



# **BISON IV OPERATING**

**LARIMER COUNTY, COLORADO (NAD 83)**

**SEC. 11 T5N R68W 6th P.M.**

**CE 5-68 11-3-2H**

**ORIGINAL WELLBORE**

**PROPOSAL #1**

## **Anticollision Report**

**18 July, 2024**



<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

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

<b>Survey Tool Program</b>	<b>Date</b>	2024-07-18		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.00	17,011.19	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						
SEC. 11 T5N R68W 6th P.M.						
ABDN DD ENCORE 18-12 - Wellbore #1 - Wellbore #1	5,043.88	4,928.31	1,645.82	1,586.94	27.949	CC
ABDN DD ENCORE 18-12 - Wellbore #1 - Wellbore #1	5,100.00	4,954.24	1,646.48	1,586.77	27.575	ES
ABDN DD ENCORE 18-12 - Wellbore #1 - Wellbore #1	5,700.00	5,294.51	1,726.09	1,659.31	25.847	SF
ABDN DD ENCORE 4-12 - Wellbore #1 - Wellbore #1	5,617.65	5,438.96	837.16	772.23	12.894	CC, ES
ABDN DD ENCORE 4-12 - Wellbore #1 - Wellbore #1	5,900.00	5,617.39	862.53	792.55	12.326	SF
ABDN DD ENCORE 5-12 - Wellbore #1 - Wellbore #1	4,472.28	4,717.00	1,483.52	1,423.96	24.909	CC
ABDN DD ENCORE 5-12 - Wellbore #1 - Wellbore #1	4,500.00	4,731.26	1,483.70	1,423.62	24.698	ES
ABDN DD ENCORE 5-12 - Wellbore #1 - Wellbore #1	5,100.00	5,117.98	1,579.66	1,510.87	22.963	SF
ABDN DD MIRACLE 12-12 - Wellbore #1 - Wellbore #1	3,338.92	4,122.07	2,498.35	2,459.56	64.404	CC
ABDN DD MIRACLE 12-12 - Wellbore #1 - Wellbore #1	3,400.00	4,138.96	2,498.96	2,459.33	63.057	ES
ABDN DD MIRACLE 12-12 - Wellbore #1 - Wellbore #1	5,200.00	5,250.03	2,913.73	2,850.04	45.749	SF
ABDN DD MIRACLE 13-12 - Wellbore #1 - Wellbore #1	2,550.46	3,093.61	2,904.20	2,873.08	93.330	CC
ABDN DD MIRACLE 13-12 - Wellbore #1 - Wellbore #1	2,600.00	3,127.67	2,904.57	2,872.79	91.417	ES
ABDN DD MIRACLE 13-12 - Wellbore #1 - Wellbore #1	4,200.00	4,055.16	3,279.64	3,227.49	62.891	SF
ABDN VERT DONNAMITE 1 - Wellbore #1 - Design #1						Out of range
ABDN VERT KNESS 1 - Wellbore #1 - Design #1	10,099.49	7,064.00	542.08	338.73	2.666	CC, ES, SF
ABDN VERT MCWHINNEY-VANDERWATER1 - Wellbor						Out of range
ABDN VERT MEAN 1 - Wellbore #1 - Design #1						Out of range
ABDN VERT NASTY 1 - Wellbore #1 - Design #1						Out of range
ABDN VERT RAUSLER 1 - Wellbore #1 - Design #1						Out of range
CE 5-68 11-10-10H - ORIGINAL WELLBORE - PROPOS	300.00	300.00	31.48	29.76	18.297	CC, ES
CE 5-68 11-10-10H - ORIGINAL WELLBORE - PROPOS	600.00	596.22	46.73	42.89	12.183	SF
CE 5-68 11-10-11H - ORIGINAL WELLBORE - PROPOS	700.00	700.00	39.86	35.27	8.686	CC, ES
CE 5-68 11-10-11H - ORIGINAL WELLBORE - PROPOS	900.00	897.38	45.80	39.84	7.680	SF
CE 5-68 11-10-12H - ORIGINAL WELLBORE - PROPOS	600.00	600.00	50.44	46.57	13.028	CC, ES
CE 5-68 11-10-12H - ORIGINAL WELLBORE - PROPOS	800.00	796.39	57.01	51.77	10.867	SF
CE 5-68 11-10-13H - ORIGINAL WELLBORE - PROPOS	500.00	500.00	65.85	62.69	20.873	CC, ES
CE 5-68 11-10-13H - ORIGINAL WELLBORE - PROPOS	800.00	792.46	80.76	75.55	15.494	SF
CE 5-68 11-10-14H - ORIGINAL WELLBORE - PROPOS	400.00	400.00	79.04	76.60	32.424	CC, ES
CE 5-68 11-10-14H - ORIGINAL WELLBORE - PROPOS	800.00	786.89	106.09	100.90	20.458	SF
CE 5-68 11-10-15H - ORIGINAL WELLBORE - PROPOS	300.00	300.00	92.64	90.92	53.838	CC, ES
CE 5-68 11-10-15H - ORIGINAL WELLBORE - PROPOS	800.00	779.80	134.61	129.44	26.058	SF
CE 5-68 11-10-5H - ORIGINAL WELLBORE - PROPOSA	1,350.00	1,350.00	47.36	38.11	5.121	CC, ES
CE 5-68 11-10-5H - ORIGINAL WELLBORE - PROPOSA	17,011.19	15,790.16	1,326.28	861.15	2.851	SF
CE 5-68 11-10-6H - ORIGINAL WELLBORE - PROPOSA	1,350.00	1,350.00	65.58	56.33	7.091	CC, ES
CE 5-68 11-10-6H - ORIGINAL WELLBORE - PROPOSA	17,011.19	15,430.32	1,751.76	1,284.61	3.750	SF

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

## Summary

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
SEC. 11 T5N R68W 6th P.M.						
CE 5-68 11-10-7H - ORIGINAL WELLBORE - PROPOSA	1,350.00	1,350.00	80.15	70.90	8.666	CC, ES
CE 5-68 11-10-7H - ORIGINAL WELLBORE - PROPOSA	17,011.19	15,375.63	2,190.89	1,723.82	4.691	SF
CE 5-68 11-10-8H - ORIGINAL WELLBORE - PROPOSA	300.00	300.00	37.63	35.91	21.869	CC
CE 5-68 11-10-8H - ORIGINAL WELLBORE - PROPOSA	2,751.97	2,717.03	47.88	26.22	2.211	ES, SF
CE 5-68 11-10-9H - ORIGINAL WELLBORE - PROPOSA	400.00	400.00	31.48	29.05	12.916	CC, ES
CE 5-68 11-10-9H - ORIGINAL WELLBORE - PROPOSA	2,200.00	2,189.72	73.92	58.25	4.717	SF
CE 5-68 11-3-1H - ORIGINAL WELLBORE - PROPOSAL	1,203.38	1,203.38	14.58	6.38	1.779	CC
CE 5-68 11-3-1H - ORIGINAL WELLBORE - PROPOSAL	1,300.00	1,299.75	15.00	6.11	1.688	ES
CE 5-68 11-3-1H - ORIGINAL WELLBORE - PROPOSAL	17,011.19	17,395.63	478.40	36.29	1.082	Level 3, SF
CE 5-68 11-3-3H - ORIGINAL WELLBORE - PROPOSAL	1,350.00	1,350.00	18.21	8.96	1.969	CC
CE 5-68 11-3-3H - ORIGINAL WELLBORE - PROPOSAL	17,011.19	16,963.56	449.25	-27.05	0.943	Level 3, ES, SF
CE 5-68 11-3-4H - ORIGINAL WELLBORE - PROPOSAL	1,350.00	1,350.00	32.79	23.54	3.545	CC, ES
CE 5-68 11-3-4H - ORIGINAL WELLBORE - PROPOSAL	17,011.19	16,566.18	879.21	399.81	1.834	SF
EXIST HZ ENCORE 1C-12HZ - Wellbore #1 - Wellbore #	4,423.94	3,972.04	820.66	776.85	18.734	CC, ES
EXIST HZ ENCORE 1C-12HZ - Wellbore #1 - Wellbore #	7,650.00	8,941.00	1,509.75	1,421.79	17.164	SF
EXIST HZ ENCORE 26N-12HZ - Wellbore #1 - Wellbore	4,625.60	4,108.88	963.99	918.49	21.189	CC
EXIST HZ ENCORE 26N-12HZ - Wellbore #1 - Wellbore	4,700.00	4,174.53	964.80	918.39	20.790	ES
EXIST HZ ENCORE 26N-12HZ - Wellbore #1 - Wellbore	7,700.00	8,790.44	1,154.86	1,066.45	13.062	SF
EXIST HZ ENCORE 40N-12HZ - Wellbore #1 - Wellbore	3,891.79	3,779.66	65.45	23.79	1.571	CC, ES, SF
EXIST HZ ENCORE 41N-12HZ - Wellbore #1 - Wellbore	4,286.67	3,971.66	586.85	542.88	13.345	CC
EXIST HZ ENCORE 41N-12HZ - Wellbore #1 - Wellbore	4,300.00	3,980.42	586.94	542.86	13.316	ES
EXIST HZ ENCORE 41N-12HZ - Wellbore #1 - Wellbore	4,400.00	4,057.22	592.65	547.80	13.212	SF
EXIST HZ ENCORE 8C-12HZ - Wellbore #1 - Wellbore #	3,874.00	3,759.21	299.78	257.38	7.071	CC, ES, SF
EXIST HZ MIRACLE 13C-12HZ - Wellbore #1 - Wellbore						Out of range
EXIST HZ MIRACLE 33N-12HZ - Wellbore #1 - Wellbore						Out of range
EXIST HZ MIRACLE 40C-11HZ - ORIGINAL WELLBORE						Out of range
EXIST HZ MIRACLE 40C-11HZ - SIDETRACK - SIDETR	5,991.50	13,277.76	3,275.84	3,112.34	20.036	CC
EXIST HZ MIRACLE 40C-11HZ - SIDETRACK - SIDETR	6,100.00	13,269.54	3,277.62	3,110.81	19.649	ES, SF
EXIST HZ MIRACLE 40N-11HZ - Wellbore #1 - Wellbore						Out of range
EXIST HZ MIRACLE 9C-11HZ - Wellbore #1 - Wellbore #						Out of range
EXIST HZ PROWANT 18-1HZ - Wellbore #1 - Wellbore #						Out of range
EXIST VERT JEFFERS 2-1 - Wellbore #1 - Design #1	11,560.85	7,090.00	810.50	570.89	3.383	CC
EXIST VERT JEFFERS 2-1 - Wellbore #1 - Design #1	11,600.00	7,090.00	811.45	569.85	3.359	ES
EXIST VERT JEFFERS 2-1 - Wellbore #1 - Design #1	11,700.00	7,090.00	822.36	576.41	3.344	SF
EXIST VERT JEFFERS 2-2 - Wellbore #1 - Design #1	12,633.66	7,057.00	535.14	268.39	2.006	CC, ES, SF
EXIST VERT WICKED 1 - Wellbore #1 - Wellbore #1						Out of range

Offset Design: SEC. 11 T5N R68W 6th P.M. - ABDN DD ENCORE 18-12 - Wellbore #1 - Wellbore #1													Offset Site Error: 0.00 usft	
Survey Program: 16-OWSG (Rev2) MWD		Offset		Semi Major Axis		Offset Wellbore Centre		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 (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
600.00	600.00	1,616.36	1,581.64	1.94	7.59	60.56	1,533.69	2,716.97	3,272.24	3,264.29	7.95	411.452		
700.00	700.00	1,691.00	1,652.78	2.29	8.05	60.63	1,519.41	2,699.44	3,242.36	3,233.77	8.59	377.464		
800.00	800.00	1,755.06	1,713.94	2.65	8.44	60.69	1,507.12	2,684.92	3,213.20	3,204.01	9.19	349.559		
900.00	900.00	1,825.40	1,781.32	3.01	8.87	60.77	1,493.71	2,669.81	3,185.06	3,175.24	9.82	324.192		
1,000.00	1,000.00	1,976.90	1,926.29	3.37	9.80	60.94	1,465.06	2,636.44	3,156.66	3,145.89	10.77	292.969		
1,100.00	1,100.00	2,053.66	1,999.66	3.73	10.27	60.99	1,451.70	2,618.24	3,127.47	3,116.03	11.44	273.441		
1,200.00	1,200.00	2,167.09	2,108.15	4.09	10.98	61.07	1,432.53	2,591.31	3,098.53	3,086.29	12.24	253.165		

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - ABDN DD ENCORE 18-12 - Wellbore #1 - Wellbore #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 16-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Separation Factor</b>	<b>Warning</b>	
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>	<b>Minimum Separation (usft)</b>		
1,300.00	1,300.00	2,277.44	2,213.28	4.45	11.68	61.15	1,412.56	2,564.36	3,068.31	3,055.27	13.03	235.432	
1,350.00	1,350.00	2,316.00	2,250.09	4.62	11.92	61.18	1,405.84	2,555.01	3,053.46	3,040.09	13.37	228.411	
1,400.00	1,400.00	2,386.22	2,316.96	4.80	12.37	46.68	1,393.74	2,537.35	3,037.92	3,024.10	13.82	219.801	
1,500.00	1,499.93	2,539.65	2,462.45	5.16	13.39	47.33	1,368.03	2,496.00	3,003.70	2,988.93	14.77	203.379	
1,600.00	1,599.68	2,585.00	2,505.38	5.52	13.69	47.96	1,360.58	2,483.42	2,967.42	2,952.09	15.33	193.547	
1,700.00	1,699.13	2,645.67	2,563.07	5.88	14.08	48.67	1,350.97	2,467.29	2,930.10	2,914.15	15.95	183.743	
1,800.00	1,798.15	2,703.11	2,618.08	6.25	14.44	49.45	1,342.30	2,453.20	2,892.41	2,875.85	16.55	174.731	
1,900.00	1,896.63	2,815.50	2,725.55	6.62	15.14	50.57	1,322.07	2,427.29	2,852.72	2,835.36	17.36	164.299	
2,000.00	1,994.44	2,931.32	2,835.92	7.02	15.88	51.91	1,299.62	2,400.32	2,810.33	2,792.13	18.20	154.443	
2,100.00	2,091.46	2,991.31	2,893.10	7.43	16.26	53.04	1,288.58	2,385.90	2,766.05	2,747.20	18.85	146.767	
2,200.00	2,187.58	3,072.68	2,971.00	7.88	16.78	54.38	1,275.13	2,366.61	2,721.06	2,701.48	19.58	138.948	
2,300.00	2,282.68	3,181.40	3,074.66	8.35	17.47	56.08	1,255.90	2,340.09	2,673.45	2,653.02	20.43	130.844	
2,400.00	2,376.65	3,237.75	3,128.38	8.85	17.83	57.52	1,245.43	2,326.68	2,624.72	2,603.58	21.14	124.163	
2,500.00	2,469.36	3,300.00	3,186.06	9.40	18.21	59.09	1,234.80	2,312.52	2,575.94	2,554.04	21.90	117.640	
2,600.00	2,560.71	3,371.69	3,256.80	9.99	18.66	60.87	1,222.78	2,296.08	2,526.16	2,503.44	22.72	111.184	
2,700.00	2,650.59	3,477.00	3,357.36	10.62	19.32	63.25	1,203.78	2,271.31	2,474.51	2,450.81	23.70	104.420	
2,800.00	2,738.88	3,540.62	3,418.04	11.29	19.73	65.25	1,191.60	2,256.58	2,422.34	2,397.74	24.60	98.453	
2,900.00	2,825.48	3,592.83	3,467.95	12.02	20.05	67.18	1,181.69	2,244.89	2,370.36	2,344.83	25.54	92.825	
3,000.00	2,910.28	3,643.14	3,516.18	12.79	20.36	69.15	1,172.54	2,233.88	2,318.82	2,292.29	26.53	87.408	
3,100.00	2,993.18	3,802.78	3,668.53	13.62	21.38	73.25	1,144.44	2,195.43	2,265.78	2,237.89	27.89	81.246	
3,185.69	3,062.62	3,862.07	3,724.80	14.36	21.78	75.50	1,133.74	2,180.10	2,219.90	2,190.99	28.91	76.795	
3,200.00	3,074.09	3,871.11	3,733.38	14.49	21.84	75.69	1,132.10	2,177.76	2,212.29	2,183.21	29.08	76.073	
3,300.00	3,154.26	3,931.63	3,790.78	15.40	22.24	76.97	1,121.04	2,162.10	2,159.98	2,129.65	30.33	71.215	
3,400.00	3,234.42	3,984.37	3,840.83	16.32	22.59	78.12	1,111.33	2,148.61	2,109.49	2,077.86	31.63	66.689	
3,500.00	3,314.58	4,007.00	3,862.32	17.26	22.74	78.63	1,107.15	2,142.89	2,061.30	2,028.37	32.93	62.599	
3,600.00	3,394.75	4,058.39	3,911.33	18.21	23.06	79.78	1,097.95	2,130.46	2,015.54	1,981.18	34.35	58.670	
3,700.00	3,474.91	4,096.00	3,947.43	19.18	23.30	80.62	1,091.62	2,122.01	1,972.88	1,937.08	35.80	55.104	
3,800.00	3,555.07	4,211.50	4,058.17	20.15	24.01	83.28	1,072.78	2,095.15	1,931.99	1,894.50	37.48	51.543	
3,900.00	3,635.24	4,301.58	4,143.94	21.14	24.59	85.42	1,057.68	2,072.18	1,891.72	1,852.56	39.16	48.311	
4,000.00	3,715.40	4,363.24	4,202.62	22.13	25.00	86.92	1,047.53	2,056.15	1,853.61	1,812.79	40.83	45.401	
4,100.00	3,795.56	4,427.15	4,263.35	23.12	25.42	88.51	1,036.56	2,039.55	1,818.03	1,775.47	42.56	42.717	
4,200.00	3,875.73	4,488.47	4,321.41	24.13	25.83	90.09	1,024.93	2,023.62	1,785.19	1,740.86	44.34	40.262	
4,300.00	3,955.89	4,549.91	4,379.66	25.13	26.24	91.68	1,013.67	2,007.67	1,755.30	1,709.15	46.15	38.034	
4,400.00	4,036.05	4,606.70	4,433.67	26.14	26.61	93.16	1,003.93	1,993.05	1,728.57	1,680.61	47.96	36.042	
4,500.00	4,116.22	4,659.27	4,483.84	27.16	26.95	94.53	995.54	1,979.78	1,705.22	1,655.47	49.76	34.270	
4,600.00	4,196.38	4,708.11	4,530.63	28.18	27.25	95.80	988.10	1,967.92	1,685.62	1,634.08	51.53	32.709	
4,700.00	4,276.54	4,758.05	4,578.64	29.20	27.55	97.10	980.78	1,956.30	1,669.86	1,616.58	53.28	31.340	
4,800.00	4,356.71	4,811.00	4,629.71	30.22	27.87	98.48	973.22	1,944.52	1,658.01	1,603.01	55.00	30.146	
4,900.00	4,436.87	4,858.84	4,675.99	31.25	28.14	99.72	966.61	1,934.39	1,650.11	1,593.47	56.64	29.131	
5,000.00	4,517.03	4,898.00	4,713.99	32.28	28.36	100.73	961.36	1,926.51	1,646.28	1,588.08	58.20	28.289	
5,043.88	4,552.21	4,928.31	4,743.48	32.73	28.52	101.51	957.43	1,920.73	1,645.82	1,586.94	58.89	27.949 CC	
5,100.00	4,597.19	4,954.24	4,768.79	33.31	28.65	102.17	954.18	1,916.06	1,646.48	1,586.77	59.71	27.575 ES	
5,200.00	4,677.36	5,002.33	4,815.86	34.34	28.89	103.38	948.44	1,908.08	1,650.85	1,589.75	61.11	27.017	
5,300.00	4,757.52	5,054.26	4,866.94	35.37	29.14	104.65	942.98	1,900.52	1,659.14	1,596.73	62.41	26.585	
5,400.00	4,837.68	5,109.41	4,921.44	36.41	29.37	105.96	938.03	1,893.65	1,671.09	1,607.47	63.62	26.265	
5,500.00	4,917.85	5,164.00	4,975.53	37.45	29.60	107.23	933.63	1,887.77	1,686.46	1,621.72	64.74	26.049	
5,600.00	4,998.01	5,233.32	5,044.36	38.49	29.86	108.80	928.66	1,881.29	1,704.87	1,639.05	65.82	25.902	
5,700.00	5,078.17	5,294.51	5,105.24	39.53	30.07	110.14	924.86	1,876.45	1,726.09	1,659.31	66.78	25.847 SF	
5,800.00	5,158.34	5,362.15	5,172.69	40.57	30.29	111.56	921.60	1,872.61	1,750.14	1,682.46	67.69	25.857	
5,900.00	5,238.50	5,443.46	5,253.89	41.61	30.53	113.19	919.21	1,869.14	1,776.05	1,707.47	68.57	25.899	
6,000.00	5,318.66	5,505.00	5,315.40	42.65	30.69	114.36	918.14	1,867.62	1,804.14	1,734.82	69.31	26.028	
6,100.00	5,398.83	5,576.23	5,386.62	43.69	30.87	115.67	917.25	1,866.92	1,834.41	1,764.38	70.04	26.192	

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: SEC. 11 T5N R68W 6th P.M. - ABDN DD ENCORE 18-12 - Wellbore #1 - Wellbore #1											Offset Site Error: 0.00 usft		
Survey Program: Reference		16-OWSG (Rev2) MWD Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance			Offset Well Error: 0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
6,200.00	5,478.99	5,648.68	5,459.07	44.74	31.04	116.96	916.41	1,866.65	1,866.47	1,795.75	70.71	26.395	
6,300.00	5,559.15	5,740.41	5,550.80	45.78	31.25	118.54	915.43	1,866.63	1,900.08	1,828.64	71.44	26.597	
6,400.00	5,639.32	5,839.88	5,650.25	46.83	31.49	120.22	915.06	1,865.36	1,933.87	1,861.70	72.17	26.796	
6,500.00	5,719.48	5,920.91	5,731.27	47.88	31.70	121.56	914.75	1,863.85	1,968.69	1,895.90	72.79	27.045	
6,600.00	5,799.64	6,002.30	5,812.64	48.92	31.91	122.87	914.35	1,862.19	2,004.72	1,931.32	73.39	27.316	
6,700.00	5,879.81	6,081.81	5,892.13	49.97	32.12	124.13	914.01	1,860.46	2,041.80	1,967.84	73.95	27.609	
6,800.00	5,959.97	6,156.84	5,967.15	51.02	32.32	125.28	913.57	1,858.92	2,080.14	2,005.67	74.47	27.931	
6,900.00	6,040.13	6,236.67	6,046.95	52.07	32.53	126.47	913.08	1,857.32	2,119.57	2,044.58	75.00	28.263	
7,000.00	6,120.29	6,311.35	6,121.62	53.12	32.73	127.54	912.61	1,855.97	2,160.08	2,084.61	75.48	28.620	
7,100.00	6,200.46	6,397.14	6,207.40	54.17	32.96	128.75	912.13	1,854.49	2,201.50	2,125.51	76.00	28.969	
7,200.00	6,280.62	6,475.20	6,285.45	55.22	33.17	129.81	911.74	1,853.00	2,243.68	2,167.22	76.47	29.342	
7,300.00	6,360.78	6,554.78	6,365.01	56.27	33.38	130.87	911.27	1,851.48	2,286.74	2,209.81	76.93	29.724	
7,400.00	6,440.95	6,631.12	6,441.33	57.32	33.59	131.85	910.91	1,850.21	2,330.60	2,253.22	77.37	30.121	
7,498.05	6,519.54	6,706.82	6,517.03	58.35	33.79	132.79	910.45	1,849.09	2,374.46	2,296.65	77.81	30.518	
7,500.00	6,521.11	6,708.41	6,518.62	58.37	33.80	133.14	910.44	1,849.07	2,375.34	2,297.53	77.81	30.526	
7,550.00	6,561.44	6,749.56	6,559.76	58.89	33.91	142.60	910.21	1,848.47	2,399.12	2,321.07	78.05	30.740	
7,600.00	6,602.00	6,790.09	6,600.29	59.38	34.02	152.50	909.98	1,847.85	2,424.99	2,346.72	78.28	30.980	
7,650.00	6,642.50	6,830.27	6,640.47	59.85	34.13	162.61	909.72	1,847.19	2,452.72	2,374.22	78.50	31.244	
7,700.00	6,682.61	6,869.46	6,679.64	60.29	34.24	172.66	909.45	1,846.51	2,482.04	2,403.31	78.73	31.527	
7,750.00	6,722.05	6,907.44	6,717.62	60.69	34.34	-177.56	909.19	1,845.89	2,512.72	2,433.77	78.95	31.826	
7,800.00	6,760.50	6,944.78	6,754.95	61.07	34.44	-168.19	908.93	1,845.34	2,544.51	2,465.33	79.18	32.135	
7,850.00	6,797.68	6,982.18	6,792.34	61.41	34.55	-159.31	908.67	1,844.81	2,577.16	2,497.74	79.42	32.450	
7,900.00	6,833.29	7,018.07	6,828.24	61.71	34.64	-150.97	908.43	1,844.30	2,610.46	2,530.80	79.66	32.771	
7,950.00	6,867.08	7,052.79	6,862.95	61.99	34.74	-143.18	908.18	1,843.77	2,644.18	2,564.28	79.90	33.094	
8,000.00	6,898.78	7,085.84	6,895.99	62.23	34.84	-135.92	907.89	1,843.12	2,678.14	2,597.99	80.14	33.416	
8,050.00	6,928.16	7,116.94	6,927.09	62.43	34.92	-129.19	907.56	1,842.39	2,712.13	2,631.74	80.39	33.738	
8,100.00	6,954.98	7,147.97	6,958.10	62.60	35.01	-123.02	907.29	1,841.68	2,745.97	2,665.33	80.65	34.050	
8,150.00	6,979.04	7,175.69	6,985.82	62.74	35.09	-117.34	907.15	1,841.20	2,779.48	2,698.58	80.90	34.357	
8,200.00	7,000.17	7,199.89	7,010.01	62.85	35.15	-112.14	907.11	1,840.88	2,812.51	2,731.36	81.15	34.658	
8,250.00	7,018.20	7,217.61	7,027.74	62.93	35.20	-107.31	907.11	1,840.69	2,844.92	2,763.54	81.38	34.959	
8,300.00	7,032.99	7,231.63	7,041.75	62.98	35.24	-102.93	907.11	1,840.55	2,876.56	2,794.96	81.60	35.251	
8,350.00	7,044.43	7,242.56	7,052.68	63.00	35.27	-98.98	907.11	1,840.44	2,907.27	2,825.45	81.82	35.532	
8,400.00	7,052.43	7,250.32	7,060.44	63.00	35.29	-95.48	907.11	1,840.37	2,936.88	2,854.84	82.04	35.798	
8,450.00	7,056.94	7,254.87	7,065.00	62.97	35.30	-92.40	907.11	1,840.33	2,965.24	2,882.99	82.25	36.050	
8,488.77	7,058.00	7,256.18	7,066.30	62.93	35.31	-90.30	907.10	1,840.31	2,986.26	2,903.84	82.41	36.234	
8,500.00	7,058.00	7,256.28	7,066.40	62.92	35.31	-90.30	907.10	1,840.31	2,992.23	2,909.77	82.46	36.287	
8,600.00	7,058.00	7,257.13	7,067.25	62.81	35.31	-90.32	907.10	1,840.31	3,046.72	2,963.84	82.89	36.757	
8,700.00	7,058.00	7,257.98	7,068.10	62.74	35.31	-90.34	907.10	1,840.30	3,103.48	3,020.16	83.32	37.246	
8,800.00	7,058.00	7,258.83	7,068.95	62.71	35.31	-90.36	907.10	1,840.29	3,162.39	3,078.62	83.77	37.753	
8,900.00	7,058.00	7,259.68	7,069.80	62.71	35.32	-90.38	907.10	1,840.28	3,223.32	3,139.11	84.21	38.277	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - ABDN DD ENCORE 4-12 - Wellbore #1 - Wellbore #1											Offset Site Error:	0.00 usft
Survey Program: 16-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)		
800.00	800.00	2,021.08	1,962.38	2.65	10.33	55.94	1,715.32	2,537.43	3,277.39	3,266.45	10.94	299.479
900.00	900.00	2,118.76	2,052.40	3.01	11.09	55.63	1,709.55	2,499.94	3,241.84	3,230.07	11.76	275.550
1,000.00	1,000.00	2,188.19	2,116.44	3.37	11.62	55.42	1,705.25	2,473.46	3,206.44	3,193.98	12.46	257.249
1,100.00	1,100.00	2,258.90	2,181.89	3.73	12.16	55.19	1,701.21	2,447.01	3,171.93	3,158.75	13.18	240.688
1,200.00	1,200.00	2,382.75	2,295.86	4.09	13.14	54.73	1,696.64	2,398.80	3,137.28	3,123.12	14.16	221.504
1,300.00	1,300.00	2,550.57	2,447.82	4.45	14.58	53.97	1,692.77	2,327.73	3,100.08	3,084.65	15.43	200.972
1,350.00	1,350.00	2,585.00	2,478.89	4.62	14.88	53.81	1,692.09	2,312.89	3,081.57	3,065.75	15.82	194.846
1,400.00	1,400.00	2,585.00	2,478.89	4.80	14.88	39.27	1,692.09	2,312.89	3,063.22	3,047.19	16.03	191.065
1,500.00	1,499.93	2,650.59	2,538.47	5.16	15.44	39.51	1,690.91	2,285.50	3,025.26	3,008.46	16.79	180.130
1,600.00	1,599.68	2,728.85	2,610.17	5.52	16.09	39.75	1,689.93	2,254.14	2,986.32	2,968.70	17.62	169.467
1,700.00	1,699.13	2,854.99	2,724.99	5.88	17.16	39.88	1,689.15	2,201.93	2,944.32	2,925.62	18.70	157.451
1,800.00	1,798.15	2,925.36	2,789.26	6.25	17.75	40.31	1,687.52	2,173.31	2,899.70	2,880.23	19.48	148.889
1,900.00	1,896.63	3,000.57	2,858.43	6.62	18.36	40.85	1,684.69	2,143.94	2,853.26	2,833.01	20.26	140.843
2,000.00	1,994.44	3,087.82	2,938.82	7.02	19.07	41.46	1,681.30	2,110.19	2,804.76	2,783.67	21.09	133.014
2,100.00	2,091.46	3,182.14	3,025.71	7.43	19.83	42.18	1,677.26	2,073.71	2,753.79	2,731.85	21.94	125.487
2,200.00	2,187.58	3,279.24	3,114.60	7.88	20.64	42.97	1,674.63	2,034.76	2,700.32	2,677.48	22.84	118.247
2,300.00	2,282.68	3,336.53	3,167.00	8.35	21.12	43.88	1,673.33	2,011.61	2,644.76	2,621.21	23.55	112.310
2,400.00	2,376.65	3,389.00	3,215.44	8.85	21.55	44.90	1,671.78	1,991.53	2,588.23	2,564.00	24.24	106.779
2,500.00	2,469.36	3,461.99	3,283.14	9.40	22.12	46.09	1,669.37	1,964.36	2,530.34	2,505.33	25.01	101.190
2,600.00	2,560.71	3,562.81	3,376.58	9.99	22.91	47.54	1,665.58	1,926.66	2,470.20	2,444.32	25.88	95.453
2,700.00	2,650.59	3,640.54	3,448.45	10.62	23.54	49.10	1,662.56	1,897.20	2,407.84	2,381.17	26.67	90.284
2,800.00	2,738.88	3,716.58	3,518.66	11.29	24.14	50.82	1,660.02	1,868.12	2,343.78	2,316.32	27.46	85.348
2,900.00	2,825.48	3,794.11	3,590.36	12.02	24.76	52.80	1,656.79	1,838.80	2,278.09	2,249.84	28.26	80.622
3,000.00	2,910.28	3,875.35	3,665.40	12.79	25.42	55.06	1,653.27	1,807.89	2,210.77	2,181.71	29.06	76.067
3,100.00	2,993.18	3,982.31	3,763.74	13.62	26.29	57.96	1,647.52	1,766.24	2,141.16	2,111.24	29.93	71.544
3,185.69	3,062.62	4,105.59	3,875.99	14.36	27.34	61.38	1,638.91	1,716.03	2,079.18	2,048.48	30.70	67.731
3,200.00	3,074.09	4,094.17	3,865.65	14.49	27.25	61.19	1,639.75	1,720.79	2,068.76	2,037.99	30.77	67.222
3,300.00	3,154.26	4,139.20	3,906.59	15.40	27.63	61.96	1,636.52	1,702.33	1,996.39	1,964.88	31.51	63.354
3,400.00	3,234.42	4,186.00	3,949.50	16.32	28.02	62.80	1,633.37	1,683.90	1,925.42	1,893.14	32.28	59.641
3,500.00	3,314.58	4,220.01	3,980.81	17.26	28.30	63.44	1,631.41	1,670.77	1,855.66	1,822.57	33.09	56.087
3,600.00	3,394.75	4,277.00	4,033.28	18.21	28.77	64.50	1,629.28	1,648.62	1,787.08	1,753.14	33.94	52.651
3,700.00	3,474.91	4,340.47	4,091.55	19.18	29.30	65.70	1,628.28	1,623.49	1,719.27	1,684.42	34.85	49.333
3,800.00	3,555.07	4,442.02	4,184.09	20.15	30.17	67.70	1,627.74	1,581.70	1,651.41	1,615.63	35.78	46.153
3,900.00	3,635.24	4,516.31	4,251.37	21.14	30.83	69.31	1,626.66	1,550.19	1,583.00	1,546.28	36.72	43.114
4,000.00	3,715.40	4,574.41	4,303.98	22.13	31.34	70.66	1,625.67	1,525.58	1,515.28	1,477.59	37.69	40.203
4,100.00	3,795.56	4,633.00	4,357.34	23.12	31.85	72.14	1,624.35	1,501.42	1,448.94	1,410.24	38.70	37.444
4,200.00	3,875.73	4,671.84	4,392.95	24.13	32.17	73.19	1,623.25	1,485.93	1,384.27	1,344.48	39.79	34.786
4,300.00	3,955.89	4,722.00	4,439.27	25.13	32.58	74.63	1,621.55	1,466.77	1,321.79	1,280.86	40.92	32.300
4,400.00	4,036.05	4,768.16	4,482.16	26.14	32.94	76.05	1,619.78	1,449.82	1,261.58	1,219.46	42.13	29.948
4,500.00	4,116.22	4,811.00	4,522.16	27.16	33.27	77.43	1,618.03	1,434.56	1,203.87	1,160.45	43.42	27.724
4,600.00	4,196.38	4,868.35	4,576.00	28.18	33.68	79.39	1,615.46	1,414.98	1,148.96	1,104.21	44.75	25.673
4,700.00	4,276.54	4,940.92	4,644.47	29.20	34.20	82.06	1,611.76	1,391.21	1,097.15	1,051.03	46.12	23.787
4,800.00	4,356.71	5,012.90	4,711.97	30.22	34.72	84.88	1,607.63	1,366.58	1,046.78	999.16	47.62	21.984
4,900.00	4,436.87	5,060.17	4,756.52	31.25	35.06	86.82	1,604.93	1,351.00	1,000.39	951.00	49.38	20.257
5,000.00	4,517.03	5,103.67	4,797.82	32.28	35.34	88.67	1,602.58	1,337.54	958.93	907.61	51.32	18.684
5,100.00	4,597.19	5,146.46	4,838.81	33.31	35.61	90.53	1,600.57	1,325.44	923.30	869.90	53.40	17.290
5,200.00	4,677.36	5,199.03	4,889.58	34.34	35.92	92.84	1,598.54	1,311.98	893.82	838.25	55.57	16.085
5,300.00	4,757.52	5,252.00	4,940.97	35.37	36.21	95.20	1,597.02	1,299.21	870.11	812.28	57.83	15.047
5,400.00	4,837.68	5,314.65	5,002.03	36.41	36.53	98.01	1,595.66	1,285.28	852.50	792.39	60.11	14.182
5,500.00	4,917.85	5,371.28	5,057.51	37.45	36.80	100.57	1,594.64	1,273.96	841.47	779.08	62.38	13.489
5,600.00	4,998.01	5,428.00	5,113.32	38.49	37.06	103.13	1,593.60	1,263.91	837.21	772.65	64.56	12.968
5,617.65	5,012.16	5,438.96	5,124.13	38.67	37.10	103.62	1,593.39	1,262.12	837.16	772.23	64.93	12.894 CC, ES

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: SEC. 11 T5N R68W 6th P.M. - ABDN DD ENCORE 4-12 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program:		16-OWSG (Rev2) MWD						Rule Assigned:				Offset Well Error:	0.00 usft	
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance			Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		Separation Factor	
5,700.00	5,078.17	5,489.76	5,174.32	39.53	37.31	105.88	1,592.49	1,254.28	839.55	772.97	66.58	12.611		
5,800.00	5,158.34	5,552.91	5,236.87	40.57	37.55	108.65	1,591.44	1,245.65	848.11	779.72	68.39	12.401		
5,900.00	5,238.50	5,617.39	5,300.88	41.61	37.78	111.40	1,590.34	1,237.97	862.53	792.55	69.98	12.326 SF		
6,000.00	5,318.66	5,683.29	5,366.41	42.65	37.99	114.14	1,589.09	1,231.14	882.36	811.04	71.33	12.370		
6,100.00	5,398.83	5,745.92	5,428.77	43.69	38.18	116.64	1,587.64	1,225.57	907.31	834.89	72.43	12.528		
6,200.00	5,478.99	5,809.52	5,492.18	44.74	38.36	119.08	1,585.72	1,220.99	937.17	863.86	73.31	12.784		
6,300.00	5,559.15	5,878.71	5,561.28	45.78	38.54	121.53	1,584.32	1,218.03	971.09	897.04	74.05	13.113		
6,400.00	5,639.32	5,954.45	5,636.99	46.83	38.70	124.02	1,583.31	1,216.17	1,008.11	933.40	74.71	13.493		
6,500.00	5,719.48	6,031.39	5,713.91	47.88	38.86	126.39	1,582.31	1,214.68	1,047.61	972.34	75.27	13.917		
6,600.00	5,799.64	6,109.38	5,791.89	48.92	39.03	128.66	1,581.29	1,213.40	1,089.24	1,013.47	75.77	14.376		
6,700.00	5,879.81	6,192.05	5,874.54	49.97	39.20	130.92	1,580.26	1,212.06	1,132.61	1,056.37	76.24	14.856		
6,800.00	5,959.97	6,271.48	5,953.96	51.02	39.37	132.95	1,579.55	1,210.70	1,177.26	1,100.62	76.64	15.361		
6,900.00	6,040.13	6,347.94	6,030.40	52.07	39.52	134.79	1,578.74	1,209.63	1,223.54	1,146.57	76.97	15.896		
7,000.00	6,120.29	6,427.98	6,110.45	53.12	39.67	136.54	1,578.32	1,209.59	1,271.05	1,193.74	77.31	16.440		
7,100.00	6,200.46	6,506.72	6,189.18	54.17	39.81	138.16	1,577.97	1,209.76	1,319.62	1,242.00	77.63	17.000		
7,200.00	6,280.62	6,584.00	6,266.46	55.22	39.96	139.66	1,577.42	1,209.75	1,369.25	1,291.33	77.92	17.572		
7,300.00	6,360.78	6,662.80	6,345.25	56.27	40.11	141.10	1,576.70	1,209.57	1,419.80	1,341.57	78.23	18.150		
7,400.00	6,440.95	6,746.01	6,428.46	57.32	40.28	142.55	1,575.93	1,209.09	1,471.03	1,392.46	78.58	18.721		
7,498.05	6,519.54	6,828.33	6,510.77	58.35	40.45	143.91	1,575.31	1,208.26	1,521.72	1,442.79	78.93	19.279		
7,500.00	6,521.11	6,829.97	6,512.41	58.37	40.46	144.30	1,575.30	1,208.24	1,522.74	1,443.80	78.94	19.290		
7,550.00	6,561.44	6,870.47	6,552.91	58.89	40.55	154.54	1,575.05	1,207.74	1,549.50	1,470.38	79.12	19.584		
7,600.00	6,602.00	6,909.73	6,592.17	59.38	40.63	165.08	1,574.79	1,207.26	1,577.62	1,498.31	79.31	19.892		
7,650.00	6,642.50	6,949.90	6,632.33	59.85	40.72	175.63	1,574.50	1,206.78	1,606.81	1,527.28	79.53	20.203		
7,700.00	6,682.61	6,992.25	6,674.67	60.29	40.82	-174.11	1,574.21	1,206.18	1,636.75	1,556.95	79.80	20.511		
7,750.00	6,722.05	7,034.18	6,716.60	60.69	40.91	-164.39	1,573.95	1,205.46	1,667.19	1,587.10	80.08	20.818		
7,800.00	6,760.50	7,076.07	6,758.48	61.07	41.01	-155.37	1,573.76	1,204.70	1,697.91	1,617.52	80.40	21.119		
7,850.00	6,797.68	7,116.77	6,799.17	61.41	41.11	-147.12	1,573.66	1,203.99	1,728.74	1,648.02	80.72	21.416		
7,900.00	6,833.29	7,148.92	6,831.32	61.71	41.18	-139.52	1,573.58	1,203.46	1,759.61	1,678.61	81.00	21.723		
7,950.00	6,867.08	7,179.62	6,862.02	61.99	41.25	-132.62	1,573.46	1,203.01	1,790.44	1,709.15	81.29	22.025		
8,000.00	6,898.78	7,208.76	6,891.15	62.23	41.32	-126.37	1,573.30	1,202.62	1,821.11	1,739.52	81.59	22.320		
8,050.00	6,928.16	7,237.81	6,920.20	62.43	41.39	-120.78	1,573.13	1,202.27	1,851.47	1,769.56	81.92	22.602		
8,100.00	6,954.98	7,264.36	6,946.75	62.60	41.45	-115.72	1,572.96	1,201.96	1,881.42	1,799.17	82.24	22.876		
8,150.00	6,979.04	7,288.20	6,970.59	62.74	41.50	-111.15	1,572.82	1,201.70	1,910.85	1,828.28	82.57	23.142		
8,200.00	7,000.17	7,307.77	6,990.15	62.85	41.54	-106.96	1,572.69	1,201.51	1,939.68	1,856.80	82.88	23.403		
8,250.00	7,018.20	7,324.08	7,006.46	62.93	41.58	-103.15	1,572.57	1,201.36	1,967.83	1,884.64	83.19	23.656		
8,300.00	7,032.99	7,337.44	7,019.82	62.98	41.61	-99.70	1,572.47	1,201.26	1,995.20	1,911.71	83.49	23.898		
8,350.00	7,044.43	7,347.78	7,030.16	63.00	41.63	-96.59	1,572.38	1,201.19	2,021.67	1,937.89	83.78	24.130		
8,400.00	7,052.43	7,355.05	7,037.43	63.00	41.65	-93.81	1,572.32	1,201.15	2,047.14	1,963.08	84.07	24.351		
8,450.00	7,056.94	7,359.23	7,041.62	62.97	41.66	-91.34	1,572.28	1,201.13	2,071.50	1,987.16	84.34	24.561		
8,488.77	7,058.00	7,360.34	7,042.73	62.93	41.66	-89.65	1,572.27	1,201.12	2,089.53	2,004.99	84.54	24.716		
8,500.00	7,058.00	7,360.40	7,042.78	62.92	41.66	-89.65	1,572.27	1,201.12	2,094.67	2,010.07	84.60	24.760		
8,600.00	7,058.00	7,360.87	7,043.26	62.81	41.66	-89.67	1,572.27	1,201.12	2,142.44	2,057.35	85.10	25.177		
8,700.00	7,058.00	7,361.34	7,043.73	62.74	41.66	-89.68	1,572.26	1,201.11	2,193.74	2,108.18	85.56	25.641		
8,800.00	7,058.00	7,361.81	7,044.19	62.71	41.66	-89.70	1,572.26	1,201.11	2,248.31	2,162.33	85.98	26.149		
8,900.00	7,058.00	7,362.26	7,044.65	62.71	41.66	-89.71	1,572.26	1,201.11	2,305.94	2,219.57	86.36	26.700		
9,000.00	7,058.00	7,362.72	7,045.10	62.76	41.66	-89.73	1,572.25	1,201.11	2,366.38	2,279.67	86.71	27.290		
9,100.00	7,058.00	7,363.16	7,045.55	62.86	41.66	-89.74	1,572.25	1,201.10	2,429.44	2,342.42	87.02	27.918		
9,200.00	7,058.00	7,363.60	7,045.99	63.01	41.67	-89.75	1,572.24	1,201.10	2,494.92	2,407.62	87.30	28.579		
9,300.00	7,058.00	7,364.04	7,046.42	63.23	41.67	-89.77	1,572.24	1,201.10	2,562.62	2,475.08	87.54	29.273		
9,400.00	7,058.00	7,364.47	7,046.85	63.54	41.67	-89.78	1,572.24	1,201.10	2,632.39	2,544.63	87.76	29.996		
9,500.00	7,058.00	7,364.89	7,047.28	63.95	41.67	-89.79	1,572.23	1,201.10	2,704.05	2,616.10	87.95	30.746		
9,600.00	7,058.00	7,365.31	7,047.70	64.49	41.67	-89.81	1,572.23	1,201.09	2,777.46	2,689.35	88.12	31.521		

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



<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - ABDN DD ENCORE 4-12 - Wellbore #1 - Wellbore #1													<b>Offset Site Error:</b> 0.00 usft
<b>Survey Program:</b> 16-OWSG (Rev2) MWD													<b>Offset Well Error:</b> 0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
9,700.00	7,058.00	7,365.73	7,048.11	65.17	41.67	-89.82	1,572.22	1,201.09	2,852.49	2,764.23	88.26	32.319	
9,800.00	7,058.00	7,366.14	7,048.52	66.02	41.67	-89.83	1,572.22	1,201.09	2,929.02	2,840.63	88.39	33.139	
9,900.00	7,058.00	7,366.54	7,048.92	67.06	41.67	-89.84	1,572.22	1,201.09	3,006.92	2,918.42	88.50	33.978	
10,000.00	7,058.00	7,366.94	7,049.32	68.29	41.67	-89.86	1,572.21	1,201.09	3,086.09	2,997.50	88.59	34.835	
10,100.00	7,058.00	7,367.33	7,049.72	69.70	41.67	-89.87	1,572.21	1,201.08	3,166.45	3,077.77	88.67	35.709	
10,200.00	7,058.00	7,367.73	7,050.11	71.29	41.67	-89.88	1,572.21	1,201.08	3,247.89	3,159.15	88.74	36.599	



Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - ABDN DD ENCORE 5-12 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program:		16-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	
400.00	400.00	2,017.27	1,912.66	1.22	12.02	62.11	1,338.56	2,528.71	3,238.74	3,229.28	9.46	342.392		
500.00	500.00	2,073.78	1,962.30	1.58	12.53	62.24	1,320.34	2,508.78	3,192.21	3,182.22	9.99	319.392		
600.00	600.00	2,131.00	2,012.94	1.94	13.05	62.39	1,302.09	2,489.37	3,146.90	3,136.33	10.56	297.931		
700.00	700.00	2,181.04	2,057.46	2.29	13.49	62.52	1,286.25	2,472.91	3,102.58	3,091.47	11.12	279.084		
800.00	800.00	2,244.56	2,114.14	2.65	14.05	62.69	1,266.24	2,452.39	3,059.04	3,047.29	11.75	260.348		
900.00	900.00	2,311.00	2,173.77	3.01	14.62	62.87	1,245.89	2,431.30	3,016.41	3,004.00	12.41	243.141		
1,000.00	1,000.00	2,343.04	2,202.73	3.37	14.89	62.95	1,236.45	2,421.37	2,974.97	2,962.06	12.91	230.450		
1,100.00	1,100.00	2,401.00	2,255.69	3.73	15.36	63.09	1,220.38	2,404.16	2,935.39	2,921.85	13.54	216.862		
1,200.00	1,200.00	2,631.08	2,464.64	4.09	17.29	63.53	1,159.74	2,329.50	2,895.43	2,880.55	14.89	194.499		
1,300.00	1,300.00	2,707.07	2,532.60	4.45	17.95	63.66	1,139.55	2,302.15	2,851.34	2,835.75	15.59	182.883		
1,350.00	1,350.00	2,728.20	2,551.60	4.62	18.14	63.71	1,133.86	2,294.86	2,829.83	2,813.95	15.88	178.231		
1,400.00	1,400.00	2,761.00	2,581.22	4.80	18.42	49.35	1,124.99	2,283.93	2,808.49	2,792.28	16.22	173.201		
1,500.00	1,499.93	2,823.37	2,637.72	5.16	18.95	50.28	1,108.11	2,263.61	2,764.93	2,748.05	16.88	163.770		
1,600.00	1,599.68	2,959.25	2,760.54	5.52	20.11	51.56	1,072.59	2,217.62	2,718.95	2,701.10	17.84	152.370		
1,700.00	1,699.13	3,028.00	2,822.43	5.88	20.71	52.72	1,054.97	2,193.40	2,670.21	2,651.67	18.54	144.007		
1,800.00	1,798.15	3,089.55	2,878.05	6.25	21.24	53.94	1,039.62	2,172.00	2,620.42	2,601.20	19.22	136.357		
1,900.00	1,896.63	3,147.55	2,930.87	6.62	21.73	55.23	1,025.98	2,152.30	2,570.13	2,550.24	19.89	129.220		
2,000.00	1,994.44	3,227.14	3,003.48	7.02	22.39	56.79	1,006.67	2,126.05	2,518.84	2,498.18	20.66	121.924		
2,100.00	2,091.46	3,326.58	3,093.85	7.43	23.22	58.70	981.78	2,092.83	2,465.48	2,443.95	21.53	114.528		
2,200.00	2,187.58	3,383.00	3,145.13	7.88	23.69	60.38	967.51	2,074.15	2,411.14	2,388.87	22.27	108.264		
2,300.00	2,282.68	3,445.38	3,201.95	8.35	24.21	62.26	951.24	2,054.19	2,356.36	2,333.28	23.08	102.098		
2,400.00	2,376.65	3,510.58	3,261.42	8.85	24.75	64.33	933.56	2,034.17	2,301.35	2,277.40	23.95	96.096		
2,500.00	2,469.36	3,655.69	3,393.44	9.40	25.96	67.80	895.26	1,987.69	2,245.47	2,220.32	25.15	89.297		
2,600.00	2,560.71	3,701.77	3,435.13	9.99	26.35	69.90	883.25	1,972.17	2,187.77	2,161.71	26.06	83.943		
2,700.00	2,650.59	3,757.37	3,485.63	10.62	26.82	72.26	869.02	1,953.76	2,130.59	2,103.50	27.08	78.667		
2,800.00	2,738.88	3,835.50	3,556.55	11.29	27.49	75.20	848.98	1,927.83	2,073.63	2,045.36	28.26	73.376		
2,900.00	2,825.48	3,942.25	3,652.63	12.02	28.42	78.99	821.09	1,890.59	2,015.90	1,986.28	29.62	68.062		
3,000.00	2,910.28	3,993.51	3,698.59	12.79	28.87	81.64	807.29	1,872.56	1,959.04	1,928.12	30.93	63.344		
3,100.00	2,993.18	4,062.21	3,760.04	13.62	29.49	84.82	788.31	1,848.43	1,903.60	1,871.18	32.42	58.723		
3,185.69	3,062.62	4,107.85	3,800.70	14.36	29.90	87.23	775.42	1,832.20	1,857.34	1,823.58	33.76	55.014		
3,200.00	3,074.09	4,113.46	3,805.70	14.49	29.95	87.40	773.82	1,830.21	1,849.79	1,815.80	33.99	54.423		
3,300.00	3,154.26	4,152.68	3,840.68	15.40	30.31	88.57	762.59	1,816.47	1,798.70	1,763.06	35.65	50.457		
3,400.00	3,234.42	4,181.00	3,865.96	16.32	30.56	89.43	754.41	1,806.69	1,750.78	1,713.40	37.38	46.843		
3,500.00	3,314.58	4,224.95	3,905.32	17.26	30.95	90.77	741.67	1,791.84	1,706.25	1,667.00	39.25	43.471		
3,600.00	3,394.75	4,272.00	3,947.65	18.21	31.36	92.24	728.05	1,776.47	1,665.60	1,624.37	41.22	40.403		
3,700.00	3,474.91	4,312.01	3,983.65	19.18	31.71	93.50	716.32	1,763.55	1,628.69	1,585.44	43.25	37.658		
3,800.00	3,555.07	4,368.38	4,034.10	20.15	32.21	95.31	699.21	1,745.10	1,595.45	1,550.04	45.41	35.137		
3,900.00	3,635.24	4,413.94	4,074.86	21.14	32.61	96.79	685.36	1,730.18	1,566.33	1,518.78	47.56	32.936		
4,000.00	3,715.40	4,465.45	4,121.09	22.13	33.06	98.48	670.06	1,713.42	1,541.66	1,491.92	49.74	30.991		
4,100.00	3,795.56	4,540.94	4,188.75	23.12	33.73	100.96	648.05	1,688.17	1,521.02	1,468.99	52.03	29.232		
4,200.00	3,875.73	4,614.39	4,254.44	24.13	34.39	103.39	627.44	1,662.63	1,504.29	1,450.02	54.27	27.720		
4,300.00	3,955.89	4,659.15	4,294.45	25.13	34.79	104.88	615.13	1,646.75	1,491.97	1,435.64	56.33	26.488		
4,400.00	4,036.05	4,694.72	4,326.05	26.14	35.12	106.07	604.68	1,634.22	1,485.04	1,426.79	58.26	25.491		
4,472.28	4,094.00	4,717.00	4,345.76	26.88	35.32	106.83	597.80	1,626.43	1,483.52	1,423.96	59.56	24.909 CC		
4,500.00	4,116.22	4,731.26	4,358.36	27.16	35.45	107.31	593.32	1,621.46	1,483.70	1,423.62	60.07	24.698 ES		
4,600.00	4,196.38	4,772.76	4,395.01	28.18	35.84	108.73	580.20	1,607.09	1,487.81	1,426.03	61.78	24.083		
4,700.00	4,276.54	4,815.84	4,433.08	29.20	36.24	110.19	566.47	1,592.31	1,497.29	1,433.96	63.34	23.640		
4,800.00	4,356.71	4,864.90	4,476.31	30.22	36.70	111.85	550.66	1,575.35	1,511.88	1,447.11	64.77	23.341		
4,900.00	4,436.87	4,939.09	4,541.49	31.25	37.39	114.36	526.80	1,549.17	1,531.25	1,465.04	66.22	23.124		
5,000.00	4,517.03	5,040.07	4,630.53	32.28	38.35	117.71	497.19	1,511.85	1,553.78	1,486.11	67.66	22.963		
5,100.00	4,597.19	5,117.98	4,698.83	33.31	39.09	120.27	475.45	1,481.34	1,579.66	1,510.87	68.79	22.963 SF		
5,200.00	4,677.36	5,181.93	4,755.10	34.34	39.70	122.33	458.65	1,456.02	1,609.17	1,539.48	69.69	23.091		

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: SEC. 11 T5N R68W 6th P.M. - ABDN DD ENCORE 5-12 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program:		16-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)		
5,300.00	4,757.52	5,235.06	4,802.42	35.37	40.19	124.00	445.54	1,435.71	1,642.54	1,572.16	70.38	23.337	
5,400.00	4,837.68	5,279.27	4,842.34	36.41	40.56	125.34	435.28	1,419.74	1,679.66	1,608.77	70.89	23.695	
5,500.00	4,917.85	5,323.94	4,883.41	37.45	40.92	126.64	425.54	1,405.13	1,720.41	1,649.12	71.29	24.132	
5,600.00	4,998.01	5,367.59	4,924.10	38.49	41.25	127.86	416.48	1,392.17	1,764.44	1,692.85	71.59	24.646	
5,700.00	5,078.17	5,410.30	4,964.10	39.53	41.56	129.02	407.54	1,380.16	1,811.54	1,739.73	71.81	25.227	
5,800.00	5,158.34	5,471.04	5,021.22	40.57	41.99	130.61	394.87	1,363.88	1,861.27	1,789.19	72.09	25.820	
5,900.00	5,238.50	5,543.11	5,089.31	41.61	42.48	132.43	380.47	1,345.14	1,912.80	1,840.41	72.40	26.421	
6,000.00	5,318.66	5,620.31	5,163.01	42.65	42.97	134.25	366.46	1,326.96	1,965.71	1,892.99	72.72	27.031	
6,100.00	5,398.83	5,692.96	5,232.80	43.69	43.41	135.86	354.17	1,310.95	2,019.86	1,946.87	72.99	27.673	
6,200.00	5,478.99	5,790.38	5,327.27	44.74	43.94	137.86	339.63	1,292.19	2,074.77	2,001.36	73.41	28.264	
6,300.00	5,559.15	5,873.87	5,408.91	45.78	44.34	139.41	328.90	1,278.38	2,130.13	2,056.41	73.72	28.895	
6,400.00	5,639.32	5,997.54	5,530.39	46.83	44.89	141.54	315.85	1,259.33	2,185.06	2,110.80	74.26	29.424	
6,500.00	5,719.48	6,083.08	5,614.84	47.88	45.23	142.88	308.53	1,247.85	2,240.01	2,165.42	74.59	30.032	
6,600.00	5,799.64	6,184.52	5,715.34	48.92	45.60	144.33	301.12	1,236.25	2,295.25	2,220.25	75.00	30.602	
6,700.00	5,879.81	6,299.59	5,829.73	49.97	45.98	145.82	295.31	1,225.14	2,349.73	2,274.25	75.49	31.127	
6,800.00	5,959.97	6,405.95	5,935.69	51.02	46.29	147.06	291.90	1,216.73	2,403.74	2,327.81	75.93	31.657	
6,900.00	6,040.13	6,490.82	6,020.40	52.07	46.50	147.96	290.19	1,211.68	2,457.63	2,381.35	76.28	32.219	
7,000.00	6,120.29	6,586.41	6,115.89	53.12	46.72	148.89	289.09	1,207.62	2,511.52	2,434.83	76.69	32.749	
7,100.00	6,200.46	6,671.35	6,200.79	54.17	46.90	149.66	288.67	1,204.93	2,565.40	2,488.34	77.06	33.292	
7,200.00	6,280.62	6,749.46	6,278.87	55.22	47.06	150.32	288.44	1,202.95	2,619.51	2,542.11	77.40	33.842	
7,300.00	6,360.78	6,827.15	6,356.55	56.27	47.22	150.94	288.25	1,201.43	2,673.94	2,596.18	77.76	34.388	
7,400.00	6,440.95	6,917.08	6,446.46	57.32	47.40	151.63	288.15	1,199.92	2,728.54	2,650.36	78.18	34.902	
7,498.05	6,519.54	6,997.68	6,527.05	58.35	47.55	152.22	288.36	1,198.78	2,782.04	2,703.48	78.56	35.413	
7,500.00	6,521.11	6,999.22	6,528.59	58.37	47.55	152.61	288.36	1,198.77	2,783.11	2,704.54	78.57	35.424	
7,550.00	6,561.44	7,038.22	6,567.59	58.89	47.63	162.84	288.48	1,198.36	2,810.96	2,732.19	78.77	35.687	
7,600.00	6,602.00	7,076.19	6,605.56	59.38	47.70	173.33	288.56	1,198.02	2,839.60	2,760.61	78.99	35.950	
7,650.00	6,642.50	7,114.17	6,643.54	59.85	47.77	-176.20	288.62	1,197.74	2,868.79	2,789.56	79.23	36.208	
7,700.00	6,682.61	7,154.66	6,684.03	60.29	47.84	-166.06	288.67	1,197.48	2,898.29	2,818.78	79.51	36.451	
7,750.00	6,722.05	7,194.49	6,723.86	60.69	47.92	-156.49	288.73	1,197.26	2,927.86	2,848.05	79.81	36.685	
7,800.00	6,760.50	7,234.46	6,763.83	61.07	47.99	-147.64	288.80	1,197.03	2,957.30	2,877.17	80.14	36.903	
7,850.00	6,797.68	7,273.44	6,802.81	61.41	48.07	-139.58	288.88	1,196.71	2,986.44	2,905.96	80.48	37.108	
7,900.00	6,833.29	7,310.12	6,839.49	61.71	48.14	-132.32	288.96	1,196.35	3,015.12	2,934.28	80.83	37.300	
7,950.00	6,867.08	7,344.19	6,873.55	61.99	48.20	-125.82	289.04	1,196.05	3,043.20	2,962.00	81.20	37.477	
8,000.00	6,898.78	7,376.11	6,905.48	62.23	48.27	-120.04	289.12	1,195.82	3,070.57	2,988.98	81.58	37.637	
8,050.00	6,928.16	7,403.24	6,932.60	62.43	48.32	-114.88	289.19	1,195.65	3,097.10	3,015.14	81.97	37.785	
8,100.00	6,954.98	7,427.53	6,956.89	62.60	48.36	-110.30	289.23	1,195.53	3,122.72	3,040.35	82.36	37.913	
8,150.00	6,979.04	7,449.28	6,978.64	62.74	48.41	-106.26	289.25	1,195.43	3,147.30	3,064.52	82.78	38.021	
8,200.00	7,000.17	7,471.00	7,000.36	62.85	48.45	-102.75	289.26	1,195.34	3,170.75	3,087.53	83.22	38.101	
8,250.00	7,018.20	7,489.90	7,019.26	62.93	48.48	-99.69	289.27	1,195.29	3,192.96	3,109.29	83.68	38.158	
8,300.00	7,032.99	7,508.40	7,037.76	62.98	48.51	-97.09	289.31	1,195.25	3,213.82	3,129.66	84.16	38.186	
8,350.00	7,044.43	7,522.65	7,052.01	63.00	48.54	-94.84	289.35	1,195.24	3,233.26	3,148.61	84.66	38.193	
8,400.00	7,052.43	7,532.57	7,061.93	63.00	48.56	-92.92	289.40	1,195.24	3,251.21	3,166.05	85.15	38.180	
8,450.00	7,056.94	7,538.12	7,067.48	62.97	48.57	-91.32	289.42	1,195.24	3,267.57	3,181.91	85.66	38.148	
8,488.77	7,058.00	7,539.40	7,068.76	62.93	48.57	-90.29	289.43	1,195.24	3,279.12	3,193.08	86.04	38.110	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - ABDN DD MIRACLE 12-12 - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program: 16-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)			
500.00	500.00	1,693.00	1,640.06	1.58	8.61	102.29	-648.56	2,977.81	3,261.30	3,252.90	8.40	388.175	
600.00	600.00	1,765.21	1,706.37	1.94	9.18	102.55	-656.64	2,950.38	3,225.97	3,216.87	9.09	354.829	
700.00	700.00	1,879.69	1,811.59	2.29	10.08	102.97	-669.32	2,907.10	3,190.92	3,180.91	10.01	318.688	
800.00	800.00	2,023.24	1,943.02	2.65	11.24	103.48	-683.49	2,851.16	3,154.56	3,143.47	11.09	284.495	
900.00	900.00	2,105.37	2,018.16	3.01	11.91	103.77	-690.69	2,818.77	3,117.73	3,105.87	11.86	262.845	
1,000.00	1,000.00	2,181.82	2,088.35	3.37	12.53	104.03	-696.87	2,789.12	3,081.48	3,068.86	12.61	244.313	
1,100.00	1,100.00	2,286.87	2,184.85	3.73	13.38	104.40	-705.57	2,748.55	3,045.53	3,032.02	13.51	225.496	
1,200.00	1,200.00	2,435.36	2,320.86	4.09	14.61	104.90	-715.48	2,689.77	3,008.42	2,993.82	14.60	206.024	
1,300.00	1,300.00	2,548.61	2,423.71	4.45	15.58	105.32	-724.05	2,643.14	2,969.98	2,954.43	15.55	190.957	
1,350.00	1,350.00	2,578.00	2,450.38	4.62	15.83	105.43	-726.20	2,631.00	2,950.76	2,934.86	15.90	185.543	
1,400.00	1,400.00	2,607.84	2,477.53	4.80	16.08	91.17	-728.41	2,618.81	2,931.82	2,915.56	16.26	180.347	
1,500.00	1,499.93	2,667.00	2,531.68	5.16	16.58	92.24	-733.18	2,595.49	2,895.30	2,878.33	16.97	170.617	
1,600.00	1,599.68	2,698.75	2,560.91	5.52	16.83	93.16	-735.93	2,583.40	2,860.35	2,842.78	17.56	162.845	
1,700.00	1,699.13	2,756.00	2,613.85	5.88	17.29	94.24	-741.23	2,562.26	2,827.24	2,808.94	18.30	154.519	
1,800.00	1,798.15	2,921.28	2,765.92	6.25	18.63	96.20	-758.68	2,499.93	2,794.80	2,775.20	19.60	142.602	
1,900.00	1,896.63	2,998.98	2,836.70	6.62	19.29	97.60	-767.36	2,469.08	2,761.05	2,740.54	20.51	134.590	
2,000.00	1,994.44	3,068.26	2,899.99	7.02	19.87	98.95	-775.05	2,441.97	2,728.80	2,707.38	21.42	127.384	
2,100.00	2,091.46	3,137.92	2,963.84	7.43	20.45	100.31	-782.57	2,415.15	2,698.23	2,675.86	22.37	120.621	
2,200.00	2,187.58	3,209.32	3,029.43	7.88	21.03	101.70	-790.26	2,388.00	2,669.44	2,646.07	23.37	114.223	
2,300.00	2,282.68	3,283.68	3,097.91	8.35	21.64	103.13	-797.94	2,360.06	2,642.55	2,618.11	24.43	108.151	
2,400.00	2,376.65	3,347.36	3,156.83	8.85	22.14	104.42	-803.85	2,336.64	2,617.82	2,592.34	25.48	102.722	
2,500.00	2,469.36	3,425.22	3,229.34	9.40	22.74	105.86	-809.70	2,308.90	2,595.49	2,568.85	26.64	97.420	
2,600.00	2,560.71	3,497.52	3,296.94	9.99	23.28	107.21	-813.72	2,283.57	2,575.22	2,547.40	27.82	92.570	
2,700.00	2,650.59	3,554.00	3,349.80	10.62	23.70	108.33	-817.38	2,264.02	2,557.88	2,528.90	28.99	88.247	
2,800.00	2,738.88	3,633.60	3,424.35	11.29	24.29	109.78	-822.73	2,236.65	2,543.42	2,513.10	30.32	83.884	
2,900.00	2,825.48	3,840.85	3,617.02	12.02	25.89	113.20	-832.51	2,160.99	2,529.42	2,497.15	32.27	78.389	
3,000.00	2,910.28	3,905.00	3,676.31	12.79	26.40	114.44	-834.56	2,136.59	2,517.20	2,483.55	33.66	74.787	
3,100.00	2,993.18	4,014.36	3,776.76	13.62	27.31	116.43	-838.89	2,093.59	2,507.86	2,472.55	35.32	71.011	
3,185.69	3,062.62	4,079.28	3,835.95	14.36	27.86	117.66	-841.93	2,067.08	2,502.22	2,465.55	36.67	68.235	
3,200.00	3,074.09	4,081.00	3,837.51	14.49	27.87	117.69	-842.01	2,066.37	2,501.54	2,464.68	36.86	67.869	
3,300.00	3,154.26	4,111.39	3,865.27	15.40	28.12	118.22	-843.57	2,054.09	2,498.60	2,460.35	38.25	65.316	
3,338.92	3,185.46	4,122.07	3,875.07	15.76	28.21	118.41	-844.15	2,049.90	2,498.35	2,459.56	38.79	64.404 CC	
3,400.00	3,234.42	4,138.96	3,890.62	16.32	28.35	118.71	-845.10	2,043.38	2,498.96	2,459.33	39.63	63.057 ES	
3,500.00	3,314.58	4,171.00	3,920.29	17.26	28.61	119.26	-847.00	2,031.43	2,502.61	2,461.60	41.01	61.018	
3,600.00	3,394.75	4,210.63	3,957.10	18.21	28.92	119.95	-849.61	2,017.01	2,509.33	2,466.91	42.41	59.162	
3,700.00	3,474.91	4,257.00	4,000.19	19.18	29.28	120.76	-853.07	2,000.22	2,518.82	2,474.99	43.83	57.468	
3,800.00	3,555.07	4,366.25	4,100.60	20.15	30.18	122.70	-862.82	1,958.32	2,530.08	2,484.47	45.62	55.463	
3,900.00	3,635.24	4,429.38	4,158.16	21.14	30.72	123.82	-868.88	1,933.09	2,543.32	2,496.18	47.13	53.958	
4,000.00	3,715.40	4,479.08	4,203.46	22.13	31.15	124.71	-873.77	1,913.24	2,559.02	2,510.48	48.54	52.717	
4,100.00	3,795.56	4,521.00	4,241.66	23.12	31.51	125.46	-878.11	1,896.54	2,577.38	2,527.51	49.87	51.686	
4,200.00	3,875.73	4,576.53	4,292.26	24.13	31.98	126.44	-884.17	1,874.48	2,598.28	2,547.04	51.24	50.704	
4,300.00	3,955.89	4,627.94	4,339.09	25.13	32.42	127.35	-890.04	1,854.12	2,621.72	2,569.16	52.55	49.887	
4,400.00	4,036.05	4,688.15	4,394.20	26.14	32.92	128.40	-896.63	1,830.75	2,647.42	2,593.55	53.88	49.139	
4,500.00	4,116.22	4,741.48	4,443.21	27.16	33.36	129.32	-902.22	1,810.48	2,675.29	2,620.19	55.11	48.548	
4,600.00	4,196.38	4,792.56	4,490.16	28.18	33.78	130.19	-907.77	1,791.14	2,705.40	2,649.12	56.28	48.073	
4,700.00	4,276.54	4,882.77	4,573.20	29.20	34.52	131.70	-917.10	1,757.17	2,737.26	2,679.58	57.68	47.460	
4,800.00	4,356.71	5,052.00	4,727.18	30.22	35.98	134.53	-932.62	1,688.75	2,769.40	2,709.79	59.61	46.461	
4,900.00	4,436.87	5,098.12	4,768.90	31.25	36.39	135.29	-936.21	1,669.43	2,802.27	2,741.61	60.67	46.192	
5,000.00	4,517.03	5,142.00	4,808.78	32.28	36.78	136.01	-939.95	1,651.51	2,837.57	2,775.90	61.67	46.014	
5,100.00	4,597.19	5,199.06	4,860.75	33.31	37.27	136.93	-944.92	1,628.46	2,874.86	2,812.15	62.72	45.839	
5,200.00	4,677.36	5,250.03	4,907.14	34.34	37.71	137.74	-949.30	1,607.83	2,913.73	2,850.04	63.69	45.749 SF	
5,300.00	4,757.52	5,285.26	4,939.11	35.37	38.02	138.30	-952.70	1,593.42	2,954.67	2,890.16	64.51	45.801	

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - ABDN DD MIRACLE 12-12 - Wellbore #1 - Wellbore #1													<b>Offset Site Error:</b> 0.00 usft
<b>Survey Program:</b> 16-OWSG (Rev2) MWD													<b>Offset Well Error:</b> 0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
5,400.00	4,837.68	5,321.68	4,972.05	36.41	38.34	138.88	-956.64	1,578.40	2,997.68	2,932.38	65.30	45.907	
5,500.00	4,917.85	5,386.63	5,030.71	37.45	38.92	139.91	-963.90	1,551.46	3,042.36	2,976.07	66.29	45.898	
5,600.00	4,998.01	5,437.51	5,076.70	38.49	39.37	140.70	-969.54	1,530.44	3,088.47	3,021.35	67.12	46.013	
5,700.00	5,078.17	5,493.00	5,127.20	39.53	39.85	141.55	-975.71	1,508.29	3,136.23	3,068.27	67.96	46.146	
5,800.00	5,158.34	5,528.56	5,159.72	40.57	40.15	142.07	-979.72	1,494.48	3,185.50	3,116.90	68.60	46.433	
5,900.00	5,238.50	5,584.00	5,210.55	41.61	40.61	142.88	-986.14	1,473.31	3,236.31	3,166.93	69.38	46.647	

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: SEC. 11 T5N R68W 6th P.M. - ABDN DD MIRACLE 13-12 - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft	
Survey Program:		16-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)				
700.00	700.00	1,854.99	1,753.87	2.29	11.32	106.63	-882.73	2,955.76	3,266.99	3,254.88	12.11	269.850			
800.00	800.00	1,925.58	1,816.06	2.65	11.97	107.11	-901.06	2,927.83	3,234.45	3,221.44	13.01	248.635			
900.00	900.00	1,988.84	1,871.93	3.01	12.56	107.54	-917.55	2,903.18	3,202.85	3,188.98	13.87	230.848			
1,000.00	1,000.00	2,040.00	1,917.09	3.37	13.03	107.90	-931.44	2,883.55	3,172.43	3,157.77	14.66	216.337			
1,100.00	1,100.00	2,101.17	1,971.24	3.73	13.59	108.34	-948.30	2,860.63	3,143.31	3,127.77	15.54	202.284			
1,200.00	1,200.00	2,153.24	2,017.62	4.09	14.06	108.71	-962.56	2,841.74	3,115.60	3,099.25	16.35	190.549			
1,300.00	1,300.00	2,218.00	2,075.61	4.45	14.64	109.18	-980.43	2,819.14	3,089.49	3,072.23	17.26	178.998			
1,350.00	1,350.00	2,234.57	2,090.49	4.62	14.78	109.30	-985.05	2,813.48	3,076.91	3,059.31	17.60	174.829			
1,400.00	1,400.00	2,273.63	2,125.50	4.80	15.13	95.05	-996.10	2,800.16	3,064.65	3,046.54	18.11	169.222			
1,500.00	1,499.93	2,340.39	2,185.23	5.16	15.72	96.08	-1,015.50	2,777.50	3,041.08	3,022.02	19.06	159.561			
1,600.00	1,599.68	2,398.00	2,236.77	5.52	16.22	97.03	-1,032.69	2,758.35	3,019.26	2,999.30	19.95	151.313			
1,700.00	1,699.13	2,470.19	2,301.31	5.88	16.86	98.14	-1,054.78	2,734.72	2,999.18	2,978.19	20.98	142.926			
1,800.00	1,798.15	2,594.46	2,411.91	6.25	17.97	99.83	-1,093.49	2,693.35	2,980.17	2,957.70	22.47	132.642			
1,900.00	1,896.63	2,682.06	2,489.47	6.62	18.77	101.18	-1,120.82	2,663.14	2,961.74	2,938.05	23.69	125.018			
2,000.00	1,994.44	2,730.06	2,532.17	7.02	19.20	102.07	-1,135.60	2,646.98	2,945.65	2,921.04	24.61	119.692			
2,100.00	2,091.46	2,781.09	2,577.87	7.43	19.65	102.95	-1,151.15	2,630.40	2,932.30	2,906.72	25.58	114.648			
2,200.00	2,187.58	2,838.00	2,628.87	7.88	20.15	103.89	-1,168.75	2,612.31	2,921.72	2,895.10	26.62	109.762			
2,300.00	2,282.68	2,941.61	2,721.29	8.35	21.06	105.44	-1,201.52	2,578.84	2,913.38	2,885.28	28.10	103.686			
2,400.00	2,376.65	2,992.10	2,766.03	8.85	21.52	106.27	-1,218.00	2,562.24	2,907.46	2,878.27	29.18	99.626			
2,500.00	2,469.36	3,057.14	2,823.48	9.40	22.12	107.29	-1,239.70	2,540.82	2,904.57	2,874.13	30.43	95.437			
2,550.46	2,515.63	3,093.61	2,855.68	9.69	22.45	107.84	-1,251.86	2,528.76	2,904.20	2,873.08	31.12	93.330	CC		
2,600.00	2,560.71	3,127.67	2,885.75	9.99	22.76	108.35	-1,263.18	2,517.48	2,904.57	2,872.79	31.77	91.417	ES		
2,700.00	2,650.59	3,193.49	2,943.91	10.62	23.37	109.32	-1,284.96	2,495.64	2,907.64	2,874.53	33.10	87.837			
2,800.00	2,738.88	3,316.88	3,052.95	11.29	24.51	111.17	-1,324.34	2,453.42	2,912.93	2,877.95	34.98	83.281			
2,900.00	2,825.48	3,372.00	3,101.63	12.02	25.02	111.90	-1,341.70	2,434.27	2,921.53	2,885.26	36.27	80.544			
3,000.00	2,910.28	3,470.31	3,188.71	12.79	25.92	113.30	-1,371.73	2,399.90	2,933.39	2,895.43	37.96	77.266			
3,100.00	2,993.18	3,528.26	3,240.21	13.62	26.45	113.98	-1,388.75	2,379.54	2,948.50	2,909.19	39.31	75.002			
3,185.69	3,062.62	3,604.26	3,307.81	14.36	27.15	114.98	-1,410.65	2,352.56	2,964.21	2,923.51	40.70	72.826			
3,200.00	3,074.09	3,618.80	3,320.72	14.49	27.28	115.23	-1,414.79	2,347.30	2,967.04	2,926.09	40.95	72.454			
3,300.00	3,154.26	3,681.11	3,375.97	15.40	27.86	116.29	-1,432.40	2,324.51	2,987.94	2,945.59	42.34	70.564			
3,400.00	3,234.42	3,722.00	3,412.19	16.32	28.24	116.98	-1,443.94	2,309.45	3,011.14	2,967.60	43.54	69.166			
3,500.00	3,314.58	3,764.14	3,449.49	17.26	28.63	117.69	-1,455.97	2,293.95	3,036.78	2,992.07	44.71	67.915			
3,600.00	3,394.75	3,811.00	3,490.92	18.21	29.07	118.48	-1,469.65	2,276.86	3,065.01	3,019.10	45.91	66.767			
3,700.00	3,474.91	3,857.57	3,531.87	19.18	29.52	119.27	-1,483.55	2,259.57	3,095.48	3,048.40	47.08	65.749			
3,800.00	3,555.07	3,914.28	3,581.16	20.15	30.07	120.24	-1,500.90	2,237.53	3,127.86	3,079.54	48.32	64.738			
3,900.00	3,635.24	3,948.12	3,610.45	21.14	30.41	120.81	-1,511.42	2,224.26	3,162.49	3,113.17	49.32	64.127			
4,000.00	3,715.40	3,987.00	3,644.09	22.13	30.79	121.47	-1,523.65	2,209.09	3,199.39	3,149.07	50.33	63.573			
4,100.00	3,795.56	4,018.16	3,671.05	23.12	31.10	121.99	-1,533.53	2,196.99	3,238.48	3,187.25	51.23	63.217			
4,200.00	3,875.73	4,055.16	3,703.09	24.13	31.47	122.61	-1,545.31	2,182.70	3,279.64	3,227.49	52.15	62.891	SF		

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - ABDN VERT KNESS 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		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	6.00	6.00	0.00	0.07	-25.56	2,868.16	-1,372.03	3,179.43					
100.00	100.00	106.00	106.00	0.14	1.34	-25.56	2,868.16	-1,372.03	3,179.43	3,177.95	1.48	2,149.733		
200.00	200.00	206.00	206.00	0.50	3.61	-25.56	2,868.16	-1,372.03	3,179.43	3,175.32	4.11	772.751		
300.00	300.00	306.00	306.00	0.86	5.69	-25.56	2,868.16	-1,372.03	3,179.43	3,172.88	6.55	485.480		
400.00	400.00	406.00	406.00	1.22	7.73	-25.56	2,868.16	-1,372.03	3,179.43	3,170.48	8.95	355.286		
500.00	500.00	506.00	506.00	1.58	9.76	-25.56	2,868.16	-1,372.03	3,179.43	3,168.10	11.34	280.470		
600.00	600.00	606.00	606.00	1.94	11.78	-25.56	2,868.16	-1,372.03	3,179.43	3,165.72	13.72	231.786		
700.00	700.00	706.00	706.00	2.29	13.80	-25.56	2,868.16	-1,372.03	3,179.43	3,163.34	16.09	197.545		
800.00	800.00	806.00	806.00	2.65	15.82	-25.56	2,868.16	-1,372.03	3,179.43	3,160.96	18.47	172.138		
900.00	900.00	906.00	906.00	3.01	17.83	-25.56	2,868.16	-1,372.03	3,179.43	3,158.59	20.84	152.532		
1,000.00	1,000.00	1,006.00	1,006.00	3.37	19.85	-25.56	2,868.16	-1,372.03	3,179.43	3,156.22	23.22	136.941		
1,100.00	1,100.00	1,106.00	1,106.00	3.73	21.86	-25.56	2,868.16	-1,372.03	3,179.43	3,153.84	25.59	124.245		
1,200.00	1,200.00	1,206.00	1,206.00	4.09	23.88	-25.56	2,868.16	-1,372.03	3,179.43	3,151.47	27.96	113.705		
1,300.00	1,300.00	1,306.00	1,306.00	4.45	25.89	-25.56	2,868.16	-1,372.03	3,179.43	3,149.10	30.33	104.815		
1,350.00	1,350.00	1,356.00	1,356.00	4.62	26.89	-25.56	2,868.16	-1,372.03	3,179.43	3,147.91	31.52	100.873		
1,400.00	1,400.00	1,406.00	1,406.00	4.80	27.90	-40.36	2,868.16	-1,372.03	3,179.10	3,146.40	32.70	97.206		
1,500.00	1,499.93	1,505.93	1,505.93	5.16	29.91	-40.44	2,868.16	-1,372.03	3,176.44	3,141.37	35.07	90.564		
1,600.00	1,599.68	1,605.68	1,605.68	5.52	31.92	-40.59	2,868.16	-1,372.03	3,171.13	3,133.69	37.44	84.699		
1,700.00	1,699.13	1,705.13	1,705.13	5.88	33.92	-40.81	2,868.16	-1,372.03	3,163.19	3,123.39	39.80	79.475		
1,800.00	1,798.15	1,804.15	1,804.15	6.25	35.91	-41.12	2,868.16	-1,372.03	3,152.64	3,110.48	42.16	74.784		
1,900.00	1,896.63	1,902.63	1,902.63	6.62	37.89	-41.50	2,868.16	-1,372.03	3,139.51	3,095.00	44.51	70.541		
2,000.00	1,994.44	2,000.44	2,000.44	7.02	39.86	-41.96	2,868.16	-1,372.03	3,123.84	3,076.99	46.85	66.678		
2,100.00	2,091.46	2,097.46	2,097.46	7.43	41.81	-42.51	2,868.16	-1,372.03	3,105.69	3,056.50	49.19	63.141		
2,200.00	2,187.58	2,193.58	2,193.58	7.88	43.75	-43.13	2,868.16	-1,372.03	3,085.10	3,033.58	51.52	59.883		
2,300.00	2,282.68	2,288.68	2,288.68	8.35	45.66	-43.84	2,868.16	-1,372.03	3,062.16	3,008.31	53.85	56.869		
2,400.00	2,376.65	2,382.65	2,382.65	8.85	47.55	-44.64	2,868.16	-1,372.03	3,036.93	2,980.76	56.17	54.068		
2,500.00	2,469.36	2,475.36	2,475.36	9.40	49.42	-45.53	2,868.16	-1,372.03	3,009.49	2,951.01	58.49	51.454		
2,600.00	2,560.71	2,566.71	2,566.71	9.99	51.25	-46.51	2,868.16	-1,372.03	2,979.96	2,919.15	60.81	49.006		
2,700.00	2,650.59	2,656.59	2,656.59	10.62	53.06	-47.59	2,868.16	-1,372.03	2,948.42	2,885.29	63.13	46.707		
2,800.00	2,738.88	2,744.88	2,744.88	11.29	54.84	-48.76	2,868.16	-1,372.03	2,915.00	2,849.55	65.45	44.541		
2,900.00	2,825.48	2,831.48	2,831.48	12.02	56.58	-50.02	2,868.16	-1,372.03	2,879.82	2,812.05	67.77	42.496		
3,000.00	2,910.28	2,916.28	2,916.28	12.79	58.28	-51.38	2,868.16	-1,372.03	2,843.01	2,772.92	70.09	40.560		
3,100.00	2,993.18	2,999.18	2,999.18	13.62	59.95	-52.84	2,868.16	-1,372.03	2,804.74	2,732.31	72.43	38.725		
3,185.69	3,062.62	3,068.62	3,068.62	14.36	61.35	-54.16	2,868.16	-1,372.03	2,770.90	2,696.47	74.43	37.228		
3,200.00	3,074.09	3,080.09	3,080.09	14.49	61.58	-54.29	2,868.16	-1,372.03	2,765.18	2,690.41	74.77	36.984		
3,300.00	3,154.26	3,160.26	3,160.26	15.40	63.19	-55.18	2,868.16	-1,372.03	2,725.63	2,648.50	77.13	35.337		
3,400.00	3,234.42	3,240.42	3,240.42	16.32	64.80	-56.09	2,868.16	-1,372.03	2,686.83	2,607.30	79.53	33.784		
3,500.00	3,314.58	3,320.58	3,320.58	17.26	66.42	-57.01	2,868.16	-1,372.03	2,648.81	2,566.85	81.96	32.317		
3,600.00	3,394.75	3,400.75	3,400.75	18.21	68.03	-57.96	2,868.16	-1,372.03	2,611.60	2,527.18	84.43	30.934		
3,700.00	3,474.91	3,480.91	3,480.91	19.18	69.64	-58.93	2,868.16	-1,372.03	2,575.25	2,488.33	86.92	29.628		
3,800.00	3,555.07	3,561.07	3,561.07	20.15	71.25	-59.92	2,868.16	-1,372.03	2,539.78	2,450.34	89.44	28.396		
3,900.00	3,635.24	3,641.24	3,641.24	21.14	72.87	-60.93	2,868.16	-1,372.03	2,505.24	2,413.24	91.99	27.233		
4,000.00	3,715.40	3,721.40	3,721.40	22.13	74.48	-61.96	2,868.16	-1,372.03	2,471.66	2,377.09	94.57	26.136		
4,100.00	3,795.56	3,801.56	3,801.56	23.12	76.09	-63.01	2,868.16	-1,372.03	2,439.08	2,341.91	97.17	25.100		
4,200.00	3,875.73	3,881.73	3,881.73	24.13	77.70	-64.08	2,868.16	-1,372.03	2,407.55	2,307.75	99.80	24.123		
4,300.00	3,955.89	3,961.89	3,961.89	25.13	79.31	-65.16	2,868.16	-1,372.03	2,377.10	2,274.65	102.45	23.202		
4,400.00	4,036.05	4,042.05	4,042.05	26.14	80.93	-66.27	2,868.16	-1,372.03	2,347.78	2,242.66	105.13	22.333		
4,500.00	4,116.22	4,122.22	4,122.22	27.16	82.54	-67.40	2,868.16	-1,372.03	2,319.63	2,211.81	107.82	21.514		
4,600.00	4,196.38	4,202.38	4,202.38	28.18	84.15	-68.55	2,868.16	-1,372.03	2,292.70	2,182.16	110.53	20.742		
4,700.00	4,276.54	4,282.54	4,282.54	29.20	85.76	-69.71	2,868.16	-1,372.03	2,267.02	2,153.76	113.26	20.016		
4,800.00	4,356.71	4,362.71	4,362.71	30.22	87.38	-70.89	2,868.16	-1,372.03	2,242.64	2,126.63	116.01	19.332		
4,900.00	4,436.87	4,442.87	4,442.87	31.25	88.99	-72.09	2,868.16	-1,372.03	2,219.60	2,100.84	118.77	18.689		

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 CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - ABDN VERT KNESS 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		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor
5,000.00	4,517.03	4,523.03	4,523.03	32.28	90.60	-73.31	2,868.16	-1,372.03	2,197.95	2,076.41	121.54	18.085
5,100.00	4,597.19	4,603.19	4,603.19	33.31	92.21	-74.54	2,868.16	-1,372.03	2,177.73	2,053.41	124.32	17.518
5,200.00	4,677.36	4,683.36	4,683.36	34.34	93.82	-75.79	2,868.16	-1,372.03	2,158.97	2,031.87	127.10	16.986
5,300.00	4,757.52	4,763.52	4,763.52	35.37	95.44	-77.05	2,868.16	-1,372.03	2,141.71	2,011.82	129.89	16.489
5,400.00	4,837.68	4,843.68	4,843.68	36.41	97.05	-78.32	2,868.16	-1,372.03	2,126.00	1,993.32	132.68	16.023
5,500.00	4,917.85	4,923.85	4,923.85	37.45	98.66	-79.60	2,868.16	-1,372.03	2,111.87	1,976.40	135.47	15.589
5,600.00	4,998.01	5,004.01	5,004.01	38.49	100.27	-80.90	2,868.16	-1,372.03	2,099.34	1,961.09	138.25	15.185
5,700.00	5,078.17	5,084.17	5,084.17	39.53	101.88	-82.20	2,868.16	-1,372.03	2,088.45	1,947.42	141.03	14.809
5,800.00	5,158.34	5,164.34	5,164.34	40.57	103.50	-83.52	2,868.16	-1,372.03	2,079.22	1,935.43	143.79	14.460
5,900.00	5,238.50	5,244.50	5,244.50	41.61	105.11	-84.84	2,868.16	-1,372.03	2,071.67	1,925.13	146.54	14.137
6,000.00	5,318.66	5,324.66	5,324.66	42.65	106.72	-86.16	2,868.16	-1,372.03	2,065.83	1,916.56	149.27	13.839
6,100.00	5,398.83	5,404.83	5,404.83	43.69	108.33	-87.49	2,868.16	-1,372.03	2,061.71	1,909.72	151.99	13.565
6,200.00	5,478.99	5,484.99	5,484.99	44.74	109.94	-88.82	2,868.16	-1,372.03	2,059.31	1,904.64	154.68	13.314
6,288.12	5,549.63	5,555.63	5,555.63	45.66	111.37	-90.00	2,868.16	-1,372.03	2,058.64	1,901.61	157.03	13.110
6,300.00	5,559.15	5,565.15	5,565.15	45.78	111.56	-90.16	2,868.16	-1,372.03	2,058.65	1,901.31	157.34	13.084
6,400.00	5,639.32	5,645.32	5,645.32	46.83	113.17	-91.49	2,868.16	-1,372.03	2,059.73	1,899.75	159.98	12.875
6,500.00	5,719.48	5,725.48	5,725.48	47.88	114.78	-92.82	2,868.16	-1,372.03	2,062.53	1,899.95	162.59	12.686
6,600.00	5,799.64	5,805.64	5,805.64	48.92	116.39	-94.15	2,868.16	-1,372.03	2,067.07	1,901.90	165.16	12.515
6,700.00	5,879.81	5,885.81	5,885.81	49.97	118.01	-95.48	2,868.16	-1,372.03	2,073.31	1,905.61	167.71	12.363
6,800.00	5,959.97	5,965.97	5,965.97	51.02	119.62	-96.80	2,868.16	-1,372.03	2,081.26	1,911.04	170.21	12.227
6,900.00	6,040.13	6,046.13	6,046.13	52.07	121.23	-98.11	2,868.16	-1,372.03	2,090.89	1,918.20	172.69	12.108
7,000.00	6,120.29	6,126.29	6,126.29	53.12	122.84	-99.41	2,868.16	-1,372.03	2,102.17	1,927.04	175.13	12.004
7,100.00	6,200.46	6,206.46	6,206.46	54.17	124.45	-100.70	2,868.16	-1,372.03	2,115.08	1,937.55	177.53	11.914
7,200.00	6,280.62	6,286.62	6,286.62	55.22	126.07	-101.98	2,868.16	-1,372.03	2,129.59	1,949.70	179.89	11.838
7,300.00	6,360.78	6,366.78	6,366.78	56.27	127.68	-103.25	2,868.16	-1,372.03	2,145.68	1,963.45	182.23	11.775
7,400.00	6,440.95	6,446.95	6,446.95	57.32	129.29	-104.51	2,868.16	-1,372.03	2,163.29	1,978.77	184.52	11.724
7,498.05	6,519.54	6,525.54	6,525.54	58.35	130.87	-105.73	2,868.16	-1,372.03	2,182.01	1,995.28	186.74	11.685
7,500.00	6,521.11	6,527.11	6,527.11	58.37	130.90	-105.50	2,868.16	-1,372.03	2,182.40	1,995.62	186.78	11.684
7,550.00	6,561.44	6,567.44	6,567.44	58.89	131.71	-99.33	2,868.16	-1,372.03	2,190.19	2,002.29	187.90	11.656
7,600.00	6,602.00	6,608.00	6,608.00	59.38	132.53	-92.98	2,868.16	-1,372.03	2,194.04	2,005.03	189.01	11.608
7,650.00	6,642.50	6,648.50	6,648.50	59.85	133.34	-86.73	2,868.16	-1,372.03	2,193.94	2,003.83	190.11	11.541
7,700.00	6,682.61	6,688.61	6,688.61	60.29	134.15	-80.82	2,868.16	-1,372.03	2,189.89	1,998.71	191.18	11.455
7,750.00	6,722.05	6,728.05	6,728.05	60.69	134.94	-75.44	2,868.16	-1,372.03	2,181.93	1,989.71	192.22	11.351
7,800.00	6,760.50	6,766.50	6,766.50	61.07	135.72	-70.72	2,868.16	-1,372.03	2,170.13	1,976.92	193.21	11.232
7,850.00	6,797.68	6,803.68	6,803.68	61.41	136.46	-66.73	2,868.16	-1,372.03	2,154.57	1,960.41	194.16	11.097
7,900.00	6,833.29	6,839.29	6,839.29	61.71	137.18	-63.47	2,868.16	-1,372.03	2,135.37	1,940.31	195.07	10.947
7,950.00	6,867.08	6,873.08	6,873.08	61.99	137.86	-60.93	2,868.16	-1,372.03	2,112.67	1,916.76	195.91	10.784
8,000.00	6,898.78	6,904.78	6,904.78	62.23	138.50	-59.09	2,868.16	-1,372.03	2,086.61	1,889.91	196.70	10.608
8,050.00	6,928.16	6,934.16	6,934.16	62.43	139.09	-57.92	2,868.16	-1,372.03	2,057.37	1,859.95	197.42	10.421
8,100.00	6,954.98	6,960.98	6,960.98	62.60	139.63	-57.43	2,868.16	-1,372.03	2,025.15	1,827.08	198.08	10.224
8,150.00	6,979.04	6,985.04	6,985.04	62.74	140.11	-57.63	2,868.16	-1,372.03	1,990.17	1,791.50	198.67	10.018
8,200.00	7,000.17	7,006.17	7,006.17	62.85	140.54	-58.59	2,868.16	-1,372.03	1,952.65	1,753.46	199.19	9.803
8,250.00	7,018.20	7,024.20	7,024.20	62.93	140.90	-60.42	2,868.16	-1,372.03	1,912.84	1,713.21	199.63	9.582
8,300.00	7,032.99	7,038.99	7,038.99	62.98	141.20	-63.29	2,868.16	-1,372.03	1,871.00	1,670.99	200.01	9.355
8,350.00	7,044.43	7,050.43	7,050.43	63.00	141.43	-67.47	2,868.16	-1,372.03	1,827.39	1,627.08	200.31	9.123
8,400.00	7,052.43	7,058.43	7,058.43	63.00	141.59	-73.39	2,868.16	-1,372.03	1,782.30	1,581.77	200.53	8.888
8,450.00	7,056.94	7,062.94	7,062.94	62.97	141.68	-81.62	2,868.16	-1,372.03	1,736.02	1,535.33	200.68	8.650
8,488.77	7,058.00	7,064.00	7,064.00	62.93	141.70	-90.00	2,868.16	-1,372.03	1,699.50	1,498.75	200.75	8.466
8,500.00	7,058.00	7,064.00	7,064.00	62.92	141.70	-90.00	2,868.16	-1,372.03	1,688.86	1,488.09	200.76	8.412
8,600.00	7,058.00	7,064.00	7,064.00	62.81	141.70	-90.00	2,868.16	-1,372.03	1,594.47	1,393.60	200.87	7.938
8,700.00	7,058.00	7,064.00	7,064.00	62.74	141.70	-90.00	2,868.16	-1,372.03	1,500.81	1,299.81	201.00	7.467
8,800.00	7,058.00	7,064.00	7,064.00	62.71	141.70	-90.00	2,868.16	-1,372.03	1,408.03	1,206.88	201.15	7.000

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



<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - ABDN VERT KNESS 1 - Wellbore #1 - Design #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-INC												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Separation Factor</b>	<b>Warning</b>	
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
8,900.00	7,058.00	7,064.00	7,064.00	62.71	141.70	-90.00	2,868.16	-1,372.03	1,316.30	1,114.98	201.31	6.539	
9,000.00	7,058.00	7,064.00	7,064.00	62.76	141.70	-90.00	2,868.16	-1,372.03	1,225.86	1,024.36	201.50	6.084	
9,100.00	7,058.00	7,064.00	7,064.00	62.86	141.70	-90.00	2,868.16	-1,372.03	1,137.03	935.31	201.72	5.637	
9,200.00	7,058.00	7,064.00	7,064.00	63.01	141.70	-90.00	2,868.16	-1,372.03	1,050.21	848.24	201.97	5.200	
9,300.00	7,058.00	7,064.00	7,064.00	63.23	141.70	-90.00	2,868.16	-1,372.03	965.94	763.68	202.26	4.776	
9,400.00	7,058.00	7,064.00	7,064.00	63.54	141.70	-90.00	2,868.16	-1,372.03	884.95	682.37	202.58	4.368	
9,500.00	7,058.00	7,064.00	7,064.00	63.95	141.70	-90.00	2,868.16	-1,372.03	808.24	605.30	202.94	3.983	
9,600.00	7,058.00	7,064.00	7,064.00	64.49	141.70	-90.00	2,868.16	-1,372.03	737.12	533.81	203.31	3.626	
9,700.00	7,058.00	7,064.00	7,064.00	65.17	141.70	-90.00	2,868.16	-1,372.03	673.38	469.71	203.67	3.306	
9,800.00	7,058.00	7,064.00	7,064.00	66.02	141.70	-90.00	2,868.16	-1,372.03	619.31	415.36	203.95	3.037	
9,900.00	7,058.00	7,064.00	7,064.00	67.06	141.70	-90.00	2,868.16	-1,372.03	577.62	373.57	204.05	2.831	
10,000.00	7,058.00	7,064.00	7,064.00	68.29	141.70	-90.00	2,868.16	-1,372.03	551.14	347.27	203.87	2.703	
10,099.49	7,058.00	7,064.00	7,064.00	69.70	141.70	-90.00	2,868.16	-1,372.03	542.08	338.73	203.35	2.666	CC, ES, SF
10,100.00	7,058.00	7,064.00	7,064.00	69.70	141.70	-90.00	2,868.16	-1,372.03	542.08	338.73	203.35	2.666	
10,200.00	7,058.00	7,064.00	7,064.00	71.29	141.70	-90.00	2,868.16	-1,372.03	551.32	348.76	202.56	2.722	
10,300.00	7,058.00	7,064.00	7,064.00	73.02	141.70	-90.00	2,868.16	-1,372.03	577.97	376.32	201.65	2.866	
10,400.00	7,058.00	7,064.00	7,064.00	74.88	141.70	-90.00	2,868.16	-1,372.03	619.80	419.00	200.80	3.087	
10,500.00	7,058.00	7,064.00	7,064.00	76.84	141.70	-90.00	2,868.16	-1,372.03	673.99	473.88	200.10	3.368	
10,600.00	7,058.00	7,064.00	7,064.00	78.89	141.70	-90.00	2,868.16	-1,372.03	737.81	538.23	199.57	3.697	
10,700.00	7,058.00	7,064.00	7,064.00	81.02	141.70	-90.00	2,868.16	-1,372.03	808.99	609.79	199.19	4.061	
10,800.00	7,058.00	7,064.00	7,064.00	83.20	141.70	-90.00	2,868.16	-1,372.03	885.75	686.82	198.93	4.453	
10,900.00	7,058.00	7,064.00	7,064.00	85.44	141.70	-90.00	2,868.16	-1,372.03	966.78	768.02	198.76	4.864	
11,000.00	7,058.00	7,064.00	7,064.00	87.71	141.70	-90.00	2,868.16	-1,372.03	1,051.08	852.43	198.64	5.291	
11,100.00	7,058.00	7,064.00	7,064.00	90.03	141.70	-90.00	2,868.16	-1,372.03	1,137.92	939.34	198.58	5.730	
11,200.00	7,058.00	7,064.00	7,064.00	92.38	141.70	-90.00	2,868.16	-1,372.03	1,226.77	1,028.23	198.54	6.179	
11,300.00	7,058.00	7,064.00	7,064.00	94.75	141.70	-90.00	2,868.16	-1,372.03	1,317.22	1,118.70	198.52	6.635	
11,400.00	7,058.00	7,064.00	7,064.00	97.15	141.70	-90.00	2,868.16	-1,372.03	1,408.96	1,210.44	198.52	7.097	
11,500.00	7,058.00	7,064.00	7,064.00	99.57	141.70	-90.00	2,868.16	-1,372.03	1,501.76	1,303.23	198.53	7.565	
11,600.00	7,058.00	7,064.00	7,064.00	102.01	141.70	-90.00	2,868.16	-1,372.03	1,595.42	1,396.88	198.54	8.036	
11,700.00	7,058.00	7,064.00	7,064.00	104.47	141.70	-90.00	2,868.16	-1,372.03	1,689.81	1,491.25	198.56	8.510	
11,800.00	7,058.00	7,064.00	7,064.00	106.94	141.70	-90.00	2,868.16	-1,372.03	1,784.82	1,586.23	198.59	8.988	
11,900.00	7,058.00	7,064.00	7,064.00	109.43	141.70	-90.00	2,868.16	-1,372.03	1,880.34	1,681.73	198.61	9.467	
12,000.00	7,058.00	7,064.00	7,064.00	111.93	141.70	-90.00	2,868.16	-1,372.03	1,976.30	1,777.66	198.64	9.949	
12,100.00	7,058.00	7,064.00	7,064.00	114.44	141.70	-90.00	2,868.16	-1,372.03	2,072.65	1,873.98	198.67	10.433	
12,200.00	7,058.00	7,064.00	7,064.00	116.96	141.70	-90.00	2,868.16	-1,372.03	2,169.33	1,970.63	198.70	10.918	
12,300.00	7,058.00	7,064.00	7,064.00	119.49	141.70	-90.00	2,868.16	-1,372.03	2,266.29	2,067.56	198.73	11.404	
12,400.00	7,058.00	7,064.00	7,064.00	122.03	141.70	-90.00	2,868.16	-1,372.03	2,363.51	2,164.75	198.76	11.891	
12,500.00	7,058.00	7,064.00	7,064.00	124.58	141.70	-90.00	2,868.16	-1,372.03	2,460.95	2,262.16	198.79	12.379	
12,600.00	7,058.00	7,064.00	7,064.00	127.14	141.70	-90.00	2,868.16	-1,372.03	2,558.59	2,359.76	198.83	12.868	
12,700.00	7,058.00	7,064.00	7,064.00	129.70	141.70	-90.00	2,868.16	-1,372.03	2,656.40	2,457.55	198.86	13.358	
12,800.00	7,058.00	7,064.00	7,064.00	132.27	141.70	-90.00	2,868.16	-1,372.03	2,754.38	2,555.49	198.89	13.849	
12,900.00	7,058.00	7,064.00	7,064.00	134.85	141.70	-90.00	2,868.16	-1,372.03	2,852.49	2,653.57	198.92	14.340	
13,000.00	7,058.00	7,064.00	7,064.00	137.44	141.70	-90.00	2,868.16	-1,372.03	2,950.73	2,751.77	198.95	14.831	
13,100.00	7,058.00	7,064.00	7,064.00	140.02	141.70	-90.00	2,868.16	-1,372.03	3,049.08	2,850.10	198.98	15.323	
13,200.00	7,058.00	7,064.00	7,064.00	142.62	141.70	-90.00	2,868.16	-1,372.03	3,147.54	2,948.52	199.01	15.816	
13,300.00	7,058.00	7,064.00	7,064.00	145.22	141.70	-90.00	2,868.16	-1,372.03	3,246.09	3,047.04	199.05	16.308	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-10H - 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	103.38	-7.29	30.63	31.48				
100.00	100.00	100.00	100.00	0.14	0.14	103.38	-7.29	30.63	31.48	31.20	0.29	109.785	
200.00	200.00	200.00	200.00	0.50	0.50	103.38	-7.29	30.63	31.48	30.48	1.00	31.367	
300.00	300.00	300.00	300.00	0.86	0.86	103.38	-7.29	30.63	31.48	29.76	1.72	18.297 CC, ES	
400.00	400.00	398.88	398.86	1.22	1.21	103.02	-7.47	32.33	33.20	30.77	2.43	13.675	
500.00	500.00	497.53	497.37	1.58	1.55	102.13	-8.04	37.39	38.34	35.21	3.13	12.244	
600.00	600.00	596.22	595.71	1.94	1.92	101.10	-8.96	45.66	46.73	42.89	3.84	12.183 SF	
700.00	700.00	695.80	694.86	2.29	2.29	100.32	-9.97	54.77	55.91	51.36	4.54	12.301	
800.00	800.00	795.37	794.02	2.65	2.67	99.76	-10.99	63.88	65.10	59.84	5.26	12.382	
900.00	900.00	894.95	893.17	3.01	3.05	99.34	-12.00	72.99	74.29	68.32	5.97	12.441	
1,000.00	1,000.00	994.52	992.32	3.37	3.43	99.01	-13.01	82.11	83.48	76.80	6.69	12.486	
1,100.00	1,100.00	1,094.10	1,091.47	3.73	3.81	98.74	-14.03	91.22	92.68	85.28	7.40	12.520	
1,200.00	1,200.00	1,193.67	1,190.63	4.09	4.20	98.53	-15.04	100.33	101.88	93.76	8.12	12.547	
1,300.00	1,300.00	1,293.25	1,289.78	4.45	4.58	98.35	-16.05	109.44	111.08	102.25	8.84	12.570	
1,350.00	1,350.00	1,343.04	1,339.35	4.62	4.78	98.27	-16.56	114.00	115.69	106.49	9.20	12.580	
1,400.00	1,400.00	1,392.83	1,388.93	4.80	4.97	98.52	-17.07	118.55	120.24	110.68	9.55	12.584	
1,500.00	1,499.93	1,492.38	1,488.07	5.16	5.36	84.74	-18.08	127.66	129.08	118.81	10.27	12.568	
1,600.00	1,599.68	1,591.81	1,587.07	5.52	5.74	87.23	-19.09	136.76	137.80	126.81	10.99	12.541	
1,700.00	1,699.13	1,690.97	1,685.81	5.88	6.13	90.75	-20.10	145.84	146.79	135.08	11.71	12.536	
1,800.00	1,798.15	1,789.76	1,784.18	6.25	6.51	95.07	-21.11	154.88	156.60	144.16	12.44	12.586	
1,900.00	1,896.63	1,888.05	1,882.06	6.62	6.90	99.96	-22.11	163.87	167.85	154.66	13.19	12.725	
2,000.00	1,994.44	1,985.73	1,979.32	7.02	7.28	105.18	-23.10	172.81	181.16	167.20	13.96	12.979	
2,100.00	2,091.46	2,082.67	2,075.84	7.43	7.65	110.49	-24.09	181.68	197.12	182.37	14.75	13.367	
2,200.00	2,187.58	2,178.75	2,171.52	7.88	8.03	115.70	-25.07	190.47	216.18	200.63	15.55	13.903	
2,300.00	2,282.68	2,273.87	2,266.23	8.35	8.40	120.63	-26.04	199.18	238.68	222.32	16.36	14.587	
2,400.00	2,376.65	2,367.90	2,359.86	8.85	8.77	125.18	-26.99	207.78	264.84	247.66	17.18	15.417	
2,500.00	2,469.36	2,460.72	2,452.29	9.40	9.13	129.30	-27.94	216.27	294.74	276.75	17.99	16.382	
2,600.00	2,560.71	2,552.23	2,543.41	9.99	9.49	132.98	-28.87	224.65	328.40	309.60	18.80	17.470	
2,700.00	2,650.59	2,642.32	2,633.12	10.62	9.84	136.23	-29.79	232.89	365.78	346.18	19.59	18.668	
2,800.00	2,738.88	2,730.87	2,721.29	11.29	10.18	139.07	-30.69	240.99	406.79	386.41	20.38	19.962	
2,900.00	2,825.48	2,817.77	2,807.83	12.02	10.52	141.56	-31.57	248.95	451.33	430.18	21.15	21.339	
3,000.00	2,910.28	2,902.93	2,892.62	12.79	10.85	143.71	-32.44	256.74	499.31	477.40	21.91	22.790	
3,100.00	2,993.18	2,986.23	2,975.57	13.62	11.18	145.58	-33.29	264.36	550.60	527.94	22.65	24.304	
3,185.69	3,062.62	3,056.07	3,045.11	14.36	11.45	146.97	-34.00	270.75	597.11	573.82	23.28	25.646	
3,200.00	3,074.09	3,067.60	3,056.59	14.49	11.50	147.29	-34.12	271.81	605.07	581.68	23.39	25.871	
3,300.00	3,154.26	3,148.23	3,136.88	15.40	11.81	149.31	-34.94	279.19	661.09	636.98	24.11	27.421	
3,400.00	3,234.42	3,228.86	3,217.17	16.32	12.13	151.03	-35.76	286.56	717.60	692.78	24.83	28.902	
3,500.00	3,314.58	3,309.49	3,297.46	17.26	12.44	152.51	-36.58	293.94	774.52	748.96	25.55	30.313	
3,600.00	3,394.75	3,390.12	3,377.75	18.21	12.76	153.79	-37.40	301.32	831.74	805.46	26.27	31.656	
3,700.00	3,474.91	3,470.76	3,458.03	19.18	13.07	154.91	-38.22	308.70	889.21	862.21	27.00	32.934	
3,800.00	3,555.07	3,551.39	3,538.32	20.15	13.39	155.90	-39.04	316.08	946.90	919.17	27.73	34.149	
3,900.00	3,635.24	3,632.02	3,618.61	21.14	13.70	156.78	-39.86	323.46	1,004.75	976.29	28.46	35.305	
4,000.00	3,715.40	3,712.65	3,698.90	22.13	14.02	157.56	-40.68	330.83	1,062.74	1,033.55	29.19	36.406	
4,100.00	3,795.56	3,793.28	3,779.19	23.12	14.33	158.27	-41.51	338.21	1,120.86	1,090.93	29.93	37.453	
4,200.00	3,875.73	3,873.91	3,859.47	24.13	14.65	158.90	-42.33	345.59	1,179.08	1,148.41	30.66	38.451	
4,300.00	3,955.89	3,954.54	3,939.76	25.13	14.96	159.48	-43.15	352.97	1,237.39	1,205.98	31.40	39.401	
4,400.00	4,036.05	4,035.17	4,020.05	26.14	15.28	160.00	-43.97	360.35	1,295.77	1,263.62	32.15	40.308	
4,500.00	4,116.22	4,115.80	4,100.34	27.16	15.59	160.48	-44.79	367.73	1,354.22	1,321.33	32.89	41.173	
4,600.00	4,196.38	4,196.43	4,180.63	28.18	15.91	160.93	-45.61	375.10	1,412.73	1,379.09	33.64	41.999	
4,700.00	4,276.54	4,277.06	4,260.91	29.20	16.22	161.33	-46.43	382.48	1,471.29	1,436.90	34.39	42.789	
4,800.00	4,356.71	4,357.69	4,341.20	30.22	16.54	161.71	-47.25	389.86	1,529.89	1,494.76	35.13	43.543	
4,900.00	4,436.87	4,438.32	4,421.49	31.25	16.85	162.06	-48.07	397.24	1,588.54	1,552.65	35.89	44.266	

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-10H - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.00 usft
Survey Program:		0-OWSG (Rev2) MWD						Rule Assigned:				Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance			Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		Separation Factor
5,000.00	4,517.03	4,518.95	4,501.78	32.28	17.17	162.38	-48.89	404.62	1,647.22	1,610.58	36.64	44.957	
5,100.00	4,597.19	4,599.58	4,582.07	33.31	17.48	162.68	-49.71	412.00	1,705.93	1,668.54	37.39	45.620	
5,200.00	4,677.36	4,680.21	4,662.35	34.34	17.80	162.96	-50.54	419.37	1,764.68	1,726.53	38.15	46.256	
5,300.00	4,757.52	4,760.84	4,742.64	35.37	18.11	163.23	-51.36	426.75	1,823.45	1,784.54	38.91	46.866	
5,400.00	4,837.68	4,841.47	4,822.93	36.41	18.43	163.47	-52.18	434.13	1,882.24	1,842.57	39.67	47.451	
5,500.00	4,917.85	4,922.10	4,903.22	37.45	18.74	163.71	-53.00	441.51	1,941.05	1,900.63	40.43	48.014	
5,600.00	4,998.01	5,002.73	4,983.51	38.49	19.06	163.92	-53.82	448.89	1,999.89	1,958.70	41.19	48.554	
5,700.00	5,078.17	5,083.36	5,063.79	39.53	19.37	164.13	-54.64	456.27	2,058.74	2,016.79	41.95	49.075	
5,800.00	5,158.34	5,163.99	5,144.08	40.57	19.69	164.33	-55.46	463.64	2,117.61	2,074.90	42.72	49.575	
5,900.00	5,238.50	5,244.63	5,224.37	41.61	20.00	164.51	-56.28	471.02	2,176.50	2,133.02	43.48	50.057	
6,000.00	5,318.66	5,325.26	5,304.66	42.65	20.32	164.68	-57.10	478.40	2,235.39	2,191.15	44.25	50.522	
6,100.00	5,398.83	5,405.89	5,384.95	43.69	20.63	164.85	-57.92	485.78	2,294.31	2,249.29	45.01	50.970	
6,200.00	5,478.99	5,486.52	5,465.23	44.74	20.95	165.01	-58.74	493.16	2,353.23	2,307.45	45.78	51.402	
6,300.00	5,559.15	5,567.15	5,545.52	45.78	21.26	165.16	-59.56	500.53	2,412.16	2,365.61	46.55	51.819	
6,400.00	5,639.32	5,647.78	5,625.81	46.83	21.58	165.30	-60.39	507.91	2,471.11	2,423.79	47.32	52.222	
6,500.00	5,719.48	5,728.41	5,706.10	47.88	21.89	165.44	-61.21	515.29	2,530.06	2,481.97	48.09	52.611	
6,600.00	5,799.64	5,809.04	5,786.39	48.92	22.21	165.57	-62.03	522.67	2,589.03	2,540.16	48.86	52.987	
6,700.00	5,879.81	5,889.67	5,866.67	49.97	22.52	165.69	-62.85	530.05	2,648.00	2,598.36	49.63	53.351	
6,800.00	5,959.97	5,970.30	5,946.96	51.02	22.84	165.81	-63.67	537.43	2,706.98	2,656.57	50.41	53.702	
6,900.00	6,040.13	6,050.93	6,027.25	52.07	23.15	165.92	-64.49	544.80	2,765.96	2,714.78	51.18	54.043	
7,000.00	6,120.29	6,131.56	6,107.54	53.12	23.47	166.03	-65.31	552.18	2,824.96	2,773.00	51.96	54.373	
7,100.00	6,200.46	6,212.19	6,187.83	54.17	23.78	166.14	-66.13	559.56	2,883.96	2,831.23	52.73	54.692	
7,200.00	6,280.62	6,292.82	6,268.11	55.22	24.10	166.24	-66.95	566.94	2,942.96	2,889.46	53.51	55.001	
7,300.00	6,360.78	6,373.45	6,348.40	56.27	24.41	166.33	-67.77	574.32	3,001.98	2,947.69	54.28	55.301	
7,400.00	6,440.95	6,454.08	6,428.69	57.32	24.73	166.43	-68.59	581.70	3,060.99	3,005.93	55.06	55.592	
7,498.05	6,519.54	6,533.14	6,507.41	58.35	25.04	166.51	-69.40	588.93	3,118.86	3,063.04	55.82	55.869	
7,500.00	6,521.11	6,534.71	6,508.98	58.37	25.04	166.91	-69.42	589.07	3,120.01	3,064.18	55.84	55.875	
7,550.00	6,561.44	6,567.11	6,541.26	58.89	25.16	177.32	-69.75	591.74	3,149.56	3,093.41	56.15	56.092	
7,600.00	6,602.00	6,600.00	6,574.13	59.38	25.28	-172.16	-70.10	592.74	3,179.08	3,122.64	56.45	56.320	
7,650.00	6,642.50	6,623.54	6,597.67	59.85	25.35	-161.77	-70.37	592.30	3,208.37	3,151.73	56.64	56.641	
7,700.00	6,682.61	6,650.00	6,624.07	60.29	25.42	-151.83	-70.67	590.65	3,237.22	3,180.37	56.85	56.940	
7,750.00	6,722.05	6,680.45	6,654.32	60.69	25.50	-142.57	-71.03	587.24	3,265.43	3,208.36	57.07	57.221	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-11H - 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		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	129.78	-25.50	30.63	39.86					
100.00	100.00	100.00	100.00	0.14	0.14	129.78	-25.50	30.63	39.86	39.57	0.29	138.976		
200.00	200.00	200.00	200.00	0.50	0.50	129.78	-25.50	30.63	39.86	38.85	1.00	39.707		
300.00	300.00	300.00	300.00	0.86	0.86	129.78	-25.50	30.63	39.86	38.13	1.72	23.163		
400.00	400.00	400.00	400.00	1.22	1.22	129.78	-25.50	30.63	39.86	37.42	2.44	16.350		
500.00	500.00	500.00	500.00	1.58	1.58	129.78	-25.50	30.63	39.86	36.70	3.15	12.634		
600.00	600.00	600.00	600.00	1.94	1.94	129.78	-25.50	30.63	39.86	35.98	3.87	10.295		
700.00	700.00	700.00	700.00	2.29	2.29	129.78	-25.50	30.63	39.86	35.27	4.59	8.686 CC, ES		
800.00	800.00	798.81	798.79	2.65	2.63	131.06	-27.13	31.14	41.31	36.03	5.28	7.820		
900.00	900.00	897.38	897.22	3.01	2.96	134.40	-31.99	32.66	45.80	39.84	5.96	7.680 SF		
1,000.00	1,000.00	996.59	996.12	3.37	3.30	138.41	-39.42	34.99	52.85	46.19	6.65	7.944		
1,100.00	1,100.00	1,096.26	1,095.48	3.73	3.65	141.54	-47.06	37.38	60.27	52.92	7.35	8.200		
1,200.00	1,200.00	1,195.94	1,194.83	4.09	4.00	143.98	-54.71	39.78	67.84	59.79	8.05	8.425		
1,300.00	1,300.00	1,295.61	1,294.18	4.45	4.36	145.93	-62.36	42.17	75.50	66.75	8.76	8.622		
1,350.00	1,350.00	1,345.45	1,343.86	4.62	4.55	146.76	-66.18	43.37	79.36	70.25	9.11	8.711		
1,400.00	1,400.00	1,395.26	1,393.51	4.80	4.73	132.89	-70.00	44.56	83.53	74.07	9.46	8.827		
1,500.00	1,499.93	1,494.63	1,492.56	5.16	5.10	135.57	-77.63	46.95	93.78	83.61	10.17	9.221		
1,600.00	1,599.68	1,593.59	1,591.19	5.52	5.46	138.92	-85.22	49.33	106.81	95.93	10.88	9.819		
1,700.00	1,699.13	1,692.00	1,689.29	5.88	5.83	142.48	-92.77	51.69	122.87	111.29	11.58	10.607		
1,800.00	1,798.15	1,789.75	1,786.72	6.25	6.20	145.95	-100.27	54.04	142.18	129.89	12.29	11.568		
1,900.00	1,896.63	1,886.73	1,883.39	6.62	6.56	149.14	-107.71	56.37	164.84	151.84	13.00	12.683		
2,000.00	1,994.44	1,982.81	1,979.15	7.02	6.92	152.00	-115.08	58.68	190.92	177.22	13.70	13.934		
2,100.00	2,091.46	2,077.87	2,073.91	7.43	7.28	154.49	-122.37	60.96	220.43	206.03	14.40	15.303		
2,200.00	2,187.58	2,171.81	2,167.54	7.88	7.64	156.65	-129.58	63.22	253.35	238.24	15.11	16.772		
2,300.00	2,282.68	2,264.50	2,259.93	8.35	7.99	158.51	-136.69	65.45	289.63	273.83	15.80	18.329		
2,400.00	2,376.65	2,355.83	2,350.97	8.85	8.34	160.10	-143.70	67.64	329.23	312.74	16.49	19.960		
2,500.00	2,469.36	2,445.69	2,440.54	9.40	8.68	161.47	-150.59	69.80	372.09	354.91	17.18	21.656		
2,600.00	2,560.71	2,533.98	2,528.54	9.99	9.02	162.64	-157.37	71.92	418.14	400.27	17.86	23.407		
2,700.00	2,650.59	2,620.58	2,614.86	10.62	9.35	163.64	-164.01	74.00	467.31	448.77	18.54	25.206		
2,800.00	2,738.88	2,705.39	2,699.40	11.29	9.67	164.51	-170.52	76.04	519.55	500.34	19.21	27.047		
2,900.00	2,825.48	2,788.31	2,782.05	12.02	9.99	165.25	-176.88	78.03	574.76	554.89	19.87	28.926		
3,000.00	2,910.28	2,869.23	2,862.70	12.79	10.30	165.88	-183.09	79.98	632.89	612.36	20.52	30.838		
3,100.00	2,993.18	2,948.05	2,941.28	13.62	10.60	166.41	-189.13	81.87	693.84	672.68	21.17	32.780		
3,185.69	3,062.62	3,013.86	3,006.87	14.36	10.85	166.81	-194.18	83.45	748.27	726.56	21.71	34.466		
3,200.00	3,074.09	3,024.71	3,017.69	14.49	10.89	166.92	-195.01	83.71	757.53	735.72	21.80	34.744		
3,300.00	3,154.26	3,100.55	3,093.28	15.40	11.18	167.65	-200.83	85.53	822.25	799.82	22.43	36.662		
3,400.00	3,234.42	3,176.39	3,168.87	16.32	11.47	168.28	-206.65	87.36	887.04	863.98	23.06	38.470		
3,500.00	3,314.58	3,252.22	3,244.46	17.26	11.76	168.82	-212.47	89.18	951.89	928.20	23.69	40.176		
3,600.00	3,394.75	3,328.06	3,320.05	18.21	12.05	169.29	-218.29	91.00	1,016.78	992.44	24.33	41.786		
3,700.00	3,474.91	3,403.89	3,395.64	19.18	12.34	169.71	-224.11	92.82	1,081.70	1,056.73	24.98	43.308		
3,800.00	3,555.07	3,479.73	3,471.23	20.15	12.63	170.08	-229.92	94.64	1,146.66	1,121.03	25.62	44.748		
3,900.00	3,635.24	3,555.56	3,546.82	21.14	12.92	170.41	-235.74	96.46	1,211.63	1,185.36	26.28	46.111		
4,000.00	3,715.40	3,631.40	3,622.41	22.13	13.21	170.70	-241.56	98.29	1,276.63	1,249.70	26.93	47.403		
4,100.00	3,795.56	3,707.24	3,698.00	23.12	13.51	170.97	-247.38	100.11	1,341.65	1,314.06	27.59	48.628		
4,200.00	3,875.73	3,783.07	3,773.59	24.13	13.80	171.22	-253.20	101.93	1,406.68	1,378.43	28.25	49.791		
4,300.00	3,955.89	3,858.91	3,849.18	25.13	14.09	171.44	-259.01	103.75	1,471.73	1,442.82	28.92	50.897		
4,400.00	4,036.05	3,934.74	3,924.77	26.14	14.38	171.64	-264.83	105.57	1,536.79	1,507.21	29.58	51.949		
4,500.00	4,116.22	4,010.58	4,000.36	27.16	14.67	171.83	-270.65	107.40	1,601.86	1,571.60	30.25	52.950		
4,600.00	4,196.38	4,086.41	4,075.95	28.18	14.96	172.00	-276.47	109.22	1,666.93	1,636.01	30.92	53.904		
4,700.00	4,276.54	4,162.25	4,151.54	29.20	15.25	172.16	-282.29	111.04	1,732.02	1,700.42	31.60	54.814		
4,800.00	4,356.71	4,238.09	4,227.13	30.22	15.55	172.31	-288.10	112.86	1,797.11	1,764.84	32.27	55.682		
4,900.00	4,436.87	4,313.92	4,302.72	31.25	15.84	172.44	-293.92	114.68	1,862.21	1,829.26	32.95	56.512		

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-11H - ORIGINAL WELLBORE - PROPOSAL #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Rule Assigned:</b>	<b>Warning</b>	
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>
5,000.00	4,517.03	4,389.76	4,378.31	32.28	16.13	172.57	-299.74	116.51	1,927.32	1,893.68		33.63	57.305
5,100.00	4,597.19	4,465.59	4,453.90	33.31	16.42	172.69	-305.56	118.33	1,992.43	1,958.11		34.31	58.064
5,200.00	4,677.36	4,541.43	4,529.49	34.34	16.71	172.80	-311.38	120.15	2,057.54	2,022.54		35.00	58.791
5,300.00	4,757.52	4,617.26	4,605.08	35.37	17.00	172.91	-317.20	121.97	2,122.66	2,086.98		35.68	59.487
5,400.00	4,837.68	4,693.10	4,680.67	36.41	17.30	173.01	-323.01	123.79	2,187.78	2,151.41		36.37	60.155
5,500.00	4,917.85	4,768.93	4,756.26	37.45	17.59	173.10	-328.83	125.62	2,252.91	2,215.85		37.06	60.796
5,600.00	4,998.01	4,844.77	4,831.85	38.49	17.88	173.19	-334.65	127.44	2,318.04	2,280.29		37.75	61.411
5,700.00	5,078.17	4,920.61	4,907.44	39.53	18.17	173.27	-340.47	129.26	2,383.17	2,344.73		38.44	62.002
5,800.00	5,158.34	4,996.44	4,983.03	40.57	18.46	173.35	-346.29	131.08	2,448.30	2,409.18		39.13	62.570
5,900.00	5,238.50	5,072.28	5,058.62	41.61	18.75	173.42	-352.10	132.90	2,513.44	2,473.62		39.82	63.116
6,000.00	5,318.66	5,148.11	5,134.21	42.65	19.05	173.50	-357.92	134.73	2,578.58	2,538.07		40.52	63.642
6,100.00	5,398.83	5,223.95	5,209.80	43.69	19.34	173.56	-363.74	136.55	2,643.72	2,602.51		41.21	64.149
6,200.00	5,478.99	5,299.78	5,285.39	44.74	19.63	173.63	-369.56	138.37	2,708.87	2,666.96		41.91	64.637
6,300.00	5,559.15	5,375.62	5,360.98	45.78	19.92	173.69	-375.38	140.19	2,774.01	2,731.41		42.61	65.108
6,400.00	5,639.32	5,451.46	5,436.57	46.83	20.21	173.75	-381.19	142.01	2,839.16	2,795.86		43.31	65.562
6,500.00	5,719.48	5,527.29	5,512.16	47.88	20.51	173.80	-387.01	143.83	2,904.31	2,860.31		44.00	66.000
6,600.00	5,799.64	5,603.13	5,587.75	48.92	20.80	173.86	-392.83	145.66	2,969.46	2,924.76		44.71	66.423
6,700.00	5,879.81	5,678.96	5,663.34	49.97	21.09	173.91	-398.65	147.48	3,034.61	2,989.21		45.41	66.831
6,800.00	5,959.97	5,754.80	5,738.93	51.02	21.38	173.96	-404.47	149.30	3,099.77	3,053.66		46.11	67.226
6,900.00	6,040.13	5,830.63	5,814.52	52.07	21.67	174.00	-410.29	151.12	3,164.92	3,118.11		46.81	67.608
7,000.00	6,120.29	5,906.47	5,890.12	53.12	21.97	174.05	-416.10	152.94	3,230.08	3,182.56		47.52	67.977

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-12H - ORIGINAL WELLBORE - PROPOSAL #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
0.00	0.00	0.00	0.00	0.00	0.00	142.61	-40.07	30.63	50.44				
100.00	100.00	100.00	100.00	0.14	0.14	142.61	-40.07	30.63	50.44	50.15	0.29	175.878	
200.00	200.00	200.00	200.00	0.50	0.50	142.61	-40.07	30.63	50.44	49.43	1.00	50.251	
300.00	300.00	300.00	300.00	0.86	0.86	142.61	-40.07	30.63	50.44	48.72	1.72	29.313	
400.00	400.00	400.00	400.00	1.22	1.22	142.61	-40.07	30.63	50.44	48.00	2.44	20.692	
500.00	500.00	500.00	500.00	1.58	1.58	142.61	-40.07	30.63	50.44	47.28	3.15	15.989	
600.00	600.00	600.00	600.00	1.94	1.94	142.61	-40.07	30.63	50.44	46.57	3.87	13.028	CC, ES
700.00	700.00	698.31	698.29	2.29	2.27	143.17	-41.66	31.20	52.08	47.51	4.57	11.406	
800.00	800.00	796.39	796.24	2.65	2.60	144.66	-46.40	32.91	57.01	51.77	5.25	10.867	SF
900.00	900.00	894.01	893.50	3.01	2.94	146.63	-54.26	35.74	65.29	59.37	5.93	11.017	
1,000.00	1,000.00	990.95	989.74	3.37	3.29	148.67	-65.13	39.65	76.94	70.34	6.60	11.652	
1,100.00	1,100.00	1,088.37	1,086.06	3.73	3.66	150.51	-78.82	44.58	91.62	84.33	7.29	12.573	
1,200.00	1,200.00	1,187.17	1,183.69	4.09	4.05	151.90	-93.16	49.75	106.86	98.87	7.99	13.374	
1,300.00	1,300.00	1,285.98	1,281.31	4.45	4.45	152.94	-107.50	54.91	122.15	113.45	8.69	14.048	
1,350.00	1,350.00	1,335.38	1,330.12	4.62	4.65	153.37	-114.67	57.49	129.80	120.75	9.05	14.342	
1,400.00	1,400.00	1,384.72	1,378.87	4.80	4.86	138.98	-121.83	60.07	137.79	128.38	9.41	14.649	
1,500.00	1,499.93	1,483.02	1,475.99	5.16	5.27	140.22	-136.09	65.21	155.77	145.65	10.12	15.398	
1,600.00	1,599.68	1,580.69	1,572.49	5.52	5.68	141.85	-150.27	70.31	176.52	165.69	10.83	16.305	
1,700.00	1,699.13	1,677.62	1,668.26	5.88	6.10	143.65	-164.33	75.38	200.15	188.62	11.53	17.354	
1,800.00	1,798.15	1,773.69	1,763.18	6.25	6.51	145.51	-178.28	80.40	226.77	214.53	12.24	18.526	
1,900.00	1,896.63	1,868.78	1,857.14	6.62	6.92	147.31	-192.08	85.37	256.45	243.50	12.95	19.808	
2,000.00	1,994.44	1,962.78	1,950.01	7.02	7.33	149.03	-205.72	90.28	289.24	275.59	13.65	21.187	
2,100.00	2,091.46	2,055.57	2,041.69	7.43	7.73	150.61	-219.18	95.13	325.16	310.81	14.36	22.650	
2,200.00	2,187.58	2,147.04	2,132.07	7.88	8.13	152.06	-232.46	99.91	364.22	349.16	15.06	24.188	
2,300.00	2,282.68	2,237.08	2,221.03	8.35	8.52	153.37	-245.53	104.61	406.39	390.64	15.76	25.791	
2,400.00	2,376.65	2,325.58	2,308.47	8.85	8.91	154.54	-258.37	109.24	451.66	435.21	16.45	27.451	
2,500.00	2,469.36	2,412.43	2,394.28	9.40	9.29	155.59	-270.97	113.78	499.98	482.83	17.15	29.161	
2,600.00	2,560.71	2,497.52	2,478.35	9.99	9.67	156.51	-283.32	118.22	551.30	533.47	17.83	30.917	
2,700.00	2,650.59	2,580.75	2,560.59	10.62	10.03	157.32	-295.40	122.57	605.56	587.05	18.51	32.712	
2,800.00	2,738.88	2,662.03	2,640.89	11.29	10.39	158.02	-307.19	126.82	662.71	643.53	19.18	34.544	
2,900.00	2,825.48	2,741.24	2,719.15	12.02	10.74	158.63	-318.69	130.96	722.68	702.83	19.85	36.409	
3,000.00	2,910.28	2,818.30	2,795.29	12.79	11.08	159.14	-329.87	134.99	785.39	764.89	20.50	38.304	
3,100.00	2,993.18	2,893.10	2,869.20	13.62	11.41	159.57	-340.73	138.90	850.77	829.62	21.15	40.229	
3,185.69	3,062.62	2,955.35	2,930.70	14.36	11.69	159.88	-349.76	142.15	908.85	887.16	21.69	41.899	
3,200.00	3,074.09	2,965.59	2,940.82	14.49	11.74	160.01	-351.25	142.68	918.71	896.93	21.78	42.174	
3,300.00	3,154.26	3,037.21	3,011.58	15.40	12.05	160.90	-361.64	146.43	987.67	965.26	22.41	44.079	
3,400.00	3,234.42	3,108.82	3,082.33	16.32	12.37	161.67	-372.04	150.17	1,056.74	1,033.70	23.03	45.878	
3,500.00	3,314.58	3,180.43	3,153.09	17.26	12.69	162.35	-382.43	153.91	1,125.89	1,102.23	23.66	47.577	
3,600.00	3,394.75	3,252.05	3,223.84	18.21	13.01	162.95	-392.82	157.65	1,195.13	1,170.83	24.30	49.184	
3,700.00	3,474.91	3,323.66	3,294.60	19.18	13.32	163.49	-403.21	161.40	1,264.42	1,239.48	24.94	50.704	
3,800.00	3,555.07	3,395.27	3,365.36	20.15	13.64	163.97	-413.61	165.14	1,333.77	1,308.19	25.58	52.144	
3,900.00	3,635.24	3,466.88	3,436.11	21.14	13.96	164.41	-424.00	168.88	1,403.16	1,376.94	26.22	53.509	
4,000.00	3,715.40	3,538.50	3,506.87	22.13	14.28	164.80	-434.39	172.62	1,472.59	1,445.72	26.87	54.804	
4,100.00	3,795.56	3,610.11	3,577.62	23.12	14.60	165.16	-444.78	176.37	1,542.05	1,514.53	27.52	56.033	
4,200.00	3,875.73	3,681.72	3,648.38	24.13	14.91	165.49	-455.18	180.11	1,611.54	1,583.37	28.17	57.202	
4,300.00	3,955.89	3,753.33	3,719.13	25.13	15.23	165.79	-465.57	183.85	1,681.06	1,652.23	28.83	58.313	
4,400.00	4,036.05	3,824.95	3,789.89	26.14	15.55	166.07	-475.96	187.59	1,750.60	1,721.11	29.49	59.371	
4,500.00	4,116.22	3,896.56	3,860.65	27.16	15.87	166.32	-486.36	191.34	1,820.16	1,790.01	30.15	60.379	
4,600.00	4,196.38	3,968.17	3,931.40	28.18	16.19	166.56	-496.75	195.08	1,889.73	1,858.93	30.81	61.341	
4,700.00	4,276.54	4,039.79	4,002.16	29.20	16.51	166.78	-507.14	198.82	1,959.33	1,927.85	31.47	62.258	
4,800.00	4,356.71	4,111.40	4,072.91	30.22	16.83	166.99	-517.53	202.56	2,028.93	1,996.80	32.14	63.134	
4,900.00	4,436.87	4,183.01	4,143.67	31.25	17.15	167.18	-527.93	206.31	2,098.55	2,065.75	32.80	63.972	

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-12H - ORIGINAL WELLBORE - PROPOSAL #1													<b>Offset Site Error:</b> 0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD													<b>Offset Well Error:</b> 0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
5,000.00	4,517.03	4,254.62	4,214.42	32.28	17.47	167.36	-538.32	210.05	2,168.18	2,134.71	33.47	64.773	
5,100.00	4,597.19	4,326.24	4,285.18	33.31	17.79	167.53	-548.71	213.79	2,237.82	2,203.68	34.14	65.540	
5,200.00	4,677.36	4,397.85	4,355.94	34.34	18.10	167.69	-559.10	217.53	2,307.47	2,272.66	34.82	66.275	
5,300.00	4,757.52	4,469.46	4,426.69	35.37	18.42	167.84	-569.50	221.27	2,377.13	2,341.64	35.49	66.979	
5,400.00	4,837.68	4,541.07	4,497.45	36.41	18.74	167.98	-579.89	225.02	2,446.80	2,410.63	36.17	67.655	
5,500.00	4,917.85	4,612.69	4,568.20	37.45	19.06	168.11	-590.28	228.76	2,516.47	2,479.63	36.84	68.303	
5,600.00	4,998.01	4,684.30	4,638.96	38.49	19.38	168.24	-600.68	232.50	2,586.15	2,548.63	37.52	68.926	
5,700.00	5,078.17	4,755.91	4,709.71	39.53	19.70	168.36	-611.07	236.24	2,655.84	2,617.64	38.20	69.525	
5,800.00	5,158.34	4,827.53	4,780.47	40.57	20.02	168.47	-621.46	239.99	2,725.53	2,686.65	38.88	70.100	
5,900.00	5,238.50	4,899.14	4,851.23	41.61	20.34	168.58	-631.85	243.73	2,795.23	2,755.67	39.56	70.654	
6,000.00	5,318.66	4,970.75	4,921.98	42.65	20.66	168.68	-642.25	247.47	2,864.93	2,824.69	40.24	71.187	
6,100.00	5,398.83	5,042.36	4,992.74	43.69	20.98	168.78	-652.64	251.21	2,934.64	2,893.71	40.93	71.701	
6,200.00	5,478.99	5,113.98	5,063.49	44.74	21.30	168.87	-663.03	254.96	3,004.35	2,962.73	41.61	72.196	
6,300.00	5,559.15	5,185.59	5,134.25	45.78	21.62	168.96	-673.42	258.70	3,074.06	3,031.76	42.30	72.673	
6,400.00	5,639.32	5,257.20	5,205.00	46.83	21.94	169.05	-683.82	262.44	3,143.78	3,100.79	42.99	73.133	
6,500.00	5,719.48	5,328.81	5,275.76	47.88	22.26	169.13	-694.21	266.18	3,213.50	3,169.83	43.68	73.577	



Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-13H - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)		
0.00	0.00	0.00	0.00	0.00	0.00	152.28	-58.29	30.63	65.85				
100.00	100.00	100.00	100.00	0.14	0.14	152.28	-58.29	30.63	65.85	65.56	0.29	229.604	
200.00	200.00	200.00	200.00	0.50	0.50	152.28	-58.29	30.63	65.85	64.84	1.00	65.601	
300.00	300.00	300.00	300.00	0.86	0.86	152.28	-58.29	30.63	65.85	64.12	1.72	38.267	
400.00	400.00	400.00	400.00	1.22	1.22	152.28	-58.29	30.63	65.85	63.41	2.44	27.012	
500.00	500.00	500.00	500.00	1.58	1.58	152.28	-58.29	30.63	65.85	62.69	3.15	20.873	CC, ES
600.00	600.00	597.79	597.77	1.94	1.91	152.64	-59.91	31.00	67.50	63.65	3.85	17.543	
700.00	700.00	695.35	695.20	2.29	2.24	153.63	-64.78	32.12	72.46	67.93	4.53	15.998	
800.00	800.00	792.46	791.95	2.65	2.58	155.00	-72.83	33.96	80.76	75.55	5.21	15.494	SF
900.00	900.00	888.90	887.70	3.01	2.93	156.50	-83.98	36.52	92.40	86.50	5.89	15.681	
1,000.00	1,000.00	984.46	982.15	3.37	3.30	157.94	-98.12	39.76	107.36	100.80	6.57	16.351	
1,100.00	1,100.00	1,078.95	1,075.01	3.73	3.69	159.23	-115.11	43.66	125.62	118.39	7.23	17.368	
1,200.00	1,200.00	1,175.46	1,169.39	4.09	4.12	160.34	-134.78	48.16	146.37	138.44	7.92	18.469	
1,300.00	1,300.00	1,273.21	1,264.96	4.45	4.56	161.18	-154.84	52.76	167.30	158.67	8.63	19.392	
1,350.00	1,350.00	1,322.09	1,312.74	4.62	4.79	161.53	-164.87	55.06	177.77	168.79	8.99	19.784	
1,400.00	1,400.00	1,370.89	1,360.44	4.80	5.02	147.01	-174.89	57.36	188.61	179.27	9.34	20.188	
1,500.00	1,499.93	1,467.93	1,455.31	5.16	5.48	147.78	-194.80	61.92	212.47	202.41	10.06	21.128	
1,600.00	1,599.68	1,564.15	1,549.37	5.52	5.94	148.76	-214.55	66.45	239.27	228.50	10.77	22.220	
1,700.00	1,699.13	1,659.42	1,642.50	5.88	6.40	149.86	-234.10	70.93	269.05	257.58	11.48	23.444	
1,800.00	1,798.15	1,753.63	1,734.60	6.25	6.86	150.98	-253.43	75.36	301.86	289.68	12.18	24.781	
1,900.00	1,896.63	1,846.66	1,825.55	6.62	7.32	152.08	-272.52	79.74	337.70	324.82	12.88	26.215	
2,000.00	1,994.44	1,938.40	1,915.23	7.02	7.77	153.14	-291.35	84.05	376.60	363.02	13.58	27.732	
2,100.00	2,091.46	2,028.74	2,003.55	7.43	8.22	154.13	-309.89	88.30	418.55	404.27	14.27	29.321	
2,200.00	2,187.58	2,117.57	2,090.39	7.88	8.66	155.04	-328.12	92.48	463.51	448.55	14.97	30.973	
2,300.00	2,282.68	2,204.78	2,175.64	8.35	9.10	155.88	-346.01	96.58	511.48	495.83	15.65	32.679	
2,400.00	2,376.65	2,290.26	2,259.21	8.85	9.53	156.63	-363.56	100.60	562.40	546.07	16.33	34.434	
2,500.00	2,469.36	2,373.91	2,340.99	9.40	9.95	157.29	-380.72	104.54	616.23	599.22	17.01	36.231	
2,600.00	2,560.71	2,455.63	2,420.87	9.99	10.36	157.88	-397.49	108.38	672.91	655.23	17.68	38.067	
2,700.00	2,650.59	2,535.32	2,498.78	10.62	10.76	158.39	-413.85	112.13	732.39	714.05	18.34	39.938	
2,800.00	2,738.88	2,612.88	2,574.60	11.29	11.15	158.82	-429.76	115.78	794.59	775.60	18.99	41.842	
2,900.00	2,825.48	2,688.22	2,648.25	12.02	11.53	159.18	-445.22	119.32	859.46	839.83	19.63	43.776	
3,000.00	2,910.28	2,761.24	2,719.63	12.79	11.90	159.47	-460.21	122.76	926.90	906.64	20.27	45.738	
3,100.00	2,993.18	2,831.86	2,788.67	13.62	12.25	159.69	-474.70	126.08	996.85	975.97	20.89	47.729	
3,185.69	3,062.62	2,890.40	2,845.89	14.36	12.55	159.82	-486.71	128.83	1,058.72	1,037.31	21.41	49.456	
3,200.00	3,074.09	2,900.01	2,855.29	14.49	12.60	159.94	-488.69	129.29	1,069.20	1,047.70	21.50	49.740	
3,300.00	3,154.26	2,967.24	2,921.01	15.40	12.94	160.73	-502.48	132.45	1,142.48	1,120.39	22.09	51.714	
3,400.00	3,234.42	3,034.46	2,986.73	16.32	13.28	161.43	-516.28	135.61	1,215.86	1,193.16	22.69	53.578	
3,500.00	3,314.58	3,101.68	3,052.44	17.26	13.62	162.05	-530.07	138.77	1,289.31	1,266.01	23.30	55.341	
3,600.00	3,394.75	3,168.90	3,118.16	18.21	13.96	162.61	-543.87	141.93	1,362.82	1,338.91	23.91	57.008	
3,700.00	3,474.91	3,236.13	3,183.87	19.18	14.30	163.11	-557.66	145.10	1,436.38	1,411.87	24.52	58.587	
3,800.00	3,555.07	3,303.35	3,249.59	20.15	14.64	163.56	-571.46	148.26	1,510.00	1,484.86	25.13	60.083	
3,900.00	3,635.24	3,370.57	3,315.30	21.14	14.98	163.97	-585.25	151.42	1,583.65	1,557.90	25.75	61.502	
4,000.00	3,715.40	3,437.79	3,381.02	22.13	15.32	164.34	-599.05	154.58	1,657.33	1,630.96	26.37	62.850	
4,100.00	3,795.56	3,505.02	3,446.74	23.12	15.66	164.68	-612.84	157.75	1,731.05	1,704.06	26.99	64.130	
4,200.00	3,875.73	3,572.24	3,512.45	24.13	16.00	165.00	-626.64	160.91	1,804.79	1,777.17	27.62	65.347	
4,300.00	3,955.89	3,639.46	3,578.17	25.13	16.35	165.29	-640.43	164.07	1,878.56	1,850.31	28.25	66.506	
4,400.00	4,036.05	3,706.68	3,643.88	26.14	16.69	165.55	-654.23	167.23	1,952.34	1,923.46	28.88	67.610	
4,500.00	4,116.22	3,773.91	3,709.60	27.16	17.03	165.80	-668.02	170.39	2,026.14	1,996.63	29.51	68.662	
4,600.00	4,196.38	3,841.13	3,775.31	28.18	17.37	166.03	-681.82	173.56	2,099.96	2,069.82	30.14	69.666	
4,700.00	4,276.54	3,908.35	3,841.03	29.20	17.71	166.25	-695.61	176.72	2,173.80	2,143.02	30.78	70.624	
4,800.00	4,356.71	3,975.57	3,906.75	30.22	18.05	166.45	-709.41	179.88	2,247.65	2,216.23	31.42	71.540	
4,900.00	4,436.87	4,042.80	3,972.46	31.25	18.40	166.64	-723.20	183.04	2,321.50	2,289.45	32.06	72.416	

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-13H - ORIGINAL WELLBORE - PROPOSAL #1													<b>Offset Site Error:</b> 0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD													<b>Offset Well Error:</b> 0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Rule Assigned:</b>		<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>	<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	
5,000.00	4,517.03	4,110.02	4,038.18	32.28	18.74	166.82	-737.00	186.20	2,395.37	2,362.67	32.70	73.254	
5,100.00	4,597.19	4,177.24	4,103.89	33.31	19.08	166.99	-750.79	189.37	2,469.25	2,435.91	33.34	74.056	
5,200.00	4,677.36	4,244.46	4,169.61	34.34	19.42	167.14	-764.59	192.53	2,543.14	2,509.16	33.99	74.825	
5,300.00	4,757.52	4,311.69	4,235.32	35.37	19.76	167.29	-778.38	195.69	2,617.04	2,582.41	34.63	75.562	
5,400.00	4,837.68	4,378.91	4,301.04	36.41	20.11	167.43	-792.18	198.85	2,690.95	2,655.66	35.28	76.270	
5,500.00	4,917.85	4,446.13	4,366.76	37.45	20.45	167.56	-805.97	202.01	2,764.86	2,728.93	35.93	76.949	
5,600.00	4,998.01	4,513.35	4,432.47	38.49	20.79	167.69	-819.77	205.18	2,838.78	2,802.19	36.58	77.601	
5,700.00	5,078.17	4,580.58	4,498.19	39.53	21.13	167.81	-833.56	208.34	2,912.70	2,875.47	37.23	78.228	
5,800.00	5,158.34	4,647.80	4,563.90	40.57	21.48	167.92	-847.36	211.50	2,986.63	2,948.74	37.89	78.831	
5,900.00	5,238.50	4,715.02	4,629.62	41.61	21.82	168.03	-861.15	214.66	3,060.56	3,022.02	38.54	79.411	
6,000.00	5,318.66	4,782.24	4,695.33	42.65	22.16	168.13	-874.95	217.83	3,134.50	3,095.31	39.20	79.969	
6,100.00	5,398.83	4,849.46	4,761.05	43.69	22.51	168.23	-888.74	220.99	3,208.45	3,168.59	39.85	80.507	

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-14H - ORIGINAL WELLBORE - PROPOSAL #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
0.00	0.00	0.00	0.00	0.00	0.00	157.20	-72.86	30.63	79.04				
100.00	100.00	100.00	100.00	0.14	0.14	157.20	-72.86	30.63	79.04	78.75	0.29	275.600	
200.00	200.00	200.00	200.00	0.50	0.50	157.20	-72.86	30.63	79.04	78.03	1.00	78.743	
300.00	300.00	300.00	300.00	0.86	0.86	157.20	-72.86	30.63	79.04	77.32	1.72	45.933	
400.00	400.00	400.00	400.00	1.22	1.22	157.20	-72.86	30.63	79.04	76.60	2.44	32.424 CC, ES	
500.00	500.00	497.28	497.26	1.58	1.55	157.19	-74.38	31.28	80.73	77.60	3.13	25.787	
600.00	600.00	594.33	594.18	1.94	1.88	157.16	-78.91	33.23	85.82	82.01	3.82	22.492	
700.00	700.00	690.94	690.44	2.29	2.22	157.13	-86.42	36.46	94.28	89.78	4.50	20.943	
800.00	800.00	786.89	785.72	2.65	2.58	157.08	-96.82	40.93	106.09	100.90	5.19	20.458 SF	
900.00	900.00	881.98	879.71	3.01	2.96	157.04	-110.02	46.60	121.19	115.33	5.86	20.667	
1,000.00	1,000.00	976.00	972.13	3.37	3.35	157.00	-125.88	53.42	139.56	133.02	6.54	21.352	
1,100.00	1,100.00	1,068.79	1,062.73	3.73	3.78	156.97	-144.25	61.32	161.12	153.92	7.20	22.379	
1,200.00	1,200.00	1,160.16	1,151.28	4.09	4.22	156.94	-164.97	70.23	185.80	177.95	7.85	23.670	
1,300.00	1,300.00	1,251.78	1,239.31	4.45	4.70	156.92	-188.24	80.23	213.43	204.92	8.51	25.080	
1,350.00	1,350.00	1,299.71	1,285.27	4.62	4.96	156.91	-200.76	85.61	227.65	218.78	8.87	25.678	
1,400.00	1,400.00	1,347.55	1,331.13	4.80	5.23	141.99	-213.25	90.98	242.19	232.97	9.22	26.260	
1,500.00	1,499.93	1,442.58	1,422.24	5.16	5.76	142.03	-238.08	101.65	273.26	263.32	9.94	27.496	
1,600.00	1,599.68	1,536.65	1,512.43	5.52	6.30	142.37	-262.65	112.22	306.96	296.31	10.65	28.816	
1,700.00	1,699.13	1,629.65	1,601.59	5.88	6.84	142.90	-286.95	122.66	343.31	331.95	11.36	30.212	
1,800.00	1,798.15	1,721.47	1,689.62	6.25	7.37	143.53	-310.93	132.97	382.35	370.28	12.07	31.672	
1,900.00	1,896.63	1,811.99	1,776.41	6.62	7.90	144.21	-334.58	143.14	424.10	411.32	12.78	33.186	
2,000.00	1,994.44	1,901.11	1,861.85	7.02	8.43	144.91	-357.86	153.14	468.57	455.08	13.49	34.746	
2,100.00	2,091.46	1,988.71	1,945.83	7.43	8.95	145.60	-380.74	162.98	515.76	501.57	14.19	36.346	
2,200.00	2,187.58	2,074.70	2,028.27	7.88	9.46	146.25	-403.20	172.64	565.68	550.79	14.89	37.980	
2,300.00	2,282.68	2,158.95	2,109.05	8.35	9.96	146.86	-425.21	182.10	618.31	602.71	15.60	39.644	
2,400.00	2,376.65	2,241.38	2,188.07	8.85	10.46	147.41	-446.74	191.35	673.61	657.32	16.30	41.335	
2,500.00	2,469.36	2,321.88	2,265.25	9.40	10.94	147.90	-467.77	200.39	731.57	714.58	16.99	43.049	
2,600.00	2,560.71	2,400.35	2,340.48	9.99	11.41	148.32	-488.27	209.20	792.14	774.45	17.69	44.787	
2,700.00	2,650.59	2,476.70	2,413.68	10.62	11.87	148.67	-508.22	217.78	855.27	836.89	18.38	46.545	
2,800.00	2,738.88	2,550.84	2,484.76	11.29	12.32	148.94	-527.58	226.10	920.90	901.84	19.06	48.323	
2,900.00	2,825.48	2,622.67	2,553.62	12.02	12.75	149.14	-546.34	234.17	988.97	969.24	19.73	50.123	
3,000.00	2,910.28	2,692.10	2,620.19	12.79	13.17	149.26	-564.48	241.97	1,059.41	1,039.02	20.40	51.944	
3,100.00	2,993.18	2,759.06	2,684.38	13.62	13.57	149.29	-581.97	249.48	1,132.16	1,111.11	21.05	53.788	
3,185.69	3,062.62	2,814.40	2,737.44	14.36	13.91	149.24	-596.43	255.70	1,196.27	1,174.67	21.60	55.385	
3,200.00	3,074.09	2,823.48	2,746.15	14.49	13.96	149.39	-598.80	256.72	1,207.11	1,185.42	21.69	55.647	
3,300.00	3,154.26	2,886.95	2,807.00	15.40	14.35	150.41	-615.38	263.85	1,282.97	1,260.65	22.32	57.473	
3,400.00	3,234.42	2,950.42	2,867.85	16.32	14.73	151.31	-631.96	270.97	1,359.00	1,336.04	22.96	59.198	
3,500.00	3,314.58	3,013.89	2,928.70	17.26	15.12	152.12	-648.54	278.10	1,435.15	1,411.56	23.59	60.830	
3,600.00	3,394.75	3,077.36	2,989.55	18.21	15.50	152.86	-665.12	285.23	1,511.42	1,487.19	24.23	62.374	
3,700.00	3,474.91	3,140.83	3,050.40	19.18	15.89	153.52	-681.70	292.35	1,587.79	1,562.92	24.87	63.837	
3,800.00	3,555.07	3,204.30	3,111.24	20.15	16.27	154.13	-698.28	299.48	1,664.24	1,638.73	25.52	65.224	
3,900.00	3,635.24	3,267.76	3,172.09	21.14	16.66	154.68	-714.86	306.61	1,740.77	1,714.61	26.16	66.539	
4,000.00	3,715.40	3,331.23	3,232.94	22.13	17.04	155.19	-731.44	313.74	1,817.36	1,790.55	26.81	67.789	
4,100.00	3,795.56	3,394.70	3,293.79	23.12	17.43	155.66	-748.02	320.86	1,894.00	1,866.54	27.46	68.977	
4,200.00	3,875.73	3,458.17	3,354.64	24.13	17.82	156.09	-764.60	327.99	1,970.70	1,942.59	28.11	70.108	
4,300.00	3,955.89	3,521.64	3,415.49	25.13	18.20	156.49	-781.18	335.12	2,047.44	2,018.67	28.76	71.184	
4,400.00	4,036.05	3,585.11	3,476.34	26.14	18.59	156.87	-797.76	342.24	2,124.21	2,094.79	29.42	72.209	
4,500.00	4,116.22	3,648.58	3,537.19	27.16	18.98	157.21	-814.34	349.37	2,201.02	2,170.95	30.07	73.187	
4,600.00	4,196.38	3,712.05	3,598.04	28.18	19.36	157.54	-830.92	356.50	2,277.87	2,247.14	30.73	74.121	
4,700.00	4,276.54	3,775.51	3,658.88	29.20	19.75	157.84	-847.49	363.63	2,354.74	2,323.35	31.39	75.013	
4,800.00	4,356.71	3,838.98	3,719.73	30.22	20.13	158.13	-864.07	370.75	2,431.64	2,399.58	32.05	75.865	
4,900.00	4,436.87	3,902.45	3,780.58	31.25	20.52	158.39	-880.65	377.88	2,508.56	2,475.84	32.71	76.680	

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-14H - ORIGINAL WELLBORE - PROPOSAL #1													<b>Offset Site Error:</b> 0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD													<b>Offset Well Error:</b> 0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
5,000.00	4,517.03	3,965.92	3,841.43	32.28	20.91	158.65	-897.23	385.01	2,585.50	2,552.12	33.38	77.461	
5,100.00	4,597.19	4,029.39	3,902.28	33.31	21.30	158.88	-913.81	392.13	2,662.46	2,628.42	34.04	78.208	
5,200.00	4,677.36	4,092.86	3,963.13	34.34	21.68	159.11	-930.39	399.26	2,739.44	2,704.73	34.71	78.924	
5,300.00	4,757.52	4,156.33	4,023.98	35.37	22.07	159.32	-946.97	406.39	2,816.44	2,781.06	35.38	79.611	
5,400.00	4,837.68	4,219.79	4,084.83	36.41	22.46	159.52	-963.55	413.52	2,893.45	2,857.40	36.05	80.271	
5,500.00	4,917.85	4,283.26	4,145.68	37.45	22.84	159.71	-980.13	420.64	2,970.47	2,933.75	36.72	80.904	
5,600.00	4,998.01	4,346.73	4,206.53	38.49	23.23	159.89	-996.71	427.77	3,047.51	3,010.12	37.39	81.512	
5,700.00	5,078.17	4,410.20	4,267.37	39.53	23.62	160.06	-1,013.29	434.90	3,124.56	3,086.50	38.06	82.097	
5,800.00	5,158.34	4,473.67	4,328.22	40.57	24.01	160.23	-1,029.87	442.02	3,201.62	3,162.88	38.73	82.659	
5,900.00	5,238.50	4,537.14	4,389.07	41.61	24.39	160.38	-1,046.45	449.15	3,278.69	3,239.28	39.41	83.200	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-15H - 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	160.69	-87.43	30.63	92.64				
100.00	100.00	100.00	100.00	0.14	0.14	160.69	-87.43	30.63	92.64	92.35	0.29	323.029	
200.00	200.00	200.00	200.00	0.50	0.50	160.69	-87.43	30.63	92.64	91.63	1.00	92.294	
300.00	300.00	300.00	300.00	0.86	0.86	160.69	-87.43	30.63	92.64	90.92	1.72	53.838 CC, ES	
400.00	400.00	396.83	396.81	1.22	1.19	160.70	-88.98	31.16	94.33	91.91	2.41	39.076	
500.00	500.00	493.44	493.29	1.58	1.53	160.72	-93.60	32.74	99.39	96.29	3.10	32.041	
600.00	600.00	589.61	589.12	1.94	1.87	160.75	-101.27	35.37	107.81	104.02	3.79	28.427	
700.00	700.00	685.13	683.97	2.29	2.23	160.78	-111.88	39.00	119.56	115.08	4.48	26.680	
800.00	800.00	779.80	777.56	2.65	2.61	160.82	-125.35	43.61	134.61	129.44	5.17	26.058 SF	
900.00	900.00	873.42	869.60	3.01	3.02	160.85	-141.54	49.15	152.89	147.04	5.84	26.164	
1,000.00	1,000.00	965.82	959.84	3.37	3.45	160.88	-160.30	55.57	174.35	167.84	6.51	26.767	
1,100.00	1,100.00	1,056.83	1,048.06	3.73	3.90	160.91	-181.46	62.82	198.93	191.75	7.18	27.714	
1,200.00	1,200.00	1,146.30	1,134.04	4.09	4.38	160.93	-204.84	70.82	226.55	218.73	7.82	28.969	
1,300.00	1,300.00	1,234.10	1,217.64	4.45	4.89	160.95	-230.24	79.51	257.13	248.67	8.46	30.390	
1,350.00	1,350.00	1,277.34	1,258.49	4.62	5.15	160.96	-243.63	84.10	273.50	264.72	8.78	31.165	
1,400.00	1,400.00	1,321.02	1,299.54	4.80	5.42	146.02	-257.74	88.92	290.90	281.80	9.10	31.969	
1,500.00	1,499.93	1,413.80	1,386.62	5.16	6.02	145.94	-288.05	99.30	328.14	318.33	9.81	33.437	
1,600.00	1,599.68	1,505.41	1,472.60	5.52	6.62	146.08	-317.98	109.54	368.07	357.54	10.53	34.966	
1,700.00	1,699.13	1,595.74	1,557.37	5.88	7.21	146.36	-347.49	119.64	410.68	399.45	11.23	36.555	
1,800.00	1,798.15	1,684.67	1,640.83	6.25	7.81	146.71	-376.54	129.59	455.99	444.05	11.94	38.194	
1,900.00	1,896.63	1,772.10	1,722.88	6.62	8.40	147.10	-405.11	139.37	503.97	491.33	12.64	39.876	
2,000.00	1,994.44	1,857.92	1,803.42	7.02	8.98	147.50	-433.15	148.96	554.62	541.28	13.33	41.594	
2,100.00	2,091.46	1,942.02	1,882.35	7.43	9.55	147.89	-460.62	158.37	607.92	593.90	14.03	43.342	
2,200.00	2,187.58	2,024.31	1,959.58	7.88	10.12	148.25	-487.51	167.57	663.85	649.14	14.71	45.116	
2,300.00	2,282.68	2,104.68	2,035.00	8.35	10.67	148.58	-513.77	176.56	722.38	706.98	15.40	46.913	
2,400.00	2,376.65	2,183.04	2,108.54	8.85	11.20	148.85	-539.37	185.32	783.46	767.38	16.08	48.729	
2,500.00	2,469.36	2,259.29	2,180.10	9.40	11.73	149.08	-564.28	193.85	847.05	830.29	16.75	50.564	
2,600.00	2,560.71	2,333.33	2,249.59	9.99	12.24	149.24	-588.47	202.13	913.09	895.67	17.42	52.417	
2,700.00	2,650.59	2,405.08	2,316.92	10.62	12.74	149.34	-611.91	210.15	981.53	963.45	18.08	54.287	
2,800.00	2,738.88	2,474.45	2,382.03	11.29	13.22	149.36	-634.57	217.91	1,052.30	1,033.57	18.73	56.176	
2,900.00	2,825.48	2,541.35	2,444.82	12.02	13.68	149.31	-656.43	225.39	1,125.33	1,105.96	19.37	58.083	
3,000.00	2,910.28	2,605.71	2,505.21	12.79	14.13	149.17	-677.46	232.59	1,200.55	1,180.54	20.01	60.011	
3,100.00	2,993.18	2,667.44	2,563.15	13.62	14.55	148.94	-697.63	239.49	1,277.88	1,257.25	20.62	61.961	
3,185.69	3,062.62	2,718.20	2,610.78	14.36	14.91	148.67	-714.21	245.16	1,345.75	1,324.61	21.14	63.650	
3,200.00	3,074.09	2,726.51	2,618.58	14.49	14.96	148.81	-716.92	246.09	1,357.21	1,335.98	21.23	63.927	
3,300.00	3,154.26	2,784.56	2,673.06	15.40	15.37	149.77	-735.89	252.59	1,437.36	1,415.54	21.82	65.862	
3,400.00	3,234.42	2,842.61	2,727.54	16.32	15.77	150.63	-754.86	259.08	1,517.65	1,495.23	22.42	67.690	
3,500.00	3,314.58	2,900.67	2,782.03	17.26	16.18	151.40	-773.82	265.57	1,598.06	1,575.04	23.02	69.421	
3,600.00	3,394.75	2,958.72	2,836.51	18.21	16.58	152.11	-792.79	272.06	1,678.56	1,654.94	23.62	71.061	
3,700.00	3,474.91	3,016.77	2,890.99	19.18	16.98	152.75	-811.76	278.55	1,759.15	1,734.92	24.23	72.615	
3,800.00	3,555.07	3,074.83	2,945.47	20.15	17.39	153.34	-830.72	285.05	1,839.81	1,814.98	24.83	74.090	
3,900.00	3,635.24	3,132.88	2,999.96	21.14	17.79	153.88	-849.69	291.54	1,920.54	1,895.09	25.44	75.490	
4,000.00	3,715.40	3,190.94	3,054.44	22.13	18.20	154.37	-868.66	298.03	2,001.32	1,975.27	26.05	76.822	
4,100.00	3,795.56	3,248.99	3,108.92	23.12	18.60	154.83	-887.62	304.52	2,082.15	2,055.49	26.66	78.088	
4,200.00	3,875.73	3,307.04	3,163.40	24.13	19.01	155.26	-906.59	311.01	2,163.03	2,135.75	27.28	79.294	
4,300.00	3,955.89	3,365.10	3,217.89	25.13	19.41	155.66	-925.56	317.51	2,243.94	2,216.05	27.89	80.443	
4,400.00	4,036.05	3,423.15	3,272.37	26.14	19.82	156.03	-944.52	324.00	2,324.89	2,296.38	28.51	81.539	
4,500.00	4,116.22	3,481.21	3,326.85	27.16	20.22	156.37	-963.49	330.49	2,405.88	2,376.74	29.13	82.584	
4,600.00	4,196.38	3,539.26	3,381.34	28.18	20.63	156.70	-982.46	336.98	2,486.89	2,457.13	29.75	83.583	
4,700.00	4,276.54	3,597.31	3,435.82	29.20	21.03	157.00	-1,001.42	343.47	2,567.93	2,537.55	30.38	84.537	
4,800.00	4,356.71	3,655.37	3,490.30	30.22	21.44	157.29	-1,020.39	349.97	2,648.99	2,617.99	31.00	85.450	
4,900.00	4,436.87	3,713.42	3,544.78	31.25	21.85	157.55	-1,039.36	356.46	2,730.07	2,698.44	31.63	86.323	

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-15H - ORIGINAL WELLBORE - PROPOSAL #1													<b>Offset Site Error:</b> 0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD													<b>Offset Well Error:</b> 0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Rule Assigned:</b>		<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>	<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	
5,000.00	4,517.03	3,771.48	3,599.27	32.28	22.25	157.81	-1,058.32	362.95	2,811.17	2,778.92	32.25	87.160	
5,100.00	4,597.19	3,829.53	3,653.75	33.31	22.66	158.05	-1,077.29	369.44	2,892.29	2,859.41	32.88	87.961	
5,200.00	4,677.36	3,887.58	3,708.23	34.34	23.06	158.27	-1,096.26	375.93	2,973.43	2,939.92	33.51	88.729	
5,300.00	4,757.52	3,945.64	3,762.72	35.37	23.47	158.49	-1,115.22	382.43	3,054.58	3,020.44	34.14	89.467	
5,400.00	4,837.68	4,003.69	3,817.20	36.41	23.88	158.69	-1,134.19	388.92	3,135.75	3,100.98	34.77	90.174	
5,500.00	4,917.85	4,061.75	3,871.68	37.45	24.28	158.88	-1,153.16	395.41	3,216.93	3,181.52	35.41	90.854	

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-5H - ORIGINAL WELLBORE - PROPOSAL #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	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	180.00	-47.36	0.00	47.36				
100.00	100.00	100.00	100.00	0.14	0.14	180.00	-47.36	0.00	47.36	47.07	0.29	165.141	
200.00	200.00	200.00	200.00	0.50	0.50	180.00	-47.36	0.00	47.36	46.36	1.00	47.183	
300.00	300.00	300.00	300.00	0.86	0.86	180.00	-47.36	0.00	47.36	45.64	1.72	27.524	
400.00	400.00	400.00	400.00	1.22	1.22	180.00	-47.36	0.00	47.36	44.92	2.44	19.428	
500.00	500.00	500.00	500.00	1.58	1.58	180.00	-47.36	0.00	47.36	44.20	3.15	15.013	
600.00	600.00	600.00	600.00	1.94	1.94	180.00	-47.36	0.00	47.36	43.49	3.87	12.233	
700.00	700.00	700.00	700.00	2.29	2.29	180.00	-47.36	0.00	47.36	42.77	4.59	10.321	
800.00	800.00	800.00	800.00	2.65	2.65	180.00	-47.36	0.00	47.36	42.05	5.31	8.927	
900.00	900.00	900.00	900.00	3.01	3.01	180.00	-47.36	0.00	47.36	41.34	6.02	7.864	
1,000.00	1,000.00	1,000.00	1,000.00	3.37	3.37	180.00	-47.36	0.00	47.36	40.62	6.74	7.027	
1,100.00	1,100.00	1,100.00	1,100.00	3.73	3.73	180.00	-47.36	0.00	47.36	39.90	7.46	6.352	
1,200.00	1,200.00	1,200.00	1,200.00	4.09	4.09	180.00	-47.36	0.00	47.36	39.19	8.17	5.794	
1,300.00	1,300.00	1,300.00	1,300.00	4.45	4.45	180.00	-47.36	0.00	47.36	38.47	8.89	5.327	
1,350.00	1,350.00	1,350.00	1,350.00	4.62	4.62	180.00	-47.36	0.00	47.36	38.11	9.25	5.121 CC, ES	
1,400.00	1,400.00	1,400.00	1,400.00	4.80	4.80	165.34	-47.36	0.00	47.78	38.17	9.61	4.974	
1,500.00	1,499.93	1,499.93	1,499.93	5.16	5.16	166.32	-47.36	0.00	51.16	40.84	10.32	4.956	
1,600.00	1,599.68	1,599.68	1,599.68	5.52	5.52	167.92	-47.36	0.00	57.97	46.93	11.04	5.250	
1,700.00	1,699.13	1,699.13	1,699.13	5.88	5.88	169.72	-47.36	0.00	68.22	56.47	11.76	5.803	
1,800.00	1,798.15	1,798.15	1,798.15	6.25	6.23	171.41	-47.36	0.00	81.96	69.49	12.47	6.572	
1,900.00	1,896.63	1,896.63	1,896.63	6.62	6.58	172.87	-47.36	0.00	99.16	85.98	13.18	7.523	
2,000.00	1,994.44	1,994.44	1,994.44	7.02	6.93	174.06	-47.36	0.00	119.83	105.93	13.89	8.626	
2,100.00	2,091.46	2,091.46	2,091.46	7.43	7.28	175.01	-47.36	0.00	143.91	129.32	14.60	9.858	
2,200.00	2,187.58	2,187.58	2,187.58	7.88	7.63	175.77	-47.36	0.00	171.39	156.09	15.30	11.201	
2,300.00	2,282.68	2,288.82	2,288.81	8.35	7.99	176.49	-45.98	0.02	200.97	184.94	16.03	12.539	
2,400.00	2,376.65	2,391.92	2,391.78	8.85	8.36	177.26	-40.93	0.09	230.57	213.82	16.75	13.763	
2,500.00	2,469.36	2,496.14	2,495.61	9.40	8.73	178.07	-32.07	0.21	260.15	242.68	17.47	14.891	
2,600.00	2,560.71	2,601.48	2,600.17	9.99	9.11	178.91	-19.28	0.38	289.70	271.51	18.18	15.932	
2,700.00	2,650.59	2,707.97	2,705.31	10.62	9.50	179.77	-2.45	0.60	319.18	300.29	18.89	16.896	
2,800.00	2,738.88	2,815.62	2,810.89	11.29	9.90	-179.33	18.53	0.89	348.59	329.00	19.60	17.789	
2,900.00	2,825.48	2,924.45	2,916.76	12.02	10.32	-178.42	43.75	1.22	377.90	357.60	20.30	18.618	
3,000.00	2,910.28	3,034.48	3,022.73	12.79	10.78	-177.48	73.31	1.62	407.09	386.09	21.00	19.385	
3,100.00	2,993.18	3,145.72	3,128.64	13.62	11.26	-176.51	107.32	2.08	436.15	414.44	21.71	20.092	
3,185.69	3,062.62	3,242.01	3,219.19	14.36	11.70	-175.67	140.05	2.52	460.92	438.60	22.32	20.651	
3,200.00	3,074.09	3,258.19	3,234.29	14.49	11.78	-175.54	145.85	2.60	465.01	442.58	22.42	20.737	
3,300.00	3,154.26	3,372.56	3,340.09	15.40	12.35	-174.55	189.25	3.18	491.56	468.41	23.15	21.234	
3,400.00	3,234.42	3,488.97	3,445.92	16.32	12.98	-173.49	237.73	3.83	514.52	490.62	23.90	21.529	
3,500.00	3,314.58	3,589.50	3,536.19	17.26	13.56	-172.57	281.96	4.43	535.19	510.41	24.78	21.596	
3,600.00	3,394.75	3,687.01	3,623.74	18.21	14.15	-171.74	324.91	5.00	555.95	530.24	25.71	21.625	
3,700.00	3,474.91	3,784.53	3,711.28	19.18	14.76	-170.97	367.86	5.58	576.80	550.15	26.66	21.639	
3,800.00	3,555.07	3,882.05	3,798.83	20.15	15.38	-170.26	410.81	6.16	597.75	570.13	27.62	21.638	
3,900.00	3,635.24	3,979.56	3,886.38	21.14	16.02	-169.59	453.76	6.73	618.78	590.17	28.61	21.626	
4,000.00	3,715.40	4,077.08	3,973.92	22.13	16.67	-168.97	496.71	7.31	639.89	610.27	29.62	21.605	
4,100.00	3,795.56	4,174.59	4,061.47	23.12	17.33	-168.38	539.66	7.89	661.07	630.43	30.64	21.575	
4,200.00	3,875.73	4,272.11	4,149.02	24.13	18.01	-167.83	582.61	8.46	682.30	650.62	31.68	21.538	
4,300.00	3,955.89	4,369.63	4,236.56	25.13	18.69	-167.32	625.56	9.04	703.60	670.87	32.73	21.495	
4,400.00	4,036.05	4,467.14	4,324.11	26.14	19.38	-166.83	668.51	9.62	724.94	691.14	33.80	21.448	
4,500.00	4,116.22	4,564.66	4,411.65	27.16	20.08	-166.38	711.46	10.20	746.34	711.46	34.88	21.397	
4,600.00	4,196.38	4,662.17	4,499.20	28.18	20.79	-165.94	754.41	10.77	767.77	731.80	35.97	21.343	
4,700.00	4,276.54	4,759.69	4,586.75	29.20	21.50	-165.53	797.36	11.35	789.25	752.17	37.08	21.287	
4,800.00	4,356.71	4,857.21	4,674.29	30.22	22.22	-165.15	840.31	11.93	810.76	772.57	38.19	21.229	
4,900.00	4,436.87	4,954.72	4,761.84	31.25	22.94	-164.78	883.26	12.50	832.30	792.99	39.31	21.170	

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 CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-5H - 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		Rule Assigned:	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor
5,000.00	4,517.03	5,052.24	4,849.39	32.28	23.66	-164.43	926.21	13.08	853.88	813.43	40.45	21.110
5,100.00	4,597.19	5,149.75	4,936.93	33.31	24.39	-164.10	969.16	13.66	875.48	833.89	41.59	21.050
5,200.00	4,677.36	5,247.27	5,024.48	34.34	25.13	-163.79	1,012.11	14.24	897.11	854.37	42.74	20.990
5,300.00	4,757.52	5,344.78	5,112.02	35.37	25.87	-163.49	1,055.06	14.81	918.77	874.87	43.90	20.929
5,400.00	4,837.68	5,442.30	5,199.57	36.41	26.61	-163.20	1,098.01	15.39	940.45	895.38	45.06	20.869
5,500.00	4,917.85	5,539.82	5,287.12	37.45	27.35	-162.92	1,140.95	15.97	962.15	915.91	46.24	20.810
5,600.00	4,998.01	5,637.33	5,374.66	38.49	28.10	-162.66	1,183.90	16.54	983.87	936.45	47.41	20.751
5,700.00	5,078.17	5,734.85	5,462.21	39.53	28.85	-162.41	1,226.85	17.12	1,005.61	957.01	48.60	20.693
5,800.00	5,158.34	5,832.36	5,549.76	40.57	29.60	-162.17	1,269.80	17.70	1,027.36	977.58	49.79	20.636
5,900.00	5,238.50	5,929.88	5,637.30	41.61	30.35	-161.94	1,312.75	18.28	1,049.14	998.16	50.98	20.579
6,000.00	5,318.66	6,027.40	5,724.85	42.65	31.11	-161.72	1,355.70	18.85	1,070.92	1,018.74	52.18	20.524
6,100.00	5,398.83	6,124.91	5,812.39	43.69	31.87	-161.51	1,398.65	19.43	1,092.73	1,039.34	53.38	20.469
6,200.00	5,478.99	6,222.43	5,899.94	44.74	32.63	-161.31	1,441.60	20.01	1,114.54	1,059.95	54.59	20.415
6,300.00	5,559.15	6,319.94	5,987.49	45.78	33.39	-161.11	1,484.55	20.58	1,136.37	1,080.57	55.81	20.363
6,400.00	5,639.32	6,417.46	6,075.03	46.83	34.15	-160.92	1,527.50	21.16	1,158.22	1,101.19	57.02	20.312
6,500.00	5,719.48	6,514.98	6,162.58	47.88	34.91	-160.74	1,570.45	21.74	1,180.07	1,121.83	58.24	20.261
6,600.00	5,799.64	6,612.49	6,250.13	48.92	35.68	-160.57	1,613.40	22.32	1,201.93	1,142.47	59.47	20.212
6,700.00	5,879.81	6,710.01	6,337.67	49.97	36.44	-160.40	1,656.35	22.89	1,223.81	1,163.11	60.69	20.164
6,800.00	5,959.97	6,807.52	6,425.22	51.02	37.21	-160.24	1,699.30	23.47	1,245.69	1,183.77	61.92	20.116
6,900.00	6,040.13	6,905.04	6,512.77	52.07	37.98	-160.08	1,742.25	24.05	1,267.59	1,204.43	63.16	20.070
7,000.00	6,120.29	7,002.56	6,600.31	53.12	38.75	-159.93	1,785.20	24.62	1,289.49	1,225.09	64.39	20.025
7,100.00	6,200.46	7,100.07	6,687.86	54.17	39.52	-159.78	1,828.15	25.20	1,311.40	1,245.77	65.63	19.981
7,200.00	6,280.62	7,174.51	6,754.68	55.22	40.11	-159.66	1,860.93	25.36	1,333.67	1,266.97	66.70	19.994
7,300.00	6,360.78	7,216.17	6,792.02	56.27	40.43	-159.50	1,879.23	22.80	1,359.27	1,291.77	67.50	20.138
7,400.00	6,440.95	7,250.00	6,822.15	57.32	40.70	-159.29	1,893.97	18.50	1,388.82	1,320.68	68.13	20.384
7,498.05	6,519.54	7,300.00	6,866.16	58.35	41.09	-158.86	1,915.48	8.54	1,421.49	1,352.48	69.01	20.599
7,500.00	6,521.11	7,300.00	6,866.16	58.37	41.09	-158.54	1,915.48	8.54	1,422.17	1,353.16	69.01	20.609
7,550.00	6,561.44	7,300.00	6,866.16	58.89	41.09	-150.31	1,915.48	8.54	1,439.16	1,370.26	68.90	20.887
7,600.00	6,602.00	7,332.39	6,894.20	59.38	41.33	-141.86	1,929.16	-0.18	1,454.43	1,385.07	69.36	20.969
7,650.00	6,642.50	7,350.00	6,909.24	59.85	41.47	-133.76	1,936.49	-5.65	1,468.33	1,398.84	69.49	21.131
7,700.00	6,682.61	7,370.60	6,926.64	60.29	41.62	-126.14	1,944.97	-12.71	1,480.61	1,411.02	69.59	21.277
7,750.00	6,722.05	7,400.00	6,951.05	60.69	41.83	-119.19	1,956.85	-23.97	1,491.28	1,421.41	69.86	21.346
7,800.00	6,760.50	7,400.00	6,951.05	61.07	41.83	-113.00	1,956.85	-23.97	1,500.09	1,430.80	69.29	21.648
7,850.00	6,797.68	7,428.46	6,974.17	61.41	42.03	-107.67	1,968.08	-36.18	1,507.05	1,437.61	69.44	21.704
7,900.00	6,833.29	7,450.00	6,991.29	61.71	42.19	-103.14	1,976.40	-46.27	1,512.25	1,442.90	69.35	21.805
7,950.00	6,867.08	7,467.17	7,004.68	61.99	42.30	-99.35	1,982.90	-54.81	1,515.59	1,446.48	69.11	21.930
8,000.00	6,898.78	7,500.00	7,029.64	62.23	42.53	-96.36	1,994.99	-72.38	1,517.23	1,447.90	69.33	21.884
8,050.00	6,928.16	7,500.00	7,029.64	62.43	42.53	-93.78	1,994.99	-72.38	1,516.74	1,448.22	68.51	22.137
8,100.00	6,954.98	7,525.03	7,048.04	62.60	42.69	-91.98	2,003.90	-86.83	1,514.50	1,446.01	68.50	22.111
8,150.00	6,979.04	7,550.00	7,065.81	62.74	42.86	-90.74	2,012.49	-102.11	1,510.52	1,442.01	68.50	22.050
8,200.00	7,000.17	7,550.00	7,065.81	62.85	42.86	-89.67	2,012.49	-102.11	1,504.86	1,437.14	67.72	22.221
8,250.00	7,018.20	7,582.16	7,087.80	62.93	43.06	-89.50	2,023.10	-123.03	1,497.24	1,429.18	68.06	22.000
8,300.00	7,032.99	7,600.00	7,099.54	62.98	43.17	-89.56	2,028.75	-135.23	1,488.12	1,420.14	67.98	21.891
8,350.00	7,044.43	7,619.48	7,111.95	63.00	43.28	-90.08	2,034.73	-148.99	1,477.45	1,409.42	68.03	21.718
8,400.00	7,052.43	7,650.00	7,130.55	63.00	43.47	-91.22	2,043.66	-171.48	1,465.44	1,396.91	68.53	21.385
8,450.00	7,056.94	7,650.00	7,130.55	62.97	43.47	-92.12	2,043.66	-171.48	1,451.88	1,383.78	68.10	21.320
8,488.77	7,058.00	7,669.69	7,141.96	62.93	43.58	-93.50	2,049.13	-186.55	1,440.56	1,372.07	68.48	21.035
8,500.00	7,058.00	7,673.68	7,144.22	62.92	43.60	-93.60	2,050.21	-189.66	1,437.21	1,368.66	68.55	20.967
8,600.00	7,058.00	7,700.00	7,158.62	62.81	43.76	-94.22	2,057.10	-210.59	1,409.98	1,341.05	68.92	20.457
8,700.00	7,058.00	7,750.00	7,183.53	62.74	44.03	-95.31	2,068.97	-252.27	1,386.91	1,316.71	70.20	19.755
8,800.00	7,058.00	7,800.00	7,205.09	62.71	44.30	-96.26	2,079.18	-296.20	1,368.14	1,296.54	71.61	19.107
8,900.00	7,058.00	7,850.00	7,223.14	62.71	44.55	-97.07	2,087.65	-342.03	1,353.39	1,280.28	73.11	18.513

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 CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-5H - 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		Rule Assigned:	
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
9,000.00	7,058.00	7,900.00	7,237.54	62.76	44.80	-97.72	2,094.31	-389.43	1,342.38	1,267.70	74.68	17.975
9,100.00	7,058.00	7,950.00	7,248.18	62.86	45.04	-98.20	2,099.13	-438.03	1,334.91	1,258.60	76.31	17.494
9,200.00	7,058.00	8,013.26	7,256.13	63.01	45.34	-98.57	2,102.50	-500.66	1,330.68	1,252.39	78.30	16.995
9,300.00	7,058.00	8,078.97	7,258.00	63.23	45.65	-98.65	2,102.87	-566.32	1,329.57	1,249.23	80.34	16.550
9,400.00	7,058.00	8,178.97	7,258.00	63.54	46.17	-98.65	2,102.03	-666.32	1,329.53	1,246.14	83.39	15.944
9,500.00	7,058.00	8,278.97	7,258.00	63.95	46.83	-98.65	2,101.19	-766.32	1,329.48	1,242.82	86.67	15.340
9,600.00	7,058.00	8,378.97	7,258.00	64.49	47.61	-98.65	2,100.36	-866.31	1,329.44	1,239.28	90.16	14.745
9,700.00	7,058.00	8,478.97	7,258.00	65.17	48.53	-98.65	2,099.52	-966.31	1,329.40	1,235.56	93.84	14.166
9,800.00	7,058.00	8,578.97	7,258.00	66.02	49.60	-98.65	2,098.68	-1,066.31	1,329.36	1,231.67	97.69	13.608
9,900.00	7,058.00	8,678.97	7,258.00	67.06	50.81	-98.65	2,097.84	-1,166.30	1,329.31	1,227.63	101.68	13.073
10,000.00	7,058.00	8,778.97	7,258.00	68.29	52.17	-98.65	2,097.00	-1,266.30	1,329.27	1,223.47	105.80	12.563
10,100.00	7,058.00	8,878.97	7,258.00	69.70	53.66	-98.65	2,096.17	-1,366.30	1,329.23	1,219.19	110.04	12.079
10,200.00	7,058.00	8,978.97	7,258.00	71.29	55.27	-98.65	2,095.33	-1,466.29	1,329.19	1,214.81	114.38	11.621
10,300.00	7,058.00	9,078.97	7,258.00	73.02	56.99	-98.65	2,094.49	-1,566.29	1,329.14	1,210.34	118.80	11.188
10,400.00	7,058.00	9,178.97	7,258.00	74.88	58.81	-98.65	2,093.65	-1,666.28	1,329.10	1,205.79	123.31	10.779
10,500.00	7,058.00	9,278.97	7,258.00	76.84	60.72	-98.65	2,092.81	-1,766.28	1,329.06	1,201.17	127.89	10.393
10,600.00	7,058.00	9,378.97	7,258.00	78.89	62.71	-98.66	2,091.97	-1,866.28	1,329.01	1,196.49	132.52	10.029
10,700.00	7,058.00	9,478.97	7,258.00	81.02	64.77	-98.66	2,091.14	-1,966.27	1,328.97	1,191.75	137.22	9.685
10,800.00	7,058.00	9,578.97	7,258.00	83.20	66.88	-98.66	2,090.30	-2,066.27	1,328.93	1,186.97	141.96	9.361
10,900.00	7,058.00	9,678.97	7,258.00	85.44	69.05	-98.66	2,089.46	-2,166.27	1,328.89	1,182.13	146.75	9.055
11,000.00	7,058.00	9,778.97	7,258.00	87.71	71.26	-98.66	2,088.62	-2,266.26	1,328.84	1,177.26	151.59	8.766
11,100.00	7,058.00	9,878.97	7,258.00	90.03	73.52	-98.66	2,087.78	-2,366.26	1,328.80	1,172.35	156.45	8.493
11,200.00	7,058.00	9,978.97	7,258.00	92.38	75.81	-98.66	2,086.95	-2,466.26	1,328.76	1,167.40	161.36	8.235
11,300.00	7,058.00	10,078.97	7,258.00	94.75	78.13	-98.66	2,086.11	-2,566.25	1,328.72	1,162.43	166.29	7.990
11,400.00	7,058.00	10,178.97	7,258.00	97.15	80.49	-98.66	2,085.27	-2,666.25	1,328.67	1,157.42	171.25	7.759
11,500.00	7,058.00	10,278.97	7,258.00	99.57	82.87	-98.66	2,084.43	-2,766.25	1,328.63	1,152.40	176.24	7.539
11,600.00	7,058.00	10,378.97	7,258.00	102.01	85.27	-98.66	2,083.59	-2,866.24	1,328.59	1,147.34	181.24	7.330
11,700.00	7,058.00	10,478.97	7,258.00	104.47	87.69	-98.66	2,082.75	-2,966.24	1,328.55	1,142.27	186.28	7.132
11,800.00	7,058.00	10,578.97	7,258.00	106.94	90.14	-98.66	2,081.92	-3,066.24	1,328.50	1,137.18	191.33	6.944
11,900.00	7,058.00	10,678.97	7,258.00	109.43	92.60	-98.66	2,081.08	-3,166.23	1,328.46	1,132.07	196.39	6.764
12,000.00	7,058.00	10,778.97	7,258.00	111.93	95.07	-98.66	2,080.24	-3,266.23	1,328.42	1,126.94	201.48	6.593
12,100.00	7,058.00	10,878.97	7,258.00	114.44	97.56	-98.66	2,079.40	-3,366.22	1,328.37	1,121.79	206.58	6.430
12,200.00	7,058.00	10,978.97	7,258.00	116.96	100.07	-98.66	2,078.56	-3,466.22	1,328.33	1,116.64	211.69	6.275
12,300.00	7,058.00	11,078.97	7,258.00	119.49	102.58	-98.66	2,077.73	-3,566.22	1,328.29	1,111.47	216.82	6.126
12,400.00	7,058.00	11,178.97	7,258.00	122.03	105.11	-98.66	2,076.89	-3,666.21	1,328.25	1,106.28	221.96	5.984
12,500.00	7,058.00	11,278.97	7,258.00	124.58	107.65	-98.66	2,076.05	-3,766.21	1,328.20	1,101.09	227.12	5.848
12,600.00	7,058.00	11,378.97	7,258.00	127.14	110.19	-98.66	2,075.21	-3,866.21	1,328.16	1,095.88	232.28	5.718
12,700.00	7,058.00	11,478.97	7,258.00	129.70	112.75	-98.66	2,074.37	-3,966.20	1,328.12	1,090.67	237.45	5.593
12,800.00	7,058.00	11,578.97	7,258.00	132.27	115.31	-98.66	2,073.53	-4,066.20	1,328.08	1,085.44	242.63	5.474
12,900.00	7,058.00	11,678.97	7,258.00	134.85	117.88	-98.66	2,072.70	-4,166.20	1,328.03	1,080.21	247.82	5.359
13,000.00	7,058.00	11,778.97	7,258.00	137.44	120.46	-98.66	2,071.86	-4,266.19	1,327.99	1,074.97	253.02	5.248
13,100.00	7,058.00	11,878.97	7,258.00	140.02	123.05	-98.66	2,071.02	-4,366.19	1,327.95	1,069.72	258.23	5.142
13,200.00	7,058.00	11,978.97	7,258.00	142.62	125.64	-98.66	2,070.18	-4,466.19	1,327.90	1,064.46	263.44	5.041
13,300.00	7,058.00	12,078.97	7,258.00	145.22	128.24	-98.66	2,069.34	-4,566.18	1,327.86	1,059.20	268.67	4.942
13,400.00	7,058.00	12,178.97	7,258.00	147.82	130.84	-98.66	2,068.51	-4,666.18	1,327.82	1,053.93	273.89	4.848
13,500.00	7,058.00	12,278.97	7,258.00	150.43	133.44	-98.66	2,067.67	-4,766.18	1,327.78	1,048.65	279.13	4.757
13,600.00	7,058.00	12,378.97	7,258.00	153.04	136.06	-98.66	2,066.83	-4,866.17	1,327.73	1,043.37	284.37	4.669
13,700.00	7,058.00	12,478.97	7,258.00	155.66	138.67	-98.66	2,065.99	-4,966.17	1,327.69	1,038.08	289.61	4.584
13,800.00	7,058.00	12,578.97	7,258.00	158.27	141.29	-98.66	2,065.15	-5,066.16	1,327.65	1,032.79	294.86	4.503
13,900.00	7,058.00	12,678.97	7,258.00	160.90	143.92	-98.66	2,064.31	-5,166.16	1,327.61	1,027.49	300.12	4.424
14,000.00	7,058.00	12,778.97	7,258.00	163.52	146.55	-98.66	2,063.48	-5,266.16	1,327.56	1,022.19	305.38	4.347
14,100.00	7,058.00	12,878.97	7,258.00	166.15	149.18	-98.66	2,062.64	-5,366.15	1,327.52	1,016.88	310.64	4.273

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-5H - 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
14,200.00	7,058.00	12,978.97	7,258.00	168.78	151.81	-98.67	2,061.80	-5,466.15	1,327.48	1,011.57	315.91	4.202	
14,300.00	7,058.00	13,078.97	7,258.00	171.42	154.45	-98.67	2,060.96	-5,566.15	1,327.44	1,006.25	321.18	4.133	
14,400.00	7,058.00	13,178.97	7,258.00	174.06	157.09	-98.67	2,060.12	-5,666.14	1,327.39	1,000.94	326.46	4.066	
14,500.00	7,058.00	13,278.97	7,258.00	176.70	159.73	-98.67	2,059.29	-5,766.14	1,327.35	995.61	331.74	4.001	
14,600.00	7,058.00	13,378.97	7,258.00	179.34	162.38	-98.67	2,058.45	-5,866.14	1,327.31	990.29	337.02	3.938	
14,700.00	7,058.00	13,478.97	7,258.00	181.99	165.03	-98.67	2,057.61	-5,966.13	1,327.26	984.96	342.30	3.877	
14,800.00	7,058.00	13,578.97	7,258.00	184.63	167.68	-98.67	2,056.77	-6,066.13	1,327.22	979.63	347.59	3.818	
14,900.00	7,058.00	13,678.97	7,258.00	187.28	170.33	-98.67	2,055.93	-6,166.13	1,327.18	974.29	352.89	3.761	
15,000.00	7,058.00	13,778.97	7,258.00	189.93	172.99	-98.67	2,055.09	-6,266.12	1,327.14	968.95	358.18	3.705	
15,100.00	7,058.00	13,878.97	7,258.00	192.59	175.65	-98.67	2,054.26	-6,366.12	1,327.09	963.61	363.48	3.651	
15,200.00	7,058.00	13,978.97	7,258.00	195.24	178.31	-98.67	2,053.42	-6,466.12	1,327.05	958.27	368.78	3.598	
15,300.00	7,058.00	14,078.97	7,258.00	197.90	180.97	-98.67	2,052.58	-6,566.11	1,327.01	952.93	374.08	3.547	
15,400.00	7,058.00	14,178.97	7,258.00	200.56	183.63	-98.67	2,051.74	-6,666.11	1,326.97	947.58	379.39	3.498	
15,500.00	7,058.00	14,278.97	7,258.00	203.22	186.30	-98.67	2,050.90	-6,766.11	1,326.92	942.23	384.70	3.449	
15,600.00	7,058.00	14,378.97	7,258.00	205.88	188.97	-98.67	2,050.07	-6,866.10	1,326.88	936.87	390.01	3.402	
15,700.00	7,058.00	14,478.97	7,258.00	208.54	191.63	-98.67	2,049.23	-6,966.10	1,326.84	931.52	395.32	3.356	
15,800.00	7,058.00	14,578.97	7,258.00	211.21	194.30	-98.67	2,048.39	-7,066.09	1,326.79	926.16	400.63	3.312	
15,900.00	7,058.00	14,678.97	7,258.00	213.87	196.98	-98.67	2,047.55	-7,166.09	1,326.75	920.80	405.95	3.268	
16,000.00	7,058.00	14,778.97	7,258.00	216.54	199.65	-98.67	2,046.71	-7,266.09	1,326.71	915.44	411.26	3.226	
16,100.00	7,058.00	14,878.97	7,258.00	219.21	202.32	-98.67	2,045.88	-7,366.08	1,326.67	910.08	416.58	3.185	
16,200.00	7,058.00	14,978.97	7,258.00	221.88	205.00	-98.67	2,045.04	-7,466.08	1,326.62	904.72	421.91	3.144	
16,300.00	7,058.00	15,078.97	7,258.00	224.55	207.68	-98.67	2,044.20	-7,566.08	1,326.58	899.35	427.23	3.105	
16,400.00	7,058.00	15,178.97	7,258.00	227.23	210.35	-98.67	2,043.36	-7,666.07	1,326.54	893.99	432.55	3.067	
16,500.00	7,058.00	15,278.97	7,258.00	229.90	213.03	-98.67	2,042.52	-7,766.07	1,326.50	888.62	437.88	3.029	
16,600.00	7,058.00	15,378.97	7,258.00	232.57	215.71	-98.67	2,041.68	-7,866.07	1,326.45	883.25	443.21	2.993	
16,700.00	7,058.00	15,478.97	7,258.00	235.25	218.39	-98.67	2,040.85	-7,966.06	1,326.41	877.88	448.54	2.957	
16,800.00	7,058.00	15,578.97	7,258.00	237.93	221.08	-98.67	2,040.01	-8,066.06	1,326.37	872.50	453.87	2.922	
16,900.00	7,058.00	15,678.97	7,258.00	240.61	223.76	-98.67	2,039.17	-8,166.06	1,326.33	867.13	459.20	2.888	
17,000.00	7,058.00	15,778.97	7,258.00	243.28	226.44	-98.67	2,038.33	-8,266.05	1,326.28	861.75	464.53	2.855	
17,011.19	7,058.00	15,790.16	7,258.00	243.58	226.74	-98.67	2,038.24	-8,277.24	1,326.28	861.15	465.13	2.851 SF	

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-6H - ORIGINAL WELLBORE - PROPOSAL #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
0.00	0.00	0.00	0.00	0.00	0.00	180.00	-65.58	0.00	65.58				
100.00	100.00	100.00	100.00	0.14	0.14	180.00	-65.58	0.00	65.58	65.29	0.29	228.671	
200.00	200.00	200.00	200.00	0.50	0.50	180.00	-65.58	0.00	65.58	64.57	1.00	65.335	
300.00	300.00	300.00	300.00	0.86	0.86	180.00	-65.58	0.00	65.58	63.86	1.72	38.112	
400.00	400.00	400.00	400.00	1.22	1.22	180.00	-65.58	0.00	65.58	63.14	2.44	26.903	
500.00	500.00	500.00	500.00	1.58	1.58	180.00	-65.58	0.00	65.58	62.42	3.15	20.788	
600.00	600.00	600.00	600.00	1.94	1.94	180.00	-65.58	0.00	65.58	61.71	3.87	16.939	
700.00	700.00	700.00	700.00	2.29	2.29	180.00	-65.58	0.00	65.58	60.99	4.59	14.292	
800.00	800.00	800.00	800.00	2.65	2.65	180.00	-65.58	0.00	65.58	60.27	5.31	12.361	
900.00	900.00	900.00	900.00	3.01	3.01	180.00	-65.58	0.00	65.58	59.56	6.02	10.889	
1,000.00	1,000.00	1,000.00	1,000.00	3.37	3.37	180.00	-65.58	0.00	65.58	58.84	6.74	9.731	
1,100.00	1,100.00	1,100.00	1,100.00	3.73	3.73	180.00	-65.58	0.00	65.58	58.12	7.46	8.795	
1,200.00	1,200.00	1,200.00	1,200.00	4.09	4.09	180.00	-65.58	0.00	65.58	57.40	8.17	8.024	
1,300.00	1,300.00	1,300.00	1,300.00	4.45	4.45	180.00	-65.58	0.00	65.58	56.69	8.89	7.376	
1,350.00	1,350.00	1,350.00	1,350.00	4.62	4.62	180.00	-65.58	0.00	65.58	56.33	9.25	7.091 CC, ES	
1,400.00	1,400.00	1,400.00	1,400.00	4.80	4.80	165.31	-65.58	0.00	66.00	56.39	9.61	6.870	
1,500.00	1,499.93	1,499.93	1,499.93	5.16	5.16	166.02	-65.58	0.00	69.38	59.06	10.32	6.721	
1,600.00	1,599.68	1,599.68	1,599.68	5.52	5.52	167.26	-65.58	0.00	76.17	65.13	11.04	6.899	
1,700.00	1,699.13	1,699.13	1,699.13	5.88	5.88	168.75	-65.58	0.00	86.40	74.64	11.76	7.349	
1,800.00	1,798.15	1,798.15	1,798.15	6.25	6.23	170.26	-65.58	0.00	100.09	87.62	12.47	8.026	
1,900.00	1,896.63	1,896.63	1,896.63	6.62	6.58	171.64	-65.58	0.00	117.24	104.06	13.18	8.894	
2,000.00	1,994.44	1,994.44	1,994.44	7.02	6.93	172.84	-65.58	0.00	137.85	123.96	13.89	9.923	
2,100.00	2,091.46	2,091.46	2,091.46	7.43	7.28	173.86	-65.58	0.00	161.89	147.29	14.60	11.089	
2,200.00	2,187.58	2,187.58	2,187.58	7.88	7.63	174.70	-65.58	0.00	189.32	174.02	15.30	12.372	
2,300.00	2,282.68	2,282.68	2,282.68	8.35	7.97	175.39	-65.58	0.00	220.12	204.12	16.00	13.755	
2,400.00	2,376.65	2,383.96	2,383.94	8.85	8.33	176.05	-64.35	0.01	253.13	236.40	16.73	15.127	
2,500.00	2,469.36	2,487.91	2,487.77	9.40	8.70	176.77	-59.42	0.07	286.17	268.70	17.47	16.384	
2,600.00	2,560.71	2,593.15	2,592.64	9.99	9.08	177.51	-50.59	0.18	319.15	300.96	18.19	17.542	
2,700.00	2,650.59	2,699.71	2,698.42	10.62	9.46	178.28	-37.74	0.33	352.05	333.14	18.92	18.612	
2,800.00	2,738.88	2,807.62	2,804.97	11.29	9.85	179.08	-20.73	0.54	384.85	365.22	19.63	19.602	
2,900.00	2,825.48	2,916.91	2,912.15	12.02	10.26	179.91	0.58	0.79	417.52	397.17	20.35	20.520	
3,000.00	2,910.28	3,027.60	3,019.80	12.79	10.69	-179.24	26.32	1.10	450.02	428.96	21.06	21.370	
3,100.00	2,993.18	3,139.71	3,127.74	13.62	11.15	-178.36	56.60	1.46	482.33	460.56	21.77	22.157	
3,185.69	3,062.62	3,236.94	3,220.33	14.36	11.57	-177.60	86.27	1.82	509.84	487.46	22.38	22.780	
3,200.00	3,074.09	3,253.29	3,235.80	14.49	11.64	-177.47	91.56	1.88	514.38	491.90	22.48	22.877	
3,300.00	3,154.26	3,369.12	3,344.48	15.40	12.18	-176.56	131.60	2.36	544.08	520.87	23.20	23.448	
3,400.00	3,234.42	3,475.70	3,443.14	16.32	12.70	-175.72	171.89	2.84	570.62	546.63	23.99	23.788	
3,500.00	3,314.58	3,571.95	3,532.06	17.26	13.20	-175.01	208.74	3.28	596.81	571.97	24.84	24.028	
3,600.00	3,394.75	3,668.21	3,620.98	18.21	13.72	-174.36	245.60	3.72	623.08	597.38	25.70	24.241	
3,700.00	3,474.91	3,764.46	3,709.89	19.18	14.26	-173.76	282.46	4.16	649.42	622.84	26.59	24.427	
3,800.00	3,555.07	3,860.72	3,798.81	20.15	14.80	-173.21	319.31	4.60	675.83	648.34	27.48	24.592	
3,900.00	3,635.24	3,956.97	3,887.73	21.14	15.36	-172.70	356.17	5.04	702.28	673.89	28.39	24.736	
4,000.00	3,715.40	4,053.23	3,976.65	22.13	15.93	-172.23	393.03	5.48	728.78	699.47	29.31	24.862	
4,100.00	3,795.56	4,149.48	4,065.57	23.12	16.51	-171.79	429.88	5.92	755.33	725.08	30.25	24.972	
4,200.00	3,875.73	4,245.74	4,154.49	24.13	17.10	-171.38	466.74	6.37	781.92	750.72	31.19	25.068	
4,300.00	3,955.89	4,341.99	4,243.40	25.13	17.70	-171.00	503.60	6.81	808.54	776.39	32.15	25.151	
4,400.00	4,036.05	4,438.25	4,332.32	26.14	18.30	-170.64	540.45	7.25	835.19	802.08	33.11	25.223	
4,500.00	4,116.22	4,534.50	4,421.24	27.16	18.92	-170.30	577.31	7.69	861.87	827.78	34.08	25.286	
4,600.00	4,196.38	4,630.76	4,510.16	28.18	19.53	-169.99	614.17	8.13	888.57	853.51	35.07	25.340	
4,700.00	4,276.54	4,727.01	4,599.08	29.20	20.16	-169.69	651.03	8.57	915.30	879.25	36.06	25.386	
4,800.00	4,356.71	4,823.27	4,688.00	30.22	20.78	-169.41	687.88	9.01	942.05	905.00	37.05	25.425	
4,900.00	4,436.87	4,919.53	4,776.91	31.25	21.42	-169.14	724.74	9.45	968.82	930.77	38.06	25.458	

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-6H - ORIGINAL WELLBORE - PROPOSAL #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Separation Factor</b>	<b>Warning</b>	
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>	<b>Minimum Separation (usft)</b>		
5,000.00	4,517.03	5,015.78	4,865.83	32.28	22.05	-168.89	761.60	9.89	995.61	956.55	39.07	25.486	
5,100.00	4,597.19	5,112.04	4,954.75	33.31	22.69	-168.65	798.45	10.33	1,022.42	982.34	40.08	25.509	
5,200.00	4,677.36	5,208.29	5,043.67	34.34	23.33	-168.43	835.31	10.77	1,049.24	1,008.14	41.10	25.528	
5,300.00	4,757.52	5,304.55	5,132.59	35.37	23.98	-168.21	872.17	11.21	1,076.08	1,033.95	42.13	25.543	
5,400.00	4,837.68	5,400.80	5,221.51	36.41	24.63	-168.01	909.02	11.65	1,102.93	1,059.77	43.16	25.554	
5,500.00	4,917.85	5,497.06	5,310.42	37.45	25.28	-167.81	945.88	12.09	1,129.79	1,085.59	44.20	25.563	
5,600.00	4,998.01	5,593.31	5,399.34	38.49	25.94	-167.63	982.74	12.54	1,156.66	1,111.43	45.24	25.569	
5,700.00	5,078.17	5,689.57	5,488.26	39.53	26.59	-167.45	1,019.59	12.98	1,183.55	1,137.27	46.28	25.573	
5,800.00	5,158.34	5,785.82	5,577.18	40.57	27.25	-167.28	1,056.45	13.42	1,210.44	1,163.11	47.33	25.575	
5,900.00	5,238.50	5,882.08	5,666.10	41.61	27.91	-167.12	1,093.31	13.86	1,237.35	1,188.97	48.38	25.575	
6,000.00	5,318.66	5,978.33	5,755.02	42.65	28.58	-166.96	1,130.16	14.30	1,264.26	1,214.82	49.44	25.574	
6,100.00	5,398.83	6,074.59	5,843.93	43.69	29.24	-166.82	1,167.02	14.74	1,291.18	1,240.69	50.49	25.571	
6,200.00	5,478.99	6,170.84	5,932.85	44.74	29.91	-166.67	1,203.88	15.18	1,318.11	1,266.55	51.56	25.567	
6,300.00	5,559.15	6,267.10	6,021.77	45.78	30.58	-166.54	1,240.73	15.62	1,345.04	1,292.42	52.62	25.561	
6,400.00	5,639.32	6,363.36	6,110.69	46.83	31.25	-166.41	1,277.59	16.06	1,371.99	1,318.30	53.69	25.555	
6,500.00	5,719.48	6,459.61	6,199.61	47.88	31.92	-166.28	1,314.45	16.50	1,398.94	1,344.18	54.76	25.548	
6,600.00	5,799.64	6,555.87	6,288.53	48.92	32.59	-166.16	1,351.30	16.94	1,425.89	1,370.06	55.83	25.540	
6,700.00	5,879.81	6,652.12	6,377.44	49.97	33.26	-166.04	1,388.16	17.38	1,452.85	1,395.95	56.90	25.532	
6,800.00	5,959.97	6,748.38	6,466.36	51.02	33.93	-165.93	1,425.02	17.82	1,479.82	1,421.84	57.98	25.522	
6,900.00	6,040.13	6,825.07	6,537.21	52.07	34.47	-165.83	1,454.38	17.95	1,507.02	1,448.09	58.93	25.572	
7,000.00	6,120.29	6,867.37	6,576.22	53.12	34.77	-165.69	1,470.53	15.42	1,536.92	1,477.28	59.64	25.769	
7,100.00	6,200.46	6,900.00	6,606.13	54.17	35.00	-165.51	1,482.89	11.33	1,570.17	1,509.96	60.21	26.078	
7,200.00	6,280.62	6,950.00	6,651.44	55.22	35.34	-165.12	1,501.58	1.52	1,606.60	1,545.61	60.98	26.345	
7,300.00	6,360.78	6,983.73	6,681.49	56.27	35.56	-164.78	1,513.96	-7.50	1,646.26	1,584.75	61.50	26.767	
7,400.00	6,440.95	7,018.32	6,711.74	57.32	35.79	-164.38	1,526.40	-18.71	1,689.07	1,627.06	62.01	27.238	
7,498.05	6,519.54	7,050.00	6,738.87	58.35	36.00	-163.96	1,537.54	-30.70	1,734.04	1,671.60	62.44	27.773	
7,500.00	6,521.11	7,050.00	6,738.87	58.37	36.00	-163.61	1,537.54	-30.70	1,734.96	1,672.53	62.43	27.790	
7,550.00	6,561.44	7,066.49	6,752.73	58.89	36.10	-154.41	1,543.22	-37.57	1,758.02	1,695.40	62.62	28.075	
7,600.00	6,602.00	7,082.60	6,766.10	59.38	36.20	-145.26	1,548.70	-44.71	1,779.82	1,717.07	62.75	28.363	
7,650.00	6,642.50	7,100.00	6,780.32	59.85	36.31	-136.40	1,554.53	-52.86	1,800.22	1,737.35	62.87	28.636	
7,700.00	6,682.61	7,100.00	6,780.32	60.29	36.31	-128.16	1,554.53	-52.86	1,819.25	1,756.71	62.53	29.092	
7,750.00	6,722.05	7,132.37	6,806.15	60.69	36.51	-120.47	1,565.09	-69.26	1,836.24	1,773.33	62.91	29.188	
7,800.00	6,760.50	7,150.00	6,819.85	61.07	36.61	-113.67	1,570.68	-78.84	1,851.64	1,788.73	62.91	29.433	
7,850.00	6,797.68	7,166.42	6,832.35	61.41	36.71	-107.73	1,575.79	-88.17	1,865.17	1,802.32	62.85	29.678	
7,900.00	6,833.29	7,183.61	6,845.18	61.71	36.81	-102.61	1,581.02	-98.36	1,876.75	1,813.97	62.78	29.894	
7,950.00	6,867.08	7,200.00	6,857.14	61.99	36.91	-98.28	1,585.89	-108.45	1,886.32	1,823.64	62.68	30.096	
8,000.00	6,898.78	7,218.22	6,870.12	62.23	37.01	-94.67	1,591.16	-120.09	1,893.83	1,831.21	62.62	30.245	
8,050.00	6,928.16	7,250.00	6,891.92	62.43	37.19	-91.79	1,600.01	-141.45	1,899.40	1,836.47	62.92	30.185	
8,100.00	6,954.98	7,250.00	6,891.92	62.60	37.19	-89.36	1,600.01	-141.45	1,902.54	1,840.14	62.40	30.489	
8,150.00	6,979.04	7,270.27	6,905.25	62.74	37.30	-87.57	1,605.41	-155.74	1,903.70	1,841.25	62.45	30.484	
8,200.00	7,000.17	7,300.00	6,923.92	62.85	37.46	-86.36	1,612.96	-177.60	1,902.86	1,840.07	62.79	30.303	
8,250.00	7,018.20	7,300.00	6,923.92	62.93	37.46	-85.38	1,612.96	-177.60	1,899.70	1,837.32	62.38	30.453	
8,300.00	7,032.99	7,321.86	6,936.97	62.98	37.58	-85.03	1,618.23	-194.32	1,894.55	1,831.93	62.63	30.252	
8,350.00	7,044.43	7,350.00	6,952.90	63.00	37.73	-85.18	1,624.64	-216.62	1,887.48	1,824.38	63.10	29.911	
8,400.00	7,052.43	7,350.00	6,952.90	63.00	37.73	-85.40	1,624.64	-216.62	1,878.28	1,815.39	62.89	29.866	
8,450.00	7,056.94	7,372.13	6,964.70	62.97	37.84	-86.30	1,629.37	-234.72	1,867.23	1,803.88	63.35	29.473	
8,488.77	7,058.00	7,400.00	6,978.63	62.93	37.99	-87.45	1,634.94	-258.21	1,857.59	1,793.55	64.05	29.004	
8,500.00	7,058.00	7,400.00	6,978.63	62.92	37.99	-87.45	1,634.94	-258.21	1,854.55	1,790.52	64.04	28.961	
8,600.00	7,058.00	7,422.32	6,989.02	62.81	38.11	-87.78	1,639.08	-277.53	1,829.98	1,765.31	64.66	28.300	
8,700.00	7,058.00	7,450.00	7,000.93	62.74	38.25	-88.16	1,643.80	-302.06	1,809.05	1,743.46	65.59	27.582	
8,800.00	7,058.00	7,500.00	7,019.61	62.71	38.51	-88.76	1,651.15	-347.84	1,791.47	1,724.27	67.20	26.659	
8,900.00	7,058.00	7,550.00	7,034.55	62.71	38.77	-89.24	1,656.93	-395.19	1,777.42	1,708.50	68.91	25.792	

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design:		SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-6H - 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			
9,000.00	7,058.00	7,580.68	7,041.80	62.76	38.93	-89.47	1,659.68	-424.86	1,766.47	1,696.22	70.26	25.143				
9,100.00	7,058.00	7,624.94	7,049.66	62.86	39.17	-89.73	1,662.56	-468.31	1,758.84	1,686.86	71.98	24.434				
9,200.00	7,058.00	7,670.29	7,054.48	63.01	39.43	-89.89	1,664.17	-513.36	1,754.35	1,680.57	73.78	23.779				
9,300.00	7,058.00	7,719.13	7,056.00	63.23	39.71	-89.93	1,664.38	-562.16	1,752.96	1,677.29	75.67	23.166				
9,400.00	7,058.00	7,819.13	7,056.00	63.54	40.37	-89.93	1,663.51	-662.16	1,752.94	1,674.12	78.82	22.239				
9,500.00	7,058.00	7,919.13	7,056.00	63.95	41.19	-89.93	1,662.64	-762.16	1,752.93	1,670.71	82.22	21.321				
9,600.00	7,058.00	8,019.13	7,056.00	64.49	42.18	-89.93	1,661.78	-862.15	1,752.91	1,667.08	85.83	20.422				
9,700.00	7,058.00	8,119.13	7,056.00	65.17	43.34	-89.93	1,660.91	-962.15	1,752.89	1,663.25	89.65	19.553				
9,800.00	7,058.00	8,219.13	7,056.00	66.02	44.66	-89.93	1,660.05	-1,062.15	1,752.88	1,659.25	93.63	18.721				
9,900.00	7,058.00	8,319.13	7,056.00	67.06	46.15	-89.93	1,659.18	-1,162.14	1,752.86	1,655.10	97.76	17.930				
10,000.00	7,058.00	8,419.13	7,056.00	68.29	47.77	-89.93	1,658.31	-1,262.14	1,752.85	1,650.82	102.02	17.181				
10,100.00	7,058.00	8,519.13	7,056.00	69.70	49.51	-89.93	1,657.45	-1,362.13	1,752.83	1,646.44	106.40	16.475				
10,200.00	7,058.00	8,619.13	7,056.00	71.29	51.36	-89.93	1,656.58	-1,462.13	1,752.82	1,641.95	110.87	15.810				
10,300.00	7,058.00	8,719.13	7,056.00	73.02	53.31	-89.93	1,655.72	-1,562.13	1,752.80	1,637.37	115.43	15.185				
10,400.00	7,058.00	8,819.13	7,056.00	74.88	55.33	-89.93	1,654.85	-1,662.12	1,752.79	1,632.72	120.06	14.599				
10,500.00	7,058.00	8,919.13	7,056.00	76.84	57.42	-89.93	1,653.99	-1,762.12	1,752.77	1,628.01	124.77	14.049				
10,600.00	7,058.00	9,019.13	7,056.00	78.89	59.58	-89.93	1,653.12	-1,862.12	1,752.75	1,623.23	129.53	13.532				
10,700.00	7,058.00	9,119.13	7,056.00	81.02	61.79	-89.93	1,652.25	-1,962.11	1,752.74	1,618.40	134.34	13.047				
10,800.00	7,058.00	9,219.13	7,056.00	83.20	64.04	-89.93	1,651.39	-2,062.11	1,752.72	1,613.52	139.20	12.591				
10,900.00	7,058.00	9,319.13	7,056.00	85.44	66.33	-89.93	1,650.52	-2,162.10	1,752.71	1,608.60	144.11	12.162				
11,000.00	7,058.00	9,419.13	7,056.00	87.71	68.66	-89.93	1,649.66	-2,262.10	1,752.69	1,603.64	149.05	11.759				
11,100.00	7,058.00	9,519.13	7,056.00	90.03	71.02	-89.93	1,648.79	-2,362.10	1,752.68	1,598.65	154.03	11.379				
11,200.00	7,058.00	9,619.13	7,056.00	92.38	73.41	-89.93	1,647.93	-2,462.09	1,752.66	1,593.62	159.04	11.020				
11,300.00	7,058.00	9,719.13	7,056.00	94.75	75.82	-89.93	1,647.06	-2,562.09	1,752.65	1,588.57	164.08	10.682				
11,400.00	7,058.00	9,819.13	7,056.00	97.15	78.25	-89.93	1,646.19	-2,662.09	1,752.63	1,583.49	169.14	10.362				
11,500.00	7,058.00	9,919.13	7,056.00	99.57	80.71	-89.93	1,645.33	-2,762.08	1,752.61	1,578.39	174.22	10.060				
11,600.00	7,058.00	10,019.13	7,056.00	102.01	83.18	-89.93	1,644.46	-2,862.08	1,752.60	1,573.27	179.33	9.773				
11,700.00	7,058.00	10,119.13	7,056.00	104.47	85.67	-89.93	1,643.60	-2,962.07	1,752.58	1,568.13	184.45	9.501				
11,800.00	7,058.00	10,219.13	7,056.00	106.94	88.17	-89.93	1,642.73	-3,062.07	1,752.57	1,562.97	189.60	9.244				
11,900.00	7,058.00	10,319.13	7,056.00	109.43	90.68	-89.93	1,641.86	-3,162.07	1,752.55	1,557.79	194.76	8.999				
12,000.00	7,058.00	10,419.13	7,056.00	111.93	93.21	-89.93	1,641.00	-3,262.06	1,752.54	1,552.60	199.93	8.766				
12,100.00	7,058.00	10,519.13	7,056.00	114.44	95.75	-89.93	1,640.13	-3,362.06	1,752.52	1,547.40	205.12	8.544				
12,200.00	7,058.00	10,619.13	7,056.00	116.96	98.30	-89.93	1,639.27	-3,462.06	1,752.51	1,542.18	210.33	8.332				
12,300.00	7,058.00	10,719.13	7,056.00	119.49	100.86	-89.93	1,638.40	-3,562.05	1,752.49	1,536.95	215.54	8.131				
12,400.00	7,058.00	10,819.13	7,056.00	122.03	103.43	-89.93	1,637.54	-3,662.05	1,752.47	1,531.71	220.76	7.938				
12,500.00	7,058.00	10,919.13	7,056.00	124.58	106.01	-89.93	1,636.67	-3,762.04	1,752.46	1,526.46	226.00	7.754				
12,600.00	7,058.00	11,019.13	7,056.00	127.14	108.59	-89.93	1,635.80	-3,862.04	1,752.44	1,521.20	231.24	7.578				
12,700.00	7,058.00	11,119.13	7,056.00	129.70	111.18	-89.93	1,634.94	-3,962.04	1,752.43	1,515.93	236.50	7.410				
12,800.00	7,058.00	11,219.13	7,056.00	132.27	113.78	-89.93	1,634.07	-4,062.03	1,752.41	1,510.65	241.76	7.249				
12,900.00	7,058.00	11,319.13	7,056.00	134.85	116.38	-89.93	1,633.21	-4,162.03	1,752.40	1,505.36	247.03	7.094				
13,000.00	7,058.00	11,419.13	7,056.00	137.44	118.99	-89.93	1,632.34	-4,262.03	1,752.38	1,500.07	252.31	6.945				
13,100.00	7,058.00	11,519.13	7,056.00	140.02	121.60	-89.93	1,631.48	-4,362.02	1,752.37	1,494.77	257.59	6.803				
13,200.00	7,058.00	11,619.13	7,056.00	142.62	124.22	-89.93	1,630.61	-4,462.02	1,752.35	1,489.46	262.88	6.666				
13,300.00	7,058.00	11,719.13	7,056.00	145.22	126.84	-89.93	1,629.74	-4,562.01	1,752.33	1,484.15	268.18	6.534				
13,400.00	7,058.00	11,819.13	7,056.00	147.82	129.47	-89.93	1,628.88	-4,662.01	1,752.32	1,478.83	273.48	6.407				
13,500.00	7,058.00	11,919.13	7,056.00	150.43	132.10	-89.93	1,628.01	-4,762.01	1,752.30	1,473.51	278.79	6.285				
13,600.00	7,058.00	12,019.13	7,056.00	153.04	134.73	-89.93	1,627.15	-4,862.00	1,752.29	1,468.18	284.11	6.168				
13,700.00	7,058.00	12,119.13	7,056.00	155.66	137.37	-89.93	1,626.28	-4,962.00	1,752.27	1,462.85	289.42	6.054				
13,800.00	7,058.00	12,219.13	7,056.00	158.27	140.01	-89.93	1,625.42	-5,062.00	1,752.26	1,457.51	294.75	5.945				
13,900.00	7,058.00	12,319.13	7,056.00	160.90	142.66	-89.93	1,624.55	-5,161.99	1,752.24	1,452.17	300.07	5.839				
14,000.00	7,058.00	12,419.13	7,056.00	163.52	145.30	-89.93	1,623.68	-5,261.99	1,752.23	1,446.82	305.41	5.737				
14,100.00	7,058.00	12,519.13	7,056.00	166.15	147.95	-89.93	1,622.82	-5,361.98	1,752.21	1,441.47	310.74	5.639				

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-6H - 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
14,200.00	7,058.00	12,619.13	7,056.00	168.78	150.61	-89.93	1,621.95	-5,461.98	1,752.19	1,436.11	316.08	5.544	
14,300.00	7,058.00	12,719.13	7,056.00	171.42	153.26	-89.93	1,621.09	-5,561.98	1,752.18	1,430.76	321.42	5.451	
14,400.00	7,058.00	12,819.13	7,056.00	174.06	155.92	-89.93	1,620.22	-5,661.97	1,752.16	1,425.40	326.77	5.362	
14,500.00	7,058.00	12,919.13	7,056.00	176.70	158.58	-89.93	1,619.35	-5,761.97	1,752.15	1,420.03	332.12	5.276	
14,600.00	7,058.00	13,019.13	7,056.00	179.34	161.24	-89.93	1,618.49	-5,861.97	1,752.13	1,414.66	337.47	5.192	
14,700.00	7,058.00	13,119.13	7,056.00	181.99	163.90	-89.93	1,617.62	-5,961.96	1,752.12	1,409.29	342.82	5.111	
14,800.00	7,058.00	13,219.13	7,056.00	184.63	166.57	-89.93	1,616.76	-6,061.96	1,752.10	1,403.92	348.18	5.032	
14,900.00	7,058.00	13,319.13	7,056.00	187.28	169.24	-89.93	1,615.89	-6,161.95	1,752.09	1,398.55	353.54	4.956	
15,000.00	7,058.00	13,419.13	7,056.00	189.93	171.91	-89.93	1,615.03	-6,261.95	1,752.07	1,393.17	358.90	4.882	
15,100.00	7,058.00	13,519.13	7,056.00	192.59	174.58	-89.93	1,614.16	-6,361.95	1,752.05	1,387.79	364.27	4.810	
15,200.00	7,058.00	13,619.13	7,056.00	195.24	177.25	-89.93	1,613.29	-6,461.94	1,752.04	1,382.40	369.63	4.740	
15,300.00	7,058.00	13,719.13	7,056.00	197.90	179.92	-89.93	1,612.43	-6,561.94	1,752.02	1,377.02	375.00	4.672	
15,400.00	7,058.00	13,819.13	7,056.00	200.56	182.60	-89.93	1,611.56	-6,661.94	1,752.01	1,371.63	380.37	4.606	
15,500.00	7,058.00	13,919.13	7,056.00	203.22	185.28	-89.93	1,610.70	-6,761.93	1,751.99	1,366.24	385.75	4.542	
15,600.00	7,058.00	14,019.13	7,056.00	205.88	187.95	-89.93	1,609.83	-6,861.93	1,751.98	1,360.85	391.12	4.479	
15,700.00	7,058.00	14,119.13	7,056.00	208.54	190.63	-89.93	1,608.97	-6,961.92	1,751.96	1,355.46	396.50	4.419	
15,800.00	7,058.00	14,219.13	7,056.00	211.21	193.31	-89.93	1,608.10	-7,061.92	1,751.94	1,350.07	401.88	4.359	
15,900.00	7,058.00	14,319.13	7,056.00	213.87	196.00	-89.93	1,607.23	-7,161.92	1,751.93	1,344.67	407.26	4.302	
16,000.00	7,058.00	14,419.13	7,056.00	216.54	198.68	-89.93	1,606.37	-7,261.91	1,751.91	1,339.27	412.64	4.246	
16,100.00	7,058.00	14,519.13	7,056.00	219.21	201.36	-89.93	1,605.50	-7,361.91	1,751.90	1,333.87	418.03	4.191	
16,200.00	7,058.00	14,619.13	7,056.00	221.88	204.05	-89.93	1,604.64	-7,461.91	1,751.88	1,328.47	423.41	4.138	
16,300.00	7,058.00	14,719.13	7,056.00	224.55	206.73	-89.93	1,603.77	-7,561.90	1,751.87	1,323.07	428.80	4.086	
16,400.00	7,058.00	14,819.13	7,056.00	227.23	209.42	-89.93	1,602.90	-7,661.90	1,751.85	1,317.66	434.19	4.035	
16,500.00	7,058.00	14,919.13	7,056.00	229.90	212.11	-89.93	1,602.04	-7,761.89	1,751.84	1,312.26	439.58	3.985	
16,600.00	7,058.00	15,019.13	7,056.00	232.57	214.80	-89.93	1,601.17	-7,861.89	1,751.82	1,306.85	444.97	3.937	
16,700.00	7,058.00	15,119.13	7,056.00	235.25	217.48	-89.93	1,600.31	-7,961.89	1,751.80	1,301.44	450.36	3.890	
16,800.00	7,058.00	15,219.13	7,056.00	237.93	220.17	-89.93	1,599.44	-8,061.88	1,751.79	1,296.04	455.75	3.844	
16,900.00	7,058.00	15,319.13	7,056.00	240.61	222.87	-89.93	1,598.58	-8,161.88	1,751.77	1,290.63	461.15	3.799	
17,000.00	7,058.00	15,419.13	7,056.00	243.28	225.56	-89.93	1,597.71	-8,261.88	1,751.76	1,285.21	466.54	3.755	
17,011.19	7,058.00	15,430.32	7,056.00	243.58	225.86	-89.93	1,597.61	-8,273.07	1,751.76	1,284.61	467.15	3.750 SF	



Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-7H - 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	-180.00	-80.15	0.00	80.15				
100.00	100.00	100.00	100.00	0.14	0.14	-180.00	-80.15	0.00	80.15	79.86	0.29	279.470	
200.00	200.00	200.00	200.00	0.50	0.50	-180.00	-80.15	0.00	80.15	79.14	1.00	79.849	
300.00	300.00	300.00	300.00	0.86	0.86	-180.00	-80.15	0.00	80.15	78.42	1.72	46.578	
400.00	400.00	400.00	400.00	1.22	1.22	-180.00	-80.15	0.00	80.15	77.71	2.44	32.879	
500.00	500.00	500.00	500.00	1.58	1.58	-180.00	-80.15	0.00	80.15	76.99	3.15	25.406	
600.00	600.00	600.00	600.00	1.94	1.94	-180.00	-80.15	0.00	80.15	76.27	3.87	20.701	
700.00	700.00	700.00	700.00	2.29	2.29	-180.00	-80.15	0.00	80.15	75.56	4.59	17.467	
800.00	800.00	800.00	800.00	2.65	2.65	-180.00	-80.15	0.00	80.15	74.84	5.31	15.106	
900.00	900.00	900.00	900.00	3.01	3.01	-180.00	-80.15	0.00	80.15	74.12	6.02	13.308	
1,000.00	1,000.00	1,000.00	1,000.00	3.37	3.37	-180.00	-80.15	0.00	80.15	73.41	6.74	11.892	
1,100.00	1,100.00	1,100.00	1,100.00	3.73	3.73	-180.00	-80.15	0.00	80.15	72.69	7.46	10.749	
1,200.00	1,200.00	1,200.00	1,200.00	4.09	4.09	-180.00	-80.15	0.00	80.15	71.97	8.17	9.806	
1,300.00	1,300.00	1,300.00	1,300.00	4.45	4.45	-180.00	-80.15	0.00	80.15	71.26	8.89	9.015	
1,350.00	1,350.00	1,350.00	1,350.00	4.62	4.62	-180.00	-80.15	0.00	80.15	70.90	9.25	8.666 CC, ES	
1,400.00	1,400.00	1,400.00	1,400.00	4.80	4.80	-165.29	-80.15	0.00	80.57	70.96	9.61	8.386	
1,500.00	1,499.93	1,499.93	1,499.93	5.16	5.16	165.88	-80.15	0.00	83.95	73.62	10.32	8.132	
1,600.00	1,599.68	1,599.68	1,599.68	5.52	5.52	166.92	-80.15	0.00	90.73	79.69	11.04	8.218	
1,700.00	1,699.13	1,699.13	1,699.13	5.88	5.88	168.22	-80.15	0.00	100.94	89.18	11.76	8.586	
1,800.00	1,798.15	1,798.15	1,798.15	6.25	6.23	169.59	-80.15	0.00	114.60	102.13	12.47	9.190	
1,900.00	1,896.63	1,896.63	1,896.63	6.62	6.58	170.90	-80.15	0.00	131.72	118.54	13.18	9.992	
2,000.00	1,994.44	1,994.44	1,994.44	7.02	6.93	172.08	-80.15	0.00	152.30	138.40	13.89	10.963	
2,100.00	2,091.46	2,091.46	2,091.46	7.43	7.28	173.10	-80.15	0.00	176.30	161.70	14.60	12.076	
2,200.00	2,187.58	2,187.58	2,187.58	7.88	7.63	173.98	-80.15	0.00	203.70	188.40	15.30	13.311	
2,300.00	2,282.68	2,282.68	2,282.68	8.35	7.97	174.71	-80.15	0.00	234.46	218.46	16.00	14.650	
2,400.00	2,376.65	2,376.65	2,376.65	8.85	8.30	175.32	-80.15	0.00	268.55	251.85	16.70	16.079	
2,500.00	2,469.36	2,477.48	2,477.48	9.40	8.67	175.92	-79.10	0.01	304.99	287.56	17.43	17.494	
2,600.00	2,560.71	2,582.13	2,582.01	9.99	9.04	176.57	-74.36	0.06	341.49	323.31	18.18	18.788	
2,700.00	2,650.59	2,688.27	2,687.78	10.62	9.42	177.25	-65.66	0.15	377.90	358.99	18.91	19.981	
2,800.00	2,738.88	2,795.92	2,794.66	11.29	9.81	177.96	-52.83	0.29	414.20	394.56	19.64	21.085	
2,900.00	2,825.48	2,905.14	2,902.52	12.02	10.20	178.69	-35.73	0.47	450.36	429.98	20.37	22.106	
3,000.00	2,910.28	3,015.96	3,011.23	12.79	10.61	179.46	-14.18	0.69	486.33	465.23	21.10	23.052	
3,100.00	2,993.18	3,128.43	3,120.61	13.62	11.05	-179.75	11.96	0.97	522.08	500.26	21.82	23.929	
3,185.69	3,062.62	3,226.15	3,214.74	14.36	11.44	-179.05	38.15	1.24	552.51	530.07	22.44	24.626	
3,200.00	3,074.09	3,242.60	3,230.51	14.49	11.51	-178.94	42.87	1.29	557.53	534.99	22.54	24.735	
3,300.00	3,154.26	3,335.78	3,319.70	15.40	11.91	-178.32	69.83	1.57	592.50	569.19	23.31	25.416	
3,400.00	3,234.42	3,429.28	3,409.20	16.32	12.32	-177.76	96.88	1.86	627.53	603.43	24.09	26.044	
3,500.00	3,314.58	3,522.78	3,498.70	17.26	12.74	-177.27	123.93	2.14	662.60	637.71	24.89	26.622	
3,600.00	3,394.75	3,616.29	3,588.21	18.21	13.17	-176.82	150.98	2.42	697.70	672.01	25.69	27.154	
3,700.00	3,474.91	3,709.79	3,677.71	19.18	13.60	-176.42	178.03	2.71	732.85	706.34	26.51	27.646	
3,800.00	3,555.07	3,803.29	3,767.22	20.15	14.05	-176.06	205.08	2.99	768.02	740.68	27.33	28.099	
3,900.00	3,635.24	3,896.80	3,856.72	21.14	14.51	-175.72	232.13	3.27	803.21	775.05	28.16	28.519	
4,000.00	3,715.40	3,990.30	3,946.23	22.13	14.97	-175.42	259.18	3.56	838.43	809.43	29.00	28.907	
4,100.00	3,795.56	4,083.80	4,035.73	23.12	15.44	-175.13	286.23	3.84	873.67	843.82	29.85	29.267	
4,200.00	3,875.73	4,177.31	4,125.24	24.13	15.91	-174.88	313.28	4.13	908.92	878.22	30.71	29.601	
4,300.00	3,955.89	4,270.81	4,214.74	25.13	16.39	-174.64	340.33	4.41	944.19	912.63	31.57	29.912	
4,400.00	4,036.05	4,364.31	4,304.24	26.14	16.88	-174.41	367.39	4.69	979.47	947.04	32.43	30.202	
4,500.00	4,116.22	4,457.82	4,393.75	27.16	17.36	-174.21	394.44	4.98	1,014.77	981.47	33.30	30.471	
4,600.00	4,196.38	4,551.32	4,483.25	28.18	17.86	-174.01	421.49	5.26	1,050.07	1,015.90	34.18	30.724	
4,700.00	4,276.54	4,644.82	4,572.76	29.20	18.35	-173.83	448.54	5.54	1,085.39	1,050.33	35.06	30.959	
4,800.00	4,356.71	4,738.33	4,662.26	30.22	18.85	-173.66	475.59	5.83	1,120.71	1,084.77	35.94	31.180	
4,900.00	4,436.87	4,831.83	4,751.77	31.25	19.35	-173.50	502.64	6.11	1,156.05	1,119.21	36.83	31.387	

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 CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-7H - 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			Offset Wellbore Centre		Distance			Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,000.00	4,517.03	4,925.33	4,841.27	32.28	19.86	-173.35	529.69	6.40	1,191.39	1,153.66	37.72	31.581	
5,100.00	4,597.19	5,018.84	4,930.78	33.31	20.37	-173.21	556.74	6.68	1,226.73	1,188.11	38.62	31.763	
5,200.00	4,677.36	5,112.34	5,020.28	34.34	20.88	-173.08	583.79	6.96	1,262.08	1,222.56	39.52	31.935	
5,300.00	4,757.52	5,205.84	5,109.79	35.37	21.39	-172.95	610.84	7.25	1,297.44	1,257.02	40.42	32.097	
5,400.00	4,837.68	5,299.35	5,199.29	36.41	21.91	-172.83	637.89	7.53	1,332.81	1,291.48	41.33	32.249	
5,500.00	4,917.85	5,392.85	5,288.79	37.45	22.42	-172.72	664.94	7.81	1,368.17	1,325.94	42.24	32.393	
5,600.00	4,998.01	5,486.35	5,378.30	38.49	22.94	-172.61	691.99	8.10	1,403.55	1,360.40	43.15	32.529	
5,700.00	5,078.17	5,579.86	5,467.80	39.53	23.46	-172.51	719.05	8.38	1,438.92	1,394.86	44.06	32.658	
5,800.00	5,158.34	5,673.36	5,557.31	40.57	23.99	-172.41	746.10	8.66	1,474.30	1,429.33	44.98	32.780	
5,900.00	5,238.50	5,766.86	5,646.81	41.61	24.51	-172.32	773.15	8.95	1,509.69	1,463.80	45.89	32.896	
6,000.00	5,318.66	5,860.37	5,736.32	42.65	25.03	-172.23	800.20	9.23	1,545.08	1,498.26	46.81	33.005	
6,100.00	5,398.83	5,953.87	5,825.82	43.69	25.56	-172.15	827.25	9.52	1,580.47	1,532.73	47.73	33.110	
6,200.00	5,478.99	6,047.37	5,915.33	44.74	26.09	-172.07	854.30	9.80	1,615.86	1,567.20	48.66	33.209	
6,300.00	5,559.15	6,140.88	6,004.83	45.78	26.62	-171.99	881.35	10.08	1,651.26	1,601.67	49.58	33.303	
6,400.00	5,639.32	6,234.38	6,094.33	46.83	27.15	-171.92	908.40	10.37	1,686.65	1,636.14	50.51	33.393	
6,500.00	5,719.48	6,327.88	6,183.84	47.88	27.68	-171.84	935.45	10.65	1,722.06	1,670.62	51.44	33.478	
6,600.00	5,799.64	6,421.39	6,273.34	48.92	28.21	-171.78	962.50	10.93	1,757.46	1,705.09	52.37	33.560	
6,700.00	5,879.81	6,514.89	6,362.85	49.97	28.74	-171.71	989.55	11.22	1,792.86	1,739.56	53.30	33.638	
6,800.00	5,959.97	6,608.39	6,452.35	51.02	29.28	-171.65	1,016.60	11.50	1,828.27	1,774.04	54.23	33.712	
6,900.00	6,040.13	6,701.90	6,541.86	52.07	29.81	-171.59	1,043.66	11.79	1,863.68	1,808.51	55.17	33.783	
7,000.00	6,120.29	6,777.98	6,614.68	53.12	30.25	-171.54	1,065.66	11.85	1,899.23	1,843.25	55.98	33.925	
7,100.00	6,200.46	6,818.34	6,653.26	54.17	30.48	-171.44	1,077.30	9.59	1,936.77	1,880.22	56.55	34.248	
7,200.00	6,280.62	6,850.00	6,683.35	55.22	30.66	-171.31	1,086.37	5.83	1,976.85	1,919.84	57.01	34.673	
7,300.00	6,360.78	6,900.00	6,730.36	56.27	30.94	-171.00	1,100.49	-3.62	2,019.35	1,961.70	57.65	35.027	
7,400.00	6,440.95	6,929.87	6,758.00	57.32	31.10	-170.76	1,108.79	-11.29	2,064.28	2,006.22	58.06	35.556	
7,498.05	6,519.54	6,950.00	6,776.41	58.35	31.21	-170.58	1,114.30	-17.31	2,110.76	2,052.45	58.31	36.200	
7,500.00	6,521.11	6,950.00	6,776.41	58.37	31.21	-170.22	1,114.30	-17.31	2,111.71	2,053.41	58.31	36.217	
7,550.00	6,561.44	6,979.58	6,803.06	58.89	31.36	-160.74	1,122.27	-27.36	2,135.36	2,076.69	58.67	36.395	
7,600.00	6,602.00	7,000.00	6,821.15	59.38	31.47	-151.37	1,127.67	-35.14	2,158.10	2,099.20	58.90	36.642	
7,650.00	6,642.50	7,000.00	6,821.15	59.85	31.47	-142.38	1,127.67	-35.14	2,179.73	2,120.93	58.80	37.071	
7,700.00	6,682.61	7,030.06	6,847.28	60.29	31.62	-133.80	1,135.47	-47.79	2,199.84	2,140.71	59.12	37.209	
7,750.00	6,722.05	7,050.00	6,864.24	60.69	31.73	-125.96	1,140.52	-56.97	2,218.57	2,159.30	59.28	37.428	
7,800.00	6,760.50	7,050.00	6,864.24	61.07	31.73	-118.93	1,140.52	-56.97	2,235.84	2,176.74	59.10	37.834	
7,850.00	6,797.68	7,082.14	6,890.91	61.41	31.88	-112.77	1,148.45	-73.03	2,251.14	2,191.73	59.41	37.890	
7,900.00	6,833.29	7,100.00	6,905.35	61.71	31.97	-107.45	1,152.73	-82.63	2,264.78	2,205.29	59.49	38.068	
7,950.00	6,867.08	7,117.42	6,919.15	61.99	32.06	-102.91	1,156.82	-92.44	2,276.55	2,216.99	59.56	38.220	
8,000.00	6,898.78	7,150.00	6,944.18	62.23	32.21	-99.17	1,164.23	-111.94	2,286.52	2,226.62	59.90	38.170	
8,050.00	6,928.16	7,150.00	6,944.18	62.43	32.21	-95.94	1,164.23	-111.94	2,294.24	2,234.55	59.69	38.436	
8,100.00	6,954.98	7,170.74	6,959.54	62.60	32.31	-93.41	1,168.76	-125.11	2,300.07	2,240.20	59.86	38.422	
8,150.00	6,979.04	7,200.00	6,980.42	62.74	32.45	-91.51	1,174.91	-144.66	2,303.93	2,243.71	60.22	38.260	
8,200.00	7,000.17	7,200.00	6,980.42	62.85	32.45	-89.87	1,174.91	-144.66	2,305.60	2,245.51	60.09	38.368	
8,250.00	7,018.20	7,223.95	6,996.78	62.93	32.56	-88.90	1,179.72	-161.48	2,305.26	2,244.82	60.44	38.139	
8,300.00	7,032.99	7,250.00	7,013.80	62.98	32.68	-88.40	1,184.70	-180.56	2,302.95	2,242.07	60.88	37.825	
8,350.00	7,044.43	7,250.00	7,013.80	63.00	32.68	-88.04	1,184.70	-180.56	2,298.61	2,237.70	60.91	37.735	
8,400.00	7,052.43	7,276.29	7,030.11	63.00	32.80	-88.37	1,189.47	-200.60	2,292.27	2,230.79	61.48	37.283	
8,450.00	7,056.94	7,300.00	7,044.06	62.97	32.91	-89.08	1,193.53	-219.34	2,284.10	2,222.05	62.06	36.807	
8,488.77	7,058.00	7,300.00	7,044.06	62.93	32.91	-89.64	1,193.53	-219.34	2,276.50	2,214.28	62.21	36.592	
8,500.00	7,058.00	7,300.00	7,044.06	62.92	32.91	-89.64	1,193.53	-219.34	2,274.19	2,211.92	62.27	36.524	
8,600.00	7,058.00	7,350.00	7,070.98	62.81	33.15	-90.34	1,201.33	-260.73	2,254.97	2,191.27	63.70	35.400	
8,700.00	7,058.00	7,383.72	7,087.15	62.74	33.31	-90.75	1,205.97	-289.95	2,238.70	2,173.72	64.98	34.451	
8,800.00	7,058.00	7,424.92	7,104.62	62.71	33.52	-91.21	1,210.95	-326.92	2,225.25	2,158.74	66.51	33.456	
8,900.00	7,058.00	7,468.96	7,120.44	62.71	33.75	-91.62	1,215.40	-367.77	2,214.48	2,146.28	68.20	32.472	

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 CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-7H - ORIGINAL WELLBORE - PROPOSAL #1												Offset Site Error:	0.00 usft
Survey Program: 0-OWSG (Rev2) MWD												Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
9,000.00	7,058.00	7,515.59	7,133.87	62.76	34.01	-91.98	1,219.09	-412.26	2,206.25	2,136.24	70.02	31.511	
9,100.00	7,058.00	7,564.37	7,144.16	62.86	34.31	-92.25	1,221.81	-459.85	2,200.45	2,128.51	71.95	30.585	
9,200.00	7,058.00	7,614.71	7,150.68	63.01	34.65	-92.42	1,223.38	-509.72	2,196.97	2,123.00	73.96	29.703	
9,300.00	7,058.00	7,667.38	7,153.00	63.23	35.04	-92.48	1,223.64	-562.32	2,195.73	2,119.67	76.06	28.867	
9,400.00	7,058.00	7,764.44	7,153.00	63.54	35.87	-92.48	1,222.85	-659.38	2,195.66	2,116.50	79.16	27.736	
9,500.00	7,058.00	7,864.44	7,153.00	63.95	36.93	-92.48	1,222.03	-759.38	2,195.60	2,113.05	82.55	26.597	
9,600.00	7,058.00	7,964.44	7,153.00	64.49	38.18	-92.48	1,221.21	-859.37	2,195.54	2,109.38	86.16	25.482	
9,700.00	7,058.00	8,064.44	7,153.00	65.17	39.62	-92.48	1,220.39	-959.37	2,195.48	2,105.51	89.97	24.403	
9,800.00	7,058.00	8,164.44	7,153.00	66.02	41.22	-92.48	1,219.58	-1,059.37	2,195.41	2,101.47	93.95	23.369	
9,900.00	7,058.00	8,264.44	7,153.00	67.06	42.95	-92.48	1,218.76	-1,159.36	2,195.35	2,097.28	98.07	22.385	
10,000.00	7,058.00	8,364.44	7,153.00	68.29	44.80	-92.48	1,217.94	-1,259.36	2,195.29	2,092.96	102.33	21.454	
10,100.00	7,058.00	8,464.44	7,153.00	69.70	46.74	-92.48	1,217.12	-1,359.36	2,195.23	2,088.53	106.69	20.575	
10,200.00	7,058.00	8,564.44	7,153.00	71.29	48.77	-92.48	1,216.30	-1,459.35	2,195.16	2,084.00	111.16	19.748	
10,300.00	7,058.00	8,664.44	7,153.00	73.02	50.88	-92.48	1,215.48	-1,559.35	2,195.10	2,079.39	115.71	18.971	
10,400.00	7,058.00	8,764.44	7,153.00	74.88	53.04	-92.48	1,214.66	-1,659.35	2,195.04	2,074.70	120.34	18.240	
10,500.00	7,058.00	8,864.44	7,153.00	76.84	55.26	-92.48	1,213.85	-1,759.34	2,194.97	2,069.94	125.04	17.555	
10,600.00	7,058.00	8,964.44	7,153.00	78.89	57.53	-92.48	1,213.03	-1,859.34	2,194.91	2,065.12	129.79	16.911	
10,700.00	7,058.00	9,064.44	7,153.00	81.02	59.83	-92.48	1,212.21	-1,959.34	2,194.85	2,060.25	134.60	16.306	
10,800.00	7,058.00	9,164.44	7,153.00	83.20	62.18	-92.48	1,211.39	-2,059.33	2,194.79	2,055.33	139.46	15.738	
10,900.00	7,058.00	9,264.44	7,153.00	85.44	64.55	-92.48	1,210.57	-2,159.33	2,194.72	2,050.37	144.36	15.204	
11,000.00	7,058.00	9,364.44	7,153.00	87.71	66.95	-92.48	1,209.75	-2,259.33	2,194.66	2,045.37	149.29	14.700	
11,100.00	7,058.00	9,464.44	7,153.00	90.03	69.38	-92.48	1,208.93	-2,359.32	2,194.60	2,040.33	154.26	14.226	
11,200.00	7,058.00	9,564.44	7,153.00	92.38	71.83	-92.48	1,208.11	-2,459.32	2,194.54	2,035.27	159.27	13.779	
11,300.00	7,058.00	9,664.44	7,153.00	94.75	74.29	-92.48	1,207.30	-2,559.32	2,194.47	2,030.18	164.30	13.357	
11,400.00	7,058.00	9,764.44	7,153.00	97.15	76.78	-92.48	1,206.48	-2,659.31	2,194.41	2,025.06	169.35	12.958	
11,500.00	7,058.00	9,864.44	7,153.00	99.57	79.28	-92.48	1,205.66	-2,759.31	2,194.35	2,019.92	174.43	12.580	
11,600.00	7,058.00	9,964.44	7,153.00	102.01	81.80	-92.48	1,204.84	-2,859.31	2,194.29	2,014.75	179.53	12.222	
11,700.00	7,058.00	10,064.44	7,153.00	104.47	84.33	-92.48	1,204.02	-2,959.30	2,194.22	2,009.57	184.65	11.883	
11,800.00	7,058.00	10,164.44	7,153.00	106.94	86.87	-92.48	1,203.20	-3,059.30	2,194.16	2,004.37	189.79	11.561	
11,900.00	7,058.00	10,264.44	7,153.00	109.43	89.42	-92.48	1,202.38	-3,159.30	2,194.10	1,999.15	194.94	11.255	
12,000.00	7,058.00	10,364.44	7,153.00	111.93	91.98	-92.48	1,201.57	-3,259.29	2,194.03	1,993.92	200.11	10.964	
12,100.00	7,058.00	10,464.44	7,153.00	114.44	94.55	-92.48	1,200.75	-3,359.29	2,193.97	1,988.67	205.30	10.687	
12,200.00	7,058.00	10,564.44	7,153.00	116.96	97.13	-92.48	1,199.93	-3,459.28	2,193.91	1,983.42	210.49	10.423	
12,300.00	7,058.00	10,664.44	7,153.00	119.49	99.72	-92.48	1,199.11	-3,559.28	2,193.85	1,978.14	215.70	10.171	
12,400.00	7,058.00	10,764.44	7,153.00	122.03	102.31	-92.48	1,198.29	-3,659.28	2,193.78	1,972.86	220.92	9.930	
12,500.00	7,058.00	10,864.44	7,153.00	124.58	104.92	-92.48	1,197.47	-3,759.27	2,193.72	1,967.57	226.15	9.700	
12,600.00	7,058.00	10,964.44	7,153.00	127.14	107.52	-92.48	1,196.65	-3,859.27	2,193.66	1,962.27	231.39	9.480	
12,700.00	7,058.00	11,064.44	7,153.00	129.70	110.14	-92.48	1,195.84	-3,959.27	2,193.60	1,956.96	236.64	9.270	
12,800.00	7,058.00	11,164.44	7,153.00	132.27	112.75	-92.48	1,195.02	-4,059.26	2,193.53	1,951.64	241.90	9.068	
12,900.00	7,058.00	11,264.44	7,153.00	134.85	115.38	-92.48	1,194.20	-4,159.26	2,193.47	1,946.31	247.16	8.875	
13,000.00	7,058.00	11,364.44	7,153.00	137.44	118.00	-92.48	1,193.38	-4,259.26	2,193.41	1,940.97	252.43	8.689	
13,100.00	7,058.00	11,464.44	7,153.00	140.02	120.64	-92.48	1,192.56	-4,359.25	2,193.35	1,935.63	257.71	8.511	
13,200.00	7,058.00	11,564.44	7,153.00	142.62	123.27	-92.48	1,191.74	-4,459.25	2,193.28	1,930.28	263.00	8.340	
13,300.00	7,058.00	11,664.44	7,153.00	145.22	125.91	-92.48	1,190.92	-4,559.25	2,193.22	1,924.93	268.29	8.175	
13,400.00	7,058.00	11,764.44	7,153.00	147.82	128.55	-92.48	1,190.10	-4,659.24	2,193.16	1,919.57	273.59	8.016	
13,500.00	7,058.00	11,864.44	7,153.00	150.43	131.20	-92.48	1,189.29	-4,759.24	2,193.09	1,914.20	278.89	7.864	
13,600.00	7,058.00	11,964.44	7,153.00	153.04	133.85	-92.48	1,188.47	-4,859.24	2,193.03	1,908.83	284.20	7.717	
13,700.00	7,058.00	12,064.44	7,153.00	155.66	136.50	-92.48	1,187.65	-4,959.23	2,192.97	1,903.46	289.51	7.575	
13,800.00	7,058.00	12,164.44	7,153.00	158.27	139.16	-92.48	1,186.83	-5,059.23	2,192.91	1,898.08	294.83	7.438	
13,900.00	7,058.00	12,264.44	7,153.00	160.90	141.81	-92.48	1,186.01	-5,159.23	2,192.84	1,892.69	300.15	7.306	
14,000.00	7,058.00	12,364.44	7,153.00	163.52	144.47	-92.48	1,185.19	-5,259.22	2,192.78	1,887.30	305.48	7.178	
14,100.00	7,058.00	12,464.44	7,153.00	166.15	147.13	-92.48	1,184.37	-5,359.22	2,192.72	1,881.91	310.81	7.055	

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-7H - ORIGINAL WELLBORE - PROPOSAL #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
14,200.00	7,058.00	12,564.44	7,153.00	168.78	149.80	-92.48	1,183.56	-5,459.22	2,192.66	1,876.52	316.14	6.936	
14,300.00	7,058.00	12,664.44	7,153.00	171.42	152.46	-92.48	1,182.74	-5,559.21	2,192.59	1,871.12	321.48	6.820	
14,400.00	7,058.00	12,764.44	7,153.00	174.06	155.13	-92.48	1,181.92	-5,659.21	2,192.53	1,865.71	326.82	6.709	
14,500.00	7,058.00	12,864.44	7,153.00	176.70	157.80	-92.48	1,181.10	-5,759.21	2,192.47	1,860.31	332.16	6.601	
14,600.00	7,058.00	12,964.44	7,153.00	179.34	160.47	-92.48	1,180.28	-5,859.20	2,192.41	1,854.90	337.51	6.496	
14,700.00	7,058.00	13,064.44	7,153.00	181.99	163.15	-92.48	1,179.46	-5,959.20	2,192.34	1,849.48	342.86	6.394	
14,800.00	7,058.00	13,164.44	7,153.00	184.63	165.82	-92.48	1,178.64	-6,059.20	2,192.28	1,844.07	348.21	6.296	
14,900.00	7,058.00	13,264.44	7,153.00	187.28	168.50	-92.48	1,177.83	-6,159.19	2,192.22	1,838.65	353.57	6.200	
15,000.00	7,058.00	13,364.44	7,153.00	189.93	171.18	-92.48	1,177.01	-6,259.19	2,192.15	1,833.23	358.92	6.108	
15,100.00	7,058.00	13,464.44	7,153.00	192.59	173.86	-92.48	1,176.19	-6,359.19	2,192.09	1,827.81	364.28	6.018	
15,200.00	7,058.00	13,564.44	7,153.00	195.24	176.54	-92.48	1,175.37	-6,459.18	2,192.03	1,822.38	369.65	5.930	
15,300.00	7,058.00	13,664.44	7,153.00	197.90	179.22	-92.48	1,174.55	-6,559.18	2,191.97	1,816.96	375.01	5.845	
15,400.00	7,058.00	13,764.44	7,153.00	200.56	181.90	-92.48	1,173.73	-6,659.18	2,191.90	1,811.53	380.38	5.762	
15,500.00	7,058.00	13,864.44	7,153.00	203.22	184.59	-92.48	1,172.91	-6,759.17	2,191.84	1,806.10	385.75	5.682	
15,600.00	7,058.00	13,964.44	7,153.00	205.88	187.27	-92.48	1,172.10	-6,859.17	2,191.78	1,800.66	391.12	5.604	
15,700.00	7,058.00	14,064.44	7,153.00	208.54	189.96	-92.48	1,171.28	-6,959.17	2,191.72	1,795.23	396.49	5.528	
15,800.00	7,058.00	14,164.44	7,153.00	211.21	192.65	-92.48	1,170.46	-7,059.16	2,191.65	1,789.79	401.86	5.454	
15,900.00	7,058.00	14,264.44	7,153.00	213.87	195.33	-92.48	1,169.64	-7,159.16	2,191.59	1,784.35	407.24	5.382	
16,000.00	7,058.00	14,364.44	7,153.00	216.54	198.02	-92.48	1,168.82	-7,259.16	2,191.53	1,778.91	412.62	5.311	
16,100.00	7,058.00	14,464.44	7,153.00	219.21	200.71	-92.48	1,168.00	-7,359.15	2,191.46	1,773.47	418.00	5.243	
16,200.00	7,058.00	14,564.44	7,153.00	221.88	203.40	-92.48	1,167.18	-7,459.15	2,191.40	1,768.03	423.38	5.176	
16,300.00	7,058.00	14,664.44	7,153.00	224.55	206.10	-92.48	1,166.36	-7,559.15	2,191.34	1,762.58	428.76	5.111	
16,400.00	7,058.00	14,764.44	7,153.00	227.23	208.79	-92.48	1,165.55	-7,659.14	2,191.28	1,757.14	434.14	5.047	
16,500.00	7,058.00	14,864.44	7,153.00	229.90	211.48	-92.48	1,164.73	-7,759.14	2,191.21	1,751.69	439.53	4.985	
16,600.00	7,058.00	14,964.44	7,153.00	232.57	214.18	-92.48	1,163.91	-7,859.14	2,191.15	1,746.24	444.91	4.925	
16,700.00	7,058.00	15,064.44	7,153.00	235.25	216.87	-92.48	1,163.09	-7,959.13	2,191.09	1,740.79	450.30	4.866	
16,800.00	7,058.00	15,164.44	7,153.00	237.93	219.57	-92.49	1,162.27	-8,059.13	2,191.03	1,735.34	455.69	4.808	
16,900.00	7,058.00	15,264.44	7,153.00	240.61	222.26	-92.49	1,161.45	-8,159.13	2,190.96	1,729.88	461.08	4.752	
17,000.00	7,058.00	15,364.44	7,153.00	243.28	224.96	-92.49	1,160.63	-8,259.12	2,190.90	1,724.43	466.47	4.697	
17,011.19	7,058.00	15,375.63	7,153.00	243.58	225.26	-92.49	1,160.54	-8,270.31	2,190.89	1,723.82	467.07	4.691 SF	

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-8H - ORIGINAL WELLBORE - PROPOSAL #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
0.00	0.00	0.00	0.00	0.00	0.00	54.49	21.86	30.63	37.63				
100.00	100.00	100.00	100.00	0.14	0.14	54.49	21.86	30.63	37.63	37.34	0.29	131.212	
200.00	200.00	200.00	200.00	0.50	0.50	54.49	21.86	30.63	37.63	36.62	1.00	37.489	
300.00	300.00	300.00	300.00	0.86	0.86	54.49	21.86	30.63	37.63	35.91	1.72	21.869 CC	
400.00	400.00	399.17	399.15	1.22	1.22	52.47	23.57	30.68	38.70	36.27	2.44	15.891	
500.00	500.00	498.10	497.95	1.58	1.58	47.06	28.70	30.85	42.18	39.03	3.15	13.386	
600.00	600.00	596.57	596.04	1.94	1.94	39.92	37.19	31.12	48.65	44.78	3.87	12.581	
700.00	700.00	694.33	693.09	2.29	2.31	32.76	48.94	31.49	58.60	54.03	4.58	12.800	
800.00	800.00	792.90	790.64	2.65	2.70	26.84	63.11	31.94	71.35	66.05	5.29	13.479	
900.00	900.00	891.85	888.55	3.01	3.10	22.71	77.41	32.39	84.69	78.68	6.01	14.090	
1,000.00	1,000.00	990.80	986.46	3.37	3.51	19.71	91.70	32.84	98.35	91.62	6.73	14.617	
1,100.00	1,100.00	1,089.75	1,084.36	3.73	3.92	17.44	106.00	33.30	112.21	104.76	7.45	15.068	
1,200.00	1,200.00	1,188.70	1,182.27	4.09	4.33	15.67	120.30	33.75	126.20	118.03	8.17	15.454	
1,300.00	1,300.00	1,287.65	1,280.18	4.45	4.74	14.26	134.60	34.21	140.29	131.40	8.89	15.787	
1,350.00	1,350.00	1,337.13	1,329.14	4.62	4.95	13.65	141.75	34.43	147.36	138.11	9.25	15.937	
1,400.00	1,400.00	1,386.66	1,378.15	4.80	5.16	-1.69	148.91	34.66	154.01	144.41	9.61	16.034	
1,500.00	1,499.93	1,486.03	1,476.48	5.16	5.58	-2.70	163.27	35.12	164.76	154.43	10.33	15.957	
1,600.00	1,599.68	1,585.72	1,575.12	5.52	6.00	-3.66	177.68	35.57	172.08	161.03	11.05	15.576	
1,700.00	1,699.13	1,685.60	1,673.95	5.88	6.42	-4.63	192.11	36.03	175.98	164.20	11.77	14.947	
1,800.00	1,798.15	1,785.54	1,772.84	6.25	6.84	-5.67	206.55	36.49	176.45	163.95	12.50	14.115	
1,900.00	1,896.63	1,885.43	1,871.68	6.62	7.27	-6.85	220.98	36.95	173.51	160.28	13.23	13.115	
2,000.00	1,994.44	1,985.14	1,970.34	7.02	7.69	-8.25	235.39	37.40	167.20	153.24	13.96	11.976	
2,100.00	2,091.46	2,084.55	2,068.71	7.43	8.11	-9.98	249.76	37.86	157.57	142.87	14.70	10.722	
2,200.00	2,187.58	2,183.54	2,166.66	7.88	8.53	-12.24	264.07	38.31	144.70	129.26	15.43	9.375	
2,300.00	2,282.68	2,282.00	2,264.09	8.35	8.95	-15.35	278.29	38.76	128.74	112.56	16.18	7.955	
2,400.00	2,376.65	2,379.80	2,360.85	8.85	9.37	-19.92	292.43	39.21	109.99	93.03	16.96	6.485	
2,500.00	2,469.36	2,476.81	2,456.85	9.40	9.78	-27.28	306.45	39.66	89.09	71.27	17.82	5.000	
2,600.00	2,560.71	2,572.93	2,551.96	9.99	10.19	-40.45	320.34	40.10	67.69	48.77	18.92	3.577	
2,700.00	2,650.59	2,668.04	2,646.07	10.62	10.60	-65.64	334.08	40.53	50.89	30.23	20.65	2.464	
2,751.97	2,696.68	2,717.03	2,694.54	10.97	10.80	-84.56	341.16	40.76	47.88	26.22	21.66	2.211 ES, SF	
2,800.00	2,738.88	2,762.02	2,739.06	11.29	11.00	-102.73	347.66	40.96	50.71	28.52	22.20	2.285	
2,900.00	2,825.48	2,854.75	2,830.82	12.02	11.39	-130.92	361.06	41.39	72.10	49.78	22.32	3.230	
3,000.00	2,910.28	2,946.12	2,921.23	12.79	11.78	-145.82	374.26	41.81	105.79	83.31	22.48	4.706	
3,100.00	2,993.18	3,036.03	3,010.19	13.62	12.16	-153.93	387.26	42.22	145.99	123.10	22.90	6.377	
3,185.69	3,062.62	3,111.82	3,085.19	14.36	12.49	-158.26	398.21	42.57	184.09	160.73	23.36	7.880	
3,200.00	3,074.09	3,124.38	3,097.61	14.49	12.54	-158.89	400.02	42.63	190.70	167.26	23.45	8.134	
3,300.00	3,154.26	3,212.12	3,184.43	15.40	12.91	-162.30	412.70	43.03	237.32	213.26	24.06	9.862	
3,400.00	3,234.42	3,299.86	3,271.25	16.32	13.29	-164.60	425.38	43.43	284.39	259.66	24.73	11.499	
3,500.00	3,314.58	3,387.61	3,358.08	17.26	13.66	-166.25	438.06	43.83	331.72	306.29	25.43	13.047	
3,600.00	3,394.75	3,475.35	3,444.90	18.21	14.04	-167.49	450.74	44.23	379.21	353.07	26.14	14.507	
3,700.00	3,474.91	3,563.09	3,531.72	19.18	14.41	-168.45	463.42	44.64	426.80	399.94	26.87	15.887	
3,800.00	3,555.07	3,650.84	3,618.54	20.15	14.79	-169.22	476.10	45.04	474.47	446.87	27.60	17.189	
3,900.00	3,635.24	3,738.58	3,705.36	21.14	15.16	-169.86	488.78	45.44	522.20	493.85	28.35	18.421	
4,000.00	3,715.40	3,826.33	3,792.19	22.13	15.53	-170.38	501.46	45.84	569.97	540.87	29.10	19.586	
4,100.00	3,795.56	3,914.07	3,879.01	23.12	15.91	-170.83	514.14	46.25	617.77	587.91	29.86	20.689	
4,200.00	3,875.73	4,001.81	3,965.83	24.13	16.28	-171.21	526.82	46.65	665.59	634.97	30.62	21.735	
4,300.00	3,955.89	4,089.56	4,052.65	25.13	16.66	-171.54	539.50	47.05	713.43	682.04	31.39	22.727	
4,400.00	4,036.05	4,177.30	4,139.47	26.14	17.03	-171.82	552.18	47.45	761.29	729.13	32.16	23.669	
4,500.00	4,116.22	4,265.04	4,226.29	27.16	17.41	-172.08	564.86	47.86	809.16	776.22	32.94	24.566	
4,600.00	4,196.38	4,352.79	4,313.12	28.18	17.78	-172.30	577.54	48.26	857.04	823.33	33.72	25.418	
4,700.00	4,276.54	4,440.53	4,399.94	29.20	18.16	-172.51	590.22	48.66	904.94	870.44	34.50	26.231	
4,800.00	4,356.71	4,528.28	4,486.76	30.22	18.53	-172.69	602.90	49.06	952.83	917.55	35.28	27.005	

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 CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-8H - 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		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
4,900.00	4,436.87	4,616.02	4,573.58	31.25	18.91	-172.85	615.58	49.46	1,000.74	964.67	36.07	27.745
5,000.00	4,517.03	4,703.76	4,660.40	32.28	19.28	-173.00	628.26	49.87	1,048.65	1,011.79	36.86	28.451
5,100.00	4,597.19	4,791.51	4,747.22	33.31	19.65	-173.14	640.94	50.27	1,096.57	1,058.92	37.65	29.126
5,200.00	4,677.36	4,879.25	4,834.05	34.34	20.03	-173.26	653.62	50.67	1,144.49	1,106.05	38.44	29.772
5,300.00	4,757.52	4,966.99	4,920.87	35.37	20.40	-173.38	666.30	51.07	1,192.42	1,153.18	39.24	30.391
5,400.00	4,837.68	5,054.74	5,007.69	36.41	20.78	-173.48	678.98	51.48	1,240.34	1,200.31	40.03	30.983
5,500.00	4,917.85	5,142.48	5,094.51	37.45	21.15	-173.58	691.66	51.88	1,288.28	1,247.45	40.83	31.552
5,600.00	4,998.01	5,230.22	5,181.33	38.49	21.53	-173.67	704.34	52.28	1,336.21	1,294.58	41.63	32.098
5,700.00	5,078.17	5,317.97	5,268.15	39.53	21.90	-173.76	717.01	52.68	1,384.15	1,341.72	42.43	32.622
5,800.00	5,158.34	5,405.71	5,354.98	40.57	22.28	-173.84	729.69	53.08	1,432.09	1,388.85	43.23	33.126
5,900.00	5,238.50	5,493.46	5,441.80	41.61	22.65	-173.91	742.37	53.49	1,480.03	1,435.99	44.03	33.610
6,000.00	5,318.66	5,581.20	5,528.62	42.65	23.03	-173.98	755.05	53.89	1,527.97	1,483.13	44.84	34.077
6,100.00	5,398.83	5,654.16	5,600.83	43.69	23.34	-174.04	765.46	54.22	1,576.12	1,530.60	45.52	34.628
6,200.00	5,478.99	5,700.00	5,646.30	44.74	23.53	-174.08	771.27	54.40	1,625.76	1,579.82	45.94	35.390
6,300.00	5,559.15	5,766.31	5,712.23	45.78	23.79	-174.16	778.39	54.63	1,676.90	1,630.37	46.53	36.037
6,400.00	5,639.32	5,820.53	5,766.24	46.83	23.99	-174.23	783.08	54.78	1,729.66	1,682.66	47.00	36.799
6,500.00	5,719.48	5,873.51	5,819.10	47.88	24.18	-174.31	786.67	54.89	1,783.93	1,736.48	47.45	37.598
6,600.00	5,799.64	5,925.27	5,870.80	48.92	24.36	-174.40	789.24	54.97	1,839.66	1,791.79	47.87	38.431
6,700.00	5,879.81	5,975.82	5,921.32	49.97	24.53	-174.49	790.84	55.02	1,896.80	1,848.53	48.27	39.298
6,800.00	5,959.97	6,025.15	5,970.65	51.02	24.68	-174.58	791.55	55.05	1,955.30	1,906.66	48.65	40.195
6,900.00	6,040.13	6,094.64	6,040.13	52.07	24.90	-174.72	791.60	55.05	2,014.84	1,965.61	49.23	40.923
7,000.00	6,120.29	6,174.80	6,120.29	53.12	25.14	-174.87	791.60	55.05	2,074.46	2,024.52	49.94	41.538
7,100.00	6,200.46	6,254.96	6,200.46	54.17	25.39	-175.02	791.60	55.05	2,134.10	2,083.45	50.65	42.135
7,200.00	6,280.62	6,335.13	6,280.62	55.22	25.63	-175.15	791.60	55.05	2,193.74	2,142.38	51.36	42.714
7,300.00	6,360.78	6,415.29	6,360.78	56.27	25.88	-175.28	791.60	55.05	2,253.38	2,201.31	52.07	43.275
7,400.00	6,440.95	6,495.45	6,440.95	57.32	26.13	-175.40	791.60	55.05	2,313.03	2,260.25	52.78	43.821
7,498.05	6,519.54	6,574.05	6,519.54	58.35	26.37	-175.52	791.60	55.05	2,371.53	2,318.05	53.48	44.341
7,500.00	6,521.11	6,575.62	6,521.11	58.37	26.37	-175.12	791.60	55.05	2,372.70	2,319.20	53.50	44.351
7,550.00	6,561.44	6,615.94	6,561.44	58.89	26.50	-165.09	791.60	55.05	2,401.95	2,348.09	53.85	44.602
7,600.00	6,602.00	6,656.51	6,602.00	59.38	26.63	-155.25	791.60	55.05	2,429.97	2,375.77	54.20	44.832
7,650.00	6,642.50	6,697.00	6,642.50	59.85	26.75	-145.83	791.60	55.05	2,456.60	2,402.06	54.54	45.041
7,700.00	6,682.61	6,731.55	6,677.04	60.29	26.86	-137.00	791.60	55.05	2,481.71	2,426.89	54.81	45.276
7,750.00	6,722.05	6,750.00	6,695.49	60.69	26.92	-128.76	791.60	54.75	2,505.37	2,450.46	54.91	45.626
7,800.00	6,760.50	6,768.06	6,713.53	61.07	26.97	-121.36	791.59	53.89	2,527.62	2,472.62	55.00	45.957
7,850.00	6,797.68	6,785.06	6,730.47	61.41	27.02	-114.81	791.58	52.55	2,548.32	2,493.24	55.08	46.269
7,900.00	6,833.29	6,800.00	6,745.33	61.71	27.06	-109.09	791.56	50.96	2,567.37	2,512.23	55.13	46.567
7,950.00	6,867.08	6,818.94	6,764.09	61.99	27.12	-104.23	791.54	48.40	2,584.67	2,529.42	55.25	46.785
8,000.00	6,898.78	6,835.81	6,780.73	62.23	27.17	-100.08	791.52	45.59	2,600.15	2,544.80	55.35	46.976
8,050.00	6,928.16	6,850.00	6,794.65	62.43	27.21	-96.56	791.50	42.85	2,613.74	2,558.29	55.45	47.139
8,100.00	6,954.98	6,869.37	6,813.54	62.60	27.27	-93.73	791.46	38.55	2,625.37	2,569.73	55.64	47.185
8,150.00	6,979.04	6,886.03	6,829.66	62.74	27.32	-91.40	791.43	34.35	2,635.02	2,579.18	55.84	47.192
8,200.00	7,000.17	6,900.00	6,843.08	62.85	27.36	-89.54	791.40	30.46	2,642.65	2,586.61	56.05	47.151
8,250.00	7,018.20	6,919.00	6,861.16	62.93	27.41	-88.22	791.35	24.66	2,648.24	2,591.88	56.36	46.984
8,300.00	7,032.99	6,935.23	6,876.46	62.98	27.45	-87.28	791.30	19.23	2,651.79	2,595.08	56.71	46.761
8,350.00	7,044.43	6,950.00	6,890.24	63.00	27.50	-86.72	791.26	13.91	2,653.31	2,596.22	57.10	46.469
8,400.00	7,052.43	6,966.92	6,905.85	63.00	27.54	-86.59	791.21	7.38	2,652.82	2,595.25	57.57	46.082
8,450.00	7,056.94	6,982.25	6,919.82	62.97	27.58	-86.80	791.16	1.07	2,650.35	2,592.28	58.07	45.639
8,488.77	7,058.00	7,000.00	6,935.78	62.93	27.63	-87.34	791.09	-6.70	2,647.11	2,588.55	58.56	45.200
8,500.00	7,058.00	7,000.00	6,935.78	62.92	27.63	-87.34	791.09	-6.70	2,646.02	2,587.36	58.66	45.111
8,600.00	7,058.00	7,030.69	6,962.78	62.81	27.71	-87.93	790.97	-21.28	2,638.11	2,578.23	59.88	44.055
8,700.00	7,058.00	7,072.80	6,998.48	62.74	27.82	-88.70	790.79	-43.61	2,633.27	2,571.92	61.35	42.923
8,800.00	7,058.00	7,126.55	7,041.49	62.71	27.95	-89.64	790.52	-75.80	2,631.20	2,568.18	63.02	41.749

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-8H - ORIGINAL WELLBORE - PROPOSAL #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Separation Factor</b>	<b>Warning</b>	
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
8,837.06	7,058.00	7,150.22	7,059.44	62.71	28.01	-90.03	790.40	-91.23	2,631.05	2,567.33	63.72	41.291	
8,900.00	7,058.00	7,196.06	7,092.32	62.71	28.12	-90.75	790.14	-123.15	2,631.44	2,566.51	64.93	40.529	
9,000.00	7,058.00	7,286.24	7,149.05	62.76	28.37	-91.98	789.56	-193.12	2,633.27	2,566.15	67.12	39.230	
9,100.00	7,058.00	7,401.01	7,204.24	62.86	28.79	-93.18	788.74	-293.53	2,635.69	2,565.95	69.74	37.795	
9,200.00	7,058.00	7,538.92	7,242.53	63.01	29.69	-94.01	787.65	-425.67	2,637.46	2,564.53	72.94	36.162	
9,300.00	7,058.00	7,669.42	7,250.00	63.23	31.02	-94.17	786.59	-555.76	2,637.76	2,561.42	76.35	34.550	
9,400.00	7,058.00	7,769.42	7,250.00	63.54	32.31	-94.17	785.77	-655.76	2,637.70	2,558.15	79.55	33.158	
9,500.00	7,058.00	7,869.42	7,250.00	63.95	33.78	-94.17	784.95	-755.75	2,637.64	2,554.65	82.99	31.781	
9,600.00	7,058.00	7,969.42	7,250.00	64.49	35.41	-94.17	784.13	-855.75	2,637.58	2,550.93	86.65	30.438	
9,700.00	7,058.00	8,069.42	7,250.00	65.17	37.17	-94.17	783.31	-955.75	2,637.52	2,547.02	90.50	29.143	
9,800.00	7,058.00	8,169.42	7,250.00	66.02	39.05	-94.17	782.49	-1,055.74	2,637.46	2,542.94	94.51	27.905	
9,900.00	7,058.00	8,269.42	7,250.00	67.06	41.02	-94.17	781.67	-1,155.74	2,637.40	2,538.73	98.67	26.729	
10,000.00	7,058.00	8,369.42	7,250.00	68.29	43.08	-94.17	780.84	-1,255.74	2,637.34	2,534.39	102.95	25.618	
10,100.00	7,058.00	8,469.42	7,250.00	69.70	45.21	-94.17	780.02	-1,355.73	2,637.28	2,529.94	107.34	24.570	
10,200.00	7,058.00	8,569.42	7,250.00	71.29	47.40	-94.18	779.20	-1,455.73	2,637.22	2,525.39	111.82	23.584	
10,300.00	7,058.00	8,669.42	7,250.00	73.02	49.64	-94.18	778.38	-1,555.73	2,637.16	2,520.76	116.39	22.658	
10,400.00	7,058.00	8,769.42	7,250.00	74.88	51.93	-94.18	777.56	-1,655.72	2,637.09	2,516.06	121.03	21.789	
10,500.00	7,058.00	8,869.42	7,250.00	76.84	54.26	-94.18	776.74	-1,755.72	2,637.03	2,511.30	125.74	20.973	
10,600.00	7,058.00	8,969.42	7,250.00	78.89	56.63	-94.18	775.92	-1,855.72	2,636.97	2,506.47	130.50	20.207	
10,700.00	7,058.00	9,069.42	7,250.00	81.02	59.02	-94.18	775.10	-1,955.71	2,636.91	2,501.60	135.32	19.487	
10,800.00	7,058.00	9,169.42	7,250.00	83.20	61.45	-94.18	774.28	-2,055.71	2,636.85	2,496.68	140.18	18.811	
10,900.00	7,058.00	9,269.42	7,250.00	85.44	63.89	-94.18	773.46	-2,155.71	2,636.79	2,491.71	145.08	18.175	
11,000.00	7,058.00	9,369.42	7,250.00	87.71	66.36	-94.18	772.64	-2,255.70	2,636.73	2,486.71	150.02	17.576	
11,100.00	7,058.00	9,469.42	7,249.99	90.03	68.85	-94.18	771.82	-2,355.70	2,636.67	2,481.68	154.99	17.012	
11,200.00	7,058.00	9,569.42	7,249.99	92.38	71.36	-94.18	771.00	-2,455.70	2,636.61	2,476.62	159.99	16.480	
11,300.00	7,058.00	9,669.42	7,249.99	94.75	73.88	-94.18	770.18	-2,555.69	2,636.55	2,471.53	165.02	15.977	
11,400.00	7,058.00	9,769.42	7,249.99	97.15	76.41	-94.18	769.36	-2,655.69	2,636.49	2,466.41	170.07	15.502	
11,500.00	7,058.00	9,869.42	7,249.99	99.57	78.96	-94.18	768.54	-2,755.69	2,636.42	2,461.27	175.15	15.052	
11,600.00	7,058.00	9,969.42	7,249.99	102.01	81.52	-94.18	767.72	-2,855.68	2,636.36	2,456.12	180.25	14.626	
11,700.00	7,058.00	10,069.42	7,249.99	104.47	84.08	-94.18	766.90	-2,955.68	2,636.30	2,450.94	185.37	14.222	
11,800.00	7,058.00	10,169.42	7,249.99	106.94	86.66	-94.18	766.08	-3,055.68	2,636.24	2,445.74	190.50	13.839	
11,900.00	7,058.00	10,269.42	7,249.99	109.43	89.25	-94.18	765.26	-3,155.67	2,636.18	2,440.53	195.65	13.474	
12,000.00	7,058.00	10,369.42	7,249.99	111.93	91.84	-94.18	764.44	-3,255.67	2,636.12	2,435.31	200.81	13.127	
12,100.00	7,058.00	10,469.42	7,249.99	114.44	94.44	-94.18	763.62	-3,355.67	2,636.06	2,430.07	205.99	12.797	
12,200.00	7,058.00	10,569.42	7,249.99	116.96	97.05	-94.18	762.80	-3,455.66	2,636.00	2,424.81	211.18	12.482	
12,300.00	7,058.00	10,669.42	7,249.99	119.49	99.67	-94.18	761.98	-3,555.66	2,635.94	2,419.55	216.39	12.182	
12,400.00	7,058.00	10,769.42	7,249.99	122.03	102.29	-94.18	761.16	-3,655.66	2,635.88	2,414.28	221.60	11.895	
12,500.00	7,058.00	10,869.42	7,249.99	124.58	104.91	-94.18	760.34	-3,755.65	2,635.82	2,408.99	226.83	11.620	
12,600.00	7,058.00	10,969.42	7,249.99	127.14	107.54	-94.18	759.52	-3,855.65	2,635.75	2,403.70	232.06	11.358	
12,700.00	7,058.00	11,069.42	7,249.99	129.70	110.17	-94.18	758.70	-3,955.65	2,635.69	2,398.39	237.30	11.107	
12,800.00	7,058.00	11,169.42	7,249.99	132.27	112.81	-94.18	757.88	-4,055.64	2,635.63	2,393.08	242.55	10.866	
12,900.00	7,058.00	11,269.42	7,249.99	134.85	115.46	-94.18	757.06	-4,155.64	2,635.57	2,387.76	247.81	10.635	
13,000.00	7,058.00	11,369.42	7,249.99	137.44	118.10	-94.18	756.23	-4,255.63	2,635.51	2,382.43	253.08	10.414	
13,100.00	7,058.00	11,469.42	7,249.99	140.02	120.75	-94.18	755.41	-4,355.63	2,635.45	2,377.10	258.35	10.201	
13,200.00	7,058.00	11,569.42	7,249.99	142.62	123.40	-94.18	754.59	-4,455.63	2,635.39	2,371.76	263.63	9.997	
13,300.00	7,058.00	11,669.42	7,249.99	145.22	126.06	-94.18	753.77	-4,555.62	2,635.33	2,366.42	268.91	9.800	
13,400.00	7,058.00	11,769.42	7,249.99	147.82	128.72	-94.18	752.95	-4,655.62	2,635.27	2,361.06	274.20	9.611	
13,500.00	7,058.00	11,869.42	7,249.99	150.43	131.38	-94.18	752.13	-4,755.62	2,635.21	2,355.71	279.50	9.428	
13,600.00	7,058.00	11,969.42	7,249.99	153.04	134.04	-94.18	751.31	-4,855.61	2,635.15	2,350.35	284.80	9.253	
13,700.00	7,058.00	12,069.42	7,249.99	155.66	136.71	-94.18	750.49	-4,955.61	2,635.09	2,344.98	290.11	9.083	
13,800.00	7,058.00	12,169.42	7,249.99	158.27	139.37	-94.18	749.67	-5,055.61	2,635.02	2,339.61	295.42	8.920	
13,900.00	7,058.00	12,269.42	7,249.99	160.90	142.04	-94.18	748.85	-5,155.60	2,634.96	2,334.23	300.73	8.762	

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



<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-8H - ORIGINAL WELLBORE - PROPOSAL #1											<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD											<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Rule Assigned:</b>	
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>	<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>
14,000.00	7,058.00	12,369.42	7,249.99	163.52	144.72	-94.18	748.03	-5,255.60	2,634.90	2,328.85	306.05	8.609
14,100.00	7,058.00	12,469.42	7,249.99	166.15	147.39	-94.18	747.21	-5,355.60	2,634.84	2,323.47	311.37	8.462
14,200.00	7,058.00	12,569.42	7,249.99	168.78	150.06	-94.18	746.39	-5,455.59	2,634.78	2,318.08	316.70	8.320
14,300.00	7,058.00	12,669.42	7,249.99	171.42	152.74	-94.18	745.57	-5,555.59	2,634.72	2,312.69	322.03	8.182
14,400.00	7,058.00	12,769.42	7,249.99	174.06	155.42	-94.18	744.75	-5,655.59	2,634.66	2,307.30	327.36	8.048
14,500.00	7,058.00	12,869.42	7,249.98	176.70	158.10	-94.18	743.93	-5,755.58	2,634.60	2,301.90	332.70	7.919
14,600.00	7,058.00	12,969.42	7,249.98	179.34	160.78	-94.18	743.11	-5,855.58	2,634.54	2,296.50	338.04	7.794
14,700.00	7,058.00	13,069.42	7,249.98	181.99	163.46	-94.18	742.29	-5,955.58	2,634.48	2,291.10	343.38	7.672
14,800.00	7,058.00	13,169.42	7,249.98	184.63	166.15	-94.18	741.47	-6,055.57	2,634.42	2,285.69	348.72	7.554
14,900.00	7,058.00	13,269.42	7,249.98	187.28	168.83	-94.18	740.65	-6,155.57	2,634.35	2,280.28	354.07	7.440
15,000.00	7,058.00	13,369.42	7,249.98	189.93	171.52	-94.18	739.83	-6,255.57	2,634.29	2,274.87	359.42	7.329
15,100.00	7,058.00	13,469.42	7,249.98	192.59	174.21	-94.18	739.01	-6,355.56	2,634.23	2,269.46	364.77	7.222
15,200.00	7,058.00	13,569.42	7,249.98	195.24	176.89	-94.18	738.19	-6,455.56	2,634.17	2,264.04	370.13	7.117
15,300.00	7,058.00	13,669.42	7,249.98	197.90	179.58	-94.18	737.37	-6,555.56	2,634.11	2,258.63	375.48	7.015
15,400.00	7,058.00	13,769.42	7,249.98	200.56	182.27	-94.18	736.55	-6,655.55	2,634.05	2,253.21	380.84	6.916
15,500.00	7,058.00	13,869.42	7,249.98	203.22	184.97	-94.18	735.73	-6,755.55	2,633.99	2,247.79	386.20	6.820
15,600.00	7,058.00	13,969.42	7,249.98	205.88	187.66	-94.18	734.91	-6,855.55	2,633.93	2,242.36	391.57	6.727
15,700.00	7,058.00	14,069.42	7,249.98	208.54	190.35	-94.18	734.09	-6,955.54	2,633.87	2,236.94	396.93	6.636
15,800.00	7,058.00	14,169.42	7,249.98	211.21	193.05	-94.18	733.27	-7,055.54	2,633.81	2,231.51	402.30	6.547
15,900.00	7,058.00	14,269.42	7,249.98	213.87	195.74	-94.18	732.45	-7,155.54	2,633.75	2,226.08	407.67	6.461
16,000.00	7,058.00	14,369.42	7,249.98	216.54	198.44	-94.18	731.62	-7,255.53	2,633.68	2,220.65	413.03	6.376
16,100.00	7,058.00	14,469.42	7,249.98	219.21	201.13	-94.18	730.80	-7,355.53	2,633.62	2,215.22	418.41	6.294
16,200.00	7,058.00	14,569.42	7,249.98	221.88	203.83	-94.18	729.98	-7,455.53	2,633.56	2,209.78	423.78	6.214
16,300.00	7,058.00	14,669.42	7,249.98	224.55	206.53	-94.18	729.16	-7,555.52	2,633.50	2,204.35	429.15	6.137
16,400.00	7,058.00	14,769.42	7,249.98	227.23	209.22	-94.18	728.34	-7,655.52	2,633.44	2,198.91	434.53	6.060
16,500.00	7,058.00	14,869.42	7,249.98	229.90	211.92	-94.18	727.52	-7,755.52	2,633.38	2,193.47	439.91	5.986
16,600.00	7,058.00	14,969.42	7,249.98	232.57	214.62	-94.18	726.70	-7,855.51	2,633.32	2,188.04	445.28	5.914
16,700.00	7,058.00	15,069.42	7,249.98	235.25	217.32	-94.18	725.88	-7,955.51	2,633.26	2,182.60	450.66	5.843
16,800.00	7,058.00	15,169.42	7,249.98	237.93	220.02	-94.18	725.06	-8,055.51	2,633.20	2,177.15	456.04	5.774
16,900.00	7,058.00	15,269.42	7,249.98	240.61	222.72	-94.18	724.24	-8,155.50	2,633.14	2,171.71	461.43	5.707
17,000.00	7,058.00	15,369.42	7,249.98	243.28	225.42	-94.18	723.42	-8,255.50	2,633.08	2,166.27	466.81	5.641
17,011.19	7,058.00	15,380.61	7,249.98	243.58	225.73	-94.18	723.33	-8,266.69	2,633.07	2,165.66	467.41	5.633



<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-9H - ORIGINAL WELLBORE - PROPOSAL #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
0.00	0.00	0.00	0.00	0.00	0.00	76.62	7.29	30.63	31.48				
100.00	100.00	100.00	100.00	0.14	0.14	76.62	7.29	30.63	31.48	31.20	0.29	109.785	
200.00	200.00	200.00	200.00	0.50	0.50	76.62	7.29	30.63	31.48	30.48	1.00	31.367	
300.00	300.00	300.00	300.00	0.86	0.86	76.62	7.29	30.63	31.48	29.76	1.72	18.297	
400.00	400.00	400.00	400.00	1.22	1.22	76.62	7.29	30.63	31.48	29.05	2.44	12.916 CC, ES	
500.00	500.00	499.11	499.09	1.58	1.57	74.77	8.63	31.69	32.86	29.71	3.15	10.431	
600.00	600.00	598.01	597.85	1.94	1.93	70.06	12.65	34.87	37.16	33.30	3.86	9.624	
700.00	700.00	697.78	697.39	2.29	2.29	65.30	17.97	39.08	43.09	38.52	4.57	9.420	
800.00	800.00	797.54	796.92	2.65	2.65	61.72	23.29	43.29	49.25	43.96	5.29	9.311	
900.00	900.00	897.31	896.46	3.01	3.02	58.93	28.61	47.50	55.56	49.56	6.01	9.252	
1,000.00	1,000.00	997.08	996.00	3.37	3.39	56.72	33.94	51.71	61.98	55.26	6.72	9.220	
1,100.00	1,100.00	1,096.85	1,095.54	3.73	3.76	54.93	39.26	55.92	68.47	61.03	7.44	9.204	
1,200.00	1,200.00	1,196.62	1,195.07	4.09	4.13	53.45	44.58	60.12	75.01	66.85	8.16	9.197	
1,300.00	1,300.00	1,296.39	1,294.61	4.45	4.50	52.20	49.90	64.33	81.59	72.72	8.87	9.196	
1,350.00	1,350.00	1,346.27	1,344.38	4.62	4.68	51.65	52.56	66.44	84.90	75.67	9.23	9.197	
1,400.00	1,400.00	1,396.18	1,394.17	4.80	4.87	36.49	55.22	68.54	87.86	78.27	9.59	9.162	
1,500.00	1,499.93	1,496.10	1,493.86	5.16	5.24	36.79	60.55	72.76	91.69	81.38	10.31	8.896	
1,600.00	1,599.68	1,596.05	1,593.59	5.52	5.61	38.39	65.88	76.97	92.76	81.73	11.03	8.413	
1,700.00	1,699.13	1,695.92	1,693.22	5.88	5.99	41.40	71.21	81.19	91.26	79.51	11.75	7.768	
1,800.00	1,798.15	1,795.58	1,792.65	6.25	6.36	46.11	76.53	85.39	87.55	75.08	12.48	7.018	
1,900.00	1,896.63	1,894.91	1,891.75	6.62	6.73	53.09	81.82	89.58	82.34	69.12	13.22	6.228	
2,000.00	1,994.44	1,993.79	1,990.40	7.02	7.10	63.08	87.10	93.75	76.83	62.83	13.99	5.490	
2,100.00	2,091.46	2,092.10	2,088.49	7.43	7.46	76.66	92.34	97.90	73.08	58.26	14.81	4.933	
2,137.79	2,127.89	2,129.07	2,125.37	7.60	7.60	82.66	94.31	99.46	72.69	57.55	15.14	4.801	
2,200.00	2,187.58	2,189.72	2,185.88	7.88	7.83	93.19	97.55	102.02	73.92	58.25	15.67	4.717 SF	
2,300.00	2,282.68	2,286.53	2,282.46	8.35	8.19	110.13	102.71	106.10	81.94	65.44	16.50	4.967	
2,400.00	2,376.65	2,382.40	2,378.12	8.85	8.55	124.65	107.82	110.15	97.95	80.70	17.25	5.678	
2,500.00	2,469.36	2,477.24	2,472.73	9.40	8.90	135.73	112.88	114.15	121.10	103.15	17.95	6.747	
2,600.00	2,560.71	2,570.91	2,566.19	9.99	9.25	143.81	117.88	118.10	150.17	131.54	18.63	8.061	
2,700.00	2,650.59	2,663.31	2,658.37	10.62	9.59	149.70	122.81	122.00	184.19	164.88	19.30	9.541	
2,800.00	2,738.88	2,754.32	2,749.17	11.29	9.93	154.05	127.66	125.84	222.51	202.53	19.98	11.136	
2,900.00	2,825.48	2,843.84	2,838.48	12.02	10.27	157.35	132.44	129.61	264.72	244.06	20.66	12.814	
3,000.00	2,910.28	2,931.75	2,926.19	12.79	10.60	159.90	137.13	133.32	310.53	289.19	21.34	14.554	
3,100.00	2,993.18	3,017.94	3,012.18	13.62	10.92	161.90	141.72	136.96	359.74	337.73	22.01	16.343	
3,185.69	3,062.62	3,090.36	3,084.43	14.36	11.19	163.29	145.58	140.01	404.50	381.91	22.59	17.906	
3,200.00	3,074.09	3,102.33	3,096.38	14.49	11.23	163.55	146.22	140.52	412.17	389.48	22.69	18.167	
3,300.00	3,154.26	3,186.04	3,179.89	15.40	11.55	165.12	150.69	144.05	465.92	442.56	23.36	19.947	
3,400.00	3,234.42	3,269.74	3,263.40	16.32	11.86	166.37	155.15	147.58	519.87	495.83	24.04	21.628	
3,500.00	3,314.58	3,353.45	3,346.91	17.26	12.17	167.39	159.62	151.11	573.97	549.24	24.72	23.215	
3,600.00	3,394.75	3,437.15	3,430.42	18.21	12.48	168.23	164.08	154.64	628.17	602.75	25.42	24.714	
3,700.00	3,474.91	3,520.85	3,513.93	19.18	12.80	168.94	168.55	158.17	682.45	656.34	26.12	26.131	
3,800.00	3,555.07	3,604.56	3,597.44	20.15	13.11	169.55	173.01	161.70	736.80	709.98	26.82	27.470	
3,900.00	3,635.24	3,688.26	3,680.95	21.14	13.42	170.07	177.48	165.24	791.20	763.67	27.53	28.738	
4,000.00	3,715.40	3,771.97	3,764.46	22.13	13.73	170.53	181.94	168.77	845.64	817.39	28.25	29.939	
4,100.00	3,795.56	3,855.67	3,847.97	23.12	14.05	170.93	186.40	172.30	900.11	871.15	28.96	31.077	
4,200.00	3,875.73	3,939.38	3,931.48	24.13	14.36	171.28	190.87	175.83	954.61	924.93	29.69	32.157	
4,300.00	3,955.89	4,023.08	4,014.99	25.13	14.67	171.60	195.33	179.36	1,009.13	978.72	30.41	33.183	
4,400.00	4,036.05	4,106.78	4,098.50	26.14	14.99	171.89	199.80	182.89	1,063.68	1,032.54	31.14	34.159	
4,500.00	4,116.22	4,190.49	4,182.01	27.16	15.30	172.14	204.26	186.42	1,118.24	1,086.37	31.87	35.087	
4,600.00	4,196.38	4,274.19	4,265.52	28.18	15.61	172.38	208.73	189.95	1,172.81	1,140.21	32.60	35.971	
4,700.00	4,276.54	4,357.90	4,349.04	29.20	15.92	172.59	213.19	193.49	1,227.40	1,194.06	33.34	36.814	
4,800.00	4,356.71	4,441.60	4,432.55	30.22	16.24	172.78	217.66	197.02	1,281.99	1,247.91	34.08	37.618	

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 CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-9H - 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		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		
4,900.00	4,436.87	4,525.31	4,516.06	31.25	16.55	172.96	222.12	200.55	1,336.60	1,301.78	34.82	38.386
5,000.00	4,517.03	4,609.01	4,599.57	32.28	16.86	173.13	226.59	204.08	1,391.22	1,355.65	35.56	39.120
5,100.00	4,597.19	4,692.71	4,683.08	33.31	17.18	173.28	231.05	207.61	1,445.84	1,409.53	36.31	39.822
5,200.00	4,677.36	4,776.42	4,766.59	34.34	17.49	173.42	235.51	211.14	1,500.47	1,463.41	37.05	40.494
5,300.00	4,757.52	4,860.12	4,850.10	35.37	17.80	173.55	239.98	214.67	1,555.10	1,517.30	37.80	41.138
5,400.00	4,837.68	4,943.83	4,933.61	36.41	18.11	173.67	244.44	218.20	1,609.74	1,571.19	38.55	41.755
5,500.00	4,917.85	5,027.53	5,017.12	37.45	18.43	173.79	248.91	221.73	1,664.39	1,625.09	39.30	42.348
5,600.00	4,998.01	5,111.24	5,100.63	38.49	18.74	173.89	253.37	225.27	1,719.04	1,678.98	40.06	42.916
5,700.00	5,078.17	5,194.94	5,184.14	39.53	19.05	173.99	257.84	228.80	1,773.69	1,732.88	40.81	43.463
5,800.00	5,158.34	5,278.64	5,267.65	40.57	19.37	174.09	262.30	232.33	1,828.35	1,786.78	41.56	43.988
5,900.00	5,238.50	5,362.35	5,351.16	41.61	19.68	174.18	266.77	235.86	1,883.01	1,840.69	42.32	44.494
6,000.00	5,318.66	5,446.05	5,434.67	42.65	19.99	174.26	271.23	239.39	1,937.67	1,894.59	43.08	44.981
6,100.00	5,398.83	5,529.76	5,518.18	43.69	20.30	174.34	275.70	242.92	1,992.34	1,948.50	43.84	45.449
6,200.00	5,478.99	5,613.46	5,601.69	44.74	20.62	174.42	280.16	246.45	2,047.01	2,002.41	44.60	45.901
6,300.00	5,559.15	5,697.17	5,685.20	45.78	20.93	174.49	284.63	249.98	2,101.68	2,056.32	45.36	46.337
6,400.00	5,639.32	5,780.87	5,768.71	46.83	21.24	174.55	289.09	253.51	2,156.35	2,110.23	46.12	46.757
6,500.00	5,719.48	5,864.57	5,852.22	47.88	21.56	174.62	293.55	257.05	2,211.03	2,164.15	46.88	47.163
6,600.00	5,799.64	5,948.28	5,935.73	48.92	21.87	174.68	298.02	260.58	2,265.70	2,218.06	47.64	47.555
6,700.00	5,879.81	6,031.98	6,019.25	49.97	22.18	174.74	302.48	264.11	2,320.38	2,271.98	48.41	47.934
6,800.00	5,959.97	6,115.69	6,102.76	51.02	22.49	174.79	306.95	267.64	2,375.06	2,325.89	49.17	48.300
6,900.00	6,040.13	6,199.39	6,186.27	52.07	22.81	174.85	311.41	271.17	2,429.75	2,379.81	49.94	48.655
7,000.00	6,120.29	6,283.10	6,269.78	53.12	23.12	174.90	315.88	274.70	2,484.43	2,433.72	50.71	48.997
7,100.00	6,200.46	6,366.80	6,353.29	54.17	23.43	174.95	320.34	278.23	2,539.11	2,487.64	51.47	49.330
7,200.00	6,280.62	6,450.50	6,436.80	55.22	23.75	174.99	324.81	281.76	2,593.80	2,541.56	52.24	49.651
7,300.00	6,360.78	6,500.00	6,486.19	56.27	23.93	175.03	327.44	283.58	2,648.76	2,596.04	52.72	50.242
7,400.00	6,440.95	6,550.00	6,536.08	57.32	24.10	175.15	330.08	281.96	2,704.81	2,651.63	53.18	50.864
7,498.05	6,519.54	6,600.00	6,585.64	58.35	24.26	175.37	332.66	275.99	2,761.00	2,707.39	53.60	51.506
7,500.00	6,521.11	6,600.00	6,585.64	58.37	24.26	175.76	332.66	275.99	2,762.13	2,708.52	53.61	51.527
7,550.00	6,561.44	6,614.65	6,600.04	58.89	24.30	-173.96	333.41	273.42	2,790.93	2,737.20	53.73	51.946
7,600.00	6,602.00	6,635.11	6,620.03	59.38	24.36	-163.62	334.43	269.22	2,819.35	2,765.46	53.89	52.317
7,650.00	6,642.50	6,650.00	6,634.49	59.85	24.40	-153.52	335.17	265.72	2,847.16	2,793.16	54.00	52.722
7,700.00	6,682.61	6,676.49	6,659.95	60.29	24.47	-143.94	336.46	258.56	2,874.13	2,819.94	54.20	53.031
7,750.00	6,722.05	6,700.00	6,682.26	60.69	24.53	-135.09	337.59	251.22	2,900.11	2,845.74	54.36	53.345
7,800.00	6,760.50	6,718.59	6,699.68	61.07	24.57	-127.07	338.46	244.77	2,924.89	2,870.40	54.49	53.677
7,850.00	6,797.68	6,750.00	6,728.60	61.41	24.64	-119.99	339.89	232.61	2,948.36	2,893.65	54.71	53.891
7,900.00	6,833.29	6,750.00	6,728.60	61.71	24.64	-113.64	339.89	232.61	2,970.31	2,915.61	54.70	54.302
7,950.00	6,867.08	6,783.38	6,758.55	61.99	24.71	-108.31	341.36	217.97	2,990.56	2,935.61	54.94	54.430
8,000.00	6,898.78	6,800.00	6,773.14	62.23	24.75	-103.65	342.07	210.03	3,009.10	2,954.02	55.08	54.636
8,050.00	6,928.16	6,827.82	6,797.02	62.43	24.80	-99.77	343.22	195.81	3,025.75	2,970.44	55.31	54.707
8,100.00	6,954.98	6,850.00	6,815.54	62.60	24.84	-96.50	344.10	183.65	3,040.44	2,984.92	55.52	54.758
8,150.00	6,979.04	6,873.39	6,834.55	62.74	24.88	-93.81	344.99	170.06	3,053.09	2,997.31	55.78	54.731
8,200.00	7,000.17	6,900.00	6,855.49	62.85	24.92	-91.68	345.97	153.67	3,063.63	3,007.53	56.10	54.609
8,250.00	7,018.20	6,920.13	6,870.82	62.93	24.95	-89.99	346.67	140.63	3,071.99	3,015.57	56.42	54.448
8,300.00	7,032.99	6,950.00	6,892.68	62.98	24.99	-88.84	347.66	120.31	3,078.17	3,021.32	56.85	54.144
8,350.00	7,044.43	6,968.09	6,905.41	63.00	25.02	-88.00	348.23	107.46	3,082.10	3,024.84	57.26	53.831
8,400.00	7,052.43	7,000.00	6,926.83	63.00	25.07	-87.72	349.17	83.84	3,083.82	3,026.01	57.80	53.352
8,450.00	7,056.94	7,017.24	6,937.85	62.97	25.10	-87.68	349.65	70.59	3,083.28	3,024.98	58.30	52.886
8,488.77	7,058.00	7,036.60	6,949.75	62.93	25.15	-87.98	350.15	55.33	3,081.35	3,022.59	58.76	52.441
8,500.00	7,058.00	7,050.00	6,957.68	62.92	25.19	-88.13	350.48	44.53	3,080.63	3,021.68	58.95	52.258
8,600.00	7,058.00	7,100.00	6,984.98	62.81	25.42	-88.64	351.58	2.68	3,075.06	3,014.80	60.27	51.025
8,700.00	7,058.00	7,157.84	7,011.89	62.74	25.77	-89.14	352.58	-48.49	3,071.14	3,009.35	61.80	49.697
8,800.00	7,058.00	7,225.82	7,036.73	62.71	26.27	-89.60	353.37	-111.71	3,068.57	3,004.99	63.58	48.265

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-9H - ORIGINAL WELLBORE - PROPOSAL #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Separation Factor</b>	<b>Warning</b>	
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
8,900.00	7,058.00	7,300.00	7,055.11	62.71	26.91	-89.95	353.74	-183.53	3,067.06	3,001.48	65.58	46.768	
9,000.00	7,058.00	7,376.87	7,064.23	62.76	27.69	-90.12	353.59	-259.79	3,066.38	2,998.59	67.79	45.235	
9,100.00	7,058.00	7,468.74	7,065.00	62.86	28.76	-90.13	352.86	-351.65	3,066.29	2,995.91	70.38	43.569	
9,200.00	7,058.00	7,568.74	7,065.00	63.01	30.11	-90.13	352.02	-451.65	3,066.24	2,992.88	73.36	41.797	
9,300.00	7,058.00	7,668.74	7,065.00	63.23	31.63	-90.13	351.18	-551.64	3,066.20	2,989.57	76.63	40.016	
9,400.00	7,058.00	7,768.74	7,065.00	63.54	33.29	-90.13	350.34	-651.64	3,066.16	2,986.02	80.14	38.262	
9,500.00	7,058.00	7,868.74	7,065.00	63.95	35.09	-90.13	349.51	-751.63	3,066.11	2,982.25	83.86	36.561	
9,600.00	7,058.00	7,968.74	7,065.00	64.49	37.00	-90.13	348.67	-851.63	3,066.07	2,978.29	87.78	34.931	
9,700.00	7,058.00	8,068.74	7,065.00	65.17	39.01	-90.13	347.83	-951.63	3,066.03	2,974.18	91.85	33.381	
9,800.00	7,058.00	8,168.74	7,065.00	66.02	41.10	-90.13	346.99	-1,051.62	3,065.98	2,969.92	96.06	31.917	
9,900.00	7,058.00	8,268.74	7,065.00	67.06	43.26	-90.13	346.15	-1,151.62	3,065.94	2,965.54	100.40	30.538	
10,000.00	7,058.00	8,368.74	7,065.00	68.29	45.48	-90.13	345.32	-1,251.62	3,065.90	2,961.06	104.84	29.245	
10,100.00	7,058.00	8,468.74	7,065.00	69.70	47.75	-90.13	344.48	-1,351.61	3,065.85	2,956.49	109.37	28.033	
10,200.00	7,058.00	8,568.74	7,065.00	71.29	50.07	-90.13	343.64	-1,451.61	3,065.81	2,951.83	113.98	26.898	
10,300.00	7,058.00	8,668.74	7,065.00	73.02	52.42	-90.13	342.80	-1,551.61	3,065.77	2,947.10	118.66	25.835	
10,400.00	7,058.00	8,768.74	7,065.00	74.88	54.81	-90.13	341.96	-1,651.60	3,065.72	2,942.31	123.41	24.841	
10,500.00	7,058.00	8,868.74	7,065.00	76.84	57.23	-90.13	341.13	-1,751.60	3,065.68	2,937.47	128.21	23.911	
10,600.00	7,058.00	8,968.74	7,065.00	78.89	59.67	-90.13	340.29	-1,851.60	3,065.64	2,932.57	133.07	23.038	
10,700.00	7,058.00	9,068.74	7,065.00	81.02	62.14	-90.13	339.45	-1,951.59	3,065.59	2,927.63	137.96	22.220	
10,800.00	7,058.00	9,168.74	7,065.00	83.20	64.63	-90.13	338.61	-2,051.59	3,065.55	2,922.65	142.90	21.452	
10,900.00	7,058.00	9,268.74	7,065.00	85.44	67.13	-90.13	337.77	-2,151.59	3,065.51	2,917.63	147.87	20.731	
11,000.00	7,058.00	9,368.74	7,065.00	87.71	69.66	-90.13	336.93	-2,251.58	3,065.46	2,912.59	152.88	20.052	
11,100.00	7,058.00	9,468.74	7,065.00	90.03	72.19	-90.13	336.10	-2,351.58	3,065.42	2,907.51	157.91	19.413	
11,200.00	7,058.00	9,568.74	7,065.00	92.38	74.74	-90.13	335.26	-2,451.58	3,065.38	2,902.41	162.97	18.810	
11,300.00	7,058.00	9,668.74	7,065.00	94.75	77.30	-90.13	334.42	-2,551.57	3,065.33	2,897.28	168.05	18.240	
11,400.00	7,058.00	9,768.74	7,065.00	97.15	79.88	-90.13	333.58	-2,651.57	3,065.29	2,892.13	173.16	17.702	
11,500.00	7,058.00	9,868.74	7,065.00	99.57	82.46	-90.13	332.74	-2,751.56	3,065.25	2,886.97	178.28	17.193	
11,600.00	7,058.00	9,968.74	7,065.00	102.01	85.05	-90.13	331.91	-2,851.56	3,065.20	2,881.78	183.43	16.711	
11,700.00	7,058.00	10,068.74	7,065.00	104.47	87.65	-90.13	331.07	-2,951.56	3,065.16	2,876.58	188.59	16.253	
11,800.00	7,058.00	10,168.74	7,065.00	106.94	90.25	-90.13	330.23	-3,051.55	3,065.12	2,871.36	193.76	15.819	
11,900.00	7,058.00	10,268.74	7,065.00	109.43	92.87	-90.13	329.39	-3,151.55	3,065.07	2,866.12	198.95	15.406	
12,000.00	7,058.00	10,368.74	7,065.00	111.93	95.48	-90.13	328.55	-3,251.55	3,065.03	2,860.88	204.15	15.013	
12,100.00	7,058.00	10,468.74	7,065.00	114.44	98.11	-90.13	327.71	-3,351.54	3,064.99	2,855.62	209.37	14.639	
12,200.00	7,058.00	10,568.74	7,065.00	116.96	100.74	-90.13	326.88	-3,451.54	3,064.95	2,850.35	214.60	14.282	
12,300.00	7,058.00	10,668.74	7,065.00	119.49	103.37	-90.13	326.04	-3,551.54	3,064.90	2,845.07	219.83	13.942	
12,400.00	7,058.00	10,768.74	7,065.00	122.03	106.01	-90.13	325.20	-3,651.53	3,064.86	2,839.78	225.08	13.617	
12,500.00	7,058.00	10,868.74	7,065.00	124.58	108.65	-90.13	324.36	-3,751.53	3,064.82	2,834.48	230.34	13.306	
12,600.00	7,058.00	10,968.74	7,065.00	127.14	111.30	-90.13	323.52	-3,851.53	3,064.77	2,829.17	235.60	13.008	
12,700.00	7,058.00	11,068.74	7,065.00	129.70	113.95	-90.13	322.69	-3,951.52	3,064.73	2,823.86	240.87	12.724	
12,800.00	7,058.00	11,168.74	7,065.00	132.27	116.60	-90.13	321.85	-4,051.52	3,064.69	2,818.53	246.15	12.450	
12,900.00	7,058.00	11,268.74	7,065.00	134.85	119.26	-90.13	321.01	-4,151.52	3,064.64	2,813.21	251.44	12.188	
13,000.00	7,058.00	11,368.74	7,065.00	137.44	121.92	-90.13	320.17	-4,251.51	3,064.60	2,807.87	256.73	11.937	
13,100.00	7,058.00	11,468.74	7,065.00	140.02	124.58	-90.13	319.33	-4,351.51	3,064.56	2,802.53	262.03	11.695	
13,200.00	7,058.00	11,568.74	7,065.00	142.62	127.24	-90.13	318.50	-4,451.50	3,064.51	2,797.18	267.33	11.463	
13,300.00	7,058.00	11,668.74	7,065.00	145.22	129.91	-90.13	317.66	-4,551.50	3,064.47	2,791.83	272.64	11.240	
13,400.00	7,058.00	11,768.74	7,065.00	147.82	132.58	-90.13	316.82	-4,651.50	3,064.43	2,786.47	277.96	11.025	
13,500.00	7,058.00	11,868.74	7,065.00	150.43	135.25	-90.13	315.98	-4,751.49	3,064.38	2,781.10	283.28	10.818	
13,600.00	7,058.00	11,968.74	7,065.00	153.04	137.92	-90.13	315.14	-4,851.49	3,064.34	2,775.74	288.60	10.618	
13,700.00	7,058.00	12,068.74	7,065.00	155.66	140.60	-90.13	314.30	-4,951.49	3,064.30	2,770.36	293.93	10.425	
13,800.00	7,058.00	12,168.74	7,065.00	158.27	143.28	-90.13	313.47	-5,051.48	3,064.25	2,764.99	299.27	10.239	
13,900.00	7,058.00	12,268.74	7,065.00	160.90	145.95	-90.13	312.63	-5,151.48	3,064.21	2,759.61	304.60	10.060	
14,000.00	7,058.00	12,368.74	7,065.00	163.52	148.63	-90.13	311.79	-5,251.48	3,064.17	2,754.22	309.94	9.886	

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-10-9H - ORIGINAL WELLBORE - PROPOSAL #1											<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD											<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Rule Assigned:</b>	
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>	<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>
14,100.00	7,058.00	12,468.74	7,065.00	166.15	151.32	-90.13	310.95	-5,351.47	3,064.12	2,748.83	315.29	9.718
14,200.00	7,058.00	12,568.74	7,065.00	168.78	154.00	-90.13	310.11	-5,451.47	3,064.08	2,743.44	320.64	9.556
14,300.00	7,058.00	12,668.74	7,065.00	171.42	156.68	-90.13	309.28	-5,551.47	3,064.04	2,738.05	325.99	9.399
14,400.00	7,058.00	12,768.74	7,065.00	174.06	159.37	-90.13	308.44	-5,651.46	3,063.99	2,732.65	331.34	9.247
14,500.00	7,058.00	12,868.74	7,065.00	176.70	162.05	-90.13	307.60	-5,751.46	3,063.95	2,727.25	336.70	9.100
14,600.00	7,058.00	12,968.74	7,065.00	179.34	164.74	-90.13	306.76	-5,851.46	3,063.91	2,721.85	342.06	8.957
14,700.00	7,058.00	13,068.74	7,065.00	181.99	167.43	-90.13	305.92	-5,951.45	3,063.86	2,716.45	347.42	8.819
14,800.00	7,058.00	13,168.74	7,065.00	184.63	170.12	-90.13	305.09	-6,051.45	3,063.82	2,711.04	352.78	8.685
14,900.00	7,058.00	13,268.74	7,065.00	187.28	172.81	-90.13	304.25	-6,151.44	3,063.78	2,705.63	358.15	8.554
15,000.00	7,058.00	13,368.74	7,065.00	189.93	175.50	-90.13	303.41	-6,251.44	3,063.73	2,700.22	363.52	8.428
15,100.00	7,058.00	13,468.74	7,065.00	192.59	178.20	-90.13	302.57	-6,351.44	3,063.69	2,694.80	368.89	8.305
15,200.00	7,058.00	13,568.74	7,065.00	195.24	180.89	-90.13	301.73	-6,451.43	3,063.65	2,689.39	374.26	8.186
15,300.00	7,058.00	13,668.74	7,065.00	197.90	183.59	-90.13	300.89	-6,551.43	3,063.61	2,683.97	379.64	8.070
15,400.00	7,058.00	13,768.74	7,065.00	200.56	186.28	-90.13	300.06	-6,651.43	3,063.56	2,678.55	385.02	7.957
15,500.00	7,058.00	13,868.74	7,065.00	203.22	188.98	-90.13	299.22	-6,751.42	3,063.52	2,673.12	390.39	7.847
15,600.00	7,058.00	13,968.74	7,065.00	205.88	191.67	-90.13	298.38	-6,851.42	3,063.48	2,667.70	395.78	7.740
15,700.00	7,058.00	14,068.74	7,065.00	208.54	194.37	-90.13	297.54	-6,951.42	3,063.43	2,662.27	401.16	7.636
15,800.00	7,058.00	14,168.74	7,065.00	211.21	197.07	-90.13	296.70	-7,051.41	3,063.39	2,656.85	406.54	7.535
15,900.00	7,058.00	14,268.74	7,065.00	213.87	199.77	-90.13	295.87	-7,151.41	3,063.35	2,651.42	411.93	7.437
16,000.00	7,058.00	14,368.74	7,065.00	216.54	202.47	-90.13	295.03	-7,251.41	3,063.30	2,645.99	417.31	7.341
16,100.00	7,058.00	14,468.74	7,065.00	219.21	205.17	-90.13	294.19	-7,351.40	3,063.26	2,640.56	422.70	7.247
16,200.00	7,058.00	14,568.74	7,065.00	221.88	207.87	-90.13	293.35	-7,451.40	3,063.22	2,635.12	428.09	7.155
16,300.00	7,058.00	14,668.74	7,065.00	224.55	210.57	-90.13	292.51	-7,551.40	3,063.17	2,629.69	433.48	7.066
16,400.00	7,058.00	14,768.74	7,065.00	227.23	213.27	-90.13	291.68	-7,651.39	3,063.13	2,624.25	438.88	6.979
16,500.00	7,058.00	14,868.74	7,065.00	229.90	215.97	-90.13	290.84	-7,751.39	3,063.09	2,618.82	444.27	6.895
16,600.00	7,058.00	14,968.74	7,065.00	232.57	218.68	-90.13	290.00	-7,851.38	3,063.04	2,613.38	449.66	6.812
16,700.00	7,058.00	15,068.74	7,065.00	235.25	221.38	-90.13	289.16	-7,951.38	3,063.00	2,607.94	455.06	6.731
16,800.00	7,058.00	15,168.74	7,065.00	237.93	224.08	-90.13	288.32	-8,051.38	3,062.96	2,602.50	460.46	6.652
16,900.00	7,058.00	15,268.74	7,065.00	240.61	226.79	-90.13	287.48	-8,151.37	3,062.91	2,597.06	465.86	6.575
17,000.00	7,058.00	15,368.74	7,065.00	243.28	229.49	-90.13	286.65	-8,251.37	3,062.87	2,591.61	471.26	6.499
17,011.19	7,058.00	15,379.93	7,065.00	243.58	229.79	-90.13	286.55	-8,262.56	3,062.87	2,591.01	471.86	6.491

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-3-1H - ORIGINAL WELLBORE - PROPOSAL #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.58	0.00	14.58				
100.00	100.00	100.00	100.00	0.14	0.14	0.00	14.58	0.00	14.58	14.29	0.29	50.841	
200.00	200.00	200.00	200.00	0.50	0.50	0.00	14.58	0.00	14.58	13.58	1.00	14.526	
300.00	300.00	300.00	300.00	0.86	0.86	0.00	14.58	0.00	14.58	12.86	1.72	8.474	
400.00	400.00	400.00	400.00	1.22	1.22	0.00	14.58	0.00	14.58	12.14	2.44	5.981	
500.00	500.00	500.00	500.00	1.58	1.58	0.00	14.58	0.00	14.58	11.43	3.15	4.622	
600.00	600.00	600.00	600.00	1.94	1.94	0.00	14.58	0.00	14.58	10.71	3.87	3.766	
700.00	700.00	700.00	700.00	2.29	2.29	0.00	14.58	0.00	14.58	9.99	4.59	3.178	
800.00	800.00	800.00	800.00	2.65	2.65	0.00	14.58	0.00	14.58	9.27	5.31	2.748	
900.00	900.00	900.00	900.00	3.01	3.01	0.00	14.58	0.00	14.58	8.56	6.02	2.421	
1,000.00	1,000.00	1,000.00	1,000.00	3.37	3.37	0.00	14.58	0.00	14.58	7.84	6.74	2.163	
1,100.00	1,100.00	1,100.00	1,100.00	3.73	3.73	0.00	14.58	0.00	14.58	7.12	7.46	1.955	
1,200.00	1,200.00	1,200.00	1,200.00	4.09	4.09	0.00	14.58	0.00	14.58	6.41	8.17	1.784	
1,203.38	1,203.38	1,203.38	1,203.38	4.10	4.10	0.00	14.58	0.00	14.58	6.38	8.20	1.779 CC	
1,300.00	1,300.00	1,299.75	1,299.75	4.45	4.44	0.38	15.00	0.10	15.00	6.11	8.89	1.688 ES	
1,350.00	1,350.00	1,349.47	1,349.45	4.62	4.62	1.40	16.26	0.40	16.27	7.03	9.24	1.761	
1,400.00	1,400.00	1,399.15	1,399.08	4.80	4.80	-12.29	18.36	0.89	17.98	8.38	9.59	1.874	
1,500.00	1,499.93	1,498.41	1,498.10	5.16	5.16	-10.79	25.06	2.47	21.39	11.10	10.29	2.079	
1,600.00	1,599.68	1,597.57	1,596.71	5.52	5.51	-9.93	35.07	4.84	24.80	13.83	10.97	2.260	
1,700.00	1,699.13	1,696.60	1,694.79	5.88	5.88	-9.46	48.39	7.99	28.19	16.55	11.64	2.422	
1,800.00	1,798.15	1,795.52	1,792.23	6.25	6.25	-9.26	64.98	11.90	31.57	19.27	12.30	2.566	
1,900.00	1,896.63	1,894.33	1,888.91	6.62	6.64	-9.25	84.80	16.59	34.92	21.97	12.95	2.696	
2,000.00	1,994.44	1,993.03	1,984.72	7.02	7.06	-9.38	107.83	22.02	38.24	24.65	13.59	2.813	
2,100.00	2,091.46	2,091.61	2,079.56	7.43	7.49	-9.61	134.03	28.21	41.53	27.30	14.23	2.918	
2,200.00	2,187.58	2,190.09	2,173.31	7.88	7.96	-9.93	163.36	35.14	44.78	29.92	14.86	3.013	
2,300.00	2,282.68	2,288.47	2,265.87	8.35	8.46	-10.32	195.76	42.79	47.99	32.50	15.49	3.098	
2,400.00	2,376.65	2,386.73	2,357.14	8.85	9.00	-10.76	231.20	51.16	51.16	35.04	16.12	3.174	
2,500.00	2,469.36	2,484.90	2,447.01	9.40	9.58	-11.24	269.63	60.24	54.29	37.54	16.76	3.240	
2,600.00	2,560.71	2,582.97	2,535.39	9.99	10.20	-11.76	310.98	70.01	57.38	39.98	17.40	3.298	
2,700.00	2,650.59	2,680.95	2,622.18	10.62	10.86	-12.31	355.21	80.45	60.41	42.37	18.05	3.348	
2,800.00	2,738.88	2,778.82	2,707.28	11.29	11.57	-12.89	402.26	91.56	63.40	44.69	18.71	3.388	
2,900.00	2,825.48	2,876.61	2,790.61	12.02	12.33	-13.50	452.06	103.33	66.34	46.94	19.40	3.420	
3,000.00	2,910.28	2,974.31	2,872.07	12.79	13.13	-14.13	504.55	115.72	69.23	49.13	20.10	3.444	
3,100.00	2,993.18	3,071.92	2,951.57	13.62	13.98	-14.78	559.66	128.74	72.06	51.23	20.84	3.458	
3,185.69	3,062.62	3,155.50	3,018.07	14.36	14.74	-15.35	608.92	140.37	74.45	52.96	21.49	3.464	
3,200.00	3,074.09	3,169.52	3,029.08	14.49	14.87	-15.44	617.37	142.37	74.88	53.27	21.61	3.465	
3,300.00	3,154.26	3,269.47	3,107.48	15.40	15.82	-16.04	677.70	156.62	78.03	55.35	22.68	3.440	
3,400.00	3,234.42	3,369.41	3,185.87	16.32	16.79	-16.59	738.04	170.87	81.18	57.40	23.78	3.414	
3,500.00	3,314.58	3,469.36	3,264.27	17.26	17.77	-17.10	798.38	185.12	84.35	59.44	24.91	3.387	
3,600.00	3,394.75	3,569.31	3,342.67	18.21	18.76	-17.57	858.71	199.37	87.52	61.47	26.05	3.359	
3,700.00	3,474.91	3,669.25	3,421.06	19.18	19.77	-18.01	919.05	213.62	90.70	63.47	27.22	3.331	
3,800.00	3,555.07	3,769.20	3,499.46	20.15	20.78	-18.42	979.38	227.87	93.88	65.46	28.41	3.304	
3,900.00	3,635.24	3,869.15	3,577.85	21.14	21.81	-18.81	1,039.72	242.12	97.06	67.44	29.62	3.277	
4,000.00	3,715.40	3,969.10	3,656.25	22.13	22.83	-19.16	1,100.05	256.37	100.25	69.41	30.84	3.251	
4,100.00	3,795.56	4,069.04	3,734.65	23.12	23.87	-19.50	1,160.39	270.62	103.45	71.37	32.08	3.225	
4,200.00	3,875.73	4,168.99	3,813.04	24.13	24.91	-19.82	1,220.73	284.87	106.65	73.32	33.33	3.200	
4,300.00	3,955.89	4,268.94	3,891.44	25.13	25.95	-20.12	1,281.06	299.12	109.85	75.26	34.59	3.176	
4,400.00	4,036.05	4,368.89	3,969.84	26.14	27.00	-20.40	1,341.40	313.37	113.05	77.19	35.86	3.153	
4,500.00	4,116.22	4,468.83	4,048.23	27.16	28.05	-20.66	1,401.73	327.62	116.25	79.11	37.14	3.130	
4,600.00	4,196.38	4,568.78	4,126.63	28.18	29.11	-20.91	1,462.07	341.87	119.46	81.03	38.43	3.108	
4,700.00	4,276.54	4,668.73	4,205.02	29.20	30.17	-21.15	1,522.40	356.12	122.67	82.94	39.73	3.088	
4,800.00	4,356.71	4,768.67	4,283.42	30.22	31.23	-21.38	1,582.74	370.37	125.89	84.85	41.04	3.068	

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-3-1H - ORIGINAL WELLBORE - PROPOSAL #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Separation Factor</b>	<b>Warning</b>	
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
4,900.00	4,436.87	4,868.62	4,361.82	31.25	32.29	-21.59	1,643.08	384.62	129.10	86.75	42.35	3.048	
5,000.00	4,517.03	4,968.57	4,440.21	32.28	33.36	-21.80	1,703.41	398.87	132.32	88.64	43.67	3.030	
5,100.00	4,597.19	5,068.52	4,518.61	33.31	34.42	-21.99	1,763.75	413.12	135.53	90.53	45.00	3.012	
5,200.00	4,677.36	5,168.46	4,597.01	34.34	35.49	-22.18	1,824.08	427.37	138.75	92.42	46.33	2.995	
5,300.00	4,757.52	5,268.41	4,675.40	35.37	36.56	-22.36	1,884.42	441.62	141.97	94.30	47.67	2.978	
5,400.00	4,837.68	5,368.36	4,753.80	36.41	37.63	-22.53	1,944.76	455.87	145.19	96.18	49.01	2.962	
5,500.00	4,917.85	5,468.30	4,832.19	37.45	38.71	-22.69	2,005.09	470.12	148.42	98.06	50.36	2.947	
5,600.00	4,998.01	5,568.25	4,910.59	38.49	39.78	-22.84	2,065.43	484.37	151.64	99.93	51.71	2.933	
5,700.00	5,078.17	5,668.20	4,988.99	39.53	40.86	-22.99	2,125.76	498.62	154.87	101.80	53.06	2.918	
5,800.00	5,158.34	5,768.15	5,067.38	40.57	41.93	-23.14	2,186.10	512.87	158.09	103.67	54.42	2.905	
5,900.00	5,238.50	5,868.09	5,145.78	41.61	43.01	-23.27	2,246.43	527.12	161.32	105.53	55.79	2.892	
6,000.00	5,318.66	5,968.04	5,224.18	42.65	44.09	-23.40	2,306.77	541.37	164.55	107.40	57.15	2.879	
6,100.00	5,398.83	6,067.99	5,302.57	43.69	45.17	-23.53	2,367.11	555.62	167.78	109.26	58.52	2.867	
6,200.00	5,478.99	6,167.93	5,380.97	44.74	46.24	-23.65	2,427.44	569.87	171.01	111.11	59.89	2.855	
6,300.00	5,559.15	6,267.88	5,459.36	45.78	47.32	-23.77	2,487.78	584.13	174.24	112.97	61.27	2.844	
6,400.00	5,639.32	6,367.83	5,537.76	46.83	48.41	-23.88	2,548.11	598.38	177.47	114.82	62.64	2.833	
6,500.00	5,719.48	6,467.78	5,616.16	47.88	49.49	-23.99	2,608.45	612.63	180.70	116.68	64.02	2.822	
6,600.00	5,799.64	6,567.72	5,694.55	48.92	50.57	-24.10	2,668.78	626.88	183.93	118.53	65.40	2.812	
6,700.00	5,879.81	6,667.67	5,772.95	49.97	51.65	-24.20	2,729.12	641.13	187.16	120.38	66.79	2.802	
6,800.00	5,959.97	6,767.62	5,851.35	51.02	52.73	-24.30	2,789.46	655.38	190.40	122.23	68.17	2.793	
6,900.00	6,040.13	6,867.56	5,929.74	52.07	53.82	-24.39	2,849.79	669.63	193.63	124.07	69.56	2.784	
7,000.00	6,120.29	6,967.51	6,008.14	53.12	54.90	-24.48	2,910.13	683.88	196.87	125.92	70.95	2.775	
7,100.00	6,200.46	7,067.46	6,086.53	54.17	55.99	-24.57	2,970.46	698.13	200.10	127.76	72.34	2.766	
7,200.00	6,280.62	7,167.41	6,164.93	55.22	57.07	-24.66	3,030.80	712.38	203.34	129.60	73.73	2.758	
7,300.00	6,360.78	7,267.35	6,243.33	56.27	58.16	-24.74	3,091.13	726.63	206.57	131.44	75.13	2.750	
7,400.00	6,440.95	7,367.30	6,321.72	57.32	59.24	-24.82	3,151.47	740.88	209.81	133.29	76.52	2.742	
7,498.05	6,519.54	7,465.30	6,398.59	58.35	60.31	-24.90	3,210.63	754.85	212.98	135.09	77.89	2.734	
7,500.00	6,521.11	7,467.25	6,400.12	58.37	60.33	-24.65	3,211.81	755.13	213.04	135.12	77.92	2.734	
7,550.00	6,561.44	7,517.17	6,439.28	58.89	60.87	-17.44	3,241.94	762.25	214.16	136.06	78.10	2.742	
7,600.00	6,602.00	7,566.75	6,478.16	59.38	61.41	-8.85	3,271.87	769.31	214.47	137.13	77.34	2.773	
7,650.00	6,642.50	7,615.59	6,516.48	59.85	61.94	0.80	3,301.36	776.28	214.35	138.61	75.75	2.830	
7,671.45	6,659.77	7,636.23	6,532.67	60.04	62.16	5.18	3,313.82	779.22	214.32	139.45	74.86	2.863	
7,700.00	6,682.61	7,663.33	6,553.92	60.29	62.46	11.15	3,330.18	783.09	214.43	140.84	73.59	2.914	
7,750.00	6,722.05	7,709.61	6,590.22	60.69	62.96	21.78	3,358.12	789.68	215.55	144.15	71.39	3.019	
7,800.00	6,760.50	7,754.08	6,625.10	61.07	63.45	32.29	3,384.96	796.02	218.73	148.73	70.00	3.125	
7,850.00	6,797.68	7,796.38	6,658.28	61.41	63.91	42.27	3,410.50	802.06	225.04	154.70	70.34	3.199	
7,900.00	6,833.29	7,836.21	6,689.53	61.71	64.34	51.35	3,434.54	807.73	235.43	162.45	72.98	3.226	
7,950.00	6,867.08	7,873.26	6,718.59	61.99	64.74	59.24	3,456.91	813.02	250.56	172.86	77.71	3.224	
8,000.00	6,898.78	7,914.23	6,750.79	62.23	65.18	66.81	3,481.68	818.28	270.50	186.72	83.78	3.229	
8,050.00	6,928.16	7,962.89	6,789.30	62.43	65.70	74.24	3,511.28	820.97	293.80	204.09	89.70	3.275	
8,100.00	6,954.98	8,016.58	6,831.84	62.60	66.24	80.99	3,543.94	819.14	319.50	225.06	94.44	3.383	
8,150.00	6,979.04	8,077.01	6,879.35	62.74	66.81	87.22	3,580.36	811.10	346.77	249.36	97.41	3.560	
8,200.00	7,000.17	8,146.70	6,932.99	62.85	67.42	93.06	3,621.40	794.07	374.77	276.68	98.10	3.820	
8,250.00	7,018.20	8,229.25	6,993.86	62.93	68.05	98.58	3,667.89	763.48	402.50	306.72	95.78	4.202	
8,300.00	7,032.99	8,329.60	7,062.27	62.98	68.69	103.76	3,719.98	711.99	428.68	339.25	89.43	4.793	
8,350.00	7,044.43	8,453.80	7,135.52	63.00	69.30	108.35	3,775.50	628.82	451.58	373.59	77.99	5.790	
8,400.00	7,052.43	8,606.42	7,203.57	63.00	69.77	111.89	3,826.65	502.69	468.81	406.56	62.25	7.531	
8,450.00	7,056.94	8,784.30	7,246.52	62.97	69.92	113.77	3,858.15	333.72	477.67	426.52	51.15	9.338	
8,488.77	7,058.00	8,888.34	7,252.00	62.93	69.85	113.94	3,861.44	230.01	478.17	425.53	52.63	9.085	
8,500.00	7,058.00	8,899.57	7,252.00	62.92	69.84	113.94	3,861.34	218.78	478.17	425.42	52.75	9.065	
8,600.00	7,058.00	8,999.57	7,252.00	62.81	69.75	113.94	3,860.46	118.78	478.17	424.11	54.06	8.846	
8,700.00	7,058.00	9,099.57	7,252.00	62.74	69.69	113.94	3,859.58	18.78	478.17	422.38	55.78	8.572	

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-3-1H - ORIGINAL WELLBORE - PROPOSAL #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Separation Factor</b>	<b>Warning</b>	
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
8,800.00	7,058.00	9,199.57	7,252.00	62.71	69.66	113.94	3,858.70	-81.21	478.17	420.27	57.89	8.259	
8,900.00	7,058.00	9,299.57	7,252.00	62.71	69.67	113.94	3,857.82	-181.21	478.17	417.82	60.35	7.923	
9,000.00	7,058.00	9,399.57	7,252.00	62.76	69.71	113.94	3,856.94	-281.20	478.17	415.06	63.11	7.577	
9,100.00	7,058.00	9,499.57	7,252.00	62.86	69.80	113.94	3,856.05	-381.20	478.17	412.04	66.13	7.231	
9,200.00	7,058.00	9,599.57	7,252.00	63.01	69.93	113.94	3,855.17	-481.20	478.17	408.78	69.38	6.892	
9,300.00	7,058.00	9,699.57	7,252.00	63.23	70.12	113.94	3,854.29	-581.19	478.17	405.33	72.84	6.565	
9,400.00	7,058.00	9,799.57	7,252.00	63.54	70.37	113.94	3,853.41	-681.19	478.17	401.70	76.46	6.254	
9,500.00	7,058.00	9,899.57	7,252.00	63.95	70.70	113.94	3,852.53	-781.18	478.17	397.93	80.24	5.959	
9,600.00	7,058.00	9,999.57	7,252.00	64.49	71.11	113.94	3,851.65	-881.18	478.17	394.02	84.14	5.683	
9,700.00	7,058.00	10,099.57	7,252.00	65.17	71.62	113.94	3,850.77	-981.18	478.17	390.01	88.16	5.424	
9,800.00	7,058.00	10,199.57	7,252.00	66.02	72.25	113.94	3,849.88	-1,081.17	478.17	385.89	92.27	5.182	
9,900.00	7,058.00	10,299.57	7,252.00	67.06	73.01	113.94	3,849.00	-1,181.17	478.17	381.69	96.47	4.957	
10,000.00	7,058.00	10,399.57	7,252.00	68.29	73.91	113.94	3,848.12	-1,281.17	478.17	377.42	100.74	4.746	
10,100.00	7,058.00	10,499.57	7,252.00	69.70	74.98	113.94	3,847.24	-1,381.16	478.17	373.08	105.08	4.550	
10,200.00	7,058.00	10,599.57	7,252.00	71.29	76.20	113.94	3,846.36	-1,481.16	478.17	368.69	109.48	4.368	
10,300.00	7,058.00	10,699.57	7,252.00	73.02	77.58	113.94	3,845.48	-1,581.15	478.17	364.24	113.92	4.197	
10,400.00	7,058.00	10,799.57	7,252.00	74.88	79.10	113.94	3,844.60	-1,681.15	478.17	359.75	118.42	4.038	
10,500.00	7,058.00	10,899.57	7,252.00	76.84	80.76	113.94	3,843.71	-1,781.15	478.17	355.22	122.95	3.889	
10,600.00	7,058.00	10,999.57	7,252.00	78.89	82.54	113.94	3,842.83	-1,881.14	478.17	350.65	127.52	3.750	
10,700.00	7,058.00	11,099.57	7,252.00	81.02	84.42	113.94	3,841.95	-1,981.14	478.17	346.05	132.12	3.619	
10,800.00	7,058.00	11,199.57	7,252.00	83.20	86.39	113.94	3,841.07	-2,081.13	478.17	341.42	136.74	3.497	
10,900.00	7,058.00	11,299.57	7,252.00	85.44	88.44	113.94	3,840.19	-2,181.13	478.17	336.77	141.40	3.382	
11,000.00	7,058.00	11,399.57	7,252.00	87.71	90.55	113.94	3,839.31	-2,281.13	478.17	332.09	146.08	3.273	
11,100.00	7,058.00	11,499.57	7,252.00	90.03	92.72	113.94	3,838.43	-2,381.12	478.17	327.39	150.78	3.171	
11,200.00	7,058.00	11,599.57	7,252.00	92.38	94.94	113.94	3,837.55	-2,481.12	478.17	322.67	155.50	3.075	
11,300.00	7,058.00	11,699.57	7,252.00	94.75	97.20	113.94	3,836.66	-2,581.12	478.16	317.93	160.23	2.984	
11,400.00	7,058.00	11,799.57	7,252.00	97.15	99.50	113.94	3,835.78	-2,681.11	478.16	313.18	164.99	2.898	
11,500.00	7,058.00	11,899.57	7,252.00	99.57	101.82	113.94	3,834.90	-2,781.11	478.16	308.41	169.76	2.817	
11,600.00	7,058.00	11,999.57	7,252.00	102.01	104.18	113.94	3,834.02	-2,881.10	478.16	303.63	174.54	2.740	
11,700.00	7,058.00	12,099.57	7,252.00	104.47	106.56	113.94	3,833.14	-2,981.10	478.16	298.83	179.33	2.666	
11,800.00	7,058.00	12,199.57	7,252.00	106.94	108.96	113.94	3,832.26	-3,081.10	478.16	294.03	184.14	2.597	
11,900.00	7,058.00	12,299.57	7,252.00	109.43	111.38	113.94	3,831.38	-3,181.09	478.16	289.21	188.95	2.531	
12,000.00	7,058.00	12,399.57	7,252.00	111.93	113.82	113.94	3,830.49	-3,281.09	478.16	284.38	193.78	2.468	
12,100.00	7,058.00	12,499.57	7,252.00	114.44	116.28	113.94	3,829.61	-3,381.08	478.16	279.55	198.62	2.407	
12,200.00	7,058.00	12,599.57	7,252.00	116.96	118.75	113.94	3,828.73	-3,481.08	478.16	274.71	203.46	2.350	
12,300.00	7,058.00	12,699.57	7,252.00	119.49	121.24	113.94	3,827.85	-3,581.08	478.16	269.85	208.31	2.295	
12,400.00	7,058.00	12,799.57	7,252.00	122.03	123.73	113.94	3,826.97	-3,681.07	478.16	264.99	213.17	2.243	
12,500.00	7,058.00	12,899.57	7,252.00	124.58	126.24	113.94	3,826.09	-3,781.07	478.16	260.13	218.04	2.193	
12,600.00	7,058.00	12,999.57	7,252.00	127.14	128.76	113.94	3,825.21	-3,881.06	478.16	255.25	222.91	2.145	
12,700.00	7,058.00	13,099.57	7,252.00	129.70	131.29	113.94	3,824.32	-3,981.06	478.16	250.38	227.79	2.099	
12,800.00	7,058.00	13,199.57	7,252.00	132.27	133.82	113.94	3,823.44	-4,081.06	478.16	245.49	232.67	2.055	
12,900.00	7,058.00	13,299.57	7,252.00	134.85	136.37	113.94	3,822.56	-4,181.05	478.16	240.60	237.56	2.013	
13,000.00	7,058.00	13,399.57	7,252.00	137.44	138.92	113.94	3,821.68	-4,281.05	478.16	235.71	242.46	1.972	
13,100.00	7,058.00	13,499.57	7,252.00	140.02	141.48	113.94	3,820.80	-4,381.05	478.16	230.81	247.36	1.933	
13,200.00	7,058.00	13,599.57	7,252.00	142.62	144.04	113.94	3,819.92	-4,481.04	478.16	225.90	252.26	1.896	
13,300.00	7,058.00	13,699.57	7,252.00	145.22	146.61	113.94	3,819.04	-4,581.04	478.16	221.00	257.17	1.859	
13,400.00	7,058.00	13,799.57	7,252.00	147.82	149.19	113.94	3,818.15	-4,681.03	478.16	216.09	262.08	1.825	
13,500.00	7,058.00	13,899.57	7,252.00	150.43	151.78	113.94	3,817.27	-4,781.03	478.16	211.17	266.99	1.791	
13,600.00	7,058.00	13,999.57	7,252.00	153.04	154.36	113.94	3,816.39	-4,881.03	478.16	206.25	271.91	1.759	
13,700.00	7,058.00	14,099.57	7,252.00	155.66	156.96	113.94	3,815.51	-4,981.02	478.16	201.33	276.83	1.727	
13,800.00	7,058.00	14,199.57	7,252.00	158.27	159.56	113.94	3,814.63	-5,081.02	478.16	196.40	281.76	1.697	
13,900.00	7,058.00	14,299.57	7,252.00	160.90	162.16	113.94	3,813.75	-5,181.01	478.16	191.47	286.69	1.668	

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



<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-3-1H - 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
14,000.00	7,058.00	14,399.57	7,252.00	163.52	164.76	113.94	3,812.87	-5,281.01	478.16	186.54	291.62	1.640	
14,100.00	7,058.00	14,499.57	7,252.00	166.15	167.37	113.94	3,811.98	-5,381.01	478.16	181.61	296.55	1.612	
14,200.00	7,058.00	14,599.57	7,252.00	168.78	169.99	113.94	3,811.10	-5,481.00	478.16	176.67	301.49	1.586	
14,300.00	7,058.00	14,699.57	7,252.00	171.42	172.61	113.94	3,810.22	-5,581.00	478.16	171.73	306.43	1.560	
14,400.00	7,058.00	14,799.57	7,252.00	174.06	175.23	113.94	3,809.34	-5,680.99	478.16	166.79	311.37	1.536	
14,500.00	7,058.00	14,899.57	7,252.00	176.70	177.85	113.94	3,808.46	-5,780.99	478.16	161.85	316.31	1.512	
14,600.00	7,058.00	14,999.57	7,252.00	179.34	180.48	113.94	3,807.58	-5,880.99	478.16	156.90	321.26	1.488	Level 3
14,700.00	7,058.00	15,099.57	7,252.00	181.99	183.11	113.94	3,806.70	-5,980.98	478.16	151.96	326.21	1.466	Level 3
14,800.00	7,058.00	15,199.57	7,252.00	184.63	185.74	113.94	3,805.81	-6,080.98	478.16	147.01	331.16	1.444	Level 3
14,900.00	7,058.00	15,299.57	7,252.00	187.28	188.37	113.94	3,804.93	-6,180.98	478.16	142.06	336.11	1.423	Level 3
15,000.00	7,058.00	15,399.57	7,252.00	189.93	191.01	113.94	3,804.05	-6,280.97	478.16	137.10	341.06	1.402	Level 3
15,100.00	7,058.00	15,499.57	7,252.00	192.59	193.65	113.94	3,803.17	-6,380.97	478.16	132.15	346.01	1.382	Level 3
15,200.00	7,058.00	15,599.57	7,252.00	195.24	196.29	113.94	3,802.29	-6,480.96	478.16	127.19	350.97	1.362	Level 3
15,300.00	7,058.00	15,699.57	7,252.00	197.90	198.94	113.94	3,801.41	-6,580.96	478.16	122.23	355.93	1.343	Level 3
15,400.00	7,058.00	15,799.57	7,252.00	200.56	201.58	113.94	3,800.53	-6,680.96	478.16	117.28	360.89	1.325	Level 3
15,500.00	7,058.00	15,899.57	7,252.00	203.22	204.23	113.94	3,799.64	-6,780.95	478.16	112.31	365.85	1.307	Level 3
15,600.00	7,058.00	15,999.57	7,252.00	205.88	206.88	113.94	3,798.76	-6,880.95	478.16	107.35	370.81	1.290	Level 3
15,700.00	7,058.00	16,099.57	7,252.00	208.54	209.53	113.94	3,797.88	-6,980.94	478.16	102.39	375.77	1.272	Level 3
15,800.00	7,058.00	16,199.57	7,252.00	211.21	212.19	113.94	3,797.00	-7,080.94	478.16	97.42	380.74	1.256	Level 3
15,900.00	7,058.00	16,299.57	7,252.00	213.87	214.84	113.94	3,796.12	-7,180.94	478.16	92.46	385.70	1.240	Level 3
16,000.00	7,058.00	16,399.57	7,252.00	216.54	217.50	113.94	3,795.24	-7,280.93	478.16	87.49	390.67	1.224	Level 3
16,100.00	7,058.00	16,499.57	7,252.00	219.21	220.16	113.94	3,794.36	-7,380.93	478.16	82.52	395.64	1.209	Level 3
16,200.00	7,058.00	16,599.57	7,252.00	221.88	222.82	113.94	3,793.47	-7,480.92	478.16	77.55	400.61	1.194	Level 3
16,300.00	7,058.00	16,699.57	7,252.00	224.55	225.48	113.94	3,792.59	-7,580.92	478.16	72.58	405.58	1.179	Level 3
16,400.00	7,058.00	16,799.57	7,252.00	227.23	228.15	113.94	3,791.71	-7,680.92	478.16	67.61	410.55	1.165	Level 3
16,500.00	7,058.00	16,899.57	7,252.00	229.90	230.81	113.94	3,790.83	-7,780.91	478.16	62.64	415.52	1.151	Level 3
16,600.00	7,058.00	16,999.57	7,252.00	232.57	233.48	113.94	3,789.95	-7,880.91	478.16	57.67	420.49	1.137	Level 3
16,700.00	7,058.00	17,099.57	7,252.00	235.25	236.14	113.94	3,789.07	-7,980.91	478.16	52.69	425.47	1.124	Level 3
16,800.00	7,058.00	17,199.57	7,252.00	237.93	238.81	113.94	3,788.19	-8,080.90	478.16	47.72	430.44	1.111	Level 3
16,900.00	7,058.00	17,299.57	7,252.00	240.61	241.48	113.94	3,787.30	-8,180.90	478.16	42.74	435.42	1.098	Level 3
16,995.80	7,058.00	17,395.37	7,252.00	243.17	244.04	113.94	3,786.46	-8,276.70	478.16	37.97	440.19	1.086	Level 3
17,000.00	7,058.00	17,395.63	7,252.00	243.28	244.05	113.94	3,786.46	-8,276.95	478.18	37.44	440.74	1.085	Level 3
17,011.19	7,058.00	17,395.63	7,252.00	243.58	244.05	113.94	3,786.46	-8,276.95	478.40	36.29	442.11	1.082	Level 3, SF



<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-3-3H - ORIGINAL WELLBORE - PROPOSAL #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	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	-180.00	-18.21	0.00	18.21				
100.00	100.00	100.00	100.00	0.14	0.14	-180.00	-18.21	0.00	18.21	17.92	0.29	63.502	
200.00	200.00	200.00	200.00	0.50	0.50	-180.00	-18.21	0.00	18.21	17.21	1.00	18.143	
300.00	300.00	300.00	300.00	0.86	0.86	-180.00	-18.21	0.00	18.21	16.49	1.72	10.584	
400.00	400.00	400.00	400.00	1.22	1.22	-180.00	-18.21	0.00	18.21	15.77	2.44	7.471	
500.00	500.00	500.00	500.00	1.58	1.58	-180.00	-18.21	0.00	18.21	15.06	3.15	5.773	
600.00	600.00	600.00	600.00	1.94	1.94	-180.00	-18.21	0.00	18.21	14.34	3.87	4.704	
700.00	700.00	700.00	700.00	2.29	2.29	-180.00	-18.21	0.00	18.21	13.62	4.59	3.969	
800.00	800.00	800.00	800.00	2.65	2.65	-180.00	-18.21	0.00	18.21	12.91	5.31	3.433	
900.00	900.00	900.00	900.00	3.01	3.01	-180.00	-18.21	0.00	18.21	12.19	6.02	3.024	
1,000.00	1,000.00	1,000.00	1,000.00	3.37	3.37	-180.00	-18.21	0.00	18.21	11.47	6.74	2.702	
1,100.00	1,100.00	1,100.00	1,100.00	3.73	3.73	-180.00	-18.21	0.00	18.21	10.75	7.46	2.442	
1,200.00	1,200.00	1,200.00	1,200.00	4.09	4.09	-180.00	-18.21	0.00	18.21	10.04	8.17	2.228	
1,300.00	1,300.00	1,300.00	1,300.00	4.45	4.45	-180.00	-18.21	0.00	18.21	9.32	8.89	2.048	
1,350.00	1,350.00	1,350.00	1,350.00	4.62	4.62	-180.00	-18.21	0.00	18.21	8.96	9.25	1.969 CC	
1,400.00	1,400.00	1,400.00	1,400.00	4.80	4.80	-165.55	-18.21	0.00	18.63	9.03	9.61	1.940	
1,500.00	1,499.93	1,499.93	1,499.93	5.16	5.16	167.80	-18.21	0.00	22.03	11.71	10.32	2.134	
1,600.00	1,599.68	1,599.68	1,599.68	5.52	5.52	170.71	-18.21	0.00	28.89	17.85	11.04	2.616	
1,700.00	1,699.13	1,699.13	1,699.13	5.88	5.88	173.15	-18.21	0.00	39.24	27.48	11.76	3.338	
1,800.00	1,798.15	1,798.15	1,798.15	6.25	6.23	174.91	-18.21	0.00	53.08	40.61	12.47	4.257	
1,900.00	1,896.63	1,896.63	1,896.63	6.62	6.58	176.14	-18.21	0.00	70.40	57.21	13.18	5.341	
2,000.00	1,994.44	1,994.44	1,994.44	7.02	6.93	177.00	-18.21	0.00	91.15	77.26	13.89	6.562	
2,100.00	2,091.46	2,095.25	2,095.23	7.43	7.30	177.57	-16.70	0.46	113.80	99.19	14.61	7.790	
2,200.00	2,187.58	2,197.09	2,196.94	7.88	7.66	177.89	-11.72	1.96	136.42	121.10	15.32	8.905	
2,300.00	2,282.68	2,299.80	2,299.25	8.35	8.03	178.08	-3.21	4.53	158.97	142.95	16.02	9.922	
2,400.00	2,376.65	2,403.39	2,402.06	8.85	8.40	178.17	8.93	8.20	181.43	164.71	16.72	10.852	
2,500.00	2,469.36	2,507.87	2,505.22	9.40	8.78	178.20	24.77	12.98	203.75	186.34	17.41	11.705	
2,600.00	2,560.71	2,613.28	2,608.60	9.99	9.18	178.19	44.39	18.91	225.91	207.82	18.09	12.490	
2,700.00	2,650.59	2,719.61	2,712.07	10.62	9.60	178.15	67.85	25.99	247.87	229.11	18.76	13.212	
2,800.00	2,738.88	2,826.89	2,815.45	11.29	10.04	178.08	95.24	34.26	269.61	250.18	19.43	13.876	
2,900.00	2,825.48	2,935.12	2,918.60	12.02	10.52	177.99	126.60	43.74	291.10	271.00	20.09	14.487	
3,000.00	2,910.28	3,044.32	3,021.35	12.79	11.03	177.88	162.00	54.43	312.29	291.54	20.75	15.049	
3,100.00	2,993.18	3,154.50	3,123.51	13.62	11.59	177.76	201.49	66.36	333.16	311.75	21.41	15.563	
3,185.69	3,062.62	3,249.70	3,210.44	14.36	12.10	177.65	238.61	77.57	350.76	328.79	21.97	15.967	
3,200.00	3,074.09	3,265.68	3,224.90	14.49	12.19	177.63	245.11	79.53	353.63	331.57	22.06	16.029	
3,300.00	3,154.26	3,378.28	3,325.72	15.40	12.86	177.48	293.10	94.03	371.55	348.84	22.71	16.359	
3,400.00	3,234.42	3,492.32	3,425.73	16.32	13.59	177.30	345.54	109.86	385.57	362.21	23.36	16.504	
3,500.00	3,314.58	3,607.46	3,524.42	17.26	14.39	177.08	402.30	127.01	395.63	371.62	24.01	16.477	
3,600.00	3,394.75	3,723.34	3,621.26	18.21	15.26	176.81	463.21	145.40	401.70	377.04	24.66	16.290	
3,700.00	3,474.91	3,839.12	3,715.37	19.18	16.19	176.49	527.76	164.90	403.74	378.43	25.31	15.952	
3,800.00	3,555.07	3,939.10	3,795.50	20.15	17.04	176.19	584.99	182.19	403.88	377.62	26.26	15.381	
3,900.00	3,635.24	4,039.07	3,875.64	21.14	17.91	175.89	642.23	199.47	404.04	376.81	27.22	14.841	
4,000.00	3,715.40	4,139.05	3,955.77	22.13	18.80	175.59	699.46	216.76	404.20	376.00	28.20	14.331	
4,100.00	3,795.56	4,239.03	4,035.90	23.12	19.71	175.30	756.69	234.04	404.38	375.18	29.20	13.849	
4,200.00	3,875.73	4,339.01	4,116.04	24.13	20.63	175.00	813.92	251.33	404.57	374.36	30.21	13.393	
4,300.00	3,955.89	4,438.99	4,196.17	25.13	21.57	174.70	871.15	268.62	404.77	373.54	31.23	12.962	
4,400.00	4,036.05	4,538.96	4,276.30	26.14	22.51	174.41	928.38	285.90	404.97	372.71	32.26	12.553	
4,500.00	4,116.22	4,638.94	4,356.44	27.16	23.47	174.11	985.62	303.19	405.19	371.89	33.30	12.166	
4,600.00	4,196.38	4,738.92	4,436.57	28.18	24.44	173.81	1,042.85	320.47	405.43	371.06	34.36	11.799	
4,700.00	4,276.54	4,838.90	4,516.70	29.20	25.41	173.52	1,100.08	337.76	405.67	370.24	35.43	11.451	
4,800.00	4,356.71	4,938.87	4,596.84	30.22	26.39	173.22	1,157.31	355.05	405.92	369.41	36.51	11.120	
4,900.00	4,436.87	5,038.85	4,676.97	31.25	27.38	172.93	1,214.54	372.33	406.18	368.59	37.59	10.805	

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

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-3-3H - 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		Rule Assigned:	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor
5,000.00	4,517.03	5,138.83	4,757.10	32.28	28.37	172.63	1,271.77	389.62	406.46	367.77	38.69	10.505
5,100.00	4,597.19	5,238.81	4,837.24	33.31	29.37	172.34	1,329.00	406.90	406.74	366.94	39.80	10.220
5,200.00	4,677.36	5,338.79	4,917.37	34.34	30.37	172.05	1,386.24	424.19	407.04	366.12	40.92	9.948
5,300.00	4,757.52	5,438.76	4,997.50	35.37	31.38	171.75	1,443.47	441.47	407.34	365.30	42.04	9.689
5,400.00	4,837.68	5,538.74	5,077.63	36.41	32.39	171.46	1,500.70	458.76	407.66	364.48	43.18	9.441
5,500.00	4,917.85	5,638.72	5,157.77	37.45	33.40	171.17	1,557.93	476.05	407.99	363.66	44.33	9.204
5,600.00	4,998.01	5,738.70	5,237.90	38.49	34.42	170.88	1,615.16	493.33	408.32	362.84	45.48	8.978
5,700.00	5,078.17	5,838.68	5,318.03	39.53	35.44	170.59	1,672.39	510.62	408.67	362.03	46.65	8.761
5,800.00	5,158.34	5,938.65	5,398.17	40.57	36.46	170.29	1,729.63	527.90	409.03	361.21	47.82	8.554
5,900.00	5,238.50	6,038.63	5,478.30	41.61	37.48	170.00	1,786.86	545.19	409.40	360.40	49.00	8.355
6,000.00	5,318.66	6,138.61	5,558.43	42.65	38.51	169.71	1,844.09	562.47	409.78	359.59	50.19	8.164
6,100.00	5,398.83	6,238.59	5,638.57	43.69	39.54	169.43	1,901.32	579.76	410.17	358.78	51.40	7.981
6,200.00	5,478.99	6,338.56	5,718.70	44.74	40.57	169.14	1,958.55	597.05	410.57	357.97	52.61	7.804
6,300.00	5,559.15	6,438.54	5,798.83	45.78	41.60	168.85	2,015.78	614.33	410.98	357.16	53.83	7.635
6,400.00	5,639.32	6,538.52	5,878.97	46.83	42.64	168.56	2,073.01	631.62	411.41	356.35	55.06	7.472
6,500.00	5,719.48	6,638.50	5,959.10	47.88	43.67	168.27	2,130.25	648.90	411.84	355.54	56.30	7.316
6,600.00	5,799.64	6,738.48	6,039.23	48.92	44.71	167.99	2,187.48	666.19	412.28	354.74	57.54	7.165
6,700.00	5,879.81	6,838.45	6,119.37	49.97	45.74	167.70	2,244.71	683.47	412.73	353.93	58.80	7.019
6,800.00	5,959.97	6,938.43	6,199.50	51.02	46.78	167.42	2,301.94	700.76	413.20	353.13	60.07	6.879
6,900.00	6,040.13	7,038.41	6,279.63	52.07	47.82	167.13	2,359.17	718.05	413.67	352.33	61.34	6.743
7,000.00	6,120.29	7,138.39	6,359.77	53.12	48.87	166.85	2,416.40	735.33	414.15	351.52	62.63	6.613
7,100.00	6,200.46	7,238.36	6,439.90	54.17	49.91	166.57	2,473.63	752.62	414.65	350.72	63.92	6.487
7,200.00	6,280.62	7,338.34	6,520.03	55.22	50.95	166.28	2,530.87	769.90	415.15	349.92	65.23	6.365
7,300.00	6,360.78	7,438.32	6,600.16	56.27	51.99	166.00	2,588.10	787.19	415.66	349.12	66.54	6.247
7,400.00	6,440.95	7,539.73	6,682.12	57.32	53.02	166.61	2,646.57	798.30	416.02	348.67	67.36	6.176
7,498.05	6,519.54	7,635.16	6,759.64	58.35	53.89	169.38	2,701.75	792.61	416.63	349.46	67.17	6.203
7,500.00	6,521.11	7,636.99	6,761.11	58.37	53.90	169.71	2,702.80	792.34	416.65	349.50	67.16	6.204
7,550.00	6,561.44	7,683.15	6,798.08	58.89	54.28	178.37	2,729.06	783.78	417.62	350.59	67.03	6.230
7,600.00	6,602.00	7,728.33	6,833.62	59.38	54.62	-172.82	2,754.28	771.90	419.04	351.99	67.05	6.249
7,650.00	6,642.50	7,772.62	6,867.63	59.85	54.93	-164.13	2,778.38	756.95	420.87	353.67	67.20	6.263
7,700.00	6,682.61	7,816.11	6,900.02	60.29	55.21	-155.80	2,801.31	739.18	423.04	355.59	67.45	6.272
7,750.00	6,722.05	7,858.87	6,930.72	60.69	55.45	-148.04	2,823.01	718.83	425.49	357.74	67.75	6.281
7,800.00	6,760.50	7,900.00	6,959.01	61.07	55.67	-141.00	2,842.98	696.66	428.14	360.08	68.06	6.291
7,850.00	6,797.68	7,942.52	6,986.83	61.41	55.86	-134.63	2,862.58	671.20	430.93	362.56	68.37	6.303
7,900.00	6,833.29	7,983.52	7,012.15	61.71	56.03	-129.03	2,880.39	644.31	433.78	365.13	68.65	6.319
7,950.00	6,867.08	8,024.07	7,035.58	61.99	56.17	-124.13	2,896.85	615.61	436.63	367.72	68.90	6.337
8,000.00	6,898.78	8,064.21	7,057.10	62.23	56.30	-119.88	2,911.93	585.28	439.40	370.27	69.13	6.356
8,050.00	6,928.16	8,100.00	7,074.80	62.43	56.39	-116.29	2,924.29	556.74	442.06	372.79	69.28	6.381
8,100.00	6,954.98	8,143.47	7,094.30	62.60	56.48	-113.11	2,937.88	520.36	444.49	374.94	69.55	6.391
8,150.00	6,979.04	8,182.68	7,109.92	62.74	56.54	-110.49	2,948.72	486.07	446.71	376.91	69.79	6.400
8,200.00	7,000.17	8,221.68	7,123.53	62.85	56.59	-108.32	2,958.12	450.77	448.64	378.55	70.09	6.401
8,250.00	7,018.20	8,260.49	7,135.10	62.93	56.62	-106.56	2,966.06	414.59	450.26	379.80	70.46	6.391
8,300.00	7,032.99	8,300.00	7,144.82	62.98	56.63	-105.20	2,972.67	376.87	451.53	380.61	70.91	6.367
8,350.00	7,044.43	8,337.73	7,152.10	63.00	56.62	-104.21	2,977.55	340.18	452.42	380.94	71.49	6.329
8,400.00	7,052.43	8,376.24	7,157.49	63.00	56.61	-103.57	2,981.07	302.23	452.93	380.76	72.17	6.276
8,450.00	7,056.94	8,414.71	7,160.79	62.97	56.58	-103.27	2,983.10	263.95	453.04	380.08	72.96	6.209
8,488.77	7,058.00	8,450.00	7,161.97	62.93	56.54	-103.27	2,983.65	228.70	452.90	379.34	73.56	6.157
8,500.00	7,058.00	8,453.20	7,161.99	62.92	56.54	-103.28	2,983.63	225.50	452.80	378.94	73.85	6.131
8,600.00	7,058.00	8,552.37	7,162.00	62.81	56.42	-103.28	2,982.81	126.33	452.75	377.33	75.42	6.003
8,601.04	7,058.00	8,553.42	7,162.00	62.81	56.42	-103.28	2,982.80	125.28	452.75	377.31	75.44	6.001
8,700.00	7,058.00	8,652.37	7,162.00	62.74	56.33	-103.28	2,981.97	26.33	452.71	375.42	77.29	5.857
8,800.00	7,058.00	8,752.37	7,162.00	62.71	56.29	-103.28	2,981.13	-73.67	452.67	373.20	79.47	5.696

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design:		SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-3-3H - 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		
8,900.00	7,058.00	8,852.37	7,162.00	62.71	56.29	-103.28	2,980.29	-173.66	452.63	370.68	81.94	5.524			
9,000.00	7,058.00	8,952.37	7,162.00	62.76	56.33	-103.28	2,979.45	-273.66	452.59	367.91	84.67	5.345			
9,100.00	7,058.00	9,052.37	7,162.00	62.86	56.44	-103.29	2,978.61	-373.66	452.54	364.91	87.64	5.164			
9,200.00	7,058.00	9,152.37	7,162.00	63.01	56.62	-103.29	2,977.77	-473.65	452.50	361.68	90.82	4.983			
9,300.00	7,058.00	9,252.37	7,162.00	63.23	56.90	-103.29	2,976.94	-573.65	452.46	358.27	94.19	4.804			
9,400.00	7,058.00	9,352.37	7,162.00	63.54	57.30	-103.29	2,976.10	-673.64	452.42	354.68	97.74	4.629			
9,500.00	7,058.00	9,452.37	7,162.00	63.95	57.87	-103.29	2,975.26	-773.64	452.38	350.94	101.44	4.460			
9,600.00	7,058.00	9,552.37	7,162.00	64.49	58.63	-103.29	2,974.42	-873.64	452.34	347.06	105.28	4.297			
9,700.00	7,058.00	9,652.37	7,162.00	65.17	59.62	-103.29	2,973.58	-973.63	452.29	343.06	109.24	4.140			
9,800.00	7,058.00	9,752.37	7,162.00	66.02	60.85	-103.29	2,972.74	-1,073.63	452.25	338.94	113.31	3.991			
9,900.00	7,058.00	9,852.37	7,162.00	67.06	62.31	-103.30	2,971.90	-1,173.63	452.21	334.73	117.48	3.849			
10,000.00	7,058.00	9,952.37	7,162.00	68.29	63.97	-103.30	2,971.07	-1,273.62	452.17	330.43	121.74	3.714			
10,100.00	7,058.00	10,052.37	7,162.00	69.70	65.79	-103.30	2,970.23	-1,373.62	452.13	326.05	126.08	3.586			
10,200.00	7,058.00	10,152.37	7,162.00	71.29	67.73	-103.30	2,969.39	-1,473.62	452.09	321.59	130.49	3.464			
10,300.00	7,058.00	10,252.37	7,162.00	73.02	69.78	-103.30	2,968.55	-1,573.61	452.04	317.07	134.97	3.349			
10,400.00	7,058.00	10,352.37	7,162.00	74.88	71.91	-103.30	2,967.71	-1,673.61	452.00	312.50	139.51	3.240			
10,500.00	7,058.00	10,452.37	7,162.00	76.84	74.10	-103.30	2,966.87	-1,773.61	451.96	307.87	144.09	3.137			
10,600.00	7,058.00	10,552.37	7,162.00	78.89	76.35	-103.30	2,966.03	-1,873.60	451.92	303.19	148.73	3.038			
10,700.00	7,058.00	10,652.37	7,162.00	81.02	78.64	-103.31	2,965.20	-1,973.60	451.88	298.47	153.41	2.946			
10,800.00	7,058.00	10,752.37	7,162.00	83.20	80.97	-103.31	2,964.36	-2,073.60	451.84	293.70	158.13	2.857			
10,900.00	7,058.00	10,852.37	7,162.00	85.44	83.33	-103.31	2,963.52	-2,173.59	451.79	288.91	162.89	2.774			
11,000.00	7,058.00	10,952.37	7,162.00	87.71	85.72	-103.31	2,962.68	-2,273.59	451.75	284.07	167.68	2.694			
11,100.00	7,058.00	11,052.37	7,162.00	90.03	88.13	-103.31	2,961.84	-2,373.58	451.71	279.21	172.50	2.619			
11,200.00	7,058.00	11,152.37	7,162.00	92.38	90.56	-103.31	2,961.00	-2,473.58	451.67	274.32	177.35	2.547			
11,300.00	7,058.00	11,252.37	7,162.00	94.75	93.01	-103.31	2,960.16	-2,573.58	451.63	269.41	182.22	2.478			
11,400.00	7,058.00	11,352.37	7,162.00	97.15	95.48	-103.31	2,959.33	-2,673.57	451.59	264.47	187.12	2.413			
11,500.00	7,058.00	11,452.37	7,162.00	99.57	97.96	-103.32	2,958.49	-2,773.57	451.54	259.50	192.04	2.351			
11,600.00	7,058.00	11,552.37	7,162.00	102.01	100.46	-103.32	2,957.65	-2,873.57	451.50	254.52	196.98	2.292			
11,700.00	7,058.00	11,652.37	7,162.00	104.47	102.97	-103.32	2,956.81	-2,973.56	451.46	249.52	201.94	2.236			
11,800.00	7,058.00	11,752.37	7,162.00	106.94	105.49	-103.32	2,955.97	-3,073.56	451.42	244.50	206.92	2.182			
11,900.00	7,058.00	11,852.37	7,162.00	109.43	108.02	-103.32	2,955.13	-3,173.56	451.38	239.47	211.91	2.130			
12,000.00	7,058.00	11,952.37	7,162.00	111.93	110.57	-103.32	2,954.29	-3,273.55	451.34	234.42	216.92	2.081			
12,100.00	7,058.00	12,052.37	7,162.00	114.44	113.12	-103.32	2,953.46	-3,373.55	451.29	229.36	221.94	2.033			
12,200.00	7,058.00	12,152.37	7,162.00	116.96	115.67	-103.32	2,952.62	-3,473.55	451.25	224.28	226.97	1.988			
12,300.00	7,058.00	12,252.37	7,162.00	119.49	118.24	-103.33	2,951.78	-3,573.54	451.21	219.19	232.02	1.945			
12,400.00	7,058.00	12,352.37	7,162.00	122.03	120.81	-103.33	2,950.94	-3,673.54	451.17	214.09	237.08	1.903			
12,500.00	7,058.00	12,452.37	7,162.00	124.58	123.39	-103.33	2,950.10	-3,773.54	451.13	208.98	242.15	1.863			
12,600.00	7,058.00	12,552.37	7,162.00	127.14	125.98	-103.33	2,949.26	-3,873.53	451.09	203.86	247.23	1.825			
12,700.00	7,058.00	12,652.37	7,162.00	129.70	128.57	-103.33	2,948.42	-3,973.53	451.04	198.73	252.32	1.788			
12,800.00	7,058.00	12,752.37	7,162.00	132.27	131.16	-103.33	2,947.59	-4,073.52	451.00	193.59	257.41	1.752			
12,900.00	7,058.00	12,852.37	7,162.00	134.85	133.76	-103.33	2,946.75	-4,173.52	450.96	188.44	262.52	1.718			
13,000.00	7,058.00	12,952.37	7,162.00	137.44	136.37	-103.33	2,945.91	-4,273.52	450.92	183.28	267.64	1.685			
13,100.00	7,058.00	13,052.37	7,162.00	140.02	138.98	-103.34	2,945.07	-4,373.51	450.88	178.12	272.76	1.653			
13,200.00	7,058.00	13,152.37	7,162.00	142.62	141.60	-103.34	2,944.23	-4,473.51	450.84	172.95	277.89	1.622			
13,300.00	7,058.00	13,252.37	7,162.00	145.22	144.21	-103.34	2,943.39	-4,573.51	450.79	167.77	283.02	1.593			
13,400.00	7,058.00	13,352.37	7,162.00	147.82	146.84	-103.34	2,942.55	-4,673.50	450.75	162.59	288.16	1.564			
13,500.00	7,058.00	13,452.37	7,162.00	150.43	149.46	-103.34	2,941.72	-4,773.50	450.71	157.40	293.31	1.537			
13,600.00	7,058.00	13,552.37	7,162.00	153.04	152.09	-103.34	2,940.88	-4,873.50	450.67	152.21	298.46	1.510			
13,700.00	7,058.00	13,652.37	7,162.00	155.66	154.73	-103.34	2,940.04	-4,973.49	450.63	147.00	303.62	1.484 Level 3			
13,800.00	7,058.00	13,752.37	7,162.00	158.27	157.36	-103.34	2,939.20	-5,073.49	450.59	141.80	308.79	1.459 Level 3			
13,900.00	7,058.00	13,852.37	7,162.00	160.90	160.00	-103.35	2,938.36	-5,173.49	450.54	136.59	313.96	1.435 Level 3			
14,000.00	7,058.00	13,952.37	7,162.00	163.52	162.64	-103.35	2,937.52	-5,273.48	450.50	131.37	319.13	1.412 Level 3			

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-3-3H - ORIGINAL WELLBORE - PROPOSAL #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
14,100.00	7,058.00	14,052.37	7,162.00	166.15	165.28	-103.35	2,936.69	-5,373.48	450.46	126.15	324.31	1.389	Level 3
14,200.00	7,058.00	14,152.37	7,162.00	168.78	167.93	-103.35	2,935.85	-5,473.48	450.42	120.93	329.49	1.367	Level 3
14,300.00	7,058.00	14,252.37	7,162.00	171.42	170.58	-103.35	2,935.01	-5,573.47	450.38	115.70	334.67	1.346	Level 3
14,400.00	7,058.00	14,352.37	7,162.00	174.06	173.23	-103.35	2,934.17	-5,673.47	450.34	110.47	339.86	1.325	Level 3
14,500.00	7,058.00	14,452.37	7,162.00	176.70	175.88	-103.35	2,933.33	-5,773.46	450.29	105.24	345.06	1.305	Level 3
14,600.00	7,058.00	14,552.37	7,162.00	179.34	178.54	-103.35	2,932.49	-5,873.46	450.25	100.00	350.25	1.286	Level 3
14,700.00	7,058.00	14,652.37	7,162.00	181.99	181.19	-103.36	2,931.65	-5,973.46	450.21	94.76	355.45	1.267	Level 3
14,800.00	7,058.00	14,752.37	7,162.00	184.63	183.85	-103.36	2,930.82	-6,073.45	450.17	89.51	360.66	1.248	Level 3
14,900.00	7,058.00	14,852.37	7,162.00	187.28	186.51	-103.36	2,929.98	-6,173.45	450.13	84.27	365.86	1.230	Level 3
15,000.00	7,058.00	14,952.37	7,162.00	189.93	189.17	-103.36	2,929.14	-6,273.45	450.09	79.02	371.07	1.213	Level 3
15,100.00	7,058.00	15,052.37	7,162.00	192.59	191.84	-103.36	2,928.30	-6,373.44	450.04	73.76	376.28	1.196	Level 3
15,200.00	7,058.00	15,152.37	7,162.00	195.24	194.50	-103.36	2,927.46	-6,473.44	450.00	68.51	381.50	1.180	Level 3
15,300.00	7,058.00	15,252.37	7,162.00	197.90	197.17	-103.36	2,926.62	-6,573.44	449.96	63.25	386.71	1.164	Level 3
15,400.00	7,058.00	15,352.37	7,162.00	200.56	199.84	-103.36	2,925.78	-6,673.43	449.92	57.99	391.93	1.148	Level 3
15,500.00	7,058.00	15,452.37	7,162.00	203.22	202.51	-103.37	2,924.95	-6,773.43	449.88	52.72	397.16	1.133	Level 3
15,600.00	7,058.00	15,552.37	7,162.00	205.88	205.18	-103.37	2,924.11	-6,873.43	449.84	47.46	402.38	1.118	Level 3
15,700.00	7,058.00	15,652.37	7,162.00	208.54	207.85	-103.37	2,923.27	-6,973.42	449.79	42.19	407.61	1.104	Level 3
15,800.00	7,058.00	15,752.37	7,162.00	211.21	210.52	-103.37	2,922.43	-7,073.42	449.75	36.92	412.83	1.089	Level 3
15,900.00	7,058.00	15,852.37	7,162.00	213.87	213.20	-103.37	2,921.59	-7,173.42	449.71	31.65	418.06	1.076	Level 3
16,000.00	7,058.00	15,952.37	7,162.00	216.54	215.88	-103.37	2,920.75	-7,273.41	449.67	26.37	423.30	1.062	Level 3
16,100.00	7,058.00	16,052.37	7,162.00	219.21	218.55	-103.37	2,919.91	-7,373.41	449.63	21.10	428.53	1.049	Level 3
16,200.00	7,058.00	16,152.37	7,162.00	221.88	221.23	-103.38	2,919.08	-7,473.40	449.59	15.82	433.77	1.036	Level 3
16,300.00	7,058.00	16,252.37	7,162.00	224.55	223.91	-103.38	2,918.24	-7,573.40	449.54	10.54	439.00	1.024	Level 3
16,400.00	7,058.00	16,352.37	7,162.00	227.23	226.59	-103.38	2,917.40	-7,673.40	449.50	5.26	444.24	1.012	Level 3
16,500.00	7,058.00	16,452.37	7,162.00	229.90	229.27	-103.38	2,916.56	-7,773.39	449.46	-0.02	449.48	1.000	Level 3
16,600.00	7,058.00	16,552.37	7,162.00	232.57	231.95	-103.38	2,915.72	-7,873.39	449.42	-5.31	454.73	0.988	Level 3
16,700.00	7,058.00	16,652.37	7,162.00	235.25	234.64	-103.38	2,914.88	-7,973.39	449.38	-10.59	459.97	0.977	Level 3
16,800.00	7,058.00	16,752.37	7,162.00	237.93	237.32	-103.38	2,914.04	-8,073.38	449.34	-15.88	465.21	0.966	Level 3
16,900.00	7,058.00	16,852.37	7,162.00	240.61	240.00	-103.38	2,913.21	-8,173.38	449.29	-21.17	470.46	0.955	Level 3
17,000.00	7,058.00	16,952.37	7,162.00	243.28	242.69	-103.39	2,912.37	-8,273.38	449.25	-26.45	475.71	0.944	Level 3
17,011.19	7,058.00	16,963.56	7,162.00	243.58	242.99	-103.39	2,912.27	-8,284.57	449.25	-27.05	476.30	0.943	Level 3, ES, SF

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-3-4H - 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	180.00	-32.79	0.00	32.79				
100.00	100.00	100.00	100.00	0.14	0.14	180.00	-32.79	0.00	32.79	32.50	0.29	114.328	
200.00	200.00	200.00	200.00	0.50	0.50	180.00	-32.79	0.00	32.79	31.78	1.00	32.665	
300.00	300.00	300.00	300.00	0.86	0.86	180.00	-32.79	0.00	32.79	31.07	1.72	19.055	
400.00	400.00	400.00	400.00	1.22	1.22	180.00	-32.79	0.00	32.79	30.35	2.44	13.450	
500.00	500.00	500.00	500.00	1.58	1.58	180.00	-32.79	0.00	32.79	29.63	3.15	10.394	
600.00	600.00	600.00	600.00	1.94	1.94	180.00	-32.79	0.00	32.79	28.92	3.87	8.469	
700.00	700.00	700.00	700.00	2.29	2.29	180.00	-32.79	0.00	32.79	28.20	4.59	7.146	
800.00	800.00	800.00	800.00	2.65	2.65	180.00	-32.79	0.00	32.79	27.48	5.31	6.180	
900.00	900.00	900.00	900.00	3.01	3.01	180.00	-32.79	0.00	32.79	26.76	6.02	5.444	
1,000.00	1,000.00	1,000.00	1,000.00	3.37	3.37	180.00	-32.79	0.00	32.79	26.05	6.74	4.865	
1,100.00	1,100.00	1,100.00	1,100.00	3.73	3.73	180.00	-32.79	0.00	32.79	25.33	7.46	4.397	
1,200.00	1,200.00	1,200.00	1,200.00	4.09	4.09	180.00	-32.79	0.00	32.79	24.61	8.17	4.012	
1,300.00	1,300.00	1,300.00	1,300.00	4.45	4.45	180.00	-32.79	0.00	32.79	23.90	8.89	3.688	
1,350.00	1,350.00	1,350.00	1,350.00	4.62	4.62	180.00	-32.79	0.00	32.79	23.54	9.25	3.545 CC, ES	
1,400.00	1,400.00	1,400.00	1,400.00	4.80	4.80	165.40	-32.79	0.00	33.21	23.60	9.61	3.457	
1,500.00	1,499.93	1,499.93	1,499.93	5.16	5.16	166.76	-32.79	0.00	36.60	26.27	10.32	3.545	
1,600.00	1,599.68	1,599.68	1,599.68	5.52	5.52	168.85	-32.79	0.00	43.42	32.38	11.04	3.933	
1,700.00	1,699.13	1,699.13	1,699.13	5.88	5.88	170.97	-32.79	0.00	53.71	41.95	11.76	4.569	
1,800.00	1,798.15	1,798.15	1,798.15	6.25	6.23	172.79	-32.79	0.00	67.49	55.02	12.47	5.412	
1,900.00	1,896.63	1,896.63	1,896.63	6.62	6.58	174.23	-32.79	0.00	84.75	71.57	13.18	6.429	
2,000.00	1,994.44	1,994.44	1,994.44	7.02	6.93	175.33	-32.79	0.00	105.46	91.57	13.89	7.592	
2,100.00	2,091.46	2,091.46	2,091.46	7.43	7.28	176.17	-32.79	0.00	129.59	114.99	14.60	8.877	
2,200.00	2,187.58	2,192.59	2,192.57	7.88	7.64	176.76	-31.37	0.49	155.70	140.38	15.32	10.163	
2,300.00	2,282.68	2,295.11	2,294.96	8.35	8.01	177.10	-26.52	2.19	181.79	165.75	16.04	11.336	
2,400.00	2,376.65	2,398.65	2,398.11	8.85	8.38	177.26	-18.11	5.14	207.81	191.06	16.75	12.409	
2,500.00	2,469.36	2,503.23	2,501.90	9.40	8.76	177.31	-6.05	9.36	233.71	216.26	17.45	13.393	
2,600.00	2,560.71	2,608.88	2,606.21	9.99	9.14	177.28	9.76	14.89	259.47	241.32	18.15	14.297	
2,700.00	2,650.59	2,715.63	2,710.90	10.62	9.54	177.18	29.41	21.77	285.04	266.20	18.84	15.130	
2,800.00	2,738.88	2,823.48	2,815.82	11.29	9.97	177.04	52.98	30.02	310.39	290.86	19.52	15.897	
2,900.00	2,825.48	2,932.47	2,920.80	12.02	10.42	176.86	80.57	39.67	335.48	315.27	20.21	16.603	
3,000.00	2,910.28	3,042.61	3,025.69	12.79	10.90	176.65	112.27	50.77	360.27	339.39	20.88	17.252	
3,100.00	2,993.18	3,153.91	3,130.30	13.62	11.42	176.40	148.13	63.32	384.73	363.17	21.56	17.847	
3,185.69	3,062.62	3,250.22	3,219.57	14.36	11.90	176.18	182.25	75.26	405.40	383.26	22.13	18.315	
3,200.00	3,074.09	3,266.40	3,234.44	14.49	11.99	176.14	188.25	77.36	408.79	386.55	22.23	18.387	
3,300.00	3,154.26	3,380.62	3,338.39	15.40	12.61	175.86	232.91	92.99	430.28	407.37	22.90	18.786	
3,400.00	3,234.42	3,496.64	3,441.97	16.32	13.30	175.52	282.23	110.25	447.88	424.30	23.58	18.994	
3,500.00	3,314.58	3,614.11	3,544.60	17.26	14.06	175.11	336.16	129.13	461.51	437.25	24.26	19.023	
3,600.00	3,394.75	3,732.67	3,645.71	18.21	14.89	174.64	394.57	149.57	471.12	446.17	24.95	18.886	
3,700.00	3,474.91	3,848.27	3,741.80	19.18	15.76	174.10	455.24	170.80	476.74	451.06	25.68	18.563	
3,800.00	3,555.07	3,948.10	3,823.97	20.15	16.55	173.62	508.74	189.52	481.03	454.39	26.65	18.052	
3,900.00	3,635.24	4,047.93	3,906.15	21.14	17.37	173.15	562.24	208.25	485.36	457.73	27.63	17.565	
4,000.00	3,715.40	4,147.76	3,988.32	22.13	18.21	172.68	615.73	226.97	489.72	461.09	28.64	17.102	
4,100.00	3,795.56	4,247.58	4,070.50	23.12	19.06	172.23	669.23	245.69	494.12	464.46	29.66	16.661	
4,200.00	3,875.73	4,347.41	4,152.67	24.13	19.93	171.78	722.73	264.42	498.54	467.84	30.70	16.241	
4,300.00	3,955.89	4,447.24	4,234.85	25.13	20.81	171.34	776.23	283.14	502.99	471.24	31.75	15.841	
4,400.00	4,036.05	4,547.06	4,317.03	26.14	21.71	170.91	829.72	301.86	507.47	474.65	32.82	15.460	
4,500.00	4,116.22	4,646.89	4,399.20	27.16	22.61	170.49	883.22	320.59	511.98	478.07	33.91	15.097	
4,600.00	4,196.38	4,746.72	4,481.38	28.18	23.53	170.07	936.72	339.31	516.52	481.51	35.01	14.751	
4,700.00	4,276.54	4,846.54	4,563.55	29.20	24.45	169.66	990.22	358.03	521.09	484.95	36.13	14.422	
4,800.00	4,356.71	4,946.37	4,645.73	30.22	25.38	169.26	1,043.71	376.76	525.68	488.41	37.26	14.107	
4,900.00	4,436.87	5,046.20	4,727.91	31.25	26.32	168.86	1,097.21	395.48	530.29	491.88	38.41	13.807	

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-3-4H - ORIGINAL WELLBORE - PROPOSAL #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Separation Factor</b>	<b>Warning</b>	
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>	<b>Minimum Separation (usft)</b>		
5,000.00	4,517.03	5,146.02	4,810.08	32.28	27.26	168.47	1,150.71	414.20	534.93	495.37	39.57	13.520	
5,100.00	4,597.19	5,245.85	4,892.26	33.31	28.21	168.09	1,204.21	432.93	539.60	498.86	40.74	13.245	
5,200.00	4,677.36	5,345.68	4,974.43	34.34	29.16	167.72	1,257.70	451.65	544.29	502.36	41.92	12.983	
5,300.00	4,757.52	5,445.51	5,056.61	35.37	30.12	167.35	1,311.20	470.37	549.00	505.88	43.12	12.732	
5,400.00	4,837.68	5,545.33	5,138.78	36.41	31.08	166.98	1,364.70	489.10	553.73	509.40	44.33	12.492	
5,500.00	4,917.85	5,645.16	5,220.96	37.45	32.04	166.63	1,418.20	507.82	558.49	512.94	45.55	12.261	
5,600.00	4,998.01	5,744.99	5,303.14	38.49	33.01	166.28	1,471.69	526.54	563.27	516.49	46.78	12.041	
5,700.00	5,078.17	5,844.81	5,385.31	39.53	33.98	165.93	1,525.19	545.27	568.06	520.04	48.02	11.829	
5,800.00	5,158.34	5,944.64	5,467.49	40.57	34.95	165.59	1,578.69	563.99	572.88	523.61	49.28	11.626	
5,900.00	5,238.50	6,044.47	5,549.66	41.61	35.93	165.26	1,632.19	582.71	577.72	527.18	50.54	11.431	
6,000.00	5,318.66	6,144.29	5,631.84	42.65	36.90	164.93	1,685.69	601.44	582.58	530.76	51.81	11.244	
6,100.00	5,398.83	6,244.12	5,714.01	43.69	37.88	164.61	1,739.18	620.16	587.45	534.35	53.10	11.063	
6,200.00	5,478.99	6,343.95	5,796.19	44.74	38.87	164.29	1,792.68	638.88	592.35	537.95	54.39	10.890	
6,300.00	5,559.15	6,443.77	5,878.37	45.78	39.85	163.98	1,846.18	657.61	597.26	541.56	55.70	10.723	
6,400.00	5,639.32	6,543.60	5,960.54	46.83	40.84	163.67	1,899.68	676.33	602.19	545.18	57.01	10.563	
6,500.00	5,719.48	6,643.43	6,042.72	47.88	41.82	163.37	1,953.17	695.05	607.13	548.80	58.33	10.408	
6,600.00	5,799.64	6,743.26	6,124.89	48.92	42.81	163.08	2,006.67	713.78	612.09	552.43	59.66	10.259	
6,700.00	5,879.81	6,843.08	6,207.07	49.97	43.80	162.78	2,060.17	732.50	617.07	556.07	61.00	10.115	
6,800.00	5,959.97	6,942.91	6,289.25	51.02	44.79	162.50	2,113.67	751.22	622.07	559.71	62.35	9.977	
6,900.00	6,040.13	7,042.74	6,371.42	52.07	45.78	162.21	2,167.16	769.95	627.08	563.37	63.71	9.843	
7,000.00	6,120.29	7,150.65	6,461.02	53.12	46.82	162.49	2,225.44	783.92	631.60	566.89	64.70	9.761	
7,100.00	6,200.46	7,256.36	6,549.46	54.17	47.71	164.47	2,282.80	778.40	634.95	570.25	64.69	9.815	
7,200.00	6,280.62	7,351.39	6,627.11	55.22	48.38	167.65	2,333.02	756.99	638.90	574.67	64.22	9.948	
7,300.00	6,360.78	7,432.99	6,690.69	56.27	48.86	171.36	2,374.04	726.63	646.07	582.23	63.84	10.120	
7,400.00	6,440.95	7,500.00	6,739.81	57.32	49.19	174.98	2,405.65	693.86	659.03	595.27	63.76	10.336	
7,498.05	6,519.54	7,556.53	6,778.53	58.35	49.41	178.36	2,430.51	661.07	679.16	615.36	63.80	10.645	
7,500.00	6,521.11	7,557.53	6,779.19	58.37	49.42	178.73	2,430.93	660.45	679.64	615.84	63.80	10.653	
7,550.00	6,561.44	7,583.14	6,795.78	58.89	49.51	-171.68	2,441.56	644.10	692.66	628.85	63.81	10.855	
7,600.00	6,602.00	7,608.69	6,811.72	59.38	49.59	-161.91	2,451.77	626.93	706.71	642.93	63.79	11.079	
7,650.00	6,642.50	7,634.21	6,826.98	59.85	49.66	-152.26	2,461.52	608.95	721.48	657.78	63.70	11.326	
7,700.00	6,682.61	7,659.70	6,841.53	60.29	49.73	-142.99	2,470.81	590.21	736.68	673.13	63.55	11.593	
7,750.00	6,722.05	7,685.15	6,855.36	60.69	49.78	-134.32	2,479.62	570.75	752.01	688.70	63.31	11.877	
7,800.00	6,760.50	7,710.58	6,868.45	61.07	49.84	-126.41	2,487.95	550.59	767.25	704.24	63.01	12.176	
7,850.00	6,797.68	7,735.99	6,880.76	61.41	49.88	-119.30	2,495.76	529.78	782.16	719.51	62.66	12.483	
7,900.00	6,833.29	7,761.38	6,892.28	61.71	49.91	-113.00	2,503.06	508.37	796.55	734.29	62.26	12.793	
7,950.00	6,867.08	7,786.76	6,902.99	61.99	49.94	-107.48	2,509.83	486.38	810.25	748.39	61.86	13.098	
8,000.00	6,898.78	7,812.13	6,912.87	62.23	49.97	-102.69	2,516.05	463.87	823.09	761.62	61.47	13.391	
8,050.00	6,928.16	7,837.48	6,921.90	62.43	49.98	-98.56	2,521.72	440.87	834.94	773.83	61.11	13.662	
8,100.00	6,954.98	7,862.83	6,930.07	62.60	49.99	-95.05	2,526.83	417.43	845.69	784.86	60.83	13.903	
8,150.00	6,979.04	7,900.00	6,940.46	62.74	50.00	-91.92	2,533.28	382.33	855.39	794.53	60.86	14.056	
8,200.00	7,000.17	7,913.50	6,943.76	62.85	49.99	-89.63	2,535.31	369.40	863.49	802.93	60.55	14.260	
8,250.00	7,018.20	7,950.00	6,951.40	62.93	49.98	-87.55	2,539.97	334.02	870.52	809.77	60.74	14.331	
8,300.00	7,032.99	7,964.15	6,953.85	62.98	49.97	-86.10	2,541.45	320.16	875.85	815.04	60.82	14.402	
8,350.00	7,044.43	8,000.00	6,958.76	63.00	49.95	-84.91	2,544.34	284.77	879.99	818.77	61.23	14.373	
8,400.00	7,052.43	8,014.79	6,960.25	63.00	49.93	-84.21	2,545.18	270.08	882.39	820.68	61.71	14.299	
8,450.00	7,056.94	8,050.00	6,962.50	62.97	49.89	-83.84	2,546.35	234.97	883.51	821.15	62.36	14.167	
8,488.77	7,058.00	8,059.74	6,962.80	62.93	49.88	-83.81	2,546.46	225.23	883.14	820.10	63.04	14.009	
8,500.00	7,058.00	8,065.43	6,962.92	62.92	49.87	-83.82	2,546.49	219.54	882.97	819.72	63.24	13.962	
8,545.06	7,058.00	8,100.05	6,963.00	62.86	49.82	-83.82	2,546.25	184.93	882.82	818.84	63.98	13.798	
8,600.00	7,058.00	8,154.99	6,963.00	62.81	49.75	-83.82	2,545.79	129.99	882.80	817.95	64.85	13.614	
8,700.00	7,058.00	8,254.99	6,963.00	62.74	49.65	-83.82	2,544.96	29.99	882.76	816.03	66.72	13.230	
8,800.00	7,058.00	8,354.99	6,963.00	62.71	49.58	-83.82	2,544.12	-70.00	882.71	813.73	68.98	12.797	

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-3-4H - ORIGINAL WELLBORE - PROPOSAL #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Separation Factor</b>	<b>Warning</b>	
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
8,900.00	7,058.00	8,454.99	6,963.00	62.71	49.57	-83.82	2,543.28	-170.00	882.67	811.09	71.58	12.332	
9,000.00	7,058.00	8,554.99	6,963.00	62.76	49.62	-83.82	2,542.44	-269.99	882.63	808.16	74.47	11.852	
9,100.00	7,058.00	8,654.99	6,963.00	62.86	49.75	-83.82	2,541.60	-369.99	882.59	804.95	77.64	11.368	
9,200.00	7,058.00	8,754.99	6,963.00	63.01	50.00	-83.82	2,540.76	-469.99	882.54	801.50	81.04	10.890	
9,300.00	7,058.00	8,854.99	6,963.00	63.23	50.41	-83.82	2,539.92	-569.98	882.50	797.84	84.66	10.424	
9,400.00	7,058.00	8,954.99	6,963.00	63.54	51.06	-83.82	2,539.09	-669.98	882.46	794.00	88.46	9.976	
9,500.00	7,058.00	9,054.99	6,963.00	63.95	52.01	-83.82	2,538.25	-769.98	882.41	790.00	92.42	9.548	
9,600.00	7,058.00	9,154.99	6,963.00	64.49	53.28	-83.82	2,537.41	-869.97	882.37	785.85	96.52	9.142	
9,700.00	7,058.00	9,254.99	6,963.00	65.17	54.83	-83.82	2,536.57	-969.97	882.33	781.59	100.74	8.758	
9,800.00	7,058.00	9,354.99	6,963.00	66.02	56.60	-83.82	2,535.73	-1,069.97	882.29	777.21	105.08	8.397	
9,900.00	7,058.00	9,454.99	6,963.00	67.06	58.53	-83.82	2,534.89	-1,169.96	882.24	772.74	109.51	8.057	
10,000.00	7,058.00	9,554.99	6,963.00	68.29	60.58	-83.82	2,534.06	-1,269.96	882.20	768.18	114.02	7.737	
10,100.00	7,058.00	9,654.99	6,963.00	69.70	62.72	-83.82	2,533.22	-1,369.96	882.16	763.55	118.61	7.437	
10,200.00	7,058.00	9,754.99	6,963.00	71.29	64.92	-83.82	2,532.38	-1,469.95	882.12	758.85	123.27	7.156	
10,300.00	7,058.00	9,854.99	6,963.00	73.02	67.18	-83.82	2,531.54	-1,569.95	882.07	754.09	127.98	6.892	
10,400.00	7,058.00	9,954.99	6,963.00	74.88	69.49	-83.82	2,530.70	-1,669.95	882.03	749.28	132.75	6.644	
10,500.00	7,058.00	10,054.99	6,963.00	76.84	71.82	-83.82	2,529.86	-1,769.94	881.99	744.42	137.57	6.411	
10,600.00	7,058.00	10,154.99	6,963.00	78.89	74.20	-83.82	2,529.02	-1,869.94	881.95	739.52	142.43	6.192	
10,700.00	7,058.00	10,254.99	6,963.00	81.02	76.59	-83.82	2,528.19	-1,969.93	881.90	734.58	147.33	5.986	
10,800.00	7,058.00	10,354.99	6,963.00	83.20	79.01	-83.82	2,527.35	-2,069.93	881.86	729.60	152.26	5.792	
10,900.00	7,058.00	10,454.99	6,963.00	85.44	81.46	-83.82	2,526.51	-2,169.93	881.82	724.59	157.23	5.609	
11,000.00	7,058.00	10,554.99	6,963.00	87.71	83.92	-83.82	2,525.67	-2,269.92	881.78	719.56	162.22	5.436	
11,100.00	7,058.00	10,654.99	6,963.00	90.03	86.39	-83.81	2,524.83	-2,369.92	881.73	714.49	167.24	5.272	
11,200.00	7,058.00	10,754.99	6,963.00	92.38	88.89	-83.81	2,523.99	-2,469.92	881.69	709.41	172.28	5.118	
11,300.00	7,058.00	10,854.99	6,963.00	94.75	91.39	-83.81	2,523.16	-2,569.91	881.65	704.30	177.35	4.971	
11,400.00	7,058.00	10,954.99	6,963.00	97.15	93.91	-83.81	2,522.32	-2,669.91	881.60	699.17	182.43	4.833	
11,500.00	7,058.00	11,054.99	6,963.00	99.57	96.44	-83.81	2,521.48	-2,769.91	881.56	694.03	187.54	4.701	
11,600.00	7,058.00	11,154.99	6,963.00	102.01	98.98	-83.81	2,520.64	-2,869.90	881.52	688.86	192.66	4.576	
11,700.00	7,058.00	11,254.99	6,963.00	104.47	101.53	-83.81	2,519.80	-2,969.90	881.48	683.68	197.79	4.457	
11,800.00	7,058.00	11,354.99	6,963.00	106.94	104.08	-83.81	2,518.96	-3,069.90	881.43	678.49	202.94	4.343	
11,900.00	7,058.00	11,454.99	6,963.00	109.43	106.65	-83.81	2,518.12	-3,169.89	881.39	673.29	208.11	4.235	
12,000.00	7,058.00	11,554.99	6,963.00	111.93	109.22	-83.81	2,517.29	-3,269.89	881.35	668.07	213.28	4.132	
12,100.00	7,058.00	11,654.99	6,963.00	114.44	111.80	-83.81	2,516.45	-3,369.89	881.31	662.84	218.47	4.034	
12,200.00	7,058.00	11,754.99	6,963.00	116.96	114.39	-83.81	2,515.61	-3,469.88	881.26	657.60	223.67	3.940	
12,300.00	7,058.00	11,854.99	6,963.00	119.49	116.98	-83.81	2,514.77	-3,569.88	881.22	652.34	228.88	3.850	
12,400.00	7,058.00	11,954.99	6,963.00	122.03	119.58	-83.81	2,513.93	-3,669.87	881.18	647.08	234.09	3.764	
12,500.00	7,058.00	12,054.99	6,963.00	124.58	122.19	-83.81	2,513.09	-3,769.87	881.14	641.82	239.32	3.682	
12,600.00	7,058.00	12,154.99	6,963.00	127.14	124.79	-83.81	2,512.26	-3,869.87	881.09	636.54	244.55	3.603	
12,700.00	7,058.00	12,254.99	6,963.00	129.70	127.41	-83.81	2,511.42	-3,969.86	881.05	631.25	249.80	3.527	
12,800.00	7,058.00	12,354.99	6,963.00	132.27	130.02	-83.81	2,510.58	-4,069.86	881.01	625.96	255.04	3.454	
12,900.00	7,058.00	12,454.99	6,963.00	134.85	132.65	-83.81	2,509.74	-4,169.86	880.97	620.66	260.30	3.384	
13,000.00	7,058.00	12,554.99	6,963.00	137.44	135.27	-83.81	2,508.90	-4,269.85	880.92	615.36	265.56	3.317	
13,100.00	7,058.00	12,654.99	6,963.00	140.02	137.90	-83.81	2,508.06	-4,369.85	880.88	610.05	270.83	3.253	
13,200.00	7,058.00	12,754.99	6,963.00	142.62	140.53	-83.81	2,507.22	-4,469.85	880.84	604.73	276.10	3.190	
13,300.00	7,058.00	12,854.99	6,963.00	145.22	143.17	-83.81	2,506.39	-4,569.84	880.79	599.41	281.38	3.130	
13,400.00	7,058.00	12,954.99	6,963.00	147.82	145.81	-83.81	2,505.55	-4,669.84	880.75	594.09	286.67	3.072	
13,500.00	7,058.00	13,054.99	6,963.00	150.43	148.45	-83.81	2,504.71	-4,769.84	880.71	588.75	291.96	3.017	
13,600.00	7,058.00	13,154.99	6,963.00	153.04	151.09	-83.81	2,503.87	-4,869.83	880.67	583.42	297.25	2.963	
13,700.00	7,058.00	13,254.99	6,963.00	155.66	153.74	-83.81	2,503.03	-4,969.83	880.62	578.08	302.55	2.911	
13,800.00	7,058.00	13,354.99	6,963.00	158.27	156.39	-83.81	2,502.19	-5,069.83	880.58	572.74	307.85	2.860	
13,900.00	7,058.00	13,454.99	6,963.00	160.90	159.04	-83.81	2,501.35	-5,169.82	880.54	567.39	313.15	2.812	
14,000.00	7,058.00	13,554.99	6,963.00	163.52	161.70	-83.81	2,500.52	-5,269.82	880.50	562.04	318.46	2.765	

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



<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - CE 5-68 11-3-4H - ORIGINAL WELLBORE - PROPOSAL #1													<b>Offset Site Error:</b> 0.00 usft
<b>Survey Program:</b> 0-OWSG (Rev2) MWD													<b>Offset Well Error:</b> 0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
14,100.00	7,058.00	13,654.99	6,963.00	166.15	164.35	-83.81	2,499.68	-5,369.81	880.45	556.68	323.77	2.719	
14,200.00	7,058.00	13,754.99	6,963.00	168.78	167.01	-83.81	2,498.84	-5,469.81	880.41	551.32	329.09	2.675	
14,300.00	7,058.00	13,854.99	6,963.00	171.42	169.67	-83.81	2,498.00	-5,569.81	880.37	545.96	334.41	2.633	
14,400.00	7,058.00	13,954.99	6,963.00	174.06	172.33	-83.80	2,497.16	-5,669.80	880.33	540.60	339.73	2.591	
14,500.00	7,058.00	14,054.99	6,963.00	176.70	175.00	-83.80	2,496.32	-5,769.80	880.28	535.23	345.05	2.551	
14,600.00	7,058.00	14,154.99	6,963.00	179.34	177.66	-83.80	2,495.49	-5,869.80	880.24	529.86	350.38	2.512	
14,700.00	7,058.00	14,254.99	6,963.00	181.99	180.33	-83.80	2,494.65	-5,969.79	880.20	524.49	355.71	2.474	
14,800.00	7,058.00	14,354.99	6,963.00	184.63	183.00	-83.80	2,493.81	-6,069.79	880.16	519.11	361.04	2.438	
14,900.00	7,058.00	14,454.99	6,963.00	187.28	185.67	-83.80	2,492.97	-6,169.79	880.11	513.74	366.38	2.402	
15,000.00	7,058.00	14,554.99	6,963.00	189.93	188.34	-83.80	2,492.13	-6,269.78	880.07	508.36	371.71	2.368	
15,100.00	7,058.00	14,654.99	6,963.00	192.59	191.01	-83.80	2,491.29	-6,369.78	880.03	502.98	377.05	2.334	
15,200.00	7,058.00	14,754.99	6,963.00	195.24	193.69	-83.80	2,490.45	-6,469.78	879.98	497.59	382.39	2.301	
15,300.00	7,058.00	14,854.99	6,963.00	197.90	196.36	-83.80	2,489.62	-6,569.77	879.94	492.21	387.74	2.269	
15,400.00	7,058.00	14,954.99	6,963.00	200.56	199.04	-83.80	2,488.78	-6,669.77	879.90	486.82	393.08	2.238	
15,500.00	7,058.00	15,054.99	6,963.00	203.22	201.72	-83.80	2,487.94	-6,769.77	879.86	481.43	398.43	2.208	
15,600.00	7,058.00	15,154.99	6,963.00	205.88	204.40	-83.80	2,487.10	-6,869.76	879.81	476.04	403.78	2.179	
15,700.00	7,058.00	15,254.99	6,963.00	208.54	207.08	-83.80	2,486.26	-6,969.76	879.77	470.65	409.13	2.150	
15,800.00	7,058.00	15,354.99	6,963.00	211.21	209.76	-83.80	2,485.42	-7,069.76	879.73	465.25	414.48	2.123	
15,900.00	7,058.00	15,454.99	6,963.00	213.87	212.44	-83.80	2,484.59	-7,169.75	879.69	459.86	419.83	2.095	
16,000.00	7,058.00	15,554.99	6,963.00	216.54	215.13	-83.80	2,483.75	-7,269.75	879.64	454.46	425.19	2.069	
16,100.00	7,058.00	15,654.99	6,963.00	219.21	217.81	-83.80	2,482.91	-7,369.74	879.60	449.06	430.54	2.043	
16,200.00	7,058.00	15,754.99	6,963.00	221.88	220.50	-83.80	2,482.07	-7,469.74	879.56	443.66	435.90	2.018	
16,300.00	7,058.00	15,854.99	6,963.00	224.55	223.18	-83.80	2,481.23	-7,569.74	879.52	438.26	441.26	1.993	
16,400.00	7,058.00	15,954.99	6,963.00	227.23	225.87	-83.80	2,480.39	-7,669.73	879.47	432.86	446.62	1.969	
16,500.00	7,058.00	16,054.99	6,963.00	229.90	228.56	-83.80	2,479.55	-7,769.73	879.43	427.45	451.98	1.946	
16,600.00	7,058.00	16,154.99	6,963.00	232.57	231.24	-83.80	2,478.72	-7,869.73	879.39	422.05	457.34	1.923	
16,700.00	7,058.00	16,254.99	6,963.00	235.25	233.93	-83.80	2,477.88	-7,969.72	879.35	416.64	462.71	1.900	
16,800.00	7,058.00	16,354.99	6,963.00	237.93	236.62	-83.80	2,477.04	-8,069.72	879.30	411.23	468.07	1.879	
16,900.00	7,058.00	16,454.99	6,963.00	240.61	239.31	-83.80	2,476.20	-8,169.72	879.26	405.82	473.44	1.857	
17,000.00	7,058.00	16,554.99	6,963.00	243.28	242.00	-83.80	2,475.36	-8,269.71	879.22	400.41	478.80	1.836	
17,011.19	7,058.00	16,566.18	6,963.00	243.58	242.31	-83.80	2,475.27	-8,280.90	879.21	399.81	479.41	1.834 SF	



Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - EXIST HZ ENCORE 1C-12HZ - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program:		16-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	
0.00	0.00	6.00	6.00	0.00	0.00	24.67	1,794.55	824.42	1,974.86					
100.00	100.00	91.11	91.11	0.14	0.27	24.67	1,794.80	824.56	1,975.20	1,974.78	0.42	4,748.854		
200.00	200.00	189.94	189.93	0.50	0.62	24.67	1,795.76	824.70	1,976.15	1,975.02	1.12	1,756.746		
300.00	300.00	343.47	343.39	0.86	1.17	24.54	1,797.19	820.57	1,976.01	1,973.99	2.03	975.306		
400.00	400.00	499.80	499.30	1.22	1.73	24.26	1,796.03	809.33	1,972.17	1,969.22	2.95	668.322		
500.00	500.00	617.97	616.71	1.58	2.19	23.91	1,795.31	796.02	1,966.99	1,963.23	3.76	523.736		
600.00	600.00	748.60	746.00	1.94	2.72	23.42	1,794.51	777.43	1,960.68	1,956.04	4.63	423.043		
700.00	700.00	884.14	879.36	2.29	3.33	22.79	1,793.04	753.35	1,952.58	1,947.01	5.57	350.331		
800.00	800.00	1,009.51	1,001.71	2.65	3.92	22.06	1,791.64	726.07	1,943.05	1,936.55	6.50	299.029		
900.00	900.00	1,133.64	1,122.35	3.01	4.56	21.28	1,789.40	696.92	1,932.48	1,925.02	7.45	259.263		
1,000.00	1,000.00	1,254.38	1,239.00	3.37	5.21	20.45	1,786.05	665.97	1,920.36	1,911.94	8.42	227.986		
1,100.00	1,100.00	1,341.76	1,322.88	3.73	5.71	19.78	1,784.00	641.58	1,908.22	1,898.96	9.27	205.896		
1,200.00	1,200.00	1,421.39	1,398.99	4.09	6.19	19.12	1,783.61	618.17	1,897.54	1,887.45	10.09	188.105		
1,300.00	1,300.00	1,512.66	1,485.95	4.45	6.75	18.31	1,783.97	590.48	1,887.75	1,876.75	11.00	171.664		
1,350.00	1,350.00	1,561.69	1,532.59	4.62	7.05	17.87	1,784.25	575.35	1,883.02	1,871.54	11.48	164.059		
1,400.00	1,400.00	1,609.77	1,578.26	4.80	7.36	2.65	1,784.57	560.30	1,877.95	1,865.98	11.96	156.990		
1,500.00	1,499.93	1,704.83	1,668.21	5.16	7.98	1.75	1,785.51	529.59	1,865.54	1,852.61	12.94	144.197		
1,600.00	1,599.68	1,800.92	1,759.17	5.52	8.61	0.82	1,786.38	498.61	1,850.13	1,836.20	13.93	132.812		
1,700.00	1,699.13	1,874.01	1,828.45	5.88	9.09	0.11	1,787.24	475.35	1,832.17	1,817.39	14.78	123.968		
1,800.00	1,798.15	1,970.54	1,920.33	6.25	9.71	-0.83	1,788.81	445.81	1,811.98	1,796.22	15.77	114.931		
1,900.00	1,896.63	2,063.14	2,008.53	6.62	10.31	-1.76	1,789.91	417.61	1,788.51	1,771.78	16.73	106.887		
2,000.00	1,994.44	2,189.51	2,127.82	7.02	11.17	-3.19	1,791.26	375.96	1,761.58	1,743.63	17.95	98.143		
2,100.00	2,091.46	2,289.64	2,222.12	7.43	11.87	-4.42	1,790.98	342.29	1,730.52	1,711.51	19.02	91.000		
2,200.00	2,187.58	2,379.59	2,306.28	7.88	12.52	-5.67	1,790.65	310.58	1,696.46	1,676.42	20.04	84.662		
2,300.00	2,282.68	2,469.91	2,390.23	8.35	13.20	-7.07	1,790.41	277.23	1,659.71	1,638.62	21.10	78.675		
2,400.00	2,376.65	2,559.77	2,473.66	8.85	13.89	-8.59	1,789.91	243.86	1,620.32	1,598.16	22.16	73.117		
2,500.00	2,469.36	2,642.44	2,550.84	9.40	14.50	-10.08	1,789.16	214.25	1,578.52	1,555.35	23.16	68.153		
2,600.00	2,560.71	2,718.38	2,622.39	9.99	15.03	-11.52	1,788.37	188.83	1,534.59	1,510.50	24.10	63.689		
2,700.00	2,650.59	2,790.03	2,690.24	10.62	15.53	-12.98	1,787.91	165.82	1,488.88	1,463.88	25.00	59.544		
2,800.00	2,738.88	2,860.05	2,756.15	11.29	16.02	-14.60	1,788.05	142.18	1,441.69	1,415.77	25.92	55.626		
2,900.00	2,825.48	2,942.59	2,834.04	12.02	16.60	-16.64	1,788.28	114.89	1,392.68	1,365.76	26.93	51.720		
3,000.00	2,910.28	3,044.34	2,930.01	12.79	17.31	-19.42	1,787.34	81.08	1,341.05	1,312.98	28.07	47.770		
3,100.00	2,993.18	3,129.02	3,009.90	13.62	17.91	-22.12	1,785.39	53.11	1,286.94	1,257.81	29.13	44.178		
3,185.69	3,062.62	3,181.72	3,059.71	14.36	18.28	-24.11	1,784.05	35.92	1,239.43	1,209.49	29.94	41.394		
3,200.00	3,074.09	3,190.23	3,067.72	14.49	18.34	-24.37	1,783.86	33.08	1,231.49	1,201.41	30.08	40.940		
3,300.00	3,154.26	3,254.27	3,127.86	15.40	18.80	-26.45	1,782.63	11.10	1,177.32	1,146.24	31.08	37.876		
3,400.00	3,234.42	3,326.78	3,195.92	16.32	19.32	-28.95	1,781.17	-13.86	1,125.16	1,092.96	32.20	34.948		
3,500.00	3,314.58	3,399.24	3,264.12	17.26	19.84	-31.58	1,779.57	-38.30	1,075.13	1,041.79	33.35	32.242		
3,600.00	3,394.75	3,467.55	3,328.60	18.21	20.32	-34.19	1,778.07	-60.82	1,027.62	993.10	34.51	29.775		
3,700.00	3,474.91	3,532.74	3,390.11	19.18	20.78	-36.80	1,776.81	-82.36	983.27	947.57	35.70	27.541		
3,800.00	3,555.07	3,594.34	3,448.09	20.15	21.22	-39.41	1,775.89	-103.13	942.82	905.92	36.90	25.548		
3,900.00	3,635.24	3,649.81	3,500.13	21.14	21.63	-41.87	1,775.51	-122.32	907.07	869.00	38.07	23.825		
4,000.00	3,715.40	3,705.00	3,551.73	22.13	22.03	-44.40	1,775.94	-141.92	876.99	837.77	39.22	22.361		
4,100.00	3,795.56	3,757.44	3,600.46	23.12	22.44	-46.87	1,777.02	-161.25	853.16	812.87	40.29	21.174		
4,200.00	3,875.73	3,814.09	3,652.70	24.13	22.89	-49.63	1,778.77	-183.12	836.15	794.82	41.34	20.228		
4,300.00	3,955.89	3,884.75	3,717.64	25.13	23.46	-53.14	1,780.98	-210.87	825.44	782.94	42.50	19.422		
4,400.00	4,036.05	3,955.19	3,782.34	26.14	24.04	-56.68	1,782.96	-238.63	820.84	777.27	43.57	18.841		
4,423.94	4,055.24	3,972.04	3,797.83	26.39	24.18	-57.53	1,783.42	-245.27	820.66	776.85	43.81	18.734 CC, ES		
4,500.00	4,116.22	4,041.46	3,861.80	27.16	24.73	-61.02	1,785.07	-272.15	822.14	777.35	44.78	18.358		
4,600.00	4,196.38	4,144.26	3,957.69	28.18	25.51	-66.14	1,785.85	-309.19	827.22	781.07	46.15	17.925		
4,700.00	4,276.54	4,219.89	4,028.76	29.20	26.06	-69.90	1,784.70	-335.02	836.46	789.44	47.02	17.789		
4,800.00	4,356.71	4,281.36	4,086.43	30.22	26.51	-72.91	1,784.04	-356.29	852.17	804.55	47.62	17.895		

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: SEC. 11 T5N R68W 6th P.M. - EXIST HZ ENCORE 1C-12HZ - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program:		16-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
4,900.00	4,436.87	4,345.02	4,146.04	31.25	26.99	-75.95	1,783.88	-378.64	874.09	825.89	48.20	18.133	
5,000.00	4,517.03	4,409.86	4,206.66	32.28	27.47	-78.94	1,784.27	-401.65	901.63	852.84	48.79	18.479	
5,100.00	4,597.19	4,476.27	4,268.65	33.31	27.97	-81.89	1,785.12	-425.45	934.17	884.75	49.42	18.904	
5,200.00	4,677.36	4,547.50	4,335.12	34.34	28.51	-84.90	1,786.41	-451.01	970.93	920.78	50.15	19.362	
5,300.00	4,757.52	4,621.34	4,404.08	35.37	29.07	-87.86	1,788.15	-477.35	1,011.20	960.24	50.96	19.844	
5,400.00	4,837.68	4,699.89	4,477.56	36.41	29.65	-90.82	1,790.27	-505.02	1,054.32	1,002.44	51.88	20.323	
5,500.00	4,917.85	4,772.30	4,545.52	37.45	30.19	-93.44	1,791.57	-530.00	1,099.74	1,047.02	52.72	20.859	
5,600.00	4,998.01	4,829.29	4,598.84	38.49	30.61	-95.40	1,792.59	-550.09	1,148.25	1,094.92	53.33	21.532	
5,700.00	5,078.17	4,897.26	4,662.22	39.53	31.13	-97.61	1,793.86	-574.61	1,199.57	1,145.42	54.14	22.155	
5,800.00	5,158.34	4,972.29	4,732.28	40.57	31.69	-99.93	1,794.77	-601.45	1,252.70	1,197.60	55.10	22.735	
5,900.00	5,238.50	5,055.04	4,809.82	41.61	32.30	-102.38	1,794.72	-630.33	1,307.18	1,250.99	56.18	23.267	
6,000.00	5,318.66	5,156.05	4,905.19	42.65	33.02	-105.19	1,794.22	-663.62	1,361.88	1,304.34	57.54	23.667	
6,100.00	5,398.83	5,241.53	4,986.32	43.69	33.60	-107.41	1,793.90	-690.52	1,416.99	1,358.34	58.65	24.161	
6,200.00	5,478.99	5,328.30	5,068.92	44.74	34.18	-109.50	1,794.04	-717.08	1,472.65	1,412.88	59.77	24.639	
6,300.00	5,559.15	5,389.41	5,127.10	45.78	34.58	-110.87	1,794.36	-735.80	1,529.38	1,468.87	60.52	25.272	
6,400.00	5,639.32	5,462.93	5,196.94	46.83	35.08	-112.43	1,795.04	-758.73	1,587.42	1,525.96	61.46	25.830	
6,500.00	5,719.48	5,554.37	5,283.83	47.88	35.69	-114.19	1,797.26	-787.16	1,645.84	1,583.17	62.67	26.262	
6,600.00	5,799.64	5,622.40	5,361.63	48.92	54.66	173.08	1,753.95	647.47	1,646.71	1,590.95	55.77	29.528	
6,700.00	5,879.81	5,692.23	5,440.10	49.97	55.00	172.33	1,753.86	667.29	1,605.42	1,546.19	59.23	27.103	
6,800.00	5,959.97	5,761.82	5,518.57	51.02	55.05	172.22	1,753.84	670.06	1,569.31	1,506.82	62.49	25.113	
6,900.00	6,040.13	5,866.24	5,621.98	52.07	55.44	171.41	1,753.67	691.31	1,538.65	1,472.47	66.18	23.250	
7,000.00	6,120.29	5,947.41	5,702.07	53.12	55.64	170.98	1,753.52	702.47	1,513.92	1,444.26	69.66	21.733	
7,100.00	6,200.46	6,023.46	5,782.17	54.17	55.84	170.56	1,753.34	713.44	1,495.37	1,422.29	73.07	20.464	
7,200.00	6,280.62	6,103.17	5,862.28	55.22	56.04	170.15	1,753.14	724.23	1,483.23	1,406.88	76.35	19.428	
7,300.00	6,360.78	6,183.78	5,942.39	56.27	56.24	169.74	1,752.90	734.83	1,477.66	1,398.25	79.42	18.606	
7,333.66	6,387.77	6,210.31	5,962.43	56.62	56.30	169.61	1,752.81	738.36	1,477.29	1,396.89	80.40	18.374	
7,400.00	6,440.95	6,270.21	6,042.50	57.32	56.43	169.34	1,752.63	745.26	1,478.75	1,396.51	82.24	17.981	
7,498.05	6,519.54	6,341.00	6,122.76	58.35	56.81	168.54	1,752.00	766.04	1,486.32	1,401.31	85.01	17.484	
7,500.00	6,521.11	6,341.00	6,122.76	58.37	56.81	168.82	1,752.00	766.04	1,486.53	1,401.48	85.05	17.478	
7,550.00	6,561.44	6,381.00	6,162.76	58.89	56.81	176.19	1,752.00	766.04	1,492.78	1,406.70	86.08	17.342	
7,600.00	6,602.00	6,421.00	6,202.76	59.38	56.81	-176.10	1,752.00	766.04	1,500.54	1,413.49	87.05	17.238	
7,650.00	6,642.50	6,461.00	6,242.76	59.85	56.81	-168.29	1,752.00	766.04	1,509.75	1,421.79	87.96	17.164 SF	
7,700.00	6,682.61	6,502.00	6,282.57	60.29	56.53	-160.07	1,752.47	751.07	1,520.19	1,431.82	88.38	17.202	
7,750.00	6,722.05	6,541.52	6,322.47	60.69	56.38	-152.46	1,752.70	742.57	1,531.83	1,442.92	88.91	17.230	
7,800.00	6,760.50	6,581.21	6,362.35	61.07	56.17	-145.26	1,752.98	731.26	1,544.43	1,455.14	89.29	17.297	
7,850.00	6,797.68	6,621.22	6,402.21	61.41	55.91	-138.54	1,753.27	717.27	1,557.79	1,468.26	89.53	17.400	
7,900.00	6,833.29	6,661.66	6,442.05	61.71	55.61	-132.35	1,753.55	700.72	1,571.69	1,482.05	89.64	17.534	
7,950.00	6,867.08	6,701.00	6,481.82	61.99	55.05	-126.34	1,753.84	670.06	1,585.95	1,496.65	89.30	17.760	
8,000.00	6,898.78	6,740.91	6,521.71	62.23	54.81	-121.43	1,753.91	655.98	1,600.13	1,510.73	89.40	17.898	
8,050.00	6,928.16	6,780.61	6,561.30	62.43	54.21	-116.54	1,754.05	621.67	1,614.00	1,525.08	88.92	18.150	
8,100.00	6,954.98	6,819.68	6,601.64	62.60	53.56	-112.19	1,754.15	584.75	1,627.19	1,538.82	88.37	18.413	
8,150.00	6,979.04	6,859.56	6,641.66	62.74	52.86	-108.34	1,754.22	543.85	1,639.41	1,551.68	87.74	18.686	
8,200.00	7,000.17	6,899.50	6,681.39	62.85	52.12	-105.01	1,754.30	499.61	1,650.38	1,563.33	87.05	18.958	
8,250.00	7,018.20	6,939.29	6,721.16	62.93	51.47	-102.31	1,754.37	459.41	1,659.90	1,573.38	86.52	19.186	
8,300.00	7,032.99	6,979.62	6,761.59	62.98	50.87	-100.19	1,754.34	421.75	1,667.97	1,581.88	86.10	19.373	
8,350.00	7,044.43	7,019.64	6,801.71	63.00	50.24	-98.56	1,754.19	381.77	1,674.46	1,588.79	85.67	19.546	
8,400.00	7,052.43	7,059.65	6,841.24	63.00	49.46	-97.38	1,753.99	328.78	1,679.03	1,593.96	85.06	19.739	
8,450.00	7,056.94	7,100.38	6,881.70	62.97	48.72	-96.75	1,753.89	278.51	1,681.43	1,596.84	84.58	19.879	
8,488.77	7,058.00	7,141.71	6,921.86	62.93	48.29	-96.62	1,753.73	246.85	1,681.94	1,597.53	84.42	19.925	
8,498.29	7,058.00	7,181.93	6,961.87	62.92	48.18	-96.62	1,753.67	239.06	1,681.94	1,597.56	84.38	19.933	
8,500.00	7,058.00	7,221.53	6,991.88	62.92	48.16	-96.62	1,753.66	237.67	1,681.94	1,597.57	84.37	19.935	
8,600.00	7,058.00	7,261.30	7,031.07	62.81	46.54	-96.63	1,752.78	113.44	1,681.91	1,598.48	83.44	20.158	

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: SEC. 11 T5N R68W 6th P.M. - EXIST HZ ENCORE 1C-12HZ - Wellbore #1 - Wellbore #1												Offset Site Error: 0.00 usft									
Survey Program: 16-OWSG (Rev2) MWD				Reference		Offset		Semi Major Axis		Highside Toolface		Offset Wellbore Centre		Rule Assigned:		Distance		Warning		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									
8,700.00	7,058.00	8,102.07	7,263.67	62.74	44.52	-96.85	1,758.30	-72.59	1,678.89	1,596.58	82.31	20.398									
8,800.00	7,058.00	7,927.28	7,262.11	62.71	43.05	-96.87	1,775.00	-246.37	1,667.14	1,585.01	82.12	20.300									
8,900.00	7,058.00	7,893.00	7,257.44	62.71	42.79	-96.72	1,777.71	-280.22	1,657.62	1,574.48	83.14	19.937									
9,000.00	7,058.00	7,826.70	7,242.81	62.76	42.36	-96.23	1,780.34	-344.79	1,650.67	1,566.63	84.04	19.640									
9,100.00	7,058.00	7,753.70	7,219.12	62.86	41.91	-95.41	1,779.55	-413.81	1,647.20	1,562.24	84.96	19.388									
9,200.00	7,058.00	7,633.37	7,171.85	63.01	41.38	-93.77	1,778.76	-524.41	1,643.60	1,557.77	85.83	19.149									
9,300.00	7,058.00	7,507.85	7,107.90	63.23	41.01	-91.54	1,779.17	-632.26	1,639.61	1,552.81	86.79	18.891									
9,400.00	7,058.00	7,435.18	7,063.31	63.54	40.90	-89.98	1,779.82	-689.61	1,636.61	1,548.68	87.93	18.612									
9,451.22	7,058.00	7,402.35	7,041.50	63.74	40.85	-89.21	1,779.97	-714.13	1,636.18	1,547.67	88.51	18.485									
9,500.00	7,058.00	7,374.15	7,021.85	63.95	40.83	-88.52	1,780.01	-734.36	1,636.60	1,547.55	89.06	18.377									
9,600.00	7,058.00	7,321.00	6,982.56	64.49	40.80	-87.15	1,779.85	-770.13	1,640.30	1,550.17	90.13	18.198									
9,700.00	7,058.00	7,266.07	6,939.48	65.17	40.80	-85.65	1,779.64	-804.20	1,647.96	1,556.84	91.12	18.086									
9,800.00	7,058.00	7,226.00	6,906.81	66.02	40.79	-84.51	1,779.61	-827.39	1,659.72	1,567.65	92.07	18.027									
9,900.00	7,058.00	7,177.00	6,865.44	67.06	40.80	-83.08	1,779.55	-853.64	1,676.01	1,583.16	92.85	18.051									
10,000.00	7,058.00	7,153.24	6,844.83	68.29	40.81	-82.37	1,779.46	-865.46	1,697.03	1,603.34	93.68	18.114									
10,100.00	7,058.00	7,130.00	6,824.35	69.70	40.81	-81.66	1,779.33	-876.43	1,722.82	1,628.42	94.40	18.250									
10,200.00	7,058.00	7,103.79	6,800.90	71.29	40.82	-80.86	1,779.08	-888.16	1,753.29	1,658.31	94.98	18.460									
10,300.00	7,058.00	7,082.98	6,782.08	73.02	40.83	-80.22	1,778.79	-897.01	1,788.32	1,692.84	95.47	18.731									
10,400.00	7,058.00	7,063.95	6,764.70	74.88	40.83	-79.63	1,778.44	-904.76	1,827.69	1,731.82	95.87	19.064									
10,500.00	7,058.00	7,035.00	6,737.98	76.84	40.84	-78.73	1,777.77	-915.89	1,871.28	1,775.20	96.09	19.475									
10,600.00	7,058.00	7,035.00	6,737.98	78.89	40.84	-78.73	1,777.77	-915.89	1,918.62	1,822.19	96.43	19.897									
10,700.00	7,058.00	7,035.00	6,737.98	81.02	40.84	-78.73	1,777.77	-915.89	1,969.90	1,873.23	96.67	20.377									
10,800.00	7,058.00	6,996.71	6,702.13	83.20	40.84	-77.54	1,776.84	-929.28	2,024.02	1,927.46	96.56	20.961									
10,900.00	7,058.00	6,982.60	6,688.77	85.44	40.84	-77.09	1,776.54	-933.81	2,081.57	1,985.01	96.56	21.558									
11,000.00	7,058.00	6,969.78	6,676.57	87.71	40.84	-76.69	1,776.29	-937.73	2,142.04	2,045.53	96.51	22.195									
11,100.00	7,058.00	6,940.00	6,648.00	90.03	40.84	-75.75	1,775.78	-946.14	2,205.41	2,109.13	96.28	22.905									
11,200.00	7,058.00	6,940.00	6,648.00	92.38	40.84	-75.75	1,775.78	-946.14	2,270.95	2,174.70	96.25	23.595									
11,300.00	7,058.00	6,940.00	6,648.00	94.75	40.84	-75.75	1,775.78	-946.14	2,338.92	2,242.75	96.17	24.321									
11,400.00	7,058.00	6,940.00	6,648.00	97.15	40.84	-75.75	1,775.78	-946.14	2,409.13	2,313.07	96.06	25.080									
11,500.00	7,058.00	6,940.00	6,648.00	99.57	40.84	-75.75	1,775.78	-946.14	2,481.38	2,385.46	95.92	25.868									
11,600.00	7,058.00	6,940.00	6,648.00	102.01	40.84	-75.75	1,775.78	-946.14	2,555.50	2,459.74	95.77	26.684									
11,700.00	7,058.00	6,940.00	6,648.00	104.47	40.84	-75.75	1,775.78	-946.14	2,631.34	2,535.74	95.60	27.525									
11,800.00	7,058.00	6,940.00	6,648.00	106.94	40.84	-75.75	1,775.78	-946.14	2,708.74	2,613.33	95.42	28.388									
11,900.00	7,058.00	6,940.00	6,648.00	109.43	40.84	-75.75	1,775.78	-946.14	2,787.59	2,692.36	95.23	29.272									
12,000.00	7,058.00	6,940.00	6,648.00	111.93	40.84	-75.75	1,775.78	-946.14	2,867.75	2,772.71	95.04	30.174									
12,100.00	7,058.00	6,940.00	6,648.00	114.44	40.84	-75.75	1,775.78	-946.14	2,949.13	2,854.28	94.85	31.094									
12,200.00	7,058.00	6,940.00	6,648.00	116.96	40.84	-75.75	1,775.78	-946.14	3,031.62	2,936.96	94.65	32.029									
12,300.00	7,058.00	6,898.01	6,607.10	119.49	40.81	-74.42	1,775.05	-955.56	3,113.29	3,019.03	94.26	33.028									
12,400.00	7,058.00	6,895.27	6,604.41	122.03	40.81	-74.33	1,775.00	-956.06	3,197.50	3,103.43	94.07	33.992									

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - EXIST HZ ENCORE 26N-12HZ - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program:		16-OWSG (Rev2) MWD						Rule Assigned:					Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance			Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)			
0.00	0.00	6.00	6.00	0.00	0.00	24.32	1,825.15	824.70	2,002.82					
100.00	100.00	100.76	100.76	0.14	0.31	24.31	1,825.32	824.58	2,002.94	2,002.49	0.45	4,441.294		
200.00	200.00	203.61	203.60	0.50	0.68	24.28	1,825.93	823.85	2,003.19	2,002.01	1.18	1,701.171		
300.00	300.00	325.34	325.26	0.86	1.12	24.17	1,827.23	820.09	2,002.92	2,000.95	1.98	1,013.991		
400.00	400.00	490.53	489.90	1.22	1.73	23.81	1,828.42	806.96	2,000.34	1,997.39	2.94	679.338		
500.00	500.00	606.33	604.89	1.58	2.18	23.45	1,828.55	793.32	1,995.67	1,991.92	3.75	531.582		
600.00	600.00	705.14	702.80	1.94	2.59	23.10	1,828.99	780.02	1,990.73	1,986.22	4.51	441.618		
700.00	700.00	799.42	796.00	2.29	2.99	22.71	1,830.18	765.89	1,986.01	1,980.75	5.26	377.254		
800.00	800.00	891.40	886.55	2.65	3.40	22.25	1,832.58	749.89	1,981.71	1,975.68	6.03	328.817		
900.00	900.00	988.56	981.72	3.01	3.85	21.70	1,836.36	730.69	1,977.84	1,971.01	6.83	289.617		
1,000.00	1,000.00	1,113.79	1,103.90	3.37	4.46	20.92	1,841.36	703.71	1,973.68	1,965.88	7.80	253.175		
1,100.00	1,100.00	1,207.38	1,194.73	3.73	4.95	20.27	1,844.97	681.44	1,968.80	1,960.16	8.64	227.985		
1,200.00	1,200.00	1,312.00	1,295.81	4.09	5.52	19.50	1,849.78	654.89	1,964.34	1,954.78	9.56	205.480		
1,300.00	1,300.00	1,473.42	1,450.55	4.45	6.46	18.18	1,855.83	609.40	1,958.67	1,947.82	10.85	180.584		
1,350.00	1,350.00	1,523.73	1,498.42	4.62	6.77	17.74	1,856.57	593.90	1,954.45	1,943.12	11.33	172.528		
1,400.00	1,400.00	1,631.83	1,600.81	4.80	7.46	1.97	1,857.53	559.30	1,949.23	1,937.06	12.17	160.165		
1,500.00	1,499.93	1,700.82	1,665.79	5.16	7.92	1.32	1,858.10	536.14	1,936.58	1,923.59	13.00	148.991		
1,600.00	1,599.68	1,769.05	1,730.08	5.52	8.38	0.65	1,859.62	513.34	1,922.30	1,908.47	13.83	139.037		
1,700.00	1,699.13	1,844.83	1,801.50	5.88	8.89	-0.10	1,862.24	488.13	1,906.24	1,891.53	14.71	129.625		
1,800.00	1,798.15	1,946.60	1,897.44	6.25	9.59	-1.15	1,866.01	454.41	1,887.59	1,871.83	15.76	119.763		
1,900.00	1,896.63	2,042.10	1,987.37	6.62	10.25	-2.17	1,868.86	422.37	1,865.32	1,848.53	16.79	111.112		
2,000.00	1,994.44	2,128.64	2,068.31	7.02	10.87	-3.19	1,872.17	391.94	1,840.68	1,822.91	17.77	103.559		
2,100.00	2,091.46	2,241.13	2,173.36	7.43	11.69	-4.59	1,875.93	351.91	1,812.90	1,793.94	18.95	95.642		
2,200.00	2,187.58	2,335.87	2,261.77	7.88	12.39	-5.86	1,877.98	317.91	1,781.37	1,761.35	20.03	88.957		
2,300.00	2,282.68	2,416.83	2,336.62	8.35	13.01	-7.09	1,880.21	287.15	1,747.56	1,726.53	21.02	83.128		
2,400.00	2,376.65	2,513.04	2,425.28	8.85	13.77	-8.68	1,882.99	249.87	1,711.43	1,689.27	22.15	77.255		
2,500.00	2,469.36	2,593.56	2,499.44	9.40	14.41	-10.13	1,884.45	218.55	1,672.14	1,648.97	23.17	72.160		
2,600.00	2,560.71	2,661.00	2,561.67	9.99	14.94	-11.46	1,886.97	192.69	1,632.19	1,608.09	24.10	67.735		
2,700.00	2,650.59	2,705.57	2,602.85	10.62	15.29	-12.45	1,889.31	175.80	1,591.22	1,566.38	24.84	64.050		
2,800.00	2,738.88	2,776.73	2,668.65	11.29	15.85	-14.03	1,893.35	149.03	1,549.00	1,523.20	25.80	60.042		
2,900.00	2,825.48	2,852.00	2,738.34	12.02	16.44	-15.82	1,898.05	120.96	1,505.39	1,478.59	26.79	56.184		
3,000.00	2,910.28	2,925.35	2,806.46	12.79	17.00	-17.72	1,902.80	94.17	1,460.26	1,432.49	27.77	52.583		
3,100.00	2,993.18	3,017.58	2,892.69	13.62	17.68	-20.20	1,908.36	61.95	1,413.20	1,384.32	28.89	48.924		
3,185.69	3,062.62	3,088.01	2,958.98	14.36	18.19	-22.29	1,911.95	38.41	1,371.05	1,341.27	29.78	46.041		
3,200.00	3,074.09	3,098.80	2,969.14	14.49	18.27	-22.57	1,912.49	34.82	1,363.93	1,334.01	29.92	45.580		
3,300.00	3,154.26	3,167.20	3,033.48	15.40	18.76	-24.40	1,915.88	11.90	1,315.16	1,284.27	30.89	42.577		
3,400.00	3,234.42	3,233.00	3,095.10	16.32	19.24	-26.27	1,919.57	-10.90	1,268.78	1,236.91	31.87	39.812		
3,500.00	3,314.58	3,328.24	3,184.45	17.26	19.94	-29.11	1,924.41	-43.52	1,224.09	1,190.98	33.11	36.975		
3,600.00	3,394.75	3,390.78	3,243.45	18.21	20.38	-31.03	1,927.38	-64.03	1,181.07	1,146.96	34.11	34.628		
3,700.00	3,474.91	3,460.91	3,309.76	19.18	20.87	-33.25	1,931.40	-86.50	1,141.01	1,105.82	35.19	32.424		
3,800.00	3,555.07	3,533.25	3,378.20	20.15	21.37	-35.63	1,935.55	-109.58	1,103.53	1,067.22	36.31	30.389		
3,900.00	3,635.24	3,592.11	3,433.75	21.14	21.78	-37.64	1,939.41	-128.65	1,069.66	1,032.31	37.35	28.642		
4,000.00	3,715.40	3,647.90	3,486.18	22.13	22.19	-39.62	1,943.78	-147.20	1,040.14	1,001.79	38.35	27.122		
4,100.00	3,795.56	3,710.00	3,544.12	23.12	22.65	-41.89	1,949.63	-168.78	1,015.68	976.27	39.41	25.773		
4,200.00	3,875.73	3,762.07	3,592.42	24.13	23.05	-43.84	1,955.26	-187.38	996.32	955.99	40.33	24.706		
4,300.00	3,955.89	3,829.75	3,655.01	25.13	23.57	-46.40	1,963.31	-211.85	982.01	940.61	41.40	23.720		
4,400.00	4,036.05	3,908.75	3,727.99	26.14	24.19	-49.45	1,972.42	-240.70	971.93	929.34	42.60	22.817		
4,500.00	4,116.22	3,983.88	3,797.37	27.16	24.79	-52.40	1,980.80	-268.27	966.15	922.44	43.71	22.102		
4,600.00	4,196.38	4,082.15	3,888.57	28.18	25.54	-56.24	1,991.49	-303.25	964.13	919.01	45.12	21.369		
4,625.60	4,216.90	4,108.88	3,913.58	28.44	25.74	-57.27	1,994.31	-312.28	963.99	918.49	45.50	21.189 CC		
4,700.00	4,276.54	4,174.53	3,975.05	29.20	26.22	-59.84	2,000.35	-334.51	964.80	918.39	46.41	20.790 ES		
4,800.00	4,356.71	4,239.08	4,035.44	30.22	26.71	-62.40	2,005.51	-356.72	969.65	922.35	47.30	20.502		

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 CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - EXIST HZ ENCORE 26N-12HZ - Wellbore #1 - Wellbore #1											Offset Site Error:	0.00 usft
Survey Program: 16-OWSG (Rev2) MWD											Offset Well Error:	0.00 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:	
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
4,900.00	4,436.87	4,305.35	4,097.00	31.25	27.21	-65.05	2,010.49	-380.72	980.08	931.90	48.17	20.345
5,000.00	4,517.03	4,390.09	4,175.85	32.28	27.87	-68.40	2,016.41	-411.22	994.75	945.43	49.31	20.172
5,100.00	4,597.19	4,478.34	4,258.33	33.31	28.53	-71.83	2,021.66	-442.14	1,012.82	962.32	50.50	20.055
5,200.00	4,677.36	4,557.66	4,332.75	34.34	29.11	-74.83	2,026.24	-469.20	1,034.37	982.81	51.56	20.061
5,300.00	4,757.52	4,641.71	4,411.86	35.37	29.72	-77.90	2,031.32	-497.13	1,059.22	1,006.52	52.70	20.099
5,400.00	4,837.68	4,716.74	4,482.65	36.41	30.25	-80.56	2,035.66	-521.64	1,087.21	1,033.48	53.73	20.236
5,500.00	4,917.85	4,781.33	4,543.53	37.45	30.72	-82.79	2,039.40	-542.90	1,118.77	1,064.16	54.61	20.486
5,600.00	4,998.01	4,836.33	4,595.09	38.49	31.12	-84.63	2,042.53	-561.75	1,154.45	1,099.09	55.35	20.855
5,700.00	5,078.17	4,912.76	4,666.51	39.53	31.69	-87.10	2,046.90	-588.61	1,193.63	1,137.17	56.45	21.143
5,800.00	5,158.34	5,026.21	4,773.20	40.57	32.51	-90.56	2,053.75	-626.58	1,234.17	1,176.03	58.14	21.226
5,900.00	5,238.50	5,117.91	4,860.25	41.61	33.14	-93.19	2,059.27	-654.89	1,274.82	1,215.34	59.48	21.432
6,000.00	5,318.66	5,193.27	4,931.92	42.65	33.64	-95.25	2,063.76	-677.70	1,317.12	1,256.54	60.58	21.741
6,100.00	5,398.83	5,273.10	5,007.86	43.69	34.17	-97.34	2,068.25	-701.91	1,361.38	1,299.63	61.75	22.047
6,200.00	5,478.99	5,361.91	5,092.47	44.74	34.75	-99.51	2,074.37	-728.20	1,406.67	1,343.63	63.04	22.313
6,300.00	5,559.15	5,448.25	5,175.07	45.78	35.30	-101.57	2,078.87	-752.96	1,452.97	1,388.69	64.28	22.603
6,400.00	5,639.32	5,541.48	5,264.63	46.83	35.88	-103.71	2,082.89	-778.53	1,499.90	1,434.32	65.59	22.869
6,500.00	5,719.48	5,655.19	5,347.61	47.88	36.46	-105.85	2,093.35	-805.04	1,540.68	1,476.22	66.89	23.135
6,600.00	5,799.64	5,740.40	5,431.78	48.92	37.04	-107.99	2,093.37	-830.25	1,580.28	1,517.67	68.19	23.401
6,700.00	5,879.81	5,824.46	5,516.96	49.97	37.62	-110.13	2,093.37	-854.30	1,619.47	1,558.36	69.49	23.667
6,800.00	5,959.97	5,908.47	5,602.15	51.02	38.20	-112.27	2,093.34	-878.31	1,658.87	1,598.91	70.79	23.933
6,900.00	6,040.13	6,000.13	5,687.36	52.07	38.78	-114.41	2,093.28	-902.28	1,698.09	1,639.09	72.09	24.199
7,000.00	6,120.29	6,120.29	5,772.57	53.12	39.36	-116.55	2,093.19	-926.20	1,737.80	1,678.39	73.39	24.465
7,100.00	6,200.46	6,200.46	5,862.81	54.17	39.94	-118.69	2,093.09	-950.07	1,777.07	1,717.64	74.69	24.731
7,200.00	6,280.62	6,280.62	5,953.07	55.22	40.52	-120.83	2,092.94	-973.83	1,816.19	1,756.94	75.99	24.997
7,300.00	6,360.78	6,360.78	6,043.33	56.27	41.10	-122.97	2,092.80	-997.59	1,855.19	1,796.19	77.29	25.263
7,400.00	6,440.95	6,440.95	6,133.59	57.32	41.68	-125.11	2,092.61	-1021.35	1,894.21	1,835.42	78.59	25.529
7,427.44	6,462.94	6,462.94	6,153.59	57.61	41.88	-125.53	2,092.56	-1025.53	1,899.53	1,840.60	78.89	25.573
7,498.05	6,519.54	6,519.54	6,219.84	58.35	42.15	-126.37	2,092.40	-1039.68	1,913.68	1,854.39	79.19	25.617
7,500.00	6,521.11	6,521.11	6,221.85	58.37	42.16	-126.39	2,092.40	-1039.68	1,913.68	1,854.39	79.19	25.617
7,550.00	6,561.44	6,561.44	6,261.95	58.89	42.68	-127.21	2,092.32	-1043.52	1,913.35	1,854.14	79.21	25.619
7,600.00	6,602.00	6,602.00	6,302.98	59.38	43.20	-128.03	2,092.30	-1047.36	1,913.58	1,854.08	79.21	25.621
7,650.00	6,642.50	6,642.50	6,343.96	59.85	43.72	-128.85	2,092.34	-1051.17	1,914.80	1,854.22	79.21	25.623
7,700.00	6,682.61	6,682.61	6,384.94	60.29	44.24	-129.67	2,092.45	-1054.96	1,916.02	1,854.45	79.21	25.625
7,750.00	6,722.05	6,722.05	6,425.92	60.69	44.76	-130.49	2,092.60	-1058.73	1,917.24	1,854.68	79.21	25.627
7,800.00	6,760.50	6,760.50	6,466.90	61.07	45.28	-131.31	2,092.78	-1062.49	1,918.46	1,854.91	79.21	25.629
7,850.00	6,797.68	6,797.68	6,507.88	61.41	45.70	-132.13	2,092.94	-1066.25	1,919.68	1,855.14	79.21	25.631
7,900.00	6,833.29	6,833.29	6,548.86	61.71	46.12	-132.95	2,093.15	-1069.99	1,920.90	1,855.37	79.21	25.633
7,950.00	6,867.08	6,867.08	6,589.84	61.99	46.54	-133.77	2,093.30	-1073.73	1,922.12	1,855.60	79.21	25.635
8,000.00	6,898.78	6,898.78	6,630.82	62.23	46.96	-134.59	2,093.37	-1077.47	1,923.34	1,855.83	79.21	25.637
8,050.00	6,928.16	6,928.16	6,671.80	62.43	47.38	-135.41	2,093.35	-1081.21	1,924.56	1,856.06	79.21	25.639
8,100.00	6,954.98	6,954.98	6,712.78	62.60	47.80	-136.23	2,093.74	-1084.95	1,925.78	1,856.29	79.21	25.641
8,150.00	6,979.04	6,979.04	6,753.76	62.74	48.22	-137.05	2,094.79	-1088.69	1,926.99	1,856.52	79.21	25.643
8,200.00	7,000.17	7,000.17	6,794.74	62.85	48.64	-137.87	2,096.17	-1092.43	1,928.21	1,856.75	79.21	25.645
8,250.00	7,018.20	7,018.20	6,835.72	62.93	49.06	-138.69	2,097.77	-1096.17	1,929.43	1,856.98	79.21	25.647
8,300.00	7,032.99	7,032.99	6,876.70	62.98	49.48	-139.51	2,099.42	-1100.00	1,930.65	1,857.21	79.21	25.649
8,350.00	7,044.43	7,044.43	6,917.68	63.00	49.90	-140.33	2,101.44	-1103.74	1,931.87	1,857.44	79.21	25.651
8,400.00	7,052.43	7,052.43	6,958.66	63.00	50.32	-141.15	2,104.15	-1107.48	1,933.09	1,857.67	79.21	25.653
8,450.00	7,056.94	7,056.94	6,999.64	62.97	50.74	-141.97	2,107.03	-1111.22	1,934.31	1,857.90	79.21	25.655
8,488.77	7,058.00	7,058.00	7,040.62	62.93	51.16	-142.79	2,109.42	-1114.96	1,935.53	1,858.13	79.21	25.657
8,500.00	7,058.00	7,058.00	7,081.60	62.92	51.58	-143.61	2,110.06	-1118.70	1,936.75	1,858.36	79.21	25.659
8,600.00	7,058.00	7,058.00	7,122.58	62.81	52.00	-144.43	2,114.54	-1122.44	1,937.97	1,858.59	79.21	25.661
8,700.00	7,058.00	7,058.00	7,163.56	62.74	52.42	-145.25	2,116.58	-1126.18	1,939.19	1,858.82	79.21	25.663

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - EXIST HZ ENCORE 26N-12HZ - Wellbore #1 - Wellbore #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 16-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Separation Factor</b>	<b>Warning</b>	
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
8,760.57	7,058.00	7,993.00	7,121.83	62.72	44.27	-92.54	2,116.52	-26.42	1,306.83	1,224.91	81.92	15.953	
8,800.00	7,058.00	7,965.11	7,123.39	62.71	44.01	-92.60	2,116.10	-54.27	1,307.13	1,225.03	82.10	15.921	
8,900.00	7,058.00	7,856.48	7,130.02	62.71	43.08	-92.89	2,114.62	-162.68	1,307.92	1,225.44	82.48	15.858	
9,000.00	7,058.00	7,752.10	7,128.00	62.76	42.34	-92.81	2,113.90	-266.91	1,307.62	1,224.52	83.10	15.736	
9,007.27	7,058.00	7,745.85	7,127.14	62.77	42.29	-92.77	2,113.81	-273.10	1,307.62	1,224.47	83.15	15.726	
9,100.00	7,058.00	7,636.52	7,100.60	62.86	41.62	-91.60	2,111.89	-379.04	1,307.65	1,224.02	83.64	15.635	
9,200.00	7,058.00	7,535.80	7,064.96	63.01	41.16	-90.04	2,111.67	-473.11	1,306.49	1,222.15	84.33	15.492	
9,224.61	7,058.00	7,516.00	7,055.92	63.06	41.07	-89.65	2,111.60	-490.72	1,306.41	1,221.90	84.50	15.460	
9,300.00	7,058.00	7,479.59	7,037.42	63.23	40.95	-88.83	2,111.07	-522.07	1,307.63	1,222.54	85.09	15.368	
9,400.00	7,058.00	7,436.93	7,012.74	63.54	40.83	-87.76	2,109.52	-556.81	1,313.41	1,227.59	85.82	15.304	
9,500.00	7,058.00	7,318.03	6,934.37	63.95	40.60	-84.35	2,105.15	-646.06	1,323.28	1,237.24	86.04	15.381	
9,600.00	7,058.00	7,219.02	6,864.61	64.49	40.50	-81.35	2,106.09	-716.28	1,333.40	1,247.20	86.20	15.469	
9,700.00	7,058.00	7,172.93	6,830.37	65.17	40.48	-79.88	2,107.17	-747.10	1,347.11	1,260.49	86.62	15.552	
9,800.00	7,058.00	7,135.00	6,801.20	66.02	40.47	-78.64	2,107.85	-771.33	1,365.92	1,278.92	87.00	15.701	
9,900.00	7,058.00	7,105.11	6,777.55	67.06	40.47	-77.64	2,108.06	-789.61	1,390.17	1,302.82	87.36	15.914	
10,000.00	7,058.00	7,080.06	6,757.27	68.29	40.48	-76.80	2,107.83	-804.30	1,419.97	1,332.31	87.66	16.199	
10,100.00	7,058.00	7,040.00	6,724.00	69.70	40.48	-75.43	2,106.72	-826.58	1,455.34	1,367.63	87.71	16.593	
10,200.00	7,058.00	7,040.00	6,724.00	71.29	40.48	-75.43	2,106.72	-826.58	1,495.27	1,407.20	88.08	16.977	
10,300.00	7,058.00	7,007.50	6,696.39	73.02	40.49	-74.32	2,105.30	-843.68	1,539.99	1,451.94	88.05	17.490	
10,400.00	7,058.00	6,982.78	6,675.12	74.88	40.50	-73.48	2,104.01	-856.20	1,588.93	1,500.90	88.03	18.050	
10,500.00	7,058.00	6,945.00	6,642.16	76.84	40.51	-72.19	2,101.70	-874.52	1,641.93	1,554.09	87.84	18.693	
10,600.00	7,058.00	6,945.00	6,642.16	78.89	40.51	-72.19	2,101.70	-874.52	1,698.29	1,610.34	87.94	19.311	
10,700.00	7,058.00	6,945.00	6,642.16	81.02	40.51	-72.19	2,101.70	-874.52	1,758.53	1,670.54	87.99	19.986	
10,800.00	7,058.00	6,907.52	6,608.66	83.20	40.52	-70.90	2,099.32	-891.15	1,821.14	1,733.44	87.69	20.767	
10,900.00	7,058.00	6,894.09	6,596.41	85.44	40.53	-70.44	2,098.52	-896.59	1,887.03	1,799.46	87.57	21.549	
11,000.00	7,058.00	6,850.00	6,555.36	87.71	40.54	-68.90	2,096.10	-912.45	1,956.42	1,869.26	87.16	22.447	
11,100.00	7,058.00	6,850.00	6,555.36	90.03	40.54	-68.90	2,096.10	-912.45	2,026.87	1,939.74	87.13	23.262	
11,200.00	7,058.00	6,850.00	6,555.36	92.38	40.54	-68.90	2,096.10	-912.45	2,099.73	2,012.64	87.09	24.111	
11,300.00	7,058.00	6,850.00	6,555.36	94.75	40.54	-68.90	2,096.10	-912.45	2,174.75	2,087.72	87.03	24.989	
11,400.00	7,058.00	6,850.00	6,555.36	97.15	40.54	-68.90	2,096.10	-912.45	2,251.70	2,164.75	86.96	25.894	
11,500.00	7,058.00	6,850.00	6,555.36	99.57	40.54	-68.90	2,096.10	-912.45	2,330.41	2,243.53	86.88	26.822	
11,600.00	7,058.00	6,850.00	6,555.36	102.01	40.54	-68.90	2,096.10	-912.45	2,410.70	2,323.90	86.81	27.771	
11,700.00	7,058.00	6,850.00	6,555.36	104.47	40.54	-68.90	2,096.10	-912.45	2,492.41	2,405.69	86.72	28.739	
11,800.00	7,058.00	6,850.00	6,555.36	106.94	40.54	-68.90	2,096.10	-912.45	2,575.42	2,488.78	86.64	29.724	
11,900.00	7,058.00	6,850.00	6,555.36	109.43	40.54	-68.90	2,096.10	-912.45	2,659.59	2,573.03	86.56	30.724	
12,000.00	7,058.00	6,850.00	6,555.36	111.93	40.54	-68.90	2,096.10	-912.45	2,744.83	2,658.34	86.49	31.738	
12,100.00	7,058.00	6,850.00	6,555.36	114.44	40.54	-68.90	2,096.10	-912.45	2,831.03	2,744.62	86.41	32.763	
12,200.00	7,058.00	6,808.09	6,515.12	116.96	40.52	-67.42	2,094.39	-923.98	2,916.05	2,829.95	86.11	33.865	
12,300.00	7,058.00	6,804.91	6,512.02	119.49	40.51	-67.30	2,094.29	-924.68	3,003.60	2,917.57	86.03	34.913	
12,400.00	7,058.00	6,801.94	6,509.13	122.03	40.51	-67.20	2,094.21	-925.32	3,091.89	3,005.93	85.96	35.969	
12,500.00	7,058.00	6,799.17	6,506.41	124.58	40.51	-67.10	2,094.14	-925.89	3,180.85	3,094.96	85.89	37.033	
12,600.00	7,058.00	6,796.57	6,503.86	127.14	40.51	-67.01	2,094.07	-926.41	3,270.43	3,184.60	85.83	38.104	

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - EXIST HZ ENCORE 40N-12HZ - Wellbore #1 - Wellbore #1													<b>Offset Site Error:</b> 0.00 usft
<b>Survey Program:</b> 16-OWSG (Rev2) MWD													<b>Offset Well Error:</b> 0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
0.00	0.00	6.00	6.00	0.00	0.00	25.78	1,706.02	824.15	1,894.66				
100.00	100.00	105.28	105.28	0.14	0.32	25.79	1,705.99	824.26	1,894.68	1,894.21	0.46	4,088.053	
200.00	200.00	241.00	241.00	0.50	0.80	25.80	1,705.04	824.14	1,894.09	1,892.79	1.30	1,454.528	
300.00	300.00	458.40	458.11	0.86	1.58	25.80	1,695.62	819.56	1,889.42	1,886.98	2.45	772.341	
400.00	400.00	641.56	640.15	1.22	2.29	25.70	1,679.14	808.19	1,878.17	1,874.70	3.47	541.831	
500.00	500.00	803.09	800.11	1.58	2.95	25.58	1,660.95	795.21	1,864.84	1,860.43	4.41	422.873	
600.00	600.00	1,006.43	999.71	1.94	3.88	25.42	1,628.51	774.13	1,845.62	1,840.12	5.51	335.214	
700.00	700.00	1,123.65	1,114.08	2.29	4.45	25.34	1,606.55	760.81	1,823.83	1,817.54	6.29	290.020	
800.00	800.00	1,317.41	1,301.82	2.65	5.47	25.27	1,564.30	738.50	1,799.51	1,792.16	7.35	244.909	
900.00	900.00	1,439.59	1,418.89	3.01	6.16	25.24	1,533.11	722.67	1,770.80	1,762.65	8.15	217.236	
1,000.00	1,000.00	1,526.70	1,502.31	3.37	6.66	25.19	1,511.01	710.80	1,742.04	1,733.20	8.84	197.065	
1,100.00	1,100.00	1,616.69	1,588.60	3.73	7.18	25.13	1,488.76	698.28	1,713.74	1,704.19	9.54	179.595	
1,200.00	1,200.00	1,707.87	1,676.10	4.09	7.71	25.05	1,466.55	685.47	1,685.71	1,675.46	10.25	164.434	
1,300.00	1,300.00	1,819.06	1,782.72	4.45	8.37	24.95	1,439.27	669.54	1,657.42	1,646.39	11.03	150.293	
1,350.00	1,350.00	1,864.30	1,826.04	4.62	8.64	24.91	1,427.93	663.16	1,643.08	1,631.69	11.38	144.336	
1,400.00	1,400.00	1,921.02	1,880.37	4.80	8.98	10.14	1,413.61	655.38	1,628.34	1,616.56	11.78	138.253	
1,500.00	1,499.93	2,045.55	1,998.99	5.16	9.74	10.16	1,380.96	636.15	1,594.71	1,582.11	12.60	126.568	
1,600.00	1,599.68	2,136.18	2,085.06	5.52	10.31	10.17	1,357.34	620.40	1,557.28	1,543.96	13.32	116.912	
1,700.00	1,699.13	2,239.55	2,183.24	5.88	10.97	10.19	1,330.61	602.24	1,516.82	1,502.75	14.07	107.785	
1,800.00	1,798.15	2,340.90	2,279.06	6.25	11.63	10.21	1,303.69	583.11	1,472.07	1,457.26	14.81	99.369	
1,900.00	1,896.63	2,440.05	2,372.61	6.62	12.28	10.26	1,276.99	563.93	1,423.82	1,408.28	15.54	91.605	
2,000.00	1,994.44	2,535.55	2,462.42	7.02	12.92	10.34	1,250.62	545.03	1,371.83	1,355.58	16.25	84.397	
2,100.00	2,091.46	2,610.99	2,533.33	7.43	13.43	10.50	1,229.59	530.15	1,316.79	1,299.87	16.91	77.849	
2,200.00	2,187.58	2,681.59	2,599.94	7.88	13.90	10.73	1,210.37	516.81	1,259.71	1,242.15	17.56	71.739	
2,300.00	2,282.68	2,755.93	2,670.25	8.35	14.39	11.02	1,190.45	503.17	1,200.38	1,182.18	18.21	65.936	
2,400.00	2,376.65	2,844.90	2,754.30	8.85	14.98	11.36	1,166.66	486.29	1,138.15	1,119.28	18.87	60.331	
2,500.00	2,469.36	2,912.71	2,818.30	9.40	15.43	11.74	1,148.63	473.02	1,073.19	1,053.71	19.49	55.066	
2,600.00	2,560.71	2,974.20	2,876.53	9.99	15.83	12.21	1,132.71	461.32	1,006.35	986.25	20.10	50.062	
2,700.00	2,650.59	3,037.00	2,936.34	10.62	16.23	12.81	1,117.19	450.06	938.15	917.44	20.71	45.298	
2,800.00	2,738.88	3,105.45	3,001.65	11.29	16.67	13.58	1,100.69	437.91	868.00	846.69	21.31	40.727	
2,900.00	2,825.48	3,174.95	3,067.86	12.02	17.10	14.53	1,083.89	425.15	795.26	773.35	21.90	36.311	
3,000.00	2,910.28	3,240.54	3,130.38	12.79	17.52	15.75	1,068.00	413.24	720.30	697.83	22.48	32.045	
3,100.00	2,993.18	3,305.14	3,191.95	13.62	17.93	17.41	1,052.15	401.78	643.16	620.13	23.04	27.919	
3,185.69	3,062.62	3,357.35	3,241.70	14.36	18.26	19.32	1,039.13	392.76	575.41	551.90	23.51	24.473	
3,200.00	3,074.09	3,365.83	3,249.78	14.49	18.31	19.56	1,037.01	391.31	563.98	540.39	23.59	23.903	
3,300.00	3,154.26	3,425.23	3,306.40	15.40	18.69	21.60	1,022.03	381.36	484.26	460.10	24.16	20.044	
3,400.00	3,234.42	3,486.18	3,364.44	16.32	19.08	24.50	1,006.52	371.13	404.71	379.95	24.76	16.347	
3,500.00	3,314.58	3,546.36	3,421.68	17.26	19.47	28.65	991.12	360.73	325.48	300.03	25.46	12.785	
3,600.00	3,394.75	3,606.16	3,478.48	18.21	19.85	34.94	975.98	349.74	247.07	220.67	26.40	9.359	
3,700.00	3,474.91	3,667.87	3,536.90	19.18	20.26	46.14	960.41	337.41	170.37	142.38	28.00	6.086	
3,800.00	3,555.07	3,727.18	3,592.74	20.15	20.66	67.38	945.28	324.35	99.93	67.31	32.62	3.064	
3,891.79	3,628.66	3,779.66	3,642.00	21.06	21.02	100.82	931.67	312.43	65.45	23.79	41.66	1.571 CC, ES, SF	
3,900.00	3,635.24	3,784.31	3,646.36	21.14	21.06	104.18	930.45	311.36	65.80	24.03	41.77	1.575	
4,000.00	3,715.40	3,840.40	3,698.90	22.13	21.45	138.32	915.64	298.42	110.80	76.24	34.56	3.206	
4,100.00	3,795.56	3,895.79	3,750.69	23.12	21.84	156.58	900.81	285.58	184.30	153.09	31.22	5.904	
4,200.00	3,875.73	3,950.78	3,802.08	24.13	22.23	165.99	885.87	272.95	263.63	233.22	30.41	8.669	
4,300.00	3,955.89	4,007.25	3,854.89	25.13	22.62	171.51	870.36	260.29	344.83	314.42	30.40	11.341	
4,400.00	4,036.05	4,070.02	3,913.99	26.14	23.05	175.03	853.43	247.65	426.12	395.27	30.85	13.811	
4,500.00	4,116.22	4,138.08	3,978.65	27.16	23.49	177.22	835.78	235.86	506.69	475.18	31.51	16.080	
4,600.00	4,196.38	4,203.81	4,041.58	28.18	23.90	178.51	819.60	225.92	586.23	554.10	32.13	18.245	
4,700.00	4,276.54	4,260.62	4,095.94	29.20	24.25	179.37	805.61	217.19	665.89	633.31	32.58	20.439	
4,800.00	4,356.71	4,318.48	4,151.22	30.22	24.61	-179.88	791.24	207.90	745.87	712.79	33.07	22.552	

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



<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: SEC. 11 T5N R68W 6th P.M. - EXIST HZ ENCORE 40N-12HZ - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft	
Survey Program:		16-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	
4,900.00	4,436.87	4,370.00	4,200.38	31.25	24.94	-179.31	778.40	199.40	826.03	792.56	33.47	24.681		
5,000.00	4,517.03	4,423.32	4,251.12	32.28	25.28	-178.79	764.80	190.28	906.68	872.77	33.92	26.731		
5,100.00	4,597.19	4,472.05	4,297.27	33.31	25.60	-178.36	751.83	181.56	988.12	953.81	34.30	28.805		
5,200.00	4,677.36	4,545.54	4,366.98	34.34	26.08	-177.81	732.54	168.50	1,069.35	1,034.24	35.11	30.455		
5,300.00	4,757.52	4,618.49	4,436.48	35.37	26.55	-177.38	714.26	155.98	1,149.79	1,113.89	35.89	32.033		
5,400.00	4,837.68	4,681.94	4,497.12	36.41	26.95	-177.07	698.88	145.38	1,229.66	1,193.13	36.53	33.666		
5,500.00	4,917.85	4,733.99	4,546.82	37.45	27.27	-176.85	686.04	136.76	1,309.77	1,272.78	36.99	35.408		
5,600.00	4,998.01	4,784.55	4,595.01	38.49	27.60	-176.67	673.26	128.40	1,390.25	1,352.81	37.44	37.128		
5,700.00	5,078.17	4,833.89	4,641.96	39.53	27.91	-176.51	660.48	120.14	1,471.13	1,433.24	37.89	38.829		
5,800.00	5,158.34	4,889.73	4,694.99	40.57	28.28	-176.34	645.81	110.66	1,552.29	1,513.86	38.43	40.393		
5,900.00	5,238.50	4,952.66	4,754.74	41.61	28.68	-176.16	629.33	99.79	1,633.47	1,594.39	39.07	41.806		
6,000.00	5,318.66	5,055.46	4,852.87	42.65	29.34	-175.93	603.67	83.05	1,713.73	1,673.49	40.24	42.585		
6,100.00	5,398.83	5,131.47	4,925.79	43.69	29.79	-175.81	585.64	71.50	1,793.06	1,752.02	41.03	43.696		
6,200.00	5,478.99	5,187.29	4,979.41	44.74	30.13	-175.73	572.66	62.96	1,872.11	1,830.54	41.57	45.032		
6,300.00	5,559.15	5,244.84	5,034.60	45.78	30.48	-175.62	559.29	53.61	1,951.34	1,909.20	42.14	46.310		
6,400.00	5,639.32	5,306.93	5,094.11	46.83	30.86	-175.49	544.99	43.13	2,030.58	1,987.82	42.76	47.488		
6,500.00	5,719.48	5,363.51	5,148.29	47.88	31.21	-175.37	532.05	33.28	2,109.85	2,066.53	43.32	48.705		
6,600.00	5,799.64	5,419.02	5,201.39	48.92	31.56	-175.25	519.27	23.36	2,189.30	2,145.43	43.87	49.907		
6,700.00	5,879.81	5,498.86	5,277.88	49.97	32.05	-175.10	501.03	9.47	2,268.55	2,223.84	44.71	50.739		
6,800.00	5,959.97	5,569.80	5,346.00	51.02	32.47	-175.01	485.08	-2.22	2,347.39	2,301.95	45.44	51.658		
6,900.00	6,040.13	5,641.51	5,414.95	52.07	32.90	-174.92	469.16	-13.87	2,426.02	2,379.84	46.18	52.535		
7,000.00	6,120.29	5,712.23	5,482.99	53.12	33.33	-174.83	453.87	-25.59	2,504.36	2,457.45	46.91	53.392		
7,100.00	6,200.46	5,767.28	5,535.86	54.17	33.66	-174.72	442.29	-35.64	2,582.72	2,535.26	47.46	54.422		
7,200.00	6,280.62	5,796.00	5,563.37	55.22	33.83	-174.65	436.37	-41.37	2,661.39	2,613.68	47.71	55.784		
7,300.00	6,360.78	5,836.57	5,602.08	56.27	34.09	-174.54	427.78	-50.01	2,740.61	2,692.51	48.11	56.970		
7,400.00	6,440.95	5,862.98	5,627.12	57.32	34.26	-174.47	421.90	-55.94	2,820.65	2,772.31	48.34	58.351		
7,498.05	6,519.54	5,891.00	5,653.58	58.35	34.44	-174.38	415.40	-62.51	2,899.82	2,851.22	48.60	59.673		
7,500.00	6,521.11	5,891.00	5,653.58	58.37	34.44	-173.87	415.40	-62.51	2,901.40	2,852.81	48.59	59.707		
7,550.00	6,561.44	5,928.01	5,688.49	58.89	34.69	-160.91	406.64	-71.11	2,941.44	2,892.44	49.00	60.035		
7,600.00	6,602.00	5,976.13	5,734.05	59.38	35.01	-148.71	395.21	-81.52	2,980.21	2,930.68	49.53	60.171		
7,650.00	6,642.50	6,018.80	5,774.61	59.85	35.29	-137.41	385.00	-90.02	3,017.44	2,967.44	49.99	60.357		
7,700.00	6,682.61	6,060.05	5,813.91	60.29	35.55	-127.17	375.02	-97.59	3,052.93	3,002.49	50.44	60.526		
7,750.00	6,722.05	6,093.85	5,846.18	60.69	35.77	-117.96	366.77	-103.34	3,086.50	3,035.70	50.80	60.756		
7,800.00	6,760.50	6,119.00	5,870.18	61.07	35.92	-109.77	360.55	-107.53	3,118.07	3,067.01	51.07	61.059		
7,850.00	6,797.68	6,143.75	5,893.80	61.41	36.08	-102.66	354.37	-111.65	3,147.51	3,096.18	51.33	61.317		
7,900.00	6,833.29	6,178.00	5,926.44	61.71	36.30	-96.71	345.71	-117.31	3,174.68	3,122.96	51.72	61.387		
7,950.00	6,867.08	6,199.63	5,947.06	61.99	36.43	-91.50	340.21	-120.87	3,199.37	3,147.40	51.97	61.562		
8,000.00	6,898.78	6,236.36	5,982.09	62.23	36.67	-87.36	330.93	-126.89	3,221.43	3,169.01	52.42	61.458		
8,050.00	6,928.16	6,271.63	6,015.74	62.43	36.89	-83.94	322.10	-132.64	3,240.76	3,187.88	52.88	61.290		
8,100.00	6,954.98	6,305.08	6,047.68	62.60	37.10	-81.15	313.77	-138.04	3,257.30	3,203.95	53.35	61.056		
8,150.00	6,979.04	6,336.31	6,077.53	62.74	37.30	-78.92	306.03	-143.02	3,271.03	3,217.19	53.84	60.754		
8,600.00	7,058.00	6,444.30	6,180.77	62.81	37.97	-74.30	279.12	-159.74	3,278.19	3,219.45	58.74	55.807		
8,700.00	7,058.00	6,463.00	6,198.62	62.74	38.09	-74.62	274.34	-162.57	3,270.23	3,209.92	60.31	54.224		
8,800.00	7,058.00	6,463.00	6,198.62	62.71	38.09	-74.62	274.34	-162.57	3,265.25	3,203.44	61.80	52.832		
8,900.00	7,058.00	6,477.40	6,212.37	62.71	38.18	-74.87	270.63	-164.70	3,263.28	3,199.68	63.59	51.315		
8,915.34	7,058.00	6,478.99	6,213.89	62.72	38.18	-74.90	270.22	-164.93	3,263.24	3,199.36	63.88	51.084		
9,000.00	7,058.00	6,487.54	6,222.05	62.76	38.24	-75.05	268.00	-166.14	3,264.32	3,198.89	65.44	49.886		
9,100.00	7,058.00	6,497.14	6,231.23	62.86	38.30	-75.21	265.49	-167.48	3,268.39	3,201.03	67.36	48.524		
9,200.00	7,058.00	6,506.24	6,239.93	63.01	38.35	-75.37	263.11	-168.71	3,275.46	3,206.12	69.33	47.242		



<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - EXIST HZ ENCORE 41N-12HZ - Wellbore #1 - Wellbore #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 16-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
0.00	0.00	6.00	6.00	0.00	0.00	25.06	1,764.67	824.98	1,947.99				
100.00	100.00	89.93	89.93	0.14	0.27	25.06	1,764.96	825.10	1,948.36	1,947.95	0.41	4,749.383	
200.00	200.00	189.11	189.10	0.50	0.62	25.05	1,765.94	825.45	1,949.40	1,948.28	1.12	1,736.246	
300.00	300.00	389.90	389.84	0.86	1.32	25.02	1,763.62	822.97	1,947.99	1,945.81	2.18	892.781	
400.00	400.00	554.96	554.48	1.22	1.90	24.85	1,756.93	813.63	1,941.87	1,938.75	3.12	622.155	
500.00	500.00	684.58	683.37	1.58	2.39	24.61	1,750.31	801.61	1,933.29	1,929.35	3.94	490.146	
600.00	600.00	811.88	809.40	1.94	2.91	24.23	1,744.16	784.90	1,923.42	1,918.64	4.78	402.133	
700.00	700.00	931.32	926.95	2.29	3.42	23.73	1,738.78	764.42	1,912.20	1,906.59	5.61	340.768	
800.00	800.00	1,031.59	1,025.23	2.65	3.88	23.24	1,735.04	744.93	1,900.88	1,894.49	6.39	297.510	
900.00	900.00	1,162.90	1,153.40	3.01	4.51	22.52	1,729.28	717.00	1,888.31	1,880.99	7.32	257.968	
1,000.00	1,000.00	1,265.35	1,253.01	3.37	5.02	21.91	1,724.52	693.50	1,875.09	1,866.94	8.15	230.074	
1,100.00	1,100.00	1,411.43	1,394.41	3.73	5.80	20.96	1,716.78	657.68	1,860.93	1,851.73	9.20	202.225	
1,200.00	1,200.00	1,519.07	1,497.87	4.09	6.41	20.19	1,709.86	628.81	1,845.05	1,834.94	10.11	182.522	
1,300.00	1,300.00	1,620.34	1,594.95	4.45	7.00	19.42	1,703.73	600.64	1,829.47	1,818.46	11.00	166.246	
1,350.00	1,350.00	1,683.05	1,655.13	4.62	7.36	18.95	1,699.27	583.58	1,821.41	1,809.90	11.51	158.196	
1,400.00	1,400.00	1,716.07	1,686.88	4.80	7.56	3.94	1,696.92	574.80	1,813.08	1,801.20	11.88	152.648	
1,500.00	1,499.93	1,805.42	1,772.99	5.16	8.07	3.32	1,690.90	551.75	1,794.70	1,781.98	12.72	141.111	
1,600.00	1,599.68	1,901.97	1,866.02	5.52	8.63	2.64	1,684.31	526.78	1,773.09	1,759.49	13.60	130.375	
1,700.00	1,699.13	2,047.29	2,004.79	5.88	9.53	1.44	1,673.30	485.12	1,746.76	1,731.99	14.76	118.305	
1,800.00	1,798.15	2,171.47	2,121.30	6.25	10.38	0.15	1,662.99	443.42	1,715.39	1,699.50	15.89	107.944	
1,900.00	1,896.63	2,267.78	2,211.07	6.62	11.07	-0.96	1,654.24	409.69	1,680.14	1,663.25	16.89	99.452	
2,000.00	1,994.44	2,358.78	2,296.25	7.02	11.71	-2.04	1,645.36	378.93	1,641.91	1,624.05	17.86	91.928	
2,100.00	2,091.46	2,457.53	2,388.87	7.43	12.41	-3.27	1,635.07	346.26	1,600.60	1,581.73	18.87	84.836	
2,200.00	2,187.58	2,552.81	2,478.28	7.88	13.08	-4.57	1,624.34	315.11	1,556.01	1,536.15	19.85	78.373	
2,300.00	2,282.68	2,625.47	2,546.74	8.35	13.57	-5.63	1,615.90	292.28	1,508.82	1,488.10	20.71	72.837	
2,400.00	2,376.65	2,697.23	2,614.82	8.85	14.05	-6.74	1,607.85	271.09	1,459.74	1,438.18	21.56	67.696	
2,500.00	2,469.36	2,780.66	2,694.37	9.40	14.59	-8.09	1,598.75	247.64	1,408.65	1,386.19	22.46	62.715	
2,600.00	2,560.71	2,866.22	2,775.59	9.99	15.15	-9.70	1,588.61	222.71	1,354.22	1,330.83	23.38	57.912	
2,700.00	2,650.59	2,914.21	2,821.08	10.62	15.47	-10.85	1,583.68	208.25	1,298.67	1,274.51	24.16	53.744	
2,800.00	2,738.88	2,969.07	2,873.05	11.29	15.85	-12.28	1,579.30	191.27	1,242.65	1,217.65	25.00	49.699	
2,900.00	2,825.48	3,037.00	2,936.87	12.02	16.32	-14.32	1,574.87	168.41	1,185.67	1,159.71	25.95	45.684	
3,000.00	2,910.28	3,101.41	2,997.15	12.79	16.79	-16.56	1,571.11	146.05	1,127.50	1,100.57	26.93	41.868	
3,100.00	2,993.18	3,172.56	3,063.96	13.62	17.30	-19.31	1,566.87	121.94	1,067.95	1,039.98	27.98	38.169	
3,185.69	3,062.62	3,231.60	3,119.30	14.36	17.72	-21.94	1,563.27	101.69	1,016.00	987.09	28.91	35.149	
3,200.00	3,074.09	3,241.11	3,128.21	14.49	17.79	-22.31	1,562.68	98.41	1,007.29	978.22	29.06	34.657	
3,300.00	3,154.26	3,307.79	3,190.73	15.40	18.27	-25.04	1,558.57	75.59	947.53	917.33	30.20	31.380	
3,400.00	3,234.42	3,374.74	3,253.46	16.32	18.76	-28.04	1,554.39	52.56	890.00	858.58	31.42	28.330	
3,500.00	3,314.58	3,441.10	3,315.25	17.26	19.25	-31.33	1,550.07	28.77	835.26	802.53	32.73	25.519	
3,600.00	3,394.75	3,509.73	3,379.34	18.21	19.76	-34.97	1,545.54	4.65	783.81	749.66	34.16	22.947	
3,700.00	3,474.91	3,581.52	3,446.45	19.18	20.29	-39.08	1,540.40	-20.34	736.08	700.38	35.70	20.618	
3,800.00	3,555.07	3,649.25	3,509.50	20.15	20.80	-43.29	1,534.85	-44.43	692.93	655.63	37.30	18.578	
3,900.00	3,635.24	3,714.94	3,570.65	21.14	21.29	-47.63	1,529.27	-67.79	655.71	616.80	38.91	16.851	
4,000.00	3,715.40	3,779.19	3,630.47	22.13	21.78	-52.09	1,523.79	-90.57	625.65	585.18	40.47	15.461	
4,100.00	3,795.56	3,846.78	3,693.43	23.12	22.29	-56.95	1,517.94	-114.44	603.73	561.80	41.92	14.400	
4,200.00	3,875.73	3,914.63	3,756.69	24.13	22.80	-61.97	1,511.64	-138.16	590.55	547.39	43.16	13.682	
4,286.67	3,945.20	3,971.66	3,809.89	25.00	23.22	-66.25	1,506.16	-157.95	586.85	542.88	43.97	13.345 CC	
4,300.00	3,955.89	3,980.42	3,818.07	25.13	23.29	-66.91	1,505.30	-160.98	586.94	542.86	44.08	13.316 ES	
4,400.00	4,036.05	4,057.22	3,889.98	26.14	23.85	-72.64	1,497.66	-186.82	592.65	547.80	44.86	13.212 SF	
4,500.00	4,116.22	4,136.05	3,964.38	27.16	24.40	-78.39	1,489.45	-211.54	606.47	561.07	45.40	13.358	
4,600.00	4,196.38	4,202.99	4,027.94	28.18	24.86	-83.13	1,482.36	-231.34	628.04	582.46	45.58	13.777	
4,700.00	4,276.54	4,253.28	4,075.47	29.20	25.20	-86.56	1,477.33	-246.95	658.67	613.27	45.40	14.509	
4,800.00	4,356.71	4,312.93	4,131.54	30.22	25.63	-90.43	1,471.76	-266.54	697.42	652.06	45.36	15.375	

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: SEC. 11 T5N R68W 6th P.M. - EXIST HZ ENCORE 41N-12HZ - Wellbore #1 - Wellbore #1												Offset Site Error: 0.00 usft		
Survey Program: 16-OWSG (Rev2) MWD		Reference		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned: Distance			Offset Well Error: 0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,900.00	4,436.87	4,379.87	4,194.50	31.25	26.11	-94.53	1,465.53	-288.42	741.87	696.35	45.51	16.300		
5,000.00	4,517.03	4,439.25	4,250.29	32.28	26.53	-97.92	1,460.20	-308.02	791.32	745.71	45.61	17.351		
5,100.00	4,597.19	4,497.29	4,304.68	33.31	26.96	-100.98	1,455.27	-327.67	845.17	799.41	45.76	18.468		
5,200.00	4,677.36	4,553.78	4,357.44	34.34	27.38	-103.75	1,450.59	-347.33	902.80	856.83	45.98	19.637		
5,300.00	4,757.52	4,627.75	4,426.48	35.37	27.93	-107.07	1,444.57	-373.16	963.07	916.47	46.60	20.668		
5,400.00	4,837.68	4,687.47	4,482.38	36.41	28.38	-109.53	1,439.72	-393.62	1,025.03	978.03	47.00	21.808		
5,500.00	4,917.85	4,735.84	4,527.41	37.45	28.75	-111.39	1,435.57	-410.76	1,089.62	1,042.37	47.25	23.062		
5,600.00	4,998.01	4,792.71	4,580.12	38.49	29.19	-113.41	1,430.46	-431.52	1,156.44	1,108.74	47.70	24.244		
5,700.00	5,078.17	4,855.65	4,638.39	39.53	29.68	-115.48	1,424.73	-454.61	1,224.64	1,176.33	48.31	25.352		
5,800.00	5,158.34	4,931.52	4,708.84	40.57	30.26	-117.78	1,417.50	-481.82	1,293.54	1,244.37	49.17	26.310		
5,900.00	5,238.50	5,015.77	4,787.54	41.61	30.89	-120.14	1,409.05	-510.68	1,362.58	1,312.41	50.17	27.162		
6,000.00	5,318.66	5,090.55	4,857.77	42.65	31.43	-122.07	1,401.43	-535.18	1,431.62	1,380.62	51.00	28.072		
6,100.00	5,398.83	5,177.76	4,939.93	43.69	32.05	-124.12	1,392.85	-563.16	1,500.92	1,448.89	52.03	28.845		
6,200.00	5,478.99	5,262.78	5,020.56	44.74	32.63	-125.95	1,385.10	-588.99	1,569.51	1,516.48	53.03	29.598		
6,300.00	5,559.15	5,322.00	5,076.75	45.78	33.03	-127.12	1,379.94	-606.98	1,638.55	1,584.91	53.63	30.551		
6,400.00	5,639.32	5,384.32	5,135.72	46.83	33.46	-128.24	1,374.93	-626.47	1,708.28	1,653.97	54.31	31.453		
6,500.00	5,719.48	5,445.21	5,197.65	47.88	32.58	171.32	1,187.46	587.35	1,769.27	1,702.90	66.37	26.658		
6,600.00	5,799.64	5,463.25	5,198.31	48.92	32.88	170.74	1,187.21	605.38	1,758.89	1,689.63	69.26	25.395		
6,700.00	5,879.81	5,480.36	5,198.91	49.97	33.18	170.19	1,186.95	622.47	1,753.98	1,681.95	72.03	24.350		
6,738.68	5,910.81	5,486.83	5,199.13	50.38	33.29	169.98	1,186.84	628.94	1,753.57	1,680.51	73.06	24.000		
6,800.00	5,959.97	5,496.93	5,199.46	51.02	33.47	169.65	1,186.67	639.03	1,754.61	1,679.96	74.65	23.505		
6,900.00	6,040.13	5,513.01	5,199.97	52.07	33.75	169.13	1,186.37	655.11	1,760.77	1,683.68	77.09	22.841		
7,000.00	6,120.29	5,528.63	5,199.42	53.12	34.03	168.63	1,186.06	670.71	1,772.41	1,693.09	79.32	22.345		
7,100.00	6,200.46	5,543.80	5,199.84	54.17	34.29	168.14	1,185.73	685.88	1,789.43	1,708.10	81.34	22.001		
7,200.00	6,280.62	5,559.00	5,199.23	55.22	34.56	167.65	1,185.37	701.06	1,811.69	1,728.55	83.14	21.792		
7,300.00	6,360.78	5,574.74	5,199.61	56.27	34.85	167.15	1,184.99	716.79	1,838.99	1,754.24	84.75	21.699		
7,400.00	6,440.95	5,590.58	5,199.95	57.32	35.14	166.64	1,184.60	732.63	1,871.10	1,784.95	86.16	21.718		
7,498.05	6,519.54	5,605.73	5,199.24	58.35	35.41	166.15	1,184.22	747.77	1,907.04	1,819.71	87.33	21.837		
7,500.00	6,521.11	5,606.03	5,199.25	58.37	35.42	166.48	1,184.21	748.06	1,907.80	1,820.45	87.35	21.841		
7,550.00	6,561.44	5,611.29	5,199.34	58.89	35.51	175.23	1,184.07	753.32	1,927.82	1,840.00	87.82	21.952		
7,600.00	6,602.00	5,612.19	5,199.36	59.38	35.53	-175.55	1,184.05	754.23	1,948.87	1,860.73	88.13	22.112		
7,650.00	6,642.50	5,608.81	5,199.30	59.85	35.47	-166.14	1,184.14	750.84	1,970.76	1,882.46	88.30	22.319		
7,700.00	6,682.61	5,601.24	5,199.16	60.29	35.33	-156.81	1,184.33	743.29	1,993.29	1,904.97	88.32	22.568		
7,750.00	6,722.05	5,589.63	5,199.93	60.69	35.12	-147.82	1,184.62	731.68	2,016.20	1,928.00	88.20	22.858		
7,800.00	6,760.50	5,574.13	5,199.59	61.07	34.83	-139.32	1,185.01	716.19	2,039.26	1,951.30	87.96	23.185		
7,850.00	6,797.68	5,559.00	5,199.23	61.41	34.56	-131.55	1,185.37	701.06	2,062.19	1,974.48	87.71	23.511		
7,900.00	6,833.29	5,535.48	5,199.62	61.71	34.15	-124.31	1,185.91	677.56	2,084.73	1,997.49	87.23	23.898		
7,950.00	6,867.08	5,512.66	5,199.96	61.99	33.74	-117.85	1,186.38	654.75	2,106.63	2,019.85	86.78	24.275		
8,000.00	6,898.78	5,487.15	5,199.14	62.23	33.30	-112.08	1,186.84	629.26	2,127.64	2,041.38	86.26	24.664		
8,050.00	6,928.16	5,458.62	5,198.14	62.43	32.80	-106.96	1,187.28	600.75	2,147.51	2,061.82	85.69	25.062		
8,100.00	6,954.98	5,424.94	5,198.67	62.60	32.24	-102.44	1,187.73	567.10	2,165.96	2,080.94	85.02	25.476		
8,150.00	6,979.04	5,388.88	5,198.40	62.74	31.63	-98.54	1,188.16	531.08	2,182.75	2,098.42	84.33	25.883		
8,200.00	7,000.17	5,336.77	5,198.35	62.85	30.79	-95.07	1,188.79	479.00	2,197.60	2,114.29	83.31	26.378		
8,250.00	7,018.20	5,274.00	5,198.15	62.93	29.81	-92.18	1,190.07	416.26	2,209.84	2,127.71	82.13	26.906		
8,300.00	7,032.99	5,229.48	5,197.10	62.98	28.95	-90.07	1,191.13	371.76	2,219.57	2,138.06	81.51	27.230		
8,350.00	7,044.43	5,188.93	5,196.07	63.00	28.56	-88.52	1,191.96	331.22	2,226.95	2,145.91	81.05	27.478		
8,400.00	7,052.43	5,148.56	5,195.22	63.00	28.00	-87.47	1,192.65	290.86	2,231.89	2,151.21	80.68	27.664		
8,450.00	7,056.94	5,108.03	5,193.16	62.97	27.45	-86.89	1,193.20	250.35	2,234.33	2,153.95	80.38	27.797		
8,488.77	7,058.00	5,083.00	5,193.40	62.93	27.11	-86.78	1,193.46	225.34	2,234.51	2,154.19	80.32	27.820		
8,500.00	7,058.00	5,067.36	5,193.94	62.92	26.91	-86.77	1,193.59	209.70	2,234.32	2,154.17	80.16	27.874		
8,600.00	7,058.00	5,038.80	5,193.60	62.81	26.91	-86.73	1,193.79	128.16	2,233.29	2,153.37	79.92	27.944		
8,700.00	7,058.00	5,018.46	5,193.44	62.74	26.83	-86.70	1,193.59	29.82	2,232.68	2,152.99	79.69	28.016		

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - EXIST HZ ENCORE 41N-12HZ - Wellbore #1 - Wellbore #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 16-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
8,800.00	7,058.00	7,797.00	6,933.78	62.71	43.96	-86.66	1,193.17	-60.62	2,232.37	2,152.50	79.86	27.953	
8,818.38	7,058.00	7,784.54	6,933.56	62.71	43.85	-86.65	1,193.07	-73.08	2,232.37	2,152.37	80.00	27.906	
8,900.00	7,058.00	7,724.32	6,933.26	62.71	43.36	-86.64	1,192.19	-133.29	2,232.87	2,152.35	80.52	27.730	
9,000.00	7,058.00	7,641.60	6,931.57	62.76	42.76	-86.60	1,190.27	-215.93	2,234.41	2,153.17	81.25	27.502	
9,100.00	7,058.00	7,511.00	6,910.99	62.86	41.97	-86.08	1,188.51	-344.77	2,236.00	2,154.33	81.66	27.381	
9,200.00	7,058.00	7,419.95	6,884.88	63.01	41.56	-85.41	1,189.00	-431.93	2,236.79	2,154.19	82.60	27.080	
9,300.00	7,058.00	7,341.47	6,853.78	63.23	41.30	-84.61	1,189.84	-503.93	2,238.53	2,154.79	83.73	26.734	
9,400.00	7,058.00	7,263.08	6,815.49	63.54	41.11	-83.63	1,191.04	-572.30	2,241.64	2,156.71	84.93	26.393	
9,500.00	7,058.00	7,199.80	6,780.44	63.95	41.00	-82.74	1,192.32	-624.95	2,246.37	2,160.11	86.27	26.040	
9,600.00	7,058.00	7,152.65	6,751.55	64.49	40.96	-82.00	1,193.13	-662.20	2,253.65	2,165.94	87.71	25.694	
9,700.00	7,058.00	7,130.00	6,736.83	65.17	40.93	-81.63	1,193.45	-679.40	2,263.95	2,174.67	89.28	25.358	
9,800.00	7,058.00	7,076.30	6,700.00	66.02	40.92	-80.70	1,193.87	-718.47	2,277.10	2,186.46	90.64	25.121	
9,900.00	7,058.00	7,035.00	6,669.99	67.06	40.91	-79.94	1,193.80	-746.83	2,293.66	2,201.64	92.02	24.926	
10,000.00	7,058.00	6,991.56	6,637.08	68.29	40.92	-79.12	1,193.76	-775.19	2,313.22	2,219.88	93.34	24.783	
10,100.00	7,058.00	6,843.39	6,515.92	69.70	40.99	-76.10	1,199.86	-859.83	2,335.34	2,241.54	93.80	24.896	
10,200.00	7,058.00	6,749.00	6,431.92	71.29	41.03	-73.98	1,212.31	-900.84	2,357.70	2,263.34	94.36	24.986	
10,300.00	7,058.00	6,749.00	6,431.92	73.02	41.03	-73.98	1,212.31	-900.84	2,383.31	2,287.53	95.78	24.884	
10,400.00	7,058.00	6,712.68	6,398.42	74.88	41.03	-73.14	1,218.42	-913.46	2,412.23	2,315.55	96.68	24.951	
10,500.00	7,058.00	6,698.26	6,384.94	76.84	41.03	-72.80	1,220.91	-917.91	2,444.85	2,347.12	97.73	25.016	
10,600.00	7,058.00	6,685.69	6,373.11	78.89	41.02	-72.50	1,223.11	-921.55	2,480.91	2,382.21	98.71	25.134	
10,700.00	7,058.00	6,654.00	6,343.00	81.02	41.02	-71.74	1,228.79	-929.64	2,520.51	2,421.17	99.35	25.371	
10,800.00	7,058.00	6,654.00	6,343.00	83.20	41.02	-71.74	1,228.79	-929.64	2,562.94	2,462.66	100.28	25.558	
10,900.00	7,058.00	6,654.00	6,343.00	85.44	41.02	-71.74	1,228.79	-929.64	2,608.52	2,507.40	101.11	25.798	
11,000.00	7,058.00	6,654.00	6,343.00	87.71	41.02	-71.74	1,228.79	-929.64	2,657.08	2,555.22	101.86	26.087	
11,100.00	7,058.00	6,654.00	6,343.00	90.03	41.02	-71.74	1,228.79	-929.64	2,708.46	2,605.95	102.51	26.422	
11,200.00	7,058.00	6,654.00	6,343.00	92.38	41.02	-71.74	1,228.79	-929.64	2,762.50	2,659.43	103.08	26.800	
11,300.00	7,058.00	6,654.00	6,343.00	94.75	41.02	-71.74	1,228.79	-929.64	2,819.06	2,715.49	103.57	27.219	
11,400.00	7,058.00	6,654.00	6,343.00	97.15	41.02	-71.74	1,228.79	-929.64	2,877.98	2,773.99	103.99	27.675	
11,500.00	7,058.00	6,654.00	6,343.00	99.57	41.02	-71.74	1,228.79	-929.64	2,939.13	2,834.78	104.35	28.166	
11,600.00	7,058.00	6,654.00	6,343.00	102.01	41.02	-71.74	1,228.79	-929.64	3,002.36	2,897.71	104.65	28.689	
11,700.00	7,058.00	6,654.00	6,343.00	104.47	41.02	-71.74	1,228.79	-929.64	3,067.55	2,962.65	104.90	29.243	
11,800.00	7,058.00	6,615.43	6,305.84	106.94	40.99	-70.81	1,235.66	-937.33	3,133.34	3,028.64	104.69	29.929	
11,900.00	7,058.00	6,612.34	6,302.84	109.43	40.98	-70.74	1,236.20	-937.84	3,201.86	3,097.03	104.83	30.545	
12,000.00	7,058.00	6,609.44	6,300.02	111.93	40.98	-70.66	1,236.70	-938.30	3,271.99	3,167.07	104.93	31.184	

Company:	BISON IV OPERATING	Local Co-ordinate Reference:	Well CE 5-68 11-3-2H
Project:	LARIMER COUNTY, COLORADO (NAD 83)	TVD Reference:	KBE @ 5000.00usft
Reference Site:	SEC. 11 T5N R68W 6th P.M.	MD Reference:	KBE @ 5000.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	CE 5-68 11-3-2H	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: SEC. 11 T5N R68W 6th P.M. - EXIST HZ ENCORE 8C-12HZ - Wellbore #1 - Wellbore #1													Offset Site Error:	0.00 usft
Survey Program: 16-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	6.00	6.00	0.00	0.00	25.41	1,735.90	824.70	1,921.84					
100.00	100.00	99.59	99.59	0.14	0.30	25.40	1,736.12	824.55	1,921.99	1,921.55	0.44	4,335.491		
200.00	200.00	215.90	215.90	0.50	0.71	25.38	1,736.60	823.72	1,922.08	1,920.86	1.22	1,580.887		
300.00	300.00	420.31	420.10	0.86	1.45	25.22	1,732.67	816.21	1,918.69	1,916.38	2.31	830.131		
400.00	400.00	520.00	519.48	1.22	1.82	25.08	1,729.19	809.22	1,912.54	1,909.51	3.03	631.834		
500.00	500.00	661.48	660.28	1.58	2.36	24.78	1,724.96	796.15	1,906.08	1,902.16	3.91	487.351		
600.00	600.00	925.16	920.69	1.94	3.48	24.03	1,705.25	760.43	1,893.46	1,888.17	5.29	358.237		
700.00	700.00	1,138.67	1,128.39	2.29	4.53	23.23	1,677.16	719.95	1,873.40	1,866.91	6.48	288.933		
800.00	800.00	1,278.19	1,262.74	2.65	5.28	22.67	1,653.44	690.73	1,849.21	1,841.80	7.41	249.617		
900.00	900.00	1,398.42	1,377.95	3.01	5.96	22.18	1,630.89	664.80	1,823.32	1,815.06	8.26	220.673		
1,000.00	1,000.00	1,493.64	1,469.13	3.37	6.52	21.77	1,612.92	644.05	1,797.44	1,788.42	9.03	199.095		
1,100.00	1,100.00	1,576.00	1,548.08	3.73	7.00	21.40	1,597.69	626.22	1,772.06	1,762.31	9.75	181.742		
1,200.00	1,200.00	1,666.78	1,635.18	4.09	7.53	20.98	1,581.45	606.47	1,747.28	1,736.77	10.51	166.198		
1,300.00	1,300.00	1,788.98	1,752.16	4.45	8.27	20.37	1,559.26	578.95	1,722.07	1,710.66	11.41	150.961		
1,350.00	1,350.00	1,838.60	1,799.47	4.62	8.57	20.10	1,550.01	567.17	1,709.06	1,697.24	11.82	144.636		
1,400.00	1,400.00	1,883.40	1,842.19	4.80	8.85	5.09	1,541.69	556.61	1,695.72	1,683.51	12.21	138.879		
1,500.00	1,499.93	2,044.71	1,994.88	5.16	9.90	4.12	1,510.42	515.09	1,665.32	1,652.02	13.30	125.214		
1,600.00	1,599.68	2,219.58	2,156.16	5.52	11.20	2.68	1,471.64	459.87	1,626.89	1,612.38	14.51	112.108		
1,700.00	1,699.13	2,325.97	2,252.23	5.88	12.06	1.58	1,446.22	421.90	1,582.72	1,567.24	15.49	102.202		
1,800.00	1,798.15	2,414.64	2,332.26	6.25	12.79	0.59	1,424.67	390.38	1,535.58	1,519.19	16.40	93.654		
1,900.00	1,896.63	2,505.47	2,414.17	6.62	13.54	-0.52	1,402.09	358.28	1,485.38	1,468.05	17.32	85.751		
2,000.00	1,994.44	2,588.21	2,488.82	7.02	14.22	-1.62	1,381.05	329.45	1,432.24	1,414.02	18.22	78.620		
2,100.00	2,091.46	2,661.80	2,555.52	7.43	14.83	-2.68	1,362.25	304.66	1,376.80	1,357.72	19.08	72.173		
2,200.00	2,187.58	2,735.71	2,622.81	7.88	15.42	-3.84	1,343.38	280.62	1,319.17	1,299.24	19.93	66.189		
2,300.00	2,282.68	2,808.52	2,689.37	8.35	16.01	-5.11	1,324.80	257.71	1,259.38	1,238.59	20.79	60.581		
2,400.00	2,376.65	2,893.21	2,766.93	8.85	16.69	-6.77	1,303.05	231.55	1,197.28	1,175.58	21.70	55.185		
2,500.00	2,469.36	2,972.91	2,839.24	9.40	17.33	-8.72	1,281.93	205.52	1,131.99	1,109.38	22.61	50.072		
2,600.00	2,560.71	3,035.56	2,896.22	9.99	17.84	-10.58	1,265.40	185.42	1,064.91	1,041.42	23.49	45.334		
2,700.00	2,650.59	3,097.30	2,952.69	10.62	18.34	-12.70	1,249.31	166.30	996.38	971.98	24.40	40.838		
2,800.00	2,738.88	3,157.71	3,008.21	11.29	18.82	-15.13	1,233.79	148.27	926.51	901.18	25.33	36.577		
2,900.00	2,825.48	3,216.67	3,062.68	12.02	19.27	-17.93	1,218.87	131.32	855.51	829.22	26.30	32.533		
3,000.00	2,910.28	3,274.79	3,116.64	12.79	19.70	-21.22	1,204.40	115.30	783.59	756.28	27.31	28.690		
3,100.00	2,993.18	3,332.20	3,170.22	13.62	20.12	-25.12	1,190.32	100.28	711.00	682.59	28.41	25.027		
3,185.69	3,062.62	3,381.25	3,216.15	14.36	20.47	-29.11	1,178.38	87.86	648.52	619.08	29.44	22.029		
3,200.00	3,074.09	3,389.32	3,223.71	14.49	20.52	-29.69	1,176.42	85.84	638.10	608.48	29.63	21.539		
3,300.00	3,154.26	3,446.10	3,276.99	15.40	20.92	-34.10	1,162.70	71.81	566.78	535.75	31.03	18.265		
3,400.00	3,234.42	3,503.53	3,331.00	16.32	21.33	-39.29	1,148.91	57.96	498.73	466.01	32.71	15.245		
3,500.00	3,314.58	3,560.16	3,384.28	17.26	21.72	-45.24	1,135.40	44.36	435.41	400.67	34.75	12.531		
3,600.00	3,394.75	3,616.28	3,436.99	18.21	22.12	-52.09	1,122.08	30.41	379.38	342.22	37.16	10.209		
3,700.00	3,474.91	3,671.23	3,488.24	19.18	22.52	-59.74	1,108.76	15.75	334.48	294.71	39.77	8.411		
3,800.00	3,555.07	3,722.61	3,535.71	20.15	22.91	-67.62	1,095.90	0.87	306.37	264.54	41.83	7.324		
3,874.00	3,614.40	3,759.21	3,569.37	20.88	23.20	-73.45	1,086.87	-10.29	299.78	257.38	42.40	7.071 CC, ES, SF		
3,900.00	3,635.24	3,772.05	3,581.16	21.14	23.30	-75.50	1,083.75	-14.31	300.60	258.25	42.35	7.098		
4,000.00	3,715.40	3,823.64	3,628.43	22.13	23.71	-83.62	1,071.42	-30.90	318.41	277.19	41.22	7.725		
4,100.00	3,795.56	3,877.76	3,677.94	23.12	24.15	-91.69	1,058.42	-48.47	355.77	316.37	39.40	9.030		
4,200.00	3,875.73	3,931.78	3,727.30	24.13	24.59	-99.05	1,045.30	-66.05	407.29	369.56	37.73	10.795		
4,300.00	3,955.89	3,985.69	3,776.55	25.13	25.03	-105.57	1,032.11	-83.58	468.34	431.78	36.56	12.810		
4,400.00	4,036.05	4,045.09	3,830.90	26.14	25.51	-111.78	1,017.73	-102.73	535.45	499.43	36.02	14.867		
4,500.00	4,116.22	4,109.75	3,890.41	27.16	26.02	-117.46	1,002.66	-123.07	606.07	570.12	35.95	16.857		
4,600.00	4,196.38	4,182.59	3,958.02	28.18	26.57	-122.82	986.16	-144.54	678.33	642.06	36.27	18.700		
4,700.00	4,276.54	4,241.09	4,012.60	29.20	27.01	-126.43	973.38	-161.29	751.94	715.47	36.46	20.622		
4,800.00	4,356.71	4,295.01	4,062.90	30.22	27.41	-129.25	962.04	-177.06	827.00	790.31	36.69	22.538		

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design: SEC. 11 T5N R68W 6th P.M. - EXIST HZ ENCORE 8C-12HZ - Wellbore #1 - Wellbore #1												Offset Site Error:	0.00 usft
Survey Program:		16-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
4,900.00	4,436.87	4,339.19	4,103.90	31.25	27.75	-131.27	952.66	-190.59	903.86	867.02	36.84	24.535	
5,000.00	4,517.03	4,384.67	4,145.82	32.28	28.10	-133.10	942.79	-205.18	982.35	945.26	37.09	26.488	
5,100.00	4,597.19	4,438.67	4,195.47	33.31	28.53	-134.99	931.15	-222.97	1,061.77	1,024.22	37.55	28.276	
5,200.00	4,677.36	4,498.63	4,250.54	34.34	29.00	-136.81	918.45	-243.00	1,141.69	1,103.53	38.16	29.921	
5,300.00	4,757.52	4,565.77	4,312.40	35.37	29.54	-138.59	904.42	-264.98	1,221.56	1,182.66	38.90	31.399	
5,400.00	4,837.68	4,617.44	4,360.06	36.41	29.94	-139.82	893.62	-281.75	1,301.63	1,262.23	39.40	33.035	
5,500.00	4,917.85	4,668.11	4,406.74	37.45	30.34	-140.90	882.87	-298.28	1,382.16	1,342.26	39.90	34.640	
5,600.00	4,998.01	4,713.83	4,448.77	38.49	30.71	-141.81	872.87	-313.25	1,463.25	1,422.92	40.33	36.279	
5,700.00	5,078.17	4,761.72	4,492.68	39.53	31.09	-142.69	862.02	-328.97	1,544.92	1,504.10	40.81	37.852	
5,800.00	5,158.34	4,825.61	4,551.31	40.57	31.60	-143.76	847.51	-349.79	1,626.69	1,585.13	41.56	39.141	
5,900.00	5,238.50	4,884.67	4,605.62	41.61	32.08	-144.66	834.22	-368.85	1,708.37	1,666.14	42.23	40.453	
6,000.00	5,318.66	4,941.02	4,657.45	42.65	32.52	-145.45	821.49	-386.90	1,790.13	1,747.27	42.86	41.764	
6,100.00	5,398.83	5,011.95	4,722.85	43.69	33.08	-146.37	805.48	-409.20	1,871.78	1,828.06	43.71	42.820	
6,200.00	5,478.99	5,068.77	4,775.40	44.74	33.52	-147.05	792.72	-426.65	1,953.20	1,908.85	44.35	44.038	
6,300.00	5,559.15	5,117.00	4,819.93	45.78	33.90	-147.59	781.79	-441.59	2,034.90	1,990.03	44.87	45.349	
6,400.00	5,639.32	5,192.36	4,889.57	46.83	34.48	-148.37	764.74	-464.85	2,116.65	2,070.87	45.78	46.234	
6,500.00	5,719.48	5,254.93	4,947.63	47.88	34.97	-148.97	750.88	-483.60	2,197.88	2,151.37	46.51	47.260	
6,600.00	5,799.64	5,299.12	4,988.53	48.92	35.31	-149.35	741.14	-497.17	2,279.40	2,232.42	46.98	48.517	
6,700.00	5,879.81	5,375.18	5,058.87	49.97	35.89	-149.95	724.48	-520.86	2,361.11	2,313.21	47.90	49.292	
6,800.00	5,959.97	5,534.42	5,208.10	51.02	37.04	-151.19	691.13	-565.20	2,441.10	2,391.24	49.86	48.955	
6,900.00	6,040.13	6,734.96	7,272.63	52.07	49.80	166.72	556.63	730.05	2,466.43	2,393.48	72.95	33.811	
7,000.00	6,120.29	8,756.22	7,272.53	53.12	50.10	166.23	556.79	751.31	2,478.53	2,403.67	74.86	33.110	
7,100.00	6,200.46	8,750.00	7,272.57	54.17	50.01	166.37	556.74	745.09	2,494.56	2,418.57	75.99	32.827	
7,200.00	6,280.62	8,772.93	7,272.53	55.22	50.36	165.84	556.88	768.02	2,514.30	2,436.54	77.77	32.331	
7,300.00	6,360.78	8,783.27	7,272.55	56.27	50.52	165.60	556.93	778.36	2,537.83	2,458.71	79.11	32.078	
7,400.00	6,440.95	8,793.84	7,272.61	57.32	50.68	165.36	556.96	788.93	2,564.97	2,484.61	80.36	31.917	
7,498.05	6,519.54	8,804.43	7,272.71	58.35	50.85	165.12	556.99	799.52	2,594.99	2,513.49	81.49	31.843	
7,500.00	6,521.11	8,804.65	7,272.71	58.37	50.85	165.43	556.99	799.73	2,595.62	2,514.10	81.51	31.843	
7,550.00	6,561.44	8,808.55	7,272.75	58.89	50.91	173.85	556.99	803.64	2,612.30	2,530.27	82.02	31.849	
7,600.00	6,602.00	8,809.54	7,272.76	59.38	50.92	-177.37	556.99	804.62	2,629.87	2,547.43	82.44	31.900	
7,650.00	6,642.50	8,807.53	7,272.74	59.85	50.89	-168.48	556.99	802.62	2,648.19	2,565.42	82.77	31.994	
7,700.00	6,682.61	8,802.51	7,272.69	60.29	50.82	-159.75	556.98	797.60	2,667.10	2,584.09	83.01	32.130	
7,750.00	6,722.05	8,794.46	7,272.62	60.69	50.69	-151.39	556.97	789.55	2,686.42	2,603.27	83.15	32.307	
7,800.00	6,760.50	8,783.39	7,272.55	61.07	50.52	-143.55	556.93	778.48	2,705.95	2,622.75	83.20	32.522	
7,850.00	6,797.68	8,769.34	7,272.52	61.41	50.31	-136.32	556.86	764.42	2,725.50	2,642.33	83.17	32.772	
7,900.00	6,833.29	8,753.94	7,272.55	61.71	50.07	-129.75	556.77	749.03	2,744.84	2,661.76	83.08	33.037	
7,950.00	6,867.08	8,721.43	7,272.64	61.99	49.60	-123.57	556.53	716.52	2,763.73	2,681.16	82.57	33.470	
8,000.00	6,898.78	8,685.27	7,272.51	62.23	49.09	-118.03	556.30	680.36	2,781.84	2,699.86	81.98	33.933	
8,050.00	6,928.16	8,647.14	7,272.11	62.43	48.57	-113.13	556.09	642.24	2,798.92	2,717.57	81.36	34.402	
8,100.00	6,954.98	8,610.61	7,271.71	62.60	48.10	-108.90	555.90	605.71	2,814.81	2,733.98	80.83	34.825	
8,150.00	6,979.04	8,571.22	7,271.40	62.74	47.60	-105.24	555.69	566.32	2,829.30	2,749.04	80.26	35.253	
8,200.00	7,000.17	8,526.69	7,271.01	62.85	47.08	-102.10	555.47	521.79	2,842.18	2,762.54	79.64	35.690	
8,250.00	7,018.20	8,479.36	7,270.06	62.93	46.54	-99.49	555.22	474.47	2,853.23	2,774.23	79.01	36.114	
8,300.00	7,032.99	8,437.55	7,268.77	62.98	46.11	-97.43	554.97	432.68	2,862.35	2,783.78	78.58	36.428	
8,350.00	7,044.43	8,397.92	7,267.26	63.00	45.72	-95.88	554.61	393.09	2,869.54	2,791.28	78.26	36.668	
8,400.00	7,052.43	8,369.00	7,266.00	63.00	45.44	-94.82	554.27	364.19	2,874.73	2,796.52	78.21	36.758	
8,450.00	7,056.94	8,340.74	7,264.72	62.97	45.20	-94.19	553.73	335.97	2,878.05	2,799.80	78.25	36.782	
8,488.77	7,058.00	8,323.49	7,263.97	62.93	45.05	-93.98	553.23	318.74	2,879.39	2,801.00	78.39	36.732	
8,500.00	7,058.00	8,318.48	7,263.76	62.92	45.01	-93.98	553.06	313.73	2,879.64	2,801.20	78.43	36.714	
8,600.00	7,058.00	8,273.74	7,261.95	62.81	44.65	-93.94	551.09	269.08	2,882.88	2,803.98	78.91	36.535	
8,700.00	7,058.00	7,937.28	7,249.64	62.74	43.05	-93.69	544.54	-66.50	2,885.37	2,809.83	75.54	38.196	
8,800.00	7,058.00	7,732.72	7,194.39	62.71	42.69	-92.60	552.33	-262.52	2,878.26	2,803.15	75.11	38.322	

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - EXIST HZ ENCORE 8C-12HZ - Wellbore #1 - Wellbore #1												<b>Offset Site Error:</b>	0.00 usft
<b>Survey Program:</b> 16-OWSG (Rev2) MWD												<b>Offset Well Error:</b>	0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
8,900.00	7,058.00	7,660.04	7,162.47	62.71	42.64	-91.97	554.98	-327.73	2,871.44	2,795.18	76.26	37.653	
9,000.00	7,058.00	7,606.00	7,134.09	62.76	42.61	-91.40	556.21	-373.69	2,866.18	2,788.50	77.68	36.899	
9,100.00	7,058.00	7,557.66	7,105.43	62.86	42.61	-90.83	556.62	-412.59	2,862.93	2,783.66	79.26	36.120	
9,195.80	7,058.00	7,511.00	7,074.97	63.00	42.62	-90.22	556.29	-447.92	2,862.03	2,781.19	80.83	35.406	
9,200.00	7,058.00	7,511.00	7,074.97	63.01	42.62	-90.22	556.29	-447.92	2,862.03	2,781.12	80.91	35.371	
9,300.00	7,058.00	7,471.78	7,047.77	63.23	42.63	-89.68	555.59	-476.16	2,863.51	2,780.82	82.69	34.630	
9,400.00	7,058.00	7,416.00	7,007.40	63.54	42.66	-88.87	554.17	-514.63	2,867.40	2,782.99	84.41	33.969	
9,500.00	7,058.00	7,372.46	6,974.50	63.95	42.68	-88.21	552.91	-543.11	2,873.56	2,787.32	86.24	33.321	
9,600.00	7,058.00	7,318.76	6,932.16	64.49	42.72	-87.37	551.47	-576.10	2,881.97	2,793.95	88.02	32.741	
9,700.00	7,058.00	7,251.63	6,876.19	65.17	42.76	-86.25	550.34	-613.10	2,892.57	2,802.83	89.74	32.232	
9,800.00	7,058.00	7,203.49	6,834.04	66.02	42.79	-85.41	550.18	-636.34	2,905.56	2,814.03	91.53	31.746	
9,900.00	7,058.00	7,164.61	6,799.29	67.06	42.81	-84.72	550.26	-653.77	2,921.23	2,827.92	93.32	31.304	
10,000.00	7,058.00	7,130.00	6,767.92	68.29	42.83	-84.10	550.45	-668.39	2,939.69	2,844.60	95.09	30.915	
10,100.00	7,058.00	7,130.00	6,767.92	69.70	42.83	-84.10	550.45	-668.39	2,961.17	2,864.18	96.98	30.532	
10,200.00	7,058.00	7,090.89	6,731.86	71.29	42.83	-83.39	550.73	-683.50	2,985.30	2,886.69	98.61	30.273	
10,300.00	7,058.00	7,074.55	6,716.56	73.02	42.84	-83.09	550.86	-689.26	3,012.50	2,912.21	100.29	30.037	
10,400.00	7,058.00	7,035.00	6,679.07	74.88	42.84	-82.35	551.18	-701.83	3,042.81	2,941.03	101.78	29.897	
10,500.00	7,058.00	7,035.00	6,679.07	76.84	42.84	-82.35	551.18	-701.83	3,075.51	2,972.11	103.39	29.745	
10,600.00	7,058.00	7,035.00	6,679.07	78.89	42.84	-82.35	551.18	-701.83	3,111.08	3,006.15	104.93	29.650	
10,700.00	7,058.00	7,035.00	6,679.07	81.02	42.84	-82.35	551.18	-701.83	3,149.42	3,043.05	106.37	29.608	
10,800.00	7,058.00	7,035.00	6,679.07	83.20	42.84	-82.35	551.18	-701.83	3,190.44	3,082.71	107.73	29.615	
10,900.00	7,058.00	7,035.00	6,679.07	85.44	42.84	-82.35	551.18	-701.83	3,234.03	3,125.03	109.00	29.670	
11,000.00	7,058.00	7,035.00	6,679.07	87.71	42.84	-82.35	551.18	-701.83	3,280.09	3,169.90	110.19	29.768	

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - EXIST HZ MIRACLE 40C-11HZ - SIDETRACK - SIDETRACK													<b>Offset Site Error:</b> 0.00 usft
<b>Survey Program:</b> 16-OWSG (Rev2) MWD													<b>Offset Well Error:</b> 0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Rule Assigned:</b>		<b>Warning</b>	
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>	<b>Highside Toolface (°)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>	<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	
5,900.00	5,238.50	13,284.56	7,213.73	41.61	166.95	171.84	-461.23	359.19	3,277.11	3,116.52	160.59	20.407	
5,991.50	5,311.85	13,277.76	7,213.80	42.56	166.77	171.72	-461.70	365.98	3,275.84	3,112.34	163.50	20.036 CC	
6,000.00	5,318.66	13,277.12	7,213.81	42.65	166.75	171.71	-461.75	366.62	3,275.85	3,112.09	163.76	20.004	
6,100.00	5,398.83	13,269.54	7,213.90	43.69	166.55	171.58	-462.28	374.17	3,277.62	3,110.81	166.81	19.649 ES, SF	



<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - EXIST VERT JEFFERS 2-1 - Wellbore #1 - Design #1											<b>Offset Site Error:</b> 0.00 usft
<b>Survey Program:</b> 0-INC											<b>Offset Well Error:</b> 0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>	
8,400.00	7,052.43	7,084.43	7,084.43	63.00	142.11	52.41	4,207.81	-2,845.24	3,263.76	3,059.02	15.941
8,450.00	7,056.94	7,088.94	7,088.94	62.97	142.20	75.93	4,207.81	-2,845.24	3,214.86	3,010.16	15.705
8,488.77	7,058.00	7,090.00	7,090.00	62.93	142.22	90.00	4,207.81	-2,845.24	3,177.20	2,972.60	15.529
8,500.00	7,058.00	7,090.00	7,090.00	62.92	142.22	90.00	4,207.81	-2,845.24	3,166.34	2,961.77	15.479
8,600.00	7,058.00	7,090.00	7,090.00	62.81	142.22	90.00	4,207.81	-2,845.24	3,069.77	2,865.57	15.033
8,700.00	7,058.00	7,090.00	7,090.00	62.74	142.22	90.00	4,207.81	-2,845.24	2,973.44	2,769.60	14.587
8,800.00	7,058.00	7,090.00	7,090.00	62.71	142.22	90.00	4,207.81	-2,845.24	2,877.36	2,673.90	14.143
8,900.00	7,058.00	7,090.00	7,090.00	62.71	142.22	90.00	4,207.81	-2,845.24	2,781.55	2,578.50	13.699
9,000.00	7,058.00	7,090.00	7,090.00	62.76	142.22	90.00	4,207.81	-2,845.24	2,686.05	2,483.41	13.256
9,100.00	7,058.00	7,090.00	7,090.00	62.86	142.22	90.00	4,207.81	-2,845.24	2,590.88	2,388.68	12.814
9,200.00	7,058.00	7,090.00	7,090.00	63.01	142.22	90.00	4,207.81	-2,845.24	2,496.10	2,294.35	12.372
9,300.00	7,058.00	7,090.00	7,090.00	63.23	142.22	90.00	4,207.81	-2,845.24	2,401.74	2,200.45	11.932
9,400.00	7,058.00	7,090.00	7,090.00	63.54	142.22	90.00	4,207.81	-2,845.24	2,307.85	2,107.05	11.493
9,500.00	7,058.00	7,090.00	7,090.00	63.95	142.22	90.00	4,207.81	-2,845.24	2,214.50	2,014.18	11.055
9,600.00	7,058.00	7,090.00	7,090.00	64.49	142.22	90.00	4,207.81	-2,845.24	2,121.75	1,921.93	10.619
9,700.00	7,058.00	7,090.00	7,090.00	65.17	142.22	90.00	4,207.81	-2,845.24	2,029.69	1,830.37	10.183
9,800.00	7,058.00	7,090.00	7,090.00	66.02	142.22	90.00	4,207.81	-2,845.24	1,938.42	1,739.59	9.749
9,900.00	7,058.00	7,090.00	7,090.00	67.06	142.22	90.00	4,207.81	-2,845.24	1,848.06	1,649.68	9.316
10,000.00	7,058.00	7,090.00	7,090.00	68.29	142.22	90.00	4,207.81	-2,845.24	1,758.74	1,560.78	8.884
10,100.00	7,058.00	7,090.00	7,090.00	69.70	142.22	90.00	4,207.81	-2,845.24	1,670.62	1,473.01	8.454
10,200.00	7,058.00	7,090.00	7,090.00	71.29	142.22	90.00	4,207.81	-2,845.24	1,583.92	1,386.56	8.025
10,300.00	7,058.00	7,090.00	7,090.00	73.02	142.22	90.00	4,207.81	-2,845.24	1,498.88	1,301.61	7.598
10,400.00	7,058.00	7,090.00	7,090.00	74.88	142.22	90.00	4,207.81	-2,845.24	1,415.80	1,218.39	7.172
10,500.00	7,058.00	7,090.00	7,090.00	76.84	142.22	90.00	4,207.81	-2,845.24	1,335.03	1,137.20	6.748
10,600.00	7,058.00	7,090.00	7,090.00	78.89	142.22	90.00	4,207.81	-2,845.24	1,257.04	1,058.38	6.328
10,700.00	7,058.00	7,090.00	7,090.00	81.02	142.22	90.00	4,207.81	-2,845.24	1,182.36	982.36	5.912
10,800.00	7,058.00	7,090.00	7,090.00	83.20	142.22	90.00	4,207.81	-2,845.24	1,111.67	909.67	5.503
10,900.00	7,058.00	7,090.00	7,090.00	85.44	142.22	90.00	4,207.81	-2,845.24	1,045.77	841.00	5.107
11,000.00	7,058.00	7,090.00	7,090.00	87.71	142.22	90.00	4,207.81	-2,845.24	985.63	777.23	4.730
11,100.00	7,058.00	7,090.00	7,090.00	90.03	142.22	90.00	4,207.81	-2,845.24	932.36	719.45	4.379
11,200.00	7,058.00	7,090.00	7,090.00	92.38	142.22	90.00	4,207.81	-2,845.24	887.20	668.97	4.065
11,300.00	7,058.00	7,090.00	7,090.00	94.75	142.22	90.00	4,207.81	-2,845.24	851.44	627.30	3.799
11,400.00	7,058.00	7,090.00	7,090.00	97.15	142.22	90.00	4,207.81	-2,845.24	826.31	596.01	3.588
11,500.00	7,058.00	7,090.00	7,090.00	99.57	142.22	90.00	4,207.81	-2,845.24	812.79	576.52	3.440
11,560.85	7,058.00	7,090.00	7,090.00	101.05	142.22	90.00	4,207.81	-2,845.24	810.50	570.89	3.383 CC
11,600.00	7,058.00	7,090.00	7,090.00	102.01	142.22	90.00	4,207.81	-2,845.24	811.45	569.85	3.359 ES
11,700.00	7,058.00	7,090.00	7,090.00	104.47	142.22	90.00	4,207.81	-2,845.24	822.36	576.41	3.344 SF
11,800.00	7,058.00	7,090.00	7,090.00	106.94	142.22	90.00	4,207.81	-2,845.24	845.05	595.90	3.392
11,900.00	7,058.00	7,090.00	7,090.00	109.43	142.22	90.00	4,207.81	-2,845.24	878.60	627.40	3.498
12,000.00	7,058.00	7,090.00	7,090.00	111.93	142.22	90.00	4,207.81	-2,845.24	921.83	669.59	3.655
12,100.00	7,058.00	7,090.00	7,090.00	114.44	142.22	90.00	4,207.81	-2,845.24	973.45	720.98	3.856
12,200.00	7,058.00	7,090.00	7,090.00	116.96	142.22	90.00	4,207.81	-2,845.24	1,032.20	780.09	4.094
12,300.00	7,058.00	7,090.00	7,090.00	119.49	142.22	90.00	4,207.81	-2,845.24	1,096.94	845.60	4.364
12,400.00	7,058.00	7,090.00	7,090.00	122.03	142.22	90.00	4,207.81	-2,845.24	1,166.66	916.35	4.661
12,500.00	7,058.00	7,090.00	7,090.00	124.58	142.22	90.00	4,207.81	-2,845.24	1,240.54	991.39	4.979
12,600.00	7,058.00	7,090.00	7,090.00	127.14	142.22	90.00	4,207.81	-2,845.24	1,317.86	1,069.95	5.316
12,700.00	7,058.00	7,090.00	7,090.00	129.70	142.22	90.00	4,207.81	-2,845.24	1,398.07	1,151.40	5.668
12,800.00	7,058.00	7,090.00	7,090.00	132.27	142.22	90.00	4,207.81	-2,845.24	1,480.68	1,235.24	6.033
12,900.00	7,058.00	7,090.00	7,090.00	134.85	142.22	90.00	4,207.81	-2,845.24	1,565.33	1,321.06	6.408
13,000.00	7,058.00	7,090.00	7,090.00	137.44	142.22	90.00	4,207.81	-2,845.24	1,651.69	1,408.55	6.793
13,100.00	7,058.00	7,090.00	7,090.00	140.02	142.22	90.00	4,207.81	-2,845.24	1,739.52	1,497.44	7.186
13,200.00	7,058.00	7,090.00	7,090.00	142.62	142.22	90.00	4,207.81	-2,845.24	1,828.59	1,587.52	7.585

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - EXIST VERT JEFFERS 2-1 - Wellbore #1 - Design #1													<b>Offset Site Error:</b> 0.00 usft
<b>Survey Program:</b> 0-INC													<b>Offset Well Error:</b> 0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Rule Assigned:</b>				<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>	<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	
13,300.00	7,058.00	7,090.00	7,090.00	145.22	142.22	90.00	4,207.81	-2,845.24	1,918.75	1,678.62	240.13	7.991	
13,400.00	7,058.00	7,090.00	7,090.00	147.82	142.22	90.00	4,207.81	-2,845.24	2,009.83	1,770.59	239.24	8.401	
13,500.00	7,058.00	7,090.00	7,090.00	150.43	142.22	90.00	4,207.81	-2,845.24	2,101.72	1,863.31	238.42	8.815	
13,600.00	7,058.00	7,090.00	7,090.00	153.04	142.22	90.00	4,207.81	-2,845.24	2,194.33	1,956.69	237.64	9.234	
13,700.00	7,058.00	7,090.00	7,090.00	155.66	142.22	90.00	4,207.81	-2,845.24	2,287.56	2,050.64	236.92	9.655	
13,800.00	7,058.00	7,090.00	7,090.00	158.27	142.22	90.00	4,207.81	-2,845.24	2,381.33	2,145.09	236.24	10.080	
13,900.00	7,058.00	7,090.00	7,090.00	160.90	142.22	90.00	4,207.81	-2,845.24	2,475.60	2,239.99	235.61	10.507	
14,000.00	7,058.00	7,090.00	7,090.00	163.52	142.22	90.00	4,207.81	-2,845.24	2,570.29	2,335.28	235.02	10.937	
14,100.00	7,058.00	7,090.00	7,090.00	166.15	142.22	90.00	4,207.81	-2,845.24	2,665.38	2,430.92	234.46	11.368	
14,200.00	7,058.00	7,090.00	7,090.00	168.78	142.22	90.00	4,207.81	-2,845.24	2,760.81	2,526.87	233.94	11.801	
14,300.00	7,058.00	7,090.00	7,090.00	171.42	142.22	90.00	4,207.81	-2,845.24	2,856.55	2,623.11	233.45	12.236	
14,400.00	7,058.00	7,090.00	7,090.00	174.06	142.22	90.00	4,207.81	-2,845.24	2,952.58	2,719.59	232.99	12.673	
14,500.00	7,058.00	7,090.00	7,090.00	176.70	142.22	90.00	4,207.81	-2,845.24	3,048.86	2,816.31	232.55	13.110	
14,600.00	7,058.00	7,090.00	7,090.00	179.34	142.22	90.00	4,207.81	-2,845.24	3,145.38	2,913.23	232.14	13.549	
14,700.00	7,058.00	7,090.00	7,090.00	181.99	142.22	90.00	4,207.81	-2,845.24	3,242.10	3,010.34	231.76	13.989	

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design:		SEC. 11 T5N R68W 6th P.M. - EXIST VERT JEFFERS 2-2 - 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		Rule Assigned:				Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor						
9,400.00	7,058.00	7,057.00	7,057.00	63.54	141.56	-90.00	2,852.77	-3,906.16	3,277.64	3,072.62	205.03	15.986						
9,500.00	7,058.00	7,057.00	7,057.00	63.95	141.56	-90.00	2,852.77	-3,906.16	3,179.03	2,973.74	205.28	15.486						
9,600.00	7,058.00	7,057.00	7,057.00	64.49	141.56	-90.00	2,852.77	-3,906.16	3,080.50	2,874.93	205.56	14.986						
9,700.00	7,058.00	7,057.00	7,057.00	65.17	141.56	-90.00	2,852.77	-3,906.16	2,982.07	2,776.20	205.87	14.485						
9,800.00	7,058.00	7,057.00	7,057.00	66.02	141.56	-90.00	2,852.77	-3,906.16	2,883.75	2,677.55	206.19	13.986						
9,900.00	7,058.00	7,057.00	7,057.00	67.06	141.56	-90.00	2,852.77	-3,906.16	2,785.55	2,579.00	206.55	13.486						
10,000.00	7,058.00	7,057.00	7,057.00	68.29	141.56	-90.00	2,852.77	-3,906.16	2,687.48	2,480.54	206.94	12.987						
10,100.00	7,058.00	7,057.00	7,057.00	69.70	141.56	-90.00	2,852.77	-3,906.16	2,589.56	2,382.20	207.36	12.488						
10,200.00	7,058.00	7,057.00	7,057.00	71.29	141.56	-90.00	2,852.77	-3,906.16	2,491.80	2,283.98	207.83	11.990						
10,300.00	7,058.00	7,057.00	7,057.00	73.02	141.56	-90.00	2,852.77	-3,906.16	2,394.23	2,185.89	208.34	11.492						
10,400.00	7,058.00	7,057.00	7,057.00	74.88	141.56	-90.00	2,852.77	-3,906.16	2,296.87	2,087.97	208.90	10.995						
10,500.00	7,058.00	7,057.00	7,057.00	76.84	141.56	-90.00	2,852.77	-3,906.16	2,199.75	1,990.22	209.52	10.499						
10,600.00	7,058.00	7,057.00	7,057.00	78.89	141.56	-90.00	2,852.77	-3,906.16	2,102.89	1,892.68	210.21	10.004						
10,700.00	7,058.00	7,057.00	7,057.00	81.02	141.56	-90.00	2,852.77	-3,906.16	2,006.34	1,795.36	210.98	9.509						
10,800.00	7,058.00	7,057.00	7,057.00	83.20	141.56	-90.00	2,852.77	-3,906.16	1,910.15	1,698.31	211.85	9.017						
10,900.00	7,058.00	7,057.00	7,057.00	85.44	141.56	-90.00	2,852.77	-3,906.16	1,814.37	1,601.56	212.82	8.525						
11,000.00	7,058.00	7,057.00	7,057.00	87.71	141.56	-90.00	2,852.77	-3,906.16	1,719.08	1,505.16	213.92	8.036						
11,100.00	7,058.00	7,057.00	7,057.00	90.03	141.56	-90.00	2,852.77	-3,906.16	1,624.34	1,409.18	215.16	7.549						
11,200.00	7,058.00	7,057.00	7,057.00	92.38	141.56	-90.00	2,852.77	-3,906.16	1,530.28	1,313.70	216.58	7.066						
11,300.00	7,058.00	7,057.00	7,057.00	94.75	141.56	-90.00	2,852.77	-3,906.16	1,437.02	1,218.81	218.21	6.585						
11,400.00	7,058.00	7,057.00	7,057.00	97.15	141.56	-90.00	2,852.77	-3,906.16	1,344.73	1,124.63	220.09	6.110						
11,500.00	7,058.00	7,057.00	7,057.00	99.57	141.56	-90.00	2,852.77	-3,906.16	1,253.62	1,031.35	222.27	5.640						
11,600.00	7,058.00	7,057.00	7,057.00	102.01	141.56	-90.00	2,852.77	-3,906.16	1,163.97	939.17	224.80	5.178						
11,700.00	7,058.00	7,057.00	7,057.00	104.47	141.56	-90.00	2,852.77	-3,906.16	1,076.15	848.39	227.76	4.725						
11,800.00	7,058.00	7,057.00	7,057.00	106.94	141.56	-90.00	2,852.77	-3,906.16	990.64	759.43	231.21	4.285						
11,900.00	7,058.00	7,057.00	7,057.00	109.43	141.56	-90.00	2,852.77	-3,906.16	908.09	672.85	235.24	3.860						
12,000.00	7,058.00	7,057.00	7,057.00	111.93	141.56	-90.00	2,852.77	-3,906.16	829.40	589.50	239.89	3.457						
12,100.00	7,058.00	7,057.00	7,057.00	114.44	141.56	-90.00	2,852.77	-3,906.16	755.76	510.57	245.18	3.082						
12,200.00	7,058.00	7,057.00	7,057.00	116.96	141.56	-90.00	2,852.77	-3,906.16	688.79	437.81	250.98	2.744						
12,300.00	7,058.00	7,057.00	7,057.00	119.49	141.56	-90.00	2,852.77	-3,906.16	630.64	373.70	256.94	2.454						
12,400.00	7,058.00	7,057.00	7,057.00	122.03	141.56	-90.00	2,852.77	-3,906.16	583.93	321.58	262.35	2.226						
12,500.00	7,058.00	7,057.00	7,057.00	124.58	141.56	-90.00	2,852.77	-3,906.16	551.58	285.44	266.14	2.073						
12,600.00	7,058.00	7,057.00	7,057.00	127.14	141.56	-90.00	2,852.77	-3,906.16	536.20	269.04	267.16	2.007						
12,633.66	7,058.00	7,057.00	7,057.00	128.00	141.56	-90.00	2,852.77	-3,906.16	535.14	268.39	266.75	2.006	CC, ES, SF					
12,700.00	7,058.00	7,057.00	7,057.00	129.70	141.56	-90.00	2,852.77	-3,906.16	539.24	274.44	264.80	2.036						
12,800.00	7,058.00	7,057.00	7,057.00	132.27	141.56	-90.00	2,852.77	-3,906.16	560.40	300.96	259.44	2.160						
12,900.00	7,058.00	7,057.00	7,057.00	134.85	141.56	-90.00	2,852.77	-3,906.16	597.75	345.50	252.25	2.370						
13,000.00	7,058.00	7,057.00	7,057.00	137.44	141.56	-90.00	2,852.77	-3,906.16	648.52	403.99	244.53	2.652						
13,100.00	7,058.00	7,057.00	7,057.00	140.02	141.56	-90.00	2,852.77	-3,906.16	709.82	472.62	237.20	2.993						
13,200.00	7,058.00	7,057.00	7,057.00	142.62	141.56	-90.00	2,852.77	-3,906.16	779.18	548.47	230.71	3.377						
13,300.00	7,058.00	7,057.00	7,057.00	145.22	141.56	-90.00	2,852.77	-3,906.16	854.62	629.43	225.19	3.795						
13,400.00	7,058.00	7,057.00	7,057.00	147.82	141.56	-90.00	2,852.77	-3,906.16	934.69	714.07	220.62	4.237						
13,500.00	7,058.00	7,057.00	7,057.00	150.43	141.56	-90.00	2,852.77	-3,906.16	1,018.29	801.43	216.86	4.696						
13,600.00	7,058.00	7,057.00	7,057.00	153.04	141.56	-90.00	2,852.77	-3,906.16	1,104.62	890.82	213.80	5.167						
13,700.00	7,058.00	7,057.00	7,057.00	155.66	141.56	-90.00	2,852.77	-3,906.16	1,193.09	981.78	211.30	5.646						
13,800.00	7,058.00	7,057.00	7,057.00	158.27	141.56	-90.00	2,852.77	-3,906.16	1,283.25	1,073.99	209.26	6.132						
13,900.00	7,058.00	7,057.00	7,057.00	160.90	141.56	-90.00	2,852.77	-3,906.16	1,374.77	1,167.18	207.59	6.623						
14,000.00	7,058.00	7,057.00	7,057.00	163.52	141.56	-90.00	2,852.77	-3,906.16	1,467.40	1,261.18	206.22	7.116						
14,100.00	7,058.00	7,057.00	7,057.00	166.15	141.56	-90.00	2,852.77	-3,906.16	1,560.94	1,355.85	205.08	7.611						
14,200.00	7,058.00	7,057.00	7,057.00	168.78	141.56	-90.00	2,852.77	-3,906.16	1,655.23	1,451.09	204.15	8.108						
14,300.00	7,058.00	7,057.00	7,057.00	171.42	141.56	-90.00	2,852.77	-3,906.16	1,750.16	1,546.80	203.37	8.606						
14,400.00	7,058.00	7,057.00	7,057.00	174.06	141.56	-90.00	2,852.77	-3,906.16	1,845.62	1,642.91	202.71	9.105						

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

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design:</b> SEC. 11 T5N R68W 6th P.M. - EXIST VERT JEFFERS 2-2 - Wellbore #1 - Design #1													<b>Offset Site Error:</b> 0.00 usft
<b>Survey Program:</b> 0-INC													<b>Offset Well Error:</b> 0.00 usft
<b>Reference</b>		<b>Offset</b>		<b>Semi Major Axis</b>		<b>Highside Toolface (°)</b>	<b>Offset Wellbore Centre</b>		<b>Distance</b>		<b>Minimum Separation (usft)</b>	<b>Separation Factor</b>	<b>Warning</b>
<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Measured Depth (usft)</b>	<b>Vertical Depth (usft)</b>	<b>Reference (usft)</b>	<b>Offset (usft)</b>		<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Between Centres (usft)</b>	<b>Between Ellipses (usft)</b>			
14,500.00	7,058.00	7,057.00	7,057.00	176.70	141.56	-90.00	2,852.77	-3,906.16	1,941.55	1,739.38	202.17	9.604	
14,600.00	7,058.00	7,057.00	7,057.00	179.34	141.56	-90.00	2,852.77	-3,906.16	2,037.86	1,836.15	201.71	10.103	
14,700.00	7,058.00	7,057.00	7,057.00	181.99	141.56	-90.00	2,852.77	-3,906.16	2,134.51	1,933.19	201.32	10.602	
14,800.00	7,058.00	7,057.00	7,057.00	184.63	141.56	-90.00	2,852.77	-3,906.16	2,231.46	2,030.46	201.00	11.102	
14,900.00	7,058.00	7,057.00	7,057.00	187.28	141.56	-90.00	2,852.77	-3,906.16	2,328.66	2,127.94	200.72	11.601	
15,000.00	7,058.00	7,057.00	7,057.00	189.93	141.56	-90.00	2,852.77	-3,906.16	2,426.10	2,225.60	200.49	12.101	
15,100.00	7,058.00	7,057.00	7,057.00	192.59	141.56	-90.00	2,852.77	-3,906.16	2,523.73	2,323.43	200.30	12.600	
15,200.00	7,058.00	7,057.00	7,057.00	195.24	141.56	-90.00	2,852.77	-3,906.16	2,621.54	2,421.41	200.13	13.099	
15,300.00	7,058.00	7,057.00	7,057.00	197.90	141.56	-90.00	2,852.77	-3,906.16	2,719.51	2,519.52	199.99	13.598	
15,400.00	7,058.00	7,057.00	7,057.00	200.56	141.56	-90.00	2,852.77	-3,906.16	2,817.62	2,617.75	199.87	14.097	
15,500.00	7,058.00	7,057.00	7,057.00	203.22	141.56	-90.00	2,852.77	-3,906.16	2,915.87	2,716.09	199.78	14.596	
15,600.00	7,058.00	7,057.00	7,057.00	205.88	141.56	-90.00	2,852.77	-3,906.16	3,014.22	2,814.53	199.70	15.094	
15,700.00	7,058.00	7,057.00	7,057.00	208.54	141.56	-90.00	2,852.77	-3,906.16	3,112.69	2,913.06	199.63	15.592	
15,800.00	7,058.00	7,057.00	7,057.00	211.21	141.56	-90.00	2,852.77	-3,906.16	3,211.24	3,011.67	199.57	16.090	

<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to KBE @ 5000.00usft

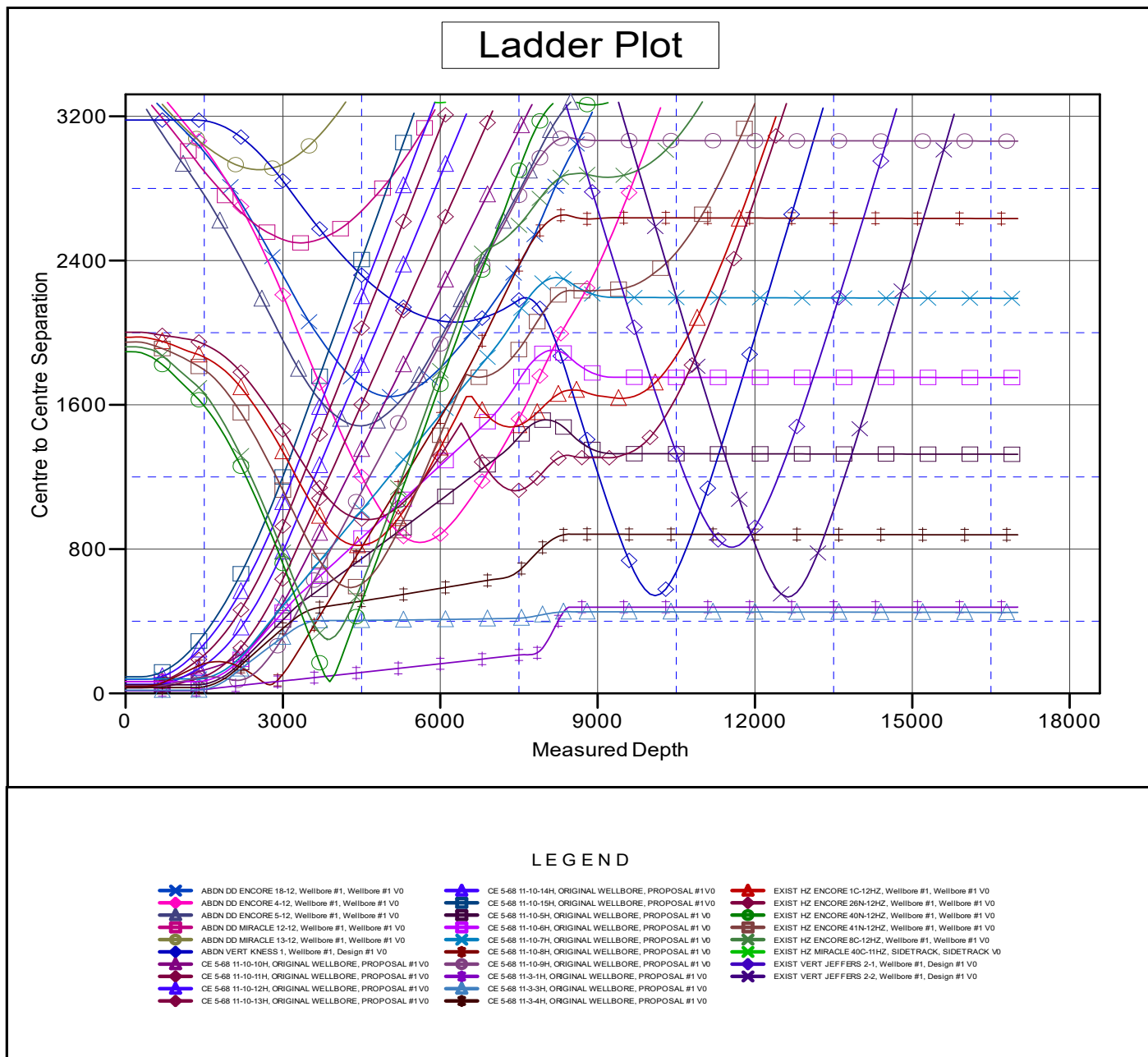
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000

Coordinates are relative to: CE 5-68 11-3-2H

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.35°

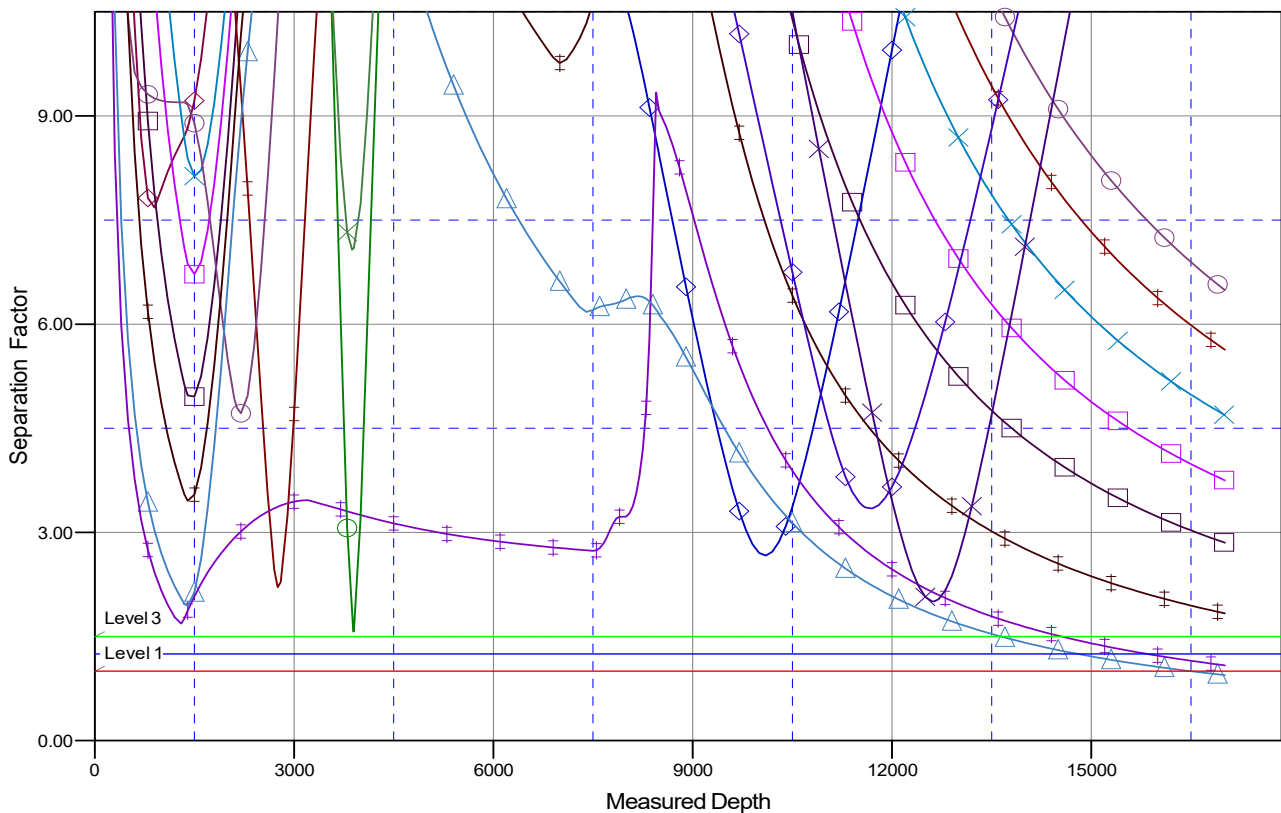


<b>Company:</b>	BISON IV OPERATING	<b>Local Co-ordinate Reference:</b>	Well CE 5-68 11-3-2H
<b>Project:</b>	LARIMER COUNTY, COLORADO (NAD 83)	<b>TVD Reference:</b>	KBE @ 5000.00usft
<b>Reference Site:</b>	SEC. 11 T5N R68W 6th P.M.	<b>MD Reference:</b>	KBE @ 5000.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	CE 5-68 11-3-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	Database 1
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to KBE @ 5000.00usft  
Offset Depths are relative to Offset Datum  
Central Meridian is -105.500000

Coordinates are relative to: CE 5-68 11-3-2H  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.35°

## Separation Factor Plot



### LEGEND

- |  |  |   |
|--|--|---|
| ABDN DD ENCORE 18-12, Wellbore #1, Wellbore #1 V0    | CE 5-68 11-10-14H, ORIGINAL WELLBORE, PROPOSAL #1 V0 | EXIST HZ ENCORE 10-12HZ, Wellbore #1, Wellbore #1 V0  |
| ABDN DD ENCORE 4-12, Wellbore #1, Wellbore #1 V0     | CE 5-68 11-10-15H, ORIGINAL WELLBORE, PROPOSAL #1 V0 | EXIST HZ ENCORE 26N-12HZ, Wellbore #1, Wellbore #1 V0 |
| ABDN DD ENCORE 5-12, Wellbore #1, Wellbore #1 V0     | CE 5-68 11-10-5H, ORIGINAL WELLBORE, PROPOSAL #1 V0  | EXIST HZ ENCORE 40N-12HZ, Wellbore #1, Wellbore #1 V0 |
| ABDN DD MIRACLE 12-12, Wellbore #1, Wellbore #1 V0   | CE 5-68 11-10-6H, ORIGINAL WELLBORE, PROPOSAL #1 V0  | EXIST HZ ENCORE 41N-12HZ, Wellbore #1, Wellbore #1 V0 |
| ABDN DD MIRACLE 13-12, Wellbore #1, Wellbore #1 V0   | CE 5-68 11-10-7H, ORIGINAL WELLBORE, PROPOSAL #1 V0  | EXIST HZ ENCORE 8C-12HZ, Wellbore #1, Wellbore #1 V0  |
| ABDN VERT KNESS 1, Wellbore #1, Design #1 V0         | CE 5-68 11-10-8H, ORIGINAL WELLBORE, PROPOSAL #1 V0  | EXIST HZ MIRACLE 40C-11HZ, SIDETRACK, SIDETRACK V0    |
| CE 5-68 11-10-10H, ORIGINAL WELLBORE, PROPOSAL #1 V0 | CE 5-68 11-10-9H, ORIGINAL WELLBORE, PROPOSAL #1 V0  | EXIST VERT JEFFERS 2-1, Wellbore #1, Design #1 V0     |
| CE 5-68 11-10-11H, ORIGINAL WELLBORE, PROPOSAL #1 V0 | CE 5-68 11-3-1H, ORIGINAL WELLBORE, PROPOSAL #1 V0   | EXIST VERT JEFFERS 2-2, Wellbore #1, Design #1 V0     |
| CE 5-68 11-10-12H, ORIGINAL WELLBORE, PROPOSAL #1 V0 | CE 5-68 11-3-3H, ORIGINAL WELLBORE, PROPOSAL #1 V0   |   |
| CE 5-68 11-10-13H, ORIGINAL WELLBORE, PROPOSAL #1 V0 | CE 5-68 11-3-4H, ORIGINAL WELLBORE, PROPOSAL #1 V0   |   |