



BISON IV OPERATING

WELD COUNTY, COLORADO (NAD 83)

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

FOX CREEK 12-63 34-2-3

ORIGINAL WELLBORE

PROPOSAL #1

Anticollision Report

24 August, 2024



Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

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

Survey Tool Program	Date	2024-08-24		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	18,663.58	PROPOSAL #1 (ORIGINAL WELLBORE)	OWSG (Rev2) MWD	OWSG MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
NE NE SEC. 34 T12N R63W 6th P.M.						
ABDN HZ FOX CREEK 223-3422H - Wellbore #1 - Wellb	337.89	334.89	148.94	147.04	78.440	CC, ES
ABDN HZ FOX CREEK 223-3422H - Wellbore #1 - Wellb	2,400.00	2,383.47	195.82	179.60	12.072	SF
EXIST HZ CRITTER CREEK 1-2H - Wellbore #1 - Wellb	14,094.39	7,172.33	2,087.51	1,958.08	16.129	CC
EXIST HZ CRITTER CREEK 1-2H - Wellbore #1 - Wellb	14,200.00	7,197.00	2,089.96	1,957.66	15.796	ES
EXIST HZ CRITTER CREEK 1-2H - Wellbore #1 - Wellb	18,100.00	10,391.41	3,266.67	3,027.21	13.642	SF
EXIST HZ CRITTER CREEK 29-2H - Wellbore #1 - Well	14,277.06	7,133.00	2,099.95	1,967.63	15.870	CC
EXIST HZ CRITTER CREEK 29-2H - Wellbore #1 - Well	14,300.00	7,133.00	2,100.08	1,967.11	15.794	ES
EXIST HZ CRITTER CREEK 29-2H - Wellbore #1 - Well	18,500.00	11,017.00	2,645.06	2,383.20	10.101	SF
EXIST HZ FOX CREEK 222-3422H - Wellbore #1 - Wellb	0.00	0.00	167.78			
EXIST HZ FOX CREEK 222-3422H - Wellbore #1 - Wellb	100.00	93.72	168.06	167.77	563.852	ES
EXIST HZ FOX CREEK 222-3422H - Wellbore #1 - Wellb	1,500.00	1,422.17	366.33	356.18	36.077	SF
EXIST HZ FOX CREEK 501-3403H - Wellbore #1 - Wellb	378.63	371.67	24.33	22.28	11.862	CC
EXIST HZ FOX CREEK 501-3403H - Wellbore #1 - Wellb	2,500.00	2,492.25	27.15	10.17	1.599	ES
EXIST HZ FOX CREEK 501-3403H - Wellbore #1 - Wellb	2,600.00	2,592.01	27.96	10.28	1.582	SF
FOX CREEK 12-63 34-23-1 - ORIGINAL WELLBORE - P	308.76	308.76	39.99	38.21	22.443	CC
FOX CREEK 12-63 34-23-1 - ORIGINAL WELLBORE - P	2,600.00	2,599.28	49.99	31.96	2.773	ES
FOX CREEK 12-63 34-23-1 - ORIGINAL WELLBORE - P	2,700.00	2,699.26	50.74	32.00	2.708	SF
FOX CREEK 12-63 34-23-2 - ORIGINAL WELLBORE - P	305.17	305.17	20.00	18.24	11.385	CC
FOX CREEK 12-63 34-23-2 - ORIGINAL WELLBORE - P	2,700.00	2,699.26	36.25	17.52	1.935	ES
FOX CREEK 12-63 34-23-2 - ORIGINAL WELLBORE - P	2,800.00	2,799.12	37.34	17.89	1.920	SF
SW SE SEC. 25 T12N R63W 6th P.M.						
ABDN VERT PORTER CREEK #1 - Wellbore #1 - Desig	12,754.21	7,346.00	2,043.80	1,812.60	8.840	CC
ABDN VERT PORTER CREEK #1 - Wellbore #1 - Desig	12,800.00	7,346.00	2,044.31	1,811.87	8.795	ES
ABDN VERT PORTER CREEK #1 - Wellbore #1 - Desig	13,100.00	7,346.00	2,072.84	1,833.11	8.646	SF
EXIST HZ FOX CREEK 1-35H - Wellbore #1 - Wellbore #	9,307.73	7,688.66	15.92	-27.15	0.370	Level 3, CC, ES, SF
EXIST HZ FOX CREEK 3-26H - Wellbore #1 - Wellbore #	7,737.17	8,971.00	3,066.47	2,991.95	41.150	CC
EXIST HZ FOX CREEK 3-26H - Wellbore #1 - Wellbore #	7,750.00	8,971.00	3,066.60	2,991.94	41.074	ES
EXIST HZ FOX CREEK 3-26H - Wellbore #1 - Wellbore #	7,850.00	8,946.52	3,075.97	3,000.77	40.900	SF
FOX CREEK 12-63 25-2-1 - ORIGINAL WELLBORE - PR	8,265.81	10,363.41	1,879.31	1,804.42	25.094	CC
FOX CREEK 12-63 25-2-1 - ORIGINAL WELLBORE - PR	18,663.58	20,762.28	2,016.52	1,624.65	5.146	ES, SF
FOX CREEK 12-63 25-2-2 - ORIGINAL WELLBORE - PR						Out of range
FOX CREEK 12-63 25-23-4 - ORIGINAL WELLBORE - P						Out of range

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Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - ABDN HZ FOX CREEK 223-3422H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 151-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	-9.11	150.52	-24.15	152.52	151.75	0.30	502.451	
100.00	100.00	96.26	96.25	0.14	0.16	-9.01	150.17	-23.81	152.05	149.92	0.92	164.495	
200.00	200.00	197.29	197.28	0.50	0.42	-8.68	149.09	-22.76	150.83	147.59	1.63	91.336	
300.00	300.00	297.25	297.21	0.86	0.78	-8.13	147.70	-21.11	149.22	147.04	1.90	78.440 CC, ES	
337.89	337.89	334.89	334.84	0.99	0.91	172.11	147.27	-20.44	148.94	147.25	2.33	64.063	
400.00	399.98	397.13	397.07	1.20	1.14	172.57	146.57	-19.34	149.58	147.25	2.69	56.248	
450.00	449.93	447.24	447.17	1.38	1.32	172.96	145.95	-18.49	151.03	148.34	3.04	50.352	
500.00	499.86	497.36	497.28	1.55	1.50	173.35	145.27	-17.69	152.86	149.83	3.74	41.872	
600.00	599.73	596.89	596.79	1.90	1.86	174.11	143.95	-16.05	156.56	152.82	4.45	36.146	
700.00	699.59	696.09	695.97	2.25	2.21	174.93	143.04	-14.19	160.68	156.24	5.16	32.013	
800.00	799.45	795.98	795.84	2.62	2.57	175.68	142.36	-12.43	165.08	159.92	5.68	29.651	
873.20	872.55	868.84	868.69	2.88	2.83	176.18	141.89	-11.20	168.34	162.67	5.87	28.877	
900.00	899.32	895.51	895.35	2.98	2.93	176.32	141.74	-10.88	169.45	163.58	6.57	26.112	
1,000.00	999.28	994.47	994.31	3.34	3.28	176.57	141.46	-10.28	171.68	165.10	6.73	25.516	
1,023.20	1,022.48	1,017.33	1,017.17	3.42	3.36	-3.43	141.48	-10.27	171.79	165.06	7.25	23.745	
1,100.00	1,099.28	1,093.28	1,093.12	3.68	3.62	-3.50	141.85	-10.50	172.18	164.93	7.93	21.765	
1,200.00	1,199.28	1,194.09	1,193.92	4.02	3.95	-3.73	142.17	-11.23	172.53	164.61	8.61	20.085	
1,300.00	1,299.28	1,293.78	1,293.62	4.36	4.28	-3.83	142.53	-11.54	172.92	164.31	9.31	18.586	
1,400.00	1,399.28	1,394.83	1,394.66	4.70	4.64	-3.80	142.65	-11.45	173.03	163.72	10.01	17.229	
1,500.00	1,499.28	1,495.64	1,495.47	5.05	4.99	-3.84	142.09	-11.56	172.49	162.47	10.71	16.045	
1,600.00	1,599.28	1,595.31	1,595.14	5.40	5.33	-3.97	141.40	-11.88	171.81	161.10	11.16	15.382	
1,664.78	1,664.07	1,659.24	1,659.07	5.63	5.56	-3.88	141.25	-11.62	171.65	160.49	11.40	15.060	
1,700.00	1,699.28	1,693.66	1,693.48	5.75	5.68	-3.78	141.34	-11.33	171.72	160.32	12.09	14.309	
1,800.00	1,799.28	1,791.36	1,791.17	6.10	6.01	-3.95	142.51	-11.90	172.95	160.86	12.77	13.704	
1,900.00	1,899.28	1,890.45	1,890.22	6.45	6.35	-4.55	144.45	-13.89	175.05	162.28	13.46	13.194	
2,000.00	1,999.28	1,989.28	1,988.95	6.80	6.68	-5.79	146.61	-17.91	177.59	164.13	14.14	12.812	
2,100.00	2,099.28	2,087.35	2,086.81	7.16	7.02	-7.48	149.51	-23.56	181.21	167.06	14.84	12.510	
2,200.00	2,199.28	2,186.89	2,186.04	7.51	7.36	-9.52	152.90	-30.68	185.64	170.80	15.54	12.241	
2,300.00	2,299.28	2,286.23	2,284.89	7.86	7.71	-12.17	155.68	-40.06	190.18	174.65	16.22	12.072 SF	
2,400.00	2,399.28	2,383.47	2,381.43	8.22	8.06	-15.25	158.52	-51.41	195.82	179.60	16.88	12.073	
2,500.00	2,499.28	2,477.78	2,474.62	8.57	8.40	-18.80	162.00	-65.36	203.77	186.89	17.56	12.213	
2,600.00	2,599.28	2,575.18	2,570.52	8.93	8.77	-22.54	166.90	-81.73	214.51	196.95	18.24	12.391	
2,700.00	2,699.26	2,672.01	2,665.84	9.28	9.14	-87.59	171.79	-98.00	226.05	207.81	18.92	12.654	
2,800.00	2,799.12	2,768.66	2,760.85	9.63	9.52	-91.63	177.16	-114.91	239.38	220.47	19.62	12.951	
2,900.00	2,898.74	2,867.46	2,857.95	9.98	9.92	-96.13	182.23	-132.40	254.11	234.49	20.34	13.276	
3,000.00	2,997.98	2,967.10	2,955.95	10.34	10.32	-101.03	185.92	-150.05	269.99	249.65	20.96	13.765	
3,100.00	3,096.75	3,058.36	3,045.74	10.70	10.70	-105.51	189.28	-165.98	288.50	267.54	21.57	14.444	
3,200.00	3,194.91	3,148.21	3,133.95	11.07	11.08	-109.83	193.47	-182.60	311.56	289.99	22.23	15.233	
3,300.00	3,292.34	3,240.90	3,224.80	11.45	11.48	-114.16	197.95	-200.40	338.71	316.48	22.90	16.127	
3,400.00	3,388.93	3,332.13	3,314.26	11.85	11.87	-118.16	202.19	-217.77	369.30	346.40	23.60	17.085	
3,500.00	3,484.55	3,425.16	3,405.54	12.27	12.28	-122.01	206.14	-235.28	403.27	379.67	24.26	18.156	
3,600.00	3,579.10	3,512.73	3,491.53	12.73	12.66	-125.36	209.35	-251.48	440.54	416.28	24.92	19.339	
3,700.00	3,672.45	3,597.70	3,574.93	13.21	13.04	-128.30	212.67	-267.41	481.86	456.94	25.57	20.611	
3,800.00	3,764.50	3,681.04	3,656.69	13.74	13.41	-130.92	215.97	-283.26	527.06	501.49	26.23	21.955	
3,900.00	3,855.12	3,762.90	3,736.96	14.31	13.78	-133.18	219.78	-298.84	575.94	549.71	26.88	23.373	
4,000.00	3,944.22	3,841.91	3,814.41	14.93	14.14	-135.12	223.54	-314.00	628.32	601.44	27.34	24.441	
4,071.71	4,007.11	3,896.10	3,867.49	15.41	14.39	-136.30	226.31	-324.56	668.09	640.75	27.52	24.866	
4,100.00	4,031.75	3,917.41	3,888.35	15.60	14.49	-136.99	227.46	-328.75	684.19	656.68	28.16	26.339	
4,200.00	4,118.84	3,993.85	3,963.15	16.32	14.84	-139.24	231.80	-343.90	741.81	713.65	28.89	27.690	
4,300.00	4,205.93	4,077.57	4,045.10	17.06	15.23	-141.34	236.79	-360.31	800.02	771.13	29.66	28.930	
4,400.00	4,293.02	4,165.43	4,131.25	17.84	15.64	-143.24	242.02	-376.72	858.08	828.42	30.42	30.105	
4,500.00	4,380.11	4,252.66	4,216.99	18.63	16.03	-144.92	246.66	-392.12	915.77	885.35			

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

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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)			
4,600.00	4,467.21	4,333.19	4,296.27	19.45	16.39	-146.37	249.74	-405.87	973.42	942.30	31.11	31.287	
4,700.00	4,554.30	4,409.97	4,371.84	20.28	16.74	-147.60	252.93	-419.10	1,031.57	999.79	31.77	32.465	
4,800.00	4,641.39	4,484.48	4,445.08	21.13	17.08	-148.61	256.95	-432.19	1,090.25	1,057.82	32.42	33.626	
4,900.00	4,728.48	4,552.42	4,511.70	21.99	17.40	-149.39	261.46	-444.68	1,149.77	1,116.75	33.02	34.824	
5,000.00	4,815.58	4,626.38	4,584.09	22.87	17.75	-150.14	266.83	-458.85	1,210.04	1,176.36	33.67	35.934	
5,100.00	4,902.67	4,703.42	4,659.50	23.75	18.12	-150.87	272.07	-473.77	1,270.65	1,236.28	34.36	36.979	
5,200.00	4,989.76	4,784.51	4,738.92	24.65	18.50	-151.61	276.79	-489.39	1,331.37	1,296.29	35.09	37.946	
5,300.00	5,076.85	4,867.77	4,820.55	25.55	18.90	-152.32	281.51	-505.11	1,391.92	1,356.09	35.83	38.846	
5,400.00	5,163.94	4,948.10	4,899.32	26.46	19.28	-152.94	286.09	-520.15	1,452.47	1,415.92	36.55	39.737	
5,500.00	5,251.04	5,028.00	4,977.75	27.38	19.65	-153.52	290.42	-534.79	1,512.81	1,475.54	37.27	40.592	
5,600.00	5,338.13	5,095.34	5,043.84	28.31	19.97	-153.99	293.77	-547.31	1,573.52	1,535.65	37.87	41.548	
5,700.00	5,425.22	5,175.56	5,122.47	29.24	20.35	-154.52	297.31	-562.79	1,634.92	1,596.33	38.59	42.363	
5,800.00	5,512.31	5,253.80	5,199.26	30.18	20.72	-155.03	300.32	-577.44	1,696.01	1,656.71	39.29	43.161	
5,900.00	5,599.40	5,322.14	5,266.28	31.12	21.05	-155.44	302.90	-590.58	1,757.56	1,717.65	39.91	44.040	
6,000.00	5,686.50	5,394.49	5,337.18	32.06	21.39	-155.85	305.58	-604.76	1,819.50	1,778.94	40.56	44.858	
6,100.00	5,773.59	5,495.91	5,436.66	33.01	21.88	-156.40	309.08	-624.16	1,881.18	1,839.70	41.47	45.358	
6,200.00	5,860.68	5,583.55	5,522.78	33.96	22.29	-156.84	312.13	-640.15	1,942.20	1,899.94	42.26	45.957	
6,300.00	5,947.77	5,666.03	5,623.63	34.92	22.76	-157.32	315.76	-657.99	2,002.61	1,959.44	43.17	46.385	
6,400.00	6,034.86	5,774.11	5,710.41	35.88	23.17	-157.71	319.10	-672.67	2,062.46	2,018.50	43.96	46.914	
6,500.00	6,121.96	5,872.02	5,806.94	36.84	23.61	-158.08	323.50	-688.45	2,121.81	2,076.98	44.84	47.323	
6,600.00	6,209.05	5,946.35	5,880.23	37.81	23.95	-158.35	327.13	-700.30	2,181.00	2,135.49	45.52	47.916	
6,700.00	6,296.14	6,135.10	6,067.09	38.77	24.75	-159.04	334.56	-725.59	2,238.35	2,191.26	47.08	47.542	
6,800.00	6,383.23	6,346.52	6,277.80	39.74	25.55	-159.89	339.57	-741.92	2,291.27	2,242.61	48.65	47.092	
6,900.00	6,470.32	6,467.77	6,398.94	40.71	25.96	-160.42	340.57	-746.87	2,341.63	2,292.05	49.58	47.225	
7,000.00	6,557.42	6,577.46	6,508.59	41.69	26.32	-160.88	341.42	-749.37	2,390.41	2,339.98	50.44	47.393	
7,100.00	6,644.51	6,737.15	6,668.14	42.66	26.84	-161.41	346.64	-751.70	2,438.49	2,386.92	51.57	47.284	
7,200.00	6,731.60	6,977.96	6,900.82	43.64	27.65	-160.93	403.83	-752.09	2,480.36	2,427.05	53.31	46.523	
7,244.75	6,770.57	7,012.98	6,932.71	44.08	27.78	-160.71	418.29	-752.66	2,498.60	2,444.88	53.72	46.510	
7,250.00	6,775.15	7,403.62	7,231.42	44.13	29.32	-157.24	662.35	-748.67	2,499.77	2,443.16	56.62	44.154	
7,300.00	6,819.19	7,426.53	7,244.94	44.60	29.42	-167.05	680.82	-747.90	2,514.13	2,457.01	57.12	44.014	
7,350.00	6,863.79	7,448.00	7,257.14	45.05	29.52	-177.85	698.48	-747.39	2,528.88	2,471.29	57.59	43.910	
7,400.00	6,908.61	7,476.07	7,272.37	45.47	29.66	171.04	722.05	-746.92	2,543.95	2,485.83	58.12	43.773	
7,450.00	6,953.31	7,499.95	7,284.64	45.84	29.79	160.09	742.53	-746.60	2,559.26	2,500.69	58.57	43.692	
7,500.00	6,997.56	7,516.57	7,292.81	46.18	29.88	149.80	757.00	-746.42	2,574.85	2,515.92	58.93	43.696	
7,550.00	7,041.01	7,526.98	7,297.76	46.47	29.94	140.52	766.16	-746.33	2,590.67	2,531.49	59.18	43.776	
7,600.00	7,083.34	7,532.13	7,300.17	46.73	29.97	132.35	770.71	-746.29	2,606.68	2,547.34	59.34	43.925	
7,650.00	7,124.22	7,532.85	7,300.51	46.94	29.97	125.23	771.35	-746.28	2,622.77	2,563.34	59.43	44.133	
7,700.00	7,163.34	7,529.84	7,299.10	47.11	29.95	119.03	768.68	-746.31	2,638.82	2,579.38	59.44	44.393	
7,750.00	7,200.41	7,523.68	7,296.21	47.24	29.92	113.63	763.25	-746.36	2,654.71	2,595.31	59.40	44.694	
7,800.00	7,235.13	7,514.87	7,291.99	47.34	29.87	108.89	755.52	-746.44	2,670.28	2,610.97	59.30	45.029	
7,850.00	7,267.26	7,503.81	7,286.57	47.40	29.81	104.72	745.88	-746.55	2,685.39	2,626.22	59.17	45.388	
7,900.00	7,296.54	7,490.85	7,280.04	47.44	29.74	101.06	734.68	-746.71	2,699.89	2,640.89	59.00	45.763	
7,950.00	7,322.74	7,476.27	7,272.48	47.44	29.67	97.84	722.23	-746.92	2,713.64	2,654.83	58.81	46.145	
8,000.00	7,345.68	7,448.00	7,257.14	47.42	29.52	94.80	698.48	-747.39	2,726.54	2,668.08	58.46	46.641	
8,050.00	7,365.18	7,448.00	7,257.14	47.38	29.52	92.68	698.48	-747.39	2,738.33	2,679.89	58.44	46.855	
8,100.00	7,381.08	7,448.00	7,257.14	47.31	29.52	90.90	698.48	-747.39	2,749.16	2,690.72	58.44	47.046	
8,150.00	7,393.27	7,419.94	7,241.10	47.23	29.39	89.01	675.47	-748.10	2,758.59	2,700.45	58.14	47.450	
8,200.00	7,401.65	7,406.34	7,233.05	47.14	29.33	87.69	664.52	-748.56	2,766.84	2,708.82	58.01	47.695	
8,250.00	7,406.16	7,392.10	7,224.42	47.03	29.27	86.68	653.20	-749.14	2,773.71	2,715.81	57.90	47.908	
8,282.77	7,407.00	7,355.00	7,201.06	46.96	29.11	85.83	624.45	-751.06	2,777.79	2,720.25	57.53	48.282	
8,300.00	7,407.00	7,355.00	7,201.06	46.92	29.11	85.83	624.45	-751.06	2,779.50	2,721.94	57.55	48.293	
8,400.00	7,407.00	7,335.88	7,188.58	46.71	29.03	85.58	610.01	-752.17	2,791.45	2,733.93	57.52	48.528	

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - ABDN HZ FOX CREEK 223-3422H - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 151-OWSG (Rev2) MWD							Rule Assigned:						Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
8,500.00	7,407.00	7,169.00	7,068.00	46.54	28.39	83.11	495.31	-756.93	2,804.98	2,748.90	56.08	50.017	
8,600.00	7,407.00	7,121.27	7,028.52	46.40	28.20	82.30	468.52	-755.72	2,818.71	2,762.80	55.91	50.419	
8,700.00	7,407.00	7,076.00	6,989.21	46.30	28.02	81.49	446.15	-754.33	2,835.46	2,779.65	55.80	50.811	
8,800.00	7,407.00	7,076.00	6,989.21	46.24	28.02	81.49	446.15	-754.33	2,855.01	2,798.83	56.17	50.825	
8,900.00	7,407.00	7,046.93	6,963.29	46.22	27.91	80.96	433.01	-753.46	2,877.59	2,821.27	56.31	51.099	
9,000.00	7,407.00	7,026.64	6,945.06	46.25	27.83	80.59	424.13	-752.95	2,903.14	2,846.57	56.57	51.322	
9,100.00	7,407.00	6,982.00	6,904.52	46.32	27.67	79.77	405.46	-752.15	2,931.84	2,875.21	56.64	51.765	
9,200.00	7,407.00	6,982.00	6,904.52	46.46	27.67	79.77	405.46	-752.15	2,962.91	2,905.79	57.12	51.872	
9,300.00	7,407.00	6,982.00	6,904.52	46.65	27.67	79.77	405.46	-752.15	2,996.99	2,939.37	57.61	52.021	
9,400.00	7,407.00	6,982.00	6,904.52	46.91	27.67	79.77	405.46	-752.15	3,033.98	2,975.87	58.11	52.211	
9,500.00	7,407.00	6,982.00	6,904.52	47.25	27.67	79.77	405.46	-752.15	3,073.78	3,015.17	58.61	52.444	
9,600.00	7,407.00	6,940.17	6,865.82	47.66	27.52	78.99	389.61	-751.74	3,115.31	3,056.51	58.81	52.975	
9,700.00	7,407.00	6,930.39	6,856.64	48.16	27.48	78.81	386.21	-751.69	3,159.87	3,100.62	59.24	53.336	
9,800.00	7,407.00	6,889.00	6,817.35	48.75	27.34	78.02	373.22	-751.66	3,207.43	3,147.97	59.46	53.942	
9,900.00	7,407.00	6,889.00	6,817.35	49.42	27.34	78.02	373.22	-751.66	3,256.42	3,196.45	59.97	54.305	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - EXIST HZ CRITTER CREEK 1-2H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 1435-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)
11,600.00	7,407.00	7,070.00	7,069.72	69.73	22.31	-82.08	-5,479.16	4,022.97	3,240.85	3,176.63	64.22	50.468	
11,700.00	7,407.00	7,070.00	7,069.72	71.20	22.31	-82.08	-5,479.16	4,022.97	3,165.16	3,100.00	65.16	48.577	
11,800.00	7,407.00	7,070.00	7,069.72	72.69	22.31	-82.08	-5,479.16	4,022.97	3,090.85	3,024.59	66.26	46.650	
11,900.00	7,407.00	7,070.00	7,069.72	74.19	22.31	-82.08	-5,479.16	4,022.97	3,018.03	2,950.51	67.52	44.698	
12,000.00	7,407.00	7,070.00	7,069.72	75.71	22.31	-82.08	-5,479.16	4,022.97	2,946.80	2,877.84	68.96	42.734	
12,100.00	7,407.00	7,070.00	7,069.72	77.24	22.31	-82.08	-5,479.16	4,022.97	2,877.28	2,806.71	70.57	40.771	
12,200.00	7,407.00	7,070.00	7,069.72	78.78	22.31	-82.08	-5,479.16	4,022.97	2,809.60	2,737.24	72.37	38.825	
12,300.00	7,407.00	7,084.72	7,084.37	80.33	22.36	-82.48	-5,480.55	4,023.40	2,743.63	2,669.26	74.37	36.893	
12,400.00	7,407.00	7,086.40	7,086.04	81.89	22.37	-82.53	-5,480.74	4,023.46	2,679.99	2,603.46	76.53	35.018	
12,500.00	7,407.00	7,101.00	7,100.50	83.46	22.42	-82.92	-5,482.69	4,024.05	2,618.81	2,539.93	78.89	33.197	
12,600.00	7,407.00	7,101.00	7,100.50	85.04	22.42	-82.92	-5,482.69	4,024.05	2,559.81	2,478.40	81.41	31.444	
12,700.00	7,407.00	7,101.00	7,100.50	86.63	22.42	-82.92	-5,482.69	4,024.05	2,503.40	2,419.30	84.10	29.766	
12,800.00	7,407.00	7,101.00	7,100.50	88.22	22.42	-82.92	-5,482.69	4,024.05	2,449.79	2,362.83	86.96	28.172	
12,900.00	7,407.00	7,101.00	7,100.50	89.82	22.42	-82.92	-5,482.69	4,024.05	2,399.14	2,309.18	89.97	26.667	
13,000.00	7,407.00	7,101.00	7,100.50	91.43	22.42	-82.92	-5,482.69	4,024.05	2,351.66	2,258.55	93.11	25.257	
13,100.00	7,407.00	7,101.00	7,100.50	93.05	22.42	-82.92	-5,482.69	4,024.05	2,307.54	2,211.17	96.37	23.944	
13,200.00	7,407.00	7,101.00	7,100.50	94.67	22.42	-82.92	-5,482.69	4,024.05	2,266.97	2,167.24	99.73	22.731	
13,300.00	7,407.00	7,101.00	7,100.50	96.30	22.42	-82.92	-5,482.69	4,024.05	2,230.16	2,127.00	103.16	21.618	
13,400.00	7,407.00	7,115.15	7,114.43	97.93	22.46	-83.30	-5,485.05	4,024.76	2,197.10	2,090.46	106.64	20.603	
13,500.00	7,407.00	7,120.29	7,119.47	99.57	22.48	-83.44	-5,486.03	4,025.04	2,168.21	2,058.08	110.13	19.688	
13,600.00	7,407.00	7,133.00	7,131.87	101.21	22.52	-83.78	-5,488.71	4,025.79	2,143.58	2,029.98	113.60	18.869	
13,700.00	7,407.00	7,133.00	7,131.87	102.86	22.52	-83.78	-5,488.71	4,025.79	2,123.24	2,006.21	117.03	18.143	
13,800.00	7,407.00	7,133.00	7,131.87	104.51	22.52	-83.78	-5,488.71	4,025.79	2,107.46	1,987.09	120.37	17.508	
13,900.00	7,407.00	7,148.45	7,146.82	106.17	22.57	-84.19	-5,492.45	4,026.83	2,096.17	1,972.57	123.59	16.960	
14,000.00	7,407.00	7,165.00	7,162.67	107.83	22.63	-84.63	-5,497.04	4,028.11	2,089.56	1,962.89	126.67	16.496	
14,094.39	7,407.00	7,172.33	7,169.63	109.40	22.65	-84.82	-5,499.25	4,028.72	2,087.51	1,958.08	129.43	16.129 CC	
14,100.00	7,407.00	7,173.65	7,170.88	109.49	22.66	-84.86	-5,499.66	4,028.83	2,087.52	1,957.93	129.59	16.109	
14,200.00	7,407.00	7,197.00	7,192.83	111.16	22.73	-85.46	-5,507.36	4,030.79	2,089.96	1,957.66	132.31	15.796 ES	
14,300.00	7,407.00	7,211.68	7,206.44	112.83	22.78	-85.84	-5,512.72	4,032.14	2,096.87	1,962.05	134.83	15.552	
14,400.00	7,407.00	7,228.00	7,221.31	114.50	22.83	-86.25	-5,519.20	4,033.86	2,108.25	1,971.12	137.13	15.374	
14,500.00	7,407.00	7,249.14	7,240.20	116.18	22.89	-86.77	-5,528.34	4,036.40	2,123.92	1,984.71	139.22	15.256	
14,600.00	7,407.00	7,260.00	7,249.75	117.86	22.93	-87.03	-5,533.32	4,037.81	2,143.73	2,002.66	141.08	15.196	
14,700.00	7,407.00	7,291.00	7,276.35	119.54	23.02	-87.77	-5,548.49	4,042.59	2,167.58	2,024.82	142.76	15.183	
14,800.00	7,407.00	7,328.45	7,307.28	121.23	23.14	-88.62	-5,568.50	4,049.26	2,195.12	2,050.84	144.28	15.214	
14,900.00	7,407.00	7,410.37	7,369.41	122.92	23.43	-90.31	-5,619.20	4,065.53	2,225.34	2,079.51	145.83	15.260	
15,000.00	7,407.00	7,550.55	7,452.79	124.61	24.01	-92.52	-5,726.68	4,097.35	2,256.37	2,108.64	147.72	15.274	
15,100.00	7,407.00	7,596.32	7,473.29	126.31	24.24	-93.05	-5,765.87	4,109.04	2,287.77	2,138.57	149.21	15.333	
15,200.00	7,407.00	7,724.88	7,510.81	128.00	24.98	-93.98	-5,883.46	4,143.76	2,318.37	2,166.86	151.51	15.302	
15,300.00	7,407.00	7,847.13	7,523.28	129.70	25.84	-94.23	-5,999.45	4,180.06	2,349.92	2,195.84	154.08	15.251	
15,400.00	7,407.00	7,914.14	7,526.98	131.40	26.38	-94.28	-6,063.36	4,199.89	2,380.69	2,224.56	156.12	15.249	
15,500.00	7,407.00	7,987.01	7,528.36	133.11	27.04	-94.28	-6,132.68	4,222.29	2,412.36	2,254.06	158.30	15.240	
15,600.00	7,407.00	8,052.48	7,527.19	134.81	27.67	-94.21	-6,194.71	4,243.16	2,444.96	2,284.56	160.41	15.242	
15,700.00	7,407.00	8,126.00	7,525.76	136.52	28.45	-94.13	-6,264.04	4,267.61	2,478.82	2,316.12	162.69	15.236	
15,800.00	7,407.00	8,219.77	7,523.79	138.23	29.52	-94.02	-6,352.30	4,299.23	2,513.21	2,347.79	165.43	15.192	
15,900.00	7,407.00	8,315.20	7,520.37	139.94	30.69	-93.89	-6,442.11	4,331.28	2,547.41	2,379.13	168.28	15.137	
16,000.00	7,407.00	8,434.99	7,517.58	141.65	32.26	-93.76	-6,555.35	4,370.24	2,580.54	2,408.82	171.72	15.028	
16,100.00	7,407.00	8,516.00	7,516.55	143.36	33.37	-93.69	-6,631.98	4,396.49	2,613.70	2,439.31	174.39	14.988	
16,200.00	7,407.00	8,589.10	7,515.96	145.08	34.42	-93.64	-6,700.96	4,420.68	2,647.58	2,470.66	176.92	14.965	
16,300.00	7,407.00	8,643.00	7,515.81	146.80	35.21	-93.61	-6,751.69	4,438.87	2,682.32	2,503.31	179.00	14.985	
16,400.00	7,407.00	8,750.85	7,514.45	148.52	36.84	-93.53	-6,852.66	4,476.75	2,718.25	2,535.82	182.43	14.901	
16,500.00	7,407.00	8,923.38	7,509.21	150.24	39.55	-93.33	-7,015.59	4,533.21	2,751.30	2,563.82	187.48	14.675	
16,600.00	7,407.00	9,026.00	7,511.11	151.96	41.20	-93.33	-7,113.02	4,565.34	2,783.53	2,592.69	190.84	14.586	

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - EXIST HZ CRITTER CREEK 1-2H - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 1435-OWSG (Rev2) MWD							Rule Assigned:						Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
16,700.00	7,407.00	9,197.90	7,515.67	153.68	44.04	-93.36	-7,276.69	4,617.68	2,815.39	2,619.55	195.84	14.376	
16,800.00	7,407.00	9,344.00	7,519.07	155.40	46.47	-93.38	-7,417.10	4,657.87	2,843.75	2,643.53	200.21	14.203	
16,900.00	7,407.00	9,407.00	7,519.94	157.13	47.53	-93.38	-7,477.65	4,675.26	2,872.24	2,669.46	202.78	14.164	
17,000.00	7,407.00	9,447.71	7,519.95	158.86	48.23	-93.36	-7,516.58	4,687.15	2,902.22	2,697.42	204.80	14.171	
17,100.00	7,407.00	9,523.63	7,519.83	160.59	49.54	-93.33	-7,588.92	4,710.17	2,933.37	2,725.73	207.65	14.127	
17,200.00	7,407.00	9,586.27	7,519.84	162.31	50.64	-93.31	-7,648.44	4,729.73	2,965.40	2,755.24	210.15	14.111	
17,300.00	7,407.00	9,685.16	7,517.90	164.04	52.39	-93.23	-7,742.19	4,761.08	2,997.85	2,784.23	213.62	14.034	
17,400.00	7,407.00	9,792.00	7,515.81	165.78	54.30	-93.15	-7,843.66	4,794.47	3,029.82	2,812.51	217.31	13.943	
17,500.00	7,407.00	9,823.00	7,515.82	167.51	54.86	-93.14	-7,872.97	4,804.57	3,062.93	2,843.97	218.96	13.989	
17,600.00	7,407.00	9,869.40	7,516.02	169.24	55.70	-93.13	-7,916.59	4,820.38	3,097.72	2,876.75	220.97	14.019	
17,700.00	7,407.00	10,041.93	7,515.93	170.98	58.87	-93.06	-8,078.96	4,878.66	3,132.68	2,906.10	226.58	13.826	
17,800.00	7,407.00	10,100.48	7,515.01	172.71	59.94	-93.02	-8,134.30	4,897.75	3,166.12	2,937.14	228.98	13.827	
17,900.00	7,407.00	10,220.70	7,513.62	174.45	62.17	-92.96	-8,247.82	4,937.31	3,199.81	2,966.68	233.13	13.725	
18,000.00	7,407.00	10,313.40	7,513.04	176.19	63.89	-92.92	-8,335.51	4,967.37	3,233.05	2,996.55	236.50	13.670	
18,100.00	7,407.00	10,391.41	7,512.68	177.92	65.34	-92.88	-8,409.19	4,992.96	3,266.67	3,027.21	239.46	13.642 SF	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - EXIST HZ CRITTER CREEK 29-2H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 1475-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)			
11,700.00	7,407.00	6,880.00	6,878.54	71.20	21.49	-77.10	-5,576.71	4,024.94	3,262.79	3,198.78	64.01	50.975	
11,800.00	7,407.00	6,880.00	6,878.54	72.69	21.49	-77.10	-5,576.71	4,024.94	3,187.70	3,122.66	65.03	49.017	
11,900.00	7,407.00	6,880.00	6,878.54	74.19	21.49	-77.10	-5,576.71	4,024.94	3,114.01	3,047.79	66.21	47.029	
12,000.00	7,407.00	6,880.00	6,878.54	75.71	21.49	-77.10	-5,576.71	4,024.94	3,041.82	2,974.26	67.56	45.024	
12,100.00	7,407.00	6,880.00	6,878.54	77.24	21.49	-77.10	-5,576.71	4,024.94	2,971.24	2,902.17	69.07	43.016	
12,200.00	7,407.00	6,880.00	6,878.54	78.78	21.49	-77.10	-5,576.71	4,024.94	2,902.40	2,831.64	70.76	41.017	
12,300.00	7,407.00	6,880.00	6,878.54	80.33	21.49	-77.10	-5,576.71	4,024.94	2,835.41	2,762.78	72.63	39.042	
12,400.00	7,407.00	6,894.18	6,892.40	81.89	21.54	-77.47	-5,579.69	4,025.24	2,770.21	2,695.53	74.68	37.094	
12,500.00	7,407.00	6,898.50	6,896.61	83.46	21.56	-77.58	-5,580.68	4,025.34	2,707.21	2,630.31	76.90	35.204	
12,600.00	7,407.00	6,912.00	6,909.69	85.04	21.61	-77.92	-5,583.98	4,025.72	2,646.53	2,567.23	79.30	33.375	
12,700.00	7,407.00	6,912.00	6,909.69	86.63	21.61	-77.92	-5,583.98	4,025.72	2,588.11	2,506.25	81.86	31.617	
12,800.00	7,407.00	6,912.00	6,909.69	88.22	21.61	-77.92	-5,583.98	4,025.72	2,532.29	2,447.70	84.58	29.938	
12,900.00	7,407.00	6,912.00	6,909.69	89.82	21.61	-77.92	-5,583.98	4,025.72	2,479.24	2,391.78	87.46	28.346	
13,000.00	7,407.00	6,931.21	6,928.16	91.43	21.68	-78.42	-5,589.24	4,026.27	2,428.93	2,338.45	90.48	26.845	
13,100.00	7,407.00	6,943.00	6,939.39	93.05	21.72	-78.72	-5,592.79	4,026.59	2,381.71	2,288.08	93.62	25.439	
13,200.00	7,407.00	6,943.00	6,939.39	94.67	21.72	-78.72	-5,592.79	4,026.59	2,337.72	2,240.83	96.89	24.128	
13,300.00	7,407.00	6,964.05	6,959.27	96.30	21.80	-79.25	-5,599.68	4,027.15	2,296.99	2,196.76	100.22	22.919	
13,400.00	7,407.00	6,974.00	6,968.59	97.93	21.84	-79.50	-5,603.18	4,027.43	2,259.81	2,156.18	103.64	21.805	
13,500.00	7,407.00	6,996.89	6,989.76	99.57	21.92	-80.06	-5,611.86	4,027.98	2,226.22	2,119.16	107.07	20.793	
13,600.00	7,407.00	7,006.00	6,998.07	101.21	21.96	-80.29	-5,615.58	4,028.16	2,196.38	2,085.84	110.54	19.869	
13,700.00	7,407.00	7,038.00	7,026.65	102.86	22.08	-81.06	-5,629.94	4,028.79	2,170.36	2,056.42	113.94	19.048	
13,800.00	7,407.00	7,048.88	7,036.14	104.51	22.12	-81.31	-5,635.25	4,029.05	2,148.28	2,030.92	117.37	18.304	
13,900.00	7,407.00	7,070.00	7,054.32	106.17	22.21	-81.81	-5,645.98	4,029.68	2,130.28	2,009.58	120.70	17.650	
14,000.00	7,407.00	7,086.14	7,067.96	107.83	22.27	-82.18	-5,654.59	4,030.32	2,116.39	1,992.43	123.96	17.073	
14,100.00	7,407.00	7,101.00	7,080.29	109.49	22.33	-82.51	-5,662.86	4,031.05	2,106.70	1,979.58	127.11	16.574	
14,200.00	7,407.00	7,120.70	7,096.20	111.16	22.41	-82.95	-5,674.40	4,032.30	2,101.24	1,971.13	130.11	16.149	
14,277.06	7,407.00	7,133.00	7,105.84	112.44	22.47	-83.21	-5,681.98	4,033.26	2,099.95	1,967.63	132.32	15.870 CC	
14,300.00	7,407.00	7,133.00	7,105.84	112.83	22.47	-83.21	-5,681.98	4,033.26	2,100.08	1,967.11	132.97	15.794 ES	
14,400.00	7,407.00	7,165.00	7,129.87	114.50	22.60	-83.87	-5,702.87	4,036.30	2,102.94	1,967.31	135.63	15.505	
14,500.00	7,407.00	7,219.69	7,167.79	116.18	22.85	-84.92	-5,741.81	4,042.11	2,109.23	1,971.11	138.12	15.271	
14,600.00	7,407.00	7,297.67	7,216.26	117.86	23.24	-86.25	-5,802.25	4,050.71	2,118.04	1,977.56	140.48	15.077	
14,700.00	7,407.00	7,373.61	7,254.88	119.54	23.67	-87.31	-5,867.00	4,059.17	2,128.56	1,985.78	142.79	14.907	
14,800.00	7,407.00	7,481.75	7,294.27	121.23	24.36	-88.39	-5,966.86	4,070.94	2,139.73	1,994.63	145.10	14.747	
14,900.00	7,407.00	7,622.14	7,314.79	122.92	25.40	-88.95	-6,104.77	4,084.79	2,150.44	2,002.89	147.55	14.574	
15,000.00	7,407.00	7,700.00	7,315.51	124.61	26.03	-88.97	-6,182.33	4,091.51	2,160.05	2,010.01	150.04	14.397	
15,100.00	7,407.00	7,775.57	7,316.75	126.31	26.70	-89.01	-6,257.53	4,098.87	2,170.74	2,018.17	152.56	14.228	
15,200.00	7,407.00	7,835.46	7,317.87	128.00	27.28	-89.04	-6,317.00	4,105.87	2,183.22	2,028.18	155.04	14.081	
15,300.00	7,407.00	7,922.00	7,319.30	129.70	28.17	-89.09	-6,402.85	4,116.69	2,196.64	2,038.94	157.70	13.930	
15,400.00	7,407.00	8,001.85	7,320.98	131.40	29.05	-89.13	-6,481.96	4,127.39	2,210.91	2,050.56	160.35	13.788	
15,500.00	7,407.00	8,097.21	7,323.47	133.11	30.16	-89.21	-6,576.36	4,140.65	2,225.71	2,062.52	163.19	13.639	
15,600.00	7,407.00	8,221.29	7,325.06	134.81	31.69	-89.25	-6,699.36	4,156.82	2,239.56	2,073.21	166.35	13.463	
15,700.00	7,407.00	8,303.00	7,324.52	136.52	32.74	-89.24	-6,780.36	4,167.55	2,253.63	2,084.44	169.18	13.321	
15,800.00	7,407.00	8,382.92	7,323.97	138.23	33.81	-89.23	-6,859.51	4,178.58	2,268.39	2,096.36	172.02	13.187	
15,900.00	7,407.00	8,479.92	7,324.32	139.94	35.15	-89.25	-6,955.49	4,192.59	2,283.75	2,108.66	175.08	13.044	
16,000.00	7,407.00	8,566.51	7,324.29	141.65	36.38	-89.25	-7,041.13	4,205.40	2,299.45	2,121.39	178.06	12.914	
16,100.00	7,407.00	8,675.87	7,323.95	143.36	37.97	-89.25	-7,149.27	4,221.65	2,315.24	2,133.88	181.36	12.766	
16,200.00	7,407.00	8,843.45	7,324.82	145.08	40.48	-89.28	-7,315.48	4,242.97	2,328.65	2,143.24	185.40	12.560	
16,300.00	7,407.00	8,938.00	7,325.10	146.80	41.92	-89.29	-7,409.38	4,254.06	2,341.29	2,152.70	188.59	12.415	
16,400.00	7,407.00	9,037.92	7,325.13	148.52	43.47	-89.29	-7,508.59	4,265.89	2,354.05	2,162.18	191.87	12.269	
16,500.00	7,407.00	9,131.22	7,325.08	150.24	44.94	-89.29	-7,601.24	4,276.92	2,366.81	2,171.72	195.09	12.132	
16,600.00	7,407.00	9,240.96	7,326.43	151.96	46.69	-89.33	-7,710.20	4,289.91	2,379.55	2,181.02	198.54	11.985	
16,700.00	7,407.00	9,335.93	7,327.59	153.68	48.22	-89.36	-7,804.51	4,301.01	2,392.15	2,190.34	201.81	11.853	

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - EXIST HZ CRITTER CREEK 29-2H - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft	
Survey Program: 1475-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)	
16,800.00	7,407.00	9,433.00	7,326.15	155.40	49.79	-89.33	-7,900.91	4,312.31	2,404.74	2,199.60	205.14	11.723		
16,900.00	7,407.00	9,545.34	7,323.60	157.13	51.64	-89.27	-8,012.48	4,325.15	2,417.11	2,208.43	208.68	11.583		
17,000.00	7,407.00	9,632.00	7,323.17	158.86	53.07	-89.27	-8,098.57	4,335.08	2,429.50	2,217.62	211.89	11.466		
17,100.00	7,407.00	9,726.02	7,323.43	160.59	54.64	-89.28	-8,191.90	4,346.42	2,442.48	2,227.27	215.20	11.350		
17,200.00	7,407.00	9,791.09	7,324.01	162.31	55.73	-89.29	-8,256.46	4,354.52	2,455.93	2,237.84	218.09	11.261		
17,300.00	7,407.00	9,881.25	7,325.47	164.04	57.25	-89.33	-8,345.76	4,366.82	2,470.47	2,249.12	221.35	11.161		
17,400.00	7,407.00	9,972.14	7,325.57	165.78	58.80	-89.34	-8,435.76	4,379.52	2,485.36	2,260.72	224.64	11.064		
17,500.00	7,407.00	10,048.94	7,325.36	167.51	60.11	-89.34	-8,511.76	4,390.53	2,500.66	2,272.97	227.69	10.983		
17,600.00	7,407.00	10,170.00	7,323.71	169.24	62.19	-89.30	-8,631.53	4,408.08	2,516.09	2,284.58	231.51	10.868		
17,700.00	7,407.00	10,280.66	7,322.54	170.98	64.10	-89.28	-8,741.11	4,423.40	2,530.87	2,295.72	235.15	10.763		
17,800.00	7,407.00	10,439.56	7,322.13	172.71	66.85	-89.28	-8,898.70	4,443.70	2,544.79	2,305.24	239.55	10.623		
17,900.00	7,407.00	10,517.00	7,324.32	174.45	68.19	-89.33	-8,975.60	4,452.52	2,557.14	2,314.47	242.67	10.537		
18,000.00	7,407.00	10,612.00	7,328.16	176.19	69.84	-89.42	-9,069.83	4,463.94	2,570.06	2,324.00	246.07	10.445		
18,100.00	7,407.00	10,690.40	7,329.99	177.92	71.21	-89.46	-9,147.55	4,473.98	2,583.75	2,334.56	249.19	10.368		
18,200.00	7,407.00	10,769.00	7,328.24	179.66	72.59	-89.43	-9,225.45	4,484.32	2,597.90	2,345.59	252.32	10.296		
18,300.00	7,407.00	10,855.68	7,326.09	181.40	74.12	-89.38	-9,311.23	4,496.57	2,612.98	2,357.40	255.58	10.224		
18,400.00	7,407.00	10,932.23	7,325.21	183.14	75.47	-89.36	-9,386.90	4,508.14	2,628.95	2,370.30	258.65	10.164		
18,500.00	7,407.00	11,017.00	7,323.79	184.88	76.97	-89.34	-9,470.67	4,520.98	2,645.06	2,383.20	261.87	10.101 SF		
18,563.60	7,407.00	11,017.00	7,323.79	185.99	76.97	-89.34	-9,470.67	4,520.98	2,656.36	2,393.60	262.76	10.110		
18,600.00	7,407.00	11,017.00	7,323.79	186.63	76.97	-89.34	-9,470.67	4,520.98	2,663.48	2,400.28	263.20	10.119		
18,663.58	7,407.00	11,017.00	7,323.79	187.73	76.97	-89.34	-9,470.67	4,520.98	2,677.08	2,413.20	263.87	10.145		

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 222-3422H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 150-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		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)			
0.00	0.00	0.00	0.00	0.00	0.00	-26.44	150.15	-74.68	167.78				
100.00	100.00	93.72	93.72	0.14	0.15	-26.45	150.47	-74.85	168.06	167.77	0.30	563.852 ES	
200.00	200.00	190.97	190.96	0.50	0.39	-26.49	151.57	-75.55	169.40	168.51	0.90	188.610	
300.00	300.00	286.57	286.48	0.86	0.74	-26.85	154.26	-78.09	173.11	171.50	1.61	107.813	
400.00	399.98	383.19	382.88	1.20	1.10	152.39	158.05	-83.30	180.61	178.30	2.31	78.352	
450.00	449.93	431.84	431.36	1.38	1.28	151.91	159.96	-86.96	186.03	183.37	2.66	69.998	
500.00	499.86	480.66	479.93	1.55	1.47	151.29	161.65	-91.58	192.09	189.07	3.01	63.777	
600.00	599.73	576.81	575.26	1.90	1.86	149.25	164.03	-103.85	205.12	201.39	3.72	55.113	
700.00	699.59	672.73	669.95	2.25	2.26	146.81	166.40	-118.95	219.99	215.55	4.45	49.484	
800.00	799.45	769.89	765.70	2.62	2.69	144.50	169.05	-135.21	236.01	230.83	5.19	45.518	
873.20	872.55	840.69	835.23	2.88	3.02	142.61	170.22	-148.53	248.27	242.54	5.73	43.305	
900.00	899.32	866.47	860.50	2.98	3.14	141.95	170.57	-153.61	252.81	246.88	5.93	42.613	
1,000.00	999.28	963.89	955.87	3.34	3.61	139.24	171.64	-173.48	268.68	262.00	6.68	40.207	
1,023.20	1,022.48	986.63	978.12	3.42	3.72	-41.43	171.85	-178.15	272.09	265.24	6.85	39.714	
1,100.00	1,099.28	1,061.50	1,051.37	3.68	4.09	-43.71	172.53	-193.63	283.46	276.05	7.42	38.228	
1,200.00	1,199.28	1,153.50	1,141.22	4.02	4.55	-46.33	173.67	-213.35	299.69	291.58	8.12	36.922	
1,300.00	1,299.28	1,241.99	1,227.20	4.36	5.02	-48.64	176.10	-234.10	319.03	310.24	8.79	36.293	
1,400.00	1,399.28	1,330.75	1,312.99	4.70	5.51	-50.64	180.37	-256.47	341.53	332.06	9.46	36.096	
1,500.00	1,499.28	1,422.17	1,400.83	5.05	6.05	-52.59	185.21	-281.33	366.33	356.18	10.15	36.077 SF	
1,600.00	1,599.28	1,516.44	1,491.03	5.40	6.62	-54.56	189.53	-308.42	392.40	381.53	10.87	36.100	
1,700.00	1,699.28	1,609.57	1,579.99	5.75	7.20	-56.39	193.16	-335.70	418.99	407.41	11.58	36.188	
1,800.00	1,799.28	1,697.64	1,663.90	6.10	7.75	-57.83	197.75	-362.03	447.14	434.90	12.24	36.527	
1,900.00	1,899.28	1,784.97	1,746.77	6.45	8.32	-58.95	204.07	-388.87	477.25	464.35	12.90	37.000	
2,000.00	1,999.28	1,870.15	1,827.16	6.80	8.91	-59.99	210.49	-416.29	508.98	495.45	13.54	37.596	
2,100.00	2,099.28	1,953.89	1,905.34	7.16	9.51	-61.12	215.92	-445.78	543.04	528.87	14.17	38.333	
2,200.00	2,199.28	2,049.72	1,994.51	7.51	10.22	-62.41	221.09	-480.50	577.78	562.87	14.92	38.726	
2,300.00	2,299.28	2,147.03	2,085.18	7.86	10.94	-63.68	225.05	-515.60	612.06	596.37	15.69	39.016	
2,400.00	2,399.28	2,244.36	2,175.87	8.22	11.66	-64.90	228.00	-550.81	646.26	629.81	16.45	39.277	
2,500.00	2,499.28	2,347.98	2,273.01	8.57	12.42	-66.03	230.91	-586.77	679.21	661.94	17.28	39.316	
2,600.00	2,599.28	2,452.54	2,371.30	8.93	13.16	-67.09	233.08	-622.35	711.52	693.42	18.10	39.315	
2,700.00	2,699.26	2,558.97	2,472.08	9.28	13.89	-129.16	234.42	-656.55	742.91	723.99	18.92	39.264	
2,800.00	2,799.12	2,659.50	2,567.77	9.63	14.56	-129.63	237.41	-687.18	775.66	755.98	19.68	39.409	
2,900.00	2,898.74	2,751.53	2,655.57	9.98	15.16	-130.09	240.26	-714.66	810.19	789.83	20.37	39.780	
3,000.00	2,997.98	2,844.27	2,744.00	10.34	15.77	-130.58	243.74	-742.36	847.29	826.23	21.05	40.244	
3,100.00	3,096.75	2,932.05	2,827.77	10.70	16.34	-131.03	247.58	-768.29	886.64	864.94	21.70	40.857	
3,200.00	3,194.91	3,014.18	2,906.05	11.07	16.88	-131.36	252.53	-792.66	928.95	906.64	22.31	41.642	
3,300.00	3,292.34	3,092.18	2,980.21	11.45	17.40	-131.58	258.51	-816.08	974.38	951.49	22.89	42.567	
3,400.00	3,388.93	3,165.02	3,049.17	11.85	17.90	-131.79	263.54	-838.97	1,023.20	999.76	23.44	43.650	
3,500.00	3,484.55	3,241.36	3,121.21	12.27	18.44	-132.12	267.77	-863.88	1,075.19	1,051.16	24.04	44.732	
3,600.00	3,579.10	3,333.34	3,207.99	12.73	19.08	-132.81	271.08	-894.19	1,129.58	1,104.81	24.78	45.591	
3,700.00	3,672.45	3,423.87	3,293.68	13.21	19.71	-133.55	272.64	-923.33	1,185.57	1,160.06	25.52	46.466	
3,800.00	3,764.50	3,513.60	3,378.92	13.74	20.31	-134.23	274.43	-951.30	1,243.36	1,217.10	26.26	47.348	
3,900.00	3,855.12	3,578.52	3,440.69	14.31	20.75	-134.37	276.32	-971.20	1,303.40	1,276.57	26.83	48.577	
4,000.00	3,944.22	3,632.74	3,492.03	14.93	21.12	-134.24	278.24	-988.49	1,366.90	1,339.57	27.34	50.004	
4,071.71	4,007.11	3,685.77	3,542.16	15.41	21.49	-134.40	280.05	-1,005.69	1,414.21	1,386.38	27.82	50.826	
4,100.00	4,031.75	3,706.40	3,561.68	15.60	21.64	-134.81	280.65	-1,012.37	1,433.10	1,405.08	28.02	51.150	
4,200.00	4,118.84	3,784.65	3,635.76	16.32	22.18	-136.32	282.52	-1,037.50	1,500.02	1,471.28	28.74	52.191	
4,300.00	4,205.93	3,851.66	3,699.30	17.06	22.64	-137.52	283.88	-1,058.73	1,567.08	1,537.70	29.38	53.332	
4,400.00	4,293.02	3,914.00	3,758.27	17.84	23.07	-138.56	285.05	-1,078.93	1,635.06	1,605.06	29.99	54.511	
4,500.00	4,380.11	3,976.05	3,816.88	18.63	23.51	-139.54	286.16	-1,099.27	1,703.69	1,673.08	30.61	55.658	
4,600.00	4,467.21	4,043.24	3,880.36	19.45	23.98	-140.53	287.28	-1,121.25	1,772.63	1,741.36	31.27	56.687	
4,700.00	4,554.30	4,108.90	3,942.35	20.28	24.44	-141.44	288.09	-1,142.88	1,842.01	1,810.09	31.92	57.704	

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 222-3422H - Wellbore #1 - Wellbore #1												Offset Site Error: 0.00 usft	
Survey Program: 150-OWSG (Rev2) MWD		Offset		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
4,800.00	4,641.39	4,199.23	4,027.80	21.13	25.07	-142.62	288.95	-1,172.15	1,911.29	1,878.52	32.77	58.317	
4,900.00	4,728.48	4,284.39	4,108.62	21.99	25.65	-143.63	289.94	-1,198.95	1,980.14	1,946.56	33.58	58.961	
5,000.00	4,815.58	4,353.61	4,174.41	22.87	26.12	-144.39	291.06	-1,220.47	2,048.91	2,014.64	34.27	59.789	
5,100.00	4,902.67	4,452.12	4,268.14	23.75	26.77	-145.39	292.70	-1,250.71	2,117.67	2,082.49	35.18	60.188	
5,200.00	4,989.76	4,534.76	4,347.15	24.65	27.31	-146.19	293.28	-1,274.95	2,185.53	2,149.55	35.97	60.758	
5,300.00	5,076.85	4,633.21	4,441.40	25.55	27.93	-147.09	293.76	-1,303.40	2,253.34	2,216.47	36.87	61.109	
5,400.00	5,163.94	4,717.62	4,522.48	26.46	28.46	-147.75	295.96	-1,326.76	2,320.20	2,282.53	37.68	61.581	
5,500.00	5,251.04	4,781.23	4,583.49	27.38	28.85	-148.18	298.87	-1,344.52	2,387.31	2,348.98	38.33	62.282	
5,600.00	5,338.13	4,839.08	4,638.82	28.31	29.22	-148.53	302.38	-1,361.02	2,454.89	2,415.94	38.95	63.034	
5,700.00	5,425.22	4,886.08	4,683.64	29.24	29.53	-148.78	305.68	-1,374.77	2,523.08	2,483.60	39.48	63.913	
5,800.00	5,512.31	4,927.84	4,723.33	30.18	29.81	-149.00	308.56	-1,387.46	2,592.14	2,552.18	39.96	64.861	
5,900.00	5,599.40	5,005.80	4,797.27	31.12	30.34	-149.41	313.37	-1,411.69	2,661.86	2,621.11	40.75	65.326	
6,000.00	5,686.50	5,088.76	4,876.31	32.06	30.89	-149.87	316.99	-1,436.62	2,730.92	2,689.35	41.57	65.699	
6,100.00	5,773.59	5,151.70	4,936.24	33.01	31.31	-150.19	319.94	-1,455.64	2,800.18	2,757.96	42.22	66.317	
6,200.00	5,860.68	5,217.12	4,998.49	33.96	31.75	-150.52	322.82	-1,475.54	2,869.66	2,826.76	42.90	66.889	
6,300.00	5,947.77	5,321.12	5,097.64	34.92	32.43	-151.04	326.29	-1,506.72	2,939.00	2,895.11	43.89	66.966	
6,400.00	6,034.86	5,403.25	5,176.23	35.88	32.96	-151.46	328.09	-1,530.52	3,007.70	2,963.01	44.69	67.303	
6,500.00	6,121.96	5,497.94	5,266.98	36.84	33.55	-151.92	329.81	-1,557.49	3,076.14	3,030.56	45.59	67.481	
6,600.00	6,209.05	5,561.12	5,327.58	37.81	33.95	-152.20	331.49	-1,575.28	3,144.34	3,098.10	46.24	68.000	
6,700.00	6,296.14	5,613.00	5,377.22	38.77	34.28	-152.41	333.34	-1,590.23	3,212.98	3,166.18	46.81	68.644	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design:		NE NE SEC. 34 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 501-3403H - Wellbore #1 - Wellbore #1											Offset Site Error:		0.00 usft		
Survey Program:		212-OWSG (Rev2) MWD						Rule Assigned:						Offset Well Error:		0.00 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)							
0.00	0.00	0.00	0.00	0.00	0.00	89.11	0.40	25.84	26.77								
100.00	100.00	93.07	93.07	0.14	0.16	88.99	0.45	25.71	25.71	25.41	0.30	85.665					
200.00	200.00	193.15	193.15	0.50	0.33	88.57	0.63	25.27	25.28	24.45	0.83	30.568					
300.00	300.00	293.16	293.16	0.86	0.65	88.40	0.69	24.63	24.64	23.14	1.51	16.363					
378.63	378.62	371.67	371.67	1.13	0.92	-94.37	0.78	24.26	24.33	22.28	2.05	11.862 CC					
400.00	399.98	392.99	392.99	1.20	1.00	-96.34	0.95	24.22	24.37	22.17	2.20	11.080					
450.00	449.93	443.02	443.01	1.38	1.17	-102.40	1.37	24.08	24.66	22.11	2.54	9.691					
500.00	499.86	493.06	493.05	1.55	1.35	-108.84	1.56	23.74	25.09	22.20	2.89	8.670					
600.00	599.73	592.93	592.92	1.90	1.71	-120.42	1.67	22.88	26.54	22.94	3.60	7.368					
700.00	699.59	692.84	692.83	2.25	2.07	-130.52	1.72	21.90	28.82	24.50	4.31	6.681					
800.00	799.45	792.81	792.79	2.62	2.42	-138.81	1.50	20.77	31.55	26.52	5.02	6.278					
873.20	872.55	865.97	865.94	2.88	2.69	-143.95	1.20	19.84	33.73	28.18	5.55	6.082					
900.00	899.32	892.71	892.68	2.98	2.78	-145.52	1.07	19.51	34.48	28.75	5.74	6.012					
1,000.00	999.28	992.65	992.61	3.34	3.14	-148.56	0.58	18.64	35.73	29.29	6.44	5.545					
1,023.20	1,022.48	1,015.87	1,015.83	3.42	3.22	31.20	0.44	18.44	35.59	28.99	6.61	5.387					
1,100.00	1,099.28	1,092.72	1,092.68	3.68	3.49	30.53	-0.06	17.66	34.76	27.62	7.14	4.867					
1,200.00	1,199.28	1,192.83	1,192.77	4.02	3.85	29.31	-0.78	16.40	33.52	25.68	7.84	4.275					
1,300.00	1,299.28	1,292.88	1,292.80	4.36	4.21	27.71	-1.77	14.83	31.89	23.35	8.54	3.733					
1,400.00	1,399.28	1,392.39	1,392.31	4.70	4.56	26.22	-2.40	13.59	30.76	21.52	9.24	3.330					
1,403.48	1,402.76	1,395.85	1,395.76	4.72	4.57	26.20	-2.40	13.58	30.76	21.50	9.26	3.321					
1,500.00	1,499.28	1,492.20	1,492.12	5.05	4.90	26.32	-1.94	13.88	31.31	21.38	9.92	3.155					
1,600.00	1,599.28	1,592.41	1,592.32	5.40	5.25	25.33	-1.56	13.46	31.47	20.84	10.62	2.962					
1,700.00	1,699.28	1,692.45	1,692.36	5.75	5.60	24.00	-1.44	12.72	31.26	19.93	11.33	2.758					
1,800.00	1,799.28	1,792.56	1,792.46	6.10	5.96	22.37	-1.37	11.78	30.96	18.91	12.04	2.571					
1,900.00	1,899.28	1,892.69	1,892.58	6.45	6.32	21.45	-2.02	10.99	30.06	17.31	12.75	2.358					
2,000.00	1,999.28	1,992.72	1,992.61	6.80	6.67	20.13	-2.76	9.98	29.02	15.56	13.46	2.156					
2,100.00	2,099.28	2,092.69	2,092.57	7.16	7.03	18.44	-3.52	8.83	27.91	13.74	14.17	1.970					
2,200.00	2,199.28	2,192.46	2,192.34	7.51	7.38	17.28	-3.98	8.09	27.25	12.37	14.88	1.832					
2,300.00	2,299.28	2,292.48	2,292.36	7.86	7.74	16.63	-4.12	7.73	27.01	11.43	15.58	1.733					
2,400.00	2,399.28	2,392.41	2,392.29	8.22	8.08	16.24	-4.25	7.50	26.83	10.54	16.29	1.647					
2,402.37	2,401.65	2,394.78	2,394.65	8.23	8.09	16.25	-4.25	7.51	26.83	10.52	16.30	1.645					
2,500.00	2,499.28	2,492.25	2,492.13	8.57	8.42	16.44	-3.96	7.68	27.15	10.17	16.98	1.599 ES					
2,600.00	2,599.28	2,592.01	2,591.88	8.93	8.77	15.11	-3.01	7.29	27.96	10.28	17.68	1.582 SF					
2,700.00	2,699.26	2,691.38	2,691.21	9.28	9.11	-51.53	-0.34	6.57	29.28	10.92	18.37	1.594					
2,800.00	2,799.12	2,790.71	2,790.42	9.63	9.45	-61.68	4.35	5.95	31.07	12.02	19.05	1.631					
2,900.00	2,898.74	2,889.79	2,889.30	9.98	9.80	-75.89	10.52	5.10	34.24	14.51	19.73	1.736					
3,000.00	2,997.98	2,988.26	2,987.44	10.34	10.14	-91.09	18.50	3.92	40.92	20.52	20.40	2.006					
3,100.00	3,096.75	3,086.80	3,085.50	10.70	10.48	-104.08	28.15	2.65	51.78	30.68	21.11	2.453					
3,200.00	3,194.91	3,184.84	3,183.04	11.07	10.83	-115.01	37.91	1.06	66.18	44.36	21.82	3.033					
3,300.00	3,292.34	3,281.68	3,279.39	11.45	11.18	-124.19	47.28	-1.49	84.83	62.31	22.52	3.766					
3,400.00	3,388.93	3,377.58	3,374.78	11.85	11.53	-131.34	56.63	-4.77	107.92	84.70	23.23	4.647					
3,500.00	3,484.55	3,472.54	3,469.23	12.27	11.87	-136.96	65.74	-8.61	135.19	111.26	23.93	5.650					
3,600.00	3,579.10	3,566.59	3,562.82	12.73	12.22	-141.62	73.99	-12.72	166.19	141.56	24.63	6.748					
3,700.00	3,672.45	3,658.97	3,654.76	13.21	12.55	-145.30	81.89	-17.01	200.98	175.66	25.32	7.937					
3,800.00	3,764.50	3,750.04	3,745.37	13.74	12.89	-148.20	89.80	-21.47	239.42	213.41	26.01	9.204					
3,900.00	3,855.12	3,840.52	3,835.35	14.31	13.23	-150.43	98.26	-25.99	281.24	254.53	26.71	10.531					
4,000.00	3,944.22	3,931.08	3,925.42	14.93	13.56	-152.32	106.66	-30.16	325.88	298.47	27.41	11.890					
4,071.71	4,007.11	3,995.60	3,989.60	15.41	13.80	-153.47	112.75	-32.76	359.45	331.53	27.91	12.877					
4,100.00	4,031.75	4,020.66	4,014.54	15.60	13.90	-154.01	115.11	-33.71	372.95	344.84	28.11	13.267					
4,200.00	4,118.84	4,108.60	4,102.05	16.32	14.23	-155.69	123.09	-36.81	420.68	391.88	28.80	14.608					
4,300.00	4,205.93	4,196.76	4,189.86	17.06	14.55	-157.14	130.29	-39.77	468.61	439.12	29.49	15.891					
4,400.00	4,293.02	4,286.95	4,279.75	17.84	14.89	-158.40	137.29	-42.31	516.31	486.11	30.20	17.098					

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 501-3403H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 212-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
4,500.00	4,380.11	4,379.09	4,371.60	18.63	15.23	-159.50	144.26	-44.32	563.65	532.73	30.92	18.228	
4,600.00	4,467.21	4,469.49	4,461.74	19.45	15.56	-160.42	151.11	-45.46	610.31	578.67	31.64	19.291	
4,700.00	4,554.30	4,556.01	4,548.00	20.28	15.88	-161.17	157.69	-46.70	657.22	624.89	32.33	20.328	
4,800.00	4,641.39	4,645.16	4,636.83	21.13	16.21	-161.79	165.01	-48.12	704.24	671.19	33.05	21.308	
4,900.00	4,728.48	4,735.52	4,726.81	21.99	16.55	-162.27	173.24	-49.47	751.04	717.26	33.79	22.229	
5,000.00	4,815.58	4,823.33	4,814.23	22.87	16.87	-162.68	181.32	-50.65	797.73	763.22	34.51	23.116	
5,100.00	4,902.67	4,909.26	4,899.78	23.75	17.20	-163.03	189.32	-52.05	844.68	809.46	35.22	23.980	
5,200.00	4,989.76	4,995.67	4,985.85	24.65	17.52	-163.38	196.81	-53.51	891.82	855.88	35.94	24.813	
5,300.00	5,076.85	5,081.21	5,071.11	25.55	17.84	-163.73	203.63	-55.00	939.20	902.55	36.65	25.624	
5,400.00	5,163.94	5,164.68	5,154.42	26.46	18.14	-164.15	208.68	-56.30	986.88	949.53	37.34	26.428	
5,500.00	5,251.04	5,244.70	5,234.36	27.38	18.43	-164.61	211.91	-57.67	1,035.17	997.17	38.00	27.244	
5,600.00	5,338.13	5,327.15	5,316.75	28.31	18.73	-165.10	214.29	-59.30	1,084.00	1,045.34	38.67	28.036	
5,700.00	5,425.22	5,410.67	5,400.23	29.24	19.03	-165.57	216.26	-61.12	1,133.20	1,093.86	39.34	28.804	
5,800.00	5,512.31	5,496.35	5,485.87	30.18	19.34	-166.04	217.92	-63.04	1,182.62	1,142.58	40.03	29.540	
5,900.00	5,599.40	5,586.92	5,576.42	31.12	19.66	-166.52	219.14	-64.79	1,231.98	1,191.22	40.76	30.224	
6,000.00	5,686.50	5,672.68	5,662.16	32.06	19.96	-166.97	219.94	-66.23	1,281.28	1,239.83	41.45	30.910	
6,100.00	5,773.59	5,767.51	5,756.99	33.01	20.29	-167.44	220.49	-67.44	1,330.41	1,288.20	42.21	31.519	
6,200.00	5,860.68	5,852.80	5,842.27	33.96	20.59	-167.86	220.59	-68.17	1,379.37	1,336.48	42.89	32.157	
6,300.00	5,947.77	5,937.04	5,926.51	34.92	20.89	-168.25	220.71	-69.02	1,428.50	1,384.93	43.58	32.783	
6,400.00	6,034.86	6,032.90	6,022.36	35.88	21.22	-168.64	221.16	-69.89	1,477.52	1,433.17	44.34	33.319	
6,500.00	6,121.96	6,123.67	6,113.13	36.84	21.54	-168.99	221.65	-70.29	1,526.16	1,481.08	45.08	33.855	
6,600.00	6,209.05	6,214.69	6,204.15	37.81	21.86	-169.33	222.01	-70.41	1,574.63	1,528.82	45.81	34.370	
6,700.00	6,296.14	6,308.28	6,297.74	38.77	22.18	-169.66	222.46	-70.22	1,622.83	1,576.27	46.56	34.852	
6,800.00	6,383.23	6,391.00	6,380.46	39.74	22.46	-169.94	222.74	-69.93	1,671.00	1,623.77	47.23	35.378	
6,900.00	6,470.32	6,472.19	6,461.65	40.71	22.74	-170.20	222.87	-69.88	1,719.47	1,671.58	47.90	35.900	
7,000.00	6,557.42	6,553.01	6,542.46	41.69	23.02	-170.45	222.96	-70.15	1,768.33	1,719.77	48.56	36.414	
7,100.00	6,644.51	6,637.49	6,626.94	42.66	23.31	-170.70	222.74	-70.55	1,817.43	1,768.18	49.25	36.902	
7,200.00	6,731.60	6,725.21	6,714.66	43.64	23.61	-170.95	222.34	-70.93	1,866.60	1,816.64	49.96	37.360	
7,244.75	6,770.57	6,762.76	6,752.22	44.08	23.74	-171.06	222.22	-71.10	1,888.59	1,838.32	50.27	37.570	
7,250.00	6,775.15	6,766.81	6,756.26	44.13	23.75	-172.19	222.21	-71.13	1,891.17	1,840.87	50.30	37.596	
7,300.00	6,819.19	6,813.69	6,803.14	44.60	23.91	176.49	221.72	-71.24	1,915.07	1,864.40	50.67	37.792	
7,350.00	6,863.79	6,864.34	6,853.75	45.05	24.08	164.54	219.84	-70.70	1,937.54	1,886.48	51.06	37.946	
7,400.00	6,908.61	6,893.78	6,883.11	45.47	24.17	152.39	217.86	-70.11	1,958.63	1,907.35	51.28	38.192	
7,450.00	6,953.31	6,922.18	6,911.36	45.84	24.26	140.69	214.95	-69.44	1,978.51	1,927.02	51.49	38.426	
7,500.00	6,997.56	6,956.00	6,944.82	46.18	24.36	130.08	210.21	-68.49	1,997.06	1,945.34	51.72	38.613	
7,550.00	7,041.01	6,956.00	6,944.82	46.47	24.36	120.59	210.21	-68.49	2,014.35	1,962.65	51.70	38.960	
7,600.00	7,083.34	6,998.52	6,986.62	46.73	24.49	112.90	202.48	-67.34	2,029.88	1,977.91	51.97	39.056	
7,650.00	7,124.22	7,021.74	7,009.29	46.94	24.55	106.40	197.50	-66.81	2,044.10	1,992.00	52.10	39.232	
7,700.00	7,163.34	7,046.00	7,032.85	47.11	24.62	101.09	191.73	-66.34	2,056.78	2,004.54	52.24	39.374	
7,750.00	7,200.41	7,079.58	7,065.27	47.24	24.72	96.92	183.01	-65.69	2,067.73	2,015.30	52.43	39.435	
7,800.00	7,235.13	7,114.73	7,099.00	47.34	24.82	93.66	173.15	-64.90	2,076.82	2,024.17	52.65	39.448	
7,850.00	7,267.26	7,146.47	7,129.26	47.40	24.90	91.10	163.63	-64.12	2,084.04	2,031.20	52.84	39.438	
7,900.00	7,296.54	7,173.20	7,154.66	47.44	24.98	89.10	155.31	-63.54	2,089.53	2,036.51	53.01	39.415	
7,950.00	7,322.74	7,199.79	7,179.85	47.44	25.05	87.65	146.80	-63.07	2,093.34	2,040.14	53.20	39.350	
8,000.00	7,345.68	7,226.45	7,205.10	47.42	25.13	86.69	138.26	-62.71	2,095.50	2,042.10	53.40	39.241	
8,050.00	7,365.18	7,240.00	7,217.94	47.38	25.17	85.90	133.93	-62.58	2,096.13	2,042.60	53.53	39.158	
8,100.00	7,381.08	7,259.35	7,236.15	47.31	25.22	85.59	127.40	-62.47	2,095.35	2,041.63	53.72	39.005	
8,150.00	7,393.27	7,272.13	7,248.03	47.23	25.26	85.47	122.69	-62.43	2,093.30	2,039.41	53.89	38.847	
8,200.00	7,401.65	7,285.00	7,259.87	47.14	25.29	85.67	117.63	-62.44	2,090.00	2,035.92	54.07	38.650	
8,250.00	7,406.16	7,285.00	7,259.87	47.03	25.29	85.85	117.63	-62.44	2,085.57	2,031.37	54.20	38.479	
8,282.77	7,407.00	7,285.00	7,259.87	46.96	25.29	86.12	117.63	-62.44	2,082.12	2,027.82	54.30	38.347	
8,300.00	7,407.00	7,309.35	7,281.81	46.92	25.36	86.72	107.10	-62.53	2,080.00	2,025.49	54.51	38.157	

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 501-3403H - Wellbore #1 - Wellbore #1											Offset Site Error:	0.00 usft
Survey Program: 212-OWSG (Rev2) MWD											Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		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
8,400.00	7,407.00	7,338.21	7,306.94	46.71	25.44	87.42	92.92	-62.71	2,071.18	2,016.14	55.04	37.631
8,500.00	7,407.00	7,374.00	7,336.59	46.54	25.53	88.24	72.89	-63.05	2,066.33	2,010.69	55.64	37.139
8,600.00	7,407.00	7,439.45	7,387.20	46.40	25.71	89.64	31.44	-63.76	2,064.83	2,008.43	56.41	36.607
8,603.86	7,407.00	7,442.18	7,389.23	46.39	25.72	89.70	29.61	-63.78	2,064.83	2,008.39	56.44	36.586
8,700.00	7,407.00	7,502.51	7,431.17	46.30	25.89	90.86	-13.66	-64.53	2,066.05	2,008.89	57.16	36.144
8,800.00	7,407.00	7,634.02	7,496.29	46.24	26.32	92.67	-127.36	-67.09	2,069.25	2,011.08	58.17	35.570
8,900.00	7,407.00	7,741.20	7,532.73	46.22	26.75	93.68	-228.14	-67.72	2,070.95	2,011.76	59.19	34.988
9,000.00	7,407.00	7,821.00	7,555.05	46.25	27.14	94.29	-304.73	-68.87	2,073.50	2,013.32	60.18	34.453
9,100.00	7,407.00	8,023.91	7,589.07	46.32	28.36	95.23	-504.37	-69.89	2,074.92	2,012.66	62.25	33.330
9,200.00	7,407.00	8,116.58	7,591.17	46.46	29.00	95.29	-596.99	-69.02	2,073.26	2,009.61	63.65	32.572
9,300.00	7,407.00	8,237.23	7,591.15	46.65	29.97	95.30	-717.64	-67.92	2,071.45	2,005.95	65.50	31.625
9,400.00	7,407.00	8,367.42	7,592.56	46.91	31.14	95.35	-847.78	-64.62	2,068.05	2,000.37	67.68	30.554
9,500.00	7,407.00	8,421.90	7,593.39	47.25	31.67	95.37	-902.23	-63.27	2,065.00	1,995.97	69.03	29.914
9,561.73	7,407.00	8,448.74	7,593.51	47.49	31.93	95.38	-929.08	-63.27	2,064.45	1,994.66	69.79	29.581
9,600.00	7,407.00	8,475.00	7,593.43	47.66	32.19	95.38	-955.33	-63.73	2,064.69	1,994.31	70.38	29.335
9,700.00	7,407.00	8,553.79	7,592.70	48.16	33.02	95.35	-1,034.09	-65.79	2,066.17	1,994.01	72.16	28.633
9,800.00	7,407.00	8,666.48	7,591.62	48.75	34.26	95.32	-1,146.74	-68.35	2,067.40	1,992.85	74.56	27.730
9,900.00	7,407.00	8,767.93	7,590.37	49.42	35.44	95.28	-1,248.16	-70.49	2,068.47	1,991.58	76.89	26.903
10,000.00	7,407.00	8,896.85	7,590.00	50.18	37.01	95.27	-1,377.07	-71.92	2,068.61	1,988.80	79.81	25.919
10,100.00	7,407.00	9,006.76	7,590.42	51.03	38.41	95.28	-1,486.98	-72.00	2,067.79	1,985.28	82.51	25.062
10,200.00	7,407.00	9,102.65	7,590.78	51.94	39.67	95.30	-1,582.87	-71.99	2,066.89	1,981.87	85.02	24.311
10,300.00	7,407.00	9,218.21	7,590.67	52.93	41.24	95.30	-1,698.43	-71.88	2,065.87	1,977.88	87.99	23.477
10,400.00	7,407.00	9,334.78	7,591.69	53.99	42.86	95.33	-1,814.99	-70.25	2,063.58	1,972.51	91.07	22.658
10,500.00	7,407.00	9,423.68	7,592.44	55.09	44.12	95.36	-1,903.87	-69.12	2,061.47	1,967.84	93.64	22.016
10,600.00	7,407.00	9,508.21	7,591.75	56.25	45.34	95.34	-1,988.40	-68.72	2,060.01	1,963.88	96.14	21.428
10,700.00	7,407.00	9,619.29	7,589.97	57.46	46.97	95.29	-2,099.46	-68.83	2,059.07	1,959.82	99.26	20.745
10,800.00	7,407.00	9,711.86	7,589.04	58.71	48.35	95.27	-2,192.02	-68.20	2,057.40	1,955.38	102.01	20.168
10,900.00	7,407.00	9,803.55	7,588.05	59.99	49.73	95.25	-2,283.71	-68.31	2,056.47	1,951.69	104.78	19.626
11,000.00	7,407.00	9,893.08	7,587.92	61.30	51.09	95.24	-2,373.24	-68.56	2,055.82	1,948.29	107.53	19.119
11,100.00	7,407.00	9,997.35	7,589.56	62.65	52.69	95.29	-2,477.49	-69.12	2,055.58	1,944.92	110.66	18.576
11,200.00	7,407.00	10,122.16	7,589.89	64.02	54.63	95.30	-2,602.30	-68.86	2,054.48	1,940.17	114.31	17.973
11,300.00	7,407.00	10,213.05	7,590.67	65.42	56.06	95.33	-2,693.18	-68.32	2,053.04	1,935.85	117.18	17.520
11,400.00	7,407.00	10,312.99	7,591.57	66.84	57.64	95.36	-2,793.12	-67.81	2,051.68	1,931.38	120.30	17.055
11,500.00	7,407.00	10,394.00	7,591.13	68.27	58.93	95.35	-2,874.13	-67.87	2,050.79	1,927.83	122.96	16.678
11,543.97	7,407.00	10,430.46	7,590.64	68.91	59.51	95.33	-2,910.58	-68.16	2,050.68	1,926.52	124.16	16.517
11,600.00	7,407.00	10,473.81	7,589.92	69.73	60.21	95.31	-2,953.92	-68.76	2,050.86	1,925.26	125.60	16.328
11,700.00	7,407.00	10,571.07	7,588.52	71.20	61.77	95.27	-3,051.16	-70.55	2,051.62	1,922.93	128.70	15.942
11,800.00	7,407.00	10,716.53	7,588.61	72.69	64.12	95.28	-3,196.61	-71.53	2,051.42	1,918.37	133.05	15.418
11,900.00	7,407.00	10,823.52	7,588.21	74.19	65.87	95.27	-3,303.59	-70.40	2,049.38	1,912.93	136.45	15.019
12,000.00	7,407.00	10,896.36	7,588.30	75.71	67.06	95.28	-3,376.42	-70.13	2,048.14	1,909.15	138.99	14.736
12,027.32	7,407.00	10,914.13	7,588.36	76.13	67.35	95.28	-3,394.20	-70.25	2,048.07	1,908.44	139.62	14.668
12,100.00	7,407.00	10,968.28	7,588.61	77.24	68.24	95.28	-3,448.34	-71.07	2,048.49	1,907.00	141.49	14.478
12,200.00	7,407.00	11,087.89	7,588.72	78.78	70.21	95.29	-3,567.94	-72.58	2,048.82	1,903.55	145.26	14.104
12,300.00	7,407.00	11,195.49	7,587.96	80.33	71.99	95.26	-3,675.54	-73.36	2,048.54	1,899.80	148.74	13.773
12,400.00	7,407.00	11,287.76	7,586.64	81.89	73.53	95.23	-3,767.79	-73.99	2,048.17	1,896.36	151.82	13.491
12,407.78	7,407.00	11,294.35	7,586.53	82.01	73.64	95.23	-3,774.38	-74.06	2,048.17	1,896.13	152.04	13.471
12,500.00	7,407.00	11,381.78	7,585.32	83.46	75.09	95.19	-3,861.79	-75.17	2,048.37	1,893.42	154.95	13.220
12,600.00	7,407.00	11,484.81	7,585.61	85.04	76.82	95.20	-3,964.82	-76.28	2,048.54	1,890.20	158.34	12.938
12,700.00	7,407.00	11,591.78	7,584.76	86.63	78.61	95.17	-4,071.78	-77.29	2,048.47	1,886.63	161.84	12.657
12,757.28	7,407.00	11,643.98	7,584.37	87.54	79.49	95.16	-4,123.98	-77.71	2,048.37	1,884.75	163.61	12.520
12,800.00	7,407.00	11,680.54	7,584.24	88.22	80.10	95.16	-4,160.53	-78.11	2,048.43	1,883.56	164.86	12.425
12,900.00	7,407.00	11,771.00	7,584.35	89.82	81.62	95.16	-4,250.98	-79.45	2,048.98	1,881.05	167.93	12.201

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design:		NE NE SEC. 34 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 501-3403H - Wellbore #1 - Wellbore #1											Offset Site Error:	0.00 usft
Survey Program:		212-OWSG (Rev2) MWD						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)			
13,000.00	7,407.00	11,884.04	7,584.63	91.43	83.53	95.17	-4,364.01	-81.11	2,049.55	1,877.92	171.64	11.941		
13,100.00	7,407.00	11,992.58	7,583.82	93.05	85.37	95.15	-4,472.54	-82.04	2,049.41	1,874.19	175.23	11.696		
13,200.00	7,407.00	12,090.32	7,582.76	94.67	87.03	95.12	-4,570.27	-82.92	2,049.28	1,870.76	178.53	11.479		
13,300.00	7,407.00	12,201.91	7,582.59	96.30	88.93	95.11	-4,681.86	-83.17	2,048.53	1,866.32	182.22	11.242		
13,400.00	7,407.00	12,290.50	7,582.98	97.93	90.44	95.13	-4,770.45	-83.63	2,048.15	1,862.87	185.28	11.054		
13,500.00	7,407.00	12,388.37	7,583.33	99.57	92.11	95.14	-4,868.31	-84.34	2,047.97	1,859.37	188.60	10.859		
13,600.00	7,407.00	12,525.52	7,583.54	101.21	94.45	95.14	-5,005.46	-84.88	2,047.63	1,854.63	193.00	10.609		
13,700.00	7,407.00	12,632.00	7,584.05	102.86	96.28	95.16	-5,111.93	-83.42	2,045.37	1,848.79	196.58	10.405		
13,800.00	7,407.00	12,694.91	7,584.16	104.51	97.37	95.17	-5,174.84	-83.13	2,044.02	1,845.05	198.97	10.273		
13,819.66	7,407.00	12,707.03	7,584.21	104.83	97.57	95.17	-5,186.96	-83.21	2,043.98	1,844.55	199.43	10.249		
13,900.00	7,407.00	12,782.99	7,584.91	106.17	98.88	95.19	-5,262.90	-84.10	2,044.23	1,842.19	202.04	10.118		
14,000.00	7,407.00	12,888.63	7,586.91	107.83	100.70	95.25	-5,368.53	-84.89	2,044.21	1,838.60	205.61	9.942		
14,036.02	7,407.00	12,922.29	7,587.36	108.42	101.28	95.26	-5,402.18	-85.13	2,044.18	1,837.41	206.77	9.886		
14,100.00	7,407.00	12,972.34	7,588.07	109.49	102.14	95.28	-5,452.23	-85.71	2,044.41	1,835.86	208.55	9.803		
14,200.00	7,407.00	13,066.70	7,589.51	111.16	103.76	95.32	-5,546.56	-87.41	2,045.41	1,833.62	211.80	9.657		
14,300.00	7,407.00	13,168.02	7,590.02	112.83	105.51	95.33	-5,647.86	-89.24	2,046.32	1,831.07	215.25	9.507		
14,400.00	7,407.00	13,300.08	7,589.48	114.50	107.79	95.31	-5,779.91	-90.87	2,046.64	1,827.04	219.60	9.320		
14,424.59	7,407.00	13,311.50	7,589.46	114.92	107.98	95.31	-5,791.33	-91.01	2,046.62	1,826.55	220.07	9.300		
14,500.00	7,407.00	13,378.00	7,589.42	116.18	109.13	95.31	-5,857.82	-91.96	2,046.96	1,824.57	222.40	9.204		
14,600.00	7,407.00	13,482.20	7,590.21	117.86	110.93	95.33	-5,962.01	-93.46	2,047.55	1,821.60	225.95	9.062		
14,700.00	7,407.00	13,593.06	7,590.11	119.54	112.86	95.33	-6,072.85	-94.56	2,047.62	1,817.92	229.70	8.914		
14,800.00	7,407.00	13,701.06	7,590.31	121.23	114.73	95.34	-6,180.85	-94.71	2,046.83	1,813.46	233.37	8.771		
14,900.00	7,407.00	13,798.48	7,591.13	122.92	116.42	95.36	-6,278.27	-95.09	2,046.36	1,809.62	236.74	8.644		
15,000.00	7,407.00	13,888.23	7,590.57	124.61	117.98	95.34	-6,368.02	-95.46	2,045.81	1,805.91	239.90	8.528		
15,005.90	7,407.00	13,892.62	7,590.53	124.71	118.06	95.34	-6,372.41	-95.50	2,045.80	1,805.74	240.06	8.522		
15,100.00	7,407.00	13,974.14	7,589.87	126.31	119.47	95.32	-6,453.91	-96.74	2,046.26	1,803.32	242.94	8.423		
15,200.00	7,407.00	14,079.98	7,589.76	128.00	121.31	95.32	-6,559.74	-98.22	2,046.72	1,800.15	246.57	8.301		
15,300.00	7,407.00	14,189.24	7,590.58	129.70	123.22	95.34	-6,668.99	-99.32	2,046.87	1,796.58	250.29	8.178		
15,400.00	7,407.00	14,330.20	7,590.29	131.40	125.68	95.34	-6,809.95	-99.12	2,045.79	1,790.91	254.89	8.026		
15,500.00	7,407.00	14,438.74	7,590.91	133.11	127.58	95.36	-6,918.47	-97.42	2,043.35	1,784.78	258.58	7.902		
15,600.00	7,407.00	14,548.32	7,592.91	134.81	129.50	95.43	-7,028.02	-95.38	2,040.76	1,778.47	262.29	7.781		
15,700.00	7,407.00	14,640.49	7,593.72	136.52	131.11	95.46	-7,120.15	-93.27	2,037.66	1,772.10	265.56	7.673		
15,800.00	7,407.00	14,717.54	7,593.80	138.23	132.46	95.46	-7,197.20	-92.40	2,035.61	1,767.20	268.42	7.584		
15,900.00	7,407.00	14,806.58	7,593.84	139.94	134.02	95.47	-7,286.24	-92.30	2,034.56	1,762.97	271.59	7.491		
16,000.00	7,407.00	14,906.01	7,594.28	141.65	135.77	95.48	-7,385.67	-92.02	2,033.39	1,758.35	275.04	7.393		
16,100.00	7,407.00	14,988.86	7,593.92	143.36	137.22	95.47	-7,468.52	-92.43	2,032.91	1,754.88	278.03	7.312		
16,115.00	7,407.00	15,001.93	7,593.82	143.62	137.44	95.47	-7,481.58	-92.55	2,032.90	1,754.41	278.49	7.300		
16,200.00	7,407.00	15,086.56	7,593.22	145.08	138.92	95.45	-7,566.21	-93.56	2,033.06	1,751.62	281.44	7.224		
16,300.00	7,407.00	15,189.65	7,593.84	146.80	140.73	95.47	-7,669.29	-94.10	2,032.70	1,747.70	285.01	7.132		
16,313.30	7,407.00	15,200.31	7,593.90	147.02	140.92	95.47	-7,679.95	-94.19	2,032.70	1,747.30	285.39	7.122		
16,400.00	7,407.00	15,283.03	7,594.19	148.52	142.37	95.48	-7,762.66	-95.17	2,032.94	1,744.65	288.29	7.052		
16,500.00	7,407.00	15,416.98	7,594.87	150.24	144.71	95.50	-7,896.61	-95.68	2,032.49	1,739.75	292.74	6.943		
16,600.00	7,407.00	15,507.52	7,595.45	151.96	146.31	95.52	-7,987.15	-95.24	2,031.15	1,735.19	295.96	6.863		
16,700.00	7,407.00	15,635.64	7,596.58	153.68	148.56	95.56	-8,115.25	-93.96	2,029.27	1,729.06	300.21	6.760		
16,800.00	7,407.00	15,718.12	7,596.88	155.40	150.01	95.57	-8,197.72	-93.10	2,027.34	1,724.12	303.23	6.686		
16,900.00	7,407.00	15,799.00	7,597.78	157.13	151.44	95.60	-8,278.60	-92.62	2,026.00	1,719.82	306.17	6.617		
16,943.50	7,407.00	15,830.52	7,598.20	157.88	151.99	95.61	-8,310.12	-92.66	2,025.76	1,718.42	307.34	6.591		
17,000.00	7,407.00	15,861.37	7,598.47	158.86	152.53	95.62	-8,340.96	-93.12	2,026.12	1,717.59	308.52	6.567		
17,100.00	7,407.00	15,926.62	7,598.62	160.59	153.67	95.62	-8,406.18	-95.26	2,028.39	1,717.52	310.87	6.525		
17,200.00	7,407.00	16,010.50	7,598.38	162.31	155.14	95.61	-8,489.97	-98.98	2,031.84	1,718.04	313.79	6.475		
17,300.00	7,407.00	16,111.06	7,599.44	164.04	156.89	95.63	-8,590.41	-103.70	2,035.68	1,718.40	317.29	6.416		
17,400.00	7,407.00	16,233.09	7,599.50	165.78	159.02	95.62	-8,712.33	-108.85	2,038.99	1,717.46	321.53	6.342		

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 501-3403H - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 212-OWSG (Rev2) MWD							Rule Assigned:						Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
17,500.00	7,407.00	16,377.92	7,601.19	167.51	161.56	95.66	-8,857.11	-112.32	2,040.56	1,714.13	326.44	6.251	
17,600.00	7,407.00	16,493.58	7,601.30	169.24	163.60	95.66	-8,972.76	-113.32	2,040.48	1,710.09	330.40	6.176	
17,700.00	7,407.00	16,612.20	7,601.61	170.98	165.69	95.67	-9,091.38	-113.71	2,039.95	1,705.52	334.42	6.100	
17,800.00	7,407.00	16,707.16	7,600.79	172.71	167.36	95.65	-9,186.33	-113.43	2,038.65	1,700.86	337.79	6.035	
17,900.00	7,407.00	16,866.04	7,601.65	174.45	170.17	95.69	-9,345.17	-110.90	2,036.18	1,693.36	342.82	5.940	
18,000.00	7,407.00	16,993.28	7,602.63	176.19	172.43	95.73	-9,472.33	-106.45	2,031.90	1,684.97	346.93	5.857	
18,100.00	7,407.00	17,120.00	7,603.60	177.92	174.68	95.78	-9,598.86	-99.52	2,025.49	1,674.51	350.98	5.771	
18,200.00	7,407.00	17,120.00	7,603.60	179.66	174.68	95.78	-9,598.86	-99.52	2,021.43	1,669.27	352.16	5.740	
18,232.25	7,407.00	17,120.00	7,603.60	180.22	174.68	95.78	-9,598.86	-99.52	2,021.17	1,668.80	352.37	5.736	
18,300.00	7,407.00	17,120.00	7,603.60	181.40	174.68	95.78	-9,598.86	-99.52	2,022.31	1,669.79	352.52	5.737	
18,400.00	7,407.00	17,120.00	7,603.60	183.14	174.68	95.78	-9,598.86	-99.52	2,028.12	1,676.07	352.05	5.761	
18,500.00	7,407.00	17,120.00	7,603.60	184.88	174.68	95.78	-9,598.86	-99.52	2,038.83	1,688.06	350.77	5.812	
18,563.60	7,407.00	17,120.00	7,603.60	185.99	174.68	95.78	-9,598.86	-99.52	2,048.15	1,698.60	349.56	5.859	
18,600.00	7,407.00	17,120.00	7,603.60	186.63	174.68	95.78	-9,598.86	-99.52	2,054.35	1,705.63	348.72	5.891	
18,663.58	7,407.00	17,120.00	7,603.60	187.73	174.68	95.78	-9,598.86	-99.52	2,066.68	1,719.63	347.04	5.955	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - FOX CREEK 12-63 34-23-1 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	-90.02	-0.01	-39.99	39.99				
100.00	100.00	100.00	100.00	0.14	0.14	-90.02	-0.01	-39.99	39.99	39.71	0.29	139.457	
200.00	200.00	200.00	200.00	0.50	0.50	-90.02	-0.01	-39.99	39.99	38.99	1.00	39.845	
300.00	300.00	300.00	300.00	0.86	0.86	-90.02	-0.01	-39.99	39.99	38.27	1.72	23.243	
308.76	308.76	308.76	308.76	0.89	0.89	90.00	-0.01	-39.99	39.99	38.21	1.78	22.443 CC	
400.00	399.98	399.98	399.98	1.20	1.22	92.48	-0.01	-39.99	40.03	37.61	2.42	16.532	
450.00	449.93	449.93	449.93	1.38	1.40	95.58	-0.01	-39.99	40.18	37.42	2.77	14.514	
500.00	499.86	499.86	499.86	1.55	1.58	99.26	-0.01	-39.99	40.52	37.40	3.12	12.988	
600.00	599.73	599.73	599.73	1.90	1.93	106.37	-0.01	-39.99	41.69	37.86	3.83	10.885	
700.00	699.59	699.59	699.59	2.25	2.29	113.00	-0.01	-39.99	43.46	38.91	4.54	9.562	
800.00	799.45	799.45	799.45	2.62	2.65	119.03	-0.01	-39.99	45.76	40.50	5.26	8.697	
873.20	872.55	872.55	872.55	2.88	2.91	123.05	-0.01	-39.99	47.74	41.95	5.79	8.250	
900.00	899.32	899.32	899.32	2.98	3.01	124.33	-0.01	-39.99	48.44	42.47	5.98	8.104	
1,000.00	999.28	999.28	999.28	3.34	3.37	126.78	-0.01	-39.99	49.93	43.24	6.69	7.462	
1,023.20	1,022.48	1,022.48	1,022.48	3.42	3.45	-53.14	-0.01	-39.99	49.99	43.13	6.85	7.292	
1,100.00	1,099.28	1,099.28	1,099.28	3.68	3.73	-53.14	-0.01	-39.99	49.99	42.60	7.39	6.765	
1,200.00	1,199.28	1,199.28	1,199.28	4.02	4.08	-53.14	-0.01	-39.99	49.99	41.90	8.09	6.179	
1,300.00	1,299.28	1,299.28	1,299.28	4.36	4.44	-53.14	-0.01	-39.99	49.99	41.20	8.79	5.686	
1,400.00	1,399.28	1,399.28	1,399.28	4.70	4.80	-53.14	-0.01	-39.99	49.99	40.49	9.50	5.264	
1,500.00	1,499.28	1,499.28	1,499.28	5.05	5.16	-53.14	-0.01	-39.99	49.99	39.78	10.20	4.899	
1,600.00	1,599.28	1,599.28	1,599.28	5.40	5.52	-53.14	-0.01	-39.99	49.99	39.08	10.91	4.582	
1,700.00	1,699.28	1,699.28	1,699.28	5.75	5.88	-53.14	-0.01	-39.99	49.99	38.37	11.62	4.302	
1,800.00	1,799.28	1,799.28	1,799.28	6.10	6.23	-53.14	-0.01	-39.99	49.99	37.66	12.33	4.054	
1,900.00	1,899.28	1,899.28	1,899.28	6.45	6.59	-53.14	-0.01	-39.99	49.99	36.95	13.04	3.834	
2,000.00	1,999.28	1,999.28	1,999.28	6.80	6.95	-53.14	-0.01	-39.99	49.99	36.24	13.75	3.635	
2,100.00	2,099.28	2,099.28	2,099.28	7.16	7.31	-53.14	-0.01	-39.99	49.99	35.52	14.46	3.456	
2,200.00	2,199.28	2,199.28	2,199.28	7.51	7.67	-53.14	-0.01	-39.99	49.99	34.81	15.17	3.294	
2,300.00	2,299.28	2,299.28	2,299.28	7.86	8.03	-53.14	-0.01	-39.99	49.99	34.10	15.89	3.146	
2,400.00	2,399.28	2,399.28	2,399.28	8.22	8.39	-53.14	-0.01	-39.99	49.99	33.39	16.60	3.011	
2,500.00	2,499.28	2,499.28	2,499.28	8.57	8.74	-53.14	-0.01	-39.99	49.99	32.67	17.31	2.887	
2,600.00	2,599.28	2,599.28	2,599.28	8.93	9.10	-53.14	-0.01	-39.99	49.99	31.96	18.03	2.773 ES	
2,700.00	2,699.26	2,699.26	2,699.26	9.28	9.46	-116.40	-0.01	-39.99	50.74	32.00	18.74	2.708 SF	
2,800.00	2,799.12	2,799.12	2,799.12	9.63	9.82	-121.40	-0.01	-39.99	53.27	33.83	19.45	2.740	
2,900.00	2,898.74	2,898.74	2,898.74	9.98	10.18	-128.64	-0.01	-39.99	58.30	38.15	20.15	2.893	
3,000.00	2,997.98	2,997.98	2,997.98	10.34	10.53	-136.71	-0.01	-39.99	66.61	45.76	20.86	3.194	
3,100.00	3,096.75	3,096.75	3,096.75	10.70	10.89	-144.36	-0.01	-39.99	78.78	57.22	21.56	3.654	
3,200.00	3,194.91	3,194.91	3,194.91	11.07	11.24	-150.89	-0.01	-39.99	95.00	72.75	22.26	4.268	
3,300.00	3,292.34	3,296.17	3,296.15	11.45	11.59	-156.38	0.06	-38.38	113.71	90.76	22.95	4.954	
3,400.00	3,388.93	3,398.20	3,398.04	11.85	11.94	-161.00	0.31	-33.15	132.93	109.31	23.62	5.628	
3,500.00	3,484.55	3,500.80	3,500.25	12.27	12.30	-165.06	0.72	-24.23	152.63	128.36	24.27	6.289	
3,600.00	3,579.10	3,603.94	3,602.61	12.73	12.66	-168.74	1.31	-11.59	172.83	147.93	24.90	6.940	
3,700.00	3,672.45	3,707.59	3,704.94	13.21	13.04	-172.14	2.08	4.81	193.58	168.05	25.52	7.584	
3,800.00	3,764.50	3,811.72	3,807.08	13.74	13.42	-175.33	3.02	25.00	214.90	188.76	26.14	8.221	
3,900.00	3,855.12	3,916.30	3,908.86	14.31	13.82	-178.36	4.14	48.99	236.86	210.10	26.76	8.852	
4,000.00	3,944.22	4,016.33	4,005.47	14.93	14.22	178.94	5.34	74.88	260.03	232.57	27.45	9.472	
4,071.71	4,007.11	4,085.15	4,071.88	15.41	14.51	177.32	6.18	92.91	278.79	250.80	27.99	9.960	
4,100.00	4,031.75	4,112.20	4,097.99	15.60	14.62	176.74	6.51	99.99	286.59	258.39	28.21	10.161	
4,200.00	4,118.84	4,207.85	4,190.29	16.32	15.03	174.95	7.68	125.05	314.34	285.37	28.97	10.850	
4,300.00	4,205.93	4,303.49	4,282.58	17.06	15.44	173.44	8.85	150.11	342.33	312.58	29.75	11.506	
4,400.00	4,293.02	4,399.13	4,374.88	17.84	15.87	172.17	10.02	175.17	370.50	339.96	30.55	12.128	
4,500.00	4,380.11	4,494.78	4,467.17	18.63	16.31	171.07	11.19	200.22	398.83	367.47	31.36	12.718	
4,600.00	4,467.21	4,590.42	4,559.47	19.45	16.75	170.11	12.36	225.28	427.27	395.08	32.19	13.275	

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - FOX CREEK 12-63 34-23-1 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
4,700.00	4,554.30	4,686.06	4,651.76	20.28	17.20	169.28	13.52	250.34	455.80	422.77	33.03	13.801	
4,800.00	4,641.39	4,781.71	4,744.06	21.13	17.65	168.54	14.69	275.40	484.42	450.54	33.88	14.298	
4,900.00	4,728.48	4,877.35	4,836.35	21.99	18.12	167.89	15.86	300.46	513.09	478.35	34.74	14.768	
5,000.00	4,815.58	4,972.99	4,928.65	22.87	18.59	167.30	17.03	325.51	541.83	506.21	35.62	15.211	
5,100.00	4,902.67	5,068.64	5,020.94	23.75	19.06	166.78	18.20	350.57	570.61	534.10	36.51	15.630	
5,200.00	4,989.76	5,164.28	5,113.24	24.65	19.54	166.30	19.37	375.63	599.43	562.03	37.40	16.026	
5,300.00	5,076.85	5,259.92	5,205.53	25.55	20.02	165.87	20.53	400.69	628.29	589.98	38.31	16.400	
5,400.00	5,163.94	5,355.57	5,297.83	26.46	20.51	165.48	21.70	425.74	657.17	617.95	39.23	16.754	
5,500.00	5,251.04	5,451.21	5,390.12	27.38	21.00	165.11	22.87	450.80	686.09	645.94	40.15	17.089	
5,600.00	5,338.13	5,546.85	5,482.42	28.31	21.49	164.78	24.04	475.86	715.02	673.94	41.08	17.406	
5,700.00	5,425.22	5,642.50	5,574.71	29.24	21.99	164.48	25.21	500.92	743.98	701.96	42.02	17.707	
5,800.00	5,512.31	5,738.14	5,667.01	30.18	22.49	164.19	26.38	525.97	772.95	729.99	42.96	17.992	
5,900.00	5,599.40	5,833.78	5,759.30	31.12	23.00	163.93	27.54	551.03	801.94	758.03	43.91	18.262	
6,000.00	5,686.50	5,929.43	5,851.60	32.06	23.50	163.69	28.71	576.09	830.94	786.07	44.87	18.519	
6,100.00	5,773.59	6,025.07	5,943.89	33.01	24.01	163.46	29.88	601.15	859.96	814.13	45.83	18.763	
6,200.00	5,860.68	6,120.71	6,036.19	33.96	24.53	163.24	31.05	626.20	888.99	842.19	46.80	18.996	
6,300.00	5,947.77	6,216.36	6,128.49	34.92	25.04	163.04	32.22	651.26	918.03	870.25	47.77	19.217	
6,400.00	6,034.86	6,312.00	6,220.78	35.88	25.56	162.86	33.39	676.32	947.07	898.33	48.75	19.427	
6,500.00	6,121.96	6,407.64	6,313.08	36.84	26.07	162.68	34.55	701.38	976.13	926.40	49.73	19.628	
6,600.00	6,209.05	6,503.29	6,405.37	37.81	26.59	162.51	35.72	726.44	1,005.20	954.48	50.72	19.820	
6,700.00	6,296.14	6,598.93	6,497.67	38.77	27.12	162.36	36.89	751.49	1,034.27	982.56	51.71	20.002	
6,800.00	6,383.23	6,694.57	6,589.96	39.74	27.64	162.21	38.06	776.55	1,063.35	1,010.65	52.70	20.177	
6,900.00	6,470.32	6,790.92	6,685.00	40.71	28.16	162.06	39.23	801.60	1,092.42	1,041.61	53.69	20.352	
7,000.00	6,557.42	6,887.38	6,770.00	41.69	28.68	161.91	40.40	826.75	1,121.49	1,071.66	54.68	20.527	
7,100.00	6,644.51	6,983.83	6,865.00	42.66	29.20	161.76	41.57	851.90	1,150.56	1,100.71	55.67	20.702	
7,200.00	6,731.60	7,080.28	6,960.00	43.64	29.72	161.61	42.74	877.05	1,179.63	1,129.76	56.66	20.877	
7,244.75	6,770.57	7,119.23	7,000.00	44.08	30.00	161.53	43.12	889.94	1,194.55	1,144.68	57.00	20.940	
7,250.00	6,775.15	7,124.03	7,000.00	44.13	30.04	161.51	43.17	891.44	1,197.05	1,147.18	57.05	20.955	
7,300.00	6,819.19	7,168.07	7,000.00	44.60	30.40	161.40	43.64	901.29	1,207.90	1,157.03	57.30	21.018	
7,350.00	6,863.79	7,212.67	7,000.00	45.05	30.76	161.28	44.09	911.14	1,218.75	1,166.88	57.55	21.081	
7,400.00	6,908.61	7,257.27	7,000.00	45.47	31.12	161.16	44.54	921.00	1,229.60	1,176.73	57.80	21.144	
7,450.00	6,953.31	7,301.87	7,000.00	45.84	31.48	161.04	44.99	930.85	1,240.45	1,186.58	58.05	21.207	
7,500.00	6,997.56	7,346.47	7,000.00	46.18	31.84	160.92	45.44	940.70	1,251.30	1,196.43	58.30	21.270	
7,511.43	7,007.57	7,356.48	7,000.00	46.25	31.91	160.90	45.51	942.20	1,253.80	1,198.93	58.35	21.285	
7,550.00	7,041.01	7,390.92	7,000.00	46.47	32.13	160.80	45.73	946.60	1,258.20	1,203.33	58.45	21.315	
7,600.00	7,083.34	7,435.25	7,000.00	46.73	32.39	160.65	46.00	951.00	1,262.60	1,207.73	58.55	21.345	
7,650.00	7,124.22	7,479.58	7,000.00	46.94	32.61	160.50	46.27	955.40	1,267.00	1,212.13	58.65	21.375	
7,700.00	7,163.34	7,523.91	7,000.00	47.11	32.83	160.34	46.54	959.80	1,271.40	1,216.53	58.75	21.405	
7,750.00	7,200.41	7,568.24	7,000.00	47.24	33.05	160.18	46.81	964.20	1,275.80	1,220.93	58.85	21.435	
7,800.00	7,235.13	7,612.57	7,000.00	47.34	33.27	160.02	47.08	968.60	1,280.20	1,225.33	58.95	21.465	
7,850.00	7,267.26	7,656.90	7,000.00	47.40	33.49	159.86	47.35	973.00	1,284.60	1,229.73	59.05	21.495	
7,900.00	7,296.54	7,701.23	7,000.00	47.44	33.71	159.69	47.62	977.40	1,289.00	1,234.13	59.15	21.525	
7,950.00	7,322.74	7,745.56	7,000.00	47.44	33.93	159.53	47.89	981.80	1,293.40	1,238.53	59.25	21.555	
8,000.00	7,345.68	7,789.89	7,000.00	47.42	34.15	159.37	48.16	986.20	1,297.80	1,242.93	59.35	21.585	
8,050.00	7,365.18	7,834.22	7,000.00	47.38	34.37	159.21	48.43	990.60	1,302.20	1,247.33	59.45	21.615	
8,100.00	7,381.08	7,878.55	7,000.00	47.31	34.59	159.04	48.70	995.00	1,306.60	1,251.73	59.55	21.645	
8,150.00	7,393.27	7,922.88	7,000.00	47.23	34.81	158.88	48.97	999.40	1,311.00	1,256.13	59.65	21.675	
8,200.00	7,401.65	7,967.21	7,000.00	47.14	35.03	158.72	49.24	1,003.80	1,315.40	1,260.53	59.75	21.705	
8,250.00	7,406.16	8,011.54	7,000.00	47.03	35.25	158.56	49.51	1,008.20	1,319.80	1,264.93	59.85	21.735	
8,282.77	7,407.00	8,016.87	7,000.00	46.96	35.47	158.39	49.78	1,012.60	1,324.20	1,269.33	59.95	21.765	
8,300.00	7,407.00	8,022.20	7,000.00	46.92	35.69	158.23	50.05	1,017.00	1,328.60	1,273.73	60.05	21.795	
8,400.00	7,407.00	8,066.53	7,000.00	46.71	36.13	157.96	50.54	1,026.40	1,337.40	1,282.53	60.15	21.825	

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - FOX CREEK 12-63 34-23-1 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.00 usft	
Survey Program:		0-OWSG (Rev2) MWD				Rule Assigned:							Offset Well Error:	0.00 usft
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)			
8,500.00	7,407.00	7,550.00	7,323.87	46.54	31.93	85.38	312.24	975.86	1,048.26	989.36	58.90	17.797		
8,600.00	7,407.00	7,511.52	7,303.24	46.40	31.78	84.27	280.25	970.26	1,069.52	1,010.19	59.33	18.028		
8,700.00	7,407.00	7,468.70	7,277.91	46.30	31.60	82.92	246.43	963.37	1,096.21	1,036.58	59.62	18.386		
8,800.00	7,407.00	7,430.62	7,253.39	46.24	31.45	81.65	218.07	956.71	1,128.38	1,068.35	60.03	18.796		
8,900.00	7,407.00	7,400.00	7,232.40	46.22	31.32	80.57	196.54	951.00	1,166.03	1,105.41	60.62	19.235		
9,000.00	7,407.00	7,366.80	7,208.41	46.25	31.17	79.37	174.54	944.49	1,208.98	1,147.88	61.10	19.787		
9,100.00	7,407.00	7,350.00	7,195.81	46.32	31.10	78.75	163.96	941.06	1,257.08	1,195.12	61.95	20.291		
9,200.00	7,407.00	7,316.34	7,169.70	46.46	30.95	77.47	143.95	933.97	1,309.70	1,247.38	62.32	21.016		
9,300.00	7,407.00	7,300.00	7,156.63	46.65	30.87	76.85	134.82	930.42	1,366.79	1,303.75	63.04	21.682		
9,400.00	7,407.00	7,276.03	7,137.00	46.91	30.76	75.92	122.12	925.09	1,427.80	1,364.29	63.51	22.481		
9,500.00	7,407.00	7,250.00	7,115.14	47.25	30.64	74.91	109.32	919.15	1,492.49	1,428.61	63.88	23.364		
9,600.00	7,407.00	7,250.00	7,115.14	47.66	30.64	74.91	109.32	919.15	1,560.30	1,495.59	64.70	24.114		
9,700.00	7,407.00	7,229.33	7,097.39	48.16	30.53	74.11	99.89	914.33	1,630.98	1,565.94	65.05	25.074		
9,800.00	7,407.00	7,200.00	7,071.66	48.75	30.39	72.96	87.66	907.34	1,704.58	1,639.39	65.19	26.146		
9,900.00	7,407.00	7,200.00	7,071.66	49.42	30.39	72.96	87.66	907.34	1,779.96	1,714.17	65.79	27.056		
10,000.00	7,407.00	7,200.00	7,071.66	50.18	30.39	72.96	87.66	907.34	1,857.66	1,791.35	66.31	28.016		
10,100.00	7,407.00	7,200.00	7,071.66	51.03	30.39	72.96	87.66	907.34	1,937.40	1,870.64	66.76	29.021		
10,200.00	7,407.00	7,175.39	7,049.63	51.94	30.26	72.00	78.47	901.36	2,018.34	1,951.52	66.82	30.205		
10,300.00	7,407.00	7,150.00	7,026.53	52.93	30.13	71.02	70.02	895.08	2,101.29	2,034.44	66.86	31.429		
10,400.00	7,407.00	7,150.00	7,026.53	53.99	30.13	71.02	70.02	895.08	2,185.07	2,117.88	67.19	32.519		
10,500.00	7,407.00	7,150.00	7,026.53	55.09	30.13	71.02	70.02	895.08	2,270.16	2,202.67	67.49	33.638		
10,600.00	7,407.00	7,150.00	7,026.53	56.25	30.13	71.02	70.02	895.08	2,356.42	2,288.67	67.75	34.782		
10,700.00	7,407.00	7,150.00	7,026.53	57.46	30.13	71.02	70.02	895.08	2,443.73	2,375.75	67.98	35.948		
10,800.00	7,407.00	7,150.00	7,026.53	58.71	30.13	71.02	70.02	895.08	2,531.98	2,463.79	68.19	37.134		
10,900.00	7,407.00	7,128.01	7,006.24	59.99	30.02	70.18	63.56	889.57	2,620.58	2,552.43	68.15	38.451		
11,000.00	7,407.00	7,122.90	7,001.50	61.30	29.99	69.98	62.18	888.29	2,710.18	2,641.91	68.28	39.694		
11,100.00	7,407.00	7,100.00	6,980.09	62.65	29.87	69.11	56.52	882.47	2,800.77	2,732.54	68.23	41.051		
11,200.00	7,407.00	7,100.00	6,980.09	64.02	29.87	69.11	56.52	882.47	2,891.49	2,823.11	68.38	42.288		
11,300.00	7,407.00	7,100.00	6,980.09	65.42	29.87	69.11	56.52	882.47	2,982.79	2,914.28	68.51	43.539		
11,400.00	7,407.00	7,100.00	6,980.09	66.84	29.87	69.11	56.52	882.47	3,074.64	3,006.01	68.63	44.800		
11,500.00	7,407.00	7,100.00	6,980.09	68.27	29.87	69.11	56.52	882.47	3,166.99	3,098.24	68.74	46.071		
11,600.00	7,407.00	7,100.00	6,980.09	69.73	29.87	69.11	56.52	882.47	3,259.78	3,190.94	68.84	47.351		

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - FOX CREEK 12-63 34-23-2 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	0.00	0.00	0.00	0.00	-90.01	0.00	-20.00	20.00				
100.00	100.00	100.00	100.00	0.14	0.14	-90.01	0.00	-20.00	20.00	19.71	0.29	69.746	
200.00	200.00	200.00	200.00	0.50	0.50	-90.01	0.00	-20.00	20.00	19.00	1.00	19.927	
300.00	300.00	300.00	300.00	0.86	0.86	-90.01	0.00	-20.00	20.00	18.28	1.72	11.624	
305.17	305.17	305.17	305.17	0.88	0.88	90.00	0.00	-20.00	20.00	18.24	1.76	11.385 CC	
400.00	399.98	399.98	399.98	1.20	1.22	94.97	0.00	-20.00	20.08	17.66	2.42	8.292	
450.00	449.93	449.93	449.93	1.38	1.40	101.08	0.00	-20.00	20.38	17.61	2.77	7.362	
500.00	499.86	499.86	499.86	1.55	1.58	108.08	0.00	-20.00	21.04	17.92	3.12	6.744	
600.00	599.73	599.73	599.73	1.90	1.93	120.44	0.00	-20.00	23.21	19.38	3.83	6.061	
700.00	699.59	699.59	699.59	2.25	2.29	130.33	0.00	-20.00	26.25	21.71	4.54	5.782	
800.00	799.45	799.45	799.45	2.62	2.65	137.99	0.00	-20.00	29.91	24.66	5.25	5.693	
873.20	872.55	872.55	872.55	2.88	2.91	142.47	0.00	-20.00	32.86	27.08	5.78	5.689	
900.00	899.32	899.32	899.32	2.98	3.01	143.79	0.00	-20.00	33.88	27.91	5.97	5.678	
1,000.00	999.28	999.28	999.28	3.34	3.37	146.22	0.00	-20.00	35.98	29.30	6.68	5.386	
1,023.20	1,022.48	1,022.48	1,022.48	3.42	3.45	-33.70	0.00	-20.00	36.05	29.21	6.84	5.269	
1,100.00	1,099.28	1,099.28	1,099.28	3.68	3.73	-33.70	0.00	-20.00	36.05	28.67	7.38	4.886	
1,200.00	1,199.28	1,199.28	1,199.28	4.02	4.08	-33.70	0.00	-20.00	36.05	27.97	8.08	4.463	
1,300.00	1,299.28	1,299.28	1,299.28	4.36	4.44	-33.70	0.00	-20.00	36.05	27.27	8.78	4.105	
1,400.00	1,399.28	1,399.28	1,399.28	4.70	4.80	-33.70	0.00	-20.00	36.05	26.57	9.49	3.800	
1,500.00	1,499.28	1,499.28	1,499.28	5.05	5.16	-33.70	0.00	-20.00	36.05	25.86	10.20	3.536	
1,600.00	1,599.28	1,599.28	1,599.28	5.40	5.52	-33.70	0.00	-20.00	36.05	25.15	10.90	3.307	
1,700.00	1,699.28	1,699.28	1,699.28	5.75	5.88	-33.70	0.00	-20.00	36.05	24.44	11.61	3.105	
1,800.00	1,799.28	1,799.28	1,799.28	6.10	6.23	-33.70	0.00	-20.00	36.05	23.73	12.32	2.926	
1,900.00	1,899.28	1,899.28	1,899.28	6.45	6.59	-33.70	0.00	-20.00	36.05	23.02	13.03	2.766	
2,000.00	1,999.28	1,999.28	1,999.28	6.80	6.95	-33.70	0.00	-20.00	36.05	22.31	13.75	2.623	
2,100.00	2,099.28	2,099.28	2,099.28	7.16	7.31	-33.70	0.00	-20.00	36.05	21.59	14.46	2.494	
2,200.00	2,199.28	2,199.28	2,199.28	7.51	7.67	-33.70	0.00	-20.00	36.05	20.88	15.17	2.376	
2,300.00	2,299.28	2,299.28	2,299.28	7.86	8.03	-33.70	0.00	-20.00	36.05	20.17	15.88	2.270	
2,400.00	2,399.28	2,399.28	2,399.28	8.22	8.39	-33.70	0.00	-20.00	36.05	19.46	16.60	2.172	
2,500.00	2,499.28	2,499.28	2,499.28	8.57	8.74	-33.70	0.00	-20.00	36.05	18.74	17.31	2.083	
2,600.00	2,599.28	2,599.28	2,599.28	8.93	9.10	-33.70	0.00	-20.00	36.05	18.03	18.03	2.000	
2,700.00	2,699.26	2,699.26	2,699.26	9.28	9.46	-97.93	0.00	-20.00	36.25	17.52	18.74	1.935 ES	
2,800.00	2,799.12	2,799.12	2,799.12	9.63	9.82	-105.88	0.00	-20.00	37.34	17.89	19.44	1.920 SF	
2,900.00	2,898.74	2,898.74	2,898.74	9.98	10.18	-117.70	0.00	-20.00	40.60	20.45	20.15	2.015	
3,000.00	2,997.98	2,997.98	2,997.98	10.34	10.53	-130.66	0.00	-20.00	47.53	26.67	20.86	2.279	
3,100.00	3,096.75	3,096.71	3,096.69	10.70	10.88	-141.96	0.04	-18.30	57.33	35.79	21.55	2.661	
3,200.00	3,194.91	3,199.82	3,199.66	11.07	11.23	-151.10	0.19	-13.04	68.22	46.00	22.21	3.071	
3,300.00	3,292.34	3,301.25	3,300.70	11.45	11.58	-158.78	0.45	-4.18	80.05	57.20	22.85	3.503	
3,400.00	3,388.93	3,402.97	3,401.65	11.85	11.94	-165.45	0.81	8.28	92.82	69.34	23.48	3.953	
3,500.00	3,484.55	3,504.94	3,502.33	12.27	12.31	-171.36	1.27	24.37	106.57	82.47	24.10	4.422	
3,600.00	3,579.10	3,607.12	3,602.58	12.73	12.69	-176.68	1.83	44.06	121.35	96.63	24.73	4.908	
3,700.00	3,672.45	3,709.47	3,702.24	13.21	13.08	178.48	2.50	67.37	137.22	111.85	25.36	5.410	
3,800.00	3,764.50	3,811.96	3,801.13	13.74	13.50	174.04	3.27	94.25	154.22	128.19	26.03	5.925	
3,900.00	3,855.12	3,914.55	3,899.09	14.31	13.94	169.96	4.14	124.68	172.41	145.67	26.74	6.448	
4,000.00	3,944.22	4,017.21	3,995.97	14.93	14.41	166.19	5.11	158.63	191.82	164.32	27.50	6.975	
4,071.71	4,007.11	4,090.85	4,064.68	15.41	14.77	163.65	5.87	185.10	206.51	178.42	28.09	7.351	
4,100.00	4,031.75	4,119.93	4,091.62	15.60	14.92	162.71	6.18	196.04	212.35	184.02	28.34	7.494	
4,200.00	4,118.84	4,223.03	4,186.21	16.32	15.47	159.36	7.36	237.02	231.78	202.51	29.28	7.917	
4,300.00	4,205.93	4,326.42	4,279.54	17.06	16.08	155.90	8.63	281.50	249.46	219.11	30.35	8.220	
4,400.00	4,293.02	4,429.84	4,371.21	17.84	16.75	152.29	10.00	329.33	265.65	234.07	31.58	8.411	
4,500.00	4,380.11	4,533.02	4,460.89	18.63	17.48	148.50	11.46	380.32	280.67	247.67	33.00	8.504	
4,600.00	4,467.21	4,635.69	4,548.25	19.45	18.28	144.52	13.00	434.22	294.88	260.26	34.63	8.516	

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - FOX CREEK 12-63 34-23-2 - 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)			
4,700.00	4,554.30	4,737.59	4,632.99	20.28	19.14	140.37	14.62	490.78	308.70	272.24	36.47	8.466	
4,800.00	4,641.39	4,838.47	4,714.85	21.13	20.08	136.04	16.31	549.71	322.58	284.08	38.50	8.378	
4,900.00	4,728.48	4,938.12	4,793.62	21.99	21.09	131.59	18.06	610.71	337.00	296.29	40.71	8.277	
5,000.00	4,815.58	5,036.30	4,869.11	22.87	22.16	127.04	19.86	673.46	352.43	309.38	43.05	8.187	
5,100.00	4,902.67	5,132.84	4,941.20	23.75	23.30	122.46	21.69	737.64	369.36	323.91	45.45	8.126	
5,200.00	4,989.76	5,227.56	5,009.78	24.65	24.49	117.90	23.56	802.93	388.22	340.37	47.85	8.113	
5,300.00	5,076.85	5,320.35	5,075.20	25.55	25.74	113.49	25.45	868.71	409.39	359.22	50.17	8.160	
5,400.00	5,163.94	5,412.75	5,140.15	26.46	27.01	109.48	27.33	934.40	432.88	380.51	52.37	8.266	
5,500.00	5,251.04	5,505.15	5,205.11	27.38	28.32	105.85	29.21	1,000.09	458.37	403.90	54.47	8.414	
5,600.00	5,338.13	5,597.55	5,270.06	28.31	29.65	102.59	31.09	1,065.78	485.54	429.04	56.49	8.595	
5,700.00	5,425.22	5,689.95	5,335.02	29.24	31.00	99.66	32.97	1,131.47	514.11	455.66	58.45	8.796	
5,800.00	5,512.31	5,782.35	5,399.97	30.18	32.38	97.02	34.86	1,197.16	543.87	483.53	60.35	9.013	
5,900.00	5,599.40	5,874.75	5,464.93	31.12	33.77	94.65	36.74	1,262.85	574.64	512.44	62.20	9.238	
6,000.00	5,686.50	5,967.15	5,529.88	32.06	35.17	92.51	38.62	1,328.54	606.26	542.23	64.03	9.468	
6,100.00	5,773.59	6,059.55	5,594.83	33.01	36.59	90.57	40.50	1,394.23	638.60	572.77	65.83	9.700	
6,200.00	5,860.68	6,151.95	5,659.79	33.96	38.02	88.81	42.38	1,459.92	671.56	603.94	67.62	9.931	
6,300.00	5,947.77	6,244.35	5,724.74	34.92	39.46	87.21	44.26	1,525.61	705.06	635.66	69.39	10.160	
6,400.00	6,034.86	6,336.75	5,789.70	35.88	40.91	85.75	46.14	1,591.31	739.01	667.85	71.16	10.385	
6,500.00	6,121.96	6,429.15	5,854.65	36.84	42.37	84.42	48.03	1,657.00	773.37	700.45	72.92	10.606	
6,600.00	6,209.05	6,521.56	5,919.61	37.81	43.84	83.20	49.91	1,722.69	808.07	733.40	74.67	10.822	
6,700.00	6,296.14	6,613.96	5,984.56	38.77	45.31	82.07	51.79	1,788.38	843.08	766.66	76.42	11.032	
6,800.00	6,383.23	6,706.36	6,049.52	39.74	46.79	81.04	53.67	1,854.07	878.36	800.19	78.18	11.236	
6,900.00	6,470.32	6,798.76	6,114.47	40.71	48.28	80.08	55.55	1,919.76	913.88	833.95	79.93	11.434	
7,000.00	6,557.42	6,891.16	6,179.42	41.69	49.77	79.19	57.43	1,985.45	949.61	867.93	81.68	11.626	
7,100.00	6,644.51	6,983.56	6,244.38	42.66	51.26	78.37	59.31	2,051.14	985.52	902.09	83.43	11.812	
7,200.00	6,731.60	7,075.96	6,309.33	43.64	52.76	77.60	61.19	2,116.83	1,021.61	936.42	85.19	11.993	
7,244.75	6,770.57	7,117.31	6,338.40	44.08	53.43	77.27	62.04	2,146.23	1,037.81	951.84	85.97	12.071	
7,250.00	6,775.15	7,122.16	6,341.81	44.13	53.51	76.52	62.14	2,149.68	1,039.69	953.63	86.06	12.081	
7,300.00	6,819.19	7,168.81	6,374.61	44.60	54.27	76.44	63.09	2,182.84	1,055.89	969.01	86.88	12.153	
7,350.00	6,863.79	7,215.93	6,407.73	45.05	55.04	75.93	64.04	2,216.34	1,068.87	981.28	87.58	12.204	
7,400.00	6,908.61	7,263.18	6,440.94	45.47	55.81	75.60	65.01	2,249.93	1,078.62	990.45	88.16	12.234	
7,450.00	6,953.31	7,310.18	6,473.98	45.84	56.58	75.60	65.96	2,283.34	1,085.15	996.56	88.59	12.249	
7,500.00	6,997.56	7,356.58	6,506.60	46.18	57.34	75.60	66.91	2,316.33	1,088.54	999.67	88.87	12.249	
7,550.00	7,041.01	7,402.03	6,538.55	46.47	58.08	75.60	67.83	2,348.64	1,088.87	999.92	88.96	12.241	
7,600.00	7,083.34	7,446.18	6,569.58	46.73	58.81	75.60	68.73	2,380.03	1,086.31	997.45	88.85	12.226	
7,650.00	7,124.22	7,488.69	6,599.47	46.94	59.50	75.60	69.60	2,410.25	1,081.01	992.48	88.54	12.210	
7,700.00	7,163.34	7,529.25	6,627.98	47.11	60.17	-1.11	70.42	2,439.09	1,073.20	985.21	88.00	12.196	
7,750.00	7,200.41	7,567.54	6,654.90	47.24	60.80	-6.79	71.20	2,466.31	1,063.13	975.91	87.22	12.189	
7,800.00	7,235.13	7,603.28	6,680.02	47.34	61.39	-12.04	71.93	2,491.72	1,051.06	964.87	86.19	12.194	
7,850.00	7,267.26	7,636.18	6,703.15	47.40	61.93	-16.92	72.60	2,515.11	1,037.30	952.39	84.91	12.216	
7,900.00	7,296.54	7,666.01	6,724.12	47.44	62.42	-21.51	73.21	2,536.31	1,022.17	938.79	83.38	12.260	
7,950.00	7,322.74	7,692.52	6,742.76	47.44	62.86	-25.82	73.75	2,555.16	1,006.01	924.42	81.59	12.329	
8,000.00	7,345.68	7,715.53	6,758.93	47.42	63.23	-29.85	74.22	2,571.52	989.18	909.60	79.58	12.430	
8,050.00	7,365.18	7,734.85	6,772.52	47.38	63.55	-33.55	74.61	2,585.26	972.02	894.65	77.36	12.564	
8,100.00	7,381.08	7,750.35	6,783.41	47.31	63.81	-36.88	74.93	2,596.27	954.87	879.89	74.98	12.735	
8,150.00	7,393.27	7,761.89	6,791.52	47.23	64.00	-39.80	75.16	2,604.48	938.07	865.58	72.49	12.940	
8,200.00	7,401.65	7,769.40	6,796.80	47.14	64.12	-42.24	75.31	2,609.82	921.91	851.94	69.97	13.176	
8,250.00	7,406.16	7,772.81	6,799.20	47.03	64.18	-44.17	75.38	2,612.24	906.66	839.16	67.50	13.432	
8,282.77	7,407.00	7,772.81	6,799.20	46.96	64.18	-45.14	75.38	2,612.24	897.25	831.30	65.96	13.604	
8,300.00	7,407.00	7,772.35	6,798.87	46.92	64.17	-45.10	75.37	2,611.91	892.60	827.42	65.18	13.694	
8,400.00	7,407.00	7,769.65	6,796.97	46.71	64.13	-44.93	75.32	2,610.00	871.83	810.39	61.44	14.191	
8,500.00	7,407.00	7,766.95	6,795.08	46.54	64.08	-44.75	75.26	2,608.08	862.22	802.70	59.52	14.486	

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: NE NE SEC. 34 T12N R63W 6th P.M. - FOX CREEK 12-63 34-23-2 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD				Rule Assigned:								Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		Minimum Separation (usft)	Separation Factor
8,533.36	7,407.00	7,766.05	6,794.45	46.48	64.07	-44.69	75.25	2,607.44	861.58	802.18	59.39	14.506	
8,600.00	7,407.00	7,764.25	6,793.18	46.40	64.04	-44.57	75.21	2,606.16	864.15	804.23	59.92	14.422	
8,700.00	7,407.00	7,761.55	6,791.28	46.30	63.99	-44.39	75.15	2,604.24	877.53	815.00	62.53	14.034	
8,800.00	7,407.00	7,758.86	6,789.39	46.24	63.95	-44.21	75.10	2,602.32	901.86	835.14	66.73	13.516	
8,900.00	7,407.00	7,756.16	6,787.49	46.22	63.90	-44.03	75.04	2,600.40	936.29	864.56	71.73	13.053	
9,000.00	7,407.00	7,753.46	6,785.60	46.25	63.86	-43.85	74.99	2,598.49	979.75	902.86	76.89	12.742	
9,100.00	7,407.00	7,750.76	6,783.70	46.32	63.82	-43.67	74.93	2,596.57	1,031.10	949.28	81.81	12.603	
9,200.00	7,407.00	7,748.07	6,781.80	46.46	63.77	-43.49	74.88	2,594.65	1,089.22	1,002.95	86.27	12.625	
9,300.00	7,407.00	7,745.37	6,779.91	46.65	63.73	-43.31	74.82	2,592.73	1,153.09	1,062.89	90.20	12.784	
9,400.00	7,407.00	7,742.67	6,778.01	46.91	63.68	-43.13	74.77	2,590.81	1,221.81	1,128.22	93.60	13.054	
9,500.00	7,407.00	7,739.97	6,776.11	47.25	63.64	-42.95	74.72	2,588.90	1,294.61	1,198.11	96.51	13.415	
9,600.00	7,407.00	7,737.27	6,774.22	47.66	63.59	-42.77	74.66	2,586.98	1,370.84	1,271.85	98.99	13.849	
9,700.00	7,407.00	7,734.58	6,772.32	48.16	63.55	-42.59	74.61	2,585.06	1,449.95	1,348.86	101.09	14.343	
9,800.00	7,407.00	7,731.88	6,770.42	48.75	63.50	-42.42	74.55	2,583.14	1,531.51	1,428.62	102.89	14.885	
9,900.00	7,407.00	7,729.18	6,768.53	49.42	63.46	-42.24	74.50	2,581.22	1,615.13	1,510.72	104.41	15.469	
10,000.00	7,407.00	7,726.48	6,766.63	50.18	63.42	-42.06	74.44	2,579.31	1,700.52	1,594.80	105.72	16.085	
10,100.00	7,407.00	7,723.78	6,764.73	51.03	63.37	-41.88	74.39	2,577.39	1,787.42	1,680.59	106.84	16.730	
10,200.00	7,407.00	7,721.09	6,762.84	51.94	63.33	-41.70	74.33	2,575.47	1,875.63	1,767.83	107.80	17.399	
10,300.00	7,407.00	7,718.39	6,760.94	52.93	63.28	-41.52	74.28	2,573.55	1,964.96	1,856.33	108.63	18.089	
10,400.00	7,407.00	7,715.69	6,759.04	53.99	63.24	-41.34	74.22	2,571.63	2,055.26	1,945.92	109.34	18.796	
10,500.00	7,407.00	7,712.99	6,757.15	55.09	63.19	-41.16	74.17	2,569.72	2,146.43	2,036.46	109.97	19.519	
10,600.00	7,407.00	7,710.29	6,755.25	56.25	63.15	-40.98	74.11	2,567.80	2,238.35	2,127.84	110.51	20.255	
10,700.00	7,407.00	7,707.60	6,753.35	57.46	63.10	-40.81	74.06	2,565.88	2,330.93	2,219.94	110.99	21.002	
10,800.00	7,407.00	7,704.90	6,751.46	58.71	63.06	-40.63	74.00	2,563.96	2,424.09	2,312.69	111.40	21.760	
10,900.00	7,407.00	7,702.20	6,749.56	59.99	63.02	-40.45	73.95	2,562.04	2,517.78	2,406.01	111.77	22.527	
11,000.00	7,407.00	7,699.50	6,747.66	61.30	62.97	-40.27	73.89	2,560.13	2,611.93	2,499.84	112.09	23.303	
11,100.00	7,407.00	7,696.80	6,745.77	62.65	62.93	-40.09	73.84	2,558.21	2,706.50	2,594.13	112.37	24.086	
11,200.00	7,407.00	7,694.11	6,743.87	64.02	62.88	-39.91	73.78	2,556.29	2,801.44	2,688.82	112.62	24.875	
11,300.00	7,407.00	7,691.41	6,741.97	65.42	62.84	-39.74	73.73	2,554.37	2,896.73	2,783.88	112.84	25.671	
11,400.00	7,407.00	7,688.71	6,740.08	66.84	62.79	-39.56	73.67	2,552.45	2,992.31	2,879.28	113.04	26.472	
11,500.00	7,407.00	7,686.01	6,738.18	68.27	62.75	-39.38	73.62	2,550.54	3,088.18	2,974.97	113.21	27.278	
11,600.00	7,407.00	7,683.32	6,736.28	69.73	62.70	-39.20	73.56	2,548.62	3,184.29	3,070.93	113.37	28.089	
11,700.00	7,407.00	7,680.62	6,734.39	71.20	62.66	-39.03	73.51	2,546.70	3,280.64	3,167.14	113.50	28.904	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	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 PORTER CREEK #1 - Wellbore #1 - Design #1												Offset Site Error:	0.00 usft
Survey Program: 0-INC												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)			
10,200.00	7,407.00	7,346.00	7,346.00	51.94	147.39	-90.00	-4,158.80	4,006.00	3,271.25	3,085.54	185.71	17.615	
10,300.00	7,407.00	7,346.00	7,346.00	52.93	147.39	-90.00	-4,158.80	4,006.00	3,193.78	3,008.15	185.63	17.205	
10,400.00	7,407.00	7,346.00	7,346.00	53.99	147.39	-90.00	-4,158.80	4,006.00	3,117.60	2,931.94	185.65	16.792	
10,500.00	7,407.00	7,346.00	7,346.00	55.09	147.39	-90.00	-4,158.80	4,006.00	3,042.79	2,857.00	185.79	16.378	
10,600.00	7,407.00	7,346.00	7,346.00	56.25	147.39	-90.00	-4,158.80	4,006.00	2,969.47	2,783.42	186.05	15.961	
10,700.00	7,407.00	7,346.00	7,346.00	57.46	147.39	-90.00	-4,158.80	4,006.00	2,897.74	2,711.28	186.46	15.541	
10,800.00	7,407.00	7,346.00	7,346.00	58.71	147.39	-90.00	-4,158.80	4,006.00	2,827.73	2,640.70	187.02	15.120	
10,900.00	7,407.00	7,346.00	7,346.00	59.99	147.39	-90.00	-4,158.80	4,006.00	2,759.57	2,571.80	187.76	14.697	
11,000.00	7,407.00	7,346.00	7,346.00	61.30	147.39	-90.00	-4,158.80	4,006.00	2,693.39	2,504.70	188.69	14.274	
11,100.00	7,407.00	7,346.00	7,346.00	62.65	147.39	-90.00	-4,158.80	4,006.00	2,629.36	2,439.54	189.81	13.852	
11,200.00	7,407.00	7,346.00	7,346.00	64.02	147.39	-90.00	-4,158.80	4,006.00	2,567.62	2,376.48	191.14	13.433	
11,300.00	7,407.00	7,346.00	7,346.00	65.42	147.39	-90.00	-4,158.80	4,006.00	2,508.35	2,315.67	192.68	13.018	
11,400.00	7,407.00	7,346.00	7,346.00	66.84	147.39	-90.00	-4,158.80	4,006.00	2,451.73	2,257.30	194.43	12.610	
11,500.00	7,407.00	7,346.00	7,346.00	68.27	147.39	-90.00	-4,158.80	4,006.00	2,397.95	2,201.56	196.39	12.210	
11,600.00	7,407.00	7,346.00	7,346.00	69.73	147.39	-90.00	-4,158.80	4,006.00	2,347.19	2,148.65	198.54	11.822	
11,700.00	7,407.00	7,346.00	7,346.00	71.20	147.39	-90.00	-4,158.80	4,006.00	2,299.67	2,098.78	200.89	11.448	
11,800.00	7,407.00	7,346.00	7,346.00	72.69	147.39	-90.00	-4,158.80	4,006.00	2,255.58	2,052.17	203.40	11.089	
11,900.00	7,407.00	7,346.00	7,346.00	74.19	147.39	-90.00	-4,158.80	4,006.00	2,215.13	2,009.05	206.08	10.749	
12,000.00	7,407.00	7,346.00	7,346.00	75.71	147.39	-90.00	-4,158.80	4,006.00	2,178.52	1,969.64	208.88	10.430	
12,100.00	7,407.00	7,346.00	7,346.00	77.24	147.39	-90.00	-4,158.80	4,006.00	2,145.95	1,934.16	211.79	10.132	
12,200.00	7,407.00	7,346.00	7,346.00	78.78	147.39	-90.00	-4,158.80	4,006.00	2,117.61	1,902.83	214.77	9.860	
12,300.00	7,407.00	7,346.00	7,346.00	80.33	147.39	-90.00	-4,158.80	4,006.00	2,093.66	1,875.86	217.80	9.613	
12,400.00	7,407.00	7,346.00	7,346.00	81.89	147.39	-90.00	-4,158.80	4,006.00	2,074.26	1,853.42	220.84	9.392	
12,500.00	7,407.00	7,346.00	7,346.00	83.46	147.39	-90.00	-4,158.80	4,006.00	2,059.55	1,835.69	223.86	9.200	
12,600.00	7,407.00	7,346.00	7,346.00	85.04	147.39	-90.00	-4,158.80	4,006.00	2,049.61	1,822.79	226.82	9.036	
12,700.00	7,407.00	7,346.00	7,346.00	86.63	147.39	-90.00	-4,158.80	4,006.00	2,044.52	1,814.83	229.69	8.901	
12,754.21	7,407.00	7,346.00	7,346.00	87.49	147.39	-90.00	-4,158.80	4,006.00	2,043.80	1,812.60	231.20	8.840 CC	
12,800.00	7,407.00	7,346.00	7,346.00	88.22	147.39	-90.00	-4,158.80	4,006.00	2,044.31	1,811.87	232.44	8.795 ES	
12,900.00	7,407.00	7,346.00	7,346.00	89.82	147.39	-90.00	-4,158.80	4,006.00	2,048.99	1,813.95	235.04	8.717	
13,000.00	7,407.00	7,346.00	7,346.00	91.43	147.39	-90.00	-4,158.80	4,006.00	2,058.52	1,821.04	237.48	8.668	
13,100.00	7,407.00	7,346.00	7,346.00	93.05	147.39	-90.00	-4,158.80	4,006.00	2,072.84	1,833.11	239.74	8.646 SF	
13,200.00	7,407.00	7,346.00	7,346.00	94.67	147.39	-90.00	-4,158.80	4,006.00	2,091.85	1,850.06	241.79	8.651	
13,300.00	7,407.00	7,346.00	7,346.00	96.30	147.39	-90.00	-4,158.80	4,006.00	2,115.42	1,871.77	243.65	8.682	
13,400.00	7,407.00	7,346.00	7,346.00	97.93	147.39	-90.00	-4,158.80	4,006.00	2,143.40	1,898.10	245.30	8.738	
13,500.00	7,407.00	7,346.00	7,346.00	99.57	147.39	-90.00	-4,158.80	4,006.00	2,175.62	1,928.87	246.75	8.817	
13,600.00	7,407.00	7,346.00	7,346.00	101.21	147.39	-90.00	-4,158.80	4,006.00	2,211.89	1,963.89	248.01	8.919	
13,700.00	7,407.00	7,346.00	7,346.00	102.86	147.39	-90.00	-4,158.80	4,006.00	2,252.03	2,002.95	249.07	9.042	
13,800.00	7,407.00	7,346.00	7,346.00	104.51	147.39	-90.00	-4,158.80	4,006.00	2,295.82	2,045.85	249.97	9.185	
13,900.00	7,407.00	7,346.00	7,346.00	106.17	147.39	-90.00	-4,158.80	4,006.00	2,343.06	2,092.37	250.70	9.346	
14,000.00	7,407.00	7,346.00	7,346.00	107.83	147.39	-90.00	-4,158.80	4,006.00	2,393.56	2,142.28	251.28	9.526	
14,100.00	7,407.00	7,346.00	7,346.00	109.49	147.39	-90.00	-4,158.80	4,006.00	2,447.09	2,195.37	251.72	9.721	
14,200.00	7,407.00	7,346.00	7,346.00	111.16	147.39	-90.00	-4,158.80	4,006.00	2,503.48	2,251.43	252.05	9.932	
14,300.00	7,407.00	7,346.00	7,346.00	112.83	147.39	-90.00	-4,158.80	4,006.00	2,562.53	2,310.26	252.27	10.158	
14,400.00	7,407.00	7,346.00	7,346.00	114.50	147.39	-90.00	-4,158.80	4,006.00	2,624.07	2,371.68	252.39	10.397	
14,500.00	7,407.00	7,346.00	7,346.00	116.18	147.39	-90.00	-4,158.80	4,006.00	2,687.92	2,435.48	252.43	10.648	
14,600.00	7,407.00	7,346.00	7,346.00	117.86	147.39	-90.00	-4,158.80	4,006.00	2,753.92	2,501.51	252.40	10.911	
14,700.00	7,407.00	7,346.00	7,346.00	119.54	147.39	-90.00	-4,158.80	4,006.00	2,821.92	2,569.60	252.31	11.184	
14,800.00	7,407.00	7,346.00	7,346.00	121.23	147.39	-90.00	-4,158.80	4,006.00	2,891.78	2,639.61	252.17	11.468	
14,900.00	7,407.00	7,346.00	7,346.00	122.92	147.39	-90.00	-4,158.80	4,006.00	2,963.36	2,711.39	251.98	11.760	
15,000.00	7,407.00	7,346.00	7,346.00	124.61	147.39	-90.00	-4,158.80	4,006.00	3,036.56	2,784.81	251.75	12.062	
15,100.00	7,407.00	7,346.00	7,346.00	126.31	147.39	-90.00	-4,158.80	4,006.00	3,111.25	2,859.75	251.50	12.371	
15,200.00	7,407.00	7,346.00	7,346.00	128.00	147.39	-90.00	-4,158.80	4,006.00	3,187.32	2,936.11	251.21	12.688	

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	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 PORTER CREEK #1 - Wellbore #1 - Design #1													Offset Site Error: 0.00 usft
Survey Program: 0-INC													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance		Rule Assigned:		Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
15,300.00	7,407.00	7,346.00	7,346.00	129.70	147.39	-90.00	-4,158.80	4,006.00	3,264.68	3,013.78	250.91	13.011	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 1-35H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 1524-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
0.00	0.00	12.00	12.00	0.00	0.02	98.71	-271.71	1,772.58	1,793.28				
100.00	100.00	112.00	112.00	0.14	0.20	98.71	-271.71	1,772.58	1,793.28	1,792.94	0.34	5,253.238	
200.00	200.00	212.00	212.00	0.50	0.37	98.71	-271.71	1,772.58	1,793.28	1,792.40	0.88	2,045.713	
300.00	300.00	312.00	312.00	0.86	0.55	98.71	-271.71	1,772.58	1,793.28	1,791.87	1.41	1,270.171	
400.00	399.98	411.98	411.98	1.20	0.73	-81.35	-271.71	1,772.58	1,793.02	1,791.09	1.93	928.586	
450.00	449.93	461.93	461.93	1.38	0.82	-81.42	-271.71	1,772.58	1,792.69	1,790.50	2.19	819.533	
500.00	499.86	511.86	511.86	1.55	0.90	-81.50	-271.71	1,772.58	1,792.30	1,789.85	2.45	732.182	
600.00	599.73	611.73	611.73	1.90	1.08	-81.67	-271.71	1,772.58	1,791.53	1,788.56	2.98	601.896	
700.00	699.59	711.59	711.59	2.25	1.26	-81.83	-271.71	1,772.58	1,790.78	1,787.27	3.51	510.012	
800.00	799.45	811.45	811.45	2.62	1.43	-82.00	-271.71	1,772.58	1,790.05	1,786.00	4.05	442.023	
873.20	872.55	884.55	884.55	2.88	1.56	-82.12	-271.71	1,772.58	1,789.52	1,785.07	4.45	402.566	
900.00	899.32	911.32	911.32	2.98	1.61	-82.16	-271.71	1,772.58	1,789.34	1,784.75	4.59	389.835	
1,000.00	999.28	1,011.28	1,011.28	3.34	1.79	-82.23	-271.71	1,772.58	1,788.99	1,783.87	5.12	349.086	
1,023.20	1,022.48	1,034.48	1,034.48	3.42	1.83	97.77	-271.71	1,772.58	1,788.98	1,783.74	5.25	341.040	
1,100.00	1,099.28	1,111.28	1,111.28	3.68	1.96	97.77	-271.71	1,772.58	1,788.98	1,783.34	5.64	317.202	
1,200.00	1,199.28	1,211.28	1,211.28	4.02	2.14	97.77	-271.71	1,772.58	1,788.98	1,782.82	6.16	290.582	
1,300.00	1,299.28	1,311.28	1,311.28	4.36	2.32	97.77	-271.71	1,772.58	1,788.98	1,782.30	6.68	267.964	
1,400.00	1,399.28	1,411.28	1,411.28	4.70	2.49	97.77	-271.71	1,772.58	1,788.98	1,781.78	7.20	248.533	
1,500.00	1,499.28	1,511.28	1,511.28	5.05	2.67	97.77	-271.71	1,772.58	1,788.98	1,781.26	7.72	231.674	
1,600.00	1,599.28	1,611.33	1,611.33	5.40	3.00	97.76	-271.70	1,772.58	1,788.98	1,780.58	8.40	212.933	
1,700.00	1,699.28	1,711.39	1,711.39	5.75	3.36	97.76	-271.62	1,772.58	1,788.98	1,779.87	9.11	196.481	
1,800.00	1,799.28	1,811.45	1,811.45	6.10	3.71	97.76	-271.49	1,772.59	1,788.97	1,779.16	9.81	182.369	
1,824.84	1,824.12	1,836.12	1,836.12	6.19	3.80	97.76	-271.45	1,772.60	1,788.97	1,778.98	9.98	179.194	
1,900.00	1,899.28	1,910.41	1,910.41	6.45	4.06	97.75	-271.34	1,772.63	1,788.98	1,778.48	10.51	170.269	
2,000.00	1,999.28	2,009.25	2,009.25	6.80	4.40	97.75	-271.27	1,772.72	1,789.07	1,777.86	11.20	159.683	
2,100.00	2,099.28	2,108.19	2,108.19	7.16	4.75	97.75	-271.26	1,772.87	1,789.21	1,777.31	11.90	150.331	
2,200.00	2,199.28	2,208.62	2,208.61	7.51	5.10	97.75	-271.25	1,773.03	1,789.37	1,776.77	12.61	141.946	
2,300.00	2,299.28	2,309.04	2,309.04	7.86	5.45	97.75	-271.19	1,773.18	1,789.51	1,776.20	13.31	134.442	
2,400.00	2,399.28	2,408.24	2,408.24	8.22	5.79	97.74	-271.08	1,773.32	1,789.63	1,775.62	14.01	127.716	
2,500.00	2,499.28	2,503.61	2,503.61	8.57	6.13	97.73	-270.89	1,773.63	1,789.93	1,775.23	14.71	121.720	
2,600.00	2,599.28	2,598.97	2,598.97	8.93	6.47	97.72	-270.60	1,774.21	1,790.49	1,775.09	15.40	116.278	
2,700.00	2,699.26	2,696.03	2,696.02	9.28	6.82	36.26	-270.21	1,775.05	1,789.89	1,773.79	16.09	111.210	
2,800.00	2,799.12	2,798.52	2,798.50	9.63	7.18	36.38	-269.77	1,775.92	1,786.45	1,769.64	16.81	106.287	
2,900.00	2,898.74	2,900.77	2,900.76	9.98	7.54	36.61	-269.32	1,776.63	1,780.06	1,762.54	17.52	101.606	
3,000.00	2,997.98	3,002.84	3,002.83	10.34	7.91	36.95	-268.88	1,777.20	1,770.76	1,752.53	18.23	97.132	
3,100.00	3,096.75	3,104.62	3,104.60	10.70	8.27	37.39	-268.41	1,777.59	1,758.56	1,739.62	18.94	92.839	
3,200.00	3,194.91	3,205.75	3,205.72	11.07	8.63	37.95	-267.91	1,777.82	1,743.50	1,723.85	19.65	88.714	
3,300.00	3,292.34	3,304.05	3,304.02	11.45	8.98	38.62	-267.35	1,777.94	1,725.69	1,705.34	20.36	84.768	
3,400.00	3,388.93	3,400.44	3,400.41	11.85	9.33	39.39	-266.54	1,778.10	1,705.33	1,684.27	21.06	80.968	
3,500.00	3,484.55	3,496.00	3,495.96	12.27	9.67	40.27	-265.46	1,778.32	1,682.51	1,660.73	21.77	77.279	
3,600.00	3,579.10	3,591.54	3,591.50	12.73	10.01	41.29	-264.15	1,778.58	1,657.29	1,634.80	22.49	73.679	
3,700.00	3,672.45	3,686.39	3,686.34	13.21	10.35	42.44	-262.78	1,778.79	1,629.73	1,606.50	23.23	70.161	
3,800.00	3,764.50	3,779.92	3,779.86	13.74	10.68	43.75	-261.37	1,778.94	1,599.96	1,575.98	23.98	66.720	
3,900.00	3,855.12	3,872.11	3,872.04	14.31	11.01	45.21	-259.93	1,779.03	1,568.13	1,543.38	24.75	63.348	
4,000.00	3,944.22	3,962.77	3,962.69	14.93	11.34	46.83	-258.51	1,779.04	1,534.41	1,508.85	25.56	60.039	
4,071.71	4,007.11	4,026.74	4,026.65	15.41	11.57	48.10	-257.51	1,779.01	1,509.17	1,483.01	26.15	57.702	
4,100.00	4,031.75	4,051.79	4,051.70	15.60	11.66	48.46	-257.12	1,778.98	1,499.08	1,472.68	26.40	56.792	
4,200.00	4,118.84	4,140.44	4,140.33	16.32	11.97	49.78	-255.73	1,778.85	1,463.84	1,436.57	27.27	53.673	
4,300.00	4,205.93	4,229.15	4,229.03	17.06	12.29	51.14	-254.31	1,778.65	1,429.31	1,401.12	28.19	50.700	
4,400.00	4,293.02	4,317.81	4,317.68	17.84	12.60	52.57	-252.85	1,778.37	1,395.54	1,366.38	29.15	47.873	
4,500.00	4,380.11	4,405.57	4,405.43	18.63	12.92	54.04	-251.38	1,778.02	1,362.59	1,332.44	30.15	45.193	
4,600.00	4,467.21	4,490.86	4,490.71	19.45	13.22	55.53	-249.99	1,777.74	1,330.70	1,299.51	31.19	42.668	

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 1-35H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 1524-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
4,700.00	4,554.30	4,576.22	4,576.05	20.28	13.53	57.08	-248.68	1,777.56	1,299.98	1,267.71	32.27	40.287	
4,800.00	4,641.39	4,661.65	4,661.47	21.13	13.83	58.69	-247.44	1,777.50	1,270.51	1,237.12	33.39	38.050	
4,900.00	4,728.48	4,749.28	4,749.09	21.99	14.14	60.41	-246.24	1,777.47	1,242.32	1,207.76	34.56	35.945	
5,000.00	4,815.58	4,837.03	4,836.83	22.87	14.46	62.20	-245.09	1,777.38	1,215.39	1,179.61	35.77	33.973	
5,100.00	4,902.67	4,924.68	4,924.48	23.75	14.77	64.06	-243.99	1,777.22	1,189.82	1,152.79	37.03	32.134	
5,200.00	4,989.76	5,013.78	5,013.58	24.65	15.09	66.01	-242.94	1,776.95	1,165.67	1,127.35	38.32	30.422	
5,300.00	5,076.85	5,103.35	5,103.14	25.55	15.40	68.06	-241.97	1,776.40	1,142.93	1,103.29	39.64	28.832	
5,400.00	5,163.94	5,192.58	5,192.36	26.46	15.72	70.17	-241.09	1,775.54	1,121.71	1,080.71	41.00	27.362	
5,500.00	5,251.04	5,282.19	5,281.96	27.38	16.03	72.37	-240.26	1,774.40	1,102.12	1,059.75	42.37	26.009	
5,600.00	5,338.13	5,372.37	5,372.12	28.31	16.35	74.64	-239.31	1,772.98	1,084.21	1,040.43	43.77	24.769	
5,700.00	5,425.22	5,462.36	5,462.09	29.24	16.66	76.98	-238.21	1,771.31	1,068.05	1,022.87	45.18	23.638	
5,800.00	5,512.31	5,549.57	5,549.27	30.18	16.97	79.29	-237.02	1,769.46	1,053.79	1,007.20	46.59	22.618	
5,900.00	5,599.40	5,630.77	5,630.45	31.12	17.25	81.49	-236.15	1,767.85	1,042.03	994.05	47.98	21.718	
6,000.00	5,686.50	5,712.03	5,711.69	32.06	17.53	83.72	-235.61	1,766.48	1,033.01	983.66	49.35	20.931	
6,100.00	5,773.59	5,793.33	5,792.99	33.01	17.81	85.98	-235.42	1,765.32	1,026.81	976.11	50.70	20.252	
6,200.00	5,860.68	5,879.54	5,879.19	33.96	18.11	88.39	-235.40	1,764.35	1,023.31	971.27	52.03	19.666	
6,299.56	5,947.39	5,966.95	5,966.60	34.92	18.42	90.82	-235.14	1,763.61	1,022.16	968.83	53.33	19.168	
6,300.00	5,947.77	5,967.34	5,966.99	34.92	18.42	90.83	-235.14	1,763.60	1,022.16	968.83	53.33	19.166	
6,400.00	6,034.86	6,055.53	6,055.17	35.88	18.73	93.27	-234.64	1,763.12	1,023.31	968.72	54.59	18.746	
6,500.00	6,121.96	6,143.37	6,143.01	36.84	19.04	95.68	-233.93	1,762.86	1,026.73	970.93	55.80	18.401	
6,600.00	6,209.05	6,230.83	6,230.47	37.81	19.35	98.05	-233.14	1,762.72	1,032.43	975.48	56.95	18.128	
6,700.00	6,296.14	6,318.41	6,318.05	38.77	19.67	100.39	-232.30	1,762.68	1,040.37	982.32	58.05	17.921	
6,800.00	6,383.23	6,405.69	6,405.32	39.74	19.98	102.69	-231.40	1,762.73	1,050.50	991.40	59.10	17.776	
6,900.00	6,470.32	6,491.99	6,491.61	40.71	20.29	104.93	-230.58	1,762.79	1,062.82	1,002.74	60.08	17.691	
7,000.00	6,557.42	6,578.23	6,577.85	41.69	20.60	107.13	-229.84	1,762.84	1,077.29	1,016.28	61.00	17.660	
7,100.00	6,644.51	6,665.00	6,664.62	42.66	20.91	109.29	-229.19	1,762.88	1,093.83	1,031.95	61.87	17.678	
7,200.00	6,731.60	6,750.69	6,750.31	43.64	21.21	111.37	-228.63	1,762.92	1,112.35	1,049.66	62.69	17.744	
7,244.75	6,770.57	6,789.28	6,788.90	44.08	21.35	112.29	-228.40	1,762.93	1,121.25	1,058.21	63.04	17.787	
7,250.00	6,775.15	6,793.82	6,793.43	44.13	21.37	111.56	-228.38	1,762.93	1,122.30	1,059.22	63.08	17.792	
7,300.00	6,819.19	6,836.63	6,836.25	44.60	21.52	103.90	-228.15	1,762.95	1,130.14	1,066.68	63.46	17.810	
7,350.00	6,863.79	6,868.71	6,868.33	45.05	21.63	94.97	-228.12	1,763.11	1,134.31	1,070.56	63.76	17.792	
7,400.00	6,908.61	6,887.00	6,886.61	45.47	21.69	85.28	-228.34	1,763.38	1,135.28	1,071.34	63.94	17.756	
7,450.00	6,953.31	6,919.00	6,918.57	45.84	21.80	76.08	-229.56	1,764.44	1,133.26	1,069.08	64.18	17.656	
7,500.00	6,997.56	6,929.13	6,928.67	46.18	21.83	67.24	-230.23	1,764.96	1,128.25	1,064.05	64.21	17.572	
7,550.00	7,041.01	6,950.00	6,949.41	46.47	21.90	59.78	-232.10	1,766.28	1,120.48	1,056.21	64.27	17.433	
7,600.00	7,083.34	6,962.14	6,961.43	46.73	21.94	53.39	-233.50	1,767.20	1,109.87	1,045.68	64.19	17.290	
7,650.00	7,124.22	6,982.00	6,981.00	46.94	22.01	48.31	-236.36	1,768.99	1,096.54	1,032.39	64.15	17.093	
7,700.00	7,163.34	6,992.49	6,991.28	47.11	22.04	44.06	-238.16	1,770.07	1,080.46	1,016.53	63.93	16.901	
7,750.00	7,200.41	7,013.00	7,011.22	47.24	22.11	40.84	-242.31	1,772.43	1,061.81	998.00	63.82	16.639	
7,800.00	7,235.13	7,013.00	7,011.22	47.34	22.11	37.92	-242.31	1,772.43	1,040.55	977.27	63.27	16.445	
7,850.00	7,267.26	7,045.00	7,041.87	47.40	22.21	36.22	-250.41	1,776.78	1,016.72	953.39	63.33	16.054	
7,900.00	7,296.54	7,045.00	7,041.87	47.44	22.21	34.36	-250.41	1,776.78	990.25	927.58	62.66	15.802	
7,950.00	7,322.74	7,061.81	7,057.67	47.44	22.27	33.27	-255.49	1,779.41	961.45	899.11	62.35	15.421	
8,000.00	7,345.68	7,076.00	7,070.81	47.42	22.31	32.50	-260.26	1,781.85	930.36	868.41	61.94	15.019	
8,050.00	7,365.18	7,086.95	7,080.81	47.38	22.34	32.01	-264.22	1,783.88	897.00	835.57	61.43	14.601	
8,100.00	7,381.08	7,108.00	7,099.67	47.31	22.41	32.11	-272.55	1,788.12	861.60	800.35	61.24	14.069	
8,150.00	7,393.27	7,108.00	7,099.67	47.23	22.41	32.03	-272.55	1,788.12	823.88	763.53	60.35	13.651	
8,200.00	7,401.65	7,123.56	7,113.29	47.14	22.45	32.77	-279.25	1,791.54	784.27	724.26	60.02	13.068	
8,250.00	7,406.16	7,139.00	7,126.53	47.03	22.50	34.02	-286.32	1,795.17	742.82	683.09	59.73	12.436	
8,282.77	7,407.00	7,139.00	7,126.53	46.96	22.50	34.76	-286.32	1,795.17	714.69	655.54	59.14	12.084	
8,300.00	7,407.00	7,139.00	7,126.53	46.92	22.50	34.76	-286.32	1,795.17	699.80	640.98	58.82	11.897	
8,400.00	7,407.00	7,171.00	7,153.13	46.71	22.60	36.23	-302.18	1,803.20	614.19	555.93	58.26	10.542	

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 1-35H - Wellbore #1 - Wellbore #1											Offset Site Error:	0.00 usft
Survey Program: 1524-OWSG (Rev2) MWD											Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		
8,500.00	7,407.00	7,203.00	7,178.65	46.54	22.70	37.78	-319.58	1,811.54	531.24	473.79	57.44	9.248
8,600.00	7,407.00	7,235.00	7,202.96	46.40	22.80	39.45	-338.64	1,819.87	451.66	395.45	56.21	8.035
8,700.00	7,407.00	7,266.00	7,225.13	46.30	22.91	41.12	-358.62	1,828.25	376.24	322.01	54.23	6.938
8,800.00	7,407.00	7,316.92	7,258.47	46.24	23.09	43.72	-393.87	1,843.64	305.38	252.01	53.37	5.722
8,900.00	7,407.00	7,373.97	7,291.86	46.22	23.33	46.65	-436.26	1,862.10	239.45	186.83	52.63	4.550
9,000.00	7,407.00	7,446.43	7,328.48	46.25	23.68	49.93	-492.82	1,888.61	177.38	123.86	53.51	3.315
9,100.00	7,407.00	7,522.19	7,359.70	46.32	24.12	51.43	-553.56	1,921.31	117.23	63.02	54.21	2.163
9,200.00	7,407.00	7,600.45	7,384.09	46.46	24.67	47.15	-618.52	1,957.44	61.11	8.36	52.75	1.158 Level 3
9,300.00	7,407.00	7,682.16	7,402.81	46.65	25.33	-6.47	-687.89	1,996.26	16.44	-21.34	37.78	0.435 Level 3
9,307.73	7,407.00	7,688.66	7,403.88	46.67	25.38	-18.23	-693.50	1,999.36	15.92	-27.15	43.07	0.370 Level 3, CC, ES, SF
9,400.00	7,407.00	7,765.59	7,412.82	46.91	26.09	-82.05	-759.38	2,037.99	52.05	-16.25	68.30	0.762 Level 3
9,500.00	7,407.00	7,850.18	7,420.03	47.25	26.97	-90.66	-831.53	2,081.55	104.17	34.66	69.50	1.499 Level 3
9,600.00	7,407.00	7,928.94	7,422.65	47.66	27.87	-91.60	-898.34	2,123.13	157.90	86.10	71.80	2.199
9,700.00	7,407.00	8,013.28	7,422.75	48.16	28.93	-91.20	-968.34	2,170.18	214.46	140.49	73.97	2.899
9,800.00	7,407.00	8,093.87	7,420.79	48.75	30.02	-90.46	-1,035.70	2,214.36	270.06	193.66	76.40	3.535
9,900.00	7,407.00	8,169.26	7,419.50	49.42	31.10	-90.11	-1,097.99	2,256.81	327.16	248.30	78.86	4.149
10,000.00	7,407.00	8,244.21	7,418.81	50.18	32.24	-89.96	-1,159.03	2,300.30	385.94	304.67	81.27	4.749
10,100.00	7,407.00	8,320.60	7,418.03	51.03	33.46	-89.84	-1,220.77	2,345.27	445.57	361.87	83.70	5.323
10,200.00	7,407.00	8,388.87	7,417.40	51.94	34.59	-89.77	-1,275.13	2,386.56	506.80	420.72	86.08	5.888
10,300.00	7,407.00	8,509.64	7,417.72	52.93	36.65	-89.84	-1,373.95	2,455.90	564.62	475.55	89.07	6.339
10,400.00	7,407.00	8,617.58	7,416.64	53.99	38.54	-89.74	-1,464.67	2,514.33	619.74	527.72	92.02	6.735
10,500.00	7,407.00	8,697.74	7,414.22	55.09	39.97	-89.52	-1,533.02	2,556.14	672.72	577.92	94.80	7.096
10,600.00	7,407.00	8,772.05	7,412.64	56.25	41.32	-89.40	-1,596.11	2,595.37	726.36	628.86	97.50	7.450
10,700.00	7,407.00	8,879.40	7,412.32	57.46	43.31	-89.43	-1,687.03	2,652.42	780.51	679.82	100.69	7.752
10,800.00	7,407.00	8,949.51	7,411.42	58.71	44.63	-89.38	-1,747.12	2,688.52	832.88	729.50	103.37	8.057
10,900.00	7,407.00	9,020.82	7,411.26	59.99	45.99	-89.40	-1,807.48	2,726.50	886.93	780.88	106.05	8.363
11,000.00	7,407.00	9,121.24	7,410.36	61.30	47.92	-89.38	-1,892.87	2,779.33	940.23	830.92	109.31	8.601
11,100.00	7,407.00	9,186.00	7,408.63	62.65	49.18	-89.29	-1,947.82	2,813.54	993.98	882.08	111.89	8.883
11,200.00	7,407.00	9,285.66	7,408.02	64.02	51.16	-89.29	-2,031.89	2,867.05	1,048.51	933.28	115.23	9.099
11,300.00	7,407.00	9,350.53	7,406.70	65.42	52.45	-89.23	-2,086.63	2,901.84	1,102.93	985.12	117.82	9.362
11,400.00	7,407.00	9,426.21	7,405.11	66.84	53.97	-89.17	-2,150.46	2,942.45	1,157.49	1,036.85	120.65	9.594
11,500.00	7,407.00	9,502.23	7,403.00	68.27	55.53	-89.09	-2,213.54	2,984.82	1,213.99	1,090.48	123.51	9.829
11,600.00	7,407.00	9,585.46	7,401.40	69.73	57.24	-89.04	-2,282.81	3,030.95	1,270.21	1,143.65	126.56	10.036
11,700.00	7,407.00	9,670.13	7,401.37	71.20	58.99	-89.08	-2,353.01	3,078.27	1,326.89	1,197.22	129.67	10.233
11,800.00	7,407.00	9,723.00	7,400.61	72.69	60.09	-89.07	-2,396.93	3,107.69	1,383.48	1,251.61	131.88	10.491
11,900.00	7,407.00	9,788.71	7,400.49	74.19	61.47	-89.09	-2,450.47	3,145.78	1,442.11	1,307.67	134.44	10.727
12,000.00	7,407.00	9,818.00	7,399.89	75.71	62.09	-89.08	-2,474.10	3,163.08	1,502.10	1,366.30	135.80	11.061
12,100.00	7,407.00	9,867.15	7,398.35	77.24	63.15	-89.03	-2,512.90	3,193.20	1,564.21	1,426.46	137.76	11.355
12,200.00	7,407.00	9,954.59	7,394.63	78.78	65.04	-88.90	-2,581.63	3,247.12	1,626.68	1,485.60	141.08	11.530
12,300.00	7,407.00	9,989.18	7,393.50	80.33	65.79	-88.87	-2,608.62	3,268.73	1,690.05	1,547.57	142.48	11.862
12,400.00	7,407.00	10,008.00	7,393.10	81.89	66.20	-88.86	-2,623.00	3,280.87	1,755.64	1,612.46	143.18	12.262
12,500.00	7,407.00	10,049.79	7,392.55	83.46	67.13	-88.86	-2,654.17	3,308.69	1,823.05	1,678.32	144.73	12.596
12,600.00	7,407.00	10,087.29	7,392.27	85.04	67.96	-88.87	-2,681.63	3,334.23	1,891.90	1,745.81	146.08	12.951
12,700.00	7,407.00	10,104.00	7,392.31	86.63	68.33	-88.88	-2,693.66	3,345.83	1,962.37	1,815.88	146.49	13.396
12,800.00	7,407.00	10,135.00	7,392.77	88.22	69.02	-88.92	-2,715.48	3,367.84	2,034.36	1,886.87	147.49	13.794
12,900.00	7,407.00	10,167.00	7,393.61	89.82	69.74	-88.97	-2,737.46	3,391.08	2,107.75	1,959.24	148.51	14.193
13,000.00	7,407.00	10,199.00	7,394.36	91.43	70.46	-89.02	-2,758.93	3,414.80	2,182.43	2,032.91	149.52	14.596
13,100.00	7,407.00	10,231.00	7,394.42	93.05	71.18	-89.04	-2,780.13	3,438.77	2,258.01	2,107.48	150.52	15.001
13,200.00	7,407.00	10,262.00	7,393.99	94.67	71.88	-89.04	-2,800.23	3,462.36	2,334.66	2,183.18	151.48	15.412
13,300.00	7,407.00	10,262.00	7,393.99	96.30	71.88	-89.04	-2,800.23	3,462.36	2,412.57	2,261.67	150.90	15.988
13,400.00	7,407.00	10,358.00	7,393.18	97.93	74.06	-89.05	-2,860.48	3,537.08	2,491.07	2,336.01	155.07	16.065
13,500.00	7,407.00	10,389.00	7,392.88	99.57	74.76	-89.06	-2,880.07	3,561.10	2,569.24	2,413.21	156.03	16.466

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 1-35H - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft
Survey Program: 1524-OWSG (Rev2) MWD													Offset Well Error: 0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
13,600.00	7,407.00	10,404.33	7,392.96	101.21	75.11	-89.07	-2,889.51	3,573.19	2,648.47	2,492.26	156.21	16.954	
13,700.00	7,407.00	10,421.00	7,393.24	102.86	75.49	-89.08	-2,899.62	3,586.44	2,728.63	2,572.17	156.45	17.441	
13,800.00	7,407.00	10,440.02	7,393.77	104.51	75.93	-89.11	-2,910.91	3,601.73	2,809.67	2,652.86	156.81	17.918	
13,900.00	7,407.00	10,459.22	7,394.50	106.17	76.36	-89.15	-2,922.04	3,617.36	2,891.59	2,734.42	157.17	18.397	
14,000.00	7,407.00	10,504.35	7,396.34	107.83	77.39	-89.23	-2,947.92	3,654.29	2,973.99	2,815.11	158.88	18.719	
14,100.00	7,407.00	10,534.25	7,397.34	109.49	78.08	-89.27	-2,964.96	3,678.84	3,056.69	2,896.88	159.81	19.127	
14,200.00	7,407.00	10,580.00	7,397.70	111.16	79.12	-89.30	-2,990.73	3,716.63	3,139.82	2,978.25	161.57	19.433	
14,300.00	7,407.00	10,611.00	7,397.18	112.83	79.83	-89.29	-3,008.13	3,742.28	3,223.14	3,060.56	162.58	19.825	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - EXIST HZ FOX CREEK 3-26H - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 1584-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
7,200.00	6,731.60	9,098.00	7,458.25	43.64	48.47	-7.21	2,672.12	4,325.70	3,265.93	3,193.84	72.09	45.302	
7,244.75	6,770.57	9,098.00	7,458.25	44.08	48.47	-7.21	2,672.12	4,325.70	3,236.81	3,164.34	72.47	44.663	
7,250.00	6,775.15	9,098.00	7,458.25	44.13	48.47	-8.42	2,672.12	4,325.70	3,233.43	3,160.91	72.52	44.590	
7,300.00	6,819.19	9,098.00	7,458.25	44.60	48.47	-20.34	2,672.12	4,325.70	3,202.53	3,129.58	72.95	43.899	
7,350.00	6,863.79	9,098.00	7,458.25	45.05	48.47	-32.71	2,672.12	4,325.70	3,174.23	3,100.82	73.41	43.239	
7,400.00	6,908.61	9,098.00	7,458.25	45.47	48.47	-45.05	2,672.12	4,325.70	3,148.82	3,074.92	73.89	42.614	
7,450.00	6,953.31	9,098.00	7,458.25	45.84	48.47	-56.75	2,672.12	4,325.70	3,126.56	3,052.17	74.39	42.030	
7,500.00	6,997.56	9,081.27	7,457.82	46.18	48.14	-66.95	2,658.39	4,335.24	3,107.56	3,033.03	74.52	41.698	
7,550.00	7,041.01	9,066.00	7,457.66	46.47	47.83	-75.70	2,645.92	4,344.06	3,092.18	3,017.48	74.70	41.395	
7,600.00	7,083.34	9,060.80	7,457.65	46.73	47.73	-83.09	2,641.68	4,347.08	3,080.43	3,005.31	75.11	41.011	
7,650.00	7,124.22	9,010.78	7,457.86	46.94	46.73	-88.36	2,600.77	4,375.85	3,072.20	2,997.70	74.49	41.241	
7,700.00	7,163.34	8,979.67	7,457.84	47.11	46.12	-92.71	2,575.30	4,393.70	3,067.55	2,993.23	74.31	41.278	
7,737.17	7,191.11	8,971.00	7,457.85	47.21	45.95	-95.45	2,568.19	4,398.67	3,066.47	2,991.95	74.52	41.150 CC	
7,750.00	7,200.41	8,971.00	7,457.85	47.24	45.95	-96.30	2,568.19	4,398.67	3,066.60	2,991.94	74.66	41.074 ES	
7,800.00	7,235.13	8,951.96	7,457.81	47.34	45.57	-98.83	2,552.68	4,409.70	3,069.39	2,994.62	74.77	41.051	
7,850.00	7,267.26	8,946.52	7,457.77	47.40	45.47	-100.72	2,548.26	4,412.88	3,075.97	3,000.77	75.21	40.900 SF	
7,900.00	7,296.54	8,862.06	7,456.73	47.44	43.81	-100.98	2,479.80	4,462.34	3,085.64	3,011.87	73.77	41.828	
7,950.00	7,322.74	8,845.00	7,456.58	47.44	43.48	-101.42	2,465.93	4,472.27	3,098.49	3,024.56	73.93	41.910	
8,000.00	7,345.68	8,813.00	7,456.25	47.42	42.86	-101.11	2,440.06	4,491.10	3,114.60	3,040.86	73.74	42.237	
8,050.00	7,365.18	8,759.38	7,455.61	47.38	41.82	-100.09	2,396.82	4,522.80	3,133.68	3,060.64	73.04	42.905	
8,100.00	7,381.08	8,702.25	7,454.90	47.31	40.74	-98.58	2,350.44	4,556.16	3,154.90	3,082.64	72.26	43.663	
8,150.00	7,393.27	8,686.00	7,454.70	47.23	40.43	-96.84	2,337.25	4,565.63	3,178.57	3,106.14	72.43	43.885	
8,200.00	7,401.65	8,665.01	7,454.45	47.14	40.04	-94.54	2,320.29	4,578.00	3,204.66	3,132.17	72.48	44.212	
8,250.00	7,406.16	8,643.66	7,454.22	47.03	39.64	-91.69	2,303.20	4,590.78	3,233.03	3,160.51	72.52	44.584	
8,282.77	7,407.00	8,595.92	7,453.61	46.96	38.75	-89.53	2,264.90	4,619.30	3,252.52	3,180.77	71.74	45.335	
8,300.00	7,407.00	8,580.65	7,453.38	46.92	38.47	-89.52	2,252.62	4,628.37	3,262.88	3,191.31	71.57	45.591	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - FOX CREEK 12-63 25-2-1 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.00 usft
Survey Program: 121-OWSG (Rev2) MWD, 1492-OWSG (Rev2) MWD							Rule Assigned:					Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,000.00	5,686.50	10,250.00	7,456.30	32.06	139.33	49.99	468.68	3,889.73	3,232.01	3,156.17	75.84	42.617	
6,100.00	5,773.59	10,250.00	7,456.30	33.01	139.33	49.99	468.68	3,889.73	3,150.57	3,073.62	76.95	40.941	
6,200.00	5,860.68	10,250.00	7,456.30	33.96	139.33	49.99	468.68	3,889.73	3,070.23	2,992.09	78.14	39.291	
6,300.00	5,947.77	10,250.00	7,456.30	34.92	139.33	49.99	468.68	3,889.73	2,991.08	2,911.68	79.40	37.671	
6,400.00	6,034.86	10,250.00	7,456.30	35.88	139.33	49.99	468.68	3,889.73	2,913.21	2,832.47	80.74	36.081	
6,500.00	6,121.96	10,231.75	7,454.07	36.84	139.27	49.45	486.60	3,892.37	2,836.55	2,755.05	81.50	34.802	
6,600.00	6,209.05	10,225.79	7,453.26	37.81	139.24	49.27	492.42	3,893.32	2,761.43	2,678.68	82.75	33.371	
6,700.00	6,296.14	10,220.01	7,452.45	38.77	139.22	49.10	498.06	3,894.29	2,687.88	2,603.82	84.07	31.973	
6,800.00	6,383.23	10,200.00	7,449.34	39.74	139.15	48.49	517.48	3,898.00	2,616.18	2,531.32	84.86	30.830	
6,900.00	6,470.32	10,200.00	7,449.34	40.71	139.15	48.49	517.48	3,898.00	2,546.14	2,459.62	86.52	29.427	
7,000.00	6,557.42	10,200.00	7,449.34	41.69	139.15	48.49	517.48	3,898.00	2,478.16	2,389.88	88.28	28.071	
7,100.00	6,644.51	10,200.00	7,449.34	42.66	139.15	48.49	517.48	3,898.00	2,412.41	2,322.28	90.13	26.766	
7,200.00	6,731.60	10,200.00	7,449.34	43.64	139.15	48.49	517.48	3,898.00	2,349.08	2,257.01	92.07	25.515	
7,244.75	6,770.57	10,200.00	7,449.34	44.08	139.15	48.49	517.48	3,898.00	2,321.57	2,228.61	92.96	24.973	
7,250.00	6,775.15	10,200.00	7,449.34	44.13	139.15	47.28	517.48	3,898.00	2,318.37	2,225.30	93.07	24.910	
7,300.00	6,819.19	10,200.00	7,449.34	44.60	139.15	34.92	517.48	3,898.00	2,287.59	2,193.64	93.95	24.349	
7,350.00	6,863.79	10,200.00	7,449.34	45.05	139.15	21.44	517.48	3,898.00	2,256.39	2,161.79	94.60	23.852	
7,400.00	6,908.61	10,200.00	7,449.34	45.47	139.15	7.41	517.48	3,898.00	2,224.98	2,130.00	94.99	23.424	
7,450.00	6,953.31	10,200.00	7,449.34	45.84	139.15	-6.43	517.48	3,898.00	2,193.62	2,098.52	95.10	23.066	
7,500.00	6,997.56	10,200.00	7,449.34	46.18	139.15	-19.42	517.48	3,898.00	2,162.54	2,067.62	94.93	22.781	
7,550.00	7,041.01	10,200.00	7,449.34	46.47	139.15	-31.14	517.48	3,898.00	2,132.01	2,037.55	94.46	22.571	
7,600.00	7,083.34	10,200.00	7,449.34	46.73	139.15	-41.46	517.48	3,898.00	2,102.27	2,008.59	93.68	22.441	
7,650.00	7,124.22	10,200.00	7,449.34	46.94	139.15	-50.41	517.48	3,898.00	2,073.59	1,980.98	92.61	22.391	
7,700.00	7,163.34	10,218.96	7,452.29	47.11	139.22	-57.65	499.09	3,894.47	2,045.94	1,953.53	92.42	22.138	
7,750.00	7,200.41	10,227.47	7,453.49	47.24	139.25	-64.09	490.79	3,893.05	2,019.85	1,928.53	91.32	22.119	
7,800.00	7,235.13	10,250.00	7,456.30	47.34	139.33	-69.30	468.68	3,889.73	1,995.58	1,904.73	90.86	21.964	
7,850.00	7,267.26	10,250.00	7,456.30	47.40	139.33	-74.16	468.68	3,889.73	1,972.89	1,884.14	88.74	22.231	
7,900.00	7,296.54	10,250.00	7,456.30	47.44	139.33	-78.25	468.68	3,889.73	1,952.45	1,866.01	86.45	22.585	
7,950.00	7,322.74	10,269.94	7,458.31	47.44	139.39	-81.38	448.98	3,887.36	1,934.15	1,848.92	85.23	22.693	
8,000.00	7,345.68	10,300.00	7,460.53	47.42	139.47	-83.85	419.12	3,884.78	1,918.61	1,834.10	84.51	22.703	
8,050.00	7,365.18	10,300.00	7,460.53	47.38	139.47	-86.16	419.12	3,884.78	1,905.06	1,823.16	81.90	23.262	
8,100.00	7,381.08	10,300.00	7,460.53	47.31	139.47	-87.92	419.12	3,884.78	1,894.49	1,815.15	79.34	23.879	
8,150.00	7,393.27	10,322.33	7,461.53	47.23	139.51	-89.07	396.84	3,883.66	1,886.56	1,808.50	78.06	24.167	
8,200.00	7,401.65	10,351.55	7,462.00	47.14	139.57	-89.78	367.63	3,883.20	1,881.76	1,804.57	77.19	24.378	
8,250.00	7,406.16	10,351.55	7,462.00	47.03	139.57	-90.20	367.63	3,883.20	1,879.41	1,804.42	74.99	25.062	
8,265.81	7,406.77	10,363.41	7,462.00	46.99	139.59	-90.22	355.77	3,883.24	1,879.31	1,804.42	74.89	25.094 CC	
8,282.77	7,407.00	10,380.38	7,462.00	46.96	139.61	-90.21	338.81	3,883.31	1,879.42	1,804.44	74.98	25.066	
8,300.00	7,407.00	10,397.60	7,462.00	46.92	139.64	-90.21	321.58	3,883.38	1,879.65	1,804.57	75.07	25.038	
8,400.00	7,407.00	10,497.59	7,462.00	46.71	139.79	-90.21	221.59	3,883.77	1,880.97	1,805.23	75.74	24.835	
8,500.00	7,407.00	10,597.58	7,462.00	46.54	139.95	-90.21	121.60	3,884.16	1,882.29	1,805.72	76.57	24.583	
8,600.00	7,407.00	10,697.57	7,462.00	46.40	140.12	-90.21	21.61	3,884.55	1,883.61	1,806.05	77.56	24.286	
8,700.00	7,407.00	10,797.57	7,462.00	46.30	140.29	-90.21	-78.38	3,884.94	1,884.93	1,806.23	78.71	23.949	
8,800.00	7,407.00	10,897.56	7,462.00	46.24	140.47	-90.21	-178.37	3,885.33	1,886.25	1,806.25	80.00	23.578	
8,900.00	7,407.00	10,997.55	7,462.00	46.22	140.66	-90.21	-278.36	3,885.72	1,887.58	1,806.13	81.44	23.177	
9,000.00	7,407.00	11,097.54	7,462.00	46.25	140.86	-90.21	-378.35	3,886.11	1,888.90	1,805.88	83.02	22.753	
9,100.00	7,407.00	11,197.53	7,462.00	46.32	141.06	-90.21	-478.34	3,886.50	1,890.22	1,805.50	84.72	22.312	
9,200.00	7,407.00	11,297.52	7,462.00	46.46	141.28	-90.21	-578.33	3,886.89	1,891.54	1,805.00	86.54	21.857	
9,300.00	7,407.00	11,397.51	7,462.00	46.65	141.50	-90.21	-678.32	3,887.28	1,892.86	1,804.38	88.48	21.393	
9,400.00	7,407.00	11,497.50	7,462.00	46.91	141.73	-90.21	-778.31	3,887.67	1,894.18	1,803.66	90.52	20.924	
9,500.00	7,407.00	11,597.50	7,462.00	47.25	141.97	-90.21	-878.31	3,888.06	1,895.51	1,802.84	92.67	20.455	
9,600.00	7,407.00	11,697.49	7,462.00	47.66	142.21	-90.21	-978.30	3,888.45	1,896.83	1,801.93	94.90	19.988	
9,700.00	7,407.00	11,797.48	7,462.00	48.16	142.47	-90.21	-1,078.29	3,888.84	1,898.15	1,800.93	97.22	19.525	

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - FOX CREEK 12-63 25-2-1 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.00 usft
Survey Program: 121-OWSG (Rev2) MWD, 1492-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Rule Assigned:												Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
9,800.00	7,407.00	11,897.47	7,462.00	48.75	142.73	-90.21	-1,178.28	3,889.23	1,899.47	1,799.85	99.62	19.068	
9,900.00	7,407.00	11,997.46	7,462.00	49.42	143.01	-90.21	-1,278.27	3,889.62	1,900.79	1,798.71	102.08	18.620	
10,000.00	7,407.00	12,097.45	7,462.00	50.18	143.29	-90.21	-1,378.26	3,890.01	1,902.11	1,797.49	104.62	18.181	
10,100.00	7,407.00	12,197.44	7,462.00	51.03	143.59	-90.21	-1,478.25	3,890.41	1,903.43	1,796.22	107.22	17.753	
10,200.00	7,407.00	12,297.43	7,462.00	51.94	143.89	-90.21	-1,578.24	3,890.80	1,904.76	1,794.88	109.87	17.336	
10,300.00	7,407.00	12,397.43	7,462.00	52.93	144.20	-90.21	-1,678.23	3,891.19	1,906.08	1,793.50	112.58	16.931	
10,400.00	7,407.00	12,497.42	7,462.00	53.99	144.53	-90.21	-1,778.22	3,891.58	1,907.40	1,792.06	115.34	16.538	
10,500.00	7,407.00	12,597.41	7,462.00	55.09	144.86	-90.21	-1,878.21	3,891.97	1,908.72	1,790.58	118.14	16.156	
10,600.00	7,407.00	12,697.40	7,462.00	56.25	145.21	-90.21	-1,978.20	3,892.36	1,910.04	1,789.06	120.98	15.788	
10,700.00	7,407.00	12,797.39	7,462.00	57.46	145.57	-90.21	-2,078.19	3,892.75	1,911.36	1,787.50	123.87	15.431	
10,800.00	7,407.00	12,897.38	7,462.00	58.71	145.94	-90.21	-2,178.18	3,893.14	1,912.68	1,785.90	126.78	15.086	
10,900.00	7,407.00	12,997.37	7,462.00	59.99	146.32	-90.21	-2,278.17	3,893.53	1,914.01	1,784.27	129.74	14.753	
11,000.00	7,407.00	13,097.36	7,462.00	61.30	146.72	-90.21	-2,378.16	3,893.92	1,915.33	1,782.61	132.72	14.431	
11,100.00	7,407.00	13,197.36	7,462.00	62.65	147.12	-90.21	-2,478.15	3,894.31	1,916.65	1,780.92	135.73	14.121	
11,200.00	7,407.00	13,297.35	7,462.00	64.02	147.54	-90.21	-2,578.14	3,894.70	1,917.97	1,779.20	138.77	13.821	
11,300.00	7,407.00	13,397.34	7,462.00	65.42	147.98	-90.21	-2,678.13	3,895.09	1,919.29	1,777.46	141.84	13.532	
11,400.00	7,407.00	13,497.33	7,462.00	66.84	148.42	-90.21	-2,778.12	3,895.48	1,920.61	1,775.69	144.92	13.253	
11,500.00	7,407.00	13,597.32	7,462.00	68.27	148.88	-90.21	-2,878.12	3,895.87	1,921.94	1,773.90	148.03	12.983	
11,600.00	7,407.00	13,697.31	7,462.00	69.73	149.36	-90.21	-2,978.11	3,896.26	1,923.26	1,772.09	151.16	12.723	
11,700.00	7,407.00	13,797.30	7,462.00	71.20	149.85	-90.21	-3,078.10	3,896.65	1,924.58	1,770.26	154.31	12.472	
11,800.00	7,407.00	13,897.29	7,462.00	72.69	150.35	-90.21	-3,178.09	3,897.04	1,925.90	1,768.42	157.48	12.229	
11,900.00	7,407.00	13,997.29	7,462.00	74.19	150.87	-90.21	-3,278.08	3,897.43	1,927.22	1,766.55	160.67	11.995	
12,000.00	7,407.00	14,097.28	7,462.00	75.71	151.40	-90.21	-3,378.07	3,897.83	1,928.54	1,764.68	163.87	11.769	
12,100.00	7,407.00	14,197.27	7,462.00	77.24	151.95	-90.21	-3,478.06	3,898.22	1,929.86	1,762.78	167.08	11.550	
12,200.00	7,407.00	14,297.26	7,462.00	78.78	152.52	-90.21	-3,578.05	3,898.61	1,931.19	1,760.87	170.31	11.339	
12,300.00	7,407.00	14,397.25	7,462.00	80.33	153.10	-90.21	-3,678.04	3,899.00	1,932.51	1,758.95	173.56	11.135	
12,400.00	7,407.00	14,497.24	7,462.00	81.89	153.70	-90.21	-3,778.03	3,899.39	1,933.83	1,757.02	176.81	10.937	
12,500.00	7,407.00	14,597.23	7,462.00	83.46	154.32	-90.21	-3,878.02	3,899.78	1,935.15	1,755.07	180.08	10.746	
12,600.00	7,407.00	14,697.22	7,462.00	85.04	154.95	-90.21	-3,978.01	3,900.17	1,936.47	1,753.11	183.36	10.561	
12,700.00	7,407.00	14,797.22	7,462.00	86.63	155.60	-90.21	-4,078.00	3,900.56	1,937.79	1,751.14	186.65	10.382	
12,800.00	7,407.00	14,897.21	7,462.00	88.22	156.27	-90.21	-4,177.99	3,900.95	1,939.12	1,749.16	189.95	10.208	
12,900.00	7,407.00	14,997.20	7,462.00	89.82	156.95	-90.21	-4,277.98	3,901.34	1,940.44	1,747.18	193.26	10.040	
13,000.00	7,407.00	15,097.19	7,462.00	91.43	157.65	-90.21	-4,377.97	3,901.73	1,941.76	1,745.18	196.58	9.878	
13,100.00	7,407.00	15,197.18	7,462.00	93.05	158.38	-90.21	-4,477.96	3,902.12	1,943.08	1,743.17	199.91	9.720	
13,200.00	7,407.00	15,297.17	7,462.00	94.67	159.11	-90.21	-4,577.95	3,902.51	1,944.40	1,741.16	203.24	9.567	
13,300.00	7,407.00	15,397.16	7,462.00	96.30	159.87	-90.21	-4,677.94	3,902.90	1,945.72	1,739.14	206.59	9.418	
13,400.00	7,407.00	15,497.15	7,462.00	97.93	160.65	-90.21	-4,777.93	3,903.29	1,947.04	1,737.11	209.94	9.274	
13,500.00	7,407.00	15,597.15	7,462.00	99.57	161.44	-90.21	-4,877.93	3,903.68	1,948.37	1,735.07	213.30	9.135	
13,600.00	7,407.00	15,697.14	7,462.00	101.21	162.26	-90.21	-4,977.92	3,904.07	1,949.69	1,733.03	216.66	8.999	
13,700.00	7,407.00	15,797.13	7,462.00	102.86	163.09	-90.21	-5,077.91	3,904.46	1,951.01	1,730.98	220.03	8.867	
13,800.00	7,407.00	15,897.12	7,462.00	104.51	163.94	-90.21	-5,177.90	3,904.86	1,952.33	1,728.92	223.41	8.739	
13,900.00	7,407.00	15,997.11	7,462.00	106.17	164.81	-90.21	-5,277.89	3,905.25	1,953.65	1,726.86	226.79	8.614	
14,000.00	7,407.00	16,097.10	7,462.00	107.83	165.70	-90.21	-5,377.88	3,905.64	1,954.97	1,724.79	230.18	8.493	
14,100.00	7,407.00	16,197.09	7,462.00	109.49	166.60	-90.21	-5,477.87	3,906.03	1,956.30	1,722.72	233.57	8.375	
14,200.00	7,407.00	16,297.09	7,462.00	111.16	167.53	-90.20	-5,577.86	3,906.42	1,957.62	1,720.64	236.97	8.261	
14,300.00	7,407.00	16,397.08	7,462.00	112.83	168.47	-90.20	-5,677.85	3,906.81	1,958.94	1,718.56	240.38	8.149	
14,400.00	7,407.00	16,497.07	7,462.00	114.50	169.44	-90.20	-5,777.84	3,907.20	1,960.26	1,716.47	243.79	8.041	
14,500.00	7,407.00	16,597.06	7,462.00	116.18	170.42	-90.20	-5,877.83	3,907.59	1,961.58	1,714.38	247.20	7.935	
14,600.00	7,407.00	16,697.05	7,462.00	117.86	171.42	-90.20	-5,977.82	3,907.98	1,962.90	1,712.29	250.62	7.832	
14,700.00	7,407.00	16,797.04	7,462.00	119.54	172.43	-90.20	-6,077.81	3,908.37	1,964.22	1,710.19	254.04	7.732	
14,800.00	7,407.00	16,897.03	7,462.00	121.23	173.47	-90.20	-6,177.80	3,908.76	1,965.55	1,708.08	257.47	7.634	
14,900.00	7,407.00	16,997.02	7,462.00	122.92	174.52	-90.20	-6,277.79	3,909.15	1,966.87	1,705.97	260.90	7.539	

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

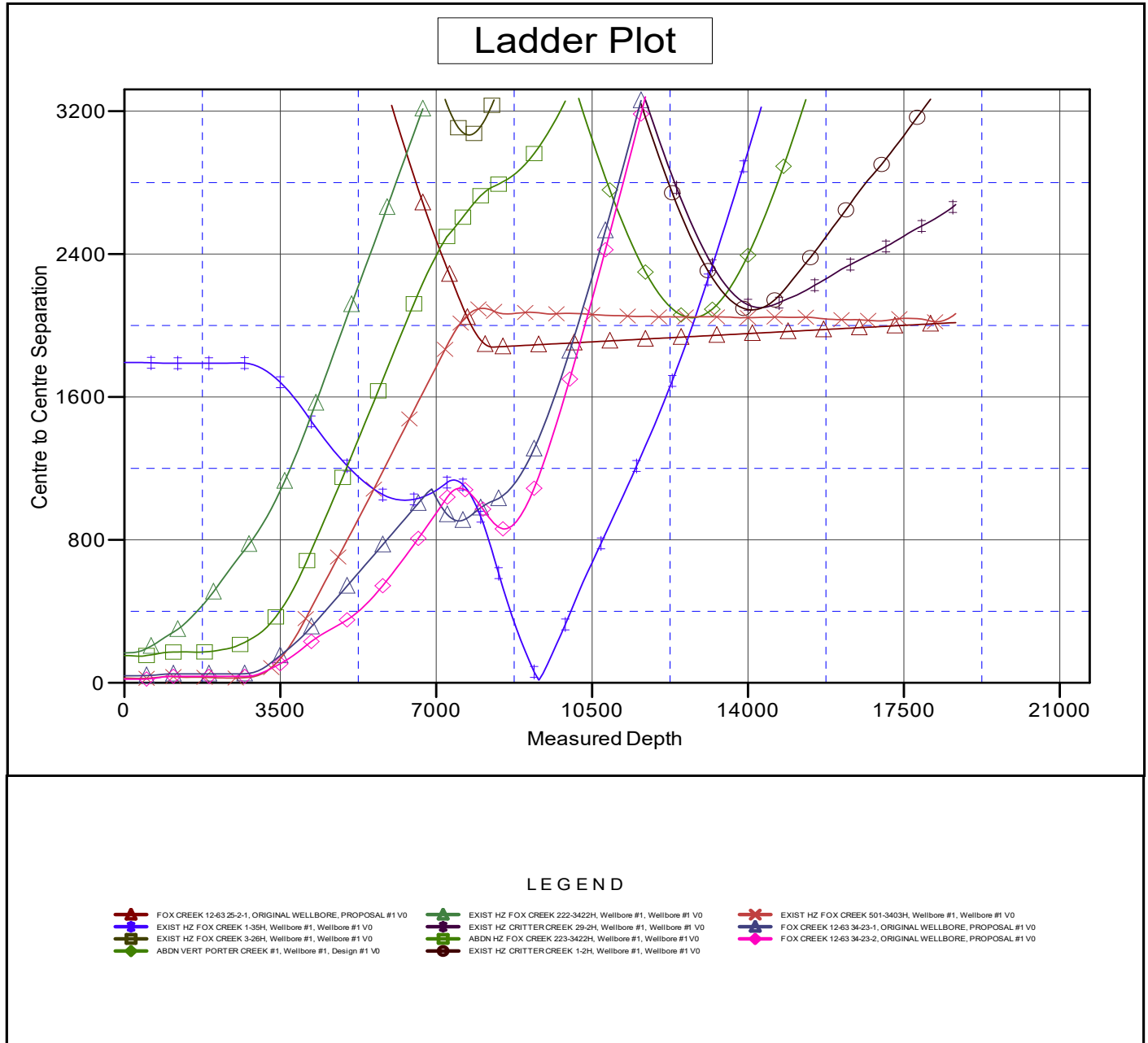
Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Offset Design: SW SE SEC. 25 T12N R63W 6th P.M. - FOX CREEK 12-63 25-2-1 - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.00 usft
Survey Program: 121-OWSG (Rev2) MWD, 1492-OWSG (Rev2) MWD							Rule Assigned:					Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	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
15,000.00	7,407.00	17,097.02	7,462.00	124.61	175.59	-90.20	-6,377.78	3,909.54	1,968.19	1,703.86	264.33	7.446	
15,100.00	7,407.00	17,197.01	7,462.00	126.31	176.67	-90.20	-6,477.77	3,909.93	1,969.51	1,701.75	267.77	7.355	
15,200.00	7,407.00	17,297.00	7,462.00	128.00	177.78	-90.20	-6,577.76	3,910.32	1,970.83	1,699.63	271.21	7.267	
15,300.00	7,407.00	17,396.99	7,462.00	129.70	178.90	-90.20	-6,677.75	3,910.71	1,972.15	1,697.50	274.65	7.181	
15,400.00	7,407.00	17,496.98	7,462.00	131.40	180.03	-90.20	-6,777.75	3,911.10	1,973.48	1,695.38	278.10	7.096	
15,500.00	7,407.00	17,596.97	7,462.00	133.11	181.18	-90.20	-6,877.74	3,911.49	1,974.80	1,693.25	281.55	7.014	
15,600.00	7,407.00	17,696.96	7,462.00	134.81	182.35	-90.20	-6,977.73	3,911.88	1,976.12	1,691.12	285.00	6.934	
15,700.00	7,407.00	17,796.95	7,462.00	136.52	183.53	-90.20	-7,077.72	3,912.28	1,977.44	1,688.99	288.45	6.855	
15,800.00	7,407.00	17,896.95	7,462.00	138.23	184.73	-90.20	-7,177.71	3,912.67	1,978.76	1,686.85	291.91	6.779	
15,900.00	7,407.00	17,996.94	7,462.00	139.94	185.94	-90.20	-7,277.70	3,913.06	1,980.08	1,684.71	295.37	6.704	
16,000.00	7,407.00	18,096.93	7,462.00	141.65	187.17	-90.20	-7,377.69	3,913.45	1,981.40	1,682.57	298.84	6.630	
16,100.00	7,407.00	18,196.92	7,462.00	143.36	188.41	-90.20	-7,477.68	3,913.84	1,982.73	1,680.42	302.30	6.559	
16,200.00	7,407.00	18,296.91	7,462.00	145.08	189.67	-90.20	-7,577.67	3,914.23	1,984.05	1,678.28	305.77	6.489	
16,300.00	7,407.00	18,396.90	7,462.00	146.80	190.93	-90.20	-7,677.66	3,914.62	1,985.37	1,676.13	309.24	6.420	
16,400.00	7,407.00	18,496.89	7,462.00	148.52	192.22	-90.20	-7,777.65	3,915.01	1,986.69	1,673.98	312.71	6.353	
16,500.00	7,407.00	18,596.88	7,462.00	150.24	193.51	-90.20	-7,877.64	3,915.40	1,988.01	1,671.82	316.19	6.287	
16,600.00	7,407.00	18,696.88	7,462.00	151.96	194.82	-90.20	-7,977.63	3,915.79	1,989.33	1,669.67	319.67	6.223	
16,700.00	7,407.00	18,796.87	7,462.00	153.68	196.13	-90.20	-8,077.62	3,916.18	1,990.66	1,667.51	323.14	6.160	
16,800.00	7,407.00	18,896.86	7,462.00	155.40	197.46	-90.20	-8,177.61	3,916.57	1,991.98	1,665.35	326.63	6.099	
16,900.00	7,407.00	18,996.85	7,462.00	157.13	198.81	-90.20	-8,277.60	3,916.96	1,993.30	1,663.19	330.11	6.038	
17,000.00	7,407.00	19,096.84	7,462.00	158.86	200.16	-90.20	-8,377.59	3,917.35	1,994.62	1,661.03	333.59	5.979	
17,100.00	7,407.00	19,196.83	7,462.00	160.59	201.52	-90.20	-8,477.58	3,917.74	1,995.94	1,658.86	337.08	5.921	
17,200.00	7,407.00	19,296.82	7,462.00	162.31	202.90	-90.20	-8,577.57	3,918.13	1,997.26	1,656.70	340.57	5.865	
17,300.00	7,407.00	19,396.81	7,462.00	164.04	204.28	-90.20	-8,677.56	3,918.52	1,998.58	1,654.53	344.06	5.809	
17,400.00	7,407.00	19,496.81	7,462.00	165.78	205.67	-90.20	-8,777.56	3,918.91	1,999.91	1,652.36	347.55	5.754	
17,500.00	7,407.00	19,596.80	7,462.00	167.51	207.08	-90.20	-8,877.55	3,919.31	2,001.23	1,650.19	351.04	5.701	
17,600.00	7,407.00	19,696.79	7,462.00	169.24	208.49	-90.20	-8,977.54	3,919.70	2,002.55	1,648.01	354.54	5.648	
17,700.00	7,407.00	19,796.78	7,462.00	170.98	209.91	-90.20	-9,077.53	3,920.09	2,003.87	1,645.84	358.03	5.597	
17,800.00	7,407.00	19,896.77	7,462.00	172.71	211.34	-90.20	-9,177.52	3,920.48	2,005.19	1,643.66	361.53	5.546	
17,900.00	7,407.00	19,996.76	7,462.00	174.45	212.78	-90.20	-9,277.51	3,920.87	2,006.51	1,641.49	365.03	5.497	
18,000.00	7,407.00	20,096.75	7,462.00	176.19	214.23	-90.20	-9,377.50	3,921.26	2,007.84	1,639.31	368.53	5.448	
18,100.00	7,407.00	20,196.74	7,462.00	177.92	215.69	-90.20	-9,477.49	3,921.65	2,009.16	1,637.13	372.03	5.401	
18,200.00	7,407.00	20,296.74	7,462.00	179.66	217.15	-90.20	-9,577.48	3,922.04	2,010.48	1,634.95	375.53	5.354	
18,300.00	7,407.00	20,396.73	7,462.00	181.40	218.62	-90.20	-9,677.47	3,922.43	2,011.80	1,632.76	379.04	5.308	
18,400.00	7,407.00	20,496.72	7,462.00	183.14	220.10	-90.20	-9,777.46	3,922.82	2,013.12	1,630.58	382.54	5.262	
18,500.00	7,407.00	20,596.71	7,462.00	184.88	221.59	-90.20	-9,877.45	3,923.21	2,014.44	1,628.40	386.05	5.218	
18,563.60	7,407.00	20,660.30	7,462.00	185.99	222.54	-90.20	-9,941.04	3,923.46	2,015.28	1,627.01	388.28	5.190	
18,600.00	7,407.00	20,698.67	7,462.00	186.63	223.11	-90.20	-9,979.41	3,923.59	2,015.74	1,626.10	389.64	5.173	
18,663.58	7,407.00	20,762.28	7,462.00	187.73	224.07	-90.20	-10,043.02	3,923.77	2,016.52	1,624.65	391.87	5.146 ES, SF	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

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

Coordinates are relative to: FOX CREEK 12-63 34-2-3
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.70°

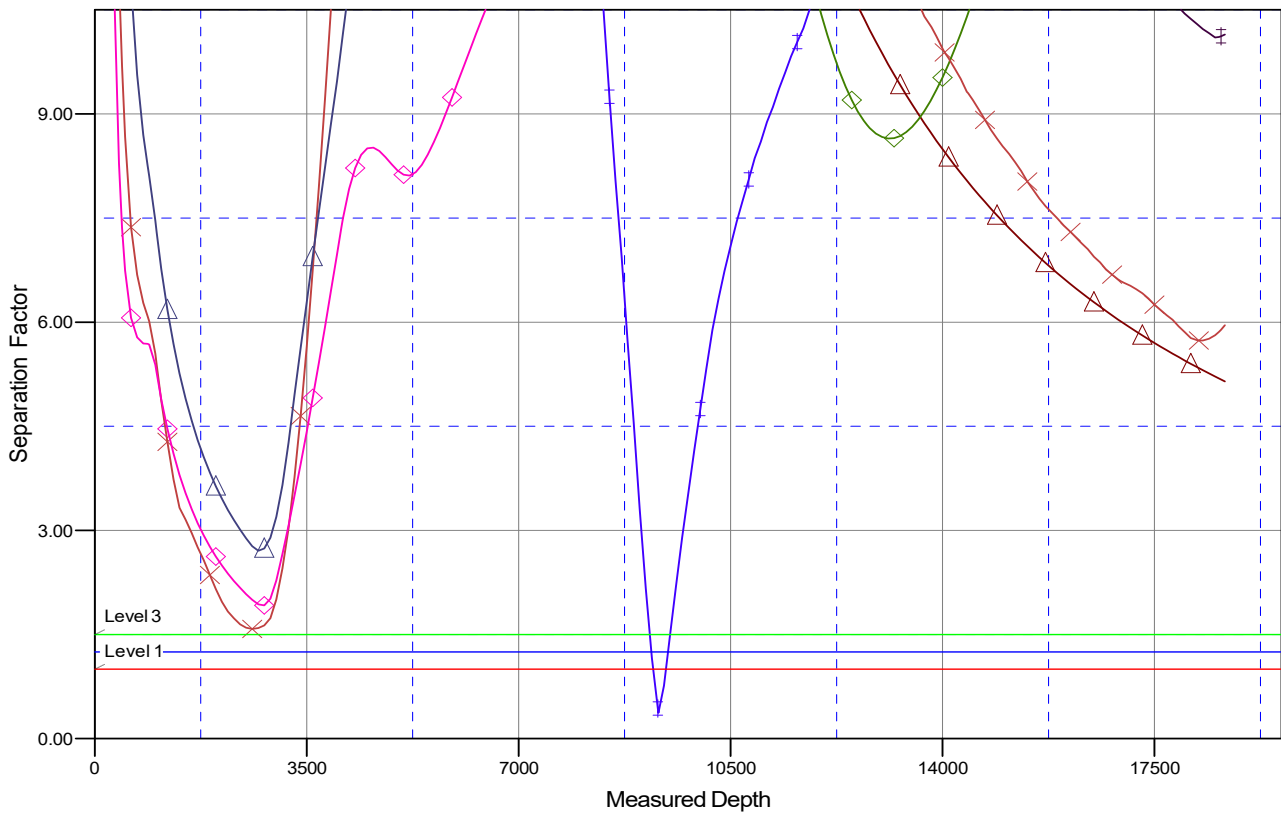


Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well FOX CREEK 12-63 34-2-3
Project:	WELD COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5371.00usft
Reference Site:	NE NE SEC. 34 T12N R63W 6th P.M.	MD Reference:	KBE @ 5371.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	FOX CREEK 12-63 34-2-3	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

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

Coordinates are relative to: FOX CREEK 12-63 34-2-3
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.70°

Separation Factor Plot



LEGEND

- FOX CREEK 12-63 25-2-1, ORIGINAL WELLBORE, PROPOSAL #1 V0
- EXIST HZ FOX CREEK 1-35H, Wellbore #1, Wellbore #1 V0
- EXIST HZ FOX CREEK 3-26H, Wellbore #1, Wellbore #1 V0
- ABDN VERT PORTER CREEK #1, Wellbore #1, Design #1 V0
- EXIST HZ FOX CREEK 222-3422H, Wellbore #1, Wellbore #1 V0
- EXIST HZ CRITTERCREEK 29-2H, Wellbore #1, Wellbore #1 V0
- ABDN HZ FOX CREEK 223-3422H, Wellbore #1, Wellbore #1 V0
- EXIST HZ CRITTERCREEK 1-2H, Wellbore #1, Wellbore #1 V0
- EXIST HZ FOX CREEK 501-3403H, Wellbore #1, Wellbore #1 V0
- FOX CREEK 12-63 34-23-1, ORIGINAL WELLBORE, PROPOSAL #1 V0
- FOX CREEK 12-63 34-23-2, ORIGINAL WELLBORE, PROPOSAL #1 V0