



BISON IV OPERATING

WELD COUNTY, COLORADO (NAD 83)

SW SE SEC. 25 T12N R63W 6th P.M.

FOX CREEK 12-63 25-1-9

ORIGINAL WELLBORE

PROPOSAL #1

Anticollision Report

12 December, 2024



Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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	2024-12-12		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	18,291.94	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						
SW SE SEC. 25 T12N R63W 6th P.M.						
ABDN HZ JAKE 2-01H - Wellbore #1 - Wellbore #1	15,800.00	8,614.03	68.49	-56.18	0.549	Level 3, ES
ABDN HZ JAKE 2-01H - Wellbore #1 - Wellbore #1	15,866.32	8,654.65	43.53	-41.30	0.513	Level 3, CC
ABDN HZ JAKE 2-01H - Wellbore #1 - Wellbore #1	15,900.00	8,674.69	51.25	-50.01	0.506	Level 3, SF
ABDN VERT LAMOTTA 5-01M - Wellbore #1 - Wellbore	14,885.81	7,358.39	163.72	15.70	1.106	Level 3, CC, ES, SF
ABDN VERT PORTER CREEK #1 - Wellbore #1 - Desig						Out of range
EXIST HZ CRITTER CREEK 1-2H - Wellbore #1 - Wellb						Out of range
EXIST HZ CRITTER CREEK 29-2H - Wellbore #1 - Well						Out of range
EXIST HZ FOX CREEK 1-35H - Wellbore #1 - Wellbore #						Out of range
EXIST HZ FOX CREEK 2-25H - Wellbore #1 - Wellbore #	1,921.43	1,915.43	976.15	965.45	91.212	CC
EXIST HZ FOX CREEK 2-25H - Wellbore #1 - Wellbore #	2,300.00	2,291.86	976.78	963.39	72.950	ES
EXIST HZ FOX CREEK 2-25H - Wellbore #1 - Wellbore #	7,250.00	8,231.48	1,087.13	1,027.75	18.309	SF
EXIST HZ FOX CREEK 3-26H - Wellbore #1 - Wellbore #						Out of range
EXIST HZ FOX CREEK 504-2524H - Wellbore #1 - Wellb	1,144.31	1,129.35	1,100.17	1,092.58	144.948	CC
EXIST HZ FOX CREEK 504-2524H - Wellbore #1 - Wellb	1,500.00	1,483.00	1,100.51	1,090.44	109.284	ES
EXIST HZ FOX CREEK 504-2524H - Wellbore #1 - Wellb	7,550.00	7,494.38	1,669.32	1,613.70	30.016	SF
EXIST HZ FOX CREEK 505-2501H - Wellbore #1 - Wellb	319.63	304.63	1,019.72	1,017.99	590.192	CC
EXIST HZ FOX CREEK 505-2501H - Wellbore #1 - Wellb	2,400.00	2,389.00	1,031.12	1,014.53	62.183	ES
EXIST HZ FOX CREEK 505-2501H - Wellbore #1 - Wellb	18,100.00	17,957.00	1,551.80	1,155.04	3.911	SF
EXIST HZ LONGHORN B 3-36H - Wellbore #1 - Wellbor	12,213.87	7,185.00	842.61	722.00	6.986	CC, ES
EXIST HZ LONGHORN B 3-36H - Wellbore #1 - Wellbor	12,300.00	7,154.00	845.85	724.36	6.962	SF
EXIST HZ LONGHORN B 5-36H - Wellbore #1 - Wellbor	12,052.99	7,433.00	697.11	574.97	5.707	CC, ES
EXIST HZ LONGHORN B 5-36H - Wellbore #1 - Wellbor	12,100.00	7,394.56	697.58	575.05	5.693	SF
EXIST HZ LONGHORN G 4-36H - Wellbore #1 - Wellbor	12,599.82	7,403.88	699.01	566.48	5.274	CC
EXIST HZ LONGHORN G 4-36H - Wellbore #1 - Wellbor	12,600.00	7,403.85	699.01	566.47	5.274	ES
EXIST HZ LONGHORN G 4-36H - Wellbore #1 - Wellbor	12,700.00	7,391.87	706.02	571.45	5.246	SF
EXIST VERT BEVO 4-36 SWD - Wellbore #1 - Wellbore	9,701.97	7,474.81	1,439.74	1,380.30	24.220	CC, ES
EXIST VERT BEVO 4-36 SWD - Wellbore #1 - Wellbore	10,100.00	7,476.85	1,493.75	1,427.42	22.521	SF
EXIST VERT LONGHORN 6-36H - Wellbore #1 - Wellbo	1,503.50	1,497.50	1,676.08	1,668.26	214.175	CC, ES
EXIST VERT LONGHORN 6-36H - Wellbore #1 - Wellbo	2,300.00	1,553.00	1,832.57	1,822.32	178.649	SF
FOX CREEK 12-63 25-1-7 - ORIGINAL WELLBORE - PR	2,100.00	2,100.00	30.10	15.47	2.058	CC, ES, SF
FOX CREEK 12-63 25-1-8 - ORIGINAL WELLBORE - PR	2,200.00	2,200.00	15.00	-0.34	0.978	Level 3, CC, ES, SF
FOX CREEK 12-63 25-2-1 - ORIGINAL WELLBORE - FI	170.73	170.74	119.38	118.62	157.644	CC
FOX CREEK 12-63 25-2-1 - ORIGINAL WELLBORE - FI	200.00	199.63	119.42	118.46	123.645	ES
FOX CREEK 12-63 25-2-1 - ORIGINAL WELLBORE - FI	1,700.00	1,674.51	233.20	221.61	20.111	SF
FOX CREEK 12-63 25-2-2 - ORIGINAL WELLBORE - FI	234.94	234.95	104.05	102.84	85.500	CC, ES
FOX CREEK 12-63 25-2-2 - ORIGINAL WELLBORE - FI	1,800.00	1,775.46	213.29	200.95	17.281	SF

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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

Summary

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
SW SE SEC. 25 T12N R63W 6th P.M.						
FOX CREEK 12-63 25-23-4 - ORIGINAL WELLBORE - F	771.07	771.85	67.45	62.33	13.171	CC
FOX CREEK 12-63 25-23-4 - ORIGINAL WELLBORE - F	900.00	900.61	67.90	61.82	11.177	ES
FOX CREEK 12-63 25-23-4 - ORIGINAL WELLBORE - F	1,300.00	1,297.76	83.03	74.04	9.239	SF
FOX CREEK 12-63 25-24-5 - ORIGINAL WELLBORE - F	1,066.30	1,068.09	33.39	26.09	4.575	CC
FOX CREEK 12-63 25-24-5 - ORIGINAL WELLBORE - F	1,100.00	1,101.65	33.54	25.99	4.445	ES
FOX CREEK 12-63 25-24-5 - ORIGINAL WELLBORE - F	1,200.00	1,201.23	35.66	27.40	4.315	SF
FOX CREEK 12-63 25-24-6 - ORIGINAL WELLBORE - F	1,402.27	1,402.36	40.85	31.37	4.311	CC
FOX CREEK 12-63 25-24-6 - ORIGINAL WELLBORE - F	1,600.00	1,599.64	41.30	30.42	3.798	ES
FOX CREEK 12-63 25-24-6 - ORIGINAL WELLBORE - F	7,541.31	7,970.58	99.64	36.76	1.585	SF

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - ABDN HZ JAKE 2-01H - Wellbore #1 - Wellbore #1											Offset Site Error:		0.00 usft			
Survey Program: 1375-OWSG (Rev2) MWD				Reference Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned: Distance				Offset Well Error:		0.00 usft
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	Warning			
12,000.00	7,462.00	7,047.00	7,032.98	96.45	22.92	75.36	-8,223.10	-1,865.88	3,259.90	3,198.74	61.16	53.304				
12,100.00	7,462.00	7,047.00	7,032.98	98.16	22.92	75.36	-8,223.10	-1,865.88	3,167.94	3,105.56	62.38	50.785				
12,200.00	7,462.00	7,060.89	7,044.96	99.87	22.98	75.83	-8,226.93	-1,859.99	3,076.42	3,012.80	63.61	48.360				
12,300.00	7,462.00	7,079.00	7,060.38	101.58	23.07	76.43	-8,232.13	-1,852.05	2,985.33	2,920.42	64.91	45.995				
12,400.00	7,462.00	7,079.00	7,060.38	103.29	23.07	76.43	-8,232.13	-1,852.05	2,894.70	2,828.24	66.46	43.559				
12,500.00	7,462.00	7,092.78	7,071.92	105.01	23.14	76.88	-8,236.32	-1,845.79	2,804.59	2,736.59	68.00	41.245				
12,600.00	7,462.00	7,110.00	7,086.03	106.73	23.22	77.44	-8,241.93	-1,837.67	2,715.13	2,645.51	69.61	39.004				
12,700.00	7,462.00	7,110.00	7,086.03	108.45	23.22	77.44	-8,241.93	-1,837.67	2,626.23	2,554.66	71.57	36.696				
12,800.00	7,462.00	7,122.67	7,096.17	110.17	23.29	77.84	-8,246.32	-1,831.49	2,538.05	2,464.54	73.51	34.528				
12,900.00	7,462.00	7,141.00	7,110.49	111.90	23.38	78.41	-8,253.08	-1,822.24	2,450.65	2,375.16	75.50	32.460				
13,000.00	7,462.00	7,141.00	7,110.49	113.62	23.38	78.41	-8,253.08	-1,822.24	2,364.03	2,286.07	77.96	30.323				
13,100.00	7,462.00	7,173.00	7,134.63	115.35	23.56	79.40	-8,265.77	-1,805.51	2,278.27	2,198.26	80.00	28.477				
13,200.00	7,462.00	7,183.25	7,142.18	117.08	23.61	79.71	-8,270.03	-1,800.04	2,193.33	2,110.69	82.64	26.542				
13,300.00	7,462.00	7,393.00	7,276.69	118.81	25.09	85.79	-8,357.60	-1,666.65	2,105.91	2,025.66	80.26	26.240				
13,400.00	7,462.00	7,413.25	7,285.93	120.54	25.27	86.24	-8,366.70	-1,651.11	2,018.84	1,936.27	82.57	24.449				
13,500.00	7,462.00	7,424.00	7,290.39	122.28	25.37	86.47	-8,371.77	-1,642.74	1,932.70	1,847.30	85.39	22.633				
13,600.00	7,462.00	7,443.44	7,297.65	124.01	25.56	86.84	-8,381.38	-1,627.48	1,847.52	1,759.39	88.13	20.964				
13,700.00	7,462.00	7,456.00	7,301.80	125.75	25.68	87.05	-8,387.88	-1,617.58	1,763.48	1,672.12	91.36	19.302				
13,800.00	7,462.00	7,475.91	7,307.43	127.49	25.88	87.33	-8,398.70	-1,601.84	1,680.66	1,586.11	94.55	17.776				
13,900.00	7,462.00	7,493.99	7,311.46	129.23	26.07	87.54	-8,409.02	-1,587.56	1,599.22	1,501.13	98.08	16.305				
14,000.00	7,462.00	7,528.00	7,316.21	130.97	26.43	87.76	-8,429.37	-1,560.75	1,519.14	1,418.08	101.07	15.031				
14,100.00	7,462.00	7,669.26	7,312.09	132.71	28.12	87.15	-8,511.94	-1,446.36	1,438.41	1,340.28	98.13	14.658				
14,200.00	7,462.00	7,715.17	7,310.40	134.46	28.76	86.88	-8,537.63	-1,408.36	1,355.58	1,255.12	100.46	13.494				
14,300.00	7,462.00	7,758.07	7,309.56	136.20	29.38	86.67	-8,562.04	-1,373.09	1,273.34	1,170.20	103.13	12.346				
14,400.00	7,462.00	7,819.82	7,308.43	137.95	30.32	86.32	-8,597.40	-1,322.48	1,191.37	1,086.72	104.64	11.385				
14,500.00	7,462.00	7,878.88	7,307.40	139.69	31.27	85.94	-8,631.00	-1,273.91	1,109.13	1,002.78	106.36	10.429				
14,600.00	7,462.00	7,936.51	7,306.87	141.44	32.25	85.56	-8,663.73	-1,226.48	1,026.84	918.64	108.20	9.490				
14,700.00	7,462.00	7,999.12	7,305.68	143.19	33.35	85.00	-8,699.07	-1,174.82	944.35	834.77	109.58	8.618				
14,800.00	7,462.00	8,053.36	7,304.05	144.94	34.34	84.35	-8,729.58	-1,130.00	861.79	750.02	111.78	7.710				
14,900.00	7,462.00	8,109.46	7,304.03	146.69	35.39	83.76	-8,761.27	-1,083.71	779.33	665.51	113.83	6.847				
15,000.00	7,462.00	8,168.13	7,304.37	148.44	36.52	83.04	-8,794.43	-1,035.32	696.91	581.37	115.54	6.032				
15,100.00	7,462.00	8,213.27	7,304.26	150.19	37.41	82.30	-8,820.13	-998.21	614.84	495.39	119.45	5.147				
15,200.00	7,462.00	8,266.00	7,304.76	151.95	38.46	81.34	-8,850.92	-955.40	533.79	411.26	122.53	4.356				
15,300.00	7,462.00	8,320.45	7,306.05	153.70	39.56	80.21	-8,883.11	-911.51	453.28	327.67	125.60	3.609				

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

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - ABDN HZ JAKE 2-01H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 1375-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)			
15,400.00	7,462.00	8,380.42	7,308.29	155.45	40.80	78.66	-8,918.74	-863.32	373.02	245.51	127.51	2.925	
15,500.00	7,462.00	8,438.37	7,310.73	157.21	42.01	76.46	-8,953.12	-816.74	292.81	162.83	129.98	2.253	
15,600.00	7,462.00	8,494.00	7,311.54	158.96	43.19	72.32	-8,986.67	-772.38	213.87	80.17	133.70	1.600	
15,700.00	7,462.00	8,549.92	7,310.05	160.72	44.37	63.20	-9,021.32	-728.52	137.96	0.13	137.83	1.001 Level 3	
15,800.00	7,462.00	8,614.03	7,308.69	162.48	45.75	37.15	-9,061.23	-678.36	68.49	-56.18	124.67	0.549 Level 3, ES	
15,866.32	7,462.00	8,654.65	7,308.47	163.64	46.63	0.68	-9,085.90	-646.10	43.53	-41.30	84.83	0.513 Level 3, CC	
15,900.00	7,462.00	8,674.69	7,308.31	164.23	47.07	-19.66	-9,097.83	-629.99	51.25	-50.01	101.26	0.506 Level 3, SF	
16,000.00	7,462.00	8,734.45	7,308.50	165.99	48.40	-55.77	-9,133.04	-581.71	116.14	-18.14	134.27	0.865 Level 3	
16,100.00	7,462.00	8,795.50	7,309.48	167.75	49.77	-69.39	-9,169.39	-532.67	192.87	50.49	142.38	1.355 Level 3	
16,200.00	7,462.00	8,857.87	7,308.19	169.51	51.17	-74.92	-9,207.27	-483.15	271.20	124.05	147.15	1.843	
16,300.00	7,462.00	8,919.03	7,305.90	171.27	52.55	-77.67	-9,244.81	-434.92	349.70	199.47	150.23	2.328	
16,400.00	7,462.00	8,981.33	7,305.31	173.03	53.97	-79.83	-9,282.99	-385.70	428.31	274.81	153.49	2.790	
16,500.00	7,462.00	9,038.22	7,305.18	174.79	55.27	-81.28	-9,317.67	-340.60	507.30	352.32	154.97	3.273	
16,600.00	7,462.00	9,104.61	7,304.20	176.55	56.80	-82.40	-9,358.08	-287.93	586.53	427.48	159.05	3.688	
16,700.00	7,462.00	9,147.91	7,303.21	178.31	57.81	-82.91	-9,384.38	-253.55	665.99	508.48	157.51	4.228	
16,800.00	7,462.00	9,181.03	7,303.05	180.08	58.59	-83.35	-9,403.46	-226.48	747.59	593.14	154.45	4.840	
16,900.00	7,462.00	9,240.37	7,302.87	181.84	59.99	-84.02	-9,436.78	-177.39	830.29	672.86	157.43	5.274	
17,000.00	7,462.00	9,303.88	7,302.16	183.60	61.50	-84.53	-9,473.21	-125.37	912.16	751.08	161.08	5.663	
17,100.00	7,462.00	9,348.52	7,302.29	185.36	62.57	-84.91	-9,498.51	-88.59	994.51	833.20	161.31	6.165	
17,200.00	7,462.00	9,393.00	7,301.95	187.13	63.64	-85.19	-9,523.43	-51.75	1,077.37	915.63	161.74	6.661	
17,300.00	7,462.00	9,436.96	7,301.09	188.89	64.70	-85.39	-9,547.65	-15.07	1,160.89	998.60	162.29	7.153	
17,400.00	7,462.00	9,482.32	7,300.98	190.66	65.80	-85.64	-9,572.30	22.99	1,244.85	1,081.63	163.22	7.627	
17,500.00	7,462.00	9,529.40	7,301.68	192.42	66.95	-85.94	-9,597.56	62.72	1,329.21	1,164.70	164.52	8.079	
17,600.00	7,462.00	9,577.19	7,302.35	194.19	68.12	-86.21	-9,622.99	103.17	1,413.87	1,247.87	166.00	8.517	
17,700.00	7,462.00	9,707.45	7,301.57	195.95	71.30	-86.64	-9,695.65	211.24	1,496.55	1,318.22	178.33	8.392	
17,800.00	7,462.00	9,775.03	7,301.33	197.72	72.94	-86.82	-9,734.64	266.44	1,578.30	1,396.29	182.01	8.672	
17,900.00	7,462.00	9,906.83	7,300.70	199.49	76.15	-87.12	-9,813.21	372.23	1,658.83	1,465.71	193.12	8.590	
18,000.00	7,462.00	9,964.95	7,298.85	201.25	77.55	-87.14	-9,849.02	417.97	1,737.70	1,542.39	195.31	8.897	
18,100.00	7,462.00	10,006.00	7,296.51	203.02	78.55	-87.10	-9,874.11	450.37	1,816.96	1,621.32	195.64	9.287	
18,191.91	7,462.00	10,038.00	7,294.15	204.64	79.33	-87.05	-9,893.31	475.86	1,890.53	1,695.12	195.41	9.675	
18,191.96	7,462.00	10,038.00	7,294.15	204.64	79.33	-87.05	-9,893.31	475.86	1,890.57	1,695.16	195.41	9.675	
18,200.00	7,462.00	10,038.00	7,294.15	204.79	79.33	-87.05	-9,893.31	475.86	1,897.04	1,701.95	195.09	9.724	
18,291.94	7,462.00	10,055.05	7,292.81	206.41	79.75	-87.02	-9,903.31	489.61	1,971.60	1,778.23	193.37	10.196	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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. - ABDN VERT LAMOTTA 5-01M - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 100-GYD_CT												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)			
11,700.00	7,462.00	7,338.26	7,337.68	91.36	2.50	-82.57	-8,105.53	-480.47	3,189.96	3,156.03	33.93	94.013	
11,800.00	7,462.00	7,339.02	7,338.44	93.05	2.50	-82.84	-8,105.54	-480.47	3,090.10	3,056.01	34.08	90.666	
11,900.00	7,462.00	7,339.77	7,339.19	94.75	2.50	-83.09	-8,105.54	-480.46	2,990.24	2,956.00	34.24	87.325	
12,000.00	7,462.00	7,340.51	7,339.93	96.45	2.50	-83.35	-8,105.55	-480.46	2,890.40	2,855.99	34.41	83.991	
12,100.00	7,462.00	7,341.24	7,340.66	98.16	2.50	-83.60	-8,105.55	-480.45	2,790.57	2,755.97	34.60	80.663	
12,200.00	7,462.00	7,341.96	7,341.38	99.87	2.50	-83.85	-8,105.56	-480.44	2,690.75	2,655.96	34.79	77.343	
12,300.00	7,462.00	7,342.68	7,342.10	101.58	2.50	-84.10	-8,105.56	-480.44	2,590.94	2,555.94	35.00	74.029	
12,400.00	7,462.00	7,343.38	7,342.80	103.29	2.50	-84.35	-8,105.56	-480.43	2,491.15	2,455.93	35.22	70.722	
12,500.00	7,462.00	7,344.08	7,343.50	105.01	2.50	-84.59	-8,105.57	-480.43	2,391.38	2,355.91	35.47	67.423	
12,600.00	7,462.00	7,344.76	7,344.18	106.73	2.50	-84.82	-8,105.57	-480.42	2,291.63	2,255.89	35.73	64.132	
12,700.00	7,462.00	7,345.44	7,344.86	108.45	2.50	-85.06	-8,105.58	-480.42	2,191.90	2,155.87	36.02	60.848	
12,800.00	7,462.00	7,346.11	7,345.53	110.17	2.50	-85.29	-8,105.58	-480.41	2,092.19	2,055.85	36.34	57.573	
12,900.00	7,462.00	7,346.77	7,346.19	111.90	2.50	-85.52	-8,105.58	-480.41	1,992.51	1,955.82	36.69	54.307	
13,000.00	7,462.00	7,347.42	7,346.84	113.62	2.50	-85.75	-8,105.59	-480.40	1,892.87	1,855.79	37.08	51.050	
13,100.00	7,462.00	7,348.07	7,347.49	115.35	2.50	-85.97	-8,105.59	-480.40	1,793.27	1,755.75	37.51	47.803	
13,200.00	7,462.00	7,348.70	7,348.12	117.08	2.50	-86.20	-8,105.60	-480.39	1,693.71	1,655.71	38.00	44.566	
13,300.00	7,462.00	7,349.33	7,348.75	118.81	2.50	-86.42	-8,105.60	-480.39	1,594.21	1,555.65	38.56	41.342	
13,400.00	7,462.00	7,349.95	7,349.37	120.54	2.50	-86.63	-8,105.60	-480.38	1,494.78	1,455.58	39.20	38.131	
13,500.00	7,462.00	7,350.57	7,349.99	122.28	2.50	-86.85	-8,105.61	-480.38	1,395.42	1,355.48	39.94	34.937	
13,600.00	7,462.00	7,351.18	7,350.60	124.01	2.50	-87.06	-8,105.61	-480.37	1,296.17	1,255.36	40.81	31.762	
13,700.00	7,462.00	7,351.78	7,351.20	125.75	2.50	-87.27	-8,105.61	-480.37	1,197.04	1,155.20	41.84	28.610	
13,800.00	7,462.00	7,352.37	7,351.79	127.49	2.50	-87.48	-8,105.62	-480.36	1,098.06	1,054.98	43.08	25.487	
13,900.00	7,462.00	7,352.96	7,352.37	129.23	2.50	-87.68	-8,105.62	-480.36	999.29	954.69	44.60	22.403	
14,000.00	7,462.00	7,353.53	7,352.95	130.97	2.50	-87.88	-8,105.62	-480.36	900.80	854.29	46.51	19.369	
14,100.00	7,462.00	7,354.11	7,353.53	132.71	2.50	-88.08	-8,105.63	-480.35	802.67	753.73	48.94	16.402	
14,200.00	7,462.00	7,354.67	7,354.09	134.46	2.50	-88.28	-8,105.63	-480.35	705.07	652.95	52.12	13.527	
14,300.00	7,462.00	7,355.23	7,354.65	136.20	2.50	-88.48	-8,105.63	-480.34	608.25	551.82	56.43	10.779	
14,400.00	7,462.00	7,355.79	7,355.21	137.95	2.50	-88.67	-8,105.63	-480.34	512.64	450.17	62.48	8.205	
14,500.00	7,462.00	7,356.33	7,355.75	139.69	2.50	-88.86	-8,105.64	-480.34	419.10	347.77	71.33	5.875	
14,600.00	7,462.00	7,356.88	7,356.29	141.44	2.50	-89.05	-8,105.64	-480.33	329.37	244.45	84.92	3.879	
14,700.00	7,462.00	7,357.41	7,356.83	143.19	2.50	-89.24	-8,105.64	-480.33	247.64	141.42	106.22	2.331	
14,800.00	7,462.00	7,357.94	7,357.36	144.94	2.50	-89.43	-8,105.65	-480.32	184.84	49.66	135.18	1.367	Level 3
14,885.81	7,462.00	7,358.39	7,357.81	146.44	2.50	-89.58	-8,105.65	-480.32	163.72	15.70	148.02	1.106	Level 3, CC, ES, SF
14,900.00	7,462.00	7,358.46	7,357.88	146.69	2.50	-89.61	-8,105.65	-480.32	164.33	17.39	146.94	1.118	Level 3
15,000.00	7,462.00	7,358.98	7,358.40	148.44	2.50	-89.79	-8,105.65	-480.32	199.61	80.25	119.35	1.672	
15,100.00	7,462.00	7,359.49	7,358.91	150.19	2.50	-89.97	-8,105.65	-480.31	269.59	180.70	88.89	3.033	
15,200.00	7,462.00	7,360.00	7,359.42	151.95	2.50	-90.15	-8,105.66	-480.31	354.28	285.02	69.27	5.115	
15,300.00	7,462.00	7,360.50	7,359.92	153.70	2.50	-90.32	-8,105.66	-480.31	445.37	388.05	57.32	7.771	
15,400.00	7,462.00	7,361.00	7,360.42	155.45	2.50	-90.50	-8,105.66	-480.30	539.62	489.79	49.83	10.829	
15,500.00	7,462.00	7,361.49	7,360.91	157.21	2.50	-90.67	-8,105.66	-480.30	635.63	590.66	44.97	14.134	
15,600.00	7,462.00	7,361.97	7,361.39	158.96	2.50	-90.84	-8,105.67	-480.29	732.71	690.99	41.72	17.563	
15,700.00	7,462.00	7,362.45	7,361.87	160.72	2.50	-91.00	-8,105.67	-480.29	830.48	790.99	39.49	21.032	
15,800.00	7,462.00	7,362.93	7,362.35	162.48	2.50	-91.17	-8,105.67	-480.29	928.73	890.80	37.92	24.489	
15,900.00	7,462.00	7,363.40	7,362.82	164.23	2.50	-91.34	-8,105.67	-480.28	1,027.31	990.50	36.81	27.906	
16,000.00	7,462.00	7,363.86	7,363.28	165.99	2.50	-91.50	-8,105.68	-480.28	1,126.14	1,090.13	36.01	31.269	
16,100.00	7,462.00	7,364.33	7,363.74	167.75	2.50	-91.66	-8,105.68	-480.28	1,225.17	1,189.73	35.44	34.573	
16,200.00	7,462.00	7,364.78	7,364.20	169.51	2.50	-91.82	-8,105.68	-480.27	1,324.34	1,289.32	35.02	37.818	
16,300.00	7,462.00	7,365.23	7,364.65	171.27	2.50	-91.98	-8,105.68	-480.27	1,423.62	1,388.90	34.72	41.008	
16,400.00	7,462.00	7,365.68	7,365.10	173.03	2.50	-92.13	-8,105.69	-480.27	1,523.00	1,488.50	34.50	44.144	
16,500.00	7,462.00	7,366.12	7,365.54	174.79	2.50	-92.29	-8,105.69	-480.27	1,622.45	1,588.10	34.35	47.232	
16,600.00	7,462.00	7,366.56	7,365.98	176.55	2.50	-92.44	-8,105.69	-480.26	1,721.97	1,687.72	34.25	50.275	
16,700.00	7,462.00	7,366.99	7,366.41	178.31	2.50	-92.59	-8,105.69	-480.26	1,821.54	1,787.35	34.19	53.277	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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. - ABDN VERT LAMOTTA 5-01M - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 100-GYD_CT													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)			
16,800.00	7,462.00	7,367.42	7,366.84	180.08	2.50	-92.74	-8,105.69	-480.26	1,921.16	1,887.00	34.16	56.241	
16,900.00	7,462.00	7,367.85	7,367.27	181.84	2.50	-92.89	-8,105.70	-480.25	2,020.81	1,986.66	34.15	59.169	
17,000.00	7,462.00	7,368.27	7,367.69	183.60	2.50	-93.04	-8,105.70	-480.25	2,120.50	2,086.33	34.17	62.066	
17,100.00	7,462.00	7,368.68	7,368.10	185.36	2.50	-93.18	-8,105.70	-480.25	2,220.21	2,186.02	34.19	64.932	
17,200.00	7,462.00	7,369.10	7,368.52	187.13	2.50	-93.33	-8,105.70	-480.24	2,319.95	2,285.72	34.23	67.769	
17,300.00	7,462.00	7,369.51	7,368.92	188.89	2.50	-93.47	-8,105.70	-480.24	2,419.71	2,385.43	34.28	70.580	
17,400.00	7,462.00	7,369.91	7,369.33	190.66	2.50	-93.61	-8,105.70	-480.24	2,519.49	2,485.15	34.34	73.365	
17,500.00	7,462.00	7,370.31	7,369.73	192.42	2.50	-93.75	-8,105.71	-480.24	2,619.28	2,584.88	34.41	76.126	
17,600.00	7,462.00	7,370.71	7,370.13	194.19	2.50	-93.89	-8,105.71	-480.23	2,719.09	2,684.62	34.48	78.863	
17,700.00	7,462.00	7,371.10	7,370.52	195.95	2.50	-94.02	-8,105.71	-480.23	2,818.92	2,784.36	34.55	81.579	
17,800.00	7,462.00	7,371.49	7,370.91	197.72	2.50	-94.16	-8,105.71	-480.23	2,918.75	2,884.12	34.63	84.273	
17,900.00	7,462.00	7,371.88	7,371.30	199.49	2.50	-94.29	-8,105.71	-480.23	3,018.60	2,983.88	34.72	86.947	
18,000.00	7,462.00	7,372.26	7,371.68	201.25	2.50	-94.43	-8,105.72	-480.22	3,118.46	3,083.65	34.80	89.600	
18,100.00	7,462.00	7,372.64	7,372.06	203.02	2.50	-94.56	-8,105.72	-480.22	3,218.32	3,183.43	34.89	92.234	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 2-25H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 1559-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	116.35	-433.50	875.12	976.63				
100.00	100.00	94.00	94.00	0.14	0.17	116.35	-433.50	875.12	976.61	976.30	0.31	3,154.405	
200.00	200.00	194.00	194.00	0.50	0.34	116.35	-433.50	875.12	976.61	975.76	0.84	1,155.893	
300.00	300.00	294.00	294.00	0.86	0.52	116.35	-433.50	875.12	976.61	975.23	1.38	707.590	
400.00	400.00	394.00	394.00	1.22	0.70	116.35	-433.50	875.12	976.61	974.69	1.92	509.850	
500.00	500.00	494.00	494.00	1.58	0.87	116.35	-433.50	875.12	976.61	974.16	2.45	398.489	
600.00	600.00	594.00	594.00	1.94	1.05	116.35	-433.50	875.12	976.61	973.62	2.99	327.055	
700.00	700.00	694.00	694.00	2.29	1.23	116.35	-433.50	875.12	976.61	973.09	3.52	277.338	
800.00	800.00	794.00	794.00	2.65	1.40	116.35	-433.50	875.12	976.61	972.55	4.06	240.742	
900.00	900.00	894.00	894.00	3.01	1.58	116.35	-433.50	875.12	976.61	972.01	4.59	212.678	
1,000.00	1,000.00	994.00	994.00	3.37	1.76	116.35	-433.50	875.12	976.61	971.48	5.13	190.474	
1,100.00	1,100.00	1,094.00	1,094.00	3.73	1.93	116.35	-433.50	875.12	976.61	970.94	5.66	172.468	
1,200.00	1,200.00	1,194.00	1,194.00	4.09	2.11	116.35	-433.50	875.12	976.61	970.41	6.20	157.573	
1,300.00	1,300.00	1,294.00	1,294.00	4.45	2.29	116.35	-433.50	875.12	976.61	969.87	6.73	145.045	
1,400.00	1,400.00	1,394.00	1,394.00	4.80	2.46	116.35	-433.50	875.12	976.61	969.34	7.27	134.363	
1,500.00	1,500.00	1,494.00	1,494.00	5.16	2.64	116.35	-433.50	875.12	976.61	968.80	7.80	125.147	
1,600.00	1,600.00	1,596.06	1,596.06	5.52	2.89	116.34	-433.34	875.12	976.54	968.13	8.41	116.119	
1,700.00	1,700.00	1,695.54	1,695.53	5.88	3.25	116.32	-432.83	875.17	976.36	967.23	9.12	107.006	
1,800.00	1,800.00	1,795.01	1,795.01	6.24	3.60	116.29	-432.32	875.28	976.23	966.39	9.84	99.222	
1,900.00	1,900.00	1,894.23	1,894.23	6.60	3.96	116.26	-431.84	875.44	976.16	965.61	10.55	92.524	
1,921.43	1,921.43	1,915.43	1,915.43	6.67	4.03	116.25	-431.75	875.48	976.15	965.45	10.70	91.212 CC	
2,000.00	2,000.00	1,993.17	1,993.16	6.95	4.30	116.23	-431.47	875.65	976.19	964.93	11.26	86.707	
2,100.00	2,100.00	2,092.10	2,092.10	7.31	4.65	116.21	-431.23	875.93	976.33	964.36	11.97	81.589	
2,200.00	2,200.00	2,191.75	2,191.75	7.67	5.01	116.19	-431.08	876.26	976.55	963.88	12.68	77.032	
2,300.00	2,300.00	2,291.86	2,291.86	8.03	5.36	116.17	-430.80	876.64	976.78	963.39	13.39	72.950 ES	
2,400.00	2,399.98	2,391.94	2,391.93	8.37	5.72	-112.13	-430.39	877.08	977.65	963.56	14.09	69.403	
2,500.00	2,499.84	2,492.73	2,492.72	8.70	6.06	-112.41	-429.96	877.49	979.81	965.04	14.76	66.362	
2,600.00	2,599.45	2,593.59	2,593.57	9.04	6.41	-112.83	-429.78	877.63	983.22	967.78	15.44	63.665	
2,700.00	2,698.70	2,694.15	2,694.14	9.38	6.75	-113.40	-429.85	877.51	987.96	971.83	16.13	61.262	
2,789.31	2,786.94	2,783.00	2,782.99	9.69	7.06	-114.01	-430.00	877.27	993.41	976.67	16.74	59.346	
2,800.00	2,797.47	2,793.60	2,793.59	9.73	7.10	-114.10	-430.00	877.24	994.13	977.32	16.81	59.129	
2,900.00	2,896.01	2,892.75	2,892.74	10.09	7.44	-114.98	-429.99	876.99	1,001.04	983.53	17.51	57.183	
3,000.00	2,994.56	2,991.74	2,991.73	10.46	7.78	-115.85	-429.82	876.74	1,008.12	989.91	18.21	55.374	
3,100.00	3,093.10	3,089.02	3,089.01	10.83	8.12	-116.71	-429.57	876.57	1,015.48	996.56	18.92	53.683	
3,200.00	3,191.65	3,186.26	3,186.24	11.22	8.46	-117.55	-429.30	876.55	1,023.19	1,003.56	19.63	52.119	
3,300.00	3,290.19	3,283.73	3,283.72	11.61	8.81	-118.39	-429.01	876.66	1,031.26	1,010.91	20.35	50.670	
3,400.00	3,388.74	3,382.91	3,382.90	12.00	9.16	-119.23	-428.62	876.81	1,039.56	1,018.47	21.09	49.302	
3,500.00	3,487.28	3,482.07	3,482.05	12.40	9.52	-120.06	-428.10	876.93	1,048.02	1,026.19	21.82	48.026	
3,600.00	3,585.83	3,581.24	3,581.22	12.80	9.87	-120.89	-427.45	877.03	1,056.63	1,034.07	22.56	46.835	
3,700.00	3,684.37	3,680.51	3,680.49	13.21	10.23	-121.71	-426.76	877.06	1,065.39	1,042.09	23.30	45.721	
3,800.00	3,782.92	3,779.81	3,779.78	13.62	10.58	-122.51	-426.08	877.01	1,074.29	1,050.24	24.05	44.677	
3,900.00	3,881.46	3,878.45	3,878.42	14.04	10.94	-123.30	-425.41	876.90	1,083.33	1,058.54	24.79	43.704	
4,000.00	3,980.01	3,976.11	3,976.08	14.46	11.28	-124.06	-424.79	876.82	1,092.61	1,067.09	25.53	42.801	
4,100.00	4,078.55	4,073.76	4,073.73	14.88	11.63	-124.80	-424.22	876.81	1,102.17	1,075.90	26.27	41.958	
4,200.00	4,177.10	4,171.91	4,171.88	15.30	11.98	-125.54	-423.72	876.84	1,111.98	1,084.97	27.01	41.167	
4,300.00	4,275.64	4,270.66	4,270.63	15.73	12.34	-126.26	-423.33	876.85	1,121.97	1,094.21	27.76	40.421	
4,400.00	4,374.19	4,369.45	4,369.41	16.16	12.69	-126.96	-423.07	876.80	1,132.10	1,103.60	28.50	39.719	
4,500.00	4,472.73	4,469.91	4,469.88	16.59	13.04	-127.66	-422.91	876.66	1,142.33	1,113.08	29.25	39.051	
4,600.00	4,571.28	4,571.58	4,571.55	17.02	13.40	-128.34	-422.77	876.26	1,152.48	1,122.48	30.00	38.411	
4,700.00	4,669.82	4,673.33	4,673.29	17.45	13.76	-129.02	-422.65	875.58	1,162.52	1,131.76	30.76	37.798	
4,800.00	4,768.37	4,772.59	4,772.55	17.89	14.10	-129.65	-422.62	874.72	1,172.52	1,141.03	31.49	37.232	
4,900.00	4,866.91	4,871.22	4,871.18	18.33	14.43	-130.26	-422.89	873.82	1,182.66	1,150.44	32.22	36.702	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 2-25H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 1559-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)			
5,000.00	4,965.46	4,969.94	4,969.89	18.77	14.77	-130.85	-423.44	872.88	1,192.93	1,159.98	32.96	36.198	
5,100.00	5,064.00	5,073.61	5,073.55	19.21	15.13	-131.44	-424.29	871.67	1,203.14	1,169.44	33.71	35.696	
5,200.00	5,162.55	5,178.00	5,177.92	19.65	15.48	-132.01	-425.35	869.95	1,213.02	1,178.56	34.46	35.203	
5,300.00	5,261.09	5,280.91	5,280.80	20.09	15.83	-132.56	-426.58	867.78	1,222.55	1,187.35	35.21	34.727	
5,400.00	5,359.64	5,375.67	5,375.53	20.53	16.16	-133.07	-427.27	865.87	1,232.25	1,196.32	35.93	34.297	
5,500.00	5,458.18	5,470.17	5,470.02	20.98	16.50	-133.61	-427.20	864.35	1,242.40	1,205.75	36.65	33.900	
5,600.00	5,556.72	5,564.64	5,564.49	21.42	16.83	-134.18	-426.38	863.21	1,253.01	1,215.64	37.37	33.532	
5,700.00	5,655.27	5,660.42	5,660.25	21.87	17.17	-134.76	-425.27	862.34	1,264.02	1,225.93	38.10	33.180	
5,800.00	5,753.81	5,756.14	5,755.97	22.32	17.51	-135.33	-424.17	861.67	1,275.38	1,236.56	38.82	32.851	
5,900.00	5,852.36	5,851.52	5,851.33	22.76	17.85	-135.89	-423.07	861.21	1,287.09	1,247.55	39.55	32.545	
6,000.00	5,950.90	5,945.32	5,945.13	23.21	18.18	-136.43	-422.11	861.05	1,299.24	1,258.98	40.26	32.270	
6,100.00	6,049.45	6,039.08	6,038.89	23.66	18.51	-136.94	-421.34	861.22	1,311.86	1,270.88	40.97	32.016	
6,200.00	6,147.99	6,133.34	6,133.14	24.11	18.85	-137.45	-420.74	861.72	1,324.94	1,283.25	41.69	31.781	
6,300.00	6,246.54	6,231.67	6,231.47	24.56	19.19	-137.96	-420.19	862.38	1,338.26	1,295.84	42.42	31.548	
6,400.00	6,345.08	6,330.01	6,329.80	25.01	19.54	-138.46	-419.65	863.05	1,351.70	1,308.55	43.15	31.326	
6,500.00	6,443.63	6,428.23	6,428.03	25.47	19.88	-138.95	-419.12	863.72	1,365.24	1,321.36	43.88	31.115	
6,600.00	6,542.17	8,213.45	7,481.24	25.92	34.87	170.63	254.87	30.09	1,303.65	1,258.73	44.92	29.020	
6,700.00	6,640.72	8,232.04	7,481.58	26.37	35.22	169.61	265.73	15.01	1,246.23	1,198.78	47.45	26.263	
6,800.00	6,739.26	8,244.01	7,481.66	26.82	35.44	168.95	272.72	5.28	1,194.38	1,144.39	49.99	23.891	
6,900.00	6,837.81	8,250.97	7,481.74	27.28	35.58	168.57	276.74	-0.40	1,148.88	1,096.39	52.50	21.885	
7,000.00	6,936.35	8,260.75	7,481.85	27.73	35.76	168.03	282.35	-8.40	1,110.51	1,055.52	54.99	20.196	
7,022.19	6,958.22	8,263.09	7,481.88	27.83	35.81	167.91	283.69	-10.33	1,103.03	1,047.51	55.53	19.865	
7,050.00	6,985.54	8,265.31	7,481.90	27.96	35.85	177.32	284.95	-12.15	1,094.75	1,038.56	56.18	19.486	
7,100.00	7,034.07	8,265.21	7,481.90	28.21	35.85	-172.30	284.89	-12.07	1,084.18	1,026.92	57.26	18.934	
7,150.00	7,081.53	8,259.29	7,481.83	28.48	35.74	-166.03	281.51	-7.21	1,079.37	1,021.20	58.17	18.556	
7,166.20	7,096.62	8,255.98	7,481.79	28.57	35.67	-164.42	279.62	-4.50	1,079.07	1,020.65	58.42	18.471	
7,200.00	7,127.56	8,246.65	7,481.70	28.76	35.49	-161.40	274.24	3.13	1,080.39	1,021.54	58.86	18.356	
7,250.00	7,171.81	8,231.48	7,481.57	29.06	35.21	-157.57	265.41	15.46	1,087.13	1,027.75	59.38	18.309 SF	
7,300.00	7,213.95	8,217.36	7,481.33	29.38	34.94	-154.18	257.16	26.92	1,099.36	1,039.58	59.78	18.389	
7,350.00	7,253.65	8,201.98	7,480.91	29.71	34.65	-150.79	248.17	39.39	1,116.76	1,056.72	60.04	18.600	
7,400.00	7,290.61	8,186.42	7,480.30	30.06	34.36	-147.26	239.09	52.01	1,138.90	1,078.72	60.18	18.925	
7,450.00	7,324.55	8,168.95	7,479.44	30.43	34.04	-143.32	228.90	66.17	1,165.28	1,105.10	60.18	19.363	
7,500.00	7,355.20	8,148.36	7,478.38	30.81	33.66	-138.78	216.87	82.85	1,195.31	1,135.27	60.04	19.910	
7,550.00	7,382.35	8,119.10	7,476.88	31.21	33.13	-133.23	199.68	106.47	1,228.37	1,168.69	59.68	20.583	
7,600.00	7,405.78	8,098.60	7,475.79	31.62	32.76	-127.54	187.55	122.97	1,263.85	1,204.42	59.43	21.267	
7,650.00	7,425.31	8,080.00	7,474.72	32.05	32.43	-121.29	176.63	137.99	1,301.38	1,242.21	59.17	21.993	
7,700.00	7,440.80	8,057.56	7,473.42	32.49	32.04	-114.28	163.50	156.14	1,340.43	1,281.60	58.84	22.782	
7,750.00	7,452.12	8,033.75	7,472.05	32.94	31.63	-106.84	149.61	175.43	1,380.49	1,322.02	58.47	23.611	
7,800.00	7,459.19	8,006.54	7,470.26	33.41	31.17	-99.20	133.78	197.49	1,421.12	1,363.08	58.05	24.482	
7,850.00	7,461.96	7,972.74	7,468.01	33.88	30.61	-91.77	114.03	224.83	1,461.78	1,404.25	57.54	25.406	
7,857.01	7,462.00	7,968.65	7,467.73	33.95	30.55	-90.78	111.65	228.13	1,467.47	1,409.99	57.48	25.532	
7,857.01	7,462.00	7,968.65	7,467.73	33.95	30.55	-90.78	111.65	228.13	1,467.47	1,409.99	57.48	25.532	
7,900.00	7,462.00	7,938.97	7,465.77	34.36	30.07	-90.63	94.26	252.12	1,502.31	1,445.26	57.05	26.333	
8,000.00	7,462.00	7,871.74	7,459.56	35.38	29.04	-90.22	54.64	306.06	1,582.96	1,526.80	56.16	28.187	
8,100.00	7,462.00	7,794.96	7,446.17	36.45	27.92	-89.44	9.42	366.62	1,663.19	1,607.94	55.25	30.102	
8,200.00	7,462.00	7,750.83	7,437.09	37.58	27.33	-88.95	-16.45	401.21	1,743.47	1,688.66	54.81	31.809	
8,300.00	7,462.00	7,689.72	7,421.87	38.75	26.55	-88.19	-51.64	448.77	1,824.17	1,769.90	54.26	33.617	
8,400.00	7,462.00	7,616.36	7,398.40	39.98	25.71	-87.10	-93.54	504.20	1,904.50	1,850.79	53.71	35.459	
8,500.00	7,462.00	7,491.69	7,343.81	41.24	24.51	-84.76	-163.14	591.68	1,984.25	1,931.28	52.97	37.457	
8,600.00	7,462.00	7,434.18	7,313.43	42.54	24.06	-83.55	-194.71	628.93	2,062.95	2,010.18	52.77	39.092	
8,700.00	7,462.00	7,359.00	7,272.20	43.87	23.53	-82.00	-235.78	676.50	2,141.74	2,089.16	52.57	40.737	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 2-25H - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 1559-OWSG (Rev2) MWD													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:		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	
8,800.00	7,462.00	7,320.36	7,248.48	45.24	23.30	-81.14	-256.02	699.30	2,220.81	2,168.26	52.55	42.263	
8,900.00	7,462.00	7,281.21	7,222.42	46.63	23.08	-80.20	-275.45	721.11	2,300.71	2,248.18	52.53	43.797	
9,000.00	7,462.00	7,249.25	7,200.24	48.05	22.91	-79.42	-290.79	738.26	2,381.33	2,328.79	52.54	45.321	
9,100.00	7,462.00	7,233.00	7,188.60	49.49	22.83	-79.02	-298.31	746.75	2,462.92	2,410.32	52.60	46.825	
9,200.00	7,462.00	7,201.00	7,164.94	50.96	22.69	-78.21	-312.50	762.95	2,545.37	2,492.75	52.62	48.374	
9,300.00	7,462.00	7,185.38	7,153.05	52.44	22.62	-77.81	-319.11	770.62	2,628.72	2,576.05	52.67	49.905	
9,400.00	7,462.00	7,169.00	7,140.35	53.94	22.54	-77.38	-325.82	778.51	2,712.94	2,660.21	52.73	51.452	
9,500.00	7,462.00	7,147.86	7,123.61	55.46	22.46	-76.83	-334.13	788.38	2,797.93	2,745.16	52.77	53.022	
9,600.00	7,462.00	7,105.00	7,088.25	57.00	22.28	-75.66	-349.96	806.68	2,883.52	2,830.76	52.76	54.653	
9,700.00	7,462.00	7,083.77	7,070.01	58.55	22.20	-75.06	-357.30	814.67	2,969.55	2,916.76	52.79	56.250	
9,800.00	7,462.00	7,074.00	7,061.46	60.11	22.17	-74.78	-360.54	818.13	3,056.25	3,003.41	52.85	57.832	
9,900.00	7,462.00	7,057.45	7,046.78	61.68	22.10	-74.30	-365.76	823.71	3,143.59	3,090.71	52.88	59.446	
10,000.00	7,462.00	7,042.00	7,032.88	63.27	22.05	-73.84	-370.36	828.63	3,231.59	3,178.67	52.91	61.071	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 504-2524H - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 149-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	120.67	-563.58	950.24	1,104.90				
100.00	100.00	83.92	83.92	0.14	0.14	120.67	-563.50	950.33	1,104.84	1,104.56	0.28	3,936.418	
200.00	200.00	183.13	183.13	0.50	0.37	120.64	-563.20	950.68	1,104.98	1,104.12	0.87	1,273.164	
300.00	300.00	286.19	286.19	0.86	0.73	120.61	-562.68	951.12	1,105.09	1,103.50	1.59	692.958	
400.00	400.00	389.64	389.64	1.22	1.10	120.56	-561.77	951.25	1,104.75	1,102.43	2.32	475.811	
500.00	500.00	488.29	488.27	1.58	1.46	120.51	-560.68	951.45	1,104.36	1,101.33	3.03	364.164	
600.00	600.00	588.75	588.73	1.94	1.82	120.47	-559.81	951.64	1,104.09	1,100.34	3.75	294.389	
700.00	700.00	691.30	691.27	2.29	2.18	120.43	-558.92	951.63	1,103.65	1,099.17	4.47	246.639	
800.00	800.00	797.99	797.96	2.65	2.56	120.38	-557.65	951.33	1,102.80	1,097.59	5.21	211.544	
900.00	900.00	895.00	894.96	3.01	2.90	120.35	-556.71	950.82	1,101.86	1,095.95	5.91	186.409	
1,000.00	1,000.00	998.07	998.03	3.37	3.25	120.38	-556.68	949.63	1,100.85	1,094.22	6.62	166.224	
1,100.00	1,100.00	1,086.56	1,086.51	3.73	3.56	120.40	-556.72	948.95	1,100.20	1,092.92	7.29	151.010	
1,144.31	1,144.31	1,129.35	1,129.31	3.89	3.70	120.40	-556.79	948.87	1,100.17	1,092.58	7.59	144.948 CC	
1,200.00	1,200.00	1,183.47	1,183.42	4.09	3.89	120.42	-557.08	948.76	1,100.22	1,092.25	7.97	137.982	
1,300.00	1,300.00	1,284.08	1,284.03	4.45	4.23	120.46	-557.74	948.52	1,100.34	1,091.67	8.67	126.885	
1,400.00	1,400.00	1,385.18	1,385.12	4.80	4.57	120.50	-558.54	948.05	1,100.35	1,090.97	9.38	117.360	
1,403.38	1,403.38	1,388.44	1,388.38	4.82	4.58	120.51	-558.57	948.03	1,100.35	1,090.95	9.40	117.069	
1,500.00	1,500.00	1,483.00	1,482.94	5.16	4.91	120.55	-559.39	947.73	1,100.51	1,090.44	10.07	109.284 ES	
1,600.00	1,600.00	1,573.00	1,572.91	5.52	5.22	120.66	-561.60	947.20	1,101.24	1,090.50	10.74	102.553	
1,700.00	1,700.00	1,666.73	1,666.54	5.88	5.55	120.88	-565.81	946.23	1,102.65	1,091.23	11.42	96.526	
1,800.00	1,800.00	1,761.03	1,760.69	6.24	5.88	121.13	-570.88	945.32	1,104.59	1,092.48	12.11	91.210	
1,900.00	1,900.00	1,861.52	1,860.98	6.60	6.23	121.43	-577.16	944.35	1,107.01	1,094.19	12.82	86.342	
2,000.00	2,000.00	1,970.59	1,969.82	6.95	6.62	121.80	-583.89	941.75	1,108.18	1,094.61	13.57	81.666	
2,100.00	2,100.00	2,052.42	2,051.43	7.31	6.91	122.09	-589.64	940.28	1,110.37	1,096.15	14.22	78.100	
2,200.00	2,200.00	2,137.73	2,136.45	7.67	7.22	122.41	-596.57	939.75	1,114.17	1,099.30	14.88	74.895	
2,300.00	2,300.00	2,230.67	2,229.03	8.03	7.56	122.76	-604.74	939.66	1,118.84	1,103.28	15.57	71.870	
2,400.00	2,399.98	2,318.45	2,316.31	8.37	7.88	-104.97	-614.15	939.21	1,124.74	1,108.51	16.22	69.325	
2,500.00	2,499.84	2,397.12	2,394.40	8.70	8.18	-104.61	-623.68	939.49	1,133.05	1,116.22	16.83	67.335	
2,600.00	2,599.45	2,471.06	2,467.60	9.04	8.46	-104.31	-633.94	940.83	1,144.42	1,127.01	17.41	65.745	
2,700.00	2,698.70	2,574.65	2,570.08	9.38	8.86	-104.12	-648.85	943.47	1,157.54	1,139.40	18.14	63.816	
2,789.31	2,786.94	2,670.36	2,664.89	9.69	9.23	-104.13	-661.75	945.76	1,169.43	1,150.61	18.82	62.147	
2,800.00	2,797.47	2,681.04	2,675.47	9.73	9.27	-104.16	-663.16	946.00	1,170.86	1,151.97	18.90	61.966	
2,900.00	2,896.01	2,781.74	2,775.29	10.09	9.66	-104.50	-676.31	948.32	1,184.27	1,164.64	19.63	60.318	
3,000.00	2,994.56	2,877.49	2,870.23	10.46	10.04	-104.84	-688.43	950.70	1,197.67	1,177.31	20.36	58.828	
3,100.00	3,093.10	2,975.08	2,966.77	10.83	10.43	-105.08	-702.63	952.36	1,211.46	1,190.36	21.11	57.400	
3,200.00	3,191.65	3,066.42	3,057.12	11.22	10.80	-105.30	-715.93	954.10	1,225.45	1,203.62	21.83	56.138	
3,300.00	3,290.19	3,165.84	3,155.41	11.61	11.21	-105.54	-730.72	956.40	1,239.96	1,217.36	22.60	54.860	
3,400.00	3,388.74	3,257.09	3,245.62	12.00	11.58	-105.75	-744.28	958.60	1,254.58	1,231.24	23.34	53.755	
3,500.00	3,487.28	3,363.55	3,350.76	12.40	12.02	-105.96	-760.76	960.93	1,269.35	1,245.18	24.17	52.527	
3,600.00	3,585.83	3,461.23	3,447.40	12.80	12.43	-106.21	-774.75	963.36	1,283.78	1,258.83	24.95	51.459	
3,700.00	3,684.37	3,555.40	3,540.63	13.21	12.82	-106.47	-787.71	966.39	1,298.56	1,272.85	25.71	50.505	
3,800.00	3,782.92	3,654.35	3,638.61	13.62	13.23	-106.75	-801.12	969.61	1,313.30	1,286.79	26.51	49.548	
3,900.00	3,881.46	3,743.02	3,726.34	14.04	13.59	-106.99	-813.61	972.85	1,328.67	1,301.42	27.25	48.764	
4,000.00	3,980.01	3,843.07	3,825.25	14.46	14.02	-107.23	-828.16	976.62	1,344.40	1,316.35	28.06	47.916	
4,100.00	4,078.55	3,945.97	3,927.01	14.88	14.45	-107.47	-843.05	980.09	1,359.78	1,330.89	28.89	47.070	
4,200.00	4,177.10	4,041.80	4,021.78	15.30	14.85	-107.69	-856.93	983.28	1,375.16	1,345.47	29.68	46.329	
4,300.00	4,275.64	4,143.23	4,122.17	15.73	15.28	-107.95	-870.86	987.25	1,390.68	1,360.18	30.51	45.586	
4,400.00	4,374.19	4,238.68	4,216.75	16.16	15.68	-108.24	-882.97	991.41	1,406.11	1,374.82	31.30	44.930	
4,500.00	4,472.73	4,360.88	4,337.85	16.59	16.18	-108.56	-898.87	995.46	1,420.81	1,388.57	32.24	44.072	
4,600.00	4,571.28	4,457.60	4,433.67	17.02	16.59	-108.79	-911.75	997.88	1,435.00	1,401.95	33.05	43.421	
4,700.00	4,669.82	4,561.41	4,536.27	17.45	17.04	-108.93	-927.53	999.09	1,448.93	1,415.02	33.91	42.734	
4,800.00	4,768.37	4,658.28	4,632.02	17.89	17.45	-109.06	-942.20	1,000.17	1,462.81	1,428.08	34.73	42.120	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 504-2524H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 149-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	4,866.91	4,754.57	4,727.22	18.33	17.87	-109.20	-956.54	1,001.62	1,476.92	1,441.37	35.55	41.544	
5,000.00	4,965.46	4,857.87	4,829.46	18.77	18.31	-109.38	-971.12	1,003.59	1,491.03	1,454.62	36.41	40.955	
5,100.00	5,064.00	4,970.98	4,941.79	19.21	18.77	-109.69	-984.09	1,006.51	1,504.51	1,467.20	37.30	40.331	
5,200.00	5,162.55	5,072.79	5,043.03	19.65	19.18	-110.02	-994.44	1,009.29	1,517.54	1,479.41	38.13	39.798	
5,300.00	5,261.09	5,181.84	5,151.69	20.09	19.60	-110.45	-1,002.99	1,012.70	1,529.91	1,490.92	38.98	39.244	
5,400.00	5,359.64	5,291.76	5,261.32	20.53	20.01	-110.95	-1,009.66	1,016.73	1,542.07	1,502.24	39.83	38.721	
5,500.00	5,458.18	5,436.48	5,405.92	20.98	20.51	-111.74	-1,013.63	1,020.94	1,552.15	1,511.37	40.79	38.052	
5,600.00	5,556.72	5,545.80	5,515.22	21.42	20.88	-112.36	-1,015.17	1,022.71	1,560.71	1,519.12	41.60	37.518	
5,700.00	5,655.27	5,659.89	5,629.29	21.87	21.27	-112.95	-1,017.24	1,023.28	1,568.59	1,526.16	42.43	36.969	
5,800.00	5,753.81	5,751.61	5,720.99	22.32	21.59	-113.42	-1,018.92	1,023.31	1,576.17	1,532.98	43.18	36.501	
5,900.00	5,852.36	5,849.51	5,818.88	22.76	21.92	-113.95	-1,020.06	1,024.10	1,584.30	1,540.35	43.95	36.049	
6,000.00	5,950.90	5,950.23	5,919.60	23.21	22.26	-114.51	-1,020.78	1,024.98	1,592.47	1,547.75	44.72	35.609	
6,100.00	6,049.45	6,049.89	6,019.25	23.66	22.59	-115.06	-1,021.05	1,025.95	1,600.68	1,555.20	45.48	35.194	
6,200.00	6,147.99	6,151.63	6,120.99	24.11	22.92	-115.64	-1,021.04	1,026.89	1,608.90	1,562.66	46.25	34.790	
6,300.00	6,246.54	6,251.64	6,220.99	24.56	23.24	-116.19	-1,021.01	1,027.62	1,617.09	1,570.09	47.00	34.404	
6,400.00	6,345.08	6,354.35	6,323.69	25.01	23.58	-116.75	-1,021.12	1,028.24	1,625.37	1,577.60	47.77	34.024	
6,500.00	6,443.63	6,456.37	6,425.71	25.47	23.91	-117.30	-1,021.10	1,028.48	1,633.40	1,584.87	48.53	33.655	
6,600.00	6,542.17	6,561.93	6,531.28	25.92	24.25	-117.87	-1,020.78	1,028.62	1,641.39	1,592.09	49.30	33.295	
6,700.00	6,640.72	6,661.00	6,630.35	26.37	24.55	-118.40	-1,020.36	1,028.36	1,649.10	1,599.07	50.04	32.958	
6,800.00	6,739.26	6,750.00	6,719.35	26.82	24.83	-118.87	-1,020.16	1,028.21	1,657.13	1,606.39	50.74	32.657	
6,900.00	6,837.81	6,840.00	6,809.29	27.28	25.11	-119.42	-1,017.70	1,029.60	1,666.09	1,614.65	51.44	32.389	
7,000.00	6,936.35	7,434.45	7,306.22	27.73	26.27	-131.77	-723.76	1,046.43	1,670.68	1,618.90	51.79	32.261	
7,022.19	6,958.22	7,444.61	7,312.91	27.83	26.29	-132.06	-716.12	1,045.88	1,668.13	1,616.16	51.97	32.098	
7,050.00	6,985.54	7,465.00	7,326.18	27.96	26.34	-122.90	-700.68	1,044.86	1,665.20	1,613.01	52.18	31.910	
7,100.00	7,034.07	7,483.29	7,337.82	28.21	26.39	-112.94	-686.60	1,044.04	1,660.40	1,607.79	52.61	31.561	
7,150.00	7,081.53	7,506.70	7,352.15	28.48	26.45	-107.86	-668.12	1,043.06	1,656.44	1,603.42	53.02	31.242	
7,200.00	7,127.56	7,521.50	7,360.88	28.76	26.49	-104.74	-656.17	1,042.48	1,653.55	1,600.12	53.42	30.951	
7,250.00	7,171.81	7,529.50	7,365.48	29.06	26.51	-102.55	-649.64	1,042.19	1,651.90	1,598.08	53.81	30.697	
7,287.00	7,203.22	7,531.86	7,366.82	29.30	26.52	-101.24	-647.69	1,042.10	1,651.53	1,597.44	54.09	30.535	
7,300.00	7,213.95	7,532.08	7,366.94	29.38	26.52	-100.81	-647.52	1,042.09	1,651.57	1,597.39	54.18	30.485	
7,350.00	7,253.65	7,530.34	7,365.95	29.71	26.52	-99.27	-648.95	1,042.16	1,652.60	1,598.09	54.51	30.315	
7,400.00	7,290.61	7,525.11	7,362.96	30.06	26.50	-97.81	-653.23	1,042.35	1,654.97	1,600.14	54.83	30.186	
7,450.00	7,324.55	7,517.06	7,358.28	30.43	26.48	-96.37	-659.78	1,042.65	1,658.60	1,603.49	55.11	30.095	
7,500.00	7,355.20	7,506.68	7,352.14	30.81	26.45	-94.91	-668.13	1,043.06	1,663.42	1,608.05	55.37	30.040	
7,550.00	7,382.35	7,494.38	7,344.69	31.21	26.42	-93.43	-677.91	1,043.56	1,669.32	1,613.70	55.61	30.016 SF	
7,600.00	7,405.78	7,480.48	7,336.06	31.62	26.38	-91.92	-688.79	1,044.16	1,676.16	1,620.32	55.84	30.018	
7,650.00	7,425.31	7,465.00	7,326.18	32.05	26.34	-90.38	-700.68	1,044.86	1,683.81	1,627.76	56.05	30.043	
7,700.00	7,440.80	7,465.00	7,326.18	32.49	26.34	-89.31	-700.68	1,044.86	1,692.24	1,635.96	56.28	30.069	
7,750.00	7,452.12	7,431.79	7,304.47	32.94	26.26	-87.35	-725.74	1,046.58	1,700.95	1,644.49	56.45	30.130	
7,800.00	7,459.19	7,412.69	7,291.76	33.41	26.22	-85.84	-739.96	1,047.72	1,710.11	1,653.46	56.65	30.188	
7,850.00	7,461.96	7,376.00	7,266.92	33.88	26.13	-84.02	-766.85	1,050.22	1,719.57	1,662.76	56.81	30.270	
7,857.01	7,462.00	7,376.00	7,266.92	33.95	26.13	-83.89	-766.85	1,050.22	1,720.84	1,664.00	56.84	30.274	
7,857.01	7,462.00	7,376.00	7,266.92	33.95	26.13	-83.89	-766.85	1,050.22	1,720.84	1,664.00	56.84	30.274	
7,857.01	7,462.00	7,376.00	7,266.92	33.95	26.13	-83.89	-766.85	1,050.22	1,720.84	1,664.00	56.84	30.274	
7,900.00	7,462.00	7,368.56	7,261.82	34.36	26.12	-83.72	-772.23	1,050.77	1,729.14	1,672.11	57.03	30.319	
8,000.00	7,462.00	7,307.47	7,219.06	35.38	26.01	-82.31	-815.64	1,055.18	1,750.87	1,693.47	57.40	30.504	
8,100.00	7,462.00	7,161.88	7,106.14	36.45	25.77	-78.60	-906.87	1,058.18	1,774.15	1,716.71	57.43	30.891	
8,200.00	7,462.00	7,048.70	7,007.75	37.58	25.58	-75.37	-961.99	1,049.99	1,798.98	1,741.71	57.27	31.414	
8,300.00	7,462.00	7,018.00	6,980.15	38.75	25.53	-74.46	-974.84	1,046.06	1,826.47	1,768.96	57.51	31.760	
8,400.00	7,462.00	7,018.00	6,980.15	39.98	25.53	-74.46	-974.84	1,046.06	1,858.89	1,800.95	57.94	32.082	
8,500.00	7,462.00	6,983.86	6,948.83	41.24	25.46	-73.43	-987.65	1,041.52	1,895.01	1,836.94	58.07	32.635	
8,600.00	7,462.00	6,974.03	6,939.66	42.54	25.44	-73.13	-990.97	1,040.32	1,935.88	1,877.53	58.35	33.177	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 504-2524H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 149-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:		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	
8,700.00	7,462.00	6,965.12	6,931.29	43.87	25.42	-72.86	-993.84	1,039.26	1,980.80	1,922.20	58.60	33.800	
8,800.00	7,462.00	6,929.00	6,896.88	45.24	25.35	-71.75	-1,004.07	1,035.37	2,030.28	1,971.69	58.59	34.654	
8,900.00	7,462.00	6,929.00	6,896.88	46.63	25.35	-71.75	-1,004.07	1,035.37	2,082.23	2,023.37	58.85	35.380	
9,000.00	7,462.00	6,929.00	6,896.88	48.05	25.35	-71.75	-1,004.07	1,035.37	2,137.59	2,078.51	59.09	36.177	
9,100.00	7,462.00	6,929.00	6,896.88	49.49	25.35	-71.75	-1,004.07	1,035.37	2,196.12	2,136.83	59.29	37.039	
9,200.00	7,462.00	6,929.00	6,896.88	50.96	25.35	-71.75	-1,004.07	1,035.37	2,257.56	2,198.09	59.47	37.962	
9,300.00	7,462.00	6,929.00	6,896.88	52.44	25.35	-71.75	-1,004.07	1,035.37	2,321.68	2,262.06	59.62	38.941	
9,400.00	7,462.00	6,929.00	6,896.88	53.94	25.35	-71.75	-1,004.07	1,035.37	2,388.27	2,328.52	59.75	39.970	
9,500.00	7,462.00	6,929.00	6,896.88	55.46	25.35	-71.75	-1,004.07	1,035.37	2,457.13	2,397.26	59.86	41.046	
9,600.00	7,462.00	6,929.00	6,896.88	57.00	25.35	-71.75	-1,004.07	1,035.37	2,528.06	2,468.10	59.96	42.165	
9,700.00	7,462.00	6,929.00	6,896.88	58.55	25.35	-71.75	-1,004.07	1,035.37	2,600.91	2,540.87	60.04	43.322	
9,800.00	7,462.00	6,929.00	6,896.88	60.11	25.35	-71.75	-1,004.07	1,035.37	2,675.51	2,615.41	60.10	44.515	
9,900.00	7,462.00	6,929.00	6,896.88	61.68	25.35	-71.75	-1,004.07	1,035.37	2,751.73	2,691.57	60.16	45.741	
10,000.00	7,462.00	6,929.00	6,896.88	63.27	25.35	-71.75	-1,004.07	1,035.37	2,829.42	2,769.22	60.21	46.996	
10,100.00	7,462.00	6,929.00	6,896.88	64.86	25.35	-71.75	-1,004.07	1,035.37	2,908.48	2,848.24	60.24	48.279	
10,200.00	7,462.00	6,929.00	6,896.88	66.47	25.35	-71.75	-1,004.07	1,035.37	2,988.79	2,928.52	60.28	49.586	
10,300.00	7,462.00	6,929.00	6,896.88	68.08	25.35	-71.75	-1,004.07	1,035.37	3,070.26	3,009.96	60.30	50.915	
10,400.00	7,462.00	6,929.00	6,896.88	69.71	25.35	-71.75	-1,004.07	1,035.37	3,152.80	3,092.48	60.32	52.265	
10,500.00	7,462.00	6,929.00	6,896.88	71.34	25.35	-71.75	-1,004.07	1,035.37	3,236.32	3,175.98	60.34	53.634	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 505-2501H - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 149-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	115.06	-432.41	924.83	1,021.03				
100.00	100.00	88.71	88.71	0.14	0.15	115.06	-432.42	924.64	1,020.77	1,020.48	0.29	3,533.483	
200.00	200.00	191.17	191.17	0.50	0.40	115.08	-432.47	924.01	1,020.23	1,019.33	0.90	1,137.029	
300.00	300.00	286.74	286.74	0.86	0.73	115.10	-432.58	923.43	1,019.74	1,018.14	1.59	639.449	
319.63	319.63	304.63	304.63	0.93	0.80	115.10	-432.64	923.39	1,019.72	1,017.99	1.73	590.192 CC	
400.00	400.00	381.73	381.73	1.22	1.07	115.12	-433.04	923.41	1,019.91	1,017.63	2.29	446.259	
500.00	500.00	479.45	479.44	1.58	1.41	115.16	-433.71	923.52	1,020.31	1,017.32	2.99	341.666	
600.00	600.00	577.53	577.52	1.94	1.75	115.18	-434.44	923.91	1,020.98	1,017.30	3.69	276.719	
700.00	700.00	679.26	679.25	2.29	2.11	115.21	-435.17	924.34	1,021.67	1,017.26	4.41	231.792	
800.00	800.00	779.94	779.92	2.65	2.47	115.24	-435.83	924.58	1,022.17	1,017.05	5.12	199.469	
900.00	900.00	879.94	879.92	3.01	2.83	115.27	-436.56	924.79	1,022.67	1,016.83	5.84	175.113	
1,000.00	1,000.00	983.85	983.82	3.37	3.20	115.31	-437.37	924.79	1,023.00	1,016.43	6.57	155.702	
1,100.00	1,100.00	1,082.00	1,081.97	3.73	3.55	115.35	-438.03	924.63	1,023.14	1,015.86	7.28	140.538	
1,200.00	1,200.00	1,180.01	1,179.99	4.09	3.90	115.38	-438.69	924.68	1,023.48	1,015.49	7.99	128.105	
1,300.00	1,300.00	1,277.58	1,277.55	4.45	4.25	115.42	-439.64	924.91	1,024.11	1,015.41	8.70	117.754	
1,400.00	1,400.00	1,379.94	1,379.90	4.80	4.62	115.47	-440.68	925.11	1,024.72	1,015.30	9.42	108.754	
1,500.00	1,500.00	1,471.69	1,471.64	5.16	4.95	115.53	-441.97	925.47	1,025.67	1,015.56	10.11	101.457	
1,600.00	1,600.00	1,573.19	1,573.12	5.52	5.31	115.61	-443.84	925.94	1,026.89	1,016.05	10.83	94.799	
1,700.00	1,700.00	1,672.97	1,672.89	5.88	5.67	115.68	-445.41	926.46	1,028.04	1,016.49	11.55	89.020	
1,800.00	1,800.00	1,774.71	1,774.62	6.24	6.04	115.73	-446.80	927.12	1,029.22	1,016.95	12.27	83.873	
1,900.00	1,900.00	1,878.14	1,878.04	6.60	6.41	115.76	-447.68	927.58	1,029.98	1,016.98	13.00	79.236	
2,000.00	2,000.00	1,976.99	1,976.89	6.95	6.76	115.77	-448.16	928.12	1,030.69	1,016.98	13.71	75.190	
2,100.00	2,100.00	2,079.05	2,078.94	7.31	7.12	115.79	-448.69	928.73	1,031.46	1,017.03	14.43	71.487	
2,200.00	2,200.00	2,189.45	2,189.34	7.67	7.51	115.84	-449.67	928.45	1,031.62	1,016.44	15.18	67.961	
2,300.00	2,300.00	2,291.81	2,291.69	8.03	7.87	115.93	-450.77	927.24	1,031.03	1,015.13	15.90	64.854	
2,343.99	2,343.99	2,335.11	2,334.99	8.18	8.02	-112.26	-451.07	926.80	1,030.88	1,014.68	16.20	63.632	
2,400.00	2,399.98	2,389.00	2,388.87	8.37	8.21	-112.29	-451.47	926.28	1,031.12	1,014.53	16.58	62.183 ES	
2,500.00	2,499.84	2,483.00	2,482.84	8.70	8.55	-112.39	-453.37	925.50	1,033.22	1,015.98	17.25	59.908	
2,600.00	2,599.45	2,576.00	2,575.75	9.04	8.88	-112.51	-457.43	924.38	1,037.36	1,019.44	17.92	57.902	
2,700.00	2,698.70	2,669.00	2,668.54	9.38	9.22	-112.64	-463.39	922.51	1,043.01	1,024.42	18.59	56.102	
2,789.31	2,786.94	2,748.04	2,747.31	9.69	9.51	-112.77	-469.71	920.98	1,049.91	1,030.72	19.19	54.720	
2,800.00	2,797.47	2,762.00	2,761.21	9.73	9.56	-112.83	-470.95	920.79	1,050.90	1,031.62	19.28	54.516	
2,900.00	2,896.01	2,839.37	2,838.26	10.09	9.85	-113.13	-477.97	920.38	1,060.89	1,040.99	19.91	53.295	
3,000.00	2,994.56	2,935.33	2,933.83	10.46	10.21	-113.54	-486.56	921.01	1,072.02	1,051.40	20.62	51.991	
3,100.00	3,093.10	3,036.83	3,035.05	10.83	10.58	-114.05	-493.99	922.31	1,083.12	1,061.76	21.36	50.705	
3,200.00	3,191.65	3,134.14	3,132.20	11.22	10.94	-114.64	-499.12	924.35	1,094.25	1,072.17	22.09	49.544	
3,300.00	3,290.19	3,239.63	3,237.57	11.61	11.32	-115.33	-503.65	926.86	1,105.39	1,082.54	22.85	48.377	
3,400.00	3,388.74	3,356.92	3,354.80	12.00	11.75	-116.14	-506.79	928.30	1,114.96	1,091.30	23.66	47.119	
3,500.00	3,487.28	3,452.72	3,450.57	12.40	12.09	-116.81	-508.82	929.55	1,124.61	1,100.22	24.39	46.110	
3,600.00	3,585.83	3,560.15	3,557.98	12.80	12.47	-117.58	-510.47	930.74	1,134.06	1,108.90	25.16	45.065	
3,700.00	3,684.37	3,666.39	3,664.21	13.21	12.85	-118.35	-511.54	931.18	1,142.86	1,116.92	25.94	44.061	
3,800.00	3,782.92	3,771.27	3,769.08	13.62	13.23	-119.08	-512.65	931.00	1,151.30	1,124.60	26.71	43.108	
3,900.00	3,881.46	3,868.85	3,866.66	14.04	13.58	-119.74	-513.62	930.57	1,159.64	1,132.18	27.45	42.244	
4,000.00	3,980.01	3,969.15	3,966.96	14.46	13.93	-120.43	-514.42	930.23	1,168.18	1,139.97	28.21	41.417	
4,100.00	4,078.55	4,067.68	4,065.49	14.88	14.28	-121.10	-515.10	929.85	1,176.79	1,147.84	28.95	40.644	
4,200.00	4,177.10	4,165.46	4,163.26	15.30	14.63	-121.76	-515.70	929.54	1,185.62	1,155.92	29.70	39.920	
4,300.00	4,275.64	4,261.77	4,259.57	15.73	14.97	-122.40	-516.34	929.33	1,194.71	1,164.27	30.44	39.244	
4,400.00	4,374.19	4,352.50	4,350.30	16.16	15.30	-122.97	-517.50	929.44	1,204.43	1,173.27	31.16	38.647	
4,500.00	4,472.73	4,453.62	4,451.39	16.59	15.66	-123.57	-519.35	929.56	1,214.43	1,182.50	31.93	38.033	
4,600.00	4,571.28	4,547.76	4,545.52	17.02	16.00	-124.15	-520.37	930.05	1,224.76	1,192.10	32.66	37.497	
4,700.00	4,669.82	4,652.40	4,650.16	17.45	16.36	-124.84	-520.65	930.66	1,235.12	1,201.69	33.43	36.945	
4,800.00	4,768.37	4,756.60	4,754.36	17.89	16.73	-125.50	-520.85	930.75	1,245.12	1,210.92	34.20	36.405	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 505-2501H - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 149-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	4,866.91	4,856.61	4,854.37	18.33	17.09	-126.11	-521.38	930.45	1,254.98	1,220.02	34.96	35.898	
5,000.00	4,965.46	4,962.93	4,960.69	18.77	17.46	-126.74	-522.02	929.95	1,264.83	1,229.10	35.74	35.391	
5,100.00	5,064.00	5,071.60	5,069.35	19.21	17.84	-127.37	-522.56	928.43	1,273.89	1,237.37	36.52	34.882	
5,200.00	5,162.55	5,173.29	5,171.02	19.65	18.19	-127.94	-523.17	926.52	1,282.61	1,245.34	37.27	34.411	
5,300.00	5,261.09	5,267.27	5,264.98	20.09	18.51	-128.49	-523.20	924.91	1,291.54	1,253.55	37.99	33.995	
5,400.00	5,359.64	5,374.99	5,372.68	20.53	18.87	-129.16	-522.14	923.17	1,300.53	1,261.78	38.75	33.561	
5,500.00	5,458.18	5,446.37	5,444.05	20.98	19.11	-129.61	-521.30	922.55	1,310.35	1,270.98	39.37	33.280	
5,600.00	5,556.72	5,533.19	5,530.86	21.42	19.39	-130.17	-519.90	923.20	1,321.85	1,281.81	40.04	33.010	
5,700.00	5,655.27	5,637.46	5,635.10	21.87	19.73	-130.86	-517.57	924.26	1,333.72	1,292.94	40.78	32.703	
5,800.00	5,753.81	5,746.79	5,744.41	22.32	20.09	-131.54	-515.69	924.46	1,345.00	1,303.45	41.54	32.376	
5,900.00	5,852.36	5,852.75	5,850.35	22.76	20.44	-132.17	-514.18	923.86	1,355.72	1,313.42	42.29	32.056	
6,000.00	5,950.90	5,952.09	5,949.69	23.21	20.78	-132.74	-513.10	922.93	1,366.25	1,323.23	43.02	31.761	
6,100.00	6,049.45	6,047.45	6,045.03	23.66	21.09	-133.28	-512.13	922.21	1,377.08	1,333.36	43.73	31.493	
6,200.00	6,147.99	6,142.85	6,140.43	24.11	21.42	-133.81	-511.09	921.55	1,388.12	1,343.69	44.44	31.239	
6,300.00	6,246.54	6,230.22	6,227.80	24.56	21.71	-134.26	-510.85	921.49	1,399.94	1,354.82	45.12	31.029	
6,400.00	6,345.08	6,324.27	6,321.85	25.01	22.04	-134.72	-511.13	921.92	1,412.40	1,366.57	45.83	30.816	
6,500.00	6,443.63	6,423.25	6,420.83	25.47	22.39	-135.19	-511.55	922.46	1,425.06	1,378.49	46.57	30.599	
6,600.00	6,542.17	6,522.13	6,519.70	25.92	22.74	-135.66	-511.71	922.97	1,437.78	1,390.48	47.31	30.392	
6,700.00	6,640.72	6,620.79	6,618.36	26.37	23.08	-136.12	-511.75	923.49	1,450.59	1,402.55	48.04	30.196	
6,800.00	6,739.26	6,722.25	6,719.82	26.82	23.43	-136.59	-511.96	923.94	1,463.43	1,414.64	48.79	29.996	
6,900.00	6,837.81	6,835.06	6,832.57	27.28	23.84	-136.99	-514.85	923.81	1,475.85	1,426.25	49.60	29.755	
7,000.00	6,936.35	6,965.24	6,960.83	27.73	24.32	-136.76	-535.79	921.37	1,486.74	1,436.21	50.53	29.422	
7,022.19	6,958.22	6,975.95	6,971.18	27.83	24.37	-136.70	-538.53	921.13	1,489.05	1,438.39	50.66	29.392	
7,050.00	6,985.54	6,995.72	6,990.19	27.96	24.44	-126.24	-543.95	920.71	1,492.05	1,441.19	50.86	29.339	
7,100.00	7,034.07	7,031.24	7,024.01	28.21	24.58	-114.54	-554.79	920.19	1,497.67	1,446.45	51.21	29.244	
7,150.00	7,081.53	7,070.61	7,060.97	28.48	24.74	-107.64	-568.35	919.93	1,503.50	1,451.89	51.61	29.133	
7,200.00	7,127.56	7,113.07	7,100.25	28.76	24.91	-103.15	-584.45	919.83	1,509.33	1,457.29	52.04	29.004	
7,250.00	7,171.81	7,153.67	7,137.20	29.06	25.08	-100.01	-601.26	919.90	1,515.09	1,462.61	52.48	28.872	
7,300.00	7,213.95	7,190.72	7,170.15	29.38	25.24	-97.69	-618.20	920.21	1,520.87	1,467.96	52.91	28.744	
7,350.00	7,253.65	7,234.00	7,207.50	29.71	25.43	-95.93	-640.03	920.91	1,526.70	1,473.30	53.40	28.588	
7,400.00	7,290.61	7,290.05	7,253.02	30.06	25.69	-94.60	-672.66	921.73	1,532.16	1,478.14	54.03	28.359	
7,450.00	7,324.55	7,355.62	7,300.61	30.43	26.01	-93.50	-717.69	921.89	1,536.66	1,481.90	54.76	28.062	
7,500.00	7,355.20	7,418.06	7,340.28	30.81	26.34	-92.58	-765.87	921.41	1,540.26	1,484.75	55.51	27.747	
7,550.00	7,382.35	7,451.02	7,359.33	31.21	26.53	-91.82	-792.75	921.16	1,543.43	1,487.37	56.06	27.532	
7,600.00	7,405.78	7,482.90	7,377.16	31.62	26.72	-91.24	-819.18	921.29	1,546.67	1,490.06	56.61	27.321	
7,650.00	7,425.31	7,514.00	7,393.98	32.05	26.90	-90.81	-845.34	921.76	1,549.99	1,492.82	57.17	27.113	
7,700.00	7,440.80	7,554.91	7,415.44	32.49	27.16	-90.62	-880.16	922.72	1,553.25	1,495.39	57.86	26.847	
7,750.00	7,452.12	7,594.47	7,435.65	32.94	27.42	-90.60	-914.14	923.87	1,556.35	1,497.81	58.54	26.585	
7,800.00	7,459.19	7,710.83	7,489.19	33.41	28.25	-91.74	-1,017.36	925.46	1,558.57	1,498.48	60.08	25.940	
7,850.00	7,461.96	7,789.59	7,516.13	33.88	28.87	-92.54	-1,091.30	924.11	1,558.69	1,497.41	61.29	25.433	
7,857.01	7,462.00	7,801.67	7,519.41	33.95	28.97	-92.66	-1,102.92	923.78	1,558.60	1,497.13	61.47	25.357	
7,857.01	7,462.00	7,801.67	7,519.41	33.95	28.97	-92.66	-1,102.92	923.78	1,558.60	1,497.13	61.47	25.357	
7,862.01	7,462.00	7,810.35	7,521.62	34.00	29.04	-92.74	-1,111.31	923.53	1,558.52	1,496.92	61.60	25.302	
7,900.00	7,462.00	7,843.28	7,529.83	34.36	29.32	-93.05	-1,143.19	922.67	1,558.03	1,495.79	62.24	25.033	
8,000.00	7,462.00	7,941.00	7,548.80	35.38	30.17	-93.75	-1,238.99	920.15	1,556.74	1,492.61	64.13	24.274	
8,078.12	7,462.00	8,002.65	7,556.26	36.22	30.75	-94.03	-1,300.17	919.17	1,556.27	1,490.76	65.51	23.757	
8,100.00	7,462.00	8,019.57	7,557.53	36.45	30.91	-94.07	-1,317.04	919.08	1,556.31	1,490.42	65.89	23.620	
8,200.00	7,462.00	8,137.53	7,561.58	37.58	32.07	-94.22	-1,434.91	918.42	1,556.17	1,487.88	68.29	22.788	
8,300.00	7,462.00	8,233.21	7,561.50	38.75	33.08	-94.22	-1,530.59	917.37	1,555.24	1,484.74	70.50	22.062	
8,331.80	7,462.00	8,256.47	7,561.31	39.14	33.33	-94.22	-1,553.85	917.28	1,555.15	1,484.04	71.11	21.869	
8,400.00	7,462.00	8,298.00	7,561.00	39.98	33.78	-94.20	-1,595.37	917.44	1,555.58	1,483.28	72.30	21.516	
8,500.00	7,462.00	8,388.00	7,559.98	41.24	34.81	-94.16	-1,685.35	918.94	1,557.35	1,482.77	74.58	20.882	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 505-2501H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 149-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)			
8,600.00	7,462.00	8,538.78	7,555.24	42.54	36.64	-93.99	-1,836.04	919.51	1,557.45	1,479.46	77.99	19.969	
8,700.00	7,462.00	8,653.85	7,552.23	43.87	38.09	-93.88	-1,951.06	917.97	1,556.09	1,475.20	80.89	19.237	
8,800.00	7,462.00	8,734.50	7,551.77	45.24	39.15	-93.86	-2,031.71	916.85	1,554.83	1,471.57	83.25	18.676	
8,900.00	7,462.00	8,841.28	7,551.51	46.63	40.57	-93.86	-2,138.47	915.91	1,554.11	1,467.97	86.14	18.042	
9,000.00	7,462.00	8,941.14	7,548.17	48.05	41.95	-93.74	-2,238.26	914.60	1,552.73	1,463.77	88.97	17.453	
9,043.88	7,462.00	8,968.82	7,547.08	48.68	42.34	-93.70	-2,265.92	914.49	1,552.50	1,462.58	89.92	17.265	
9,100.00	7,462.00	9,014.00	7,545.52	49.49	42.97	-93.64	-2,311.07	914.90	1,552.93	1,461.61	91.32	17.005	
9,200.00	7,462.00	9,084.84	7,544.33	50.96	43.98	-93.59	-2,381.89	916.38	1,554.93	1,461.28	93.65	16.604	
9,300.00	7,462.00	9,171.49	7,545.26	52.44	45.23	-93.62	-2,468.49	918.82	1,557.96	1,461.64	96.32	16.175	
9,400.00	7,462.00	9,313.44	7,547.89	53.94	47.32	-93.71	-2,610.38	921.93	1,560.57	1,460.38	100.20	15.575	
9,500.00	7,462.00	9,444.54	7,549.83	55.46	49.28	-93.78	-2,741.45	920.74	1,559.79	1,455.93	103.86	15.018	
9,600.00	7,462.00	9,546.99	7,550.70	57.00	50.83	-93.82	-2,843.89	919.14	1,558.45	1,451.47	106.97	14.568	
9,700.00	7,462.00	9,664.97	7,549.84	58.55	52.64	-93.79	-2,961.84	916.66	1,556.46	1,446.03	110.43	14.094	
9,800.00	7,462.00	9,762.57	7,548.31	60.11	54.15	-93.74	-3,059.39	913.87	1,553.68	1,440.16	113.52	13.687	
9,900.00	7,462.00	9,839.39	7,546.46	61.68	55.35	-93.67	-3,136.18	912.62	1,552.05	1,435.84	116.20	13.357	
9,971.21	7,462.00	9,896.47	7,545.85	62.81	56.24	-93.65	-3,193.25	912.31	1,551.72	1,433.56	118.16	13.132	
10,000.00	7,462.00	9,921.22	7,545.92	63.27	56.63	-93.65	-3,217.99	912.31	1,551.77	1,432.78	118.99	13.041	
10,100.00	7,462.00	10,020.18	7,546.24	64.86	58.20	-93.67	-3,316.96	912.62	1,552.26	1,430.09	122.16	12.706	
10,200.00	7,462.00	10,154.01	7,545.68	66.47	60.34	-93.65	-3,450.78	911.38	1,551.45	1,425.35	126.10	12.303	
10,300.00	7,462.00	10,238.27	7,544.98	68.08	61.69	-93.62	-3,535.01	909.79	1,549.74	1,420.73	129.01	12.013	
10,336.22	7,462.00	10,263.30	7,544.90	68.67	62.10	-93.62	-3,560.05	909.63	1,549.57	1,419.63	129.94	11.925	
10,400.00	7,462.00	10,301.78	7,544.86	69.71	62.72	-93.62	-3,598.53	909.80	1,549.97	1,418.53	131.44	11.792	
10,500.00	7,462.00	10,372.00	7,544.48	71.34	63.86	-93.60	-3,668.70	912.06	1,553.05	1,419.06	134.00	11.590	
10,600.00	7,462.00	10,447.43	7,543.77	72.98	65.10	-93.57	-3,744.04	915.83	1,557.92	1,421.26	136.66	11.400	
10,700.00	7,462.00	10,632.66	7,542.78	74.62	68.14	-93.52	-3,929.18	920.51	1,560.89	1,418.88	142.02	10.991	
10,800.00	7,462.00	10,761.49	7,541.56	76.27	70.27	-93.48	-4,057.98	918.23	1,559.14	1,413.20	145.94	10.683	
10,900.00	7,462.00	10,857.43	7,540.38	77.93	71.85	-93.44	-4,153.88	916.02	1,556.92	1,407.74	149.18	10.437	
11,000.00	7,462.00	10,951.89	7,538.94	79.59	73.42	-93.39	-4,248.32	914.31	1,555.18	1,402.78	152.40	10.205	
11,100.00	7,462.00	11,062.69	7,536.93	81.26	75.26	-93.32	-4,359.07	911.86	1,553.01	1,397.04	155.97	9.957	
11,200.00	7,462.00	11,172.17	7,534.93	82.93	77.08	-93.25	-4,468.50	909.03	1,550.49	1,390.98	159.52	9.720	
11,300.00	7,462.00	11,274.25	7,533.23	84.61	78.79	-93.20	-4,570.51	905.63	1,547.23	1,384.31	162.92	9.497	
11,400.00	7,462.00	11,365.31	7,532.84	86.29	80.31	-93.19	-4,661.52	902.89	1,544.36	1,378.26	166.10	9.298	
11,500.00	7,462.00	11,461.30	7,532.19	87.97	81.93	-93.17	-4,757.49	900.51	1,542.00	1,372.61	169.40	9.103	
11,600.00	7,462.00	11,559.36	7,532.67	89.66	83.58	-93.19	-4,855.51	898.12	1,539.75	1,367.02	172.74	8.914	
11,700.00	7,462.00	11,642.68	7,534.53	91.36	84.99	-93.26	-4,938.80	896.40	1,538.00	1,362.24	175.76	8.751	
11,800.00	7,462.00	11,736.32	7,535.89	93.05	86.58	-93.31	-5,032.42	895.56	1,537.34	1,358.33	179.01	8.588	
11,866.61	7,462.00	11,791.35	7,536.54	94.18	87.51	-93.34	-5,087.44	895.10	1,536.97	1,355.96	181.01	8.491	
11,900.00	7,462.00	11,810.92	7,536.70	94.75	87.85	-93.35	-5,107.01	895.17	1,537.14	1,355.33	181.81	8.454	
12,000.00	7,462.00	11,872.49	7,536.82	96.45	88.90	-93.35	-5,168.57	896.52	1,539.46	1,355.23	184.23	8.356	
12,100.00	7,462.00	11,978.97	7,538.15	98.16	90.73	-93.39	-5,274.98	900.00	1,542.96	1,355.14	187.83	8.215	
12,200.00	7,462.00	12,165.78	7,540.05	99.87	93.92	-93.46	-5,461.73	899.67	1,542.84	1,349.54	193.30	7.981	
12,300.00	7,462.00	12,247.62	7,540.04	101.58	95.32	-93.46	-5,543.56	898.12	1,541.06	1,344.72	196.34	7.849	
12,400.00	7,462.00	12,412.89	7,539.60	103.29	98.14	-93.46	-5,708.67	891.24	1,536.71	1,335.69	201.02	7.644	
12,500.00	7,462.00	12,558.36	7,538.28	105.01	100.60	-93.44	-5,853.68	879.88	1,528.76	1,323.65	205.11	7.453	
12,600.00	7,462.00	12,630.52	7,538.19	106.73	101.82	-93.45	-5,925.61	874.11	1,520.97	1,312.83	208.13	7.308	
12,700.00	7,462.00	12,673.00	7,537.76	108.45	102.55	-93.43	-5,968.02	871.89	1,515.96	1,305.41	210.55	7.200	
12,761.49	7,462.00	12,688.44	7,537.75	109.51	102.81	-93.43	-5,983.46	871.69	1,515.08	1,303.42	211.65	7.158	
12,800.00	7,462.00	12,704.00	7,537.87	110.17	103.08	-93.44	-5,999.02	871.84	1,515.43	1,303.03	212.41	7.135	
12,900.00	7,462.00	12,787.83	7,539.29	111.90	104.53	-93.49	-6,082.82	873.49	1,517.63	1,302.21	215.42	7.045	
13,000.00	7,462.00	12,874.37	7,541.30	113.62	106.04	-93.56	-6,169.30	875.87	1,520.68	1,302.18	218.50	6.960	
13,100.00	7,462.00	12,983.63	7,543.40	115.35	107.94	-93.63	-6,278.49	879.16	1,523.97	1,301.75	222.22	6.858	
13,200.00	7,462.00	13,077.00	7,544.95	117.08	109.56	-93.68	-6,371.81	881.93	1,527.19	1,301.69	225.49	6.773	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 505-2501H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 149-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)			
13,300.00	7,462.00	13,184.16	7,547.51	118.81	111.43	-93.77	-6,478.90	885.06	1,530.42	1,301.27	229.16	6.678	
13,400.00	7,462.00	13,312.24	7,551.15	120.54	113.66	-93.90	-6,606.90	887.31	1,532.59	1,299.23	233.36	6.568	
13,500.00	7,462.00	13,439.20	7,553.61	122.28	115.87	-93.99	-6,733.82	886.83	1,532.45	1,294.99	237.46	6.453	
13,600.00	7,462.00	13,538.12	7,552.78	124.01	117.59	-93.96	-6,832.74	885.95	1,531.66	1,290.75	240.92	6.358	
13,641.86	7,462.00	13,569.24	7,552.08	124.74	118.13	-93.93	-6,863.85	885.82	1,531.50	1,289.37	242.12	6.325	
13,700.00	7,462.00	13,610.66	7,551.18	125.75	118.85	-93.90	-6,905.26	886.05	1,531.82	1,288.08	243.74	6.285	
13,800.00	7,462.00	13,705.73	7,549.41	127.49	120.51	-93.83	-7,000.31	887.49	1,533.35	1,286.24	247.11	6.205	
13,900.00	7,462.00	13,816.94	7,548.32	129.23	122.45	-93.79	-7,111.50	888.58	1,534.42	1,283.53	250.89	6.116	
14,000.00	7,462.00	13,922.89	7,548.05	130.97	124.30	-93.77	-7,217.45	888.95	1,534.91	1,280.38	254.52	6.031	
14,100.00	7,462.00	14,028.49	7,548.61	132.71	126.14	-93.80	-7,323.05	888.79	1,534.95	1,276.81	258.14	5.946	
14,122.94	7,462.00	14,050.38	7,548.74	133.11	126.52	-93.80	-7,344.94	888.74	1,534.95	1,276.03	258.91	5.928	
14,200.00	7,462.00	14,124.97	7,548.86	134.46	127.82	-93.80	-7,419.53	888.70	1,535.03	1,273.48	261.54	5.869	
14,300.00	7,462.00	14,217.31	7,548.86	136.20	129.44	-93.80	-7,511.87	888.76	1,535.26	1,270.42	264.84	5.797	
14,400.00	7,462.00	14,293.85	7,548.77	137.95	130.78	-93.80	-7,588.40	889.80	1,536.75	1,269.03	267.72	5.740	
14,500.00	7,462.00	14,414.16	7,549.03	139.69	132.89	-93.80	-7,708.70	891.54	1,538.38	1,266.63	271.76	5.661	
14,600.00	7,462.00	14,524.35	7,550.30	141.44	134.82	-93.85	-7,818.88	891.53	1,538.58	1,263.08	275.50	5.585	
14,700.00	7,462.00	14,609.96	7,551.74	143.19	136.32	-93.90	-7,904.48	891.78	1,539.16	1,260.54	278.62	5.524	
14,800.00	7,462.00	14,703.53	7,552.47	144.94	137.96	-93.93	-7,998.03	893.12	1,540.78	1,258.83	281.95	5.465	
14,900.00	7,462.00	14,798.32	7,553.27	146.69	139.63	-93.95	-8,092.81	894.25	1,542.21	1,256.90	285.31	5.405	
15,000.00	7,462.00	14,896.19	7,553.27	148.44	141.35	-93.95	-8,190.65	896.41	1,544.56	1,255.80	288.76	5.349	
15,100.00	7,462.00	15,015.58	7,553.04	150.19	143.45	-93.93	-8,310.03	897.81	1,545.85	1,253.07	292.78	5.280	
15,200.00	7,462.00	15,131.67	7,552.33	151.95	145.49	-93.91	-8,426.12	897.98	1,546.11	1,249.42	296.69	5.211	
15,211.83	7,462.00	15,138.82	7,552.29	152.15	145.61	-93.90	-8,433.27	897.97	1,546.11	1,249.12	296.99	5.206	
15,300.00	7,462.00	15,204.64	7,551.72	153.70	146.77	-93.88	-8,499.09	898.41	1,546.78	1,247.26	299.52	5.164	
15,400.00	7,462.00	15,319.85	7,550.23	155.45	148.80	-93.82	-8,614.28	899.74	1,548.04	1,244.60	303.44	5.102	
15,500.00	7,462.00	15,427.35	7,548.96	157.21	150.69	-93.78	-8,721.77	899.75	1,548.11	1,240.96	307.15	5.040	
15,600.00	7,462.00	15,513.18	7,547.75	158.96	152.20	-93.73	-8,807.59	900.16	1,548.65	1,238.33	310.32	4.991	
15,700.00	7,462.00	15,620.37	7,546.21	160.72	154.08	-93.67	-8,914.77	901.03	1,549.54	1,235.51	314.03	4.934	
15,800.00	7,462.00	15,728.26	7,544.87	162.48	155.98	-93.62	-9,022.65	900.76	1,549.34	1,231.59	317.75	4.876	
15,803.63	7,462.00	15,731.27	7,544.83	162.54	156.04	-93.62	-9,025.66	900.76	1,549.34	1,231.47	317.86	4.874	
15,900.00	7,462.00	15,821.75	7,543.88	164.23	157.63	-93.58	-9,116.13	901.04	1,549.71	1,228.59	321.12	4.826	
16,000.00	7,462.00	15,914.01	7,543.00	165.99	159.25	-93.55	-9,208.39	901.28	1,550.09	1,225.64	324.45	4.778	
16,100.00	7,462.00	15,993.26	7,542.04	167.75	160.65	-93.51	-9,287.62	902.47	1,551.67	1,224.26	327.41	4.739	
16,200.00	7,462.00	16,080.17	7,541.85	169.51	162.19	-93.50	-9,374.50	904.77	1,554.43	1,223.88	330.56	4.702	
16,300.00	7,462.00	16,189.01	7,542.55	171.27	164.12	-93.52	-9,483.30	907.65	1,557.28	1,222.93	334.34	4.658	
16,400.00	7,462.00	16,296.50	7,544.23	173.03	166.02	-93.58	-9,590.76	909.67	1,559.40	1,221.33	338.07	4.613	
16,500.00	7,462.00	16,393.45	7,545.71	174.79	167.73	-93.63	-9,687.68	911.43	1,561.46	1,219.96	341.50	4.572	
16,600.00	7,462.00	16,495.24	7,546.98	176.55	169.54	-93.67	-9,789.44	913.46	1,563.69	1,218.63	345.06	4.532	
16,700.00	7,462.00	16,628.96	7,547.88	178.31	171.90	-93.70	-9,923.15	914.77	1,564.93	1,215.47	349.46	4.478	
16,800.00	7,462.00	16,735.98	7,548.13	180.08	173.79	-93.71	-10,030.16	914.28	1,564.65	1,211.51	353.14	4.431	
16,900.00	7,462.00	16,841.35	7,548.28	181.84	175.64	-93.71	-10,135.53	913.49	1,564.07	1,207.29	356.78	4.384	
17,000.00	7,462.00	16,976.53	7,548.54	183.60	178.02	-93.73	-10,270.68	910.86	1,562.38	1,201.40	360.98	4.328	
17,100.00	7,462.00	17,083.00	7,547.24	185.36	179.89	-93.69	-10,377.07	906.92	1,558.75	1,194.14	364.61	4.275	
17,200.00	7,462.00	17,158.19	7,546.45	187.13	181.21	-93.67	-10,452.22	904.65	1,555.87	1,188.17	367.70	4.231	
17,300.00	7,462.00	17,268.77	7,545.78	188.89	183.15	-93.65	-10,562.78	902.31	1,553.91	1,182.49	371.42	4.184	
17,400.00	7,462.00	17,357.23	7,545.28	190.66	184.71	-93.63	-10,651.21	900.21	1,551.65	1,176.93	374.73	4.141	
17,500.00	7,462.00	17,476.25	7,543.94	192.42	186.80	-93.59	-10,770.17	896.81	1,548.84	1,170.23	378.60	4.091	
17,600.00	7,462.00	17,549.00	7,543.10	194.19	188.08	-93.56	-10,842.89	895.07	1,546.56	1,164.94	381.62	4.053	
17,687.14	7,462.00	17,615.27	7,542.33	195.73	189.25	-93.54	-10,909.16	894.52	1,545.93	1,161.69	384.24	4.023	
17,700.00	7,462.00	17,624.83	7,542.22	195.95	189.42	-93.53	-10,918.72	894.52	1,545.94	1,161.33	384.61	4.020	
17,800.00	7,462.00	17,708.99	7,541.34	197.72	190.91	-93.50	-11,002.87	895.13	1,546.75	1,159.01	387.74	3.989	
17,900.00	7,462.00	17,805.67	7,540.10	199.49	192.62	-93.45	-11,099.53	896.45	1,548.19	1,156.99	391.20	3.958	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 505-2501H - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 149-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)			
18,000.00	7,462.00	17,906.48	7,537.91	201.25	194.41	-93.36	-11,200.30	897.86	1,549.61	1,154.83	394.78	3.925	
18,100.00	7,462.00	17,957.00	7,536.59	203.02	195.31	-93.31	-11,250.80	898.57	1,551.80	1,155.04	396.77	3.911 SF	
18,191.91	7,462.00	17,957.00	7,536.59	204.64	195.31	-93.31	-11,250.80	898.57	1,558.73	1,162.65	396.08	3.935	
18,191.96	7,462.00	17,957.00	7,536.59	204.64	195.31	-93.31	-11,250.80	898.57	1,558.73	1,162.66	396.07	3.935	
18,200.00	7,462.00	17,957.00	7,536.59	204.79	195.31	-93.31	-11,250.80	898.57	1,559.60	1,163.65	395.95	3.939	
18,291.94	7,462.00	17,957.00	7,536.59	206.41	195.31	-93.31	-11,250.80	898.57	1,572.35	1,178.51	393.84	3.992	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 LONGHORN B 3-36H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 100-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)			
6,100.00	6,049.45	11,480.00	7,378.68	23.66	94.92	20.47	-1,571.71	-3,177.16	3,273.22	3,166.54	106.68	30.681	
6,200.00	6,147.99	11,480.00	7,378.68	24.11	94.92	20.47	-1,571.71	-3,177.16	3,218.04	3,109.96	108.09	29.773	
6,300.00	6,246.54	11,480.00	7,378.68	24.56	94.92	20.47	-1,571.71	-3,177.16	3,165.06	3,055.59	109.47	28.912	
6,400.00	6,345.08	11,480.00	7,378.68	25.01	94.92	20.47	-1,571.71	-3,177.16	3,114.39	3,003.55	110.84	28.098	
6,500.00	6,443.63	11,480.00	7,378.68	25.47	94.92	20.47	-1,571.71	-3,177.16	3,066.14	2,953.96	112.17	27.334	
6,600.00	6,542.17	11,480.00	7,378.68	25.92	94.92	20.47	-1,571.71	-3,177.16	3,020.43	2,906.96	113.47	26.619	
6,700.00	6,640.72	11,480.00	7,378.68	26.37	94.92	20.47	-1,571.71	-3,177.16	2,977.38	2,862.66	114.72	25.954	
6,800.00	6,739.26	11,480.00	7,378.68	26.82	94.92	20.47	-1,571.71	-3,177.16	2,937.11	2,821.20	115.91	25.339	
6,900.00	6,837.81	11,480.00	7,378.68	27.28	94.92	20.47	-1,571.71	-3,177.16	2,899.73	2,782.69	117.04	24.776	
7,000.00	6,936.35	11,480.00	7,378.68	27.73	94.92	20.47	-1,571.71	-3,177.16	2,865.35	2,747.26	118.09	24.265	
7,022.19	6,958.22	11,480.00	7,378.68	27.83	94.92	20.47	-1,571.71	-3,177.16	2,858.14	2,739.83	118.31	24.159	
7,050.00	6,985.54	11,480.00	7,378.68	27.96	94.92	31.42	-1,571.71	-3,177.16	2,849.09	2,730.51	118.58	24.027	
7,100.00	7,034.07	11,480.00	7,378.68	28.21	94.92	44.10	-1,571.71	-3,177.16	2,832.35	2,713.30	119.05	23.790	
7,150.00	7,081.53	11,480.00	7,378.68	28.48	94.92	52.09	-1,571.71	-3,177.16	2,815.09	2,695.59	119.51	23.556	
7,200.00	7,127.56	11,480.00	7,378.68	28.76	94.92	57.80	-1,571.71	-3,177.16	2,797.44	2,677.50	119.94	23.324	
7,250.00	7,171.81	11,480.00	7,378.68	29.06	94.92	62.29	-1,571.71	-3,177.16	2,779.52	2,659.18	120.34	23.097	
7,300.00	7,213.95	11,480.00	7,378.68	29.38	94.92	66.05	-1,571.71	-3,177.16	2,761.47	2,640.75	120.72	22.874	
7,350.00	7,253.65	11,480.00	7,378.68	29.71	94.92	69.33	-1,571.71	-3,177.16	2,743.43	2,622.34	121.08	22.658	
7,400.00	7,290.61	11,480.00	7,378.68	30.06	94.92	72.27	-1,571.71	-3,177.16	2,725.52	2,604.10	121.42	22.448	
7,450.00	7,324.55	11,480.00	7,378.68	30.43	94.92	74.95	-1,571.71	-3,177.16	2,707.90	2,586.16	121.73	22.245	
7,500.00	7,355.20	11,480.00	7,378.68	30.81	94.92	77.40	-1,571.71	-3,177.16	2,690.70	2,568.66	122.03	22.049	
7,550.00	7,382.35	11,480.00	7,378.68	31.21	94.92	79.66	-1,571.71	-3,177.16	2,674.06	2,551.74	122.31	21.862	
7,600.00	7,405.78	11,480.00	7,378.68	31.62	94.92	81.72	-1,571.71	-3,177.16	2,658.12	2,535.54	122.58	21.684	
7,650.00	7,425.31	11,480.00	7,378.68	32.05	94.92	83.60	-1,571.71	-3,177.16	2,643.03	2,520.19	122.84	21.516	
7,700.00	7,440.80	11,479.17	7,378.68	32.49	94.90	85.28	-1,572.51	-3,176.95	2,628.90	2,505.82	123.07	21.361	
7,750.00	7,452.12	11,267.26	7,378.28	32.94	90.99	85.83	-1,776.21	-3,118.77	2,614.70	2,494.80	119.91	21.806	
7,800.00	7,459.19	11,220.39	7,378.23	33.41	90.10	87.46	-1,820.81	-3,104.34	2,598.60	2,479.20	119.40	21.764	
7,850.00	7,461.96	10,993.13	7,377.77	33.88	85.73	88.99	-2,034.42	-3,026.96	2,581.35	2,465.96	115.39	22.370	
7,857.01	7,462.00	10,985.50	7,377.76	33.95	85.58	89.28	-2,041.50	-3,024.11	2,578.71	2,463.42	115.29	22.367	
7,857.01	7,462.00	10,985.50	7,377.76	33.95	85.58	89.28	-2,041.50	-3,024.11	2,578.71	2,463.42	115.29	22.367	
7,862.01	7,462.00	10,980.05	7,377.76	34.00	85.47	89.27	-2,046.55	-3,022.07	2,576.84	2,461.61	115.22	22.364	
7,900.00	7,462.00	10,957.09	7,377.76	34.36	85.03	89.27	-2,067.85	-3,013.50	2,562.62	2,447.55	115.07	22.270	
8,000.00	7,462.00	10,910.00	7,377.89	35.38	84.11	89.27	-2,111.73	-2,996.41	2,526.24	2,411.23	115.01	21.966	
8,100.00	7,462.00	10,847.00	7,377.83	36.45	82.90	89.26	-2,170.74	-2,974.36	2,491.18	2,376.47	114.71	21.717	
8,200.00	7,462.00	10,816.00	7,377.80	37.58	82.31	89.26	-2,200.06	-2,964.28	2,458.21	2,343.07	115.14	21.349	
8,300.00	7,462.00	10,530.99	7,377.24	38.75	76.84	89.21	-2,466.34	-2,863.08	2,422.35	2,312.11	110.25	21.972	
8,400.00	7,462.00	10,405.97	7,376.52	39.98	74.40	89.17	-2,580.95	-2,813.12	2,382.18	2,273.51	108.66	21.922	
8,500.00	7,462.00	10,336.19	7,376.89	41.24	73.04	89.17	-2,644.91	-2,785.24	2,342.08	2,233.63	108.45	21.596	
8,600.00	7,462.00	10,132.54	7,374.20	42.54	69.04	89.06	-2,829.94	-2,700.32	2,300.28	2,195.40	104.88	21.932	
8,700.00	7,462.00	10,023.71	7,373.30	43.87	66.90	89.01	-2,927.33	-2,651.74	2,255.45	2,151.77	103.68	21.755	
8,800.00	7,462.00	9,992.00	7,373.30	45.24	66.27	89.01	-2,955.74	-2,637.67	2,211.49	2,106.87	104.61	21.139	
8,900.00	7,462.00	9,928.00	7,373.56	46.63	65.03	89.00	-3,013.74	-2,610.62	2,169.22	2,064.47	104.76	20.707	
9,000.00	7,462.00	9,864.00	7,373.30	48.05	63.80	88.98	-3,072.07	-2,584.30	2,128.10	2,023.13	104.96	20.275	
9,100.00	7,462.00	9,801.00	7,372.80	49.49	62.61	88.95	-3,129.87	-2,559.26	2,088.31	1,983.06	105.25	19.841	
9,200.00	7,462.00	9,610.00	7,371.66	50.96	58.98	88.87	-3,303.98	-2,480.88	2,047.09	1,945.10	101.99	20.071	
9,300.00	7,462.00	9,527.42	7,372.31	52.44	57.42	88.87	-3,378.49	-2,445.29	2,003.86	1,902.08	101.78	19.689	
9,400.00	7,462.00	9,435.46	7,372.01	53.94	55.69	88.83	-3,461.66	-2,406.06	1,961.07	1,859.75	101.32	19.355	
9,500.00	7,462.00	9,359.00	7,370.49	55.46	54.26	88.76	-3,530.79	-2,373.43	1,918.28	1,816.90	101.38	18.922	
9,600.00	7,462.00	9,282.64	7,368.46	57.00	52.85	88.67	-3,600.11	-2,341.45	1,876.29	1,774.80	101.49	18.487	
9,700.00	7,462.00	9,183.73	7,367.91	58.55	51.05	88.62	-3,690.02	-2,300.26	1,834.53	1,733.59	100.94	18.174	
9,800.00	7,462.00	9,099.34	7,367.71	60.11	49.52	88.58	-3,766.69	-2,265.01	1,792.62	1,691.74	100.89	17.769	
9,900.00	7,462.00	9,030.58	7,367.46	61.68	48.30	88.55	-3,829.31	-2,236.58	1,751.21	1,649.83	101.38	17.273	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 LONGHORN B 3-36H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 100-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)			
10,000.00	7,462.00	8,969.78	7,367.61	63.27	47.24	88.53	-3,885.10	-2,212.44	1,711.36	1,609.16	102.20	16.746	
10,100.00	7,462.00	8,865.82	7,367.53	64.86	45.45	88.49	-3,980.93	-2,172.12	1,672.50	1,570.84	101.66	16.452	
10,200.00	7,462.00	8,765.30	7,367.18	66.47	43.74	88.43	-4,072.92	-2,131.60	1,632.02	1,530.77	101.25	16.118	
10,300.00	7,462.00	8,661.94	7,366.80	68.08	42.02	88.37	-4,167.38	-2,089.66	1,591.30	1,490.53	100.77	15.791	
10,400.00	7,462.00	8,524.73	7,366.19	69.71	39.78	88.28	-4,291.56	-2,031.31	1,548.41	1,449.35	99.06	15.631	
10,500.00	7,462.00	8,426.69	7,367.32	71.34	38.22	88.27	-4,379.48	-1,987.95	1,503.97	1,405.21	98.76	15.228	
10,600.00	7,462.00	8,233.36	7,371.90	72.98	35.25	88.36	-4,549.38	-1,895.97	1,455.43	1,360.79	94.65	15.377	
10,700.00	7,462.00	8,137.55	7,372.93	74.62	33.86	88.34	-4,631.87	-1,847.25	1,404.38	1,310.00	94.37	14.881	
10,800.00	7,462.00	8,069.03	7,372.80	76.27	32.92	88.28	-4,691.23	-1,813.03	1,354.28	1,258.93	95.34	14.205	
10,900.00	7,462.00	7,989.96	7,369.75	77.93	31.88	88.07	-4,759.81	-1,773.80	1,304.62	1,208.67	95.95	13.597	
11,000.00	7,462.00	7,914.89	7,366.02	79.59	30.95	87.81	-4,825.19	-1,737.10	1,255.71	1,158.87	96.84	12.967	
11,100.00	7,462.00	7,852.76	7,363.08	81.26	30.23	87.59	-4,879.79	-1,707.61	1,208.23	1,109.81	98.42	12.276	
11,200.00	7,462.00	7,776.08	7,358.99	82.93	29.40	87.29	-4,948.03	-1,672.89	1,162.86	1,063.38	99.48	11.689	
11,300.00	7,462.00	7,660.00	7,349.34	84.61	28.27	86.57	-5,049.93	-1,618.19	1,115.70	1,016.90	98.80	11.293	
11,400.00	7,462.00	7,586.72	7,340.78	86.29	27.64	85.93	-5,113.88	-1,583.47	1,068.55	968.31	100.23	10.661	
11,500.00	7,462.00	7,534.00	7,328.00	87.97	27.23	85.03	-5,158.91	-1,559.34	1,023.25	920.42	102.83	9.951	
11,600.00	7,462.00	7,482.86	7,307.83	89.66	26.85	83.64	-5,200.88	-1,538.29	982.06	876.38	105.67	9.293	
11,700.00	7,462.00	7,411.33	7,275.82	91.36	26.38	81.37	-5,258.63	-1,510.79	944.70	837.06	107.64	8.777	
11,800.00	7,462.00	7,357.28	7,250.99	93.05	26.07	79.55	-5,302.20	-1,490.66	910.82	800.45	110.37	8.252	
11,900.00	7,462.00	7,312.00	7,228.82	94.75	25.82	77.90	-5,338.66	-1,475.49	882.78	769.42	113.37	7.787	
12,000.00	7,462.00	7,280.00	7,211.68	96.45	25.67	76.63	-5,363.89	-1,465.84	861.55	744.93	116.62	7.388	
12,100.00	7,462.00	7,234.06	7,183.63	98.16	25.46	74.59	-5,398.14	-1,453.63	848.01	729.20	118.81	7.138	
12,200.00	7,462.00	7,185.00	7,150.29	99.87	25.24	72.19	-5,432.18	-1,442.03	842.72	722.50	120.22	7.010	
12,213.87	7,462.00	7,185.00	7,150.29	100.11	25.24	72.19	-5,432.18	-1,442.03	842.61	722.00	120.61	6.986 CC, ES	
12,300.00	7,462.00	7,154.00	7,127.75	101.58	25.12	70.59	-5,452.32	-1,435.17	845.85	724.36	121.49	6.962 SF	
12,400.00	7,462.00	7,122.00	7,103.00	103.29	24.99	68.86	-5,471.53	-1,428.70	858.39	736.60	121.79	7.048	
12,500.00	7,462.00	7,102.59	7,087.20	105.01	24.92	67.78	-5,482.21	-1,425.13	880.50	758.93	121.58	7.242	
12,600.00	7,462.00	7,091.00	7,077.48	106.73	24.87	67.12	-5,488.20	-1,423.09	911.94	791.23	120.72	7.554	
12,700.00	7,462.00	7,059.00	7,049.76	108.45	24.75	65.28	-5,503.29	-1,417.90	951.78	833.14	118.64	8.023	
12,800.00	7,462.00	7,059.00	7,049.76	110.17	24.75	65.28	-5,503.29	-1,417.90	999.45	882.56	116.88	8.551	
12,900.00	7,462.00	7,038.89	7,031.69	111.90	24.68	64.10	-5,511.65	-1,415.02	1,053.79	939.45	114.34	9.217	
13,000.00	7,462.00	7,027.00	7,020.80	113.62	24.63	63.41	-5,516.14	-1,413.48	1,114.19	1,002.38	111.81	9.965	
13,100.00	7,462.00	7,027.00	7,020.80	115.35	24.63	63.41	-5,516.14	-1,413.48	1,179.77	1,070.33	109.44	10.780	
13,200.00	7,462.00	7,008.20	7,003.30	117.08	24.56	62.32	-5,522.66	-1,411.29	1,249.42	1,142.64	106.78	11.701	
13,300.00	7,462.00	6,995.00	6,990.86	118.81	24.52	61.55	-5,526.86	-1,409.93	1,322.86	1,218.55	104.32	12.681	
13,400.00	7,462.00	6,995.00	6,990.86	120.54	24.52	61.55	-5,526.86	-1,409.93	1,399.38	1,297.23	102.15	13.700	
13,500.00	7,462.00	6,995.00	6,990.86	122.28	24.52	61.55	-5,526.86	-1,409.93	1,478.71	1,378.62	100.09	14.774	
13,600.00	7,462.00	6,976.87	6,973.59	124.01	24.45	60.51	-5,532.08	-1,408.24	1,559.97	1,462.00	97.97	15.924	
13,700.00	7,462.00	6,964.00	6,961.20	125.75	24.40	59.78	-5,535.41	-1,407.15	1,643.41	1,547.36	96.05	17.111	
13,800.00	7,462.00	6,964.00	6,961.20	127.49	24.40	59.78	-5,535.41	-1,407.15	1,728.40	1,634.01	94.39	18.311	
13,900.00	7,462.00	6,964.00	6,961.20	129.23	24.40	59.78	-5,535.41	-1,407.15	1,814.93	1,722.07	92.86	19.546	
14,000.00	7,462.00	6,949.23	6,946.90	130.97	24.35	58.95	-5,538.92	-1,405.95	1,902.61	1,811.30	91.31	20.838	
14,100.00	7,462.00	6,932.00	6,930.15	132.71	24.28	58.00	-5,542.73	-1,404.62	1,991.47	1,901.61	89.85	22.164	
14,200.00	7,462.00	6,932.00	6,930.15	134.46	24.28	58.00	-5,542.73	-1,404.62	2,081.12	1,992.48	88.64	23.477	
14,300.00	7,462.00	6,932.00	6,930.15	136.20	24.28	58.00	-5,542.73	-1,404.62	2,171.68	2,084.16	87.52	24.813	
14,400.00	7,462.00	6,932.00	6,930.15	137.95	24.28	58.00	-5,542.73	-1,404.62	2,263.03	2,176.55	86.48	26.167	
14,500.00	7,462.00	6,932.00	6,930.15	139.69	24.28	58.00	-5,542.73	-1,404.62	2,355.09	2,269.57	85.52	27.539	
14,600.00	7,462.00	6,932.00	6,930.15	141.44	24.28	58.00	-5,542.73	-1,404.62	2,447.77	2,363.15	84.62	28.926	
14,700.00	7,462.00	6,932.00	6,930.15	143.19	24.28	58.00	-5,542.73	-1,404.62	2,541.01	2,457.22	83.79	30.327	
14,800.00	7,462.00	6,916.35	6,914.84	144.94	24.23	57.14	-5,545.76	-1,403.49	2,634.39	2,551.47	82.91	31.773	
14,900.00	7,462.00	6,901.00	6,899.71	146.69	24.17	56.31	-5,548.17	-1,402.53	2,728.70	2,646.60	82.10	33.237	
15,000.00	7,462.00	6,901.00	6,899.71	148.44	24.17	56.31	-5,548.17	-1,402.53	2,823.09	2,741.66	81.43	34.669	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 LONGHORN B 3-36H - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 100-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)			
15,100.00	7,462.00	6,901.00	6,899.71	150.19	24.17	56.31	-5,548.17	-1,402.53	2,917.86	2,837.05	80.81	36.109	
15,200.00	7,462.00	6,901.00	6,899.71	151.95	24.17	56.31	-5,548.17	-1,402.53	3,012.96	2,932.74	80.22	37.557	
15,300.00	7,462.00	6,901.00	6,899.71	153.70	24.17	56.31	-5,548.17	-1,402.53	3,108.37	3,028.70	79.68	39.012	
15,400.00	7,462.00	6,901.00	6,899.71	155.45	24.17	56.31	-5,548.17	-1,402.53	3,204.06	3,124.90	79.17	40.472	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 LONGHORN B 5-36H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 30-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference												Rule Assigned:	
Offset												Warning	
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	
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
4,800.00	4,768.37	11,187.00	7,359.61	17.89	78.64	-0.53	-1,550.95	-1,713.71	3,273.24	3,215.68	57.56	56.866	
4,900.00	4,866.91	11,187.00	7,359.61	18.33	78.64	-0.53	-1,550.95	-1,713.71	3,183.90	3,125.54	58.36	54.557	
5,000.00	4,965.46	11,187.00	7,359.61	18.77	78.64	-0.53	-1,550.95	-1,713.71	3,095.21	3,036.01	59.20	52.287	
5,100.00	5,064.00	11,187.00	7,359.61	19.21	78.64	-0.53	-1,550.95	-1,713.71	3,007.23	2,947.15	60.08	50.056	
5,200.00	5,162.55	11,187.00	7,359.61	19.65	78.64	-0.53	-1,550.95	-1,713.71	2,920.02	2,859.02	61.00	47.867	
5,300.00	5,261.09	11,187.00	7,359.61	20.09	78.64	-0.53	-1,550.95	-1,713.71	2,833.66	2,771.69	61.98	45.722	
5,400.00	5,359.64	11,187.00	7,359.61	20.53	78.64	-0.53	-1,550.95	-1,713.71	2,748.23	2,685.23	63.00	43.623	
5,500.00	5,458.18	11,187.00	7,359.61	20.98	78.64	-0.53	-1,550.95	-1,713.71	2,663.81	2,599.73	64.08	41.573	
5,600.00	5,556.72	11,187.00	7,359.61	21.42	78.64	-0.53	-1,550.95	-1,713.71	2,580.50	2,515.30	65.21	39.574	
5,700.00	5,655.27	11,187.00	7,359.61	21.87	78.64	-0.53	-1,550.95	-1,713.71	2,498.42	2,432.02	66.40	37.629	
5,800.00	5,753.81	11,187.00	7,359.61	22.32	78.64	-0.53	-1,550.95	-1,713.71	2,417.69	2,350.04	67.65	35.740	
5,900.00	5,852.36	11,187.00	7,359.61	22.76	78.64	-0.53	-1,550.95	-1,713.71	2,338.45	2,269.49	68.96	33.912	
6,000.00	5,950.90	11,187.00	7,359.61	23.21	78.64	-0.53	-1,550.95	-1,713.71	2,260.85	2,190.52	70.33	32.147	
6,100.00	6,049.45	11,187.00	7,359.61	23.66	78.64	-0.53	-1,550.95	-1,713.71	2,185.08	2,113.32	71.76	30.450	
6,200.00	6,147.99	11,187.00	7,359.61	24.11	78.64	-0.53	-1,550.95	-1,713.71	2,111.32	2,038.07	73.25	28.822	
6,300.00	6,246.54	11,187.00	7,359.61	24.56	78.64	-0.53	-1,550.95	-1,713.71	2,039.80	1,965.00	74.80	27.269	
6,400.00	6,345.08	11,187.00	7,359.61	25.01	78.64	-0.53	-1,550.95	-1,713.71	1,970.76	1,894.36	76.40	25.795	
6,500.00	6,443.63	11,187.00	7,359.61	25.47	78.64	-0.53	-1,550.95	-1,713.71	1,904.47	1,826.43	78.04	24.404	
6,600.00	6,542.17	11,187.00	7,359.61	25.92	78.64	-0.53	-1,550.95	-1,713.71	1,841.23	1,761.52	79.71	23.100	
6,700.00	6,640.72	11,187.00	7,359.61	26.37	78.64	-0.53	-1,550.95	-1,713.71	1,781.36	1,699.97	81.38	21.889	
6,800.00	6,739.26	11,187.00	7,359.61	26.82	78.64	-0.53	-1,550.95	-1,713.71	1,725.21	1,642.16	83.05	20.773	
6,900.00	6,837.81	11,187.00	7,359.61	27.28	78.64	-0.53	-1,550.95	-1,713.71	1,673.16	1,588.48	84.68	19.759	
7,000.00	6,936.35	11,187.00	7,359.61	27.73	78.64	-0.53	-1,550.95	-1,713.71	1,625.60	1,539.36	86.23	18.851	
7,022.19	6,958.22	11,187.00	7,359.61	27.83	78.64	-0.53	-1,550.95	-1,713.71	1,615.70	1,529.13	86.57	18.664	
7,050.00	6,985.54	11,187.00	7,359.61	27.96	78.64	10.56	-1,550.95	-1,713.71	1,603.23	1,516.24	86.98	18.431	
7,100.00	7,034.07	11,187.00	7,359.61	28.21	78.64	23.59	-1,550.95	-1,713.71	1,579.80	1,492.04	87.76	18.000	
7,150.00	7,081.53	11,187.00	7,359.61	28.48	78.64	32.06	-1,550.95	-1,713.71	1,555.19	1,466.61	88.58	17.557	
7,200.00	7,127.56	11,187.00	7,359.61	28.76	78.64	38.40	-1,550.95	-1,713.71	1,529.53	1,440.10	89.43	17.104	
7,250.00	7,171.81	11,187.00	7,359.61	29.06	78.64	43.66	-1,550.95	-1,713.71	1,502.96	1,412.65	90.31	16.643	
7,300.00	7,213.95	11,187.00	7,359.61	29.38	78.64	48.34	-1,550.95	-1,713.71	1,475.64	1,384.41	91.23	16.175	
7,350.00	7,253.65	11,187.00	7,359.61	29.71	78.64	52.70	-1,550.95	-1,713.71	1,447.75	1,355.56	92.19	15.704	
7,400.00	7,290.61	11,187.00	7,359.61	30.06	78.64	56.87	-1,550.95	-1,713.71	1,419.46	1,326.27	93.20	15.231	
7,450.00	7,324.55	11,187.00	7,359.61	30.43	78.64	60.91	-1,550.95	-1,713.71	1,390.99	1,296.74	94.25	14.758	
7,500.00	7,355.20	11,187.00	7,359.61	30.81	78.64	64.83	-1,550.95	-1,713.71	1,362.53	1,267.17	95.36	14.288	
7,550.00	7,382.35	11,187.00	7,359.61	31.21	78.64	68.63	-1,550.95	-1,713.71	1,334.32	1,237.80	96.52	13.824	
7,600.00	7,405.78	11,187.00	7,359.61	31.62	78.64	72.28	-1,550.95	-1,713.71	1,306.59	1,208.84	97.74	13.367	
7,650.00	7,425.31	11,187.00	7,359.61	32.05	78.64	75.75	-1,550.95	-1,713.71	1,279.58	1,180.56	99.02	12.922	
7,700.00	7,440.80	11,187.00	7,359.61	32.49	78.64	79.00	-1,550.95	-1,713.71	1,253.57	1,153.21	100.36	12.491	
7,750.00	7,452.12	11,187.00	7,359.61	32.94	78.64	82.00	-1,550.95	-1,713.71	1,228.81	1,127.07	101.74	12.078	
7,800.00	7,459.19	11,187.00	7,359.61	33.41	78.64	84.72	-1,550.95	-1,713.71	1,205.58	1,102.42	103.17	11.686	
7,850.00	7,461.96	11,187.00	7,359.61	33.88	78.64	87.12	-1,550.95	-1,713.71	1,184.15	1,079.54	104.61	11.320	
7,857.01	7,462.00	11,187.00	7,359.61	33.95	78.64	87.43	-1,550.95	-1,713.71	1,181.31	1,076.50	104.81	11.271	
7,857.01	7,462.00	11,187.00	7,359.61	33.95	78.64	87.43	-1,550.95	-1,713.71	1,181.31	1,076.50	104.81	11.271	
7,862.01	7,462.00	11,187.00	7,359.61	34.00	78.64	87.43	-1,550.95	-1,713.71	1,179.30	1,074.34	104.96	11.236	
7,900.00	7,462.00	11,187.00	7,359.61	34.36	78.64	87.43	-1,550.95	-1,713.71	1,164.65	1,058.59	106.06	10.981	
8,000.00	7,462.00	11,187.00	7,359.61	35.38	78.64	87.43	-1,550.95	-1,713.71	1,131.28	1,022.37	108.91	10.388	
8,100.00	7,462.00	11,187.00	7,359.61	36.45	78.64	87.43	-1,550.95	-1,713.71	1,105.97	994.42	111.56	9.914	
8,200.00	7,462.00	11,187.00	7,359.61	37.58	78.64	87.43	-1,550.95	-1,713.71	1,089.29	975.45	113.85	9.568	
8,300.00	7,462.00	11,088.86	7,359.75	38.75	76.94	87.42	-1,648.46	-1,702.55	1,077.76	964.43	113.33	9.510	
8,400.00	7,462.00	10,994.65	7,359.68	39.98	75.31	87.38	-1,742.00	-1,691.34	1,065.73	952.75	112.97	9.434	
8,500.00	7,462.00	10,874.49	7,359.74	41.24	73.23	87.35	-1,861.24	-1,676.58	1,053.34	941.42	111.93	9.411	
8,600.00	7,462.00	10,755.26	7,359.93	42.54	71.17	87.31	-1,979.19	-1,659.21	1,038.59	927.70	110.89	9.366	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 LONGHORN B 5-36H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 30-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)			
8,700.00	7,462.00	10,653.19	7,360.08	43.87	69.41	87.28	-2,080.01	-1,643.24	1,022.79	912.40	110.39	9.265	
8,800.00	7,462.00	10,565.19	7,360.10	45.24	67.89	87.24	-2,166.96	-1,629.66	1,007.25	896.86	110.39	9.124	
8,900.00	7,462.00	10,462.50	7,360.10	46.63	66.14	87.20	-2,268.57	-1,614.84	992.69	882.73	109.96	9.028	
9,000.00	7,462.00	10,365.33	7,359.92	48.05	64.49	87.15	-2,364.68	-1,600.58	977.88	868.14	109.74	8.911	
9,100.00	7,462.00	10,270.99	7,359.93	49.49	62.89	87.11	-2,458.00	-1,586.74	963.08	853.43	109.65	8.783	
9,200.00	7,462.00	10,160.98	7,363.35	50.96	61.03	87.27	-2,566.75	-1,570.54	948.07	839.00	109.06	8.693	
9,300.00	7,462.00	10,073.99	7,363.96	52.44	59.58	87.26	-2,652.67	-1,556.99	932.40	823.10	109.29	8.531	
9,400.00	7,462.00	9,995.00	7,363.29	53.94	58.27	87.19	-2,731.03	-1,547.04	919.56	809.74	109.83	8.373	
9,500.00	7,462.00	9,907.09	7,361.69	55.46	56.82	87.06	-2,818.35	-1,537.02	908.08	797.99	110.09	8.249	
9,600.00	7,462.00	9,811.86	7,361.02	57.00	55.27	86.98	-2,913.04	-1,526.89	897.34	787.20	110.14	8.147	
9,700.00	7,462.00	9,744.55	7,360.01	58.55	54.19	86.89	-2,980.02	-1,520.36	887.89	776.81	111.09	7.993	
9,800.00	7,462.00	9,680.06	7,359.54	60.11	53.17	86.85	-3,044.45	-1,517.90	883.59	771.55	112.04	7.886	
9,900.00	7,462.00	9,584.00	7,359.17	61.68	51.67	86.82	-3,140.43	-1,514.08	879.54	767.37	112.17	7.841	
9,961.78	7,462.00	9,544.43	7,359.10	62.66	51.06	86.81	-3,179.98	-1,512.94	878.06	765.33	112.73	7.789	
10,000.00	7,462.00	9,521.00	7,359.10	63.27	50.70	86.81	-3,203.40	-1,513.39	878.61	765.53	113.07	7.770	
10,100.00	7,462.00	9,455.02	7,358.97	64.86	49.72	86.81	-3,269.31	-1,516.55	882.89	769.08	113.81	7.758	
10,200.00	7,462.00	9,336.98	7,358.47	66.47	47.99	86.80	-3,387.21	-1,522.20	887.56	773.91	113.65	7.810	
10,300.00	7,462.00	9,123.07	7,358.18	68.08	44.81	86.75	-3,600.85	-1,515.14	883.52	772.54	110.98	7.961	
10,400.00	7,462.00	9,016.00	7,357.87	69.71	43.22	86.69	-3,707.36	-1,504.27	873.21	762.32	110.90	7.874	
10,500.00	7,462.00	8,933.20	7,358.57	71.34	42.02	86.71	-3,789.80	-1,496.79	863.98	752.37	111.61	7.741	
10,600.00	7,462.00	8,794.00	7,359.65	72.98	40.04	86.72	-3,928.22	-1,482.29	853.37	742.83	110.53	7.720	
10,700.00	7,462.00	8,703.28	7,359.62	74.62	38.78	86.68	-4,018.29	-1,471.45	841.26	730.17	111.09	7.573	
10,800.00	7,462.00	8,616.40	7,359.69	76.27	37.60	86.65	-4,104.63	-1,461.86	830.08	718.27	111.81	7.424	
10,900.00	7,462.00	8,492.28	7,363.33	77.93	35.97	86.84	-4,227.75	-1,446.65	817.35	706.03	111.31	7.343	
11,000.00	7,462.00	8,388.34	7,364.10	79.59	34.66	86.84	-4,330.80	-1,433.17	804.22	692.68	111.54	7.210	
11,100.00	7,462.00	8,308.36	7,365.11	81.26	33.69	86.87	-4,410.06	-1,422.48	790.80	678.11	112.69	7.017	
11,200.00	7,462.00	8,239.09	7,365.42	82.93	32.89	86.87	-4,479.01	-1,415.96	781.19	666.99	114.20	6.840	
11,300.00	7,462.00	8,141.67	7,365.86	84.61	31.83	86.87	-4,576.24	-1,409.98	774.84	659.98	114.87	6.746	
11,400.00	7,462.00	8,026.02	7,363.05	86.29	30.64	86.62	-4,691.36	-1,399.27	765.46	650.44	115.02	6.655	
11,500.00	7,462.00	7,905.52	7,362.95	87.97	29.51	86.55	-4,811.10	-1,385.98	754.24	639.18	115.06	6.555	
11,600.00	7,462.00	7,810.25	7,364.47	89.66	28.70	86.61	-4,905.67	-1,374.67	742.13	626.09	116.04	6.396	
11,700.00	7,462.00	7,703.63	7,359.09	91.36	27.88	86.12	-5,011.20	-1,360.62	729.06	612.38	116.69	6.248	
11,800.00	7,462.00	7,611.47	7,349.60	93.05	27.26	85.30	-5,102.09	-1,348.85	716.87	598.98	117.89	6.081	
11,900.00	7,462.00	7,520.89	7,330.24	94.75	26.71	83.64	-5,189.72	-1,336.97	705.47	586.35	119.12	5.922	
12,000.00	7,462.00	7,465.00	7,312.33	96.45	26.40	82.12	-5,242.25	-1,330.66	698.15	576.87	121.28	5.757	
12,052.99	7,462.00	7,433.00	7,299.24	97.36	26.24	81.02	-5,271.33	-1,328.12	697.11	574.97	122.14	5.707 CC, ES	
12,100.00	7,462.00	7,394.56	7,281.89	98.16	26.05	79.58	-5,305.53	-1,325.57	697.58	575.05	122.53	5.693 SF	
12,200.00	7,462.00	7,332.10	7,249.65	99.87	25.76	76.92	-5,358.83	-1,321.41	702.42	579.04	123.38	5.693	
12,300.00	7,462.00	7,268.06	7,211.15	101.58	25.50	73.81	-5,409.87	-1,317.90	714.44	591.06	123.38	5.791	
12,400.00	7,462.00	7,211.00	7,173.30	103.29	25.28	70.80	-5,452.35	-1,313.95	732.89	610.24	122.65	5.976	
12,500.00	7,462.00	7,169.30	7,143.29	105.01	25.12	68.48	-5,481.17	-1,311.18	759.64	638.28	121.36	6.260	
12,600.00	7,462.00	7,148.00	7,127.13	106.73	25.05	67.26	-5,495.00	-1,310.10	795.44	675.79	119.65	6.648	
12,700.00	7,462.00	7,116.00	7,101.55	108.45	24.93	65.39	-5,514.18	-1,309.11	839.77	722.63	117.14	7.169	
12,800.00	7,462.00	7,099.09	7,087.38	110.17	24.88	64.39	-5,523.40	-1,308.80	891.80	777.37	114.43	7.793	
12,900.00	7,462.00	7,084.00	7,074.38	111.90	24.82	63.48	-5,531.05	-1,308.53	950.48	838.95	111.53	8.522	
13,000.00	7,462.00	7,066.57	7,058.97	113.62	24.76	62.42	-5,539.19	-1,308.24	1,014.85	906.31	108.54	9.350	
13,100.00	7,462.00	7,053.00	7,046.69	115.35	24.71	61.59	-5,544.97	-1,308.03	1,084.08	978.44	105.64	10.262	
13,200.00	7,462.00	7,040.34	7,035.08	117.08	24.67	60.82	-5,549.99	-1,307.85	1,157.36	1,054.48	102.88	11.250	
13,300.00	7,462.00	7,021.00	7,017.08	118.81	24.60	59.65	-5,557.06	-1,307.55	1,234.04	1,133.82	100.23	12.313	
13,400.00	7,462.00	7,021.00	7,017.08	120.54	24.60	59.65	-5,557.06	-1,307.55	1,313.45	1,215.54	97.91	13.415	
13,500.00	7,462.00	7,008.37	7,005.18	122.28	24.56	58.89	-5,561.30	-1,307.39	1,395.29	1,299.61	95.68	14.583	
13,600.00	7,462.00	6,989.00	6,986.74	124.01	24.50	57.74	-5,567.22	-1,307.31	1,479.36	1,385.76	93.60	15.805	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 LONGHORN B 5-36H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 30-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)			
13,700.00	7,462.00	6,989.00	6,986.74	125.75	24.50	57.74	-5,567.22	-1,307.31	1,564.86	1,473.06	91.80	17.046	
13,800.00	7,462.00	6,989.00	6,986.74	127.49	24.50	57.74	-5,567.22	-1,307.31	1,651.98	1,561.83	90.15	18.325	
13,900.00	7,462.00	6,989.00	6,986.74	129.23	24.50	57.74	-5,567.22	-1,307.31	1,740.49	1,651.86	88.63	19.637	
14,000.00	7,462.00	6,971.45	6,969.86	130.97	24.44	56.71	-5,572.01	-1,307.35	1,829.84	1,742.66	87.18	20.988	
14,100.00	7,462.00	6,957.00	6,955.85	132.71	24.39	55.88	-5,575.57	-1,307.41	1,920.36	1,834.49	85.86	22.365	
14,200.00	7,462.00	6,957.00	6,955.85	134.46	24.39	55.88	-5,575.57	-1,307.41	2,011.56	1,926.85	84.70	23.748	
14,300.00	7,462.00	6,957.00	6,955.85	136.20	24.39	55.88	-5,575.57	-1,307.41	2,103.56	2,019.92	83.64	25.151	
14,400.00	7,462.00	6,957.00	6,955.85	137.95	24.39	55.88	-5,575.57	-1,307.41	2,196.26	2,113.60	82.66	26.571	
14,500.00	7,462.00	6,957.00	6,955.85	139.69	24.39	55.88	-5,575.57	-1,307.41	2,289.57	2,207.82	81.75	28.007	
14,600.00	7,462.00	6,957.00	6,955.85	141.44	24.39	55.88	-5,575.57	-1,307.41	2,383.43	2,302.51	80.92	29.456	
14,700.00	7,462.00	6,957.00	6,955.85	143.19	24.39	55.88	-5,575.57	-1,307.41	2,477.77	2,397.62	80.14	30.916	
14,800.00	7,462.00	6,942.27	6,941.46	144.94	24.34	55.05	-5,578.69	-1,307.50	2,572.16	2,492.77	79.39	32.398	
14,900.00	7,462.00	6,940.19	6,939.42	146.69	24.33	54.93	-5,579.07	-1,307.51	2,667.20	2,588.47	78.73	33.879	
15,000.00	7,462.00	6,925.00	6,924.42	148.44	24.28	54.08	-5,581.50	-1,307.61	2,762.87	2,684.80	78.07	35.389	
15,100.00	7,462.00	6,925.00	6,924.42	150.19	24.28	54.08	-5,581.50	-1,307.61	2,858.47	2,780.97	77.50	36.881	
15,200.00	7,462.00	6,925.00	6,924.42	151.95	24.28	54.08	-5,581.50	-1,307.61	2,954.36	2,877.38	76.98	38.380	
15,300.00	7,462.00	6,925.00	6,924.42	153.70	24.28	54.08	-5,581.50	-1,307.61	3,050.52	2,974.03	76.49	39.883	
15,400.00	7,462.00	6,925.00	6,924.42	155.45	24.28	54.08	-5,581.50	-1,307.61	3,146.91	3,070.88	76.03	41.390	
15,500.00	7,462.00	6,925.00	6,924.42	157.21	24.28	54.08	-5,581.50	-1,307.61	3,243.53	3,167.92	75.60	42.901	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 LONGHORN G 4-36H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 140-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)			
5,400.00	5,359.64	11,814.00	7,870.14	20.53	79.33	-3.66	-1,677.67	-1,735.22	3,202.40	3,143.33	59.06	54.219	
5,500.00	5,458.18	11,814.00	7,870.14	20.98	79.33	-3.66	-1,677.67	-1,735.22	3,113.84	3,053.96	59.88	51.998	
5,600.00	5,556.72	11,814.00	7,870.14	21.42	79.33	-3.66	-1,677.67	-1,735.22	3,026.00	2,965.25	60.75	49.815	
5,700.00	5,655.27	11,814.00	7,870.14	21.87	79.33	-3.66	-1,677.67	-1,735.22	2,938.93	2,877.28	61.65	47.671	
5,800.00	5,753.81	11,814.00	7,870.14	22.32	79.33	-3.66	-1,677.67	-1,735.22	2,852.71	2,790.11	62.60	45.570	
5,900.00	5,852.36	11,814.00	7,870.14	22.76	79.33	-3.66	-1,677.67	-1,735.22	2,767.42	2,703.82	63.60	43.513	
6,000.00	5,950.90	11,814.00	7,870.14	23.21	79.33	-3.66	-1,677.67	-1,735.22	2,683.15	2,618.50	64.65	41.502	
6,100.00	6,049.45	11,814.00	7,870.14	23.66	79.33	-3.66	-1,677.67	-1,735.22	2,599.99	2,534.23	65.76	39.540	
6,200.00	6,147.99	11,814.00	7,870.14	24.11	79.33	-3.66	-1,677.67	-1,735.22	2,518.05	2,451.14	66.92	37.630	
6,300.00	6,246.54	11,814.00	7,870.14	24.56	79.33	-3.66	-1,677.67	-1,735.22	2,437.47	2,369.33	68.14	35.774	
6,400.00	6,345.08	11,814.00	7,870.14	25.01	79.33	-3.66	-1,677.67	-1,735.22	2,358.37	2,288.95	69.41	33.975	
6,500.00	6,443.63	11,814.00	7,870.14	25.47	79.33	-3.66	-1,677.67	-1,735.22	2,280.91	2,210.16	70.75	32.238	
6,600.00	6,542.17	11,814.00	7,870.14	25.92	79.33	-3.66	-1,677.67	-1,735.22	2,205.27	2,133.11	72.15	30.564	
6,700.00	6,640.72	11,814.00	7,870.14	26.37	79.33	-3.66	-1,677.67	-1,735.22	2,131.63	2,058.02	73.61	28.958	
6,800.00	6,739.26	11,814.00	7,870.14	26.82	79.33	-3.66	-1,677.67	-1,735.22	2,060.22	1,985.10	75.12	27.424	
6,900.00	6,837.81	11,814.00	7,870.14	27.28	79.33	-3.66	-1,677.67	-1,735.22	1,991.27	1,914.58	76.69	25.966	
7,000.00	6,936.35	11,814.00	7,870.14	27.73	79.33	-3.66	-1,677.67	-1,735.22	1,925.05	1,846.75	78.29	24.588	
7,022.19	6,958.22	11,814.00	7,870.14	27.83	79.33	-3.66	-1,677.67	-1,735.22	1,910.75	1,832.10	78.65	24.293	
7,050.00	6,985.54	11,814.00	7,870.14	27.96	79.33	8.09	-1,677.67	-1,735.22	1,892.69	1,813.57	79.11	23.923	
7,100.00	7,034.07	11,814.00	7,870.14	28.21	79.33	22.48	-1,677.67	-1,735.22	1,859.05	1,779.08	79.97	23.247	
7,150.00	7,081.53	11,814.00	7,870.14	28.48	79.33	32.57	-1,677.67	-1,735.22	1,824.09	1,743.23	80.86	22.559	
7,200.00	7,127.56	11,814.00	7,870.14	28.76	79.33	40.79	-1,677.67	-1,735.22	1,787.99	1,706.21	81.78	21.863	
7,250.00	7,171.81	11,814.00	7,870.14	29.06	79.33	48.21	-1,677.67	-1,735.22	1,750.97	1,668.23	82.74	21.163	
7,300.00	7,213.95	11,814.00	7,870.14	29.38	79.33	55.30	-1,677.67	-1,735.22	1,713.27	1,629.54	83.73	20.463	
7,350.00	7,253.65	11,814.00	7,870.14	29.71	79.33	62.25	-1,677.67	-1,735.22	1,675.12	1,590.37	84.75	19.765	
7,400.00	7,290.61	11,814.00	7,870.14	30.06	79.33	69.09	-1,677.67	-1,735.22	1,636.81	1,551.00	85.81	19.075	
7,450.00	7,324.55	11,814.00	7,870.14	30.43	79.33	75.75	-1,677.67	-1,735.22	1,598.62	1,511.71	86.91	18.395	
7,500.00	7,355.20	11,814.00	7,870.14	30.81	79.33	82.14	-1,677.67	-1,735.22	1,560.86	1,472.82	88.04	17.729	
7,550.00	7,382.35	11,814.00	7,870.14	31.21	79.33	88.12	-1,677.67	-1,735.22	1,523.87	1,434.66	89.21	17.082	
7,600.00	7,405.78	11,814.00	7,870.14	31.62	79.33	93.59	-1,677.67	-1,735.22	1,487.98	1,397.57	90.41	16.457	
7,650.00	7,425.31	11,814.00	7,870.14	32.05	79.33	98.48	-1,677.67	-1,735.22	1,453.57	1,361.92	91.65	15.860	
7,700.00	7,440.80	11,814.00	7,870.14	32.49	79.33	102.77	-1,677.67	-1,735.22	1,421.02	1,328.12	92.90	15.296	
7,750.00	7,452.12	11,814.00	7,870.14	32.94	79.33	106.46	-1,677.67	-1,735.22	1,390.70	1,296.54	94.17	14.768	
7,800.00	7,459.19	11,814.00	7,870.14	33.41	79.33	109.56	-1,677.67	-1,735.22	1,363.02	1,267.59	95.42	14.284	
7,850.00	7,461.96	11,814.00	7,870.14	33.88	79.33	112.10	-1,677.67	-1,735.22	1,338.34	1,241.69	96.65	13.847	
7,857.01	7,462.00	11,814.00	7,870.14	33.95	79.33	112.41	-1,677.67	-1,735.22	1,335.14	1,238.32	96.82	13.790	
7,857.01	7,462.00	11,814.00	7,870.14	33.95	79.33	112.41	-1,677.67	-1,735.22	1,335.14	1,238.32	96.82	13.790	
7,862.01	7,462.00	11,814.00	7,870.14	34.00	79.33	112.41	-1,677.67	-1,735.22	1,332.89	1,235.95	96.94	13.749	
7,900.00	7,462.00	11,814.00	7,870.14	34.36	79.33	112.41	-1,677.67	-1,735.22	1,316.29	1,218.42	97.87	13.450	
8,000.00	7,462.00	11,814.00	7,870.14	35.38	79.33	112.41	-1,677.67	-1,735.22	1,276.97	1,176.61	100.37	12.723	
8,100.00	7,462.00	11,814.00	7,870.14	36.45	79.33	112.41	-1,677.67	-1,735.22	1,244.47	1,141.58	102.89	12.096	
8,200.00	7,462.00	11,814.00	7,870.14	37.58	79.33	112.41	-1,677.67	-1,735.22	1,219.32	1,114.01	105.31	11.578	
8,300.00	7,462.00	11,814.00	7,870.14	38.75	79.33	112.41	-1,677.67	-1,735.22	1,201.99	1,094.47	107.52	11.179	
8,400.00	7,462.00	11,814.00	7,870.14	39.98	79.33	112.41	-1,677.67	-1,735.22	1,192.82	1,083.42	109.39	10.904	
8,500.00	7,462.00	11,767.84	7,869.90	41.24	78.56	112.40	-1,723.83	-1,735.14	1,191.10	1,081.02	110.08	10.821	
8,549.17	7,462.00	11,724.65	7,869.66	41.88	77.85	112.39	-1,767.02	-1,735.17	1,190.96	1,080.92	110.04	10.823	
8,600.00	7,462.00	11,680.44	7,869.37	42.54	77.13	112.37	-1,811.22	-1,735.51	1,191.11	1,081.10	110.01	10.827	
8,700.00	7,462.00	11,589.00	7,868.56	43.87	75.63	112.32	-1,902.65	-1,736.47	1,191.64	1,081.72	109.92	10.841	
8,800.00	7,462.00	11,494.00	7,867.57	45.24	74.09	112.25	-1,997.63	-1,738.38	1,192.97	1,083.13	109.83	10.862	
8,900.00	7,462.00	11,414.44	7,866.85	46.63	72.81	112.16	-2,077.13	-1,741.21	1,195.72	1,085.69	110.03	10.867	
9,000.00	7,462.00	11,312.73	7,866.20	48.05	71.20	112.06	-2,178.75	-1,745.43	1,199.18	1,089.26	109.92	10.909	
9,100.00	7,462.00	11,198.45	7,865.50	49.49	69.38	111.97	-2,292.96	-1,749.30	1,201.96	1,092.32	109.64	10.963	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 LONGHORN G 4-36H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 140-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)			
9,200.00	7,462.00	11,058.52	7,864.82	50.96	67.14	111.92	-2,432.88	-1,750.24	1,202.20	1,093.34	108.86	11.044	
9,300.00	7,462.00	10,954.57	7,864.75	52.44	65.48	111.95	-2,536.81	-1,748.48	1,200.45	1,091.78	108.67	11.047	
9,400.00	7,462.00	10,862.38	7,864.26	53.94	64.01	111.95	-2,629.00	-1,747.57	1,199.19	1,090.44	108.75	11.027	
9,500.00	7,462.00	10,766.77	7,863.99	55.46	62.51	111.95	-2,724.61	-1,747.12	1,198.50	1,089.71	108.79	11.017	
9,566.69	7,462.00	10,706.86	7,863.67	56.49	61.57	111.94	-2,784.52	-1,747.08	1,198.24	1,089.33	108.91	11.002	
9,600.00	7,462.00	10,679.56	7,863.47	57.00	61.15	111.93	-2,811.81	-1,747.28	1,198.32	1,089.30	109.02	10.992	
9,700.00	7,462.00	10,590.51	7,862.69	58.55	59.78	111.87	-2,900.85	-1,748.81	1,199.43	1,090.16	109.27	10.977	
9,800.00	7,462.00	10,482.03	7,862.30	60.11	58.13	111.82	-3,009.31	-1,750.65	1,200.74	1,091.54	109.20	10.996	
9,900.00	7,462.00	10,366.33	7,862.46	61.68	56.37	111.83	-3,125.00	-1,750.78	1,200.74	1,091.77	108.98	11.018	
10,000.00	7,462.00	10,267.70	7,864.61	63.27	54.87	111.95	-3,223.61	-1,749.43	1,200.13	1,091.14	108.99	11.011	
10,100.00	7,462.00	10,174.90	7,867.03	64.86	53.48	112.08	-3,316.37	-1,748.40	1,199.94	1,090.80	109.14	10.995	
10,132.49	7,462.00	10,125.22	7,868.24	65.39	52.74	112.14	-3,366.02	-1,747.78	1,199.84	1,091.02	108.82	11.026	
10,200.00	7,462.00	10,040.42	7,869.65	66.47	51.48	112.26	-3,450.77	-1,744.91	1,197.95	1,089.45	108.50	11.041	
10,300.00	7,462.00	9,955.44	7,871.13	68.08	50.23	112.37	-3,535.71	-1,742.83	1,196.15	1,087.29	108.86	10.988	
10,400.00	7,462.00	9,771.25	7,870.49	69.71	47.55	112.50	-3,719.64	-1,734.19	1,191.86	1,084.70	107.17	11.121	
10,500.00	7,462.00	9,647.85	7,867.83	71.34	45.75	112.61	-3,842.45	-1,722.46	1,182.06	1,075.36	106.70	11.078	
10,600.00	7,462.00	9,524.55	7,865.31	72.98	43.98	112.76	-3,964.94	-1,708.66	1,170.86	1,064.68	106.18	11.027	
10,700.00	7,462.00	9,434.28	7,863.78	74.62	42.70	112.91	-4,054.46	-1,697.11	1,158.30	1,051.76	106.54	10.872	
10,800.00	7,462.00	9,328.24	7,864.24	76.27	41.24	113.20	-4,159.64	-1,683.66	1,146.67	1,040.24	106.43	10.774	
10,900.00	7,462.00	9,213.85	7,864.75	77.93	39.70	113.55	-4,272.86	-1,667.38	1,133.60	1,027.52	106.08	10.686	
11,000.00	7,462.00	9,099.71	7,867.90	79.59	38.20	114.10	-4,385.38	-1,648.53	1,119.43	1,013.81	105.62	10.599	
11,100.00	7,462.00	8,935.08	7,871.94	81.26	36.12	115.01	-4,546.60	-1,615.60	1,102.29	998.92	103.37	10.663	
11,200.00	7,462.00	8,843.80	7,872.24	82.93	35.02	115.50	-4,635.52	-1,594.93	1,081.72	978.05	103.67	10.434	
11,300.00	7,462.00	8,753.69	7,872.77	84.61	34.00	116.00	-4,723.43	-1,575.20	1,062.01	957.96	104.05	10.206	
11,400.00	7,462.00	8,651.46	7,872.50	86.29	32.91	116.52	-4,823.33	-1,553.45	1,042.60	938.51	104.09	10.016	
11,500.00	7,462.00	8,573.87	7,871.56	87.97	32.15	116.88	-4,899.31	-1,537.77	1,023.82	918.73	105.09	9.742	
11,600.00	7,462.00	8,444.31	7,869.37	89.66	30.97	117.45	-5,026.26	-1,512.06	1,005.38	900.98	104.39	9.631	
11,700.00	7,462.00	8,322.61	7,863.09	91.36	30.00	117.85	-5,144.90	-1,485.70	983.65	879.55	104.10	9.449	
11,800.00	7,462.00	8,215.87	7,855.18	93.05	29.27	118.13	-5,248.46	-1,461.08	959.60	855.15	104.45	9.187	
11,900.00	7,462.00	8,104.26	7,846.48	94.75	28.62	118.41	-5,356.71	-1,435.35	935.53	830.83	104.70	8.935	
12,000.00	7,462.00	7,680.90	7,651.18	96.45	27.06	108.10	-5,709.44	-1,359.57	902.12	803.37	98.75	9.135	
12,100.00	7,462.00	7,587.51	7,572.48	98.16	26.81	102.44	-5,758.47	-1,349.63	849.24	745.34	103.90	8.173	
12,200.00	7,462.00	7,511.50	7,503.69	99.87	26.60	97.11	-5,790.07	-1,343.47	800.08	690.13	109.96	7.276	
12,300.00	7,462.00	7,476.88	7,471.07	101.58	26.50	94.49	-5,801.46	-1,341.41	757.98	641.31	116.67	6.497	
12,400.00	7,462.00	7,447.91	7,443.24	103.29	26.42	92.23	-5,809.43	-1,340.38	726.07	602.97	123.10	5.898	
12,500.00	7,462.00	7,420.95	7,416.96	105.01	26.34	90.08	-5,815.34	-1,339.65	705.92	577.34	128.58	5.490	
12,599.82	7,462.00	7,403.88	7,400.15	106.72	26.29	88.70	-5,818.30	-1,339.25	699.01	566.48	132.53	5.274 CC	
12,600.00	7,462.00	7,403.85	7,400.12	106.73	26.29	88.70	-5,818.31	-1,339.25	699.01	566.47	132.54	5.274 ES	
12,700.00	7,462.00	7,391.87	7,388.27	108.45	26.25	87.73	-5,820.03	-1,338.99	706.02	571.45	134.57	5.246 SF	
12,800.00	7,462.00	7,383.07	7,379.54	110.17	26.22	87.01	-5,821.12	-1,338.82	726.67	592.03	134.64	5.397	
12,900.00	7,462.00	7,376.34	7,372.84	111.90	26.20	86.46	-5,821.84	-1,338.69	759.89	626.86	133.03	5.712	
13,000.00	7,462.00	7,365.00	7,361.56	113.62	26.17	85.54	-5,822.86	-1,338.49	804.23	674.05	130.18	6.178	
13,100.00	7,462.00	7,365.00	7,361.56	115.35	26.17	85.54	-5,822.86	-1,338.49	857.85	731.17	126.68	6.772	
13,200.00	7,462.00	7,365.00	7,361.56	117.08	26.17	85.54	-5,822.86	-1,338.49	919.25	796.40	122.85	7.483	
13,300.00	7,462.00	7,365.00	7,361.56	118.81	26.17	85.54	-5,822.86	-1,338.49	986.99	868.02	118.98	8.296	
13,400.00	7,462.00	7,365.00	7,361.56	120.54	26.17	85.54	-5,822.86	-1,338.49	1,059.85	944.62	115.23	9.198	
13,500.00	7,462.00	7,365.00	7,361.56	122.28	26.17	85.54	-5,822.86	-1,338.49	1,136.84	1,025.13	111.71	10.177	
13,600.00	7,462.00	7,365.00	7,361.56	124.01	26.17	85.54	-5,822.86	-1,338.49	1,217.18	1,108.72	108.46	11.223	
13,700.00	7,462.00	7,365.00	7,361.56	125.75	26.17	85.54	-5,822.86	-1,338.49	1,300.25	1,194.77	105.48	12.327	
13,800.00	7,462.00	7,365.00	7,361.56	127.49	26.17	85.54	-5,822.86	-1,338.49	1,385.56	1,282.78	102.77	13.482	
13,900.00	7,462.00	7,365.00	7,361.56	129.23	26.17	85.54	-5,822.86	-1,338.49	1,472.72	1,372.40	100.32	14.680	
14,000.00	7,462.00	7,347.17	7,343.77	130.97	26.11	84.09	-5,823.98	-1,338.26	1,561.03	1,463.02	98.02	15.926	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 LONGHORN G 4-36H - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 140-OWSG (Rev2) MWD													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:		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	
14,100.00	7,462.00	7,345.98	7,342.57	132.71	26.10	83.99	-5,824.03	-1,338.25	1,650.98	1,554.98	96.00	17.198	
14,200.00	7,462.00	7,344.89	7,341.48	134.46	26.10	83.90	-5,824.08	-1,338.24	1,742.01	1,647.84	94.17	18.498	
14,300.00	7,462.00	7,343.88	7,340.48	136.20	26.10	83.82	-5,824.12	-1,338.23	1,833.98	1,741.47	92.51	19.824	
14,400.00	7,462.00	7,342.96	7,339.56	137.95	26.09	83.75	-5,824.16	-1,338.22	1,926.75	1,835.74	91.01	21.172	
14,500.00	7,462.00	7,342.11	7,338.71	139.69	26.09	83.68	-5,824.19	-1,338.21	2,020.20	1,930.57	89.63	22.539	
14,600.00	7,462.00	7,341.32	7,337.92	141.44	26.09	83.62	-5,824.22	-1,338.21	2,114.25	2,025.87	88.38	23.923	
14,700.00	7,462.00	7,340.58	7,337.18	143.19	26.08	83.56	-5,824.25	-1,338.20	2,208.83	2,121.60	87.23	25.322	
14,800.00	7,462.00	7,339.90	7,336.50	144.94	26.08	83.50	-5,824.27	-1,338.20	2,303.86	2,217.68	86.18	26.733	
14,900.00	7,462.00	7,339.26	7,335.86	146.69	26.08	83.45	-5,824.30	-1,338.19	2,399.29	2,314.08	85.21	28.156	
15,000.00	7,462.00	7,338.66	7,335.26	148.44	26.08	83.40	-5,824.31	-1,338.19	2,495.08	2,410.76	84.32	29.589	
15,100.00	7,462.00	7,338.10	7,334.70	150.19	26.08	83.35	-5,824.33	-1,338.19	2,591.19	2,507.68	83.51	31.030	
15,200.00	7,462.00	7,337.57	7,334.18	151.95	26.07	83.31	-5,824.35	-1,338.18	2,687.58	2,604.83	82.75	32.479	
15,300.00	7,462.00	7,337.08	7,333.68	153.70	26.07	83.27	-5,824.36	-1,338.18	2,784.23	2,702.18	82.05	33.934	
15,400.00	7,462.00	7,317.00	7,313.61	155.45	26.01	81.65	-5,824.59	-1,338.16	2,881.52	2,800.21	81.31	35.441	
15,500.00	7,462.00	7,317.00	7,313.61	157.21	26.01	81.65	-5,824.59	-1,338.16	2,978.58	2,897.87	80.71	36.906	
15,600.00	7,462.00	7,317.00	7,313.61	158.96	26.01	81.65	-5,824.59	-1,338.16	3,075.82	2,995.67	80.15	38.376	
15,700.00	7,462.00	7,317.00	7,313.61	160.72	26.01	81.65	-5,824.59	-1,338.16	3,173.24	3,093.61	79.63	39.849	
15,800.00	7,462.00	7,317.00	7,313.61	162.48	26.01	81.65	-5,824.59	-1,338.16	3,270.82	3,191.67	79.15	41.325	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 VERT BEVO 4-36 SWD - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 100-GYD_CT												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)			
4,500.00	4,472.73	4,476.79	4,476.72	16.59	1.24	-14.03	-2,921.59	-2,093.83	3,270.71	3,253.80	16.91	193.425	
4,600.00	4,571.28	4,574.08	4,574.00	17.02	1.26	-14.12	-2,922.27	-2,092.81	3,254.20	3,236.91	17.29	188.206	
4,700.00	4,669.82	4,682.76	4,682.67	17.45	1.28	-14.22	-2,922.68	-2,091.76	3,237.48	3,219.81	17.67	183.193	
4,800.00	4,768.37	4,774.25	4,774.16	17.89	1.31	-14.30	-2,922.80	-2,091.04	3,220.66	3,202.60	18.06	178.355	
4,900.00	4,866.91	4,880.22	4,880.13	18.33	1.33	-14.39	-2,922.88	-2,090.49	3,203.97	3,185.53	18.44	173.787	
5,000.00	4,965.46	4,976.00	4,975.91	18.77	1.34	-14.47	-2,922.71	-2,090.04	3,187.08	3,168.26	18.82	169.369	
5,100.00	5,064.00	5,070.52	5,070.42	19.21	1.36	-14.56	-2,922.94	-2,089.26	3,170.36	3,151.16	19.20	165.116	
5,200.00	5,162.55	5,161.01	5,160.91	19.65	1.37	-14.63	-2,922.84	-2,089.24	3,153.79	3,134.21	19.58	161.062	
5,300.00	5,261.09	5,248.46	5,248.36	20.09	1.37	-14.69	-2,922.77	-2,089.69	3,137.55	3,117.59	19.96	157.171	
5,400.00	5,359.64	5,337.95	5,337.84	20.53	1.38	-14.74	-2,922.50	-2,091.04	3,121.67	3,101.32	20.35	153.430	
5,500.00	5,458.18	5,440.99	5,440.85	20.98	1.39	-14.78	-2,921.81	-2,093.43	3,105.94	3,085.21	20.73	149.858	
5,600.00	5,556.72	5,557.72	5,557.57	21.42	1.40	-14.85	-2,921.38	-2,094.56	3,089.71	3,068.61	21.10	146.409	
5,700.00	5,655.27	5,694.27	5,694.11	21.87	1.42	-14.97	-2,921.08	-2,093.70	3,072.79	3,051.31	21.47	143.087	
5,800.00	5,753.81	5,789.41	5,789.23	22.32	1.44	-15.09	-2,921.19	-2,091.36	3,055.12	3,033.26	21.87	139.712	
5,900.00	5,852.36	5,884.97	5,884.75	22.76	1.46	-15.22	-2,921.54	-2,088.91	3,037.61	3,015.35	22.26	136.460	
6,000.00	5,950.90	5,991.41	5,991.17	23.21	1.49	-15.34	-2,921.47	-2,086.72	3,020.04	2,997.39	22.65	133.330	
6,100.00	6,049.45	6,093.34	6,093.08	23.66	1.52	-15.45	-2,920.93	-2,084.94	3,002.25	2,979.21	23.05	130.274	
6,200.00	6,147.99	6,183.63	6,183.36	24.11	1.54	-15.55	-2,920.32	-2,083.67	2,984.54	2,961.10	23.45	127.296	
6,300.00	6,246.54	6,272.39	6,272.12	24.56	1.57	-15.64	-2,919.82	-2,082.76	2,967.14	2,943.30	23.85	124.423	
6,400.00	6,345.08	6,361.09	6,360.81	25.01	1.59	-15.72	-2,919.54	-2,082.06	2,950.07	2,925.82	24.25	121.655	
6,500.00	6,443.63	6,468.49	6,468.21	25.47	1.62	-15.83	-2,919.25	-2,081.40	2,933.16	2,908.51	24.65	119.016	
6,600.00	6,542.17	6,564.77	6,564.48	25.92	1.65	-15.93	-2,918.87	-2,080.36	2,915.89	2,890.84	25.05	116.425	
6,700.00	6,640.72	6,653.09	6,652.80	26.37	1.67	-16.02	-2,918.64	-2,079.75	2,898.95	2,873.50	25.45	113.911	
6,800.00	6,739.26	6,743.78	6,743.50	26.82	1.69	-16.11	-2,918.49	-2,079.54	2,882.34	2,856.49	25.85	111.506	
6,900.00	6,837.81	6,840.90	6,840.62	27.28	1.71	-16.21	-2,918.58	-2,079.26	2,865.92	2,839.68	26.24	109.217	
7,000.00	6,936.35	6,943.32	6,943.04	27.73	1.73	-16.31	-2,918.45	-2,079.12	2,849.40	2,822.77	26.63	106.982	
7,022.19	6,958.22	6,965.57	6,965.28	27.83	1.74	-16.33	-2,918.41	-2,079.08	2,845.73	2,819.00	26.72	106.487	
7,050.00	6,985.54	6,993.37	6,993.08	27.96	1.75	-6.02	-2,918.36	-2,079.03	2,840.55	2,813.72	26.84	105.850	
7,100.00	7,034.07	7,045.31	7,045.02	28.21	1.76	5.66	-2,918.22	-2,078.94	2,828.43	2,801.40	27.03	104.637	
7,150.00	7,081.53	7,096.44	7,096.16	28.48	1.77	12.87	-2,917.98	-2,078.88	2,812.73	2,785.52	27.22	103.338	
7,200.00	7,127.56	7,139.11	7,138.82	28.76	1.78	18.05	-2,917.81	-2,078.77	2,793.65	2,766.26	27.40	101.972	
7,250.00	7,171.81	7,179.70	7,179.41	29.06	1.78	22.29	-2,917.81	-2,078.52	2,771.41	2,743.84	27.56	100.549	
7,300.00	7,213.95	7,219.81	7,219.52	29.38	1.79	26.16	-2,917.94	-2,078.15	2,746.17	2,718.45	27.72	99.080	
7,350.00	7,253.65	7,259.06	7,258.76	29.71	1.80	30.00	-2,918.10	-2,077.75	2,718.12	2,690.26	27.86	97.574	
7,400.00	7,290.61	7,295.65	7,295.35	30.06	1.81	34.02	-2,918.28	-2,077.35	2,687.49	2,659.51	27.98	96.035	
7,450.00	7,324.55	7,328.87	7,328.57	30.43	1.82	38.39	-2,918.46	-2,076.98	2,654.55	2,626.45	28.10	94.471	
7,500.00	7,355.20	7,358.87	7,358.57	30.81	1.82	43.23	-2,918.62	-2,076.66	2,619.59	2,591.39	28.20	92.887	
7,550.00	7,382.35	7,385.49	7,385.18	31.21	1.83	48.63	-2,918.77	-2,076.38	2,582.92	2,554.62	28.29	91.288	
7,600.00	7,405.78	7,408.61	7,408.31	31.62	1.83	54.64	-2,918.91	-2,076.14	2,544.85	2,516.48	28.38	89.677	
7,650.00	7,425.31	7,428.07	7,427.76	32.05	1.84	61.21	-2,919.02	-2,075.95	2,505.74	2,477.28	28.46	88.057	
7,700.00	7,440.80	7,443.55	7,443.24	32.49	1.84	68.20	-2,919.11	-2,075.80	2,465.91	2,437.38	28.53	86.429	
7,750.00	7,452.12	7,454.94	7,454.63	32.94	1.84	75.40	-2,919.17	-2,075.69	2,425.74	2,397.13	28.61	84.793	
7,800.00	7,459.19	7,462.15	7,461.84	33.41	1.84	82.50	-2,919.21	-2,075.63	2,385.57	2,356.88	28.69	83.150	
7,850.00	7,461.96	7,465.13	7,464.82	33.88	1.84	89.22	-2,919.23	-2,075.60	2,345.75	2,316.97	28.78	81.503	
7,857.01	7,462.00	7,465.21	7,464.90	33.95	1.84	90.12	-2,919.23	-2,075.60	2,340.22	2,311.43	28.79	81.273	
7,857.01	7,462.00	7,465.21	7,464.90	33.95	1.84	90.12	-2,919.23	-2,075.60	2,340.22	2,311.43	28.79	81.273	
7,862.01	7,462.00	7,465.24	7,464.93	34.00	1.84	90.12	-2,919.23	-2,075.60	2,336.28	2,307.48	28.81	81.106	
7,900.00	7,462.00	7,465.44	7,465.13	34.36	1.84	90.12	-2,919.23	-2,075.60	2,306.48	2,277.59	28.89	79.834	
8,000.00	7,462.00	7,465.96	7,465.65	35.38	1.84	90.15	-2,919.23	-2,075.59	2,229.23	2,200.03	29.20	76.335	
8,100.00	7,462.00	7,466.49	7,466.18	36.45	1.84	90.17	-2,919.23	-2,075.59	2,153.86	2,124.20	29.65	72.635	
8,200.00	7,462.00	7,467.02	7,466.71	37.58	1.84	90.19	-2,919.24	-2,075.59	2,080.55	2,050.30	30.26	68.759	
8,300.00	7,462.00	7,467.54	7,467.23	38.75	1.84	90.21	-2,919.24	-2,075.58	2,009.56	1,978.52	31.04	64.744	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 VERT BEVO 4-36 SWD - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 100-GYD_CT												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)			
8,400.00	7,462.00	7,468.06	7,467.75	39.98	1.85	90.23	-2,919.24	-2,075.58	1,941.12	1,909.11	32.01	60.642	
8,500.00	7,462.00	7,468.59	7,468.28	41.24	1.85	90.25	-2,919.24	-2,075.57	1,875.51	1,842.33	33.18	56.519	
8,600.00	7,462.00	7,469.11	7,468.80	42.54	1.85	90.27	-2,919.25	-2,075.57	1,813.05	1,778.48	34.57	52.443	
8,700.00	7,462.00	7,469.63	7,469.32	43.87	1.85	90.29	-2,919.25	-2,075.56	1,754.07	1,717.90	36.18	48.487	
8,800.00	7,462.00	7,470.15	7,469.84	45.24	1.85	90.31	-2,919.25	-2,075.56	1,698.94	1,660.94	37.99	44.717	
8,900.00	7,462.00	7,470.67	7,470.36	46.63	1.85	90.33	-2,919.26	-2,075.55	1,648.03	1,608.01	40.01	41.187	
9,000.00	7,462.00	7,471.19	7,470.88	48.05	1.85	90.35	-2,919.26	-2,075.55	1,601.75	1,559.54	42.22	37.942	
9,100.00	7,462.00	7,471.71	7,471.40	49.49	1.85	90.37	-2,919.26	-2,075.54	1,560.52	1,515.95	44.57	35.010	
9,200.00	7,462.00	7,472.22	7,471.91	50.96	1.85	90.39	-2,919.26	-2,075.54	1,524.74	1,477.69	47.05	32.409	
9,300.00	7,462.00	7,472.74	7,472.43	52.44	1.85	90.42	-2,919.27	-2,075.53	1,494.80	1,445.21	49.59	30.142	
9,400.00	7,462.00	7,473.26	7,472.95	53.94	1.85	90.44	-2,919.27	-2,075.53	1,471.07	1,418.91	52.16	28.205	
9,500.00	7,462.00	7,473.77	7,473.46	55.46	1.85	90.46	-2,919.27	-2,075.53	1,453.84	1,399.16	54.68	26.587	
9,600.00	7,462.00	7,474.29	7,473.98	57.00	1.85	90.48	-2,919.28	-2,075.52	1,443.35	1,386.24	57.11	25.271	
9,700.00	7,462.00	7,474.80	7,474.49	58.55	1.85	90.50	-2,919.28	-2,075.52	1,439.75	1,380.35	59.40	24.238	
9,701.97	7,462.00	7,474.81	7,474.50	58.58	1.85	90.50	-2,919.28	-2,075.52	1,439.74	1,380.30	59.44	24.220 CC, ES	
9,800.00	7,462.00	7,475.31	7,475.00	60.11	1.85	90.52	-2,919.28	-2,075.51	1,443.08	1,381.58	61.49	23.467	
9,900.00	7,462.00	7,475.83	7,475.52	61.68	1.85	90.54	-2,919.28	-2,075.51	1,453.30	1,389.94	63.36	22.938	
10,000.00	7,462.00	7,476.34	7,476.03	63.27	1.85	90.56	-2,919.29	-2,075.50	1,470.27	1,405.29	64.97	22.629	
10,100.00	7,462.00	7,476.85	7,476.54	64.86	1.85	90.58	-2,919.29	-2,075.50	1,493.75	1,427.42	66.33	22.521 SF	
10,200.00	7,462.00	7,477.36	7,477.05	66.47	1.85	90.60	-2,919.29	-2,075.49	1,523.45	1,456.03	67.42	22.596	
10,300.00	7,462.00	7,477.87	7,477.56	68.08	1.85	90.62	-2,919.29	-2,075.49	1,559.01	1,490.73	68.27	22.836	
10,400.00	7,462.00	7,478.37	7,478.06	69.71	1.85	90.64	-2,919.30	-2,075.49	1,600.03	1,531.14	68.89	23.225	
10,500.00	7,462.00	7,478.88	7,478.57	71.34	1.85	90.66	-2,919.30	-2,075.48	1,646.12	1,576.81	69.31	23.750	
10,600.00	7,462.00	7,479.39	7,479.08	72.98	1.85	90.68	-2,919.30	-2,075.48	1,696.85	1,627.30	69.55	24.396	
10,700.00	7,462.00	7,479.90	7,479.58	74.62	1.85	90.70	-2,919.31	-2,075.47	1,751.83	1,682.18	69.65	25.153	
10,800.00	7,462.00	7,480.40	7,480.09	76.27	1.85	90.72	-2,919.31	-2,075.47	1,810.67	1,741.05	69.61	26.010	
10,900.00	7,462.00	7,480.91	7,480.59	77.93	1.85	90.74	-2,919.31	-2,075.46	1,872.99	1,803.52	69.48	26.958	
11,000.00	7,462.00	7,481.41	7,481.10	79.59	1.85	90.76	-2,919.31	-2,075.46	1,938.48	1,869.22	69.26	27.987	
11,100.00	7,462.00	7,481.91	7,481.60	81.26	1.85	90.78	-2,919.32	-2,075.46	2,006.82	1,937.83	68.98	29.091	
11,200.00	7,462.00	7,482.41	7,482.10	82.93	1.85	90.80	-2,919.32	-2,075.45	2,077.72	2,009.06	68.66	30.262	
11,300.00	7,462.00	7,482.92	7,482.61	84.61	1.85	90.82	-2,919.32	-2,075.45	2,150.93	2,082.64	68.30	31.495	
11,400.00	7,462.00	7,483.42	7,483.11	86.29	1.85	90.84	-2,919.32	-2,075.44	2,226.23	2,158.32	67.91	32.783	
11,500.00	7,462.00	7,483.92	7,483.61	87.97	1.85	90.86	-2,919.33	-2,075.44	2,303.41	2,235.91	67.51	34.122	
11,600.00	7,462.00	7,484.42	7,484.11	89.66	1.85	90.88	-2,919.33	-2,075.43	2,382.29	2,315.20	67.09	35.507	
11,700.00	7,462.00	7,484.92	7,484.60	91.36	1.85	90.90	-2,919.33	-2,075.43	2,462.70	2,396.02	66.68	36.935	
11,800.00	7,462.00	7,485.41	7,485.10	93.05	1.85	90.92	-2,919.33	-2,075.43	2,544.50	2,478.24	66.26	38.401	
11,900.00	7,462.00	7,485.91	7,485.60	94.75	1.85	90.94	-2,919.34	-2,075.42	2,627.56	2,561.71	65.85	39.903	
12,000.00	7,462.00	7,486.41	7,486.10	96.45	1.85	90.96	-2,919.34	-2,075.42	2,711.77	2,646.32	65.44	41.437	
12,100.00	7,462.00	7,486.90	7,486.59	98.16	1.85	90.98	-2,919.34	-2,075.41	2,797.01	2,731.97	65.05	43.000	
12,200.00	7,462.00	7,487.40	7,487.09	99.87	1.85	91.00	-2,919.34	-2,075.41	2,883.20	2,818.55	64.66	44.591	
12,300.00	7,462.00	7,487.89	7,487.58	101.58	1.85	91.02	-2,919.35	-2,075.41	2,970.26	2,905.98	64.28	46.207	
12,400.00	7,462.00	7,488.39	7,488.08	103.29	1.85	91.04	-2,919.35	-2,075.40	3,058.11	2,994.20	63.92	47.846	
12,500.00	7,462.00	7,488.88	7,488.57	105.01	1.85	91.06	-2,919.35	-2,075.40	3,146.69	3,083.13	63.56	49.505	
12,600.00	7,462.00	7,489.37	7,489.06	106.73	1.85	91.08	-2,919.35	-2,075.39	3,235.93	3,172.71	63.22	51.184	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 VERT LONGHORN 6-36H - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 1553-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	148.92	-1,435.50	865.21	1,676.09				
100.00	100.00	94.00	94.00	0.14	0.17	148.92	-1,435.50	865.21	1,676.08	1,675.77	0.31	5,410.044	
200.00	200.00	194.00	194.00	0.50	0.34	148.92	-1,435.50	865.21	1,676.08	1,675.24	0.85	1,982.769	
300.00	300.00	294.00	294.00	0.86	0.52	148.92	-1,435.50	865.21	1,676.08	1,674.70	1.38	1,213.814	
400.00	400.00	394.00	394.00	1.22	0.70	148.92	-1,435.50	865.21	1,676.08	1,674.16	1.92	874.620	
500.00	500.00	494.00	494.00	1.58	0.87	148.92	-1,435.50	865.21	1,676.08	1,673.63	2.45	683.594	
600.00	600.00	594.00	594.00	1.94	1.05	148.92	-1,435.50	865.21	1,676.08	1,673.09	2.99	561.054	
700.00	700.00	694.00	694.00	2.29	1.23	148.92	-1,435.50	865.21	1,676.08	1,672.56	3.52	475.768	
800.00	800.00	794.00	794.00	2.65	1.41	148.92	-1,435.50	865.21	1,676.08	1,672.02	4.06	412.990	
900.00	900.00	894.00	894.00	3.01	1.58	148.92	-1,435.50	865.21	1,676.08	1,671.49	4.59	364.847	
1,000.00	1,000.00	994.00	994.00	3.37	1.76	148.92	-1,435.50	865.21	1,676.08	1,670.95	5.13	326.757	
1,100.00	1,100.00	1,094.00	1,094.00	3.73	1.94	148.92	-1,435.50	865.21	1,676.08	1,670.42	5.66	295.868	
1,200.00	1,200.00	1,194.00	1,194.00	4.09	2.11	148.92	-1,435.50	865.21	1,676.08	1,669.88	6.20	270.315	
1,300.00	1,300.00	1,294.00	1,294.00	4.45	2.29	148.92	-1,435.50	865.21	1,676.08	1,669.35	6.74	248.825	
1,400.00	1,400.00	1,394.00	1,394.00	4.80	2.47	148.92	-1,435.50	865.21	1,676.08	1,668.81	7.27	230.500	
1,500.00	1,500.00	1,494.00	1,494.00	5.16	2.65	148.92	-1,435.50	865.21	1,676.08	1,668.27	7.81	214.689	
1,503.50	1,503.50	1,497.50	1,497.50	5.17	2.65	148.92	-1,435.50	865.21	1,676.08	1,668.26	7.83	214.175 CC, ES	
1,600.00	1,600.00	1,553.00	1,553.00	5.52	2.75	148.92	-1,435.50	865.21	1,676.58	1,668.31	8.27	202.759	
1,700.00	1,700.00	1,553.00	1,553.00	5.88	2.75	148.92	-1,435.50	865.21	1,682.00	1,673.39	8.61	195.257	
1,800.00	1,800.00	1,553.00	1,553.00	6.24	2.75	148.92	-1,435.50	865.21	1,693.32	1,684.38	8.94	189.360	
1,900.00	1,900.00	1,553.00	1,553.00	6.60	2.75	148.92	-1,435.50	865.21	1,710.42	1,701.17	9.25	184.905	
2,000.00	2,000.00	1,553.00	1,553.00	6.95	2.75	148.92	-1,435.50	865.21	1,733.13	1,723.59	9.54	181.739	
2,100.00	2,100.00	1,553.00	1,553.00	7.31	2.75	148.92	-1,435.50	865.21	1,761.23	1,751.43	9.80	179.724	
2,200.00	2,200.00	1,553.00	1,553.00	7.67	2.75	148.92	-1,435.50	865.21	1,794.47	1,784.43	10.04	178.733	
2,300.00	2,300.00	1,553.00	1,553.00	8.03	2.75	148.92	-1,435.50	865.21	1,832.57	1,822.32	10.26	178.649 SF	
2,400.00	2,399.98	1,553.00	1,553.00	8.37	2.75	-78.35	-1,435.50	865.21	1,874.94	1,864.50	10.44	179.581	
2,500.00	2,499.84	1,553.00	1,553.00	8.70	2.75	-77.34	-1,435.50	865.21	1,920.97	1,910.37	10.59	181.349	
2,600.00	2,599.45	1,553.00	1,553.00	9.04	2.75	-76.23	-1,435.50	865.21	1,970.34	1,959.61	10.73	183.600	
2,700.00	2,698.70	1,553.00	1,553.00	9.38	2.75	-75.04	-1,435.50	865.21	2,022.76	2,011.89	10.86	186.241	
2,789.31	2,786.94	1,553.00	1,553.00	9.69	2.75	-73.90	-1,435.50	865.21	2,071.91	2,060.94	10.97	188.852	
2,800.00	2,797.47	1,553.00	1,553.00	9.73	2.75	-73.90	-1,435.50	865.21	2,077.93	2,066.95	10.98	189.195	
2,900.00	2,896.01	1,553.00	1,553.00	10.09	2.75	-73.90	-1,435.50	865.21	2,136.06	2,124.95	11.10	192.363	
3,000.00	2,994.56	1,553.00	1,553.00	10.46	2.75	-73.90	-1,435.50	865.21	2,197.20	2,185.98	11.22	195.820	
3,100.00	3,093.10	1,553.00	1,553.00	10.83	2.75	-73.90	-1,435.50	865.21	2,261.12	2,249.79	11.33	199.529	
3,200.00	3,191.65	1,553.00	1,553.00	11.22	2.75	-73.90	-1,435.50	865.21	2,327.58	2,316.14	11.44	203.458	
3,300.00	3,290.19	1,553.00	1,553.00	11.61	2.75	-73.90	-1,435.50	865.21	2,396.37	2,384.82	11.54	207.575	
3,400.00	3,388.74	1,553.00	1,553.00	12.00	2.75	-73.90	-1,435.50	865.21	2,467.29	2,455.65	11.65	211.853	
3,500.00	3,487.28	1,553.00	1,553.00	12.40	2.75	-73.90	-1,435.50	865.21	2,540.18	2,528.43	11.75	216.262	
3,600.00	3,585.83	1,553.00	1,553.00	12.80	2.75	-73.90	-1,435.50	865.21	2,614.85	2,603.01	11.84	220.780	
3,700.00	3,684.37	1,553.00	1,553.00	13.21	2.75	-73.90	-1,435.50	865.21	2,691.17	2,679.23	11.94	225.383	
3,800.00	3,782.92	1,553.00	1,553.00	13.62	2.75	-73.90	-1,435.50	865.21	2,769.00	2,756.96	12.04	230.049	
3,900.00	3,881.46	1,553.00	1,553.00	14.04	2.75	-73.90	-1,435.50	865.21	2,848.21	2,836.08	12.13	234.761	
4,000.00	3,980.01	1,553.00	1,553.00	14.46	2.75	-73.90	-1,435.50	865.21	2,928.70	2,916.47	12.23	239.499	
4,100.00	4,078.55	1,553.00	1,553.00	14.88	2.75	-73.90	-1,435.50	865.21	3,010.36	2,998.03	12.33	244.248	
4,200.00	4,177.10	1,553.00	1,553.00	15.30	2.75	-73.90	-1,435.50	865.21	3,093.09	3,080.67	12.42	248.993	
4,300.00	4,275.64	1,553.00	1,553.00	15.73	2.75	-73.90	-1,435.50	865.21	3,176.82	3,164.29	12.52	253.721	
4,400.00	4,374.19	1,553.00	1,553.00	16.16	2.75	-73.90	-1,435.50	865.21	3,261.46	3,248.84	12.62	258.419	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 25-1-7 - 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			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)			
0.00	0.00	0.00	0.00	0.00	0.00	-89.19	0.43	-30.10	30.10					
100.00	100.00	100.00	100.00	0.14	0.14	-89.19	0.43	-30.10	30.10	29.81	0.29	104.957		
200.00	200.00	200.00	200.00	0.50	0.50	-89.19	0.43	-30.10	30.10	29.10	1.00	29.988		
300.00	300.00	300.00	300.00	0.86	0.86	-89.19	0.43	-30.10	30.10	28.38	1.72	17.493		
400.00	400.00	400.00	400.00	1.22	1.22	-89.19	0.43	-30.10	30.10	27.66	2.44	12.348		
500.00	500.00	500.00	500.00	1.58	1.58	-89.19	0.43	-30.10	30.10	26.94	3.15	9.542		
600.00	600.00	600.00	600.00	1.94	1.94	-89.19	0.43	-30.10	30.10	26.23	3.87	7.775		
700.00	700.00	700.00	700.00	2.29	2.29	-89.19	0.43	-30.10	30.10	25.51	4.59	6.560		
800.00	800.00	800.00	800.00	2.65	2.65	-89.19	0.43	-30.10	30.10	24.79	5.31	5.673		
900.00	900.00	900.00	900.00	3.01	3.01	-89.19	0.43	-30.10	30.10	24.08	6.02	4.998		
1,000.00	1,000.00	1,000.00	1,000.00	3.37	3.37	-89.19	0.43	-30.10	30.10	23.36	6.74	4.466		
1,100.00	1,100.00	1,100.00	1,100.00	3.73	3.73	-89.19	0.43	-30.10	30.10	22.64	7.46	4.037		
1,200.00	1,200.00	1,200.00	1,200.00	4.09	4.09	-89.19	0.43	-30.10	30.10	21.93	8.17	3.683		
1,300.00	1,300.00	1,300.00	1,300.00	4.45	4.45	-89.19	0.43	-30.10	30.10	21.21	8.89	3.386		
1,400.00	1,400.00	1,400.00	1,400.00	4.80	4.80	-89.19	0.43	-30.10	30.10	20.49	9.61	3.133		
1,500.00	1,500.00	1,500.00	1,500.00	5.16	5.16	-89.19	0.43	-30.10	30.10	19.78	10.32	2.915		
1,600.00	1,600.00	1,600.00	1,600.00	5.52	5.52	-89.19	0.43	-30.10	30.10	19.06	11.04	2.726		
1,700.00	1,700.00	1,700.00	1,700.00	5.88	5.88	-89.19	0.43	-30.10	30.10	18.34	11.76	2.560		
1,800.00	1,800.00	1,800.00	1,800.00	6.24	6.24	-89.19	0.43	-30.10	30.10	17.62	12.47	2.413		
1,900.00	1,900.00	1,900.00	1,900.00	6.60	6.60	-89.19	0.43	-30.10	30.10	16.91	13.19	2.282		
2,000.00	2,000.00	2,000.00	2,000.00	6.95	6.95	-89.19	0.43	-30.10	30.10	16.19	13.91	2.164		
2,100.00	2,100.00	2,100.00	2,100.00	7.31	7.31	-89.19	0.43	-30.10	30.10	15.47	14.63	2.058 CC, ES, SF		
2,200.00	2,200.00	2,198.94	2,198.92	7.67	7.66	-89.81	0.10	-31.77	31.79	16.47	15.32	2.075		
2,300.00	2,300.00	2,297.65	2,297.49	8.03	7.99	-91.34	-0.86	-36.79	36.88	20.89	15.99	2.307		
2,400.00	2,399.98	2,396.02	2,395.49	8.37	8.33	40.00	-2.46	-45.10	44.05	27.42	16.63	2.649		
2,500.00	2,499.84	2,494.08	2,492.84	8.70	8.68	41.48	-4.69	-56.67	51.94	34.71	17.23	3.014		
2,600.00	2,599.45	2,591.79	2,589.38	9.04	9.03	44.07	-7.54	-71.44	60.66	42.83	17.83	3.403		
2,700.00	2,698.70	2,689.10	2,684.95	9.38	9.40	47.24	-10.99	-89.36	70.36	51.94	18.42	3.820		
2,789.31	2,786.94	2,775.64	2,769.39	9.69	9.74	50.28	-14.57	-107.97	79.98	61.02	18.95	4.220		
2,800.00	2,797.47	2,785.97	2,779.43	9.73	9.78	50.66	-15.03	-110.36	81.20	62.19	19.02	4.270		
2,900.00	2,896.01	2,882.26	2,872.57	10.09	10.18	53.25	-19.64	-134.32	94.55	74.93	19.62	4.820		
3,000.00	2,994.56	2,977.73	2,964.06	10.46	10.60	54.50	-24.80	-161.10	111.05	90.83	20.21	5.494		
3,100.00	3,093.10	3,072.19	3,053.64	10.83	11.05	54.81	-30.46	-190.53	130.54	109.74	20.80	6.277		
3,200.00	3,191.65	3,165.46	3,141.07	11.22	11.53	54.55	-36.60	-222.42	152.94	131.58	21.36	7.160		
3,300.00	3,290.19	3,257.36	3,226.13	11.61	12.04	53.95	-43.18	-256.56	178.22	156.31	21.91	8.134		
3,400.00	3,388.74	3,347.73	3,308.65	12.00	12.58	53.16	-50.14	-292.72	206.32	183.88	22.44	9.194		
3,500.00	3,487.28	3,436.44	3,388.49	12.40	13.16	52.30	-57.45	-330.69	237.22	214.27	22.95	10.336		
3,600.00	3,585.83	3,523.37	3,465.53	12.80	13.77	51.41	-65.06	-370.23	270.86	247.42	23.44	11.555		
3,700.00	3,684.37	3,608.42	3,539.68	13.21	14.42	50.54	-72.94	-411.13	307.18	283.27	23.91	12.846		
3,800.00	3,782.92	3,691.49	3,610.89	13.62	15.10	49.71	-81.03	-453.14	346.12	321.76	24.37	14.205		
3,900.00	3,881.46	3,778.06	3,683.96	14.04	15.86	48.89	-89.80	-498.71	387.26	362.29	24.97	15.510		
4,000.00	3,980.01	3,868.94	3,760.53	14.46	16.69	48.18	-99.06	-546.78	428.72	403.00	25.72	16.668		
4,100.00	4,078.55	3,959.83	3,837.11	14.88	17.55	47.59	-108.31	-594.85	470.22	443.74	26.49	17.754		
4,200.00	4,177.10	4,050.71	3,913.68	15.30	18.42	47.10	-117.57	-642.92	511.76	484.50	27.26	18.771		
4,300.00	4,275.64	4,141.59	3,990.26	15.73	19.32	46.68	-126.82	-690.99	553.33	525.28	28.05	19.727		
4,400.00	4,374.19	4,232.48	4,066.83	16.16	20.23	46.32	-136.08	-739.05	594.91	566.07	28.84	20.625		
4,500.00	4,472.73	4,323.36	4,143.41	16.59	21.16	46.01	-145.33	-787.12	636.51	606.87	29.65	21.469		
4,600.00	4,571.28	4,414.25	4,219.98	17.02	22.10	45.74	-154.59	-835.19	678.13	647.67	30.46	22.265		
4,700.00	4,669.82	4,505.13	4,296.55	17.45	23.05	45.50	-163.84	-883.26	719.76	688.48	31.27	23.015		
4,800.00	4,768.37	4,596.01	4,373.13	17.89	24.01	45.28	-173.10	-931.33	761.40	729.30	32.10	23.722		
4,900.00	4,866.91	4,686.90	4,449.70	18.33	24.98	45.09	-182.35	-979.40	803.04	770.12	32.92	24.391		
5,000.00	4,965.46	4,777.78	4,526.28	18.77	25.95	44.91	-191.61	-1,027.46	844.69	810.94	33.76	25.023		

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 25-1-7 - 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)		
5,100.00	5,064.00	4,868.67	4,602.85	19.21	26.94	44.75	-200.86	-1,075.53	886.35	851.76	34.59	25.622	
5,200.00	5,162.55	4,959.55	4,679.43	19.65	27.93	44.61	-210.12	-1,123.60	928.01	892.58	35.43	26.190	
5,300.00	5,261.09	5,050.43	4,756.00	20.09	28.92	44.48	-219.37	-1,171.67	969.68	933.40	36.28	26.728	
5,400.00	5,359.64	5,141.32	4,832.58	20.53	29.92	44.36	-228.63	-1,219.74	1,011.35	974.23	37.13	27.240	
5,500.00	5,458.18	5,232.20	4,909.15	20.98	30.92	44.25	-237.88	-1,267.80	1,053.03	1,015.05	37.98	27.726	
5,600.00	5,556.72	5,323.09	4,985.73	21.42	31.93	44.14	-247.14	-1,315.87	1,094.71	1,055.87	38.83	28.190	
5,700.00	5,655.27	5,413.97	5,062.30	21.87	32.94	44.05	-256.39	-1,363.94	1,136.39	1,096.70	39.69	28.631	
5,800.00	5,753.81	5,504.85	5,138.88	22.32	33.96	43.96	-265.65	-1,412.01	1,178.07	1,137.52	40.55	29.051	
5,900.00	5,852.36	5,595.74	5,215.45	22.76	34.97	43.88	-274.90	-1,460.08	1,219.75	1,178.34	41.41	29.453	
6,000.00	5,950.90	5,686.62	5,292.03	23.21	35.99	43.80	-284.16	-1,508.15	1,261.44	1,219.16	42.28	29.836	
6,100.00	6,049.45	5,777.51	5,368.60	23.66	37.02	43.73	-293.41	-1,556.21	1,303.13	1,259.98	43.15	30.203	
6,200.00	6,147.99	5,868.39	5,445.18	24.11	38.04	43.66	-302.67	-1,604.28	1,344.82	1,300.80	44.02	30.553	
6,300.00	6,246.54	5,959.27	5,521.75	24.56	39.07	43.60	-311.92	-1,652.35	1,386.51	1,341.63	44.89	30.889	
6,400.00	6,345.08	6,050.16	5,598.33	25.01	40.10	43.54	-321.18	-1,700.42	1,428.21	1,382.45	45.76	31.211	
6,500.00	6,443.63	6,141.04	5,674.90	25.47	41.13	43.48	-330.43	-1,748.49	1,469.90	1,423.26	46.64	31.519	
6,600.00	6,542.17	6,231.93	5,751.48	25.92	42.16	43.43	-339.69	-1,796.55	1,511.60	1,464.08	47.51	31.815	
6,700.00	6,640.72	6,322.81	5,828.05	26.37	43.20	43.38	-348.94	-1,844.62	1,553.29	1,504.90	48.39	32.099	
6,800.00	6,739.26	6,413.69	5,904.63	26.82	44.23	43.33	-358.20	-1,892.69	1,594.99	1,545.72	49.27	32.372	
6,900.00	6,837.81	6,504.58	5,981.20	27.28	45.27	43.29	-367.45	-1,940.76	1,636.69	1,586.54	50.15	32.635	
7,000.00	6,936.35	6,595.46	6,057.78	27.73	46.31	43.24	-376.71	-1,988.83	1,678.39	1,627.35	51.03	32.888	
7,022.19	6,958.22	6,615.63	6,074.77	27.83	46.54	43.23	-378.76	-1,999.49	1,687.64	1,636.41	51.23	32.942	
7,050.00	6,985.54	6,640.89	6,096.05	27.96	46.83	52.02	-381.33	-2,012.86	1,699.25	1,647.76	51.49	33.004	
7,100.00	7,034.07	6,686.13	6,134.17	28.21	47.34	60.87	-385.94	-2,036.78	1,720.14	1,668.15	51.99	33.084	
7,150.00	7,081.53	6,730.82	6,171.82	28.48	47.86	65.12	-390.49	-2,060.42	1,740.94	1,688.38	52.56	33.122	
7,200.00	7,127.56	6,774.64	6,208.74	28.76	48.36	67.19	-394.95	-2,083.59	1,761.54	1,708.36	53.19	33.119	
7,250.00	7,171.81	6,817.24	6,244.63	29.06	48.85	68.15	-399.29	-2,106.12	1,781.89	1,728.02	53.87	33.076	
7,300.00	7,213.95	6,858.30	6,279.23	29.38	49.32	68.48	-403.47	-2,127.84	1,801.94	1,747.32	54.62	32.992	
7,350.00	7,253.65	6,897.52	6,312.28	29.71	49.77	68.44	-407.47	-2,148.58	1,821.65	1,766.23	55.42	32.869	
7,400.00	7,290.61	6,934.59	6,343.51	30.06	50.19	68.17	-411.24	-2,168.19	1,841.02	1,784.73	56.28	32.710	
7,450.00	7,324.55	6,969.23	6,372.70	30.43	50.59	67.73	-414.77	-2,186.51	1,860.05	1,802.85	57.20	32.518	
7,500.00	7,355.20	7,001.18	6,399.61	30.81	50.96	67.16	-418.02	-2,203.41	1,878.75	1,820.57	58.17	32.296	
7,550.00	7,382.35	7,030.19	6,424.05	31.21	51.29	66.47	-420.98	-2,218.75	1,897.13	1,837.93	59.19	32.049	
7,600.00	7,405.78	7,056.04	6,445.84	31.62	51.59	65.68	-423.61	-2,232.42	1,915.20	1,854.94	60.26	31.782	
7,650.00	7,425.31	7,078.54	6,464.79	32.05	51.84	64.78	-425.90	-2,244.32	1,932.96	1,871.60	61.36	31.500	
7,700.00	7,440.80	7,097.51	6,480.78	32.49	52.06	63.78	-427.83	-2,254.36	1,950.42	1,887.92	62.49	31.209	
7,750.00	7,452.12	7,112.81	6,493.67	32.94	52.24	62.66	-429.39	-2,262.45	1,967.54	1,903.89	63.64	30.915	
7,800.00	7,459.19	7,124.33	6,503.38	33.41	52.37	61.43	-430.56	-2,268.54	1,984.29	1,919.50	64.80	30.624	
7,850.00	7,461.96	7,131.98	6,509.82	33.88	52.46	60.09	-431.34	-2,272.59	2,000.63	1,934.69	65.94	30.339	
7,857.01	7,462.00	7,132.73	6,510.46	33.95	52.47	59.89	-431.42	-2,272.99	2,002.88	1,936.78	66.10	30.300	
7,857.01	7,462.00	7,132.73	6,510.46	33.95	52.47	59.89	-431.42	-2,272.99	2,002.88	1,936.78	66.10	30.300	
7,857.01	7,462.00	7,132.73	6,510.46	33.95	52.47	59.89	-431.42	-2,272.99	2,002.88	1,936.78	66.10	30.300	
7,900.00	7,462.00	7,137.15	6,514.18	34.36	52.52	60.03	-431.87	-2,275.32	2,017.08	1,950.00	67.08	30.069	
8,000.00	7,462.00	7,147.41	6,522.83	35.38	52.64	60.33	-432.91	-2,280.75	2,053.18	1,983.82	69.36	29.604	
8,100.00	7,462.00	7,157.68	6,531.48	36.45	52.75	60.64	-433.96	-2,286.18	2,093.38	2,021.79	71.59	29.240	
8,200.00	7,462.00	7,167.95	6,540.13	37.58	52.87	60.95	-435.00	-2,291.61	2,137.46	2,063.70	73.77	28.975	
8,300.00	7,462.00	7,178.22	6,548.78	38.75	52.99	61.26	-436.05	-2,297.04	2,185.19	2,109.32	75.87	28.803	
8,400.00	7,462.00	9,149.14	7,462.00	39.98	68.80	90.00	-1,627.39	-2,866.52	2,232.77	2,152.26	80.51	27.733	
8,500.00	7,462.00	9,249.14	7,462.00	41.24	69.31	90.00	-1,727.38	-2,866.17	2,232.26	2,149.33	82.93	26.918	
8,600.00	7,462.00	9,349.14	7,462.00	42.54	69.85	90.00	-1,827.38	-2,865.83	2,231.75	2,146.33	85.43	26.124	
8,700.00	7,462.00	9,449.14	7,462.00	43.87	70.42	90.00	-1,927.38	-2,865.48	2,231.25	2,143.25	88.00	25.355	
8,800.00	7,462.00	9,549.13	7,462.00	45.24	71.03	90.00	-2,027.38	-2,865.13	2,230.74	2,140.10	90.64	24.611	
8,900.00	7,462.00	9,649.13	7,462.00	46.63	71.66	90.00	-2,127.38	-2,864.78	2,230.23	2,136.89	93.34	23.893	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 25-1-7 - 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)			
9,000.00	7,462.00	9,749.13	7,462.00	48.05	72.32	90.00	-2,227.37	-2,864.43	2,229.72	2,133.62	96.10	23.202	
9,100.00	7,462.00	9,849.13	7,462.00	49.49	73.02	90.00	-2,327.37	-2,864.08	2,229.22	2,130.31	98.91	22.538	
9,200.00	7,462.00	9,949.13	7,462.00	50.96	73.75	90.00	-2,427.37	-2,863.73	2,228.71	2,126.94	101.77	21.900	
9,300.00	7,462.00	10,049.13	7,462.00	52.44	74.51	90.00	-2,527.37	-2,863.38	2,228.20	2,123.53	104.67	21.288	
9,400.00	7,462.00	10,149.13	7,462.00	53.94	75.31	90.00	-2,627.37	-2,863.03	2,227.70	2,120.08	107.61	20.701	
9,500.00	7,462.00	10,249.13	7,462.00	55.46	76.14	90.00	-2,727.36	-2,862.68	2,227.19	2,116.60	110.59	20.139	
9,600.00	7,462.00	10,349.12	7,462.00	57.00	77.00	90.00	-2,827.36	-2,862.33	2,226.68	2,113.08	113.60	19.601	
9,700.00	7,462.00	10,449.12	7,462.00	58.55	77.89	90.00	-2,927.36	-2,861.99	2,226.17	2,109.53	116.64	19.085	
9,800.00	7,462.00	10,549.12	7,462.00	60.11	78.82	90.00	-3,027.36	-2,861.64	2,225.67	2,105.95	119.72	18.591	
9,900.00	7,462.00	10,649.12	7,462.00	61.68	79.78	90.00	-3,127.36	-2,861.29	2,225.16	2,102.34	122.82	18.118	
10,000.00	7,462.00	10,749.12	7,462.00	63.27	80.77	90.00	-3,227.35	-2,860.94	2,224.65	2,098.71	125.94	17.664	
10,100.00	7,462.00	10,849.12	7,462.00	64.86	81.79	90.00	-3,327.35	-2,860.59	2,224.14	2,095.05	129.09	17.229	
10,200.00	7,462.00	10,949.12	7,462.00	66.47	82.84	90.00	-3,427.35	-2,860.24	2,223.64	2,091.38	132.26	16.813	
10,300.00	7,462.00	11,049.11	7,462.00	68.08	83.92	90.00	-3,527.35	-2,859.89	2,223.13	2,087.68	135.45	16.413	
10,400.00	7,462.00	11,149.11	7,462.00	69.71	85.03	90.00	-3,627.35	-2,859.54	2,222.62	2,083.97	138.66	16.030	
10,500.00	7,462.00	11,249.11	7,462.00	71.34	86.17	90.00	-3,727.35	-2,859.19	2,222.11	2,080.23	141.88	15.662	
10,600.00	7,462.00	11,349.11	7,462.00	72.98	87.33	90.00	-3,827.34	-2,858.84	2,221.61	2,076.49	145.12	15.309	
10,700.00	7,462.00	11,449.11	7,462.00	74.62	88.52	90.00	-3,927.34	-2,858.49	2,221.10	2,072.72	148.38	14.969	
10,800.00	7,462.00	11,549.11	7,462.00	76.27	89.73	90.00	-4,027.34	-2,858.15	2,220.59	2,068.94	151.65	14.643	
10,900.00	7,462.00	11,649.11	7,462.00	77.93	90.97	90.00	-4,127.34	-2,857.80	2,220.09	2,065.15	154.93	14.329	
11,000.00	7,462.00	11,749.11	7,462.00	79.59	92.23	90.00	-4,227.34	-2,857.45	2,219.58	2,061.35	158.23	14.028	
11,100.00	7,462.00	11,849.10	7,462.00	81.26	93.51	90.00	-4,327.33	-2,857.10	2,219.07	2,057.53	161.54	13.737	
11,200.00	7,462.00	11,949.10	7,462.00	82.93	94.81	90.00	-4,427.33	-2,856.75	2,218.56	2,053.71	164.86	13.458	
11,300.00	7,462.00	12,049.10	7,462.00	84.61	96.13	90.00	-4,527.33	-2,856.40	2,218.06	2,049.87	168.19	13.188	
11,400.00	7,462.00	12,149.10	7,462.00	86.29	97.47	90.00	-4,627.33	-2,856.05	2,217.55	2,046.02	171.52	12.928	
11,500.00	7,462.00	12,249.10	7,462.00	87.97	98.83	90.00	-4,727.33	-2,855.70	2,217.04	2,042.17	174.87	12.678	
11,600.00	7,462.00	12,349.10	7,462.00	89.66	100.20	90.00	-4,827.32	-2,855.35	2,216.53	2,038.30	178.23	12.436	
11,700.00	7,462.00	12,449.10	7,462.00	91.36	101.59	90.00	-4,927.32	-2,855.00	2,216.03	2,034.43	181.60	12.203	
11,800.00	7,462.00	12,549.10	7,462.00	93.05	103.00	90.00	-5,027.32	-2,854.65	2,215.52	2,030.55	184.97	11.978	
11,900.00	7,462.00	12,649.09	7,462.00	94.75	104.42	90.00	-5,127.32	-2,854.31	2,215.01	2,026.66	188.35	11.760	
12,000.00	7,462.00	12,749.09	7,462.00	96.45	105.86	90.00	-5,227.32	-2,853.96	2,214.50	2,022.77	191.74	11.550	
12,100.00	7,462.00	12,849.09	7,462.00	98.16	107.31	90.00	-5,327.32	-2,853.61	2,214.00	2,018.87	195.13	11.346	
12,200.00	7,462.00	12,949.09	7,462.00	99.87	108.77	90.00	-5,427.31	-2,853.26	2,213.49	2,014.96	198.53	11.149	
12,300.00	7,462.00	13,049.09	7,462.00	101.58	110.25	90.00	-5,527.31	-2,852.91	2,212.98	2,011.05	201.94	10.959	
12,400.00	7,462.00	13,149.09	7,462.00	103.29	111.73	90.00	-5,627.31	-2,852.56	2,212.48	2,007.13	205.35	10.774	
12,500.00	7,462.00	13,249.09	7,462.00	105.01	113.23	90.00	-5,727.31	-2,852.21	2,211.97	2,003.20	208.76	10.596	
12,600.00	7,462.00	13,349.09	7,462.00	106.73	114.74	90.00	-5,827.31	-2,851.86	2,211.46	1,999.27	212.19	10.422	
12,700.00	7,462.00	13,449.08	7,462.00	108.45	116.25	90.00	-5,927.30	-2,851.51	2,210.95	1,995.34	215.61	10.254	
12,800.00	7,462.00	13,549.08	7,462.00	110.17	117.78	90.00	-6,027.30	-2,851.16	2,210.45	1,991.40	219.05	10.091	
12,900.00	7,462.00	13,649.08	7,462.00	111.90	119.32	90.00	-6,127.30	-2,850.81	2,209.94	1,987.46	222.48	9.933	
13,000.00	7,462.00	13,749.08	7,462.00	113.62	120.86	90.00	-6,227.30	-2,850.47	2,209.43	1,983.51	225.92	9.780	
13,100.00	7,462.00	13,849.08	7,462.00	115.35	122.41	90.00	-6,327.30	-2,850.12	2,208.92	1,979.56	229.37	9.631	
13,200.00	7,462.00	13,949.08	7,462.00	117.08	123.97	90.00	-6,427.29	-2,849.77	2,208.42	1,975.60	232.81	9.486	
13,300.00	7,462.00	14,049.08	7,462.00	118.81	125.54	90.00	-6,527.29	-2,849.42	2,207.91	1,971.64	236.27	9.345	
13,400.00	7,462.00	14,149.08	7,462.00	120.54	127.12	90.00	-6,627.29	-2,849.07	2,207.40	1,967.68	239.72	9.208	
13,500.00	7,462.00	14,249.07	7,462.00	122.28	128.70	90.00	-6,727.29	-2,848.72	2,206.90	1,963.72	243.18	9.075	
13,600.00	7,462.00	14,349.07	7,462.00	124.01	130.29	90.00	-6,827.29	-2,848.37	2,206.39	1,959.75	246.64	8.946	
13,700.00	7,462.00	14,449.07	7,462.00	125.75	131.88	90.00	-6,927.28	-2,848.02	2,205.88	1,955.77	250.11	8.820	
13,800.00	7,462.00	14,549.07	7,462.00	127.49	133.48	90.00	-7,027.28	-2,847.67	2,205.37	1,951.80	253.57	8.697	
13,900.00	7,462.00	14,649.07	7,462.00	129.23	135.09	90.00	-7,127.28	-2,847.32	2,204.87	1,947.82	257.05	8.578	
14,000.00	7,462.00	14,749.07	7,462.00	130.97	136.70	90.00	-7,227.28	-2,846.97	2,204.36	1,943.84	260.52	8.461	
14,100.00	7,462.00	14,849.07	7,462.00	132.71	138.32	90.00	-7,327.28	-2,846.63	2,203.85	1,939.86	264.00	8.348	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 25-1-7 - 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)			
14,200.00	7,462.00	14,949.06	7,462.00	134.46	139.94	90.00	-7,427.28	-2,846.28	2,203.34	1,935.87	267.47	8.238	
14,300.00	7,462.00	15,049.06	7,462.00	136.20	141.57	90.00	-7,527.27	-2,845.93	2,202.84	1,931.88	270.96	8.130	
14,400.00	7,462.00	15,149.06	7,462.00	137.95	143.20	90.00	-7,627.27	-2,845.58	2,202.33	1,927.89	274.44	8.025	
14,500.00	7,462.00	15,249.06	7,462.00	139.69	144.84	90.00	-7,727.27	-2,845.23	2,201.82	1,923.90	277.92	7.922	
14,600.00	7,462.00	15,349.06	7,462.00	141.44	146.48	90.00	-7,827.27	-2,844.88	2,201.31	1,919.90	281.41	7.822	
14,700.00	7,462.00	15,449.06	7,462.00	143.19	148.12	90.00	-7,927.27	-2,844.53	2,200.81	1,915.90	284.90	7.725	
14,800.00	7,462.00	15,549.06	7,462.00	144.94	149.77	90.00	-8,027.26	-2,844.18	2,200.30	1,911.91	288.39	7.629	
14,900.00	7,462.00	15,649.06	7,462.00	146.69	151.42	90.00	-8,127.26	-2,843.83	2,199.79	1,907.90	291.89	7.536	
15,000.00	7,462.00	15,749.05	7,462.00	148.44	153.08	90.00	-8,227.26	-2,843.48	2,199.29	1,903.90	295.38	7.445	
15,100.00	7,462.00	15,849.05	7,462.00	150.19	154.73	90.00	-8,327.26	-2,843.13	2,198.78	1,899.90	298.88	7.357	
15,200.00	7,462.00	15,949.05	7,462.00	151.95	156.40	90.00	-8,427.26	-2,842.79	2,198.27	1,895.89	302.38	7.270	
15,300.00	7,462.00	16,049.05	7,462.00	153.70	158.06	90.00	-8,527.25	-2,842.44	2,197.76	1,891.88	305.88	7.185	
15,400.00	7,462.00	16,149.05	7,462.00	155.45	159.73	90.00	-8,627.25	-2,842.09	2,197.26	1,887.87	309.39	7.102	
15,500.00	7,462.00	16,249.05	7,462.00	157.21	161.40	90.00	-8,727.25	-2,841.74	2,196.75	1,883.86	312.89	7.021	
15,600.00	7,462.00	16,349.05	7,462.00	158.96	163.08	90.00	-8,827.25	-2,841.39	2,196.24	1,879.85	316.40	6.941	
15,700.00	7,462.00	16,449.05	7,462.00	160.72	164.75	90.00	-8,927.25	-2,841.04	2,195.73	1,875.83	319.90	6.864	
15,800.00	7,462.00	16,549.04	7,462.00	162.48	166.43	90.00	-9,027.25	-2,840.69	2,195.23	1,871.82	323.41	6.788	
15,900.00	7,462.00	16,649.04	7,462.00	164.23	168.12	90.00	-9,127.24	-2,840.34	2,194.72	1,867.80	326.92	6.713	
16,000.00	7,462.00	16,749.04	7,462.00	165.99	169.80	90.00	-9,227.24	-2,839.99	2,194.21	1,863.78	330.43	6.640	
16,100.00	7,462.00	16,849.04	7,462.00	167.75	171.49	90.00	-9,327.24	-2,839.64	2,193.70	1,859.76	333.95	6.569	
16,200.00	7,462.00	16,949.04	7,462.00	169.51	173.18	90.00	-9,427.24	-2,839.29	2,193.20	1,855.74	337.46	6.499	
16,300.00	7,462.00	17,049.04	7,462.00	171.27	174.87	90.00	-9,527.24	-2,838.95	2,192.69	1,851.72	340.97	6.431	
16,400.00	7,462.00	17,149.04	7,462.00	173.03	176.56	90.00	-9,627.23	-2,838.60	2,192.18	1,847.69	344.49	6.364	
16,500.00	7,462.00	17,249.04	7,462.00	174.79	178.26	90.00	-9,727.23	-2,838.25	2,191.68	1,843.67	348.01	6.298	
16,600.00	7,462.00	17,349.03	7,462.00	176.55	179.96	90.00	-9,827.23	-2,837.90	2,191.17	1,839.64	351.53	6.233	
16,700.00	7,462.00	17,449.03	7,462.00	178.31	181.66	90.00	-9,927.23	-2,837.55	2,190.66	1,835.61	355.05	6.170	
16,800.00	7,462.00	17,549.03	7,462.00	180.08	183.36	90.00	-10,027.23	-2,837.20	2,190.15	1,831.59	358.57	6.108	
16,900.00	7,462.00	17,649.03	7,462.00	181.84	185.07	90.00	-10,127.22	-2,836.85	2,189.65	1,827.56	362.09	6.047	
17,000.00	7,462.00	17,749.03	7,462.00	183.60	186.77	90.00	-10,227.22	-2,836.50	2,189.14	1,823.53	365.61	5.988	
17,100.00	7,462.00	17,849.03	7,462.00	185.36	188.48	90.00	-10,327.22	-2,836.15	2,188.63	1,819.50	369.13	5.929	
17,200.00	7,462.00	17,949.03	7,462.00	187.13	190.19	90.00	-10,427.22	-2,835.80	2,188.12	1,815.47	372.66	5.872	
17,300.00	7,462.00	18,049.03	7,462.00	188.89	191.90	90.00	-10,527.22	-2,835.46	2,187.62	1,811.43	376.18	5.815	
17,400.00	7,462.00	18,149.02	7,462.00	190.66	193.61	90.00	-10,627.21	-2,835.11	2,187.11	1,807.40	379.71	5.760	
17,500.00	7,462.00	18,249.02	7,462.00	192.42	195.32	90.00	-10,727.21	-2,834.76	2,186.60	1,803.36	383.24	5.706	
17,600.00	7,462.00	18,349.02	7,462.00	194.19	197.04	90.00	-10,827.21	-2,834.41	2,186.09	1,799.33	386.77	5.652	
17,700.00	7,462.00	18,449.02	7,462.00	195.95	198.76	90.00	-10,927.21	-2,834.06	2,185.59	1,795.29	390.29	5.600	
17,800.00	7,462.00	18,549.02	7,462.00	197.72	200.47	90.00	-11,027.21	-2,833.71	2,185.08	1,791.26	393.82	5.548	
17,900.00	7,462.00	18,649.02	7,462.00	199.49	202.19	90.00	-11,127.21	-2,833.36	2,184.57	1,787.22	397.35	5.498	
18,000.00	7,462.00	18,749.02	7,462.00	201.25	203.91	90.00	-11,227.20	-2,833.01	2,184.07	1,783.18	400.89	5.448	
18,100.00	7,462.00	18,849.01	7,462.00	203.02	205.64	90.00	-11,327.20	-2,832.66	2,183.56	1,779.14	404.42	5.399	
18,191.91	7,462.00	18,949.93	7,462.00	204.64	207.22	90.00	-11,419.11	-2,832.34	2,183.09	1,775.43	407.66	5.355	
18,191.96	7,462.00	18,940.98	7,462.00	204.64	207.22	90.00	-11,419.16	-2,832.34	2,183.09	1,775.43	407.67	5.355	
18,200.00	7,462.00	18,948.89	7,462.00	204.79	207.36	90.00	-11,427.08	-2,832.31	2,183.05	1,775.10	407.95	5.351	
18,291.94	7,462.00	19,040.83	7,462.00	206.41	208.94	90.00	-11,519.01	-2,832.00	2,182.59	1,771.39	411.20	5.308	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 25-1-8 - 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	-89.62	0.10	-15.00	15.00				
100.00	100.00	100.00	100.00	0.14	0.14	-89.62	0.10	-15.00	15.00	14.71	0.29	52.306	
200.00	200.00	200.00	200.00	0.50	0.50	-89.62	0.10	-15.00	15.00	14.00	1.00	14.945	
300.00	300.00	300.00	300.00	0.86	0.86	-89.62	0.10	-15.00	15.00	13.28	1.72	8.718	
400.00	400.00	400.00	400.00	1.22	1.22	-89.62	0.10	-15.00	15.00	12.56	2.44	6.154	
500.00	500.00	500.00	500.00	1.58	1.58	-89.62	0.10	-15.00	15.00	11.85	3.15	4.755	
600.00	600.00	600.00	600.00	1.94	1.94	-89.62	0.10	-15.00	15.00	11.13	3.87	3.875	
700.00	700.00	700.00	700.00	2.29	2.29	-89.62	0.10	-15.00	15.00	10.41	4.59	3.269	
800.00	800.00	800.00	800.00	2.65	2.65	-89.62	0.10	-15.00	15.00	9.69	5.31	2.827	
900.00	900.00	900.00	900.00	3.01	3.01	-89.62	0.10	-15.00	15.00	8.98	6.02	2.491	
1,000.00	1,000.00	1,000.00	1,000.00	3.37	3.37	-89.62	0.10	-15.00	15.00	8.26	6.74	2.226	
1,100.00	1,100.00	1,100.00	1,100.00	3.73	3.73	-89.62	0.10	-15.00	15.00	7.54	7.46	2.012	
1,200.00	1,200.00	1,200.00	1,200.00	4.09	4.09	-89.62	0.10	-15.00	15.00	6.83	8.17	1.835	
1,300.00	1,300.00	1,300.00	1,300.00	4.45	4.45	-89.62	0.10	-15.00	15.00	6.11	8.89	1.687	
1,400.00	1,400.00	1,400.00	1,400.00	4.80	4.80	-89.62	0.10	-15.00	15.00	5.39	9.61	1.561	
1,500.00	1,500.00	1,500.00	1,500.00	5.16	5.16	-89.62	0.10	-15.00	15.00	4.68	10.32	1.453 Level 3	
1,600.00	1,600.00	1,600.00	1,600.00	5.52	5.52	-89.62	0.10	-15.00	15.00	3.96	11.04	1.359 Level 3	
1,700.00	1,700.00	1,700.00	1,700.00	5.88	5.88	-89.62	0.10	-15.00	15.00	3.24	11.76	1.276 Level 3	
1,800.00	1,800.00	1,800.00	1,800.00	6.24	6.24	-89.62	0.10	-15.00	15.00	2.53	12.47	1.202 Level 3	
1,900.00	1,900.00	1,900.00	1,900.00	6.60	6.60	-89.62	0.10	-15.00	15.00	1.81	13.19	1.137 Level 3	
2,000.00	2,000.00	2,000.00	2,000.00	6.95	6.95	-89.62	0.10	-15.00	15.00	1.09	13.91	1.078 Level 3	
2,100.00	2,100.00	2,100.00	2,100.00	7.31	7.31	-89.62	0.10	-15.00	15.00	0.37	14.63	1.026 Level 3	
2,200.00	2,200.00	2,200.00	2,200.00	7.67	7.67	-89.62	0.10	-15.00	15.00	-0.34	15.34	0.978 Level 3, CC, ES, SF	
2,300.00	2,300.00	2,299.46	2,299.44	8.03	8.02	-91.44	-0.42	-16.65	16.66	0.62	16.04	1.039 Level 3	
2,400.00	2,399.98	2,398.78	2,398.62	8.37	8.35	39.45	-1.98	-21.57	20.33	3.64	16.69	1.218 Level 3	
2,500.00	2,499.84	2,497.93	2,497.40	8.70	8.69	41.83	-4.56	-29.76	24.68	7.36	17.32	1.425 Level 3	
2,600.00	2,599.45	2,596.90	2,595.63	9.04	9.04	45.87	-8.17	-41.18	29.81	11.88	17.93	1.662	
2,700.00	2,698.70	2,695.64	2,693.17	9.38	9.39	50.54	-12.78	-55.78	35.91	17.36	18.55	1.935	
2,789.31	2,786.94	2,783.63	2,779.60	9.69	9.72	54.76	-17.74	-71.50	42.30	23.18	19.12	2.212	
2,800.00	2,797.47	2,794.14	2,789.89	9.73	9.76	55.24	-18.38	-73.54	43.14	23.95	19.19	2.248	
2,900.00	2,896.01	2,892.29	2,885.57	10.09	10.14	57.83	-24.96	-94.38	52.67	32.84	19.83	2.657	
3,000.00	2,994.56	2,989.86	2,979.89	10.46	10.55	57.88	-32.48	-118.18	65.06	44.62	20.45	3.182	
3,100.00	3,093.10	3,086.64	3,072.56	10.83	10.97	56.58	-40.88	-144.80	80.26	59.21	21.05	3.813	
3,200.00	3,191.65	3,182.42	3,163.28	11.22	11.42	54.69	-50.13	-174.07	98.31	76.69	21.62	4.547	
3,300.00	3,290.19	3,277.28	3,252.07	11.61	11.90	52.62	-60.17	-205.88	119.27	97.10	22.18	5.378	
3,400.00	3,388.74	3,374.68	3,342.77	12.00	12.43	50.86	-70.87	-239.75	141.56	118.67	22.89	6.184	
3,500.00	3,487.28	3,472.09	3,433.46	12.40	12.98	49.58	-81.57	-273.63	163.94	140.32	23.63	6.939	
3,600.00	3,585.83	3,569.50	3,524.16	12.80	13.55	48.60	-92.26	-307.51	186.38	162.01	24.37	7.647	
3,700.00	3,684.37	3,666.90	3,614.86	13.21	14.13	47.84	-102.96	-341.39	208.86	183.73	25.13	8.310	
3,800.00	3,782.92	3,764.31	3,705.55	13.62	14.73	47.23	-113.66	-375.27	231.37	205.47	25.90	8.932	
3,900.00	3,881.46	3,861.72	3,796.25	14.04	15.34	46.72	-124.36	-409.15	253.90	227.22	26.68	9.516	
4,000.00	3,980.01	3,959.12	3,886.94	14.46	15.97	46.30	-135.05	-443.03	276.44	248.97	27.47	10.064	
4,100.00	4,078.55	4,056.53	3,977.64	14.88	16.61	45.94	-145.75	-476.91	299.00	270.74	28.26	10.580	
4,200.00	4,177.10	4,153.94	4,068.34	15.30	17.25	45.63	-156.45	-510.79	321.56	292.51	29.06	11.066	
4,300.00	4,275.64	4,251.35	4,159.03	15.73	17.90	45.36	-167.15	-544.67	344.14	314.28	29.86	11.524	
4,400.00	4,374.19	4,348.75	4,249.73	16.16	18.57	45.12	-177.84	-578.55	366.72	336.05	30.67	11.956	
4,500.00	4,472.73	4,446.16	4,340.43	16.59	19.23	44.91	-188.54	-612.43	389.30	357.82	31.49	12.365	
4,600.00	4,571.28	4,543.57	4,431.12	17.02	19.91	44.73	-199.24	-646.31	411.89	379.59	32.30	12.751	
4,700.00	4,669.82	4,640.97	4,521.82	17.45	20.59	44.56	-209.94	-680.19	434.49	401.36	33.12	13.117	
4,800.00	4,768.37	4,738.38	4,612.52	17.89	21.27	44.41	-220.64	-714.07	457.08	423.13	33.95	13.464	
4,900.00	4,866.91	4,835.79	4,703.21	18.33	21.96	44.28	-231.33	-747.95	479.68	444.91	34.78	13.793	
5,000.00	4,965.46	4,933.19	4,793.91	18.77	22.65	44.15	-242.03	-781.83	502.28	466.68	35.61	14.106	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 25-1-8 - 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)			
5,100.00	5,064.00	5,030.60	4,884.60	19.21	23.35	44.04	-252.73	-815.71	524.89	488.45	36.44	14.403	
5,200.00	5,162.55	5,128.01	4,975.30	19.65	24.05	43.94	-263.43	-849.59	547.49	510.21	37.28	14.686	
5,300.00	5,261.09	5,225.41	5,066.00	20.09	24.75	43.84	-274.12	-883.47	570.10	531.98	38.12	14.956	
5,400.00	5,359.64	5,322.82	5,156.69	20.53	25.46	43.75	-284.82	-917.35	592.71	553.75	38.96	15.213	
5,500.00	5,458.18	5,420.23	5,247.39	20.98	26.16	43.67	-295.52	-951.23	615.32	575.51	39.80	15.459	
5,600.00	5,556.72	5,517.64	5,338.09	21.42	26.87	43.60	-306.22	-985.11	637.93	597.28	40.65	15.694	
5,700.00	5,655.27	5,615.04	5,428.78	21.87	27.59	43.53	-316.91	-1,018.99	660.54	619.04	41.50	15.918	
5,800.00	5,753.81	5,712.45	5,519.48	22.32	28.30	43.46	-327.61	-1,052.87	683.15	640.81	42.35	16.133	
5,900.00	5,852.36	5,809.86	5,610.18	22.76	29.02	43.40	-338.31	-1,086.75	705.77	662.57	43.20	16.339	
6,000.00	5,950.90	5,907.26	5,700.87	23.21	29.74	43.34	-349.01	-1,120.63	728.38	684.33	44.05	16.536	
6,100.00	6,049.45	6,004.67	5,791.57	23.66	30.46	43.29	-359.71	-1,154.51	751.00	706.09	44.90	16.725	
6,200.00	6,147.99	6,102.08	5,882.27	24.11	31.18	43.23	-370.40	-1,188.39	773.61	727.85	45.76	16.907	
6,300.00	6,246.54	6,199.48	5,972.96	24.56	31.90	43.19	-381.10	-1,222.27	796.23	749.61	46.61	17.081	
6,400.00	6,345.08	6,296.89	6,063.66	25.01	32.63	43.14	-391.80	-1,256.15	818.84	771.37	47.47	17.249	
6,500.00	6,443.63	6,394.30	6,154.35	25.47	33.35	43.10	-402.50	-1,290.02	841.46	793.13	48.33	17.410	
6,600.00	6,542.17	6,491.70	6,245.05	25.92	34.08	43.06	-413.19	-1,323.90	864.08	814.89	49.19	17.566	
6,700.00	6,640.72	6,589.11	6,335.75	26.37	34.81	43.02	-423.89	-1,357.78	886.70	836.64	50.05	17.716	
6,800.00	6,739.26	6,686.52	6,426.44	26.82	35.53	42.98	-434.59	-1,391.66	909.31	858.40	50.91	17.860	
6,900.00	6,837.81	6,783.93	6,517.14	27.28	36.26	42.95	-445.29	-1,425.54	931.93	880.15	51.78	17.999	
7,000.00	6,936.35	6,881.33	6,607.84	27.73	36.99	42.91	-455.98	-1,459.42	954.55	901.91	52.64	18.133	
7,022.19	6,958.22	6,902.94	6,627.96	27.83	37.16	42.91	-458.36	-1,466.94	959.57	906.74	52.83	18.162	
7,050.00	6,985.54	6,930.02	6,653.17	27.96	37.36	42.91	-461.33	-1,476.36	965.87	912.79	53.08	18.195	
7,100.00	7,034.07	6,978.51	6,698.31	28.21	37.72	42.89	-466.66	-1,493.22	977.25	923.66	53.60	18.234	
7,150.00	7,081.53	7,026.41	6,742.92	28.48	38.08	42.87	-471.92	-1,509.88	988.68	934.50	54.18	18.248	
7,200.00	7,127.56	7,073.37	6,786.65	28.76	38.44	42.85	-477.08	-1,526.22	1,000.16	945.32	54.84	18.239	
7,250.00	7,171.81	7,119.04	6,829.17	29.06	38.78	42.83	-482.09	-1,542.17	1,011.77	956.20	55.57	18.208	
7,300.00	7,213.95	7,163.06	6,870.16	29.38	39.11	42.81	-486.93	-1,557.41	1,023.61	967.24	56.37	18.159	
7,350.00	7,253.65	7,205.10	6,909.30	29.71	39.43	42.79	-491.54	-1,572.03	1,035.82	978.58	57.24	18.095	
7,400.00	7,290.61	7,244.84	6,946.30	30.06	39.73	42.77	-495.91	-1,585.86	1,048.55	990.36	58.19	18.019	
7,450.00	7,324.55	7,281.98	6,980.88	30.43	40.01	42.75	-499.99	-1,598.77	1,061.97	1,002.77	59.20	17.938	
7,500.00	7,355.20	7,339.19	7,033.81	30.81	40.45	42.73	-508.81	-1,618.54	1,075.89	1,015.35	60.54	17.772	
7,550.00	7,382.35	7,406.01	7,094.24	31.21	40.97	42.71	-526.18	-1,641.07	1,089.77	1,027.79	61.97	17.585	
7,600.00	7,405.78	7,483.46	7,161.34	31.62	41.58	42.69	-555.53	-1,666.07	1,103.30	1,039.87	63.42	17.396	
7,650.00	7,425.31	7,575.02	7,235.03	32.05	42.30	42.67	-602.27	-1,693.46	1,116.04	1,051.26	64.78	17.228	
7,700.00	7,440.80	7,684.76	7,312.80	32.49	43.14	42.65	-673.87	-1,722.29	1,127.37	1,061.49	65.87	17.114	
7,750.00	7,452.12	7,788.51	7,373.04	32.94	43.89	42.63	-755.14	-1,744.54	1,136.41	1,069.72	66.69	17.040	
7,800.00	7,459.19	7,938.23	7,434.12	33.41	44.91	42.61	-889.41	-1,766.91	1,142.18	1,075.29	66.89	17.074	
7,900.00	7,462.00	8,175.66	7,462.00	34.36	46.37	42.59	-1,123.58	-1,776.52	1,143.55	1,076.18	67.37	16.974	
8,000.00	7,462.00	8,275.66	7,462.00	35.38	47.00	42.57	-1,223.58	-1,776.17	1,143.04	1,073.68	69.36	16.479	
8,100.00	7,462.00	8,375.66	7,462.00	36.45	47.68	42.55	-1,323.58	-1,775.82	1,142.53	1,071.06	71.48	15.985	
8,200.00	7,462.00	8,475.66	7,462.00	37.58	48.41	42.53	-1,423.58	-1,775.47	1,142.03	1,068.32	73.70	15.495	
8,300.00	7,462.00	8,575.65	7,462.00	38.75	49.19	42.51	-1,523.57	-1,775.12	1,141.52	1,065.49	76.03	15.014	
8,400.00	7,462.00	8,675.65	7,462.00	39.98	50.02	42.49	-1,623.57	-1,774.77	1,141.01	1,062.56	78.45	14.544	
8,500.00	7,462.00	8,775.65	7,462.00	41.24	50.89	42.47	-1,723.57	-1,774.42	1,140.50	1,059.54	80.96	14.087	
8,600.00	7,462.00	8,875.65	7,462.00	42.54	51.81	42.45	-1,823.57	-1,774.08	1,140.00	1,056.45	83.54	13.645	
8,700.00	7,462.00	8,975.65	7,462.00	43.87	52.77	42.43	-1,923.57	-1,773.73	1,139.49	1,053.29	86.20	13.219	
8,800.00	7,462.00	9,075.65	7,462.00	45.24	53.78	42.41	-2,023.57	-1,773.38	1,138.98	1,050.07	88.92	12.809	
8,900.00	7,462.00	9,175.65	7,462.00	46.63	54.83	42.39	-2,123.56	-1,773.03	1,138.48	1,046.78	91.69	12.416	
9,000.00	7,462.00	9,275.65	7,462.00	48.05	55.91	42.37	-2,223.56	-1,772.68	1,137.97	1,043.44	94.53	12.039	
9,100.00	7,462.00	9,375.64	7,462.00	49.49	57.04	42.35	-2,323.56	-1,772.33	1,137.46	1,040.06	97.40	11.678	
9,200.00	7,462.00	9,475.64	7,462.00	50.96	58.20	42.33	-2,423.56	-1,771.98	1,136.95	1,036.63	100.33	11.332	
9,300.00	7,462.00	9,575.64	7,462.00	52.44	59.39	42.31	-2,523.56	-1,771.63	1,136.45	1,033.15	103.29	11.002	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 25-1-8 - 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)			
9,400.00	7,462.00	9,675.64	7,462.00	53.94	60.62	90.00	-2,623.55	-1,771.28	1,135.94	1,029.65	106.29	10.687	
9,500.00	7,462.00	9,775.64	7,462.00	55.46	61.88	90.00	-2,723.55	-1,770.93	1,135.43	1,026.10	109.33	10.385	
9,600.00	7,462.00	9,875.64	7,462.00	57.00	63.16	90.00	-2,823.55	-1,770.59	1,134.93	1,022.53	112.40	10.097	
9,700.00	7,462.00	9,975.64	7,462.00	58.55	64.47	90.00	-2,923.55	-1,770.24	1,134.42	1,018.92	115.49	9.822	
9,800.00	7,462.00	10,075.64	7,462.00	60.11	65.81	90.00	-3,023.55	-1,769.89	1,133.91	1,015.29	118.62	9.559	
9,900.00	7,462.00	10,175.63	7,462.00	61.68	67.17	90.00	-3,123.54	-1,769.54	1,133.40	1,011.64	121.77	9.308	
10,000.00	7,462.00	10,275.63	7,462.00	63.27	68.55	90.00	-3,223.54	-1,769.19	1,132.90	1,007.96	124.94	9.068	
10,100.00	7,462.00	10,375.63	7,462.00	64.86	69.95	90.00	-3,323.54	-1,768.84	1,132.39	1,004.26	128.13	8.838	
10,200.00	7,462.00	10,475.63	7,462.00	66.47	71.37	90.00	-3,423.54	-1,768.49	1,131.88	1,000.54	131.34	8.618	
10,300.00	7,462.00	10,575.63	7,462.00	68.08	72.81	90.00	-3,523.54	-1,768.14	1,131.38	996.81	134.57	8.407	
10,400.00	7,462.00	10,675.63	7,462.00	69.71	74.26	90.00	-3,623.54	-1,767.79	1,130.87	993.05	137.82	8.206	
10,500.00	7,462.00	10,775.63	7,462.00	71.34	75.73	90.00	-3,723.53	-1,767.45	1,130.36	989.28	141.08	8.012	
10,600.00	7,462.00	10,875.63	7,462.00	72.98	77.22	90.00	-3,823.53	-1,767.10	1,129.85	985.50	144.35	7.827	
10,700.00	7,462.00	10,975.62	7,462.00	74.62	78.72	90.00	-3,923.53	-1,766.75	1,129.35	981.70	147.65	7.649	
10,800.00	7,462.00	11,075.62	7,462.00	76.27	80.23	90.00	-4,023.53	-1,766.40	1,128.84	977.89	150.95	7.478	
10,900.00	7,462.00	11,175.62	7,462.00	77.93	81.76	90.00	-4,123.53	-1,766.05	1,128.33	974.07	154.26	7.314	
11,000.00	7,462.00	11,275.62	7,462.00	79.59	83.29	90.00	-4,223.52	-1,765.70	1,127.82	970.23	157.59	7.157	
11,100.00	7,462.00	11,375.62	7,462.00	81.26	84.84	90.00	-4,323.52	-1,765.35	1,127.32	966.39	160.93	7.005	
11,200.00	7,462.00	11,475.62	7,462.00	82.93	86.39	90.00	-4,423.52	-1,765.00	1,126.81	962.54	164.27	6.859	
11,300.00	7,462.00	11,575.62	7,462.00	84.61	87.96	90.00	-4,523.52	-1,764.65	1,126.30	958.67	167.63	6.719	
11,400.00	7,462.00	11,675.61	7,462.00	86.29	89.54	90.00	-4,623.52	-1,764.30	1,125.80	954.80	171.00	6.584	
11,500.00	7,462.00	11,775.61	7,462.00	87.97	91.12	90.00	-4,723.51	-1,763.96	1,125.29	950.92	174.37	6.454	
11,600.00	7,462.00	11,875.61	7,462.00	89.66	92.71	90.00	-4,823.51	-1,763.61	1,124.78	947.03	177.75	6.328	
11,700.00	7,462.00	11,975.61	7,462.00	91.36	94.31	90.00	-4,923.51	-1,763.26	1,124.27	943.14	181.14	6.207	
11,800.00	7,462.00	12,075.61	7,462.00	93.05	95.92	90.00	-5,023.51	-1,762.91	1,123.77	939.23	184.53	6.090	
11,900.00	7,462.00	12,175.61	7,462.00	94.75	97.53	90.00	-5,123.51	-1,762.56	1,123.26	935.32	187.93	5.977	
12,000.00	7,462.00	12,275.61	7,462.00	96.45	99.15	90.00	-5,223.50	-1,762.21	1,122.75	931.41	191.34	5.868	
12,100.00	7,462.00	12,375.61	7,462.00	98.16	100.78	90.00	-5,323.50	-1,761.86	1,122.25	927.49	194.76	5.762	
12,200.00	7,462.00	12,475.60	7,462.00	99.87	102.41	90.00	-5,423.50	-1,761.51	1,121.74	923.56	198.18	5.660	
12,300.00	7,462.00	12,575.60	7,462.00	101.58	104.05	90.00	-5,523.50	-1,761.16	1,121.23	919.63	201.60	5.562	
12,400.00	7,462.00	12,675.60	7,462.00	103.29	105.69	90.00	-5,623.50	-1,760.81	1,120.72	915.69	205.03	5.466	
12,500.00	7,462.00	12,775.60	7,462.00	105.01	107.34	90.00	-5,723.50	-1,760.47	1,120.22	911.75	208.47	5.374	
12,600.00	7,462.00	12,875.60	7,462.00	106.73	108.99	90.00	-5,823.49	-1,760.12	1,119.71	907.80	211.90	5.284	
12,700.00	7,462.00	12,975.60	7,462.00	108.45	110.65	90.00	-5,923.49	-1,759.77	1,119.20	903.85	215.35	5.197	
12,800.00	7,462.00	13,075.60	7,462.00	110.17	112.31	90.00	-6,023.49	-1,759.42	1,118.69	899.90	218.80	5.113	
12,900.00	7,462.00	13,175.60	7,462.00	111.90	113.97	90.00	-6,123.49	-1,759.07	1,118.19	895.94	222.25	5.031	
13,000.00	7,462.00	13,275.59	7,462.00	113.62	115.64	90.00	-6,223.49	-1,758.72	1,117.68	891.98	225.70	4.952	
13,100.00	7,462.00	13,375.59	7,462.00	115.35	117.31	90.00	-6,323.48	-1,758.37	1,117.17	888.01	229.16	4.875	
13,200.00	7,462.00	13,475.59	7,462.00	117.08	118.99	90.00	-6,423.48	-1,758.02	1,116.67	884.04	232.62	4.800	
13,300.00	7,462.00	13,575.59	7,462.00	118.81	120.67	90.00	-6,523.48	-1,757.67	1,116.16	880.07	236.09	4.728	
13,400.00	7,462.00	13,675.59	7,462.00	120.54	122.35	90.00	-6,623.48	-1,757.32	1,115.65	876.09	239.56	4.657	
13,500.00	7,462.00	13,775.59	7,462.00	122.28	124.04	90.00	-6,723.48	-1,756.98	1,115.14	872.11	243.03	4.589	
13,600.00	7,462.00	13,875.59	7,462.00	124.01	125.73	90.00	-6,823.47	-1,756.63	1,114.64	868.13	246.50	4.522	
13,700.00	7,462.00	13,975.59	7,462.00	125.75	127.42	90.00	-6,923.47	-1,756.28	1,114.13	864.15	249.98	4.457	
13,800.00	7,462.00	14,075.58	7,462.00	127.49	129.11	90.00	-7,023.47	-1,755.93	1,113.62	860.16	253.46	4.394	
13,900.00	7,462.00	14,175.58	7,462.00	129.23	130.81	90.00	-7,123.47	-1,755.58	1,113.12	856.17	256.94	4.332	
14,000.00	7,462.00	14,275.58	7,462.00	130.97	132.51	90.00	-7,223.47	-1,755.23	1,112.61	852.18	260.43	4.272	
14,100.00	7,462.00	14,375.58	7,462.00	132.71	134.21	90.00	-7,323.46	-1,754.88	1,112.10	848.19	263.92	4.214	
14,200.00	7,462.00	14,475.58	7,462.00	134.46	135.92	90.00	-7,423.46	-1,754.53	1,111.59	844.19	267.41	4.157	
14,300.00	7,462.00	14,575.58	7,462.00	136.20	137.62	90.00	-7,523.46	-1,754.18	1,111.09	840.19	270.90	4.102	
14,400.00	7,462.00	14,675.58	7,462.00	137.95	139.33	90.00	-7,623.46	-1,753.84	1,110.58	836.19	274.39	4.047	
14,500.00	7,462.00	14,775.58	7,462.00	139.69	141.04	90.00	-7,723.46	-1,753.49	1,110.07	832.19	277.89	3.995	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 25-1-8 - 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)			
14,600.00	7,462.00	14,875.57	7,462.00	141.44	142.75	90.00	-7,823.46	-1,753.14	1,109.56	828.18	281.38	3.943	
14,700.00	7,462.00	14,975.57	7,462.00	143.19	144.47	90.00	-7,923.45	-1,752.79	1,109.06	824.17	284.88	3.893	
14,800.00	7,462.00	15,075.57	7,462.00	144.94	146.18	90.00	-8,023.45	-1,752.44	1,108.55	820.17	288.38	3.844	
14,900.00	7,462.00	15,175.57	7,462.00	146.69	147.90	90.00	-8,123.45	-1,752.09	1,108.04	816.16	291.89	3.796	
15,000.00	7,462.00	15,275.57	7,462.00	148.44	149.62	90.00	-8,223.45	-1,751.74	1,107.54	812.14	295.39	3.749	
15,100.00	7,462.00	15,375.57	7,462.00	150.19	151.34	90.00	-8,323.45	-1,751.39	1,107.03	808.13	298.90	3.704	
15,200.00	7,462.00	15,475.57	7,462.00	151.95	153.07	90.00	-8,423.44	-1,751.04	1,106.52	804.12	302.41	3.659	
15,300.00	7,462.00	15,575.56	7,462.00	153.70	154.79	90.00	-8,523.44	-1,750.69	1,106.01	800.10	305.91	3.615	
15,400.00	7,462.00	15,675.56	7,462.00	155.45	156.52	90.00	-8,623.44	-1,750.35	1,105.51	796.08	309.43	3.573	
15,500.00	7,462.00	15,775.56	7,462.00	157.21	158.24	90.00	-8,723.44	-1,750.00	1,105.00	792.06	312.94	3.531	
15,600.00	7,462.00	15,875.56	7,462.00	158.96	159.97	90.00	-8,823.44	-1,749.65	1,104.49	788.04	316.45	3.490	
15,700.00	7,462.00	15,975.56	7,462.00	160.72	161.70	90.00	-8,923.43	-1,749.30	1,103.99	784.02	319.97	3.450	
15,800.00	7,462.00	16,075.56	7,462.00	162.48	163.43	90.00	-9,023.43	-1,748.95	1,103.48	780.00	323.48	3.411	
15,900.00	7,462.00	16,175.56	7,462.00	164.23	165.17	90.00	-9,123.43	-1,748.60	1,102.97	775.97	327.00	3.373	
16,000.00	7,462.00	16,275.56	7,462.00	165.99	166.90	90.00	-9,223.43	-1,748.25	1,102.46	771.95	330.52	3.336	
16,100.00	7,462.00	16,375.55	7,462.00	167.75	168.63	90.00	-9,323.43	-1,747.90	1,101.96	767.92	334.04	3.299	
16,200.00	7,462.00	16,475.55	7,462.00	169.51	170.37	90.00	-9,423.43	-1,747.55	1,101.45	763.89	337.56	3.263	
16,300.00	7,462.00	16,575.55	7,462.00	171.27	172.11	90.00	-9,523.42	-1,747.20	1,100.94	759.86	341.08	3.228	
16,400.00	7,462.00	16,675.55	7,462.00	173.03	173.85	90.00	-9,623.42	-1,746.86	1,100.43	755.83	344.60	3.193	
16,500.00	7,462.00	16,775.55	7,462.00	174.79	175.58	90.00	-9,723.42	-1,746.51	1,099.93	751.80	348.13	3.160	
16,600.00	7,462.00	16,875.55	7,462.00	176.55	177.32	90.00	-9,823.42	-1,746.16	1,099.42	747.77	351.65	3.126	
16,700.00	7,462.00	16,975.55	7,462.00	178.31	179.07	90.00	-9,923.42	-1,745.81	1,098.91	743.74	355.18	3.094	
16,800.00	7,462.00	17,075.55	7,462.00	180.08	180.81	90.00	-10,023.41	-1,745.46	1,098.41	739.70	358.70	3.062	
16,900.00	7,462.00	17,175.54	7,462.00	181.84	182.55	90.00	-10,123.41	-1,745.11	1,097.90	735.67	362.23	3.031	
17,000.00	7,462.00	17,275.54	7,462.00	183.60	184.29	90.00	-10,223.41	-1,744.76	1,097.39	731.63	365.76	3.000	
17,100.00	7,462.00	17,375.54	7,462.00	185.36	186.04	90.00	-10,323.41	-1,744.41	1,096.88	727.60	369.29	2.970	
17,200.00	7,462.00	17,475.54	7,462.00	187.13	187.78	90.00	-10,423.41	-1,744.06	1,096.38	723.56	372.82	2.941	
17,300.00	7,462.00	17,575.54	7,462.00	188.89	189.53	90.00	-10,523.40	-1,743.71	1,095.87	719.52	376.35	2.912	
17,400.00	7,462.00	17,675.54	7,462.00	190.66	191.28	90.00	-10,623.40	-1,743.37	1,095.36	715.48	379.88	2.883	
17,500.00	7,462.00	17,775.54	7,462.00	192.42	193.02	90.00	-10,723.40	-1,743.02	1,094.86	711.44	383.41	2.856	
17,600.00	7,462.00	17,875.54	7,462.00	194.19	194.77	90.00	-10,823.40	-1,742.67	1,094.35	707.40	386.94	2.828	
17,700.00	7,462.00	17,975.53	7,462.00	195.95	196.52	90.00	-10,923.40	-1,742.32	1,093.84	703.36	390.48	2.801	
17,800.00	7,462.00	18,075.53	7,462.00	197.72	198.27	90.00	-11,023.39	-1,741.97	1,093.33	699.32	394.01	2.775	
17,900.00	7,462.00	18,175.53	7,462.00	199.49	200.02	90.00	-11,123.39	-1,741.62	1,092.83	695.28	397.55	2.749	
18,000.00	7,462.00	18,275.53	7,462.00	201.25	201.77	90.00	-11,223.39	-1,741.27	1,092.32	691.24	401.08	2.723	
18,100.00	7,462.00	18,375.53	7,462.00	203.02	203.53	90.00	-11,323.39	-1,740.92	1,091.81	687.19	404.62	2.698	
18,191.91	7,462.00	18,467.44	7,462.00	204.64	205.14	90.00	-11,415.30	-1,740.60	1,091.35	683.48	407.87	2.676	
18,191.96	7,462.00	18,467.49	7,462.00	204.64	205.14	90.00	-11,415.35	-1,740.60	1,091.35	683.47	407.87	2.676	
18,200.00	7,462.00	18,475.47	7,462.00	204.79	205.28	90.00	-11,423.33	-1,740.57	1,091.31	683.15	408.16	2.674	
18,291.94	7,462.00	18,567.40	7,462.00	206.41	206.89	90.00	-11,515.26	-1,740.26	1,090.85	679.44	411.41	2.651	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 - FINAL SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 121-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	-89.09	1.90	-119.84	119.86				
100.00	100.00	100.56	100.56	0.14	0.15	-89.39	1.27	-119.61	119.62	119.33	0.30	405.483	
170.73	170.73	170.74	170.73	0.40	0.36	-89.90	0.21	-119.38	119.38	118.62	0.76	157.644 CC	
200.00	200.00	199.63	199.61	0.50	0.46	-90.12	-0.26	-119.42	119.42	118.46	0.97	123.645 ES	
300.00	300.00	297.36	297.33	0.86	0.81	-90.79	-1.65	-120.59	120.63	118.96	1.67	72.095	
400.00	400.00	396.52	396.45	1.22	1.16	-91.04	-2.24	-123.21	123.28	120.90	2.38	51.814	
500.00	500.00	494.36	494.22	1.58	1.51	-91.03	-2.27	-126.79	126.94	123.86	3.08	41.176	
600.00	600.00	590.57	590.26	1.94	1.86	-90.94	-2.17	-132.47	132.85	129.07	3.78	35.119	
700.00	700.00	687.44	686.79	2.29	2.22	-90.83	-2.05	-140.58	141.22	136.73	4.48	31.489	
800.00	800.00	788.07	787.01	2.65	2.60	-90.70	-1.82	-149.67	150.25	145.05	5.20	28.880	
900.00	900.00	886.91	885.45	3.01	2.97	-90.42	-1.16	-158.49	159.17	153.25	5.91	26.913	
1,000.00	1,000.00	986.49	984.62	3.37	3.35	-90.16	-0.46	-167.54	168.25	161.62	6.63	25.380	
1,100.00	1,100.00	1,084.65	1,082.31	3.73	3.73	-89.89	0.33	-177.04	177.92	170.58	7.34	24.245	
1,200.00	1,200.00	1,185.72	1,182.93	4.09	4.12	-89.74	0.85	-186.58	187.36	179.30	8.06	23.235	
1,300.00	1,300.00	1,285.30	1,282.09	4.45	4.51	-89.70	1.03	-195.66	196.48	187.69	8.78	22.373	
1,400.00	1,400.00	1,385.68	1,382.06	4.80	4.90	-89.65	1.25	-204.74	205.53	196.03	9.50	21.625	
1,500.00	1,500.00	1,487.43	1,483.48	5.16	5.29	-89.78	0.82	-213.02	213.66	203.43	10.23	20.877	
1,600.00	1,600.00	1,581.00	1,576.71	5.52	5.65	-89.81	0.73	-220.85	222.08	211.16	10.92	20.341	
1,700.00	1,700.00	1,674.51	1,669.63	5.88	6.02	-89.50	2.01	-231.21	233.20	221.61	11.60	20.111 SF	
1,800.00	1,800.00	1,766.64	1,760.76	6.24	6.41	-88.92	4.59	-244.48	247.66	235.40	12.26	20.201	
1,900.00	1,900.00	1,858.57	1,851.33	6.60	6.81	-88.42	7.16	-260.04	264.65	251.73	12.92	20.488	
2,000.00	2,000.00	1,942.71	1,933.60	6.95	7.20	-88.27	8.40	-277.58	285.54	272.05	13.49	21.163	
2,100.00	2,100.00	2,032.37	2,020.52	7.31	7.64	-88.41	8.34	-299.52	310.00	295.88	14.12	21.951	
2,200.00	2,200.00	2,119.00	2,104.02	7.67	8.09	-88.92	6.09	-322.48	336.52	321.80	14.72	22.867	
2,300.00	2,300.00	2,208.00	2,189.20	8.03	8.58	-89.63	2.24	-347.97	365.19	349.85	15.34	23.801	
2,400.00	2,399.98	2,289.67	2,266.54	8.37	9.06	41.33	-1.31	-373.95	395.82	379.96	15.86	24.956	
2,500.00	2,499.84	2,377.44	2,348.80	8.70	9.61	40.82	-5.11	-404.34	426.76	410.32	16.45	25.948	
2,600.00	2,599.45	2,464.07	2,429.46	9.04	10.18	40.64	-8.65	-435.75	456.86	439.84	17.02	26.837	
2,700.00	2,698.70	2,548.26	2,507.17	9.38	10.76	40.76	-11.51	-467.97	486.53	468.95	17.58	27.681	
2,789.31	2,786.94	2,630.83	2,582.82	9.69	11.36	40.97	-15.19	-500.87	512.38	494.19	18.18	28.176	
2,800.00	2,797.47	2,641.06	2,592.19	9.73	11.44	41.04	-15.73	-504.95	515.36	497.10	18.26	28.220	
2,900.00	2,896.01	2,727.63	2,671.14	10.09	12.09	41.53	-20.86	-540.07	544.01	525.13	18.88	28.814	
3,000.00	2,994.56	2,804.00	2,739.96	10.46	12.70	41.86	-25.93	-572.78	575.08	555.72	19.37	29.696	
3,100.00	3,093.10	2,883.54	2,810.45	10.83	13.38	42.16	-31.15	-609.24	609.28	589.36	19.91	30.598	
3,200.00	3,191.65	2,963.45	2,880.60	11.22	14.09	42.42	-36.51	-647.15	645.24	624.76	20.48	31.505	
3,300.00	3,290.19	3,034.44	2,942.00	11.61	14.76	42.62	-41.35	-682.44	683.65	662.73	20.93	32.670	
3,400.00	3,388.74	3,104.00	3,000.66	12.00	15.46	42.80	-45.73	-719.55	725.73	704.37	21.36	33.969	
3,500.00	3,487.28	3,156.29	3,043.63	12.40	16.04	42.94	-48.85	-749.19	771.27	749.73	21.54	35.810	
3,600.00	3,585.83	3,217.67	3,092.86	12.80	16.74	43.07	-52.54	-785.64	820.03	798.15	21.87	37.487	
3,700.00	3,684.37	3,284.00	3,144.89	13.21	17.53	43.17	-56.60	-826.58	871.30	848.98	22.32	39.043	
3,800.00	3,782.92	3,358.74	3,202.75	13.62	18.47	43.31	-60.75	-873.72	924.07	901.15	22.92	40.314	
3,900.00	3,881.46	3,422.89	3,251.97	14.04	19.31	43.45	-63.75	-914.75	977.93	954.56	23.37	41.848	
4,000.00	3,980.01	3,481.06	3,295.70	14.46	20.09	43.56	-66.36	-953.02	1,033.78	1,010.05	23.73	43.557	
4,100.00	4,078.55	3,535.01	3,335.33	14.88	20.84	43.66	-68.67	-989.54	1,091.74	1,067.69	24.05	45.398	
4,200.00	4,177.10	3,603.10	3,384.36	15.30	21.82	43.76	-71.61	-1,036.70	1,151.38	1,126.76	24.62	46.766	
4,300.00	4,275.64	3,666.20	3,429.47	15.73	22.76	43.83	-74.69	-1,080.71	1,211.63	1,186.50	25.12	48.227	
4,400.00	4,374.19	3,732.00	3,475.28	16.16	23.76	43.88	-77.90	-1,127.83	1,273.77	1,248.08	25.69	49.587	
4,500.00	4,472.73	3,762.31	3,495.87	16.59	24.25	43.90	-79.29	-1,150.03	1,337.36	1,311.68	25.68	52.068	
4,600.00	4,571.28	3,821.00	3,534.86	17.02	25.20	43.96	-81.66	-1,193.83	1,402.93	1,376.76	26.17	53.611	
4,700.00	4,669.82	3,856.95	3,558.22	17.45	25.80	43.99	-83.03	-1,221.12	1,469.81	1,443.52	26.30	55.895	
4,800.00	4,768.37	3,911.00	3,592.71	17.89	26.72	44.02	-85.24	-1,262.68	1,538.01	1,511.27	26.74	57.525	
4,900.00	4,866.91	3,954.42	3,619.88	18.33	27.48	44.03	-87.17	-1,296.50	1,607.31	1,580.29	27.02	59.484	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 - FINAL SURVEYS											Offset Site Error: 0.00 usft
Survey Program: 121-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)	
5,000.00	4,965.46	4,002.18	3,649.20	18.77	28.32	44.03	-89.51	-1,334.12	1,677.70	1,650.31	61.254
5,100.00	5,064.00	4,080.42	3,696.91	19.21	29.73	44.01	-93.61	-1,395.99	1,748.41	1,720.15	61.866
5,200.00	5,162.55	4,151.18	3,740.19	19.65	31.01	43.99	-97.43	-1,451.84	1,818.94	1,789.93	62.684
5,300.00	5,261.09	4,221.00	3,782.86	20.09	32.28	43.98	-101.15	-1,506.98	1,889.52	1,859.76	63.482
5,400.00	5,359.64	4,293.23	3,826.99	20.53	33.60	43.96	-105.03	-1,564.03	1,960.12	1,929.57	64.154
5,500.00	5,458.18	4,369.58	3,873.78	20.98	35.00	43.95	-109.13	-1,624.22	2,030.56	1,999.15	64.649
5,600.00	5,556.72	4,439.81	3,916.86	21.42	36.30	43.93	-112.99	-1,679.56	2,100.93	2,068.75	65.297
5,700.00	5,655.27	4,502.15	3,954.99	21.87	37.46	43.92	-116.43	-1,728.75	2,171.44	2,138.61	66.146
5,800.00	5,753.81	4,575.87	3,999.92	22.32	38.83	43.91	-120.43	-1,787.07	2,242.18	2,208.52	66.621
5,900.00	5,852.36	4,703.51	4,078.79	22.76	41.20	43.85	-128.57	-1,887.08	2,312.17	2,276.91	65.577
6,000.00	5,950.90	4,841.93	4,167.25	23.21	43.70	43.77	-138.48	-1,993.08	2,379.98	2,343.00	64.358
6,100.00	6,049.45	4,928.83	4,224.12	23.66	45.26	43.72	-145.06	-2,058.47	2,446.20	2,408.23	64.424
6,200.00	6,147.99	4,986.00	4,261.24	24.11	46.28	43.70	-149.12	-2,101.75	2,512.99	2,474.43	65.173
6,300.00	6,246.54	5,085.98	4,326.30	24.56	48.07	43.66	-156.04	-2,177.35	2,579.75	2,540.02	64.933
6,400.00	6,345.08	5,147.51	4,366.53	25.01	49.17	43.65	-159.99	-2,223.73	2,646.20	2,605.81	65.526
6,500.00	6,443.63	5,191.53	4,395.19	25.47	49.97	43.66	-162.46	-2,257.05	2,713.10	2,672.29	66.483
6,600.00	6,542.17	5,226.82	4,417.81	25.92	50.62	43.67	-164.07	-2,284.09	2,781.01	2,739.88	67.627
6,700.00	6,640.72	5,254.00	4,435.01	26.37	51.12	43.68	-165.07	-2,305.12	2,849.94	2,808.61	68.955
6,800.00	6,739.26	5,308.04	4,468.76	26.82	52.13	43.72	-166.69	-2,347.29	2,919.59	2,877.68	69.663
6,900.00	6,837.81	5,344.00	4,490.97	27.28	52.81	43.74	-167.58	-2,375.55	2,989.95	2,947.70	70.770
7,000.00	6,936.35	5,398.98	4,524.57	27.73	53.86	43.78	-168.86	-2,419.05	3,060.87	3,018.02	71.427
7,022.19	6,958.22	5,409.22	4,530.78	27.83	54.06	43.79	-169.10	-2,427.19	3,076.69	3,033.72	71.616
7,050.00	6,985.54	5,433.00	4,545.15	27.96	54.51	51.05	-169.67	-2,446.13	3,096.59	3,053.34	71.593
7,100.00	7,034.07	5,537.08	4,609.09	28.21	56.50	57.48	-173.59	-2,528.15	3,131.80	3,087.16	70.166
7,150.00	7,081.53	5,562.34	4,624.77	28.48	56.98	59.12	-174.82	-2,547.92	3,166.41	3,121.41	70.365
7,200.00	7,127.56	5,586.88	4,639.94	28.76	57.44	58.64	-176.05	-2,567.17	3,200.63	3,155.23	70.494
7,250.00	7,171.81	5,612.00	4,655.40	29.06	57.92	57.18	-177.34	-2,586.93	3,234.25	3,188.38	70.517
7,300.00	7,213.95	5,745.51	4,739.37	29.38	60.42	56.74	-184.20	-2,690.49	3,266.20	3,218.38	68.301

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 - FINAL SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 121-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	-88.97	1.89	-105.21	105.22				
100.00	100.00	100.74	100.73	0.14	0.15	-89.20	1.46	-104.86	104.87	104.58	0.30	354.915	
200.00	200.00	200.55	200.54	0.50	0.47	-89.76	0.43	-104.17	104.17	103.21	0.97	107.531	
234.94	234.94	234.95	234.94	0.63	0.59	-89.99	0.01	-104.05	104.05	102.84	1.22	85.500 CC, ES	
300.00	300.00	298.38	298.35	0.86	0.82	-90.67	-1.23	-104.54	104.56	102.89	1.68	62.349	
400.00	400.00	396.64	396.55	1.22	1.17	-92.01	-3.76	-106.90	107.03	104.64	2.38	44.878	
500.00	500.00	495.69	495.50	1.58	1.52	-93.34	-6.43	-110.42	110.70	107.60	3.10	35.757	
600.00	600.00	592.43	592.04	1.94	1.87	-94.96	-10.02	-115.39	116.09	112.29	3.80	30.533	
700.00	700.00	690.30	689.53	2.29	2.24	-96.98	-14.99	-122.41	123.77	119.25	4.51	27.418	
800.00	800.00	790.46	789.26	2.65	2.62	-98.86	-20.28	-130.06	132.07	126.84	5.24	25.222	
900.00	900.00	890.12	888.53	3.01	3.01	-100.31	-25.02	-137.49	140.22	134.26	5.96	23.543	
1,000.00	1,000.00	989.43	987.44	3.37	3.39	-101.62	-29.81	-144.98	148.55	141.87	6.67	22.260	
1,100.00	1,100.00	1,089.09	1,086.67	3.73	3.78	-102.95	-35.06	-152.52	157.06	149.67	7.39	21.243	
1,200.00	1,200.00	1,189.62	1,186.83	4.09	4.16	-103.85	-39.45	-159.98	165.30	157.19	8.12	20.364	
1,300.00	1,300.00	1,290.13	1,287.03	4.45	4.55	-104.57	-43.38	-166.95	172.98	164.14	8.84	19.568	
1,400.00	1,400.00	1,389.76	1,386.35	4.80	4.93	-105.23	-47.28	-173.63	180.47	170.91	9.56	18.882	
1,500.00	1,500.00	1,489.98	1,486.26	5.16	5.31	-105.80	-51.08	-180.48	188.08	177.80	10.28	18.298	
1,600.00	1,600.00	1,590.51	1,586.52	5.52	5.69	-106.49	-55.28	-186.70	195.18	184.17	11.00	17.741	
1,700.00	1,700.00	1,686.90	1,682.63	5.88	6.07	-107.00	-59.00	-192.94	202.50	190.80	11.70	17.305	
1,800.00	1,800.00	1,775.46	1,770.65	6.24	6.42	-107.54	-63.66	-201.44	213.29	200.95	12.34	17.281 SF	
1,900.00	1,900.00	1,865.58	1,859.55	6.60	6.80	-107.81	-69.09	-215.08	229.50	216.52	12.98	17.683	
2,000.00	2,000.00	1,958.52	1,950.85	6.95	7.21	-107.82	-74.46	-231.60	248.20	234.56	13.64	18.202	
2,100.00	2,100.00	2,045.78	2,036.03	7.31	7.61	-107.18	-77.40	-250.28	269.67	255.45	14.22	18.959	
2,200.00	2,200.00	2,133.53	2,120.72	7.67	8.04	-106.18	-79.24	-273.18	295.28	280.47	14.81	19.934	
2,300.00	2,300.00	2,221.26	2,204.83	8.03	8.49	-105.37	-81.90	-297.94	323.32	307.91	15.41	20.988	
2,400.00	2,399.98	2,305.36	2,284.77	8.37	8.96	26.68	-86.56	-323.65	352.81	336.87	15.93	22.143	
2,500.00	2,499.84	2,388.03	2,362.40	8.70	9.45	26.91	-92.67	-351.38	382.72	366.30	16.42	23.303	
2,600.00	2,599.45	2,474.83	2,442.94	9.04	10.00	27.30	-99.70	-382.95	412.66	395.68	16.98	24.300	
2,700.00	2,698.70	2,564.61	2,525.86	9.38	10.61	27.87	-106.90	-416.60	440.85	423.25	17.59	25.059	
2,789.31	2,786.94	2,643.87	2,598.44	9.69	11.16	28.70	-111.72	-448.10	465.28	447.15	18.13	25.663	
2,800.00	2,797.47	2,654.42	2,608.08	9.73	11.24	28.85	-112.33	-452.33	468.12	449.90	18.21	25.705	
2,900.00	2,896.01	2,745.69	2,691.52	10.09	11.90	30.04	-117.91	-488.89	494.76	475.89	18.87	26.217	
3,000.00	2,994.56	2,825.33	2,763.57	10.46	12.52	30.94	-123.30	-522.38	523.79	504.42	19.37	27.046	
3,100.00	3,093.10	2,900.54	2,830.47	10.83	13.13	31.71	-128.90	-556.30	556.22	536.42	19.80	28.087	
3,200.00	3,191.65	2,975.00	2,895.54	11.22	13.79	32.39	-134.79	-591.99	591.87	571.62	20.24	29.239	
3,300.00	3,290.19	3,046.33	2,956.71	11.61	14.46	32.99	-140.57	-628.23	630.66	610.02	20.65	30.546	
3,400.00	3,388.74	3,114.40	3,013.84	12.00	15.15	33.54	-145.92	-664.83	672.69	651.68	21.01	32.015	
3,500.00	3,487.28	3,179.84	3,067.54	12.40	15.84	34.09	-150.52	-701.93	717.86	696.51	21.35	33.620	
3,600.00	3,585.83	3,244.00	3,118.93	12.80	16.56	34.57	-155.28	-740.05	766.05	744.36	21.69	35.316	
3,700.00	3,684.37	3,308.49	3,169.45	13.21	17.34	35.01	-160.11	-779.86	816.83	794.76	22.06	37.023	
3,800.00	3,782.92	3,388.01	3,230.76	13.62	18.32	35.52	-165.76	-830.16	869.33	846.60	22.73	38.253	
3,900.00	3,881.46	3,464.18	3,289.44	14.04	19.29	35.96	-171.31	-878.41	922.02	898.67	23.35	39.494	
4,000.00	3,980.01	3,538.27	3,345.77	14.46	20.25	36.38	-176.15	-926.30	976.07	952.12	23.95	40.759	
4,100.00	4,078.55	3,632.47	3,417.58	14.88	21.50	36.85	-182.42	-986.93	1,029.91	1,005.01	24.90	41.361	
4,200.00	4,177.10	3,725.01	3,488.64	15.30	22.73	37.25	-188.83	-1,045.87	1,083.05	1,057.23	25.83	41.937	
4,300.00	4,275.64	3,812.31	3,555.99	15.73	23.90	37.57	-195.20	-1,101.05	1,135.70	1,109.04	26.67	42.586	
4,400.00	4,374.19	3,893.94	3,618.84	16.16	25.00	37.83	-201.33	-1,152.77	1,188.57	1,161.14	27.43	43.332	
4,500.00	4,472.73	3,982.18	3,686.80	16.59	26.20	38.07	-208.22	-1,208.63	1,241.39	1,213.09	28.30	43.869	
4,600.00	4,571.28	4,070.05	3,754.61	17.02	27.39	38.27	-215.53	-1,264.04	1,293.98	1,264.82	29.16	44.370	
4,700.00	4,669.82	4,156.04	3,821.00	17.45	28.57	38.44	-222.99	-1,318.17	1,346.49	1,316.49	30.00	44.876	
4,800.00	4,768.37	4,243.06	3,888.27	17.89	29.76	38.58	-230.74	-1,372.83	1,398.86	1,368.00	30.86	45.323	
4,900.00	4,866.91	4,322.49	3,949.57	18.33	30.86	38.70	-237.81	-1,422.85	1,451.40	1,419.78	31.62	45.901	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 - FINAL SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 121-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)			
5,000.00	4,965.46	4,413.28	4,019.63	18.77	32.12	38.84	-245.81	-1,480.03	1,503.97	1,471.43	32.54	46.217	
5,100.00	5,064.00	4,535.93	4,115.32	19.21	33.79	38.98	-257.13	-1,555.91	1,555.35	1,521.46	33.89	45.889	
5,200.00	5,162.55	4,626.63	4,187.10	19.65	35.00	39.08	-265.52	-1,610.72	1,605.13	1,570.32	34.80	46.120	
5,300.00	5,261.09	4,698.27	4,243.46	20.09	35.97	39.20	-271.04	-1,654.60	1,655.74	1,620.27	35.47	46.683	
5,400.00	5,359.64	4,799.26	4,323.04	20.53	37.33	39.39	-277.92	-1,716.40	1,706.32	1,669.80	36.52	46.719	
5,500.00	5,458.18	4,881.33	4,388.15	20.98	38.44	39.54	-283.44	-1,766.04	1,756.14	1,718.81	37.33	47.043	
5,600.00	5,556.72	4,946.00	4,438.75	21.42	39.32	39.69	-286.85	-1,806.17	1,807.49	1,769.57	37.92	47.665	
5,700.00	5,655.27	5,025.20	4,500.40	21.87	40.42	39.90	-289.86	-1,855.80	1,859.61	1,820.91	38.71	48.044	
5,800.00	5,753.81	5,114.25	4,570.16	22.32	41.64	40.15	-292.59	-1,911.07	1,911.18	1,871.56	39.62	48.235	
5,900.00	5,852.36	5,194.86	4,633.26	22.76	42.75	40.36	-295.20	-1,961.16	1,962.83	1,922.40	40.43	48.545	
6,000.00	5,950.90	5,268.33	4,690.59	23.21	43.77	40.53	-297.92	-2,007.04	2,014.85	1,973.69	41.15	48.958	
6,100.00	6,049.45	5,355.05	4,757.98	23.66	44.98	40.72	-301.19	-2,061.52	2,067.28	2,025.23	42.05	49.162	
6,200.00	6,147.99	5,470.58	4,848.37	24.11	46.59	40.95	-305.68	-2,133.33	2,119.02	2,075.71	43.31	48.930	
6,300.00	6,246.54	5,639.25	4,983.03	24.56	48.83	41.26	-312.72	-2,234.63	2,168.53	2,123.36	45.18	48.002	
6,400.00	6,345.08	5,709.54	5,039.94	25.01	49.75	41.37	-316.24	-2,275.75	2,216.35	2,170.48	45.87	48.321	
6,500.00	6,443.63	5,776.12	5,093.16	25.47	50.63	41.43	-320.55	-2,315.51	2,265.36	2,218.85	46.51	48.703	
6,600.00	6,542.17	5,902.67	5,194.52	25.92	52.31	41.50	-330.61	-2,390.60	2,314.09	2,266.24	47.85	48.356	
6,700.00	6,640.72	5,980.13	5,257.06	26.37	53.32	41.53	-337.11	-2,435.84	2,361.77	2,313.14	48.63	48.567	
6,800.00	6,739.26	6,054.15	5,316.34	26.82	54.30	41.56	-343.44	-2,479.71	2,410.32	2,360.95	49.37	48.823	
6,900.00	6,837.81	6,109.00	5,360.20	27.28	55.03	41.55	-348.97	-2,512.17	2,459.08	2,409.20	49.88	49.296	
7,000.00	6,936.35	6,161.81	5,402.04	27.73	55.75	41.56	-354.04	-2,544.00	2,509.02	2,458.65	50.38	49.806	
7,022.19	6,958.22	6,169.71	5,408.23	27.83	55.86	41.56	-354.68	-2,548.86	2,520.37	2,469.93	50.44	49.967	
7,050.00	6,985.54	6,198.00	5,430.24	27.96	56.25	49.99	-356.74	-2,566.52	2,534.87	2,484.12	50.75	49.949	
7,100.00	7,034.07	6,198.00	5,430.24	28.21	56.25	57.97	-356.74	-2,566.52	2,560.71	2,509.98	50.73	50.474	
7,150.00	7,081.53	6,250.94	5,471.31	28.48	57.00	61.54	-359.86	-2,599.77	2,586.57	2,535.16	51.41	50.314	
7,200.00	7,127.56	6,377.00	5,570.71	28.76	58.73	63.73	-365.79	-2,677.05	2,611.27	2,558.26	53.01	49.264	
7,250.00	7,171.81	6,413.24	5,599.71	29.06	59.22	64.11	-367.69	-2,698.71	2,634.67	2,581.07	53.60	49.157	
7,300.00	7,213.95	6,436.36	5,618.10	29.38	59.53	63.72	-368.94	-2,712.66	2,657.75	2,603.66	54.10	49.129	
7,350.00	7,253.65	6,467.00	5,642.35	29.71	59.95	63.08	-370.64	-2,731.31	2,680.39	2,625.64	54.75	48.956	
7,400.00	7,290.61	6,523.24	5,686.94	30.06	60.71	62.67	-373.99	-2,765.43	2,702.24	2,646.46	55.78	48.447	
7,450.00	7,324.55	6,547.76	5,706.56	30.43	61.04	61.70	-375.62	-2,780.04	2,722.85	2,666.34	56.50	48.190	
7,500.00	7,355.20	6,584.03	5,735.50	30.81	61.53	60.91	-377.93	-2,801.78	2,742.66	2,685.22	57.44	47.748	
7,550.00	7,382.35	6,598.14	5,746.72	31.21	61.72	59.74	-378.78	-2,810.29	2,761.74	2,703.55	58.19	47.462	
7,600.00	7,405.78	6,610.43	5,756.47	31.62	61.89	58.55	-379.50	-2,817.74	2,779.98	2,721.00	58.99	47.129	
7,650.00	7,425.31	6,620.84	5,764.70	32.05	62.03	57.36	-380.09	-2,824.08	2,797.31	2,737.48	59.83	46.754	
7,700.00	7,440.80	6,646.00	5,784.54	32.49	62.38	56.54	-381.43	-2,839.51	2,813.74	2,752.81	60.93	46.181	
7,750.00	7,452.12	6,646.00	5,784.54	32.94	62.38	55.26	-381.43	-2,839.51	2,828.94	2,767.17	61.77	45.797	
7,800.00	7,459.19	6,646.00	5,784.54	33.41	62.38	54.05	-381.43	-2,839.51	2,843.04	2,780.37	62.67	45.366	
7,850.00	7,461.96	6,646.00	5,784.54	33.88	62.38	52.92	-381.43	-2,839.51	2,855.95	2,792.34	63.61	44.895	
7,857.01	7,462.00	6,646.00	5,784.54	33.95	62.38	52.77	-381.43	-2,839.51	2,857.66	2,793.91	63.75	44.826	
7,857.01	7,462.00	6,646.00	5,784.54	33.95	62.38	-72.51	-381.43	-2,839.51	2,857.66	2,793.91	63.75	44.826	
7,857.01	7,462.00	6,646.00	5,784.54	33.95	62.38	52.77	-381.43	-2,839.51	2,857.66	2,793.91	63.75	44.826	
7,900.00	7,462.00	6,646.00	5,784.54	34.36	62.38	52.77	-381.43	-2,839.51	2,868.37	2,803.77	64.59	44.406	
8,000.00	7,462.00	6,650.62	5,788.17	35.38	62.44	52.87	-381.66	-2,842.35	2,895.59	2,828.93	66.66	43.436	
8,100.00	7,462.00	6,661.73	5,796.92	36.45	62.59	53.10	-382.22	-2,849.18	2,925.97	2,857.11	68.86	42.492	
8,200.00	7,462.00	6,672.68	5,805.55	37.58	62.74	53.32	-382.77	-2,855.88	2,959.39	2,888.32	71.07	41.638	
8,300.00	7,462.00	6,683.47	5,814.08	38.75	62.89	53.54	-383.31	-2,862.48	2,995.77	2,922.48	73.29	40.878	
8,400.00	7,462.00	6,694.12	5,822.51	39.98	63.03	53.76	-383.84	-2,868.96	3,034.98	2,959.50	75.48	40.209	
8,500.00	7,462.00	6,704.61	5,830.83	41.24	63.18	53.98	-384.36	-2,875.34	3,076.93	2,999.29	77.64	39.630	
8,600.00	7,462.00	6,714.96	5,839.05	42.54	63.32	54.19	-384.86	-2,881.61	3,121.50	3,041.74	79.76	39.134	
8,700.00	7,462.00	6,725.17	5,847.16	43.87	63.46	54.40	-385.36	-2,887.77	3,168.59	3,086.75	81.84	38.719	
8,800.00	7,462.00	6,735.23	5,855.18	45.24	63.59	54.61	-385.84	-2,893.84	3,218.08	3,134.23	83.85	38.379	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 - FINAL SURVEYS													Offset Site Error:	0.00 usft
Survey Program:		121-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)		
8,900.00	7,462.00	6,745.16	5,863.10	46.63	63.73	54.82	-386.32	-2,899.80	3,269.87	3,184.06	85.80	38.109		

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 - FINAL SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 121-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	-89.12	1.15	-75.11	75.12				
100.00	100.00	100.33	100.33	0.14	0.15	-89.66	0.45	-74.89	74.90	74.60	0.29	254.099	
200.00	200.00	200.55	200.52	0.50	0.47	-91.20	-1.56	-74.29	74.31	73.34	0.97	76.498	
300.00	300.00	300.74	300.69	0.86	0.83	-92.98	-3.82	-73.40	73.50	71.81	1.69	43.453	
400.00	400.00	400.87	400.79	1.22	1.19	-94.48	-5.66	-72.25	72.48	70.07	2.41	30.059	
500.00	500.00	501.51	501.36	1.58	1.56	-97.26	-8.97	-70.38	70.96	67.82	3.14	22.625	
600.00	600.00	601.48	601.16	1.94	1.93	-101.72	-14.04	-67.68	69.13	65.27	3.86	17.887	
700.00	700.00	701.19	700.62	2.29	2.30	-107.51	-20.40	-64.64	67.78	63.18	4.60	14.741	
771.07	771.07	771.85	771.07	2.55	2.57	-112.11	-25.39	-62.49	67.45	62.33	5.12	13.171 CC	
800.00	800.00	800.74	799.87	2.65	2.68	-114.04	-27.50	-61.64	67.49	62.16	5.34	12.651	
900.00	900.00	900.61	899.36	3.01	3.07	-121.39	-35.37	-57.96	67.90	61.82	6.07	11.177 ES	
1,000.00	1,000.00	999.76	998.14	3.37	3.45	-128.31	-43.24	-54.72	69.77	62.96	6.81	10.246	
1,100.00	1,100.00	1,099.15	1,097.10	3.73	3.84	-135.26	-51.91	-51.44	73.13	65.59	7.54	9.699	
1,200.00	1,200.00	1,198.72	1,196.22	4.09	4.23	-141.63	-60.68	-48.04	77.49	69.22	8.27	9.372	
1,300.00	1,300.00	1,297.76	1,294.81	4.45	4.61	-147.21	-69.67	-44.87	83.03	74.04	8.99	9.239 SF	
1,400.00	1,400.00	1,396.76	1,393.35	4.80	5.00	-151.51	-78.82	-42.77	89.92	80.22	9.70	9.270	
1,500.00	1,500.00	1,497.63	1,493.79	5.16	5.40	-155.00	-87.98	-41.03	97.28	86.86	10.42	9.332	
1,600.00	1,600.00	1,597.46	1,593.30	5.52	5.78	-157.81	-95.83	-39.08	103.70	92.56	11.14	9.309	
1,700.00	1,700.00	1,695.15	1,690.66	5.88	6.16	-159.90	-103.73	-37.96	110.86	99.02	11.84	9.365	
1,800.00	1,800.00	1,792.41	1,787.47	6.24	6.53	-160.55	-112.88	-39.85	120.37	107.84	12.53	9.609	
1,900.00	1,900.00	1,890.07	1,884.50	6.60	6.90	-159.95	-122.65	-44.77	131.48	118.27	13.21	9.952	
2,000.00	2,000.00	1,986.51	1,980.01	6.95	7.26	-157.80	-132.29	-53.97	144.26	130.39	13.88	10.395	
2,100.00	2,100.00	2,081.15	2,073.26	7.31	7.61	-155.06	-142.61	-66.31	159.53	145.02	14.51	10.992	
2,200.00	2,200.00	2,173.05	2,163.11	7.67	7.97	-152.02	-154.04	-81.84	178.29	163.18	15.11	11.800	
2,300.00	2,300.00	2,266.25	2,253.58	8.03	8.34	-149.04	-166.96	-100.16	200.16	184.44	15.72	12.731	
2,400.00	2,399.98	2,356.18	2,340.14	8.37	8.72	-14.61	-180.98	-120.06	223.65	207.39	16.26	13.752	
2,500.00	2,499.84	2,451.50	2,431.13	8.70	9.15	-11.83	-195.37	-144.54	245.99	229.11	16.88	14.576	
2,600.00	2,599.45	2,544.65	2,519.45	9.04	9.58	-9.14	-208.59	-171.02	266.53	249.08	17.45	15.274	
2,700.00	2,698.70	2,634.24	2,603.71	9.38	10.03	-6.92	-222.55	-198.04	286.44	268.48	17.96	15.948	
2,789.31	2,786.94	2,713.27	2,677.18	9.69	10.46	-5.06	-235.66	-224.02	304.12	285.72	18.40	16.532	
2,800.00	2,797.47	2,722.71	2,685.90	9.73	10.52	-4.84	-237.26	-227.28	306.25	287.80	18.45	16.602	
2,900.00	2,896.01	2,809.73	2,765.64	10.09	11.03	-2.87	-252.63	-258.52	328.04	309.13	18.91	17.344	
3,000.00	2,994.56	2,892.61	2,840.32	10.46	11.57	-1.05	-268.48	-290.79	353.70	334.39	19.31	18.321	
3,100.00	3,093.10	2,973.00	2,911.36	10.83	12.14	0.63	-284.97	-324.60	383.28	363.62	19.66	19.495	
3,200.00	3,191.65	3,063.00	2,989.47	11.22	12.83	2.45	-304.02	-365.03	416.07	395.82	20.25	20.545	
3,300.00	3,290.19	3,140.95	3,056.04	11.61	13.48	4.01	-320.32	-402.17	451.41	430.81	20.60	21.909	
3,400.00	3,388.74	3,226.19	3,127.85	12.00	14.23	5.69	-337.64	-444.70	488.93	467.79	21.14	23.128	
3,500.00	3,487.28	3,303.07	3,191.79	12.40	14.94	7.10	-353.40	-484.38	528.53	507.00	21.53	24.554	
3,600.00	3,585.83	3,376.25	3,251.38	12.80	15.67	8.30	-369.21	-523.77	571.16	549.29	21.86	26.124	
3,700.00	3,684.37	3,447.78	3,308.28	13.21	16.42	9.50	-384.22	-564.44	616.68	594.49	22.20	27.783	
3,800.00	3,782.92	3,520.37	3,364.66	13.62	17.22	10.78	-398.43	-607.89	664.78	642.20	22.58	29.439	
3,900.00	3,881.46	3,600.00	3,426.03	14.04	18.14	12.11	-413.28	-656.41	713.93	690.79	23.14	30.849	
4,000.00	3,980.01	3,664.26	3,474.77	14.46	18.92	13.11	-425.27	-696.53	765.01	741.58	23.42	32.662	
4,100.00	4,078.55	3,727.32	3,521.11	14.88	19.73	14.03	-437.41	-737.53	819.11	795.40	23.71	34.547	
4,200.00	4,177.10	3,798.77	3,572.77	15.30	20.67	14.94	-451.79	-784.75	874.97	850.77	24.20	36.160	
4,300.00	4,275.64	3,882.55	3,633.19	15.73	21.81	15.87	-469.14	-840.14	931.27	906.32	24.95	37.332	
4,400.00	4,374.19	3,965.56	3,693.14	16.16	22.95	16.68	-486.21	-894.95	987.58	961.90	25.69	38.444	
4,500.00	4,472.73	4,051.79	3,755.59	16.59	24.15	17.36	-505.06	-951.35	1,043.84	1,017.34	26.50	39.390	
4,600.00	4,571.28	4,160.73	3,835.79	17.02	25.67	18.01	-529.83	-1,020.79	1,098.71	1,071.00	27.70	39.658	
4,700.00	4,669.82	4,245.75	3,898.99	17.45	26.84	18.49	-548.62	-1,074.46	1,152.79	1,124.29	28.49	40.459	
4,800.00	4,768.37	4,326.89	3,959.24	17.89	27.97	18.89	-566.77	-1,125.69	1,207.02	1,177.80	29.22	41.304	
4,900.00	4,866.91	4,414.40	4,024.24	18.33	29.20	19.25	-586.86	-1,180.72	1,261.26	1,231.20	30.06	41.956	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 - FINAL SURVEYS													Offset Site Error: 0.00 usft
Survey Program: 121-OWSG (Rev2) MWD													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)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
5,000.00	4,965.46	4,515.67	4,100.01	18.77	30.61	19.63	-610.09	-1,243.77	1,314.87	1,283.75	31.11	42.259	
5,100.00	5,064.00	4,627.83	4,185.16	19.21	32.16	19.97	-635.91	-1,312.05	1,367.07	1,334.75	32.32	42.302	
5,200.00	5,162.55	4,749.12	4,278.98	19.65	33.78	20.28	-663.75	-1,383.69	1,417.37	1,383.75	33.62	42.153	
5,300.00	5,261.09	4,813.27	4,328.95	20.09	34.64	20.42	-678.55	-1,421.10	1,467.01	1,432.88	34.12	42.991	
5,400.00	5,359.64	4,871.15	4,373.22	20.53	35.43	20.52	-692.58	-1,455.64	1,518.41	1,483.87	34.54	43.960	
5,500.00	5,458.18	4,944.00	4,428.25	20.98	36.44	20.65	-710.45	-1,499.91	1,571.09	1,535.91	35.18	44.661	
5,600.00	5,556.72	4,997.63	4,468.28	21.42	37.21	20.74	-723.75	-1,533.03	1,624.87	1,589.32	35.55	45.705	
5,700.00	5,655.27	5,059.79	4,514.08	21.87	38.11	20.83	-739.44	-1,572.01	1,679.91	1,643.86	36.05	46.596	
5,800.00	5,753.81	5,130.35	4,565.58	22.32	39.15	20.94	-757.31	-1,616.81	1,735.83	1,699.15	36.68	47.320	
5,900.00	5,852.36	5,233.96	4,641.67	22.76	40.68	21.10	-783.00	-1,682.28	1,791.17	1,753.39	37.79	47.402	
6,000.00	5,950.90	5,301.00	4,690.77	23.21	41.66	21.19	-800.00	-1,724.64	1,846.77	1,808.40	38.38	48.122	
6,100.00	6,049.45	5,378.92	4,747.54	23.66	42.82	21.28	-820.02	-1,774.11	1,902.86	1,863.73	39.12	48.636	
6,200.00	6,147.99	5,521.04	4,852.61	24.11	44.89	21.45	-855.59	-1,862.94	1,957.58	1,916.84	40.74	48.053	
6,300.00	6,246.54	5,629.37	4,934.14	24.56	46.44	21.55	-882.46	-1,929.03	2,010.69	1,968.81	41.87	48.017	
6,400.00	6,345.08	5,762.81	5,036.00	25.01	48.31	21.66	-915.44	-2,008.66	2,062.41	2,019.09	43.31	47.619	
6,500.00	6,443.63	5,911.45	5,151.87	25.47	50.30	21.73	-952.69	-2,093.98	2,111.89	2,067.00	44.89	47.049	
6,600.00	6,542.17	5,990.04	5,213.91	25.92	51.33	21.76	-972.25	-2,138.07	2,159.91	2,114.28	45.63	47.338	
6,700.00	6,640.72	6,069.77	5,276.48	26.37	52.39	21.78	-992.48	-2,183.16	2,208.54	2,162.16	46.38	47.616	
6,800.00	6,739.26	6,132.46	5,325.61	26.82	53.24	21.82	-1,007.55	-2,219.07	2,257.51	2,210.56	46.94	48.090	
6,900.00	6,837.81	6,196.00	5,374.57	27.28	54.11	21.91	-1,021.70	-2,257.00	2,308.13	2,260.61	47.52	48.571	
7,000.00	6,936.35	6,218.91	5,391.96	27.73	54.44	21.95	-1,026.59	-2,271.09	2,360.01	2,312.40	47.61	49.569	
7,022.19	6,958.22	6,228.29	5,399.04	27.83	54.58	21.96	-1,028.59	-2,276.91	2,371.77	2,324.08	47.68	49.741	
7,050.00	6,985.54	6,240.02	5,407.86	27.96	54.75	30.43	-1,031.09	-2,284.23	2,386.41	2,338.64	47.77	49.952	
7,100.00	7,034.07	6,261.04	5,423.56	28.21	55.05	38.77	-1,035.57	-2,297.46	2,411.99	2,364.03	47.96	50.294	
7,150.00	7,081.53	6,286.00	5,442.05	28.48	55.41	42.64	-1,040.89	-2,313.37	2,436.46	2,388.24	48.22	50.530	
7,200.00	7,127.56	6,366.83	5,502.15	28.76	56.60	44.98	-1,058.42	-2,364.50	2,459.23	2,410.01	49.22	49.968	
7,250.00	7,171.81	6,411.29	5,535.53	29.06	57.25	46.08	-1,068.18	-2,392.20	2,479.74	2,429.94	49.80	49.799	
7,300.00	7,213.95	6,449.67	5,564.33	29.38	57.81	46.65	-1,076.43	-2,416.19	2,498.49	2,448.15	50.34	49.628	
7,350.00	7,253.65	6,485.07	5,590.87	29.71	58.32	46.95	-1,083.89	-2,438.38	2,515.45	2,464.54	50.91	49.410	
7,400.00	7,290.61	6,517.73	5,615.33	30.06	58.80	47.12	-1,090.64	-2,458.95	2,530.63	2,479.13	51.50	49.140	
7,450.00	7,324.55	6,554.00	5,642.44	30.43	59.33	47.34	-1,097.97	-2,481.90	2,544.01	2,491.82	52.20	48.737	
7,500.00	7,355.20	6,554.00	5,642.44	30.81	59.33	46.96	-1,097.97	-2,481.90	2,555.72	2,503.22	52.50	48.678	
7,550.00	7,382.35	6,579.90	5,661.68	31.21	59.72	47.06	-1,103.19	-2,498.43	2,565.68	2,512.46	53.21	48.213	
7,600.00	7,405.78	6,592.51	5,670.98	31.62	59.91	46.98	-1,105.75	-2,506.58	2,574.07	2,520.24	53.83	47.819	
7,650.00	7,425.31	6,603.86	5,679.29	32.05	60.08	46.93	-1,108.06	-2,513.94	2,580.81	2,526.30	54.51	47.349	
7,700.00	7,440.80	6,613.86	5,686.58	32.49	60.23	46.93	-1,110.11	-2,520.47	2,585.91	2,530.67	55.24	46.808	
7,750.00	7,452.12	6,644.00	5,708.36	32.94	60.69	47.42	-1,116.34	-2,540.35	2,589.57	2,533.22	56.35	45.955	
7,800.00	7,459.19	6,644.00	5,708.36	33.41	60.69	47.37	-1,116.34	-2,540.35	2,591.30	2,534.18	57.11	45.372	
7,850.00	7,461.96	6,644.00	5,708.36	33.88	60.69	47.40	-1,116.34	-2,540.35	2,591.47	2,533.52	57.95	44.721	
7,857.01	7,462.00	6,644.00	5,708.36	33.95	60.69	47.40	-1,116.34	-2,540.35	2,591.37	2,533.30	58.07	44.625	
7,857.01	7,462.00	6,644.00	5,708.36	33.95	60.69	47.40	-1,116.34	-2,540.35	2,591.37	2,533.30	58.07	44.625	
7,862.01	7,462.00	6,644.00	5,708.36	34.00	60.69	47.40	-1,116.34	-2,540.35	2,591.29	2,533.13	58.16	44.555	
7,899.77	7,462.00	6,644.00	5,708.36	34.36	60.69	47.40	-1,116.34	-2,540.35	2,591.01	2,532.18	58.84	44.037	
7,900.00	7,462.00	6,644.00	5,708.36	34.36	60.69	47.40	-1,116.34	-2,540.35	2,591.02	2,532.17	58.84	44.033	
8,000.00	7,462.00	6,655.96	5,716.94	35.38	60.87	47.66	-1,118.83	-2,548.30	2,592.93	2,531.99	60.94	42.552	
8,100.00	7,462.00	6,676.98	5,732.02	36.45	61.20	48.12	-1,123.22	-2,562.27	2,598.53	2,535.22	63.32	41.040	
8,200.00	7,462.00	6,698.13	5,747.19	37.58	61.53	48.57	-1,127.65	-2,576.33	2,607.79	2,541.97	65.82	39.621	
8,300.00	7,462.00	6,719.40	5,762.45	38.75	61.86	49.03	-1,132.12	-2,590.47	2,620.67	2,552.26	68.41	38.306	
8,400.00	7,462.00	6,791.29	5,814.38	39.98	62.96	50.59	-1,147.24	-2,637.82	2,637.04	2,565.09	71.95	36.649	
8,500.00	7,462.00	6,918.62	5,909.08	41.24	64.85	53.33	-1,174.06	-2,718.58	2,656.12	2,579.62	76.49	34.723	
8,600.00	7,462.00	6,930.47	5,918.02	42.54	65.02	53.58	-1,176.56	-2,725.94	2,678.29	2,599.18	79.11	33.854	
8,700.00	7,462.00	6,946.81	5,930.35	43.87	65.25	53.93	-1,179.97	-2,736.11	2,703.86	2,622.07	81.79	33.057	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 - FINAL SURVEYS													Offset Site Error: 0.00 usft
Survey Program: 121-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)			
8,800.00	7,462.00	6,962.85	5,942.44	45.24	65.49	54.28	-1,183.29	-2,746.11	2,732.72	2,648.29	84.44	32.364	
8,900.00	7,462.00	6,978.59	5,954.30	46.63	65.72	54.62	-1,186.52	-2,755.94	2,764.79	2,677.76	87.03	31.768	
9,000.00	7,462.00	7,003.00	5,972.68	48.05	66.07	55.14	-1,191.46	-2,771.23	2,799.96	2,710.23	89.73	31.204	
9,100.00	7,462.00	7,003.00	5,972.68	49.49	66.07	55.14	-1,191.46	-2,771.23	2,838.09	2,746.20	91.89	30.886	
9,200.00	7,462.00	7,024.28	5,988.69	50.96	66.38	55.60	-1,195.72	-2,784.58	2,879.07	2,784.69	94.39	30.503	
9,300.00	7,462.00	7,039.05	5,999.80	52.44	66.60	55.91	-1,198.64	-2,793.87	2,922.82	2,826.15	96.67	30.235	
9,400.00	7,462.00	7,053.57	6,010.71	53.94	66.81	56.22	-1,201.48	-2,803.02	2,969.19	2,870.33	98.86	30.033	
9,500.00	7,462.00	7,067.85	6,021.43	55.46	67.02	56.53	-1,204.26	-2,812.03	3,018.07	2,917.11	100.96	29.893	
9,600.00	7,462.00	7,092.00	6,039.55	57.00	67.37	57.05	-1,208.90	-2,827.31	3,069.36	2,966.17	103.19	29.745	
9,700.00	7,462.00	7,092.00	6,039.55	58.55	67.37	57.05	-1,208.90	-2,827.31	3,122.89	3,018.09	104.80	29.799	
9,800.00	7,462.00	7,092.00	6,039.55	60.11	67.37	57.05	-1,208.90	-2,827.31	3,178.66	3,072.35	106.31	29.899	
9,900.00	7,462.00	7,092.00	6,039.55	61.68	67.37	57.05	-1,208.90	-2,827.31	3,236.56	3,128.83	107.73	30.044	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 25-24-5 - ORIGINAL WELLBORE - FINAL SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 121-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	-89.24	0.80	-60.20	60.20				
100.00	100.00	100.54	100.54	0.14	0.15	-89.53	0.49	-59.75	59.75	59.46	0.30	202.119	
200.00	200.00	201.19	201.17	0.50	0.47	-90.56	-0.56	-58.31	58.32	57.35	0.97	59.899	
300.00	300.00	301.18	301.12	0.86	0.83	-92.38	-2.34	-56.18	56.24	54.55	1.69	33.245	
400.00	400.00	401.12	401.02	1.22	1.19	-94.40	-4.16	-54.15	54.32	51.91	2.41	22.532	
500.00	500.00	501.42	501.29	1.58	1.56	-96.42	-5.83	-51.81	52.16	49.03	3.13	16.656	
600.00	600.00	601.96	601.73	1.94	1.93	-99.96	-8.49	-48.34	49.11	45.26	3.86	12.736	
700.00	700.00	702.06	701.66	2.29	2.30	-105.54	-12.20	-43.87	45.56	40.98	4.58	9.939	
800.00	800.00	802.40	801.75	2.65	2.67	-113.22	-16.37	-38.17	41.57	36.25	5.32	7.817	
900.00	900.00	902.46	901.45	3.01	3.05	-124.07	-20.98	-31.02	37.48	31.42	6.06	6.185	
1,000.00	1,000.00	1,002.25	1,000.78	3.37	3.44	-138.49	-25.56	-22.63	34.15	27.34	6.81	5.016	
1,066.30	1,066.30	1,068.09	1,066.30	3.61	3.69	-149.30	-28.71	-17.05	33.39	26.09	7.30	4.575 CC	
1,100.00	1,100.00	1,101.65	1,099.71	3.73	3.82	-154.86	-30.36	-14.25	33.54	25.99	7.55	4.445 ES	
1,200.00	1,200.00	1,201.23	1,198.81	4.09	4.21	-170.46	-35.15	-5.91	35.66	27.40	8.26	4.315 SF	
1,300.00	1,300.00	1,301.00	1,298.24	4.45	4.60	-178.44	-39.63	1.08	39.69	30.72	8.97	4.423	
1,400.00	1,400.00	1,400.88	1,397.82	4.80	4.98	-170.10	-43.61	7.61	44.32	34.64	9.68	4.579	
1,500.00	1,500.00	1,500.44	1,497.02	5.16	5.36	-161.98	-47.19	15.35	49.72	39.34	10.38	4.790	
1,600.00	1,600.00	1,599.64	1,595.83	5.52	5.74	-155.74	-51.30	23.12	56.42	45.34	11.08	5.092	
1,700.00	1,700.00	1,698.76	1,694.60	5.88	6.13	-153.13	-57.24	29.00	64.39	52.61	11.78	5.464	
1,800.00	1,800.00	1,798.20	1,793.66	6.24	6.51	-152.27	-64.38	33.85	73.01	60.52	12.50	5.843	
1,900.00	1,900.00	1,897.55	1,892.63	6.60	6.89	-152.07	-71.92	38.12	81.73	68.53	13.20	6.190	
2,000.00	2,000.00	1,996.97	1,991.56	6.95	7.26	-154.26	-81.64	39.35	91.02	77.11	13.91	6.543	
2,100.00	2,100.00	2,098.40	2,092.33	7.31	7.62	-158.62	-92.59	36.25	99.73	85.10	14.63	6.816	
2,200.00	2,200.00	2,198.70	2,191.81	7.67	7.95	-164.41	-102.97	28.72	107.22	91.88	15.34	6.991	
2,300.00	2,300.00	2,294.79	2,286.83	8.03	8.28	-170.17	-114.03	19.76	116.48	100.49	15.99	7.283	
2,400.00	2,399.98	2,392.76	2,382.98	8.37	8.61	-51.66	-127.50	6.80	127.73	111.09	16.64	7.675	
2,500.00	2,499.84	2,489.02	2,476.38	8.70	8.94	-45.16	-141.83	-11.48	139.31	122.08	17.23	8.084	
2,600.00	2,599.45	2,585.69	2,569.50	9.04	9.28	-39.49	-157.09	-32.52	151.09	133.27	17.82	8.478	
2,700.00	2,698.70	2,678.95	2,658.67	9.38	9.63	-35.20	-173.85	-54.03	163.75	145.42	18.33	8.932	
2,789.31	2,786.94	2,762.37	2,737.63	9.69	9.98	-32.04	-190.96	-74.84	175.99	157.20	18.79	9.366	
2,800.00	2,797.47	2,772.45	2,747.11	9.73	10.02	-31.70	-193.14	-77.46	177.50	158.65	18.85	9.417	
2,900.00	2,896.01	2,866.73	2,835.27	10.09	10.46	-28.46	-214.21	-103.39	193.18	173.80	19.38	9.966	
3,000.00	2,994.56	2,962.10	2,923.22	10.46	10.95	-24.69	-235.61	-133.38	211.29	191.34	19.94	10.594	
3,100.00	3,093.10	3,060.37	3,013.69	10.83	11.48	-21.30	-257.64	-164.81	230.43	209.83	20.60	11.184	
3,200.00	3,191.65	3,155.48	3,101.36	11.22	12.03	-18.55	-278.82	-195.00	249.98	228.78	21.20	11.792	
3,300.00	3,290.19	3,242.32	3,180.32	11.61	12.57	-15.98	-298.81	-225.10	272.46	250.87	21.59	12.619	
3,400.00	3,388.74	3,327.13	3,255.57	12.00	13.15	-13.40	-319.93	-257.98	299.66	277.72	21.94	13.659	
3,500.00	3,487.28	3,409.93	3,327.78	12.40	13.76	-11.10	-341.83	-292.08	330.45	308.19	22.26	14.845	
3,600.00	3,585.83	3,491.39	3,397.14	12.80	14.41	-9.21	-365.88	-327.37	365.66	343.07	22.59	16.189	
3,700.00	3,684.37	3,583.47	3,474.98	13.21	15.19	-7.44	-393.93	-367.78	402.46	379.22	23.24	17.315	
3,800.00	3,782.92	3,678.08	3,555.15	13.62	16.01	-5.97	-422.81	-408.90	439.25	415.27	23.98	18.315	
3,900.00	3,881.46	3,772.52	3,635.47	14.04	16.85	-4.81	-451.71	-449.29	475.77	451.05	24.73	19.239	
4,000.00	3,980.01	3,874.47	3,722.55	14.46	17.76	-3.79	-482.80	-492.22	511.87	486.22	25.65	19.959	
4,100.00	4,078.55	3,976.21	3,810.83	14.88	18.67	-3.17	-514.02	-532.01	545.77	519.23	26.55	20.558	
4,200.00	4,177.10	4,071.91	3,894.16	15.30	19.52	-2.70	-543.29	-568.85	579.19	551.87	27.33	21.196	
4,300.00	4,275.64	4,170.29	3,980.01	15.73	20.40	-2.25	-573.03	-606.58	612.26	584.10	28.16	21.746	
4,400.00	4,374.19	4,273.46	4,070.62	16.16	21.31	-1.90	-604.03	-644.96	644.30	615.24	29.07	22.166	
4,500.00	4,472.73	4,359.83	4,146.44	16.59	22.08	-1.55	-629.36	-677.65	676.37	646.68	29.69	22.783	
4,600.00	4,571.28	4,466.05	4,239.81	17.02	23.04	-1.08	-659.56	-718.31	708.14	677.50	30.65	23.107	
4,700.00	4,669.82	4,555.22	4,318.53	17.45	23.84	-0.72	-684.47	-751.98	739.22	707.89	31.32	23.599	
4,800.00	4,768.37	4,627.00	4,380.75	17.89	24.51	-0.36	-704.91	-781.35	773.09	741.36	31.72	24.369	
4,900.00	4,866.91	4,698.52	4,441.64	18.33	25.22	0.06	-725.67	-812.58	809.67	777.55	32.12	25.204	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 25-24-5 - ORIGINAL WELLBORE - FINAL SURVEYS													Offset Site Error:	0.00 usft
Survey Program: Reference		121-OWSG (Rev2) MWD Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance				Offset Well Error:	0.00 usft
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	Warning	
5,000.00	4,965.46	4,790.42	4,519.51	18.77	26.14	0.61	-752.25	-853.52	847.15	814.27	32.88	25.764		
5,100.00	5,064.00	4,903.34	4,615.88	19.21	27.27	1.18	-784.60	-902.70	883.69	849.71	33.98	26.005		
5,200.00	5,162.55	4,994.80	4,694.47	19.65	28.17	1.52	-811.22	-941.17	919.29	884.56	34.73	26.467		
5,300.00	5,261.09	5,108.89	4,793.12	20.09	29.28	1.89	-844.07	-988.11	953.97	918.15	35.83	26.628		
5,400.00	5,359.64	5,207.41	4,879.30	20.53	30.22	2.13	-871.96	-1,026.85	986.74	950.06	36.68	26.903		
5,500.00	5,458.18	5,299.06	4,959.08	20.98	31.09	2.28	-899.27	-1,062.75	1,020.41	982.98	37.43	27.259		
5,600.00	5,556.72	5,440.91	5,084.10	21.42	32.41	2.44	-940.37	-1,115.63	1,052.13	1,013.28	38.85	27.081		
5,700.00	5,655.27	5,522.00	5,156.19	21.87	33.14	2.45	-964.24	-1,144.07	1,082.12	1,042.65	39.47	27.417		
5,800.00	5,753.81	5,572.45	5,200.45	22.32	33.62	2.44	-980.01	-1,162.44	1,114.46	1,074.77	39.69	28.082		
5,900.00	5,852.36	5,635.25	5,254.32	22.76	34.24	2.46	-1,000.43	-1,187.43	1,150.34	1,110.29	40.05	28.721		
6,000.00	5,950.90	5,748.41	5,351.46	23.21	35.37	2.53	-1,036.83	-1,232.63	1,186.32	1,145.19	41.13	28.842		
6,100.00	6,049.45	5,836.61	5,427.65	23.66	36.25	2.69	-1,062.81	-1,268.69	1,221.27	1,179.41	41.86	29.174		
6,200.00	6,147.99	5,947.39	5,522.87	24.11	37.36	2.93	-1,095.29	-1,315.06	1,257.09	1,214.20	42.89	29.306		
6,300.00	6,246.54	6,090.07	5,648.34	24.56	38.72	3.22	-1,133.89	-1,370.90	1,288.66	1,244.36	44.30	29.092		
6,400.00	6,345.08	6,149.00	5,700.37	25.01	39.27	3.32	-1,149.70	-1,393.63	1,320.20	1,275.53	44.67	29.556		
6,500.00	6,443.63	6,215.11	5,757.97	25.47	39.92	3.42	-1,168.67	-1,419.94	1,353.96	1,308.84	45.12	30.007		
6,600.00	6,542.17	6,274.01	5,808.33	25.92	40.53	3.49	-1,186.89	-1,444.46	1,390.51	1,345.03	45.48	30.575		
6,700.00	6,640.72	6,339.18	5,863.31	26.37	41.21	3.56	-1,207.75	-1,472.54	1,429.06	1,383.14	45.92	31.124		
6,800.00	6,739.26	6,417.00	5,928.39	26.82	42.06	3.63	-1,233.41	-1,506.62	1,468.90	1,422.37	46.53	31.568		
6,900.00	6,837.81	6,489.10	5,988.24	27.28	42.85	3.67	-1,258.03	-1,538.42	1,509.77	1,462.70	47.07	32.073		
7,000.00	6,936.35	6,683.87	6,151.71	27.73	44.94	3.74	-1,323.46	-1,621.57	1,550.16	1,500.92	49.24	31.482		
7,022.19	6,958.22	6,716.52	6,179.92	27.83	45.27	3.78	-1,332.93	-1,634.98	1,557.90	1,508.33	49.56	31.433		
7,050.00	6,985.54	6,755.77	6,213.99	27.96	45.66	13.17	-1,343.85	-1,651.13	1,567.00	1,517.06	49.94	31.375		
7,100.00	7,034.07	6,803.38	6,255.44	28.21	46.14	23.26	-1,356.52	-1,670.82	1,581.08	1,530.71	50.36	31.394		
7,150.00	7,081.53	6,841.54	6,288.56	28.48	46.52	28.86	-1,366.59	-1,686.88	1,592.77	1,542.09	50.68	31.429		
7,200.00	7,127.56	6,883.53	6,324.89	28.76	46.94	32.45	-1,377.67	-1,704.79	1,602.06	1,551.01	51.05	31.381		
7,250.00	7,171.81	6,932.04	6,366.86	29.06	47.42	35.14	-1,390.89	-1,725.21	1,608.74	1,557.21	51.52	31.223		
7,300.00	7,213.95	6,985.37	6,410.37	29.38	50.38	87.06	-543.86	-2,192.23	1,605.09	1,543.99	61.10	26.271		
7,350.00	7,253.65	6,957.00	6,411.02	29.71	50.48	88.47	-572.20	-2,193.42	1,596.91	1,535.02	61.88	25.806		
7,400.00	7,290.61	6,939.68	6,411.44	30.06	50.54	89.71	-589.49	-2,194.25	1,590.46	1,527.63	62.83	25.313		
7,450.00	7,324.55	6,939.92	6,412.21	30.43	50.72	89.91	-635.20	-2,196.28	1,585.49	1,522.02	63.47	24.980		
7,500.00	7,355.20	6,939.92	6,412.21	30.81	52.38	76.20	-1,126.95	-2,142.78	1,573.65	1,513.48	60.16	26.156		
7,550.00	7,382.35	6,997.24	6,245.09	31.21	52.53	75.45	-1,187.63	-2,124.55	1,561.63	1,500.93	60.70	25.728		
7,600.00	7,405.78	6,976.10	6,233.40	31.62	52.57	76.31	-1,204.33	-2,118.99	1,549.96	1,488.39	61.57	25.175		
7,650.00	7,425.31	6,953.33	6,220.35	32.05	52.61	76.96	-1,222.02	-2,113.04	1,539.08	1,476.62	62.46	24.642		
7,700.00	7,440.80	6,903.38	6,189.72	32.49	52.67	76.59	-1,259.16	-2,099.78	1,528.87	1,465.71	63.17	24.204		
7,750.00	7,452.12	6,841.96	6,147.54	32.94	52.72	75.72	-1,300.20	-2,082.32	1,518.76	1,454.96	63.80	23.806		
7,800.00	7,459.19	6,796.17	6,112.86	33.41	52.70	75.25	-1,326.72	-2,068.61	1,508.89	1,444.33	64.56	23.372		
7,850.00	7,461.96	6,758.57	6,082.45	33.88	52.69	74.94	-1,345.55	-2,057.04	1,499.45	1,434.02	65.44	22.914		
7,857.01	7,462.00	6,753.46	6,078.21	33.95	52.68	74.90	-1,347.93	-2,055.44	1,498.17	1,432.61	65.56	22.851		
7,857.01	7,462.00	6,753.46	6,078.21	33.95	52.68	74.90	-1,347.93	-2,055.44	1,498.17	1,432.61	65.56	22.851		
7,862.01	7,462.00	6,749.82	6,075.20	34.00	52.67	74.77	-1,349.61	-2,054.30	1,497.26	1,431.61	65.65	22.806		
7,900.00	7,462.00	6,723.48	6,053.22	34.36	52.63	73.86	-1,361.50	-2,045.99	1,490.72	1,424.37	66.35	22.467		
8,000.00	7,462.00	6,672.00	6,009.63	35.38	52.56	72.04	-1,383.26	-2,029.34	1,476.76	1,408.30	68.46	21.572		
8,100.00	7,462.00	6,648.66	6,989.55	36.45	52.52	71.21	-1,392.50	-2,021.83	1,468.53	1,397.52	71.01	20.681		
8,181.04	7,462.00	6,633.20	6,976.11	37.36	52.49	70.65	-1,398.44	-2,017.03	1,466.45	1,393.26	73.19	20.036		
8,200.00	7,462.00	6,629.69	6,973.04	37.58	52.48	70.52	-1,399.76	-2,015.96	1,466.56	1,392.86	73.70	19.899		
8,300.00	7,462.00	6,611.85	6,957.36	38.75	52.45	69.88	-1,406.38	-2,010.63	1,470.94	1,394.52	76.42	19.248		
8,400.00	7,462.00	6,731.00	6,694.97	39.98	51.20	58.65	-1,479.17	-1,892.51	1,480.70	1,407.17	73.53	20.137		
8,500.00	7,462.00	6,731.00	6,694.97	41.24	51.20	58.65	-1,479.17	-1,892.51	1,493.38	1,417.14	76.23	19.590		
8,600.00	7,462.00	6,731.00	6,694.97	42.54	51.20	58.65	-1,479.17	-1,892.51	1,512.57	1,433.74	78.82	19.190		
8,700.00	7,462.00	6,731.00	6,694.97	43.87	51.20	58.65	-1,479.17	-1,892.51	1,538.03	1,456.78	81.25	18.930		

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 25-24-5 - ORIGINAL WELLBORE - FINAL SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 121-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)			
8,800.00	7,462.00	7,313.00	6,694.97	45.24	51.20	58.65	-1,479.17	-1,892.51	1,569.47	1,485.99	83.48	18.800	
8,900.00	7,462.00	7,313.00	6,694.97	46.63	51.20	58.65	-1,479.17	-1,892.51	1,606.52	1,521.03	85.49	18.791	
9,000.00	7,462.00	7,313.00	6,694.97	48.05	51.20	58.65	-1,479.17	-1,892.51	1,648.82	1,561.54	87.28	18.890	
9,100.00	7,462.00	7,313.00	6,694.97	49.49	51.20	58.65	-1,479.17	-1,892.51	1,695.96	1,607.11	88.85	19.088	
9,200.00	7,462.00	7,313.00	6,694.97	50.96	51.20	58.65	-1,479.17	-1,892.51	1,747.56	1,657.36	90.21	19.373	
9,300.00	7,462.00	7,313.00	6,694.97	52.44	51.20	58.65	-1,479.17	-1,892.51	1,803.24	1,711.87	91.37	19.736	
9,400.00	7,462.00	7,313.00	6,694.97	53.94	51.20	58.65	-1,479.17	-1,892.51	1,862.62	1,770.27	92.35	20.169	
9,500.00	7,462.00	7,313.00	6,694.97	55.46	51.20	58.65	-1,479.17	-1,892.51	1,925.37	1,832.20	93.17	20.665	
9,600.00	7,462.00	7,313.00	6,694.97	57.00	51.20	58.65	-1,479.17	-1,892.51	1,991.16	1,897.31	93.85	21.216	
9,700.00	7,462.00	7,313.00	6,694.97	58.55	51.20	58.65	-1,479.17	-1,892.51	2,059.71	1,965.30	94.41	21.816	
9,800.00	7,462.00	7,313.00	6,694.97	60.11	51.20	58.65	-1,479.17	-1,892.51	2,130.75	2,035.89	94.86	22.461	
9,900.00	7,462.00	7,313.00	6,694.97	61.68	51.20	58.65	-1,479.17	-1,892.51	2,204.04	2,108.81	95.23	23.145	
10,000.00	7,462.00	7,313.00	6,694.97	63.27	51.20	58.65	-1,479.17	-1,892.51	2,279.36	2,183.85	95.51	23.865	
10,100.00	7,462.00	7,313.00	6,694.97	64.86	51.20	58.65	-1,479.17	-1,892.51	2,356.51	2,260.78	95.73	24.616	
10,200.00	7,462.00	7,313.00	6,694.97	66.47	51.20	58.65	-1,479.17	-1,892.51	2,435.33	2,339.44	95.89	25.396	
10,300.00	7,462.00	7,313.00	6,694.97	68.08	51.20	58.65	-1,479.17	-1,892.51	2,515.66	2,419.65	96.01	26.202	
10,400.00	7,462.00	7,313.00	6,694.97	69.71	51.20	58.65	-1,479.17	-1,892.51	2,597.35	2,501.26	96.09	27.030	
10,500.00	7,462.00	7,313.00	6,694.97	71.34	51.20	58.65	-1,479.17	-1,892.51	2,680.28	2,584.14	96.14	27.880	
10,600.00	7,462.00	7,313.00	6,694.97	72.98	51.20	58.65	-1,479.17	-1,892.51	2,764.34	2,668.19	96.15	28.749	
10,700.00	7,462.00	7,313.00	6,694.97	74.62	51.20	58.65	-1,479.17	-1,892.51	2,849.43	2,753.28	96.15	29.635	
10,800.00	7,462.00	7,313.00	6,694.97	76.27	51.20	58.65	-1,479.17	-1,892.51	2,935.47	2,839.34	96.13	30.537	
10,900.00	7,462.00	7,313.00	6,694.97	77.93	51.20	58.65	-1,479.17	-1,892.51	3,022.36	2,926.27	96.09	31.453	
11,000.00	7,462.00	7,313.00	6,694.97	79.59	51.20	58.65	-1,479.17	-1,892.51	3,110.04	3,014.00	96.04	32.382	
11,100.00	7,462.00	7,313.00	6,694.97	81.26	51.20	58.65	-1,479.17	-1,892.51	3,198.44	3,102.46	95.98	33.323	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 25-24-6 - ORIGINAL WELLBORE - FINAL SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 122-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	-89.45	0.43	-45.01	45.01				
100.00	100.00	100.32	100.32	0.14	0.15	-90.16	-0.12	-44.65	44.65	44.35	0.30	151.162	
200.00	200.00	200.31	200.30	0.50	0.46	-91.63	-1.25	-43.85	43.87	42.91	0.97	45.380	
262.56	262.56	262.58	262.56	0.73	0.68	-92.11	-1.61	-43.59	43.62	42.21	1.41	30.983	
300.00	300.00	299.79	299.77	0.86	0.81	-92.12	-1.62	-43.68	43.71	42.04	1.67	26.175	
400.00	400.00	399.92	399.90	1.22	1.15	-91.27	-0.98	-44.18	44.19	41.82	2.37	18.651	
500.00	500.00	499.72	499.69	1.58	1.50	-89.38	0.49	-44.61	44.61	41.54	3.07	14.514	
600.00	600.00	600.24	600.19	1.94	1.85	-87.20	2.19	-44.68	44.73	40.95	3.79	11.817	
700.00	700.00	700.24	700.19	2.29	2.20	-86.11	3.00	-44.19	44.30	39.80	4.50	9.852	
800.00	800.00	800.17	800.12	2.65	2.56	-85.39	3.54	-43.84	43.98	38.78	5.21	8.446	
900.00	900.00	900.30	900.25	3.01	2.91	-85.28	3.59	-43.43	43.58	37.66	5.92	7.364	
1,000.00	1,000.00	1,000.44	1,000.38	3.37	3.26	-86.32	2.75	-42.74	42.83	36.21	6.62	6.467	
1,100.00	1,100.00	1,100.43	1,100.35	3.73	3.60	-87.97	1.49	-41.85	41.88	34.55	7.33	5.712	
1,200.00	1,200.00	1,200.25	1,200.17	4.09	3.96	-88.98	0.74	-41.30	41.30	33.26	8.04	5.137	
1,300.00	1,300.00	1,300.18	1,300.10	4.45	4.31	-90.13	-0.09	-40.97	40.97	32.22	8.75	4.682	
1,400.00	1,400.00	1,400.09	1,400.00	4.80	4.66	-91.69	-1.21	-40.83	40.85	31.39	9.46	4.318	
1,402.27	1,402.27	1,402.36	1,402.27	4.81	4.66	-91.72	-1.23	-40.83	40.85	31.37	9.48	4.311 CC	
1,500.00	1,500.00	1,500.11	1,500.02	5.16	5.01	-93.18	-2.26	-40.80	40.86	30.69	10.17	4.018	
1,505.08	1,505.08	1,505.17	1,505.08	5.18	5.03	-93.28	-2.34	-40.79	40.86	30.65	10.20	4.004	
1,600.00	1,600.00	1,599.64	1,599.54	5.52	5.36	-94.61	-3.32	-41.16	41.30	30.42	10.87	3.798 ES	
1,700.00	1,700.00	1,698.78	1,698.59	5.88	5.70	-98.93	-6.76	-42.99	43.54	31.96	11.58	3.761	
1,800.00	1,800.00	1,797.15	1,796.60	6.24	6.05	-107.76	-14.64	-45.71	48.12	35.85	12.27	3.923	
1,900.00	1,900.00	1,894.23	1,892.71	6.60	6.41	-117.91	-27.12	-51.19	58.39	45.47	12.92	4.520	
2,000.00	2,000.00	1,991.44	1,988.50	6.95	6.78	-126.18	-42.26	-57.79	72.52	58.95	13.57	5.344	
2,100.00	2,100.00	2,087.72	2,082.87	7.31	7.16	-132.73	-59.95	-64.90	90.00	75.79	14.21	6.334	
2,200.00	2,200.00	2,181.74	2,174.20	7.67	7.55	-138.94	-81.40	-70.92	111.00	96.21	14.80	7.502	
2,300.00	2,300.00	2,277.10	2,266.09	8.03	7.97	-143.96	-106.12	-77.22	135.55	120.11	15.44	8.780	
2,400.00	2,399.98	2,370.53	2,355.93	8.37	8.40	-15.50	-130.82	-84.03	159.99	143.96	16.03	9.981	
2,500.00	2,499.84	2,460.66	2,441.84	8.70	8.85	-18.14	-156.86	-91.95	184.55	168.02	16.52	11.168	
2,600.00	2,599.45	2,557.14	2,532.97	9.04	9.35	-21.14	-187.61	-99.73	208.69	191.51	17.18	12.146	
2,700.00	2,698.70	2,657.80	2,628.37	9.38	9.89	-24.02	-218.85	-107.14	229.15	211.22	17.93	12.777	
2,789.31	2,786.94	2,748.34	2,714.57	9.69	10.38	-26.55	-245.86	-113.13	243.97	225.36	18.61	13.107	
2,800.00	2,797.47	2,759.09	2,724.83	9.73	10.43	-26.86	-249.00	-113.81	245.56	226.86	18.69	13.136	
2,900.00	2,896.01	2,858.23	2,819.57	10.09	10.97	-29.54	-277.53	-119.99	260.22	240.80	19.42	13.400	
3,000.00	2,994.56	2,953.32	2,910.20	10.46	11.50	-32.01	-305.82	-125.36	276.19	256.11	20.08	13.753	
3,100.00	3,093.10	3,048.31	3,000.61	10.83	12.04	-34.26	-334.52	-130.55	293.08	272.32	20.76	14.118	
3,200.00	3,191.65	3,139.00	3,086.23	11.22	12.58	-35.94	-363.65	-137.18	312.65	291.28	21.37	14.631	
3,300.00	3,290.19	3,237.29	3,178.69	11.61	13.17	-37.47	-396.05	-144.99	333.46	311.32	22.14	15.061	
3,400.00	3,388.74	3,339.41	3,275.14	12.00	13.79	-38.92	-428.71	-152.65	353.40	330.41	22.99	15.373	
3,500.00	3,487.28	3,441.92	3,372.39	12.40	14.41	-40.31	-460.41	-159.56	372.35	348.51	23.84	15.616	
3,600.00	3,585.83	3,545.31	3,470.90	12.80	15.02	-41.63	-491.09	-166.07	390.14	365.43	24.71	15.786	
3,700.00	3,684.37	3,632.43	3,553.73	13.21	15.55	-42.50	-517.27	-172.60	408.62	383.28	25.34	16.126	
3,800.00	3,782.92	3,726.51	3,642.44	13.62	16.14	-43.08	-547.22	-181.79	429.17	403.09	26.08	16.458	
3,900.00	3,881.46	3,826.31	3,736.51	14.04	16.77	-43.65	-579.09	-191.50	449.89	422.97	26.91	16.715	
4,000.00	3,980.01	3,925.55	3,830.22	14.46	17.40	-44.22	-610.42	-200.73	470.23	442.48	27.75	16.947	
4,100.00	4,078.55	4,024.79	3,924.05	14.88	18.03	-44.76	-641.50	-209.72	490.34	461.75	28.58	17.154	
4,200.00	4,177.10	4,126.86	4,020.75	15.30	18.67	-45.39	-673.09	-218.05	510.07	480.61	29.47	17.310	
4,300.00	4,275.64	4,238.47	4,127.11	15.73	19.35	-46.13	-705.93	-226.04	528.28	497.81	30.47	17.336	
4,400.00	4,374.19	4,336.73	4,221.35	16.16	19.93	-46.84	-733.04	-232.20	544.63	513.32	31.31	17.396	
4,500.00	4,472.73	4,429.83	4,310.31	16.59	20.50	-47.35	-759.59	-239.18	562.00	529.92	32.08	17.519	
4,600.00	4,571.28	4,511.01	4,387.32	17.02	21.01	-47.58	-784.02	-247.08	581.09	548.40	32.70	17.773	
4,700.00	4,669.82	4,596.89	4,467.65	17.45	21.59	-47.54	-812.26	-258.17	603.05	569.69	33.36	18.078	

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 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 25-24-6 - ORIGINAL WELLBORE - FINAL SURVEYS												Offset Site Error:	0.00 usft
Survey Program: 122-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)			
4,800.00	4,768.37	4,687.74	4,552.28	17.89	22.21	-47.51	-843.22	-269.76	626.26	592.17	34.10	18.367	
4,900.00	4,866.91	4,782.95	4,640.77	18.33	22.87	-47.52	-876.35	-281.48	650.21	615.30	34.91	18.628	
5,000.00	4,965.46	4,902.74	4,752.81	18.77	23.68	-47.65	-916.55	-294.86	672.94	636.89	36.06	18.664	
5,100.00	5,064.00	5,011.95	4,856.03	19.21	24.39	-47.85	-950.37	-306.13	692.92	655.88	37.04	18.707	
5,200.00	5,162.55	5,123.97	4,962.66	19.65	25.09	-48.14	-983.09	-316.48	711.09	673.04	38.05	18.688	
5,300.00	5,261.09	5,217.75	5,052.34	20.09	25.67	-48.45	-1,009.41	-324.23	728.13	689.27	38.86	18.738	
5,400.00	5,359.64	5,300.37	5,130.98	20.53	26.19	-48.79	-1,034.07	-330.02	747.01	707.47	39.54	18.891	
5,500.00	5,458.18	5,396.39	5,221.88	20.98	26.81	-49.16	-1,064.24	-336.81	767.54	727.15	40.39	19.004	
5,600.00	5,556.72	5,488.02	5,308.73	21.42	27.40	-49.48	-1,092.68	-343.43	787.73	746.54	41.18	19.128	
5,700.00	5,655.27	5,592.06	5,407.03	21.87	28.08	-49.83	-1,125.94	-350.89	808.91	766.78	42.13	19.201	
5,800.00	5,753.81	5,723.55	5,532.66	22.32	28.89	-50.32	-1,163.76	-359.48	826.71	783.34	43.37	19.064	
5,900.00	5,852.36	5,811.62	5,617.12	22.76	29.42	-50.68	-1,188.16	-364.58	843.60	799.46	44.14	19.113	
6,000.00	5,950.90	5,898.17	5,699.73	23.21	29.96	-50.96	-1,213.26	-370.45	861.82	816.93	44.89	19.199	
6,100.00	6,049.45	5,987.20	5,784.17	23.66	30.53	-51.11	-1,240.38	-378.32	881.40	835.74	45.66	19.304	
6,200.00	6,147.99	6,085.30	5,877.08	24.11	31.17	-51.20	-1,270.30	-388.12	901.00	854.47	46.53	19.364	
6,300.00	6,246.54	6,175.44	5,961.94	24.56	31.77	-51.19	-1,298.93	-398.33	921.79	874.48	47.31	19.486	
6,400.00	6,345.08	6,286.92	6,067.48	25.01	32.50	-51.25	-1,332.93	-409.82	941.30	892.98	48.32	19.479	
6,500.00	6,443.63	6,299.00	6,162.47	25.47	33.69	-176.88	-449.11	-514.52	953.94	927.85	26.09	36.566	
6,600.00	6,542.17	6,281.45	6,257.28	25.92	33.68	-178.27	-466.63	-515.38	855.13	828.92	26.21	32.630	
6,700.00	6,640.72	6,272.71	6,352.22	26.37	33.67	-175.52	-475.37	-515.78	756.59	730.04	26.54	28.503	
6,800.00	6,739.26	6,263.50	6,447.18	26.82	33.66	-172.37	-484.57	-516.19	658.33	631.37	26.96	24.419	
6,900.00	6,837.81	6,253.79	6,542.18	27.28	33.66	-168.74	-494.26	-516.61	560.48	532.97	27.52	20.370	
7,000.00	6,936.35	6,243.55	6,637.21	27.73	33.65	-164.56	-504.50	-517.03	463.30	434.96	28.34	16.347	
7,022.19	6,958.22	6,241.20	6,732.23	27.83	33.65	-163.56	-506.85	-517.13	441.87	413.28	28.59	15.457	
7,050.00	6,985.54	6,237.63	6,827.25	27.96	33.65	-160.41	-510.41	-517.27	415.18	386.25	28.94	14.348	
7,100.00	7,034.07	6,228.15	6,922.33	28.21	33.64	-157.61	-519.89	-517.63	368.10	338.39	29.72	12.387	
7,150.00	7,081.53	6,214.66	7,017.51	28.48	33.64	-155.83	-533.37	-518.12	322.62	291.86	30.77	10.486	
7,200.00	7,127.56	6,195.37	7,112.82	28.76	33.64	-153.45	-552.64	-518.78	279.28	247.12	32.16	8.685	
7,250.00	7,171.81	6,171.33	7,208.16	29.06	33.64	-150.26	-576.67	-519.57	238.54	204.43	34.11	6.993	
7,300.00	7,213.95	6,143.72	7,303.45	29.38	33.65	-146.12	-604.27	-520.47	201.04	164.08	36.95	5.440	
7,350.00	7,253.65	6,112.54	7,398.65	29.71	33.67	-140.56	-635.43	-521.44	167.60	126.58	41.02	4.086	
7,400.00	7,290.61	6,077.94	7,493.44	30.06	33.71	-132.99	-670.01	-522.32	139.18	92.56	46.62	2.985	
7,450.00	7,324.55	6,041.40	7,588.60	30.43	33.75	-123.24	-706.54	-522.97	117.30	63.82	53.48	2.193	
7,500.00	7,355.20	6,001.58	7,683.12	30.81	33.81	-110.33	-746.27	-523.20	103.56	43.49	60.07	1.724	
7,541.31	7,377.89	5,970.58	7,778.45	31.14	33.86	-98.47	-776.90	-522.79	99.64	36.76	62.88	1.585 SF	
7,550.00	7,382.35	5,964.37	7,873.21	31.21	33.87	-95.96	-782.99	-522.64	99.82	36.88	62.94	1.586	
7,600.00	7,405.78	5,929.48	7,968.55	31.62	33.93	-81.66	-816.75	-521.47	107.45	47.48	59.97	1.792	
7,650.00	7,425.31	5,893.11	8,063.62	32.05	34.00	-68.30	-851.41	-520.19	123.33	69.07	54.26	2.273	
7,700.00	7,440.80	5,856.67	8,158.18	32.49	34.07	-57.47	-885.64	-519.06	143.44	94.69	48.76	2.942	
7,750.00	7,452.12	5,817.96	8,253.95	32.94	34.16	-48.99	-921.61	-517.71	164.99	120.43	44.56	3.702	
7,800.00	7,459.19	5,776.93	8,348.85	33.41	34.26	-42.96	-959.71	-515.53	185.80	144.02	41.78	4.447	
7,850.00	7,461.96	5,735.66	8,443.43	33.88	34.37	-38.90	-997.88	-512.73	204.79	164.77	40.02	5.117	
7,857.01	7,462.00	5,729.94	8,538.21	33.95	34.38	-38.43	-1,003.14	-512.34	207.30	167.48	39.82	5.205	
7,857.01	7,462.00	5,729.94	8,633.21	33.95	34.38	-58.65	-1,003.14	-512.34	207.30	167.48	39.82	5.205	
7,857.01	7,462.00	5,729.94	8,728.21	33.95	34.38	-38.43	-1,003.14	-512.34	207.30	167.48	39.82	5.205	
7,900.00	7,462.00	5,695.22	8,823.21	34.36	34.48	-36.53	-1,034.83	-510.05	223.13	184.39	38.74	5.760	
8,000.00	7,462.00	5,626.96	8,918.21	35.38	34.68	-32.85	-1,095.46	-505.88	265.20	228.11	37.09	7.151	
8,100.00	7,462.00	5,582.00	9,013.85	36.45	34.82	-30.35	-1,133.16	-503.50	317.04	279.59	37.45	8.467	
8,200.00	7,462.00	5,523.14	9,109.28	37.58	34.98	-27.25	-1,179.13	-500.31	376.79	339.35	37.44	10.065	
8,300.00	7,462.00	5,492.00	9,204.90	38.75	35.06	-25.76	-1,201.69	-498.41	444.11	404.85	39.26	11.312	
8,400.00	7,462.00	5,443.56	9,299.40	39.98	35.16	-23.73	-1,234.44	-494.89	516.33	476.43	39.90	12.939	
8,500.00	7,462.00	5,403.00	9,394.91	41.24	35.25	-22.30	-1,259.73	-491.25	592.96	552.13	40.83	14.521	

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

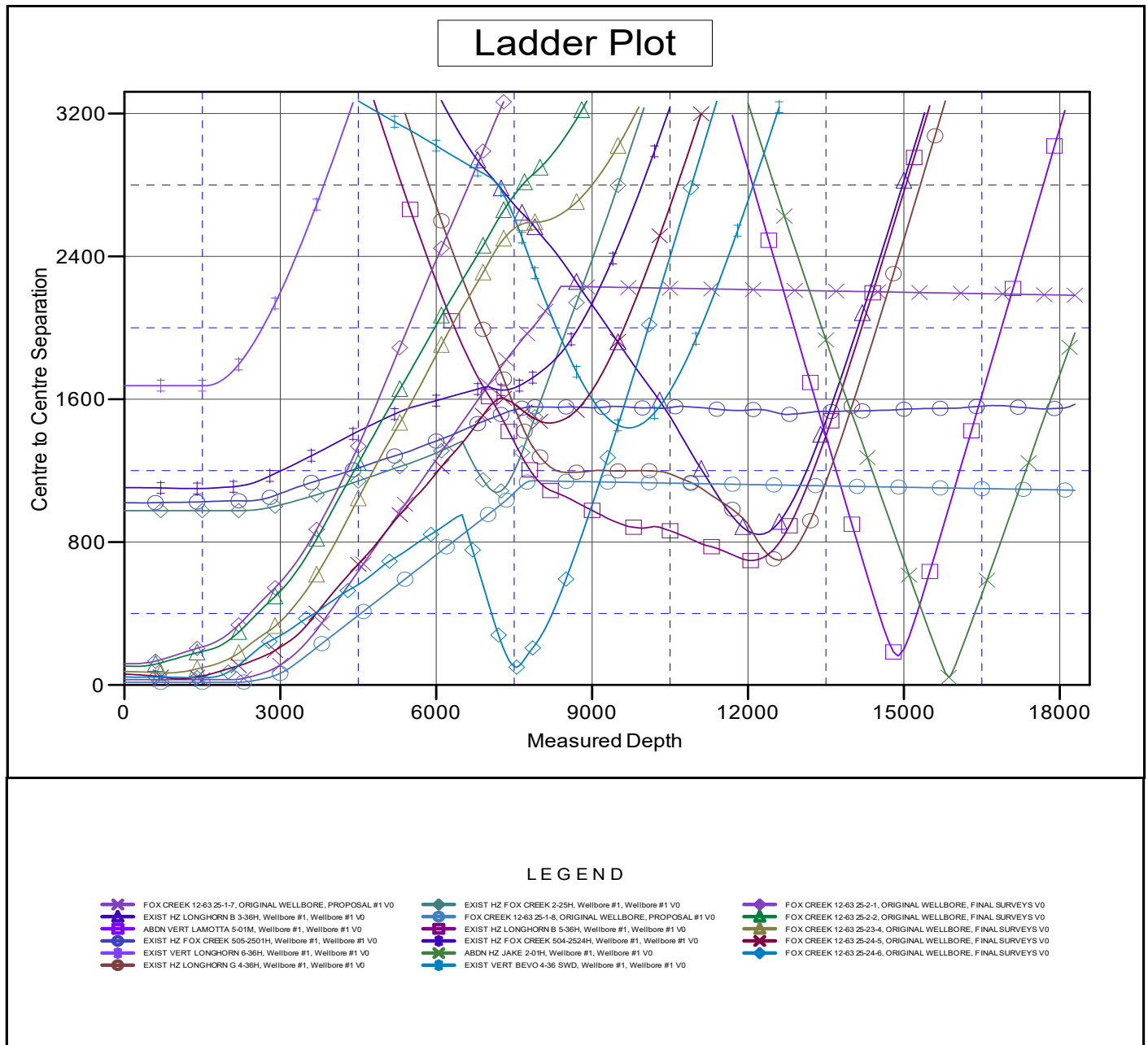
Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 25-24-6 - ORIGINAL WELLBORE - FINAL SURVEYS												Offset Site Error:	0.00 usft
Survey Program:		122-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)		
8,600.00	7,462.00	7,369.58	7,089.16	42.54	35.31	-21.29	-1,279.48	-487.96	672.37	630.48	41.88	16.054	
8,700.00	7,462.00	7,328.69	7,055.93	43.87	35.39	-20.20	-1,302.95	-483.82	753.50	711.04	42.46	17.748	
8,800.00	7,462.00	7,313.00	7,043.04	45.24	35.42	-19.83	-1,311.75	-482.21	836.50	792.75	43.75	19.120	
8,900.00	7,462.00	7,273.19	7,009.61	46.63	35.47	-18.92	-1,333.00	-478.29	920.76	876.67	44.09	20.881	
9,000.00	7,462.00	7,251.55	6,990.94	48.05	35.51	-18.43	-1,343.76	-476.33	1,007.01	962.14	44.87	22.444	
9,100.00	7,462.00	7,223.00	6,965.80	49.49	35.55	-17.81	-1,357.08	-473.94	1,094.78	1,049.43	45.35	24.140	
9,200.00	7,462.00	7,223.00	6,965.80	50.96	35.55	-17.81	-1,357.08	-473.94	1,183.68	1,137.30	46.38	25.522	
9,300.00	7,462.00	7,223.00	6,965.80	52.44	35.55	-17.81	-1,357.08	-473.94	1,274.22	1,226.98	47.24	26.974	
9,400.00	7,462.00	7,180.23	6,927.23	53.94	35.58	-16.92	-1,375.28	-470.71	1,364.33	1,317.13	47.20	28.906	
9,500.00	7,462.00	7,165.55	6,913.78	55.46	35.59	-16.62	-1,381.05	-469.70	1,455.92	1,408.28	47.64	30.558	
9,600.00	7,462.00	7,134.00	6,884.51	57.00	35.62	-16.01	-1,392.65	-467.69	1,548.51	1,500.74	47.77	32.414	
9,700.00	7,462.00	7,134.00	6,884.51	58.55	35.62	-16.01	-1,392.65	-467.69	1,641.13	1,592.79	48.35	33.946	
9,800.00	7,462.00	7,134.00	6,884.51	60.11	35.62	-16.01	-1,392.65	-467.69	1,734.58	1,685.73	48.85	35.509	
9,900.00	7,462.00	7,134.00	6,884.51	61.68	35.62	-16.01	-1,392.65	-467.69	1,828.72	1,779.42	49.29	37.098	
10,000.00	7,462.00	7,099.23	6,851.90	63.27	35.63	-15.44	-1,404.39	-464.87	1,922.65	1,873.38	49.27	39.025	
10,100.00	7,462.00	7,086.77	6,840.18	64.86	35.63	-15.28	-1,408.39	-463.51	2,017.24	1,967.74	49.50	40.751	
10,200.00	7,462.00	7,074.97	6,829.07	66.47	35.63	-15.15	-1,412.08	-462.05	2,112.15	2,062.43	49.72	42.481	
10,300.00	7,462.00	7,044.00	6,799.86	68.08	35.64	-14.89	-1,421.28	-457.44	2,207.59	2,157.89	49.71	44.410	
10,400.00	7,462.00	7,044.00	6,799.86	69.71	35.64	-14.89	-1,421.28	-457.44	2,302.87	2,252.84	50.02	46.036	
10,500.00	7,462.00	7,044.00	6,799.86	71.34	35.64	-14.89	-1,421.28	-457.44	2,398.52	2,348.21	50.31	47.675	
10,600.00	7,462.00	7,044.00	6,799.86	72.98	35.64	-14.89	-1,421.28	-457.44	2,494.52	2,443.94	50.57	49.323	
10,700.00	7,462.00	7,044.00	6,799.86	74.62	35.64	-14.89	-1,421.28	-457.44	2,590.82	2,540.00	50.82	50.981	
10,800.00	7,462.00	7,044.00	6,799.86	76.27	35.64	-14.89	-1,421.28	-457.44	2,687.39	2,636.34	51.05	52.646	
10,900.00	7,462.00	7,044.00	6,799.86	77.93	35.64	-14.89	-1,421.28	-457.44	2,784.20	2,732.94	51.26	54.316	
11,000.00	7,462.00	7,044.00	6,799.86	79.59	35.64	-14.89	-1,421.28	-457.44	2,881.23	2,829.77	51.46	55.992	
11,100.00	7,462.00	7,044.00	6,799.86	81.26	35.64	-14.89	-1,421.28	-457.44	2,978.46	2,926.81	51.65	57.671	
11,200.00	7,462.00	7,044.00	6,799.86	82.93	35.64	-14.89	-1,421.28	-457.44	3,075.86	3,024.04	51.82	59.354	
11,300.00	7,462.00	7,005.40	6,763.09	84.61	35.61	-14.62	-1,431.19	-451.20	3,172.02	3,120.33	51.69	61.367	
11,400.00	7,462.00	7,001.71	6,759.54	86.29	35.61	-14.59	-1,432.01	-450.63	3,269.46	3,217.63	51.83	63.081	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 @ 5419.00usft
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: FOX CREEK 12-63 25-1-9
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.73°

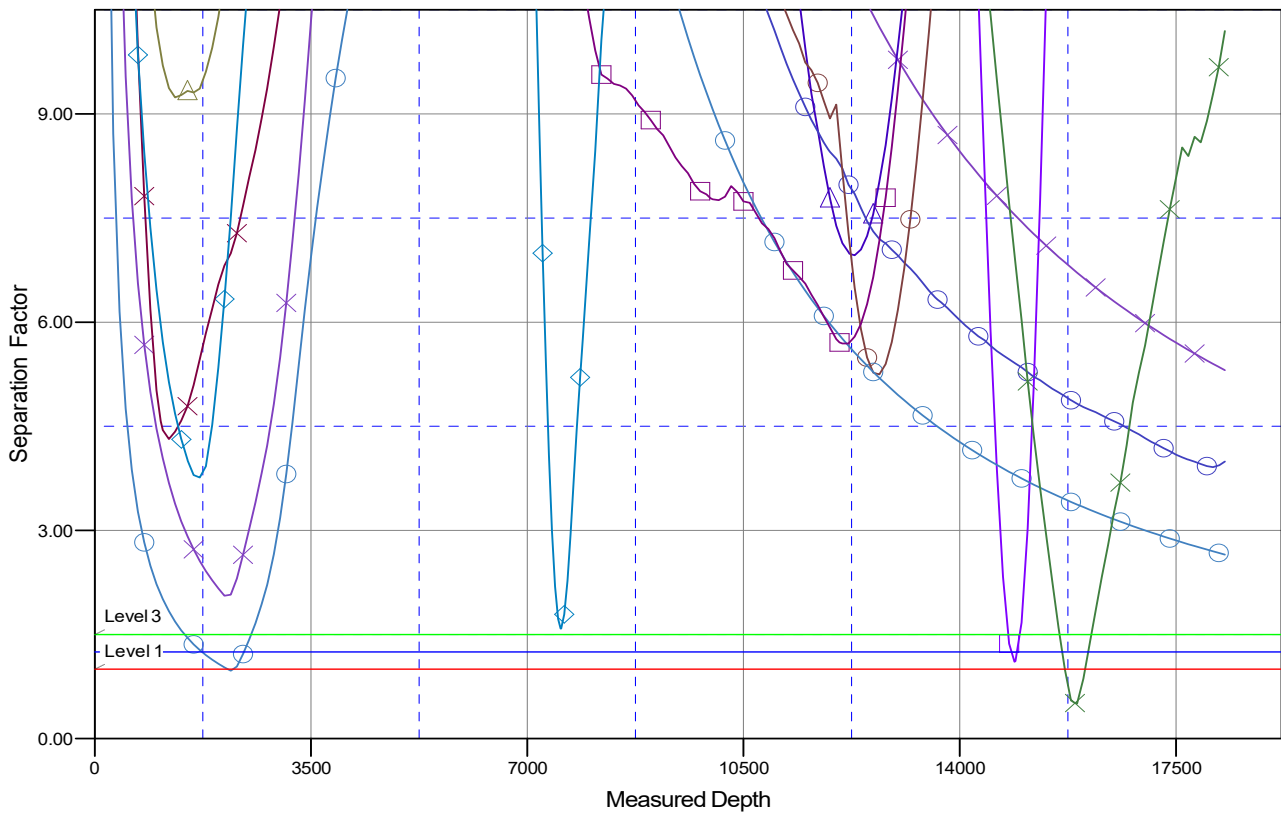


Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 25-1-9
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5419.00usft
Reference Site:	SW SE SEC. 25 T12N R63W 6th P.M.	MD Reference:	KBE @ 5419.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 25-1-9	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 @ 5419.00usft
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: FOX CREEK 12-63 25-1-9
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.73°

Separation Factor Plot



LEGEND

- | | | |
|--|---|--|
| <ul style="list-style-type: none"> FOX CREEK 12-63 25-1-7, ORIGINAL WELLBORE, PROPOSAL #1 V0 EXIST HZ LONGHORN B 3-36H, Wellbore #1, Wellbore #1 V0 ABDN VERT LAMOTTA B 5-01M, Wellbore #1, Wellbore #1 V0 EXIST HZ FOX CREEK 505-2501H, Wellbore #1, Wellbore #1 V0 EXIST VERT LONGHORN 6-36H, Wellbore #1, Wellbore #1 V0 EXIST HZ LONGHORN G 4-36H, Wellbore #1, Wellbore #1 V0 | <ul style="list-style-type: none"> EXIST HZ FOX CREEK 2-25H, Wellbore #1, Wellbore #1 V0 FOX CREEK 12-63 25-1-8, ORIGINAL WELLBORE, PROPOSAL #1 V0 EXIST HZ LONGHORN B 5-36H, Wellbore #1, Wellbore #1 V0 EXIST HZ FOX CREEK 504-2524H, Wellbore #1, Wellbore #1 V0 ABDN HZ JAKE 2-01H, Wellbore #1, Wellbore #1 V0 EXIST VERT BEVO 4-36 SWD, Wellbore #1, Wellbore #1 V0 | <ul style="list-style-type: none"> FOX CREEK 12-63 25-2-1, ORIGINAL WELLBORE, FINAL SURVEYS V0 FOX CREEK 12-63 25-2-2, ORIGINAL WELLBORE, FINAL SURVEYS V0 FOX CREEK 12-63 25-23-4, ORIGINAL WELLBORE, FINAL SURVEYS V0 FOX CREEK 12-63 25-24-5, ORIGINAL WELLBORE, FINAL SURVEYS V0 FOX CREEK 12-63 25-24-6, ORIGINAL WELLBORE, FINAL SURVEYS V0 |
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