253.20	57.45	5.408	
6,500.00	5,904.45	5,918.07	5,917.73	43.49	18.25	83.39	-235.31	1,783.99	290.36	229.12	61.24	4.741	
6,569.36	5,953.21	5,966.84	5,966.48	44.60	18.42	90.36	-235.14	1,783.61	286.11	223.09	63.02	4.540 CC, ES	
6,600.00	5,974.75	5,988.43	5,988.08	45.09	18.49	93.45	-235.04	1,783.47	286.94	223.45	63.49	4.519 SF	
6,700.00	6,045.05	6,059.13	6,058.77	46.69	18.74	103.35	-234.61	1,783.10	300.85	237.12	63.73	4.721	
6,800.00	6,115.34	6,129.80	6,129.45	48.30	18.99	112.52	-234.04	1,782.89	329.80	267.32	62.48	5.279	
6,900.00	6,185.64	6,200.31	6,199.95	49.91	19.24	120.63	-233.42	1,782.76	370.32	309.69	60.63	6.108	
7,000.00	6,255.94	6,270.95	6,270.59	51.53	19.50	127.62	-232.76	1,782.69	419.04	360.23	58.81	7.126	
7,100.00	6,326.23	6,341.72	6,341.35	53.15	19.75	133.55	-232.06	1,782.69	473.41	416.13	57.27	8.266	
7,200.00	6,396.53	6,412.21	6,411.84	54.78	20.00	138.50	-231.33	1,782.73	531.68	475.59	56.09	9.479	
7,300.00	6,466.83	6,482.27	6,481.90	56.41	20.25	142.64	-230.66	1,782.79	592.77	537.54	55.23	10.733	
7,400.00	6,537.12	6,552.32	6,551.95	58.05	20.50	146.13	-230.05	1,782.83	655.90	601.26	54.64	12.003	
7,500.00	6,607.42	6,622.35	6,621.97	59.69	20.75	149.09	-229.49	1,782.87	720.55	666.27	54.28	13.275	
7,600.00	6,677.72	6,692.39	6,692.01	61.33	21.00	151.62	-229.00	1,782.90	786.33	732.24	54.09	14.537	
7,700.00	6,748.01	6,762.47	6,762.09	62.98	21.26	153.80	-228.55	1,782.92	852.99	798.94	54.05	15.782	
7,800.00	6,818.31	6,832.61	6,832.23	64.63	21.51	155.69	-228.16	1,782.95	920.33	866.21	54.12	17.006	
7,900.00	6,888.61	6,903.40	6,929.93	66.28	21.84	157.70	-230.32	1,785.03	987.46	932.75	54.71	18.050	
8,000.00	6,958.90	7,028.80	7,026.44	67.93	22.16	158.33	-246.05	1,794.48	1,052.60	996.86	55.74	18.884	
8,078.15	7,013.84	7,123.55	7,113.28	69.23	22.45	157.49	-279.24	1,811.54	1,102.19	1,044.87	57.33	19.227	
8,100.00	7,029.19	7,147.89	7,134.03	69.59	22.53	160.79	-290.57	1,817.35	1,115.81	1,058.00	57.81	19.301	
8,150.00	7,064.14	7,180.95	7,161.18	70.41	22.63	168.69	-307.42	1,825.78	1,147.89	1,089.42	58.48	19.630	
8,200.00	7,098.63	7,203.00	7,178.65	71.21	22.70	176.92	-319.58	1,831.54	1,181.56	1,122.60	58.95	20.043	
8,250.00	7,132.41	7,217.91	7,190.14	71.98	22.74	-174.50	-328.23	1,835.44	1,216.75	1,157.45	59.30	20.517	
8,300.00	7,165.21	7,235.00	7,202.96	72.72	22.80	-166.01	-338.63	1,839.87	1,253.32	1,193.53	59.79	20.963	
8,350.00	7,196.78	7,246.03	7,211.02	73.42	22.84	-157.24	-345.59	1,842.77	1,290.91	1,230.76	60.16	21.459	
8,400.00	7,226.88	7,263.07	7,223.10	74.08	22.90	-148.97	-356.67	1,847.43	1,329.25	1,268.47	60.77	21.872	
8,450.00	7,255.29	7,275.25	7,231.45	74.68	22.94	-140.63	-364.81	1,850.90	1,368.11	1,306.79	61.31	22.313	
8,500.00	7,281.79	7,280.53	7,235.02	75.22	22.96	-132.16	-368.40	1,852.45	1,407.27	1,345.58	61.70	22.809	
8,550.00	7,306.18	7,279.49	7,234.32	75.72	22.95	-123.77	-367.69	1,852.14	1,446.48	1,384.54	61.95	23.350	
8,600.00	7,328.26	7,273.40	7,230.20	76.15	22.93	-115.71	-363.57	1,850.37	1,485.44	1,423.34	62.10	23.919	
8,650.00	7,347.88	7,263.94	7,223.70	76.53	22.90	-108.26	-357.24	1,847.67	1,523.84	1,461.61	62.23	24.489	
8,700.00	7,364.89	7,253.73	7,216.53	76.86	22.86	-101.66	-350.55	1,844.85	1,561.37	1,498.97	62.40	25.021	
8,750.00	7,379.14	7,241.56	7,207.78	77.13	22.82	-95.86	-342.75	1,841.58	1,597.78	1,535.18	62.60	25.524	
8,800.00	7,390.55	7,235.00	7,202.96	77.35	22.80	-91.15	-338.63	1,839.87	1,632.82	1,569.78	63.05	25.898	
8,850.00	7,399.01	7,235.00	7,202.96	77.53	22.80	-87.44	-338.63	1,839.87	1,666.40	1,602.63	63.77	26.133	
8,900.00	7,404.46	7,216.59	7,189.14	77.67	22.74	-83.76	-327.45	1,835.10	1,698.06	1,634.04	64.02	26.523	
8,950.00	7,406.87	7,203.00	7,178.65	77.77	22.70	-80.93	-319.58	1,831.54	1,727.94	1,663.44	64.50	26.789	
8,964.31	7,407.00	7,203.00	7,178.65	77.79	22.70	-80.35	-319.58	1,831.54	1,736.09	1,671.33	64.76	26.807	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 1-35H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 1524-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		
9,000.00	7,407.00	7,203.00	7,178.65	77.84	22.70	-80.35	-319.58	1,831.54	1,756.47	1,691.06	65.41	26.852	
9,100.00	7,407.00	7,171.00	7,153.13	77.99	22.60	-79.41	-302.18	1,823.20	1,815.67	1,749.34	66.33	27.374	
9,200.00	7,407.00	7,157.25	7,141.84	78.16	22.56	-78.99	-295.18	1,819.68	1,877.70	1,810.03	67.66	27.750	
9,300.00	7,407.00	7,139.00	7,126.53	78.34	22.50	-78.44	-286.32	1,815.17	1,942.39	1,873.59	68.81	28.229	
9,400.00	7,407.00	7,117.22	7,107.78	78.54	22.44	-77.76	-276.46	1,810.12	2,009.51	1,939.71	69.80	28.789	
9,500.00	7,407.00	7,108.00	7,099.67	78.75	22.41	-77.47	-272.54	1,808.12	2,078.94	2,007.94	71.00	29.283	
9,600.00	7,407.00	7,087.88	7,081.66	78.98	22.35	-76.82	-264.57	1,804.06	2,150.44	2,078.55	71.89	29.914	
9,700.00	7,407.00	7,076.00	7,070.81	79.23	22.31	-76.44	-260.25	1,801.86	2,223.96	2,151.09	72.87	30.520	
9,800.00	7,407.00	7,076.00	7,070.81	79.49	22.31	-76.44	-260.25	1,801.86	2,299.38	2,225.41	73.98	31.082	
9,900.00	7,407.00	7,058.28	7,054.37	79.78	22.25	-75.85	-254.37	1,798.84	2,376.37	2,301.66	74.71	31.808	
10,000.00	7,407.00	7,045.00	7,041.87	80.08	22.21	-75.40	-250.40	1,796.78	2,455.00	2,379.54	75.46	32.535	
10,100.00	7,407.00	7,045.00	7,041.87	80.41	22.21	-75.40	-250.40	1,796.78	2,535.00	2,458.67	76.34	33.209	
10,200.00	7,407.00	7,045.00	7,041.87	80.75	22.21	-75.40	-250.40	1,796.78	2,616.38	2,539.24	77.14	33.915	
10,300.00	7,407.00	7,031.02	7,028.56	81.12	22.17	-74.93	-246.62	1,794.78	2,698.85	2,621.15	77.71	34.732	
10,400.00	7,407.00	7,013.00	7,011.22	81.52	22.11	-74.32	-242.30	1,792.43	2,782.60	2,704.42	78.18	35.594	
10,500.00	7,407.00	7,013.00	7,011.22	81.94	22.11	-74.32	-242.30	1,792.43	2,867.13	2,788.31	78.82	36.374	
10,600.00	7,407.00	7,013.00	7,011.22	82.38	22.11	-74.32	-242.30	1,792.43	2,952.63	2,873.21	79.42	37.176	
10,700.00	7,407.00	7,013.00	7,011.22	82.85	22.11	-74.32	-242.30	1,792.43	3,039.02	2,959.04	79.98	37.999	
10,800.00	7,407.00	7,013.00	7,011.22	83.35	22.11	-74.32	-242.30	1,792.43	3,126.22	3,045.73	80.49	38.840	
10,900.00	7,407.00	7,013.00	7,011.22	83.88	22.11	-74.32	-242.30	1,792.43	3,214.16	3,133.19	80.97	39.698	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 3-26H - Wellbore #1 - Wellbore #1											Offset Site Error:	0.00 usft
Survey Program: 1584-OWSG (Rev2) MWD											Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor
7,400.00	6,537.12	8,184.81	7,451.42	58.05	31.69	-56.14	1,933.40	4,882.35	3,243.87	3,176.20	67.67	47.940
7,500.00	6,607.42	8,133.79	7,451.70	59.69	30.90	-55.06	1,892.30	4,912.57	3,169.54	3,101.51	68.03	46.588
7,600.00	6,677.72	8,116.00	7,451.71	61.33	30.63	-54.68	1,877.98	4,923.13	3,096.23	3,026.93	69.30	44.681
7,700.00	6,748.01	8,099.39	7,451.65	62.98	30.39	-54.32	1,864.70	4,933.11	3,024.21	2,953.58	70.64	42.815
7,800.00	6,818.31	8,085.00	7,451.50	64.63	30.17	-54.00	1,853.33	4,941.92	2,953.68	2,881.60	72.08	40.978
7,900.00	6,888.61	8,053.00	7,451.05	66.28	29.70	-53.29	1,828.15	4,961.67	2,884.56	2,811.49	73.08	39.474
8,000.00	6,958.90	8,022.00	7,450.62	67.93	29.26	-52.59	1,803.83	4,980.89	2,816.84	2,742.71	74.13	38.000
8,078.15	7,013.84	7,996.57	7,450.26	69.23	28.90	-52.01	1,783.94	4,996.72	2,764.96	2,690.02	74.93	36.899
8,100.00	7,029.19	7,990.00	7,450.17	69.59	28.81	-48.51	1,778.80	5,000.81	2,750.36	2,675.19	75.17	36.591
8,150.00	7,064.14	7,973.96	7,449.92	70.41	28.59	-40.12	1,766.26	5,010.80	2,715.43	2,639.85	75.58	35.928
8,200.00	7,098.63	7,962.77	7,449.71	71.21	28.44	-31.37	1,757.52	5,017.80	2,678.61	2,602.61	76.00	35.243
8,250.00	7,132.41	7,959.00	7,449.63	71.98	28.39	-22.37	1,754.58	5,020.15	2,640.15	2,563.64	76.51	34.508
8,300.00	7,165.21	7,959.00	7,449.63	72.72	28.39	-13.03	1,754.58	5,020.15	2,600.31	2,523.33	76.98	33.778
8,350.00	7,196.78	7,951.37	7,449.45	73.42	28.28	-2.90	1,748.63	5,024.93	2,559.33	2,482.25	77.08	33.203
8,400.00	7,226.88	7,959.00	7,449.63	74.08	28.39	7.06	1,754.58	5,020.15	2,517.54	2,440.04	77.50	32.485
8,450.00	7,255.29	7,959.00	7,449.63	74.68	28.39	17.65	1,754.58	5,020.15	2,475.14	2,397.61	77.54	31.922
8,500.00	7,281.79	7,959.00	7,449.63	75.22	28.39	28.33	1,754.58	5,020.15	2,432.47	2,355.05	77.43	31.417
8,550.00	7,306.18	7,971.02	7,449.86	75.72	28.55	38.30	1,763.96	5,012.64	2,389.81	2,312.25	77.56	30.811
8,600.00	7,328.26	7,984.29	7,450.09	76.15	28.73	47.72	1,774.33	5,004.37	2,347.44	2,269.82	77.61	30.245
8,650.00	7,347.88	8,003.00	7,450.35	76.53	28.99	56.25	1,788.96	4,992.72	2,305.62	2,227.89	77.73	29.663
8,700.00	7,364.89	8,022.00	7,450.62	76.86	29.26	63.90	1,803.83	4,980.89	2,264.62	2,186.88	77.74	29.129
8,750.00	7,379.14	8,042.85	7,450.91	77.13	29.56	70.57	1,820.18	4,967.94	2,224.75	2,147.02	77.73	28.623
8,800.00	7,390.55	8,067.80	7,451.26	77.35	29.92	76.27	1,839.80	4,952.53	2,186.33	2,108.56	77.77	28.113
8,850.00	7,399.01	8,085.00	7,451.50	77.53	30.17	81.16	1,853.33	4,941.92	2,149.58	2,072.13	77.45	27.754
8,900.00	7,404.46	8,102.48	7,451.67	77.67	30.43	85.18	1,867.17	4,931.24	2,114.96	2,037.89	77.07	27.441
8,950.00	7,406.87	8,116.00	7,451.71	77.77	30.63	88.41	1,877.98	4,923.13	2,082.92	2,006.43	76.48	27.234
8,964.31	7,407.00	8,123.78	7,451.71	77.79	30.75	89.20	1,884.24	4,918.50	2,074.24	1,997.80	76.45	27.132
9,000.00	7,407.00	8,148.00	7,451.66	77.84	31.12	89.19	1,903.75	4,904.16	2,052.95	1,976.40	76.55	26.818
9,100.00	7,407.00	8,220.72	7,451.11	77.99	32.25	89.15	1,962.29	4,861.03	1,993.25	1,916.16	77.08	25.858
9,200.00	7,407.00	8,268.26	7,450.83	78.16	33.02	89.12	2,001.05	4,833.50	1,934.78	1,858.09	76.69	25.229
9,300.00	7,407.00	8,373.70	7,451.14	78.34	34.77	89.10	2,086.77	4,772.09	1,876.05	1,797.37	78.68	23.844
9,400.00	7,407.00	8,505.33	7,452.56	78.54	37.09	89.10	2,192.52	4,693.74	1,816.19	1,734.27	81.92	22.169
9,500.00	7,407.00	8,558.00	7,453.10	78.75	38.05	89.11	2,234.42	4,661.83	1,755.30	1,673.34	81.96	21.417
9,600.00	7,407.00	8,645.98	7,454.25	78.98	39.68	89.12	2,305.06	4,609.39	1,695.28	1,611.72	83.56	20.288
9,700.00	7,407.00	8,692.30	7,454.77	79.23	40.55	89.12	2,342.37	4,581.96	1,635.63	1,552.21	83.42	19.607
9,800.00	7,407.00	8,789.77	7,455.96	79.49	42.41	89.14	2,421.38	4,524.89	1,576.68	1,491.10	85.58	18.424
9,900.00	7,407.00	8,851.38	7,456.64	79.78	43.60	89.14	2,471.12	4,488.55	1,517.33	1,431.10	86.23	17.596
10,000.00	7,407.00	8,940.00	7,457.69	80.08	45.34	89.16	2,543.02	4,436.75	1,458.43	1,370.28	88.15	16.546
10,100.00	7,407.00	8,999.11	7,457.85	80.41	46.50	89.14	2,591.22	4,402.55	1,400.09	1,311.27	88.82	15.763
10,200.00	7,407.00	9,081.42	7,457.82	80.75	48.14	89.10	2,658.52	4,355.15	1,342.08	1,251.49	90.59	14.815
10,300.00	7,407.00	9,147.13	7,459.93	81.12	49.46	89.18	2,712.66	4,317.98	1,284.96	1,193.27	91.68	14.015
10,400.00	7,407.00	9,232.30	7,462.49	81.52	51.18	89.29	2,782.81	4,269.76	1,227.85	1,134.17	93.68	13.107
10,500.00	7,407.00	9,300.53	7,463.01	81.94	52.56	89.29	2,839.42	4,231.67	1,171.53	1,076.49	95.04	12.327
10,600.00	7,407.00	9,387.91	7,462.11	82.38	54.34	89.20	2,911.95	4,182.96	1,115.35	1,018.07	97.28	11.465
10,700.00	7,407.00	9,470.11	7,462.64	82.85	56.03	89.19	2,980.08	4,136.97	1,058.97	959.61	99.36	10.658
10,800.00	7,407.00	9,555.55	7,463.83	83.35	57.80	89.23	3,050.86	4,089.14	1,002.53	900.92	101.61	9.867
10,900.00	7,407.00	9,639.00	7,464.53	83.88	59.54	89.23	3,119.84	4,042.18	945.81	841.97	103.84	9.109
11,000.00	7,407.00	9,737.24	7,466.41	84.43	61.60	89.32	3,200.79	3,986.56	888.79	782.14	106.65	8.334
11,100.00	7,407.00	9,822.50	7,468.71	85.02	63.42	89.47	3,270.30	3,937.23	830.46	721.45	109.01	7.618
11,200.00	7,407.00	9,917.29	7,469.97	85.64	65.46	89.53	3,346.71	3,881.17	770.81	659.04	111.77	6.897
11,300.00	7,407.00	9,984.00	7,469.50	86.30	66.89	89.45	3,400.73	3,842.02	711.68	598.08	113.60	6.265
11,400.00	7,407.00	10,089.12	7,468.48	86.98	69.17	89.28	3,485.82	3,780.34	652.81	536.05	116.76	5.591

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 3-26H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 1584-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
11,500.00	7,407.00	10,157.39	7,467.61	87.70	70.66	89.11	3,540.24	3,739.13	592.05	473.26	118.78	4.984	
11,600.00	7,407.00	10,236.93	7,464.20	88.46	72.39	88.55	3,604.18	3,691.94	532.31	411.03	121.28	4.389	
11,700.00	7,407.00	10,311.87	7,460.97	89.25	74.03	87.90	3,664.75	3,647.93	473.18	349.44	123.74	3.824	
11,800.00	7,407.00	10,394.59	7,459.92	90.07	75.84	87.41	3,731.77	3,599.46	414.22	287.86	126.35	3.278	
11,900.00	7,407.00	10,474.08	7,460.87	90.93	77.58	87.17	3,795.91	3,552.52	354.74	225.82	128.92	2.752	
12,000.00	7,407.00	10,555.28	7,462.10	91.82	79.37	86.90	3,861.68	3,504.93	295.69	164.16	131.53	2.248	
12,100.00	7,407.00	10,637.50	7,462.69	92.75	81.18	86.27	3,927.94	3,456.25	236.10	101.92	134.18	1.760	
12,200.00	7,407.00	10,717.78	7,463.44	93.71	82.96	85.31	3,992.51	3,408.56	176.31	39.40	136.92	1.288 Level 3	
12,300.00	7,407.00	10,798.94	7,464.89	94.70	84.77	83.73	4,057.58	3,360.07	116.20	-23.41	139.61	0.832 Level 3	
12,400.00	7,407.00	10,878.85	7,466.70	95.73	86.55	79.25	4,121.41	3,312.03	55.82	-86.59	142.41	0.392 Level 3	
12,491.07	7,407.00	10,951.05	7,468.49	96.69	88.17	-1.08	4,178.99	3,268.51	6.51	-73.53	80.04	0.081 Level 3, CC	
12,500.00	7,407.00	10,958.16	7,468.56	96.78	88.32	-34.36	4,184.69	3,264.26	8.45	-96.71	105.16	0.080 Level 3, ES, SF	
12,600.00	7,407.00	11,038.79	7,468.08	97.87	90.12	-82.46	4,249.84	3,216.77	65.17	-79.63	144.80	0.450 Level 3	
12,700.00	7,407.00	11,119.71	7,466.01	98.99	91.91	-84.86	4,315.53	3,169.56	123.93	-24.49	148.42	0.835 Level 3	
12,800.00	7,407.00	11,202.84	7,464.71	100.14	93.76	-86.04	4,383.19	3,121.29	182.40	30.46	151.94	1.200 Level 3	
12,900.00	7,407.00	11,288.71	7,464.02	101.31	95.65	-86.82	4,453.91	3,072.59	239.51	83.90	155.61	1.539	
13,000.00	7,407.00	11,370.07	7,464.78	102.52	97.45	-87.60	4,521.15	3,026.78	296.18	137.59	158.59	1.868	
13,100.00	7,407.00	11,453.09	7,465.28	103.74	99.28	-88.08	4,589.81	2,980.11	352.79	191.08	161.71	2.182	
13,200.00	7,407.00	11,537.47	7,465.52	105.00	101.14	-88.39	4,659.76	2,932.92	409.13	244.20	164.93	2.481	
13,300.00	7,407.00	11,620.35	7,466.37	106.27	102.97	-88.71	4,728.50	2,886.65	465.37	297.38	167.99	2.770	
13,400.00	7,407.00	11,700.76	7,466.97	107.57	104.74	-88.93	4,795.19	2,841.71	521.68	350.87	170.80	3.054	
13,500.00	7,407.00	11,782.20	7,467.31	108.89	106.54	-89.07	4,862.57	2,795.97	578.28	404.55	173.73	3.329	
13,600.00	7,407.00	11,861.03	7,467.29	110.23	108.29	-89.15	4,927.64	2,751.47	635.17	458.74	176.43	3.600	
13,700.00	7,407.00	11,934.80	7,467.65	111.59	109.94	-89.25	4,988.17	2,709.31	692.75	514.02	178.73	3.876	
13,800.00	7,407.00	12,017.90	7,467.75	112.97	111.80	-89.32	5,056.07	2,661.40	750.83	568.96	181.87	4.128	
13,900.00	7,407.00	12,033.00	7,467.81	114.36	112.14	-89.34	5,068.42	2,652.72	811.50	632.22	179.28	4.527	
14,000.00	7,407.00	12,033.00	7,467.81	115.77	112.14	-89.34	5,068.42	2,652.72	879.25	703.67	175.58	5.008	
14,100.00	7,407.00	12,033.00	7,467.81	117.20	112.14	-89.34	5,068.42	2,652.72	952.70	780.44	172.26	5.530	
14,200.00	7,407.00	12,033.00	7,467.81	118.64	112.14	-89.34	5,068.42	2,652.72	1,030.63	861.25	169.38	6.085	
14,300.00	7,407.00	12,033.00	7,467.81	120.10	112.14	-89.34	5,068.42	2,652.72	1,112.09	945.18	166.91	6.663	
14,400.00	7,407.00	12,033.00	7,467.81	121.56	112.14	-89.34	5,068.42	2,652.72	1,196.37	1,031.57	164.80	7.259	
14,500.00	7,407.00	12,033.00	7,467.81	123.05	112.14	-89.34	5,068.42	2,652.72	1,282.91	1,119.91	163.00	7.870	
14,600.00	7,407.00	12,033.00	7,467.81	124.54	112.14	-89.34	5,068.42	2,652.72	1,371.28	1,209.83	161.46	8.493	
14,700.00	7,407.00	12,033.00	7,467.81	126.04	112.14	-89.34	5,068.42	2,652.72	1,461.16	1,301.04	160.12	9.125	
14,800.00	7,407.00	12,033.00	7,467.81	127.56	112.14	-89.34	5,068.42	2,652.72	1,552.27	1,393.31	158.95	9.766	
14,900.00	7,407.00	12,033.00	7,467.81	129.08	112.14	-89.34	5,068.42	2,652.72	1,644.41	1,486.48	157.93	10.412	
15,000.00	7,407.00	12,033.00	7,467.81	130.62	112.14	-89.34	5,068.42	2,652.72	1,737.42	1,580.39	157.03	11.064	
15,100.00	7,407.00	12,033.00	7,467.81	132.16	112.14	-89.34	5,068.42	2,652.72	1,831.17	1,674.95	156.23	11.721	
15,200.00	7,407.00	12,033.00	7,467.81	133.71	112.14	-89.34	5,068.42	2,652.72	1,925.55	1,770.04	155.51	12.382	
15,300.00	7,407.00	12,033.00	7,467.81	135.28	112.14	-89.34	5,068.42	2,652.72	2,020.47	1,865.60	154.87	13.046	
15,400.00	7,407.00	12,033.00	7,467.81	136.84	112.14	-89.34	5,068.42	2,652.72	2,115.86	1,961.57	154.29	13.714	
15,500.00	7,407.00	12,033.00	7,467.81	138.42	112.14	-89.34	5,068.42	2,652.72	2,211.66	2,057.89	153.76	14.384	
15,600.00	7,407.00	12,033.00	7,467.81	140.00	112.14	-89.34	5,068.42	2,652.72	2,307.81	2,154.53	153.28	15.056	
15,700.00	7,407.00	12,033.00	7,467.81	141.59	112.14	-89.34	5,068.42	2,652.72	2,404.27	2,251.43	152.85	15.730	
15,800.00	7,407.00	12,033.00	7,467.81	143.19	112.14	-89.34	5,068.42	2,652.72	2,501.02	2,348.57	152.44	16.406	
15,900.00	7,407.00	12,033.00	7,467.81	144.79	112.14	-89.34	5,068.42	2,652.72	2,598.01	2,445.93	152.08	17.084	
16,000.00	7,407.00	12,033.00	7,467.81	146.40	112.14	-89.34	5,068.42	2,652.72	2,695.22	2,543.48	151.74	17.762	
16,100.00	7,407.00	12,033.00	7,467.81	148.02	112.14	-89.34	5,068.42	2,652.72	2,792.62	2,641.20	151.43	18.442	
16,200.00	7,407.00	12,033.00	7,467.81	149.63	112.14	-89.34	5,068.42	2,652.72	2,890.21	2,739.07	151.14	19.123	
16,300.00	7,407.00	12,033.00	7,467.81	151.26	112.14	-89.34	5,068.42	2,652.72	2,987.95	2,837.09	150.87	19.805	
16,400.00	7,407.00	12,033.00	7,467.81	152.89	112.14	-89.34	5,068.42	2,652.72	3,085.84	2,935.22	150.62	20.488	
16,500.00	7,407.00	12,033.00	7,467.81	154.52	112.14	-89.34	5,068.42	2,652.72	3,183.86	3,033.47	150.39	21.171	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - FOX CREEK 12-63 25-2-1 - ORIGINAL WELLBORE - PROPOSAL #1													Offset Site Error: 0.00 usft
Survey Program: 121-OWSG (Rev2) MWD, 1492-OWSG (Rev2) MWD							Rule Assigned:						Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
5,900.00	5,482.67	10,671.76	7,462.00	34.15	140.07	8.03	47.43	3,904.45	3,241.77	3,169.42	72.35	44.804	
6,000.00	5,552.97	10,670.00	7,462.00	35.67	140.07	7.82	49.19	3,904.44	3,142.82	3,070.32	72.50	43.348	
6,100.00	5,623.27	10,668.25	7,462.00	37.21	140.07	7.60	50.94	3,904.43	3,043.93	2,971.28	72.66	41.895	
6,200.00	5,693.56	10,666.49	7,462.00	38.77	140.06	7.38	52.70	3,904.43	2,945.12	2,872.30	72.82	40.446	
6,300.00	5,763.86	10,664.73	7,462.00	40.33	140.06	7.16	54.46	3,904.42	2,846.39	2,773.41	72.98	39.002	
6,400.00	5,834.16	10,662.97	7,462.00	41.91	140.06	6.95	56.22	3,904.41	2,747.75	2,674.59	73.15	37.561	
6,500.00	5,904.45	10,661.21	7,462.00	43.49	140.05	6.73	57.98	3,904.41	2,649.21	2,575.88	73.33	36.125	
6,600.00	5,974.75	10,659.45	7,462.00	45.09	140.05	6.51	59.74	3,904.40	2,550.78	2,477.26	73.52	34.694	
6,700.00	6,045.05	10,657.70	7,462.00	46.69	140.05	6.29	61.50	3,904.39	2,452.48	2,378.77	73.72	33.269	
6,800.00	6,115.34	10,655.94	7,462.00	48.30	140.05	6.07	63.25	3,904.39	2,354.33	2,280.40	73.92	31.849	
6,900.00	6,185.64	10,654.18	7,462.00	49.91	140.04	5.85	65.01	3,904.38	2,256.33	2,182.19	74.13	30.435	
7,000.00	6,255.94	10,652.42	7,462.00	51.53	140.04	5.63	66.77	3,904.37	2,158.51	2,084.16	74.36	29.029	
7,100.00	6,326.23	10,650.66	7,462.00	53.15	140.04	5.42	68.53	3,904.37	2,060.91	1,986.32	74.59	27.630	
7,200.00	6,396.53	10,648.90	7,462.00	54.78	140.03	5.20	70.29	3,904.36	1,963.54	1,888.70	74.83	26.239	
7,300.00	6,466.83	10,647.15	7,462.00	56.41	140.03	4.98	72.05	3,904.35	1,866.45	1,791.36	75.09	24.857	
7,400.00	6,537.12	10,645.39	7,462.00	58.05	140.03	4.76	73.80	3,904.34	1,769.68	1,694.32	75.35	23.485	
7,500.00	6,607.42	10,643.63	7,462.00	59.69	140.03	4.54	75.56	3,904.34	1,673.29	1,597.66	75.63	22.125	
7,600.00	6,677.72	10,641.87	7,462.00	61.33	140.02	4.32	77.32	3,904.33	1,577.34	1,501.42	75.92	20.777	
7,700.00	6,748.01	10,640.11	7,462.00	62.98	140.02	4.10	79.08	3,904.32	1,481.93	1,405.72	76.22	19.444	
7,800.00	6,818.31	10,638.35	7,462.00	64.63	140.02	3.88	80.84	3,904.32	1,387.17	1,310.64	76.52	18.127	
7,900.00	6,888.61	10,636.59	7,462.00	66.28	140.01	3.66	82.60	3,904.31	1,293.19	1,216.35	76.84	16.830	
8,000.00	6,958.90	10,634.84	7,462.00	67.93	140.01	3.44	84.35	3,904.30	1,200.18	1,123.03	77.15	15.557	
8,078.15	7,013.84	10,633.46	7,462.00	69.23	140.01	3.27	85.73	3,904.30	1,128.33	1,050.95	77.38	14.581	
8,100.00	7,029.19	10,632.66	7,462.00	69.59	140.01	10.17	86.53	3,904.30	1,108.40	1,030.96	77.44	14.313	
8,150.00	7,064.14	10,627.70	7,462.00	70.41	140.00	24.70	91.49	3,904.28	1,063.28	985.73	77.55	13.711	
8,200.00	7,098.63	10,618.43	7,462.00	71.21	139.98	37.21	100.76	3,904.24	1,019.13	941.52	77.61	13.131	
8,250.00	7,132.41	10,604.91	7,462.00	71.98	139.96	47.73	114.28	3,904.19	976.32	898.69	77.63	12.577	
8,300.00	7,165.21	10,587.25	7,462.00	72.72	139.93	56.46	131.94	3,904.12	935.20	857.60	77.60	12.052	
8,350.00	7,196.78	10,565.58	7,462.00	73.42	139.90	63.67	153.61	3,904.03	896.10	818.58	77.52	11.560	
8,400.00	7,226.88	10,540.06	7,462.00	74.08	139.86	69.60	179.13	3,903.93	859.32	781.92	77.39	11.103	
8,450.00	7,255.29	10,510.90	7,462.00	74.68	139.81	74.45	208.29	3,903.82	825.11	747.89	77.22	10.685	
8,500.00	7,281.79	10,478.31	7,462.00	75.22	139.76	78.39	240.88	3,903.69	793.69	716.68	77.01	10.307	
8,550.00	7,306.18	10,442.54	7,462.00	75.72	139.70	81.56	276.65	3,903.55	765.25	688.48	76.76	9.969	
8,600.00	7,328.26	10,403.87	7,462.00	76.15	139.65	84.07	315.32	3,903.40	739.91	663.42	76.49	9.673	
8,650.00	7,347.88	10,362.58	7,462.00	76.53	139.58	86.04	356.61	3,903.24	717.76	641.54	76.21	9.418	
8,700.00	7,364.89	10,334.28	7,461.83	76.86	139.54	87.95	384.90	3,903.33	699.19	621.38	77.81	8.986	
8,750.00	7,379.14	10,300.00	7,460.53	77.13	139.47	89.14	419.13	3,904.79	685.39	606.23	79.16	8.658	
8,800.00	7,390.55	10,285.11	7,459.55	77.35	139.43	90.29	433.94	3,905.91	676.18	591.98	84.20	8.030	
8,850.00	7,399.01	10,250.00	7,456.30	77.53	139.33	90.44	468.68	3,909.73	672.24	585.72	86.52	7.770	
8,866.40	7,401.13	10,250.00	7,456.30	77.58	139.33	90.62	468.68	3,909.73	671.87	582.31	89.55	7.502 CC	
8,900.00	7,404.46	10,234.11	7,454.38	77.67	139.27	90.48	484.29	3,912.00	673.06	580.12	92.94	7.242 ES	
8,950.00	7,406.87	10,200.00	7,449.34	77.77	139.15	89.68	517.49	3,918.00	679.09	583.07	96.02	7.072	
8,964.31	7,407.00	10,200.00	7,449.34	77.79	139.15	89.51	517.49	3,918.00	681.58	582.62	98.96	6.887	
9,000.00	7,407.00	10,183.90	7,446.52	77.84	139.07	89.28	532.98	3,921.35	688.97	586.05	102.93	6.694	
9,100.00	7,407.00	10,136.10	7,436.56	77.99	138.83	88.45	578.16	3,933.28	714.41	601.00	113.40	6.300	
9,200.00	7,407.00	10,100.00	7,427.46	78.16	138.62	87.73	611.35	3,944.20	746.71	620.94	125.78	5.937	
9,300.00	7,407.00	10,050.00	7,412.72	78.34	138.26	86.60	655.69	3,961.94	785.27	650.92	134.35	5.845	
9,400.00	7,407.00	10,000.00	7,395.58	78.54	137.84	85.36	697.85	3,982.60	830.16	688.16	142.00	5.846	
9,500.00	7,407.00	9,975.48	7,386.34	78.75	137.60	84.72	717.64	3,993.75	880.34	727.46	152.87	5.759 SF	
9,600.00	7,407.00	9,950.00	7,376.17	78.98	137.35	84.04	737.52	4,006.02	935.85	773.86	161.98	5.777	
9,700.00	7,407.00	9,900.00	7,354.65	79.23	136.80	82.68	774.38	4,032.02	996.07	829.68	166.39	5.986	
9,800.00	7,407.00	9,900.00	7,354.65	79.49	136.80	82.68	774.38	4,032.02	1,060.21	884.05	176.16	6.019	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - FOX CREEK 12-63 25-2-1 - ORIGINAL WELLBORE - PROPOSAL #1													Offset Site Error: 0.00 usft
Survey Program: 121-OWSG (Rev2) MWD, 1492-OWSG (Rev2) MWD							Rule Assigned:						Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis		Distance		Offset Wellbore Centre		Between		Minimum	Separation	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)		
9,900.00	7,407.00	9,850.00	7,331.17	79.78	136.18	81.30	808.16	4,060.41	1,127.96	949.11	178.86	6.306	
10,000.00	7,407.00	9,850.00	7,331.17	80.08	136.18	81.30	808.16	4,060.41	1,198.92	1,012.89	186.03	6.445	
10,100.00	7,407.00	9,819.43	7,315.93	80.41	135.77	80.47	827.18	4,078.85	1,272.64	1,083.34	189.30	6.723	
10,200.00	7,407.00	9,800.00	7,305.91	80.75	135.50	79.94	838.60	4,090.97	1,348.98	1,156.05	192.93	6.992	
10,300.00	7,407.00	9,800.00	7,305.91	81.12	135.50	79.94	838.60	4,090.97	1,427.84	1,230.49	197.35	7.235	
10,400.00	7,407.00	9,768.02	7,288.91	81.52	135.03	79.08	856.21	4,111.55	1,508.01	1,309.03	198.98	7.579	
10,500.00	7,407.00	9,750.00	7,279.07	81.94	134.76	78.60	865.47	4,123.47	1,590.23	1,389.03	201.20	7.904	
10,600.00	7,407.00	9,750.00	7,279.07	82.38	134.76	78.60	865.47	4,123.47	1,674.03	1,469.98	204.05	8.204	
10,700.00	7,407.00	9,728.04	7,266.84	82.85	134.41	78.03	876.09	4,138.30	1,758.99	1,553.62	205.37	8.565	
10,800.00	7,407.00	9,700.00	7,250.86	83.35	133.97	77.31	888.56	4,157.66	1,845.56	1,639.34	206.22	8.950	
10,900.00	7,407.00	9,700.00	7,250.86	83.88	133.97	77.31	888.56	4,157.66	1,932.62	1,724.46	208.15	9.285	
11,000.00	7,407.00	9,700.00	7,250.86	84.43	133.97	77.31	888.56	4,157.66	2,020.87	1,811.06	209.81	9.632	
11,100.00	7,407.00	9,700.00	7,250.86	85.02	133.97	77.31	888.56	4,157.66	2,110.18	1,898.93	211.24	9.989	
11,200.00	7,407.00	9,678.71	7,238.47	85.64	133.61	76.78	897.21	4,172.67	2,199.91	1,988.16	211.75	10.389	
11,300.00	7,407.00	9,670.75	7,233.80	86.30	133.47	76.58	900.25	4,178.34	2,290.51	2,077.90	212.61	10.773	
11,400.00	7,407.00	9,650.00	7,221.47	86.98	133.12	76.08	907.71	4,193.28	2,381.94	2,168.97	212.97	11.184	
11,500.00	7,407.00	9,650.00	7,221.47	87.70	133.12	76.08	907.71	4,193.28	2,473.60	2,259.71	213.88	11.565	
11,600.00	7,407.00	9,650.00	7,221.47	88.46	133.12	76.08	907.71	4,193.28	2,565.88	2,351.19	214.68	11.952	
11,700.00	7,407.00	9,650.00	7,221.47	89.25	133.12	76.08	907.71	4,193.28	2,658.72	2,443.33	215.39	12.344	
11,800.00	7,407.00	9,650.00	7,221.47	90.07	133.12	76.08	907.71	4,193.28	2,752.06	2,536.04	216.01	12.740	
11,900.00	7,407.00	9,650.00	7,221.47	90.93	133.12	76.08	907.71	4,193.28	2,845.85	2,629.29	216.57	13.141	
12,000.00	7,407.00	9,626.99	7,207.62	91.82	132.72	75.53	915.15	4,210.08	2,939.51	2,722.96	216.55	13.575	
12,100.00	7,407.00	9,622.05	7,204.63	92.75	132.63	75.42	916.63	4,213.71	3,033.83	2,816.92	216.90	13.987	
12,200.00	7,407.00	9,600.00	7,191.15	93.71	132.24	74.91	922.75	4,230.06	3,128.76	2,911.90	216.86	14.427	
12,300.00	7,407.00	9,600.00	7,191.15	94.70	132.24	74.91	922.75	4,230.06	3,223.53	3,006.27	217.26	14.837	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - FOX CREEK 12-63 25-2-2 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.00 usft
Survey Program: 121-OWSG (Rev2) MWD, 1492-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
7,600.00	6,677.72	9,529.78	7,639.99	61.33	96.18	2.87	83.96	5,603.92	3,226.79	3,156.53	70.26	45.928	
7,700.00	6,748.01	9,528.02	7,639.99	62.98	96.17	2.81	85.72	5,603.92	3,139.04	3,068.42	70.62	44.447	
7,800.00	6,818.31	9,526.26	7,639.99	64.63	96.17	2.74	87.49	5,603.91	3,052.05	2,981.05	71.00	42.988	
7,900.00	6,888.61	9,524.50	7,639.99	66.28	96.17	2.67	89.25	5,603.90	2,965.87	2,894.49	71.38	41.551	
8,000.00	6,958.90	9,522.74	7,639.99	67.93	96.16	2.61	91.01	5,603.90	2,880.59	2,808.82	71.77	40.139	
8,078.15	7,013.84	9,521.37	7,639.99	69.23	96.16	2.56	92.38	5,603.89	2,814.61	2,742.54	72.07	39.054	
8,100.00	7,029.19	9,520.57	7,639.99	69.59	96.15	8.04	93.18	5,603.89	2,796.29	2,724.13	72.15	38.755	
8,150.00	7,064.14	9,515.61	7,639.99	70.41	96.14	20.12	98.14	5,603.87	2,754.72	2,682.40	72.32	38.093	
8,200.00	7,098.63	9,506.33	7,639.99	71.21	96.12	31.30	107.42	5,603.83	2,713.93	2,641.49	72.44	37.463	
8,250.00	7,132.41	9,492.81	7,639.99	71.98	96.08	41.39	120.94	5,603.78	2,674.22	2,601.68	72.54	36.868	
8,300.00	7,165.21	9,475.15	7,640.00	72.72	96.03	50.34	138.60	5,603.71	2,635.88	2,563.29	72.60	36.308	
8,350.00	7,196.78	9,453.48	7,640.00	73.42	95.98	58.18	160.27	5,603.62	2,599.20	2,526.57	72.63	35.787	
8,400.00	7,226.88	9,427.96	7,640.00	74.08	95.91	64.97	185.78	5,603.52	2,564.42	2,491.79	72.63	35.308	
8,450.00	7,255.29	9,398.80	7,640.00	74.68	95.84	70.81	214.95	5,603.41	2,531.79	2,459.18	72.61	34.870	
8,500.00	7,281.79	9,366.21	7,640.00	75.22	95.76	75.80	247.54	5,603.28	2,501.51	2,428.94	72.57	34.471	
8,550.00	7,306.18	9,304.95	7,637.71	75.72	95.61	79.64	308.73	5,603.04	2,473.65	2,401.84	71.81	34.446	
8,600.00	7,328.26	9,238.49	7,627.96	76.15	95.45	82.71	374.43	5,602.78	2,448.06	2,377.05	71.02	34.471	
8,650.00	7,347.88	9,200.00	7,618.86	76.53	95.36	85.58	411.82	5,602.66	2,425.09	2,354.07	71.02	34.146	
8,700.00	7,364.89	9,200.00	7,618.86	76.86	95.36	88.41	411.82	5,602.66	2,405.57	2,333.42	72.15	33.339	
8,750.00	7,379.14	9,178.84	7,612.93	77.13	95.31	90.36	432.13	5,602.98	2,389.62	2,316.77	72.85	32.803	
8,800.00	7,390.55	9,150.00	7,603.94	77.35	95.23	91.70	459.50	5,604.24	2,377.79	2,304.39	73.41	32.392	
8,850.00	7,399.01	9,150.00	7,603.94	77.53	95.23	92.87	459.50	5,604.24	2,369.55	2,294.52	75.03	31.583	
8,900.00	7,404.46	9,150.00	7,603.94	77.67	95.23	93.52	459.50	5,604.24	2,365.60	2,288.77	76.83	30.791	
8,920.51	7,405.82	9,150.00	7,603.94	77.71	95.23	93.64	459.50	5,604.24	2,365.24	2,287.62	77.61	30.475 CC, ES	
8,950.00	7,406.87	9,128.71	7,596.65	77.77	95.16	93.48	479.45	5,605.77	2,365.65	2,287.71	77.94	30.352	
8,964.31	7,407.00	9,124.99	7,595.32	77.79	95.14	93.41	482.90	5,606.09	2,366.43	2,288.07	78.36	30.199	
9,000.00	7,407.00	9,100.00	7,585.96	77.84	95.06	93.18	505.93	5,608.65	2,369.19	2,290.38	78.82	30.060	
9,100.00	7,407.00	9,100.00	7,585.96	77.99	95.06	93.18	505.93	5,608.65	2,378.44	2,295.33	83.11	28.619	
9,200.00	7,407.00	9,050.00	7,565.03	78.16	94.85	92.66	550.75	5,615.85	2,391.15	2,305.59	85.56	27.947	
9,300.00	7,407.00	9,050.00	7,565.03	78.34	94.85	92.66	550.75	5,615.85	2,406.77	2,316.37	90.39	26.625	
9,400.00	7,407.00	9,020.41	7,551.33	78.54	94.70	92.33	576.38	5,621.41	2,425.71	2,331.66	94.04	25.793	
9,500.00	7,407.00	9,000.00	7,541.33	78.75	94.59	92.08	593.62	5,625.79	2,447.86	2,349.67	98.20	24.929	
9,600.00	7,407.00	8,978.41	7,530.28	78.98	94.46	91.81	611.45	5,630.91	2,473.15	2,370.83	102.32	24.172	
9,700.00	7,407.00	8,950.00	7,515.03	79.23	94.29	91.44	634.21	5,638.40	2,501.59	2,395.47	106.12	23.573	
9,800.00	7,407.00	8,950.00	7,515.03	79.49	94.29	91.44	634.21	5,638.40	2,533.02	2,421.87	111.15	22.789	
9,900.00	7,407.00	8,922.42	7,499.48	79.78	94.10	91.06	655.52	5,646.45	2,567.31	2,452.44	114.86	22.351	
10,000.00	7,407.00	8,900.00	7,486.34	80.08	93.94	90.75	672.22	5,653.57	2,604.58	2,485.87	118.71	21.941	
10,100.00	7,407.00	8,900.00	7,486.34	80.41	93.94	90.75	672.22	5,653.57	2,644.70	2,521.33	123.37	21.437	
10,200.00	7,407.00	8,874.18	7,470.65	80.75	93.74	90.37	690.74	5,662.37	2,687.36	2,560.55	126.81	21.192	
10,300.00	7,407.00	8,850.00	7,455.46	81.12	93.55	90.01	707.36	5,671.19	2,732.80	2,602.62	130.19	20.992	
10,400.00	7,407.00	8,850.00	7,455.46	81.52	93.55	90.01	707.36	5,671.19	2,780.60	2,646.27	134.33	20.699	
10,500.00	7,407.00	8,850.00	7,455.46	81.94	93.55	90.01	707.36	5,671.19	2,831.13	2,692.86	138.28	20.475	
10,600.00	7,407.00	8,820.29	7,436.18	82.38	93.28	89.56	726.77	5,682.77	2,883.44	2,742.48	140.96	20.455	
10,700.00	7,407.00	8,800.00	7,422.64	82.85	93.10	89.24	739.36	5,691.13	2,938.29	2,794.44	143.85	20.426	
10,800.00	7,407.00	8,800.00	7,422.64	83.35	93.10	89.24	739.36	5,691.13	2,995.10	2,847.86	147.24	20.341	
10,900.00	7,407.00	8,800.00	7,422.64	83.88	93.10	89.24	739.36	5,691.13	3,054.14	2,903.70	150.44	20.301 SF	
11,000.00	7,407.00	8,776.17	7,406.39	84.43	92.86	88.86	753.43	5,701.40	3,114.74	2,962.01	152.73	20.394	
11,100.00	7,407.00	8,750.00	7,388.13	85.02	92.60	88.44	767.97	5,713.23	3,177.57	3,022.75	154.82	20.524	
11,200.00	7,407.00	8,750.00	7,388.13	85.64	92.60	88.44	767.97	5,713.23	3,241.66	3,084.12	157.53	20.577	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - FOX CREEK 12-63 25-23-4 - ORIGINAL WELLBORE - PROPOSAL #2												Offset Site Error:	0.00 usft
Survey Program: 121-OWSG (Rev2) MWD, 1495-OWSG (Rev2) MWD							Rule Assigned:					Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,500.00	6,607.42	9,377.03	7,603.45	59.69	99.31	-17.23	623.06	5,514.90	3,266.54	3,202.04	64.50	50.643	
7,600.00	6,677.72	9,378.38	7,603.86	61.33	99.31	-17.28	624.30	5,514.55	3,179.20	3,114.26	64.93	48.962	
7,700.00	6,748.01	9,379.73	7,604.26	62.98	99.31	-17.33	625.54	5,514.20	3,092.62	3,027.24	65.38	47.301	
7,800.00	6,818.31	9,381.07	7,604.66	64.63	99.31	-17.38	626.78	5,513.86	3,006.87	2,941.02	65.85	45.663	
7,900.00	6,888.61	9,400.00	7,610.08	66.28	99.34	-18.07	644.31	5,509.25	2,922.21	2,855.68	66.53	43.922	
8,000.00	6,958.90	9,400.00	7,610.08	67.93	99.34	-18.07	644.31	5,509.25	2,838.33	2,771.29	67.04	42.337	
8,078.15	7,013.84	9,400.00	7,610.08	69.23	99.34	-18.07	644.31	5,509.25	2,773.52	2,706.07	67.45	41.119	
8,100.00	7,029.19	9,400.00	7,610.08	69.59	99.34	-12.86	644.31	5,509.25	2,755.45	2,687.89	67.56	40.785	
8,150.00	7,064.14	9,400.00	7,610.08	70.41	99.34	-0.69	644.31	5,509.25	2,713.85	2,646.10	67.74	40.060	
8,200.00	7,098.63	9,400.00	7,610.08	71.21	99.34	11.51	644.31	5,509.25	2,672.15	2,604.31	67.84	39.391	
8,250.00	7,132.41	9,400.00	7,610.08	71.98	99.34	23.35	644.31	5,509.25	2,630.67	2,562.84	67.83	38.781	
8,300.00	7,165.21	9,400.00	7,610.08	72.72	99.34	34.47	644.31	5,509.25	2,589.75	2,522.00	67.74	38.228	
8,350.00	7,196.78	9,400.00	7,610.08	73.42	99.34	44.61	644.31	5,509.25	2,549.73	2,482.15	67.58	37.728	
8,400.00	7,226.88	9,400.00	7,610.08	74.08	99.34	53.66	644.31	5,509.25	2,510.97	2,443.60	67.37	37.272	
8,450.00	7,255.29	9,419.94	7,615.32	74.68	99.35	61.27	663.03	5,504.81	2,473.54	2,406.20	67.34	36.733	
8,500.00	7,281.79	9,429.02	7,617.54	75.22	99.35	68.05	671.63	5,502.93	2,438.06	2,370.90	67.15	36.307	
8,550.00	7,306.18	9,450.00	7,622.28	75.72	99.36	73.75	691.68	5,498.94	2,404.82	2,337.76	67.06	35.859	
8,600.00	7,328.26	9,450.00	7,622.28	76.15	99.36	78.77	691.68	5,498.94	2,373.89	2,307.06	66.83	35.522	
8,650.00	7,347.88	9,450.00	7,622.28	76.53	99.36	82.95	691.68	5,498.94	2,345.92	2,279.20	66.72	35.163	
8,700.00	7,364.89	9,474.00	7,627.03	76.86	99.36	86.30	714.86	5,494.97	2,320.80	2,254.06	66.75	34.771	
8,750.00	7,379.14	9,500.00	7,631.35	77.13	99.35	89.02	740.25	5,491.40	2,299.23	2,232.41	66.82	34.409	
8,800.00	7,390.55	9,500.00	7,631.35	77.35	99.35	91.22	740.25	5,491.40	2,280.95	2,213.86	67.09	33.998	
8,850.00	7,399.01	9,500.00	7,631.35	77.53	99.35	92.83	740.25	5,491.40	2,266.70	2,199.08	67.62	33.523	
8,900.00	7,404.46	9,529.23	7,635.18	77.67	99.32	93.94	769.06	5,488.31	2,256.02	2,188.04	67.98	33.188	
8,950.00	7,406.87	9,550.00	7,637.23	77.77	99.30	94.58	789.66	5,486.71	2,249.55	2,181.02	68.53	32.824	
8,964.31	7,407.00	9,550.00	7,637.23	77.79	99.30	94.66	789.66	5,486.71	2,248.42	2,179.60	68.81	32.674	
9,000.00	7,407.00	9,550.00	7,637.23	77.84	99.30	94.66	789.66	5,486.71	2,246.33	2,176.73	69.60	32.273	
9,100.00	7,407.00	9,600.00	7,639.85	77.99	99.23	94.73	839.55	5,484.89	2,242.50	2,171.38	71.11	31.533	
9,169.27	7,407.00	9,609.21	7,639.98	78.10	99.21	94.73	848.76	5,484.87	2,241.54	2,168.48	73.06	30.680 CC	
9,200.00	7,407.00	9,625.97	7,640.00	78.16	99.18	94.73	865.51	5,485.02	2,241.63	2,168.00	73.62	30.448	
9,300.00	7,407.00	9,725.97	7,640.00	78.34	99.00	94.73	965.51	5,486.03	2,242.10	2,167.89	74.21	30.213	
9,400.00	7,407.00	9,825.97	7,640.00	78.54	98.83	94.73	1,065.50	5,487.03	2,242.57	2,167.63	74.94	29.924	
9,500.00	7,407.00	9,925.97	7,640.00	78.75	98.68	94.73	1,165.50	5,488.04	2,243.04	2,167.22	75.82	29.583	
9,600.00	7,407.00	10,025.96	7,640.00	78.98	98.54	94.73	1,265.49	5,489.04	2,243.51	2,166.67	76.84	29.196	
9,700.00	7,407.00	10,125.96	7,640.00	79.23	98.42	94.73	1,365.48	5,490.05	2,243.99	2,165.98	78.00	28.768	
9,800.00	7,407.00	10,225.96	7,640.00	79.49	98.32	94.73	1,465.48	5,491.05	2,244.46	2,165.17	79.29	28.307	
9,900.00	7,407.00	10,325.96	7,640.00	79.78	98.22	94.73	1,565.47	5,492.06	2,244.93	2,164.23	80.70	27.817	
10,000.00	7,407.00	10,425.96	7,640.00	80.08	98.15	94.73	1,665.46	5,493.06	2,245.40	2,163.17	82.24	27.304	
10,100.00	7,407.00	10,525.96	7,640.00	80.41	98.09	94.73	1,765.46	5,494.06	2,245.87	2,161.99	83.88	26.774	
10,200.00	7,407.00	10,625.96	7,640.00	80.75	98.05	94.72	1,865.45	5,495.07	2,246.35	2,160.71	85.64	26.230	
10,300.00	7,407.00	10,725.96	7,640.00	81.12	98.02	94.72	1,965.45	5,496.07	2,246.82	2,159.33	87.49	25.680	
10,400.00	7,407.00	10,825.96	7,640.00	81.52	98.01	94.72	2,065.44	5,497.08	2,247.29	2,157.83	89.46	25.121	
10,500.00	7,407.00	10,925.95	7,640.00	81.94	98.01	94.72	2,165.43	5,498.08	2,247.76	2,156.26	91.50	24.565	
10,600.00	7,407.00	11,025.95	7,640.00	82.38	98.03	94.72	2,265.43	5,499.09	2,248.24	2,154.60	93.64	24.010	
10,700.00	7,407.00	11,125.95	7,640.00	82.85	98.07	94.72	2,365.42	5,500.09	2,248.71	2,152.85	95.85	23.460	
10,800.00	7,407.00	11,225.95	7,640.00	83.35	98.13	94.72	2,465.42	5,501.10	2,249.18	2,151.03	98.15	22.917	
10,900.00	7,407.00	11,325.95	7,640.00	83.88	98.20	94.72	2,565.41	5,502.10	2,249.65	2,149.14	100.51	22.382	
11,000.00	7,407.00	11,425.95	7,640.00	84.43	98.30	94.72	2,665.40	5,503.11	2,250.12	2,147.18	102.94	21.858	
11,100.00	7,407.00	11,525.95	7,640.00	85.02	98.41	94.72	2,765.40	5,504.11	2,250.60	2,145.16	105.44	21.345	
11,200.00	7,407.00	11,625.95	7,640.00	85.64	98.55	94.71	2,865.39	5,505.12	2,251.07	2,143.08	107.99	20.845	
11,300.00	7,407.00	11,725.95	7,640.00	86.30	98.70	94.71	2,965.38	5,506.12	2,251.54	2,140.94	110.60	20.357	
11,400.00	7,407.00	11,825.94	7,640.00	86.98	98.87	94.71	3,065.38	5,507.13	2,252.01	2,138.75	113.26	19.883	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - FOX CREEK 12-63 25-23-4 - ORIGINAL WELLBORE - PROPOSAL #2												Offset Site Error:	0.00 usft
Survey Program: 121-OWSG (Rev2) MWD, 1495-OWSG (Rev2) MWD							Rule Assigned:					Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
11,500.00	7,407.00	11,925.94	7,640.00	87.70	99.07	94.71	3,165.37	5,508.13	2,252.49	2,136.51	115.97	19.423	
11,600.00	7,407.00	12,025.94	7,640.00	88.46	99.29	94.71	3,265.37	5,509.14	2,252.96	2,134.23	118.73	18.976	
11,700.00	7,407.00	12,125.94	7,640.00	89.25	99.53	94.71	3,365.36	5,510.14	2,253.43	2,131.91	121.52	18.543	
11,800.00	7,407.00	12,225.94	7,640.00	90.07	99.80	94.71	3,465.35	5,511.15	2,253.90	2,129.54	124.36	18.124	
11,900.00	7,407.00	12,325.94	7,640.00	90.93	100.09	94.71	3,565.35	5,512.15	2,254.37	2,127.14	127.23	17.719	
12,000.00	7,407.00	12,425.94	7,640.00	91.82	100.41	94.71	3,665.34	5,513.16	2,254.85	2,124.71	130.14	17.327	
12,100.00	7,407.00	12,525.94	7,640.00	92.75	100.76	94.71	3,765.34	5,514.16	2,255.32	2,122.24	133.08	16.948	
12,200.00	7,407.00	12,625.94	7,640.00	93.71	101.13	94.70	3,865.33	5,515.17	2,255.79	2,119.75	136.04	16.581	
12,300.00	7,407.00	12,725.93	7,640.00	94.70	101.53	94.70	3,965.32	5,516.17	2,256.26	2,117.22	139.04	16.227	
12,400.00	7,407.00	12,825.93	7,640.00	95.73	101.96	94.70	4,065.32	5,517.18	2,256.74	2,114.67	142.07	15.885	
12,500.00	7,407.00	12,925.93	7,640.00	96.78	102.42	94.70	4,165.31	5,518.18	2,257.21	2,112.09	145.11	15.555	
12,600.00	7,407.00	13,025.93	7,640.00	97.87	102.91	94.70	4,265.30	5,519.19	2,257.68	2,109.49	148.19	15.236	
12,700.00	7,407.00	13,125.93	7,640.00	98.99	103.43	94.70	4,365.30	5,520.19	2,258.15	2,106.87	151.28	14.927	
12,800.00	7,407.00	13,225.93	7,640.00	100.14	103.99	94.70	4,465.29	5,521.20	2,258.62	2,104.23	154.39	14.629	
12,900.00	7,407.00	13,325.93	7,640.00	101.31	104.58	94.70	4,565.29	5,522.20	2,259.10	2,101.57	157.53	14.341	
13,000.00	7,407.00	13,425.93	7,640.00	102.52	105.20	94.70	4,665.28	5,523.20	2,259.57	2,098.89	160.68	14.063	
13,100.00	7,407.00	13,525.93	7,640.00	103.74	105.85	94.70	4,765.27	5,524.21	2,260.04	2,096.20	163.85	13.794	
13,200.00	7,407.00	13,625.92	7,640.00	105.00	106.54	94.69	4,865.27	5,525.21	2,260.51	2,093.48	167.03	13.534	
13,300.00	7,407.00	13,725.92	7,640.00	106.27	107.26	94.69	4,965.26	5,526.22	2,260.99	2,090.76	170.23	13.282	
13,400.00	7,407.00	13,825.92	7,640.00	107.57	108.01	94.69	5,065.25	5,527.22	2,261.46	2,088.01	173.44	13.039	
13,500.00	7,407.00	13,925.92	7,640.00	108.89	108.80	94.69	5,165.25	5,528.23	2,261.93	2,085.26	176.67	12.803	
13,600.00	7,407.00	14,025.92	7,640.00	110.23	109.62	94.69	5,265.24	5,529.23	2,262.40	2,082.49	179.91	12.575	
13,700.00	7,407.00	14,125.92	7,640.00	111.59	110.48	94.69	5,365.24	5,530.24	2,262.87	2,079.71	183.16	12.354	
13,800.00	7,407.00	14,225.92	7,640.00	112.97	111.36	94.69	5,465.23	5,531.24	2,263.35	2,076.92	186.43	12.141	
13,900.00	7,407.00	14,325.92	7,640.00	114.36	112.28	94.69	5,565.22	5,532.25	2,263.82	2,074.12	189.70	11.934	
14,000.00	7,407.00	14,425.92	7,640.00	115.77	113.23	94.69	5,665.22	5,533.25	2,264.29	2,071.30	192.99	11.733	
14,100.00	7,407.00	14,525.91	7,640.00	117.20	114.21	94.69	5,765.21	5,534.26	2,264.76	2,068.48	196.28	11.538	
14,200.00	7,407.00	14,625.91	7,640.00	118.64	115.23	94.68	5,865.21	5,535.26	2,265.24	2,065.65	199.59	11.350	
14,300.00	7,407.00	14,725.91	7,640.00	120.10	116.27	94.68	5,965.20	5,536.27	2,265.71	2,062.81	202.90	11.167	
14,400.00	7,407.00	14,825.91	7,640.00	121.56	117.33	94.68	6,065.19	5,537.27	2,266.18	2,059.96	206.22	10.989	
14,500.00	7,407.00	14,925.91	7,640.00	123.05	118.43	94.68	6,165.19	5,538.28	2,266.65	2,057.10	209.55	10.817	
14,600.00	7,407.00	15,025.91	7,640.00	124.54	119.55	94.68	6,265.18	5,539.28	2,267.12	2,054.24	212.89	10.649	
14,700.00	7,407.00	15,125.91	7,640.00	126.04	120.70	94.68	6,365.17	5,540.29	2,267.60	2,051.37	216.23	10.487	
14,800.00	7,407.00	15,225.91	7,640.00	127.56	121.87	94.68	6,465.17	5,541.29	2,268.07	2,048.49	219.58	10.329	
14,900.00	7,407.00	15,325.91	7,640.00	129.08	123.06	94.68	6,565.16	5,542.30	2,268.54	2,045.60	222.94	10.176	
15,000.00	7,407.00	15,425.90	7,640.00	130.62	124.28	94.68	6,665.16	5,543.30	2,269.01	2,042.71	226.30	10.026	
15,100.00	7,407.00	15,525.90	7,640.00	132.16	125.52	94.68	6,765.15	5,544.31	2,269.49	2,039.81	229.67	9.881	
15,200.00	7,407.00	15,625.90	7,640.00	133.71	126.78	94.67	6,865.14	5,545.31	2,269.96	2,036.91	233.05	9.740	
15,300.00	7,407.00	15,725.90	7,640.00	135.28	128.06	94.67	6,965.14	5,546.32	2,270.43	2,034.00	236.43	9.603	
15,400.00	7,407.00	15,825.90	7,640.00	136.84	129.35	94.67	7,065.13	5,547.32	2,270.90	2,031.09	239.81	9.469	
15,500.00	7,407.00	15,925.90	7,640.00	138.42	130.67	94.67	7,165.13	5,548.33	2,271.37	2,028.17	243.21	9.339	
15,600.00	7,407.00	16,025.90	7,640.00	140.00	132.00	94.67	7,265.12	5,549.33	2,271.85	2,025.25	246.60	9.213	
15,700.00	7,407.00	16,125.90	7,640.00	141.59	133.35	94.67	7,365.11	5,550.33	2,272.32	2,022.32	250.00	9.089	
15,800.00	7,407.00	16,225.90	7,640.00	143.19	134.71	94.67	7,465.11	5,551.34	2,272.79	2,019.38	253.41	8.969	
15,900.00	7,407.00	16,325.89	7,640.00	144.79	136.09	94.67	7,565.10	5,552.34	2,273.26	2,016.45	256.82	8.852	
16,000.00	7,407.00	16,425.89	7,640.00	146.40	137.48	94.67	7,665.09	5,553.35	2,273.74	2,013.51	260.23	8.737	
16,100.00	7,407.00	16,525.89	7,640.00	148.02	138.89	94.67	7,765.09	5,554.35	2,274.21	2,010.56	263.65	8.626	
16,200.00	7,407.00	16,625.89	7,640.00	149.63	140.31	94.67	7,865.08	5,555.36	2,274.68	2,007.61	267.07	8.517	
16,300.00	7,407.00	16,725.89	7,640.00	151.26	141.74	94.66	7,965.08	5,556.36	2,275.15	2,004.66	270.49	8.411	
16,400.00	7,407.00	16,825.89	7,640.00	152.89	143.18	94.66	8,065.07	5,557.37	2,275.62	2,001.70	273.92	8.308	
16,500.00	7,407.00	16,925.89	7,640.00	154.52	144.63	94.66	8,165.06	5,558.37	2,276.10	1,998.75	277.35	8.207	
16,600.00	7,407.00	17,025.89	7,640.00	156.16	146.09	94.66	8,265.06	5,559.38	2,276.57	1,995.78	280.79	8.108	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

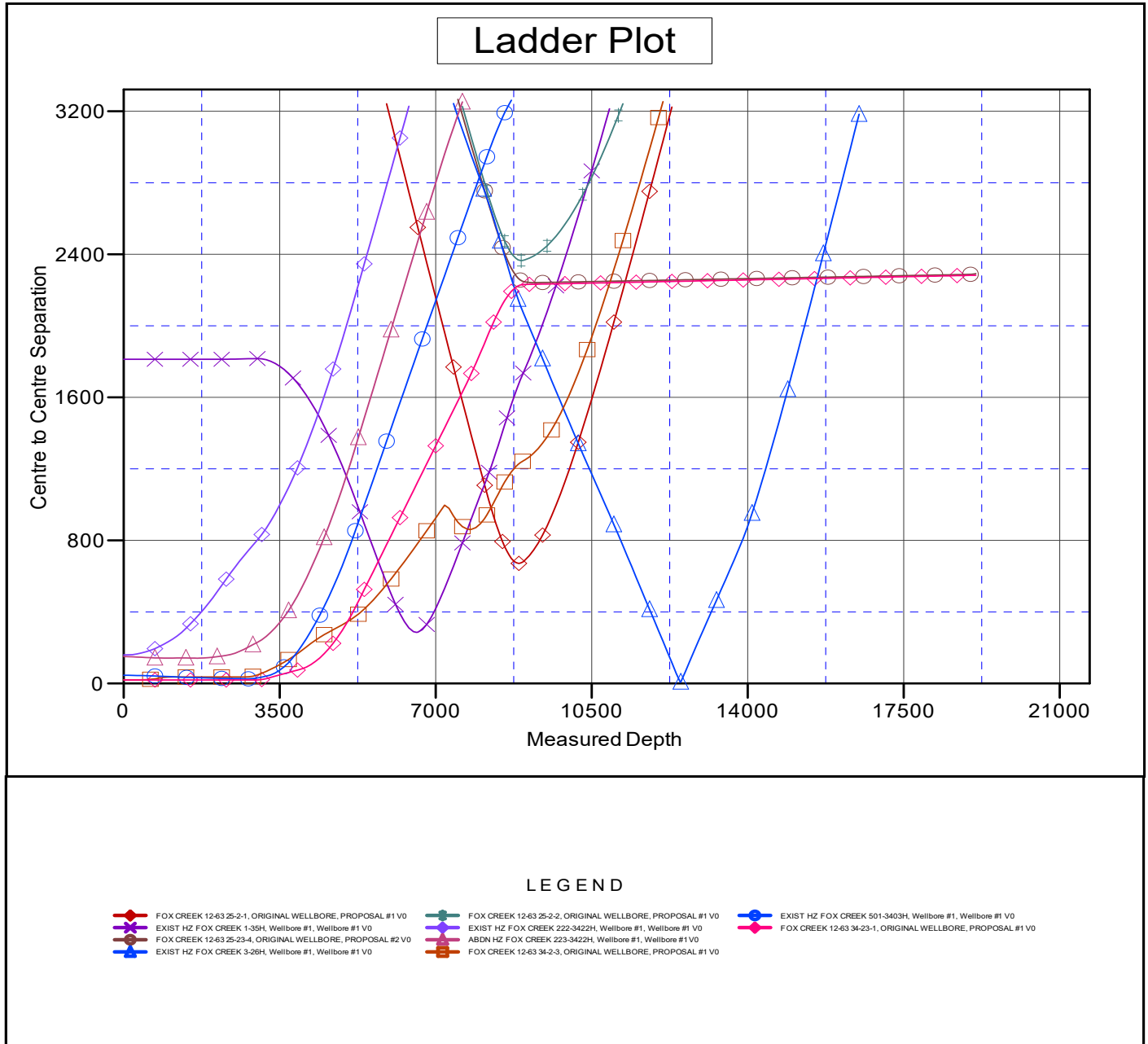
Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - FOX CREEK 12-63 25-23-4 - ORIGINAL WELLBORE - PROPOSAL #2												Offset Site Error:	0.00 usft
Survey Program: 121-OWSG (Rev2) MWD, 1495-OWSG (Rev2) MWD							Rule Assigned:					Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
16,700.00	7,407.00	17,125.88	7,640.00	157.80	147.57	94.66	8,365.05	5,560.38	2,277.04	1,992.82	284.22	8.011	
16,800.00	7,407.00	17,225.88	7,640.00	159.45	149.05	94.66	8,465.05	5,561.39	2,277.51	1,989.85	287.66	7.917	
16,900.00	7,407.00	17,325.88	7,640.00	161.10	150.54	94.66	8,565.04	5,562.39	2,277.99	1,986.88	291.11	7.825	
17,000.00	7,407.00	17,425.88	7,640.00	162.75	152.04	94.66	8,665.03	5,563.40	2,278.46	1,983.90	294.55	7.735	
17,100.00	7,407.00	17,525.88	7,640.00	164.41	153.55	94.66	8,765.03	5,564.40	2,278.93	1,980.93	298.00	7.647	
17,200.00	7,407.00	17,625.88	7,640.00	166.07	155.07	94.66	8,865.02	5,565.41	2,279.40	1,977.95	301.45	7.561	
17,300.00	7,407.00	17,725.88	7,640.00	167.74	156.60	94.65	8,965.01	5,566.41	2,279.87	1,974.97	304.91	7.477	
17,400.00	7,407.00	17,825.88	7,640.00	169.41	158.13	94.65	9,065.01	5,567.42	2,280.35	1,971.98	308.37	7.395	
17,500.00	7,407.00	17,925.88	7,640.00	171.08	159.67	94.65	9,165.00	5,568.42	2,280.82	1,969.00	311.82	7.314	
17,600.00	7,407.00	18,025.87	7,640.00	172.75	161.21	94.65	9,265.00	5,569.43	2,281.29	1,966.01	315.29	7.236	
17,700.00	7,407.00	18,125.87	7,640.00	174.43	162.77	94.65	9,364.99	5,570.43	2,281.76	1,963.02	318.75	7.159	
17,800.00	7,407.00	18,225.87	7,640.00	176.11	164.33	94.65	9,464.98	5,571.44	2,282.24	1,960.02	322.21	7.083	
17,900.00	7,407.00	18,325.87	7,640.00	177.79	165.89	94.65	9,564.98	5,572.44	2,282.71	1,957.03	325.68	7.009	
18,000.00	7,407.00	18,425.87	7,640.00	179.47	167.46	94.65	9,664.97	5,573.45	2,283.18	1,954.03	329.15	6.937	
18,100.00	7,407.00	18,525.87	7,640.00	181.16	169.04	94.65	9,764.96	5,574.45	2,283.65	1,951.03	332.62	6.866	
18,200.00	7,407.00	18,625.87	7,640.00	182.85	170.62	94.65	9,864.96	5,575.46	2,284.12	1,948.03	336.09	6.796	
18,300.00	7,407.00	18,725.87	7,640.00	184.54	172.20	94.64	9,964.95	5,576.46	2,284.60	1,945.03	339.57	6.728	
18,400.00	7,407.00	18,825.87	7,640.00	186.23	173.79	94.64	10,064.95	5,577.47	2,285.07	1,942.02	343.05	6.661	
18,500.00	7,407.00	18,925.86	7,640.00	187.93	175.39	94.64	10,164.94	5,578.47	2,285.54	1,939.02	346.52	6.596	
18,600.00	7,407.00	19,025.86	7,640.00	189.63	176.99	94.64	10,264.93	5,579.47	2,286.01	1,936.01	350.00	6.531	
18,700.00	7,407.00	19,125.86	7,640.00	191.33	178.60	94.64	10,364.93	5,580.48	2,286.49	1,933.00	353.49	6.468	
18,800.00	7,407.00	19,225.86	7,640.00	193.03	180.20	94.64	10,464.92	5,581.48	2,286.96	1,929.99	356.97	6.407	
18,900.00	7,407.00	19,324.06	7,640.00	194.73	181.79	94.64	10,563.11	5,582.48	2,287.44	1,927.03	360.41	6.347	
19,000.00	7,407.00	19,415.97	7,640.00	196.44	183.27	94.64	10,655.02	5,583.47	2,288.00	1,924.31	363.69	6.291 ES	
19,017.90	7,407.00	19,415.97	7,640.00	196.74	183.27	94.64	10,655.02	5,583.47	2,288.23	1,924.37	363.86	6.289	
19,100.00	7,407.00	19,415.97	7,640.00	198.14	183.27	94.64	10,655.02	5,583.47	2,291.09	1,926.69	364.40	6.287 SF	
19,117.88	7,407.00	19,415.97	7,640.00	198.45	183.27	94.64	10,655.02	5,583.47	2,292.11	1,927.63	364.47	6.289	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KBE @ 5371.00usft
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: FOX CREEK 12-63 34-23-2
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.70°

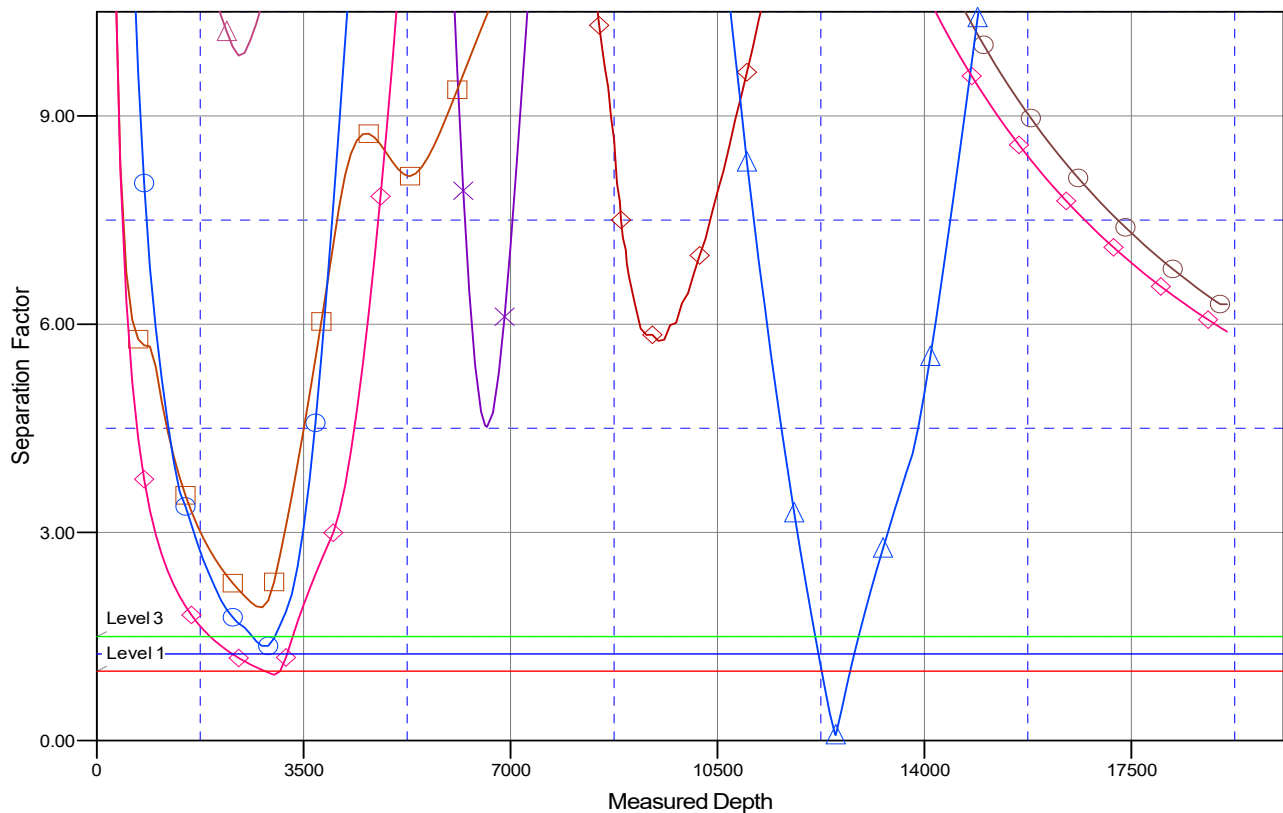


Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-23-2
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-23-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KBE @ 5371.00usft
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: FOX CREEK 12-63 34-23-2
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.70°

Separation Factor Plot



LEGEND

- FOX CREEK 12-63 25-2-1, ORIGINAL WELLBORE, PROPOSAL #1 V0
- EXIST HZ FOX CREEK 1-35H, Wellbore #1, Wellbore #1 V0
- FOX CREEK 12-63 25-23-4, ORIGINAL WELLBORE, PROPOSAL #2 V0
- EXIST HZ FOX CREEK 3-26H, Wellbore #1, Wellbore #1 V0
- FOX CREEK 12-63 25-2-2, ORIGINAL WELLBORE, PROPOSAL #1 V0
- EXIST HZ FOX CREEK 223-3422H, Wellbore #1, Wellbore #1 V0
- ABDN HZ FOX CREEK 223-3422H, Wellbore #1, Wellbore #1 V0
- FOX CREEK 12-63 34-2-3, ORIGINAL WELLBORE, PROPOSAL #1 V0
- EXIST HZ FOX CREEK 501-3403H, Wellbore #1, Wellbore #1 V0
- FOX CREEK 12-63 34-23-1, ORIGINAL WELLBORE, PROPOSAL #1 V0