

Verdad Oil & Gas Corporation

Well Name: **Johnson 01N-65W-30-5C**

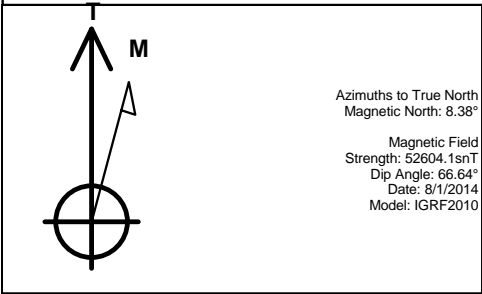
Surface Location: Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W						
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone						
Ground Elevation: 5000.0						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1249523.07	3221340.54	40.015620	-104.709740	
		Original Well Elev	WELL @ 5013.0ft (Original Well Elev)			

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1249523.07	3221340.54	40.015620	-104.709740	
		Original Well Elev	WELL @ 5013.0ft (Original Well Elev)			

Original Well Elev	WELL @ 5013.0ft (Original Well Elev)
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WELLBORE TARGET DETAILS	
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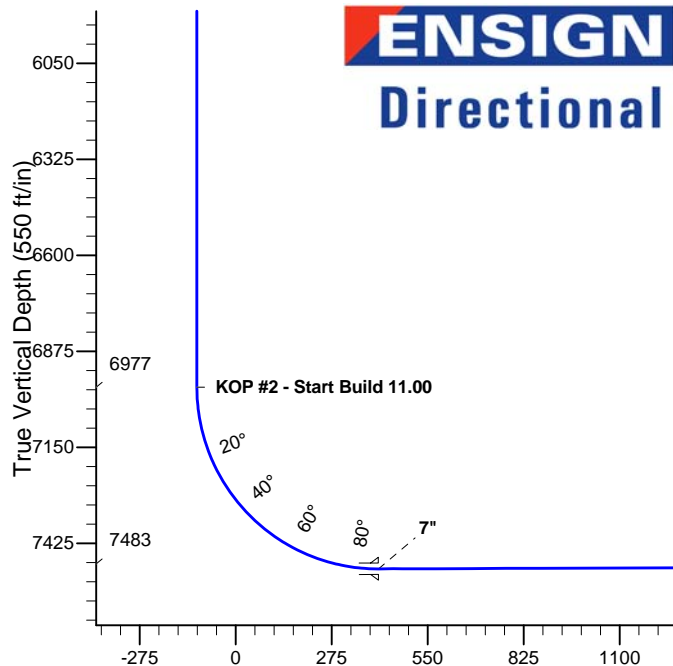
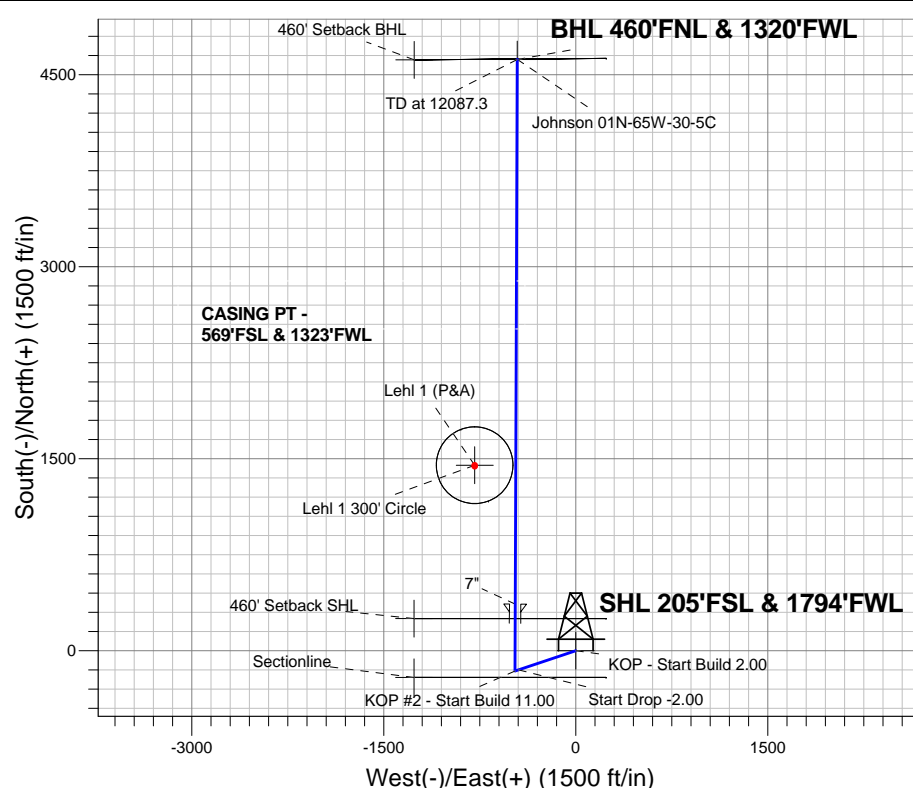
Name	TVD	+N/-S	+E/-W	Shape
460' Setback BHL	1.0	4615.6	-1261.6	Polygon
460' Setback SHL	1.0	251.4	-1261.6	Polygon
Sectionline	1.0	-208.6	-1261.6	Polygon
SHL 205'FSL & 1794'FWL	1.0	0.0	0.0	Point
Lehl 1 300' Circle	7.0	1449.5	-789.0	Circle (Radius: 300.0)
BHL 460'FNL & 1320'FWL	7483.0	4619.2	-456.5	Point



Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W
Johnson 01N-65W-30-5C
Plan #2 (8-5-14)

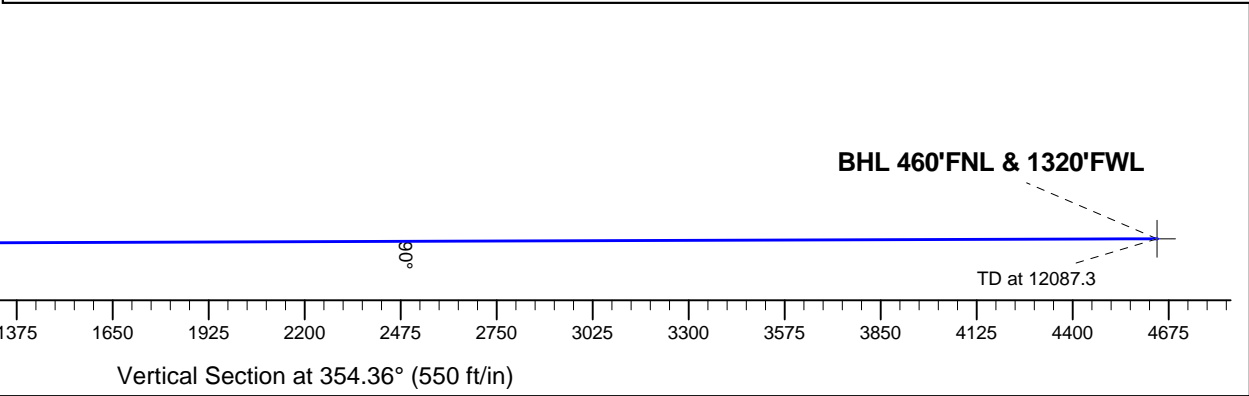
ANNOTATIONS		
TVD	MD	Annotation
1200.0	1200.0	KOP - Start Build 2.00
4581.3	4614.9	Start Drop -2.00
6977.0	7012.2	KOP #2 - Start Build 11.00
7483.0	12087.3	TD at 12087.3

TVD	MD	Annotation
1200.0	1200.0	KOP - Start Build 2.00
4581.3	4614.9	Start Drop -2.00
6977.0	7012.2	KOP #2 - Start Build 11.00
7483.0	12087.3	TD at 12087.3



SECTION DETAILS	
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Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1200.0	0.00	0.00	1200.0	0.0	0.0	0.00	0.00	0.0	
3	1620.2	8.40	251.48	1618.7	-9.8	-29.2	2.00	251.48	-6.9	
4	4614.9	8.40	251.48	4581.3	-148.8	-444.2	0.00	0.00	-104.4	
5	5035.2	0.00	0.00	5000.0	-158.6	-473.4	2.00	180.00	-111.3	
6	7012.2	0.00	0.00	6977.0	-158.6	-473.4	0.00	0.00	-111.3	
7	7832.2	90.20	0.20	7497.9	364.1	-471.5	11.00	0.20	408.7	
8	12087.3	90.20	0.20	7483.0	4619.2	-456.5	0.00	0.00	4641.7	BHL 460'FNL & 1320'FWL





Verdad Oil & Gas Corporation

SEC.30-T1N-R65W

Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W

Johnson 01N-65W-30-5C

Wellbore #1

Plan: Plan #2 (8-5-14)

Standard Planning Report

05 August, 2014

Database:	landmark	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Company:	Verdad Oil & Gas Corporation	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Project:	SEC.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	North Reference:	True
Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (8-5-14)		

Project	SEC.30-T1N-R65W, Weld County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site		Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W			
Site Position:		Northing:	1,249,518.89ft	Latitude:	40.015610
From:	Lat/Long	Easting:	3,221,278.95ft	Longitude:	-104.709960
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.51 °

Well	Johnson 01N-65W-30-5C					
Well Position	+N/-S	3.6 ft	Northing:	1,249,523.07 ft	Latitude:	40.015620
	+E/-W	61.6 ft	Easting:	3,221,340.54 ft	Longitude:	-104.709740
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,000.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/1/2014	8.38	66.64	52,604

Design	Plan #2 (8-5-14)			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	354.36

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,620.2	8.40	251.48	1,618.7	-9.8	-29.2	2.00	2.00	0.00	251.48	
4,614.9	8.40	251.48	4,581.3	-148.8	-444.2	0.00	0.00	0.00	0.00	
5,035.2	0.00	0.00	5,000.0	-158.6	-473.4	2.00	-2.00	0.00	180.00	
7,012.2	0.00	0.00	6,977.0	-158.6	-473.4	0.00	0.00	0.00	0.00	
7,832.2	90.20	0.20	7,497.9	364.1	-471.5	11.00	11.00	0.00	0.20	
12,087.3	90.20	0.20	7,483.0	4,619.2	-456.5	0.00	0.00	0.00	0.00	BHL 460'FNL & 132

Database:	landmark	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Company:	Verdad Oil & Gas Corporation	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Project:	SEC.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	North Reference:	True
Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (8-5-14)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - Start Build 2.00									
1,300.0	2.00	251.48	1,300.0	-0.6	-1.7	-0.4	2.00	2.00	0.00
1,400.0	4.00	251.48	1,399.8	-2.2	-6.6	-1.6	2.00	2.00	0.00
1,500.0	6.00	251.48	1,499.5	-5.0	-14.9	-3.5	2.00	2.00	0.00
1,600.0	8.00	251.48	1,598.7	-8.9	-26.4	-6.2	2.00	2.00	0.00
1,620.2	8.40	251.48	1,618.7	-9.8	-29.2	-6.9	2.00	2.00	0.00
1,700.0	8.40	251.48	1,697.6	-13.5	-40.2	-9.5	0.00	0.00	0.00
1,800.0	8.40	251.48	1,796.6	-18.1	-54.1	-12.7	0.00	0.00	0.00
1,900.0	8.40	251.48	1,895.5	-22.8	-67.9	-16.0	0.00	0.00	0.00
2,000.0	8.40	251.48	1,994.4	-27.4	-81.8	-19.2	0.00	0.00	0.00
2,100.0	8.40	251.48	2,093.3	-32.1	-95.7	-22.5	0.00	0.00	0.00
2,200.0	8.40	251.48	2,192.3	-36.7	-109.5	-25.7	0.00	0.00	0.00
2,300.0	8.40	251.48	2,291.2	-41.3	-123.4	-29.0	0.00	0.00	0.00
2,400.0	8.40	251.48	2,390.1	-46.0	-137.2	-32.3	0.00	0.00	0.00
2,500.0	8.40	251.48	2,489.0	-50.6	-151.1	-35.5	0.00	0.00	0.00
2,600.0	8.40	251.48	2,588.0	-55.3	-165.0	-38.8	0.00	0.00	0.00
2,700.0	8.40	251.48	2,686.9	-59.9	-178.8	-42.0	0.00	0.00	0.00
2,800.0	8.40	251.48	2,785.8	-64.6	-192.7	-45.3	0.00	0.00	0.00
2,900.0	8.40	251.48	2,884.7	-69.2	-206.5	-48.6	0.00	0.00	0.00
3,000.0	8.40	251.48	2,983.7	-73.8	-220.4	-51.8	0.00	0.00	0.00
3,100.0	8.40	251.48	3,082.6	-78.5	-234.3	-55.1	0.00	0.00	0.00
3,200.0	8.40	251.48	3,181.5	-83.1	-248.1	-58.3	0.00	0.00	0.00
3,300.0	8.40	251.48	3,280.5	-87.8	-262.0	-61.6	0.00	0.00	0.00
3,400.0	8.40	251.48	3,379.4	-92.4	-275.8	-64.8	0.00	0.00	0.00
3,500.0	8.40	251.48	3,478.3	-97.1	-289.7	-68.1	0.00	0.00	0.00
3,600.0	8.40	251.48	3,577.2	-101.7	-303.6	-71.4	0.00	0.00	0.00
3,700.0	8.40	251.48	3,676.2	-106.3	-317.4	-74.6	0.00	0.00	0.00
3,800.0	8.40	251.48	3,775.1	-111.0	-331.3	-77.9	0.00	0.00	0.00
3,900.0	8.40	251.48	3,874.0	-115.6	-345.1	-81.1	0.00	0.00	0.00
4,000.0	8.40	251.48	3,972.9	-120.3	-359.0	-84.4	0.00	0.00	0.00
4,100.0	8.40	251.48	4,071.9	-124.9	-372.9	-87.6	0.00	0.00	0.00
4,200.0	8.40	251.48	4,170.8	-129.6	-386.7	-90.9	0.00	0.00	0.00
4,300.0	8.40	251.48	4,269.7	-134.2	-400.6	-94.2	0.00	0.00	0.00
4,400.0	8.40	251.48	4,368.6	-138.8	-414.4	-97.4	0.00	0.00	0.00
4,500.0	8.40	251.48	4,467.6	-143.5	-428.3	-100.7	0.00	0.00	0.00
4,600.0	8.40	251.48	4,566.5	-148.1	-442.2	-103.9	0.00	0.00	0.00
4,614.9	8.40	251.48	4,581.2	-148.8	-444.2	-104.4	0.00	0.00	0.00
Start Drop -2.00									
4,700.0	6.70	251.48	4,665.6	-152.4	-454.8	-106.9	2.00	-2.00	0.00
4,800.0	4.70	251.48	4,765.1	-155.5	-464.3	-109.1	2.00	-2.00	0.00

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Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	North Reference:	True
Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (8-5-14)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,900.0	2.70	251.48	4,864.9	-157.6	-470.4	-110.6	2.00	-2.00	0.00
5,000.0	0.70	251.48	4,964.8	-158.5	-473.2	-111.2	2.00	-2.00	0.00
5,035.2	0.00	0.00	5,000.0	-158.6	-473.4	-111.3	2.00	-2.00	0.00
5,100.0	0.00	0.00	5,064.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
5,200.0	0.00	0.00	5,164.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
5,300.0	0.00	0.00	5,264.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
5,400.0	0.00	0.00	5,364.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
5,500.0	0.00	0.00	5,464.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
5,600.0	0.00	0.00	5,564.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
5,700.0	0.00	0.00	5,664.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
5,800.0	0.00	0.00	5,764.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
5,900.0	0.00	0.00	5,864.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
6,000.0	0.00	0.00	5,964.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
6,100.0	0.00	0.00	6,064.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
6,200.0	0.00	0.00	6,164.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
6,300.0	0.00	0.00	6,264.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
6,400.0	0.00	0.00	6,364.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
6,500.0	0.00	0.00	6,464.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
6,600.0	0.00	0.00	6,564.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
6,700.0	0.00	0.00	6,664.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
6,800.0	0.00	0.00	6,764.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
6,900.0	0.00	0.00	6,864.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
7,000.0	0.00	0.00	6,964.8	-158.6	-473.4	-111.3	0.00	0.00	0.00
7,012.2	0.00	0.00	6,977.0	-158.6	-473.4	-111.3	0.00	0.00	0.00
KOP #2 - Start Build 11.00									
7,100.0	9.66	0.20	7,064.4	-151.2	-473.4	-103.9	11.01	11.01	0.00
7,200.0	20.66	0.20	7,160.8	-125.1	-473.3	-78.0	11.00	11.00	0.00
7,300.0	31.66	0.20	7,250.4	-81.1	-473.1	-34.2	11.00	11.00	0.00
7,400.0	42.66	0.20	7,330.0	-20.8	-472.9	25.8	11.00	11.00	0.00
7,500.0	53.66	0.20	7,396.6	53.6	-472.6	99.8	11.00	11.00	0.00
7,600.0	64.66	0.20	7,447.7	139.4	-472.3	185.1	11.00	11.00	0.00
7,700.0	75.66	0.20	7,481.6	233.3	-472.0	278.6	11.00	11.00	0.00
7,800.0	86.66	0.20	7,497.0	331.9	-471.7	376.7	11.00	11.00	0.00
7,832.2	90.20	0.20	7,497.9	364.1	-471.5	408.7	10.99	10.99	0.00
7"									
7,900.0	90.20	0.20	7,497.6	431.9	-471.3	476.2	0.00	0.00	0.00
8,000.0	90.20	0.20	7,497.3	531.9	-471.0	575.7	0.00	0.00	0.00
8,100.0	90.20	0.20	7,496.9	631.9	-470.6	675.1	0.00	0.00	0.00
8,200.0	90.20	0.20	7,496.6	731.9	-470.2	774.6	0.00	0.00	0.00
8,300.0	90.20	0.20	7,496.2	831.9	-469.9	874.1	0.00	0.00	0.00
8,400.0	90.20	0.20	7,495.9	931.9	-469.5	973.6	0.00	0.00	0.00
8,500.0	90.20	0.20	7,495.5	1,031.9	-469.2	1,073.1	0.00	0.00	0.00
8,600.0	90.20	0.20	7,495.2	1,131.9	-468.8	1,172.5	0.00	0.00	0.00
8,700.0	90.20	0.20	7,494.8	1,231.9	-468.5	1,272.0	0.00	0.00	0.00
8,800.0	90.20	0.20	7,494.5	1,331.9	-468.1	1,371.5	0.00	0.00	0.00
8,900.0	90.20	0.20	7,494.1	1,431.9	-467.8	1,471.0	0.00	0.00	0.00
9,000.0	90.20	0.20	7,493.8	1,531.9	-467.4	1,570.4	0.00	0.00	0.00
9,100.0	90.20	0.20	7,493.4	1,631.9	-467.1	1,669.9	0.00	0.00	0.00
9,200.0	90.20	0.20	7,493.1	1,731.9	-466.7	1,769.4	0.00	0.00	0.00
9,300.0	90.20	0.20	7,492.7	1,831.9	-466.3	1,868.9	0.00	0.00	0.00
9,400.0	90.20	0.20	7,492.4	1,931.9	-466.0	1,968.4	0.00	0.00	0.00
9,500.0	90.20	0.20	7,492.0	2,031.9	-465.6	2,067.8	0.00	0.00	0.00
9,600.0	90.20	0.20	7,491.7	2,131.9	-465.3	2,167.3	0.00	0.00	0.00

Database:	landmark	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Company:	Verdad Oil & Gas Corporation	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Project:	SEC.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	North Reference:	True
Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 (8-5-14)		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,700.0	90.20	0.20	7,491.3	2,231.9	-464.9	2,266.8	0.00	0.00	0.00
9,800.0	90.20	0.20	7,491.0	2,331.9	-464.6	2,366.3	0.00	0.00	0.00
9,900.0	90.20	0.20	7,490.6	2,431.9	-464.2	2,465.8	0.00	0.00	0.00
10,000.0	90.20	0.20	7,490.3	2,531.9	-463.9	2,565.2	0.00	0.00	0.00
10,100.0	90.20	0.20	7,489.9	2,631.9	-463.5	2,664.7	0.00	0.00	0.00
10,200.0	90.20	0.20	7,489.6	2,731.9	-463.2	2,764.2	0.00	0.00	0.00
10,300.0	90.20	0.20	7,489.2	2,831.9	-462.8	2,863.7	0.00	0.00	0.00
10,400.0	90.20	0.20	7,488.9	2,931.9	-462.5	2,963.2	0.00	0.00	0.00
10,500.0	90.20	0.20	7,488.5	3,031.9	-462.1	3,062.6	0.00	0.00	0.00
10,600.0	90.20	0.20	7,488.2	3,131.9	-461.7	3,162.1	0.00	0.00	0.00
10,700.0	90.20	0.20	7,487.8	3,231.9	-461.4	3,261.6	0.00	0.00	0.00
10,800.0	90.20	0.20	7,487.5	3,331.9	-461.0	3,361.1	0.00	0.00	0.00
10,900.0	90.20	0.20	7,487.1	3,431.9	-460.7	3,460.6	0.00	0.00	0.00
11,000.0	90.20	0.20	7,486.8	3,531.9	-460.3	3,560.0	0.00	0.00	0.00
11,100.0	90.20	0.20	7,486.4	3,631.9	-460.0	3,659.5	0.00	0.00	0.00
11,200.0	90.20	0.20	7,486.1	3,731.9	-459.6	3,759.0	0.00	0.00	0.00
11,300.0	90.20	0.20	7,485.7	3,831.9	-459.3	3,858.5	0.00	0.00	0.00
11,400.0	90.20	0.20	7,485.4	3,931.9	-458.9	3,958.0	0.00	0.00	0.00
11,500.0	90.20	0.20	7,485.1	4,031.9	-458.6	4,057.4	0.00	0.00	0.00
11,600.0	90.20	0.20	7,484.7	4,131.9	-458.2	4,156.9	0.00	0.00	0.00
11,700.0	90.20	0.20	7,484.4	4,231.9	-457.8	4,256.4	0.00	0.00	0.00
11,800.0	90.20	0.20	7,484.0	4,331.9	-457.5	4,355.9	0.00	0.00	0.00
11,900.0	90.20	0.20	7,483.7	4,431.9	-457.1	4,455.3	0.00	0.00	0.00
12,000.0	90.20	0.20	7,483.3	4,531.9	-456.8	4,554.8	0.00	0.00	0.00
12,087.3	90.20	0.20	7,483.0	4,619.2	-456.5	4,641.7	0.00	0.00	0.00
TD at 12087.3									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,832.2	7,497.9	7"	7	7-1/2

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,200.0	1,200.0	0.0	0.0	KOP - Start Build 2.00
4,614.9	4,581.3	-9.8	-29.2	Start Drop -2.00
7,012.2	6,977.0	-148.8	-444.2	KOP #2 - Start Build 11.00
12,087.3	7,483.0	-158.6	-473.4	TD at 12087.3



Verdad Oil & Gas Corporation

SEC.30-T1N-R65W

Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W

Johnson 01N-65W-30-5C

Wellbore #1

Plan #2 (8-5-14)

Anticollision Report

05 August, 2014

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Reference	Plan #2 (8-5-14)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,000.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date 8/5/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	12,087.3	Plan #2 (8-5-14) (Wellbore #1)	MWD	MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Existing Wells Sec.30-T1N-R65W						
Gilmore 1-30 (P&A) - Wellbore #1 - Wellbore #1	11,411.1	7,463.4	496.1	269.4	2.188	CC, ES, SF
Lehl 1 (P&A) - Wellbore #1 - Wellbore #1	8,916.5	7,488.1	321.3	139.1	1.764	CC, ES, SF
Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W						
Johnson 01N-65W-30-1C - Wellbore #1 - Plan #2 (8-5-14)	200.0	200.0	61.7	61.1	91.546	CC, ES
Johnson 01N-65W-30-1C - Wellbore #1 - Plan #2 (8-5-14)	12,088.1	12,150.9	658.1	477.4	3.641	SF
Johnson 01N-65W-30-2N - Wellbore #1 - Plan #2 (8-5-14)	400.0	400.0	47.8	46.2	30.353	CC, ES
Johnson 01N-65W-30-2N - Wellbore #1 - Plan #2 (8-5-14)	12,088.1	11,732.0	638.0	488.6	4.273	SF
Johnson 01N-65W-30-3N - Wellbore #1 - Plan #2 (8-5-14)	600.0	600.0	31.0	28.6	12.549	CC, ES
Johnson 01N-65W-30-3N - Wellbore #1 - Plan #2 (8-5-14)	12,088.1	11,905.5	347.4	193.5	2.258	SF
Johnson 01N-65W-30-4N - Wellbore #1 - Plan #2 (8-5-14)	800.0	800.0	16.8	13.4	4.985	CC, ES
Johnson 01N-65W-30-4N - Wellbore #1 - Plan #2 (8-5-14)	12,088.1	11,899.1	263.3	134.8	2.049	SF
Johnson 01N-65W-30-6N - Wellbore #1 - Plan #1 (8-1-14)	1,200.0	1,200.0	14.0	8.8	2.709	CC, ES
Johnson 01N-65W-30-6N - Wellbore #1 - Plan #1 (8-1-14)	12,088.1	11,790.0	263.3	139.1	2.120	SF
Johnson 01N-65W-30-7N - Wellbore #1 - Plan #1 (8-1-14)	1,200.0	1,199.0	28.0	22.8	5.421	CC, ES
Johnson 01N-65W-30-7N - Wellbore #1 - Plan #1 (8-1-14)	12,088.1	11,778.8	388.9	232.2	2.483	SF
Johnson 01N-65W-30-8N - Wellbore #1 - Plan #1 (8-1-14)	1,200.0	1,199.0	44.8	39.6	8.673	CC, ES
Johnson 01N-65W-30-8N - Wellbore #1 - Plan #1 (8-1-14)	12,088.1	11,768.4	536.4	368.1	3.188	SF
Johnson 01N-65W-30-9C - Wellbore #1 - Plan #1 (8-1-14)	1,200.0	1,199.0	58.8	53.7	11.383	CC, ES
Johnson 01N-65W-30-9C - Wellbore #1 - Plan #1 (8-1-14)	12,088.1	11,972.1	660.9	480.6	3.665	SF

Offset Design Existing Wells Sec.30-T1N-R65W - Gilmore 1-30 (P&A) - Wellbore #1 - Wellbore #1											
Survey Program: 8208-UNKNOWN											
Reference		Offset		Semi Major Axis		Distance					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)
10,600.0	7,488.2	7,466.2	7,466.2	62.8	149.3	90.33	3,941.2	37.2	950.8	739.1	211.72
10,700.0	7,487.8	7,465.8	7,465.8	64.6	149.3	90.29	3,941.2	37.2	867.1	653.5	213.56
10,800.0	7,487.5	7,465.5	7,465.5	66.5	149.3	90.25	3,941.2	37.2	787.1	571.7	215.41
10,900.0	7,487.1	7,465.1	7,465.1	68.3	149.3	90.21	3,941.2	37.2	712.3	495.0	217.26
11,000.0	7,486.8	7,464.8	7,464.8	70.2	149.3	90.17	3,941.2	37.2	644.3	425.2	219.11
11,100.0	7,486.4	7,464.4	7,464.4	72.0	149.3	90.13	3,941.2	37.2	585.6	364.6	220.96
11,200.0	7,486.1	7,464.1	7,464.1	73.9	149.3	90.09	3,941.2	37.2	539.2	316.3	222.82
											2.420

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

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Sec.30-T1N-R65W - Gilmore 1-30 (P&A) - Wellbore #1 - Wellbore #1													Offset Site Error:	0.0 ft
Survey Program: 8208-UNKNOWN													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
11,300.0	7,485.7	7,463.7	7,463.7	75.7	149.3	90.04	3,941.2	37.2	508.4	283.7	224.68	2.263		
11,400.0	7,485.4	7,463.4	7,463.4	77.6	149.3	90.00	3,941.2	37.2	496.2	269.7	226.54	2.191		
11,411.1	7,485.4	7,463.4	7,463.4	77.8	149.3	90.00	3,941.2	37.2	496.1	269.4	226.75	2.188	CC, ES, SF	
11,500.0	7,485.1	7,463.1	7,463.1	79.5	149.3	89.96	3,941.2	37.2	504.0	275.6	228.41	2.207		
11,600.0	7,484.7	7,462.7	7,462.7	81.3	149.3	89.92	3,941.2	37.2	530.9	300.6	230.27	2.305		
11,700.0	7,484.4	7,462.4	7,462.4	83.2	149.2	89.88	3,941.2	37.2	574.1	342.0	232.14	2.473		
11,800.0	7,484.0	7,462.0	7,462.0	85.1	149.2	89.84	3,941.2	37.2	630.4	396.4	234.01	2.694		
11,900.0	7,483.7	7,461.7	7,461.7	86.9	149.2	89.80	3,941.2	37.2	696.5	460.7	235.88	2.953		
12,000.0	7,483.3	7,461.3	7,461.3	88.8	149.2	89.76	3,941.2	37.2	770.0	532.3	237.75	3.239		
12,088.1	7,483.0	7,461.0	7,461.0	90.5	149.2	89.73	3,941.2	37.2	839.3	599.9	239.40	3.506		

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Existing Wells Sec.30-T1N-R65W - Lehl 1 (P&A) - Wellbore #1 - Wellbore #1												Offset Site Error:	0.0 ft
Survey Program: 8026-UNKNOWN												Offset Well Error:	0.0 ft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
8,000.0	7,497.3	7,491.3	7,491.3	20.5	149.8	-90.57	1,449.5	-789.0	971.1	802.0	169.16	5.741	
8,100.0	7,496.9	7,490.9	7,490.9	21.5	149.8	-90.51	1,449.5	-789.0	877.4	707.1	170.26	5.153	
8,200.0	7,496.6	7,490.6	7,490.6	22.7	149.8	-90.45	1,449.5	-789.0	785.2	613.7	171.46	4.579	
8,300.0	7,496.2	7,490.2	7,490.2	23.9	149.8	-90.38	1,449.5	-789.0	695.2	522.4	172.77	4.024	
8,400.0	7,495.9	7,489.9	7,489.9	25.3	149.8	-90.32	1,449.5	-789.0	608.2	434.1	174.15	3.493	
8,500.0	7,495.5	7,489.5	7,489.5	26.7	149.8	-90.26	1,449.5	-789.0	526.0	350.4	175.60	2.995	
8,600.0	7,495.2	7,489.2	7,489.2	28.1	149.8	-90.20	1,449.5	-789.0	451.0	273.9	177.11	2.546	
8,700.0	7,494.8	7,488.8	7,488.8	29.7	149.8	-90.13	1,449.5	-789.0	387.4	208.7	178.66	2.168	
8,800.0	7,494.5	7,488.5	7,488.5	31.2	149.8	-90.07	1,449.5	-789.0	341.7	161.5	180.26	1.896	
8,900.0	7,494.1	7,488.1	7,488.1	32.8	149.8	-90.01	1,449.5	-789.0	321.7	139.8	181.89	1.769	
8,916.5	7,494.1	7,488.1	7,488.1	33.1	149.8	-90.00	1,449.5	-789.0	321.3	139.1	182.16	1.764 CC, ES, SF	
9,000.0	7,493.8	7,487.8	7,487.8	34.5	149.8	-89.95	1,449.5	-789.0	332.0	148.4	183.54	1.809	
9,100.0	7,493.4	7,487.4	7,487.4	36.1	149.7	-89.89	1,449.5	-789.0	370.0	184.8	185.23	1.998	
9,200.0	7,493.1	7,487.1	7,487.1	37.8	149.7	-89.82	1,449.5	-789.0	428.5	241.6	186.93	2.292	
9,300.0	7,492.7	7,486.7	7,486.7	39.5	149.7	-89.76	1,449.5	-789.0	500.3	311.7	188.66	2.652	
9,400.0	7,492.4	7,486.4	7,486.4	41.2	149.7	-89.70	1,449.5	-789.0	580.5	390.1	190.39	3.049	
9,500.0	7,492.0	7,486.0	7,486.0	43.0	149.7	-89.64	1,449.5	-789.0	666.1	474.0	192.15	3.467	
9,600.0	7,491.7	7,485.7	7,485.7	44.7	149.7	-89.57	1,449.5	-789.0	755.3	561.4	193.92	3.895	
9,700.0	7,491.3	7,485.3	7,485.3	46.5	149.7	-89.51	1,449.5	-789.0	846.8	651.2	195.69	4.327	
9,800.0	7,491.0	7,485.0	7,485.0	48.3	149.7	-89.45	1,449.5	-789.0	940.1	742.7	197.48	4.761	

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-1C - Wellbore #1 - Plan #2 (8													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-93.38	-3.6	-61.6	61.7					
100.0	100.0	100.0	100.0	0.1	0.1	-93.38	-3.6	-61.6	61.7	61.5	0.22	274.639		
200.0	200.0	200.0	200.0	0.3	0.3	-93.38	-3.6	-61.6	61.7	61.1	0.67	91.546 CC, ES		
300.0	300.0	297.9	297.8	0.6	0.5	-93.52	-3.9	-63.3	63.4	62.3	1.11	57.266		
400.0	400.0	395.5	395.3	0.8	0.8	-93.87	-4.6	-68.2	68.5	67.0	1.55	44.273		
500.0	500.0	492.7	492.2	1.0	1.0	-94.36	-5.8	-76.4	77.0	75.0	2.01	38.278		
600.0	600.0	589.2	588.0	1.2	1.3	-94.89	-7.5	-87.7	88.9	86.4	2.51	35.464		
700.0	700.0	684.8	682.5	1.5	1.6	-95.39	-9.6	-102.1	104.0	101.0	3.04	34.277		
800.0	800.0	781.4	777.5	1.7	2.0	-95.83	-12.2	-119.4	122.1	118.5	3.61	33.867		
900.0	900.0	879.6	874.0	1.9	2.3	-96.17	-14.8	-137.3	140.6	136.4	4.20	33.474		
1,000.0	1,000.0	977.9	970.6	2.1	2.7	-96.43	-17.5	-155.3	159.0	154.2	4.80	33.119		
1,100.0	1,100.0	1,076.2	1,067.2	2.4	3.1	-96.63	-20.2	-173.3	177.5	172.1	5.41	32.809		
1,200.0	1,200.0	1,174.5	1,163.8	2.6	3.5	-96.80	-22.8	-191.3	196.0	190.0	6.02	32.541		
1,300.0	1,300.0	1,273.0	1,260.7	2.8	4.0	11.61	-25.5	-209.3	212.8	207.1	5.69	37.421		
1,400.0	1,399.8	1,372.1	1,358.0	3.0	4.4	11.70	-28.2	-227.4	226.2	220.1	6.12	36.931		
1,500.0	1,499.5	1,471.6	1,455.8	3.2	4.8	11.96	-30.8	-245.6	236.2	229.6	6.57	35.957		
1,600.0	1,598.7	1,571.4	1,553.9	3.4	5.2	12.38	-33.5	-263.8	242.9	235.8	7.02	34.596		
1,700.0	1,697.6	1,671.2	1,652.0	3.7	5.6	12.93	-36.2	-282.1	247.2	239.7	7.49	33.012		
1,800.0	1,796.6	1,771.1	1,750.2	4.0	6.0	13.46	-38.9	-300.4	251.5	243.5	7.97	31.568		
1,900.0	1,895.5	1,871.0	1,848.3	4.2	6.5	13.98	-41.6	-318.6	255.8	247.3	8.45	30.265		
2,000.0	1,994.4	1,970.9	1,946.5	4.5	6.9	14.48	-44.3	-336.9	260.1	251.1	8.94	29.087		
2,100.0	2,093.3	2,070.8	2,044.7	4.8	7.3	14.96	-47.0	-355.1	264.4	255.0	9.44	28.017		
2,200.0	2,192.3	2,170.7	2,142.8	5.2	7.7	15.43	-49.7	-373.4	268.8	258.9	9.94	27.042		
2,300.0	2,291.2	2,270.5	2,241.0	5.5	8.1	15.89	-52.4	-391.7	273.2	262.7	10.45	26.151		
2,400.0	2,390.1	2,370.4	2,339.1	5.8	8.6	16.32	-55.1	-409.9	277.6	266.6	10.96	25.334		
2,500.0	2,489.0	2,470.3	2,437.3	6.1	9.0	16.75	-57.8	-428.2	282.0	270.5	11.47	24.582		
2,600.0	2,588.0	2,570.2	2,535.5	6.5	9.4	17.16	-60.5	-446.5	286.4	274.4	11.99	23.888		
2,700.0	2,686.9	2,670.1	2,633.6	6.8	9.8	17.56	-63.2	-464.7	290.8	278.3	12.51	23.247		
2,800.0	2,785.8	2,769.9	2,731.8	7.1	10.3	17.95	-65.9	-483.0	295.3	282.3	13.04	22.652		
2,900.0	2,884.7	2,869.8	2,829.9	7.5	10.7	18.32	-68.6	-501.3	299.8	286.2	13.56	22.099		
3,000.0	2,983.7	2,969.7	2,928.1	7.8	11.1	18.69	-71.3	-519.5	304.2	290.2	14.10	21.584		
3,100.0	3,082.6	3,069.6	3,026.3	8.2	11.5	19.04	-74.0	-537.8	308.7	294.1	14.63	21.103		
3,200.0	3,181.5	3,169.5	3,124.4	8.5	11.9	19.39	-76.7	-556.0	313.2	298.1	15.17	20.653		
3,300.0	3,280.5	3,269.3	3,222.6	8.8	12.4	19.72	-79.4	-574.3	317.8	302.1	15.71	20.231		
3,400.0	3,379.4	3,369.2	3,320.7	9.2	12.8	20.05	-82.1	-592.6	322.3	306.0	16.25	19.834		
3,500.0	3,478.3	3,469.1	3,418.9	9.5	13.2	20.36	-84.8	-610.8	326.8	310.0	16.79	19.461		
3,600.0	3,577.2	3,569.0	3,517.1	9.9	13.6	20.67	-87.5	-629.1	331.4	314.0	17.34	19.110		
3,700.0	3,676.2	3,668.9	3,615.2	10.2	14.1	20.97	-90.2	-647.4	335.9	318.0	17.89	18.778		
3,800.0	3,775.1	3,768.8	3,713.4	10.6	14.5	21.26	-92.9	-665.6	340.5	322.0	18.44	18.464		
3,900.0	3,874.0	3,868.6	3,811.5	10.9	14.9	21.54	-95.6	-683.9	345.0	326.1	18.99	18.167		
4,000.0	3,972.9	3,968.5	3,909.7	11.3	15.3	21.82	-98.3	-702.2	349.6	330.1	19.55	17.886		
4,100.0	4,071.9	4,068.4	4,007.9	11.7	15.7	22.09	-101.0	-720.4	354.2	334.1	20.10	17.618		
4,200.0	4,170.8	4,168.3	4,106.0	12.0	16.2	22.35	-103.7	-738.7	358.8	338.1	20.66	17.364		
4,300.0	4,269.7	4,268.2	4,204.2	12.4	16.6	22.60	-106.4	-756.9	363.4	342.2	21.22	17.123		
4,400.0	4,368.6	4,368.0	4,302.3	12.7	17.0	22.85	-109.1	-775.2	368.0	346.2	21.79	16.892		
4,500.0	4,467.6	4,467.9	4,400.5	13.1	17.4	23.10	-111.8	-793.5	372.6	350.3	22.35	16.673		
4,600.0	4,566.5	4,567.8	4,498.7	13.4	17.9	23.33	-114.5	-811.7	377.3	354.3	22.91	16.463		
4,700.0	4,665.6	4,667.6	4,596.8	13.7	18.3	23.53	-117.2	-830.0	383.0	359.6	23.44	16.342		
4,800.0	4,765.1	4,767.2	4,694.6	14.0	18.7	23.55	-119.9	-848.2	392.0	368.1	23.88	16.413		
4,900.0	4,864.9	4,866.5	4,792.2	14.1	19.1	23.40	-122.6	-866.4	404.1	379.8	24.27	16.649		
5,000.0	4,964.8	4,965.2	4,889.2	14.3	19.5	23.10	-125.3	-884.4	419.4	394.8	24.61	17.042		

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

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-1C - Wellbore #1 - Plan #2 (8													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis Reference	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Distance +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,064.8	5,063.5	4,985.9	14.5	20.0	-85.91	-127.9	-902.4	437.3	412.3	24.95	17.528		
5,200.0	5,164.8	5,161.8	5,082.4	14.6	20.4	-86.41	-130.6	-920.4	455.4	430.0	25.34	17.971		
5,300.0	5,264.8	5,260.1	5,179.0	14.8	20.8	-86.88	-133.3	-938.3	473.5	447.7	25.73	18.398		
5,400.0	5,364.8	5,358.4	5,275.6	14.9	21.2	-87.31	-135.9	-956.3	491.6	465.5	26.14	18.809		
5,500.0	5,464.8	5,456.7	5,372.2	15.1	21.6	-87.71	-138.6	-974.3	509.8	483.2	26.54	19.205		
5,600.0	5,564.8	5,554.9	5,468.8	15.3	22.0	-88.08	-141.2	-992.2	527.9	501.0	26.96	19.586		
5,700.0	5,664.8	5,653.2	5,565.4	15.4	22.5	-88.43	-143.9	-1,010.2	546.1	518.8	27.37	19.954		
5,800.0	5,764.8	5,751.5	5,661.9	15.6	22.9	-88.75	-146.5	-1,028.2	564.4	536.6	27.79	20.308		
5,900.0	5,864.8	5,849.8	5,758.5	15.8	23.3	-89.06	-149.2	-1,046.2	582.6	554.4	28.21	20.650		
6,000.0	5,964.8	5,948.0	5,855.1	15.9	23.7	-89.35	-151.8	-1,064.1	600.9	572.2	28.64	20.981		
6,100.0	6,064.8	6,046.3	5,951.7	16.1	24.1	-89.61	-154.5	-1,082.1	619.1	590.1	29.07	21.300		
6,200.0	6,164.8	6,166.9	6,070.5	16.3	24.5	-89.90	-157.5	-1,102.4	636.0	606.5	29.50	21.560		
6,300.0	6,264.8	6,294.4	6,196.9	16.5	24.8	-90.11	-159.9	-1,118.5	648.7	618.8	29.92	21.680		
6,400.0	6,364.8	6,423.0	6,325.1	16.6	25.1	-90.25	-161.5	-1,129.1	656.9	626.6	30.33	21.658		
6,500.0	6,464.8	6,552.4	6,454.4	16.8	25.3	-90.31	-162.2	-1,134.1	660.8	630.0	30.74	21.493		
6,600.0	6,564.8	6,662.8	6,564.8	17.0	25.4	-90.32	-162.2	-1,134.4	661.0	629.9	31.13	21.236		
6,700.0	6,664.8	6,762.8	6,664.8	17.2	25.5	-90.32	-162.2	-1,134.4	661.0	629.5	31.50	20.986		
6,800.0	6,764.8	6,862.8	6,764.8	17.3	25.6	-90.32	-162.2	-1,134.4	661.0	629.2	31.87	20.741		
6,900.0	6,864.8	6,962.8	6,864.8	17.5	25.7	-90.32	-162.2	-1,134.4	661.0	628.8	32.25	20.500		
7,000.0	6,964.8	7,062.8	6,964.8	17.7	25.9	-90.32	-162.2	-1,134.4	661.0	628.4	32.62	20.263		
7,100.0	7,064.4	7,163.9	7,065.5	17.9	26.0	-90.51	-154.7	-1,134.4	661.0	628.1	32.97	20.049		
7,200.0	7,160.8	7,265.1	7,162.9	18.0	26.0	-90.48	-127.9	-1,134.3	661.0	627.8	33.20	19.908		
7,300.0	7,250.4	7,366.2	7,253.3	18.1	26.1	-90.44	-82.9	-1,134.1	661.0	627.6	33.39	19.797		
7,400.0	7,330.0	7,467.2	7,333.2	18.1	26.1	-90.38	-21.4	-1,133.8	660.9	627.3	33.61	19.664		
7,500.0	7,396.6	7,568.0	7,399.6	18.2	26.2	-90.31	54.2	-1,133.5	660.9	626.9	33.98	19.449		
7,600.0	7,447.7	7,668.6	7,450.2	18.3	26.2	-90.22	141.0	-1,133.2	660.8	626.2	34.59	19.102		
7,700.0	7,481.6	7,769.0	7,483.1	18.6	26.4	-90.13	235.7	-1,132.8	660.8	625.2	35.52	18.601		
7,800.0	7,497.0	7,869.2	7,497.3	19.0	26.6	-90.03	334.7	-1,132.4	660.7	623.9	36.78	17.962		
7,900.0	7,497.6	7,969.2	7,497.6	19.7	27.0	-90.00	434.7	-1,131.9	660.6	622.3	38.37	17.220		
8,000.0	7,497.3	8,069.2	7,497.2	20.5	27.5	-90.00	534.7	-1,131.5	660.6	620.3	40.23	16.418		
8,100.0	7,496.9	8,169.2	7,496.9	21.5	28.1	-90.00	634.7	-1,131.1	660.5	618.2	42.37	15.590		
8,200.0	7,496.6	8,269.2	7,496.5	22.7	28.9	-90.00	734.7	-1,130.7	660.5	615.7	44.73	14.767		
8,300.0	7,496.2	8,369.2	7,496.2	23.9	29.8	-90.00	834.7	-1,130.3	660.4	613.1	47.28	13.968		
8,400.0	7,495.9	8,469.2	7,495.8	25.3	30.8	-90.00	934.7	-1,129.9	660.3	610.3	49.99	13.209		
8,500.0	7,495.5	8,569.2	7,495.5	26.7	31.9	-90.00	1,034.7	-1,129.5	660.3	607.4	52.85	12.494		
8,600.0	7,495.2	8,669.2	7,495.2	28.1	33.1	-90.00	1,134.7	-1,129.0	660.2	604.4	55.82	11.829		
8,700.0	7,494.8	8,769.2	7,494.8	29.7	34.3	-90.00	1,234.7	-1,128.6	660.2	601.3	58.88	11.211		
8,800.0	7,494.5	8,869.2	7,494.5	31.2	35.7	-90.00	1,334.7	-1,128.2	660.1	598.1	62.04	10.640		
8,900.0	7,494.1	8,969.2	7,494.1	32.8	37.1	-90.00	1,434.7	-1,127.8	660.0	594.8	65.26	10.113		
9,000.0	7,493.8	9,069.2	7,493.8	34.5	38.5	-90.00	1,534.6	-1,127.4	660.0	591.4	68.55	9.628		
9,100.0	7,493.4	9,169.2	7,493.4	36.1	40.0	-90.00	1,634.6	-1,127.0	659.9	588.0	71.89	9.179		
9,200.0	7,493.1	9,269.2	7,493.1	37.8	41.5	-90.00	1,734.6	-1,126.6	659.9	584.6	75.28	8.766		
9,300.0	7,492.7	9,369.2	7,492.7	39.5	43.1	-90.00	1,834.6	-1,126.1	659.8	581.1	78.71	8.383		
9,400.0	7,492.4	9,469.2	7,492.4	41.2	44.7	-90.00	1,934.6	-1,125.7	659.7	577.6	82.17	8.029		
9,500.0	7,492.0	9,569.2	7,492.0	43.0	46.3	-90.00	2,034.6	-1,125.3	659.7	574.0	85.66	7.701		
9,600.0	7,491.7	9,669.2	7,491.7	44.7	47.9	-90.00	2,134.6	-1,124.9	659.6	570.4	89.18	7.396		
9,700.0	7,491.3	9,769.2	7,491.3	46.5	49.6	-90.00	2,234.6	-1,124.5	659.6	566.8	92.73	7.113		
9,800.0	7,491.0	9,869.2	7,491.0	48.3	51.2	-90.00	2,334.6	-1,124.1	659.5	563.2	96.30	6.848		
9,900.0	7,490.6	9,969.2	7,490.6	50.1	52.9	-90.00	2,434.6	-1,123.6	659.4	559.5	99.88	6.602		
10,000.0	7,490.3	10,069.2	7,490.3	51.9	54.6	-90.00	2,534.6	-1,123.2	659.4	555.9	103.49	6.371		
10,100.0	7,489.9	10,169.2	7,489.9	53.7	56.3	-90.00	2,634.6	-1,122.8	659.3	552.2	107.11	6.156		

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

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-1C - Wellbore #1 - Plan #2 (8													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
10,200.0	7,489.6	10,269.2	7,489.6	55.5	58.1	-90.00	2,734.6	-1,122.4	659.2	548.5	110.74	5.953		
10,300.0	7,489.2	10,369.2	7,489.2	57.3	59.8	-90.00	2,834.6	-1,122.0	659.2	544.8	114.39	5.763		
10,400.0	7,488.9	10,469.2	7,488.9	59.1	61.6	-90.00	2,934.6	-1,121.6	659.1	541.1	118.05	5.584		
10,500.0	7,488.5	10,569.2	7,488.5	60.9	63.3	-90.00	3,034.6	-1,121.2	659.1	537.4	121.71	5.415		
10,600.0	7,488.2	10,669.2	7,488.2	62.8	65.1	-90.00	3,134.6	-1,120.7	659.0	533.6	125.39	5.256		
10,700.0	7,487.8	10,769.2	7,487.8	64.6	66.9	-90.00	3,234.6	-1,120.3	658.9	529.9	129.08	5.105		
10,800.0	7,487.5	10,869.2	7,487.5	66.5	68.7	-90.00	3,334.6	-1,119.9	658.9	526.1	132.77	4.962		
10,900.0	7,487.1	10,969.2	7,487.1	68.3	70.5	-90.00	3,434.6	-1,119.5	658.8	522.3	136.47	4.827		
11,000.0	7,486.8	11,069.2	7,486.8	70.2	72.3	-90.00	3,534.6	-1,119.1	658.8	518.6	140.18	4.699		
11,100.0	7,486.4	11,169.2	7,486.4	72.0	74.1	-90.00	3,634.6	-1,118.7	658.7	514.8	143.90	4.578		
11,200.0	7,486.1	11,269.2	7,486.1	73.9	75.9	-90.00	3,734.6	-1,118.3	658.6	511.0	147.62	4.462		
11,300.0	7,485.7	11,369.2	7,485.7	75.7	77.7	-90.00	3,834.6	-1,117.8	658.6	507.2	151.35	4.352		
11,400.0	7,485.4	11,469.2	7,485.4	77.6	79.5	-90.00	3,934.6	-1,117.4	658.5	503.4	155.08	4.246		
11,500.0	7,485.1	11,569.2	7,485.0	79.5	81.3	-90.00	4,034.6	-1,117.0	658.5	499.6	158.81	4.146		
11,600.0	7,484.7	11,669.2	7,484.7	81.3	83.2	-90.00	4,134.6	-1,116.6	658.4	495.8	162.55	4.050		
11,700.0	7,484.4	11,769.2	7,484.3	83.2	85.0	-90.00	4,234.6	-1,116.2	658.3	492.0	166.30	3.959		
11,800.0	7,484.0	11,869.2	7,484.0	85.1	86.8	-90.00	4,334.6	-1,115.8	658.3	488.2	170.04	3.871		
11,900.0	7,483.7	11,969.2	7,483.6	86.9	88.7	-90.00	4,434.6	-1,115.4	658.2	484.4	173.79	3.787		
12,000.0	7,483.3	12,069.2	7,483.3	88.8	90.5	-90.00	4,534.6	-1,114.9	658.2	480.6	177.55	3.707		
12,064.4	7,483.1	12,133.6	7,483.1	90.0	91.7	-90.00	4,599.0	-1,114.7	658.1	478.2	179.97	3.657		
12,088.1	7,483.0	12,150.9	7,483.0	90.5	92.1	-90.00	4,616.3	-1,114.6	658.1	477.4	180.73	3.641 SF		

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-2N - Wellbore #1 - Plan #2 (8													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-94.37	-94.37	-3.6	-47.6	47.8				
100.0	100.0	100.0	100.0	0.1	0.1	-94.37	-94.37	-3.6	-47.6	47.8	47.5	0.22	212.470	
200.0	200.0	200.0	200.0	0.3	0.3	-94.37	-94.37	-3.6	-47.6	47.8	47.1	0.67	70.823	
300.0	300.0	300.0	300.0	0.6	0.6	-94.37	-94.37	-3.6	-47.6	47.8	46.6	1.12	42.494	
400.0	400.0	400.0	400.0	0.8	0.8	-94.37	-94.37	-3.6	-47.6	47.8	46.2	1.57	30.353 CC, ES	
500.0	500.0	498.3	498.3	1.0	1.0	-94.55	-94.55	-3.9	-49.3	49.5	47.5	2.01	24.664	
600.0	600.0	596.4	596.3	1.2	1.2	-95.01	-95.01	-4.8	-54.3	54.6	52.2	2.44	22.399	
700.0	700.0	694.1	693.5	1.5	1.4	-95.61	-95.61	-6.1	-62.5	63.1	60.2	2.89	21.849	
800.0	800.0	791.0	789.8	1.7	1.7	-96.23	-96.23	-8.1	-73.9	75.0	71.7	3.37	22.281	
900.0	900.0	887.1	884.7	1.9	2.0	-96.77	-96.77	-10.5	-88.4	90.3	86.4	3.88	23.270	
1,000.0	1,000.0	984.3	980.4	2.1	2.3	-97.23	-97.23	-13.4	-105.5	108.2	103.7	4.43	24.412	
1,100.0	1,100.0	1,082.7	1,077.1	2.4	2.7	-97.56	-97.56	-16.3	-123.1	126.3	121.2	5.00	25.232	
1,200.0	1,200.0	1,181.0	1,173.9	2.6	3.1	-97.81	-97.81	-19.3	-140.7	144.4	138.8	5.59	25.831	
1,300.0	1,300.0	1,279.7	1,270.9	2.8	3.5	10.58	10.58	-22.2	-158.3	160.8	155.2	5.58	28.797	
1,400.0	1,399.8	1,378.8	1,368.4	3.0	3.8	10.68	10.68	-25.2	-176.0	173.8	167.8	6.01	28.912	
1,500.0	1,499.5	1,478.3	1,466.3	3.2	4.2	10.97	10.97	-28.2	-193.8	183.4	177.0	6.44	28.458	
1,600.0	1,598.7	1,578.1	1,564.4	3.4	4.6	11.46	11.46	-31.2	-211.6	189.6	182.7	6.89	27.536	
1,700.0	1,697.6	1,678.0	1,662.6	3.7	5.1	12.07	12.07	-34.2	-229.4	193.5	186.2	7.35	26.337	
1,800.0	1,796.6	1,777.9	1,760.9	4.0	5.5	12.67	12.67	-37.2	-247.3	197.4	189.5	7.82	25.237	
1,900.0	1,895.5	1,877.8	1,859.2	4.2	5.9	13.25	13.25	-40.2	-265.1	201.2	192.9	8.30	24.244	
2,000.0	1,994.4	1,977.7	1,957.4	4.5	6.3	13.81	13.81	-43.2	-282.9	205.1	196.3	8.79	23.344	
2,100.0	2,093.3	2,077.7	2,055.7	4.8	6.7	14.34	14.34	-46.2	-300.8	209.0	199.8	9.28	22.527	
2,200.0	2,192.3	2,177.6	2,153.9	5.2	7.1	14.86	14.86	-49.2	-318.6	213.0	203.2	9.78	21.782	
2,300.0	2,291.2	2,277.5	2,252.2	5.5	7.5	15.35	15.35	-52.2	-336.5	216.9	206.6	10.28	21.101	
2,400.0	2,390.1	2,377.4	2,350.4	5.8	7.9	15.83	15.83	-55.2	-354.3	220.9	210.1	10.79	20.476	
2,500.0	2,489.0	2,477.3	2,448.7	6.1	8.3	16.29	16.29	-58.2	-372.2	224.8	213.5	11.30	19.901	
2,600.0	2,588.0	2,577.2	2,546.9	6.5	8.8	16.74	16.74	-61.2	-390.0	228.8	217.0	11.81	19.370	
2,700.0	2,686.9	2,677.1	2,645.2	6.8	9.2	17.17	17.17	-64.2	-407.9	232.8	220.5	12.33	18.880	
2,800.0	2,785.8	2,777.0	2,743.4	7.1	9.6	17.59	17.59	-67.2	-425.7	236.9	224.0	12.86	18.424	
2,900.0	2,884.7	2,876.9	2,841.7	7.5	10.0	17.99	17.99	-70.2	-443.5	240.9	227.5	13.38	18.001	
3,000.0	2,983.7	2,976.8	2,939.9	7.8	10.4	18.38	18.38	-73.2	-461.4	244.9	231.0	13.91	17.606	
3,100.0	3,082.6	3,076.7	3,038.2	8.2	10.8	18.75	18.75	-76.2	-479.2	249.0	234.5	14.44	17.238	
3,200.0	3,181.5	3,176.6	3,136.4	8.5	11.2	19.12	19.12	-79.2	-497.1	253.0	238.1	14.98	16.893	
3,300.0	3,280.5	3,276.5	3,234.7	8.8	11.7	19.47	19.47	-82.2	-514.9	257.1	241.6	15.52	16.569	
3,400.0	3,379.4	3,376.4	3,332.9	9.2	12.1	19.81	19.81	-85.2	-532.8	261.2	245.1	16.06	16.266	
3,500.0	3,478.3	3,476.3	3,431.2	9.5	12.5	20.14	20.14	-88.2	-550.6	265.3	248.7	16.60	15.980	
3,600.0	3,577.2	3,576.2	3,529.4	9.9	12.9	20.47	20.47	-91.2	-568.4	269.4	252.2	17.15	15.711	
3,700.0	3,676.2	3,676.1	3,627.7	10.2	13.3	20.78	20.78	-94.2	-586.3	273.5	255.8	17.69	15.456	
3,800.0	3,775.1	3,776.0	3,726.0	10.6	13.7	21.08	21.08	-97.2	-604.1	277.6	259.3	18.24	15.216	
3,900.0	3,874.0	3,875.9	3,824.2	10.9	14.1	21.37	21.37	-100.2	-622.0	281.7	262.9	18.79	14.989	
4,000.0	3,972.9	3,975.8	3,922.5	11.3	14.6	21.66	21.66	-103.2	-639.8	285.8	266.5	19.35	14.773	
4,100.0	4,071.9	4,075.7	4,020.7	11.7	15.0	21.93	21.93	-106.2	-657.7	290.0	270.1	19.90	14.568	
4,200.0	4,170.8	4,175.7	4,119.0	12.0	15.4	22.20	22.20	-109.2	-675.5	294.1	273.6	20.46	14.374	
4,300.0	4,269.7	4,275.6	4,217.2	12.4	15.8	22.46	22.46	-112.2	-693.4	298.3	277.2	21.02	14.188	
4,400.0	4,368.6	4,375.5	4,315.5	12.7	16.2	22.72	22.72	-115.2	-711.2	302.4	280.8	21.58	14.012	
4,500.0	4,467.6	4,475.4	4,413.7	13.1	16.6	22.97	22.97	-118.2	-729.0	306.6	284.4	22.14	13.844	
4,600.0	4,566.5	4,575.3	4,512.0	13.4	17.1	23.21	23.21	-121.2	-746.9	310.7	288.0	22.71	13.683	
4,700.0	4,665.6	4,675.1	4,610.2	13.7	17.5	23.39	23.39	-124.2	-764.7	316.1	292.8	23.23	13.603	
4,800.0	4,765.1	4,774.8	4,708.2	14.0	17.9	23.35	23.35	-127.2	-782.5	324.6	300.9	23.67	13.709	
4,900.0	4,864.9	4,874.0	4,805.8	14.1	18.3	23.11	23.11	-130.2	-800.2	336.2	312.2	24.06	13.976	
5,000.0	4,964.8	4,972.9	4,903.0	14.3	18.7	22.69	22.69	-133.1	-817.9	351.1	326.7	24.39	14.397	

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

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-2N - Wellbore #1 - Plan #2 (8													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,100.0	5,064.8	5,071.3	4,999.8	14.5	19.1	-86.44	-136.1	-835.5	368.6	343.8	24.71	14.912		
5,200.0	5,164.8	5,169.6	5,096.5	14.6	19.5	-87.05	-139.0	-853.0	386.2	361.1	25.10	15.390		
5,300.0	5,264.8	5,268.0	5,193.2	14.8	19.9	-87.61	-142.0	-870.6	403.9	378.5	25.48	15.850		
5,400.0	5,364.8	5,366.3	5,289.9	14.9	20.4	-88.12	-144.9	-888.2	421.7	395.8	25.88	16.294		
5,500.0	5,464.8	5,464.6	5,386.6	15.1	20.8	-88.58	-147.9	-905.7	439.5	413.2	26.28	16.721		
5,600.0	5,564.8	5,563.4	5,483.8	15.3	21.2	-89.02	-150.9	-923.4	457.3	430.6	26.69	17.133		
5,700.0	5,664.8	5,680.9	5,599.7	15.4	21.5	-89.44	-154.0	-941.9	473.0	445.9	27.09	17.463		
5,800.0	5,764.8	5,799.8	5,717.8	15.6	21.8	-89.73	-156.3	-955.9	484.8	457.3	27.48	17.642		
5,900.0	5,864.8	5,919.6	5,837.2	15.8	22.0	-89.92	-157.9	-965.1	492.4	464.6	27.87	17.671		
6,000.0	5,964.8	6,040.1	5,957.6	15.9	22.2	-90.00	-158.6	-969.3	496.0	467.7	28.26	17.552		
6,100.0	6,064.8	6,147.3	6,064.8	16.1	22.3	-90.00	-158.6	-969.6	496.2	467.6	28.64	17.329		
6,200.0	6,164.8	6,247.3	6,164.8	16.3	22.5	-90.00	-158.6	-969.6	496.2	467.2	29.01	17.107		
6,300.0	6,264.8	6,347.3	6,264.8	16.5	22.6	-90.00	-158.6	-969.6	496.2	466.8	29.38	16.890		
6,400.0	6,364.8	6,447.3	6,364.8	16.6	22.7	-90.00	-158.6	-969.6	496.2	466.5	29.75	16.678		
6,500.0	6,464.8	6,547.3	6,464.8	16.8	22.8	-90.00	-158.6	-969.6	496.2	466.1	30.13	16.469		
6,600.0	6,564.8	6,647.3	6,564.8	17.0	23.0	-90.00	-158.6	-969.6	496.2	465.7	30.51	16.265		
6,659.9	6,624.8	6,707.3	6,624.8	17.1	23.0	-89.75	-156.5	-969.6	496.2	465.5	30.75	16.137		
6,700.0	6,664.8	6,746.8	6,664.0	17.2	23.1	-89.16	-151.4	-969.6	496.2	465.3	30.94	16.040		
6,800.0	6,764.8	6,840.4	6,754.4	17.3	23.2	-86.42	-127.6	-969.5	497.2	465.7	31.48	15.791		
6,900.0	6,864.8	6,923.4	6,829.8	17.5	23.2	-82.50	-93.3	-969.3	501.4	469.3	32.12	15.612		
7,000.0	6,964.8	6,993.9	6,889.0	17.7	23.2	-78.20	-55.0	-969.2	512.1	479.3	32.80	15.616		
7,100.0	7,064.4	7,050.0	6,932.0	17.9	23.3	-73.10	-19.1	-969.0	529.8	496.1	33.68	15.729		
7,200.0	7,160.8	7,116.6	6,977.7	18.0	23.3	-67.32	29.2	-968.8	550.4	516.1	34.28	16.056		
7,300.0	7,250.4	7,175.7	7,012.8	18.1	23.3	-62.56	76.7	-968.6	571.7	537.4	34.32	16.657		
7,400.0	7,330.0	7,233.9	7,041.9	18.1	23.4	-58.61	127.1	-968.4	591.9	558.3	33.62	17.604		
7,500.0	7,396.6	7,300.0	7,068.0	18.2	23.5	-55.32	187.8	-968.1	609.5	576.9	32.59	18.701		
7,600.0	7,447.7	7,350.0	7,082.4	18.3	23.6	-53.23	235.7	-967.9	623.2	591.5	31.68	19.672		
7,700.0	7,481.6	7,400.0	7,092.2	18.6	23.7	-51.85	284.7	-967.7	632.5	601.1	31.37	20.159		
7,800.0	7,497.0	7,461.9	7,097.8	19.0	23.9	-51.16	346.3	-967.5	636.7	604.5	32.16	19.801		
7,900.0	7,497.6	7,547.7	7,097.7	19.7	24.3	-51.11	432.1	-967.1	637.0	603.3	33.66	18.923		
8,000.0	7,497.3	7,647.7	7,097.2	20.5	24.8	-51.10	532.1	-966.7	637.0	601.7	35.31	18.039		
8,100.0	7,496.9	7,747.7	7,096.8	21.5	25.6	-51.09	632.1	-966.3	637.0	599.9	37.15	17.147		
8,200.0	7,496.6	7,847.7	7,096.3	22.7	26.4	-51.07	732.1	-965.8	637.0	597.9	39.15	16.271		
8,300.0	7,496.2	7,947.7	7,095.8	23.9	27.4	-51.06	832.1	-965.4	637.1	595.8	41.29	15.429		
8,400.0	7,495.9	8,047.7	7,095.4	25.3	28.6	-51.05	932.1	-965.0	637.1	593.5	43.54	14.631		
8,500.0	7,495.5	8,147.7	7,094.9	26.7	29.8	-51.04	1,032.1	-964.6	637.1	591.2	45.90	13.880		
8,600.0	7,495.2	8,247.7	7,094.4	28.1	31.1	-51.02	1,132.1	-964.1	637.1	588.8	48.34	13.180		
8,700.0	7,494.8	8,347.7	7,093.9	29.7	32.4	-51.01	1,232.1	-963.7	637.2	586.3	50.85	12.529		
8,800.0	7,494.5	8,447.7	7,093.5	31.2	33.8	-51.00	1,332.1	-963.3	637.2	583.8	53.43	11.926		
8,900.0	7,494.1	8,547.7	7,093.0	32.8	35.3	-50.99	1,432.1	-962.9	637.2	581.1	56.06	11.367		
9,000.0	7,493.8	8,647.7	7,092.5	34.5	36.8	-50.97	1,532.1	-962.4	637.2	578.5	58.73	10.850		
9,100.0	7,493.4	8,747.7	7,092.1	36.1	38.4	-50.96	1,632.1	-962.0	637.2	575.8	61.45	10.371		
9,200.0	7,493.1	8,847.7	7,091.6	37.8	40.0	-50.95	1,732.1	-961.6	637.3	573.1	64.20	9.927		
9,300.0	7,492.7	8,947.7	7,091.1	39.5	41.6	-50.94	1,832.1	-961.2	637.3	570.3	66.98	9.515		
9,400.0	7,492.4	9,047.7	7,090.6	41.2	43.2	-50.92	1,932.1	-960.8	637.3	567.5	69.78	9.133		
9,500.0	7,492.0	9,147.7	7,090.2	43.0	44.9	-50.91	2,032.1	-960.3	637.3	564.7	72.61	8.777		
9,600.0	7,491.7	9,247.7	7,089.7	44.7	46.6	-50.90	2,132.1	-959.9	637.4	561.9	75.46	8.446		
9,700.0	7,491.3	9,347.7	7,089.2	46.5	48.3	-50.89	2,232.1	-959.5	637.4	559.1	78.33	8.137		
9,800.0	7,491.0	9,447.7	7,088.8	48.3	50.0	-50.87	2,332.1	-959.1	637.4	556.2	81.22	7.848		
9,900.0	7,490.6	9,547.7	7,088.3	50.1	51.7	-50.86	2,432.1	-958.6	637.4	553.3	84.12	7.578		
10,000.0	7,490.3	9,647.7	7,087.8	51.9	53.5	-50.85	2,532.1	-958.2	637.5	550.4	87.03	7.325		

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

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-2N - Wellbore #1 - Plan #2 (8												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,100.0	7,489.9	9,747.7	7,087.3	53.7	55.2	-50.84	2,632.1	-957.8	637.5	547.5	89.95	7.087	
10,200.0	7,489.6	9,847.7	7,086.9	55.5	57.0	-50.82	2,732.1	-957.4	637.5	544.6	92.89	6.863	
10,300.0	7,489.2	9,947.7	7,086.4	57.3	58.8	-50.81	2,832.1	-956.9	637.5	541.7	95.83	6.653	
10,400.0	7,488.9	10,047.7	7,085.9	59.1	60.5	-50.80	2,932.1	-956.5	637.5	538.8	98.78	6.454	
10,500.0	7,488.5	10,147.7	7,085.5	60.9	62.3	-50.79	3,032.1	-956.1	637.6	535.8	101.74	6.266	
10,600.0	7,488.2	10,247.7	7,085.0	62.8	64.1	-50.77	3,132.1	-955.7	637.6	532.9	104.71	6.089	
10,700.0	7,487.8	10,347.7	7,084.5	64.6	65.9	-50.76	3,232.1	-955.2	637.6	529.9	107.69	5.921	
10,800.0	7,487.5	10,447.7	7,084.0	66.5	67.7	-50.75	3,332.1	-954.8	637.6	527.0	110.66	5.762	
10,900.0	7,487.1	10,547.7	7,083.6	68.3	69.6	-50.74	3,432.1	-954.4	637.7	524.0	113.65	5.611	
11,000.0	7,486.8	10,647.7	7,083.1	70.2	71.4	-50.72	3,532.1	-954.0	637.7	521.0	116.64	5.467	
11,100.0	7,486.4	10,747.7	7,082.6	72.0	73.2	-50.71	3,632.1	-953.5	637.7	518.1	119.63	5.331	
11,200.0	7,486.1	10,847.7	7,082.2	73.9	75.0	-50.70	3,732.1	-953.1	637.7	515.1	122.63	5.201	
11,300.0	7,485.7	10,947.7	7,081.7	75.7	76.9	-50.69	3,832.1	-952.7	637.8	512.1	125.63	5.076	
11,400.0	7,485.4	11,047.7	7,081.2	77.6	78.7	-50.67	3,932.1	-952.3	637.8	509.1	128.63	4.958	
11,500.0	7,485.1	11,147.7	7,080.7	79.5	80.6	-50.66	4,032.1	-951.8	637.8	506.2	131.64	4.845	
11,600.0	7,484.7	11,247.7	7,080.3	81.3	82.4	-50.65	4,132.1	-951.4	637.8	503.2	134.65	4.737	
11,700.0	7,484.4	11,347.7	7,079.8	83.2	84.2	-50.64	4,232.1	-951.0	637.8	500.2	137.66	4.633	
11,800.0	7,484.0	11,447.7	7,079.3	85.1	86.1	-50.62	4,332.1	-950.6	637.9	497.2	140.68	4.534	
11,900.0	7,483.7	11,547.7	7,078.9	86.9	88.0	-50.61	4,432.1	-950.1	637.9	494.2	143.69	4.439	
12,000.0	7,483.3	11,647.7	7,078.4	88.8	89.8	-50.60	4,532.1	-949.7	637.9	491.2	146.71	4.348	
12,049.9	7,483.1	11,697.6	7,078.2	89.7	90.7	-50.59	4,582.0	-949.5	637.9	489.7	148.22	4.304	
12,088.1	7,483.0	11,732.0	7,078.0	90.5	91.4	-50.59	4,616.3	-949.4	638.0	488.6	149.31	4.273 SF	

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-3N - Wellbore #1 - Plan #2 (8													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-96.74	-3.6	-30.8	31.0					
100.0	100.0	100.0	100.0	0.1	0.1	-96.74	-3.6	-30.8	31.0	30.8	0.22	138.035		
200.0	200.0	200.0	200.0	0.3	0.3	-96.74	-3.6	-30.8	31.0	30.4	0.67	46.012		
300.0	300.0	300.0	300.0	0.6	0.6	-96.74	-3.6	-30.8	31.0	29.9	1.12	27.607		
400.0	400.0	400.0	400.0	0.8	0.8	-96.74	-3.6	-30.8	31.0	29.5	1.57	19.719		
500.0	500.0	500.0	500.0	1.0	1.0	-96.74	-3.6	-30.8	31.0	29.0	2.02	15.337		
600.0	600.0	600.0	600.0	1.2	1.2	-96.74	-3.6	-30.8	31.0	28.6	2.47	12.549 CC, ES		
700.0	700.0	698.9	698.9	1.5	1.4	-97.02	-4.0	-32.5	32.7	29.8	2.90	11.274		
800.0	800.0	797.6	797.4	1.7	1.6	-97.71	-5.1	-37.5	37.9	34.6	3.33	11.375		
900.0	900.0	895.7	895.2	1.9	1.9	-98.51	-6.8	-45.7	46.5	42.7	3.78	12.309		
1,000.0	1,000.0	993.2	992.0	2.1	2.1	-99.23	-9.3	-57.2	58.5	54.2	4.24	13.773		
1,100.0	1,100.0	1,091.6	1,089.3	2.4	2.4	-99.80	-12.3	-71.1	73.0	68.2	4.74	15.391		
1,200.0	1,200.0	1,190.5	1,187.1	2.6	2.7	-100.19	-15.3	-85.4	87.7	82.4	5.26	16.673		
1,300.0	1,300.0	1,289.6	1,285.2	2.8	3.0	8.17	-18.4	-99.6	100.7	95.1	5.52	18.250		
1,400.0	1,399.8	1,389.2	1,383.6	3.0	3.3	8.29	-21.5	-113.9	110.2	104.3	5.93	18.592		
1,500.0	1,499.5	1,489.0	1,482.4	3.2	3.7	8.65	-24.5	-128.3	116.3	110.0	6.35	18.329		
1,600.0	1,598.7	1,588.9	1,581.2	3.4	4.0	9.25	-27.6	-142.6	119.0	112.2	6.77	17.580		
1,700.0	1,697.6	1,688.9	1,680.1	3.7	4.4	10.03	-30.7	-157.0	119.3	112.1	7.21	16.540		
1,800.0	1,796.6	1,788.9	1,779.0	4.0	4.7	10.80	-33.8	-171.4	119.6	111.9	7.67	15.591		
1,900.0	1,895.5	1,888.9	1,877.9	4.2	5.0	11.57	-36.9	-185.7	119.9	111.8	8.14	14.739		
2,000.0	1,994.4	1,988.9	1,976.8	4.5	5.4	12.34	-39.9	-200.1	120.3	111.6	8.61	13.969		
2,100.0	2,093.3	2,088.8	2,075.7	4.8	5.7	13.11	-43.0	-214.5	120.6	111.5	9.09	13.272		
2,200.0	2,192.3	2,188.8	2,174.6	5.2	6.1	13.87	-46.1	-228.8	121.0	111.4	9.57	12.639		
2,300.0	2,291.2	2,288.8	2,273.5	5.5	6.5	14.62	-49.2	-243.2	121.4	111.3	10.06	12.062		
2,400.0	2,390.1	2,388.8	2,372.4	5.8	6.8	15.37	-52.3	-257.6	121.8	111.2	10.56	11.534		
2,500.0	2,489.0	2,488.8	2,471.3	6.1	7.2	16.11	-55.3	-272.0	122.2	111.2	11.06	11.049		
2,600.0	2,588.0	2,588.8	2,570.2	6.5	7.5	16.85	-58.4	-286.3	122.7	111.1	11.57	10.604		
2,700.0	2,686.9	2,688.8	2,669.1	6.8	7.9	17.59	-61.5	-300.7	123.2	111.1	12.08	10.192		
2,800.0	2,785.8	2,788.8	2,768.0	7.1	8.2	18.31	-64.6	-315.1	123.7	111.1	12.60	9.812		
2,900.0	2,884.7	2,888.7	2,866.9	7.5	8.6	19.03	-67.7	-329.4	124.2	111.1	13.13	9.458		
3,000.0	2,983.7	2,988.7	2,965.8	7.8	8.9	19.75	-70.7	-343.8	124.7	111.1	13.66	9.130		
3,100.0	3,082.6	3,088.7	3,064.7	8.2	9.3	20.46	-73.8	-358.2	125.3	111.1	14.20	8.825		
3,200.0	3,181.5	3,188.7	3,163.6	8.5	9.7	21.16	-76.9	-372.5	125.9	111.1	14.74	8.539		
3,300.0	3,280.5	3,288.7	3,262.5	8.8	10.0	21.86	-80.0	-386.9	126.5	111.2	15.29	8.272		
3,400.0	3,379.4	3,388.7	3,361.4	9.2	10.4	22.55	-83.1	-401.3	127.1	111.2	15.84	8.022		
3,500.0	3,478.3	3,488.7	3,460.3	9.5	10.7	23.23	-86.1	-415.7	127.7	111.3	16.40	7.788		
3,600.0	3,577.2	3,588.6	3,559.2	9.9	11.1	23.91	-89.2	-430.0	128.3	111.4	16.96	7.567		
3,700.0	3,676.2	3,688.6	3,658.1	10.2	11.5	24.58	-92.3	-444.4	129.0	111.5	17.53	7.360		
3,800.0	3,775.1	3,788.6	3,757.0	10.6	11.8	25.24	-95.4	-458.8	129.7	111.6	18.10	7.164		
3,900.0	3,874.0	3,888.6	3,855.9	10.9	12.2	25.89	-98.5	-473.1	130.4	111.7	18.68	6.979		
4,000.0	3,972.9	3,988.6	3,954.8	11.3	12.5	26.54	-101.5	-487.5	131.1	111.9	19.27	6.805		
4,100.0	4,071.9	4,088.6	4,053.7	11.7	12.9	27.18	-104.6	-501.9	131.9	112.0	19.86	6.640		
4,200.0	4,170.8	4,188.6	4,152.6	12.0	13.3	27.81	-107.7	-516.3	132.6	112.2	20.45	6.483		
4,300.0	4,269.7	4,288.6	4,251.5	12.4	13.6	28.44	-110.8	-530.6	133.4	112.3	21.05	6.335		
4,400.0	4,368.6	4,388.5	4,350.4	12.7	14.0	29.06	-113.9	-545.0	134.2	112.5	21.66	6.194		
4,500.0	4,467.6	4,488.5	4,449.3	13.1	14.3	29.67	-116.9	-559.4	135.0	112.7	22.27	6.061		
4,600.0	4,566.5	4,588.5	4,548.2	13.4	14.7	30.28	-120.0	-573.7	135.8	112.9	22.88	5.934		
4,700.0	4,665.6	4,688.5	4,647.1	13.7	15.1	30.62	-123.1	-588.1	137.7	114.2	23.44	5.873		
4,800.0	4,765.1	4,788.4	4,745.9	14.0	15.4	30.28	-126.2	-602.5	142.6	118.7	23.86	5.975		
4,900.0	4,864.9	4,888.0	4,844.5	14.1	15.8	29.32	-129.2	-616.8	150.5	126.3	24.18	6.224		
5,000.0	4,964.8	4,987.3	4,942.7	14.3	16.1	27.91	-132.3	-631.0	161.5	137.1	24.41	6.617		

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

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-3N - Wellbore #1 - Plan #2 (8													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,100.0	5,064.8	5,086.2	5,040.6	14.5	16.5	-82.30	-135.4	-645.3	175.1	150.5	24.62	7.112		
5,200.0	5,164.8	5,185.2	5,138.4	14.6	16.9	-83.81	-138.4	-659.5	189.0	164.1	24.90	7.590		
5,300.0	5,264.8	5,284.1	5,236.3	14.8	17.2	-85.11	-141.4	-673.7	203.1	177.8	25.21	8.054		
5,400.0	5,364.8	5,383.0	5,334.1	14.9	17.6	-86.24	-144.5	-687.9	217.2	191.6	25.54	8.502		
5,500.0	5,464.8	5,481.9	5,431.9	15.1	17.9	-87.23	-147.5	-702.1	231.3	205.5	25.89	8.935		
5,600.0	5,564.8	5,580.8	5,529.8	15.3	18.3	-88.11	-150.6	-716.3	245.6	219.3	26.25	9.355		
5,700.0	5,664.8	5,684.5	5,632.4	15.4	18.6	-88.90	-153.7	-730.8	259.4	232.8	26.62	9.745		
5,800.0	5,764.8	5,793.7	5,741.0	15.6	18.9	-89.49	-156.2	-742.4	270.1	243.1	26.97	10.014		
5,900.0	5,864.8	5,903.8	5,850.7	15.8	19.1	-89.84	-157.8	-750.1	277.1	249.7	27.33	10.136		
6,000.0	5,964.8	6,014.2	5,961.1	15.9	19.3	-90.00	-158.6	-753.7	280.3	252.6	27.70	10.117		
6,100.0	6,064.8	6,117.9	6,064.8	16.1	19.4	-90.01	-158.6	-753.9	280.5	252.4	28.09	9.988		
6,200.0	6,164.8	6,217.9	6,164.8	16.3	19.5	-90.01	-158.6	-753.9	280.5	252.0	28.46	9.855		
6,300.0	6,264.8	6,317.9	6,264.8	16.5	19.7	-90.01	-158.6	-753.9	280.5	251.7	28.84	9.726		
6,400.0	6,364.8	6,417.9	6,364.8	16.6	19.8	-90.01	-158.6	-753.9	280.5	251.3	29.22	9.599		
6,500.0	6,464.8	6,517.9	6,464.8	16.8	20.0	-90.01	-158.6	-753.9	280.5	250.9	29.61	9.474		
6,600.0	6,564.8	6,617.9	6,564.8	17.0	20.1	-90.01	-158.6	-753.9	280.5	250.5	29.99	9.353		
6,700.0	6,664.8	6,717.9	6,664.8	17.2	20.3	-90.01	-158.6	-753.9	280.5	250.1	30.38	9.233		
6,800.0	6,764.8	6,817.9	6,764.8	17.3	20.4	-90.01	-158.6	-753.9	280.5	249.7	30.77	9.117		
6,845.2	6,810.1	6,863.2	6,810.1	17.4	20.5	-89.80	-157.6	-753.9	280.5	249.6	30.96	9.062		
6,900.0	6,864.8	6,917.3	6,863.8	17.5	20.5	-88.53	-151.4	-753.9	280.6	249.3	31.24	8.980		
7,000.0	6,964.8	7,010.7	6,954.0	17.7	20.6	-83.71	-127.7	-753.8	282.3	250.4	31.94	8.838		
7,100.0	7,064.4	7,096.4	7,031.9	17.9	20.7	-77.40	-92.1	-753.7	288.3	255.5	32.83	8.782		
7,200.0	7,160.8	7,178.2	7,099.8	18.0	20.7	-71.49	-46.7	-753.5	297.3	263.9	33.40	8.902		
7,300.0	7,250.4	7,257.0	7,157.7	18.1	20.8	-66.43	6.6	-753.3	307.9	274.4	33.45	9.203		
7,400.0	7,330.0	7,333.5	7,205.7	18.1	20.8	-62.28	66.1	-753.1	318.6	285.6	33.00	9.655		
7,500.0	7,396.6	7,408.4	7,243.7	18.2	20.9	-59.06	130.5	-752.9	328.4	296.1	32.25	10.181		
7,600.0	7,447.7	7,482.0	7,271.7	18.3	21.0	-56.73	198.6	-752.6	336.3	304.6	31.63	10.630		
7,700.0	7,481.6	7,550.0	7,288.8	18.6	21.2	-55.29	264.3	-752.4	341.7	310.1	31.58	10.819		
7,800.0	7,497.0	7,627.3	7,297.6	19.0	21.5	-54.58	341.1	-752.1	344.2	311.7	32.51	10.589		
7,900.0	7,497.6	7,718.2	7,297.7	19.7	21.9	-54.53	432.0	-751.8	344.4	310.4	34.04	10.119		
8,000.0	7,497.3	7,818.2	7,297.3	20.5	22.6	-54.51	532.0	-751.5	344.5	308.8	35.73	9.642		
8,100.0	7,496.9	7,918.2	7,296.8	21.5	23.5	-54.49	632.0	-751.1	344.6	307.0	37.62	9.159		
8,200.0	7,496.6	8,018.2	7,296.3	22.7	24.5	-54.48	732.0	-750.7	344.6	305.0	39.68	8.685		
8,300.0	7,496.2	8,118.2	7,295.8	23.9	25.6	-54.46	832.0	-750.4	344.7	302.8	41.89	8.228		
8,400.0	7,495.9	8,218.2	7,295.4	25.3	26.9	-54.44	932.0	-750.0	344.8	300.6	44.23	7.795		
8,500.0	7,495.5	8,318.2	7,294.9	26.7	28.2	-54.43	1,032.0	-749.7	344.9	298.2	46.67	7.389		
8,600.0	7,495.2	8,418.2	7,294.4	28.1	29.6	-54.41	1,132.0	-749.3	344.9	295.7	49.20	7.011		
8,700.0	7,494.8	8,518.2	7,294.0	29.7	31.0	-54.39	1,232.0	-749.0	345.0	293.2	51.80	6.660		
8,800.0	7,494.5	8,618.2	7,293.5	31.2	32.5	-54.38	1,332.0	-748.6	345.1	290.6	54.47	6.334		
8,900.0	7,494.1	8,718.2	7,293.0	32.8	34.1	-54.36	1,432.0	-748.3	345.1	287.9	57.20	6.034		
9,000.0	7,493.8	8,818.2	7,292.5	34.5	35.7	-54.34	1,532.0	-747.9	345.2	285.2	59.97	5.756		
9,100.0	7,493.4	8,918.2	7,292.1	36.1	37.3	-54.33	1,632.0	-747.5	345.3	282.5	62.79	5.499		
9,200.0	7,493.1	9,018.2	7,291.6	37.8	38.9	-54.31	1,732.0	-747.2	345.3	279.7	65.64	5.261		
9,300.0	7,492.7	9,118.2	7,291.1	39.5	40.6	-54.29	1,832.0	-746.8	345.4	276.9	68.52	5.041		
9,400.0	7,492.4	9,218.2	7,290.7	41.2	42.3	-54.28	1,932.0	-746.5	345.5	274.0	71.43	4.836		
9,500.0	7,492.0	9,318.2	7,290.2	43.0	44.0	-54.26	2,032.0	-746.1	345.6	271.2	74.37	4.646		
9,600.0	7,491.7	9,418.2	7,289.7	44.7	45.7	-54.24	2,132.0	-745.8	345.6	268.3	77.32	4.470		
9,700.0	7,491.3	9,518.2	7,289.2	46.5	47.4	-54.23	2,231.9	-745.4	345.7	265.4	80.30	4.305		
9,800.0	7,491.0	9,618.2	7,288.8	48.3	49.2	-54.21	2,331.9	-745.0	345.8	262.5	83.29	4.151		
9,900.0	7,490.6	9,718.2	7,288.3	50.1	50.9	-54.19	2,431.9	-744.7	345.8	259.5	86.29	4.008		
10,000.0	7,490.3	9,818.2	7,287.8	51.9	52.7	-54.18	2,531.9	-744.3	345.9	256.6	89.31	3.873		

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

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-3N - Wellbore #1 - Plan #2 (8												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,100.0	7,489.9	9,918.2	7,287.4	53.7	54.5	-54.16	2,631.9	-744.0	346.0	253.6	92.34	3.747	
10,200.0	7,489.6	10,018.2	7,286.9	55.5	56.3	-54.14	2,731.9	-743.6	346.0	250.7	95.38	3.628	
10,300.0	7,489.2	10,118.2	7,286.4	57.3	58.1	-54.13	2,831.9	-743.3	346.1	247.7	98.43	3.516	
10,400.0	7,488.9	10,218.2	7,286.0	59.1	59.9	-54.11	2,931.9	-742.9	346.2	244.7	101.49	3.411	
10,500.0	7,488.5	10,318.2	7,285.5	60.9	61.7	-54.09	3,031.9	-742.6	346.3	241.7	104.56	3.312	
10,600.0	7,488.2	10,418.2	7,285.0	62.8	63.5	-54.08	3,131.9	-742.2	346.3	238.7	107.63	3.218	
10,700.0	7,487.8	10,518.2	7,284.5	64.6	65.3	-54.06	3,231.9	-741.8	346.4	235.7	110.71	3.129	
10,800.0	7,487.5	10,618.2	7,284.1	66.5	67.2	-54.04	3,331.9	-741.5	346.5	232.7	113.79	3.045	
10,900.0	7,487.1	10,718.2	7,283.6	68.3	69.0	-54.03	3,431.9	-741.1	346.5	229.7	116.88	2.965	
11,000.0	7,486.8	10,818.2	7,283.1	70.2	70.8	-54.01	3,531.9	-740.8	346.6	226.6	119.98	2.889	
11,100.0	7,486.4	10,918.2	7,282.7	72.0	72.7	-53.99	3,631.9	-740.4	346.7	223.6	123.08	2.817	
11,200.0	7,486.1	11,018.2	7,282.2	73.9	74.5	-53.98	3,731.9	-740.1	346.7	220.6	126.18	2.748	
11,300.0	7,485.7	11,118.2	7,281.7	75.7	76.4	-53.96	3,831.9	-739.7	346.8	217.5	129.29	2.683	
11,400.0	7,485.4	11,218.2	7,281.2	77.6	78.2	-53.95	3,931.9	-739.4	346.9	214.5	132.40	2.620	
11,500.0	7,485.1	11,318.2	7,280.8	79.5	80.1	-53.93	4,031.9	-739.0	347.0	211.5	135.51	2.560	
11,600.0	7,484.7	11,418.2	7,280.3	81.3	81.9	-53.91	4,131.9	-738.6	347.0	208.4	138.62	2.503	
11,700.0	7,484.4	11,518.2	7,279.8	83.2	83.8	-53.90	4,231.9	-738.3	347.1	205.4	141.74	2.449	
11,800.0	7,484.0	11,618.2	7,279.4	85.1	85.6	-53.88	4,331.9	-737.9	347.2	202.3	144.86	2.397	
11,900.0	7,483.7	11,718.2	7,278.9	86.9	87.5	-53.86	4,431.9	-737.6	347.2	199.3	147.98	2.347	
12,000.0	7,483.3	11,818.2	7,278.4	88.8	89.4	-53.85	4,531.9	-737.2	347.3	196.2	151.10	2.299	
12,088.1	7,483.0	11,905.5	7,278.0	90.5	91.0	-53.83	4,619.2	-736.9	347.4	193.5	153.84	2.258 SF	

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-4N - Wellbore #1 - Plan #2 (8													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	-90.00	0.0	-16.8	16.8	16.8	0.00	N/A	
100.0	100.0	100.0	100.0	0.1	0.1	-90.00	-90.00	0.0	-16.8	16.8	16.6	0.22	74.771	
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	-90.00	0.0	-16.8	16.8	16.1	0.67	24.924	
300.0	300.0	300.0	300.0	0.6	0.6	-90.00	-90.00	0.0	-16.8	16.8	15.7	1.12	14.954	
400.0	400.0	400.0	400.0	0.8	0.8	-90.00	-90.00	0.0	-16.8	16.8	15.2	1.57	10.682	
500.0	500.0	500.0	500.0	1.0	1.0	-90.00	-90.00	0.0	-16.8	16.8	14.8	2.02	8.308	
600.0	600.0	600.0	600.0	1.2	1.2	-90.00	-90.00	0.0	-16.8	16.8	14.3	2.47	6.797	
700.0	700.0	700.0	700.0	1.5	1.5	-90.00	-90.00	0.0	-16.8	16.8	13.9	2.92	5.752	
800.0	800.0	800.0	800.0	1.7	1.7	-90.00	-90.00	0.0	-16.8	16.8	13.4	3.37	4.985 CC, ES	
900.0	900.0	899.4	899.4	1.9	1.9	-91.32	-91.32	-0.4	-18.5	18.5	14.7	3.80	4.862	
1,000.0	1,000.0	998.6	998.4	2.1	2.1	-94.14	-94.14	-1.7	-23.5	23.6	19.4	4.23	5.578	
1,100.0	1,100.0	1,097.2	1,096.7	2.4	2.3	-96.84	-96.84	-3.8	-31.7	32.1	27.5	4.67	6.885	
1,200.0	1,200.0	1,195.2	1,194.0	2.6	2.5	-98.85	-98.85	-6.7	-43.2	44.1	39.0	5.13	8.604	
1,300.0	1,300.0	1,293.9	1,291.5	2.8	2.8	-8.53	-8.53	-10.3	-57.2	57.0	51.5	5.51	10.360	
1,400.0	1,399.8	1,393.4	1,390.0	3.0	3.1	8.20	8.20	-14.0	-71.5	66.7	60.8	5.90	11.300	
1,500.0	1,499.5	1,493.2	1,488.6	3.2	3.4	8.35	8.35	-17.6	-85.9	72.9	66.6	6.31	11.561	
1,600.0	1,598.7	1,593.1	1,587.5	3.4	3.7	8.86	8.86	-21.3	-100.3	75.7	69.0	6.72	11.267	
1,700.0	1,697.6	1,693.1	1,686.4	3.7	4.1	9.64	9.64	-25.0	-114.7	76.2	69.0	7.16	10.640	
1,800.0	1,796.6	1,793.1	1,785.3	4.0	4.4	10.42	10.42	-28.6	-129.1	76.6	68.9	7.61	10.061	
1,900.0	1,895.5	1,893.1	1,884.1	4.2	4.7	11.20	11.20	-32.3	-143.5	77.0	68.9	8.07	9.537	
2,000.0	1,994.4	1,993.1	1,983.0	4.5	5.1	11.96	11.96	-36.0	-157.9	77.4	68.8	8.54	9.064	
2,100.0	2,093.3	2,093.1	2,081.9	4.8	5.4	12.71	12.71	-39.6	-172.2	77.8	68.8	9.01	8.634	
2,200.0	2,192.3	2,193.1	2,180.8	5.2	5.8	13.46	13.46	-43.3	-186.6	78.2	68.8	9.49	8.244	
2,300.0	2,291.2	2,293.1	2,279.7	5.5	6.1	14.20	14.20	-47.0	-201.0	78.7	68.7	9.98	7.886	
2,400.0	2,390.1	2,393.1	2,378.6	5.8	6.5	14.93	14.93	-50.7	-215.4	79.2	68.7	10.47	7.559	
2,500.0	2,489.0	2,493.1	2,477.5	6.1	6.8	15.65	15.65	-54.3	-229.8	79.6	68.7	10.97	7.259	
2,600.0	2,588.0	2,593.1	2,576.3	6.5	7.2	16.36	16.36	-58.0	-244.2	80.1	68.7	11.48	6.982	
2,700.0	2,686.9	2,693.1	2,675.2	6.8	7.5	17.07	17.07	-61.7	-258.6	80.6	68.7	11.99	6.727	
2,800.0	2,785.8	2,793.1	2,774.1	7.1	7.9	17.76	17.76	-65.3	-273.0	81.2	68.7	12.51	6.490	
2,900.0	2,884.7	2,893.1	2,873.0	7.5	8.2	18.45	18.45	-69.0	-287.4	81.7	68.7	13.03	6.271	
3,000.0	2,983.7	2,993.0	2,971.9	7.8	8.6	19.13	19.13	-72.7	-301.8	82.2	68.7	13.56	6.067	
3,100.0	3,082.6	3,093.0	3,070.8	8.2	8.9	19.79	19.79	-76.4	-316.2	82.8	68.7	14.09	5.876	
3,200.0	3,181.5	3,193.0	3,169.6	8.5	9.3	20.45	20.45	-80.0	-330.6	83.4	68.7	14.63	5.699	
3,300.0	3,280.5	3,293.0	3,268.5	8.8	9.7	21.10	21.10	-83.7	-345.0	83.9	68.8	15.17	5.532	
3,400.0	3,379.4	3,393.0	3,367.4	9.2	10.0	21.74	21.74	-87.4	-359.4	84.5	68.8	15.72	5.377	
3,500.0	3,478.3	3,493.0	3,466.3	9.5	10.4	22.38	22.38	-91.0	-373.7	85.1	68.8	16.27	5.230	
3,600.0	3,577.2	3,593.0	3,565.2	9.9	10.7	23.00	23.00	-94.7	-388.1	85.7	68.9	16.83	5.093	
3,700.0	3,676.2	3,693.0	3,664.1	10.2	11.1	23.62	23.62	-98.4	-402.5	86.3	68.9	17.39	4.963	
3,800.0	3,775.1	3,793.0	3,763.0	10.6	11.5	24.22	24.22	-102.1	-416.9	87.0	69.0	17.96	4.841	
3,900.0	3,874.0	3,893.0	3,861.8	10.9	11.8	24.82	24.82	-105.7	-431.3	87.6	69.1	18.54	4.726	
4,000.0	3,972.9	3,993.0	3,960.7	11.3	12.2	25.41	25.41	-109.4	-445.7	88.2	69.1	19.11	4.616	
4,100.0	4,071.9	4,093.0	4,059.6	11.7	12.5	25.99	25.99	-113.1	-460.1	88.9	69.2	19.70	4.513	
4,200.0	4,170.8	4,193.0	4,158.5	12.0	12.9	26.56	26.56	-116.7	-474.5	89.6	69.3	20.28	4.415	
4,300.0	4,269.7	4,293.0	4,257.4	12.4	13.3	27.12	27.12	-120.4	-488.9	90.2	69.4	20.87	4.323	
4,400.0	4,368.6	4,393.0	4,356.3	12.7	13.6	27.68	27.68	-124.1	-503.3	90.9	69.4	21.47	4.234	
4,500.0	4,467.6	4,493.0	4,455.1	13.1	14.0	28.22	28.22	-127.8	-517.7	91.6	69.5	22.07	4.151	
4,600.0	4,566.5	4,592.9	4,554.0	13.4	14.4	28.76	28.76	-131.4	-532.1	92.3	69.6	22.67	4.071	
4,700.0	4,665.6	4,692.9	4,652.9	13.7	14.7	28.93	28.93	-135.1	-546.5	94.1	70.9	23.21	4.054	
4,800.0	4,765.1	4,792.8	4,751.7	14.0	15.1	28.15	28.15	-138.8	-560.8	98.9	75.3	23.59	4.194	
4,900.0	4,864.9	4,892.4	4,850.2	14.1	15.4	26.62	26.62	-142.4	-575.2	106.9	83.0	23.85	4.482	
5,000.0	4,964.8	4,991.7	4,948.4	14.3	15.8	24.60	24.60	-146.1	-589.5	118.1	94.1	24.03	4.914	

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

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-4N - Wellbore #1 - Plan #2 (8													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,064.8	5,090.6	5,046.2	14.5	16.2	-86.09	-86.09	-149.7	-603.7	131.9	107.7	24.21	5.449	
5,200.0	5,164.8	5,193.1	5,147.7	14.6	16.5	-87.86	-87.86	-153.2	-617.5	145.2	120.8	24.47	5.936	
5,300.0	5,264.8	5,297.9	5,251.8	14.8	16.7	-89.01	-89.01	-155.9	-628.2	155.3	130.6	24.75	6.276	
5,400.0	5,364.8	5,403.3	5,357.0	14.9	16.9	-89.69	-89.69	-157.7	-635.1	161.9	136.9	25.07	6.458	
5,500.0	5,464.8	5,509.1	5,462.7	15.1	17.1	-89.98	-89.98	-158.5	-638.4	165.0	139.6	25.42	6.490	
5,600.0	5,564.8	5,611.2	5,564.8	15.3	17.2	-90.00	-90.00	-158.6	-638.6	165.2	139.4	25.80	6.404	
5,700.0	5,664.8	5,711.2	5,664.8	15.4	17.4	-90.00	-90.00	-158.6	-638.6	165.2	139.0	26.17	6.312	
5,800.0	5,764.8	5,811.2	5,764.8	15.6	17.5	-90.00	-90.00	-158.6	-638.6	165.2	138.7	26.55	6.223	
5,900.0	5,864.8	5,911.2	5,864.8	15.8	17.7	-90.00	-90.00	-158.6	-638.6	165.2	138.3	26.93	6.135	
6,000.0	5,964.8	6,011.2	5,964.8	15.9	17.8	-90.00	-90.00	-158.6	-638.6	165.2	137.9	27.31	6.049	
6,100.0	6,064.8	6,111.2	6,064.8	16.1	18.0	-90.00	-90.00	-158.6	-638.6	165.2	137.5	27.70	5.965	
6,200.0	6,164.8	6,211.2	6,164.8	16.3	18.1	-90.00	-90.00	-158.6	-638.6	165.2	137.1	28.08	5.883	
6,300.0	6,264.8	6,311.2	6,264.8	16.5	18.3	-90.00	-90.00	-158.6	-638.6	165.2	136.7	28.47	5.803	
6,400.0	6,364.8	6,411.2	6,364.8	16.6	18.4	-90.00	-90.00	-158.6	-638.6	165.2	136.3	28.86	5.725	
6,500.0	6,464.8	6,511.2	6,464.8	16.8	18.6	-90.00	-90.00	-158.6	-638.6	165.2	136.0	29.25	5.648	
6,600.0	6,564.8	6,611.2	6,564.8	17.0	18.7	-90.00	-90.00	-158.6	-638.6	165.2	135.6	29.64	5.573	
6,700.0	6,664.8	6,711.2	6,664.8	17.2	18.9	-90.00	-90.00	-158.6	-638.6	165.2	135.2	30.04	5.500	
6,800.0	6,764.8	6,811.2	6,764.8	17.3	19.1	-90.00	-90.00	-158.6	-638.6	165.2	134.8	30.43	5.428	
6,838.6	6,803.4	6,849.8	6,803.4	17.4	19.1	-89.77	-89.77	-157.9	-638.6	165.2	134.6	30.60	5.399	
6,900.0	6,864.8	6,910.4	6,863.7	17.5	19.2	-87.49	-87.49	-151.4	-638.6	165.3	134.4	30.98	5.337	
7,000.0	6,964.8	7,003.8	6,953.9	17.7	19.3	-79.40	-79.40	-127.7	-638.5	168.3	136.4	31.95	5.268	
7,100.0	7,064.4	7,089.4	7,031.7	17.9	19.4	-69.10	-69.10	-92.2	-638.4	178.3	145.1	33.20	5.369	
7,200.0	7,160.8	7,171.2	7,099.6	18.0	19.4	-60.29	-60.29	-46.8	-638.2	192.5	158.7	33.79	5.697	
7,300.0	7,250.4	7,250.0	7,157.6	18.1	19.5	-53.39	-53.39	6.5	-638.0	208.5	175.1	33.40	6.242	
7,400.0	7,330.0	7,326.5	7,205.5	18.1	19.5	-48.21	-48.21	65.9	-637.8	224.0	191.9	32.13	6.972	
7,500.0	7,396.6	7,400.0	7,243.0	18.2	19.6	-44.50	-44.50	129.1	-637.6	237.7	207.3	30.38	7.825	
7,600.0	7,447.7	7,475.0	7,271.6	18.3	19.7	-41.89	-41.89	198.4	-637.3	248.5	219.7	28.73	8.648	
7,700.0	7,481.6	7,550.0	7,290.0	18.6	19.9	-40.29	-40.29	271.0	-637.1	255.7	227.9	27.84	9.185	
7,800.0	7,497.0	7,620.2	7,297.6	19.0	20.2	-39.63	-39.63	340.8	-636.8	259.0	230.8	28.24	9.173	
7,900.0	7,497.6	7,711.0	7,297.7	19.7	20.7	-39.57	-39.57	431.6	-636.5	259.3	229.8	29.54	8.778	
8,000.0	7,497.3	7,811.0	7,297.3	20.5	21.5	-39.56	-39.56	531.6	-636.2	259.4	228.5	30.96	8.378	
8,100.0	7,496.9	7,911.0	7,296.8	21.5	22.4	-39.54	-39.54	631.6	-635.8	259.5	227.0	32.54	7.975	
8,200.0	7,496.6	8,011.0	7,296.3	22.7	23.5	-39.52	-39.52	731.6	-635.5	259.6	225.3	34.26	7.578	
8,300.0	7,496.2	8,111.0	7,295.8	23.9	24.7	-39.51	-39.51	831.6	-635.1	259.7	223.6	36.09	7.196	
8,400.0	7,495.9	8,211.0	7,295.4	25.3	26.0	-39.49	-39.49	931.6	-634.8	259.8	221.8	38.02	6.833	
8,500.0	7,495.5	8,311.0	7,294.9	26.7	27.3	-39.47	-39.47	1,031.6	-634.4	259.9	219.8	40.04	6.491	
8,600.0	7,495.2	8,411.0	7,294.4	28.1	28.8	-39.45	-39.45	1,131.6	-634.0	260.0	217.9	42.13	6.171	
8,700.0	7,494.8	8,511.0	7,294.0	29.7	30.3	-39.44	-39.44	1,231.6	-633.7	260.1	215.8	44.28	5.873	
8,800.0	7,494.5	8,611.0	7,293.5	31.2	31.8	-39.42	-39.42	1,331.6	-633.3	260.2	213.7	46.49	5.597	
8,900.0	7,494.1	8,711.0	7,293.0	32.8	33.4	-39.40	-39.40	1,431.5	-633.0	260.3	211.5	48.74	5.340	
9,000.0	7,493.8	8,811.0	7,292.6	34.5	35.0	-39.39	-39.39	1,531.5	-632.6	260.4	209.3	51.03	5.102	
9,100.0	7,493.4	8,911.0	7,292.1	36.1	36.6	-39.37	-39.37	1,631.5	-632.3	260.5	207.1	53.35	4.882	
9,200.0	7,493.1	9,011.0	7,291.6	37.8	38.3	-39.35	-39.35	1,731.5	-631.9	260.6	204.8	55.71	4.677	
9,300.0	7,492.7	9,111.0	7,291.1	39.5	40.0	-39.34	-39.34	1,831.5	-631.6	260.6	202.6	58.09	4.487	
9,400.0	7,492.4	9,211.0	7,290.7	41.2	41.7	-39.32	-39.32	1,931.5	-631.2	260.7	200.3	60.49	4.311	
9,500.0	7,492.0	9,311.0	7,290.2	43.0	43.4	-39.30	-39.30	2,031.5	-630.9	260.8	197.9	62.91	4.146	
9,600.0	7,491.7	9,411.0	7,289.7	44.7	45.1	-39.29	-39.29	2,131.5	-630.5	260.9	195.6	65.35	3.993	
9,700.0	7,491.3	9,511.0	7,289.3	46.5	46.9	-39.27	-39.27	2,231.5	-630.2	261.0	193.2	67.81	3.850	
9,800.0	7,491.0	9,611.0	7,288.8	48.3	48.7	-39.25	-39.25	2,331.5	-629.8	261.1	190.8	70.28	3.716	
9,900.0	7,490.6	9,711.0	7,288.3	50.1	50.4	-39.23	-39.23	2,431.5	-629.4	261.2	188.5	72.76	3.590	
10,000.0	7,490.3	9,811.0	7,287.8	51.9	52.2	-39.22	-39.22	2,531.5	-629.1	261.3	186.1	75.25	3.473	

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

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-4N - Wellbore #1 - Plan #2 (8												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,100.0	7,489.9	9,911.0	7,287.4	53.7	54.0	-39.20	2,631.5	-628.7	261.4	183.7	77.75	3.362	
10,200.0	7,489.6	10,011.0	7,286.9	55.5	55.8	-39.18	2,731.5	-628.4	261.5	181.2	80.26	3.258	
10,300.0	7,489.2	10,111.0	7,286.4	57.3	57.6	-39.17	2,831.5	-628.0	261.6	178.8	82.78	3.160	
10,400.0	7,488.9	10,211.0	7,286.0	59.1	59.4	-39.15	2,931.5	-627.7	261.7	176.4	85.30	3.068	
10,500.0	7,488.5	10,311.0	7,285.5	60.9	61.3	-39.13	3,031.5	-627.3	261.8	174.0	87.83	2.980	
10,600.0	7,488.2	10,411.0	7,285.0	62.8	63.1	-39.12	3,131.5	-627.0	261.9	171.5	90.37	2.898	
10,700.0	7,487.8	10,511.0	7,284.5	64.6	64.9	-39.10	3,231.5	-626.6	262.0	169.1	92.91	2.820	
10,800.0	7,487.5	10,611.0	7,284.1	66.5	66.8	-39.08	3,331.5	-626.3	262.1	166.6	95.46	2.745	
10,900.0	7,487.1	10,711.0	7,283.6	68.3	68.6	-39.07	3,431.5	-625.9	262.2	164.2	98.01	2.675	
11,000.0	7,486.8	10,811.0	7,283.1	70.2	70.4	-39.05	3,531.5	-625.6	262.3	161.7	100.56	2.608	
11,100.0	7,486.4	10,911.0	7,282.7	72.0	72.3	-39.03	3,631.5	-625.2	262.4	159.2	103.12	2.544	
11,200.0	7,486.1	11,011.0	7,282.2	73.9	74.1	-39.02	3,731.5	-624.8	262.5	156.8	105.68	2.483	
11,300.0	7,485.7	11,111.0	7,281.7	75.7	76.0	-39.00	3,831.5	-624.5	262.5	154.3	108.24	2.426	
11,400.0	7,485.4	11,211.0	7,281.2	77.6	77.9	-38.98	3,931.5	-624.1	262.6	151.8	110.81	2.370	
11,500.0	7,485.1	11,311.0	7,280.8	79.5	79.7	-38.97	4,031.5	-623.8	262.7	149.4	113.37	2.317	
11,600.0	7,484.7	11,411.0	7,280.3	81.3	81.6	-38.95	4,131.5	-623.4	262.8	146.9	115.94	2.267	
11,700.0	7,484.4	11,511.0	7,279.8	83.2	83.4	-38.93	4,231.5	-623.1	262.9	144.4	118.51	2.219	
11,800.0	7,484.0	11,611.0	7,279.4	85.1	85.3	-38.92	4,331.5	-622.7	263.0	141.9	121.08	2.172	
11,900.0	7,483.7	11,711.0	7,278.9	86.9	87.2	-38.90	4,431.5	-622.4	263.1	139.5	123.66	2.128	
12,000.0	7,483.3	11,811.0	7,278.4	88.8	89.0	-38.88	4,531.5	-622.0	263.2	137.0	126.23	2.085	
12,088.1	7,483.0	11,899.1	7,278.0	90.5	90.7	-38.87	4,619.5	-621.7	263.3	134.8	128.49	2.049 SF	

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-6N - Wellbore #1 - Plan #1 (8													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	14.0	14.0	14.0	0.00	N/A		
100.0	100.0	100.0	100.0	0.1	0.1	90.00	0.0	14.0	14.0	13.8	0.22	62.309		
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	14.0	14.0	13.3	0.67	20.770		
300.0	300.0	300.0	300.0	0.6	0.6	90.00	0.0	14.0	14.0	12.9	1.12	12.462		
400.0	400.0	400.0	400.0	0.8	0.8	90.00	0.0	14.0	14.0	12.4	1.57	8.901		
500.0	500.0	500.0	500.0	1.0	1.0	90.00	0.0	14.0	14.0	12.0	2.02	6.923		
600.0	600.0	600.0	600.0	1.2	1.2	90.00	0.0	14.0	14.0	11.5	2.47	5.664		
700.0	700.0	700.0	700.0	1.5	1.5	90.00	0.0	14.0	14.0	11.1	2.92	4.793		
800.0	800.0	800.0	800.0	1.7	1.7	90.00	0.0	14.0	14.0	10.6	3.37	4.154		
900.0	900.0	900.0	900.0	1.9	1.9	90.00	0.0	14.0	14.0	10.2	3.82	3.665		
1,000.0	1,000.0	1,000.0	1,000.0	2.1	2.1	90.00	0.0	14.0	14.0	9.7	4.27	3.279		
1,100.0	1,100.0	1,100.0	1,100.0	2.4	2.4	90.00	0.0	14.0	14.0	9.3	4.72	2.967		
1,200.0	1,200.0	1,200.0	1,200.0	2.6	2.6	90.00	0.0	14.0	14.0	8.8	5.17	2.709 CC, ES		
1,300.0	1,300.0	1,300.0	1,300.0	2.8	2.8	-163.50	0.0	14.0	15.7	10.1	5.60	2.799		
1,400.0	1,399.8	1,399.8	1,399.8	3.0	3.0	-167.58	0.0	14.0	20.7	14.7	6.01	3.452		
1,500.0	1,499.5	1,500.4	1,500.4	3.2	3.2	-170.22	-0.8	12.4	27.6	21.2	6.40	4.322		
1,600.0	1,598.7	1,601.2	1,601.0	3.4	3.4	-171.02	-3.1	7.7	34.7	27.9	6.76	5.125		
1,700.0	1,697.6	1,702.3	1,701.7	3.7	3.6	-170.67	-7.0	-0.3	40.7	33.5	7.16	5.680		
1,800.0	1,796.6	1,803.3	1,802.0	4.0	3.9	-169.10	-12.5	-11.3	43.5	35.9	7.57	5.744		
1,900.0	1,895.5	1,903.2	1,901.1	4.2	4.1	-167.34	-18.2	-23.0	45.5	37.5	8.00	5.686		
2,000.0	1,994.4	2,003.2	2,000.2	4.5	4.4	-165.72	-24.0	-34.7	47.5	39.1	8.45	5.630		
2,100.0	2,093.3	2,103.2	2,099.3	4.8	4.6	-164.25	-29.8	-46.5	49.6	40.7	8.90	5.575		
2,200.0	2,192.3	2,203.1	2,198.4	5.2	4.9	-162.89	-35.5	-58.2	51.7	42.4	9.37	5.521		
2,300.0	2,291.2	2,303.1	2,297.5	5.5	5.2	-161.63	-41.3	-69.9	53.9	44.0	9.85	5.469		
2,400.0	2,390.1	2,403.1	2,396.6	5.8	5.5	-160.48	-47.1	-81.6	56.0	45.7	10.34	5.419		
2,500.0	2,489.0	2,503.1	2,495.7	6.1	5.8	-159.41	-52.9	-93.3	58.2	47.4	10.84	5.370		
2,600.0	2,588.0	2,603.0	2,594.9	6.5	6.1	-158.42	-58.6	-105.1	60.4	49.1	11.35	5.323		
2,700.0	2,686.9	2,703.0	2,694.0	6.8	6.4	-157.49	-64.4	-116.8	62.6	50.8	11.86	5.278		
2,800.0	2,785.8	2,803.0	2,793.1	7.1	6.7	-156.63	-70.2	-128.5	64.8	52.5	12.39	5.234		
2,900.0	2,884.7	2,902.9	2,892.2	7.5	7.0	-155.83	-75.9	-140.2	67.1	54.2	12.92	5.192		
3,000.0	2,983.7	3,002.9	2,991.3	7.8	7.3	-155.08	-81.7	-151.9	69.3	55.9	13.46	5.152		
3,100.0	3,082.6	3,102.9	3,090.4	8.2	7.6	-154.38	-87.5	-163.6	71.6	57.6	14.00	5.114		
3,200.0	3,181.5	3,202.9	3,189.5	8.5	7.9	-153.72	-93.2	-175.4	73.9	59.3	14.55	5.078		
3,300.0	3,280.5	3,302.8	3,288.7	8.8	8.2	-153.10	-99.0	-187.1	76.2	61.1	15.11	5.043		
3,400.0	3,379.4	3,402.8	3,387.8	9.2	8.6	-152.52	-104.8	-198.8	78.5	62.8	15.67	5.009		
3,500.0	3,478.3	3,502.8	3,486.9	9.5	8.9	-151.97	-110.6	-210.5	80.8	64.5	16.23	4.977		
3,600.0	3,577.2	3,602.7	3,586.0	9.9	9.2	-151.45	-116.3	-222.2	83.1	66.3	16.80	4.947		
3,700.0	3,676.2	3,702.7	3,685.1	10.2	9.5	-150.95	-122.1	-234.0	85.4	68.0	17.37	4.918		
3,800.0	3,775.1	3,802.7	3,784.2	10.6	9.8	-150.49	-127.9	-245.7	87.7	69.8	17.94	4.890		
3,900.0	3,874.0	3,902.6	3,883.3	10.9	10.2	-150.05	-133.6	-257.4	90.0	71.5	18.52	4.863		
4,000.0	3,972.9	4,002.6	3,982.4	11.3	10.5	-149.63	-139.4	-269.1	92.4	73.3	19.10	4.838		
4,100.0	4,071.9	4,102.6	4,081.6	11.7	10.8	-149.23	-145.2	-280.8	94.7	75.0	19.68	4.813		
4,200.0	4,170.8	4,200.0	4,178.2	12.0	11.1	-149.04	-150.6	-291.8	97.5	77.2	20.22	4.820		
4,300.0	4,269.7	4,298.3	4,276.1	12.4	11.3	-149.91	-154.7	-300.2	102.6	82.0	20.64	4.972		
4,400.0	4,368.6	4,395.1	4,372.6	12.7	11.5	-151.72	-157.3	-305.6	110.5	89.6	20.96	5.272		
4,500.0	4,467.6	4,491.2	4,468.7	13.1	11.7	-154.15	-158.5	-307.9	121.3	100.1	21.22	5.716		
4,600.0	4,566.5	4,589.0	4,566.5	13.4	11.9	-156.79	-158.6	-308.1	134.5	113.0	21.47	6.263		
4,700.0	4,665.6	4,688.1	4,665.6	13.7	12.0	-158.92	-158.6	-308.1	146.9	125.1	21.76	6.751		
4,800.0	4,765.1	4,787.6	4,765.1	14.0	12.2	-160.29	-158.6	-308.1	156.2	134.1	22.05	7.083		
4,900.0	4,864.9	4,887.4	4,864.9	14.1	12.4	-161.10	-158.6	-308.1	162.3	139.9	22.36	7.258		
5,000.0	4,964.8	4,987.3	4,964.8	14.3	12.6	-161.45	-158.6	-308.1	165.1	142.4	22.68	7.281		

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

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-6N - Wellbore #1 - Plan #1 (8													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,064.8	5,087.3	5,064.8	14.5	12.7	90.00		-158.6	-308.1	165.3	142.3	23.02	7.180	
5,200.0	5,164.8	5,187.3	5,164.8	14.6	12.9	90.00		-158.6	-308.1	165.3	141.9	23.41	7.061	
5,300.0	5,264.8	5,287.3	5,264.8	14.8	13.1	90.00		-158.6	-308.1	165.3	141.5	23.80	6.946	
5,400.0	5,364.8	5,387.3	5,364.8	14.9	13.3	90.00		-158.6	-308.1	165.3	141.1	24.19	6.834	
5,500.0	5,464.8	5,487.3	5,464.8	15.1	13.5	90.00		-158.6	-308.1	165.3	140.7	24.58	6.725	
5,600.0	5,564.8	5,587.3	5,564.8	15.3	13.6	90.00		-158.6	-308.1	165.3	140.3	24.97	6.619	
5,700.0	5,664.8	5,687.3	5,664.8	15.4	13.8	90.00		-158.6	-308.1	165.3	139.9	25.37	6.516	
5,800.0	5,764.8	5,787.3	5,764.8	15.6	14.0	90.00		-158.6	-308.1	165.3	139.5	25.77	6.415	
5,900.0	5,864.8	5,887.3	5,864.8	15.8	14.2	90.00		-158.6	-308.1	165.3	139.1	26.17	6.317	
6,000.0	5,964.8	5,987.3	5,964.8	15.9	14.4	90.00		-158.6	-308.1	165.3	138.7	26.57	6.222	
6,100.0	6,064.8	6,087.3	6,064.8	16.1	14.6	90.00		-158.6	-308.1	165.3	138.3	26.97	6.129	
6,200.0	6,164.8	6,187.3	6,164.8	16.3	14.8	90.00		-158.6	-308.1	165.3	137.9	27.37	6.039	
6,300.0	6,264.8	6,287.3	6,264.8	16.5	15.0	90.00		-158.6	-308.1	165.3	137.5	27.78	5.951	
6,400.0	6,364.8	6,387.3	6,364.8	16.6	15.2	90.00		-158.6	-308.1	165.3	137.1	28.19	5.865	
6,500.0	6,464.8	6,487.3	6,464.8	16.8	15.4	90.00		-158.6	-308.1	165.3	136.7	28.59	5.781	
6,600.0	6,564.8	6,587.3	6,564.8	17.0	15.6	90.00		-158.6	-308.1	165.3	136.3	29.00	5.699	
6,632.4	6,597.3	6,619.7	6,597.3	17.0	15.6	89.94		-158.4	-308.1	165.3	136.2	29.13	5.674	
6,700.0	6,664.8	6,686.9	6,664.2	17.2	15.7	88.35		-153.8	-308.1	165.4	136.1	29.32	5.642	
6,800.0	6,764.8	6,783.3	6,759.0	17.3	15.9	82.32		-136.3	-308.0	167.0	137.5	29.44	5.672	
6,900.0	6,864.8	6,873.6	6,844.8	17.5	16.0	73.16		-108.5	-307.9	174.1	144.4	29.62	5.876	
7,000.0	6,964.8	6,955.7	6,919.3	17.7	16.1	62.94		-74.0	-307.8	191.4	161.4	30.08	6.364	
7,100.0	7,064.4	7,032.1	6,984.6	17.9	16.2	52.03		-34.5	-307.7	217.8	187.3	30.57	7.127	
7,200.0	7,160.8	7,107.7	7,044.7	18.0	16.2	44.36		11.2	-307.5	244.0	213.5	30.51	7.997	
7,300.0	7,250.4	7,182.8	7,099.4	18.1	16.3	39.27		62.7	-307.3	266.4	236.7	29.69	8.972	
7,400.0	7,330.0	7,257.5	7,148.1	18.1	16.4	36.10		119.3	-307.1	283.2	255.0	28.22	10.036	
7,500.0	7,396.6	7,332.1	7,190.6	18.2	16.6	34.39		180.6	-306.9	293.3	266.9	26.40	11.111	
7,600.0	7,447.7	7,406.6	7,226.4	18.3	16.9	33.92		245.8	-306.7	296.2	271.6	24.69	11.997	
7,700.0	7,481.6	7,481.0	7,255.3	18.6	17.3	34.61		314.4	-306.4	291.9	268.3	23.65	12.344	
7,800.0	7,497.0	7,550.0	7,275.6	19.0	17.8	36.44		380.3	-306.2	280.6	256.9	23.70	11.841	
7,900.0	7,497.6	7,631.0	7,291.2	19.7	18.6	38.69		459.8	-305.9	266.0	240.9	25.13	10.585	
8,000.0	7,497.3	7,708.6	7,297.6	20.5	19.3	39.62		537.1	-305.6	259.3	232.7	26.56	9.761	
8,039.0	7,497.1	7,740.9	7,297.8	20.9	19.7	39.67		569.4	-305.5	258.9	231.8	27.10	9.557	
8,100.0	7,496.9	7,801.9	7,297.5	21.5	20.4	39.66		630.4	-305.3	259.0	231.0	27.99	9.253	
8,200.0	7,496.6	7,901.9	7,297.0	22.7	21.6	39.64		730.4	-305.0	259.1	229.5	29.62	8.748	
8,300.0	7,496.2	8,001.9	7,296.5	23.9	22.9	39.62		830.4	-304.6	259.2	227.8	31.39	8.258	
8,400.0	7,495.9	8,101.9	7,296.0	25.3	24.3	39.60		930.4	-304.3	259.3	226.0	33.28	7.792	
8,500.0	7,495.5	8,201.9	7,295.6	26.7	25.8	39.58		1,030.4	-303.9	259.4	224.2	35.28	7.354	
8,600.0	7,495.2	8,301.9	7,295.1	28.1	27.3	39.56		1,130.4	-303.6	259.5	222.2	37.36	6.948	
8,700.0	7,494.8	8,401.9	7,294.6	29.7	28.9	39.54		1,230.4	-303.2	259.6	220.1	39.51	6.572	
8,800.0	7,494.5	8,501.9	7,294.1	31.2	30.5	39.52		1,330.4	-302.8	259.8	218.0	41.72	6.226	
8,900.0	7,494.1	8,601.9	7,293.6	32.8	32.1	39.50		1,430.4	-302.5	259.9	215.9	43.98	5.909	
9,000.0	7,493.8	8,701.9	7,293.1	34.5	33.8	39.48		1,530.3	-302.1	260.0	213.7	46.28	5.617	
9,100.0	7,493.4	8,801.9	7,292.6	36.1	35.5	39.46		1,630.3	-301.8	260.1	211.4	48.62	5.349	
9,200.0	7,493.1	8,901.9	7,292.1	37.8	37.2	39.44		1,730.3	-301.4	260.2	209.2	51.00	5.102	
9,300.0	7,492.7	9,001.9	7,291.6	39.5	38.9	39.42		1,830.3	-301.1	260.3	206.9	53.40	4.875	
9,400.0	7,492.4	9,101.9	7,291.2	41.2	40.6	39.40		1,930.3	-300.7	260.4	204.6	55.82	4.665	
9,500.0	7,492.0	9,201.9	7,290.7	43.0	42.4	39.38		2,030.3	-300.4	260.5	202.2	58.26	4.471	
9,600.0	7,491.7	9,301.9	7,290.2	44.7	44.2	39.36		2,130.3	-300.0	260.6	199.9	60.72	4.292	
9,700.0	7,491.3	9,401.9	7,289.7	46.5	46.0	39.34		2,230.3	-299.7	260.7	197.5	63.19	4.126	
9,800.0	7,491.0	9,501.9	7,289.2	48.3	47.8	39.32		2,330.3	-299.3	260.8	195.1	65.68	3.971	
9,900.0	7,490.6	9,601.9	7,288.7	50.1	49.6	39.30		2,430.3	-299.0	260.9	192.7	68.18	3.827	

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

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-6N - Wellbore #1 - Plan #1 (8												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,000.0	7,490.3	9,701.9	7,288.2	51.9	51.4	39.28	2,530.3	-298.6	261.0	190.3	70.69	3.693	
10,100.0	7,489.9	9,801.9	7,287.7	53.7	53.2	39.26	2,630.3	-298.3	261.1	187.9	73.21	3.567	
10,200.0	7,489.6	9,901.9	7,287.2	55.5	55.0	39.24	2,730.3	-297.9	261.2	185.5	75.74	3.449	
10,300.0	7,489.2	10,001.9	7,286.8	57.3	56.9	39.22	2,830.3	-297.6	261.4	183.1	78.27	3.339	
10,400.0	7,488.9	10,101.9	7,286.3	59.1	58.7	39.20	2,930.3	-297.2	261.5	180.7	80.81	3.235	
10,500.0	7,488.5	10,201.9	7,285.8	60.9	60.5	39.18	3,030.3	-296.9	261.6	178.2	83.36	3.138	
10,600.0	7,488.2	10,301.9	7,285.3	62.8	62.4	39.16	3,130.3	-296.5	261.7	175.8	85.91	3.046	
10,700.0	7,487.8	10,401.9	7,284.8	64.6	64.2	39.14	3,230.3	-296.2	261.8	173.3	88.46	2.959	
10,800.0	7,487.5	10,501.9	7,284.3	66.5	66.1	39.12	3,330.3	-295.8	261.9	170.9	91.02	2.877	
10,900.0	7,487.1	10,601.9	7,283.8	68.3	67.9	39.10	3,430.3	-295.4	262.0	168.4	93.58	2.800	
11,000.0	7,486.8	10,701.9	7,283.3	70.2	69.8	39.08	3,530.3	-295.1	262.1	166.0	96.15	2.726	
11,100.0	7,486.4	10,801.9	7,282.9	72.0	71.7	39.06	3,630.3	-294.7	262.2	163.5	98.72	2.656	
11,200.0	7,486.1	10,901.9	7,282.4	73.9	73.5	39.04	3,730.3	-294.4	262.3	161.0	101.28	2.590	
11,300.0	7,485.7	11,001.9	7,281.9	75.7	75.4	39.02	3,830.3	-294.0	262.4	158.6	103.86	2.527	
11,400.0	7,485.4	11,101.9	7,281.4	77.6	77.3	39.00	3,930.3	-293.7	262.5	156.1	106.43	2.467	
11,500.0	7,485.1	11,201.9	7,280.9	79.5	79.1	38.98	4,030.3	-293.3	262.6	153.6	109.01	2.409	
11,600.0	7,484.7	11,301.9	7,280.4	81.3	81.0	38.96	4,130.3	-293.0	262.7	151.2	111.58	2.355	
11,700.0	7,484.4	11,401.9	7,279.9	83.2	82.9	38.94	4,230.3	-292.6	262.9	148.7	114.16	2.303	
11,800.0	7,484.0	11,501.9	7,279.4	85.1	84.8	38.93	4,330.3	-292.3	263.0	146.2	116.74	2.253	
11,900.0	7,483.7	11,601.9	7,278.9	86.9	86.6	38.91	4,430.3	-291.9	263.1	143.8	119.32	2.205	
12,000.0	7,483.3	11,701.9	7,278.5	88.8	88.5	38.89	4,530.3	-291.6	263.2	141.3	121.90	2.159	
12,088.1	7,483.0	11,790.0	7,278.0	90.5	90.2	38.87	4,618.3	-291.3	263.3	139.1	124.17	2.120 SF	

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-7N - Wellbore #1 - Plan #1 (8													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis Reference (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	90.01	90.01	0.0	28.0	28.0				
100.0	100.0	99.0	99.0	0.1	0.1	90.01	90.01	0.0	28.0	28.0	27.8	0.22	125.243	
200.0	200.0	199.0	199.0	0.3	0.3	90.01	90.01	0.0	28.0	28.0	27.3	0.67	41.678	
300.0	300.0	299.0	299.0	0.6	0.6	90.01	90.01	0.0	28.0	28.0	26.9	1.12	24.974	
400.0	400.0	399.0	399.0	0.8	0.8	90.01	90.01	0.0	28.0	28.0	26.4	1.57	17.828	
500.0	500.0	499.0	499.0	1.0	1.0	90.01	90.01	0.0	28.0	28.0	26.0	2.02	13.862	
600.0	600.0	599.0	599.0	1.2	1.2	90.01	90.01	0.0	28.0	28.0	25.5	2.47	11.339	
700.0	700.0	699.0	699.0	1.5	1.5	90.01	90.01	0.0	28.0	28.0	25.1	2.92	9.593	
800.0	800.0	799.0	799.0	1.7	1.7	90.01	90.01	0.0	28.0	28.0	24.6	3.37	8.313	
900.0	900.0	899.0	899.0	1.9	1.9	90.01	90.01	0.0	28.0	28.0	24.2	3.82	7.335	
1,000.0	1,000.0	999.0	999.0	2.1	2.1	90.01	90.01	0.0	28.0	28.0	23.7	4.27	6.562	
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	90.01	90.01	0.0	28.0	28.0	23.3	4.72	5.937	
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	90.01	90.01	0.0	28.0	28.0	22.8	5.17	5.421	CC, ES
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	-162.53	-162.53	0.0	28.0	29.7	24.1	5.60	5.301	
1,400.0	1,399.8	1,398.8	1,398.8	3.0	3.0	-165.10	-165.10	0.0	28.0	34.7	28.7	6.01	5.777	
1,500.0	1,499.5	1,498.5	1,498.5	3.2	3.3	-168.04	-168.04	0.0	28.0	43.2	36.8	6.41	6.731	
1,600.0	1,598.7	1,597.7	1,597.7	3.4	3.5	-170.62	-170.62	0.0	28.0	55.2	48.3	6.82	8.088	
1,700.0	1,697.6	1,698.1	1,698.1	3.7	3.7	-172.04	-172.04	-0.9	27.1	68.5	61.3	7.22	9.486	
1,800.0	1,796.6	1,799.2	1,799.1	4.0	3.9	-172.02	-172.02	-3.5	24.2	79.7	72.1	7.61	10.471	
1,900.0	1,895.5	1,900.7	1,900.4	4.2	4.1	-171.09	-171.09	-8.0	19.3	88.7	80.6	8.01	11.063	
2,000.0	1,994.4	2,002.5	2,001.7	4.5	4.3	-169.43	-169.43	-14.3	12.4	95.4	87.0	8.43	11.318	
2,100.0	2,093.3	2,103.5	2,102.1	4.8	4.5	-167.19	-167.19	-22.2	3.7	100.3	91.5	8.87	11.314	
2,200.0	2,192.3	2,203.3	2,201.1	5.2	4.7	-165.04	-165.04	-30.3	-5.2	105.0	95.7	9.32	11.269	
2,300.0	2,291.2	2,303.1	2,300.2	5.5	5.0	-163.07	-163.07	-38.4	-14.0	109.8	100.0	9.79	11.224	
2,400.0	2,390.1	2,402.9	2,399.3	5.8	5.2	-161.26	-161.26	-46.5	-22.9	114.8	104.5	10.27	11.178	
2,500.0	2,489.0	2,502.7	2,498.4	6.1	5.5	-159.61	-159.61	-54.6	-31.8	119.8	109.0	10.76	11.131	
2,600.0	2,588.0	2,602.6	2,597.5	6.5	5.7	-158.09	-158.09	-62.7	-40.7	124.9	113.7	11.27	11.084	
2,700.0	2,686.9	2,702.4	2,696.6	6.8	6.0	-156.69	-156.69	-70.8	-49.6	130.2	118.4	11.79	11.036	
2,800.0	2,785.8	2,802.2	2,795.7	7.1	6.3	-155.40	-155.40	-79.0	-58.5	135.4	123.1	12.33	10.989	
2,900.0	2,884.7	2,902.0	2,894.8	7.5	6.6	-154.21	-154.21	-87.1	-67.3	140.8	127.9	12.87	10.942	
3,000.0	2,983.7	3,001.8	2,993.9	7.8	6.8	-153.11	-153.11	-95.2	-76.2	146.2	132.8	13.42	10.895	
3,100.0	3,082.6	3,101.6	3,092.9	8.2	7.1	-152.08	-152.08	-103.3	-85.1	151.6	137.7	13.98	10.850	
3,200.0	3,181.5	3,201.5	3,192.0	8.5	7.4	-151.13	-151.13	-111.4	-94.0	157.1	142.6	14.54	10.806	
3,300.0	3,280.5	3,301.3	3,291.1	8.8	7.7	-150.24	-150.24	-119.5	-102.9	162.7	147.6	15.11	10.763	
3,400.0	3,379.4	3,401.1	3,390.2	9.2	8.0	-149.41	-149.41	-127.6	-111.7	168.3	152.6	15.69	10.721	
3,500.0	3,478.3	3,500.9	3,489.3	9.5	8.3	-148.63	-148.63	-135.7	-120.6	173.9	157.6	16.28	10.681	
3,600.0	3,577.2	3,600.0	3,587.7	9.9	8.6	-147.99	-147.99	-143.6	-129.2	179.7	162.8	16.85	10.664	
3,700.0	3,676.2	3,696.6	3,683.9	10.2	8.8	-147.95	-147.95	-149.8	-136.0	186.7	169.4	17.35	10.765	
3,800.0	3,775.1	3,793.5	3,780.5	10.6	9.0	-148.51	-148.51	-154.3	-141.0	195.2	177.4	17.80	10.965	
3,900.0	3,874.0	3,890.0	3,876.9	10.9	9.2	-149.58	-149.58	-157.3	-144.2	205.2	187.0	18.22	11.262	
4,000.0	3,972.9	3,986.0	3,972.9	11.3	9.4	-151.07	-151.07	-158.5	-145.6	216.8	198.2	18.60	11.653	
4,100.0	4,071.9	4,084.0	4,070.9	11.7	9.6	-152.79	-152.79	-158.6	-145.7	229.7	210.7	18.97	12.107	
4,200.0	4,170.8	4,182.9	4,169.8	12.0	9.8	-154.37	-154.37	-158.6	-145.7	242.8	223.4	19.34	12.550	
4,300.0	4,269.7	4,281.8	4,268.7	12.4	10.0	-155.78	-155.78	-158.6	-145.7	256.1	236.3	19.73	12.980	
4,400.0	4,368.6	4,380.7	4,367.6	12.7	10.1	-157.05	-157.05	-158.6	-145.7	269.5	249.4	20.12	13.395	
4,500.0	4,467.6	4,479.7	4,466.6	13.1	10.3	-158.20	-158.20	-158.6	-145.7	283.0	262.5	20.51	13.796	
4,600.0	4,566.5	4,578.6	4,565.5	13.4	10.5	-159.25	-159.25	-158.6	-145.7	296.7	275.7	20.92	14.183	
4,700.0	4,665.6	4,677.7	4,664.6	13.7	10.7	-160.20	-160.20	-158.6	-145.7	309.2	287.9	21.32	14.501	
4,800.0	4,765.1	4,777.2	4,764.1	14.0	10.9	-160.87	-160.87	-158.6	-145.7	318.6	296.9	21.70	14.683	
4,900.0	4,864.9	4,877.0	4,863.9	14.1	11.1	-161.28	-161.28	-158.6	-145.7	324.7	302.6	22.06	14.719	
5,000.0	4,964.8	4,976.9	4,963.8	14.3	11.3	-161.46	-161.46	-158.6	-145.7	327.5	305.1	22.41	14.617	

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

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-7N - Wellbore #1 - Plan #1 (8													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis Reference (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Distance +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,064.8	5,076.9	5,063.8	14.5	11.5	90.00		-158.6	-145.7	327.7	304.9	22.77	14.391	
5,200.0	5,164.8	5,176.9	5,163.8	14.6	11.7	90.00		-158.6	-145.7	327.7	304.5	23.17	14.146	
5,300.0	5,264.8	5,276.9	5,263.8	14.8	11.9	90.00		-158.6	-145.7	327.7	304.1	23.56	13.908	
5,400.0	5,364.8	5,376.9	5,363.8	14.9	12.1	90.00		-158.6	-145.7	327.7	303.7	23.96	13.676	
5,500.0	5,464.8	5,476.9	5,463.8	15.1	12.3	90.00		-158.6	-145.7	327.7	303.3	24.36	13.452	
5,600.0	5,564.8	5,576.9	5,563.8	15.3	12.5	90.00		-158.6	-145.7	327.7	302.9	24.76	13.233	
5,700.0	5,664.8	5,676.9	5,663.8	15.4	12.7	90.00		-158.6	-145.7	327.7	302.5	25.17	13.021	
5,800.0	5,764.8	5,776.9	5,763.8	15.6	12.9	90.00		-158.6	-145.7	327.7	302.1	25.57	12.815	
5,900.0	5,864.8	5,876.9	5,863.8	15.8	13.1	90.00		-158.6	-145.7	327.7	301.7	25.98	12.615	
6,000.0	5,964.8	5,976.9	5,963.8	15.9	13.3	90.00		-158.6	-145.7	327.7	301.3	26.39	12.420	
6,100.0	6,064.8	6,076.9	6,063.8	16.1	13.6	90.00		-158.6	-145.7	327.7	300.9	26.80	12.230	
6,200.0	6,164.8	6,176.9	6,163.8	16.3	13.8	90.00		-158.6	-145.7	327.7	300.5	27.21	12.045	
6,300.0	6,264.8	6,276.9	6,263.8	16.5	14.0	90.00		-158.6	-145.7	327.7	300.1	27.62	11.866	
6,400.0	6,364.8	6,376.9	6,363.8	16.6	14.2	90.00		-158.6	-145.7	327.7	299.7	28.03	11.691	
6,500.0	6,464.8	6,476.9	6,463.8	16.8	14.4	90.00		-158.6	-145.7	327.7	299.3	28.44	11.521	
6,600.0	6,564.8	6,576.9	6,563.8	17.0	14.6	90.00		-158.6	-145.7	327.7	298.9	28.86	11.355	
6,626.6	6,591.5	6,603.5	6,590.4	17.0	14.6	89.99		-158.5	-145.7	327.7	298.7	28.97	11.313	
6,700.0	6,664.8	6,676.4	6,663.1	17.2	14.8	89.17		-153.8	-145.7	327.8	298.5	29.22	11.216	
6,800.0	6,764.8	6,772.8	6,757.8	17.3	14.9	86.12		-136.4	-145.6	328.6	299.1	29.47	11.151	
6,900.0	6,864.8	6,863.0	6,843.6	17.5	15.1	81.33		-108.6	-145.5	332.3	302.7	29.67	11.202	
7,000.0	6,964.8	6,945.0	6,918.0	17.7	15.2	75.57		-74.2	-145.3	341.8	311.9	29.90	11.432	
7,100.0	7,064.4	7,021.3	6,983.3	17.9	15.3	68.45		-34.7	-145.2	357.4	327.2	30.10	11.871	
7,200.0	7,160.8	7,100.0	7,045.8	18.0	15.3	62.52		13.0	-145.0	374.0	343.8	30.16	12.401	
7,300.0	7,250.4	7,172.0	7,098.1	18.1	15.4	58.29		62.4	-144.8	389.0	359.1	29.91	13.005	
7,400.0	7,330.0	7,250.0	7,148.9	18.1	15.6	55.23		121.6	-144.5	400.7	371.3	29.42	13.620	
7,500.0	7,396.6	7,321.2	7,189.3	18.2	15.9	53.60		180.2	-144.3	407.9	379.0	28.83	14.149	
7,600.0	7,447.7	7,400.0	7,227.1	18.3	16.3	53.12		249.3	-144.0	410.0	381.6	28.48	14.398	
7,700.0	7,481.6	7,470.1	7,254.1	18.6	16.8	53.84		313.9	-143.7	406.9	378.3	28.63	14.211	
7,800.0	7,497.0	7,550.0	7,277.1	19.0	17.5	55.91		390.4	-143.4	398.8	369.2	29.65	13.451	
7,900.0	7,497.6	7,620.1	7,290.1	19.7	18.1	57.82		459.2	-143.1	388.7	357.5	31.24	12.443	
8,000.0	7,497.3	7,700.0	7,296.6	20.5	18.9	58.68		538.8	-142.8	384.2	351.2	32.98	11.648	
8,034.7	7,497.1	7,725.5	7,296.8	20.9	19.2	58.72		564.3	-142.7	383.9	350.4	33.56	11.440	
8,100.0	7,496.9	7,790.8	7,296.5	21.5	20.0	58.72		629.6	-142.4	384.0	349.2	34.81	11.030	
8,200.0	7,496.6	7,890.8	7,296.0	22.7	21.2	58.70		729.6	-142.0	384.1	347.2	36.92	10.403	
8,300.0	7,496.2	7,990.8	7,295.5	23.9	22.6	58.69		829.6	-141.6	384.2	345.0	39.20	9.801	
8,400.0	7,495.9	8,090.8	7,295.0	25.3	24.0	58.67		929.6	-141.2	384.4	342.7	41.63	9.232	
8,500.0	7,495.5	8,190.8	7,294.6	26.7	25.4	58.66		1,029.6	-140.8	384.5	340.3	44.18	8.703	
8,600.0	7,495.2	8,290.8	7,294.1	28.1	27.0	58.65		1,129.6	-140.4	384.6	337.8	46.83	8.213	
8,700.0	7,494.8	8,390.8	7,293.6	29.7	28.6	58.63		1,229.6	-140.0	384.7	335.2	49.56	7.762	
8,800.0	7,494.5	8,490.8	7,293.1	31.2	30.2	58.62		1,329.6	-139.6	384.8	332.5	52.37	7.349	
8,900.0	7,494.1	8,590.8	7,292.6	32.8	31.8	58.61		1,429.6	-139.2	385.0	329.7	55.23	6.970	
9,000.0	7,493.8	8,690.8	7,292.1	34.5	33.5	58.60		1,529.6	-138.7	385.1	326.9	58.15	6.622	
9,100.0	7,493.4	8,790.8	7,291.6	36.1	35.2	58.58		1,629.6	-138.3	385.2	324.1	61.11	6.303	
9,200.0	7,493.1	8,890.8	7,291.1	37.8	36.9	58.57		1,729.6	-137.9	385.3	321.2	64.11	6.010	
9,300.0	7,492.7	8,990.8	7,290.7	39.5	38.7	58.56		1,829.6	-137.5	385.5	318.3	67.14	5.741	
9,400.0	7,492.4	9,090.8	7,290.2	41.2	40.4	58.54		1,929.6	-137.1	385.6	315.4	70.20	5.492	
9,500.0	7,492.0	9,190.8	7,289.7	43.0	42.2	58.53		2,029.6	-136.7	385.7	312.4	73.29	5.263	
9,600.0	7,491.7	9,290.8	7,289.2	44.7	44.0	58.52		2,129.6	-136.3	385.8	309.4	76.39	5.051	
9,700.0	7,491.3	9,390.8	7,288.7	46.5	45.8	58.50		2,229.6	-135.9	385.9	306.4	79.51	4.854	
9,800.0	7,491.0	9,490.8	7,288.2	48.3	47.6	58.49		2,329.6	-135.5	386.1	303.4	82.66	4.671	
9,900.0	7,490.6	9,590.8	7,287.7	50.1	49.4	58.48		2,429.6	-135.0	386.2	300.4	85.81	4.500	

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

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-7N - Wellbore #1 - Plan #1 (8												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,000.0	7,490.3	9,690.8	7,287.2	51.9	51.2	58.46	2,529.6	-134.6	386.3	297.3	88.98	4.342	
10,100.0	7,489.9	9,790.8	7,286.7	53.7	53.0	58.45	2,629.6	-134.2	386.4	294.3	92.16	4.193	
10,200.0	7,489.6	9,890.8	7,286.3	55.5	54.9	58.44	2,729.6	-133.8	386.5	291.2	95.35	4.054	
10,300.0	7,489.2	9,990.8	7,285.8	57.3	56.7	58.42	2,829.6	-133.4	386.7	288.1	98.55	3.924	
10,400.0	7,488.9	10,090.8	7,285.3	59.1	58.5	58.41	2,929.5	-133.0	386.8	285.0	101.76	3.801	
10,500.0	7,488.5	10,190.8	7,284.8	60.9	60.4	58.40	3,029.5	-132.6	386.9	281.9	104.97	3.686	
10,600.0	7,488.2	10,290.8	7,284.3	62.8	62.2	58.38	3,129.5	-132.2	387.0	278.8	108.20	3.577	
10,700.0	7,487.8	10,390.8	7,283.8	64.6	64.1	58.37	3,229.5	-131.7	387.2	275.7	111.42	3.475	
10,800.0	7,487.5	10,490.8	7,283.3	66.5	65.9	58.36	3,329.5	-131.3	387.3	272.6	114.66	3.378	
10,900.0	7,487.1	10,590.8	7,282.8	68.3	67.8	58.34	3,429.5	-130.9	387.4	269.5	117.90	3.286	
11,000.0	7,486.8	10,690.8	7,282.3	70.2	69.7	58.33	3,529.5	-130.5	387.5	266.4	121.14	3.199	
11,100.0	7,486.4	10,790.8	7,281.9	72.0	71.5	58.32	3,629.5	-130.1	387.6	263.3	124.39	3.116	
11,200.0	7,486.1	10,890.8	7,281.4	73.9	73.4	58.30	3,729.5	-129.7	387.8	260.1	127.64	3.038	
11,300.0	7,485.7	10,990.8	7,280.9	75.7	75.3	58.29	3,829.5	-129.3	387.9	257.0	130.89	2.963	
11,400.0	7,485.4	11,090.8	7,280.4	77.6	77.1	58.28	3,929.5	-128.9	388.0	253.9	134.15	2.892	
11,500.0	7,485.1	11,190.8	7,279.9	79.5	79.0	58.27	4,029.5	-128.5	388.1	250.7	137.41	2.825	
11,600.0	7,484.7	11,290.8	7,279.4	81.3	80.9	58.25	4,129.5	-128.0	388.3	247.6	140.68	2.760	
11,700.0	7,484.4	11,390.8	7,278.9	83.2	82.8	58.24	4,229.5	-127.6	388.4	244.4	143.94	2.698	
11,800.0	7,484.0	11,490.8	7,278.4	85.1	84.6	58.23	4,329.5	-127.2	388.5	241.3	147.21	2.639	
11,900.0	7,483.7	11,590.8	7,277.9	86.9	86.5	58.21	4,429.5	-126.8	388.6	238.1	150.48	2.583	
12,000.0	7,483.3	11,690.8	7,277.5	88.8	88.4	58.20	4,529.5	-126.4	388.7	235.0	153.75	2.528	
12,088.1	7,483.0	11,778.8	7,277.0	90.5	90.1	58.19	4,617.6	-126.0	388.9	232.2	156.63	2.483 SF	

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-8N - Wellbore #1 - Plan #1 (8													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	44.8	44.8					
100.0	100.0	99.0	99.0	0.1	0.1	90.00	0.0	44.8	44.8	44.6	0.22	200.390		
200.0	200.0	199.0	199.0	0.3	0.3	90.00	0.0	44.8	44.8	44.1	0.67	66.685		
300.0	300.0	299.0	299.0	0.6	0.6	90.00	0.0	44.8	44.8	43.7	1.12	39.958		
400.0	400.0	399.0	399.0	0.8	0.8	90.00	0.0	44.8	44.8	43.2	1.57	28.525		
500.0	500.0	499.0	499.0	1.0	1.0	90.00	0.0	44.8	44.8	42.8	2.02	22.179		
600.0	600.0	599.0	599.0	1.2	1.2	90.00	0.0	44.8	44.8	42.3	2.47	18.143		
700.0	700.0	699.0	699.0	1.5	1.5	90.00	0.0	44.8	44.8	41.9	2.92	15.349		
800.0	800.0	799.0	799.0	1.7	1.7	90.00	0.0	44.8	44.8	41.4	3.37	13.301		
900.0	900.0	899.0	899.0	1.9	1.9	90.00	0.0	44.8	44.8	41.0	3.82	11.736		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	90.00	0.0	44.8	44.8	40.5	4.27	10.500		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	90.00	0.0	44.8	44.8	40.1	4.72	9.499		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	90.00	0.0	44.8	44.8	39.6	5.17	8.673 CC, ES		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	-162.15	0.0	44.8	46.5	40.9	5.60	8.304		
1,400.0	1,399.8	1,398.8	1,398.8	3.0	3.0	-163.91	0.0	44.8	51.5	45.5	6.01	8.571		
1,500.0	1,499.5	1,498.5	1,498.5	3.2	3.3	-166.18	0.0	44.8	59.9	53.5	6.42	9.338		
1,600.0	1,598.7	1,597.7	1,597.7	3.4	3.5	-168.45	0.0	44.8	71.8	65.0	6.82	10.526		
1,700.0	1,697.6	1,696.6	1,696.6	3.7	3.7	-170.38	0.0	44.8	86.1	78.9	7.24	11.886		
1,800.0	1,796.6	1,795.6	1,795.6	4.0	3.9	-171.77	0.0	44.8	100.6	92.9	7.68	13.099		
1,900.0	1,895.5	1,894.5	1,894.5	4.2	4.1	-172.81	0.0	44.8	115.0	106.9	8.11	14.181		
2,000.0	1,994.4	1,993.4	1,993.4	4.5	4.4	-173.62	0.0	44.8	129.6	121.0	8.55	15.149		
2,100.0	2,093.3	2,092.3	2,092.3	4.8	4.6	-174.27	0.0	44.8	144.1	135.1	8.99	16.020		
2,200.0	2,192.3	2,191.3	2,191.3	5.2	4.8	-174.80	0.0	44.8	158.6	149.2	9.44	16.806		
2,300.0	2,291.2	2,290.2	2,290.2	5.5	5.0	-175.23	0.0	44.8	173.2	163.3	9.89	17.518		
2,400.0	2,390.1	2,389.1	2,389.1	5.8	5.3	-175.60	0.0	44.8	187.8	177.4	10.34	18.166		
2,500.0	2,489.0	2,488.0	2,488.0	6.1	5.5	-175.92	0.0	44.8	202.4	191.6	10.79	18.758		
2,600.0	2,588.0	2,589.0	2,589.0	6.5	5.7	-175.95	-1.0	44.6	216.5	205.3	11.22	19.301		
2,700.0	2,686.9	2,690.5	2,690.4	6.8	5.9	-175.36	-4.7	44.1	229.7	218.0	11.63	19.754		
2,800.0	2,785.8	2,792.1	2,791.8	7.1	6.0	-174.24	-11.0	43.0	241.8	229.8	12.04	20.084		
2,900.0	2,884.7	2,892.9	2,892.3	7.5	6.2	-172.69	-19.8	41.6	253.1	240.7	12.47	20.308		
3,000.0	2,983.7	2,992.1	2,990.9	7.8	6.4	-171.15	-29.2	40.1	264.4	251.5	12.90	20.494		
3,100.0	3,082.6	3,091.2	3,089.6	8.2	6.6	-169.74	-38.6	38.5	275.8	262.5	13.35	20.665		
3,200.0	3,181.5	3,190.3	3,188.3	8.5	6.8	-168.44	-47.9	37.0	287.4	273.6	13.80	20.820		
3,300.0	3,280.5	3,289.4	3,286.9	8.8	7.0	-167.24	-57.3	35.5	299.1	284.9	14.27	20.960		
3,400.0	3,379.4	3,388.6	3,385.6	9.2	7.2	-166.14	-66.6	34.0	311.0	296.2	14.75	21.087		
3,500.0	3,478.3	3,487.7	3,484.3	9.5	7.4	-165.11	-76.0	32.5	322.9	307.7	15.23	21.202		
3,600.0	3,577.2	3,586.8	3,582.9	9.9	7.7	-164.16	-85.4	30.9	335.0	319.2	15.72	21.306		
3,700.0	3,676.2	3,685.9	3,681.6	10.2	7.9	-163.27	-94.7	29.4	347.1	330.9	16.22	21.400		
3,800.0	3,775.1	3,785.1	3,780.3	10.6	8.1	-162.44	-104.1	27.9	359.3	342.6	16.72	21.485		
3,900.0	3,874.0	3,884.2	3,878.9	10.9	8.3	-161.67	-113.5	26.4	371.6	354.3	17.23	21.562		
4,000.0	3,972.9	3,983.3	3,977.6	11.3	8.6	-160.95	-122.8	24.8	383.9	366.2	17.75	21.631		
4,100.0	4,071.9	4,082.4	4,076.3	11.7	8.8	-160.27	-132.2	23.3	396.3	378.0	18.27	21.694		
4,200.0	4,170.8	4,181.0	4,174.4	12.0	9.1	-159.67	-141.3	21.8	408.8	390.0	18.79	21.758		
4,300.0	4,269.7	4,278.8	4,271.9	12.4	9.3	-159.38	-148.3	20.7	421.5	402.2	19.29	21.857		
4,400.0	4,368.6	4,376.5	4,369.6	12.7	9.5	-159.45	-152.8	20.0	434.6	414.9	19.76	21.993		
4,500.0	4,467.6	4,474.1	4,467.1	13.1	9.7	-159.83	-154.9	19.6	448.1	427.9	20.21	22.168		
4,600.0	4,566.5	4,572.5	4,565.5	13.4	9.9	-160.43	-155.0	19.6	461.8	441.2	20.65	22.368		
4,700.0	4,665.6	4,671.6	4,664.6	13.7	10.1	-161.04	-155.0	19.6	474.5	453.4	21.09	22.497		
4,800.0	4,765.1	4,771.1	4,764.1	14.0	10.3	-161.48	-155.0	19.6	483.9	462.4	21.49	22.511		
4,900.0	4,864.9	4,870.8	4,863.9	14.1	10.5	-161.76	-155.0	19.6	490.0	468.1	21.88	22.395		
5,000.0	4,964.8	4,970.8	4,963.8	14.3	10.7	-161.89	-155.0	19.6	492.8	470.6	22.24	22.155		

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

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-8N - Wellbore #1 - Plan #1 (8													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis Reference (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,064.8	5,070.8	5,063.8	14.5	10.9	89.58		-155.0	19.6	493.0	470.4	22.62	21.797	
5,200.0	5,164.8	5,170.8	5,163.8	14.6	11.2	89.58		-155.0	19.6	493.0	470.0	23.02	21.421	
5,300.0	5,264.8	5,270.8	5,263.8	14.8	11.4	89.58		-155.0	19.6	493.0	469.6	23.42	21.055	
5,400.0	5,364.8	5,370.8	5,363.8	14.9	11.6	89.58		-155.0	19.6	493.0	469.2	23.82	20.701	
5,500.0	5,464.8	5,470.8	5,463.8	15.1	11.8	89.58		-155.0	19.6	493.0	468.8	24.22	20.356	
5,600.0	5,564.8	5,570.8	5,563.8	15.3	12.0	89.58		-155.0	19.6	493.0	468.4	24.62	20.022	
5,700.0	5,664.8	5,670.8	5,663.8	15.4	12.2	89.58		-155.0	19.6	493.0	468.0	25.03	19.697	
5,800.0	5,764.8	5,770.8	5,763.8	15.6	12.4	89.58		-155.0	19.6	493.0	467.6	25.44	19.382	
5,900.0	5,864.8	5,870.8	5,863.8	15.8	12.6	89.58		-155.0	19.6	493.0	467.2	25.85	19.075	
6,000.0	5,964.8	5,970.8	5,963.8	15.9	12.8	89.58		-155.0	19.6	493.0	466.8	26.26	18.778	
6,100.0	6,064.8	6,070.8	6,063.8	16.1	13.1	89.58		-155.0	19.6	493.0	466.4	26.67	18.488	
6,200.0	6,164.8	6,170.8	6,163.8	16.3	13.3	89.58		-155.0	19.6	493.0	465.9	27.08	18.206	
6,300.0	6,264.8	6,270.8	6,263.8	16.5	13.5	89.58		-155.0	19.6	493.0	465.5	27.49	17.932	
6,400.0	6,364.8	6,370.8	6,363.8	16.6	13.7	89.58		-155.0	19.6	493.0	465.1	27.91	17.666	
6,500.0	6,464.8	6,470.8	6,463.8	16.8	13.9	89.58		-155.0	19.6	493.0	464.7	28.32	17.407	
6,600.0	6,564.8	6,570.8	6,563.8	17.0	14.1	89.58		-155.0	19.6	493.0	464.3	28.74	17.154	
6,606.7	6,571.5	6,577.5	6,570.5	17.0	14.1	89.58		-155.0	19.6	493.0	464.3	28.77	17.138	
6,700.0	6,664.8	6,669.8	6,662.6	17.2	14.3	89.03		-150.3	19.6	493.1	464.0	29.12	16.932	
6,800.0	6,764.8	6,765.6	6,756.8	17.3	14.5	87.03		-133.0	19.7	493.8	464.4	29.42	16.783	
6,900.0	6,864.8	6,855.4	6,842.2	17.5	14.6	83.86		-105.5	19.8	496.5	466.9	29.68	16.732	
7,000.0	6,964.8	6,937.1	6,916.5	17.7	14.7	79.98		-71.4	20.0	503.2	473.3	29.92	16.819	
7,100.0	7,064.4	7,013.2	6,981.6	17.9	14.8	74.93		-32.2	20.1	514.2	484.1	30.12	17.069	
7,200.0	7,160.8	7,088.6	7,041.8	18.0	15.0	70.70		13.2	20.3	526.0	495.8	30.24	17.394	
7,300.0	7,250.4	7,163.5	7,096.4	18.1	15.2	67.38		64.3	20.5	536.9	506.6	30.24	17.754	
7,400.0	7,330.0	7,238.0	7,145.3	18.1	15.4	65.03		120.6	20.7	545.4	515.2	30.15	18.090	
7,500.0	7,396.6	7,312.4	7,187.9	18.2	15.8	63.67		181.5	21.0	550.6	520.5	30.10	18.295	
7,600.0	7,447.7	7,386.7	7,224.0	18.3	16.2	63.31		246.4	21.3	552.0	521.8	30.28	18.232	
7,700.0	7,481.6	7,461.0	7,253.1	18.6	16.7	63.96		314.7	21.5	549.5	518.6	30.89	17.788	
7,800.0	7,497.0	7,535.4	7,275.0	19.0	17.3	65.60		385.7	21.8	543.4	511.3	32.06	16.947	
7,900.0	7,497.6	7,610.7	7,289.6	19.7	18.0	67.25		459.6	22.1	535.8	502.1	33.70	15.899	
8,000.0	7,497.3	7,688.2	7,296.4	20.5	18.8	67.95		536.7	22.5	532.4	496.9	35.48	15.006	
8,039.6	7,497.1	7,720.0	7,296.8	20.9	19.2	68.00		568.5	22.6	532.1	495.9	36.22	14.694	
8,100.0	7,496.9	7,780.4	7,296.5	21.5	19.9	68.00		628.9	22.8	532.2	494.7	37.48	14.198	
8,200.0	7,496.6	7,880.4	7,296.0	22.7	21.1	67.99		728.9	23.2	532.3	492.5	39.77	13.385	
8,300.0	7,496.2	7,980.4	7,295.6	23.9	22.5	67.97		828.9	23.6	532.4	490.2	42.23	12.606	
8,400.0	7,495.9	8,080.4	7,295.1	25.3	23.9	67.96		928.9	24.1	532.5	487.7	44.85	11.873	
8,500.0	7,495.5	8,180.4	7,294.6	26.7	25.4	67.95		1,028.9	24.5	532.6	485.0	47.60	11.190	
8,600.0	7,495.2	8,280.4	7,294.1	28.1	26.9	67.94		1,128.9	24.9	532.7	482.3	50.45	10.560	
8,700.0	7,494.8	8,380.4	7,293.6	29.7	28.5	67.93		1,228.9	25.3	532.8	479.4	53.38	9.981	
8,800.0	7,494.5	8,480.4	7,293.1	31.2	30.1	67.92		1,328.9	25.7	532.9	476.5	56.40	9.449	
8,900.0	7,494.1	8,580.4	7,292.6	32.8	31.8	67.90		1,428.9	26.1	533.0	473.6	59.47	8.962	
9,000.0	7,493.8	8,680.4	7,292.1	34.5	33.5	67.89		1,528.9	26.5	533.1	470.5	62.60	8.516	
9,100.0	7,493.4	8,780.4	7,291.6	36.1	35.2	67.88		1,628.9	26.9	533.2	467.5	65.78	8.106	
9,200.0	7,493.1	8,880.4	7,291.2	37.8	36.9	67.87		1,728.9	27.3	533.3	464.3	69.00	7.730	
9,300.0	7,492.7	8,980.4	7,290.7	39.5	38.7	67.86		1,828.9	27.7	533.4	461.2	72.25	7.383	
9,400.0	7,492.4	9,080.4	7,290.2	41.2	40.4	67.85		1,928.9	28.2	533.6	458.0	75.53	7.064	
9,500.0	7,492.0	9,180.4	7,289.7	43.0	42.2	67.83		2,028.9	28.6	533.7	454.8	78.84	6.769	
9,600.0	7,491.7	9,280.4	7,289.2	44.7	44.0	67.82		2,128.9	29.0	533.8	451.6	82.17	6.496	
9,700.0	7,491.3	9,380.4	7,288.7	46.5	45.8	67.81		2,228.9	29.4	533.9	448.3	85.52	6.243	
9,800.0	7,491.0	9,480.4	7,288.2	48.3	47.6	67.80		2,328.9	29.8	534.0	445.1	88.88	6.008	
9,900.0	7,490.6	9,580.4	7,287.7	50.1	49.4	67.79		2,428.9	30.2	534.1	441.8	92.27	5.788	

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

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-8N - Wellbore #1 - Plan #1 (8													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
10,000.0	7,490.3	9,680.4	7,287.3	51.9	51.2	67.78	2,528.9	30.6	534.2	438.5	95.66	5.584		
10,100.0	7,489.9	9,780.4	7,286.8	53.7	53.0	67.76	2,628.9	31.0	534.3	435.2	99.07	5.393		
10,200.0	7,489.6	9,880.4	7,286.3	55.5	54.9	67.75	2,728.9	31.4	534.4	431.9	102.49	5.214		
10,300.0	7,489.2	9,980.4	7,285.8	57.3	56.7	67.74	2,828.9	31.8	534.5	428.6	105.92	5.046		
10,400.0	7,488.9	10,080.4	7,285.3	59.1	58.6	67.73	2,928.9	32.3	534.6	425.2	109.36	4.888		
10,500.0	7,488.5	10,180.4	7,284.8	60.9	60.4	67.72	3,028.9	32.7	534.7	421.9	112.81	4.740		
10,600.0	7,488.2	10,280.4	7,284.3	62.8	62.3	67.71	3,128.9	33.1	534.8	418.5	116.27	4.600		
10,700.0	7,487.8	10,380.4	7,283.8	64.6	64.1	67.70	3,228.9	33.5	534.9	415.2	119.73	4.468		
10,800.0	7,487.5	10,480.4	7,283.3	66.5	66.0	67.68	3,328.9	33.9	535.0	411.8	123.20	4.343		
10,900.0	7,487.1	10,580.4	7,282.9	68.3	67.8	67.67	3,428.9	34.3	535.1	408.4	126.67	4.224		
11,000.0	7,486.8	10,680.4	7,282.4	70.2	69.7	67.66	3,528.9	34.7	535.2	405.1	130.15	4.112		
11,100.0	7,486.4	10,780.4	7,281.9	72.0	71.6	67.65	3,628.9	35.1	535.3	401.7	133.64	4.006		
11,200.0	7,486.1	10,880.4	7,281.4	73.9	73.4	67.64	3,728.9	35.5	535.4	398.3	137.12	3.905		
11,300.0	7,485.7	10,980.4	7,280.9	75.7	75.3	67.63	3,828.9	35.9	535.5	394.9	140.62	3.809		
11,400.0	7,485.4	11,080.4	7,280.4	77.6	77.2	67.61	3,928.9	36.4	535.6	391.5	144.11	3.717		
11,500.0	7,485.1	11,180.4	7,279.9	79.5	79.1	67.60	4,028.9	36.8	535.7	388.1	147.61	3.629		
11,600.0	7,484.7	11,280.4	7,279.4	81.3	80.9	67.59	4,128.9	37.2	535.9	384.7	151.11	3.546		
11,700.0	7,484.4	11,380.4	7,278.9	83.2	82.8	67.58	4,228.8	37.6	536.0	381.3	154.62	3.466		
11,800.0	7,484.0	11,480.4	7,278.5	85.1	84.7	67.57	4,328.8	38.0	536.1	377.9	158.12	3.390		
11,900.0	7,483.7	11,580.4	7,278.0	86.9	86.6	67.56	4,428.8	38.4	536.2	374.5	161.63	3.317		
12,000.0	7,483.3	11,680.4	7,277.5	88.8	88.5	67.55	4,528.8	38.8	536.3	371.1	165.15	3.247		
12,088.1	7,483.0	11,768.4	7,277.0	90.5	90.1	67.53	4,616.9	39.2	536.4	368.1	168.24	3.188 SF		

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design		Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-9C - Wellbore #1 - Plan #1 (8										Offset Site Error:		0.0 ft
Survey Program: 0-MWD												Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	58.8	58.8					
100.0	100.0	99.0	99.0	0.1	0.1	90.00	0.0	58.8	58.8	58.6	0.22	263.011		
200.0	200.0	199.0	199.0	0.3	0.3	90.00	0.0	58.8	58.8	58.1	0.67	87.525		
300.0	300.0	299.0	299.0	0.6	0.6	90.00	0.0	58.8	58.8	57.7	1.12	52.445		
400.0	400.0	399.0	399.0	0.8	0.8	90.00	0.0	58.8	58.8	57.2	1.57	37.439		
500.0	500.0	499.0	499.0	1.0	1.0	90.00	0.0	58.8	58.8	56.8	2.02	29.110		
600.0	600.0	599.0	599.0	1.2	1.2	90.00	0.0	58.8	58.8	56.4	2.47	23.812		
700.0	700.0	699.0	699.0	1.5	1.5	90.00	0.0	58.8	58.8	55.9	2.92	20.146		
800.0	800.0	799.0	799.0	1.7	1.7	90.00	0.0	58.8	58.8	55.5	3.37	17.458		
900.0	900.0	899.0	899.0	1.9	1.9	90.00	0.0	58.8	58.8	55.0	3.82	15.403		
1,000.0	1,000.0	999.0	999.0	2.1	2.1	90.00	0.0	58.8	58.8	54.6	4.27	13.781		
1,100.0	1,100.0	1,099.0	1,099.0	2.4	2.4	90.00	0.0	58.8	58.8	54.1	4.72	12.468		
1,200.0	1,200.0	1,199.0	1,199.0	2.6	2.6	90.00	0.0	58.8	58.8	53.7	5.17	11.383 CC, ES		
1,300.0	1,300.0	1,299.0	1,299.0	2.8	2.8	-161.99	0.0	58.8	60.5	54.9	5.60	10.806		
1,400.0	1,399.8	1,398.8	1,398.8	3.0	3.0	-163.38	0.0	58.8	65.5	59.5	6.01	10.900		
1,500.0	1,499.5	1,498.5	1,498.5	3.2	3.3	-165.27	0.0	58.8	73.9	67.5	6.42	11.514		
1,600.0	1,598.7	1,597.7	1,597.7	3.4	3.5	-167.29	0.0	58.8	85.7	78.9	6.82	12.565		
1,700.0	1,697.6	1,696.6	1,696.6	3.7	3.7	-169.11	0.0	58.8	100.0	92.7	7.25	13.797		
1,800.0	1,796.6	1,795.6	1,795.6	4.0	3.9	-170.50	0.0	58.8	114.4	106.7	7.68	14.895		
1,900.0	1,895.5	1,893.0	1,892.9	4.2	4.1	-171.11	-0.9	59.5	129.4	121.3	8.09	15.993		
2,000.0	1,994.4	1,989.9	1,989.8	4.5	4.3	-170.74	-3.7	61.8	145.6	137.1	8.48	17.162		
2,100.0	2,093.3	2,086.4	2,086.1	4.8	4.5	-169.68	-8.3	65.6	163.1	154.2	8.89	18.353		
2,200.0	2,192.3	2,182.2	2,181.5	5.2	4.7	-168.17	-14.8	70.9	182.0	172.7	9.30	19.561		
2,300.0	2,291.2	2,278.7	2,277.5	5.5	4.9	-166.43	-23.0	77.5	202.1	192.4	9.73	20.764		
2,400.0	2,390.1	2,376.4	2,374.6	5.8	5.1	-164.92	-31.5	84.4	222.6	212.4	10.18	21.870		
2,500.0	2,489.0	2,474.2	2,471.7	6.1	5.3	-163.66	-40.0	91.3	243.2	232.6	10.63	22.874		
2,600.0	2,588.0	2,571.9	2,568.8	6.5	5.5	-162.60	-48.5	98.3	263.9	252.8	11.10	23.784		
2,700.0	2,686.9	2,669.6	2,665.9	6.8	5.8	-161.69	-57.0	105.2	284.7	273.1	11.57	24.614		
2,800.0	2,785.8	2,767.3	2,763.1	7.1	6.0	-160.91	-65.5	112.1	305.5	293.5	12.04	25.369		
2,900.0	2,884.7	2,865.1	2,860.2	7.5	6.3	-160.23	-74.0	119.0	326.4	313.9	12.53	26.058		
3,000.0	2,983.7	2,962.8	2,957.3	7.8	6.5	-159.63	-82.5	125.9	347.3	334.3	13.01	26.688		
3,100.0	3,082.6	3,060.5	3,054.4	8.2	6.8	-159.10	-91.0	132.8	368.3	354.8	13.51	27.266		
3,200.0	3,181.5	3,158.2	3,151.5	8.5	7.0	-158.62	-99.5	139.7	389.3	375.3	14.00	27.796		
3,300.0	3,280.5	3,256.0	3,248.6	8.8	7.3	-158.19	-108.0	146.6	410.3	395.8	14.51	28.285		
3,400.0	3,379.4	3,353.7	3,345.7	9.2	7.6	-157.81	-116.5	153.5	431.3	416.3	15.01	28.736		
3,500.0	3,478.3	3,451.4	3,442.8	9.5	7.8	-157.46	-125.0	160.5	452.3	436.8	15.52	29.154		
3,600.0	3,577.2	3,549.2	3,539.9	9.9	8.1	-157.14	-133.5	167.4	473.4	457.4	16.03	29.541		
3,700.0	3,676.2	3,653.3	3,643.5	10.2	8.4	-156.89	-142.1	174.3	494.0	477.5	16.53	29.880		
3,800.0	3,775.1	3,761.3	3,751.1	10.6	8.6	-156.89	-148.7	179.7	512.9	495.9	17.03	30.114		
3,900.0	3,874.0	3,870.0	3,859.7	10.9	8.9	-157.13	-153.0	183.2	529.8	512.3	17.52	30.247		
4,000.0	3,972.9	3,979.3	3,968.9	11.3	9.1	-157.60	-154.9	184.7	544.8	526.9	17.99	30.289		
4,100.0	4,071.9	4,081.2	4,070.9	11.7	9.3	-158.18	-155.0	184.8	558.5	540.1	18.44	30.292		
4,200.0	4,170.8	4,180.1	4,169.8	12.0	9.5	-158.72	-155.0	184.8	572.1	553.2	18.88	30.296		
4,300.0	4,269.7	4,279.0	4,268.7	12.4	9.7	-159.24	-155.0	184.8	585.8	566.4	19.33	30.301		
4,400.0	4,368.6	4,378.0	4,367.6	12.7	9.9	-159.73	-155.0	184.8	599.5	579.7	19.78	30.307		
4,500.0	4,467.6	4,476.9	4,466.6	13.1	10.1	-160.21	-155.0	184.8	613.2	593.0	20.23	30.315		
4,600.0	4,566.5	4,575.8	4,565.5	13.4	10.3	-160.66	-155.0	184.8	627.0	606.3	20.68	30.323		
4,700.0	4,665.6	4,674.9	4,664.6	13.7	10.5	-161.12	-155.0	184.8	639.7	618.5	21.14	30.253		
4,800.0	4,765.1	4,774.4	4,764.1	14.0	10.7	-161.47	-155.0	184.8	649.1	627.5	21.57	30.097		
4,900.0	4,864.9	4,874.2	4,863.9	14.1	10.9	-161.69	-155.0	184.8	655.2	633.2	21.97	29.828		
5,000.0	4,964.8	4,974.2	4,963.8	14.3	11.1	-161.78	-155.0	184.8	658.0	635.7	22.34	29.453		

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

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-9C - Wellbore #1 - Plan #1 (8													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Semi Major Axis	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,064.8	5,074.2	5,063.8	14.5	11.3	89.69		-155.0	184.8	658.2	635.5	22.72	28.970	
5,200.0	5,164.8	5,174.2	5,163.8	14.6	11.5	89.69		-155.0	184.8	658.2	635.1	23.12	28.472	
5,300.0	5,264.8	5,274.2	5,263.8	14.8	11.7	89.69		-155.0	184.8	658.2	634.7	23.52	27.990	
5,400.0	5,364.8	5,374.2	5,363.8	14.9	11.9	89.69		-155.0	184.8	658.2	634.3	23.92	27.521	
5,500.0	5,464.8	5,474.2	5,463.8	15.1	12.1	89.69		-155.0	184.8	658.2	633.9	24.32	27.066	
5,600.0	5,564.8	5,574.2	5,563.8	15.3	12.3	89.69		-155.0	184.8	658.2	633.5	24.72	26.623	
5,700.0	5,664.8	5,674.2	5,663.8	15.4	12.5	89.69		-155.0	184.8	658.2	633.1	25.13	26.194	
5,800.0	5,764.8	5,774.2	5,763.8	15.6	12.7	89.69		-155.0	184.8	658.2	632.7	25.54	25.776	
5,900.0	5,864.8	5,874.2	5,863.8	15.8	12.9	89.69		-155.0	184.8	658.2	632.3	25.94	25.371	
6,000.0	5,964.8	5,974.2	5,963.8	15.9	13.1	89.69		-155.0	184.8	658.2	631.9	26.35	24.977	
6,100.0	6,064.8	6,074.2	6,063.8	16.1	13.4	89.69		-155.0	184.8	658.2	631.5	26.76	24.593	
6,200.0	6,164.8	6,174.2	6,163.8	16.3	13.6	89.69		-155.0	184.8	658.2	631.1	27.18	24.220	
6,300.0	6,264.8	6,274.2	6,263.8	16.5	13.8	89.69		-155.0	184.8	658.2	630.6	27.59	23.857	
6,400.0	6,364.8	6,374.2	6,363.8	16.6	14.0	89.69		-155.0	184.8	658.2	630.2	28.00	23.505	
6,500.0	6,464.8	6,474.2	6,463.8	16.8	14.2	89.69		-155.0	184.8	658.2	629.8	28.42	23.161	
6,600.0	6,564.8	6,574.2	6,563.8	17.0	14.4	89.69		-155.0	184.8	658.2	629.4	28.84	22.827	
6,700.0	6,664.8	6,674.2	6,663.8	17.2	14.6	89.69		-155.0	184.8	658.2	629.0	29.25	22.501	
6,800.0	6,764.8	6,774.2	6,763.8	17.3	14.8	89.69		-155.0	184.8	658.2	628.6	29.67	22.184	
6,803.5	6,768.4	6,777.7	6,767.4	17.3	14.8	89.69		-155.0	184.8	658.2	628.5	29.69	22.173	
6,900.0	6,864.8	6,873.1	6,862.6	17.5	15.0	89.28		-150.3	184.8	658.3	628.2	30.06	21.897	
7,000.0	6,964.8	6,968.8	6,956.7	17.7	15.2	87.78		-133.0	184.9	658.8	628.5	30.39	21.680	
7,100.0	7,064.4	7,060.7	7,044.0	17.9	15.3	85.55		-104.8	185.0	660.3	629.7	30.65	21.541	
7,200.0	7,160.8	7,150.0	7,124.8	18.0	15.5	84.02		-66.9	185.2	662.0	631.1	30.86	21.451	
7,300.0	7,250.4	7,241.1	7,201.7	18.1	15.6	83.02		-18.2	185.4	663.2	632.2	31.07	21.348	
7,400.0	7,330.0	7,330.5	7,270.6	18.1	15.7	82.64		38.8	185.6	663.8	632.4	31.35	21.175	
7,500.0	7,396.6	7,419.9	7,331.8	18.2	15.8	82.86		103.8	185.9	663.5	631.7	31.80	20.868	
7,600.0	7,447.7	7,509.6	7,384.6	18.3	16.2	83.68		176.2	186.2	662.5	630.0	32.49	20.387	
7,700.0	7,481.6	7,600.0	7,428.3	18.6	16.7	85.07		255.3	186.5	661.0	627.5	33.51	19.724	
7,800.0	7,497.0	7,691.4	7,462.0	19.0	17.4	87.00		340.3	186.9	659.4	624.6	34.86	18.914	
7,900.0	7,497.6	7,785.5	7,485.0	19.7	18.2	88.99		431.4	187.2	658.6	622.1	36.54	18.027	
7,957.0	7,497.4	7,841.3	7,493.0	20.1	18.7	89.70		486.6	187.5	658.6	620.9	37.64	17.498	
8,000.0	7,497.3	7,884.0	7,496.2	20.5	19.2	89.99		529.2	187.6	658.6	620.1	38.50	17.107	
8,100.0	7,496.9	7,984.1	7,496.7	21.5	20.3	90.06		629.2	188.0	658.6	617.9	40.71	16.180	
8,200.0	7,496.6	8,084.1	7,496.3	22.7	21.5	90.06		729.2	188.5	658.7	615.6	43.14	15.268	
8,300.0	7,496.2	8,184.1	7,495.9	23.9	22.8	90.06		829.2	188.9	658.8	613.0	45.76	14.395	
8,400.0	7,495.9	8,284.1	7,495.6	25.3	24.2	90.06		929.2	189.3	658.8	610.3	48.55	13.571	
8,500.0	7,495.5	8,384.1	7,495.2	26.7	25.7	90.06		1,029.2	189.7	658.9	607.4	51.47	12.802	
8,600.0	7,495.2	8,484.1	7,494.8	28.1	27.2	90.06		1,129.2	190.1	658.9	604.4	54.50	12.091	
8,700.0	7,494.8	8,584.1	7,494.5	29.7	28.8	90.05		1,229.2	190.5	659.0	601.4	57.62	11.436	
8,800.0	7,494.5	8,684.1	7,494.1	31.2	30.4	90.05		1,329.2	190.9	659.0	598.2	60.83	10.835	
8,900.0	7,494.1	8,784.1	7,493.7	32.8	32.0	90.05		1,429.2	191.3	659.1	595.0	64.10	10.282	
9,000.0	7,493.8	8,884.1	7,493.4	34.5	33.7	90.05		1,529.2	191.7	659.2	591.7	67.43	9.775	
9,100.0	7,493.4	8,984.1	7,493.0	36.1	35.4	90.05		1,629.2	192.1	659.2	588.4	70.82	9.309	
9,200.0	7,493.1	9,084.1	7,492.6	37.8	37.1	90.05		1,729.2	192.6	659.3	585.0	74.24	8.880	
9,300.0	7,492.7	9,184.1	7,492.3	39.5	38.8	90.05		1,829.2	193.0	659.3	581.6	77.71	8.485	
9,400.0	7,492.4	9,284.1	7,491.9	41.2	40.6	90.04		1,929.2	193.4	659.4	578.2	81.20	8.120	
9,500.0	7,492.0	9,384.1	7,491.5	43.0	42.3	90.04		2,029.2	193.8	659.4	574.7	84.73	7.783	
9,600.0	7,491.7	9,484.1	7,491.2	44.7	44.1	90.04		2,129.2	194.2	659.5	571.2	88.28	7.471	
9,700.0	7,491.3	9,584.1	7,490.8	46.5	45.9	90.04		2,229.2	194.6	659.5	567.7	91.85	7.181	
9,800.0	7,491.0	9,684.1	7,490.4	48.3	47.7	90.04		2,329.2	195.0	659.6	564.2	95.44	6.911	
9,900.0	7,490.6	9,784.1	7,490.1	50.1	49.5	90.04		2,429.2	195.4	659.7	560.6	99.05	6.660	

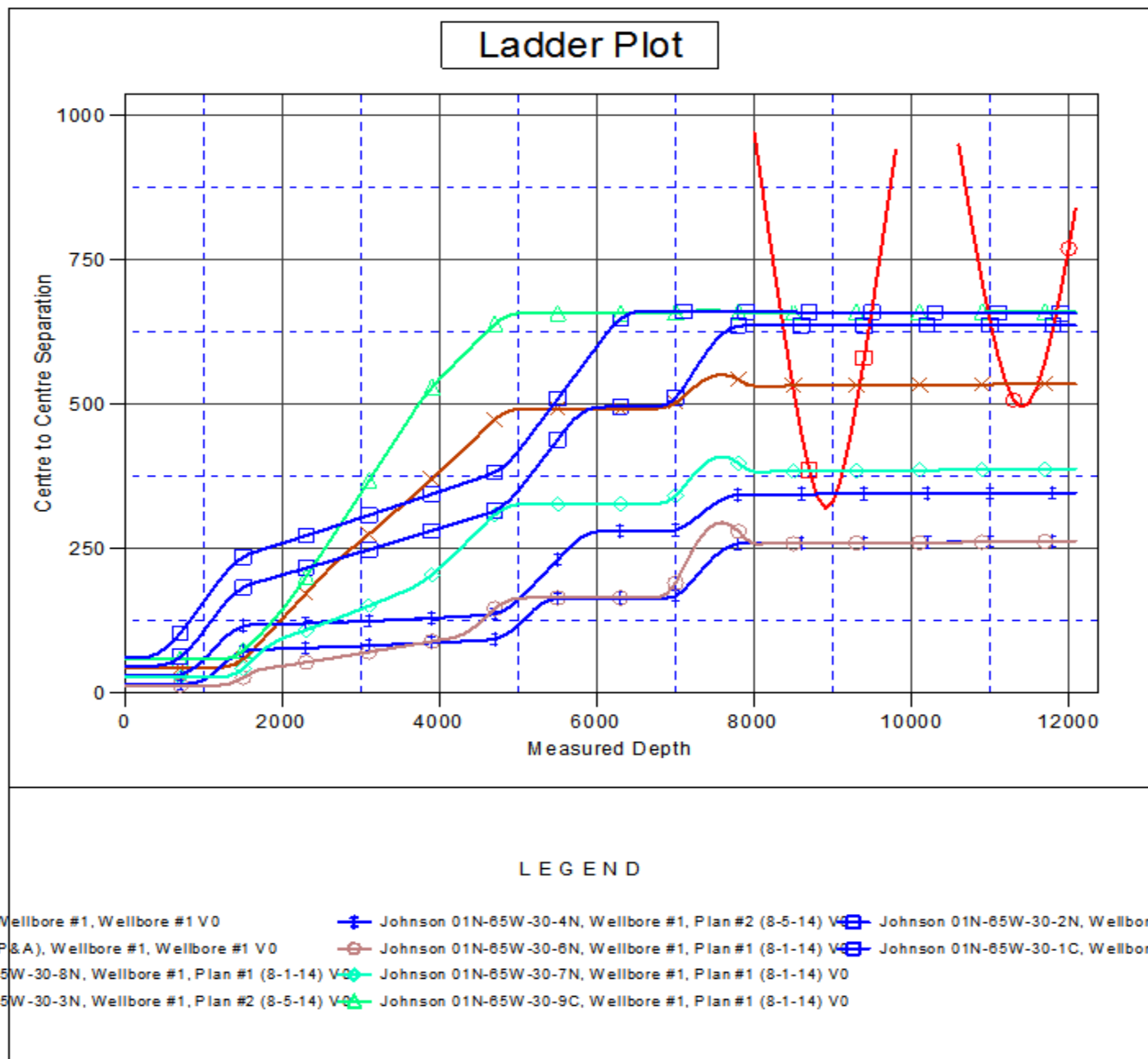
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-9C - Wellbore #1 - Plan #1 (8												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
10,000.0	7,490.3	9,884.1	7,489.7	51.9	51.3	90.03	2,529.2	195.8	659.7	557.0	102.68	6.425	
10,100.0	7,489.9	9,984.1	7,489.3	53.7	53.1	90.03	2,629.2	196.2	659.8	553.5	106.32	6.206	
10,200.0	7,489.6	10,084.1	7,489.0	55.5	55.0	90.03	2,729.2	196.7	659.8	549.9	109.97	6.000	
10,300.0	7,489.2	10,184.1	7,488.6	57.3	56.8	90.03	2,829.2	197.1	659.9	546.2	113.64	5.807	
10,400.0	7,488.9	10,284.1	7,488.2	59.1	58.6	90.03	2,929.2	197.5	659.9	542.6	117.31	5.625	
10,500.0	7,488.5	10,384.1	7,487.9	60.9	60.5	90.03	3,029.2	197.9	660.0	539.0	121.00	5.455	
10,600.0	7,488.2	10,484.1	7,487.5	62.8	62.3	90.03	3,129.2	198.3	660.1	535.4	124.69	5.294	
10,700.0	7,487.8	10,584.1	7,487.1	64.6	64.2	90.02	3,229.2	198.7	660.1	531.7	128.39	5.141	
10,800.0	7,487.5	10,684.1	7,486.8	66.5	66.0	90.02	3,329.2	199.1	660.2	528.1	132.10	4.998	
10,900.0	7,487.1	10,784.1	7,486.4	68.3	67.9	90.02	3,429.2	199.5	660.2	524.4	135.81	4.861	
11,000.0	7,486.8	10,884.1	7,486.0	70.2	69.7	90.02	3,529.2	199.9	660.3	520.7	139.53	4.732	
11,100.0	7,486.4	10,984.1	7,485.7	72.0	71.6	90.02	3,629.2	200.4	660.3	517.1	143.26	4.609	
11,200.0	7,486.1	11,084.1	7,485.3	73.9	73.5	90.02	3,729.2	200.8	660.4	513.4	146.99	4.493	
11,300.0	7,485.7	11,184.1	7,484.9	75.7	75.3	90.01	3,829.2	201.2	660.4	509.7	150.73	4.382	
11,400.0	7,485.4	11,284.1	7,484.6	77.6	77.2	90.01	3,929.2	201.6	660.5	506.0	154.47	4.276	
11,500.0	7,485.1	11,384.1	7,484.2	79.5	79.1	90.01	4,029.2	202.0	660.6	502.3	158.22	4.175	
11,600.0	7,484.7	11,484.1	7,483.8	81.3	81.0	90.01	4,129.2	202.4	660.6	498.6	161.96	4.079	
11,700.0	7,484.4	11,584.1	7,483.5	83.2	82.8	90.01	4,229.2	202.8	660.7	495.0	165.72	3.987	
11,800.0	7,484.0	11,684.1	7,483.1	85.1	84.7	90.01	4,329.2	203.2	660.7	491.3	169.47	3.899	
11,900.0	7,483.7	11,784.1	7,482.7	86.9	86.6	90.01	4,429.2	203.6	660.8	487.5	173.23	3.814	
12,000.0	7,483.3	11,884.1	7,482.4	88.8	88.5	90.00	4,529.2	204.0	660.8	483.8	176.99	3.734	
12,088.1	7,483.0	11,972.1	7,482.0	90.5	90.1	90.00	4,617.2	204.4	660.9	480.6	180.31	3.665 SF	

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5013.0ft (Original Well Elev) Coordinates are relative to: Johnson 01N-65W-30-5C
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.51°



Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-5C
Project:	SEC.30-T1N-R65W	TVD Reference:	WELL @ 5013.0ft (Original Well Elev)
Reference Site:	Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W	MD Reference:	WELL @ 5013.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Johnson 01N-65W-30-5C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	landmark
Reference Design:	Plan #2 (8-5-14)	Offset TVD Reference:	Offset Datum

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