



Bison Oil & Gas II, LLC

Weld Co., CO (NAD-83)

Tatanka Pads

Tatanka LD13-660

OH

Plan: Plan #1

Standard Planning Report

13 January, 2022



Plan #1



Project: Weld Co., CO (NAD-83)
 Site: Tatanka Pads
 Well: Tatanka LD13-660
 Wellbore: OH
 Design: Plan #1
 Lat: 40.754718
 Long: -103.841942
 GL: 4680.00
 KB: KB=23' @ 4703.00usft

WELL DETAILS: Tatanka LD13-660

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1522083.46	3459343.22	40.754718	-103.841942

WELLBORE TARGET DETAILS (LAT/LONG)

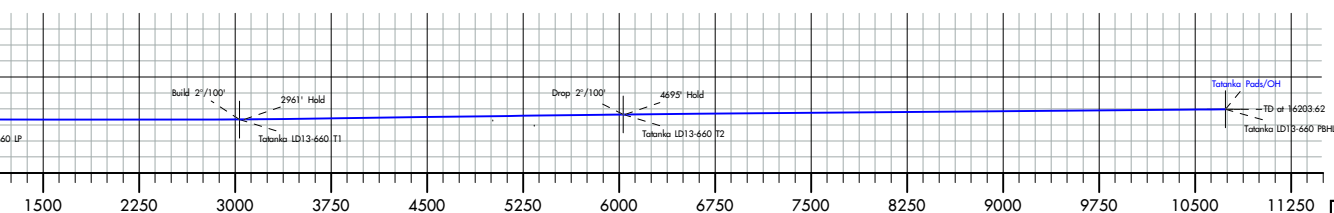
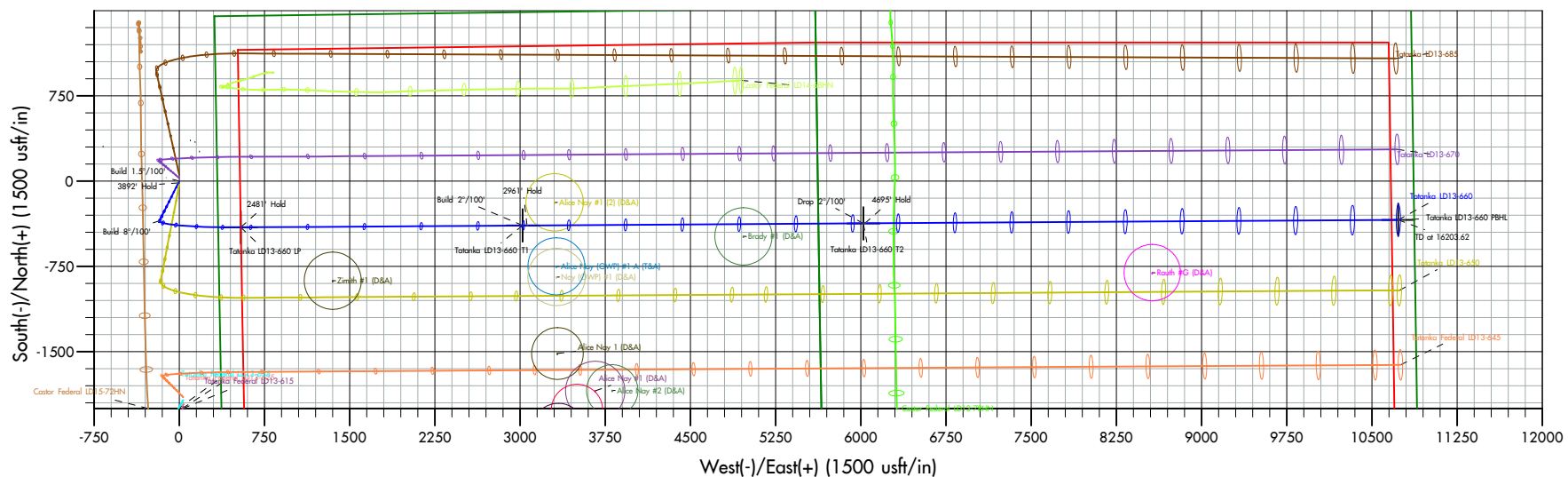
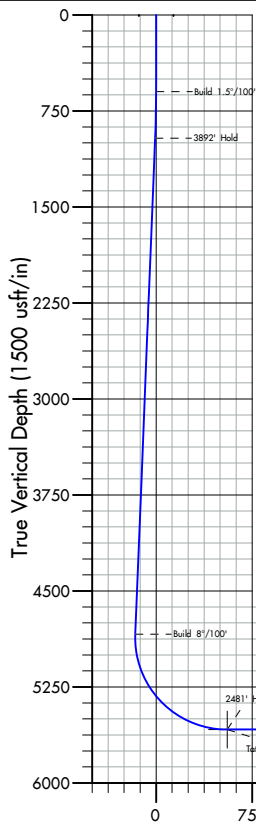
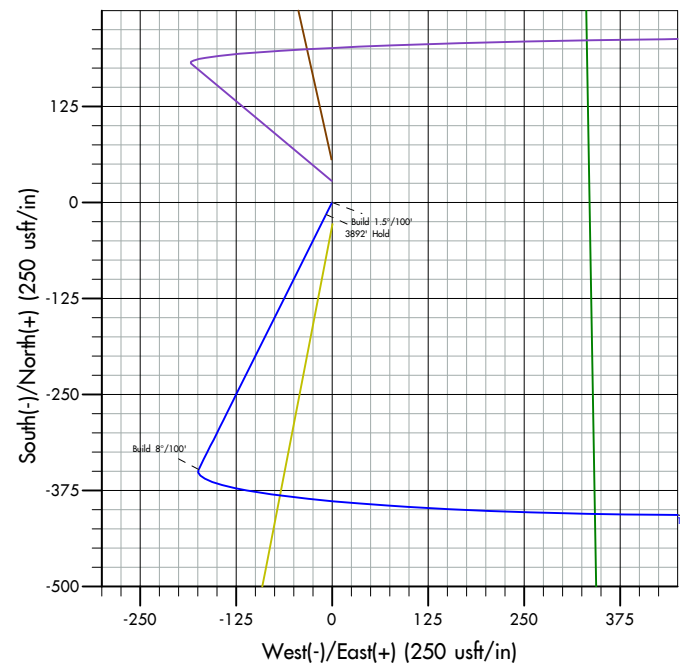
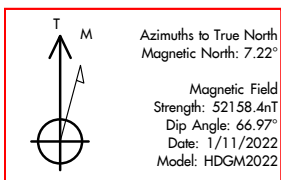
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Tatanka LD13-660 PBHL	5503.00	-340.48	10732.35	1521943.69	3470080.06	Point
Tatanka LD13-660 T2	5543.00	-371.03	6023.23	1521825.11	3465372.33	Point
Tatanka LD13-660 LP	5583.00	-406.58	542.20	1521687.08	3459892.93	Point
Tatanka LD13-660 T1	5583.00	-390.49	3023.38	1521749.57	3462373.37	Point

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSecl	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	Build 1.5°/100'
964.87	5.47	206.55	964.31	-15.58	-7.78	1.50	206.55	-7.29	3892' Hold
4856.88	5.47	206.55	4838.58	-347.63	-173.72	0.00	0.00	-162.61	Build 8°/100'
6012.82	90.00	89.63	5583.00	-406.58	542.20	8.00	-116.82	554.82	2481' Hold
8494.05	90.00	89.63	5583.00	-390.49	3023.38	0.00	0.00	3034.24	Build 2°/100'
8532.50	90.77	89.63	5582.74	-390.24	3061.82	2.00	0.00	3072.66	2961' Hold
11494.23	90.77	89.63	5543.00	-371.03	6023.23	0.00	0.00	6031.96	Drop 2°/100'
11508.36	90.49	89.63	5542.85	-370.94	6037.36	2.00	180.00	6046.08	4695' Hold
16203.62	90.49	89.63	5503.00	-340.48	10732.35	0.00	0.00	10737.75	TD at 16203.62

FORMATION TOPS

TVDPath	MDPath	Formation
359.00	359.00	Pierre Shale (Base of Fox Hills)
3183.00	3193.72	Parkman
3680.00	3692.99	Sussex
4280.00	4295.74	Shannon
5373.00	5448.91	Sharon Springs
5453.00	5573.67	Sharon Springs Hot Marker
5473.00	5609.86	Niobrara A Chalk
5548.00	5787.58	Niobrara B Chalk



Plan: Plan #1 (Tatanka LD13-660/OH)

Created By: Dusty Moyer

Date: 11:54 January 13, 2022



Altitude Energy Partners

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Tatanka LD13-660
Company:	Bison Oil & Gas II, LLC	TVD Reference:	KB=23' @ 4703.00usft
Project:	Weld Co., CO (NAD-83)	MD Reference:	KB=23' @ 4703.00usft
Site:	Tatanka Pads	North Reference:	True
Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Project	Weld Co., CO (NAD-83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	Tatanka Pads			
Site Position:		Northing:	1,522,139.55 usft	Latitude: 40.754872
From:	Lat/Long	Easting:	3,459,341.34 usft	Longitude: -103.841945
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	

Well	Tatanka LD13-660			
Well Position	+N/-S	0.00 usft	Northing:	1,522,083.46 usft
	+E/-W	0.00 usft	Easting:	3,459,343.22 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft	Ground Level: 4,680.00 usft
Grid Convergence:	1.07 °			

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2022	1/11/2022	7.22	66.97	52,158.40000000

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	91.82

Plan Survey Tool Program	Date	1/13/2022		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	16,203.62 Plan #1 (OH)	MWD+IFR1+MS	
			OWSG MWD + IFR1 + Mult	



Altitude Energy Partners

Planning Report



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Site:	Tatanka Pads	North Reference:	True
Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
964.87	5.47	206.55	964.31	-15.58	-7.78	1.50	1.50	0.00	206.55	
4,856.88	5.47	206.55	4,838.58	-347.63	-173.72	0.00	0.00	0.00	0.00	
6,012.82	90.00	89.63	5,583.00	-406.58	542.20	8.00	7.31	-10.12	-116.82	Tatanka LD13-660 I
8,494.05	90.00	89.63	5,583.00	-390.49	3,023.38	0.00	0.00	0.00	0.00	Tatanka LD13-660 I
8,532.50	90.77	89.63	5,582.74	-390.24	3,061.82	2.00	2.00	0.00	0.00	
11,494.23	90.77	89.63	5,543.00	-371.03	6,023.23	0.00	0.00	0.00	0.00	Tatanka LD13-660 I
11,508.36	90.49	89.63	5,542.85	-370.94	6,037.36	2.00	-2.00	0.00	180.00	
16,203.62	90.49	89.63	5,503.00	-340.48	10,732.35	0.00	0.00	0.00	0.00	Tatanka LD13-660 I

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Site:	Tatanka Pads	North Reference:	True
Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
359.00	0.00	0.00	359.00	0.00	0.00	0.00	0.00	0.00	0.00
Pierre Shale (Base of Fox Hills)									
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
Build 1.5°/100'									
700.00	1.50	206.55	699.99	-1.17	-0.59	-0.55	1.50	1.50	0.00
800.00	3.00	206.55	799.91	-4.68	-2.34	-2.19	1.50	1.50	0.00
900.00	4.50	206.55	899.69	-10.53	-5.26	-4.93	1.50	1.50	0.00
964.87	5.47	206.55	964.31	-15.58	-7.78	-7.29	1.50	1.50	0.00
3892' Hold									
1,000.00	5.47	206.55	999.29	-18.57	-9.28	-8.69	0.00	0.00	0.00
1,100.00	5.47	206.55	1,098.83	-27.11	-13.55	-12.68	0.00	0.00	0.00
1,200.00	5.47	206.55	1,198.37	-35.64	-17.81	-16.67	0.00	0.00	0.00
1,300.00	5.47	206.55	1,297.92	-44.17	-22.07	-20.66	0.00	0.00	0.00
1,400.00	5.47	206.55	1,397.46	-52.70	-26.34	-24.65	0.00	0.00	0.00
1,500.00	5.47	206.55	1,497.01	-61.23	-30.60	-28.64	0.00	0.00	0.00
1,600.00	5.47	206.55	1,596.55	-69.76	-34.86	-32.63	0.00	0.00	0.00
1,700.00	5.47	206.55	1,696.09	-78.30	-39.13	-36.63	0.00	0.00	0.00
1,800.00	5.47	206.55	1,795.64	-86.83	-43.39	-40.62	0.00	0.00	0.00
1,900.00	5.47	206.55	1,895.18	-95.36	-47.65	-44.61	0.00	0.00	0.00
2,000.00	5.47	206.55	1,994.73	-103.89	-51.92	-48.60	0.00	0.00	0.00
2,100.00	5.47	206.55	2,094.27	-112.42	-56.18	-52.59	0.00	0.00	0.00
2,200.00	5.47	206.55	2,193.81	-120.95	-60.45	-56.58	0.00	0.00	0.00
2,300.00	5.47	206.55	2,293.36	-129.49	-64.71	-60.57	0.00	0.00	0.00
2,400.00	5.47	206.55	2,392.90	-138.02	-68.97	-64.56	0.00	0.00	0.00
2,500.00	5.47	206.55	2,492.45	-146.55	-73.24	-68.55	0.00	0.00	0.00
2,600.00	5.47	206.55	2,591.99	-155.08	-77.50	-72.54	0.00	0.00	0.00
2,700.00	5.47	206.55	2,691.54	-163.61	-81.76	-76.53	0.00	0.00	0.00
2,800.00	5.47	206.55	2,791.08	-172.14	-86.03	-80.53	0.00	0.00	0.00
2,900.00	5.47	206.55	2,890.62	-180.68	-90.29	-84.52	0.00	0.00	0.00
3,000.00	5.47	206.55	2,990.17	-189.21	-94.55	-88.51	0.00	0.00	0.00
3,100.00	5.47	206.55	3,089.71	-197.74	-98.82	-92.50	0.00	0.00	0.00
3,193.72	5.47	206.55	3,183.00	-205.73	-102.81	-96.24	0.00	0.00	0.00
Parkman									
3,200.00	5.47	206.55	3,189.26	-206.27	-103.08	-96.49	0.00	0.00	0.00
3,300.00	5.47	206.55	3,288.80	-214.80	-107.35	-100.48	0.00	0.00	0.00
3,400.00	5.47	206.55	3,388.34	-223.33	-111.61	-104.47	0.00	0.00	0.00
3,500.00	5.47	206.55	3,487.89	-231.87	-115.87	-108.46	0.00	0.00	0.00
3,600.00	5.47	206.55	3,587.43	-240.40	-120.14	-112.45	0.00	0.00	0.00
3,692.99	5.47	206.55	3,680.00	-248.33	-124.10	-116.16	0.00	0.00	0.00
Sussex									
3,700.00	5.47	206.55	3,686.98	-248.93	-124.40	-116.44	0.00	0.00	0.00
3,800.00	5.47	206.55	3,786.52	-257.46	-128.66	-120.43	0.00	0.00	0.00
3,900.00	5.47	206.55	3,886.06	-265.99	-132.93	-124.43	0.00	0.00	0.00
4,000.00	5.47	206.55	3,985.61	-274.52	-137.19	-128.42	0.00	0.00	0.00
4,100.00	5.47	206.55	4,085.15	-283.05	-141.45	-132.41	0.00	0.00	0.00
4,200.00	5.47	206.55	4,184.70	-291.59	-145.72	-136.40	0.00	0.00	0.00
4,295.74	5.47	206.55	4,280.00	-299.75	-149.80	-140.22	0.00	0.00	0.00

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Site:	Tatanka Pads	North Reference:	True
Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
Shannon									
4,300.00	5.47	206.55	4,284.24	-300.12	-149.98	-140.39	0.00	0.00	0.00
4,400.00	5.47	206.55	4,383.79	-308.65	-154.25	-144.38	0.00	0.00	0.00
4,500.00	5.47	206.55	4,483.33	-317.18	-158.51	-148.37	0.00	0.00	0.00
4,600.00	5.47	206.55	4,582.87	-325.71	-162.77	-152.36	0.00	0.00	0.00
4,700.00	5.47	206.55	4,682.42	-334.24	-167.04	-156.35	0.00	0.00	0.00
4,800.00	5.47	206.55	4,781.96	-342.78	-171.30	-160.34	0.00	0.00	0.00
4,856.88	5.47	206.55	4,838.58	-347.63	-173.72	-162.61	0.00	0.00	0.00
Build 8°/100'									
4,900.00	4.98	168.33	4,881.54	-351.30	-174.27	-163.04	8.00	-1.15	-88.64
4,950.00	6.97	133.99	4,931.28	-355.53	-171.64	-160.28	8.00	3.97	-68.68
5,000.00	10.21	117.95	4,980.72	-359.72	-165.55	-154.06	8.00	6.48	-32.08
5,050.00	13.85	109.90	5,029.61	-363.83	-156.00	-144.39	8.00	7.28	-16.09
5,100.00	17.64	105.21	5,077.73	-367.86	-143.06	-131.32	8.00	7.59	-9.39
5,150.00	21.51	102.15	5,124.83	-371.78	-126.78	-114.93	8.00	7.73	-6.13
5,200.00	25.42	99.98	5,170.69	-375.57	-107.24	-95.28	8.00	7.81	-4.32
5,250.00	29.35	98.37	5,215.08	-379.21	-84.54	-72.48	8.00	7.86	-3.23
5,300.00	33.29	97.10	5,257.79	-382.70	-58.79	-46.63	8.00	7.89	-2.53
5,350.00	37.25	96.08	5,298.60	-386.00	-30.12	-17.86	8.00	7.91	-2.05
5,400.00	41.21	95.23	5,337.32	-389.10	1.35	13.68	8.00	7.93	-1.71
5,448.91	45.10	94.51	5,373.00	-391.93	34.67	47.08	8.00	7.94	-1.46
Sharon Springs									
5,450.00	45.18	94.50	5,373.77	-391.99	35.44	47.85	8.00	7.94	-1.36
5,500.00	49.15	93.86	5,407.75	-394.66	72.00	84.48	8.00	7.95	-1.27
5,550.00	53.13	93.30	5,439.11	-397.09	110.86	123.39	8.00	7.95	-1.12
5,573.67	55.01	93.06	5,453.00	-398.15	129.99	142.55	8.00	7.96	-1.04
Sharon Springs Hot Marker									
5,600.00	57.11	92.80	5,467.70	-399.26	151.81	164.39	8.00	7.96	-0.99
5,609.86	57.89	92.70	5,473.00	-399.66	160.12	172.71	8.00	7.96	-0.96
Niobrara A Chalk									
5,650.00	61.09	92.33	5,493.37	-401.18	194.66	207.28	8.00	7.96	-0.92
5,700.00	65.07	91.90	5,516.01	-402.82	239.20	251.85	8.00	7.96	-0.86
5,750.00	69.05	91.50	5,535.49	-404.19	285.22	297.89	8.00	7.97	-0.80
5,787.58	72.05	91.21	5,548.00	-405.03	320.64	333.32	8.00	7.97	-0.77
Niobrara B Chalk									
5,800.00	73.04	91.12	5,551.73	-405.27	332.49	345.17	8.00	7.97	-0.75
5,850.00	77.02	90.76	5,564.64	-406.06	380.77	393.46	8.00	7.97	-0.73
5,900.00	81.01	90.40	5,574.16	-406.55	429.84	442.52	8.00	7.97	-0.71
5,950.00	84.99	90.06	5,580.26	-406.75	479.46	492.12	8.00	7.97	-0.69
6,000.00	88.98	89.72	5,582.89	-406.65	529.38	542.01	8.00	7.97	-0.68
6,012.82	90.00	89.63	5,583.00	-406.58	542.20	554.82	8.00	7.97	-0.68
2481' Hold									
6,100.00	90.00	89.63	5,583.00	-406.02	629.38	641.94	0.00	0.00	0.00
6,200.00	90.00	89.63	5,583.00	-405.37	729.38	741.86	0.00	0.00	0.00
6,300.00	90.00	89.63	5,583.00	-404.72	829.37	841.79	0.00	0.00	0.00
6,400.00	90.00	89.63	5,583.00	-404.07	929.37	941.72	0.00	0.00	0.00
6,500.00	90.00	89.63	5,583.00	-403.42	1,029.37	1,041.64	0.00	0.00	0.00
6,600.00	90.00	89.63	5,583.00	-402.77	1,129.37	1,141.57	0.00	0.00	0.00
6,700.00	90.00	89.63	5,583.00	-402.12	1,229.37	1,241.50	0.00	0.00	0.00
6,800.00	90.00	89.63	5,583.00	-401.47	1,329.36	1,341.43	0.00	0.00	0.00
6,900.00	90.00	89.63	5,583.00	-400.83	1,429.36	1,441.35	0.00	0.00	0.00
7,000.00	90.00	89.63	5,583.00	-400.18	1,529.36	1,541.28	0.00	0.00	0.00
7,100.00	90.00	89.63	5,583.00	-399.53	1,629.36	1,641.21	0.00	0.00	0.00

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Site:	Tatanka Pads	North Reference:	True
Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,200.00	90.00	89.63	5,583.00	-398.88	1,729.36	1,741.13	0.00	0.00	0.00
7,300.00	90.00	89.63	5,583.00	-398.23	1,829.35	1,841.06	0.00	0.00	0.00
7,400.00	90.00	89.63	5,583.00	-397.58	1,929.35	1,940.99	0.00	0.00	0.00
7,500.00	90.00	89.63	5,583.00	-396.93	2,029.35	2,040.92	0.00	0.00	0.00
7,600.00	90.00	89.63	5,583.00	-396.29	2,129.35	2,140.84	0.00	0.00	0.00
7,700.00	90.00	89.63	5,583.00	-395.64	2,229.35	2,240.77	0.00	0.00	0.00
7,800.00	90.00	89.63	5,583.00	-394.99	2,329.34	2,340.70	0.00	0.00	0.00
7,900.00	90.00	89.63	5,583.00	-394.34	2,429.34	2,440.62	0.00	0.00	0.00
8,000.00	90.00	89.63	5,583.00	-393.69	2,529.34	2,540.55	0.00	0.00	0.00
8,100.00	90.00	89.63	5,583.00	-393.04	2,629.34	2,640.48	0.00	0.00	0.00
8,200.00	90.00	89.63	5,583.00	-392.39	2,729.33	2,740.40	0.00	0.00	0.00
8,300.00	90.00	89.63	5,583.00	-391.75	2,829.33	2,840.33	0.00	0.00	0.00
8,400.00	90.00	89.63	5,583.00	-391.10	2,929.33	2,940.26	0.00	0.00	0.00
8,494.05	90.00	89.63	5,583.00	-390.49	3,023.38	3,034.24	0.00	0.00	0.00
Build 2°/100'									
8,500.00	90.12	89.63	5,582.99	-390.45	3,029.33	3,040.19	2.00	2.00	0.00
8,532.50	90.77	89.63	5,582.74	-390.24	3,061.82	3,072.66	2.00	2.00	0.00
2961' Hold									
8,600.00	90.77	89.63	5,581.84	-389.80	3,129.32	3,140.11	0.00	0.00	0.00
8,700.00	90.77	89.63	5,580.49	-389.15	3,229.31	3,240.02	0.00	0.00	0.00
8,800.00	90.77	89.63	5,579.15	-388.50	3,329.30	3,339.94	0.00	0.00	0.00
8,900.00	90.77	89.63	5,577.81	-387.85	3,429.29	3,439.86	0.00	0.00	0.00
9,000.00	90.77	89.63	5,576.47	-387.21	3,529.27	3,539.78	0.00	0.00	0.00
9,100.00	90.77	89.63	5,575.13	-386.56	3,629.26	3,639.70	0.00	0.00	0.00
9,200.00	90.77	89.63	5,573.79	-385.91	3,729.25	3,739.61	0.00	0.00	0.00
9,300.00	90.77	89.63	5,572.44	-385.26	3,829.24	3,839.53	0.00	0.00	0.00
9,400.00	90.77	89.63	5,571.10	-384.61	3,929.23	3,939.45	0.00	0.00	0.00
9,500.00	90.77	89.63	5,569.76	-383.96	4,029.22	4,039.37	0.00	0.00	0.00
9,600.00	90.77	89.63	5,568.42	-383.31	4,129.21	4,139.29	0.00	0.00	0.00
9,700.00	90.77	89.63	5,567.08	-382.67	4,229.20	4,239.20	0.00	0.00	0.00
9,800.00	90.77	89.63	5,565.73	-382.02	4,329.19	4,339.12	0.00	0.00	0.00
9,900.00	90.77	89.63	5,564.39	-381.37	4,429.17	4,439.04	0.00	0.00	0.00
10,000.00	90.77	89.63	5,563.05	-380.72	4,529.16	4,538.96	0.00	0.00	0.00
10,100.00	90.77	89.63	5,561.71	-380.07	4,629.15	4,638.88	0.00	0.00	0.00
10,200.00	90.77	89.63	5,560.37	-379.42	4,729.14	4,738.79	0.00	0.00	0.00
10,300.00	90.77	89.63	5,559.02	-378.77	4,829.13	4,838.71	0.00	0.00	0.00
10,400.00	90.77	89.63	5,557.68	-378.13	4,929.12	4,938.63	0.00	0.00	0.00
10,500.00	90.77	89.63	5,556.34	-377.48	5,029.11	5,038.55	0.00	0.00	0.00
10,600.00	90.77	89.63	5,555.00	-376.83	5,129.10	5,138.47	0.00	0.00	0.00
10,700.00	90.77	89.63	5,553.66	-376.18	5,229.09	5,238.38	0.00	0.00	0.00
10,800.00	90.77	89.63	5,552.32	-375.53	5,329.07	5,338.30	0.00	0.00	0.00
10,900.00	90.77	89.63	5,550.97	-374.88	5,429.06	5,438.22	0.00	0.00	0.00
11,000.00	90.77	89.63	5,549.63	-374.23	5,529.05	5,538.14	0.00	0.00	0.00
11,100.00	90.77	89.63	5,548.29	-373.59	5,629.04	5,638.06	0.00	0.00	0.00
11,200.00	90.77	89.63	5,546.95	-372.94	5,729.03	5,737.97	0.00	0.00	0.00
11,300.00	90.77	89.63	5,545.61	-372.29	5,829.02	5,837.89	0.00	0.00	0.00
11,400.00	90.77	89.63	5,544.26	-371.64	5,929.01	5,937.81	0.00	0.00	0.00
11,494.23	90.77	89.63	5,543.00	-371.03	6,023.23	6,031.96	0.00	0.00	0.00
Drop 2°/100'									
11,508.36	90.49	89.63	5,542.85	-370.94	6,037.36	6,046.08	2.00	-2.00	0.00
4695' Hold									
11,600.00	90.49	89.63	5,542.07	-370.34	6,128.99	6,137.65	0.00	0.00	0.00
11,700.00	90.49	89.63	5,541.22	-369.69	6,228.99	6,237.58	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Tatanka LD13-660
Company:	Bison Oil & Gas II, LLC	TVD Reference:	KB=23' @ 4703.00usft
Project:	Weld Co., CO (NAD-83)	MD Reference:	KB=23' @ 4703.00usft
Site:	Tatanka Pads	North Reference:	True
Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,800.00	90.49	89.63	5,540.37	-369.05	6,328.98	6,337.50	0.00	0.00	0.00
11,900.00	90.49	89.63	5,539.52	-368.40	6,428.97	6,437.42	0.00	0.00	0.00
12,000.00	90.49	89.63	5,538.67	-367.75	6,528.97	6,537.35	0.00	0.00	0.00
12,100.00	90.49	89.63	5,537.82	-367.10	6,628.96	6,637.27	0.00	0.00	0.00
12,200.00	90.49	89.63	5,536.98	-366.45	6,728.96	6,737.19	0.00	0.00	0.00
12,300.00	90.49	89.63	5,536.13	-365.80	6,828.95	6,837.12	0.00	0.00	0.00
12,400.00	90.49	89.63	5,535.28	-365.15	6,928.95	6,937.04	0.00	0.00	0.00
12,500.00	90.49	89.63	5,534.43	-364.51	7,028.94	7,036.96	0.00	0.00	0.00
12,600.00	90.49	89.63	5,533.58	-363.86	7,128.93	7,136.89	0.00	0.00	0.00
12,700.00	90.49	89.63	5,532.73	-363.21	7,228.93	7,236.81	0.00	0.00	0.00
12,800.00	90.49	89.63	5,531.88	-362.56	7,328.92	7,336.73	0.00	0.00	0.00
12,900.00	90.49	89.63	5,531.04	-361.91	7,428.92	7,436.66	0.00	0.00	0.00
13,000.00	90.49	89.63	5,530.19	-361.26	7,528.91	7,536.58	0.00	0.00	0.00
13,100.00	90.49	89.63	5,529.34	-360.61	7,628.91	7,636.50	0.00	0.00	0.00
13,200.00	90.49	89.63	5,528.49	-359.97	7,728.90	7,736.43	0.00	0.00	0.00
13,300.00	90.49	89.63	5,527.64	-359.32	7,828.89	7,836.35	0.00	0.00	0.00
13,400.00	90.49	89.63	5,526.79	-358.67	7,928.89	7,936.27	0.00	0.00	0.00
13,500.00	90.49	89.63	5,525.94	-358.02	8,028.88	8,036.20	0.00	0.00	0.00
13,600.00	90.49	89.63	5,525.10	-357.37	8,128.88	8,136.12	0.00	0.00	0.00
13,700.00	90.49	89.63	5,524.25	-356.72	8,228.87	8,236.04	0.00	0.00	0.00
13,800.00	90.49	89.63	5,523.40	-356.07	8,328.87	8,335.97	0.00	0.00	0.00
13,900.00	90.49	89.63	5,522.55	-355.43	8,428.86	8,435.89	0.00	0.00	0.00
14,000.00	90.49	89.63	5,521.70	-354.78	8,528.85	8,535.82	0.00	0.00	0.00
14,100.00	90.49	89.63	5,520.85	-354.13	8,628.85	8,635.74	0.00	0.00	0.00
14,200.00	90.49	89.63	5,520.00	-353.48	8,728.84	8,735.66	0.00	0.00	0.00
14,300.00	90.49	89.63	5,519.15	-352.83	8,828.84	8,835.59	0.00	0.00	0.00
14,400.00	90.49	89.63	5,518.31	-352.18	8,928.83	8,935.51	0.00	0.00	0.00
14,500.00	90.49	89.63	5,517.46	-351.53	9,028.83	9,035.43	0.00	0.00	0.00
14,600.00	90.49	89.63	5,516.61	-350.89	9,128.82	9,135.36	0.00	0.00	0.00
14,700.00	90.49	89.63	5,515.76	-350.24	9,228.81	9,235.28	0.00	0.00	0.00
14,800.00	90.49	89.63	5,514.91	-349.59	9,328.81	9,335.20	0.00	0.00	0.00
14,900.00	90.49	89.63	5,514.06	-348.94	9,428.80	9,435.13	0.00	0.00	0.00
15,000.00	90.49	89.63	5,513.21	-348.29	9,528.80	9,535.05	0.00	0.00	0.00
15,100.00	90.49	89.63	5,512.37	-347.64	9,628.79	9,634.97	0.00	0.00	0.00
15,200.00	90.49	89.63	5,511.52	-346.99	9,728.79	9,734.90	0.00	0.00	0.00
15,300.00	90.49	89.63	5,510.67	-346.35	9,828.78	9,834.82	0.00	0.00	0.00
15,400.00	90.49	89.63	5,509.82	-345.70	9,928.77	9,934.74	0.00	0.00	0.00
15,500.00	90.49	89.63	5,508.97	-345.05	10,028.77	10,034.67	0.00	0.00	0.00
15,600.00	90.49	89.63	5,508.12	-344.40	10,128.76	10,134.59	0.00	0.00	0.00
15,700.00	90.49	89.63	5,507.27	-343.75	10,228.76	10,234.51	0.00	0.00	0.00
15,800.00	90.49	89.63	5,506.43	-343.10	10,328.75	10,334.44	0.00	0.00	0.00
15,900.00	90.49	89.63	5,505.58	-342.45	10,428.75	10,434.36	0.00	0.00	0.00
16,000.00	90.49	89.63	5,504.73	-341.81	10,528.74	10,534.28	0.00	0.00	0.00
16,100.00	90.49	89.63	5,503.88	-341.16	10,628.73	10,634.21	0.00	0.00	0.00
16,203.62	90.49	89.63	5,503.00	-340.48	10,732.35	10,737.75	0.00	0.00	0.00
TD at 16203.62									

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well Tatanka LD13-660
Company:	Bison Oil & Gas II, LLC	TVD Reference:	KB=23' @ 4703.00usft
Project:	Weld Co., CO (NAD-83)	MD Reference:	KB=23' @ 4703.00usft
Site:	Tatanka Pads	North Reference:	True
Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Tatanka LD13-660 PB - plan hits target center - Point	0.00	0.00	5,503.00	-340.48	10,732.35	1,521,943.70	3,470,080.06	40.753777	-103.803205
Tatanka LD13-660 T2 - plan hits target center - Point	0.00	0.00	5,543.00	-371.03	6,023.23	1,521,825.11	3,465,372.33	40.753698	-103.820202
Tatanka LD13-660 LP - plan hits target center - Point	0.00	0.00	5,583.00	-406.58	542.20	1,521,687.09	3,459,892.93	40.753602	-103.839985
Tatanka LD13-660 T1 - plan hits target center - Point	0.00	0.00	5,583.00	-390.49	3,023.38	1,521,749.57	3,462,373.37	40.753646	-103.831030

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
359.00	359.00	Pierre Shale (Base of Fox Hills)			
3,193.72	3,183.00	Parkman			
3,692.99	3,680.00	Sussex			
4,295.74	4,280.00	Shannon			
5,448.91	5,373.00	Sharon Springs			
5,573.67	5,453.00	Sharon Springs Hot Marker			
5,609.86	5,473.00	Niobrara A Chalk			
5,787.58	5,548.00	Niobrara B Chalk			

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
600.00	600.00	0.00	0.00	Build 1.5°/100'
964.87	964.31	-15.58	-7.78	3892' Hold
4,856.88	4,838.58	-347.63	-173.72	Build 8°/100'
6,012.82	5,583.00	-406.58	542.20	2481' Hold
8,494.05	5,583.00	-390.49	3,023.38	Build 2°/100'
8,532.50	5,582.74	-390.24	3,061.82	2961' Hold
11,494.23	5,543.00	-371.03	6,023.23	Drop 2°/100'
11,508.36	5,542.85	-370.94	6,037.36	4695' Hold
16,203.62	5,503.00	-340.48	10,732.35	TD at 16203.62



Bison Oil & Gas II, LLC

Weld Co., CO (NAD-83)

Tatanka Pads

Tatanka LD13-660

OH

Plan #1

Anticollision Report

13 January, 2022



Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria
Interpolation Method:	Stations
Depth Range:	Unlimited
Results Limited by:	Max. Cent. Dist. of 1,000.00usft or Max. SF of 10
Warning Levels Evaluated at:	2.00 Sigma
Error Model:	ISCWSA
Scan Method:	Closest Approach 3D
Error Surface:	Pedal Curve
Casing Method:	Not applied

Survey Tool Program		Date	1/13/2022		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.00	16,203.62	Plan #1 (OH)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction	

Summary						
Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Tatanka Offsets						
Alice G Nay #1 (P&A) - OH - OH	8,797.04	5,513.19	1,791.09	1,524.83	6.727	CC
Alice G Nay #1 (P&A) - OH - OH	8,800.00	5,513.15	1,791.09	1,524.79	6.726	ES
Alice G Nay #1 (P&A) - OH - OH	8,900.00	5,511.81	1,794.04	1,526.58	6.708	SF
Alice Nay #1 (2) (D&A) - OH - OH	8,776.45	5,543.47	201.98	-65.26	0.756	No-Go Zone - Stop Drilling
Alice Nay #1 (D&A) - OH - OH	9,123.37	5,515.81	1,457.97	1,187.82	5.397	CC, ES
Alice Nay #1 (D&A) - OH - OH	9,200.00	5,514.79	1,459.98	1,188.92	5.386	SF
Alice Nay #2 (D&A) - OH - OH	9,273.02	5,509.81	1,455.27	1,183.62	5.357	CC
Alice Nay #2 (D&A) - OH - OH	9,300.00	5,509.44	1,455.52	1,183.53	5.351	ES
Alice Nay #2 (D&A) - OH - OH	9,400.00	5,508.10	1,460.80	1,187.71	5.349	SF
Alice Nay (OWP) #1-A (T&A) - OH - OH	8,788.39	5,536.31	360.64	93.55	1.350	Collision Avoidance Req.,
Alice Nay (OWP) #1-A (T&A) - OH - OH	8,800.00	5,536.15	360.82	93.55	1.350	Collision Avoidance Req.,
Alice Nay 1 (D&A) - OH - OH	8,792.94	5,523.25	1,127.97	861.35	4.231	CC
Alice Nay 1 (D&A) - OH - OH	8,800.00	5,523.15	1,127.99	861.28	4.229	ES, SF
Brady #1 (D&A) - OH - OH	10,437.02	5,534.19	107.27	-179.20	0.374	No-Go Zone - Stop Drilling
Castor Federal LD13-78HN - OH - OH	11,800.00	7,156.99	50.95	-14.86	0.774	No-Go Zone - Stop Drilling
Castor Federal LD14-68HN - OH - OH	7,259.50	6,678.38	1,180.15	1,114.57	17.996	CC
Castor Federal LD14-68HN - OH - OH	9,900.00	9,272.00	1,236.87	1,072.76	7.537	ES
Castor Federal LD14-68HN - OH - OH	10,500.00	9,836.66	1,267.53	1,081.70	6.821	SF
Castor Federal LD15-72HN - OH - OH	5,400.00	7,076.99	423.80	383.56	10.533	CC
Castor Federal LD15-72HN - OH - OH	5,400.12	7,077.00	423.80	383.56	10.532	ES
Castor Federal LD15-72HN - OH - OH	5,450.00	7,081.23	428.59	386.80	10.255	SF
Mcdermott #1-14 (P&A) - OH - OH	8,961.59	5,510.98	1,624.53	1,356.46	6.060	CC
Mcdermott #1-14 (P&A) - OH - OH	9,000.00	5,510.47	1,624.99	1,356.45	6.051	ES
Mcdermott #1-14 (P&A) - OH - OH	9,100.00	5,509.13	1,630.42	1,360.77	6.047	SF
Nay (OWP) #1 (D&A) - OH - OH	8,788.90	5,685.30	453.91	180.86	1.662	Collision Risk Procedures
Nay (OWP) #1 (D&A) - OH - OH	8,800.00	5,685.15	454.05	180.82	1.662	Collision Risk Procedures
Rauth #G (D&A) - OH - OH	14,034.43	5,443.41	450.23	123.47	1.378	Collision Avoidance Req.,
Zimith #1 (D&A) - OH - OH	6,818.80	5,540.00	474.11	227.61	1.923	Collision Risk Procedures

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Summary

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Tatanka Pads						
Tatanka Federal LD13-615 - OH - Plan #1	0.00	0.00	1,982.75			
Tatanka Federal LD13-615 - OH - Plan #1	500.00	481.00	1,982.66	1,977.51	385.618	CC, ES
Tatanka Federal LD13-625 - OH - Plan #1	1,062.68	880.38	1,949.43	1,941.53	246.858	CC
Tatanka Federal LD13-625 - OH - Plan #1	1,100.00	900.00	1,949.53	1,941.46	241.768	ES
Tatanka Federal LD13-625 - OH - Plan #1	16,203.62	16,297.92	2,517.99	2,246.83	9.286	SF
Tatanka Federal LD13-635 - OH - Plan #1	5,248.39	5,076.79	1,887.80	1,853.02	54.282	CC
Tatanka Federal LD13-635 - OH - Plan #1	16,203.62	16,156.19	1,896.28	1,625.30	6.998	ES, SF
Tatanka Federal LD13-645 - OH - Plan #1	6,032.74	5,941.52	1,272.44	1,236.58	35.486	CC
Tatanka Federal LD13-645 - OH - Plan #1	16,203.62	16,112.04	1,275.26	1,004.10	4.703	ES, SF
Tatanka LD13-650 - OH - Plan #1	500.00	500.00	28.06	22.86	5.396	CC, ES
Tatanka LD13-650 - OH - Plan #1	16,203.62	16,271.10	621.77	351.21	2.298	SF
Tatanka LD13-670 - OH - Plan #1	600.00	600.00	28.06	22.30	4.873	CC, ES
Tatanka LD13-670 - OH - Plan #1	16,203.62	16,190.56	621.80	350.94	2.296	SF
Tatanka LD13-685 - OH - Plan #1	500.00	500.00	56.12	50.92	10.791	CC, ES
Tatanka LD13-685 - OH - Plan #1	16,203.62	16,377.82	1,425.02	1,153.30	5.244	SF

Offset Design: Tatanka Offsets - Alice G Nay #1 (P&A) - OH - OH

													Offset Site Error: 0.00 usft
													Offset Well Error: 0.00 usft
Survey Program:	5650-Unknown												
Reference	Vertical	Offset	Vertical	Semi Major Axis	Offset	Highside	Offset Wellbore Centre		Rule Assigned:				
Measured Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N-S (usft)	+E-W (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,200.00	5,583.00	5,517.00	5,517.00	28.61	220.68	90.00	-2,179.57	3,337.95	2,399.68	2,158.33	241.35	9.943	
7,300.00	5,583.00	5,517.00	5,517.00	29.58	220.68	90.00	-2,179.57	3,337.95	2,334.32	2,091.70	242.62	9.621	
7,400.00	5,583.00	5,517.00	5,517.00	30.58	220.68	90.00	-2,179.57	3,337.95	2,271.48	2,027.51	243.97	9.310	
7,500.00	5,583.00	5,517.00	5,517.00	31.59	220.68	90.00	-2,179.57	3,337.95	2,211.39	1,965.98	245.40	9.011	
7,600.00	5,583.00	5,517.00	5,517.00	32.62	220.68	90.00	-2,179.57	3,337.95	2,154.26	1,907.35	246.91	8.725	
7,700.00	5,583.00	5,517.00	5,517.00	33.66	220.68	90.00	-2,179.57	3,337.95	2,100.34	1,851.85	248.49	8.452	
7,800.00	5,583.00	5,517.00	5,517.00	34.72	220.68	90.00	-2,179.57	3,337.95	2,049.88	1,799.76	250.12	8.196	
7,900.00	5,583.00	5,517.00	5,517.00	35.79	220.68	90.00	-2,179.57	3,337.95	2,003.15	1,751.35	251.81	7.955	
8,000.00	5,583.00	5,517.00	5,517.00	36.88	220.68	90.00	-2,179.57	3,337.95	1,960.41	1,706.88	253.53	7.732	
8,100.00	5,583.00	5,517.00	5,517.00	37.97	220.68	90.00	-2,179.57	3,337.95	1,921.93	1,666.66	255.27	7.529	
8,200.00	5,583.00	5,517.00	5,517.00	39.07	220.68	90.00	-2,179.57	3,337.95	1,887.97	1,630.95	257.02	7.346	
8,300.00	5,583.00	5,517.00	5,517.00	40.18	220.68	90.00	-2,179.57	3,337.95	1,858.77	1,600.02	258.75	7.184	
8,400.00	5,583.00	5,517.00	5,517.00	41.30	220.68	90.00	-2,179.57	3,337.95	1,834.56	1,574.11	260.45	7.044	
8,494.05	5,583.00	5,517.00	5,517.00	42.36	220.68	90.00	-2,179.57	3,337.95	1,816.53	1,554.54	261.99	6.934	
8,500.00	5,582.99	5,516.99	5,516.99	42.43	220.68	90.02	-2,179.57	3,337.95	1,815.55	1,553.46	262.08	6.927	
8,532.50	5,582.74	5,516.74	5,516.74	42.79	220.67	90.11	-2,179.57	3,337.95	1,810.51	1,547.92	262.59	6.895	
8,600.00	5,581.84	5,515.84	5,515.84	43.55	220.63	90.08	-2,179.57	3,337.95	1,801.89	1,538.30	263.59	6.836	
8,700.00	5,580.49	5,514.49	5,514.49	44.69	220.58	90.04	-2,179.57	3,337.95	1,793.71	1,528.71	265.00	6.769	
8,797.04	5,579.19	5,513.19	5,513.19	45.80	220.53	90.00	-2,179.57	3,337.95	1,791.09	1,524.83	266.26	6.727	CC
8,800.00	5,579.15	5,513.15	5,513.15	45.84	220.53	90.00	-2,179.57	3,337.95	1,791.09	1,524.79	266.30	6.726	ES
8,900.00	5,577.81	5,511.81	5,511.81	46.99	220.47	89.96	-2,179.57	3,337.95	1,794.04	1,526.58	267.46	6.708	SF
9,000.00	5,576.47	5,510.47	5,510.47	48.14	220.42	89.91	-2,179.57	3,337.95	1,802.55	1,534.06	268.49	6.714	
9,100.00	5,575.13	5,509.13	5,509.13	49.31	220.37	89.87	-2,179.57	3,337.95	1,816.52	1,547.16	269.36	6.744	
9,200.00	5,573.79	5,507.79	5,507.79	50.47	220.31	89.83	-2,179.57	3,337.95	1,835.85	1,565.76	270.09	6.797	
9,300.00	5,572.44	5,506.44	5,506.44	51.64	220.26	89.78	-2,179.57	3,337.95	1,860.35	1,589.68	270.67	6.873	
9,400.00	5,571.10	5,505.10	5,505.10	52.81	220.20	89.74	-2,179.57	3,337.95	1,889.84	1,618.73	271.11	6.971	
9,500.00	5,569.76	5,503.76	5,503.76	53.99	220.15	89.70	-2,179.57	3,337.95	1,924.07	1,652.65	271.42	7.089	
9,600.00	5,568.42	5,502.42	5,502.42	55.17	220.10	89.66	-2,179.57	3,337.95	1,962.81	1,691.21	271.60	7.227	

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



Altitude Energy Partners

Anticollision Report



Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Alice G Nay #1 (P&A) - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 5650-Unknown													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Rule Assigned:		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		
9,700.00	5,567.08	5,501.08	5,501.08	56.35	220.04	89.61	-2,179.57	3,337.95	2,005.79	1,734.11	271.68	7.383		
9,800.00	5,565.73	5,499.73	5,499.73	57.53	219.99	89.57	-2,179.57	3,337.95	2,052.74	1,781.09	271.65	7.557		
9,900.00	5,564.39	5,498.39	5,498.39	58.72	219.94	89.53	-2,179.57	3,337.95	2,103.40	1,831.86	271.54	7.746		
10,000.00	5,563.05	5,497.05	5,497.05	59.91	219.88	89.48	-2,179.57	3,337.95	2,157.51	1,886.15	271.36	7.951		
10,100.00	5,561.71	5,495.71	5,495.71	61.10	219.83	89.44	-2,179.57	3,337.95	2,214.81	1,943.70	271.11	8.169		
10,200.00	5,560.37	5,494.37	5,494.37	62.30	219.77	89.40	-2,179.57	3,337.95	2,275.07	2,004.25	270.82	8.401		
10,300.00	5,559.02	5,493.02	5,493.02	63.49	219.72	89.35	-2,179.57	3,337.95	2,338.05	2,067.57	270.48	8.644		
10,400.00	5,557.68	5,491.68	5,491.68	64.69	219.67	89.31	-2,179.57	3,337.95	2,403.54	2,133.43	270.11	8.898		
10,500.00	5,556.34	5,490.34	5,490.34	65.89	219.61	89.27	-2,179.57	3,337.95	2,471.34	2,201.63	269.72	9.163		
10,600.00	5,555.00	5,489.00	5,489.00	67.10	219.56	89.23	-2,179.57	3,337.95	2,541.27	2,271.97	269.30	9.436		
10,700.00	5,553.66	5,487.66	5,487.66	68.30	219.51	89.18	-2,179.57	3,337.95	2,613.16	2,344.28	268.88	9.719		

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Alice Nay #1 (2) (D&A) - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 6315-Unknown													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N-S (usft)	+E-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
6,500.00	5,583.00	5,547.00	5,547.00	22.57	221.88	-90.00	-186.68	3,304.44	2,285.37	2,051.56	233.81	9.775	
6,600.00	5,583.00	5,547.00	5,547.00	23.33	221.88	-90.00	-186.68	3,304.44	2,185.78	1,951.89	233.89	9.345	
6,700.00	5,583.00	5,547.00	5,547.00	24.13	221.88	-90.00	-186.68	3,304.44	2,086.22	1,852.25	233.98	8.916	
6,800.00	5,583.00	5,547.00	5,547.00	24.96	221.88	-90.00	-186.68	3,304.44	1,986.72	1,752.64	234.08	8.487	
6,900.00	5,583.00	5,547.00	5,547.00	25.83	221.88	-90.00	-186.68	3,304.44	1,887.26	1,653.07	234.19	8.059	
7,000.00	5,583.00	5,547.00	5,547.00	26.73	221.88	-90.00	-186.68	3,304.44	1,787.87	1,553.54	234.33	7.630	
7,100.00	5,583.00	5,547.00	5,547.00	27.66	221.88	-90.00	-186.68	3,304.44	1,688.55	1,454.07	234.48	7.201	
7,200.00	5,583.00	5,547.00	5,547.00	28.61	221.88	-90.00	-186.68	3,304.44	1,589.31	1,354.66	234.65	6.773	
7,300.00	5,583.00	5,547.00	5,547.00	29.58	221.88	-90.00	-186.68	3,304.44	1,490.18	1,255.33	234.85	6.345	
7,400.00	5,583.00	5,547.00	5,547.00	30.58	221.88	-90.00	-186.68	3,304.44	1,391.16	1,156.08	235.08	5.918	
7,500.00	5,583.00	5,547.00	5,547.00	31.59	221.88	-90.00	-186.68	3,304.44	1,292.31	1,056.94	235.36	5.491	
7,600.00	5,583.00	5,547.00	5,547.00	32.62	221.88	-90.00	-186.68	3,304.44	1,193.64	957.94	235.70	5.064	
7,700.00	5,583.00	5,547.00	5,547.00	33.66	221.88	-90.00	-186.68	3,304.44	1,095.21	859.10	236.11	4.639	
7,800.00	5,583.00	5,547.00	5,547.00	34.72	221.88	-90.00	-186.68	3,304.44	997.10	760.48	236.62	4.214	
7,900.00	5,583.00	5,547.00	5,547.00	35.79	221.88	-90.00	-186.68	3,304.44	899.40	662.14	237.26	3.791	
8,000.00	5,583.00	5,547.00	5,547.00	36.88	221.88	-90.00	-186.68	3,304.44	802.27	564.17	238.09	3.370	
8,100.00	5,583.00	5,547.00	5,547.00	37.97	221.88	-90.00	-186.68	3,304.44	705.94	466.74	239.20	2.951	
8,200.00	5,583.00	5,547.00	5,547.00	39.07	221.88	-90.00	-186.68	3,304.44	610.79	370.08	240.71	2.537	
8,300.00	5,583.00	5,547.00	5,547.00	40.18	221.88	-90.00	-186.68	3,304.44	517.47	274.63	242.84	2.131	
8,400.00	5,583.00	5,547.00	5,547.00	41.30	221.88	-90.00	-186.68	3,304.44	427.19	181.26	245.93	1.737	Collision Risk Procedures Req.
8,494.05	5,583.00	5,547.00	5,547.00	42.36	221.88	-90.00	-186.68	3,304.44	347.17	96.98	250.19	1.388	Collision Avoidance Req.
8,500.00	5,582.99	5,546.99	5,546.99	42.43	221.88	-90.16	-186.68	3,304.44	342.35	91.84	250.52	1.367	Collision Avoidance Req.
8,532.50	5,582.74	5,546.74	5,546.74	42.79	221.87	-90.93	-186.68	3,304.44	316.70	64.27	252.42	1.255	Collision Avoidance Req.
8,600.00	5,581.84	5,545.84	5,545.84	43.55	221.83	-90.67	-186.68	3,304.44	268.19	11.09	257.09	1.043	Collision Avoidance Req.
8,700.00	5,580.49	5,544.49	5,544.49	44.69	221.78	-90.29	-186.68	3,304.44	215.96	-48.64	264.60	0.816	No-Go Zone - Stop Drilling
8,776.45	5,579.47	5,543.47	5,543.47	45.57	221.74	-90.00	-186.68	3,304.44	201.98	-65.26	267.24	0.756	No-Go Zone - Stop Drilling, CC, ES
8,800.00	5,579.15	5,543.15	5,543.15	45.84	221.73	-89.91	-186.68	3,304.44	203.35	-63.57	266.92	0.762	No-Go Zone - Stop Drilling
8,900.00	5,577.81	5,541.81	5,541.81	46.99	221.67	-89.53	-186.68	3,304.44	236.77	-24.15	260.92	0.907	No-Go Zone - Stop Drilling
9,000.00	5,576.47	5,540.47	5,540.47	48.14	221.62	-89.15	-186.68	3,304.44	301.27	47.94	253.33	1.189	Collision Avoidance Req.
9,100.00	5,575.13	5,539.13	5,539.13	49.31	221.57	-88.77	-186.68	3,304.44	381.40	133.70	247.69	1.540	Collision Risk Procedures Req.
9,200.00	5,573.79	5,537.79	5,537.79	50.47	221.51	-88.39	-186.68	3,304.44	469.21	225.29	243.92	1.924	Collision Risk Procedures Req.
9,300.00	5,572.44	5,536.44	5,536.44	51.64	221.46	-88.01	-186.68	3,304.44	561.12	319.73	241.39	2.325	
9,400.00	5,571.10	5,535.10	5,535.10	52.81	221.40	-87.63	-186.68	3,304.44	655.40	415.74	239.66	2.735	
9,500.00	5,569.76	5,533.76	5,533.76	53.99	221.35	-87.25	-186.68	3,304.44	751.15	512.72	238.43	3.150	
9,600.00	5,568.42	5,532.42	5,532.42	55.17	221.30	-86.87	-186.68	3,304.44	847.89	610.34	237.55	3.569	
9,700.00	5,567.08	5,531.08	5,531.08	56.35	221.24	-86.49	-186.68	3,304.44	945.30	708.41	236.89	3.990	
9,800.00	5,565.73	5,529.73	5,529.73	57.53	221.19	-86.11	-186.68	3,304.44	1,043.20	806.81	236.39	4.413	
9,900.00	5,564.39	5,528.39	5,528.39	58.72	221.14	-85.73	-186.68	3,304.44	1,141.46	905.45	236.02	4.836	
10,000.00	5,563.05	5,527.05	5,527.05	59.91	221.08	-85.35	-186.68	3,304.44	1,240.00	1,004.28	235.72	5.260	
10,100.00	5,561.71	5,525.71	5,525.71	61.10	221.03	-84.98	-186.68	3,304.44	1,338.76	1,103.27	235.49	5.685	
10,200.00	5,560.37	5,524.37	5,524.37	62.30	220.97	-84.60	-186.68	3,304.44	1,437.68	1,202.38	235.31	6.110	
10,300.00	5,559.02	5,523.02	5,523.02	63.49	220.92	-84.22	-186.68	3,304.44	1,536.75	1,301.58	235.16	6.535	
10,400.00	5,557.68	5,521.68	5,521.68	64.69	220.87	-83.84	-186.68	3,304.44	1,635.92	1,400.88	235.05	6.960	
10,500.00	5,556.34	5,520.34	5,520.34	65.89	220.81	-83.47	-186.68	3,304.44	1,735.19	1,500.24	234.95	7.385	
10,600.00	5,555.00	5,519.00	5,519.00	67.10	220.76	-83.09	-186.68	3,304.44	1,834.54	1,599.66	234.88	7.811	
10,700.00	5,553.66	5,517.66	5,517.66	68.30	220.71	-82.72	-186.68	3,304.44	1,933.96	1,699.13	234.82	8.236	
10,800.00	5,552.32	5,516.32	5,516.32	69.51	220.65	-82.34	-186.68	3,304.44	2,033.43	1,798.65	234.78	8.661	
10,900.00	5,550.97	5,514.97	5,514.97	70.71	220.60	-81.97	-186.68	3,304.44	2,132.95	1,898.20	234.74	9.086	
11,000.00	5,549.63	5,513.63	5,513.63	71.92	220.55	-81.60	-186.68	3,304.44	2,232.51	1,997.79	234.72	9.511	
11,100.00	5,548.29	5,512.29	5,512.29	73.13	220.49	-81.23	-186.68	3,304.44	2,332.11	2,097.41	234.70	9.936	

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Alice Nay #1 (D&A) - OH - OH													Offset Site Error:
Survey Program: 6528-Unknown													Offset Well Error:
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum		Separation		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)		
7,300.00	5,583.00	5,524.00	5,524.00	29.58	220.96	90.00	-1,844.34	3,662.08	2,334.55	2,095.26	239.30	9.756	
7,400.00	5,583.00	5,524.00	5,524.00	30.58	220.96	90.00	-1,844.34	3,662.08	2,257.32	2,016.89	240.42	9.389	
7,500.00	5,583.00	5,524.00	5,524.00	31.59	220.96	90.00	-1,844.34	3,662.08	2,181.93	1,940.28	241.65	9.029	
7,600.00	5,583.00	5,524.00	5,524.00	32.62	220.96	90.00	-1,844.34	3,662.08	2,108.59	1,865.61	242.98	8.678	
7,700.00	5,583.00	5,524.00	5,524.00	33.66	220.96	90.00	-1,844.34	3,662.08	2,037.52	1,793.10	244.42	8.336	
7,800.00	5,583.00	5,524.00	5,524.00	34.72	220.96	90.00	-1,844.34	3,662.08	1,968.97	1,723.01	245.96	8.005	
7,900.00	5,583.00	5,524.00	5,524.00	35.79	220.96	90.00	-1,844.34	3,662.08	1,903.20	1,655.60	247.60	7.686	
8,000.00	5,583.00	5,524.00	5,524.00	36.88	220.96	90.00	-1,844.34	3,662.08	1,840.52	1,591.17	249.35	7.381	
8,100.00	5,583.00	5,524.00	5,524.00	37.97	220.96	90.00	-1,844.34	3,662.08	1,781.25	1,530.07	251.18	7.091	
8,200.00	5,583.00	5,524.00	5,524.00	39.07	220.96	90.00	-1,844.34	3,662.08	1,725.74	1,472.64	253.10	6.818	
8,300.00	5,583.00	5,524.00	5,524.00	40.18	220.96	90.00	-1,844.34	3,662.08	1,674.37	1,419.28	255.09	6.564	
8,400.00	5,583.00	5,524.00	5,524.00	41.30	220.96	90.00	-1,844.34	3,662.08	1,627.53	1,370.41	257.12	6.330	
8,494.05	5,583.00	5,524.00	5,524.00	42.36	220.96	90.00	-1,844.34	3,662.08	1,587.97	1,328.91	259.06	6.130	
8,500.00	5,582.99	5,523.99	5,523.99	42.43	220.96	90.05	-1,844.34	3,662.08	1,585.62	1,326.44	259.18	6.118	
8,532.50	5,582.74	5,523.74	5,523.74	42.79	220.95	90.31	-1,844.34	3,662.08	1,573.13	1,313.29	259.84	6.054	
8,600.00	5,581.84	5,522.84	5,522.84	43.55	220.91	90.28	-1,844.34	3,662.08	1,549.04	1,287.86	261.18	5.931	
8,700.00	5,580.49	5,521.49	5,521.49	44.69	220.86	90.22	-1,844.34	3,662.08	1,518.18	1,255.04	263.14	5.769	
8,800.00	5,579.15	5,520.15	5,520.15	45.84	220.81	90.17	-1,844.34	3,662.08	1,493.39	1,228.36	265.03	5.635	
8,900.00	5,577.81	5,518.81	5,518.81	46.99	220.75	90.12	-1,844.34	3,662.08	1,474.98	1,208.18	266.80	5.528	
9,000.00	5,576.47	5,517.47	5,517.47	48.14	220.70	90.07	-1,844.34	3,662.08	1,463.18	1,194.77	268.41	5.451	
9,100.00	5,575.13	5,516.13	5,516.13	49.31	220.65	90.01	-1,844.34	3,662.08	1,458.16	1,188.31	269.84	5.404	
9,123.37	5,574.81	5,515.81	5,515.81	49.58	220.63	90.00	-1,844.34	3,662.08	1,457.97	1,187.82	270.15	5.397 CC, ES	
9,200.00	5,573.79	5,514.79	5,514.79	50.47	220.59	89.96	-1,844.34	3,662.08	1,459.98	1,188.92	271.06	5.386 SF	
9,300.00	5,572.44	5,513.44	5,513.44	51.64	220.54	89.91	-1,844.34	3,662.08	1,468.63	1,196.58	272.05	5.398	
9,400.00	5,571.10	5,512.10	5,512.10	52.81	220.48	89.85	-1,844.34	3,662.08	1,483.98	1,211.17	272.81	5.440	
9,500.00	5,569.76	5,510.76	5,510.76	53.99	220.43	89.80	-1,844.34	3,662.08	1,505.82	1,232.49	273.33	5.509	
9,600.00	5,568.42	5,509.42	5,509.42	55.17	220.38	89.75	-1,844.34	3,662.08	1,533.89	1,260.25	273.63	5.606	
9,700.00	5,567.08	5,508.08	5,508.08	56.35	220.32	89.70	-1,844.34	3,662.08	1,567.84	1,294.10	273.73	5.728	
9,800.00	5,565.73	5,506.73	5,506.73	57.53	220.27	89.64	-1,844.34	3,662.08	1,607.30	1,333.65	273.66	5.873	
9,900.00	5,564.39	5,505.39	5,505.39	58.72	220.22	89.59	-1,844.34	3,662.08	1,651.88	1,378.46	273.42	6.041	
10,000.00	5,563.05	5,504.05	5,504.05	59.91	220.16	89.54	-1,844.34	3,662.08	1,701.18	1,428.12	273.06	6.230	
10,100.00	5,561.71	5,502.71	5,502.71	61.10	220.11	89.49	-1,844.34	3,662.08	1,754.80	1,482.20	272.60	6.437	
10,200.00	5,560.37	5,501.37	5,501.37	62.30	220.05	89.43	-1,844.34	3,662.08	1,812.35	1,540.29	272.06	6.662	
10,300.00	5,559.02	5,500.02	5,500.02	63.49	220.00	89.38	-1,844.34	3,662.08	1,873.47	1,602.01	271.46	6.902	
10,400.00	5,557.68	5,498.68	5,498.68	64.69	219.95	89.33	-1,844.34	3,662.08	1,937.83	1,667.01	270.81	7.156	
10,500.00	5,556.34	5,497.34	5,497.34	65.89	219.89	89.27	-1,844.34	3,662.08	2,005.11	1,734.97	270.14	7.423	
10,600.00	5,555.00	5,496.00	5,496.00	67.10	219.84	89.22	-1,844.34	3,662.08	2,075.02	1,805.57	269.45	7.701	
10,700.00	5,553.66	5,494.66	5,494.66	68.30	219.79	89.17	-1,844.34	3,662.08	2,147.32	1,878.57	268.76	7.990	
10,800.00	5,552.32	5,493.32	5,493.32	69.51	219.73	89.12	-1,844.34	3,662.08	2,221.77	1,953.71	268.06	8.288	
10,900.00	5,550.97	5,491.97	5,491.97	70.71	219.68	89.06	-1,844.34	3,662.08	2,298.16	2,030.78	267.38	8.595	
11,000.00	5,549.63	5,490.63	5,490.63	71.92	219.63	89.01	-1,844.34	3,662.08	2,376.30	2,109.59	266.70	8.910	
11,100.00	5,548.29	5,489.29	5,489.29	73.13	219.57	88.96	-1,844.34	3,662.08	2,456.02	2,189.98	266.05	9.232	
11,200.00	5,546.95	5,487.95	5,487.95	74.35	219.52	88.91	-1,844.34	3,662.08	2,537.18	2,271.78	265.41	9.560	
11,300.00	5,545.61	5,486.61	5,486.61	75.56	219.46	88.85	-1,844.34	3,662.08	2,619.65	2,354.86	264.78	9.893	

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Alice Nay #2 (D&A) - OH - OH													Offset Site Error:
Survey Program: 5662-Unknown													Offset Well Error:
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Minimum		Separation		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)		
7,400.00	5,583.00	5,520.00	5,520.00	30.58	220.80	90.00	-1,840.68	3,811.70	2,371.87	2,132.41	239.46	9.905	
7,500.00	5,583.00	5,520.00	5,520.00	31.59	220.80	90.00	-1,840.68	3,811.70	2,293.73	2,053.13	240.59	9.534	
7,600.00	5,583.00	5,520.00	5,520.00	32.62	220.80	90.00	-1,840.68	3,811.70	2,217.34	1,975.51	241.83	9.169	
7,700.00	5,583.00	5,520.00	5,520.00	33.66	220.80	90.00	-1,840.68	3,811.70	2,142.90	1,899.73	243.17	8.812	
7,800.00	5,583.00	5,520.00	5,520.00	34.72	220.80	90.00	-1,840.68	3,811.70	2,070.61	1,826.00	244.61	8.465	
7,900.00	5,583.00	5,520.00	5,520.00	35.79	220.80	90.00	-1,840.68	3,811.70	2,000.70	1,754.55	246.16	8.128	
8,000.00	5,583.00	5,520.00	5,520.00	36.88	220.80	90.00	-1,840.68	3,811.70	1,933.45	1,685.64	247.81	7.802	
8,100.00	5,583.00	5,520.00	5,520.00	37.97	220.80	90.00	-1,840.68	3,811.70	1,869.13	1,619.57	249.56	7.490	
8,200.00	5,583.00	5,520.00	5,520.00	39.07	220.80	90.00	-1,840.68	3,811.70	1,808.05	1,556.64	251.41	7.192	
8,300.00	5,583.00	5,520.00	5,520.00	40.18	220.80	90.00	-1,840.68	3,811.70	1,750.56	1,497.21	253.35	6.910	
8,400.00	5,583.00	5,520.00	5,520.00	41.30	220.80	90.00	-1,840.68	3,811.70	1,697.02	1,441.66	255.36	6.646	
8,494.05	5,583.00	5,520.00	5,520.00	42.36	220.80	90.00	-1,840.68	3,811.70	1,650.61	1,393.30	257.30	6.415	
8,500.00	5,582.99	5,519.99	5,519.99	42.43	220.80	90.06	-1,840.68	3,811.70	1,647.81	1,390.38	257.43	6.401	
8,532.50	5,582.74	5,519.74	5,519.74	42.79	220.79	90.39	-1,840.68	3,811.70	1,632.82	1,374.72	258.10	6.326	
8,600.00	5,581.84	5,518.84	5,518.84	43.55	220.75	90.36	-1,840.68	3,811.70	1,603.34	1,343.86	259.48	6.179	
8,700.00	5,580.49	5,517.49	5,517.49	44.69	220.70	90.30	-1,840.68	3,811.70	1,564.01	1,302.47	261.54	5.980	
8,800.00	5,579.15	5,516.15	5,516.15	45.84	220.65	90.25	-1,840.68	3,811.70	1,530.21	1,266.64	263.57	5.806	
8,900.00	5,577.81	5,514.81	5,514.81	46.99	220.59	90.20	-1,840.68	3,811.70	1,502.31	1,236.78	265.53	5.658	
9,000.00	5,576.47	5,513.47	5,513.47	48.14	220.54	90.14	-1,840.68	3,811.70	1,480.66	1,213.26	267.40	5.537	
9,100.00	5,575.13	5,512.13	5,512.13	49.31	220.49	90.09	-1,840.68	3,811.70	1,465.52	1,196.40	269.12	5.446	
9,200.00	5,573.79	5,510.79	5,510.79	50.47	220.43	90.04	-1,840.68	3,811.70	1,457.10	1,186.44	270.66	5.384	
9,273.02	5,572.81	5,509.81	5,509.81	51.32	220.39	90.00	-1,840.68	3,811.70	1,455.27	1,183.62	271.66	5.357 CC	
9,300.00	5,572.44	5,509.44	5,509.44	51.64	220.38	89.99	-1,840.68	3,811.70	1,455.52	1,183.53	271.99	5.351 ES	
9,400.00	5,571.10	5,508.10	5,508.10	52.81	220.32	89.93	-1,840.68	3,811.70	1,460.80	1,187.71	273.10	5.349 SF	
9,500.00	5,569.76	5,506.76	5,506.76	53.99	220.27	89.88	-1,840.68	3,811.70	1,472.86	1,198.91	273.96	5.376	
9,600.00	5,568.42	5,505.42	5,505.42	55.17	220.22	89.83	-1,840.68	3,811.70	1,491.55	1,216.98	274.57	5.432	
9,700.00	5,567.08	5,504.08	5,504.08	56.35	220.16	89.77	-1,840.68	3,811.70	1,516.61	1,241.65	274.95	5.516	
9,800.00	5,565.73	5,502.73	5,502.73	57.53	220.11	89.72	-1,840.68	3,811.70	1,547.73	1,272.61	275.12	5.626	
9,900.00	5,564.39	5,501.39	5,501.39	58.72	220.06	89.67	-1,840.68	3,811.70	1,584.57	1,309.48	275.09	5.760	
10,000.00	5,563.05	5,500.05	5,500.05	59.91	220.00	89.62	-1,840.68	3,811.70	1,626.72	1,351.84	274.88	5.918	
10,100.00	5,561.71	5,498.71	5,498.71	61.10	219.95	89.56	-1,840.68	3,811.70	1,673.80	1,399.26	274.54	6.097	
10,200.00	5,560.37	5,497.37	5,497.37	62.30	219.89	89.51	-1,840.68	3,811.70	1,725.39	1,451.31	274.07	6.295	
10,300.00	5,559.02	5,496.02	5,496.02	63.49	219.84	89.46	-1,840.68	3,811.70	1,781.10	1,507.58	273.52	6.512	
10,400.00	5,557.68	5,494.68	5,494.68	64.69	219.79	89.40	-1,840.68	3,811.70	1,840.56	1,567.67	272.89	6.745	
10,500.00	5,556.34	5,493.34	5,493.34	65.89	219.73	89.35	-1,840.68	3,811.70	1,903.42	1,631.20	272.22	6.992	
10,600.00	5,555.00	5,492.00	5,492.00	67.10	219.68	89.30	-1,840.68	3,811.70	1,969.36	1,697.85	271.51	7.253	
10,700.00	5,553.66	5,490.66	5,490.66	68.30	219.63	89.25	-1,840.68	3,811.70	2,038.07	1,767.28	270.79	7.527	
10,800.00	5,552.32	5,489.32	5,489.32	69.51	219.57	89.19	-1,840.68	3,811.70	2,109.28	1,839.23	270.05	7.811	
10,900.00	5,550.97	5,487.97	5,487.97	70.71	219.52	89.14	-1,840.68	3,811.70	2,182.75	1,913.44	269.31	8.105	
11,000.00	5,549.63	5,486.63	5,486.63	71.92	219.47	89.09	-1,840.68	3,811.70	2,258.26	1,989.68	268.58	8.408	
11,100.00	5,548.29	5,485.29	5,485.29	73.13	219.41	89.03	-1,840.68	3,811.70	2,335.61	2,067.75	267.86	8.719	
11,200.00	5,546.95	5,483.95	5,483.95	74.35	219.36	88.98	-1,840.68	3,811.70	2,414.62	2,147.46	267.16	9.038	
11,300.00	5,545.61	5,482.61	5,482.61	75.56	219.30	88.93	-1,840.68	3,811.70	2,495.14	2,228.66	266.48	9.363	
11,400.00	5,544.26	5,481.26	5,481.26	76.77	219.25	88.88	-1,840.68	3,811.70	2,577.02	2,311.21	265.81	9.695	

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Alice Nay (OWP) #1-A (T&A) - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 6277-Unknown								Rule Assigned:				Offset Well Error:	0.00 usft
Reference	Offset	Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre		Distance		Separation		Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Factor	
6,500.00	5,583.00	5,540.00	5,540.00	22.57	221.60	90.00	-749.21	3,320.03	2,316.61	2,084.28	232.33	9.971	
6,600.00	5,583.00	5,540.00	5,540.00	23.33	221.60	90.00	-749.21	3,320.03	2,217.88	1,985.53	232.36	9.545	
6,700.00	5,583.00	5,540.00	5,540.00	24.13	221.60	90.00	-749.21	3,320.03	2,119.28	1,886.88	232.40	9.119	
6,800.00	5,583.00	5,540.00	5,540.00	24.96	221.60	90.00	-749.21	3,320.03	2,020.81	1,788.35	232.46	8.693	
6,900.00	5,583.00	5,540.00	5,540.00	25.83	221.60	90.00	-749.21	3,320.03	1,922.49	1,689.95	232.54	8.267	
7,000.00	5,583.00	5,540.00	5,540.00	26.73	221.60	90.00	-749.21	3,320.03	1,824.37	1,591.72	232.65	7.842	
7,100.00	5,583.00	5,540.00	5,540.00	27.66	221.60	90.00	-749.21	3,320.03	1,726.45	1,493.67	232.78	7.417	
7,200.00	5,583.00	5,540.00	5,540.00	28.61	221.60	90.00	-749.21	3,320.03	1,628.79	1,395.83	232.96	6.992	
7,300.00	5,583.00	5,540.00	5,540.00	29.58	221.60	90.00	-749.21	3,320.03	1,531.43	1,298.25	233.19	6.567	
7,400.00	5,583.00	5,540.00	5,540.00	30.58	221.60	90.00	-749.21	3,320.03	1,434.44	1,200.96	233.48	6.144	
7,500.00	5,583.00	5,540.00	5,540.00	31.59	221.60	90.00	-749.21	3,320.03	1,337.89	1,104.03	233.86	5.721	
7,600.00	5,583.00	5,540.00	5,540.00	32.62	221.60	90.00	-749.21	3,320.03	1,241.88	1,007.54	234.34	5.299	
7,700.00	5,583.00	5,540.00	5,540.00	33.66	221.60	90.00	-749.21	3,320.03	1,146.56	911.60	234.96	4.880	
7,800.00	5,583.00	5,540.00	5,540.00	34.72	221.60	90.00	-749.21	3,320.03	1,052.11	816.33	235.77	4.462	
7,900.00	5,583.00	5,540.00	5,540.00	35.79	221.60	90.00	-749.21	3,320.03	958.78	721.96	236.82	4.049	
8,000.00	5,583.00	5,540.00	5,540.00	36.88	221.60	90.00	-749.21	3,320.03	866.94	628.76	238.18	3.640	
8,100.00	5,583.00	5,540.00	5,540.00	37.97	221.60	90.00	-749.21	3,320.03	777.11	537.17	239.95	3.239	
8,200.00	5,583.00	5,540.00	5,540.00	39.07	221.60	90.00	-749.21	3,320.03	690.10	447.84	242.26	2.849	
8,300.00	5,583.00	5,540.00	5,540.00	40.18	221.60	90.00	-749.21	3,320.03	607.09	361.82	245.27	2.475	
8,400.00	5,583.00	5,540.00	5,540.00	41.30	221.60	90.00	-749.21	3,320.03	529.99	280.85	249.14	2.127	
8,494.05	5,583.00	5,540.00	5,540.00	42.36	221.60	90.00	-749.21	3,320.03	465.49	211.86	253.63	1.835 Collision Risk Procedures Req.	
8,500.00	5,582.99	5,539.99	5,539.99	42.43	221.60	90.10	-749.21	3,320.03	461.75	207.82	253.94	1.818 Collision Risk Procedures Req.	
8,532.50	5,582.74	5,539.74	5,539.74	42.79	221.59	90.55	-749.21	3,320.03	442.19	186.53	255.65	1.730 Collision Risk Procedures Req.	
8,600.00	5,581.84	5,538.84	5,538.84	43.55	221.55	90.40	-749.21	3,320.03	406.87	147.55	259.32	1.569 Collision Risk Procedures Req.	
8,700.00	5,580.49	5,537.49	5,537.49	44.69	221.50	90.19	-749.21	3,320.03	371.31	106.97	264.34	1.405 Collision Avoidance Req.	
8,788.39	5,579.31	5,536.31	5,536.31	45.71	221.45	90.00	-749.21	3,320.03	360.64	93.55	267.09	1.350 Collision Avoidance Req., CC, ES	
8,800.00	5,579.15	5,536.15	5,536.15	45.84	221.45	89.98	-749.21	3,320.03	360.82	93.55	267.27	1.350 Collision Avoidance Req., SF	
8,900.00	5,577.81	5,534.81	5,534.81	46.99	221.39	89.76	-749.21	3,320.03	377.51	110.43	267.08	1.413 Collision Avoidance Req.	
9,000.00	5,576.47	5,533.47	5,533.47	48.14	221.34	89.55	-749.21	3,320.03	418.13	153.65	264.47	1.581 Collision Risk Procedures Req.	
9,100.00	5,575.13	5,532.13	5,532.13	49.31	221.29	89.34	-749.21	3,320.03	476.59	215.66	260.93	1.827 Collision Risk Procedures Req.	
9,200.00	5,573.79	5,530.79	5,530.79	50.47	221.23	89.12	-749.21	3,320.03	547.22	289.78	257.44	2.126	
9,300.00	5,572.44	5,529.44	5,529.44	51.64	221.18	88.91	-749.21	3,320.03	625.90	371.51	254.40	2.460	
9,400.00	5,571.10	5,528.10	5,528.10	52.81	221.12	88.70	-749.21	3,320.03	709.97	458.11	251.86	2.819	
9,500.00	5,569.76	5,526.76	5,526.76	53.99	221.07	88.48	-749.21	3,320.03	797.72	547.94	249.77	3.194	
9,600.00	5,568.42	5,525.42	5,525.42	55.17	221.02	88.27	-749.21	3,320.03	888.06	640.00	248.06	3.580	
9,700.00	5,567.08	5,524.08	5,524.08	56.35	220.96	88.06	-749.21	3,320.03	980.28	733.63	246.64	3.974	
9,800.00	5,565.73	5,522.73	5,522.73	57.53	220.91	87.84	-749.21	3,320.03	1,073.88	828.42	245.47	4.375	
9,900.00	5,564.39	5,521.39	5,521.39	58.72	220.86	87.63	-749.21	3,320.03	1,168.55	924.08	244.48	4.780	
10,000.00	5,563.05	5,520.05	5,520.05	59.91	220.80	87.42	-749.21	3,320.03	1,264.04	1,020.40	243.64	5.188	
10,100.00	5,561.71	5,518.71	5,518.71	61.10	220.75	87.21	-749.21	3,320.03	1,360.17	1,117.25	242.92	5.599	
10,200.00	5,560.37	5,517.37	5,517.37	62.30	220.69	86.99	-749.21	3,320.03	1,456.83	1,214.52	242.30	6.012	
10,300.00	5,559.02	5,516.02	5,516.02	63.49	220.64	86.78	-749.21	3,320.03	1,553.90	1,312.14	241.77	6.427	
10,400.00	5,557.68	5,514.68	5,514.68	64.69	220.59	86.57	-749.21	3,320.03	1,651.33	1,410.03	241.30	6.843	
10,500.00	5,556.34	5,513.34	5,513.34	65.89	220.53	86.36	-749.21	3,320.03	1,749.04	1,508.15	240.89	7.261	
10,600.00	5,555.00	5,512.00	5,512.00	67.10	220.48	86.14	-749.21	3,320.03	1,847.00	1,606.47	240.53	7.679	
10,700.00	5,553.66	5,510.66	5,510.66	68.30	220.43	85.93	-749.21	3,320.03	1,945.16	1,704.95	240.21	8.098	
10,800.00	5,552.32	5,509.32	5,509.32	69.51	220.37	85.72	-749.21	3,320.03	2,043.50	1,803.58	239.93	8.517	
10,900.00	5,550.97	5,507.97	5,507.97	70.71	220.32	85.51	-749.21	3,320.03	2,142.00	1,902.32	239.67	8.937	
11,000.00	5,549.63	5,506.63	5,506.63	71.92	220.27	85.30	-749.21	3,320.03	2,240.62	2,001.18	239.45	9.357	
11,100.00	5,548.29	5,505.29	5,505.29	73.13	220.21	85.08	-749.21	3,320.03	2,339.37	2,100.12	239.24	9.778	

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Alice Nay 1 (D&A) - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 5705-Unknown												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)					
6,800.00	5,583.00	5,527.00	5,527.00	24.96	221.08	90.00	-1,516.49	3,329.55	2,289.98	2,055.41	234.57	9.762	
6,900.00	5,583.00	5,527.00	5,527.00	25.83	221.08	90.00	-1,516.49	3,329.55	2,203.50	1,968.27	235.23	9.367	
7,000.00	5,583.00	5,527.00	5,527.00	26.73	221.08	90.00	-1,516.49	3,329.55	2,118.22	1,882.23	235.99	8.976	
7,100.00	5,583.00	5,527.00	5,527.00	27.66	221.08	90.00	-1,516.49	3,329.55	2,034.27	1,797.43	236.84	8.589	
7,200.00	5,583.00	5,527.00	5,527.00	28.61	221.08	90.00	-1,516.49	3,329.55	1,951.84	1,714.03	237.82	8.207	
7,300.00	5,583.00	5,527.00	5,527.00	29.58	221.08	90.00	-1,516.49	3,329.55	1,871.12	1,632.22	238.91	7.832	
7,400.00	5,583.00	5,527.00	5,527.00	30.58	221.08	90.00	-1,516.49	3,329.55	1,792.35	1,552.22	240.13	7.464	
7,500.00	5,583.00	5,527.00	5,527.00	31.59	221.08	90.00	-1,516.49	3,329.55	1,715.79	1,474.31	241.48	7.105	
7,600.00	5,583.00	5,527.00	5,527.00	32.62	221.08	90.00	-1,516.49	3,329.55	1,641.75	1,398.77	242.98	6.757	
7,700.00	5,583.00	5,527.00	5,527.00	33.66	221.08	90.00	-1,516.49	3,329.55	1,570.60	1,325.98	244.62	6.421	
7,800.00	5,583.00	5,527.00	5,527.00	34.72	221.08	90.00	-1,516.49	3,329.55	1,502.73	1,256.32	246.41	6.099	
7,900.00	5,583.00	5,527.00	5,527.00	35.79	221.08	90.00	-1,516.49	3,329.55	1,438.61	1,190.28	248.33	5.793	
8,000.00	5,583.00	5,527.00	5,527.00	36.88	221.08	90.00	-1,516.49	3,329.55	1,378.78	1,128.39	250.39	5.507	
8,100.00	5,583.00	5,527.00	5,527.00	37.97	221.08	90.00	-1,516.49	3,329.55	1,323.80	1,071.24	252.56	5.242	
8,200.00	5,583.00	5,527.00	5,527.00	39.07	221.08	90.00	-1,516.49	3,329.55	1,274.31	1,019.50	254.80	5.001	
8,300.00	5,583.00	5,527.00	5,527.00	40.18	221.08	90.00	-1,516.49	3,329.55	1,230.96	973.88	257.09	4.788	
8,400.00	5,583.00	5,527.00	5,527.00	41.30	221.08	90.00	-1,516.49	3,329.55	1,194.44	935.09	259.36	4.605	
8,494.05	5,583.00	5,527.00	5,527.00	42.36	221.08	90.00	-1,516.49	3,329.55	1,166.89	905.48	261.41	4.464	
8,500.00	5,582.99	5,526.99	5,526.99	42.43	221.08	90.03	-1,516.49	3,329.55	1,165.38	903.84	261.54	4.456	
8,532.50	5,582.74	5,526.74	5,526.74	42.79	221.07	90.18	-1,516.49	3,329.55	1,157.64	895.44	262.20	4.415	
8,600.00	5,581.84	5,525.84	5,525.84	43.55	221.03	90.13	-1,516.49	3,329.55	1,144.35	880.84	263.51	4.343	
8,700.00	5,580.49	5,524.49	5,524.49	44.69	220.98	90.06	-1,516.49	3,329.55	1,131.79	866.53	265.25	4.267	
8,792.94	5,579.25	5,523.25	5,523.25	45.76	220.93	90.00	-1,516.49	3,329.55	1,127.97	861.35	266.62	4.231 CC	
8,800.00	5,579.15	5,523.15	5,523.15	45.84	220.93	90.00	-1,516.49	3,329.55	1,127.99	861.28	266.71	4.229 ES, SF	
8,900.00	5,577.81	5,521.81	5,521.81	46.99	220.87	89.93	-1,516.49	3,329.55	1,133.04	865.21	267.83	4.230	
9,000.00	5,576.47	5,520.47	5,520.47	48.14	220.82	89.86	-1,516.49	3,329.55	1,146.81	878.21	268.60	4.270	
9,100.00	5,575.13	5,519.13	5,519.13	49.31	220.77	89.79	-1,516.49	3,329.55	1,169.01	899.99	269.02	4.345	
9,200.00	5,573.79	5,517.79	5,517.79	50.47	220.71	89.72	-1,516.49	3,329.55	1,199.16	930.04	269.12	4.456	
9,300.00	5,572.44	5,516.44	5,516.44	51.64	220.66	89.65	-1,516.49	3,329.55	1,236.68	967.73	268.95	4.598	
9,400.00	5,571.10	5,515.10	5,515.10	52.81	220.60	89.59	-1,516.49	3,329.55	1,280.92	1,012.38	268.54	4.770	
9,500.00	5,569.76	5,513.76	5,513.76	53.99	220.55	89.52	-1,516.49	3,329.55	1,331.22	1,063.26	267.96	4.968	
9,600.00	5,568.42	5,512.42	5,512.42	55.17	220.50	89.45	-1,516.49	3,329.55	1,386.92	1,119.67	267.25	5.190	
9,700.00	5,567.08	5,511.08	5,511.08	56.35	220.44	89.38	-1,516.49	3,329.55	1,447.39	1,180.93	266.46	5.432	
9,800.00	5,565.73	5,509.73	5,509.73	57.53	220.39	89.31	-1,516.49	3,329.55	1,512.05	1,246.45	265.61	5.693	
9,900.00	5,564.39	5,508.39	5,508.39	58.72	220.34	89.25	-1,516.49	3,329.55	1,580.40	1,315.67	264.73	5.970	
10,000.00	5,563.05	5,507.05	5,507.05	59.91	220.28	89.18	-1,516.49	3,329.55	1,651.98	1,388.14	263.85	6.261	
10,100.00	5,561.71	5,505.71	5,505.71	61.10	220.23	89.11	-1,516.49	3,329.55	1,726.39	1,463.41	262.97	6.565	
10,200.00	5,560.37	5,504.37	5,504.37	62.30	220.17	89.04	-1,516.49	3,329.55	1,803.27	1,541.15	262.12	6.880	
10,300.00	5,559.02	5,503.02	5,503.02	63.49	220.12	88.97	-1,516.49	3,329.55	1,882.32	1,621.03	261.29	7.204	
10,400.00	5,557.68	5,501.68	5,501.68	64.69	220.07	88.90	-1,516.49	3,329.55	1,963.29	1,702.79	260.50	7.537	
10,500.00	5,556.34	5,500.34	5,500.34	65.89	220.01	88.84	-1,516.49	3,329.55	2,045.93	1,786.19	259.74	7.877	
10,600.00	5,555.00	5,499.00	5,499.00	67.10	219.96	88.77	-1,516.49	3,329.55	2,130.07	1,871.05	259.02	8.224	
10,700.00	5,553.66	5,497.66	5,497.66	68.30	219.91	88.70	-1,516.49	3,329.55	2,215.52	1,957.20	258.33	8.576	
10,800.00	5,552.32	5,496.32	5,496.32	69.51	219.85	88.63	-1,516.49	3,329.55	2,302.15	2,044.48	257.67	8.934	
10,900.00	5,550.97	5,494.97	5,494.97	70.71	219.80	88.56	-1,516.49	3,329.55	2,389.82	2,132.76	257.05	9.297	
11,000.00	5,549.63	5,493.63	5,493.63	71.92	219.75	88.50	-1,516.49	3,329.55	2,478.42	2,221.95	256.47	9.664	

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Brady #1 (D&A) - OH - OH												Offset Site Error:	0.00 usft
Survey Program: 6302-Unknown												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
8,100.00	5,583.00	5,560.00	5,560.00	37.97	222.40	90.00	-485.15	4,966.83	2,339.31	2,105.37	233.94	10.000	
8,200.00	5,583.00	5,560.00	5,560.00	39.07	222.40	90.00	-485.15	4,966.83	2,239.42	2,005.43	233.98	9.571	
8,300.00	5,583.00	5,560.00	5,560.00	40.18	222.40	90.00	-485.15	4,966.83	2,139.54	1,905.51	234.02	9.142	
8,400.00	5,583.00	5,560.00	5,560.00	41.30	222.40	90.00	-485.15	4,966.83	2,039.67	1,805.60	234.07	8.714	
8,494.05	5,583.00	5,560.00	5,560.00	42.36	222.40	90.00	-485.15	4,966.83	1,945.75	1,711.63	234.12	8.311	
8,500.00	5,582.99	5,559.99	5,559.99	42.43	222.40	92.15	-485.15	4,966.83	1,939.81	1,705.69	234.12	8.285	
8,532.50	5,582.74	5,559.74	5,559.74	42.79	222.39	103.40	-485.15	4,966.83	1,907.37	1,673.24	234.13	8.147	
8,600.00	5,581.84	5,558.84	5,558.84	43.55	222.35	102.94	-485.15	4,966.83	1,839.98	1,605.85	234.13	7.859	
8,700.00	5,580.49	5,557.49	5,557.49	44.69	222.30	102.26	-485.15	4,966.83	1,740.17	1,506.03	234.14	7.432	
8,800.00	5,579.15	5,556.15	5,556.15	45.84	222.25	101.57	-485.15	4,966.83	1,640.38	1,406.23	234.15	7.006	
8,900.00	5,577.81	5,554.81	5,554.81	46.99	222.19	100.88	-485.15	4,966.83	1,540.62	1,306.44	234.18	6.579	
9,000.00	5,576.47	5,553.47	5,553.47	48.14	222.14	100.19	-485.15	4,966.83	1,440.89	1,206.68	234.21	6.152	
9,100.00	5,575.13	5,552.13	5,552.13	49.31	222.09	99.49	-485.15	4,966.83	1,341.19	1,106.94	234.26	5.725	
9,200.00	5,573.79	5,550.79	5,550.79	50.47	222.03	98.80	-485.15	4,966.83	1,241.55	1,007.22	234.32	5.298	
9,300.00	5,572.44	5,549.44	5,549.44	51.64	221.98	98.09	-485.15	4,966.83	1,141.96	907.54	234.42	4.871	
9,400.00	5,571.10	5,548.10	5,548.10	52.81	221.92	97.39	-485.15	4,966.83	1,042.46	807.90	234.55	4.444	
9,500.00	5,569.76	5,546.76	5,546.76	53.99	221.87	96.68	-485.15	4,966.83	943.05	708.31	234.75	4.017	
9,600.00	5,568.42	5,545.42	5,545.42	55.17	221.82	95.98	-485.15	4,966.83	843.79	608.76	235.03	3.590	
9,700.00	5,567.08	5,544.08	5,544.08	56.35	221.76	95.27	-485.15	4,966.83	744.72	509.27	235.45	3.163	
9,800.00	5,565.73	5,542.73	5,542.73	57.53	221.71	94.56	-485.15	4,966.83	645.93	409.83	236.10	2.736	
9,900.00	5,564.39	5,541.39	5,541.39	58.72	221.66	93.84	-485.15	4,966.83	547.58	310.44	237.14	2.309	
10,000.00	5,563.05	5,540.05	5,540.05	59.91	221.60	93.13	-485.15	4,966.83	449.95	211.08	238.87	1.884	Collision Risk Procedures Req.
10,100.00	5,561.71	5,538.71	5,538.71	61.10	221.55	92.41	-485.15	4,966.83	353.65	111.69	241.95	1.462	Collision Avoidance Req.
10,200.00	5,560.37	5,537.37	5,537.37	62.30	221.49	91.70	-485.15	4,966.83	260.14	12.29	247.86	1.050	Collision Avoidance Req.
10,300.00	5,559.02	5,536.02	5,536.02	63.49	221.44	90.98	-485.15	4,966.83	174.00	-86.14	260.15	0.669	No-Go Zone - Stop Drilling
10,400.00	5,557.68	5,534.68	5,534.68	64.69	221.39	90.27	-485.15	4,966.83	113.48	-168.44	281.92	0.403	No-Go Zone - Stop Drilling
10,437.02	5,557.19	5,534.19	5,534.19	65.14	221.37	90.00	-485.15	4,966.83	107.27	-179.20	286.46	0.374	No-Go Zone - Stop Drilling, CC, ES
10,500.00	5,556.34	5,533.34	5,533.34	65.89	221.33	89.55	-485.15	4,966.83	124.39	-155.25	279.64	0.445	No-Go Zone - Stop Drilling
10,600.00	5,555.00	5,532.00	5,532.00	67.10	221.28	88.83	-485.15	4,966.83	195.10	-66.46	261.56	0.746	No-Go Zone - Stop Drilling
10,700.00	5,553.66	5,530.66	5,530.66	68.30	221.23	88.12	-485.15	4,966.83	284.00	32.32	251.68	1.128	Collision Avoidance Req.
10,800.00	5,552.32	5,529.32	5,529.32	69.51	221.17	87.40	-485.15	4,966.83	378.47	131.98	246.49	1.535	Collision Risk Procedures Req.
10,900.00	5,550.97	5,527.97	5,527.97	70.71	221.12	86.69	-485.15	4,966.83	475.21	231.72	243.48	1.952	Collision Risk Procedures Req.
11,000.00	5,549.63	5,526.63	5,526.63	71.92	221.07	85.97	-485.15	4,966.83	573.06	331.47	241.59	2.372	
11,100.00	5,548.29	5,525.29	5,525.29	73.13	221.01	85.26	-485.15	4,966.83	671.55	431.22	240.32	2.794	
11,200.00	5,546.95	5,523.95	5,523.95	74.35	220.96	84.55	-485.15	4,966.83	770.42	530.98	239.43	3.218	
11,300.00	5,545.61	5,522.61	5,522.61	75.56	220.90	83.84	-485.15	4,966.83	869.55	630.76	238.78	3.642	
11,400.00	5,544.26	5,521.26	5,521.26	76.77	220.85	83.13	-485.15	4,966.83	968.85	730.55	238.30	4.066	
11,494.23	5,543.00	5,520.00	5,520.00	77.92	220.80	82.47	-485.15	4,966.83	1,062.55	824.60	237.94	4.466	
11,508.36	5,542.85	5,519.85	5,519.85	78.09	220.79	85.16	-485.15	4,966.83	1,076.60	838.70	237.90	4.525	
11,600.00	5,542.07	5,519.07	5,519.07	79.20	220.76	84.74	-485.15	4,966.83	1,167.82	930.17	237.65	4.914	
11,700.00	5,541.22	5,518.22	5,518.22	80.42	220.73	84.29	-485.15	4,966.83	1,267.43	1,029.99	237.44	5.338	
11,800.00	5,540.37	5,517.37	5,517.37	81.64	220.69	83.85	-485.15	4,966.83	1,367.09	1,129.81	237.28	5.762	
11,900.00	5,539.52	5,516.52	5,516.52	82.86	220.66	83.40	-485.15	4,966.83	1,466.80	1,229.65	237.15	6.185	
12,000.00	5,538.67	5,515.67	5,515.67	84.08	220.63	82.95	-485.15	4,966.83	1,566.55	1,329.50	237.05	6.609	
12,100.00	5,537.82	5,514.82	5,514.82	85.30	220.59	82.51	-485.15	4,966.83	1,666.32	1,429.35	236.97	7.032	
12,200.00	5,536.98	5,513.98	5,513.98	86.52	220.56	82.06	-485.15	4,966.83	1,766.12	1,529.21	236.91	7.455	
12,300.00	5,536.13	5,513.13	5,513.13	87.74	220.53	81.62	-485.15	4,966.83	1,865.94	1,629.08	236.87	7.878	
12,400.00	5,535.28	5,512.28	5,512.28	88.97	220.49	81.17	-485.15	4,966.83	1,965.78	1,728.95	236.84	8.300	
12,500.00	5,534.43	5,511.43	5,511.43	90.19	220.46	80.73	-485.15	4,966.83	2,065.64	1,828.82	236.82	8.723	
12,600.00	5,533.58	5,510.58	5,510.58	91.41	220.42	80.29	-485.15	4,966.83	2,165.51	1,928.70	236.81	9.145	
12,700.00	5,532.73	5,509.73	5,509.73	92.64	220.39	79.85	-485.15	4,966.83	2,265.39	2,028.58	236.80	9.567	
12,800.00	5,531.88	5,508.88	5,508.88	93.87	220.36	79.41	-485.15	4,966.83	2,365.27	2,128.47	236.81	9.988	

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



Altitude Energy Partners

Anticollision Report



Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Castor Federal LD13-78HN - OH - OH													Offset Site Error:	0.00 usft
Survey Program:		275-MWD											Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Highside		Offset Wellbore Centre		Rule Assigned:				Offset Well Error:		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
9,800.00	5,565.73	7,183.01	5,520.50	57.53	41.34	141.99	-394.36	6,288.31	1,959.17	1,905.11	54.06	36.238		
9,900.00	5,564.39	7,182.22	5,520.50	58.72	41.33	142.88	-393.57	6,288.32	1,859.20	1,805.07	54.13	34.347		
10,000.00	5,563.05	7,181.39	5,520.50	59.91	41.32	143.84	-392.74	6,288.32	1,759.22	1,705.02	54.20	32.460		
10,100.00	5,561.71	7,180.53	5,520.49	61.10	41.30	144.85	-391.87	6,288.33	1,659.25	1,604.98	54.27	30.575		
10,200.00	5,560.37	7,179.62	5,520.49	62.30	41.29	145.94	-390.97	6,288.34	1,559.28	1,504.94	54.34	28.694		
10,300.00	5,559.02	7,178.68	5,520.49	63.49	41.27	147.11	-390.03	6,288.34	1,459.31	1,404.89	54.42	26.817		
10,400.00	5,557.68	7,177.70	5,520.48	64.69	41.25	148.37	-389.04	6,288.35	1,359.35	1,304.85	54.50	24.943		
10,500.00	5,556.34	7,176.67	5,520.48	65.89	41.24	149.72	-388.01	6,288.36	1,259.39	1,204.80	54.58	23.073		
10,600.00	5,555.00	7,175.59	5,520.48	67.10	41.22	151.18	-386.93	6,288.37	1,159.43	1,104.76	54.67	21.206		
10,700.00	5,553.66	7,174.45	5,520.47	68.30	41.20	152.76	-385.80	6,288.38	1,059.49	1,004.71	54.77	19.343		
10,800.00	5,552.32	7,173.26	5,520.47	69.51	41.18	154.46	-384.61	6,288.39	959.55	904.67	54.88	17.484		
10,900.00	5,550.97	7,172.01	5,520.46	70.71	41.16	156.31	-383.36	6,288.40	859.62	804.62	55.01	15.628		
11,000.00	5,549.63	7,170.70	5,520.46	71.92	41.14	158.31	-382.04	6,288.41	759.72	704.57	55.15	13.776		
11,100.00	5,548.29	7,169.31	5,520.45	73.13	41.11	160.48	-380.66	6,288.43	659.83	604.51	55.32	11.927		
11,200.00	5,546.95	7,167.84	5,520.45	74.35	41.09	162.84	-379.19	6,288.45	559.99	504.44	55.55	10.081		
11,300.00	5,545.61	7,166.29	5,520.44	75.56	41.06	165.41	-377.64	6,288.46	460.20	404.34	55.86	8.239		
11,400.00	5,544.26	7,164.65	5,520.44	76.77	41.03	168.19	-376.00	6,288.48	360.53	304.19	56.34	6.399		
11,494.23	5,543.00	7,163.01	5,520.43	77.92	41.01	171.03	-374.36	6,288.50	266.82	209.66	57.15	4.668		
11,508.36	5,542.85	7,162.76	5,520.43	78.09	41.00	171.12	-374.11	6,288.51	252.79	195.46	57.33	4.409		
11,600.00	5,542.07	7,161.06	5,520.43	79.20	40.97	174.24	-372.41	6,288.53	162.23	102.95	59.28	2.737		
11,700.00	5,541.22	7,159.09	5,520.42	80.42	40.94	177.89	-370.44	6,288.56	66.79	-0.88	67.68	0.987 No-Go Zone - Stop Drilling		
11,800.00	5,540.37	7,156.99	5,520.41	81.64	40.90	-178.19	-368.34	6,288.59	50.95	-14.86	65.81	0.774 No-Go Zone - Stop Drilling, CC, ES		
11,900.00	5,539.52	7,154.74	5,520.40	82.86	40.87	-174.01	-366.09	6,288.62	143.95	88.29	55.65	2.586		
12,000.00	5,538.67	7,152.33	5,520.40	84.08	40.83	-169.61	-363.68	6,288.66	242.56	187.93	54.63	4.440		
12,100.00	5,537.82	7,149.75	5,520.39	85.30	40.78	-165.01	-361.09	6,288.71	341.96	287.42	54.55	6.269		
12,200.00	5,536.98	7,146.96	5,520.38	86.52	40.74	-160.27	-358.31	6,288.75	441.62	387.01	54.61	8.087		
12,300.00	5,536.13	7,143.95	5,520.37	87.74	40.68	-155.44	-355.30	6,288.81	541.39	486.69	54.70	9.897		
12,400.00	5,535.28	7,140.68	5,520.36	88.97	40.63	-150.59	-352.03	6,288.88	641.22	586.43	54.79	11.703		
12,500.00	5,534.43	7,137.13	5,520.34	90.19	40.57	-145.80	-348.48	6,288.95	741.08	686.21	54.87	13.506		
12,600.00	5,533.58	7,133.62	5,520.33	91.41	40.51	-141.53	-344.97	6,289.03	840.97	786.02	54.95	15.305		
12,700.00	5,532.73	7,130.43	5,520.32	92.64	40.46	-138.04	-341.78	6,289.10	940.87	885.84	55.02	17.100		
12,800.00	5,531.88	7,127.17	5,520.31	93.87	40.40	-134.83	-338.52	6,289.17	1,040.77	985.68	55.09	18.891		
12,900.00	5,531.04	7,123.83	5,520.29	95.09	40.35	-131.87	-335.18	6,289.25	1,140.69	1,085.53	55.16	20.679		
13,000.00	5,530.19	7,120.42	5,520.27	96.32	40.29	-129.17	-331.78	6,289.33	1,240.61	1,185.39	55.23	22.464		
13,100.00	5,529.34	7,116.93	5,520.26	97.55	40.23	-126.68	-328.29	6,289.41	1,340.54	1,285.25	55.29	24.246		
13,200.00	5,528.49	7,113.36	5,520.23	98.78	40.18	-124.40	-324.72	6,289.50	1,440.47	1,385.12	55.35	26.025		
13,300.00	5,527.64	7,109.71	5,520.21	100.01	40.12	-122.31	-321.07	6,289.59	1,540.40	1,484.99	55.41	27.802		
13,400.00	5,526.79	7,105.97	5,520.18	101.24	40.05	-120.39	-317.33	6,289.68	1,640.33	1,584.87	55.46	29.576		
13,500.00	5,525.94	7,102.14	5,520.16	102.47	39.99	-118.63	-313.51	6,289.78	1,740.26	1,684.75	55.52	31.347		
13,600.00	5,525.10	7,098.23	5,520.12	103.70	39.93	-117.00	-309.59	6,289.88	1,840.20	1,784.63	55.57	33.116		
13,700.00	5,524.25	7,094.21	5,520.09	104.93	39.86	-115.50	-305.57	6,289.98	1,940.13	1,884.51	55.62	34.882		

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Castor Federal LD14-68HN - OH - OH														Offset Site Error:	0.00 usft
Survey Program: 1214-MWD														Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning		
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
0.00	0.00	1,176.00	1,176.00	0.00	0.00	40.61	955.91	819.68	1,723.65						
100.00	100.00	1,176.00	1,176.00	0.88	0.00	40.61	955.91	819.68	1,656.97	1,655.33	1.64	1,011.172			
200.00	200.00	1,176.00	1,176.00	1.50	0.00	40.61	955.91	819.68	1,593.79	1,591.94	1.85	863.114			
300.00	300.00	1,176.00	1,176.00	1.94	0.00	40.61	955.91	819.68	1,534.52	1,532.45	2.07	741.587			
400.00	400.00	1,176.00	1,176.00	2.29	0.00	40.61	955.91	819.68	1,479.65	1,477.34	2.30	642.105			
500.00	500.00	1,176.00	1,176.00	2.60	0.00	40.61	955.91	819.68	1,429.67	1,427.12	2.55	560.801			
600.00	600.00	1,176.00	1,176.00	2.88	0.00	40.61	955.91	819.68	1,385.12	1,382.32	2.80	494.500			
700.00	699.99	1,176.00	1,176.00	3.19	0.00	-166.09	955.91	819.68	1,347.73	1,344.63	3.10	435.098			
800.00	799.91	1,176.00	1,176.00	3.49	0.00	-166.19	955.91	819.68	1,319.33	1,315.93	3.40	388.001			
900.00	899.69	1,176.00	1,176.00	3.80	0.00	-166.26	955.91	819.68	1,300.55	1,296.82	3.73	348.699			
964.87	964.31	1,176.00	1,176.00	3.93	0.00	-166.29	955.91	819.68	1,293.72	1,289.84	3.88	333.613			
1,000.00	999.29	1,176.00	1,176.00	3.99	0.00	-166.29	955.91	819.68	1,291.65	1,287.71	3.94	327.778			
1,058.42	1,057.44	1,176.00	1,176.00	4.16	0.00	-166.29	955.91	819.68	1,290.33	1,286.20	4.13	312.587			
1,100.00	1,098.83	1,176.00	1,176.00	4.29	0.00	-166.29	955.91	819.68	1,291.00	1,286.74	4.26	303.206			
1,200.00	1,198.37	1,197.77	1,197.76	4.60	0.24	-166.30	955.79	819.81	1,297.89	1,293.21	4.69	276.902			
1,300.00	1,297.92	1,287.39	1,287.37	4.93	1.28	-166.31	954.80	821.35	1,307.44	1,301.68	5.76	226.793			
1,400.00	1,397.46	1,383.30	1,383.27	5.26	2.33	-166.37	954.96	822.56	1,317.64	1,310.39	7.26	181.600			
1,500.00	1,497.01	1,481.54	1,481.50	5.61	3.42	-166.43	955.18	823.90	1,327.96	1,319.19	8.77	151.428			
1,600.00	1,596.55	1,579.76	1,579.71	5.96	4.53	-166.48	955.41	825.36	1,338.36	1,328.10	10.27	130.373			
1,700.00	1,696.09	1,684.60	1,684.54	6.31	5.18	-166.53	955.50	826.88	1,348.63	1,337.38	11.25	119.835			
1,800.00	1,795.64	1,807.37	1,807.30	6.67	5.84	-166.60	955.06	828.09	1,358.37	1,346.18	12.20	111.346			
1,900.00	1,895.18	1,943.96	1,943.78	7.04	7.05	-166.85	953.95	823.30	1,364.58	1,351.47	13.11	104.125			
2,000.00	1,994.73	2,089.68	2,088.88	7.41	7.55	-167.43	955.20	810.21	1,368.94	1,355.01	13.93	98.274			
2,100.00	2,094.27	2,275.55	2,272.47	7.78	7.97	-168.53	955.16	781.35	1,368.68	1,353.92	14.76	92.710			
2,200.00	2,193.81	2,499.43	2,490.03	8.15	8.68	-170.17	945.29	729.84	1,360.06	1,344.21	15.85	85.810			
2,300.00	2,293.36	2,600.16	2,587.01	8.52	8.92	-170.92	936.79	704.00	1,347.10	1,330.59	16.51	81.616			
2,400.00	2,392.90	2,685.85	2,669.78	8.90	9.09	-171.52	929.48	683.06	1,335.04	1,317.93	17.11	78.025			
2,500.00	2,492.45	2,809.26	2,789.04	9.28	9.39	-172.38	918.44	653.30	1,323.11	1,305.29	17.82	74.253			
2,600.00	2,591.99	2,880.30	2,857.66	9.66	9.61	-172.89	911.94	636.15	1,311.09	1,292.58	18.51	70.839			
2,700.00	2,691.54	2,960.32	2,935.31	10.04	9.85	-173.44	905.51	617.92	1,300.95	1,281.76	19.19	67.784			
2,800.00	2,791.08	3,073.61	3,044.96	10.42	10.20	-174.34	898.20	590.39	1,291.57	1,271.61	19.95	64.724			
2,900.00	2,890.62	3,184.96	3,152.02	10.81	10.56	-175.33	890.55	560.78	1,280.73	1,260.02	20.71	61.831			
3,000.00	2,990.17	3,286.11	3,249.17	11.19	10.86	-176.25	883.13	533.55	1,269.65	1,248.22	21.43	59.239			
3,100.00	3,089.71	3,388.48	3,347.32	11.58	11.18	-177.21	875.44	505.55	1,258.51	1,236.33	22.17	56.756			
3,200.00	3,189.26	3,471.00	3,426.62	11.96	11.46	-177.95	868.74	483.71	1,247.71	1,224.82	22.89	54.514			
3,300.00	3,288.80	3,544.01	3,497.34	12.35	11.81	-178.53	862.86	466.57	1,238.80	1,215.15	23.66	52.369			
3,400.00	3,388.34	3,617.16	3,568.84	12.74	12.20	-179.02	857.69	452.04	1,232.58	1,208.14	24.44	50.434			
3,500.00	3,487.89	3,691.64	3,642.04	13.12	12.61	-179.46	852.92	439.09	1,228.34	1,203.19	25.15	48.846			
3,600.00	3,587.43	3,764.73	3,714.26	13.51	12.97	-179.81	848.88	428.71	1,226.42	1,200.58	25.84	47.467			
3,700.00	3,686.98	3,851.00	3,799.79	13.90	13.31	-179.85	844.30	418.42	1,225.87	1,199.37	26.50	46.259			
3,717.58	3,704.48	3,871.75	3,820.39	13.97	13.37	-179.78	843.18	416.16	1,225.83	1,199.21	26.63	46.041			
3,800.00	3,786.52	3,946.00	3,894.18	14.29	13.60	-179.56	839.30	408.90	1,226.24	1,199.10	27.14	45.181			
3,900.00	3,886.06	4,024.24	3,972.07	14.68	13.86	-179.37	835.68	402.42	1,227.95	1,200.22	27.73	44.285			
4,000.00	3,985.61	4,106.23	4,053.80	15.07	14.10	-179.19	832.73	396.59	1,231.14	1,202.85	28.30	43.506			
4,100.00	4,085.15	4,192.40	4,139.78	15.46	14.34	-179.02	830.46	391.40	1,235.69	1,206.83	28.86	42.821			
4,200.00	4,184.70	4,281.08	4,228.34	15.85	14.57	-178.89	828.49	387.19	1,241.19	1,211.78	29.41	42.204			
4,300.00	4,284.24	4,362.95	4,310.13	16.24	14.78	-178.78	827.35	383.78	1,247.72	1,217.80	29.92	41.699			
4,400.00	4,383.79	4,442.85	4,389.96	16.63	14.98	-178.64	827.84	380.58	1,256.06	1,225.66	30.40	41.312			
4,500.00	4,483.33	4,541.15	4,488.18	17.02	15.21	-178.47	829.05	376.81	1,265.08	1,234.17	30.92	40.919			
4,600.00	4,582.87	4,640.08	4,587.06	17.41	15.45	-178.34	830.00	373.78	1,274.20	1,242.78	31.42	40.551			
4,700.00	4,682.42	4,740.44	4,687.38	17.81	15.73	-178.25	830.62	371.40	1,283.30	1,251.31	31.99	40.119			
4,800.00	4,781.96	4,836.17	4,783.11	18.20	15.92	-178.19	830.87	369.88	1,292.41	1,259.90	32.52	39.746			

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Castor Federal LD14-68HN - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 1214-MWD		Offset		Semi Major Axis		Highside Toolface (°)	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)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,856.88	4,838.58	4,886.57	4,833.50	18.41	15.94	178.22	830.76	370.20	1,297.88	1,265.10	32.78	39.598		
4,900.00	4,881.54	4,897.00	4,843.93	18.56	15.95	-143.40	830.72	370.39	1,301.98	1,269.14	32.85	39.639		
4,950.00	4,931.28	4,940.70	4,887.53	18.70	16.36	-108.97	830.32	373.17	1,305.72	1,272.61	33.11	39.430		
5,000.00	4,980.72	4,967.57	4,914.15	18.75	16.61	-92.88	829.90	376.74	1,309.04	1,275.85	33.19	39.446		
5,050.00	5,029.61	4,992.00	4,938.16	18.76	16.85	-84.85	829.40	381.21	1,311.72	1,278.54	33.18	39.535		
5,100.00	5,077.73	5,013.67	4,959.28	18.74	16.99	-80.22	829.04	386.06	1,313.90	1,280.86	33.04	39.770		
5,150.00	5,124.83	5,037.00	4,981.81	18.71	17.14	-77.31	828.92	392.10	1,315.71	1,282.83	32.87	40.022		
5,200.00	5,170.69	5,070.51	5,013.71	18.67	17.18	-75.41	828.62	402.34	1,316.84	1,284.12	32.72	40.242		
5,250.00	5,215.08	5,119.90	5,059.49	18.63	17.22	-74.20	826.85	420.73	1,316.73	1,284.10	32.63	40.352		
5,300.00	5,257.79	5,181.41	5,114.26	18.59	17.23	-73.43	822.05	448.29	1,314.87	1,282.28	32.59	40.345		
5,350.00	5,298.60	5,210.98	5,139.68	18.55	17.21	-72.91	819.08	463.08	1,311.64	1,279.23	32.41	40.474		
5,400.00	5,337.32	5,227.00	5,153.21	18.52	17.20	-72.59	817.48	471.51	1,307.83	1,275.67	32.16	40.663		
5,450.00	5,373.77	5,256.09	5,177.36	18.50	17.17	-72.54	814.88	487.52	1,303.50	1,271.49	32.01	40.724		
5,500.00	5,407.75	5,277.00	5,194.39	18.49	17.15	-72.62	813.40	499.55	1,298.96	1,267.14	31.82	40.823		
5,550.00	5,439.11	5,295.11	5,208.88	18.49	17.13	-72.80	812.36	510.37	1,294.19	1,262.54	31.65	40.889		
5,600.00	5,467.70	5,322.00	5,229.80	18.52	17.11	-73.20	811.22	527.22	1,289.31	1,257.74	31.57	40.838		
5,650.00	5,493.37	5,344.75	5,247.00	18.57	17.10	-73.67	810.39	542.10	1,284.06	1,252.57	31.50	40.768		
5,700.00	5,516.01	5,382.39	5,274.48	18.63	17.08	-74.47	808.73	567.75	1,278.14	1,246.56	31.58	40.472		
5,750.00	5,535.49	5,417.00	5,298.69	18.73	17.04	-75.35	807.03	592.42	1,271.62	1,239.93	31.70	40.120		
5,800.00	5,551.73	5,457.98	5,326.87	18.84	16.98	-76.51	805.08	622.11	1,264.49	1,232.54	31.95	39.578		
5,850.00	5,564.64	5,486.37	5,346.33	18.98	16.94	-77.59	803.87	642.74	1,256.90	1,224.74	32.16	39.083		
5,900.00	5,574.16	5,512.00	5,363.24	19.15	16.90	-78.69	802.95	661.98	1,249.34	1,216.94	32.40	38.558		
5,950.00	5,580.26	5,530.10	5,374.68	19.34	16.90	-79.65	802.44	676.00	1,242.03	1,209.38	32.65	38.042		
5,974.55	5,581.98	5,539.32	5,380.30	19.45	16.91	-80.14	802.25	683.30	1,238.59	1,205.79	32.79	37.769		
6,000.00	5,582.89	5,562.00	5,393.50	19.55	16.91	-80.99	801.96	701.74	1,235.29	1,202.18	33.11	37.303		
6,012.82	5,583.00	5,562.00	5,393.50	19.61	16.91	-81.13	801.96	701.74	1,233.51	1,200.38	33.14	37.224		
6,017.71	5,583.00	5,562.00	5,393.50	19.63	16.91	-81.13	801.96	701.74	1,232.86	1,199.71	33.15	37.191		
6,024.52	5,583.00	5,562.00	5,393.50	19.67	16.91	-81.13	801.96	701.74	1,231.98	1,198.82	33.16	37.147		
6,100.00	5,583.00	5,591.39	5,409.48	20.04	16.92	-81.87	801.96	726.40	1,224.08	1,190.32	33.76	36.261		
6,129.19	5,583.00	5,607.00	5,417.54	20.20	16.93	-82.24	802.12	739.77	1,221.79	1,187.73	34.07	35.866		
6,200.00	5,583.00	5,648.38	5,438.37	20.59	16.90	-83.22	802.96	775.51	1,217.71	1,182.79	34.91	34.879		
6,230.09	5,583.00	5,672.81	5,450.46	20.77	16.89	-83.79	803.63	796.73	1,216.51	1,181.09	35.42	34.344		
6,300.00	5,583.00	5,728.63	5,475.90	21.20	16.95	-84.99	804.88	846.39	1,214.36	1,177.72	36.64	33.143		
6,328.07	5,583.00	5,752.00	5,485.81	21.38	17.06	-85.45	805.53	867.55	1,213.92	1,176.75	37.18	32.652		
6,400.00	5,583.00	5,873.32	5,528.24	21.86	18.67	-87.45	804.76	981.10	1,211.13	1,171.17	39.95	30.313		
6,500.00	5,583.00	5,966.63	5,552.50	22.57	20.33	-88.60	802.25	1,071.13	1,206.76	1,164.24	42.51	28.387		
6,600.00	5,583.00	6,089.31	5,568.27	23.33	22.80	-89.34	798.01	1,192.60	1,202.53	1,156.61	45.92	26.189		
6,700.00	5,583.00	6,189.28	5,571.63	24.13	25.00	-89.50	792.79	1,292.36	1,196.61	1,147.66	48.95	24.446		
6,800.00	5,583.00	6,265.00	5,572.58	24.96	26.71	-89.55	789.30	1,367.99	1,191.43	1,139.97	51.46	23.152		
6,900.00	5,583.00	6,360.00	5,573.00	25.83	28.92	-89.57	786.28	1,462.94	1,187.61	1,133.06	54.55	21.771		
7,000.00	5,583.00	6,450.89	5,572.82	26.73	31.10	-89.56	784.25	1,553.81	1,184.72	1,127.10	57.61	20.563		
7,100.00	5,583.00	6,537.92	5,571.86	27.66	33.22	-89.51	782.90	1,640.82	1,182.53	1,121.90	60.63	19.504		
7,200.00	5,583.00	6,643.86	5,568.35	28.61	35.84	-89.34	781.70	1,746.69	1,180.79	1,116.59	64.20	18.392		
7,259.50	5,583.00	6,678.38	5,567.37	29.19	36.72	-89.29	781.54	1,781.20	1,180.15	1,114.57	65.58	17.996 CC		
7,300.00	5,583.00	6,701.53	5,567.13	29.58	37.32	-89.28	781.85	1,804.35	1,180.44	1,113.94	66.50	17.751		
7,400.00	5,583.00	6,771.32	5,568.20	30.58	39.12	-89.33	784.60	1,874.07	1,183.55	1,114.39	69.16	17.113		
7,500.00	5,583.00	6,874.43	5,571.27	31.59	41.77	-89.48	789.51	1,977.01	1,187.64	1,114.76	72.89	16.294		
7,600.00	5,583.00	7,001.07	5,571.64	32.62	45.02	-89.50	793.85	2,103.56	1,190.46	1,113.15	77.32	15.397		
7,700.00	5,583.00	7,103.51	5,567.97	33.66	47.66	-89.33	795.69	2,205.92	1,191.64	1,110.64	81.00	14.712		
7,800.00	5,583.00	7,187.90	5,563.93	34.72	49.85	-89.13	797.77	2,290.18	1,193.54	1,109.39	84.15	14.184		
7,900.00	5,583.00	7,301.10	5,560.07	35.79	52.81	-88.95	801.22	2,403.27	1,196.05	1,107.83	88.22	13.558		
8,000.00	5,583.00	7,386.13	5,557.72	36.88	55.05	-88.84	803.43	2,488.23	1,198.08	1,106.63	91.45	13.101		

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Castor Federal LD14-68HN - OH - OH													Offset Site Error:
Survey Program: 1214-MWD													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,100.00	5,583.00	7,509.90	5,554.24	37.97	58.31	-88.67	806.79	2,611.91	1,200.28	1,104.38	95.89	12.517	
8,122.57	5,583.00	7,535.31	5,553.68	38.22	58.99	-88.65	807.13	2,637.30	1,200.45	1,103.62	96.82	12.398	
8,200.00	5,583.00	7,619.45	5,552.06	39.07	61.22	-88.57	807.72	2,721.42	1,200.51	1,100.59	99.92	12.015	
8,214.89	5,583.00	7,632.93	5,551.89	39.24	61.58	-88.56	807.81	2,734.90	1,200.52	1,100.09	100.44	11.953	
8,300.00	5,583.00	7,707.00	5,551.60	40.18	63.55	-88.55	808.64	2,808.97	1,200.95	1,097.63	103.31	11.624	
8,400.00	5,583.00	7,785.00	5,552.89	41.30	65.63	-88.61	810.76	2,886.93	1,202.95	1,096.53	106.43	11.303	
8,494.05	5,583.00	7,897.79	5,556.15	42.36	68.64	-88.77	814.11	2,999.62	1,205.11	1,094.48	110.63	10.893	
8,500.00	5,582.99	7,906.40	5,556.40	42.43	68.87	-88.78	814.27	3,008.23	1,205.18	1,094.24	110.94	10.863	
8,532.50	5,582.74	7,953.45	5,557.80	42.79	70.13	-88.86	814.84	3,055.25	1,205.33	1,092.70	112.63	10.701	
8,600.00	5,581.84	8,025.25	5,559.81	43.55	72.06	-89.00	814.98	3,127.02	1,204.97	1,089.60	115.36	10.445	
8,625.57	5,581.49	8,049.67	5,560.40	43.85	72.72	-89.05	815.05	3,151.44	1,204.86	1,088.54	116.32	10.358	
8,700.00	5,580.49	8,125.39	5,561.72	44.69	74.75	-89.16	815.29	3,227.14	1,204.57	1,085.35	119.23	10.103	
8,737.55	5,579.99	8,164.54	5,562.00	45.12	75.80	-89.20	815.34	3,266.29	1,204.37	1,083.65	120.72	9.977	
8,800.00	5,579.15	8,249.05	5,561.65	45.84	78.08	-89.23	814.60	3,350.79	1,203.41	1,079.66	123.75	9.724	
8,891.49	5,577.92	8,311.04	5,561.32	46.89	79.76	-89.26	814.04	3,412.78	1,202.08	1,075.64	126.44	9.507	
8,900.00	5,577.81	8,316.24	5,561.36	46.99	79.90	-89.26	814.08	3,417.98	1,202.09	1,075.42	126.67	9.490	
9,000.00	5,576.47	8,383.49	5,562.80	48.14	81.73	-89.37	815.81	3,485.18	1,203.89	1,074.36	129.53	9.294	
9,100.00	5,575.13	8,463.70	5,566.15	49.31	83.91	-89.59	819.52	3,565.23	1,207.80	1,075.03	132.77	9.097	
9,200.00	5,573.79	8,561.22	5,570.92	50.47	86.52	-89.87	824.87	3,662.49	1,212.62	1,076.04	136.59	8.878	
9,300.00	5,572.44	8,675.08	5,576.33	51.64	89.58	-90.20	830.61	3,776.07	1,217.04	1,076.07	140.97	8.633	
9,400.00	5,571.10	8,798.75	5,577.43	52.81	92.91	-90.33	834.77	3,899.66	1,219.76	1,074.13	145.63	8.376	
9,500.00	5,569.76	8,879.73	5,576.73	53.99	95.09	-90.35	836.94	3,980.61	1,221.89	1,073.00	148.89	8.206	
9,600.00	5,568.42	8,955.81	5,577.24	55.17	97.15	-90.42	840.96	4,056.58	1,226.47	1,074.50	151.97	8.071	
9,700.00	5,567.08	9,083.23	5,575.00	56.35	100.58	-90.39	847.96	4,183.77	1,231.49	1,074.71	156.79	7.855	
9,800.00	5,565.73	9,189.88	5,569.11	57.53	103.46	-90.18	851.06	4,290.21	1,233.70	1,072.85	160.86	7.670	
9,900.00	5,564.39	9,272.00	5,563.82	58.72	105.67	-89.99	854.19	4,372.10	1,236.87	1,072.76	164.11	7.537 ES	
10,000.00	5,563.05	9,359.72	5,557.19	59.91	108.02	-89.74	858.78	4,459.44	1,241.47	1,073.95	167.52	7.411	
10,100.00	5,561.71	9,463.69	5,548.19	61.10	110.80	-89.39	864.57	4,562.86	1,246.47	1,075.00	171.46	7.270	
10,200.00	5,560.37	9,572.49	5,538.11	62.30	113.71	-88.99	869.79	4,671.06	1,250.75	1,075.18	175.56	7.124	
10,300.00	5,559.02	9,658.15	5,532.03	63.49	116.01	-88.77	874.00	4,756.41	1,255.15	1,076.25	178.90	7.016	
10,400.00	5,557.68	9,743.80	5,527.14	64.69	118.31	-88.61	879.39	4,841.74	1,260.89	1,078.66	182.23	6.919	
10,500.00	5,556.34	9,836.66	5,522.91	65.89	120.81	-88.48	886.09	4,934.26	1,267.53	1,081.70	185.83	6.821 SF	
10,600.00	5,555.00	9,850.00	5,522.32	67.10	121.17	-88.46	887.07	4,947.56	1,277.26	1,091.24	186.02	6.866	
10,700.00	5,553.66	9,850.00	5,522.32	68.30	121.17	-88.46	887.07	4,947.56	1,294.60	1,109.94	184.65	7.011	
10,800.00	5,552.32	9,850.00	5,522.32	69.51	121.17	-88.46	887.07	4,947.56	1,319.30	1,136.97	182.33	7.236	
10,900.00	5,550.97	9,850.00	5,522.32	70.71	121.17	-88.46	887.07	4,947.56	1,350.98	1,171.78	179.20	7.539	
11,000.00	5,549.63	9,850.00	5,522.32	71.92	121.17	-88.46	887.07	4,947.56	1,389.14	1,213.73	175.41	7.919	
11,100.00	5,548.29	9,850.00	5,522.32	73.13	121.17	-88.46	887.07	4,947.56	1,433.28	1,262.14	171.14	8.375	
11,200.00	5,546.95	9,850.00	5,522.32	74.35	121.17	-88.46	887.07	4,947.56	1,482.86	1,316.31	166.55	8.904	
11,300.00	5,545.61	9,850.00	5,522.32	75.56	121.17	-88.46	887.07	4,947.56	1,537.35	1,375.60	161.76	9.504	
11,400.00	5,544.26	9,850.00	5,522.32	76.77	121.17	-88.46	887.07	4,947.56	1,596.26	1,439.37	156.88	10.175	
11,494.23	5,543.00	9,850.00	5,522.32	77.92	121.17	-88.46	887.07	4,947.56	1,655.37	1,503.07	152.30	10.869	
11,508.36	5,542.85	9,850.00	5,522.32	78.09	121.17	-88.70	887.07	4,947.56	1,664.52	1,512.90	151.62	10.978	
11,600.00	5,542.07	9,850.00	5,522.32	79.20	121.17	-88.70	887.07	4,947.56	1,725.46	1,578.23	147.24	11.719	
11,700.00	5,541.22	9,850.00	5,522.32	80.42	121.17	-88.70	887.07	4,947.56	1,794.95	1,652.37	142.58	12.589	
11,800.00	5,540.37	9,850.00	5,522.32	81.64	121.17	-88.70	887.07	4,947.56	1,867.20	1,729.12	138.09	13.522	
11,900.00	5,539.52	9,850.00	5,522.32	82.86	121.17	-88.70	887.07	4,947.56	1,941.92	1,808.14	133.78	14.516	

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Castor Federal LD15-72HN - OH - OH													Offset Site Error:
Survey Program: 350-MWD													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	25.11	25.11	0.00	0.26	-16.68	1,144.73	-342.98	1,195.01				
100.00	100.00	125.57	125.57	0.88	1.31	-16.68	1,144.68	-343.08	1,194.98	1,192.80	2.18	547.013	
200.00	200.00	226.03	226.03	1.50	2.35	-16.70	1,144.54	-343.30	1,194.92	1,191.07	3.84	310.907	
300.00	300.00	326.48	326.48	1.94	3.39	-16.72	1,144.32	-343.66	1,194.81	1,189.49	5.32	224.721	
400.00	400.00	428.73	428.72	2.29	4.63	-16.74	1,143.99	-344.04	1,194.61	1,187.70	6.91	172.856	
500.00	500.00	531.51	531.51	2.60	5.93	-16.75	1,143.48	-344.22	1,194.18	1,185.66	8.52	140.161	
600.00	600.00	634.30	634.29	2.88	7.24	-16.76	1,142.78	-344.17	1,193.52	1,183.42	10.10	118.190	
646.57	646.57	682.17	682.16	3.02	7.84	136.70	1,142.40	-344.07	1,193.34	1,182.50	10.84	110.117	
700.00	699.99	737.08	737.07	3.19	8.54	136.73	1,141.90	-343.89	1,193.58	1,181.90	11.68	102.217	
800.00	799.91	836.09	836.07	3.49	9.75	136.85	1,141.01	-343.44	1,195.45	1,182.29	13.16	90.832	
900.00	899.69	934.43	934.41	3.80	10.95	137.03	1,140.29	-342.86	1,199.36	1,184.73	14.63	81.971	
964.87	964.31	998.10	998.07	3.93	11.73	137.19	1,139.91	-342.41	1,203.00	1,187.48	15.52	77.518	
1,000.00	999.29	1,032.55	1,032.52	3.99	12.15	137.31	1,139.74	-342.15	1,205.22	1,189.23	15.98	75.413	
1,100.00	1,098.83	1,130.58	1,130.56	4.29	13.36	137.64	1,139.34	-341.30	1,211.64	1,194.20	17.44	69.464	
1,200.00	1,198.37	1,226.07	1,226.04	4.60	14.22	137.97	1,139.13	-340.41	1,218.26	1,199.68	18.58	65.576	
1,300.00	1,297.92	1,319.77	1,319.74	4.93	14.27	138.25	1,139.25	-340.44	1,225.50	1,206.61	18.90	64.857	
1,400.00	1,397.46	1,418.72	1,418.69	5.26	14.30	138.53	1,139.44	-340.76	1,232.91	1,213.70	19.20	64.198	
1,500.00	1,497.01	1,518.31	1,518.28	5.61	14.34	138.81	1,139.67	-341.20	1,240.42	1,220.90	19.52	63.532	
1,600.00	1,596.55	1,617.54	1,617.50	5.96	14.38	139.07	1,139.83	-341.69	1,247.91	1,228.06	19.85	62.874	
1,700.00	1,696.09	1,717.23	1,717.20	6.31	14.43	139.34	1,140.08	-342.09	1,255.48	1,235.31	20.18	62.225	
1,800.00	1,795.64	1,802.78	1,802.73	6.67	14.47	139.60	1,140.71	-341.98	1,263.46	1,242.94	20.52	61.570	
1,900.00	1,895.18	1,875.46	1,875.39	7.04	14.59	139.86	1,142.63	-341.12	1,273.08	1,252.20	20.88	60.971	
2,000.00	1,994.73	1,943.64	1,943.48	7.41	14.74	140.08	1,145.99	-341.12	1,285.17	1,263.92	21.25	60.481	
2,100.00	2,094.27	2,028.00	2,027.62	7.78	14.88	140.39	1,152.00	-340.65	1,299.27	1,277.62	21.65	60.016	
2,200.00	2,193.81	2,090.20	2,089.55	8.15	14.93	140.65	1,157.76	-339.93	1,315.26	1,293.28	21.99	59.823	
2,300.00	2,293.36	2,165.32	2,164.19	8.52	14.98	140.95	1,166.21	-339.45	1,333.44	1,311.10	22.34	59.691	
2,400.00	2,392.90	2,247.87	2,246.09	8.90	15.03	141.27	1,176.53	-339.07	1,352.97	1,330.27	22.69	59.625	
2,500.00	2,492.45	2,329.88	2,327.35	9.28	15.09	141.58	1,187.61	-338.90	1,373.57	1,350.54	23.03	59.636	
2,600.00	2,591.99	2,407.00	2,403.60	9.66	15.15	141.88	1,199.16	-338.74	1,395.62	1,372.24	23.38	59.703	
2,700.00	2,691.54	2,487.64	2,483.17	10.04	15.24	142.16	1,212.18	-339.17	1,418.98	1,395.24	23.74	59.766	
2,800.00	2,791.08	2,568.55	2,560.73	10.42	15.34	142.46	1,228.46	-340.70	1,442.90	1,418.72	24.18	59.683	
2,900.00	2,890.62	2,691.81	2,684.61	10.81	15.46	142.77	1,245.35	-342.21	1,466.41	1,441.76	24.65	59.492	
3,000.00	2,990.17	2,799.90	2,791.43	11.19	15.60	143.08	1,261.87	-343.62	1,489.20	1,464.05	25.15	59.219	
3,100.00	3,089.71	2,885.55	2,876.05	11.58	15.72	143.30	1,274.99	-345.32	1,512.17	1,486.60	25.56	59.155	
3,200.00	3,189.26	2,995.64	2,984.84	11.96	15.88	143.53	1,291.55	-348.35	1,535.01	1,508.92	26.09	58.827	
3,300.00	3,288.80	3,091.65	3,079.77	12.35	16.03	143.74	1,305.72	-350.70	1,557.56	1,530.98	26.58	58.608	
3,400.00	3,388.34	3,184.21	3,171.25	12.74	16.19	143.92	1,319.55	-353.23	1,580.34	1,553.29	27.05	58.416	
3,500.00	3,487.89	3,282.77	3,268.64	13.12	16.37	144.14	1,334.56	-355.38	1,603.34	1,575.77	27.57	58.153	
3,600.00	3,587.43	3,387.92	3,372.62	13.51	16.56	144.41	1,350.18	-355.98	1,625.75	1,597.61	28.13	57.787	
3,700.00	3,686.98	3,483.04	3,466.64	13.90	16.75	144.68	1,364.64	-356.04	1,648.47	1,619.81	28.66	57.516	
3,800.00	3,786.52	3,582.98	3,564.96	14.29	17.30	145.20	1,390.32	-356.40	1,669.04	1,639.24	29.81	55.994	
3,900.00	3,886.06	3,683.08	3,664.78	14.68	17.80	145.77	1,398.48	-355.62	1,679.64	1,648.85	30.79	54.548	
4,000.00	3,985.61	3,783.89	3,763.94	15.07	18.28	114.19	-274.75	-320.38	1,638.61	1,608.86	29.75	55.078	
4,100.00	4,085.15	3,883.54	3,863.95	15.46	18.88	112.83	-281.40	-320.35	1,539.23	1,509.28	29.95	51.392	
4,200.00	4,184.70	3,983.38	3,963.97	15.85	19.48	111.34	-288.24	-320.31	1,439.90	1,409.74	30.16	47.748	
4,300.00	4,284.24	4,083.42	4,063.99	16.24	20.08	109.71	-295.29	-320.27	1,340.62	1,310.25	30.37	44.144	
4,400.00	4,383.79	4,183.67	4,163.03	16.63	20.68	107.93	-302.54	-320.23	1,241.41	1,210.82	30.59	40.583	
4,500.00	4,483.33	4,283.15	4,263.08	17.02	21.28	105.96	-310.01	-320.20	1,142.27	1,111.45	30.82	37.065	
4,600.00	4,582.87	4,382.69	4,362.14	17.41	21.88	103.79	-317.72	-320.16	1,043.23	1,012.18	31.06	33.589	
4,700.00	4,682.42	4,482.24	4,461.24	17.81	22.48	100.39	-328.87	-320.11	944.33	913.03	31.30	30.168	
4,800.00	4,781.96	4,581.78	4,560.31	18.20	23.08	97.96	-336.21	-320.08	845.57	813.99	31.58	26.778	
4,856.88	4,838.58	4,622.03	4,600.37	18.41	23.90	95.63	-342.89	-320.03	789.48	757.74	31.73	24.878	

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Castor Federal LD15-72HN - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 350-MWD													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,900.00	4,881.54	7,026.97	5,639.40	18.56	33.97	124.16	-347.83	-319.99	747.22	715.36	31.87	23.449	
4,950.00	4,931.28	7,032.57	5,639.44	18.70	34.06	151.92	-353.44	-319.93	699.07	667.02	32.05	21.811	
5,000.00	4,980.72	7,038.05	5,639.47	18.75	34.14	163.82	-358.91	-319.86	652.27	619.97	32.29	20.198	
5,050.00	5,029.61	7,043.39	5,639.49	18.76	34.22	169.02	-364.25	-319.79	607.37	574.75	32.62	18.619	
5,100.00	5,077.73	7,048.59	5,639.50	18.74	34.30	171.61	-369.46	-319.71	565.09	532.02	33.07	17.088	
5,150.00	5,124.83	7,053.67	5,639.51	18.71	34.38	173.04	-374.53	-319.63	526.29	492.60	33.69	15.622	
5,200.00	5,170.69	7,058.61	5,639.51	18.67	34.46	173.87	-379.47	-319.54	492.00	457.47	34.53	14.248	
5,250.00	5,215.08	7,063.41	5,639.51	18.63	34.53	174.37	-384.27	-319.44	463.41	427.77	35.64	13.004	
5,300.00	5,257.79	7,068.07	5,639.51	18.59	34.60	174.67	-388.93	-319.34	441.78	404.78	37.01	11.937	
5,350.00	5,298.60	7,072.60	5,639.50	18.55	34.67	174.82	-393.46	-319.24	428.30	389.71	38.59	11.100	
5,400.00	5,337.32	7,076.99	5,639.48	18.52	34.73	174.87	-397.84	-319.14	423.80	383.56	40.24	10.533 CC	
5,400.12	5,337.41	7,077.00	5,639.48	18.52	34.73	174.87	-397.85	-319.14	423.80	383.56	40.24	10.532 ES	
5,450.00	5,373.77	7,081.23	5,639.47	18.50	34.80	174.84	-402.08	-319.03	428.59	386.80	41.79	10.255 SF	
5,500.00	5,407.75	7,085.32	5,639.45	18.49	34.86	174.74	-406.17	-318.93	442.36	399.23	43.13	10.257	
5,550.00	5,439.11	7,089.26	5,639.43	18.49	34.92	174.57	-410.11	-318.82	464.25	420.07	44.17	10.510	
5,600.00	5,467.70	7,093.04	5,639.40	18.52	34.98	174.33	-413.89	-318.71	493.08	448.14	44.94	10.972	
5,650.00	5,493.37	7,096.66	5,639.38	18.57	35.03	173.99	-417.51	-318.61	527.59	482.11	45.48	11.601	
5,700.00	5,516.01	7,100.11	5,639.35	18.63	35.09	173.54	-420.96	-318.50	566.60	520.75	45.84	12.359	
5,750.00	5,535.49	7,103.38	5,639.32	18.73	35.14	172.93	-424.22	-318.40	609.07	562.98	46.09	13.214	
5,800.00	5,551.73	7,106.45	5,639.29	18.84	35.18	172.07	-427.30	-318.30	654.16	607.89	46.27	14.139	
5,850.00	5,564.64	7,109.33	5,639.27	18.98	35.23	170.77	-430.18	-318.20	701.15	654.76	46.39	15.115	
5,900.00	5,574.16	7,112.00	5,639.24	19.15	35.27	168.60	-432.84	-318.11	749.49	703.01	46.48	16.125	
5,950.00	5,580.26	7,114.43	5,639.21	19.34	35.30	164.17	-435.27	-318.03	798.72	752.17	46.55	17.159	
6,000.00	5,582.89	7,116.63	5,639.19	19.55	35.34	150.18	-437.46	-317.95	848.47	801.86	46.60	18.206	
6,012.82	5,583.00	7,117.15	5,639.18	19.61	35.34	140.37	-437.99	-317.93	861.27	814.65	46.62	18.476	
6,100.00	5,583.00	7,120.76	5,639.14	20.04	35.40	136.62	-441.59	-317.80	948.35	901.66	46.69	20.310	
6,200.00	5,583.00	7,116.47	5,639.20	20.59	35.34	141.13	-437.31	-317.99	1,048.32	1,001.71	46.61	22.490	
6,300.00	5,583.00	7,118.54	5,639.18	21.20	35.37	138.88	-439.38	-317.93	1,148.25	1,101.59	46.66	24.606	
6,400.00	5,583.00	7,120.57	5,639.15	21.86	35.40	136.81	-441.40	-317.87	1,248.19	1,201.47	46.72	26.718	
6,500.00	5,583.00	7,122.55	5,639.13	22.57	35.43	134.92	-443.38	-317.81	1,348.13	1,301.36	46.77	28.825	
6,600.00	5,583.00	7,124.48	5,639.11	23.33	35.46	133.18	-445.32	-317.75	1,448.08	1,401.26	46.82	30.927	
6,700.00	5,583.00	7,126.38	5,639.09	24.13	35.49	131.57	-447.21	-317.70	1,548.03	1,501.16	46.88	33.023	
6,800.00	5,583.00	7,128.23	5,639.07	24.96	35.52	130.09	-449.07	-317.65	1,647.99	1,601.06	46.93	35.113	
6,900.00	5,583.00	7,130.05	5,639.05	25.83	35.55	128.72	-450.88	-317.59	1,747.95	1,700.96	46.99	37.198	
7,000.00	5,583.00	7,131.83	5,639.03	26.73	35.58	127.45	-452.66	-317.54	1,847.91	1,800.86	47.05	39.277	
7,100.00	5,583.00	7,133.57	5,639.01	27.66	35.60	126.28	-454.40	-317.49	1,947.87	1,900.76	47.11	41.349	

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Mcdermott #1-14 (P&A) - OH - OH											Offset Site Error:
											0.00 usft
Survey Program:	Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Distance	Rule Assigned:	Offset Well Error:			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Reference	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
7,200.00	5,583.00	5,517.00	28.61	220.68	90.00	-2,011.96	3,501.41	2,396.28	2,156.61	239.67	9.998
7,300.00	5,583.00	5,517.00	29.58	220.68	90.00	-2,011.96	3,501.41	2,323.76	2,082.92	240.84	9.648
7,400.00	5,583.00	5,517.00	30.58	220.68	90.00	-2,011.96	3,501.41	2,253.34	2,011.24	242.11	9.307
7,500.00	5,583.00	5,517.00	31.59	220.68	90.00	-2,011.96	3,501.41	2,185.23	1,941.77	243.46	8.976
7,600.00	5,583.00	5,517.00	32.62	220.68	90.00	-2,011.96	3,501.41	2,119.65	1,874.74	244.91	8.655
7,700.00	5,583.00	5,517.00	33.66	220.68	90.00	-2,011.96	3,501.41	2,056.85	1,810.40	246.44	8.346
7,800.00	5,583.00	5,517.00	34.72	220.68	90.00	-2,011.96	3,501.41	1,997.08	1,749.01	248.07	8.051
7,900.00	5,583.00	5,517.00	35.79	220.68	90.00	-2,011.96	3,501.41	1,940.62	1,690.86	249.76	7.770
8,000.00	5,583.00	5,517.00	36.88	220.68	90.00	-2,011.96	3,501.41	1,887.77	1,636.24	251.53	7.505
8,100.00	5,583.00	5,517.00	37.97	220.68	90.00	-2,011.96	3,501.41	1,838.85	1,585.50	253.35	7.258
8,200.00	5,583.00	5,517.00	39.07	220.68	90.00	-2,011.96	3,501.41	1,794.18	1,538.96	255.22	7.030
8,300.00	5,583.00	5,517.00	40.18	220.68	90.00	-2,011.96	3,501.41	1,754.07	1,496.96	257.11	6.822
8,400.00	5,583.00	5,517.00	41.30	220.68	90.00	-2,011.96	3,501.41	1,718.85	1,459.86	258.99	6.637
8,494.05	5,583.00	5,517.00	42.36	220.68	90.00	-2,011.96	3,501.41	1,690.46	1,429.72	260.74	6.483
8,500.00	5,582.99	5,516.99	42.43	220.68	90.03	-2,011.96	3,501.41	1,688.83	1,427.98	260.85	6.474
8,532.50	5,582.74	5,516.74	42.79	220.67	90.20	-2,011.96	3,501.41	1,680.24	1,418.81	261.43	6.427
8,600.00	5,581.84	5,515.84	43.55	220.63	90.17	-2,011.96	3,501.41	1,664.28	1,401.68	262.60	6.338
8,700.00	5,580.49	5,514.49	44.69	220.58	90.12	-2,011.96	3,501.41	1,645.46	1,381.18	264.28	6.226
8,800.00	5,579.15	5,513.15	45.84	220.53	90.08	-2,011.96	3,501.41	1,632.55	1,366.71	265.84	6.141
8,900.00	5,577.81	5,511.81	46.99	220.47	90.03	-2,011.96	3,501.41	1,625.70	1,358.43	267.27	6.083
8,961.59	5,576.98	5,510.98	47.70	220.44	90.00	-2,011.96	3,501.41	1,624.53	1,356.46	268.07	6.060 CC
9,000.00	5,576.47	5,510.47	48.14	220.42	89.98	-2,011.96	3,501.41	1,624.99	1,356.45	268.54	6.051 ES
9,100.00	5,575.13	5,509.13	49.31	220.37	89.93	-2,011.96	3,501.41	1,630.42	1,360.77	269.65	6.047 SF
9,200.00	5,573.79	5,507.79	50.47	220.31	89.89	-2,011.96	3,501.41	1,641.93	1,371.37	270.57	6.068
9,300.00	5,572.44	5,506.44	51.64	220.26	89.84	-2,011.96	3,501.41	1,659.40	1,388.10	271.30	6.116
9,400.00	5,571.10	5,505.10	52.81	220.20	89.79	-2,011.96	3,501.41	1,682.64	1,410.79	271.86	6.189
9,500.00	5,569.76	5,503.76	53.99	220.15	89.75	-2,011.96	3,501.41	1,711.42	1,439.18	272.23	6.287
9,600.00	5,568.42	5,502.42	55.17	220.10	89.70	-2,011.96	3,501.41	1,745.45	1,473.00	272.45	6.407
9,700.00	5,567.08	5,501.08	56.35	220.04	89.65	-2,011.96	3,501.41	1,784.45	1,511.93	272.52	6.548
9,800.00	5,565.73	5,499.73	57.53	219.99	89.60	-2,011.96	3,501.41	1,828.09	1,555.63	272.46	6.710
9,900.00	5,564.39	5,498.39	58.72	219.94	89.56	-2,011.96	3,501.41	1,876.05	1,603.77	272.28	6.890
10,000.00	5,563.05	5,497.05	59.91	219.88	89.51	-2,011.96	3,501.41	1,928.01	1,655.99	272.02	7.088
10,100.00	5,561.71	5,495.71	61.10	219.83	89.46	-2,011.96	3,501.41	1,983.65	1,711.97	271.67	7.302
10,200.00	5,560.37	5,494.37	62.30	219.77	89.41	-2,011.96	3,501.41	2,042.67	1,771.40	271.27	7.530
10,300.00	5,559.02	5,493.02	63.49	219.72	89.37	-2,011.96	3,501.41	2,104.79	1,833.98	270.81	7.772
10,400.00	5,557.68	5,491.68	64.69	219.67	89.32	-2,011.96	3,501.41	2,169.74	1,899.42	270.32	8.027
10,500.00	5,556.34	5,490.34	65.89	219.61	89.27	-2,011.96	3,501.41	2,237.27	1,967.47	269.80	8.292
10,600.00	5,555.00	5,489.00	67.10	219.56	89.22	-2,011.96	3,501.41	2,307.17	2,037.90	269.26	8.568
10,700.00	5,553.66	5,487.66	68.30	219.51	89.18	-2,011.96	3,501.41	2,379.21	2,110.49	268.72	8.854
10,800.00	5,552.32	5,486.32	69.51	219.45	89.13	-2,011.96	3,501.41	2,453.21	2,185.05	268.16	9.148
10,900.00	5,550.97	5,484.97	70.71	219.40	89.08	-2,011.96	3,501.41	2,529.01	2,261.39	267.61	9.450
11,000.00	5,549.63	5,483.63	71.92	219.35	89.04	-2,011.96	3,501.41	2,606.43	2,339.36	267.07	9.759

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Nay (OWP) #1 (D&A) - OH - OH													Offset Site Error:
Survey Program: 6310-Unknown													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N-S (usft)	+E-W (usft)					
6,500.00	5,583.00	5,689.00	5,689.00	22.57	227.56	90.00	-842.48	3,321.15	2,333.46	2,095.17	238.28	9.793	
6,600.00	5,583.00	5,689.00	5,689.00	23.33	227.56	90.00	-842.48	3,321.15	2,235.45	1,997.11	238.34	9.379	
6,700.00	5,583.00	5,689.00	5,689.00	24.13	227.56	90.00	-842.48	3,321.15	2,137.63	1,899.21	238.42	8.966	
6,800.00	5,583.00	5,689.00	5,689.00	24.96	227.56	90.00	-842.48	3,321.15	2,040.02	1,801.49	238.53	8.552	
6,900.00	5,583.00	5,689.00	5,689.00	25.83	227.56	90.00	-842.48	3,321.15	1,942.66	1,703.99	238.67	8.140	
7,000.00	5,583.00	5,689.00	5,689.00	26.73	227.56	90.00	-842.48	3,321.15	1,845.57	1,606.73	238.85	7.727	
7,100.00	5,583.00	5,689.00	5,689.00	27.66	227.56	90.00	-842.48	3,321.15	1,748.82	1,509.75	239.07	7.315	
7,200.00	5,583.00	5,689.00	5,689.00	28.61	227.56	90.00	-842.48	3,321.15	1,652.45	1,413.09	239.35	6.904	
7,300.00	5,583.00	5,689.00	5,689.00	29.58	227.56	90.00	-842.48	3,321.15	1,556.54	1,316.83	239.71	6.493	
7,400.00	5,583.00	5,689.00	5,689.00	30.58	227.56	90.00	-842.48	3,321.15	1,461.17	1,221.02	240.15	6.084	
7,500.00	5,583.00	5,689.00	5,689.00	31.59	227.56	90.00	-842.48	3,321.15	1,366.47	1,125.76	240.71	5.677	
7,600.00	5,583.00	5,689.00	5,689.00	32.62	227.56	90.00	-842.48	3,321.15	1,272.59	1,031.17	241.41	5.271	
7,700.00	5,583.00	5,689.00	5,689.00	33.66	227.56	90.00	-842.48	3,321.15	1,179.70	937.42	242.28	4.869	
7,800.00	5,583.00	5,689.00	5,689.00	34.72	227.56	90.00	-842.48	3,321.15	1,088.08	844.71	243.37	4.471	
7,900.00	5,583.00	5,689.00	5,689.00	35.79	227.56	90.00	-842.48	3,321.15	998.07	753.34	244.73	4.078	
8,000.00	5,583.00	5,689.00	5,689.00	36.88	227.56	90.00	-842.48	3,321.15	910.15	663.72	246.43	3.693	
8,100.00	5,583.00	5,689.00	5,689.00	37.97	227.56	90.00	-842.48	3,321.15	824.98	576.44	248.54	3.319	
8,200.00	5,583.00	5,689.00	5,689.00	39.07	227.56	90.00	-842.48	3,321.15	743.52	492.37	251.15	2.960	
8,300.00	5,583.00	5,689.00	5,689.00	40.18	227.56	90.00	-842.48	3,321.15	667.11	412.77	254.34	2.623	
8,400.00	5,583.00	5,689.00	5,689.00	41.30	227.56	90.00	-842.48	3,321.15	597.72	339.56	258.16	2.315	
8,494.05	5,583.00	5,689.00	5,689.00	42.36	227.56	90.00	-842.48	3,321.15	541.26	279.02	262.23	2.064	
8,500.00	5,582.99	5,688.99	5,688.99	42.43	227.56	90.08	-842.48	3,321.15	538.04	275.54	262.50	2.050	
8,532.50	5,582.74	5,688.74	5,688.74	42.79	227.55	90.43	-842.48	3,321.15	521.31	257.35	263.96	1.975 Collision Risk Procedures Req.	
8,600.00	5,581.84	5,687.84	5,687.84	43.55	227.51	90.32	-842.48	3,321.15	491.64	224.69	266.95	1.842 Collision Risk Procedures Req.	
8,700.00	5,580.49	5,686.49	5,686.49	44.69	227.46	90.15	-842.48	3,321.15	462.53	191.71	270.83	1.708 Collision Risk Procedures Req.	
8,788.90	5,579.30	5,685.30	5,685.30	45.71	227.41	90.00	-842.48	3,321.15	453.91	180.86	273.05	1.662 Collision Risk Procedures Req., CC	
8,800.00	5,579.15	5,685.15	5,685.15	45.84	227.41	89.98	-842.48	3,321.15	454.05	180.82	273.22	1.662 Collision Risk Procedures Req., ES	
8,900.00	5,577.81	5,683.81	5,683.81	46.99	227.35	89.81	-842.48	3,321.15	467.31	193.71	273.60	1.708 Collision Risk Procedures Req.	
9,000.00	5,576.47	5,682.47	5,682.47	48.14	227.30	89.64	-842.48	3,321.15	500.59	228.38	272.21	1.839 Collision Risk Procedures Req.	
9,100.00	5,575.13	5,681.13	5,681.13	49.31	227.25	89.47	-842.48	3,321.15	550.27	280.48	269.79	2.040	
9,200.00	5,573.79	5,679.79	5,679.79	50.47	227.19	89.30	-842.48	3,321.15	612.37	345.35	267.02	2.293	
9,300.00	5,572.44	5,678.44	5,678.44	51.64	227.14	89.13	-842.48	3,321.15	683.52	419.20	264.33	2.586	
9,400.00	5,571.10	5,677.10	5,677.10	52.81	227.08	88.97	-842.48	3,321.15	761.19	499.30	261.89	2.907	
9,500.00	5,569.76	5,675.76	5,675.76	53.99	227.03	88.80	-842.48	3,321.15	843.56	583.81	259.75	3.248	
9,600.00	5,568.42	5,674.42	5,674.42	55.17	226.98	88.63	-842.48	3,321.15	929.40	671.48	257.92	3.603	
9,700.00	5,567.08	5,673.08	5,673.08	56.35	226.92	88.46	-842.48	3,321.15	1,017.83	761.49	256.34	3.971	
9,800.00	5,565.73	5,671.73	5,671.73	57.53	226.87	88.29	-842.48	3,321.15	1,108.22	853.23	254.99	4.346	
9,900.00	5,564.39	5,670.39	5,670.39	58.72	226.82	88.12	-842.48	3,321.15	1,200.14	946.31	253.83	4.728	
10,000.00	5,563.05	5,669.05	5,669.05	59.91	226.76	87.95	-842.48	3,321.15	1,293.26	1,040.43	252.83	5.115	
10,100.00	5,561.71	5,667.71	5,667.71	61.10	226.71	87.78	-842.48	3,321.15	1,387.33	1,135.38	251.95	5.506	
10,200.00	5,560.37	5,666.37	5,666.37	62.30	226.65	87.61	-842.48	3,321.15	1,482.18	1,230.99	251.19	5.901	
10,300.00	5,559.02	5,665.02	5,665.02	63.49	226.60	87.44	-842.48	3,321.15	1,577.67	1,327.15	250.52	6.298	
10,400.00	5,557.68	5,663.68	5,663.68	64.69	226.55	87.27	-842.48	3,321.15	1,673.68	1,423.75	249.93	6.697	
10,500.00	5,556.34	5,662.34	5,662.34	65.89	226.49	87.10	-842.48	3,321.15	1,770.13	1,520.73	249.40	7.098	
10,600.00	5,555.00	5,661.00	5,661.00	67.10	226.44	86.94	-842.48	3,321.15	1,866.95	1,618.02	248.93	7.500	
10,700.00	5,553.66	5,659.66	5,659.66	68.30	226.39	86.77	-842.48	3,321.15	1,964.09	1,715.58	248.51	7.903	
10,800.00	5,552.32	5,658.32	5,658.32	69.51	226.33	86.60	-842.48	3,321.15	2,061.51	1,813.37	248.14	8.308	
10,900.00	5,550.97	5,656.97	5,656.97	70.71	226.28	86.43	-842.48	3,321.15	2,159.15	1,911.35	247.80	8.713	
11,000.00	5,549.63	5,655.63	5,655.63	71.92	226.23	86.26	-842.48	3,321.15	2,257.01	2,009.51	247.50	9.119	
11,100.00	5,548.29	5,654.29	5,654.29	73.13	226.17	86.09	-842.48	3,321.15	2,355.04	2,107.82	247.22	9.526	
11,200.00	5,546.95	5,652.95	5,652.95	74.35	226.12	85.92	-842.48	3,321.15	2,453.23	2,206.27	246.97	9.933	

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Rauth #G (D&A) - OH - OH											Offset Site Error:		0.00 usft
Survey Program: Reference		6218-Unknown 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
11,800.00	5,540.37	5,462.37	5,462.37	81.64	218.49	92.41	-804.77	8,566.21	2,279.26	2,040.97	238.30	9.565	
11,900.00	5,539.52	5,461.52	5,461.52	82.86	218.46	92.30	-804.77	8,566.21	2,181.33	1,942.31	239.02	9.126	
12,000.00	5,538.67	5,460.67	5,460.67	84.08	218.43	92.20	-804.77	8,566.21	2,083.59	1,843.77	239.82	8.688	
12,100.00	5,537.82	5,459.82	5,459.82	85.30	218.39	92.09	-804.77	8,566.21	1,986.07	1,745.35	240.72	8.250	
12,200.00	5,536.98	5,458.98	5,458.98	86.52	218.36	91.98	-804.77	8,566.21	1,888.81	1,647.07	241.74	7.813	
12,300.00	5,536.13	5,458.13	5,458.13	87.74	218.33	91.87	-804.77	8,566.21	1,791.86	1,548.97	242.89	7.377	
12,400.00	5,535.28	5,457.28	5,457.28	88.97	218.29	91.76	-804.77	8,566.21	1,695.25	1,451.07	244.19	6.942	
12,500.00	5,534.43	5,456.43	5,456.43	90.19	218.26	91.66	-804.77	8,566.21	1,599.07	1,353.40	245.67	6.509	
12,600.00	5,533.58	5,455.58	5,455.58	91.41	218.22	91.55	-804.77	8,566.21	1,503.38	1,256.02	247.37	6.078	
12,700.00	5,532.73	5,454.73	5,454.73	92.64	218.19	91.44	-804.77	8,566.21	1,408.29	1,158.98	249.32	5.649	
12,800.00	5,531.88	5,453.88	5,453.88	93.87	218.16	91.33	-804.77	8,566.21	1,313.93	1,062.36	251.57	5.223	
12,900.00	5,531.04	5,453.04	5,453.04	95.09	218.12	91.22	-804.77	8,566.21	1,220.47	966.28	254.19	4.801	
13,000.00	5,530.19	5,452.19	5,452.19	96.32	218.09	91.12	-804.77	8,566.21	1,128.13	870.87	257.26	4.385	
13,100.00	5,529.34	5,451.34	5,451.34	97.55	218.05	91.01	-804.77	8,566.21	1,037.21	776.34	260.88	3.976	
13,200.00	5,528.49	5,450.49	5,450.49	98.78	218.02	90.90	-804.77	8,566.21	948.12	682.97	265.15	3.576	
13,300.00	5,527.64	5,449.64	5,449.64	100.01	217.99	90.79	-804.77	8,566.21	861.43	591.19	270.24	3.188	
13,400.00	5,526.79	5,448.79	5,448.79	101.24	217.95	90.69	-804.77	8,566.21	777.94	501.63	276.31	2.815	
13,500.00	5,525.94	5,447.94	5,447.94	102.47	217.92	90.58	-804.77	8,566.21	698.79	415.28	283.50	2.465	
13,600.00	5,525.10	5,447.10	5,447.10	103.70	217.88	90.47	-804.77	8,566.21	625.64	333.72	291.92	2.143	
13,700.00	5,524.25	5,446.25	5,446.25	104.93	217.85	90.36	-804.77	8,566.21	560.84	259.43	301.41	1.861	Collision Risk Procedures Req.
13,800.00	5,523.40	5,445.40	5,445.40	106.16	217.82	90.25	-804.77	8,566.21	507.60	196.28	311.32	1.630	Collision Risk Procedures Req.
13,900.00	5,522.55	5,444.55	5,444.55	107.39	217.78	90.15	-804.77	8,566.21	469.87	149.68	320.19	1.467	Collision Avoidance Req.
14,000.00	5,521.70	5,443.70	5,443.70	108.62	217.75	90.04	-804.77	8,566.21	451.54	125.66	325.89	1.386	Collision Avoidance Req.
14,034.43	5,521.41	5,443.41	5,443.41	109.05	217.74	90.00	-804.77	8,566.21	450.23	123.47	326.76	1.378	Collision Avoidance Req., CC, ES,
14,100.00	5,520.85	5,442.85	5,442.85	109.85	217.71	89.93	-804.77	8,566.21	454.98	128.26	326.72	1.393	Collision Avoidance Req.
14,200.00	5,520.00	5,442.00	5,442.00	111.09	217.68	89.82	-804.77	8,566.21	479.70	156.93	322.77	1.486	Collision Avoidance Req.
14,300.00	5,519.15	5,441.15	5,441.15	112.32	217.65	89.71	-804.77	8,566.21	522.71	206.95	315.76	1.655	Collision Risk Procedures Req.
14,400.00	5,518.31	5,440.31	5,440.31	113.55	217.61	89.61	-804.77	8,566.21	579.94	272.31	307.64	1.885	Collision Risk Procedures Req.
14,500.00	5,517.46	5,439.46	5,439.46	114.79	217.58	89.50	-804.77	8,566.21	647.64	347.94	299.70	2.161	
14,600.00	5,516.61	5,438.61	5,438.61	116.02	217.54	89.39	-804.77	8,566.21	722.88	430.33	292.54	2.471	
14,700.00	5,515.76	5,437.76	5,437.76	117.26	217.51	89.28	-804.77	8,566.21	803.53	517.20	286.33	2.806	
14,800.00	5,514.91	5,436.91	5,436.91	118.49	217.48	89.17	-804.77	8,566.21	888.12	607.11	281.01	3.160	
14,900.00	5,514.06	5,436.06	5,436.06	119.73	217.44	89.07	-804.77	8,566.21	975.63	699.15	276.48	3.529	
15,000.00	5,513.21	5,435.21	5,435.21	120.96	217.41	88.96	-804.77	8,566.21	1,065.34	792.72	272.63	3.908	
15,100.00	5,512.37	5,434.37	5,434.37	122.20	217.37	88.85	-804.77	8,566.21	1,156.74	887.41	269.33	4.295	
15,200.00	5,511.52	5,433.52	5,433.52	123.44	217.34	88.74	-804.77	8,566.21	1,249.46	982.96	266.50	4.688	
15,300.00	5,510.67	5,432.67	5,432.67	124.67	217.31	88.63	-804.77	8,566.21	1,343.22	1,079.17	264.05	5.087	
15,400.00	5,509.82	5,431.82	5,431.82	125.91	217.27	88.53	-804.77	8,566.21	1,437.83	1,175.91	261.92	5.490	
15,500.00	5,508.97	5,430.97	5,430.97	127.15	217.24	88.42	-804.77	8,566.21	1,533.11	1,273.05	260.06	5.895	
15,600.00	5,508.12	5,430.12	5,430.12	128.38	217.20	88.31	-804.77	8,566.21	1,628.97	1,370.54	258.42	6.303	
15,700.00	5,507.27	5,429.27	5,429.27	129.62	217.17	88.20	-804.77	8,566.21	1,725.29	1,468.31	256.98	6.714	
15,800.00	5,506.43	5,428.43	5,428.43	130.86	217.14	88.09	-804.77	8,566.21	1,822.01	1,566.31	255.70	7.126	
15,900.00	5,505.58	5,427.58	5,427.58	132.10	217.10	87.99	-804.77	8,566.21	1,919.06	1,664.50	254.56	7.539	
16,000.00	5,504.73	5,426.73	5,426.73	133.33	217.07	87.88	-804.77	8,566.21	2,016.40	1,762.86	253.54	7.953	
16,100.00	5,503.88	5,425.88	5,425.88	134.57	217.04	87.77	-804.77	8,566.21	2,113.99	1,861.36	252.63	8.368	
16,203.62	5,503.00	5,425.00	5,425.00	135.86	217.00	87.66	-804.77	8,566.21	2,215.34	1,963.57	251.78	8.799	

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Zimith #1 (D&A) - OH - OH													Offset Site Error: 0.00 usft
Survey Program: 6292-Unknown													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)					
0.00	0.00	0.00	0.00	0.00	0.00	122.94	-875.45	1,351.24	1,610.62				
100.00	100.00	57.00	57.00	0.88	2.28	122.94	-875.45	1,351.24	1,610.05	1,606.88	3.16	508.857	
200.00	200.00	157.00	157.00	1.50	6.28	122.94	-875.45	1,351.24	1,610.05	1,602.27	7.78	206.887	
300.00	300.00	257.00	257.00	1.94	10.28	122.94	-875.45	1,351.24	1,610.05	1,597.83	12.22	131.806	
400.00	400.00	357.00	357.00	2.29	14.28	122.94	-875.45	1,351.24	1,610.05	1,593.48	16.57	97.163	
500.00	500.00	457.00	457.00	2.60	18.28	122.94	-875.45	1,351.24	1,610.05	1,589.17	20.88	77.108	
600.00	600.00	557.00	557.00	2.88	22.28	122.94	-875.45	1,351.24	1,610.05	1,584.89	25.16	63.994	
700.00	699.99	656.99	656.99	3.19	26.28	-83.66	-875.45	1,351.24	1,609.90	1,580.50	29.40	54.753	
800.00	799.91	756.91	756.91	3.49	30.28	-83.81	-875.45	1,351.24	1,609.47	1,575.86	33.62	47.877	
900.00	899.69	856.69	856.69	3.80	34.27	-84.05	-875.45	1,351.24	1,608.78	1,570.97	37.81	42.544	
964.87	964.31	921.31	921.31	3.93	36.85	-84.26	-875.45	1,351.24	1,608.20	1,567.73	40.47	39.737	
1,000.00	999.29	956.29	956.29	3.99	38.25	-84.38	-875.45	1,351.24	1,607.87	1,565.98	41.89	38.384	
1,100.00	1,098.83	1,055.83	1,055.83	4.29	42.23	-84.71	-875.45	1,351.24	1,606.96	1,560.89	46.07	34.882	
1,200.00	1,198.37	1,155.37	1,155.37	4.60	46.22	-85.05	-875.45	1,351.24	1,606.11	1,555.86	50.24	31.968	
1,300.00	1,297.92	1,254.92	1,254.92	4.93	50.20	-85.39	-875.45	1,351.24	1,605.31	1,550.90	54.41	29.505	
1,400.00	1,397.46	1,354.46	1,354.46	5.26	54.18	-85.73	-875.45	1,351.24	1,604.56	1,545.99	58.57	27.395	
1,500.00	1,497.01	1,454.01	1,454.01	5.61	58.16	-86.06	-875.45	1,351.24	1,603.88	1,541.15	62.73	25.568	
1,600.00	1,596.55	1,553.55	1,553.55	5.96	62.14	-86.40	-875.45	1,351.24	1,603.25	1,536.36	66.89	23.970	
1,700.00	1,696.09	1,653.09	1,653.09	6.31	66.12	-86.74	-875.45	1,351.24	1,602.68	1,531.64	71.04	22.561	
1,800.00	1,795.64	1,752.64	1,752.64	6.67	70.11	-87.08	-875.45	1,351.24	1,602.16	1,526.97	75.19	21.309	
1,900.00	1,895.18	1,852.18	1,852.18	7.04	74.09	-87.42	-875.45	1,351.24	1,601.70	1,522.36	79.33	20.189	
2,000.00	1,994.73	1,951.73	1,951.73	7.41	78.07	-87.76	-875.45	1,351.24	1,601.30	1,517.82	83.48	19.182	
2,100.00	2,094.27	2,051.27	2,051.27	7.78	82.05	-88.10	-875.45	1,351.24	1,600.95	1,513.33	87.62	18.271	
2,200.00	2,193.81	2,150.81	2,150.81	8.15	86.03	-88.44	-875.45	1,351.24	1,600.66	1,508.90	91.76	17.444	
2,300.00	2,293.36	2,250.36	2,250.36	8.52	90.01	-88.78	-875.45	1,351.24	1,600.43	1,504.53	95.90	16.688	
2,400.00	2,392.90	2,349.90	2,349.90	8.90	94.00	-89.12	-875.45	1,351.24	1,600.25	1,500.21	100.04	15.997	
2,500.00	2,492.45	2,449.45	2,449.45	9.28	97.98	-89.46	-875.45	1,351.24	1,600.13	1,495.96	104.17	15.360	
2,600.00	2,591.99	2,548.99	2,548.99	9.66	101.96	-89.80	-875.45	1,351.24	1,600.07	1,491.76	108.31	14.773	
2,659.78	2,651.50	2,608.50	2,608.50	9.89	104.34	-90.00	-875.45	1,351.24	1,600.06	1,489.28	110.78	14.444	
2,700.00	2,691.54	2,648.54	2,648.54	10.04	105.94	-90.14	-875.45	1,351.24	1,600.06	1,487.62	112.44	14.230	
2,800.00	2,791.08	2,748.08	2,748.08	10.42	109.92	-90.48	-875.45	1,351.24	1,600.12	1,483.54	116.57	13.726	
2,900.00	2,890.62	2,847.62	2,847.62	10.81	113.91	-90.82	-875.45	1,351.24	1,600.22	1,479.52	120.71	13.257	
3,000.00	2,990.17	2,947.17	2,947.17	11.19	117.89	-91.16	-875.45	1,351.24	1,600.39	1,475.55	124.84	12.820	
3,100.00	3,089.71	3,046.71	3,046.71	11.58	121.87	-91.50	-875.45	1,351.24	1,600.61	1,471.64	128.97	12.411	
3,200.00	3,189.26	3,146.26	3,146.26	11.96	125.85	-91.84	-875.45	1,351.24	1,600.89	1,467.79	133.10	12.028	
3,300.00	3,288.80	3,245.80	3,245.80	12.35	129.83	-92.18	-875.45	1,351.24	1,601.22	1,463.99	137.23	11.668	
3,400.00	3,388.34	3,345.34	3,345.34	12.74	133.81	-92.51	-875.45	1,351.24	1,601.62	1,460.25	141.36	11.330	
3,500.00	3,487.89	3,444.89	3,444.89	13.12	137.80	-92.85	-875.45	1,351.24	1,602.06	1,456.57	145.49	11.011	
3,600.00	3,587.43	3,544.43	3,544.43	13.51	141.78	-93.19	-875.45	1,351.24	1,602.57	1,452.95	149.62	10.711	
3,700.00	3,686.98	3,643.98	3,643.98	13.90	145.76	-93.53	-875.45	1,351.24	1,603.13	1,449.38	153.76	10.426	
3,800.00	3,786.52	3,743.52	3,743.52	14.29	149.74	-93.87	-875.45	1,351.24	1,603.75	1,445.86	157.89	10.157	
3,900.00	3,886.06	3,843.06	3,843.06	14.68	153.72	-94.21	-875.45	1,351.24	1,604.43	1,442.40	162.02	9.903	
4,000.00	3,985.61	3,942.61	3,942.61	15.07	157.70	-94.55	-875.45	1,351.24	1,605.16	1,439.00	166.15	9.661	
4,100.00	4,085.15	4,042.15	4,042.15	15.46	161.69	-94.88	-875.45	1,351.24	1,605.94	1,435.66	170.29	9.431	
4,200.00	4,184.70	4,141.70	4,141.70	15.85	165.67	-95.22	-875.45	1,351.24	1,606.79	1,432.36	174.42	9.212	
4,300.00	4,284.24	4,241.24	4,241.24	16.24	169.65	-95.56	-875.45	1,351.24	1,607.69	1,429.13	178.56	9.004	
4,400.00	4,383.79	4,340.79	4,340.79	16.63	173.63	-95.90	-875.45	1,351.24	1,608.64	1,425.95	182.70	8.805	
4,500.00	4,483.33	4,440.33	4,440.33	17.02	177.61	-96.23	-875.45	1,351.24	1,609.66	1,422.82	186.84	8.615	
4,600.00	4,582.87	4,539.87	4,539.87	17.41	181.60	-96.57	-875.45	1,351.24	1,610.72	1,419.75	190.98	8.434	
4,700.00	4,682.42	4,639.42	4,639.42	17.81	185.58	-96.90	-875.45	1,351.24	1,611.85	1,416.73	195.12	8.261	
4,800.00	4,781.96	4,738.96	4,738.96	18.20	189.56	-97.24	-875.45	1,351.24	1,613.03	1,413.76	199.26	8.095	
4,856.88	4,838.58	4,795.58	4,795.58	18.41	191.82	-97.43	-875.45	1,351.24	1,613.72	1,412.12	201.60	8.005	

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Zimith #1 (D&A) - OH - OH													Offset Site Error:
Survey Program: 6292-Unknown													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,900.00	4,881.54	4,838.54	4,838.54	18.56	193.54	-59.46	-875.45	1,351.24	1,613.04	1,409.66	203.38	7.931	
4,950.00	4,931.28	4,888.28	4,888.28	18.70	195.53	-25.30	-875.45	1,351.24	1,609.19	1,403.78	205.40	7.834	
5,000.00	4,980.72	4,937.72	4,937.72	18.75	197.51	-9.32	-875.45	1,351.24	1,602.06	1,394.65	207.41	7.724	
5,050.00	5,029.61	4,986.61	4,986.61	18.76	199.46	-1.19	-875.45	1,351.24	1,591.70	1,382.30	209.40	7.601	
5,100.00	5,077.73	5,034.73	5,034.73	18.74	201.39	3.73	-875.45	1,351.24	1,578.15	1,366.79	211.37	7.466	
5,150.00	5,124.83	5,081.83	5,081.83	18.71	203.27	7.17	-875.45	1,351.24	1,561.48	1,348.19	213.29	7.321	
5,200.00	5,170.69	5,127.69	5,127.69	18.67	205.11	9.87	-875.45	1,351.24	1,541.77	1,326.61	215.16	7.166	
5,250.00	5,215.08	5,172.08	5,172.08	18.63	206.88	12.23	-875.45	1,351.24	1,519.12	1,302.14	216.98	7.001	
5,300.00	5,257.79	5,214.79	5,214.79	18.59	208.59	14.46	-875.45	1,351.24	1,493.65	1,274.92	218.73	6.829	
5,350.00	5,298.60	5,255.60	5,255.60	18.55	210.22	16.70	-875.45	1,351.24	1,465.50	1,245.09	220.41	6.649	
5,400.00	5,337.32	5,294.32	5,294.32	18.52	211.77	19.08	-875.45	1,351.24	1,434.83	1,212.81	222.02	6.463	
5,450.00	5,373.77	5,330.77	5,330.77	18.50	213.23	21.71	-875.45	1,351.24	1,401.80	1,178.27	223.53	6.271	
5,500.00	5,407.75	5,364.75	5,364.75	18.49	214.59	24.69	-875.45	1,351.24	1,366.60	1,141.64	224.96	6.075	
5,550.00	5,439.11	5,396.11	5,396.11	18.49	215.84	28.13	-875.45	1,351.24	1,329.43	1,103.14	226.28	5.875	
5,600.00	5,467.70	5,424.70	5,424.70	18.52	216.99	32.17	-875.45	1,351.24	1,290.50	1,062.99	227.50	5.672	
5,650.00	5,493.37	5,450.37	5,450.37	18.57	218.01	36.92	-875.45	1,351.24	1,250.04	1,021.43	228.61	5.468	
5,700.00	5,516.01	5,473.01	5,473.01	18.63	218.92	42.51	-875.45	1,351.24	1,208.30	978.69	229.62	5.262	
5,750.00	5,535.49	5,492.49	5,492.49	18.73	219.70	48.99	-875.45	1,351.24	1,165.54	935.04	230.50	5.057	
5,800.00	5,551.73	5,508.73	5,508.73	18.84	220.35	56.33	-875.45	1,351.24	1,122.02	890.75	231.27	4.852	
5,850.00	5,564.64	5,521.64	5,521.64	18.98	220.87	64.34	-875.45	1,351.24	1,078.02	846.10	231.93	4.648	
5,900.00	5,574.16	5,531.16	5,531.16	19.15	221.25	72.64	-875.45	1,351.24	1,033.84	801.37	232.47	4.447	
5,950.00	5,580.26	5,537.26	5,537.26	19.34	221.49	80.76	-875.45	1,351.24	989.78	756.89	232.90	4.250	
6,000.00	5,582.89	5,539.89	5,539.89	19.55	221.60	88.23	-875.45	1,351.24	946.16	712.94	233.22	4.057	
6,012.82	5,583.00	5,540.00	5,540.00	19.61	221.60	90.00	-875.45	1,351.24	935.08	701.79	233.29	4.008	
6,100.00	5,583.00	5,540.00	5,540.00	20.04	221.60	90.00	-875.45	1,351.24	861.07	627.27	233.81	3.683	
6,200.00	5,583.00	5,540.00	5,540.00	20.59	221.60	90.00	-875.45	1,351.24	779.54	544.89	234.65	3.322	
6,300.00	5,583.00	5,540.00	5,540.00	21.20	221.60	90.00	-875.45	1,351.24	702.80	466.96	235.84	2.980	
6,400.00	5,583.00	5,540.00	5,540.00	21.86	221.60	90.00	-875.45	1,351.24	632.59	395.16	237.43	2.664	
6,500.00	5,583.00	5,540.00	5,540.00	22.57	221.60	90.00	-875.45	1,351.24	571.32	331.88	239.44	2.386	
6,600.00	5,583.00	5,540.00	5,540.00	23.33	221.60	90.00	-875.45	1,351.24	522.16	280.37	241.79	2.160	
6,700.00	5,583.00	5,540.00	5,540.00	24.13	221.60	90.00	-875.45	1,351.24	488.77	244.58	244.19	2.002	
6,800.00	5,583.00	5,540.00	5,540.00	24.96	221.60	90.00	-875.45	1,351.24	474.48	228.28	246.20	1.927 Collision Risk Procedures Req.	
6,818.80	5,583.00	5,540.00	5,540.00	25.13	221.60	90.00	-875.45	1,351.24	474.11	227.61	246.50	1.923 Collision Risk Procedures Req., CC	
6,900.00	5,583.00	5,540.00	5,540.00	25.83	221.60	90.00	-875.45	1,351.24	481.01	233.59	247.42	1.944 Collision Risk Procedures Req.	
7,000.00	5,583.00	5,540.00	5,540.00	26.73	221.60	90.00	-875.45	1,351.24	507.56	259.82	247.74	2.049	
7,100.00	5,583.00	5,540.00	5,540.00	27.66	221.60	90.00	-875.45	1,351.24	551.23	303.89	247.35	2.229	
7,200.00	5,583.00	5,540.00	5,540.00	28.61	221.60	90.00	-875.45	1,351.24	608.35	361.80	246.56	2.467	
7,300.00	5,583.00	5,540.00	5,540.00	29.58	221.60	90.00	-875.45	1,351.24	675.53	429.90	245.63	2.750	
7,400.00	5,583.00	5,540.00	5,540.00	30.58	221.60	90.00	-875.45	1,351.24	750.05	505.34	244.71	3.065	
7,500.00	5,583.00	5,540.00	5,540.00	31.59	221.60	90.00	-875.45	1,351.24	829.95	586.10	243.85	3.403	
7,600.00	5,583.00	5,540.00	5,540.00	32.62	221.60	90.00	-875.45	1,351.24	913.82	670.72	243.10	3.759	
7,700.00	5,583.00	5,540.00	5,540.00	33.66	221.60	90.00	-875.45	1,351.24	1,000.65	758.21	242.44	4.127	
7,800.00	5,583.00	5,540.00	5,540.00	34.72	221.60	90.00	-875.45	1,351.24	1,089.74	847.88	241.86	4.506	
7,900.00	5,583.00	5,540.00	5,540.00	35.79	221.60	90.00	-875.45	1,351.24	1,180.58	939.21	241.37	4.891	
8,000.00	5,583.00	5,540.00	5,540.00	36.88	221.60	90.00	-875.45	1,351.24	1,272.80	1,031.85	240.95	5.283	
8,100.00	5,583.00	5,540.00	5,540.00	37.97	221.60	90.00	-875.45	1,351.24	1,366.11	1,125.53	240.58	5.678	
8,200.00	5,583.00	5,540.00	5,540.00	39.07	221.60	90.00	-875.45	1,351.24	1,460.31	1,220.05	240.26	6.078	
8,300.00	5,583.00	5,540.00	5,540.00	40.18	221.60	90.00	-875.45	1,351.24	1,555.23	1,315.25	239.98	6.481	
8,400.00	5,583.00	5,540.00	5,540.00	41.30	221.60	90.00	-875.45	1,351.24	1,650.75	1,411.01	239.74	6.886	
8,494.05	5,583.00	5,540.00	5,540.00	42.36	221.60	90.00	-875.45	1,351.24	1,741.05	1,501.51	239.54	7.268	
8,500.00	5,582.99	5,539.99	5,539.99	42.43	221.60	89.58	-875.45	1,351.24	1,746.78	1,507.24	239.53	7.292	
8,532.50	5,582.74	5,539.74	5,539.74	42.79	221.59	87.22	-875.45	1,351.24	1,778.07	1,538.61	239.46	7.425	

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



Altitude Energy Partners

Anticollision Report



Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Offsets - Zimith #1 (D&A) - OH - OH													Offset Site Error:	0.00 usft
Survey Program: 6292-Unknown													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Rule Assigned:				Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
8,600.00	5,581.84	5,538.84	5,538.84	43.55	221.55	87.11	-875.45	1,351.24	1,843.21	1,603.91	239.31	7.702		
8,700.00	5,580.49	5,537.49	5,537.49	44.69	221.50	86.95	-875.45	1,351.24	1,940.01	1,700.91	239.10	8.114		
8,800.00	5,579.15	5,536.15	5,536.15	45.84	221.45	86.79	-875.45	1,351.24	2,037.12	1,798.21	238.91	8.527		
8,900.00	5,577.81	5,534.81	5,534.81	46.99	221.39	86.63	-875.45	1,351.24	2,134.49	1,895.75	238.74	8.941		
9,000.00	5,576.47	5,533.47	5,533.47	48.14	221.34	86.47	-875.45	1,351.24	2,232.09	1,993.51	238.58	9.356		
9,100.00	5,575.13	5,532.13	5,532.13	49.31	221.29	86.31	-875.45	1,351.24	2,329.90	2,091.46	238.44	9.771		



Altitude Energy Partners

Anticollision Report



Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka Federal LD13-615 - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS													Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Rule Assigned:			Warning						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	178.97	-1,982.33	35.74	1,982.75					
100.00	100.00	81.00	81.00	0.88	0.72	178.97	-1,982.33	35.74	1,982.66	1,981.06	1.60	1,239.337		
200.00	200.00	181.00	181.00	1.50	1.38	178.97	-1,982.33	35.74	1,982.66	1,979.77	2.89	686.837		
300.00	300.00	281.00	281.00	1.94	1.85	178.97	-1,982.33	35.74	1,982.66	1,978.87	3.79	523.426		
400.00	400.00	381.00	381.00	2.29	2.22	178.97	-1,982.33	35.74	1,982.66	1,978.14	4.51	439.290		
500.00	500.00	481.00	481.00	2.60	2.54	178.97	-1,982.33	35.74	1,982.66	1,977.51	5.14	385.618	CC, ES	
600.00	600.00	548.04	548.04	2.88	2.81	178.97	-1,982.73	35.70	1,983.33	1,977.64	5.69	348.632		
700.00	699.99	600.00	599.98	3.19	3.04	-27.58	-1,984.07	35.54	1,984.88	1,978.67	6.21	319.650		
800.00	799.91	666.61	666.51	3.49	3.31	-27.59	-1,987.14	35.18	1,986.11	1,979.36	6.75	294.146		
900.00	899.69	725.86	725.63	3.80	3.55	-27.62	-1,991.17	34.71	1,987.10	1,979.83	7.27	273.313		
964.87	964.31	764.29	763.92	3.93	3.70	-27.65	-1,994.43	34.33	1,987.60	1,980.06	7.54	263.675		
1,000.00	999.29	800.00	799.45	3.99	3.84	-27.68	-1,997.92	33.93	1,988.06	1,980.33	7.73	257.267		
1,100.00	1,098.83	844.31	843.48	4.29	4.02	-27.72	-2,002.86	33.35	1,990.39	1,982.22	8.17	243.501		
1,200.00	1,198.37	900.00	898.70	4.60	4.25	-27.76	-2,010.03	32.51	1,994.87	1,986.20	8.68	229.870		

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka Federal LD13-625 - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program:		0-MWD+IFR1+MS								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	
0.00	0.00	0.00	0.00	0.00	0.00	178.97	-1,954.28	35.19	1,954.69					
100.00	100.00	81.00	81.00	0.88	0.72	178.97	-1,954.28	35.19	1,954.59	1,952.99	1.60	1,221.795		
200.00	200.00	181.00	181.00	1.50	1.38	178.97	-1,954.28	35.19	1,954.59	1,951.71	2.89	677.115		
300.00	300.00	281.00	281.00	1.94	1.85	178.97	-1,954.28	35.19	1,954.59	1,950.81	3.79	516.018		
400.00	400.00	381.00	381.00	2.29	2.22	178.97	-1,954.28	35.19	1,954.59	1,950.08	4.51	433.072		
500.00	500.00	481.00	481.00	2.60	2.54	178.97	-1,954.28	35.19	1,954.59	1,949.45	5.14	380.160		
600.00	600.00	581.00	581.00	2.88	2.83	178.97	-1,954.28	35.19	1,954.59	1,948.89	5.71	342.600		
700.00	699.99	651.17	651.17	3.19	3.06	-27.60	-1,954.67	35.11	1,954.05	1,947.82	6.23	313.518		
800.00	799.91	700.00	699.98	3.49	3.23	-27.62	-1,955.77	34.89	1,953.12	1,946.44	6.68	292.408		
900.00	899.69	777.55	777.46	3.80	3.49	-27.68	-1,958.99	34.23	1,951.59	1,944.37	7.22	270.339		
964.87	964.31	818.54	818.38	3.93	3.63	-27.72	-1,961.42	33.74	1,950.42	1,942.95	7.47	261.031		
1,000.00	999.29	840.75	840.53	3.99	3.71	-27.74	-1,962.95	33.43	1,949.86	1,942.26	7.59	256.826		
1,062.68	1,061.68	880.38	880.04	4.17	3.84	-27.77	-1,966.04	32.80	1,949.43	1,941.53	7.90	246.858	CC	
1,100.00	1,098.83	900.00	899.58	4.29	3.91	-27.78	-1,967.74	32.46	1,949.53	1,941.46	8.06	241.768	ES	
1,200.00	1,198.37	967.22	966.45	4.60	4.15	-27.83	-1,974.44	31.10	1,951.07	1,942.49	8.58	227.352		
1,300.00	1,297.92	1,030.40	1,029.17	4.93	4.38	-27.86	-1,981.96	29.57	1,954.50	1,945.41	9.10	214.838		
1,400.00	1,397.46	1,100.00	1,098.06	5.26	4.64	-27.89	-1,991.62	27.62	1,959.83	1,950.18	9.65	203.095		
1,500.00	1,497.01	1,156.44	1,153.77	5.61	4.85	-27.90	-2,000.51	25.81	1,967.00	1,956.84	10.16	193.575		
1,600.00	1,596.55	1,219.20	1,215.52	5.96	5.09	-27.91	-2,011.49	23.59	1,976.05	1,965.36	10.69	184.803		
1,700.00	1,696.09	1,282.82	1,277.89	6.31	5.30	-27.91	-2,023.81	21.09	1,986.96	1,975.76	11.20	177.356		
1,800.00	1,795.64	1,382.13	1,375.06	6.67	5.64	-27.90	-2,043.87	17.02	1,998.73	1,986.86	11.87	168.392		
15,500.00	5,508.97	15,594.31	5,589.85	127.15	127.65	92.27	-2,860.58	10,044.42	2,517.56	2,263.75	253.82	9.919		
15,500.11	5,508.97	15,594.42	5,589.85	127.15	127.65	92.27	-2,860.58	10,044.53	2,517.56	2,263.74	253.82	9.919		
15,600.00	5,508.12	15,694.31	5,589.46	128.38	128.87	92.28	-2,859.97	10,144.41	2,517.62	2,261.34	256.28	9.824		
15,600.12	5,508.12	15,694.42	5,589.46	128.38	128.88	92.28	-2,859.97	10,144.53	2,517.62	2,261.34	256.28	9.824		
15,700.00	5,507.27	15,794.31	5,589.07	129.62	130.10	92.29	-2,859.37	10,244.41	2,517.68	2,258.94	258.74	9.731		
15,700.12	5,507.27	15,794.42	5,589.06	129.62	130.11	92.29	-2,859.36	10,244.53	2,517.68	2,258.94	258.74	9.730		
15,800.00	5,506.43	15,894.30	5,588.67	130.86	131.33	92.30	-2,858.76	10,344.40	2,517.74	2,256.54	261.20	9.639		
15,800.12	5,506.42	15,894.42	5,588.67	130.86	131.33	92.30	-2,858.76	10,344.52	2,517.74	2,256.54	261.21	9.639		
15,900.00	5,505.58	15,994.30	5,588.28	132.10	132.56	92.31	-2,858.15	10,444.40	2,517.80	2,254.14	263.67	9.549		
15,900.12	5,505.58	15,994.42	5,588.28	132.10	132.56	92.31	-2,858.15	10,444.52	2,517.80	2,254.13	263.67	9.549		
16,000.00	5,504.73	16,094.30	5,587.89	133.33	133.79	92.33	-2,857.55	10,544.40	2,517.86	2,251.73	266.13	9.461		
16,000.12	5,504.73	16,094.42	5,587.89	133.33	133.80	92.33	-2,857.55	10,544.52	2,517.86	2,251.73	266.14	9.461		
16,100.00	5,503.88	16,194.30	5,587.49	134.57	135.02	92.34	-2,856.94	10,644.39	2,517.92	2,249.33	268.60	9.374		
16,100.13	5,503.88	16,194.43	5,587.49	134.57	135.03	92.34	-2,856.94	10,644.52	2,517.92	2,249.32	268.60	9.374		
16,203.62	5,503.00	16,297.92	5,587.09	135.86	136.30	92.35	-2,856.31	10,748.01	2,517.99	2,246.83	271.15	9.286	SF	

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka Federal LD13-635 - OH - Plan #1													Offset Site Error:
													0.00 usft
													Offset Well Error:
													0.00 usft
Survey Program:	Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Distance	Rule Assigned:						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Reference	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor			
0.00	0.00	0.00	0.00	178.97	-1,926.22	34.63	1,926.63						
100.00	100.00	81.00	0.88	178.97	-1,926.22	34.63	1,926.53	1,924.93	1.60	1,204.256			
200.00	200.00	181.00	1.50	178.97	-1,926.22	34.63	1,926.53	1,923.65	2.89	667.395			
300.00	300.00	281.00	1.94	178.97	-1,926.22	34.63	1,926.53	1,922.75	3.79	508.610			
400.00	400.00	381.00	2.29	178.97	-1,926.22	34.63	1,926.53	1,922.02	4.51	426.855			
500.00	500.00	481.00	2.60	178.97	-1,926.22	34.63	1,926.53	1,921.39	5.14	374.702			
600.00	600.00	581.00	2.88	178.97	-1,926.22	34.63	1,926.53	1,920.83	5.71	337.682			
700.00	699.99	680.99	3.19	-27.61	-1,926.22	34.63	1,925.37	1,919.11	6.26	307.456			
800.00	799.91	756.50	3.49	-27.66	-1,926.59	34.43	1,922.41	1,915.66	6.74	285.030			
900.00	899.69	826.30	3.80	-27.73	-1,928.03	33.60	1,918.67	1,911.45	7.22	265.867			
964.87	964.31	871.60	3.93	-27.78	-1,929.57	32.72	1,915.84	1,908.39	7.45	257.077			
1,000.00	999.29	900.00	3.99	-27.79	-1,930.77	32.03	1,914.33	1,906.75	7.57	252.800			
1,100.00	1,098.83	966.07	4.29	-27.82	-1,934.26	30.03	1,911.06	1,903.03	8.02	238.152			
1,200.00	1,198.37	1,036.06	4.60	-27.83	-1,939.05	27.30	1,909.36	1,900.91	8.45	225.890			
1,300.00	1,297.92	1,129.07	4.93	-27.82	-1,946.45	23.06	1,908.77	1,899.85	8.92	213.981			
1,400.00	1,397.46	1,229.07	5.26	-27.81	-1,954.45	18.48	1,908.23	1,898.74	9.49	200.989			
1,500.00	1,497.01	1,329.07	5.61	-27.80	-1,962.44	13.91	1,907.69	1,897.60	10.09	189.159			
1,600.00	1,596.55	1,429.07	5.96	-27.79	-1,970.44	9.33	1,907.14	1,896.45	10.69	178.417			
1,700.00	1,696.09	1,529.07	6.31	-27.78	-1,978.43	4.75	1,906.60	1,895.29	11.30	168.657			
1,800.00	1,795.64	1,629.07	6.67	-27.77	-1,986.43	0.18	1,906.05	1,894.12	11.93	159.777			
1,900.00	1,895.18	1,729.06	7.04	-27.76	-1,994.42	-4.40	1,905.51	1,892.95	12.56	151.684			
2,000.00	1,994.73	1,829.06	7.41	-27.75	-2,002.42	-8.97	1,904.96	1,891.76	13.20	144.292			
2,100.00	2,094.27	1,929.06	7.78	-27.75	-2,010.41	-13.55	1,904.42	1,890.57	13.85	137.523			
2,200.00	2,193.81	2,029.06	8.15	-27.74	-2,018.41	-18.12	1,903.88	1,889.38	14.50	131.311			
2,300.00	2,293.36	2,129.06	8.52	-27.73	-2,026.40	-22.70	1,903.33	1,888.18	15.15	125.595			
2,400.00	2,392.90	2,229.05	8.90	-27.72	-2,034.40	-27.27	1,902.79	1,886.98	15.81	120.323			
2,500.00	2,492.45	2,329.05	9.28	-27.71	-2,042.39	-31.85	1,902.25	1,885.77	16.48	115.449			
2,600.00	2,591.99	2,429.05	9.66	-27.70	-2,050.39	-36.43	1,901.70	1,884.56	17.14	110.931			
2,700.00	2,691.54	2,529.05	10.04	-27.69	-2,058.38	-41.00	1,901.16	1,883.35	17.81	106.735			
2,800.00	2,791.08	2,629.05	10.42	-27.68	-2,066.38	-45.58	1,900.61	1,882.13	18.48	102.829			
2,900.00	2,890.62	2,729.04	10.81	-27.67	-2,074.37	-50.15	1,900.07	1,880.91	19.16	99.185			
3,000.00	2,990.17	2,829.04	11.19	-27.66	-2,082.37	-54.73	1,899.53	1,879.69	19.83	95.778			
3,100.00	3,089.71	2,929.04	11.58	-27.66	-2,090.36	-59.30	1,898.98	1,878.47	20.51	92.588			
3,200.00	3,189.26	3,029.04	11.96	-27.65	-2,098.36	-63.88	1,898.44	1,877.25	21.19	89.595			
3,300.00	3,288.80	3,129.04	12.35	-27.64	-2,106.35	-68.45	1,897.90	1,876.03	21.87	86.782			
3,400.00	3,388.34	3,229.03	12.74	-27.63	-2,114.35	-73.03	1,897.35	1,874.80	22.55	84.134			
3,500.00	3,487.89	3,329.03	13.12	-27.62	-2,122.34	-77.61	1,896.81	1,873.57	23.23	81.636			
3,600.00	3,587.43	3,429.03	13.51	-27.61	-2,130.34	-82.18	1,896.27	1,872.35	23.92	79.277			
3,700.00	3,686.98	3,529.03	13.90	-27.60	-2,138.33	-86.76	1,895.72	1,871.12	24.60	77.047			
3,800.00	3,786.52	3,629.03	14.29	-27.59	-2,146.33	-91.33	1,895.18	1,869.89	25.29	74.934			
3,900.00	3,886.06	3,729.02	14.68	-27.58	-2,154.32	-95.91	1,894.64	1,868.66	25.98	72.930			
4,000.00	3,985.61	3,829.02	15.07	-27.57	-2,162.32	-100.48	1,894.09	1,867.43	26.67	71.027			
4,100.00	4,085.15	3,929.02	15.46	-27.56	-2,170.32	-105.06	1,893.55	1,866.19	27.36	69.218			
4,200.00	4,184.70	4,029.02	15.85	-27.55	-2,178.31	-109.63	1,893.01	1,864.96	28.05	67.496			
4,300.00	4,284.24	4,129.02	16.24	-27.55	-2,186.31	-114.21	1,892.47	1,863.73	28.74	65.855			
4,400.00	4,383.79	4,229.02	16.63	-27.54	-2,194.30	-118.79	1,891.92	1,862.49	29.43	64.289			
4,500.00	4,483.33	4,329.01	17.02	-27.53	-2,202.30	-123.36	1,891.38	1,861.26	30.12	62.794			
4,600.00	4,582.87	4,429.01	17.41	-27.52	-2,210.29	-127.94	1,890.84	1,860.02	30.81	61.366			
4,700.00	4,682.42	4,529.01	17.81	-27.51	-2,218.29	-132.51	1,890.29	1,858.79	31.51	59.998			
4,800.00	4,781.96	4,629.01	18.20	-27.50	-2,226.28	-137.09	1,889.75	1,857.55	32.20	58.689			
4,856.88	4,838.58	4,685.89	18.41	-27.49	-2,230.83	-139.69	1,889.44	1,856.86	32.58	57.992			
4,900.00	4,881.54	4,728.98	18.56	17.45	-2,234.27	-141.66	1,889.19	1,856.31	32.88	57.455			

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka Federal LD13-635 - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+MS		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
4,950.00	4,931.28	4,778.72	4,762.38	18.70	17.65	44.99	-2,238.25	-143.94	1,888.88	1,855.62	33.26	56.794	
5,000.00	4,980.72	4,827.95	4,811.40	18.75	17.83	61.13	-2,242.19	-146.18	1,888.56	1,854.96	33.60	56.201	
5,050.00	5,029.61	4,876.67	4,859.95	18.76	17.99	69.32	-2,246.08	-146.46	1,888.29	1,854.36	33.93	55.660	
5,100.00	5,077.73	4,926.04	4,909.06	18.74	18.09	74.15	-2,249.99	-143.37	1,888.07	1,853.86	34.21	55.183	
5,124.87	5,101.30	4,950.86	4,933.64	18.73	18.13	75.89	-2,251.94	-140.54	1,887.99	1,853.65	34.34	54.975	
5,150.00	5,124.83	4,976.12	4,958.53	18.71	18.13	77.35	-2,253.92	-136.78	1,887.92	1,853.47	34.45	54.803	
5,169.53	5,142.90	4,995.86	4,977.90	18.70	18.13	78.33	-2,255.45	-133.23	1,887.88	1,853.35	34.53	54.677	
5,200.00	5,170.69	5,026.91	5,008.13	18.67	18.12	79.65	-2,257.83	-126.56	1,887.83	1,853.20	34.63	54.509	
5,216.11	5,185.16	5,043.44	5,024.09	18.66	18.11	80.26	-2,259.09	-122.48	1,887.81	1,853.13	34.69	54.427	
5,248.39	5,213.68	5,076.79	5,056.00	18.63	18.09	81.35	-2,261.59	-113.13	1,887.80	1,853.02	34.78	54.282 CC	
5,250.00	5,215.08	5,078.46	5,057.59	18.63	18.09	81.40	-2,261.72	-112.62	1,887.80	1,853.02	34.78	54.275	
5,259.54	5,223.37	5,088.39	5,066.99	18.62	18.08	81.68	-2,262.45	-109.53	1,887.80	1,852.99	34.81	54.235	
5,300.00	5,257.79	5,130.78	5,106.64	18.59	18.04	82.78	-2,265.55	-94.86	1,887.83	1,852.93	34.91	54.084	
5,308.46	5,264.83	5,139.71	5,114.88	18.58	18.03	82.99	-2,266.19	-91.47	1,887.84	1,852.92	34.92	54.055	
5,350.00	5,298.60	5,183.90	5,154.99	18.55	17.98	83.92	-2,269.31	-73.20	1,887.92	1,852.91	35.01	53.925	
5,400.00	5,337.32	5,237.84	5,202.30	18.52	17.92	84.87	-2,272.96	-47.59	1,888.06	1,852.96	35.10	53.789	
5,450.00	5,373.77	5,292.60	5,248.23	18.50	17.87	85.68	-2,276.48	-18.01	1,888.25	1,853.07	35.18	53.667	
5,500.00	5,407.75	5,348.18	5,292.42	18.49	17.82	86.38	-2,279.84	15.52	1,888.49	1,853.22	35.27	53.550	
5,550.00	5,439.11	5,404.60	5,334.48	18.49	17.78	87.00	-2,283.01	52.96	1,888.76	1,853.40	35.35	53.427	
5,600.00	5,467.70	5,461.82	5,374.02	18.52	17.76	87.53	-2,285.96	94.21	1,889.05	1,853.60	35.45	53.286	
5,650.00	5,493.37	5,519.84	5,401.62	18.57	17.76	87.99	-2,288.65	139.12	1,889.37	1,853.80	35.57	53.117	
5,700.00	5,516.01	5,578.62	5,443.88	18.63	17.78	88.40	-2,291.06	187.50	1,889.69	1,853.98	35.72	52.907	
5,750.00	5,535.49	5,638.11	5,473.41	18.73	17.84	88.74	-2,293.15	239.08	1,890.02	1,854.12	35.90	52.648	
5,800.00	5,551.73	5,698.26	5,498.82	18.84	17.93	89.03	-2,294.90	293.55	1,890.34	1,854.21	36.12	52.331	
5,850.00	5,564.64	5,759.00	5,519.78	18.98	18.07	89.27	-2,296.28	350.53	1,890.64	1,854.24	36.40	51.944	
5,900.00	5,574.16	5,820.26	5,535.96	19.15	18.24	89.46	-2,297.26	409.58	1,890.91	1,854.19	36.72	51.489	
5,950.00	5,580.26	5,881.94	5,547.11	19.34	18.45	89.59	-2,297.84	470.23	1,891.16	1,854.05	37.11	50.967	
6,000.00	5,582.89	5,943.95	5,553.04	19.55	18.70	89.68	-2,297.99	531.94	1,891.36	1,853.83	37.54	50.384	
6,012.82	5,583.00	5,959.89	5,553.70	19.61	18.77	89.69	-2,297.95	547.86	1,891.41	1,853.75	37.66	50.225	
6,100.00	5,583.00	6,052.78	5,553.37	20.04	19.23	89.68	-2,297.44	640.74	1,891.49	1,852.93	38.56	49.052	
6,120.10	5,583.00	6,072.88	5,553.17	20.15	19.34	89.67	-2,297.32	660.84	1,891.50	1,852.71	38.79	48.768	
6,200.00	5,583.00	6,152.77	5,552.37	20.59	19.79	89.65	-2,296.83	740.73	1,891.54	1,851.82	39.72	47.627	
6,220.35	5,583.00	6,173.12	5,552.17	20.71	19.90	89.64	-2,296.71	761.07	1,891.55	1,851.58	39.97	47.326	
6,300.00	5,583.00	6,252.77	5,551.38	21.20	20.40	89.62	-2,296.23	840.72	1,891.58	1,850.59	40.99	46.146	
6,320.56	5,583.00	6,273.32	5,551.18	21.34	20.53	89.61	-2,296.10	861.27	1,891.59	1,850.32	41.27	45.834	
6,400.00	5,583.00	6,352.76	5,550.39	21.86	21.07	89.59	-2,295.62	940.70	1,891.63	1,849.26	42.38	44.638	
6,420.73	5,583.00	6,373.50	5,550.18	22.01	21.21	89.58	-2,295.49	961.44	1,891.64	1,848.96	42.68	44.322	
6,500.00	5,583.00	6,452.76	5,549.39	22.57	21.79	89.56	-2,295.01	1,040.69	1,891.68	1,847.82	43.86	43.128	
6,520.89	5,583.00	6,473.64	5,549.19	22.73	21.95	89.55	-2,294.89	1,061.58	1,891.69	1,847.51	44.19	42.811	
6,600.00	5,583.00	6,552.75	5,548.40	23.33	22.56	89.53	-2,294.41	1,140.68	1,891.73	1,846.30	45.44	41.633	
6,621.02	5,583.00	6,573.77	5,548.19	23.50	22.72	89.52	-2,294.28	1,161.70	1,891.74	1,845.96	45.78	41.321	
6,700.00	5,583.00	6,652.75	5,547.41	24.13	23.37	89.50	-2,293.80	1,240.67	1,891.79	1,844.69	47.09	40.170	
6,721.14	5,583.00	6,673.89	5,547.20	24.31	23.54	89.49	-2,293.67	1,261.81	1,891.80	1,844.34	47.46	39.864	
6,800.00	5,583.00	6,752.74	5,546.41	24.96	24.21	89.47	-2,293.20	1,340.66	1,891.84	1,843.01	48.82	38.749	
6,821.25	5,583.00	6,773.99	5,546.20	25.15	24.40	89.46	-2,293.07	1,361.90	1,891.85	1,842.65	49.20	38.451	
6,900.00	5,583.00	6,852.74	5,545.42	25.83	25.09	89.44	-2,292.59	1,440.65	1,891.89	1,841.27	50.62	37.376	
6,921.34	5,583.00	6,874.08	5,545.21	26.02	25.28	89.43	-2,292.46	1,461.98	1,891.90	1,840.89	51.01	37.089	
7,000.00	5,583.00	6,952.73	5,544.43	26.73	26.00	89.41	-2,291.98	1,540.63	1,891.94	1,839.47	52.47	36.057	
7,021.43	5,583.00	6,974.16	5,544.21	26.93	26.20	89.40	-2,291.85	1,562.06	1,891.95	1,839.08	52.88	35.781	
7,100.00	5,583.00	7,052.73	5,543.43	27.66	26.94	89.38	-2,291.38	1,640.62	1,891.99	1,837.62	54.38	34.795	
7,121.50	5,583.00	7,074.23	5,543.22	27.86	27.15	89.37	-2,291.25	1,662.12	1,892.01	1,837.21	54.79	34.530	
7,200.00	5,583.00	7,152.72	5,542.44	28.61	27.91	89.35	-2,290.77	1,740.61	1,892.05	1,835.72	56.33	33.590	

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka Federal LD13-635 - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 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	
7,221.57	5,583.00	7,174.29	5,542.23	28.82	28.12	89.34	-2,290.64	1,762.18	1,892.06	1,835.30	56.76	33.337		
7,300.00	5,583.00	7,252.72	5,541.45	29.58	28.89	89.32	-2,290.17	1,840.60	1,892.10	1,833.78	58.32	32.442		
7,321.64	5,583.00	7,274.35	5,541.23	29.80	29.11	89.31	-2,290.03	1,862.23	1,892.11	1,833.35	58.76	32.200		
7,400.00	5,583.00	7,352.71	5,540.45	30.58	29.90	89.29	-2,289.56	1,940.59	1,892.16	1,831.80	60.36	31.350		
7,421.69	5,583.00	7,374.41	5,540.24	30.80	30.12	89.28	-2,289.43	1,962.28	1,892.17	1,831.36	60.80	31.120		
7,500.00	5,583.00	7,452.71	5,539.46	31.59	30.92	89.26	-2,288.95	2,040.57	1,892.21	1,829.79	62.42	30.312		
7,521.75	5,583.00	7,474.45	5,539.24	31.81	31.15	89.25	-2,288.82	2,062.32	1,892.22	1,829.34	62.88	30.093		
7,600.00	5,583.00	7,552.70	5,538.47	32.62	31.97	89.23	-2,288.35	2,140.56	1,892.27	1,827.74	64.52	29.327		
7,621.80	5,583.00	7,574.50	5,538.25	32.85	32.19	89.22	-2,288.21	2,162.36	1,892.28	1,827.29	64.98	29.119		
7,700.00	5,583.00	7,652.70	5,537.47	33.66	33.02	89.20	-2,287.74	2,240.55	1,892.32	1,825.67	66.65	28.392		
7,721.84	5,583.00	7,674.54	5,537.26	33.90	33.25	89.19	-2,287.61	2,262.39	1,892.33	1,825.22	67.12	28.194		
7,800.00	5,583.00	7,752.69	5,536.48	34.72	34.09	89.17	-2,287.13	2,340.54	1,892.38	1,823.58	68.80	27.505		
7,821.88	5,583.00	7,774.58	5,536.26	34.96	34.33	89.16	-2,287.00	2,362.42	1,892.39	1,823.11	69.28	27.316		
7,900.00	5,583.00	7,852.69	5,535.49	35.79	35.17	89.14	-2,286.53	2,440.53	1,892.44	1,821.46	70.98	26.663		
7,921.92	5,583.00	7,874.61	5,535.27	36.03	35.41	89.13	-2,286.40	2,462.45	1,892.45	1,820.99	71.46	26.483		
8,000.00	5,583.00	7,952.68	5,534.49	36.88	36.26	89.11	-2,285.92	2,540.52	1,892.49	1,819.32	73.17	25.863		
8,021.96	5,583.00	7,974.64	5,534.28	37.12	36.51	89.10	-2,285.79	2,562.48	1,892.51	1,818.85	73.66	25.693		
8,100.00	5,583.00	8,052.68	5,533.50	37.97	37.37	89.08	-2,285.32	2,640.50	1,892.55	1,817.16	75.39	25.103		
8,122.00	5,583.00	8,074.67	5,533.28	38.21	37.61	89.07	-2,285.18	2,662.50	1,892.56	1,816.68	75.88	24.941		
8,200.00	5,583.00	8,152.67	5,532.51	39.07	38.48	89.05	-2,284.71	2,740.49	1,892.61	1,814.99	77.62	24.382		
8,222.03	5,583.00	8,174.70	5,532.29	39.32	38.72	89.04	-2,284.58	2,762.52	1,892.62	1,814.50	78.12	24.227		
8,300.00	5,583.00	8,252.67	5,531.51	40.18	39.60	89.02	-2,284.10	2,840.48	1,892.67	1,812.80	79.87	23.696		
8,322.06	5,583.00	8,274.73	5,531.29	40.43	39.85	89.01	-2,283.97	2,862.54	1,892.68	1,812.31	80.37	23.549		
8,400.00	5,583.00	8,352.66	5,530.52	41.30	40.73	88.99	-2,283.50	2,940.47	1,892.73	1,810.59	82.14	23.043		
8,420.83	5,583.00	8,373.50	5,530.31	41.54	40.96	88.98	-2,283.37	2,961.30	1,892.74	1,810.13	82.61	22.911		
8,494.05	5,583.00	8,446.71	5,529.59	42.36	41.79	88.96	-2,282.93	3,034.51	1,892.79	1,808.51	84.28	22.458		
8,494.14	5,583.00	8,446.80	5,529.59	42.36	41.80	88.96	-2,282.93	3,034.60	1,892.79	1,808.50	84.28	22.458		
8,500.00	5,582.99	8,452.66	5,529.53	42.43	41.86	88.96	-2,282.89	3,040.46	1,892.79	1,808.37	84.42	22.422		
8,507.35	5,582.97	8,460.01	5,529.45	42.51	41.95	88.96	-2,282.85	3,047.81	1,892.79	1,808.21	84.58	22.378		
8,532.50	5,582.74	8,485.15	5,529.20	42.79	42.23	88.95	-2,282.69	3,072.95	1,892.80	1,807.65	85.16	22.228		
8,548.12	5,582.53	8,500.78	5,529.05	42.97	42.41	88.96	-2,282.60	3,088.58	1,892.81	1,807.30	85.51	22.135		
8,600.00	5,581.84	8,553.00	5,528.86	43.55	43.00	88.97	-2,282.28	3,140.79	1,892.82	1,806.13	86.69	21.834		
8,623.35	5,581.52	8,576.34	5,528.86	43.82	43.27	88.98	-2,282.14	3,164.14	1,892.83	1,805.61	87.22	21.701		
8,700.00	5,580.49	8,652.99	5,528.86	44.69	44.15	89.01	-2,281.68	3,240.78	1,892.84	1,803.87	88.97	21.275		
8,723.33	5,580.18	8,676.32	5,528.86	44.96	44.42	89.02	-2,281.54	3,264.11	1,892.85	1,803.34	89.51	21.148		
8,800.00	5,579.15	8,752.98	5,528.86	45.84	45.30	89.05	-2,281.07	3,340.77	1,892.86	1,801.60	91.27	20.740		
8,823.31	5,578.84	8,776.29	5,528.86	46.11	45.57	89.06	-2,280.93	3,364.08	1,892.87	1,801.06	91.80	20.619		
8,900.00	5,577.81	8,852.97	5,528.86	46.99	46.46	89.09	-2,280.47	3,440.76	1,892.88	1,799.31	93.57	20.230		
8,923.30	5,577.50	8,876.26	5,528.87	47.26	46.73	89.10	-2,280.32	3,464.05	1,892.89	1,798.78	94.11	20.114		
9,000.00	5,576.47	8,952.96	5,528.87	48.14	47.62	89.13	-2,279.86	3,540.75	1,892.90	1,797.02	95.88	19.742		
9,023.28	5,576.16	8,976.24	5,528.87	48.41	47.90	89.14	-2,279.72	3,564.02	1,892.91	1,796.49	96.42	19.631		
9,100.00	5,575.13	9,052.95	5,528.87	49.31	48.79	89.17	-2,279.25	3,640.74	1,892.93	1,794.72	98.20	19.275		
9,123.25	5,574.82	9,076.20	5,528.87	49.58	49.06	89.18	-2,279.11	3,663.99	1,892.93	1,794.19	98.75	19.170		
9,200.00	5,573.79	9,152.94	5,528.87	50.47	49.96	89.22	-2,278.65	3,740.73	1,892.95	1,792.42	100.53	18.829		
9,223.23	5,573.47	9,176.17	5,528.87	50.74	50.24	89.22	-2,278.51	3,763.95	1,892.96	1,791.88	101.08	18.728		
9,300.00	5,572.44	9,252.93	5,528.87	51.64	51.14	89.26	-2,278.04	3,840.72	1,892.97	1,790.10	102.87	18.402		
9,323.20	5,572.13	9,276.14	5,528.87	51.91	51.41	89.27	-2,277.90	3,863.92	1,892.98	1,789.57	103.41	18.305		
9,400.00	5,571.10	9,352.93	5,528.87	52.81	52.32	89.30	-2,277.43	3,940.70	1,893.00	1,787.79	105.21	17.992		
9,423.17	5,570.79	9,376.10	5,528.87	53.08	52.59	89.31	-2,277.29	3,963.88	1,893.01	1,787.25	105.76	17.899		
9,500.00	5,569.76	9,452.92	5,528.88	53.99	53.50	89.34	-2,276.83	4,040.69	1,893.03	1,785.46	107.56	17.599		
9,523.14	5,569.45	9,476.05	5,528.88	54.26	53.77	89.35	-2,276.69	4,063.83	1,893.03	1,784.92	108.11	17.510		
9,600.00	5,568.42	9,552.91	5,528.88	55.17	54.68	89.38	-2,276.22	4,140.68	1,893.05	1,783.13	109.92	17.222		

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka Federal LD13-635 - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+HFR1+MS		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: 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)			
9,623.10	5,568.11	9,576.01	5,528.88	55.44	54.96	89.39	-2,276.08	4,163.78	1,893.06	1,782.59	110.47	17.137	
9,700.00	5,567.08	9,652.90	5,528.88	56.35	55.87	89.42	-2,275.62	4,240.67	1,893.08	1,780.80	112.28	16.860	
9,723.06	5,566.77	9,675.95	5,528.88	56.62	56.15	89.43	-2,275.48	4,263.73	1,893.09	1,780.26	112.83	16.778	
9,800.00	5,565.73	9,752.89	5,528.88	57.53	57.06	89.46	-2,275.01	4,340.66	1,893.11	1,778.46	114.65	16.512	
9,823.00	5,565.43	9,775.89	5,528.88	57.81	57.34	89.47	-2,274.87	4,363.66	1,893.12	1,777.92	115.20	16.434	
9,900.00	5,564.39	9,852.88	5,528.88	58.72	58.26	89.50	-2,274.40	4,440.65	1,893.14	1,776.12	117.02	16.177	
9,922.94	5,564.08	9,875.82	5,528.88	58.99	58.53	89.51	-2,274.26	4,463.59	1,893.15	1,775.58	117.57	16.103	
10,000.00	5,563.05	9,952.87	5,528.89	59.91	59.45	89.54	-2,273.80	4,540.64	1,893.17	1,773.77	119.40	15.856	
10,022.87	5,562.74	9,975.74	5,528.89	60.18	59.72	89.55	-2,273.66	4,563.51	1,893.18	1,773.24	119.95	15.784	
10,100.00	5,561.71	10,052.86	5,528.89	61.10	60.65	89.58	-2,273.19	4,640.63	1,893.21	1,771.42	121.78	15.546	
10,122.78	5,561.40	10,075.64	5,528.89	61.37	60.92	89.59	-2,273.05	4,663.41	1,893.21	1,770.89	122.33	15.477	
10,200.00	5,560.37	10,152.85	5,528.89	62.30	61.85	89.62	-2,272.59	4,740.62	1,893.24	1,769.07	124.17	15.247	
10,222.67	5,560.06	10,175.52	5,528.89	62.57	62.12	89.63	-2,272.45	4,763.29	1,893.25	1,768.54	124.71	15.181	
10,300.00	5,559.02	10,252.84	5,528.89	63.49	63.05	89.66	-2,271.98	4,840.61	1,893.27	1,766.71	126.56	14.960	
10,322.53	5,558.72	10,275.37	5,528.89	63.76	63.32	89.67	-2,271.84	4,863.13	1,893.28	1,766.18	127.10	14.896	
10,400.00	5,557.68	10,352.83	5,528.89	64.69	64.25	89.70	-2,271.37	4,940.60	1,893.31	1,764.36	128.95	14.682	
10,422.35	5,557.38	10,375.18	5,528.89	64.96	64.52	89.71	-2,271.24	4,962.94	1,893.32	1,763.83	129.49	14.622	
10,500.00	5,556.34	10,452.83	5,528.89	65.89	65.46	89.74	-2,270.77	5,040.59	1,893.34	1,761.99	131.35	14.415	
10,522.09	5,556.04	10,474.92	5,528.89	66.16	65.72	89.75	-2,270.63	5,062.68	1,893.35	1,761.47	131.88	14.357	
10,600.00	5,555.00	10,552.82	5,528.90	67.10	66.67	89.78	-2,270.16	5,140.57	1,893.38	1,759.63	133.75	14.156	
10,700.00	5,553.66	10,632.81	5,528.90	68.30	67.87	89.83	-2,269.55	5,240.56	1,893.42	1,757.27	136.15	13.907	
10,800.00	5,552.32	10,752.80	5,528.90	69.51	69.08	89.87	-2,268.95	5,340.55	1,893.46	1,754.90	138.56	13.665	
10,900.00	5,550.97	10,852.79	5,528.90	70.71	70.30	89.91	-2,268.34	5,440.54	1,893.50	1,752.53	140.97	13.432	
11,000.00	5,549.63	10,952.78	5,528.90	71.92	71.51	89.95	-2,267.74	5,540.53	1,893.54	1,750.16	143.38	13.206	
11,100.00	5,548.29	11,052.77	5,528.91	73.13	72.72	89.99	-2,267.13	5,640.52	1,893.58	1,747.78	145.79	12.988	
11,200.00	5,546.95	11,152.76	5,528.91	74.35	73.94	90.03	-2,266.52	5,740.51	1,893.62	1,745.41	148.21	12.777	
11,200.31	5,546.94	11,153.07	5,528.91	74.35	73.94	90.03	-2,266.52	5,740.81	1,893.62	1,745.40	148.22	12.776	
11,300.00	5,545.61	11,252.75	5,528.91	75.56	75.15	90.07	-2,265.92	5,840.50	1,893.67	1,743.04	150.63	12.572	
11,300.01	5,545.61	11,252.76	5,528.91	75.56	75.15	90.07	-2,265.92	5,840.50	1,893.67	1,743.04	150.63	12.572	
11,400.00	5,544.26	11,352.74	5,528.91	76.77	76.37	90.11	-2,265.31	5,940.49	1,893.71	1,740.66	153.05	12.373	
11,400.06	5,544.26	11,352.80	5,528.91	76.77	76.37	90.11	-2,265.31	5,940.54	1,893.71	1,740.66	153.05	12.373	
11,494.23	5,543.00	11,446.96	5,528.91	77.92	77.52	90.15	-2,264.74	6,034.71	1,893.75	1,738.42	155.33	12.191	
11,494.35	5,543.00	11,447.08	5,528.91	77.92	77.52	90.15	-2,264.74	6,034.82	1,893.75	1,738.42	155.34	12.191	
11,508.36	5,542.85	11,461.09	5,528.91	78.09	77.69	90.15	-2,264.65	6,048.84	1,893.76	1,738.08	155.68	12.165	
11,508.61	5,542.84	11,461.35	5,528.91	78.09	77.69	90.15	-2,264.65	6,049.09	1,893.76	1,738.08	155.68	12.164	
11,600.00	5,542.07	11,552.73	5,528.91	79.20	78.81	90.18	-2,264.10	6,140.47	1,893.80	1,735.90	157.90	11.993	
11,600.77	5,542.06	11,553.50	5,528.91	79.21	78.82	90.18	-2,264.09	6,141.24	1,893.80	1,735.88	157.92	11.992	
11,700.00	5,541.22	11,652.73	5,528.92	80.42	80.03	90.20	-2,263.49	6,240.47	1,893.85	1,733.51	160.33	11.812	
11,701.30	5,541.21	11,654.02	5,528.92	80.43	80.04	90.20	-2,263.49	6,241.76	1,893.85	1,733.48	160.37	11.809	
11,800.00	5,540.37	11,752.72	5,528.92	81.64	81.25	90.23	-2,262.89	6,340.46	1,893.89	1,731.12	162.77	11.635	
11,801.71	5,540.36	11,754.44	5,528.92	81.66	81.27	90.23	-2,262.88	6,342.17	1,893.89	1,731.08	162.81	11.633	
11,900.00	5,539.52	11,852.72	5,528.92	82.86	82.47	90.25	-2,262.28	6,440.45	1,893.94	1,728.73	165.20	11.464	
11,902.05	5,539.50	11,854.78	5,528.92	82.88	82.50	90.25	-2,262.27	6,442.51	1,893.94	1,728.68	165.25	11.461	
12,000.00	5,538.67	11,952.72	5,528.92	84.08	83.70	90.28	-2,261.67	6,540.45	1,893.98	1,726.34	167.64	11.298	
12,002.34	5,538.65	11,955.05	5,528.92	84.11	83.72	90.28	-2,261.66	6,542.79	1,893.98	1,726.29	167.70	11.294	
12,100.00	5,537.82	12,052.71	5,528.92	85.30	84.92	90.31	-2,261.07	6,640.44	1,894.03	1,723.95	170.08	11.136	
12,102.57	5,537.80	12,055.29	5,528.92	85.33	84.95	90.31	-2,261.05	6,643.02	1,894.03	1,723.89	170.14	11.132	
12,200.00	5,536.98	12,152.71	5,528.93	86.52	86.14	90.33	-2,260.46	6,740.44	1,894.08	1,721.56	172.52	10.979	
12,202.78	5,536.95	12,155.49	5,528.93	86.55	86.18	90.33	-2,260.45	6,743.21	1,894.08	1,721.49	172.59	10.975	
12,300.00	5,536.13	12,252.71	5,528.93	87.74	87.37	90.36	-2,259.86	6,840.43	1,894.12	1,719.16	174.96	10.826	
12,302.95	5,536.10	12,255.66	5,528.93	87.78	87.41	90.36	-2,259.84	6,843.38	1,894.13	1,719.09	175.03	10.821	
12,400.00	5,535.28	12,352.70	5,528.93	88.97	88.60	90.38	-2,259.25	6,940.43	1,894.17	1,716.77	177.40	10.677	

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka Federal LD13-635 - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS		Offset		Semi Major Axis		Highside Toolface (°)	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)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
12,403.10	5,535.25	12,355.81	5,528.93	89.00	88.63	90.38	-2,259.23	6,943.53	1,894.17	1,716.69	177.48	10.673		
12,500.00	5,534.43	12,452.70	5,528.93	90.19	89.82	90.41	-2,258.64	7,040.42	1,894.22	1,714.37	179.85	10.532		
12,503.24	5,534.40	12,455.94	5,528.93	90.23	89.86	90.41	-2,258.62	7,043.66	1,894.22	1,714.29	179.93	10.528		
12,600.00	5,533.58	12,552.70	5,528.93	91.41	91.05	90.43	-2,258.04	7,140.42	1,894.27	1,711.97	182.29	10.391		
12,603.36	5,533.55	12,556.05	5,528.93	91.46	91.09	90.43	-2,258.02	7,143.77	1,894.27	1,711.89	182.38	10.387		
12,700.00	5,532.73	12,652.69	5,528.93	92.64	92.28	90.46	-2,257.43	7,240.41	1,894.32	1,709.58	184.74	10.254		
12,703.46	5,532.70	12,656.15	5,528.94	92.68	92.32	90.46	-2,257.41	7,243.87	1,894.32	1,709.49	184.83	10.249		
12,800.00	5,531.88	12,752.69	5,528.94	93.87	93.51	90.49	-2,256.83	7,340.41	1,894.37	1,707.18	187.19	10.120		
12,803.56	5,531.85	12,756.25	5,528.94	93.91	93.55	90.49	-2,256.80	7,343.96	1,894.37	1,707.09	187.28	10.115		
12,900.00	5,531.04	12,852.68	5,528.94	95.09	94.73	90.51	-2,256.22	7,440.40	1,894.42	1,704.78	189.64	9.990		
12,903.64	5,531.00	12,856.33	5,528.94	95.14	94.78	90.51	-2,256.20	7,444.04	1,894.42	1,704.69	189.73	9.985		
13,000.00	5,530.19	12,952.68	5,528.94	96.32	95.96	90.54	-2,255.61	7,540.39	1,894.47	1,702.38	192.09	9.862		
13,003.72	5,530.16	12,956.40	5,528.94	96.37	96.01	90.54	-2,255.59	7,544.12	1,894.47	1,702.29	192.18	9.858		
13,100.00	5,529.34	13,052.68	5,528.94	97.55	97.19	90.56	-2,255.01	7,640.39	1,894.52	1,699.98	194.54	9.738		
13,103.79	5,529.31	13,056.47	5,528.94	97.60	97.24	90.56	-2,254.98	7,644.18	1,894.52	1,699.89	194.63	9.734		
13,200.00	5,528.49	13,152.67	5,528.94	98.78	98.42	90.59	-2,254.40	7,740.38	1,894.57	1,697.58	196.99	9.617		
13,203.86	5,528.46	13,156.53	5,528.94	98.82	98.47	90.59	-2,254.38	7,744.24	1,894.57	1,697.48	197.09	9.613		
13,300.00	5,527.64	13,252.67	5,528.95	100.01	99.66	90.61	-2,253.79	7,840.38	1,894.62	1,695.17	199.45	9.499		
13,303.92	5,527.61	13,256.59	5,528.95	100.05	99.70	90.61	-2,253.77	7,844.30	1,894.62	1,695.08	199.54	9.495		
13,400.00	5,526.79	13,352.67	5,528.95	101.24	100.89	90.64	-2,253.19	7,940.37	1,894.67	1,692.77	201.90	9.384		
13,403.97	5,526.76	13,356.64	5,528.95	101.28	100.94	90.64	-2,253.16	7,944.35	1,894.67	1,692.68	202.00	9.380		
13,500.00	5,525.94	13,452.66	5,528.95	102.47	102.12	90.67	-2,252.58	8,040.37	1,894.72	1,690.37	204.36	9.272		
13,504.03	5,525.91	13,456.69	5,528.95	102.51	102.17	90.67	-2,252.56	8,044.39	1,894.73	1,690.27	204.45	9.267		
13,600.00	5,525.10	13,552.66	5,528.95	103.70	103.35	90.69	-2,251.98	8,140.36	1,894.78	1,687.97	206.81	9.162		
13,604.07	5,525.06	13,556.73	5,528.95	103.75	103.40	90.69	-2,251.95	8,144.43	1,894.78	1,687.87	206.91	9.157		
13,700.00	5,524.25	13,652.66	5,528.95	104.93	104.58	90.72	-2,251.37	8,240.36	1,894.83	1,685.56	209.27	9.055		
13,704.12	5,524.21	13,656.77	5,528.95	104.98	104.64	90.72	-2,251.34	8,244.47	1,894.83	1,685.46	209.37	9.050		
13,800.00	5,523.40	13,752.65	5,528.96	106.16	105.82	90.74	-2,250.76	8,340.35	1,894.88	1,683.16	211.73	8.950		
13,804.16	5,523.36	13,756.81	5,528.96	106.21	105.87	90.74	-2,250.74	8,344.51	1,894.89	1,683.06	211.83	8.945		
13,900.00	5,522.55	13,852.65	5,528.96	107.39	107.05	90.77	-2,250.16	8,440.35	1,894.94	1,680.75	214.19	8.847		
13,904.20	5,522.51	13,856.84	5,528.96	107.44	107.10	90.77	-2,250.13	8,444.54	1,894.94	1,680.65	214.29	8.843		
14,000.00	5,521.70	13,952.64	5,528.96	108.62	108.29	90.79	-2,249.55	8,540.34	1,894.99	1,678.35	216.64	8.747		
14,004.23	5,521.66	13,956.88	5,528.96	108.67	108.34	90.79	-2,249.53	8,544.57	1,894.99	1,678.24	216.75	8.743		
14,100.00	5,520.85	14,052.64	5,528.96	109.85	109.52	90.82	-2,248.95	8,640.33	1,895.05	1,675.94	219.10	8.649		
14,104.27	5,520.82	14,056.91	5,528.96	109.91	109.57	90.82	-2,248.92	8,644.60	1,895.05	1,675.84	219.21	8.645		
14,200.00	5,520.00	14,152.64	5,528.96	111.09	110.75	90.85	-2,248.34	8,740.33	1,895.10	1,673.54	221.56	8.553		
14,204.30	5,519.97	14,156.94	5,528.96	111.14	110.81	90.85	-2,248.31	8,744.63	1,895.10	1,673.43	221.67	8.549		
14,300.00	5,519.15	14,252.63	5,528.96	112.32	111.99	90.87	-2,247.73	8,840.32	1,895.16	1,671.13	224.03	8.460		
14,304.33	5,519.12	14,256.96	5,528.96	112.37	112.04	90.87	-2,247.71	8,844.65	1,895.16	1,671.03	224.13	8.456		
14,400.00	5,518.31	14,352.63	5,528.97	113.55	113.22	90.90	-2,247.13	8,940.32	1,895.21	1,668.72	226.49	8.368		
14,404.36	5,518.27	14,356.99	5,528.97	113.61	113.28	90.90	-2,247.10	8,944.67	1,895.21	1,668.62	226.60	8.364		
14,500.00	5,517.46	14,452.63	5,528.97	114.79	114.46	90.92	-2,246.52	9,040.31	1,895.27	1,666.32	228.95	8.278		
14,504.38	5,517.42	14,457.01	5,528.97	114.84	114.51	90.92	-2,246.49	9,044.70	1,895.27	1,666.21	229.06	8.274		
14,600.00	5,516.61	14,552.62	5,528.97	116.02	115.70	90.95	-2,245.91	9,140.31	1,895.32	1,663.91	231.41	8.190		
14,604.41	5,516.57	14,557.03	5,528.97	116.08	115.75	90.95	-2,245.89	9,144.72	1,895.33	1,663.80	231.52	8.186		
14,700.00	5,515.76	14,652.62	5,528.97	117.26	116.93	90.97	-2,245.31	9,240.30	1,895.38	1,661.50	233.88	8.104		
14,704.43	5,515.72	14,657.05	5,528.97	117.31	116.99	90.97	-2,245.28	9,244.73	1,895.38	1,661.40	233.99	8.100		
14,800.00	5,514.91	14,752.62	5,528.97	118.49	118.17	91.00	-2,244.70	9,340.30	1,895.44	1,659.10	236.34	8.020		
14,800.01	5,514.91	14,752.62	5,528.97	118.49	118.17	91.00	-2,244.70	9,340.30	1,895.44	1,659.10	236.34	8.020		
14,900.00	5,514.06	14,852.61	5,528.98	119.73	119.41	91.02	-2,244.10	9,440.29	1,895.49	1,656.69	238.81	7.937		
14,900.01	5,514.06	14,852.62	5,528.98	119.73	119.41	91.02	-2,244.10	9,440.30	1,895.49	1,656.69	238.81	7.937		
15,000.00	5,513.21	14,952.61	5,528.98	120.96	120.64	91.05	-2,243.49	9,540.29	1,895.55	1,654.28	241.27	7.856		

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka Federal LD13-635 - OH - Plan #1												Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS												Offset Well Error:	0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
15,000.01	5,513.21	14,952.62	5,528.98	120.96	120.64	91.05	-2,243.49	9,540.29	1,895.55	1,654.28	241.27	7.856	
15,100.00	5,512.37	15,052.60	5,528.98	122.20	121.88	91.08	-2,242.88	9,640.28	1,895.61	1,651.87	243.74	7.777	
15,100.02	5,512.37	15,052.62	5,528.98	122.20	121.88	91.08	-2,242.88	9,640.30	1,895.61	1,651.87	243.74	7.777	
15,200.00	5,511.52	15,152.60	5,528.98	123.44	123.12	91.10	-2,242.28	9,740.27	1,895.67	1,649.46	246.20	7.700	
15,200.04	5,511.52	15,152.64	5,528.98	123.44	123.12	91.10	-2,242.28	9,740.31	1,895.67	1,649.46	246.20	7.700	
15,300.00	5,510.67	15,252.60	5,528.98	124.67	124.36	91.13	-2,241.67	9,840.27	1,895.73	1,647.06	248.67	7.623	
15,300.01	5,510.67	15,252.60	5,528.98	124.67	124.36	91.13	-2,241.67	9,840.27	1,895.73	1,647.06	248.67	7.623	
15,400.00	5,509.82	15,352.59	5,528.98	125.91	125.59	91.15	-2,241.06	9,940.26	1,895.79	1,644.65	251.14	7.549	
15,400.00	5,509.82	15,352.60	5,528.98	125.91	125.59	91.15	-2,241.06	9,940.27	1,895.79	1,644.65	251.14	7.549	
15,500.00	5,508.97	15,452.59	5,528.99	127.15	126.83	91.18	-2,240.46	10,040.26	1,895.85	1,642.24	253.61	7.476	
15,500.01	5,508.97	15,452.60	5,528.99	127.15	126.83	91.18	-2,240.46	10,040.27	1,895.85	1,642.24	253.61	7.476	
15,600.00	5,508.12	15,552.59	5,528.99	128.38	128.07	91.20	-2,239.85	10,140.25	1,895.91	1,639.83	256.07	7.404	
15,600.00	5,508.12	15,552.59	5,528.99	128.38	128.07	91.20	-2,239.85	10,140.26	1,895.91	1,639.83	256.07	7.404	
15,700.00	5,507.27	15,652.58	5,528.99	129.62	129.31	91.23	-2,239.25	10,240.25	1,895.97	1,637.43	258.54	7.333	
15,700.02	5,507.27	15,652.60	5,528.99	129.62	129.31	91.23	-2,239.25	10,240.27	1,895.97	1,637.42	258.54	7.333	
15,800.00	5,506.43	15,752.58	5,528.99	130.86	130.55	91.26	-2,238.64	10,340.24	1,896.03	1,635.02	261.01	7.264	
15,800.03	5,506.43	15,752.61	5,528.99	130.86	130.55	91.26	-2,238.64	10,340.28	1,896.03	1,635.02	261.01	7.264	
15,900.00	5,505.58	15,852.58	5,528.99	132.10	131.79	91.28	-2,238.03	10,440.24	1,896.09	1,632.61	263.48	7.196	
15,900.05	5,505.58	15,852.62	5,528.99	132.10	131.79	91.28	-2,238.03	10,440.28	1,896.09	1,632.61	263.48	7.196	
16,000.00	5,504.73	15,952.57	5,529.00	133.33	133.03	91.31	-2,237.43	10,540.23	1,896.15	1,630.20	265.95	7.130	
16,000.00	5,504.73	15,952.57	5,529.00	133.33	133.03	91.31	-2,237.43	10,540.23	1,896.15	1,630.20	265.95	7.130	
16,100.00	5,503.88	16,052.57	5,529.00	134.57	134.27	91.33	-2,236.82	10,640.23	1,896.21	1,627.79	268.42	7.064	
16,100.01	5,503.88	16,052.58	5,529.00	134.57	134.27	91.33	-2,236.82	10,640.23	1,896.21	1,627.79	268.42	7.064	
16,203.62	5,503.00	16,156.19	5,529.00	135.86	135.55	91.36	-2,236.19	10,743.84	1,896.28	1,625.30	270.98	6.998 ES, SF	

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka Federal LD13-645 - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+MS													Offset Well Error: 0.00 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	178.97	-1,898.53	34.08	1,898.93				
100.00	100.00	81.00	81.00	0.88	0.72	178.97	-1,898.53	34.08	1,898.84	1,897.24	1.60	1,186.944	
200.00	200.00	181.00	181.00	1.50	1.38	178.97	-1,898.53	34.08	1,898.84	1,895.95	2.89	657.801	
300.00	300.00	281.00	281.00	1.94	1.85	178.97	-1,898.53	34.08	1,898.84	1,895.05	3.79	501.298	
400.00	400.00	381.00	381.00	2.29	2.22	178.97	-1,898.53	34.08	1,898.84	1,894.33	4.51	420.719	
500.00	500.00	481.00	481.00	2.60	2.54	178.97	-1,898.53	34.08	1,898.84	1,893.70	5.14	369.316	
600.00	600.00	654.26	654.19	2.88	3.20	179.06	-1,895.61	31.13	1,897.28	1,891.30	5.97	317.765	
700.00	699.99	765.19	764.91	3.19	3.48	-27.41	-1,890.83	26.32	1,891.71	1,885.20	6.51	290.436	
800.00	799.91	864.84	864.37	3.49	3.77	-27.39	-1,886.47	21.94	1,883.80	1,876.74	7.06	266.756	
900.00	899.69	964.30	963.64	3.80	4.07	-27.42	-1,882.13	17.56	1,873.57	1,865.95	7.62	245.976	
964.87	964.31	1,028.69	1,027.90	3.93	4.28	-27.46	-1,879.31	14.73	1,865.70	1,857.79	7.91	235.819	
1,000.00	999.29	1,063.53	1,062.68	3.99	4.39	-27.46	-1,877.79	13.19	1,861.18	1,853.12	8.05	231.105	
1,100.00	1,098.83	1,162.70	1,161.65	4.29	4.70	-27.47	-1,873.46	8.83	1,848.30	1,839.70	8.60	215.015	
1,200.00	1,198.37	1,261.87	1,260.63	4.60	5.03	-27.47	-1,869.12	4.47	1,835.42	1,826.27	9.15	200.604	
1,300.00	1,297.92	1,361.03	1,359.61	4.93	5.35	-27.47	-1,864.79	0.10	1,822.54	1,812.83	9.71	187.670	
1,400.00	1,397.46	1,460.20	1,458.58	5.26	5.68	-27.47	-1,860.46	-4.26	1,809.67	1,799.39	10.28	176.028	
1,500.00	1,497.01	1,559.37	1,557.56	5.61	6.02	-27.47	-1,856.12	-8.62	1,796.79	1,785.93	10.86	165.517	
1,600.00	1,596.55	1,658.54	1,656.53	5.96	6.35	-27.48	-1,851.79	-12.99	1,783.91	1,772.48	11.44	155.996	
1,700.00	1,696.09	1,757.70	1,755.51	6.31	6.69	-27.48	-1,847.46	-17.35	1,771.03	1,759.01	12.02	147.343	
1,800.00	1,795.64	1,856.87	1,854.49	6.67	7.03	-27.48	-1,843.12	-21.71	1,758.16	1,745.55	12.61	139.453	
1,900.00	1,895.18	1,956.04	1,953.46	7.04	7.37	-27.48	-1,838.79	-26.08	1,745.28	1,732.08	13.20	132.236	
2,000.00	1,994.73	2,055.21	2,052.44	7.41	7.71	-27.48	-1,834.46	-30.44	1,732.40	1,718.61	13.79	125.613	
2,100.00	2,094.27	2,154.37	2,151.42	7.78	8.05	-27.49	-1,830.12	-34.81	1,719.52	1,705.14	14.39	119.518	
2,200.00	2,193.81	2,253.54	2,250.39	8.15	8.40	-27.49	-1,825.79	-39.17	1,706.64	1,691.66	14.98	113.893	
2,300.00	2,293.36	2,352.71	2,349.37	8.52	8.74	-27.49	-1,821.46	-43.53	1,693.77	1,678.18	15.58	108.687	
2,400.00	2,392.90	2,451.87	2,448.35	8.90	9.09	-27.49	-1,817.12	-47.90	1,680.89	1,664.70	16.18	103.857	
2,500.00	2,492.45	2,551.04	2,547.32	9.28	9.43	-27.49	-1,812.79	-52.26	1,668.01	1,651.22	16.79	99.364	
2,600.00	2,591.99	2,650.21	2,646.30	9.66	9.78	-27.50	-1,808.46	-56.62	1,655.13	1,637.74	17.39	95.177	
2,700.00	2,691.54	2,749.38	2,745.28	10.04	10.13	-27.50	-1,804.12	-60.99	1,642.26	1,624.26	17.99	91.265	
2,800.00	2,791.08	2,848.54	2,844.25	10.42	10.48	-27.50	-1,799.79	-65.35	1,629.38	1,610.78	18.60	87.602	
2,900.00	2,890.62	2,947.71	2,943.23	10.81	10.83	-27.50	-1,795.46	-69.71	1,616.50	1,597.29	19.21	84.167	
3,000.00	2,990.17	3,046.88	3,042.21	11.19	11.17	-27.50	-1,791.12	-74.08	1,603.62	1,583.81	19.81	80.939	
3,100.00	3,089.71	3,146.05	3,141.18	11.58	11.52	-27.51	-1,786.79	-78.44	1,590.74	1,570.32	20.42	77.900	
3,200.00	3,189.26	3,245.21	3,240.16	11.96	11.87	-27.51	-1,782.46	-82.80	1,577.87	1,556.84	21.03	75.034	
3,300.00	3,288.80	3,344.38	3,339.13	12.35	12.22	-27.51	-1,778.12	-87.17	1,564.99	1,543.35	21.64	72.328	
3,400.00	3,388.34	3,443.55	3,438.11	12.74	12.57	-27.51	-1,773.79	-91.53	1,552.11	1,529.86	22.25	69.768	
3,500.00	3,487.89	3,542.72	3,537.09	13.12	12.92	-27.52	-1,769.46	-95.89	1,539.23	1,516.38	22.86	67.343	
3,600.00	3,587.43	3,641.88	3,636.06	13.51	13.27	-27.52	-1,765.12	-100.26	1,526.36	1,502.89	23.47	65.043	
3,700.00	3,686.98	3,741.05	3,735.04	13.90	13.63	-27.52	-1,760.79	-104.62	1,513.48	1,489.40	24.08	62.859	
3,800.00	3,786.52	3,840.22	3,834.02	14.29	13.98	-27.52	-1,756.46	-108.99	1,500.60	1,475.91	24.69	60.781	
3,900.00	3,886.06	3,939.38	3,932.99	14.68	14.33	-27.53	-1,752.12	-113.35	1,487.72	1,462.42	25.30	58.803	
4,000.00	3,985.61	4,038.55	4,031.97	15.07	14.68	-27.53	-1,747.79	-117.71	1,474.85	1,448.93	25.91	56.918	
4,100.00	4,085.15	4,137.72	4,130.95	15.46	15.03	-27.53	-1,743.46	-122.08	1,461.97	1,435.44	26.52	55.119	
4,200.00	4,184.70	4,236.89	4,229.92	15.85	15.38	-27.54	-1,739.12	-126.44	1,449.09	1,421.95	27.14	53.401	
4,300.00	4,284.24	4,336.05	4,328.90	16.24	15.74	-27.54	-1,734.79	-130.80	1,436.21	1,408.46	27.75	51.758	
4,400.00	4,383.79	4,435.22	4,427.88	16.63	16.09	-27.54	-1,730.46	-135.17	1,423.33	1,394.97	28.36	50.185	
4,500.00	4,483.33	4,534.39	4,526.85	17.02	16.44	-27.54	-1,726.12	-139.53	1,410.46	1,381.48	28.97	48.679	
4,600.00	4,582.87	4,633.56	4,625.83	17.41	16.79	-27.55	-1,721.79	-143.89	1,397.58	1,367.99	29.59	47.235	
4,700.00	4,682.42	4,732.72	4,724.81	17.81	17.14	-27.55	-1,717.46	-148.26	1,384.70	1,354.50	30.20	45.856	
4,800.00	4,781.96	4,831.07	4,823.00	18.20	17.44	-27.63	-1,713.15	-150.78	1,371.84	1,341.02	30.82	44.513	
4,856.88	4,838.58	4,885.99	4,877.74	18.41	17.48	-27.89	-1,710.71	-147.20	1,364.58	1,333.44	31.15	43.810	
4,900.00	4,881.54	4,927.07	4,918.41	18.56	17.44	10.37	-1,708.89	-141.77	1,359.12	1,327.77	31.36	43.342	

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka Federal LD13-645 - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+MS		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
4,950.00	4,931.28	4,974.31	4,964.71	18.70	17.37	44.76	-1,706.79	-132.67	1,352.84	1,321.25	31.59	42.825	
5,000.00	4,980.72	5,021.15	5,009.92	18.75	17.29	60.85	-1,704.73	-120.64	1,346.62	1,314.85	31.77	42.389	
5,050.00	5,029.61	5,067.62	5,053.91	18.76	17.20	68.95	-1,702.70	-105.82	1,340.50	1,308.60	31.90	42.020	
5,100.00	5,077.73	5,113.75	5,096.53	18.74	17.12	73.69	-1,700.71	-88.30	1,334.51	1,302.50	32.01	41.692	
5,150.00	5,124.83	5,159.56	5,137.65	18.71	17.03	76.80	-1,698.78	-68.23	1,328.67	1,296.57	32.10	41.393	
5,200.00	5,170.69	5,205.08	5,177.16	18.67	16.94	79.01	-1,696.90	-45.72	1,323.01	1,290.83	32.18	41.113	
5,250.00	5,215.08	5,250.00	5,214.67	18.63	16.87	80.66	-1,695.10	-21.08	1,317.54	1,285.29	32.25	40.848	
5,300.00	5,257.79	5,295.36	5,250.91	18.59	16.79	81.96	-1,693.33	6.13	1,312.30	1,279.97	32.33	40.591	
5,350.00	5,298.60	5,340.16	5,284.94	18.55	16.73	83.00	-1,691.66	35.21	1,307.30	1,274.90	32.41	40.338	
5,400.00	5,337.32	5,384.78	5,316.96	18.52	16.68	83.86	-1,690.06	66.23	1,302.57	1,270.08	32.50	40.084	
5,450.00	5,373.77	5,429.21	5,346.87	18.50	16.65	84.59	-1,688.54	99.05	1,298.13	1,265.53	32.60	39.824	
5,500.00	5,407.75	5,473.50	5,374.60	18.49	16.62	85.20	-1,687.10	133.54	1,293.99	1,261.27	32.71	39.555	
5,550.00	5,439.11	5,517.66	5,400.07	18.49	16.61	85.73	-1,685.76	169.58	1,290.17	1,257.32	32.85	39.271	
5,600.00	5,467.70	5,561.71	5,423.22	18.52	16.62	86.19	-1,684.51	207.02	1,286.69	1,253.67	33.02	38.970	
5,650.00	5,493.37	5,605.67	5,443.99	18.57	16.65	86.58	-1,683.36	245.74	1,283.56	1,250.35	33.21	38.649	
5,700.00	5,516.01	5,650.00	5,462.49	18.63	16.70	86.91	-1,682.30	286.01	1,280.80	1,247.36	33.44	38.304	
5,750.00	5,535.49	5,693.37	5,478.15	18.73	16.77	87.19	-1,681.36	326.44	1,278.41	1,244.71	33.70	37.936	
5,800.00	5,551.73	5,737.16	5,491.45	18.84	16.86	87.43	-1,680.52	368.14	1,276.42	1,242.42	34.00	37.544	
5,850.00	5,564.64	5,780.92	5,502.17	18.98	16.98	87.62	-1,679.79	410.55	1,274.82	1,240.48	34.33	37.132	
5,900.00	5,574.16	5,824.67	5,510.29	19.15	17.11	87.78	-1,679.17	453.53	1,273.62	1,238.92	34.70	36.700	
5,922.08	5,577.28	5,843.99	5,513.03	19.24	17.17	87.83	-1,678.93	472.66	1,273.22	1,238.35	34.88	36.504	
5,950.00	5,580.26	5,868.43	5,515.77	19.34	17.26	87.89	-1,678.66	496.94	1,272.84	1,237.73	35.11	36.255	
5,969.01	5,581.67	5,885.07	5,517.15	19.42	17.33	87.92	-1,678.50	513.52	1,272.65	1,237.38	35.27	36.080	
6,000.00	5,582.89	5,912.21	5,518.59	19.55	17.44	87.96	-1,678.27	540.62	1,272.47	1,236.92	35.54	35.799	
6,012.82	5,583.00	5,923.44	5,518.88	19.61	17.48	87.97	-1,678.18	551.85	1,272.44	1,236.78	35.66	35.682	
6,015.38	5,583.00	5,925.69	5,518.92	19.62	17.49	87.97	-1,678.17	554.09	1,272.44	1,236.75	35.69	35.657	
6,016.04	5,583.00	5,926.27	5,518.93	19.63	17.49	87.97	-1,678.16	554.67	1,272.44	1,236.75	35.69	35.651	
6,032.74	5,583.00	5,941.52	5,519.00	19.71	17.56	87.97	-1,678.07	569.92	1,272.44	1,236.58	35.86	35.486 CC	
6,100.00	5,583.00	6,008.77	5,519.00	20.04	17.88	87.97	-1,677.66	637.18	1,272.46	1,235.87	36.59	34.780	
6,123.03	5,583.00	6,031.80	5,519.00	20.16	18.00	87.97	-1,677.51	660.20	1,272.47	1,235.60	36.86	34.518	
6,200.00	5,583.00	6,108.77	5,519.00	20.59	18.41	87.97	-1,677.04	737.17	1,272.50	1,234.69	37.80	33.663	
6,223.03	5,583.00	6,131.80	5,519.00	20.73	18.55	87.97	-1,676.90	760.20	1,272.50	1,234.40	38.11	33.393	
6,300.00	5,583.00	6,208.77	5,519.00	21.20	19.02	87.97	-1,676.43	837.17	1,272.53	1,233.39	39.14	32.514	
6,323.03	5,583.00	6,231.80	5,519.00	21.35	19.17	87.97	-1,676.29	860.20	1,272.54	1,233.07	39.47	32.241	
6,400.00	5,583.00	6,308.77	5,519.00	21.86	19.69	87.97	-1,675.82	937.17	1,272.57	1,231.98	40.58	31.356	
6,423.03	5,583.00	6,331.80	5,519.00	22.03	19.85	87.97	-1,675.67	960.20	1,272.57	1,231.64	40.94	31.084	
6,500.00	5,583.00	6,408.77	5,519.00	22.57	20.41	87.97	-1,675.20	1,037.17	1,272.60	1,230.47	42.13	30.207	
6,523.03	5,583.00	6,431.80	5,519.00	22.75	20.59	87.97	-1,675.06	1,060.20	1,272.61	1,230.10	42.51	29.940	
6,600.00	5,583.00	6,508.77	5,519.00	23.33	21.20	87.97	-1,674.59	1,137.17	1,272.64	1,228.87	43.76	29.080	
6,623.03	5,583.00	6,531.80	5,519.00	23.51	21.39	87.97	-1,674.45	1,160.19	1,272.65	1,228.49	44.16	28.821	
6,700.00	5,583.00	6,608.77	5,519.00	24.13	22.03	87.97	-1,673.98	1,237.16	1,272.67	1,227.20	45.48	27.986	
6,723.03	5,583.00	6,631.80	5,519.00	24.32	22.23	87.97	-1,673.84	1,260.19	1,272.68	1,226.80	45.89	27.736	
6,800.00	5,583.00	6,708.77	5,519.00	24.96	22.90	87.97	-1,673.36	1,337.16	1,272.71	1,225.45	47.26	26.931	
6,823.03	5,583.00	6,731.80	5,519.00	25.16	23.11	87.97	-1,673.22	1,360.19	1,272.72	1,225.03	47.68	26.692	
6,900.00	5,583.00	6,808.77	5,519.00	25.83	23.81	87.97	-1,672.75	1,437.16	1,272.74	1,223.64	49.10	25.921	
6,923.03	5,583.00	6,831.80	5,519.00	26.04	24.03	87.97	-1,672.61	1,460.19	1,272.75	1,223.21	49.54	25.692	
7,000.00	5,583.00	6,908.77	5,519.00	26.73	24.75	87.97	-1,672.14	1,537.16	1,272.78	1,221.78	51.00	24.956	
7,023.03	5,583.00	6,931.80	5,519.00	26.95	24.98	87.97	-1,672.00	1,560.19	1,272.79	1,221.34	51.45	24.739	
7,100.00	5,583.00	7,008.77	5,519.00	27.66	25.73	87.97	-1,671.52	1,637.16	1,272.81	1,219.86	52.95	24.038	
7,123.03	5,583.00	7,031.80	5,519.00	27.88	25.96	87.97	-1,671.38	1,660.18	1,272.82	1,219.41	53.41	23.832	
7,200.00	5,583.00	7,108.77	5,519.00	28.61	26.72	87.97	-1,670.91	1,737.16	1,272.85	1,217.91	54.94	23.166	
7,223.03	5,583.00	7,131.80	5,519.00	28.83	26.96	87.97	-1,670.77	1,760.18	1,272.86	1,217.45	55.41	22.971	

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka Federal LD13-645 - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+MS		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: 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)			
7,300.00	5,583.00	7,208.77	5,519.00	29.58	27.74	87.97	-1,670.30	1,837.15	1,272.89	1,215.91	56.98	22.340	
7,323.03	5,583.00	7,231.80	5,519.00	29.81	27.98	87.97	-1,670.16	1,860.18	1,272.89	1,215.44	57.45	22.156	
7,400.00	5,583.00	7,308.77	5,519.00	30.58	28.79	87.97	-1,669.68	1,937.15	1,272.92	1,213.88	59.05	21.558	
7,423.03	5,583.00	7,331.80	5,519.00	30.81	29.03	87.97	-1,669.54	1,960.18	1,272.93	1,213.40	59.53	21.384	
7,500.00	5,583.00	7,408.77	5,519.00	31.59	29.84	87.97	-1,669.07	2,037.15	1,272.96	1,211.81	61.15	20.818	
7,523.03	5,583.00	7,431.80	5,519.00	31.83	30.09	87.97	-1,668.93	2,060.18	1,272.96	1,211.33	61.64	20.653	
7,600.00	5,583.00	7,508.77	5,519.00	32.62	30.92	87.97	-1,668.46	2,137.15	1,272.99	1,209.72	63.27	20.119	
7,623.03	5,583.00	7,531.80	5,519.00	32.86	31.17	87.97	-1,668.32	2,160.17	1,273.00	1,209.23	63.77	19.962	
7,700.00	5,583.00	7,608.77	5,519.00	33.66	32.00	87.97	-1,667.84	2,237.15	1,273.03	1,207.60	65.43	19.456	
7,723.03	5,583.00	7,631.80	5,519.00	33.91	32.26	87.97	-1,667.70	2,260.17	1,273.04	1,207.10	65.93	19.309	
7,800.00	5,583.00	7,708.77	5,519.00	34.72	33.10	87.97	-1,667.23	2,337.14	1,273.06	1,205.45	67.61	18.830	
7,823.03	5,583.00	7,731.80	5,519.00	34.97	33.36	87.97	-1,667.09	2,360.17	1,273.07	1,204.96	68.11	18.690	
7,900.00	5,583.00	7,808.77	5,519.00	35.79	34.22	87.97	-1,666.62	2,437.14	1,273.10	1,203.29	69.81	18.237	
7,923.03	5,583.00	7,831.80	5,519.00	36.04	34.47	87.97	-1,666.48	2,460.17	1,273.11	1,202.79	70.32	18.105	
8,000.00	5,583.00	7,908.77	5,519.00	36.88	35.34	87.97	-1,666.01	2,537.14	1,273.13	1,201.11	72.03	17.676	
8,023.03	5,583.00	7,931.80	5,519.00	37.13	35.60	87.97	-1,665.86	2,560.17	1,273.14	1,200.60	72.54	17.550	
8,100.00	5,583.00	8,008.77	5,519.00	37.97	36.47	87.97	-1,665.39	2,637.14	1,273.17	1,198.90	74.26	17.144	
8,123.03	5,583.00	8,031.80	5,519.00	38.22	36.73	87.97	-1,665.25	2,660.16	1,273.18	1,198.39	74.78	17.025	
8,200.00	5,583.00	8,108.77	5,519.00	39.07	37.60	87.97	-1,664.78	2,737.14	1,273.20	1,196.69	76.52	16.640	
8,223.03	5,583.00	8,131.80	5,519.00	39.33	37.87	87.97	-1,664.64	2,760.16	1,273.21	1,196.17	77.04	16.527	
8,300.00	5,583.00	8,208.77	5,519.00	40.18	38.75	87.97	-1,664.17	2,837.13	1,273.24	1,194.46	78.78	16.161	
8,323.03	5,583.00	8,231.80	5,519.00	40.44	39.01	87.97	-1,664.02	2,860.16	1,273.25	1,193.94	79.31	16.054	
8,400.00	5,583.00	8,308.77	5,519.00	41.30	39.90	87.97	-1,663.55	2,937.13	1,273.28	1,192.21	81.07	15.707	
8,421.70	5,583.00	8,330.48	5,519.00	41.55	40.15	87.97	-1,663.42	2,958.84	1,273.28	1,191.72	81.56	15.611	
8,494.05	5,583.00	8,402.83	5,519.00	42.36	40.99	87.97	-1,662.98	3,031.18	1,273.31	1,190.09	83.22	15.300	
8,494.18	5,583.00	8,402.95	5,519.00	42.36	40.99	87.97	-1,662.98	3,031.31	1,273.31	1,190.08	83.22	15.300	
8,500.00	5,582.99	8,408.77	5,519.00	42.43	41.06	87.97	-1,662.94	3,037.13	1,273.31	1,189.95	83.36	15.275	
8,532.50	5,582.74	8,441.27	5,519.00	42.79	41.44	87.99	-1,662.74	3,069.63	1,273.31	1,189.21	84.10	15.140	
8,538.62	5,582.66	8,447.39	5,519.00	42.86	41.51	87.99	-1,662.70	3,075.75	1,273.31	1,189.07	84.24	15.115	
8,597.42	5,581.87	8,506.05	5,518.99	43.52	42.19	88.02	-1,662.34	3,134.41	1,273.31	1,187.71	85.59	14.876	
8,600.00	5,581.84	8,508.59	5,518.98	43.55	42.22	88.03	-1,662.33	3,136.94	1,273.31	1,187.65	85.65	14.866	
8,623.40	5,581.52	8,531.94	5,518.86	43.82	42.49	88.03	-1,662.18	3,160.29	1,273.31	1,187.11	86.19	14.773	
8,700.00	5,580.49	8,608.53	5,518.45	44.69	43.39	88.06	-1,661.71	3,236.88	1,273.31	1,185.35	87.96	14.475	
8,723.41	5,580.18	8,631.94	5,518.33	44.96	43.66	88.07	-1,661.57	3,260.29	1,273.32	1,184.81	88.51	14.386	
8,800.00	5,579.15	8,708.53	5,517.93	45.84	44.56	88.10	-1,661.10	3,336.88	1,273.32	1,183.03	90.29	14.103	
8,823.40	5,578.84	8,731.93	5,517.81	46.11	44.83	88.11	-1,660.96	3,360.28	1,273.32	1,182.49	90.84	14.018	
8,900.00	5,577.81	8,808.53	5,517.40	46.99	45.74	88.14	-1,660.49	3,436.87	1,273.33	1,180.71	92.62	13.747	
8,923.40	5,577.50	8,831.93	5,517.28	47.26	46.01	88.14	-1,660.35	3,460.27	1,273.33	1,180.16	93.17	13.667	
9,000.00	5,576.47	8,908.52	5,516.88	48.14	46.92	88.17	-1,659.88	3,536.87	1,273.34	1,178.37	94.96	13.409	
9,023.40	5,576.16	8,931.92	5,516.76	48.42	47.19	88.18	-1,659.73	3,560.26	1,273.34	1,177.83	95.51	13.331	
9,100.00	5,575.13	9,008.52	5,516.35	49.31	48.10	88.21	-1,659.26	3,636.86	1,273.35	1,176.03	97.31	13.085	
9,123.40	5,574.81	9,031.92	5,516.23	49.58	48.38	88.22	-1,659.12	3,660.25	1,273.35	1,175.49	97.87	13.011	
9,200.00	5,573.79	9,108.52	5,515.83	50.47	49.29	88.25	-1,658.65	3,736.85	1,273.36	1,173.69	99.67	12.776	
9,223.39	5,573.47	9,131.91	5,515.71	50.74	49.57	88.26	-1,658.51	3,760.24	1,273.36	1,173.14	100.22	12.705	
9,300.00	5,572.44	9,208.51	5,515.30	51.64	50.48	88.28	-1,658.04	3,836.85	1,273.37	1,171.34	102.03	12.480	
9,323.39	5,572.13	9,231.90	5,515.18	51.91	50.76	88.29	-1,657.89	3,860.23	1,273.37	1,170.78	102.59	12.412	
9,400.00	5,571.10	9,308.51	5,514.78	52.81	51.67	88.32	-1,657.42	3,936.84	1,273.38	1,168.98	104.40	12.197	
9,423.39	5,570.79	9,331.89	5,514.66	53.09	51.95	88.33	-1,657.28	3,960.22	1,273.38	1,168.42	104.96	12.132	
9,500.00	5,569.76	9,408.51	5,514.25	53.99	52.87	88.36	-1,656.81	4,036.83	1,273.39	1,166.61	106.78	11.925	
9,523.38	5,569.45	9,431.89	5,514.13	54.26	53.15	88.37	-1,656.67	4,060.21	1,273.40	1,166.06	107.34	11.864	
9,600.00	5,568.42	9,508.50	5,513.73	55.17	54.07	88.39	-1,656.20	4,136.83	1,273.41	1,164.24	109.16	11.665	
9,623.38	5,568.10	9,531.88	5,513.61	55.44	54.35	88.40	-1,656.05	4,160.20	1,273.41	1,163.69	109.72	11.606	

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka Federal LD13-645 - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+MS		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: 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)			
9,700.00	5,567.08	9,608.50	5,513.20	56.35	55.27	88.43	-1,655.58	4,236.82	1,273.42	1,161.87	111.55	11.416	
9,723.37	5,566.76	9,631.87	5,513.08	56.62	55.55	88.44	-1,655.44	4,260.19	1,273.42	1,161.31	112.11	11.359	
9,800.00	5,565.73	9,708.50	5,512.68	57.53	56.47	88.47	-1,654.97	4,336.81	1,273.43	1,159.49	113.94	11.176	
9,823.37	5,565.42	9,731.87	5,512.56	57.81	56.76	88.48	-1,654.83	4,360.18	1,273.43	1,158.94	114.50	11.122	
9,900.00	5,564.39	9,808.49	5,512.15	58.72	57.68	88.50	-1,654.36	4,436.81	1,273.45	1,157.11	116.33	10.946	
9,923.36	5,564.08	9,831.86	5,512.03	59.00	57.96	88.51	-1,654.21	4,460.17	1,273.45	1,156.55	116.90	10.894	
10,000.00	5,563.05	9,908.49	5,511.63	59.91	58.89	88.54	-1,653.74	4,536.80	1,273.46	1,154.73	118.73	10.725	
10,023.36	5,562.74	9,931.85	5,511.51	60.19	59.17	88.55	-1,653.60	4,560.16	1,273.46	1,154.17	119.30	10.675	
10,100.00	5,561.71	10,008.49	5,511.10	61.10	60.10	88.58	-1,653.13	4,636.79	1,273.47	1,152.34	121.14	10.513	
10,123.36	5,561.40	10,031.84	5,510.98	61.38	60.38	88.59	-1,652.99	4,660.15	1,273.48	1,151.78	121.70	10.464	
10,200.00	5,560.37	10,108.48	5,510.58	62.30	61.31	88.61	-1,652.52	4,736.79	1,273.49	1,149.94	123.55	10.308	
10,223.35	5,560.05	10,131.83	5,510.46	62.58	61.59	88.62	-1,652.37	4,760.13	1,273.49	1,149.38	124.11	10.261	
10,300.00	5,559.02	10,208.48	5,510.05	63.49	62.52	88.65	-1,651.90	4,836.78	1,273.51	1,147.55	125.96	10.111	
10,323.34	5,558.71	10,231.82	5,509.93	63.77	62.80	88.66	-1,651.76	4,860.12	1,273.51	1,146.99	126.52	10.066	
10,400.00	5,557.68	10,308.48	5,509.53	64.69	63.73	88.69	-1,651.29	4,936.77	1,273.52	1,145.15	128.37	9.921	
10,423.34	5,557.37	10,331.81	5,509.41	64.97	64.02	88.70	-1,651.15	4,960.11	1,273.53	1,144.59	128.94	9.877	
10,500.00	5,556.34	10,408.47	5,509.00	65.89	64.95	88.72	-1,650.68	5,036.77	1,273.54	1,142.75	130.79	9.737	
10,523.33	5,556.03	10,431.80	5,508.88	66.17	65.23	88.73	-1,650.54	5,060.10	1,273.54	1,142.19	131.35	9.695	
10,600.00	5,555.00	10,508.47	5,508.48	67.10	66.17	88.76	-1,650.07	5,136.76	1,273.56	1,140.35	133.21	9.560	
10,623.33	5,554.69	10,531.79	5,508.36	67.38	66.45	88.77	-1,649.92	5,160.08	1,273.56	1,139.79	133.78	9.520	
10,700.00	5,553.66	10,608.47	5,507.95	68.30	67.38	88.80	-1,649.45	5,236.75	1,273.58	1,137.94	135.63	9.390	
10,723.32	5,553.34	10,631.78	5,507.83	68.58	67.67	88.81	-1,649.31	5,260.07	1,273.58	1,137.38	136.20	9.351	
10,800.00	5,552.32	10,708.46	5,507.43	69.51	68.60	88.84	-1,648.84	5,336.75	1,273.59	1,135.53	138.06	9.225	
10,823.31	5,552.00	10,731.77	5,507.31	69.79	68.89	88.84	-1,648.70	5,360.06	1,273.60	1,134.97	138.63	9.187	
10,900.00	5,550.97	10,808.46	5,506.90	70.71	69.82	88.87	-1,648.23	5,436.74	1,273.61	1,133.12	140.49	9.066	
10,923.30	5,550.66	10,831.76	5,506.78	71.00	70.11	88.88	-1,648.08	5,460.04	1,273.62	1,132.56	141.06	9.029	
11,000.00	5,549.63	10,908.46	5,506.38	71.92	71.04	88.91	-1,647.61	5,536.73	1,273.63	1,130.71	142.92	8.911	
11,023.29	5,549.32	10,931.75	5,506.26	72.21	71.33	88.92	-1,647.47	5,560.03	1,273.64	1,130.15	143.49	8.876	
11,100.00	5,548.29	11,008.45	5,505.85	73.13	72.27	88.95	-1,647.00	5,636.73	1,273.65	1,128.30	145.35	8.762	
11,123.28	5,547.98	11,031.74	5,505.73	73.42	72.55	88.95	-1,646.86	5,660.01	1,273.66	1,127.74	145.92	8.728	
11,200.00	5,546.95	11,108.45	5,505.33	74.35	73.49	88.98	-1,646.39	5,736.72	1,273.67	1,125.88	147.79	8.618	
11,223.28	5,546.64	11,131.72	5,505.21	74.63	73.77	88.99	-1,646.24	5,759.99	1,273.68	1,125.32	148.36	8.585	
11,300.00	5,545.61	11,208.45	5,504.80	75.56	74.71	89.02	-1,645.77	5,836.71	1,273.69	1,123.47	150.23	8.478	
11,323.26	5,545.29	11,231.71	5,504.68	75.84	75.00	89.03	-1,645.63	5,859.98	1,273.70	1,122.90	150.80	8.447	
11,400.00	5,544.26	11,308.44	5,504.28	76.77	75.94	89.06	-1,645.16	5,936.71	1,273.72	1,121.05	152.67	8.343	
11,421.94	5,543.97	11,330.38	5,504.16	77.04	76.21	89.06	-1,645.03	5,959.95	1,273.72	1,120.52	153.20	8.314	
11,494.23	5,543.00	11,402.67	5,503.78	77.92	77.09	89.09	-1,644.58	6,030.93	1,273.74	1,118.77	154.97	8.219	
11,497.47	5,542.96	11,405.91	5,503.77	77.96	77.13	89.09	-1,644.56	6,034.17	1,273.74	1,118.69	155.05	8.215	
11,508.36	5,542.85	11,416.80	5,503.71	78.09	77.27	89.09	-1,644.50	6,045.06	1,273.74	1,118.43	155.31	8.201	
11,529.37	5,542.67	11,437.81	5,503.60	78.34	77.52	89.10	-1,644.37	6,066.07	1,273.75	1,117.92	155.83	8.174	
11,600.00	5,542.07	11,508.44	5,503.23	79.20	78.39	89.11	-1,643.93	6,136.70	1,273.77	1,116.22	157.55	8.085	
11,622.89	5,541.87	11,531.32	5,503.11	79.48	78.67	89.11	-1,643.79	6,159.58	1,273.78	1,115.66	158.11	8.056	
11,700.00	5,541.22	11,608.44	5,502.70	80.42	79.62	89.12	-1,643.32	6,236.69	1,273.80	1,113.80	160.00	7.961	
11,722.88	5,541.02	11,631.31	5,502.58	80.70	79.90	89.13	-1,643.18	6,259.57	1,273.81	1,113.25	160.56	7.934	
11,800.00	5,540.37	11,708.44	5,502.18	81.64	80.85	89.14	-1,642.71	6,336.69	1,273.83	1,111.39	162.44	7.842	
11,822.87	5,540.18	11,731.31	5,502.06	81.92	81.13	89.14	-1,642.57	6,359.55	1,273.84	1,110.83	163.00	7.815	
11,900.00	5,539.52	11,808.44	5,501.65	82.86	82.07	89.15	-1,642.09	6,436.68	1,273.86	1,108.97	164.89	7.725	
11,922.86	5,539.33	11,831.30	5,501.53	83.14	82.36	89.15	-1,641.95	6,459.54	1,273.87	1,108.41	165.45	7.699	
12,000.00	5,538.67	11,908.44	5,501.13	84.08	83.30	89.17	-1,641.48	6,536.68	1,273.89	1,106.55	167.34	7.612	
12,022.85	5,538.48	11,931.28	5,501.01	84.36	83.59	89.17	-1,641.34	6,559.53	1,273.90	1,105.99	167.90	7.587	
12,100.00	5,537.82	12,008.44	5,500.60	85.30	84.53	89.18	-1,640.87	6,636.68	1,273.92	1,104.13	169.79	7.503	
12,122.84	5,537.63	12,031.27	5,500.48	85.58	84.81	89.18	-1,640.73	6,659.51	1,273.93	1,103.57	170.35	7.478	

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka Federal LD13-645 - OH - Plan #1													Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS		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	
12,200.00	5,536.98	12,108.44	5,500.08	86.52	85.76	89.19	-1,640.26	6,736.67	1,273.95	1,101.71	172.25	7.396		
12,222.83	5,536.78	12,131.26	5,499.96	86.80	86.05	89.20	-1,640.12	6,759.50	1,273.96	1,101.15	172.81	7.372		
12,300.00	5,536.13	12,208.44	5,499.55	87.74	87.00	89.21	-1,639.64	6,836.67	1,273.98	1,099.28	174.70	7.292		
12,322.82	5,535.93	12,231.25	5,499.43	88.02	87.28	89.21	-1,639.50	6,859.48	1,273.99	1,098.73	175.26	7.269		
12,400.00	5,535.28	12,308.44	5,499.03	88.97	88.23	89.22	-1,639.03	6,936.67	1,274.01	1,096.86	177.16	7.191		
12,422.80	5,535.09	12,331.24	5,498.91	89.25	88.51	89.23	-1,638.89	6,959.47	1,274.02	1,096.30	177.72	7.169		
12,500.00	5,534.43	12,408.43	5,498.50	90.19	89.46	89.24	-1,638.42	7,036.66	1,274.05	1,094.43	179.61	7.093		
12,522.79	5,534.24	12,431.23	5,498.38	90.47	89.74	89.24	-1,638.28	7,059.45	1,274.05	1,093.88	180.17	7.071		
12,600.00	5,533.58	12,508.43	5,497.98	91.41	90.69	89.25	-1,637.80	7,136.66	1,274.08	1,092.01	182.07	6.998		
12,622.78	5,533.39	12,531.21	5,497.86	91.69	90.97	89.26	-1,637.66	7,159.44	1,274.08	1,091.45	182.63	6.976		
12,700.00	5,532.73	12,608.43	5,497.45	92.64	91.92	89.27	-1,637.19	7,236.65	1,274.11	1,089.58	184.53	6.905		
12,722.77	5,532.54	12,631.20	5,497.33	92.92	92.21	89.27	-1,637.05	7,259.42	1,274.12	1,089.02	185.09	6.884		
12,800.00	5,531.88	12,708.43	5,496.93	93.87	93.16	89.28	-1,636.58	7,336.65	1,274.14	1,087.15	186.99	6.814		
12,822.75	5,531.69	12,731.19	5,496.81	94.15	93.44	89.29	-1,636.44	7,359.40	1,274.15	1,086.60	187.55	6.794		
12,900.00	5,531.04	12,808.43	5,496.40	95.09	94.39	89.30	-1,635.96	7,436.65	1,274.17	1,084.72	189.45	6.726		
12,922.74	5,530.84	12,831.17	5,496.28	95.37	94.67	89.30	-1,635.82	7,459.39	1,274.18	1,084.17	190.01	6.706		
13,000.00	5,530.19	12,908.43	5,495.88	96.32	95.63	89.31	-1,635.35	7,536.64	1,274.20	1,082.29	191.91	6.639		
13,022.72	5,529.99	12,931.16	5,495.76	96.60	95.91	89.31	-1,635.21	7,559.37	1,274.21	1,081.74	192.47	6.620		
13,100.00	5,529.34	13,008.43	5,495.35	97.55	96.86	89.33	-1,634.74	7,636.64	1,274.23	1,079.86	194.38	6.555		
13,122.71	5,529.15	13,031.14	5,495.23	97.83	97.14	89.33	-1,634.60	7,659.35	1,274.24	1,079.30	194.94	6.537		
13,200.00	5,528.49	13,108.43	5,494.83	98.78	98.10	89.34	-1,634.12	7,736.64	1,274.27	1,077.42	196.84	6.474		
13,222.69	5,528.30	13,131.12	5,494.71	99.06	98.38	89.34	-1,633.98	7,759.33	1,274.27	1,076.87	197.40	6.455		
13,300.00	5,527.64	13,208.43	5,494.30	100.01	99.33	89.36	-1,633.51	7,836.63	1,274.30	1,074.99	199.31	6.394		
13,322.68	5,527.45	13,231.11	5,494.18	100.28	99.61	89.36	-1,633.37	7,859.31	1,274.30	1,074.44	199.86	6.376		
13,400.00	5,526.79	13,308.43	5,493.78	101.24	100.57	89.37	-1,632.90	7,936.63	1,274.33	1,072.56	201.77	6.316		
13,422.66	5,526.60	13,331.09	5,493.66	101.51	100.85	89.37	-1,632.76	7,959.29	1,274.34	1,072.01	202.33	6.298		
13,500.00	5,525.94	13,408.43	5,493.25	102.47	101.80	89.38	-1,632.28	8,036.62	1,274.36	1,070.12	204.24	6.240		
13,522.64	5,525.75	13,431.07	5,493.14	102.74	102.08	89.39	-1,632.15	8,059.26	1,274.37	1,069.57	204.80	6.223		
13,600.00	5,525.10	13,508.43	5,492.73	103.70	103.04	89.40	-1,631.67	8,136.62	1,274.39	1,067.69	206.71	6.165		
13,622.62	5,524.90	13,531.05	5,492.61	103.97	103.32	89.40	-1,631.53	8,159.24	1,274.40	1,067.14	207.26	6.149		
13,700.00	5,524.25	13,608.43	5,492.20	104.93	104.28	89.41	-1,631.06	8,236.62	1,274.43	1,065.25	209.17	6.093		
13,722.60	5,524.05	13,631.03	5,492.09	105.20	104.56	89.42	-1,630.92	8,259.22	1,274.43	1,064.70	209.73	6.077		
13,800.00	5,523.40	13,708.43	5,491.68	106.16	105.51	89.43	-1,630.44	8,336.61	1,274.46	1,062.82	211.64	6.022		
13,822.58	5,523.21	13,731.01	5,491.56	106.44	105.79	89.43	-1,630.31	8,359.19	1,274.47	1,062.27	212.20	6.006		
13,900.00	5,522.55	13,808.43	5,491.15	107.39	106.75	89.44	-1,629.83	8,436.61	1,274.49	1,060.38	214.11	5.952		
13,922.56	5,522.36	13,830.98	5,491.04	107.67	107.03	89.45	-1,629.69	8,459.17	1,274.50	1,059.83	214.67	5.937		
14,000.00	5,521.70	13,908.43	5,490.63	108.62	107.99	89.46	-1,629.22	8,536.61	1,274.52	1,057.94	216.58	5.885		
14,022.53	5,521.51	13,930.96	5,490.51	108.90	108.27	89.46	-1,629.08	8,559.14	1,274.53	1,057.39	217.14	5.870		
14,100.00	5,520.85	14,008.43	5,490.10	109.85	109.23	89.47	-1,628.61	8,636.60	1,274.55	1,055.50	219.05	5.818		
14,122.51	5,520.66	14,030.93	5,489.99	110.13	109.51	89.47	-1,628.47	8,659.11	1,274.56	1,054.95	219.61	5.804		
14,200.00	5,520.00	14,108.43	5,489.58	111.09	110.46	89.49	-1,627.99	8,736.60	1,274.59	1,053.06	221.52	5.754		
14,222.48	5,519.81	14,130.91	5,489.46	111.36	110.74	89.49	-1,627.85	8,759.08	1,274.59	1,052.51	222.08	5.739		
14,300.00	5,519.15	14,208.43	5,489.05	112.32	111.70	89.50	-1,627.38	8,836.59	1,274.62	1,050.62	224.00	5.690		
14,322.45	5,518.96	14,230.88	5,488.94	112.60	111.98	89.50	-1,627.24	8,859.05	1,274.63	1,050.08	224.55	5.676		
14,400.00	5,518.31	14,308.42	5,488.53	113.55	112.94	89.52	-1,626.77	8,936.59	1,274.65	1,048.18	226.47	5.628		
14,422.42	5,518.12	14,330.85	5,488.41	113.83	113.22	89.52	-1,626.63	8,959.01	1,274.66	1,047.64	227.02	5.615		
14,500.00	5,517.46	14,408.42	5,488.00	114.79	114.18	89.53	-1,626.15	9,036.59	1,274.69	1,045.74	228.94	5.568		
14,522.39	5,517.27	14,430.82	5,487.89	115.06	114.46	89.53	-1,626.02	9,058.98	1,274.69	1,045.20	229.50	5.554		
14,600.00	5,516.61	14,508.42	5,487.48	116.02	115.42	89.54	-1,625.54	9,136.58	1,274.72	1,043.30	231.42	5.508		
14,622.36	5,516.42	14,530.78	5,487.36	116.30	115.70	89.55	-1,625.40	9,158.94	1,274.73	1,042.76	231.97	5.495		
14,700.00	5,515.76	14,608.42	5,486.95	117.26	116.66	89.56	-1,624.93	9,236.58	1,274.75	1,040.86	233.89	5.450		
14,722.32	5,515.57	14,630.74	5,486.84	117.53	116.94	89.56	-1,624.79	9,258.90	1,274.76	1,040.32	234.44	5.437		

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka Federal LD13-645 - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+MS													Offset Well Error: 0.00 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Rule Assigned:	Distance	Minimum	Separation	Warning				
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	Factor	
14,800.00	5,514.91	14,708.42	5,486.43	118.49	117.90	89.57	-1,624.31	9,336.58	1,274.78	1,038.42	236.37	5.393	
14,822.28	5,514.72	14,730.70	5,486.31	118.77	118.18	89.58	-1,624.18	9,358.86	1,274.79	1,037.87	236.92	5.381	
14,900.00	5,514.06	14,808.42	5,485.90	119.73	119.14	89.59	-1,623.70	9,436.57	1,274.82	1,035.98	238.84	5.338	
14,922.24	5,513.87	14,830.66	5,485.79	120.00	119.41	89.59	-1,623.56	9,458.81	1,274.82	1,035.43	239.39	5.325	
15,000.00	5,513.21	14,908.42	5,485.38	120.96	120.38	89.60	-1,623.09	9,536.57	1,274.85	1,033.53	241.32	5.283	
15,022.19	5,513.03	14,930.62	5,485.26	121.24	120.65	89.61	-1,622.95	9,558.76	1,274.86	1,032.99	241.87	5.271	
15,100.00	5,512.37	15,008.42	5,484.85	122.20	121.62	89.62	-1,622.47	9,636.56	1,274.88	1,031.09	243.79	5.229	
15,122.15	5,512.18	15,030.57	5,484.74	122.47	121.89	89.62	-1,622.34	9,658.71	1,274.89	1,030.55	244.34	5.218	
15,200.00	5,511.52	15,108.42	5,484.33	123.44	122.86	89.63	-1,621.86	9,736.56	1,274.92	1,028.65	246.27	5.177	
15,222.09	5,511.33	15,130.51	5,484.21	123.71	123.13	89.64	-1,621.73	9,758.65	1,274.92	1,028.11	246.82	5.165	
15,300.00	5,510.67	15,208.42	5,483.80	124.67	124.10	89.65	-1,621.25	9,836.56	1,274.95	1,026.20	248.75	5.125	
15,322.04	5,510.48	15,230.46	5,483.69	124.94	124.37	89.65	-1,621.11	9,858.59	1,274.96	1,025.66	249.29	5.114	
15,400.00	5,509.82	15,308.42	5,483.28	125.91	125.34	89.66	-1,620.63	9,936.55	1,274.98	1,023.76	251.23	5.075	
15,421.97	5,509.63	15,330.39	5,483.16	126.18	125.61	89.66	-1,620.50	9,958.52	1,274.99	1,023.22	251.77	5.064	
15,500.00	5,508.97	15,408.42	5,482.75	127.15	126.58	89.68	-1,620.02	10,036.55	1,275.02	1,021.31	253.70	5.026	
15,521.90	5,508.79	15,430.32	5,482.64	127.42	126.85	89.68	-1,619.89	10,058.45	1,275.02	1,020.78	254.25	5.015	
15,600.00	5,508.12	15,508.42	5,482.23	128.38	127.82	89.69	-1,619.41	10,136.54	1,275.05	1,018.87	256.18	4.977	
15,621.83	5,507.94	15,530.25	5,482.11	128.65	128.09	89.69	-1,619.27	10,158.37	1,275.06	1,018.33	256.72	4.967	
15,700.00	5,507.27	15,608.42	5,481.70	129.62	129.06	89.70	-1,618.80	10,236.54	1,275.08	1,016.42	258.66	4.930	
15,721.75	5,507.09	15,630.16	5,481.59	129.89	129.33	89.71	-1,618.66	10,258.28	1,275.09	1,015.89	259.20	4.919	
15,800.00	5,506.43	15,708.42	5,481.18	130.86	130.31	89.72	-1,618.18	10,336.54	1,275.12	1,013.98	261.14	4.883	
15,821.65	5,506.24	15,730.07	5,481.07	131.13	130.58	89.72	-1,618.05	10,358.19	1,275.13	1,013.45	261.68	4.873	
15,900.00	5,505.58	15,808.42	5,480.65	132.10	131.55	89.73	-1,617.57	10,436.53	1,275.15	1,011.53	263.62	4.837	
15,921.55	5,505.39	15,829.96	5,480.54	132.36	131.82	89.74	-1,617.44	10,458.08	1,275.16	1,011.00	264.16	4.827	
16,000.00	5,504.73	15,908.42	5,480.13	133.33	132.79	89.75	-1,616.96	10,536.53	1,275.19	1,009.09	266.10	4.792	
16,021.43	5,504.55	15,929.85	5,480.02	133.60	133.06	89.75	-1,616.82	10,557.96	1,275.19	1,008.56	266.63	4.783	
16,100.00	5,503.88	16,008.42	5,479.60	134.57	134.03	89.76	-1,616.34	10,636.53	1,275.22	1,006.64	268.58	4.748	
16,122.09	5,503.69	16,030.50	5,479.49	134.85	134.31	89.77	-1,616.21	10,658.61	1,275.23	1,006.10	269.13	4.738	
16,203.62	5,503.00	16,112.04	5,479.06	135.86	135.32	89.78	-1,615.71	10,740.15	1,275.26	1,004.10	271.15	4.703 ES, SF	

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka LD13-650 - OH - Plan #1													Offset Site Error:	0.00 usft			
Survey Program: 0-MWD+IFR1+MS				Reference		Offset		Semi Major Axis		Highside		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)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning				
0.00	0.00	0.00	0.00	0.00	0.00	178.87	-28.05	0.55	28.06								
100.00	100.00	100.00	100.00	0.88	0.88	178.87	-28.05	0.55	28.06	26.29	1.77	15.873					
200.00	200.00	200.00	200.00	1.50	1.50	178.87	-28.05	0.55	28.06	25.05	3.00	9.340					
300.00	300.00	300.00	300.00	1.94	1.94	178.87	-28.05	0.55	28.06	24.19	3.87	7.250					
400.00	400.00	400.00	400.00	2.29	2.29	178.87	-28.05	0.55	28.06	23.48	4.58	6.125					
500.00	500.00	500.00	500.00	2.60	2.60	178.87	-28.05	0.55	28.06	22.86	5.20	5.396	CC, ES				
600.00	600.00	599.01	598.99	2.88	3.04	179.56	-29.73	0.23	29.75	23.84	5.91	5.037					
700.00	699.99	697.86	697.71	3.19	3.43	-26.25	-34.76	-0.74	33.67	27.07	6.59	5.107					
800.00	799.91	796.52	795.99	3.49	3.83	-26.42	-43.11	-2.36	38.62	31.37	7.25	5.328					
900.00	899.69	894.94	893.69	3.80	4.23	-27.19	-54.74	-4.61	44.62	36.71	7.91	5.641					
964.87	964.31	958.63	956.68	3.93	4.49	-27.89	-64.02	-6.40	49.06	40.79	8.27	5.933					
1,000.00	999.29	993.07	990.63	3.99	4.64	-28.24	-69.61	-7.49	51.79	43.35	8.44	6.133					
1,100.00	1,098.83	1,090.68	1,086.50	4.29	5.07	-28.57	-87.63	-10.97	61.82	52.69	9.13	6.774					
1,200.00	1,198.37	1,189.65	1,183.28	4.60	5.42	-28.42	-107.95	-14.90	73.93	64.16	9.77	7.570					
1,300.00	1,297.92	1,288.91	1,280.34	4.93	5.78	-28.31	-128.36	-18.85	86.07	75.64	10.43	8.254					
1,400.00	1,397.46	1,388.17	1,377.40	5.26	6.15	-28.23	-148.77	-22.80	98.21	87.09	11.11	8.838					
1,500.00	1,497.01	1,487.43	1,474.46	5.61	6.53	-28.17	-169.18	-26.75	110.35	98.53	11.82	9.339					
1,600.00	1,596.55	1,586.69	1,571.52	5.96	6.93	-28.11	-189.60	-30.70	122.49	109.96	12.53	9.773					
1,700.00	1,696.09	1,685.95	1,668.58	6.31	7.33	-28.07	-210.01	-34.65	134.63	121.36	13.27	10.149					
1,800.00	1,795.64	1,785.21	1,765.64	6.67	7.74	-28.04	-230.42	-38.60	146.77	132.76	14.01	10.478					
1,900.00	1,895.18	1,884.47	1,862.69	7.04	8.16	-28.01	-250.83	-42.55	158.91	144.15	14.76	10.768					
2,000.00	1,994.73	1,983.73	1,959.75	7.41	8.58	-27.98	-271.24	-46.50	171.05	155.54	15.52	11.024					
2,100.00	2,094.27	2,082.99	2,056.81	7.78	9.01	-27.96	-291.65	-50.45	183.20	166.91	16.28	11.251					
2,200.00	2,193.81	2,182.25	2,153.87	8.15	9.45	-27.94	-312.07	-54.39	195.34	178.28	17.05	11.454					
2,300.00	2,293.36	2,281.51	2,250.93	8.52	9.88	-27.92	-332.48	-58.34	207.48	189.65	17.83	11.636					
2,400.00	2,392.90	2,380.77	2,347.99	8.90	10.32	-27.91	-352.89	-62.29	219.62	201.01	18.61	11.800					
2,500.00	2,492.45	2,480.03	2,445.04	9.28	10.76	-27.89	-373.30	-66.24	231.76	212.36	19.40	11.949					
2,600.00	2,591.99	2,579.29	2,542.10	9.66	11.21	-27.88	-393.71	-70.19	243.90	223.72	20.18	12.084					
2,700.00	2,691.54	2,678.55	2,639.16	10.04	11.66	-27.87	-414.13	-74.14	256.04	235.07	20.98	12.207					
2,800.00	2,791.08	2,777.81	2,736.22	10.42	12.10	-27.86	-434.54	-78.09	268.18	246.42	21.77	12.320					
2,900.00	2,890.62	2,877.07	2,833.28	10.81	12.55	-27.85	-454.95	-82.04	280.33	257.76	22.57	12.423					
3,000.00	2,990.17	2,976.33	2,930.34	11.19	13.01	-27.84	-475.36	-85.99	292.47	269.10	23.36	12.518					
3,100.00	3,089.71	3,075.59	3,027.40	11.58	13.46	-27.83	-495.77	-89.94	304.61	280.44	24.16	12.606					
3,200.00	3,189.26	3,174.85	3,124.45	11.96	13.92	-27.83	-516.18	-93.89	316.75	291.78	24.97	12.687					
3,300.00	3,288.80	3,274.11	3,221.51	12.35	14.37	-27.82	-536.60	-97.84	328.89	303.12	25.77	12.763					
3,400.00	3,388.34	3,373.37	3,318.57	12.74	14.83	-27.81	-557.01	-101.78	341.03	314.46	26.58	12.833					
3,500.00	3,487.89	3,472.63	3,415.63	13.12	15.29	-27.81	-577.42	-105.73	353.17	325.79	27.38	12.898					
3,600.00	3,587.43	3,571.89	3,512.69	13.51	15.74	-27.80	-597.83	-109.68	365.32	337.13	28.19	12.959					
3,700.00	3,686.98	3,671.15	3,609.75	13.90	16.20	-27.80	-618.24	-113.63	377.46	348.46	29.00	13.016					
3,800.00	3,786.52	3,770.41	3,706.80	14.29	16.66	-27.79	-638.66	-117.58	389.60	359.79	29.81	13.070					
3,900.00	3,886.06	3,869.67	3,803.86	14.68	17.13	-27.79	-659.07	-121.53	401.74	371.12	30.62	13.120					
4,000.00	3,985.61	3,968.93	3,900.92	15.07	17.59	-27.78	-679.48	-125.48	413.88	382.45	31.43	13.168					
4,100.00	4,085.15	4,068.19	3,997.98	15.46	18.05	-27.78	-699.89	-129.43	426.02	393.78	32.24	13.213					
4,200.00	4,184.70	4,167.45	4,095.04	15.85	18.51	-27.78	-720.30	-133.38	438.16	405.11	33.06	13.255					
4,300.00	4,284.24	4,266.71	4,192.10	16.24	18.98	-27.77	-740.71	-137.33	450.31	416.43	33.87	13.295					
4,400.00	4,383.79	4,365.98	4,289.16	16.63	19.44	-27.77	-761.13	-141.28	462.45	427.76	34.69	13.333					
4,500.00	4,483.33	4,465.24	4,386.21	17.02	19.90	-27.77	-781.54	-145.22	474.59	439.09	35.50	13.368					
4,600.00	4,582.87	4,564.50	4,483.27	17.41	20.37	-27.76	-801.95	-149.17	486.73	450.41	36.32	13.402					
4,700.00	4,682.42	4,663.76	4,580.33	17.81	20.83	-27.76	-822.36	-153.12	498.87	461.74	37.13	13.435					
4,800.00	4,781.96	4,763.02	4,677.39	18.20	21.30	-27.76	-842.77	-157.07	511.01	473.06	37.95	13.466					
4,856.88	4,838.58	4,819.47	4,732.60	18.41	21.56	-27.76	-854.38	-159.32	517.92	479.52	38.40	13.487					
4,900.00	4,881.54	4,862.25	4,774.42	18.56	21.76	10.04	-863.18	-161.02	523.13	484.36	38.77	13.493					

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka LD13-650 - OH - Plan #1													Offset Site Error:
Survey Program: 0-MWD+IFR1+MS													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Distance Between Centres (usft)		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)					
4,950.00	4,931.28	4,911.66	4,822.73	18.70	21.99	44.24	-873.34	-162.99	529.13	489.87	39.26	13.477	
5,000.00	4,980.72	4,960.71	4,870.72	18.75	22.21	60.44	-883.43	-164.39	535.14	495.39	39.74	13.464	
5,050.00	5,029.61	5,010.14	4,919.06	18.76	22.42	68.66	-893.57	-162.72	541.19	501.00	40.19	13.465	
5,100.00	5,077.73	5,060.14	4,967.72	18.74	22.62	73.53	-903.76	-157.56	547.26	506.66	40.60	13.479	
5,150.00	5,124.83	5,110.73	5,016.49	18.71	22.79	76.76	-913.94	-148.83	553.33	512.36	40.96	13.508	
5,200.00	5,170.69	5,161.93	5,065.11	18.67	22.93	79.07	-924.08	-136.44	559.34	518.07	41.27	13.552	
5,250.00	5,215.08	5,213.76	5,113.32	18.63	23.04	80.83	-934.10	-120.31	565.27	523.74	41.53	13.610	
5,300.00	5,257.79	5,266.24	5,160.85	18.59	23.13	82.23	-943.95	-100.40	571.09	529.34	41.75	13.679	
5,350.00	5,298.60	5,319.38	5,207.40	18.55	23.20	83.37	-953.58	-76.67	576.74	534.82	41.92	13.757	
5,400.00	5,337.32	5,373.18	5,252.65	18.52	23.27	84.32	-962.91	-49.11	582.21	540.14	42.07	13.841	
5,450.00	5,373.77	5,427.66	5,296.28	18.50	23.32	85.13	-971.87	-17.77	587.44	545.26	42.18	13.927	
5,500.00	5,407.75	5,482.80	5,337.94	18.49	23.38	85.82	-980.39	17.32	592.41	550.14	42.27	14.014	
5,550.00	5,439.11	5,538.60	5,377.29	18.49	23.43	86.43	-988.41	56.04	597.06	554.71	42.35	14.098	
5,600.00	5,467.70	5,595.03	5,413.96	18.52	23.49	86.95	-995.84	98.26	601.38	558.95	42.43	14.174	
5,650.00	5,493.37	5,652.06	5,447.61	18.57	23.55	87.41	-1,002.61	143.78	605.31	562.80	42.51	14.240	
5,700.00	5,516.01	5,709.65	5,477.88	18.63	23.63	87.80	-1,008.66	192.39	608.83	566.23	42.60	14.291	
5,750.00	5,535.49	5,767.77	5,504.47	18.73	23.72	88.14	-1,013.91	243.78	611.91	569.19	42.72	14.324	
5,800.00	5,551.73	5,826.35	5,527.05	18.84	23.83	88.42	-1,018.30	297.64	614.52	571.65	42.87	14.335	
5,850.00	5,564.64	5,885.33	5,545.36	18.98	23.96	88.65	-1,021.79	353.58	616.63	573.58	43.05	14.322	
5,900.00	5,574.16	5,944.65	5,559.18	19.15	24.12	88.83	-1,024.32	411.19	618.23	574.94	43.29	14.282	
5,950.00	5,580.26	6,004.22	5,568.31	19.34	24.30	88.97	-1,025.86	470.02	619.29	575.73	43.57	14.215	
6,000.00	5,582.89	6,063.96	5,572.63	19.55	24.50	89.06	-1,026.38	529.58	619.81	575.91	43.90	14.119	
6,012.82	5,583.00	6,079.29	5,572.96	19.61	24.56	89.07	-1,026.35	544.92	619.86	575.86	43.99	14.090	
6,033.95	5,583.00	6,101.71	5,573.00	19.71	24.64	89.08	-1,026.22	567.33	619.86	575.69	44.17	14.033	
6,100.00	5,583.00	6,167.76	5,573.00	20.04	24.92	89.08	-1,025.79	633.38	619.87	575.08	44.78	13.842	
6,123.26	5,583.00	6,191.01	5,573.00	20.17	25.01	89.08	-1,025.64	656.63	619.87	574.86	45.01	13.771	
6,200.00	5,583.00	6,267.76	5,573.00	20.59	25.37	89.08	-1,025.14	733.38	619.87	574.06	45.81	13.532	
6,223.26	5,583.00	6,291.01	5,573.00	20.73	25.48	89.08	-1,024.99	756.63	619.87	573.81	46.06	13.457	
6,300.00	5,583.00	6,367.76	5,573.00	21.20	25.88	89.08	-1,024.50	833.37	619.87	572.93	46.94	13.205	
6,323.26	5,583.00	6,391.01	5,573.00	21.35	26.00	89.08	-1,024.35	856.63	619.87	572.65	47.22	13.127	
6,400.00	5,583.00	6,467.76	5,573.00	21.86	26.44	89.08	-1,023.85	933.37	619.88	571.70	48.18	12.866	
6,423.26	5,583.00	6,491.01	5,573.00	22.03	26.57	89.08	-1,023.70	956.63	619.88	571.39	48.48	12.785	
6,500.00	5,583.00	6,567.76	5,573.00	22.57	27.04	89.08	-1,023.21	1,033.37	619.88	570.37	49.51	12.519	
6,523.26	5,583.00	6,591.01	5,573.00	22.75	27.19	89.08	-1,023.06	1,056.62	619.88	570.04	49.84	12.438	
6,600.00	5,583.00	6,667.76	5,573.00	23.33	27.69	89.08	-1,022.56	1,133.37	619.88	568.95	50.94	12.170	
6,623.26	5,583.00	6,691.01	5,573.00	23.52	27.84	89.08	-1,022.41	1,156.62	619.89	568.61	51.28	12.089	
6,700.00	5,583.00	6,767.76	5,573.00	24.13	28.38	89.08	-1,021.92	1,233.36	619.89	567.45	52.44	11.822	
6,723.26	5,583.00	6,791.01	5,573.00	24.32	28.54	89.08	-1,021.77	1,256.62	619.89	567.09	52.80	11.741	
6,800.00	5,583.00	6,867.76	5,573.00	24.96	29.10	89.08	-1,021.27	1,333.36	619.89	565.88	54.01	11.477	
6,823.26	5,583.00	6,891.01	5,573.00	25.17	29.27	89.08	-1,021.12	1,356.62	619.89	565.50	54.39	11.397	
6,900.00	5,583.00	6,967.76	5,573.00	25.83	29.86	89.08	-1,020.63	1,433.36	619.89	564.24	55.65	11.138	
6,923.26	5,583.00	6,991.01	5,573.00	26.04	30.04	89.08	-1,020.48	1,456.62	619.90	563.85	56.05	11.061	
7,000.00	5,583.00	7,067.76	5,573.00	26.73	30.65	89.08	-1,019.98	1,533.36	619.90	562.54	57.36	10.808	
7,023.26	5,583.00	7,091.01	5,573.00	26.95	30.83	89.08	-1,019.83	1,556.61	619.90	562.14	57.76	10.732	
7,100.00	5,583.00	7,167.76	5,573.00	27.66	31.47	89.08	-1,019.34	1,633.36	619.90	560.79	59.12	10.486	
7,123.26	5,583.00	7,191.01	5,573.00	27.88	31.66	89.08	-1,019.19	1,656.61	619.90	560.37	59.53	10.413	
7,200.00	5,583.00	7,267.76	5,573.00	28.61	32.31	89.08	-1,018.69	1,733.35	619.91	558.98	60.93	10.175	
7,223.26	5,583.00	7,291.01	5,573.00	28.84	32.51	89.08	-1,018.54	1,756.61	619.91	558.55	61.36	10.104	
7,300.00	5,583.00	7,367.76	5,573.00	29.58	33.18	89.08	-1,018.05	1,833.35	619.91	557.12	62.78	9.874	
7,323.26	5,583.00	7,391.01	5,573.00	29.81	33.39	89.08	-1,017.90	1,856.61	619.91	556.69	63.22	9.805	
7,400.00	5,583.00	7,467.76	5,573.00	30.58	34.08	89.08	-1,017.40	1,933.35	619.91	555.23	64.68	9.584	
7,423.26	5,583.00	7,491.01	5,573.00	30.81	34.29	89.08	-1,017.25	1,956.61	619.91	554.78	65.13	9.518	

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka LD13-650 - OH - Plan #1											Offset Site Error: 0.00 usft		
Survey Program: 0-MWD+IFR1+MS								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
7,500.00	5,583.00	7,567.76	5,573.00	31.59	34.99	89.08	-1,016.76	2,033.35	619.92	553.29	66.62	9.305	
7,523.26	5,583.00	7,591.01	5,573.00	31.83	35.21	89.08	-1,016.61	2,056.60	619.92	552.84	67.08	9.241	
7,600.00	5,583.00	7,667.76	5,573.00	32.62	35.93	89.08	-1,016.11	2,133.35	619.92	551.32	68.60	9.037	
7,623.26	5,583.00	7,691.01	5,573.00	32.86	36.15	89.08	-1,015.96	2,156.60	619.92	550.86	69.06	8.976	
7,700.00	5,583.00	7,767.76	5,573.00	33.66	36.88	89.08	-1,015.47	2,233.34	619.92	549.32	70.61	8.780	
7,723.26	5,583.00	7,791.01	5,573.00	33.91	37.11	89.08	-1,015.32	2,256.60	619.92	548.85	71.08	8.722	
7,800.00	5,583.00	7,867.76	5,573.00	34.72	37.85	89.08	-1,014.82	2,333.34	619.93	547.28	72.64	8.534	
7,823.26	5,583.00	7,891.01	5,573.00	34.97	38.08	89.08	-1,014.67	2,356.60	619.93	546.80	73.12	8.478	
7,900.00	5,583.00	7,967.76	5,573.00	35.79	38.84	89.08	-1,014.18	2,433.34	619.93	545.22	74.71	8.298	
7,923.26	5,583.00	7,991.01	5,573.00	36.05	39.07	89.08	-1,014.03	2,456.59	619.93	544.74	75.19	8.244	
8,000.00	5,583.00	8,067.76	5,573.00	36.88	39.84	89.08	-1,013.53	2,533.34	619.93	543.13	76.80	8.072	
8,023.26	5,583.00	8,091.01	5,573.00	37.13	40.07	89.08	-1,013.38	2,556.59	619.93	542.64	77.29	8.021	
8,100.00	5,583.00	8,167.76	5,573.00	37.97	40.85	89.08	-1,012.89	2,633.34	619.94	541.02	78.92	7.856	
8,123.26	5,583.00	8,191.01	5,573.00	38.23	41.09	89.08	-1,012.74	2,656.59	619.94	540.53	79.41	7.807	
8,200.00	5,583.00	8,267.76	5,573.00	39.07	41.88	89.08	-1,012.24	2,733.33	619.94	538.89	81.05	7.649	
8,223.26	5,583.00	8,291.01	5,573.00	39.33	42.12	89.08	-1,012.09	2,756.59	619.94	538.39	81.55	7.602	
8,300.00	5,583.00	8,367.76	5,573.00	40.18	42.92	89.08	-1,011.60	2,833.33	619.94	536.73	83.21	7.450	
8,323.26	5,583.00	8,391.01	5,573.00	40.44	43.16	89.08	-1,011.45	2,856.59	619.94	536.23	83.71	7.406	
8,400.00	5,583.00	8,467.76	5,573.00	41.30	43.97	89.08	-1,010.95	2,933.33	619.95	534.56	85.38	7.261	
8,421.22	5,583.00	8,488.98	5,573.00	41.54	44.19	89.08	-1,010.81	2,954.55	619.95	534.10	85.85	7.222	
8,494.05	5,583.00	8,561.68	5,572.43	42.36	44.96	89.02	-1,010.34	3,027.25	619.96	532.50	87.46	7.089	
8,494.17	5,583.00	8,561.79	5,572.43	42.36	44.96	89.02	-1,010.34	3,027.36	619.96	532.50	87.46	7.088	
8,500.00	5,582.99	8,567.63	5,572.35	42.43	45.02	89.02	-1,010.31	3,033.19	619.96	532.37	87.59	7.078	
8,507.49	5,582.97	8,575.12	5,572.26	42.51	45.10	89.01	-1,010.26	3,040.68	619.96	532.20	87.76	7.064	
8,532.50	5,582.74	8,600.12	5,571.94	42.79	45.37	89.00	-1,010.10	3,065.69	619.96	531.66	88.31	7.020	
8,548.28	5,582.53	8,615.90	5,571.74	42.97	45.54	89.00	-1,009.99	3,081.46	619.97	531.31	88.66	6.993	
8,600.00	5,581.84	8,667.63	5,571.09	43.55	46.09	89.01	-1,009.66	3,133.18	619.97	530.17	89.80	6.904	
8,623.35	5,581.52	8,690.97	5,570.80	43.82	46.34	89.01	-1,009.51	3,156.53	619.97	529.65	90.31	6.865	
8,700.00	5,580.49	8,767.63	5,569.83	44.69	47.17	89.01	-1,009.02	3,233.17	619.97	527.95	92.02	6.738	
8,723.35	5,580.18	8,790.97	5,569.54	44.96	47.42	89.02	-1,008.87	3,256.52	619.97	527.43	92.54	6.700	
8,800.00	5,579.15	8,867.63	5,568.57	45.84	48.25	89.02	-1,008.37	3,333.16	619.97	525.72	94.25	6.578	
8,823.35	5,578.84	8,890.97	5,568.27	46.11	48.51	89.02	-1,008.22	3,356.51	619.97	525.20	94.77	6.542	
8,900.00	5,577.81	8,967.63	5,567.31	46.99	49.35	89.03	-1,007.73	3,433.15	619.97	523.48	96.49	6.425	
8,923.35	5,577.50	8,990.97	5,567.01	47.26	49.60	89.03	-1,007.58	3,456.50	619.97	522.95	97.02	6.390	
9,000.00	5,576.47	9,067.63	5,566.05	48.14	50.45	89.04	-1,007.08	3,533.14	619.97	521.22	98.75	6.278	
9,023.35	5,576.16	9,090.97	5,565.75	48.42	50.71	89.04	-1,006.93	3,556.49	619.98	520.69	99.28	6.245	
9,100.00	5,575.13	9,167.63	5,564.78	49.31	51.56	89.04	-1,006.44	3,633.13	619.98	518.96	101.02	6.137	
9,123.35	5,574.81	9,190.97	5,564.49	49.58	51.81	89.05	-1,006.29	3,656.48	619.98	518.42	101.55	6.105	
9,200.00	5,573.79	9,267.63	5,563.52	50.47	52.67	89.05	-1,005.79	3,733.12	619.98	516.68	103.30	6.002	
9,223.35	5,573.47	9,290.97	5,563.23	50.74	52.93	89.05	-1,005.64	3,756.47	619.98	516.15	103.83	5.971	
9,300.00	5,572.44	9,367.63	5,562.26	51.64	53.79	89.06	-1,005.15	3,833.11	619.98	514.39	105.59	5.872	
9,323.35	5,572.13	9,390.97	5,561.97	51.91	54.05	89.06	-1,004.99	3,856.46	619.98	513.86	106.13	5.842	
9,400.00	5,571.10	9,467.63	5,561.00	52.81	54.91	89.07	-1,004.50	3,933.10	619.98	512.10	107.89	5.747	
9,423.35	5,570.79	9,490.97	5,560.71	53.08	55.18	89.07	-1,004.35	3,956.45	619.98	511.56	108.43	5.718	
9,500.00	5,569.76	9,567.63	5,559.74	53.99	56.04	89.07	-1,003.86	4,033.09	619.99	509.79	110.19	5.626	
9,523.35	5,569.45	9,590.97	5,559.44	54.26	56.31	89.08	-1,003.70	4,056.44	619.99	509.25	110.73	5.599	
9,600.00	5,568.42	9,667.63	5,558.48	55.17	57.18	89.08	-1,003.21	4,133.08	619.99	507.48	112.51	5.511	
9,623.35	5,568.10	9,690.97	5,558.18	55.44	57.44	89.08	-1,003.06	4,156.43	619.99	506.94	113.05	5.484	
9,700.00	5,567.08	9,767.63	5,557.22	56.35	58.32	89.09	-1,002.57	4,233.07	619.99	505.16	114.83	5.399	
9,723.35	5,566.76	9,790.97	5,556.92	56.62	58.59	89.09	-1,002.41	4,256.42	619.99	504.62	115.38	5.374	
9,800.00	5,565.73	9,867.63	5,555.96	57.53	59.46	89.10	-1,001.92	4,333.06	619.99	502.83	117.16	5.292	
9,823.35	5,565.42	9,890.97	5,555.66	57.81	59.73	89.10	-1,001.77	4,356.41	619.99	502.29	117.71	5.267	

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka LD13-650 - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+MS		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: 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)			
9,900.00	5,564.39	9,967.63	5,554.69	58.72	60.61	89.10	-1,001.27	4,433.05	619.99	500.50	119.50	5.188	
9,923.35	5,564.08	9,990.97	5,554.40	59.00	60.88	89.11	-1,001.12	4,456.40	619.99	499.95	120.04	5.165	
10,000.00	5,563.05	10,067.63	5,553.43	59.91	61.76	89.11	-1,000.63	4,533.04	620.00	498.16	121.84	5.089	
10,023.35	5,562.74	10,090.97	5,553.14	60.19	62.03	89.11	-1,000.48	4,556.39	620.00	497.61	122.39	5.066	
10,100.00	5,561.71	10,167.63	5,552.17	61.10	62.92	89.12	-999.98	4,633.03	620.00	495.81	124.19	4.992	
10,123.35	5,561.40	10,190.97	5,551.88	61.38	63.19	89.12	-999.83	4,656.38	620.00	495.26	124.74	4.970	
10,200.00	5,560.37	10,267.63	5,550.91	62.30	64.08	89.13	-999.34	4,733.02	620.00	493.46	126.54	4.900	
10,223.35	5,560.05	10,290.97	5,550.62	62.58	64.35	89.13	-999.19	4,756.37	620.00	492.91	127.09	4.878	
10,300.00	5,559.02	10,367.63	5,549.65	63.49	65.24	89.13	-998.69	4,833.01	620.00	491.10	128.90	4.810	
10,323.35	5,558.71	10,390.97	5,549.35	63.77	65.51	89.14	-998.54	4,856.36	620.00	490.55	129.45	4.789	
10,400.00	5,557.68	10,467.63	5,548.39	64.69	66.41	89.14	-998.05	4,933.00	620.01	488.74	131.27	4.723	
10,500.00	5,556.34	10,567.74	5,547.77	65.89	67.58	89.21	-997.40	5,033.11	620.00	486.39	133.61	4.640	
10,530.29	5,555.93	10,598.03	5,547.77	66.26	67.93	89.25	-997.21	5,063.40	619.99	485.68	134.32	4.616	
10,600.00	5,555.00	10,667.73	5,547.78	67.10	68.75	89.33	-996.76	5,133.10	619.98	484.04	135.94	4.561	
10,631.11	5,554.58	10,698.83	5,547.78	67.47	69.11	89.37	-996.56	5,164.20	619.98	483.31	136.67	4.536	
10,700.00	5,553.66	10,767.72	5,547.78	68.30	69.92	89.46	-996.11	5,233.09	619.97	481.70	138.28	4.484	
10,731.39	5,553.24	10,799.11	5,547.78	68.68	70.29	89.50	-995.91	5,264.48	619.97	480.96	139.01	4.460	
10,800.00	5,552.32	10,867.71	5,547.79	69.51	71.10	89.58	-995.47	5,333.07	619.97	479.35	140.62	4.409	
10,831.84	5,551.89	10,899.54	5,547.79	69.89	71.47	89.62	-995.26	5,364.91	619.96	478.60	141.36	4.386	
10,900.00	5,550.97	10,967.70	5,547.79	70.71	72.28	89.71	-994.82	5,433.06	619.96	477.00	142.96	4.337	
10,932.60	5,550.54	11,000.30	5,547.79	71.11	72.66	89.75	-994.61	5,465.66	619.96	476.23	143.73	4.313	
11,000.00	5,549.63	11,067.69	5,547.79	71.92	73.46	89.83	-994.18	5,533.05	619.96	474.65	145.31	4.267	
11,017.75	5,549.39	11,085.44	5,547.79	72.14	73.67	89.85	-994.06	5,550.80	619.96	474.23	145.73	4.254	
11,034.20	5,549.17	11,101.89	5,547.79	72.34	73.86	89.87	-993.96	5,567.25	619.96	473.85	146.11	4.243	
11,100.00	5,548.29	11,167.68	5,547.80	73.13	74.64	89.95	-993.53	5,633.04	619.96	472.30	147.66	4.199	
11,200.00	5,546.95	11,267.67	5,547.80	74.35	75.83	90.08	-992.89	5,733.03	619.96	469.95	150.01	4.133	
11,200.00	5,546.95	11,267.68	5,547.80	74.35	75.83	90.08	-992.89	5,733.03	619.96	469.95	150.01	4.133	
11,300.00	5,545.61	11,367.67	5,547.81	75.56	77.02	90.20	-992.24	5,833.02	619.97	467.60	152.37	4.069	
11,300.89	5,545.59	11,368.55	5,547.81	75.57	77.03	90.20	-992.24	5,833.91	619.97	467.58	152.39	4.068	
11,400.00	5,544.26	11,467.66	5,547.81	76.77	78.21	90.33	-991.60	5,933.01	619.98	465.25	154.73	4.007	
11,402.36	5,544.23	11,470.02	5,547.81	76.80	78.23	90.33	-991.58	5,935.37	619.98	465.20	154.78	4.006	
11,494.23	5,543.00	11,561.88	5,547.81	77.92	79.33	90.44	-990.99	6,027.23	619.99	463.04	156.95	3.950	
11,494.23	5,543.00	11,561.88	5,547.81	77.92	79.33	90.44	-990.99	6,027.23	619.99	463.04	156.95	3.950	
11,508.36	5,542.85	11,576.01	5,547.81	78.09	79.50	90.46	-990.90	6,041.36	619.99	462.71	157.29	3.942	
11,512.07	5,542.81	11,579.72	5,547.81	78.13	79.54	90.46	-990.87	6,045.06	619.99	462.62	157.37	3.940	
11,600.00	5,542.07	11,667.64	5,547.82	79.20	80.59	90.53	-990.31	6,132.99	620.00	460.54	159.47	3.888	
11,604.08	5,542.03	11,671.72	5,547.82	79.25	80.64	90.53	-990.28	6,137.07	620.00	460.44	159.56	3.886	
11,700.00	5,541.22	11,767.64	5,547.82	80.42	81.79	90.61	-989.66	6,232.99	620.02	458.16	161.85	3.831	
11,704.23	5,541.18	11,771.87	5,547.82	80.47	81.84	90.61	-989.64	6,237.22	620.02	458.06	161.95	3.828	
11,800.00	5,540.37	11,867.64	5,547.83	81.64	82.98	90.69	-989.02	6,332.98	620.03	455.79	164.24	3.775	
11,804.35	5,540.33	11,871.99	5,547.83	81.69	83.04	90.69	-988.99	6,337.33	620.03	455.69	164.34	3.773	
11,900.00	5,539.52	11,967.63	5,547.83	82.86	84.18	90.77	-988.37	6,432.97	620.04	453.42	166.63	3.721	
11,900.00	5,539.52	11,967.64	5,547.83	82.86	84.18	90.77	-988.37	6,432.98	620.04	453.42	166.63	3.721	
12,000.00	5,538.67	12,067.63	5,547.83	84.08	85.38	90.85	-987.73	6,532.97	620.06	451.04	169.02	3.669	
12,000.03	5,538.67	12,067.66	5,547.83	84.08	85.38	90.85	-987.73	6,533.00	620.06	451.04	169.02	3.669	
12,100.00	5,537.82	12,167.63	5,547.84	85.30	86.58	90.93	-987.08	6,632.96	620.08	448.66	171.41	3.617	
12,100.01	5,537.82	12,167.63	5,547.84	85.30	86.58	90.93	-987.08	6,632.97	620.08	448.66	171.41	3.617	
12,200.00	5,536.98	12,267.62	5,547.84	86.52	87.78	91.00	-986.44	6,732.96	620.09	446.29	173.81	3.568	
12,200.01	5,536.98	12,267.63	5,547.84	86.52	87.78	91.00	-986.44	6,732.96	620.09	446.29	173.81	3.568	
12,300.00	5,536.13	12,367.62	5,547.84	87.74	88.99	91.08	-985.79	6,832.95	620.11	443.91	176.20	3.519	
12,300.00	5,536.13	12,367.62	5,547.84	87.74	88.99	91.08	-985.79	6,832.95	620.11	443.91	176.20	3.519	
12,400.00	5,535.28	12,467.62	5,547.85	88.97	90.19	91.16	-985.15	6,932.95	620.13	441.53	178.60	3.472	

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka LD13-650 - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+MS		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: 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)			
12,400.05	5,535.28	12,467.66	5,547.85	88.97	90.19	91.16	-985.15	6,932.99	620.13	441.53	178.60	3.472	
12,500.00	5,534.43	12,567.61	5,547.85	90.19	91.40	91.24	-984.50	7,032.94	620.15	439.15	181.00	3.426	
12,500.00	5,534.43	12,567.61	5,547.85	90.19	91.40	91.24	-984.50	7,032.94	620.15	439.15	181.00	3.426	
12,600.00	5,533.58	12,667.61	5,547.86	91.41	92.61	91.32	-983.86	7,132.93	620.18	436.77	183.40	3.381	
12,600.02	5,533.58	12,667.62	5,547.86	91.42	92.61	91.32	-983.86	7,132.95	620.18	436.77	183.40	3.381	
12,700.00	5,532.73	12,767.60	5,547.86	92.64	93.82	91.40	-983.21	7,232.93	620.20	434.39	185.81	3.338	
12,700.04	5,532.73	12,767.65	5,547.86	92.64	93.82	91.40	-983.21	7,232.97	620.20	434.39	185.81	3.338	
12,800.00	5,531.88	12,867.60	5,547.86	93.87	95.03	91.48	-982.57	7,332.92	620.22	432.01	188.21	3.295	
12,800.00	5,531.88	12,867.60	5,547.86	93.87	95.03	91.48	-982.57	7,332.92	620.22	432.01	188.21	3.295	
12,900.00	5,531.04	12,967.60	5,547.87	95.09	96.24	91.56	-981.92	7,432.92	620.25	429.63	190.62	3.254	
12,900.00	5,531.04	12,967.60	5,547.87	95.09	96.24	91.56	-981.92	7,432.92	620.25	429.63	190.62	3.254	
13,000.00	5,530.19	13,067.59	5,547.87	96.32	97.45	91.63	-981.28	7,532.91	620.28	427.25	193.03	3.213	
13,000.01	5,530.19	13,067.61	5,547.87	96.32	97.45	91.63	-981.28	7,532.93	620.28	427.25	193.03	3.213	
13,100.00	5,529.34	13,167.59	5,547.88	97.55	98.66	91.71	-980.63	7,632.91	620.31	424.87	195.43	3.174	
13,100.03	5,529.34	13,167.62	5,547.88	97.55	98.66	91.71	-980.63	7,632.94	620.31	424.87	195.43	3.174	
13,200.00	5,528.49	13,267.59	5,547.88	98.78	99.87	91.79	-979.99	7,732.90	620.34	422.49	197.84	3.135	
13,200.00	5,528.49	13,267.59	5,547.88	98.78	99.87	91.79	-979.99	7,732.90	620.34	422.49	197.84	3.135	
13,300.00	5,527.64	13,367.58	5,547.88	100.01	101.09	91.87	-979.34	7,832.89	620.37	420.11	200.26	3.098	
13,300.01	5,527.64	13,367.59	5,547.88	100.01	101.09	91.87	-979.34	7,832.90	620.37	420.11	200.26	3.098	
13,400.00	5,526.79	13,467.58	5,547.89	101.24	102.30	91.95	-978.70	7,932.89	620.40	417.73	202.67	3.061	
13,400.00	5,526.79	13,467.58	5,547.89	101.24	102.30	91.95	-978.70	7,932.89	620.40	417.73	202.67	3.061	
13,500.00	5,525.94	13,567.58	5,547.89	102.47	103.52	92.03	-978.05	8,032.88	620.43	415.35	205.08	3.025	
13,500.01	5,525.94	13,567.58	5,547.89	102.47	103.52	92.03	-978.05	8,032.89	620.43	415.35	205.08	3.025	
13,600.00	5,525.10	13,667.57	5,547.90	103.70	104.74	92.11	-977.40	8,132.88	620.47	412.97	207.50	2.990	
13,600.01	5,525.10	13,667.58	5,547.90	103.70	104.74	92.11	-977.40	8,132.89	620.47	412.97	207.50	2.990	
13,700.00	5,524.25	13,767.57	5,547.90	104.93	105.95	92.18	-976.76	8,232.87	620.50	410.59	209.91	2.956	
13,700.02	5,524.25	13,767.59	5,547.90	104.93	105.95	92.18	-976.76	8,232.89	620.50	410.59	209.91	2.956	
13,800.00	5,523.40	13,867.56	5,547.90	106.16	107.17	92.26	-976.11	8,332.87	620.54	408.21	212.33	2.923	
13,800.03	5,523.40	13,867.60	5,547.90	106.16	107.17	92.26	-976.11	8,332.90	620.54	408.21	212.33	2.923	
13,900.00	5,522.55	13,967.56	5,547.91	107.39	108.39	92.34	-975.47	8,432.86	620.58	405.83	214.74	2.890	
13,900.04	5,522.55	13,967.60	5,547.91	107.39	108.39	92.34	-975.47	8,432.90	620.58	405.83	214.74	2.890	
14,000.00	5,521.70	14,067.56	5,547.91	108.62	109.61	92.42	-974.82	8,532.85	620.61	403.45	217.16	2.858	
14,000.05	5,521.70	14,067.61	5,547.91	108.62	109.61	92.42	-974.82	8,532.90	620.61	403.45	217.16	2.858	
14,100.00	5,520.85	14,167.55	5,547.92	109.85	110.83	92.50	-974.18	8,632.85	620.65	401.08	219.58	2.827	
14,100.06	5,520.85	14,167.61	5,547.92	109.86	110.83	92.50	-974.18	8,632.91	620.65	401.07	219.58	2.827	
14,200.00	5,520.00	14,267.55	5,547.92	111.09	112.05	92.58	-973.53	8,732.84	620.70	398.70	222.00	2.796	
14,200.07	5,520.00	14,267.62	5,547.92	111.09	112.05	92.58	-973.53	8,732.91	620.70	398.70	222.00	2.796	
14,300.00	5,519.15	14,367.55	5,547.92	112.32	113.27	92.66	-972.89	8,832.84	620.74	396.32	224.42	2.766	
14,300.08	5,519.15	14,367.62	5,547.92	112.32	113.27	92.66	-972.89	8,832.91	620.74	396.32	224.42	2.766	
14,400.00	5,518.31	14,467.54	5,547.93	113.55	114.49	92.73	-972.24	8,932.83	620.78	393.94	226.84	2.737	
14,400.08	5,518.31	14,467.63	5,547.93	113.56	114.50	92.74	-972.24	8,932.92	620.78	393.94	226.84	2.737	
14,500.00	5,517.46	14,567.54	5,547.93	114.79	115.72	92.81	-971.60	9,032.83	620.83	391.57	229.26	2.708	
14,500.09	5,517.46	14,567.63	5,547.93	114.79	115.72	92.81	-971.60	9,032.92	620.83	391.57	229.26	2.708	
14,600.00	5,516.61	14,667.54	5,547.94	116.02	116.94	92.89	-970.95	9,132.82	620.87	389.19	231.68	2.680	
14,600.10	5,516.61	14,667.63	5,547.94	116.02	116.94	92.89	-970.95	9,132.92	620.87	389.19	231.68	2.680	
14,700.00	5,515.76	14,767.53	5,547.94	117.26	118.16	92.97	-970.31	9,232.81	620.92	386.82	234.10	2.652	
14,700.10	5,515.76	14,767.64	5,547.94	117.26	118.17	92.97	-970.31	9,232.92	620.92	386.82	234.10	2.652	
14,800.00	5,514.91	14,867.53	5,547.94	118.49	119.39	93.05	-969.66	9,332.81	620.97	384.44	236.53	2.625	
14,800.11	5,514.91	14,867.64	5,547.94	118.49	119.39	93.05	-969.66	9,332.92	620.97	384.44	236.53	2.625	
14,900.00	5,514.06	14,967.52	5,547.95	119.73	120.61	93.13	-969.02	9,432.80	621.02	382.07	238.95	2.599	
14,900.12	5,514.06	14,967.64	5,547.95	119.73	120.62	93.13	-969.02	9,432.92	621.02	382.07	238.95	2.599	
15,000.00	5,513.21	15,067.52	5,547.95	120.96	121.84	93.21	-968.37	9,532.80	621.07	379.70	241.37	2.573	

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



Altitude Energy Partners

Anticollision Report



Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka LD13-650 - OH - Plan #1											Offset Site Error:	0.00 usft
Survey Program: 0-MWD+IFR1+MS											Offset Well Error:	0.00 usft
Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Rule Assigned:	Distance	Minimum	Separation	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Separation (usft)	
15,000.12	5,513.21	15,067.64	5,547.95	120.96	121.84	93.21	-968.37	9,532.92	621.07	379.70	241.37	2.573
15,100.00	5,512.37	15,167.52	5,547.96	122.20	123.07	93.28	-967.73	9,632.79	621.12	377.33	243.79	2.548
15,100.13	5,512.36	15,167.64	5,547.96	122.20	123.07	93.28	-967.73	9,632.92	621.12	377.32	243.80	2.548
15,200.00	5,511.52	15,267.51	5,547.96	123.44	124.29	93.36	-967.08	9,732.79	621.17	374.96	246.22	2.523
15,200.13	5,511.52	15,267.65	5,547.96	123.44	124.29	93.36	-967.08	9,732.92	621.17	374.95	246.22	2.523
15,300.00	5,510.67	15,367.51	5,547.96	124.67	125.52	93.44	-966.44	9,832.78	621.23	372.59	248.64	2.498
15,300.14	5,510.67	15,367.65	5,547.96	124.67	125.52	93.44	-966.44	9,832.92	621.23	372.58	248.64	2.498
15,400.00	5,509.82	15,467.51	5,547.97	125.91	126.75	93.52	-965.79	9,932.77	621.28	370.22	251.06	2.475
15,400.14	5,509.82	15,467.65	5,547.97	125.91	126.75	93.52	-965.79	9,932.91	621.28	370.21	251.07	2.475
15,500.00	5,508.97	15,567.50	5,547.97	127.15	127.97	93.60	-965.15	10,032.77	621.34	367.85	253.49	2.451
15,500.15	5,508.97	15,567.65	5,547.97	127.15	127.98	93.60	-965.15	10,032.91	621.34	367.85	253.49	2.451
15,600.00	5,508.12	15,667.50	5,547.98	128.38	129.20	93.68	-964.50	10,132.76	621.40	365.48	255.91	2.428
15,600.15	5,508.12	15,667.65	5,547.98	128.38	129.20	93.68	-964.50	10,132.91	621.40	365.48	255.92	2.428
15,700.00	5,507.27	15,767.50	5,547.98	129.62	130.43	93.76	-963.86	10,232.76	621.45	363.12	258.34	2.406
15,700.15	5,507.27	15,767.65	5,547.98	129.62	130.43	93.76	-963.86	10,232.91	621.45	363.11	258.34	2.406
15,800.00	5,506.43	15,867.49	5,547.98	130.86	131.66	93.83	-963.21	10,332.75	621.51	360.75	260.76	2.383
15,800.16	5,506.42	15,867.65	5,547.98	130.86	131.66	93.83	-963.21	10,332.91	621.51	360.75	260.77	2.383
15,900.00	5,505.58	15,967.49	5,547.99	132.10	132.89	93.91	-962.57	10,432.75	621.57	358.39	263.19	2.362
15,900.16	5,505.58	15,967.65	5,547.99	132.10	132.89	93.91	-962.57	10,432.91	621.57	358.38	263.19	2.362
16,000.00	5,504.73	16,067.48	5,547.99	133.33	134.12	93.99	-961.92	10,532.74	621.64	356.02	265.61	2.340
16,000.16	5,504.73	16,067.65	5,547.99	133.34	134.12	93.99	-961.92	10,532.90	621.64	356.02	265.62	2.340
16,100.00	5,503.88	16,167.48	5,548.00	134.57	135.35	94.07	-961.28	10,632.73	621.70	353.66	268.04	2.319
16,100.17	5,503.88	16,167.65	5,548.00	134.57	135.35	94.07	-961.28	10,632.90	621.70	353.66	268.04	2.319
16,203.62	5,503.00	16,271.10	5,548.00	135.86	136.62	94.15	-960.61	10,736.35	621.77	351.21	270.55	2.298 SF

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka LD13-670 - OH - Plan #1

Survey Program: Reference		0-MWD+IFR1+MS Offset			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
0.00	0.00	0.00	0.00	0.00	0.00	-0.57	28.06	-0.28	28.06				
100.00	100.00	100.00	100.00	0.88	0.88	-0.57	28.06	-0.28	28.06	26.29	1.77	15.873	
200.00	200.00	200.00	200.00	1.50	1.50	-0.57	28.06	-0.28	28.06	25.05	3.00	9.340	
300.00	300.00	300.00	300.00	1.94	1.94	-0.57	28.06	-0.28	28.06	24.19	3.87	7.250	
400.00	400.00	400.00	400.00	2.29	2.29	-0.57	28.06	-0.28	28.06	23.48	4.58	6.125	
500.00	500.00	500.00	500.00	2.60	2.60	-0.57	28.06	-0.28	28.06	22.86	5.20	5.396	
600.00	600.00	600.00	600.00	2.88	2.88	-0.57	28.06	-0.28	28.06	22.30	5.76	4.873	CC, ES
700.00	699.99	699.48	699.47	3.19	3.20	152.12	28.89	-1.27	30.07	23.73	6.34	4.746	
800.00	799.91	798.72	798.63	3.49	3.51	150.33	31.37	-4.25	36.12	29.24	6.88	5.247	
900.00	899.69	898.11	897.86	3.80	3.70	149.08	35.00	-8.61	45.70	38.36	7.33	6.231	
964.87	964.31	962.55	962.19	3.93	3.89	149.24	37.39	-11.47	53.14	45.52	7.61	6.979	
1,000.00	999.29	997.42	997.00	3.99	3.99	149.49	38.68	-13.01	57.42	49.67	7.75	7.410	
1,100.00	1,098.83	1,096.67	1,096.08	4.29	4.28	150.03	42.35	-17.42	69.62	61.35	8.27	8.416	
1,200.00	1,198.37	1,195.92	1,195.17	4.60	4.58	150.41	46.02	-21.82	81.82	73.02	8.81	9.292	
1,300.00	1,297.92	1,295.17	1,294.25	4.93	4.89	150.70	49.70	-26.23	94.03	84.68	9.35	10.059	
1,400.00	1,397.46	1,394.42	1,393.34	5.26	5.20	150.91	53.37	-30.63	106.24	96.34	9.90	10.735	
1,500.00	1,497.01	1,493.67	1,492.42	5.61	5.52	151.09	57.04	-35.04	118.45	107.99	10.45	11.334	
1,600.00	1,596.55	1,592.92	1,591.51	5.96	5.84	151.23	60.71	-39.44	130.66	119.65	11.01	11.867	
1,700.00	1,696.09	1,692.17	1,690.60	6.31	6.16	151.34	64.39	-43.84	142.87	131.29	11.57	12.345	
1,800.00	1,795.64	1,791.43	1,789.68	6.67	6.49	151.44	68.06	-48.25	155.08	142.94	12.14	12.775	
1,900.00	1,895.18	1,890.68	1,888.77	7.04	6.82	151.52	71.73	-52.65	167.29	154.58	12.71	13.164	
2,000.00	1,994.73	1,989.93	1,987.85	7.41	7.15	151.60	75.40	-57.06	179.50	166.22	13.28	13.517	
2,100.00	2,094.27	2,089.18	2,086.94	7.78	7.48	151.66	79.08	-61.46	191.71	177.86	13.85	13.839	
2,200.00	2,193.81	2,188.43	2,186.02	8.15	7.81	151.71	82.75	-65.87	203.92	189.50	14.43	14.133	
2,300.00	2,293.36	2,287.68	2,285.11	8.52	8.15	151.76	86.42	-70.27	216.14	201.13	15.01	14.404	
2,400.00	2,392.90	2,386.93	2,384.19	8.90	8.49	151.81	90.09	-74.67	228.35	212.76	15.58	14.652	
2,500.00	2,492.45	2,486.19	2,483.28	9.28	8.82	151.85	93.77	-79.08	240.56	224.40	16.16	14.882	
2,600.00	2,591.99	2,585.44	2,582.37	9.66	9.16	151.88	97.44	-83.48	252.77	236.03	16.74	15.096	
2,700.00	2,691.54	2,684.69	2,681.45	10.04	9.50	151.91	101.11	-87.89	264.99	247.66	17.33	15.293	
2,800.00	2,791.08	2,783.94	2,780.54	10.42	9.84	151.94	104.79	-92.29	277.20	259.29	17.91	15.478	
2,900.00	2,890.62	2,883.19	2,879.62	10.81	10.18	151.97	108.46	-96.70	289.41	270.92	18.49	15.650	
3,000.00	2,990.17	2,982.44	2,978.71	11.19	10.52	152.00	112.13	-101.10	301.63	282.55	19.08	15.811	
3,100.00	3,089.71	3,081.69	3,077.79	11.58	10.86	152.02	115.80	-105.50	313.84	294.18	19.66	15.962	
3,200.00	3,189.26	3,180.94	3,176.88	11.96	11.21	152.04	119.48	-109.91	326.05	305.80	20.25	16.103	
3,300.00	3,288.80	3,280.20	3,275.96	12.35	11.55	152.06	123.15	-114.31	338.27	317.43	20.83	16.237	
3,400.00	3,388.34	3,379.45	3,375.05	12.74	11.89	152.08	126.82	-118.72	350.48	329.06	21.42	16.362	
3,500.00	3,487.89	3,478.70	3,474.14	13.12	12.24	152.10	130.49	-123.12	362.69	340.68	22.01	16.481	
3,600.00	3,587.43	3,577.95	3,573.22	13.51	12.58	152.11	134.17	-127.53	374.90	352.31	22.59	16.593	
3,700.00	3,686.98	3,677.20	3,672.31	13.90	12.92	152.13	137.84	-131.93	387.12	363.94	23.18	16.699	
3,800.00	3,786.52	3,776.45	3,771.39	14.29	13.27	152.14	141.51	-136.33	399.33	375.56	23.77	16.800	
3,900.00	3,886.06	3,875.70	3,870.48	14.68	13.61	152.15	145.18	-140.74	411.54	387.19	24.36	16.896	
4,000.00	3,985.61	3,974.96	3,969.56	15.07	13.96	152.17	148.86	-145.14	423.76	398.81	24.95	16.987	
4,100.00	4,085.15	4,074.21	4,068.65	15.46	14.30	152.18	152.53	-149.55	435.97	410.44	25.54	17.073	
4,200.00	4,184.70	4,173.46	4,167.73	15.85	14.65	152.19	156.20	-153.95	448.18	422.06	26.12	17.156	
4,300.00	4,284.24	4,272.71	4,266.82	16.24	14.99	152.20	159.87	-158.36	460.40	433.68	26.71	17.235	
4,400.00	4,383.79	4,371.96	4,365.91	16.63	15.34	152.21	163.55	-162.76	472.61	445.31	27.30	17.310	
4,500.00	4,483.33	4,471.21	4,464.99	17.02	15.68	152.22	167.22	-167.16	484.83	456.93	27.89	17.382	
4,600.00	4,582.87	4,570.46	4,564.08	17.41	16.03	152.23	170.89	-171.57	497.04	468.56	28.48	17.451	
4,700.00	4,682.42	4,669.71	4,663.16	17.81	16.38	152.24	174.56	-175.97	509.25	480.18	29.07	17.516	
4,800.00	4,781.96	4,768.97	4,762.25	18.20	16.72	152.24	178.24	-180.38	521.47	491.80	29.66	17.580	
4,856.88	4,838.58	4,825.42	4,818.61	18.41	16.91	152.25	180.33	-182.88	528.41	498.44	29.98	17.627	
4,900.00	4,881.54	4,868.43	4,861.56	18.56	17.04	-169.34	181.92	-184.32	533.69	503.47	30.22	17.658	

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka LD13-670 - OH - Plan #1													Offset Site Error:
													0.00 usft
Survey Program:	Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Distance	Rule Assigned:	Offset Well Error:					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Reference	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	0.00 usft	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
4,950.00	4,931.28	4,918.55	18.70	17.11	-134.80	183.80	-182.99	539.81	509.28	30.53	17.682		
5,000.00	4,980.72	4,968.76	18.75	17.08	-118.57	185.70	-178.14	545.90	515.15	30.75	17.752		
5,050.00	5,029.61	5,019.07	18.76	16.99	-110.34	187.60	-169.78	551.92	521.02	30.90	17.864		
5,100.00	5,077.73	5,069.48	18.74	16.90	-105.46	189.51	-157.93	557.85	526.84	31.01	17.992		
5,150.00	5,124.83	5,120.00	18.71	16.79	-102.22	191.40	-142.63	563.65	532.56	31.09	18.128		
5,200.00	5,170.69	5,170.62	18.67	16.68	-99.90	193.28	-123.94	569.31	538.14	31.17	18.265		
5,250.00	5,215.08	5,221.36	18.63	16.57	-98.13	195.13	-101.91	574.78	543.54	31.24	18.400		
5,300.00	5,257.79	5,272.21	18.59	16.46	-96.73	196.94	-76.65	580.05	548.75	31.30	18.529		
5,350.00	5,298.60	5,323.17	18.55	16.36	-95.59	198.70	-48.26	585.09	553.72	31.37	18.649		
5,400.00	5,337.32	5,374.23	18.52	16.27	-94.64	200.41	-16.87	589.87	558.42	31.45	18.754		
5,450.00	5,373.77	5,425.40	18.50	16.19	-93.83	202.05	17.38	594.37	562.83	31.55	18.842		
5,500.00	5,407.75	5,476.67	18.49	16.13	-93.14	203.61	54.34	598.57	566.91	31.66	18.907		
5,550.00	5,439.11	5,528.02	18.49	16.08	-92.54	205.09	93.81	602.45	570.65	31.80	18.948		
5,600.00	5,467.70	5,579.46	18.52	16.06	-92.03	206.48	135.60	605.98	574.01	31.96	18.958		
5,650.00	5,493.37	5,630.98	18.57	16.06	-91.58	207.77	179.50	609.15	576.98	32.17	18.937		
5,700.00	5,516.01	5,682.56	18.63	16.08	-91.20	208.96	225.28	611.94	579.53	32.41	18.881		
5,750.00	5,535.49	5,734.19	18.73	16.14	-90.88	210.02	272.70	614.34	581.65	32.70	18.790		
5,800.00	5,551.73	5,785.86	18.84	16.22	-90.60	210.97	321.50	616.34	583.31	33.03	18.663		
5,850.00	5,564.64	5,837.56	18.98	16.34	-90.38	211.80	371.42	617.93	584.53	33.40	18.501		
5,900.00	5,574.16	5,889.27	19.15	16.48	-90.21	212.49	422.19	619.09	585.27	33.82	18.306		
5,950.00	5,580.26	5,940.98	19.34	16.66	-90.09	213.05	473.53	619.83	585.55	34.28	18.082		
6,000.00	5,582.89	5,992.66	19.55	16.86	-90.01	213.47	525.15	620.14	585.36	34.78	17.832		
6,012.82	5,583.00	6,005.70	19.61	16.91	-90.00	213.55	538.18	620.15	585.24	34.91	17.763		
6,100.00	5,583.00	6,092.87	20.04	17.33	-90.00	214.12	625.36	620.15	584.25	35.90	17.276		
6,200.00	5,583.00	6,192.87	20.59	17.88	-90.00	214.77	725.35	620.15	582.99	37.15	16.691		
6,300.00	5,583.00	6,292.87	21.20	18.50	-90.00	215.42	825.35	620.15	581.62	38.53	16.094		
6,400.00	5,583.00	6,392.87	21.86	19.19	-90.00	216.07	925.35	620.15	580.13	40.02	15.496		
6,500.00	5,583.00	6,492.87	22.57	19.94	-90.00	216.71	1,025.35	620.15	578.54	41.60	14.906		
6,600.00	5,583.00	6,592.87	23.33	20.75	-90.00	217.36	1,125.35	620.15	576.87	43.27	14.331		
6,700.00	5,583.00	6,692.87	24.13	21.60	-90.00	218.01	1,225.34	620.15	575.13	45.02	13.775		
6,800.00	5,583.00	6,792.87	24.96	22.50	-90.00	218.66	1,325.34	620.15	573.32	46.83	13.242		
6,900.00	5,583.00	6,892.87	25.83	23.44	-90.00	219.31	1,425.34	620.15	571.44	48.71	12.732		
7,000.00	5,583.00	6,992.87	26.73	24.41	-90.00	219.96	1,525.34	620.15	569.51	50.63	12.248		
7,100.00	5,583.00	7,092.87	27.66	25.41	-90.00	220.61	1,625.34	620.15	567.54	52.61	11.788		
7,200.00	5,583.00	7,192.87	28.61	26.43	-90.00	221.25	1,725.33	620.15	565.52	54.63	11.352		
7,300.00	5,583.00	7,292.87	29.58	27.48	-90.00	221.90	1,825.33	620.15	563.46	56.68	10.941		
7,400.00	5,583.00	7,392.87	30.58	28.54	-90.00	222.55	1,925.33	620.15	561.37	58.77	10.552		
7,500.00	5,583.00	7,492.87	31.59	29.62	-90.00	223.20	2,025.33	620.15	559.25	60.89	10.184		
7,600.00	5,583.00	7,592.87	32.62	30.71	-90.00	223.85	2,125.33	620.15	557.11	63.04	9.837		
7,700.00	5,583.00	7,692.87	33.66	31.81	-90.00	224.50	2,225.32	620.15	554.93	65.21	9.509		
7,800.00	5,583.00	7,792.87	34.72	32.93	-90.00	225.14	2,325.32	620.15	552.74	67.41	9.200		
7,900.00	5,583.00	7,892.87	35.79	34.06	-90.00	225.79	2,425.32	620.15	550.52	69.62	8.907		
8,000.00	5,583.00	7,992.87	36.88	35.19	-90.00	226.44	2,525.32	620.15	548.29	71.86	8.630		
8,100.00	5,583.00	8,092.87	37.97	36.34	-90.00	227.09	2,625.31	620.15	546.04	74.11	8.368		
8,200.00	5,583.00	8,192.87	39.07	37.49	-90.00	227.74	2,725.31	620.15	543.77	76.38	8.120		
8,300.00	5,583.00	8,292.87	40.18	38.65	-90.00	228.39	2,825.31	620.15	541.49	78.66	7.884		
8,400.00	5,583.00	8,392.87	41.30	39.81	-90.00	229.04	2,925.31	620.15	539.20	80.95	7.661		
8,494.05	5,583.00	8,486.93	42.36	40.91	-90.00	229.65	3,019.36	620.15	537.03	83.12	7.461		
8,500.00	5,582.99	8,492.87	42.43	40.98	-90.00	229.68	3,025.31	620.15	536.89	83.25	7.449		
8,532.50	5,582.74	8,525.37	42.79	41.36	-90.01	229.90	3,057.80	620.15	536.15	84.00	7.383		
8,544.25	5,582.58	8,537.12	42.92	41.49	-90.01	229.97	3,069.55	620.15	535.87	84.27	7.359		
8,600.00	5,581.84	8,592.88	43.55	42.15	-90.02	230.33	3,125.30	620.15	534.59	85.56	7.248		

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka LD13-670 - OH - Plan #1													Offset Site Error:
													0.00 usft
													Offset Well Error:
													0.00 usft
Survey Program:	Reference	Offset	Semi Major Axis	Highside	Offset Wellbore Centre	Distance	Rule Assigned:						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,618.09	5,581.59	8,610.96	5,581.80	43.76	42.36	-90.02	230.45	3,143.38	620.15	534.17	85.98	7.213	
8,700.00	5,580.49	8,692.88	5,580.76	44.69	43.32	-90.02	230.98	3,225.29	620.15	532.26	87.88	7.056	
8,718.91	5,580.24	8,711.78	5,580.52	44.91	43.55	-90.03	231.10	3,244.19	620.15	531.82	88.32	7.021	
8,800.00	5,579.15	8,792.88	5,579.50	45.84	44.51	-90.03	231.63	3,325.28	620.15	529.93	90.22	6.874	
8,819.38	5,578.89	8,812.25	5,579.26	46.06	44.74	-90.03	231.76	3,344.65	620.15	529.47	90.67	6.839	
8,900.00	5,577.81	8,892.88	5,578.24	46.99	45.69	-90.04	232.28	3,425.27	620.15	527.59	92.56	6.700	
8,919.68	5,577.55	8,912.56	5,577.99	47.22	45.93	-90.04	232.41	3,444.95	620.15	527.12	93.02	6.667	
9,000.00	5,576.47	8,992.88	5,576.98	48.14	46.88	-90.05	232.93	3,525.26	620.15	525.23	94.91	6.534	
9,019.89	5,576.20	9,012.77	5,576.73	48.38	47.12	-90.05	233.06	3,545.15	620.15	524.77	95.38	6.502	
9,100.00	5,575.13	9,092.88	5,575.72	49.31	48.07	-90.05	233.58	3,625.25	620.15	522.88	97.27	6.376	
9,120.05	5,574.86	9,112.93	5,575.46	49.54	48.31	-90.06	233.71	3,645.30	620.15	522.40	97.74	6.345	
9,200.00	5,573.79	9,192.88	5,574.46	50.47	49.27	-90.06	234.22	3,725.24	620.15	520.51	99.64	6.224	
9,251.00	5,573.10	9,243.88	5,573.81	51.07	49.88	-90.07	234.55	3,776.24	620.15	519.30	100.84	6.150	
9,300.00	5,572.44	9,292.88	5,573.19	51.64	50.47	-90.07	234.87	3,825.23	620.15	518.14	102.01	6.079	
9,300.02	5,572.44	9,292.90	5,573.19	51.64	50.47	-90.07	234.87	3,825.25	620.15	518.14	102.01	6.079	
9,400.00	5,571.10	9,392.88	5,571.93	52.81	51.67	-90.08	235.52	3,925.22	620.15	515.76	104.38	5.941	
9,400.01	5,571.10	9,392.88	5,571.93	52.81	51.67	-90.08	235.52	3,925.23	620.15	515.76	104.38	5.941	
9,500.00	5,569.76	9,492.88	5,570.67	53.99	52.87	-90.08	236.17	4,025.21	620.15	513.38	106.77	5.808	
9,500.00	5,569.76	9,492.88	5,570.67	53.99	52.87	-90.08	236.17	4,025.21	620.15	513.38	106.77	5.808	
9,600.00	5,568.42	9,592.88	5,569.41	55.17	54.07	-90.09	236.82	4,125.20	620.15	510.99	109.16	5.681	
9,600.02	5,568.42	9,592.89	5,569.41	55.17	54.08	-90.09	236.82	4,125.22	620.15	510.99	109.16	5.681	
9,700.00	5,567.08	9,692.88	5,568.15	56.35	55.28	-90.10	237.47	4,225.19	620.15	508.60	111.55	5.559	
9,700.01	5,567.08	9,692.88	5,568.15	56.35	55.28	-90.10	237.47	4,225.19	620.15	508.60	111.55	5.559	
9,800.00	5,565.73	9,792.88	5,566.89	57.53	56.49	-90.11	238.11	4,325.18	620.15	506.20	113.95	5.442	
9,800.01	5,565.73	9,792.88	5,566.89	57.53	56.49	-90.11	238.11	4,325.18	620.15	506.20	113.95	5.442	
9,900.00	5,564.39	9,892.88	5,565.63	58.72	57.70	-90.11	238.76	4,425.17	620.15	503.80	116.35	5.330	
9,900.04	5,564.39	9,892.92	5,565.63	58.72	57.70	-90.11	238.76	4,425.21	620.15	503.80	116.35	5.330	
10,000.00	5,563.05	9,992.88	5,564.37	59.91	58.91	-90.12	239.41	4,525.16	620.15	501.39	118.75	5.222	
10,000.07	5,563.05	9,992.95	5,564.36	59.91	58.91	-90.12	239.41	4,525.23	620.15	501.39	118.75	5.222	
10,100.00	5,561.71	10,092.88	5,563.10	61.10	60.13	-90.13	240.06	4,625.15	620.15	498.98	121.16	5.118	
10,100.10	5,561.71	10,092.98	5,563.10	61.10	60.13	-90.13	240.06	4,625.25	620.15	498.98	121.17	5.118	
10,200.00	5,560.37	10,192.88	5,561.84	62.30	61.34	-90.14	240.71	4,725.14	620.15	496.57	123.58	5.018	
10,200.12	5,560.37	10,193.00	5,561.84	62.30	61.34	-90.14	240.71	4,725.26	620.15	496.57	123.58	5.018	
10,300.00	5,559.02	10,292.88	5,560.58	63.49	62.56	-90.14	241.36	4,825.13	620.15	494.15	125.99	4.922	
10,300.15	5,559.02	10,293.02	5,560.58	63.50	62.56	-90.14	241.36	4,825.27	620.15	494.15	126.00	4.922	
10,400.00	5,557.68	10,392.88	5,559.32	64.69	63.78	-90.15	242.01	4,925.12	620.15	491.73	128.41	4.829	
10,400.17	5,557.68	10,393.04	5,559.32	64.70	63.78	-90.15	242.01	4,925.28	620.15	491.73	128.42	4.829	
10,500.00	5,556.34	10,492.88	5,558.06	65.89	65.00	-90.16	242.65	5,025.11	620.15	489.31	130.83	4.740	
10,501.63	5,556.32	10,494.50	5,558.04	65.91	65.02	-90.16	242.66	5,026.73	620.15	489.27	130.87	4.739	
10,600.00	5,555.00	10,592.85	5,557.67	67.10	66.21	-90.25	243.30	5,125.08	620.15	486.89	133.26	4.654	
10,602.14	5,554.97	10,594.99	5,557.66	67.12	66.24	-90.25	243.32	5,127.22	620.15	486.84	133.31	4.652	
10,700.00	5,553.66	10,692.84	5,557.49	68.30	67.44	-90.35	243.95	5,225.07	620.16	484.47	135.69	4.570	
10,703.00	5,553.62	10,695.84	5,557.49	68.34	67.47	-90.36	243.97	5,228.07	620.16	484.39	135.76	4.568	
10,800.00	5,552.32	10,792.84	5,557.32	69.51	68.66	-90.46	244.60	5,325.06	620.16	482.04	138.12	4.490	
10,803.48	5,552.27	10,796.32	5,557.31	69.55	68.70	-90.47	244.62	5,328.54	620.16	481.96	138.21	4.487	
10,900.00	5,550.97	10,892.83	5,557.15	70.71	69.88	-90.57	245.25	5,425.05	620.17	479.62	140.56	4.412	
10,903.79	5,550.92	10,896.62	5,557.14	70.76	69.93	-90.57	245.27	5,428.85	620.18	479.52	140.65	4.409	
11,000.00	5,549.63	10,992.82	5,556.98	71.92	71.11	-90.68	245.90	5,525.04	620.19	477.19	143.00	4.337	
11,004.01	5,549.58	10,996.84	5,556.97	71.97	71.16	-90.68	245.92	5,529.06	620.19	477.09	143.09	4.334	
11,100.00	5,548.29	11,092.82	5,556.80	73.13	72.33	-90.79	246.54	5,625.03	620.20	474.77	145.44	4.264	
11,104.18	5,548.23	11,096.99	5,556.80	73.18	72.39	-90.79	246.57	5,629.21	620.20	474.67	145.54	4.261	
11,200.00	5,546.95	11,192.81	5,556.63	74.35	73.56	-90.89	247.19	5,725.03	620.22	472.34	147.88	4.194	

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka LD13-670 - OH - Plan #1													Offset Site Error: 0.00 usft
Survey Program: 0-MWD+IFR1+MS		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
11,204.30	5,546.89	11,197.11	5,556.62	74.40	73.61	-90.90	247.22	5,729.32	620.22	472.24	147.98	4.191	
11,300.00	5,545.61	11,292.80	5,556.46	75.56	74.79	-91.00	247.84	5,825.02	620.24	469.92	150.32	4.126	
11,304.40	5,545.55	11,297.20	5,556.45	75.61	74.84	-91.01	247.87	5,829.41	620.24	469.81	150.43	4.123	
11,400.00	5,544.26	11,392.80	5,556.28	76.77	76.02	-91.11	248.49	5,925.01	620.26	467.50	152.76	4.060	
11,400.07	5,544.26	11,392.86	5,556.28	76.77	76.02	-91.11	248.49	5,925.07	620.26	467.50	152.76	4.060	
11,494.23	5,543.00	11,487.02	5,556.12	77.92	77.17	-91.21	249.10	6,019.23	620.28	465.22	155.06	4.000	
11,494.27	5,543.00	11,487.06	5,556.12	77.92	77.17	-91.21	249.10	6,019.27	620.28	465.22	155.07	4.000	
11,508.36	5,542.85	11,501.15	5,556.10	78.09	77.35	-91.22	249.19	6,033.36	620.28	464.88	155.41	3.991	
11,508.42	5,542.84	11,501.20	5,556.10	78.09	77.35	-91.22	249.19	6,033.41	620.28	464.87	155.41	3.991	
11,600.00	5,542.07	11,592.79	5,555.94	79.20	78.47	-91.28	249.79	6,124.99	620.30	462.65	157.65	3.935	
11,600.00	5,542.07	11,592.79	5,555.94	79.20	78.47	-91.28	249.79	6,125.00	620.30	462.65	157.65	3.935	
11,700.00	5,541.22	11,692.78	5,555.77	80.42	79.70	-91.34	250.44	6,224.99	620.31	460.22	160.10	3.875	
11,700.01	5,541.22	11,692.80	5,555.77	80.42	79.70	-91.34	250.44	6,225.00	620.31	460.22	160.10	3.875	
11,800.00	5,540.37	11,792.78	5,555.59	81.64	80.94	-91.41	251.08	6,324.98	620.33	457.78	162.55	3.816	
11,800.03	5,540.37	11,792.81	5,555.59	81.64	80.94	-91.41	251.08	6,325.01	620.33	457.78	162.55	3.816	
11,900.00	5,539.52	11,892.78	5,555.42	82.86	82.17	-91.47	251.73	6,424.98	620.35	455.35	165.00	3.760	
11,900.04	5,539.52	11,892.82	5,555.42	82.86	82.17	-91.47	251.73	6,425.02	620.35	455.35	165.00	3.760	
12,000.00	5,538.67	11,992.78	5,555.25	84.08	83.40	-91.53	252.38	6,524.98	620.36	452.92	167.45	3.705	
12,000.06	5,538.67	11,992.84	5,555.25	84.08	83.40	-91.53	252.38	6,525.03	620.36	452.91	167.45	3.705	
12,100.00	5,537.82	12,092.78	5,555.08	85.30	84.63	-91.59	253.03	6,624.97	620.38	450.48	169.90	3.651	
12,100.07	5,537.82	12,092.85	5,555.08	85.30	84.63	-91.59	253.03	6,625.04	620.38	450.48	169.90	3.651	
12,200.00	5,536.98	12,192.77	5,554.90	86.52	85.86	-91.66	253.68	6,724.97	620.40	448.05	172.35	3.600	
12,200.08	5,536.98	12,192.86	5,554.90	86.52	85.87	-91.66	253.68	6,725.05	620.40	448.05	172.36	3.600	
12,300.00	5,536.13	12,292.77	5,554.73	87.74	87.10	-91.72	254.33	6,824.96	620.42	445.61	174.81	3.549	
12,300.09	5,536.13	12,292.86	5,554.73	87.74	87.10	-91.72	254.33	6,825.06	620.42	445.61	174.81	3.549	
12,400.00	5,535.28	12,392.77	5,554.56	88.97	88.33	-91.78	254.98	6,924.96	620.44	443.18	177.26	3.500	
12,400.10	5,535.28	12,392.87	5,554.56	88.97	88.33	-91.78	254.98	6,925.06	620.44	443.18	177.27	3.500	
12,500.00	5,534.43	12,492.77	5,554.39	90.19	89.57	-91.84	255.62	7,024.95	620.46	440.74	179.72	3.452	
12,500.11	5,534.43	12,492.88	5,554.38	90.19	89.57	-91.84	255.62	7,025.07	620.46	440.74	179.72	3.452	
12,600.00	5,533.58	12,592.76	5,554.21	91.41	90.80	-91.91	256.27	7,124.95	620.49	438.31	182.18	3.406	
12,600.12	5,533.58	12,592.89	5,554.21	91.42	90.80	-91.91	256.27	7,125.07	620.49	438.31	182.18	3.406	
12,700.00	5,532.73	12,692.76	5,554.04	92.64	92.04	-91.97	256.92	7,224.94	620.51	435.87	184.63	3.361	
12,700.13	5,532.73	12,692.89	5,554.04	92.64	92.04	-91.97	256.92	7,225.07	620.51	435.87	184.64	3.361	
12,800.00	5,531.88	12,792.76	5,553.87	93.87	93.27	-92.03	257.57	7,324.94	620.53	433.44	187.09	3.317	
12,800.14	5,531.88	12,792.90	5,553.87	93.87	93.27	-92.03	257.57	7,325.08	620.53	433.44	187.10	3.317	
12,900.00	5,531.04	12,892.76	5,553.69	95.09	94.51	-92.09	258.22	7,424.93	620.56	431.00	189.55	3.274	
12,900.15	5,531.03	12,892.90	5,553.69	95.10	94.51	-92.09	258.22	7,425.08	620.56	431.00	189.55	3.274	
13,000.00	5,530.19	12,992.75	5,553.52	96.32	95.74	-92.15	258.87	7,524.93	620.58	428.57	192.01	3.232	
13,000.15	5,530.19	12,992.91	5,553.52	96.32	95.75	-92.15	258.87	7,525.08	620.58	428.57	192.01	3.232	
13,100.00	5,529.34	13,092.75	5,553.35	97.55	96.98	-92.22	259.51	7,624.93	620.61	426.14	194.47	3.191	
13,100.16	5,529.34	13,092.91	5,553.35	97.55	96.98	-92.22	259.52	7,625.09	620.61	426.13	194.47	3.191	
13,200.00	5,528.49	13,192.75	5,553.18	98.78	98.22	-92.28	260.16	7,724.92	620.63	423.70	196.93	3.152	
13,200.17	5,528.49	13,192.92	5,553.18	98.78	98.22	-92.28	260.16	7,725.09	620.63	423.70	196.94	3.151	
13,300.00	5,527.64	13,292.75	5,553.00	100.01	99.45	-92.34	260.81	7,824.92	620.66	421.27	199.39	3.113	
13,300.17	5,527.64	13,292.92	5,553.00	100.01	99.46	-92.34	260.81	7,825.09	620.66	421.26	199.40	3.113	
13,400.00	5,526.79	13,392.75	5,552.83	101.24	100.69	-92.40	261.46	7,924.91	620.69	418.83	201.85	3.075	
13,400.18	5,526.79	13,392.92	5,552.83	101.24	100.69	-92.40	261.46	7,925.09	620.69	418.83	201.86	3.075	
13,500.00	5,525.94	13,492.74	5,552.66	102.47	101.93	-92.47	262.11	8,024.91	620.72	416.40	204.32	3.038	
13,500.18	5,525.94	13,492.93	5,552.66	102.47	101.93	-92.47	262.11	8,025.09	620.72	416.40	204.32	3.038	
13,600.00	5,525.10	13,592.74	5,552.49	103.70	103.17	-92.53	262.76	8,124.90	620.75	413.97	206.78	3.002	
13,600.19	5,525.09	13,592.93	5,552.49	103.70	103.17	-92.53	262.76	8,125.09	620.75	413.96	206.78	3.002	
13,700.00	5,524.25	13,692.74	5,552.31	104.93	104.41	-92.59	263.41	8,224.90	620.78	411.53	209.24	2.967	

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka LD13-670 - OH - Plan #1													Offset Site Error:
Survey Program: 0-MWD+IFR1+MS													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre		Rule Assigned: Distance		Minimum Separation (usft)	Separation Factor	Warning
							+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)			
13,700.19	5,524.24	13,692.93	5,552.31	104.93	104.41	-92.59	263.41	8,225.09	620.78	411.53	209.25	2.967	
13,800.00	5,523.40	13,792.74	5,552.14	106.16	105.64	-92.65	264.05	8,324.89	620.81	409.10	211.71	2.932	
13,800.20	5,523.40	13,792.93	5,552.14	106.16	105.65	-92.65	264.06	8,325.09	620.81	409.10	211.71	2.932	
13,900.00	5,522.55	13,892.73	5,551.97	107.39	106.88	-92.72	264.70	8,424.89	620.84	406.67	214.17	2.899	
13,900.20	5,522.55	13,892.94	5,551.97	107.39	106.89	-92.72	264.70	8,425.09	620.84	406.67	214.17	2.899	
14,000.00	5,521.70	13,992.73	5,551.80	108.62	108.12	-92.78	265.35	8,524.88	620.87	404.24	216.63	2.866	
14,000.21	5,521.70	13,992.94	5,551.79	108.62	108.13	-92.78	265.35	8,525.09	620.87	404.23	216.64	2.866	
14,100.00	5,520.85	14,092.73	5,551.62	109.85	109.36	-92.84	266.00	8,624.88	620.90	401.81	219.10	2.834	
14,100.21	5,520.85	14,092.94	5,551.62	109.86	109.37	-92.84	266.00	8,625.09	620.90	401.80	219.10	2.834	
14,200.00	5,520.00	14,192.73	5,551.45	111.09	110.60	-92.90	266.65	8,724.88	620.94	399.38	221.56	2.803	
14,200.21	5,520.00	14,192.94	5,551.45	111.09	110.60	-92.90	266.65	8,725.09	620.94	399.37	221.57	2.802	
14,300.00	5,519.15	14,292.72	5,551.28	112.32	111.84	-92.97	267.30	8,824.87	620.97	396.95	224.03	2.772	
14,300.22	5,519.15	14,292.94	5,551.28	112.32	111.84	-92.97	267.30	8,825.09	620.97	396.94	224.03	2.772	
14,400.00	5,518.31	14,392.72	5,551.10	113.55	113.08	-93.03	267.95	8,924.87	621.01	394.52	226.49	2.742	
14,400.22	5,518.30	14,392.94	5,551.10	113.56	113.09	-93.03	267.95	8,925.09	621.01	394.51	226.50	2.742	
14,500.00	5,517.46	14,492.72	5,550.93	114.79	114.32	-93.09	268.59	9,024.86	621.04	392.09	228.95	2.713	
14,500.22	5,517.46	14,492.94	5,550.93	114.79	114.33	-93.09	268.60	9,025.09	621.04	392.08	228.96	2.712	
14,600.00	5,516.61	14,592.72	5,550.76	116.02	115.56	-93.15	269.24	9,124.86	621.08	389.66	231.42	2.684	
14,600.23	5,516.61	14,592.95	5,550.76	116.03	115.57	-93.15	269.24	9,125.09	621.08	389.66	231.42	2.684	
14,700.00	5,515.76	14,692.72	5,550.59	117.26	116.80	-93.21	269.89	9,224.85	621.12	387.23	233.89	2.656	
14,700.23	5,515.76	14,692.95	5,550.59	117.26	116.81	-93.21	269.89	9,225.08	621.12	387.23	233.89	2.656	
14,800.00	5,514.91	14,792.71	5,550.41	118.49	118.04	-93.28	270.54	9,324.85	621.16	384.81	236.35	2.628	
14,800.23	5,514.91	14,792.95	5,550.41	118.50	118.05	-93.28	270.54	9,325.08	621.16	384.80	236.36	2.628	
14,900.00	5,514.06	14,892.71	5,550.24	119.73	119.29	-93.34	271.19	9,424.84	621.19	382.38	238.81	2.601	
14,900.24	5,514.06	14,892.95	5,550.24	119.73	119.29	-93.34	271.19	9,425.08	621.19	382.37	238.82	2.601	
15,000.00	5,513.21	14,992.71	5,550.07	120.96	120.53	-93.40	271.84	9,524.84	621.23	379.95	241.29	2.575	
15,000.24	5,513.21	14,992.95	5,550.07	120.97	120.53	-93.40	271.84	9,525.08	621.23	379.95	241.29	2.575	
15,100.00	5,512.37	15,092.71	5,549.90	122.20	121.77	-93.46	272.49	9,624.83	621.27	377.53	243.75	2.549	
15,100.24	5,512.36	15,092.95	5,549.90	122.20	121.77	-93.46	272.49	9,625.08	621.27	377.52	243.75	2.549	
15,200.00	5,511.52	15,192.70	5,549.72	123.44	123.01	-93.53	273.13	9,724.83	621.32	375.11	246.21	2.524	
15,200.25	5,511.52	15,192.95	5,549.72	123.44	123.01	-93.53	273.14	9,725.08	621.32	375.10	246.22	2.523	
15,300.00	5,510.67	15,292.70	5,549.55	124.67	124.25	-93.59	273.78	9,824.83	621.36	372.68	248.68	2.499	
15,300.25	5,510.67	15,292.95	5,549.55	124.67	124.26	-93.59	273.78	9,825.07	621.36	372.68	248.68	2.499	
15,400.00	5,509.82	15,392.70	5,549.38	125.91	125.49	-93.65	274.43	9,924.82	621.40	370.26	251.14	2.474	
15,400.25	5,509.82	15,392.95	5,549.38	125.91	125.50	-93.65	274.43	9,925.07	621.40	370.25	251.15	2.474	
15,500.00	5,508.97	15,492.70	5,549.21	127.15	126.74	-93.71	275.08	10,024.82	621.44	367.84	253.61	2.450	
15,500.25	5,508.97	15,492.95	5,549.20	127.15	126.74	-93.71	275.08	10,025.07	621.44	367.83	253.61	2.450	
15,600.00	5,508.12	15,592.70	5,549.03	128.38	127.98	-93.77	275.73	10,124.81	621.49	365.42	256.07	2.427	
15,600.25	5,508.12	15,592.95	5,549.03	128.39	127.98	-93.77	275.73	10,125.07	621.49	365.41	256.08	2.427	
15,700.00	5,507.27	15,692.69	5,548.86	129.62	129.22	-93.84	276.38	10,224.81	621.53	363.00	258.54	2.404	
15,700.26	5,507.27	15,692.95	5,548.86	129.62	129.22	-93.84	276.38	10,225.06	621.53	362.99	258.54	2.404	
15,800.00	5,506.43	15,792.69	5,548.69	130.86	130.46	-93.90	277.02	10,324.80	621.58	360.58	261.00	2.382	
15,800.26	5,506.42	15,792.95	5,548.69	130.86	130.47	-93.90	277.03	10,325.06	621.58	360.57	261.01	2.381	
15,900.00	5,505.58	15,892.69	5,548.51	132.10	131.71	-93.96	277.67	10,424.80	621.62	358.16	263.47	2.359	
15,900.26	5,505.57	15,892.95	5,548.51	132.10	131.71	-93.96	277.67	10,425.06	621.62	358.15	263.47	2.359	
16,000.00	5,504.73	15,992.69	5,548.34	133.33	132.95	-94.02	278.32	10,524.79	621.67	355.74	265.93	2.338	
16,000.26	5,504.73	15,992.95	5,548.34	133.34	132.95	-94.02	278.32	10,525.06	621.67	355.73	265.94	2.338	
16,100.00	5,503.88	16,092.68	5,548.17	134.57	134.19	-94.08	278.97	10,624.79	621.72	353.32	268.40	2.316	
16,100.26	5,503.88	16,092.94	5,548.17	134.57	134.19	-94.09	278.97	10,625.05	621.72	353.32	268.40	2.316	
16,203.62	5,503.00	16,190.56	5,548.00	135.86	135.41	-94.15	279.60	10,722.66	621.80	350.94	270.85	2.296 SF	

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka LD13-685 - OH - Plan #1

Survey Program: Reference		0-MWD+IFR1+MS Offset							Rule Assigned: Distance					Offset Well Error: 0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning		
0.00	0.00	0.00	0.00	0.00	0.00	-0.85	56.11	-0.83	56.12						
100.00	100.00	100.00	100.00	0.88	0.88	-0.85	56.11	-0.83	56.12	54.35	1.77	31.746			
200.00	200.00	200.00	200.00	1.50	1.50	-0.85	56.11	-0.83	56.12	53.11	3.00	18.680			
300.00	300.00	300.00	300.00	1.94	1.94	-0.85	56.11	-0.83	56.12	52.25	3.87	14.500			
400.00	400.00	400.00	400.00	2.29	2.29	-0.85	56.11	-0.83	56.12	51.54	4.58	12.250			
500.00	500.00	500.00	500.00	2.60	2.60	-0.85	56.11	-0.83	56.12	50.92	5.20	10.791	CC, ES		
600.00	600.00	598.08	598.06	2.88	3.04	-1.18	57.75	-1.19	57.80	51.88	5.91	9.773			
700.00	699.99	695.85	695.70	3.19	3.46	151.87	62.64	-2.28	63.98	57.37	6.61	9.676			
800.00	799.91	792.83	792.32	3.49	3.86	151.96	70.71	-4.07	75.79	68.51	7.28	10.412			
900.00	899.69	888.54	887.35	3.80	4.26	152.31	81.80	-6.52	93.16	85.21	7.95	11.725			
964.87	964.31	949.74	947.90	3.93	4.52	152.59	90.51	-8.45	107.35	99.04	8.31	12.916			
1,000.00	999.29	982.58	980.30	3.99	4.66	152.76	95.70	-9.61	115.84	107.35	8.49	13.644			
1,100.00	1,098.83	1,075.01	1,071.16	4.29	5.06	152.96	112.26	-13.28	142.09	132.96	9.13	15.564			
1,200.00	1,198.37	1,167.36	1,161.38	4.60	5.36	152.88	131.52	-17.55	171.21	161.53	9.68	17.691			
1,300.00	1,297.92	1,262.80	1,254.45	4.93	5.69	152.77	152.13	-22.11	201.06	190.75	10.30	19.518			
1,400.00	1,397.46	1,358.25	1,347.53	5.26	6.05	152.70	172.74	-26.68	230.90	219.94	10.97	21.056			
1,500.00	1,497.01	1,453.69	1,440.61	5.61	6.43	152.64	193.35	-31.25	260.75	249.11	11.65	22.384			
1,600.00	1,596.55	1,549.13	1,533.69	5.96	6.82	152.59	213.96	-35.81	290.60	278.26	12.35	23.537			
1,700.00	1,696.09	1,644.57	1,626.76	6.31	7.21	152.55	234.57	-40.38	320.45	307.40	13.06	24.544			
1,800.00	1,795.64	1,740.01	1,719.84	6.67	7.62	152.52	255.17	-44.95	350.30	336.53	13.78	25.427			
1,900.00	1,895.18	1,835.45	1,812.92	7.04	8.03	152.49	275.78	-49.52	380.15	365.65	14.51	26.207			
2,000.00	1,994.73	1,930.89	1,905.99	7.41	8.44	152.47	296.39	-54.08	410.00	394.76	15.24	26.898			
2,100.00	2,094.27	2,026.33	1,999.07	7.78	8.86	152.45	317.00	-58.65	439.85	423.87	15.99	27.515			
2,200.00	2,193.81	2,121.77	2,092.15	8.15	9.28	152.43	337.61	-63.22	469.70	452.97	16.74	28.067			
2,300.00	2,293.36	2,217.21	2,185.23	8.52	9.71	152.42	358.21	-67.79	499.55	482.06	17.49	28.564			
2,400.00	2,392.90	2,312.65	2,278.30	8.90	10.14	152.40	378.82	-72.35	529.40	511.16	18.25	29.012			
2,500.00	2,492.45	2,408.09	2,371.38	9.28	10.57	152.39	399.43	-76.92	559.25	540.24	19.01	29.420			
2,600.00	2,591.99	2,503.54	2,464.46	9.66	11.00	152.38	420.04	-81.49	589.10	569.33	19.78	29.790			
2,700.00	2,691.54	2,598.98	2,557.54	10.04	11.44	152.37	440.65	-86.06	618.95	598.41	20.54	30.129			
2,800.00	2,791.08	2,694.42	2,650.61	10.42	11.87	152.36	461.25	-90.62	648.80	627.49	21.32	30.439			
2,900.00	2,890.62	2,789.86	2,743.69	10.81	12.31	152.35	481.86	-95.19	678.65	656.56	22.09	30.724			
3,000.00	2,990.17	2,885.30	2,836.77	11.19	12.75	152.35	502.47	-99.76	708.50	685.64	22.86	30.987			
3,100.00	3,089.71	2,980.74	2,929.85	11.58	13.19	152.34	523.08	-104.33	738.35	714.71	23.64	31.230			
3,200.00	3,189.26	3,076.18	3,022.92	11.96	13.64	152.33	543.69	-108.89	768.20	743.78	24.42	31.455			
3,300.00	3,288.80	3,171.62	3,116.00	12.35	14.08	152.33	564.30	-113.46	798.05	772.85	25.20	31.664			
3,400.00	3,388.34	3,267.06	3,209.08	12.74	14.53	152.32	584.90	-118.03	827.90	801.92	25.99	31.859			
3,500.00	3,487.89	3,362.50	3,302.16	13.12	14.97	152.32	605.51	-122.60	857.75	830.98	26.77	32.041			
3,600.00	3,587.43	3,457.94	3,395.23	13.51	15.42	152.31	626.12	-127.16	887.60	860.05	27.56	32.211			
3,700.00	3,686.98	3,553.39	3,488.31	13.90	15.87	152.31	646.73	-131.73	917.45	889.11	28.34	32.370			
3,800.00	3,786.52	3,648.83	3,581.39	14.29	16.32	152.30	667.34	-136.30	947.30	918.17	29.13	32.520			
3,900.00	3,886.06	3,744.27	3,674.47	14.68	16.76	152.30	687.94	-140.87	977.15	947.24	29.92	32.660			
4,000.00	3,985.61	3,839.71	3,767.54	15.07	17.21	152.29	708.55	-145.43	1,007.01	976.30	30.71	32.793			
4,100.00	4,085.15	3,935.15	3,860.62	15.46	17.66	152.29	729.16	-150.00	1,036.86	1,005.36	31.50	32.917			
4,200.00	4,184.70	4,030.59	3,953.70	15.85	18.11	152.29	749.77	-154.57	1,066.71	1,034.42	32.29	33.035			
4,300.00	4,284.24	4,126.03	4,046.78	16.24	18.57	152.28	770.38	-159.14	1,096.56	1,063.47	33.08	33.147			
4,400.00	4,383.79	4,221.47	4,139.85	16.63	19.02	152.28	790.99	-163.70	1,126.41	1,092.53	33.87	33.252			
4,500.00	4,483.33	4,316.91	4,232.93	17.02	19.47	152.28	811.59	-168.27	1,156.26	1,121.59	34.67	33.352			
4,600.00	4,582.87	4,412.35	4,326.01	17.41	19.92	152.28	832.20	-172.84	1,186.11	1,150.64	35.46	33.447			
4,700.00	4,682.42	4,507.79	4,419.08	17.81	20.37	152.27	852.81	-177.40	1,215.96	1,179.70	36.26	33.537			
4,800.00	4,781.96	4,603.24	4,512.16	18.20	20.83	152.27	873.42	-181.97	1,245.81	1,208.76	37.05	33.623			
4,856.88	4,838.58	4,657.52	4,565.10	18.41	21.08	152.27	885.14	-184.57	1,262.79	1,225.29	37.49	33.681			
4,900.00	4,881.54	4,698.64	4,605.21	18.56	21.28	-168.63	894.02	-186.54	1,275.67	1,237.85	37.82	33.726			

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka LD13-685 - OH - Plan #1													Offset Site Error:
Survey Program: 0-MWD+IFR1+MS													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Rule Assigned: Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
4,950.00	4,931.28	4,746.11	4,651.50	18.70	21.50	-133.43	904.27	-188.81	1,290.61	1,252.40	38.21	33.777	
5,000.00	4,980.72	4,793.13	4,697.36	18.75	21.73	-116.69	914.42	-191.06	1,305.52	1,266.98	38.54	33.874	
5,050.00	5,029.61	4,839.48	4,742.55	18.76	21.95	-108.07	924.43	-193.28	1,320.38	1,281.56	38.82	34.012	
5,100.00	5,077.73	4,884.91	4,786.86	18.74	22.16	-102.94	934.24	-195.45	1,335.22	1,296.15	39.07	34.178	
5,150.00	5,124.83	4,929.22	4,830.08	18.71	22.38	-99.55	943.81	-197.57	1,350.06	1,310.78	39.28	34.368	
5,200.00	5,170.69	4,972.19	4,871.98	18.67	22.58	-97.15	953.09	-199.63	1,364.95	1,325.48	39.47	34.579	
5,250.00	5,215.08	5,013.61	4,912.37	18.63	22.77	-95.35	962.03	-201.61	1,379.95	1,340.32	39.64	34.816	
5,300.00	5,257.79	5,061.74	4,959.34	18.59	22.99	-94.12	972.42	-202.76	1,395.04	1,355.20	39.84	35.017	
5,350.00	5,298.60	5,113.99	5,010.30	18.55	23.21	-93.23	983.69	-200.40	1,410.02	1,369.94	40.07	35.185	
5,400.00	5,337.32	5,169.26	5,063.87	18.52	23.43	-92.56	995.51	-193.76	1,424.78	1,384.46	40.32	35.338	
5,450.00	5,373.77	5,228.04	5,120.11	18.50	23.62	-92.09	1,007.91	-182.09	1,439.24	1,398.68	40.56	35.484	
5,500.00	5,407.75	5,290.89	5,179.00	18.49	23.78	-91.79	1,020.88	-164.42	1,453.26	1,412.47	40.80	35.622	
5,550.00	5,439.11	5,358.43	5,240.34	18.49	23.92	-91.64	1,034.36	-139.64	1,466.73	1,425.70	41.03	35.748	
5,600.00	5,467.70	5,431.33	5,303.66	18.52	24.04	-91.62	1,048.24	-106.38	1,479.47	1,438.20	41.27	35.849	
5,650.00	5,493.37	5,510.23	5,368.10	18.57	24.16	-91.72	1,062.34	-63.16	1,491.33	1,449.80	41.53	35.912	
5,700.00	5,516.01	5,595.69	5,432.21	18.63	24.27	-91.91	1,076.32	-8.48	1,502.08	1,460.27	41.81	35.927	
5,750.00	5,535.49	5,688.04	5,493.81	18.73	24.39	-92.15	1,089.71	58.91	1,511.51	1,469.38	42.13	35.876	
5,800.00	5,551.73	5,787.20	5,549.94	18.84	24.55	-92.41	1,101.83	139.65	1,519.39	1,476.88	42.51	35.745	
5,850.00	5,564.64	5,892.50	5,597.04	18.98	24.75	-92.61	1,111.91	233.19	1,525.47	1,482.52	42.95	35.519	
5,900.00	5,574.16	6,002.58	5,631.42	19.15	25.01	-92.73	1,119.13	337.40	1,529.56	1,486.09	43.46	35.191	
5,950.00	5,580.26	6,115.36	5,650.07	19.34	25.35	-92.71	1,122.85	448.44	1,531.51	1,487.45	44.06	34.761	
5,957.39	5,580.86	6,132.10	5,651.38	19.37	25.41	-92.69	1,123.08	465.14	1,531.61	1,487.46	44.15	34.688	
6,000.00	5,582.89	6,203.19	5,652.94	19.55	25.66	-92.61	1,123.16	536.18	1,531.44	1,486.83	44.61	34.333	
6,012.82	5,583.00	6,216.00	5,652.90	19.61	25.71	-92.62	1,123.11	549.00	1,531.30	1,486.59	44.72	34.246	
6,100.00	5,583.00	6,303.18	5,652.65	20.04	26.07	-92.61	1,122.73	636.17	1,530.35	1,484.85	45.50	33.635	
6,200.00	5,583.00	6,403.17	5,652.35	20.59	26.54	-92.60	1,122.30	736.17	1,529.26	1,482.74	46.51	32.878	
6,300.00	5,583.00	6,503.17	5,652.06	21.20	27.05	-92.59	1,121.87	836.16	1,528.16	1,480.53	47.64	32.078	
6,400.00	5,583.00	6,603.16	5,651.76	21.86	27.61	-92.58	1,121.44	936.15	1,527.07	1,478.21	48.87	31.251	
6,500.00	5,583.00	6,703.15	5,651.47	22.57	28.22	-92.57	1,121.01	1,036.14	1,525.98	1,475.80	50.19	30.406	
6,600.00	5,583.00	6,803.15	5,651.18	23.33	28.86	-92.56	1,120.58	1,136.13	1,524.89	1,473.30	51.59	29.556	
6,700.00	5,583.00	6,903.14	5,650.88	24.13	29.55	-92.55	1,120.15	1,236.13	1,523.80	1,470.72	53.08	28.707	
6,800.00	5,583.00	7,003.13	5,650.59	24.96	30.27	-92.54	1,119.72	1,336.12	1,522.71	1,468.06	54.64	27.867	
6,900.00	5,583.00	7,103.13	5,650.29	25.83	31.02	-92.53	1,119.28	1,436.11	1,521.61	1,465.35	56.27	27.042	
7,000.00	5,583.00	7,203.12	5,650.00	26.73	31.80	-92.53	1,118.85	1,536.10	1,520.52	1,462.57	57.96	26.235	
7,100.00	5,583.00	7,303.12	5,649.70	27.66	32.62	-92.52	1,118.42	1,636.10	1,519.43	1,459.73	59.70	25.450	
7,200.00	5,583.00	7,403.11	5,649.41	28.61	33.46	-92.51	1,117.99	1,736.09	1,518.34	1,456.84	61.50	24.689	
7,300.00	5,583.00	7,503.10	5,649.12	29.58	34.32	-92.50	1,117.56	1,836.08	1,517.25	1,453.91	63.34	23.953	
7,400.00	5,583.00	7,603.10	5,648.82	30.58	35.20	-92.49	1,117.13	1,936.07	1,516.16	1,450.93	65.23	23.244	
7,500.00	5,583.00	7,703.09	5,648.53	31.59	36.11	-92.48	1,116.70	2,036.07	1,515.07	1,447.91	67.15	22.561	
7,600.00	5,583.00	7,803.08	5,648.23	32.62	37.04	-92.47	1,116.27	2,136.06	1,513.97	1,444.86	69.12	21.905	
7,700.00	5,583.00	7,903.08	5,647.94	33.66	37.98	-92.46	1,115.84	2,236.05	1,512.88	1,441.77	71.11	21.275	
7,800.00	5,583.00	8,003.07	5,647.64	34.72	38.95	-92.45	1,115.41	2,336.04	1,511.79	1,438.65	73.14	20.671	
7,900.00	5,583.00	8,103.07	5,647.35	35.79	39.92	-92.44	1,114.97	2,436.04	1,510.70	1,435.51	75.19	20.091	
8,000.00	5,583.00	8,203.06	5,647.06	36.88	40.92	-92.43	1,114.54	2,536.03	1,509.61	1,432.34	77.27	19.536	
8,100.00	5,583.00	8,303.05	5,646.76	37.97	41.92	-92.42	1,114.11	2,636.02	1,508.52	1,429.14	79.38	19.005	
8,200.00	5,583.00	8,403.05	5,646.47	39.07	42.94	-92.41	1,113.68	2,736.01	1,507.43	1,425.93	81.50	18.496	
8,300.00	5,583.00	8,503.04	5,646.17	40.18	43.97	-92.40	1,113.25	2,836.01	1,506.34	1,422.69	83.65	18.008	
8,400.00	5,583.00	8,603.03	5,645.88	41.30	45.01	-92.39	1,112.82	2,936.00	1,505.25	1,419.43	85.81	17.541	
8,494.05	5,583.00	8,697.08	5,645.60	42.36	46.00	-92.39	1,112.41	3,030.04	1,504.22	1,416.36	87.86	17.120	
8,500.00	5,582.99	8,703.03	5,645.58	42.43	46.06	-92.39	1,112.39	3,035.99	1,504.15	1,416.16	87.99	17.094	
8,532.50	5,582.74	8,735.52	5,645.49	42.79	46.41	-92.40	1,112.25	3,068.48	1,503.81	1,415.11	88.70	16.953	
8,600.00	5,581.84	8,803.02	5,645.29	43.55	47.13	-92.43	1,111.96	3,135.98	1,503.11	1,412.93	90.18	16.668	

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design: Tatanka Pads - Tatanka LD13-685 - OH - Plan #1													Offset Site Error:
Survey Program: 0-MWD+IFR1+MS													Offset Well Error:
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
8,700.00	5,580.49	8,903.01	5,645.00	44.69	48.20	-92.47	1,111.53	3,235.97	1,502.08	1,409.69	92.39	16.258	
8,800.00	5,579.15	9,003.00	5,644.70	45.84	49.27	-92.51	1,111.10	3,335.95	1,501.05	1,406.44	94.61	15.866	
8,900.00	5,577.81	9,102.98	5,644.41	46.99	50.36	-92.55	1,110.66	3,435.94	1,500.01	1,403.17	96.84	15.489	
9,000.00	5,576.47	9,202.97	5,644.11	48.14	51.46	-92.59	1,110.23	3,535.93	1,498.98	1,399.89	99.09	15.128	
9,100.00	5,575.13	9,302.96	5,643.82	49.31	52.56	-92.64	1,109.80	3,635.92	1,497.95	1,396.61	101.34	14.781	
9,200.00	5,573.79	9,402.95	5,643.53	50.47	53.66	-92.68	1,109.37	3,735.90	1,496.92	1,393.31	103.61	14.448	
9,300.00	5,572.44	9,502.94	5,643.23	51.64	54.78	-92.72	1,108.94	3,835.89	1,495.89	1,390.00	105.89	14.127	
9,400.00	5,571.10	9,602.93	5,642.94	52.81	55.90	-92.76	1,108.51	3,935.88	1,494.86	1,386.69	108.17	13.819	
9,500.00	5,569.76	9,702.92	5,642.64	53.99	57.02	-92.80	1,108.08	4,035.86	1,493.84	1,383.37	110.47	13.523	
9,600.00	5,568.42	9,802.90	5,642.35	55.17	58.15	-92.85	1,107.65	4,135.85	1,492.81	1,380.04	112.77	13.237	
9,700.00	5,567.08	9,902.89	5,642.05	56.35	59.28	-92.89	1,107.22	4,235.84	1,491.78	1,376.70	115.08	12.963	
9,800.00	5,565.73	10,002.88	5,641.76	57.53	60.42	-92.93	1,106.79	4,335.83	1,490.76	1,373.36	117.40	12.698	
9,900.00	5,564.39	10,102.87	5,641.47	58.72	61.57	-92.97	1,106.36	4,435.81	1,489.73	1,370.01	119.72	12.443	
10,000.00	5,563.05	10,202.86	5,641.17	59.91	62.71	-93.02	1,105.92	4,535.80	1,488.71	1,366.66	122.05	12.197	
10,100.00	5,561.71	10,302.85	5,640.88	61.10	63.87	-93.06	1,105.49	4,635.79	1,487.69	1,363.30	124.39	11.960	
10,200.00	5,560.37	10,402.84	5,640.58	62.30	65.02	-93.10	1,105.06	4,735.78	1,486.67	1,359.93	126.73	11.731	
10,300.00	5,559.02	10,502.83	5,640.29	63.49	66.18	-93.14	1,104.63	4,835.76	1,485.64	1,356.56	129.08	11.509	
10,400.00	5,557.68	10,602.81	5,639.99	64.69	67.34	-93.19	1,104.20	4,935.75	1,484.62	1,353.19	131.43	11.296	
10,500.00	5,556.34	10,702.80	5,639.70	65.89	68.50	-93.23	1,103.77	5,035.74	1,483.61	1,349.81	133.79	11.089	
10,600.00	5,555.00	10,802.79	5,639.41	67.10	69.67	-93.27	1,103.34	5,135.73	1,482.59	1,346.43	136.15	10.889	
10,700.00	5,553.66	10,902.78	5,639.11	68.30	70.84	-93.31	1,102.91	5,235.71	1,481.57	1,343.05	138.52	10.696	
10,800.00	5,552.32	11,002.77	5,638.82	69.51	72.02	-93.36	1,102.48	5,335.70	1,480.55	1,339.66	140.89	10.509	
10,900.00	5,550.97	11,102.76	5,638.52	70.71	73.19	-93.40	1,102.05	5,435.69	1,479.54	1,336.27	143.26	10.328	
11,000.00	5,549.63	11,202.75	5,638.23	71.92	74.37	-93.44	1,101.61	5,535.67	1,478.52	1,332.88	145.64	10.152	
11,100.00	5,548.29	11,302.73	5,637.93	73.13	75.55	-93.49	1,101.18	5,635.66	1,477.51	1,329.49	148.02	9.982	
11,200.00	5,546.95	11,402.72	5,637.64	74.35	76.73	-93.53	1,100.75	5,735.65	1,476.49	1,326.09	150.40	9.817	
11,300.00	5,545.61	11,502.71	5,637.35	75.56	77.92	-93.57	1,100.32	5,835.64	1,475.48	1,322.69	152.79	9.657	
11,400.00	5,544.26	11,602.70	5,637.05	76.77	79.10	-93.62	1,099.89	5,935.62	1,474.47	1,319.29	155.18	9.502	
11,494.23	5,543.00	11,696.92	5,636.77	77.92	80.22	-93.66	1,099.48	6,029.84	1,473.52	1,316.08	157.43	9.360	
11,508.36	5,542.85	11,711.05	5,636.73	78.09	80.39	-93.66	1,099.42	6,043.97	1,473.37	1,315.60	157.77	9.339	
11,600.00	5,542.07	11,802.68	5,636.46	79.20	81.48	-93.68	1,099.03	6,135.60	1,472.42	1,312.45	159.97	9.204	
11,700.00	5,541.22	11,902.67	5,636.17	80.42	82.68	-93.71	1,098.60	6,235.59	1,471.37	1,309.00	162.37	9.062	
11,800.00	5,540.37	12,002.67	5,635.87	81.64	83.87	-93.73	1,098.17	6,335.58	1,470.33	1,305.56	164.78	8.923	
11,900.00	5,539.52	12,102.66	5,635.58	82.86	85.07	-93.75	1,097.74	6,435.58	1,469.29	1,302.11	167.18	8.788	
12,000.00	5,538.67	12,202.65	5,635.29	84.08	86.26	-93.78	1,097.30	6,535.57	1,468.25	1,298.66	169.59	8.658	
12,100.00	5,537.82	12,302.65	5,634.99	85.30	87.46	-93.80	1,096.87	6,635.56	1,467.21	1,295.21	172.00	8.530	
12,200.00	5,536.98	12,402.64	5,634.70	86.52	88.66	-93.83	1,096.44	6,735.55	1,466.17	1,291.75	174.42	8.406	
12,300.00	5,536.13	12,502.63	5,634.40	87.74	89.86	-93.85	1,096.01	6,835.54	1,465.13	1,288.30	176.83	8.285	
12,400.00	5,535.28	12,602.62	5,634.11	88.97	91.07	-93.88	1,095.58	6,935.53	1,464.09	1,284.84	179.25	8.168	
12,500.00	5,534.43	12,702.62	5,633.82	90.19	92.27	-93.90	1,095.15	7,035.52	1,463.05	1,281.38	181.67	8.053	
12,600.00	5,533.58	12,802.61	5,633.52	91.41	93.48	-93.93	1,094.72	7,135.52	1,462.01	1,277.92	184.09	7.942	
12,700.00	5,532.73	12,902.60	5,633.23	92.64	94.68	-93.95	1,094.29	7,235.51	1,460.97	1,274.46	186.51	7.833	
12,800.00	5,531.88	13,002.59	5,632.93	93.87	95.89	-93.97	1,093.86	7,335.50	1,459.93	1,271.00	188.94	7.727	
12,900.00	5,531.04	13,102.59	5,632.64	95.09	97.10	-94.00	1,093.43	7,435.49	1,458.89	1,267.53	191.36	7.624	
13,000.00	5,530.19	13,202.58	5,632.34	96.32	98.31	-94.02	1,093.00	7,535.48	1,457.86	1,264.07	193.79	7.523	
13,100.00	5,529.34	13,302.57	5,632.05	97.55	99.52	-94.05	1,092.56	7,635.47	1,456.82	1,260.60	196.22	7.424	
13,200.00	5,528.49	13,402.56	5,631.76	98.78	100.73	-94.07	1,092.13	7,735.46	1,455.78	1,257.13	198.65	7.328	
13,300.00	5,527.64	13,502.56	5,631.46	100.01	101.94	-94.10	1,091.70	7,835.45	1,454.74	1,253.66	201.08	7.235	
13,400.00	5,526.79	13,602.55	5,631.17	101.24	103.16	-94.12	1,091.27	7,935.45	1,453.71	1,250.19	203.51	7.143	
13,500.00	5,525.94	13,702.54	5,630.87	102.47	104.37	-94.15	1,090.84	8,035.44	1,452.67	1,246.72	205.95	7.054	
13,600.00	5,525.10	13,802.54	5,630.58	103.70	105.59	-94.17	1,090.41	8,135.43	1,451.63	1,243.25	208.38	6.966	
13,700.00	5,524.25	13,902.53	5,630.28	104.93	106.80	-94.20	1,089.98	8,235.42	1,450.60	1,239.78	210.82	6.881	

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

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

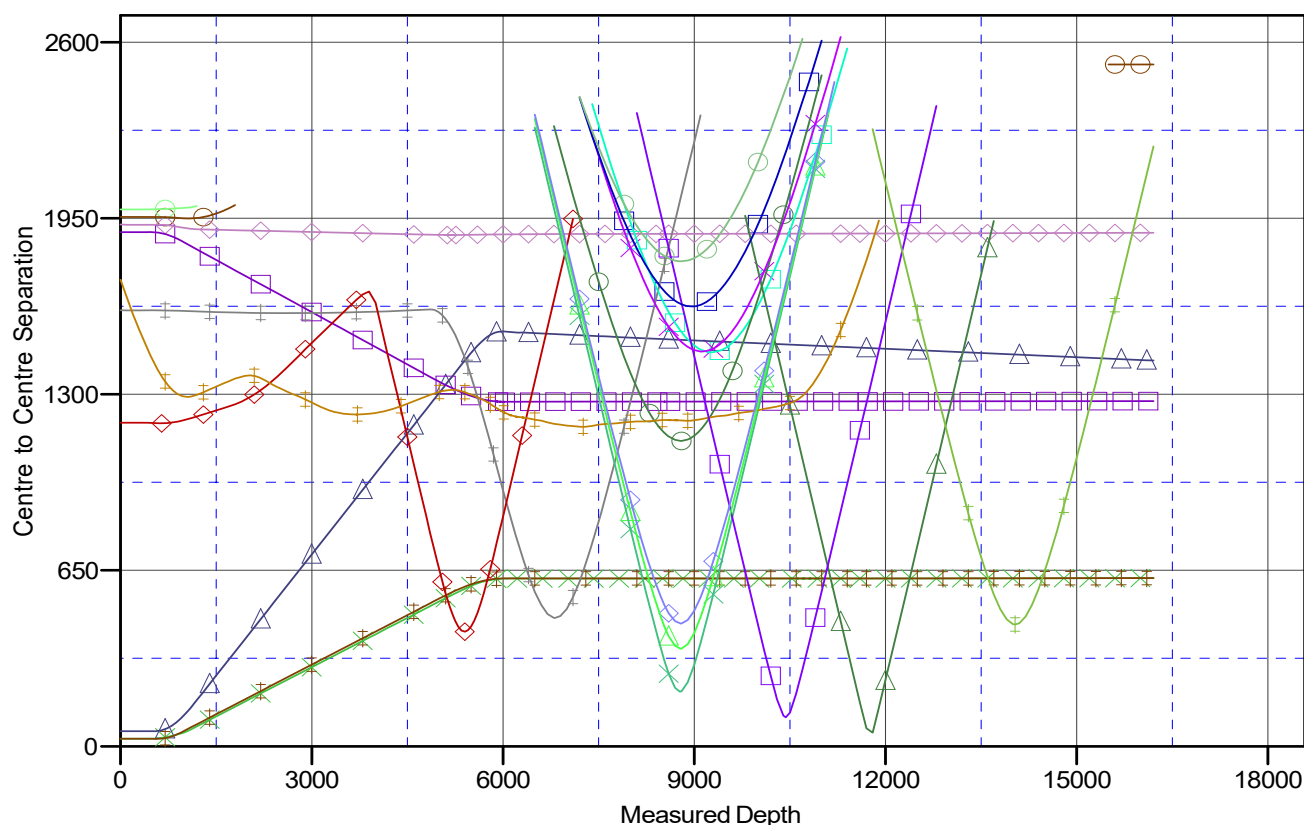
Offset Design: Tatanka Pads - Tatanka LD13-685 - OH - Plan #1											Offset Site Error: 0.00 usft		
Survey Program: 0-MWD+IFR1+MS		Offset		Semi Major Axis		Offset Wellbore Centre		Rule Assigned:				Offset Well Error: 0.00 usft	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical 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
13,800.00	5,523.40	14,002.52	5,629.99	106.16	108.02	-94.22	1,089.55	8,335.41	1,449.56	1,236.31	213.25	6.797	
13,900.00	5,522.55	14,102.51	5,629.70	107.39	109.24	-94.25	1,089.12	8,435.40	1,448.52	1,232.83	215.69	6.716	
14,000.00	5,521.70	14,202.51	5,629.40	108.62	110.45	-94.27	1,088.69	8,535.39	1,447.49	1,229.36	218.13	6.636	
14,100.00	5,520.85	14,302.50	5,629.11	109.85	111.67	-94.30	1,088.25	8,635.38	1,446.45	1,225.88	220.57	6.558	
14,200.00	5,520.00	14,402.49	5,628.81	111.09	112.89	-94.32	1,087.82	8,735.38	1,445.42	1,222.41	223.01	6.481	
14,300.00	5,519.15	14,502.48	5,628.52	112.32	114.11	-94.35	1,087.39	8,835.37	1,444.38	1,218.93	225.45	6.407	
14,400.00	5,518.31	14,602.48	5,628.22	113.55	115.33	-94.37	1,086.96	8,935.36	1,443.35	1,215.46	227.89	6.333	
14,500.00	5,517.46	14,702.47	5,627.93	114.79	116.56	-94.40	1,086.53	9,035.35	1,442.32	1,211.98	230.34	6.262	
14,600.00	5,516.61	14,802.46	5,627.64	116.02	117.78	-94.42	1,086.10	9,135.34	1,441.28	1,208.50	232.78	6.192	
14,700.00	5,515.76	14,902.45	5,627.34	117.26	119.00	-94.45	1,085.67	9,235.33	1,440.25	1,205.02	235.23	6.123	
14,800.00	5,514.91	15,002.45	5,627.05	118.49	120.22	-94.47	1,085.24	9,335.32	1,439.22	1,201.54	237.67	6.055	
14,900.00	5,514.06	15,102.44	5,626.75	119.73	121.45	-94.50	1,084.81	9,435.31	1,438.18	1,198.06	240.12	5.989	
15,000.00	5,513.21	15,202.43	5,626.46	120.96	122.67	-94.52	1,084.38	9,535.31	1,437.15	1,194.59	242.56	5.925	
15,100.00	5,512.37	15,302.42	5,626.16	122.20	123.90	-94.55	1,083.94	9,635.30	1,436.12	1,191.11	245.01	5.861	
15,200.00	5,511.52	15,402.42	5,625.87	123.44	125.12	-94.58	1,083.51	9,735.29	1,435.09	1,187.63	247.46	5.799	
15,300.00	5,510.67	15,502.41	5,625.58	124.67	126.35	-94.60	1,083.08	9,835.28	1,434.05	1,184.15	249.91	5.738	
15,400.00	5,509.82	15,602.40	5,625.28	125.91	127.58	-94.63	1,082.65	9,935.27	1,433.02	1,180.67	252.36	5.679	
15,500.00	5,508.97	15,702.40	5,624.99	127.15	128.80	-94.65	1,082.22	10,035.26	1,431.99	1,177.18	254.81	5.620	
15,600.00	5,508.12	15,802.39	5,624.69	128.38	130.03	-94.68	1,081.79	10,135.25	1,430.96	1,173.70	257.26	5.562	
15,700.00	5,507.27	15,902.38	5,624.40	129.62	131.26	-94.70	1,081.36	10,235.24	1,429.93	1,170.22	259.71	5.506	
15,724.93	5,507.06	15,927.31	5,624.33	129.93	131.56	-94.71	1,081.25	10,260.17	1,429.67	1,169.35	260.32	5.492	
15,800.00	5,506.43	16,002.37	5,624.10	130.86	132.49	-94.73	1,080.93	10,335.24	1,428.90	1,166.74	262.16	5.451	
15,824.90	5,506.21	16,027.28	5,624.03	131.17	132.79	-94.74	1,080.82	10,360.14	1,428.64	1,165.87	262.77	5.437	
15,900.00	5,505.58	16,102.37	5,623.81	132.10	133.72	-94.76	1,080.50	10,435.23	1,427.87	1,163.26	264.61	5.396	
15,924.88	5,505.37	16,127.25	5,623.74	132.40	134.02	-94.76	1,080.39	10,460.11	1,427.61	1,162.39	265.22	5.383	
16,000.00	5,504.73	16,202.36	5,623.52	133.33	134.94	-94.78	1,080.07	10,535.22	1,426.84	1,159.78	267.06	5.343	
16,024.86	5,504.52	16,227.22	5,623.44	133.64	135.25	-94.79	1,079.96	10,560.07	1,426.58	1,158.91	267.67	5.330	
16,100.00	5,503.88	16,302.35	5,623.22	134.57	136.17	-94.81	1,079.63	10,635.21	1,425.81	1,156.30	269.51	5.290	
16,127.06	5,503.65	16,329.41	5,623.14	134.91	136.51	-94.81	1,079.52	10,662.26	1,425.53	1,155.35	270.18	5.276	
16,203.62	5,503.00	16,377.82	5,623.00	135.86	137.10	-94.83	1,079.31	10,710.68	1,425.02	1,153.30	271.72	5.244	SF

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB=23' @ 4703.00usft
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: Tatanka LD13-660
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 1.07°

Ladder Plot



LEGEND

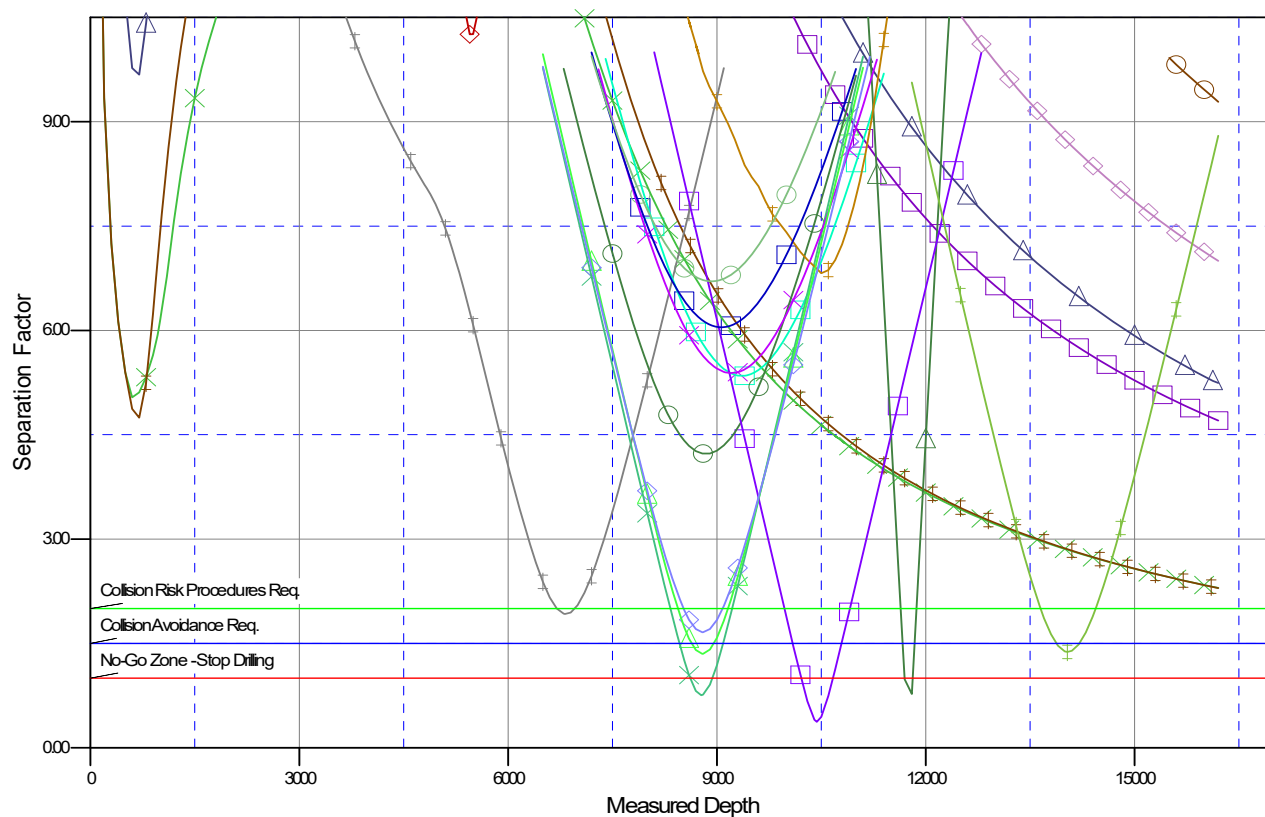
Tatanka Federal LD13-625, OH, Plan #1 V0	Zmith #1 (D&A), OH, OH V0	Brady #1 (D&A), OH, OH V0
Tatanka Federal LD13-635, OH, Plan #1 V0	Alice Nay #2 (D&A), OH, OH V0	Rauth #6 (D&A), OH, OH V0
Tatanka LD13-650, OH, Plan #1 V0	Alice Nay #1 (D&A), OH, OH V0	Alice Nay #1 (D&A), OH, OH V0
Tatanka Federal LD13-615, OH, Plan #1 V0	Castor Federal LD15-72HN, OH, OH V0	Modemott #14 (P&A), OH, OH V0
Tatanka LD13-685, OH, Plan #1 V0	Alice Nay #1 (2) (D&A), OH, OH V0	Alice Nay (OWP) #1-A (T&A), OH, OH V0
Tatanka LD13-670, OH, Plan #1 V0	Castor Federal LD13-78HN, OH, OH V0	Alice G Nay #1 (P&A), OH, OH V0
Tatanka Federal LD13-645, OH, Plan #1 V0	Castor Federal LD14-68HN, OH, OH V0	Nay (OWP) #1 (D&A), OH, OH V0

Company:	Bison Oil & Gas II, LLC	Local Co-ordinate Reference:	Well Tatanka LD13-660
Project:	Weld Co., CO (NAD-83)	TVD Reference:	KB=23' @ 4703.00usft
Reference Site:	Tatanka Pads	MD Reference:	KB=23' @ 4703.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	Tatanka LD13-660	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.1 Single User Db
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB=23' @ 4703.00usft
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: Tatanka LD13-660
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 1.07°

Separation Factor Plot



LEGEND

Tatanka Federal LD13-625, OH, Plan #1 V0	Zmith #1 (D&A), OH, OH V0	Brady #1 (D&A), OH, OH V0
Tatanka Federal LD13-635, OH, Plan #1 V0	Alice Nay #2 (D&A), OH, OH V0	Rauth #2 (D&A), OH, OH V0
Tatanka LD13-650, OH, Plan #1 V0	Alice Nay #1 (D&A), OH, OH V0	Alice Nay #1 (D&A), OH, OH V0
Tatanka Federal LD13-615, OH, Plan #1 V0	Castor Federal LD15-72HN, OH, OH V0	Modemott #14 (P&A), OH, OH V0
Tatanka LD13-685, OH, Plan #1 V0	Alice Nay #1 (2) (D&A), OH, OH V0	Alice Nay (OWP) #1-A (T&A), OH, OH V0
Tatanka LD13-670, OH, Plan #1 V0	Castor Federal LD13-78HN, OH, OH V0	Alice G Nay #1 (P&A), OH, OH V0
Tatanka Federal LD13-645, OH, Plan #1 V0	Castor Federal LD14-68HN, OH, OH V0	Nay (OWP) #1 (D&A), OH, OH V0