

Verdad Oil & Gas Corporation

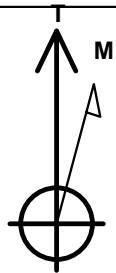
Well Name: **Johnson 01N-65W-30-2N**

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	1249519.01	3221292.96	40.015610	-104.709910	
Original Well Elev WELL @ 5013.0ft (Original Well Elev)						

WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Shape
460' Setback BHL	1.0	4619.2	-1214.0	Polygon
460' Setback SHL	1.0	255.0	-1214.0	Polygon
Sectionline	1.0	-205.0	-1214.0	Polygon
SHL 205'FSL & 1749'FWL	1.0	0.0	0.0	Point
Lehl 1 300' Circle	7.0	1453.2	-741.4	Circle (Radius: 300.0)
BHL 460'FNL & 825'FWL	7278.0	4619.2	-901.8	Point



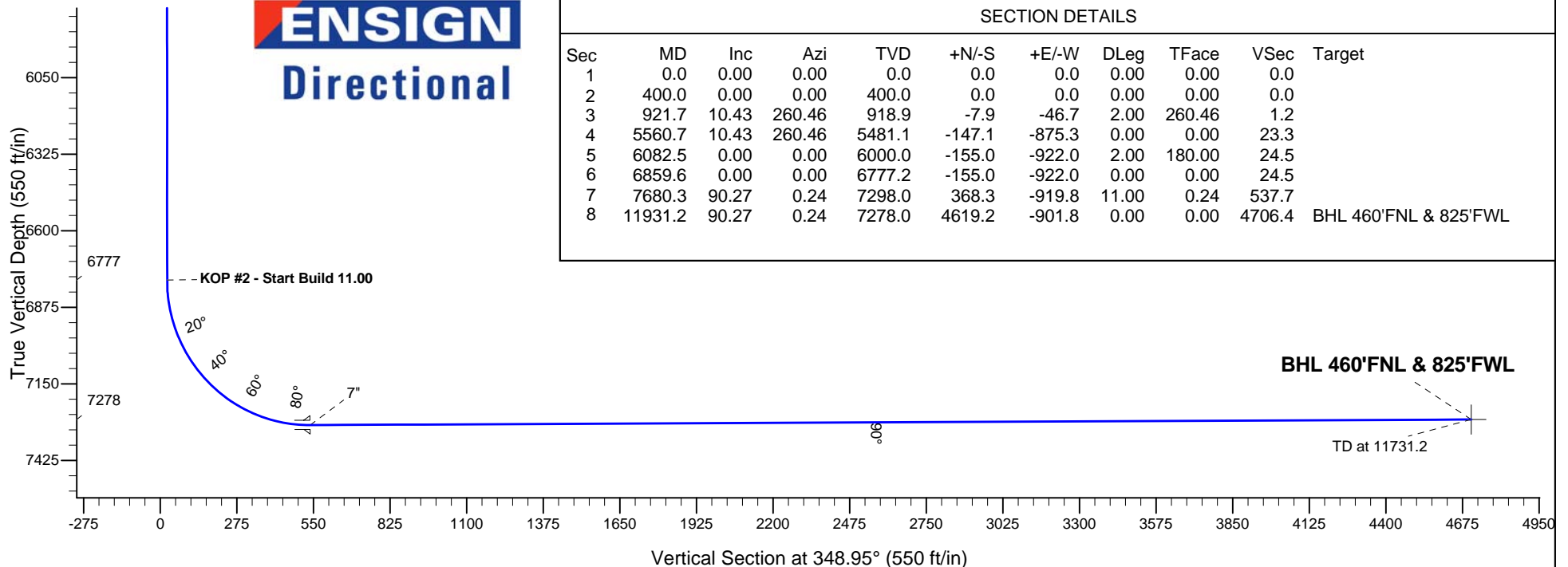
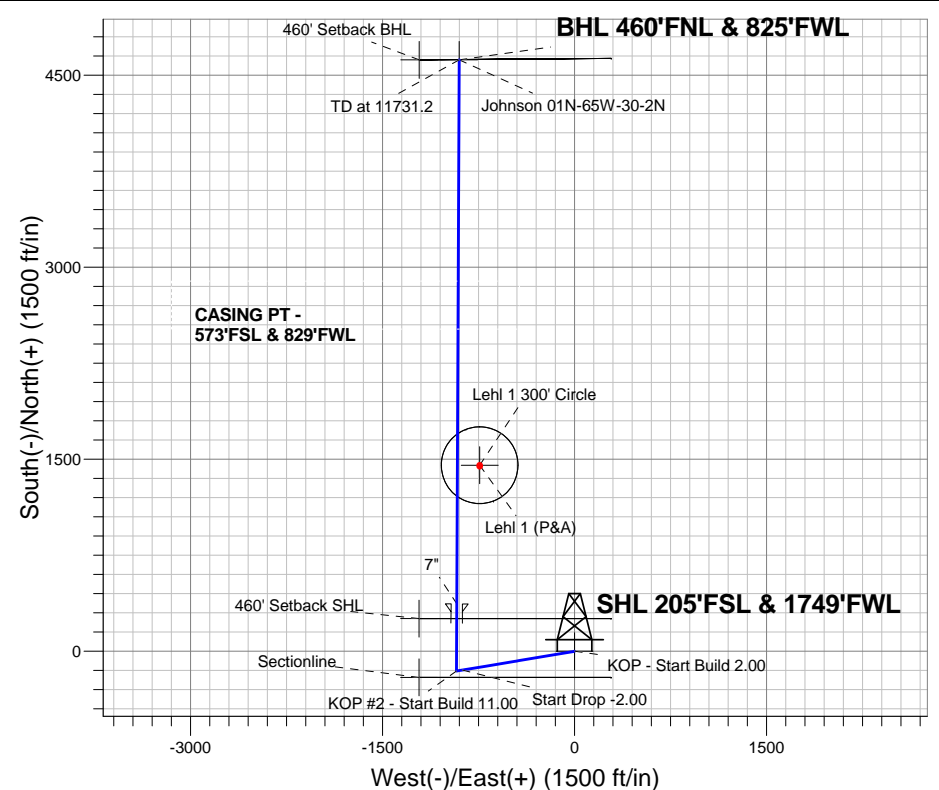
Azimuths to True North
Magnetic North: 8.38°

Magnetic Field
Strength: 52604.0snT
Dip Angle: 66.64°
Date: 8/1/2014
Model: IGRF2010

Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W
Johnson 01N-65W-30-2N
Plan #3 (8-6-14)

ANNOTATIONS

TVD	MD	Annotation
400.0	400.0	KOP - Start Build 2.00
5481.1	5560.7	Start Drop -2.00
6777.1	6859.6	KOP #2 - Start Build 11.00
7278.0	11931.2	TD at 11731.2



SECTION DETAILS

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	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	921.7	10.43	260.46	918.9	-7.9	-46.7	2.00	260.46	1.2	
4	5560.7	10.43	260.46	5481.1	-147.1	-875.3	0.00	0.00	23.3	
5	6082.5	0.00	0.00	6000.0	-155.0	-922.0	2.00	180.00	24.5	
6	6859.6	0.00	0.00	6777.2	-155.0	-922.0	0.00	0.00	24.5	
7	7680.3	90.27	0.24	7298.0	368.3	-919.8	11.00	0.24	537.7	
8	11931.2	90.27	0.24	7278.0	4619.2	-901.8	0.00	0.00	4706.4	BHL 460'FNL & 825'FWL



Verdad Oil & Gas Corporation

SEC.30-T1N-R65W

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

Johnson 01N-65W-30-2N

Wellbore #1

Plan: Plan #3 (8-6-14)

Standard Planning Report

06 August, 2014

Database:	landmark	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-2N
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-30-2N	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (8-6-14)		

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:	1,249,518.89 ft
From:	Lat/Long	Easting:	3,221,278.95 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40.015610
		Longitude:	-104.709960
		Grid Convergence:	0.51 °

Well	Johnson 01N-65W-30-2N		
Well Position	+N/-S	0.0 ft	Northing:
	+E/-W	14.0 ft	Easting:
Position Uncertainty		0.0 ft	Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

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 #3 (8-6-14)			
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	348.95

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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
921.7	10.43	260.46	918.9	-7.9	-46.7	2.00	2.00	0.00	260.46	
5,560.7	10.43	260.46	5,481.1	-147.1	-875.3	0.00	0.00	0.00	0.00	
6,082.5	0.00	0.00	6,000.0	-155.0	-922.0	2.00	-2.00	0.00	180.00	
6,859.6	0.00	0.00	6,777.2	-155.0	-922.0	0.00	0.00	0.00	0.00	
7,680.3	90.27	0.24	7,298.0	368.3	-919.8	11.00	11.00	0.00	0.24	
11,931.2	90.27	0.24	7,278.0	4,619.2	-901.8	0.00	0.00	0.00	0.00	BHL 460'FNL & 825'

Database:	landmark	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-2N
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-30-2N	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (8-6-14)		

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
KOP - Start Build 2.00									
500.0	2.00	260.46	500.0	-0.3	-1.7	0.0	2.00	2.00	0.00
600.0	4.00	260.46	599.8	-1.2	-6.9	0.2	2.00	2.00	0.00
700.0	6.00	260.46	699.5	-2.6	-15.5	0.4	2.00	2.00	0.00
800.0	8.00	260.46	798.7	-4.6	-27.5	0.7	2.00	2.00	0.00
900.0	10.00	260.46	897.5	-7.2	-42.9	1.1	2.00	2.00	0.00
921.7	10.43	260.46	918.9	-7.9	-46.7	1.2	2.00	2.00	0.00
1,000.0	10.43	260.46	995.8	-10.2	-60.7	1.6	0.00	0.00	0.00
1,100.0	10.43	260.46	1,094.2	-13.2	-78.6	2.1	0.00	0.00	0.00
1,200.0	10.43	260.46	1,192.5	-16.2	-96.4	2.6	0.00	0.00	0.00
1,300.0	10.43	260.46	1,290.9	-19.2	-114.3	3.0	0.00	0.00	0.00
1,400.0	10.43	260.46	1,389.2	-22.2	-132.1	3.5	0.00	0.00	0.00
1,500.0	10.43	260.46	1,487.6	-25.2	-150.0	4.0	0.00	0.00	0.00
1,600.0	10.43	260.46	1,585.9	-28.2	-167.9	4.5	0.00	0.00	0.00
1,700.0	10.43	260.46	1,684.3	-31.2	-185.7	4.9	0.00	0.00	0.00
1,800.0	10.43	260.46	1,782.6	-34.2	-203.6	5.4	0.00	0.00	0.00
1,900.0	10.43	260.46	1,880.9	-37.2	-221.4	5.9	0.00	0.00	0.00
2,000.0	10.43	260.46	1,979.3	-40.2	-239.3	6.4	0.00	0.00	0.00
2,100.0	10.43	260.46	2,077.6	-43.2	-257.2	6.8	0.00	0.00	0.00
2,200.0	10.43	260.46	2,176.0	-46.2	-275.0	7.3	0.00	0.00	0.00
2,300.0	10.43	260.46	2,274.3	-49.2	-292.9	7.8	0.00	0.00	0.00
2,400.0	10.43	260.46	2,372.7	-52.2	-310.7	8.3	0.00	0.00	0.00
2,500.0	10.43	260.46	2,471.0	-55.2	-328.6	8.7	0.00	0.00	0.00
2,600.0	10.43	260.46	2,569.4	-58.2	-346.5	9.2	0.00	0.00	0.00
2,700.0	10.43	260.46	2,667.7	-61.2	-364.3	9.7	0.00	0.00	0.00
2,800.0	10.43	260.46	2,766.1	-64.3	-382.2	10.2	0.00	0.00	0.00
2,900.0	10.43	260.46	2,864.4	-67.3	-400.1	10.6	0.00	0.00	0.00
3,000.0	10.43	260.46	2,962.8	-70.3	-417.9	11.1	0.00	0.00	0.00
3,100.0	10.43	260.46	3,061.1	-73.3	-435.8	11.6	0.00	0.00	0.00
3,200.0	10.43	260.46	3,159.4	-76.3	-453.6	12.1	0.00	0.00	0.00
3,300.0	10.43	260.46	3,257.8	-79.3	-471.5	12.5	0.00	0.00	0.00
3,400.0	10.43	260.46	3,356.1	-82.3	-489.4	13.0	0.00	0.00	0.00
3,500.0	10.43	260.46	3,454.5	-85.3	-507.2	13.5	0.00	0.00	0.00
3,600.0	10.43	260.46	3,552.8	-88.3	-525.1	14.0	0.00	0.00	0.00
3,700.0	10.43	260.46	3,651.2	-91.3	-542.9	14.4	0.00	0.00	0.00
3,800.0	10.43	260.46	3,749.5	-94.3	-560.8	14.9	0.00	0.00	0.00
3,900.0	10.43	260.46	3,847.9	-97.3	-578.7	15.4	0.00	0.00	0.00
4,000.0	10.43	260.46	3,946.2	-100.3	-596.5	15.9	0.00	0.00	0.00
4,100.0	10.43	260.46	4,044.6	-103.3	-614.4	16.3	0.00	0.00	0.00
4,200.0	10.43	260.46	4,142.9	-106.3	-632.2	16.8	0.00	0.00	0.00
4,300.0	10.43	260.46	4,241.3	-109.3	-650.1	17.3	0.00	0.00	0.00
4,400.0	10.43	260.46	4,339.6	-112.3	-668.0	17.8	0.00	0.00	0.00
4,500.0	10.43	260.46	4,437.9	-115.3	-685.8	18.2	0.00	0.00	0.00
4,600.0	10.43	260.46	4,536.3	-118.3	-703.7	18.7	0.00	0.00	0.00
4,700.0	10.43	260.46	4,634.6	-121.3	-721.5	19.2	0.00	0.00	0.00
4,800.0	10.43	260.46	4,733.0	-124.3	-739.4	19.7	0.00	0.00	0.00
4,900.0	10.43	260.46	4,831.3	-127.3	-757.3	20.1	0.00	0.00	0.00
5,000.0	10.43	260.46	4,929.7	-130.3	-775.1	20.6	0.00	0.00	0.00

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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-30-2N	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (8-6-14)		

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)
5,100.0	10.43	260.46	5,028.0	-133.3	-793.0	21.1	0.00	0.00	0.00
5,200.0	10.43	260.46	5,126.4	-136.3	-810.8	21.6	0.00	0.00	0.00
5,300.0	10.43	260.46	5,224.7	-139.3	-828.7	22.0	0.00	0.00	0.00
5,400.0	10.43	260.46	5,323.1	-142.3	-846.6	22.5	0.00	0.00	0.00
5,500.0	10.43	260.46	5,421.4	-145.3	-864.4	23.0	0.00	0.00	0.00
5,560.7	10.43	260.46	5,481.1	-147.1	-875.3	23.3	0.00	0.00	0.00
Start Drop -2.00									
5,600.0	9.65	260.46	5,519.8	-148.3	-882.0	23.5	2.00	-2.00	0.00
5,700.0	7.65	260.46	5,618.7	-150.8	-896.9	23.9	2.00	-2.00	0.00
5,800.0	5.65	260.46	5,718.0	-152.7	-908.3	24.2	2.00	-2.00	0.00
5,900.0	3.65	260.46	5,817.6	-154.0	-916.3	24.4	2.00	-2.00	0.00
6,000.0	1.65	260.46	5,917.5	-154.8	-920.8	24.5	2.00	-2.00	0.00
6,082.5	0.00	0.00	6,000.0	-155.0	-922.0	24.5	2.00	-2.00	0.00
6,100.0	0.00	0.00	6,017.5	-155.0	-922.0	24.5	0.00	0.00	0.00
6,200.0	0.00	0.00	6,117.5	-155.0	-922.0	24.5	0.00	0.00	0.00
6,300.0	0.00	0.00	6,217.5	-155.0	-922.0	24.5	0.00	0.00	0.00
6,400.0	0.00	0.00	6,317.5	-155.0	-922.0	24.5	0.00	0.00	0.00
6,500.0	0.00	0.00	6,417.5	-155.0	-922.0	24.5	0.00	0.00	0.00
6,600.0	0.00	0.00	6,517.5	-155.0	-922.0	24.5	0.00	0.00	0.00
6,700.0	0.00	0.00	6,617.5	-155.0	-922.0	24.5	0.00	0.00	0.00
6,800.0	0.00	0.00	6,717.5	-155.0	-922.0	24.5	0.00	0.00	0.00
6,859.6	0.00	0.00	6,777.1	-155.0	-922.0	24.5	0.00	0.00	0.00
KOP #2 - Start Build 11.00									
6,900.0	4.44	0.24	6,817.5	-153.4	-922.0	26.1	10.99	10.99	0.00
7,000.0	15.44	0.24	6,915.8	-136.2	-921.9	43.0	11.00	11.00	0.00
7,100.0	26.44	0.24	7,009.1	-100.5	-921.8	78.0	11.00	11.00	0.00
7,200.0	37.44	0.24	7,093.8	-47.7	-921.5	129.8	11.00	11.00	0.00
7,300.0	48.44	0.24	7,166.9	20.3	-921.3	196.5	11.00	11.00	0.00
7,400.0	59.44	0.24	7,225.7	101.0	-920.9	275.6	11.00	11.00	0.00
7,500.0	70.44	0.24	7,268.0	191.5	-920.5	364.3	11.00	11.00	0.00
7,600.0	81.44	0.24	7,292.2	288.3	-920.1	459.3	11.00	11.00	0.00
7,680.3	90.27	0.24	7,298.0	368.3	-919.8	537.7	11.00	11.00	0.00
7"									
7,700.0	90.27	0.24	7,297.9	388.0	-919.7	557.1	0.00	0.00	0.00
7,800.0	90.27	0.24	7,297.5	488.0	-919.3	655.1	0.00	0.00	0.00
7,900.0	90.27	0.24	7,297.0	588.0	-918.8	753.2	0.00	0.00	0.00
8,000.0	90.27	0.24	7,296.5	688.0	-918.4	851.3	0.00	0.00	0.00
8,100.0	90.27	0.24	7,296.1	788.0	-918.0	949.3	0.00	0.00	0.00
8,200.0	90.27	0.24	7,295.6	888.0	-917.6	1,047.4	0.00	0.00	0.00
8,300.0	90.27	0.24	7,295.1	988.0	-917.2	1,145.5	0.00	0.00	0.00
8,400.0	90.27	0.24	7,294.6	1,088.0	-916.7	1,243.5	0.00	0.00	0.00
8,500.0	90.27	0.24	7,294.2	1,188.0	-916.3	1,341.6	0.00	0.00	0.00
8,600.0	90.27	0.24	7,293.7	1,288.0	-915.9	1,439.6	0.00	0.00	0.00
8,700.0	90.27	0.24	7,293.2	1,388.0	-915.5	1,537.7	0.00	0.00	0.00
8,800.0	90.27	0.24	7,292.8	1,488.0	-915.0	1,635.8	0.00	0.00	0.00
8,900.0	90.27	0.24	7,292.3	1,588.0	-914.6	1,733.8	0.00	0.00	0.00
9,000.0	90.27	0.24	7,291.8	1,688.0	-914.2	1,831.9	0.00	0.00	0.00
9,100.0	90.27	0.24	7,291.3	1,788.0	-913.8	1,930.0	0.00	0.00	0.00
9,200.0	90.27	0.24	7,290.9	1,888.0	-913.3	2,028.0	0.00	0.00	0.00
9,300.0	90.27	0.24	7,290.4	1,988.0	-912.9	2,126.1	0.00	0.00	0.00
9,400.0	90.27	0.24	7,289.9	2,088.0	-912.5	2,224.2	0.00	0.00	0.00
9,500.0	90.27	0.24	7,289.5	2,188.0	-912.1	2,322.2	0.00	0.00	0.00
9,600.0	90.27	0.24	7,289.0	2,288.0	-911.6	2,420.3	0.00	0.00	0.00

Database:	landmark	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-2N
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-30-2N	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #3 (8-6-14)		

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	90.27	0.24	7,288.5	2,388.0	-911.2	2,518.3	0.00	0.00	0.00
9,800.0	90.27	0.24	7,288.0	2,488.0	-910.8	2,616.4	0.00	0.00	0.00
9,900.0	90.27	0.24	7,287.6	2,588.0	-910.4	2,714.5	0.00	0.00	0.00
10,000.0	90.27	0.24	7,287.1	2,688.0	-909.9	2,812.5	0.00	0.00	0.00
10,100.0	90.27	0.24	7,286.6	2,788.0	-909.5	2,910.6	0.00	0.00	0.00
10,200.0	90.27	0.24	7,286.2	2,888.0	-909.1	3,008.7	0.00	0.00	0.00
10,300.0	90.27	0.24	7,285.7	2,988.0	-908.7	3,106.7	0.00	0.00	0.00
10,400.0	90.27	0.24	7,285.2	3,088.0	-908.2	3,204.8	0.00	0.00	0.00
10,500.0	90.27	0.24	7,284.7	3,188.0	-907.8	3,302.9	0.00	0.00	0.00
10,600.0	90.27	0.24	7,284.3	3,288.0	-907.4	3,400.9	0.00	0.00	0.00
10,700.0	90.27	0.24	7,283.8	3,388.0	-907.0	3,499.0	0.00	0.00	0.00
10,800.0	90.27	0.24	7,283.3	3,488.0	-906.6	3,597.1	0.00	0.00	0.00
10,900.0	90.27	0.24	7,282.9	3,588.0	-906.1	3,695.1	0.00	0.00	0.00
11,000.0	90.27	0.24	7,282.4	3,688.0	-905.7	3,793.2	0.00	0.00	0.00
11,100.0	90.27	0.24	7,281.9	3,788.0	-905.3	3,891.2	0.00	0.00	0.00
11,200.0	90.27	0.24	7,281.4	3,888.0	-904.9	3,989.3	0.00	0.00	0.00
11,300.0	90.27	0.24	7,281.0	3,988.0	-904.4	4,087.4	0.00	0.00	0.00
11,400.0	90.27	0.24	7,280.5	4,088.0	-904.0	4,185.4	0.00	0.00	0.00
11,500.0	90.27	0.24	7,280.0	4,188.0	-903.6	4,283.5	0.00	0.00	0.00
11,600.0	90.27	0.24	7,279.6	4,288.0	-903.2	4,381.6	0.00	0.00	0.00
11,700.0	90.27	0.24	7,279.1	4,388.0	-902.7	4,479.6	0.00	0.00	0.00
11,800.0	90.27	0.24	7,278.6	4,488.0	-902.3	4,577.7	0.00	0.00	0.00
11,900.0	90.27	0.24	7,278.1	4,588.0	-901.9	4,675.8	0.00	0.00	0.00
11,931.2	90.27	0.24	7,278.0	4,619.2	-901.8	4,706.4	0.00	0.00	0.00
TD at 11731.2									

Casing Points				
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
7,680.3	7,298.0	7"	7	7-1/2

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
400.0	400.0	0.0	0.0	KOP - Start Build 2.00
5,560.7	5,481.1	-147.1	-875.3	Start Drop -2.00
6,859.6	6,777.1	-155.0	-922.0	KOP #2 - Start Build 11.00
11,931.2	7,278.0	4,619.2	-901.8	TD at 11731.2



Verdad Oil & Gas Corporation

SEC.30-T1N-R65W

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

Johnson 01N-65W-30-2N

Wellbore #1

Plan #3 (8-6-14)

Anticollision Report

06 August, 2014

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-2N
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-30-2N	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 #3 (8-6-14)	Offset TVD Reference:	Offset Datum

Reference	Plan #3 (8-6-14)		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	Error Model:	ISCSWA
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	8/6/2014		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	11,931.2	Plan #3 (8-6-14) (Wellbore #1)	MWD	MWD - Standard	

Summary						
Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Existing Wells Sec.30-T1N-R65W						
Gilmore 1-30 (P&A) - Wellbore #1 - Wellbore #1	11,261.1	7,259.2	989.5	766.5	4.438	CC, ES
Gilmore 1-30 (P&A) - Wellbore #1 - Wellbore #1	11,300.0	7,259.0	990.2	766.6	4.427	SF
Lehl 1 (P&A) - Wellbore #1 - Wellbore #1	8,765.8	7,286.9	173.8	-4.8	0.973	Level 1, 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	14.0	13.3	20.770	CC, ES
Johnson 01N-65W-30-1C - Wellbore #1 - Plan #2 (8-5-14	11,931.2	12,150.9	263.3	140.8	2.150	SF
Johnson 01N-65W-30-3N - Wellbore #1 - Plan #2 (8-5-14	400.0	400.0	16.8	15.2	10.682	CC, ES
Johnson 01N-65W-30-3N - Wellbore #1 - Plan #2 (8-5-14	11,931.2	11,901.1	212.4	31.9	1.176	Level 2, SF
Johnson 01N-65W-30-4N - Wellbore #1 - Plan #2 (8-5-14	400.0	400.0	31.0	29.5	19.719	CC, ES
Johnson 01N-65W-30-4N - Wellbore #1 - Plan #2 (8-5-14	11,931.2	11,893.9	327.6	147.2	1.816	SF
Johnson 01N-65W-30-5C - Wellbore #1 - Plan #2 (8-5-14	400.0	400.0	47.8	46.2	30.353	CC, ES
Johnson 01N-65W-30-5C - Wellbore #1 - Plan #2 (8-5-14	11,931.2	12,082.7	533.8	363.3	3.131	SF
Johnson 01N-65W-30-6N - Wellbore #1 - Plan #2 (8-5-14	400.0	400.0	61.7	60.2	39.234	CC, ES
Johnson 01N-65W-30-6N - Wellbore #1 - Plan #2 (8-5-14	11,931.2	11,868.9	658.1	477.8	3.650	SF
Johnson 01N-65W-30-7N - Wellbore #1 - Plan #2 (8-5-14	400.0	399.0	75.7	74.1	48.192	CC, ES
Johnson 01N-65W-30-7N - Wellbore #1 - Plan #2 (8-5-14	11,931.2	11,857.5	823.3	643.3	4.573	SF
Johnson 01N-65W-30-8N - Wellbore #1 - Plan #2 (8-5-14	400.0	399.0	92.5	90.9	58.878	CC, ES
Johnson 01N-65W-30-8N - Wellbore #1 - Plan #2 (8-5-14	900.0	896.5	135.8	132.0	36.018	SF
Johnson 01N-65W-30-9C - Wellbore #1 - Plan #2 (8-5-14	400.0	399.0	106.5	104.9	67.786	CC, ES
Johnson 01N-65W-30-9C - Wellbore #1 - Plan #2 (8-5-14	1,800.0	1,781.6	312.3	304.4	39.350	SF

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			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
11,200.0	7,281.4	7,259.4	7,259.4	77.9	145.2	90.02	3,944.9	84.9	991.3	769.5	221.80	4.470		
11,261.1	7,281.2	7,259.2	7,259.2	79.0	145.2	90.00	3,944.9	84.9	989.5	766.5	222.94	4.438	CC, ES	
11,300.0	7,281.0	7,259.0	7,259.0	79.7	145.2	89.99	3,944.9	84.9	990.2	766.6	223.66	4.427	SF	
11,400.0	7,280.5	7,258.5	7,258.5	81.6	145.2	89.96	3,944.9	84.9	999.2	773.6	225.52	4.431		

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-2N
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-30-2N	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 #3 (8-6-14)	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
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
7,800.0	7,297.5	7,291.5	7,291.5	24.8	145.8	91.50	91.50	1,453.2	-741.4	981.4	816.0	165.40	5.933	
7,900.0	7,297.0	7,291.0	7,291.0	25.4	145.8	91.34	91.34	1,453.2	-741.4	883.1	716.7	166.40	5.307	
8,000.0	7,296.5	7,290.5	7,290.5	26.2	145.8	91.19	91.19	1,453.2	-741.4	785.3	617.8	167.53	4.688	
8,100.0	7,296.1	7,290.1	7,290.1	27.2	145.8	91.03	91.03	1,453.2	-741.4	688.2	519.4	168.76	4.078	
8,200.0	7,295.6	7,289.6	7,289.6	28.2	145.8	90.88	90.88	1,453.2	-741.4	592.0	421.9	170.07	3.481	
8,300.0	7,295.1	7,289.1	7,289.1	29.4	145.8	90.72	90.72	1,453.2	-741.4	497.2	325.8	171.46	2.900	
8,400.0	7,294.6	7,288.6	7,288.6	30.6	145.8	90.57	90.57	1,453.2	-741.4	405.1	232.1	172.91	2.343	
8,500.0	7,294.2	7,288.2	7,288.2	32.0	145.8	90.41	90.41	1,453.2	-741.4	317.6	143.2	174.41	1.821	
8,600.0	7,293.7	7,287.7	7,287.7	33.3	145.8	90.26	90.26	1,453.2	-741.4	240.2	64.3	175.95	1.365 Level 3	
8,700.0	7,293.2	7,287.2	7,287.2	34.8	145.7	90.10	90.10	1,453.2	-741.4	185.9	8.3	177.54	1.047 Level 2	
8,765.8	7,292.9	7,286.9	7,286.9	35.8	145.7	90.00	90.00	1,453.2	-741.4	173.8	-4.8	178.60	0.973 Level 1, CC, ES, SF	
8,800.0	7,292.8	7,286.8	7,286.8	36.3	145.7	89.95	89.95	1,453.2	-741.4	177.1	-2.0	179.15	0.989 Level 1	
8,900.0	7,292.3	7,286.3	7,286.3	37.8	145.7	89.79	89.79	1,453.2	-741.4	219.5	38.7	180.79	1.214 Level 2	
9,000.0	7,291.8	7,285.8	7,285.8	39.4	145.7	89.64	89.64	1,453.2	-741.4	291.6	109.1	182.46	1.598	
9,100.0	7,291.3	7,285.3	7,285.3	41.0	145.7	89.48	89.48	1,453.2	-741.4	376.6	192.5	184.14	2.045	
9,200.0	7,290.9	7,284.9	7,284.9	42.6	145.7	89.33	89.33	1,453.2	-741.4	467.6	281.8	185.84	2.516	
9,300.0	7,290.4	7,284.4	7,284.4	44.2	145.7	89.17	89.17	1,453.2	-741.4	561.7	374.1	187.56	2.995	
9,400.0	7,289.9	7,283.9	7,283.9	45.9	145.7	89.01	89.01	1,453.2	-741.4	657.5	468.2	189.29	3.473	
9,500.0	7,289.5	7,283.5	7,283.5	47.6	145.7	88.86	88.86	1,453.2	-741.4	754.4	563.4	191.03	3.949	
9,600.0	7,289.0	7,283.0	7,283.0	49.3	145.7	88.70	88.70	1,453.2	-741.4	852.0	659.2	192.79	4.420	
9,700.0	7,288.5	7,282.5	7,282.5	51.0	145.7	88.55	88.55	1,453.2	-741.4	950.1	755.6	194.55	4.884	

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-2N
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-30-2N	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 #3 (8-6-14)	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 (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	-90.02	-90.02	0.0	-14.0	14.0	14.0	0.00	N/A	
100.0	100.0	100.0	100.0	0.1	0.1	-90.02	-90.02	0.0	-14.0	14.0	13.8	0.22	62.309	
200.0	200.0	200.0	200.0	0.3	0.3	-90.02	-90.02	0.0	-14.0	14.0	13.3	0.67	20.770 CC, ES	
300.0	300.0	299.5	299.5	0.6	0.5	-90.94	-90.94	-0.3	-15.7	15.7	14.6	1.11	14.154	
400.0	400.0	398.7	398.6	0.8	0.8	-92.78	-92.78	-1.0	-20.8	20.9	19.3	1.56	13.437	
500.0	500.0	497.6	497.1	1.0	1.0	5.43	5.43	-2.3	-29.3	27.8	25.8	1.98	13.998	
600.0	599.8	596.3	595.1	1.2	1.3	4.74	4.74	-4.0	-41.1	34.6	32.2	2.41	14.357	
700.0	699.5	694.8	692.3	1.4	1.6	4.38	4.38	-6.2	-56.2	41.5	38.6	2.86	14.521	
800.0	798.7	794.0	789.9	1.7	2.0	4.24	4.24	-8.9	-74.1	47.6	44.3	3.31	14.367	
900.0	897.5	894.0	888.1	2.0	2.4	4.41	4.41	-11.6	-92.4	50.5	46.7	3.78	13.360	
1,000.0	995.8	994.0	986.4	2.4	2.8	4.78	4.78	-14.3	-110.6	51.0	46.7	4.27	11.945	
1,100.0	1,094.2	1,094.0	1,084.7	2.8	3.2	5.15	5.15	-17.0	-128.9	51.4	46.6	4.77	10.780	
1,200.0	1,192.5	1,194.0	1,183.0	3.1	3.6	5.52	5.52	-19.7	-147.2	51.8	46.5	5.27	9.824	
1,300.0	1,290.9	1,294.0	1,281.2	3.5	4.0	5.88	5.88	-22.4	-165.5	52.2	46.4	5.78	9.030	
1,400.0	1,389.2	1,394.0	1,379.5	3.9	4.5	6.23	6.23	-25.1	-183.8	52.6	46.3	6.30	8.357	
1,500.0	1,487.6	1,494.0	1,477.8	4.3	4.9	6.58	6.58	-27.8	-202.1	53.0	46.2	6.81	7.783	
1,600.0	1,585.9	1,594.0	1,576.1	4.7	5.3	6.92	6.92	-30.5	-220.3	53.4	46.1	7.33	7.287	
1,700.0	1,684.3	1,694.0	1,674.4	5.1	5.7	7.26	7.26	-33.2	-238.6	53.9	46.0	7.86	6.854	
1,800.0	1,782.6	1,794.0	1,772.6	5.6	6.1	7.60	7.60	-35.9	-256.9	54.3	45.9	8.38	6.474	
1,900.0	1,880.9	1,894.0	1,870.9	6.0	6.6	7.92	7.92	-38.6	-275.2	54.7	45.8	8.91	6.137	
2,000.0	1,979.3	1,994.0	1,969.2	6.4	7.0	8.25	8.25	-41.3	-293.5	55.1	45.7	9.45	5.837	
2,100.0	2,077.6	2,094.0	2,067.5	6.8	7.4	8.56	8.56	-44.0	-311.8	55.6	45.6	9.98	5.567	
2,200.0	2,176.0	2,194.0	2,165.7	7.2	7.8	8.88	8.88	-46.7	-330.1	56.0	45.5	10.51	5.324	
2,300.0	2,274.3	2,294.0	2,264.0	7.6	8.2	9.18	9.18	-49.4	-348.3	56.4	45.4	11.05	5.104	
2,400.0	2,372.7	2,394.0	2,362.3	8.0	8.7	9.49	9.49	-52.1	-366.6	56.8	45.2	11.59	4.903	
2,500.0	2,471.0	2,494.0	2,460.6	8.4	9.1	9.79	9.79	-54.8	-384.9	57.3	45.1	12.13	4.720	
2,600.0	2,569.4	2,594.0	2,558.8	8.8	9.5	10.08	10.08	-57.5	-403.2	57.7	45.0	12.68	4.551	
2,700.0	2,667.7	2,694.0	2,657.1	9.3	9.9	10.37	10.37	-60.2	-421.5	58.1	44.9	13.22	4.396	
2,800.0	2,766.1	2,794.0	2,755.4	9.7	10.4	10.66	10.66	-62.9	-439.8	58.6	44.8	13.77	4.253	
2,900.0	2,864.4	2,894.0	2,853.7	10.1	10.8	10.94	10.94	-65.7	-458.1	59.0	44.7	14.32	4.120	
3,000.0	2,962.8	2,994.0	2,951.9	10.5	11.2	11.21	11.21	-68.4	-476.3	59.5	44.6	14.87	3.997	
3,100.0	3,061.1	3,094.0	3,050.2	10.9	11.6	11.49	11.49	-71.1	-494.6	59.9	44.5	15.43	3.882	
3,200.0	3,159.4	3,194.0	3,148.5	11.3	12.0	11.76	11.76	-73.8	-512.9	60.3	44.4	15.98	3.775	
3,300.0	3,257.8	3,294.0	3,246.8	11.8	12.5	12.02	12.02	-76.5	-531.2	60.8	44.2	16.54	3.675	
3,400.0	3,356.1	3,394.0	3,345.0	12.2	12.9	12.28	12.28	-79.2	-549.5	61.2	44.1	17.10	3.580	
3,500.0	3,454.5	3,494.0	3,443.3	12.6	13.3	12.54	12.54	-81.9	-567.8	61.7	44.0	17.66	3.492	
3,600.0	3,552.8	3,594.0	3,541.6	13.0	13.7	12.80	12.80	-84.6	-586.1	62.1	43.9	18.22	3.409	
3,700.0	3,651.2	3,694.0	3,639.9	13.4	14.2	13.05	13.05	-87.3	-604.3	62.6	43.8	18.79	3.330	
3,800.0	3,749.5	3,794.0	3,738.1	13.8	14.6	13.29	13.29	-90.0	-622.6	63.0	43.7	19.35	3.256	
3,900.0	3,847.9	3,894.0	3,836.4	14.2	15.0	13.54	13.54	-92.7	-640.9	63.5	43.5	19.92	3.186	
4,000.0	3,946.2	3,993.9	3,934.7	14.7	15.4	13.78	13.78	-95.4	-659.2	63.9	43.4	20.49	3.119	
4,100.0	4,044.6	4,093.9	4,033.0	15.1	15.9	14.01	14.01	-98.1	-677.5	64.4	43.3	21.06	3.056	
4,200.0	4,142.9	4,193.9	4,131.2	15.5	16.3	14.24	14.24	-100.8	-695.8	64.8	43.2	21.63	2.996	
4,300.0	4,241.3	4,293.9	4,229.5	15.9	16.7	14.47	14.47	-103.5	-714.0	65.3	43.1	22.21	2.939	
4,400.0	4,339.6	4,393.9	4,327.8	16.3	17.1	14.70	14.70	-106.2	-732.3	65.7	42.9	22.79	2.885	
4,500.0	4,437.9	4,493.9	4,426.1	16.7	17.5	14.93	14.93	-108.9	-750.6	66.2	42.8	23.36	2.833	
4,600.0	4,536.3	4,593.9	4,524.3	17.2	18.0	15.15	15.15	-111.6	-768.9	66.6	42.7	23.94	2.783	
4,700.0	4,634.6	4,693.9	4,622.6	17.6	18.4	15.36	15.36	-114.3	-787.2	67.1	42.6	24.52	2.736	
4,800.0	4,733.0	4,793.9	4,720.9	18.0	18.8	15.58	15.58	-117.0	-805.5	67.6	42.5	25.11	2.691	
4,900.0	4,831.3	4,893.9	4,819.2	18.4	19.2	15.79	15.79	-119.7	-823.8	68.0	42.3	25.69	2.648	
5,000.0	4,929.7	4,993.9	4,917.4	18.8	19.7	16.00	16.00	-122.4	-842.0	68.5	42.2	26.28	2.606	

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-30-2N
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-30-2N	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 #3 (8-6-14)	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)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,028.0	5,093.9	5,015.7	19.2	20.1	16.20		-125.1	-860.3	68.9	42.1	26.86	2.566	
5,200.0	5,126.4	5,193.9	5,114.0	19.7	20.5	16.41		-127.8	-878.6	69.4	42.0	27.45	2.528	
5,300.0	5,224.7	5,293.9	5,212.3	20.1	20.9	16.61		-130.5	-896.9	69.9	41.8	28.04	2.492	
5,400.0	5,323.1	5,393.9	5,310.5	20.5	21.4	16.81		-133.2	-915.2	70.3	41.7	28.63	2.456	
5,500.0	5,421.4	5,493.9	5,408.8	20.9	21.8	17.00		-135.9	-933.5	70.8	41.6	29.23	2.422	
5,600.0	5,519.8	5,593.9	5,507.1	21.3	22.2	17.13		-138.6	-951.8	71.5	41.7	29.80	2.400	
5,700.0	5,618.7	5,693.9	5,605.3	21.6	22.6	16.63		-141.3	-970.0	75.0	44.8	30.17	2.485	
5,800.0	5,718.0	5,793.6	5,703.3	21.8	23.1	15.52		-144.0	-988.3	81.8	51.4	30.38	2.692	
5,900.0	5,817.6	5,893.1	5,801.1	22.0	23.5	14.04		-146.7	-1,006.5	92.0	61.5	30.50	3.016	
6,000.0	5,917.5	5,992.1	5,898.4	22.2	23.9	12.46		-149.4	-1,024.6	105.6	75.1	30.57	3.455	
6,100.0	6,017.5	6,091.7	5,996.3	22.3	24.3	-88.61		-152.1	-1,042.7	122.5	91.9	30.62	4.002	
6,200.0	6,117.5	6,195.1	6,098.4	22.4	24.6	-89.78		-154.5	-1,058.8	138.2	107.3	30.84	4.480	
6,300.0	6,217.5	6,299.5	6,202.0	22.5	24.8	-90.51		-156.3	-1,071.4	150.2	119.1	31.12	4.828	
6,400.0	6,317.5	6,404.8	6,306.9	22.6	25.0	-90.96		-157.7	-1,080.4	158.7	127.3	31.43	5.051	
6,500.0	6,417.5	6,510.6	6,412.6	22.8	25.2	-91.19		-158.4	-1,085.5	163.6	131.8	31.75	5.152	
6,600.0	6,517.5	6,615.5	6,517.5	22.9	25.3	-91.25		-158.6	-1,086.8	164.8	132.7	32.10	5.135	
6,700.0	6,617.5	6,715.5	6,617.5	23.0	25.4	-91.25		-158.6	-1,086.8	164.8	132.4	32.45	5.081	
6,800.0	6,717.5	6,815.5	6,717.5	23.2	25.6	-91.25		-158.6	-1,086.8	164.8	132.0	32.80	5.026	
6,843.2	6,760.7	6,858.7	6,760.7	23.2	25.6	-91.75		-158.6	-1,086.8	164.9	131.9	32.94	5.005	
6,900.0	6,817.5	6,915.5	6,817.5	23.3	25.7	-92.03		-158.6	-1,086.8	164.9	131.8	33.10	4.981	
7,000.0	6,915.8	7,013.8	6,915.8	23.4	25.8	-97.70		-158.6	-1,086.8	166.4	133.5	32.91	5.056	
7,100.0	7,009.1	7,111.1	7,013.1	23.5	25.9	-107.92		-157.4	-1,086.8	174.6	141.7	32.85	5.314	
7,200.0	7,093.8	7,219.8	7,120.0	23.5	26.0	-118.27		-138.6	-1,086.7	190.3	157.5	32.79	5.804	
7,300.0	7,166.9	7,339.5	7,230.3	23.5	26.1	-126.73		-92.9	-1,086.5	210.1	178.3	31.78	6.610	
7,400.0	7,225.7	7,472.0	7,336.6	23.6	26.1	-133.18		-14.5	-1,086.2	230.2	200.5	29.63	7.769	
7,500.0	7,268.0	7,617.6	7,426.7	23.7	26.2	-137.62		99.4	-1,085.7	246.9	220.0	26.86	9.193	
7,600.0	7,292.2	7,774.3	7,484.3	24.0	26.4	-140.03		244.4	-1,085.1	257.0	232.5	24.53	10.477	
7,700.0	7,297.9	7,920.3	7,497.8	24.3	26.8	-140.48		389.4	-1,084.5	259.0	235.1	23.90	10.837	
7,800.0	7,297.5	8,020.3	7,497.4	24.8	27.2	-140.50		489.4	-1,084.1	259.1	234.2	24.92	10.401	
7,900.0	7,297.0	8,120.3	7,497.1	25.4	27.8	-140.51		589.4	-1,083.7	259.2	233.1	26.16	9.908	
8,000.0	7,296.5	8,220.3	7,496.7	26.2	28.5	-140.53		689.4	-1,083.3	259.3	231.7	27.62	9.390	
8,100.0	7,296.1	8,320.3	7,496.4	27.2	29.3	-140.54		789.4	-1,082.9	259.4	230.2	29.24	8.872	
8,200.0	7,295.6	8,420.3	7,496.0	28.2	30.3	-140.56		889.4	-1,082.5	259.5	228.5	31.02	8.368	
8,300.0	7,295.1	8,520.3	7,495.7	29.4	31.3	-140.57		989.4	-1,082.0	259.6	226.7	32.91	7.889	
8,400.0	7,294.6	8,620.3	7,495.3	30.6	32.5	-140.59		1,089.4	-1,081.6	259.7	224.8	34.91	7.441	
8,500.0	7,294.2	8,720.3	7,495.0	32.0	33.7	-140.61		1,189.4	-1,081.2	259.8	222.9	36.99	7.025	
8,600.0	7,293.7	8,820.3	7,494.6	33.3	35.0	-140.62		1,289.4	-1,080.8	259.9	220.8	39.14	6.641	
8,700.0	7,293.2	8,920.3	7,494.3	34.8	36.4	-140.64		1,389.4	-1,080.4	260.0	218.7	41.35	6.288	
8,800.0	7,292.8	9,020.3	7,493.9	36.3	37.8	-140.65		1,489.4	-1,080.0	260.1	216.5	43.62	5.964	
8,900.0	7,292.3	9,120.3	7,493.6	37.8	39.3	-140.67		1,589.4	-1,079.6	260.2	214.3	45.92	5.667	
9,000.0	7,291.8	9,220.3	7,493.2	39.4	40.8	-140.68		1,689.4	-1,079.1	260.3	212.1	48.27	5.394	
9,100.0	7,291.3	9,320.3	7,492.9	41.0	42.3	-140.70		1,789.4	-1,078.7	260.4	209.8	50.64	5.143	
9,200.0	7,290.9	9,420.3	7,492.5	42.6	43.9	-140.71		1,889.4	-1,078.3	260.5	207.5	53.04	4.912	
9,300.0	7,290.4	9,520.3	7,492.2	44.2	45.5	-140.73		1,989.4	-1,077.9	260.6	205.2	55.46	4.699	
9,400.0	7,289.9	9,620.3	7,491.8	45.9	47.1	-140.74		2,089.4	-1,077.5	260.7	202.8	57.91	4.503	
9,500.0	7,289.5	9,720.3	7,491.5	47.6	48.7	-140.76		2,189.4	-1,077.1	260.8	200.5	60.37	4.321	
9,600.0	7,289.0	9,820.3	7,491.1	49.3	50.4	-140.78		2,289.4	-1,076.6	260.9	198.1	62.85	4.152	
9,700.0	7,288.5	9,920.3	7,490.8	51.0	52.1	-140.79		2,389.4	-1,076.2	261.0	195.7	65.34	3.995	
9,800.0	7,288.0	10,020.3	7,490.4	52.7	53.8	-140.81		2,489.4	-1,075.8	261.1	193.3	67.84	3.849	
9,900.0	7,287.6	10,120.3	7,490.1	54.5	55.5	-140.82		2,589.4	-1,075.4	261.2	190.9	70.35	3.713	
10,000.0	7,287.1	10,220.3	7,489.7	56.2	57.2	-140.84		2,689.4	-1,075.0	261.3	188.5	72.87	3.586	

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-30-2N
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-30-2N	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 #3 (8-6-14)	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)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
10,100.0	7,286.6	10,320.3	7,489.4	58.0	59.0	-140.85	2,789.4	-1,074.6	261.5	186.0	75.40	3.467		
10,200.0	7,286.2	10,420.3	7,489.0	59.8	60.7	-140.87	2,889.4	-1,074.2	261.6	183.6	77.94	3.356		
10,300.0	7,285.7	10,520.3	7,488.7	61.6	62.5	-140.88	2,989.4	-1,073.7	261.7	181.2	80.49	3.251		
10,400.0	7,285.2	10,620.3	7,488.3	63.4	64.2	-140.90	3,089.4	-1,073.3	261.8	178.7	83.04	3.152		
10,500.0	7,284.7	10,720.3	7,488.0	65.2	66.0	-140.91	3,189.4	-1,072.9	261.9	176.3	85.59	3.059		
10,600.0	7,284.3	10,820.3	7,487.6	67.0	67.8	-140.93	3,289.4	-1,072.5	262.0	173.8	88.15	2.972		
10,700.0	7,283.8	10,920.3	7,487.3	68.8	69.6	-140.94	3,389.4	-1,072.1	262.1	171.3	90.71	2.889		
10,800.0	7,283.3	11,020.3	7,486.9	70.6	71.4	-140.96	3,489.4	-1,071.7	262.2	168.9	93.28	2.810		
10,900.0	7,282.9	11,120.3	7,486.6	72.4	73.2	-140.97	3,589.4	-1,071.3	262.3	166.4	95.85	2.736		
11,000.0	7,282.4	11,220.3	7,486.2	74.2	75.0	-140.99	3,689.4	-1,070.8	262.4	163.9	98.42	2.666		
11,100.0	7,281.9	11,320.3	7,485.9	76.1	76.8	-141.00	3,789.4	-1,070.4	262.5	161.5	101.00	2.599		
11,200.0	7,281.4	11,420.3	7,485.5	77.9	78.6	-141.02	3,889.4	-1,070.0	262.6	159.0	103.58	2.535		
11,300.0	7,281.0	11,520.3	7,485.2	79.7	80.5	-141.04	3,989.4	-1,069.6	262.7	156.5	106.15	2.474		
11,400.0	7,280.5	11,620.3	7,484.8	81.6	82.3	-141.05	4,089.4	-1,069.2	262.8	154.0	108.74	2.416		
11,500.0	7,280.0	11,720.3	7,484.5	83.4	84.1	-141.07	4,189.4	-1,068.8	262.9	151.5	111.32	2.361		
11,600.0	7,279.6	11,820.3	7,484.2	85.3	85.9	-141.08	4,289.4	-1,068.4	263.0	149.1	113.90	2.309		
11,700.0	7,279.1	11,920.3	7,483.8	87.1	87.8	-141.10	4,389.4	-1,067.9	263.1	146.6	116.49	2.258		
11,800.0	7,278.6	12,020.3	7,483.5	89.0	89.6	-141.11	4,489.4	-1,067.5	263.2	144.1	119.08	2.210		
11,900.0	7,278.1	12,120.3	7,483.1	90.8	91.5	-141.13	4,589.4	-1,067.1	263.3	141.6	121.66	2.164		
11,931.2	7,278.0	12,150.9	7,483.0	91.4	92.1	-141.13	4,619.9	-1,067.0	263.3	140.8	122.46	2.150 SF		

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-2N
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-30-2N	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 #3 (8-6-14)	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	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	16.8	16.8	16.8	0.00	N/A	
100.0	100.0	100.0	100.0	0.1	0.1	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		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		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		0.0	16.8	16.8	15.2	1.57	10.682 CC, ES	
500.0	500.0	500.0	500.0	1.0	1.0	-171.35		0.0	16.8	18.5	16.5	2.01	9.214	
600.0	599.8	599.8	599.8	1.2	1.2	-173.24		0.0	16.8	23.7	21.3	2.44	9.704	
700.0	699.5	700.5	700.5	1.4	1.4	-174.63		-0.4	15.1	30.7	27.8	2.86	10.705	
800.0	798.7	801.5	801.3	1.7	1.7	-175.26		-1.5	9.9	37.6	34.3	3.28	11.479	
900.0	897.5	902.7	902.1	2.0	1.9	-175.48		-3.3	1.2	44.5	40.8	3.70	12.032	
1,000.0	995.8	1,004.2	1,002.9	2.4	2.1	-175.38		-6.0	-11.0	50.3	46.2	4.15	12.143	
1,100.0	1,094.2	1,104.4	1,102.0	2.8	2.4	-174.99		-9.0	-25.4	53.9	49.3	4.61	11.697	
1,200.0	1,192.5	1,204.4	1,200.9	3.1	2.7	-174.64		-12.1	-39.7	57.4	52.4	5.09	11.295	
1,300.0	1,290.9	1,304.3	1,299.7	3.5	3.1	-174.33		-15.2	-54.1	61.0	55.4	5.57	10.948	
1,400.0	1,389.2	1,404.3	1,398.6	3.9	3.4	-174.05		-18.3	-68.5	64.5	58.4	6.06	10.646	
1,500.0	1,487.6	1,504.2	1,497.4	4.3	3.7	-173.81		-21.4	-82.8	68.0	61.5	6.55	10.382	
1,600.0	1,585.9	1,604.1	1,596.3	4.7	4.1	-173.59		-24.4	-97.2	71.5	64.5	7.05	10.149	
1,700.0	1,684.3	1,704.1	1,695.1	5.1	4.4	-173.39		-27.5	-111.6	75.1	67.5	7.55	9.943	
1,800.0	1,782.6	1,804.0	1,794.0	5.6	4.7	-173.20		-30.6	-125.9	78.6	70.5	8.05	9.760	
1,900.0	1,880.9	1,903.9	1,892.8	6.0	5.1	-173.04		-33.7	-140.3	82.1	73.5	8.56	9.595	
2,000.0	1,979.3	2,003.9	1,991.7	6.4	5.4	-172.88		-36.8	-154.6	85.6	76.6	9.06	9.447	
2,100.0	2,077.6	2,103.8	2,090.6	6.8	5.8	-172.74		-39.8	-169.0	89.2	79.6	9.57	9.313	
2,200.0	2,176.0	2,203.8	2,189.4	7.2	6.2	-172.61		-42.9	-183.4	92.7	82.6	10.08	9.192	
2,300.0	2,274.3	2,303.7	2,288.3	7.6	6.5	-172.49		-46.0	-197.7	96.2	85.6	10.60	9.081	
2,400.0	2,372.7	2,403.6	2,387.1	8.0	6.9	-172.38		-49.1	-212.1	99.7	88.6	11.11	8.980	
2,500.0	2,471.0	2,503.6	2,486.0	8.4	7.2	-172.27		-52.1	-226.5	103.3	91.7	11.62	8.887	
2,600.0	2,569.4	2,603.5	2,584.8	8.8	7.6	-172.17		-55.2	-240.8	106.8	94.7	12.14	8.801	
2,700.0	2,667.7	2,703.4	2,683.7	9.3	7.9	-172.08		-58.3	-255.2	110.3	97.7	12.65	8.721	
2,800.0	2,766.1	2,803.4	2,782.5	9.7	8.3	-172.00		-61.4	-269.6	113.9	100.7	13.17	8.648	
2,900.0	2,864.4	2,903.3	2,881.4	10.1	8.6	-171.92		-64.5	-283.9	117.4	103.7	13.68	8.579	
3,000.0	2,962.8	3,003.3	2,980.2	10.5	9.0	-171.84		-67.5	-298.3	120.9	106.7	14.20	8.516	
3,100.0	3,061.1	3,103.2	3,079.1	10.9	9.4	-171.77		-70.6	-312.6	124.5	109.7	14.72	8.456	
3,200.0	3,159.4	3,203.1	3,177.9	11.3	9.7	-171.70		-73.7	-327.0	128.0	112.8	15.24	8.400	
3,300.0	3,257.8	3,303.1	3,276.8	11.8	10.1	-171.64		-76.8	-341.4	131.5	115.8	15.76	8.348	
3,400.0	3,356.1	3,403.0	3,375.6	12.2	10.4	-171.58		-79.9	-355.7	135.1	118.8	16.27	8.299	
3,500.0	3,454.5	3,502.9	3,474.5	12.6	10.8	-171.52		-82.9	-370.1	138.6	121.8	16.79	8.253	
3,600.0	3,552.8	3,602.9	3,573.3	13.0	11.2	-171.46		-86.0	-384.5	142.1	124.8	17.31	8.209	
3,700.0	3,651.2	3,702.8	3,672.2	13.4	11.5	-171.41		-89.1	-398.8	145.7	127.8	17.83	8.168	
3,800.0	3,749.5	3,802.8	3,771.0	13.8	11.9	-171.36		-92.2	-413.2	149.2	130.8	18.35	8.129	
3,900.0	3,847.9	3,902.7	3,869.9	14.2	12.2	-171.31		-95.2	-427.5	152.7	133.8	18.87	8.092	
4,000.0	3,946.2	4,002.6	3,968.7	14.7	12.6	-171.27		-98.3	-441.9	156.3	136.9	19.39	8.057	
4,100.0	4,044.6	4,102.6	4,067.6	15.1	13.0	-171.23		-101.4	-456.3	159.8	139.9	19.91	8.024	
4,200.0	4,142.9	4,202.5	4,166.4	15.5	13.3	-171.18		-104.5	-470.6	163.3	142.9	20.43	7.992	
4,300.0	4,241.3	4,302.4	4,265.3	15.9	13.7	-171.14		-107.6	-485.0	166.9	145.9	20.96	7.962	
4,400.0	4,339.6	4,402.4	4,364.1	16.3	14.0	-171.11		-110.6	-499.4	170.4	148.9	21.48	7.933	
4,500.0	4,437.9	4,502.3	4,463.0	16.7	14.4	-171.07		-113.7	-513.7	173.9	151.9	22.00	7.906	
4,600.0	4,536.3	4,602.3	4,561.9	17.2	14.8	-171.04		-116.8	-528.1	177.4	154.9	22.52	7.880	
4,700.0	4,634.6	4,702.2	4,660.7	17.6	15.1	-171.00		-119.9	-542.5	181.0	157.9	23.04	7.855	
4,800.0	4,733.0	4,802.1	4,759.6	18.0	15.5	-170.97		-123.0	-556.8	184.5	161.0	23.56	7.831	
4,900.0	4,831.3	4,902.1	4,858.4	18.4	15.8	-170.94		-126.0	-571.2	188.0	164.0	24.09	7.808	
5,000.0	4,929.7	5,002.0	4,957.3	18.8	16.2	-170.91		-129.1	-585.5	191.6	167.0	24.61	7.785	

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-30-2N
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-30-2N	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 #3 (8-6-14)	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	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	5,028.0	5,102.0	5,056.1	19.2	16.6	-170.88	-132.2	-599.9	195.1	170.0	25.13	7.764		
5,200.0	5,126.4	5,201.9	5,155.0	19.7	16.9	-170.85	-135.3	-614.3	198.6	173.0	25.65	7.744		
5,300.0	5,224.7	5,301.8	5,253.8	20.1	17.3	-170.82	-138.4	-628.6	202.2	176.0	26.17	7.724		
5,400.0	5,323.1	5,401.8	5,352.7	20.5	17.6	-170.80	-141.4	-643.0	205.7	179.0	26.70	7.706		
5,500.0	5,421.4	5,501.7	5,451.5	20.9	18.0	-170.77	-144.5	-657.4	209.2	182.0	27.22	7.687		
5,600.0	5,519.8	5,601.6	5,550.4	21.3	18.4	-170.74	-147.6	-671.7	212.5	184.8	27.74	7.661		
5,700.0	5,618.7	5,696.8	5,644.6	21.6	18.7	-170.64	-150.4	-684.7	213.8	185.6	28.18	7.587		
5,800.0	5,718.0	5,790.0	5,737.2	21.8	18.9	-170.56	-152.5	-694.5	214.7	186.1	28.53	7.525		
5,900.0	5,817.6	5,883.1	5,830.1	22.0	19.1	-170.50	-153.9	-701.4	215.3	186.4	28.82	7.468		
6,000.0	5,917.5	5,976.3	5,923.2	22.2	19.2	-170.47	-154.8	-705.3	215.6	186.5	29.07	7.416		
6,100.0	6,017.5	6,070.6	6,017.5	22.3	19.3	90.00	-155.0	-706.3	215.7	186.4	29.29	7.364		
6,200.0	6,117.5	6,170.6	6,117.5	22.4	19.5	90.00	-155.0	-706.3	215.7	186.1	29.64	7.276		
6,300.0	6,217.5	6,270.6	6,217.5	22.5	19.6	90.00	-155.0	-706.3	215.7	185.7	30.00	7.191		
6,400.0	6,317.5	6,370.6	6,317.5	22.6	19.8	90.00	-155.0	-706.3	215.7	185.4	30.35	7.107		
6,500.0	6,417.5	6,470.6	6,417.5	22.8	19.9	90.00	-155.0	-706.3	215.7	185.0	30.71	7.024		
6,600.0	6,517.5	6,570.6	6,517.5	22.9	20.0	90.00	-155.0	-706.3	215.7	184.6	31.07	6.942		
6,700.0	6,617.5	6,670.6	6,617.5	23.0	20.2	90.00	-155.0	-706.3	215.7	184.3	31.43	6.862		
6,800.0	6,717.5	6,770.6	6,717.5	23.2	20.3	90.00	-155.0	-706.3	215.7	183.9	31.80	6.783		
6,900.0	6,817.5	6,870.6	6,817.4	23.3	20.5	89.76	-153.4	-706.3	215.7	183.5	32.18	6.704		
7,000.0	6,915.8	6,970.4	6,915.6	23.4	20.6	89.77	-136.3	-706.2	215.7	183.2	32.44	6.648		
7,100.0	7,009.1	7,070.3	7,008.8	23.5	20.7	89.78	-100.7	-706.1	215.7	183.0	32.63	6.609		
7,200.0	7,093.8	7,170.2	7,093.5	23.5	20.7	89.81	-48.0	-705.9	215.6	182.8	32.82	6.570		
7,300.0	7,166.9	7,270.1	7,166.5	23.5	20.8	89.84	19.9	-705.7	215.6	182.5	33.10	6.513		
7,400.0	7,225.7	7,370.0	7,225.4	23.6	20.9	89.88	100.5	-705.4	215.5	181.9	33.59	6.417		
7,500.0	7,268.0	7,469.9	7,267.7	23.7	21.0	89.92	190.8	-705.1	215.5	181.1	34.37	6.269		
7,600.0	7,292.2	7,569.9	7,292.1	24.0	21.2	89.97	287.6	-704.7	215.4	179.9	35.49	6.069		
7,700.0	7,297.9	7,669.9	7,298.0	24.3	21.7	90.01	387.3	-704.4	215.3	178.4	36.94	5.829		
7,800.0	7,297.5	7,769.9	7,297.5	24.8	22.3	90.01	487.3	-704.0	215.3	176.6	38.71	5.561		
7,900.0	7,297.0	7,869.9	7,297.0	25.4	23.0	90.01	587.3	-703.7	215.2	174.4	40.75	5.280		
8,000.0	7,296.5	7,969.9	7,296.5	26.2	24.0	90.01	687.3	-703.3	215.1	172.1	43.04	4.998		
8,100.0	7,296.1	8,069.9	7,296.1	27.2	25.1	90.01	787.3	-702.9	215.1	169.5	45.53	4.723		
8,200.0	7,295.6	8,169.9	7,295.6	28.2	26.2	90.01	887.3	-702.6	215.0	166.8	48.20	4.460		
8,300.0	7,295.1	8,269.9	7,295.1	29.4	27.5	90.01	987.3	-702.2	214.9	163.9	51.02	4.212		
8,400.0	7,294.6	8,369.9	7,294.7	30.6	28.9	90.01	1,087.3	-701.9	214.9	160.9	53.96	3.981		
8,500.0	7,294.2	8,469.9	7,294.2	32.0	30.3	90.01	1,187.3	-701.5	214.8	157.8	57.01	3.767		
8,600.0	7,293.7	8,569.9	7,293.7	33.3	31.8	90.01	1,287.3	-701.2	214.7	154.6	60.15	3.570		
8,700.0	7,293.2	8,669.9	7,293.2	34.8	33.3	90.01	1,387.3	-700.8	214.7	151.3	63.36	3.388		
8,800.0	7,292.8	8,769.9	7,292.8	36.3	34.9	90.01	1,487.3	-700.5	214.6	147.9	66.64	3.220		
8,900.0	7,292.3	8,869.9	7,292.3	37.8	36.5	90.01	1,587.3	-700.1	214.5	144.5	69.97	3.066		
9,000.0	7,291.8	8,969.9	7,291.8	39.4	38.1	90.01	1,687.3	-699.7	214.4	141.1	73.36	2.923		
9,100.0	7,291.3	9,069.9	7,291.4	41.0	39.8	90.01	1,787.2	-699.4	214.4	137.6	76.78	2.792		
9,200.0	7,290.9	9,169.9	7,290.9	42.6	41.4	90.01	1,887.2	-699.0	214.3	134.1	80.24	2.671		
9,300.0	7,290.4	9,269.9	7,290.4	44.2	43.1	90.01	1,987.2	-698.7	214.2	130.5	83.73	2.559		
9,400.0	7,289.9	9,369.9	7,289.9	45.9	44.9	90.01	2,087.2	-698.3	214.2	126.9	87.25	2.455		
9,500.0	7,289.5	9,469.9	7,289.5	47.6	46.6	90.01	2,187.2	-698.0	214.1	123.3	90.80	2.358		
9,600.0	7,289.0	9,569.9	7,289.0	49.3	48.3	90.01	2,287.2	-697.6	214.0	119.7	94.37	2.268		
9,700.0	7,288.5	9,669.9	7,288.5	51.0	50.1	90.01	2,387.2	-697.2	214.0	116.0	97.95	2.184		
9,800.0	7,288.0	9,769.9	7,288.1	52.7	51.8	90.01	2,487.2	-696.9	213.9	112.3	101.56	2.106		
9,900.0	7,287.6	9,869.9	7,287.6	54.5	53.6	90.01	2,587.2	-696.5	213.8	108.7	105.18	2.033		
10,000.0	7,287.1	9,969.9	7,287.1	56.2	55.4	90.01	2,687.2	-696.2	213.8	104.9	108.81	1.964		
10,100.0	7,286.6	10,069.9	7,286.7	58.0	57.2	90.01	2,787.2	-695.8	213.7	101.2	112.46	1.900		

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-30-2N
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-30-2N	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 #3 (8-6-14)	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
10,200.0	7,286.2	10,169.9	7,286.2	59.8	59.0	90.01	2,887.2	-695.5	213.6	97.5	116.12	1.840	
10,300.0	7,285.7	10,269.9	7,285.7	61.6	60.8	90.01	2,987.2	-695.1	213.6	93.8	119.79	1.783	
10,400.0	7,285.2	10,369.9	7,285.2	63.4	62.6	90.01	3,087.2	-694.8	213.5	90.0	123.47	1.729	
10,500.0	7,284.7	10,469.9	7,284.8	65.2	64.4	90.01	3,187.2	-694.4	213.4	86.3	127.16	1.678	
10,600.0	7,284.3	10,569.9	7,284.3	67.0	66.3	90.01	3,287.2	-694.0	213.4	82.5	130.86	1.630	
10,700.0	7,283.8	10,669.9	7,283.8	68.8	68.1	90.01	3,387.2	-693.7	213.3	78.7	134.56	1.585	
10,800.0	7,283.3	10,769.9	7,283.4	70.6	69.9	90.01	3,487.2	-693.3	213.2	74.9	138.27	1.542	
10,900.0	7,282.9	10,869.9	7,282.9	72.4	71.8	90.01	3,587.2	-693.0	213.1	71.2	141.99	1.501	
11,000.0	7,282.4	10,969.9	7,282.4	74.2	73.6	90.01	3,687.2	-692.6	213.1	67.4	145.71	1.462 Level 3	
11,100.0	7,281.9	11,069.9	7,281.9	76.1	75.5	90.01	3,787.2	-692.3	213.0	63.6	149.44	1.425 Level 3	
11,200.0	7,281.4	11,169.9	7,281.5	77.9	77.3	90.01	3,887.2	-691.9	212.9	59.8	153.17	1.390 Level 3	
11,300.0	7,281.0	11,269.9	7,281.0	79.7	79.2	90.01	3,987.2	-691.6	212.9	56.0	156.91	1.357 Level 3	
11,400.0	7,280.5	11,369.9	7,280.5	81.6	81.0	90.01	4,087.2	-691.2	212.8	52.2	160.65	1.325 Level 3	
11,500.0	7,280.0	11,469.9	7,280.1	83.4	82.9	90.01	4,187.2	-690.8	212.7	48.3	164.39	1.294 Level 3	
11,600.0	7,279.6	11,569.9	7,279.6	85.3	84.7	90.01	4,287.2	-690.5	212.7	44.5	168.14	1.265 Level 3	
11,700.0	7,279.1	11,669.9	7,279.1	87.1	86.6	90.01	4,387.2	-690.1	212.6	40.7	171.90	1.237 Level 2	
11,800.0	7,278.6	11,769.9	7,278.6	89.0	88.5	90.01	4,487.2	-689.8	212.5	36.9	175.65	1.210 Level 2	
11,900.0	7,278.1	11,869.9	7,278.2	90.8	90.3	90.01	4,587.2	-689.4	212.5	33.1	179.41	1.184 Level 2	
11,931.2	7,278.0	11,901.1	7,278.0	91.4	90.9	90.01	4,618.4	-689.3	212.4	31.9	180.59	1.176 Level 2, SF	

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-2N
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-30-2N	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 #3 (8-6-14)	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)	+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	83.26		3.6	30.8	31.0				
100.0	100.0	100.0	100.0	0.1	0.1	83.26		3.6	30.8	31.0	30.8	0.22	138.035	
200.0	200.0	200.0	200.0	0.3	0.3	83.26		3.6	30.8	31.0	30.4	0.67	46.012	
300.0	300.0	300.0	300.0	0.6	0.6	83.26		3.6	30.8	31.0	29.9	1.12	27.607	
400.0	400.0	400.0	400.0	0.8	0.8	83.26		3.6	30.8	31.0	29.5	1.57	19.719 CC, ES	
500.0	500.0	500.0	500.0	1.0	1.0	-177.35		3.6	30.8	32.8	30.8	2.01	16.294	
600.0	599.8	599.8	599.8	1.2	1.2	-177.71		3.6	30.8	38.0	35.6	2.44	15.548	
700.0	699.5	699.5	699.5	1.4	1.5	-178.13		3.6	30.8	46.7	43.8	2.88	16.201	
800.0	798.7	798.7	798.7	1.7	1.7	-178.51		3.6	30.8	58.9	55.6	3.33	17.708	
900.0	897.5	900.0	900.0	2.0	1.9	-178.68		3.2	29.1	72.8	69.1	3.75	19.412	
1,000.0	995.8	1,002.0	1,001.8	2.4	2.1	-178.58		1.9	23.9	85.7	81.5	4.17	20.545	
1,100.0	1,094.2	1,104.8	1,104.2	2.8	2.3	-178.27		-0.4	15.1	95.1	90.5	4.61	20.628	
1,200.0	1,192.5	1,208.1	1,206.7	3.1	2.6	-177.77		-3.5	2.7	100.9	95.9	5.07	19.924	
1,300.0	1,290.9	1,308.7	1,306.2	3.5	2.9	-177.16		-7.2	-11.7	104.4	98.9	5.53	18.872	
1,400.0	1,389.2	1,408.7	1,405.1	3.9	3.2	-176.60		-10.9	-26.1	107.8	101.8	6.01	17.949	
1,500.0	1,487.6	1,508.6	1,503.9	4.3	3.5	-176.06		-14.5	-40.5	111.2	104.7	6.49	17.144	
1,600.0	1,585.9	1,608.5	1,602.7	4.7	3.8	-175.56		-18.2	-54.9	114.7	107.7	6.98	16.436	
1,700.0	1,684.3	1,708.5	1,701.5	5.1	4.1	-175.09		-21.9	-69.3	118.1	110.6	7.47	15.814	
1,800.0	1,782.6	1,808.4	1,800.4	5.6	4.4	-174.65		-25.6	-83.7	121.6	113.6	7.97	15.259	
1,900.0	1,880.9	1,908.3	1,899.2	6.0	4.8	-174.23		-29.2	-98.0	125.0	116.5	8.47	14.763	
2,000.0	1,979.3	2,008.3	1,998.0	6.4	5.1	-173.83		-32.9	-112.4	128.5	119.5	8.97	14.317	
2,100.0	2,077.6	2,108.2	2,096.9	6.8	5.5	-173.45		-36.6	-126.8	131.9	122.5	9.48	13.915	
2,200.0	2,176.0	2,208.1	2,195.7	7.2	5.8	-173.10		-40.2	-141.2	135.4	125.4	9.99	13.551	
2,300.0	2,274.3	2,308.1	2,294.5	7.6	6.2	-172.76		-43.9	-155.6	138.9	128.4	10.51	13.219	
2,400.0	2,372.7	2,408.0	2,393.3	8.0	6.5	-172.44		-47.6	-170.0	142.4	131.4	11.02	12.916	
2,500.0	2,471.0	2,508.0	2,492.2	8.4	6.9	-172.13		-51.2	-184.3	145.9	134.3	11.54	12.637	
2,600.0	2,569.4	2,607.9	2,591.0	8.8	7.2	-171.84		-54.9	-198.7	149.4	137.3	12.06	12.381	
2,700.0	2,667.7	2,707.8	2,689.8	9.3	7.6	-171.56		-58.6	-213.1	152.9	140.3	12.59	12.145	
2,800.0	2,766.1	2,807.8	2,788.6	9.7	7.9	-171.29		-62.2	-227.5	156.4	143.2	13.11	11.926	
2,900.0	2,864.4	2,907.7	2,887.5	10.1	8.3	-171.03		-65.9	-241.9	159.9	146.2	13.64	11.723	
3,000.0	2,962.8	3,007.6	2,986.3	10.5	8.6	-170.79		-69.6	-256.3	163.4	149.2	14.16	11.534	
3,100.0	3,061.1	3,107.6	3,085.1	10.9	9.0	-170.56		-73.2	-270.6	166.9	152.2	14.69	11.357	
3,200.0	3,159.4	3,207.5	3,184.0	11.3	9.4	-170.33		-76.9	-285.0	170.4	155.2	15.22	11.192	
3,300.0	3,257.8	3,307.4	3,282.8	11.8	9.7	-170.12		-80.6	-299.4	173.9	158.1	15.75	11.038	
3,400.0	3,356.1	3,407.4	3,381.6	12.2	10.1	-169.91		-84.3	-313.8	177.4	161.1	16.29	10.893	
3,500.0	3,454.5	3,507.3	3,480.4	12.6	10.4	-169.71		-87.9	-328.2	180.9	164.1	16.82	10.756	
3,600.0	3,552.8	3,607.3	3,579.3	13.0	10.8	-169.52		-91.6	-342.6	184.4	167.1	17.36	10.627	
3,700.0	3,651.2	3,707.2	3,678.1	13.4	11.2	-169.33		-95.3	-357.0	188.0	170.1	17.89	10.506	
3,800.0	3,749.5	3,807.1	3,776.9	13.8	11.5	-169.16		-98.9	-371.3	191.5	173.1	18.43	10.391	
3,900.0	3,847.9	3,907.1	3,875.8	14.2	11.9	-168.99		-102.6	-385.7	195.0	176.0	18.97	10.282	
4,000.0	3,946.2	4,007.0	3,974.6	14.7	12.2	-168.82		-106.3	-400.1	198.5	179.0	19.50	10.179	
4,100.0	4,044.6	4,106.9	4,073.4	15.1	12.6	-168.66		-109.9	-414.5	202.1	182.0	20.04	10.082	
4,200.0	4,142.9	4,206.9	4,172.2	15.5	13.0	-168.51		-113.6	-428.9	205.6	185.0	20.58	9.989	
4,300.0	4,241.3	4,306.8	4,271.1	15.9	13.3	-168.36		-117.3	-443.3	209.1	188.0	21.12	9.900	
4,400.0	4,339.6	4,406.7	4,369.9	16.3	13.7	-168.22		-120.9	-457.6	212.7	191.0	21.67	9.816	
4,500.0	4,437.9	4,506.7	4,468.7	16.7	14.0	-168.08		-124.6	-472.0	216.2	194.0	22.21	9.735	
4,600.0	4,536.3	4,606.6	4,567.5	17.2	14.4	-167.94		-128.3	-486.4	219.7	197.0	22.75	9.659	
4,700.0	4,634.6	4,706.6	4,666.4	17.6	14.8	-167.81		-132.0	-500.8	223.3	200.0	23.29	9.585	
4,800.0	4,733.0	4,806.5	4,765.2	18.0	15.1	-167.69		-135.6	-515.2	226.8	203.0	23.84	9.515	
4,900.0	4,831.3	4,906.4	4,864.0	18.4	15.5	-167.57		-139.3	-529.6	230.3	206.0	24.38	9.448	
5,000.0	4,929.7	5,006.4	4,962.9	18.8	15.9	-167.45		-143.0	-543.9	233.9	209.0	24.93	9.383	

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-30-2N
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-30-2N	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 #3 (8-6-14)	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)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
5,100.0	5,028.0	5,106.3	5,061.7	19.2	16.2	-167.33	-146.6	-558.3	237.4	212.0	25.47	9.321		
5,200.0	5,126.4	5,200.0	5,154.5	19.7	16.5	-167.31	-149.8	-570.7	242.1	216.2	25.96	9.326		
5,300.0	5,224.7	5,291.9	5,245.9	20.1	16.7	-167.49	-152.2	-580.0	249.9	223.5	26.39	9.470		
5,400.0	5,323.1	5,383.5	5,337.2	20.5	16.9	-167.85	-153.8	-586.5	260.7	233.9	26.78	9.735		
5,500.0	5,421.4	5,474.4	5,428.0	20.9	17.0	-168.36	-154.7	-590.1	274.6	247.4	27.14	10.115		
5,600.0	5,519.8	5,566.1	5,519.8	21.3	17.2	-168.99	-155.0	-591.0	291.1	263.6	27.49	10.588		
5,700.0	5,618.7	5,665.0	5,618.7	21.6	17.3	-169.58	-155.0	-591.0	305.9	278.1	27.81	11.000		
5,800.0	5,718.0	5,764.3	5,718.0	21.8	17.5	-170.00	-155.0	-591.0	317.3	289.2	28.11	11.287		
5,900.0	5,817.6	5,864.0	5,817.6	22.0	17.6	-170.28	-155.0	-591.0	325.3	296.9	28.39	11.456		
6,000.0	5,917.5	5,963.9	5,917.5	22.2	17.7	-170.43	-155.0	-591.0	329.8	301.2	28.65	11.511		
6,100.0	6,017.5	6,063.9	6,017.5	22.3	17.9	89.99	-155.0	-591.0	331.0	302.1	28.90	11.454		
6,200.0	6,117.5	6,163.9	6,117.5	22.4	18.0	89.99	-155.0	-591.0	331.0	301.8	29.26	11.314		
6,300.0	6,217.5	6,263.9	6,217.5	22.5	18.2	89.99	-155.0	-591.0	331.0	301.4	29.62	11.176		
6,400.0	6,317.5	6,363.9	6,317.5	22.6	18.4	89.99	-155.0	-591.0	331.0	301.0	29.98	11.040		
6,500.0	6,417.5	6,463.9	6,417.5	22.8	18.5	89.99	-155.0	-591.0	331.0	300.7	30.35	10.907		
6,600.0	6,517.5	6,563.9	6,517.5	22.9	18.7	89.99	-155.0	-591.0	331.0	300.3	30.72	10.776		
6,700.0	6,617.5	6,663.9	6,617.5	23.0	18.8	89.99	-155.0	-591.0	331.0	299.9	31.09	10.648		
6,800.0	6,717.5	6,763.9	6,717.5	23.2	19.0	89.99	-155.0	-591.0	331.0	299.6	31.46	10.522		
6,900.0	6,817.5	6,863.8	6,817.4	23.3	19.1	89.75	-153.4	-591.0	331.0	299.2	31.84	10.395		
7,000.0	6,915.8	6,963.5	6,915.5	23.4	19.3	89.76	-136.3	-590.9	331.0	298.9	32.11	10.307		
7,100.0	7,009.1	7,063.3	7,008.6	23.5	19.4	89.78	-100.7	-590.8	331.0	298.7	32.30	10.245		
7,200.0	7,093.8	7,163.1	7,093.2	23.5	19.4	89.80	-48.1	-590.6	330.9	298.4	32.49	10.186		
7,300.0	7,166.9	7,263.0	7,166.3	23.5	19.5	89.84	19.7	-590.4	330.9	298.1	32.77	10.098		
7,400.0	7,225.7	7,362.8	7,225.2	23.6	19.5	89.87	100.2	-590.1	330.8	297.6	33.25	9.949		
7,500.0	7,268.0	7,462.7	7,267.6	23.7	19.7	89.92	190.4	-589.8	330.8	296.7	34.03	9.719		
7,600.0	7,292.2	7,562.7	7,292.1	24.0	20.0	89.97	287.2	-589.4	330.7	295.5	35.16	9.406		
7,700.0	7,297.9	7,662.7	7,298.0	24.3	20.4	90.00	386.9	-589.1	330.6	294.0	36.61	9.031		
7,800.0	7,297.5	7,762.7	7,297.5	24.8	21.1	90.00	486.9	-588.7	330.6	292.2	38.39	8.611		
7,900.0	7,297.0	7,862.7	7,297.0	25.4	21.9	90.00	586.9	-588.4	330.5	290.0	40.44	8.173		
8,000.0	7,296.5	7,962.7	7,296.5	26.2	23.0	90.00	686.9	-588.0	330.4	287.7	42.73	7.732		
8,100.0	7,296.1	8,062.7	7,296.1	27.2	24.1	90.00	786.9	-587.7	330.3	285.1	45.24	7.303		
8,200.0	7,295.6	8,162.7	7,295.6	28.2	25.3	90.00	886.9	-587.3	330.3	282.4	47.91	6.893		
8,300.0	7,295.1	8,262.7	7,295.1	29.4	26.7	90.00	986.9	-587.0	330.2	279.5	50.74	6.508		
8,400.0	7,294.6	8,362.7	7,294.7	30.6	28.1	90.00	1,086.9	-586.6	330.1	276.4	53.69	6.149		
8,500.0	7,294.2	8,462.7	7,294.2	32.0	29.5	90.00	1,186.9	-586.2	330.1	273.3	56.75	5.817		
8,600.0	7,293.7	8,562.7	7,293.7	33.3	31.1	90.00	1,286.9	-585.9	330.0	270.1	59.89	5.510		
8,700.0	7,293.2	8,662.7	7,293.2	34.8	32.6	90.00	1,386.9	-585.5	329.9	266.8	63.11	5.228		
8,800.0	7,292.8	8,762.7	7,292.8	36.3	34.2	90.00	1,486.9	-585.2	329.9	263.5	66.40	4.968		
8,900.0	7,292.3	8,862.7	7,292.3	37.8	35.8	90.00	1,586.8	-584.8	329.8	260.0	69.74	4.729		
9,000.0	7,291.8	8,962.7	7,291.8	39.4	37.5	90.00	1,686.8	-584.5	329.7	256.6	73.12	4.509		
9,100.0	7,291.3	9,062.7	7,291.4	41.0	39.2	90.00	1,786.8	-584.1	329.6	253.1	76.55	4.306		
9,200.0	7,290.9	9,162.7	7,290.9	42.6	40.9	90.00	1,886.8	-583.8	329.6	249.6	80.02	4.119		
9,300.0	7,290.4	9,262.7	7,290.4	44.2	42.6	90.00	1,986.8	-583.4	329.5	246.0	83.52	3.945		
9,400.0	7,289.9	9,362.7	7,290.0	45.9	44.3	90.00	2,086.8	-583.1	329.4	242.4	87.04	3.785		
9,500.0	7,289.5	9,462.7	7,289.5	47.6	46.0	90.00	2,186.8	-582.7	329.4	238.8	90.59	3.636		
9,600.0	7,289.0	9,562.7	7,289.0	49.3	47.8	90.00	2,286.8	-582.4	329.3	235.1	94.16	3.497		
9,700.0	7,288.5	9,662.7	7,288.5	51.0	49.6	90.00	2,386.8	-582.0	329.2	231.5	97.75	3.368		
9,800.0	7,288.0	9,762.7	7,288.1	52.7	51.4	90.00	2,486.8	-581.6	329.1	227.8	101.36	3.247		
9,900.0	7,287.6	9,862.7	7,287.6	54.5	53.1	90.00	2,586.8	-581.3	329.1	224.1	104.99	3.135		
10,000.0	7,287.1	9,962.7	7,287.1	56.2	54.9	90.00	2,686.8	-580.9	329.0	220.4	108.62	3.029		
10,100.0	7,286.6	10,062.7	7,286.7	58.0	56.7	90.00	2,786.8	-580.6	328.9	216.7	112.27	2.930		

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-30-2N
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-30-2N	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 #3 (8-6-14)	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
10,200.0	7,286.2	10,162.7	7,286.2	59.8	58.6	90.00	2,886.8	-580.2	328.9	212.9	115.94	2.837	
10,300.0	7,285.7	10,262.7	7,285.7	61.6	60.4	90.00	2,986.8	-579.9	328.8	209.2	119.61	2.749	
10,400.0	7,285.2	10,362.7	7,285.2	63.4	62.2	90.00	3,086.8	-579.5	328.7	205.4	123.29	2.666	
10,500.0	7,284.7	10,462.7	7,284.8	65.2	64.0	90.00	3,186.8	-579.2	328.7	201.7	126.98	2.588	
10,600.0	7,284.3	10,562.7	7,284.3	67.0	65.9	90.00	3,286.8	-578.8	328.6	197.9	130.68	2.514	
10,700.0	7,283.8	10,662.7	7,283.8	68.8	67.7	90.00	3,386.8	-578.5	328.5	194.1	134.38	2.445	
10,800.0	7,283.3	10,762.7	7,283.4	70.6	69.5	90.00	3,486.8	-578.1	328.4	190.3	138.10	2.378	
10,900.0	7,282.9	10,862.7	7,282.9	72.4	71.4	90.00	3,586.8	-577.8	328.4	186.6	141.82	2.315	
11,000.0	7,282.4	10,962.7	7,282.4	74.2	73.2	90.00	3,686.8	-577.4	328.3	182.8	145.54	2.256	
11,100.0	7,281.9	11,062.7	7,281.9	76.1	75.1	90.00	3,786.8	-577.0	328.2	179.0	149.27	2.199	
11,200.0	7,281.4	11,162.7	7,281.5	77.9	77.0	90.00	3,886.8	-576.7	328.2	175.2	153.00	2.145	
11,300.0	7,281.0	11,262.7	7,281.0	79.7	78.8	90.00	3,986.8	-576.3	328.1	171.3	156.74	2.093	
11,400.0	7,280.5	11,362.7	7,280.5	81.6	80.7	90.00	4,086.8	-576.0	328.0	167.5	160.49	2.044	
11,500.0	7,280.0	11,462.7	7,280.1	83.4	82.5	90.00	4,186.8	-575.6	328.0	163.7	164.23	1.997	
11,600.0	7,279.6	11,562.7	7,279.6	85.3	84.4	90.00	4,286.8	-575.3	327.9	159.9	167.98	1.952	
11,700.0	7,279.1	11,662.7	7,279.1	87.1	86.3	90.00	4,386.8	-574.9	327.8	156.1	171.74	1.909	
11,800.0	7,278.6	11,762.7	7,278.6	89.0	88.1	90.00	4,486.8	-574.6	327.7	152.2	175.49	1.868	
11,900.0	7,278.1	11,862.7	7,278.2	90.8	90.0	90.00	4,586.8	-574.2	327.7	148.4	179.25	1.828	
11,931.2	7,278.0	11,893.9	7,278.0	91.4	90.6	90.00	4,618.0	-574.1	327.6	147.2	180.43	1.816 SF	

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-2N
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-30-2N	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 #3 (8-6-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-5C - 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	85.63	3.6	47.6	47.8					
100.0	100.0	100.0	100.0	0.1	0.1	85.63	3.6	47.6	47.8	47.5	0.22	212.470		
200.0	200.0	200.0	200.0	0.3	0.3	85.63	3.6	47.6	47.8	47.1	0.67	70.823		
300.0	300.0	300.0	300.0	0.6	0.6	85.63	3.6	47.6	47.8	46.6	1.12	42.494		
400.0	400.0	400.0	400.0	0.8	0.8	85.63	3.6	47.6	47.8	46.2	1.57	30.353 CC, ES		
500.0	500.0	500.0	500.0	1.0	1.0	-175.01	3.6	47.6	49.5	47.5	2.01	24.611		
600.0	599.8	599.8	599.8	1.2	1.2	-175.48	3.6	47.6	54.7	52.3	2.44	22.386		
700.0	699.5	699.5	699.5	1.4	1.5	-176.09	3.6	47.6	63.4	60.5	2.88	21.991		
800.0	798.7	798.7	798.7	1.7	1.7	-176.70	3.6	47.6	75.6	72.2	3.33	22.720		
900.0	897.5	897.5	897.5	2.0	1.9	-177.25	3.6	47.6	91.2	87.4	3.77	24.182		
1,000.0	995.8	995.8	995.8	2.4	2.1	-177.70	3.6	47.6	109.2	105.0	4.22	25.878		
1,100.0	1,094.2	1,094.2	1,094.2	2.8	2.3	-178.03	3.6	47.6	127.3	122.6	4.67	27.231		
1,200.0	1,192.5	1,192.5	1,192.5	3.1	2.6	-178.28	3.6	47.6	145.4	140.3	5.13	28.322		
1,300.0	1,290.9	1,296.2	1,296.2	3.5	2.8	-178.37	3.1	46.1	162.0	156.4	5.59	29.004		
1,400.0	1,389.2	1,401.5	1,401.3	3.9	3.0	-178.22	1.4	40.9	175.1	169.0	6.03	29.055		
1,500.0	1,487.6	1,507.6	1,507.0	4.3	3.2	-177.86	-1.6	32.0	184.5	178.1	6.48	28.482		
1,600.0	1,585.9	1,614.2	1,612.8	4.7	3.5	-177.30	-5.9	19.3	190.4	183.4	6.95	27.411		
1,700.0	1,684.3	1,714.5	1,712.0	5.1	3.7	-176.68	-10.5	5.4	194.2	186.8	7.41	26.201		
1,800.0	1,782.6	1,814.4	1,810.8	5.6	4.0	-176.08	-15.1	-8.5	198.1	190.2	7.89	25.114		
1,900.0	1,880.9	1,914.3	1,909.7	6.0	4.3	-175.51	-19.8	-22.3	201.9	193.6	8.37	24.130		
2,000.0	1,979.3	2,014.2	2,008.5	6.4	4.6	-174.95	-24.4	-36.2	205.8	197.0	8.85	23.246		
2,100.0	2,077.6	2,114.1	2,107.3	6.8	4.9	-174.42	-29.1	-50.0	209.8	200.4	9.35	22.437		
2,200.0	2,176.0	2,214.0	2,206.2	7.2	5.2	-173.91	-33.7	-63.9	213.7	203.8	9.85	21.700		
2,300.0	2,274.3	2,313.9	2,305.0	7.6	5.5	-173.42	-38.3	-77.7	217.6	207.3	10.35	21.026		
2,400.0	2,372.7	2,413.8	2,403.8	8.0	5.8	-172.94	-43.0	-91.5	221.6	210.7	10.86	20.407		
2,500.0	2,471.0	2,513.8	2,502.7	8.4	6.2	-172.48	-47.6	-105.4	225.6	214.2	11.37	19.837		
2,600.0	2,569.4	2,613.7	2,601.5	8.8	6.5	-172.04	-52.3	-119.2	229.6	217.7	11.89	19.311		
2,700.0	2,667.7	2,713.6	2,700.3	9.3	6.8	-171.61	-56.9	-133.1	233.6	221.2	12.41	18.825		
2,800.0	2,766.1	2,813.5	2,799.1	9.7	7.2	-171.20	-61.5	-146.9	237.6	224.7	12.93	18.373		
2,900.0	2,864.4	2,913.4	2,898.0	10.1	7.5	-170.80	-66.2	-160.8	241.6	228.2	13.46	17.954		
3,000.0	2,962.8	3,013.3	2,996.8	10.5	7.9	-170.41	-70.8	-174.6	245.7	231.7	13.99	17.562		
3,100.0	3,061.1	3,113.2	3,095.6	10.9	8.2	-170.04	-75.5	-188.5	249.7	235.2	14.52	17.197		
3,200.0	3,159.4	3,213.1	3,194.5	11.3	8.5	-169.68	-80.1	-202.3	253.8	238.7	15.06	16.854		
3,300.0	3,257.8	3,313.0	3,293.3	11.8	8.9	-169.33	-84.7	-216.2	257.8	242.3	15.60	16.533		
3,400.0	3,356.1	3,412.9	3,392.1	12.2	9.2	-168.99	-89.4	-230.0	261.9	245.8	16.14	16.232		
3,500.0	3,454.5	3,512.8	3,491.0	12.6	9.6	-168.66	-94.0	-243.9	266.0	249.3	16.68	15.948		
3,600.0	3,552.8	3,612.7	3,589.8	13.0	9.9	-168.34	-98.6	-257.7	270.1	252.9	17.23	15.681		
3,700.0	3,651.2	3,712.6	3,688.6	13.4	10.3	-168.03	-103.3	-271.6	274.2	256.4	17.77	15.428		
3,800.0	3,749.5	3,812.5	3,787.5	13.8	10.6	-167.73	-107.9	-285.4	278.3	260.0	18.32	15.189		
3,900.0	3,847.9	3,912.4	3,886.3	14.2	11.0	-167.44	-112.6	-299.2	282.5	263.6	18.88	14.963		
4,000.0	3,946.2	4,012.3	3,985.1	14.7	11.3	-167.15	-117.2	-313.1	286.6	267.2	19.43	14.749		
4,100.0	4,044.6	4,112.2	4,084.0	15.1	11.7	-166.88	-121.8	-326.9	290.7	270.7	19.99	14.545		
4,200.0	4,142.9	4,212.1	4,182.8	15.5	12.1	-166.61	-126.5	-340.8	294.9	274.3	20.55	14.352		
4,300.0	4,241.3	4,312.0	4,281.6	15.9	12.4	-166.35	-131.1	-354.6	299.0	277.9	21.11	14.168		
4,400.0	4,339.6	4,411.9	4,380.5	16.3	12.8	-166.10	-135.8	-368.5	303.2	281.5	21.67	13.993		
4,500.0	4,437.9	4,511.8	4,479.3	16.7	13.1	-165.85	-140.4	-382.3	307.3	285.1	22.23	13.825		
4,600.0	4,536.3	4,611.8	4,578.1	17.2	13.5	-165.61	-145.0	-396.2	311.5	288.7	22.79	13.666		
4,700.0	4,634.6	4,700.0	4,665.6	17.6	13.7	-165.49	-148.7	-407.2	317.0	293.8	23.29	13.614		
4,800.0	4,733.0	4,793.1	4,758.2	18.0	13.9	-165.58	-151.7	-416.1	325.5	301.7	23.74	13.712		
4,900.0	4,831.3	4,882.9	4,847.8	18.4	14.1	-165.86	-153.7	-421.9	336.8	312.6	24.15	13.947		
5,000.0	4,929.7	4,972.0	4,936.8	18.8	14.3	-166.30	-154.7	-425.1	350.9	326.4	24.53	14.307		

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-30-2N
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-30-2N	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 #3 (8-6-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-5C - 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	5,028.0	5,063.2	5,028.0	19.2	14.4	-166.87		-155.0	-425.8	367.8	342.9	24.90	14.774	
5,200.0	5,126.4	5,161.5	5,126.4	19.7	14.6	-167.48		-155.0	-425.8	385.5	360.2	25.28	15.249	
5,300.0	5,224.7	5,259.9	5,224.7	20.1	14.7	-168.04		-155.0	-425.8	403.2	377.6	25.67	15.707	
5,400.0	5,323.1	5,358.2	5,323.1	20.5	14.9	-168.55		-155.0	-425.8	421.0	394.9	26.07	16.148	
5,500.0	5,421.4	5,456.6	5,421.4	20.9	15.0	-169.02		-155.0	-425.8	438.8	412.3	26.47	16.573	
5,600.0	5,519.8	5,555.0	5,519.8	21.3	15.2	-169.47		-155.0	-425.8	456.3	429.4	26.88	16.975	
5,700.0	5,618.7	5,653.8	5,618.7	21.6	15.4	-169.86		-155.0	-425.8	471.1	443.9	27.24	17.292	
5,800.0	5,718.0	5,753.2	5,718.0	21.8	15.5	-170.14		-155.0	-425.8	482.5	454.9	27.59	17.491	
5,900.0	5,817.6	5,852.8	5,817.6	22.0	15.7	-170.33		-155.0	-425.8	490.5	462.6	27.90	17.580	
6,000.0	5,917.5	5,952.7	5,917.5	22.2	15.9	-170.44		-155.0	-425.8	495.0	466.9	28.19	17.561	
6,100.0	6,017.5	6,052.7	6,017.5	22.3	16.0	90.00		-155.0	-425.8	496.2	467.8	28.46	17.437	
6,200.0	6,117.5	6,152.7	6,117.5	22.4	16.2	90.00		-155.0	-425.8	496.2	467.4	28.83	17.214	
6,300.0	6,217.5	6,252.7	6,217.5	22.5	16.4	90.00		-155.0	-425.8	496.2	467.0	29.20	16.995	
6,400.0	6,317.5	6,352.7	6,317.5	22.6	16.5	90.00		-155.0	-425.8	496.2	466.6	29.57	16.780	
6,500.0	6,417.5	6,452.7	6,417.5	22.8	16.7	90.00		-155.0	-425.8	496.2	466.3	29.95	16.569	
6,600.0	6,517.5	6,552.7	6,517.5	22.9	16.9	90.00		-155.0	-425.8	496.2	465.9	30.33	16.363	
6,700.0	6,617.5	6,652.7	6,617.5	23.0	17.1	90.00		-155.0	-425.8	496.2	465.5	30.71	16.161	
6,800.0	6,717.5	6,752.7	6,717.5	23.2	17.3	90.00		-155.0	-425.8	496.2	465.1	31.09	15.962	
6,900.0	6,817.5	6,852.7	6,817.5	23.3	17.4	89.93		-155.0	-425.8	496.2	464.7	31.50	15.752	
6,908.7	6,826.2	6,861.3	6,826.2	23.3	17.5	90.02		-155.0	-425.8	496.2	464.7	31.54	15.734	
7,000.0	6,915.8	6,951.0	6,915.8	23.4	17.6	91.85		-155.0	-425.8	496.5	464.5	32.01	15.509	
7,100.0	7,009.1	7,047.8	7,012.6	23.5	17.8	95.45		-153.7	-425.8	498.8	466.2	32.63	15.286	
7,200.0	7,093.8	7,155.0	7,118.0	23.5	17.9	99.47		-135.5	-425.7	504.1	471.0	33.11	15.226	
7,300.0	7,166.9	7,272.8	7,226.9	23.5	18.1	103.31		-91.1	-425.6	511.6	478.3	33.29	15.368	
7,400.0	7,225.7	7,403.1	7,332.3	23.6	18.1	106.79		-15.0	-425.3	520.1	486.8	33.28	15.628	
7,500.0	7,268.0	7,546.8	7,422.5	23.7	18.3	109.62		96.1	-424.9	527.9	494.4	33.45	15.778	
7,600.0	7,292.2	7,701.9	7,482.1	24.0	18.6	111.45		238.8	-424.4	533.2	498.8	34.38	15.507	
7,700.0	7,297.9	7,851.4	7,497.8	24.3	19.3	111.95		387.0	-423.9	534.6	498.3	36.26	14.743	
7,800.0	7,297.5	7,951.4	7,497.4	24.8	20.1	111.97		487.0	-423.5	534.6	496.6	37.99	14.072	
7,900.0	7,297.0	8,051.4	7,497.1	25.4	21.0	111.98		587.0	-423.2	534.6	494.6	39.95	13.380	
8,000.0	7,296.5	8,151.4	7,496.7	26.2	22.1	112.00		687.0	-422.8	534.5	492.4	42.13	12.688	
8,100.0	7,296.1	8,251.4	7,496.4	27.2	23.3	112.01		787.0	-422.4	534.5	490.0	44.49	12.014	
8,200.0	7,295.6	8,351.4	7,496.0	28.2	24.6	112.03		887.0	-422.1	534.5	487.5	47.01	11.370	
8,300.0	7,295.1	8,451.4	7,495.7	29.4	26.0	112.04		987.0	-421.7	534.5	484.8	49.66	10.763	
8,400.0	7,294.6	8,551.4	7,495.3	30.6	27.4	112.06		1,087.0	-421.4	534.5	482.0	52.42	10.196	
8,500.0	7,294.2	8,651.4	7,495.0	32.0	28.9	112.07		1,187.0	-421.0	534.4	479.2	55.27	9.669	
8,600.0	7,293.7	8,751.4	7,494.6	33.3	30.5	112.09		1,287.0	-420.7	534.4	476.2	58.21	9.181	
8,700.0	7,293.2	8,851.4	7,494.3	34.8	32.1	112.10		1,387.0	-420.3	534.4	473.2	61.21	8.730	
8,800.0	7,292.8	8,951.4	7,493.9	36.3	33.7	112.12		1,487.0	-420.0	534.4	470.1	64.28	8.314	
8,900.0	7,292.3	9,051.4	7,493.6	37.8	35.3	112.13		1,587.0	-419.6	534.4	467.0	67.39	7.929	
9,000.0	7,291.8	9,151.4	7,493.2	39.4	37.0	112.15		1,687.0	-419.3	534.3	463.8	70.55	7.574	
9,100.0	7,291.3	9,251.4	7,492.9	41.0	38.7	112.16		1,787.0	-418.9	534.3	460.6	73.75	7.245	
9,200.0	7,290.9	9,351.4	7,492.6	42.6	40.4	112.18		1,887.0	-418.6	534.3	457.3	76.98	6.941	
9,300.0	7,290.4	9,451.4	7,492.2	44.2	42.1	112.19		1,987.0	-418.2	534.3	454.1	80.24	6.659	
9,400.0	7,289.9	9,551.4	7,491.9	45.9	43.9	112.21		2,087.0	-417.8	534.3	450.8	83.52	6.397	
9,500.0	7,289.5	9,651.4	7,491.5	47.6	45.6	112.22		2,187.0	-417.5	534.3	447.4	86.83	6.153	
9,600.0	7,289.0	9,751.4	7,491.2	49.3	47.4	112.24		2,287.0	-417.1	534.2	444.1	90.16	5.925	
9,700.0	7,288.5	9,851.4	7,490.8	51.0	49.2	112.25		2,387.0	-416.8	534.2	440.7	93.51	5.713	
9,800.0	7,288.0	9,951.4	7,490.5	52.7	51.0	112.27		2,487.0	-416.4	534.2	437.3	96.87	5.515	
9,900.0	7,287.6	10,051.4	7,490.1	54.5	52.8	112.28		2,587.0	-416.1	534.2	433.9	100.25	5.329	
10,000.0	7,287.1	10,151.4	7,489.8	56.2	54.6	112.30		2,687.0	-415.7	534.2	430.5	103.64	5.154	

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-30-2N
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-30-2N	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 #3 (8-6-14)	Offset TVD Reference:	Offset Datum

Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-5C - 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	7,286.6	10,251.4	7,489.4	58.0	56.4	112.31	2,786.9	-415.4	534.1	427.1	107.04	4.990	
10,200.0	7,286.2	10,351.4	7,489.1	59.8	58.2	112.33	2,886.9	-415.0	534.1	423.7	110.45	4.836	
10,300.0	7,285.7	10,451.4	7,488.7	61.6	60.0	112.34	2,986.9	-414.7	534.1	420.2	113.87	4.691	
10,400.0	7,285.2	10,551.4	7,488.4	63.4	61.9	112.36	3,086.9	-414.3	534.1	416.8	117.30	4.553	
10,500.0	7,284.7	10,651.4	7,488.0	65.2	63.7	112.37	3,186.9	-413.9	534.1	413.3	120.74	4.423	
10,600.0	7,284.3	10,751.4	7,487.7	67.0	65.6	112.39	3,286.9	-413.6	534.1	409.9	124.18	4.301	
10,700.0	7,283.8	10,851.4	7,487.3	68.8	67.4	112.40	3,386.9	-413.2	534.0	406.4	127.63	4.184	
10,800.0	7,283.3	10,951.4	7,487.0	70.6	69.3	112.42	3,486.9	-412.9	534.0	402.9	131.09	4.074	
10,900.0	7,282.9	11,051.4	7,486.6	72.4	71.1	112.43	3,586.9	-412.5	534.0	399.4	134.55	3.969	
11,000.0	7,282.4	11,151.4	7,486.3	74.2	73.0	112.45	3,686.9	-412.2	534.0	396.0	138.02	3.869	
11,100.0	7,281.9	11,251.4	7,485.9	76.1	74.8	112.46	3,786.9	-411.8	534.0	392.5	141.49	3.774	
11,200.0	7,281.4	11,351.4	7,485.6	77.9	76.7	112.48	3,886.9	-411.5	533.9	389.0	144.97	3.683	
11,300.0	7,281.0	11,451.4	7,485.2	79.7	78.5	112.49	3,986.9	-411.1	533.9	385.5	148.45	3.597	
11,400.0	7,280.5	11,551.4	7,484.9	81.6	80.4	112.51	4,086.9	-410.8	533.9	382.0	151.93	3.514	
11,500.0	7,280.0	11,651.4	7,484.5	83.4	82.3	112.52	4,186.9	-410.4	533.9	378.5	155.42	3.435	
11,600.0	7,279.6	11,751.4	7,484.2	85.3	84.2	112.54	4,286.9	-410.1	533.9	375.0	158.90	3.360	
11,700.0	7,279.1	11,851.4	7,483.8	87.1	86.0	112.55	4,386.9	-409.7	533.9	371.5	162.40	3.287	
11,800.0	7,278.6	11,951.4	7,483.5	89.0	87.9	112.57	4,486.9	-409.3	533.8	367.9	165.89	3.218	
11,900.0	7,278.1	12,051.4	7,483.1	90.8	89.8	112.58	4,586.9	-409.0	533.8	364.4	169.39	3.151	
11,931.2	7,278.0	12,082.7	7,483.0	91.4	90.4	112.59	4,618.2	-408.9	533.8	363.3	170.48	3.131 SF	

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-2N
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-30-2N	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 #3 (8-6-14)	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 #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)	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	86.62	3.6	61.6	61.7					
100.0	100.0	100.0	100.0	0.1	0.1	86.62	3.6	61.6	61.7	61.5	0.22	274.639		
200.0	200.0	200.0	200.0	0.3	0.3	86.62	3.6	61.6	61.7	61.1	0.67	91.546		
300.0	300.0	300.0	300.0	0.6	0.6	86.62	3.6	61.6	61.7	60.6	1.12	54.928		
400.0	400.0	400.0	400.0	0.8	0.8	86.62	3.6	61.6	61.7	60.2	1.57	39.234 CC, ES		
500.0	500.0	500.0	500.0	1.0	1.0	-174.01	3.6	61.6	63.5	61.5	2.01	31.558		
600.0	599.8	599.8	599.8	1.2	1.2	-174.45	3.6	61.6	68.7	66.2	2.44	28.099		
700.0	699.5	699.5	699.5	1.4	1.5	-175.06	3.6	61.6	77.4	74.5	2.88	26.828		
800.0	798.7	798.7	798.7	1.7	1.7	-175.71	3.6	61.6	89.5	86.2	3.33	26.908		
900.0	897.5	897.5	897.5	2.0	1.9	-176.33	3.6	61.6	105.1	101.3	3.77	27.869		
1,000.0	995.8	995.8	995.8	2.4	2.1	-176.86	3.6	61.6	123.1	118.9	4.22	29.168		
1,100.0	1,094.2	1,094.2	1,094.2	2.8	2.3	-177.27	3.6	61.6	141.2	136.5	4.68	30.198		
1,200.0	1,192.5	1,192.5	1,192.5	3.1	2.6	-177.58	3.6	61.6	159.3	154.2	5.13	31.021		
1,300.0	1,290.9	1,290.9	1,290.9	3.5	2.8	-177.82	3.6	61.6	177.4	171.8	5.60	31.693		
1,400.0	1,389.2	1,389.2	1,389.2	3.9	3.0	-178.03	3.6	61.6	195.5	189.4	6.06	32.250		
1,500.0	1,487.6	1,487.6	1,487.6	4.3	3.2	-178.07	3.0	60.2	212.2	205.7	6.52	32.549		
1,600.0	1,585.9	1,601.0	1,600.9	4.7	3.4	-177.79	0.5	55.3	225.5	218.5	6.96	32.382		
1,700.0	1,684.3	1,708.7	1,708.1	5.1	3.7	-177.22	-3.7	46.7	235.3	227.9	7.42	31.706		
1,800.0	1,782.6	1,813.7	1,812.3	5.6	3.9	-176.41	-9.4	35.1	241.8	233.9	7.89	30.665		
1,900.0	1,880.9	1,913.4	1,911.2	6.0	4.1	-175.63	-15.2	23.4	247.7	239.3	8.35	29.655		
2,000.0	1,979.3	2,013.2	2,010.1	6.4	4.4	-174.88	-20.9	11.7	253.6	244.8	8.83	28.728		
2,100.0	2,077.6	2,113.0	2,109.0	6.8	4.6	-174.17	-26.7	0.0	259.6	250.3	9.31	27.877		
2,200.0	2,176.0	2,212.7	2,207.9	7.2	4.9	-173.49	-32.5	-11.7	265.6	255.8	9.80	27.096		
2,300.0	2,274.3	2,312.5	2,306.8	7.6	5.2	-172.84	-38.2	-23.4	271.7	261.4	10.30	26.374		
2,400.0	2,372.7	2,412.3	2,405.8	8.0	5.5	-172.22	-44.0	-35.1	277.8	267.0	10.81	25.706		
2,500.0	2,471.0	2,512.1	2,504.7	8.4	5.8	-171.62	-49.7	-46.8	283.9	272.6	11.32	25.088		
2,600.0	2,569.4	2,611.8	2,603.6	8.8	6.1	-171.05	-55.5	-58.5	290.0	278.2	11.83	24.514		
2,700.0	2,667.7	2,711.6	2,702.5	9.3	6.4	-170.51	-61.2	-70.2	296.2	283.9	12.35	23.981		
2,800.0	2,766.1	2,811.4	2,801.4	9.7	6.7	-169.98	-67.0	-81.9	302.4	289.5	12.88	23.484		
2,900.0	2,864.4	2,911.1	2,900.3	10.1	7.0	-169.48	-72.8	-93.6	308.6	295.2	13.41	23.020		
3,000.0	2,962.8	3,010.9	2,999.2	10.5	7.3	-169.00	-78.5	-105.3	314.9	301.0	13.94	22.586		
3,100.0	3,061.1	3,110.7	3,098.2	10.9	7.6	-168.53	-84.3	-116.9	321.2	306.7	14.48	22.179		
3,200.0	3,159.4	3,210.4	3,197.1	11.3	7.9	-168.09	-90.0	-128.6	327.5	312.4	15.02	21.798		
3,300.0	3,257.8	3,310.2	3,296.0	11.8	8.3	-167.66	-95.8	-140.3	333.8	318.2	15.57	21.439		
3,400.0	3,356.1	3,410.0	3,394.9	12.2	8.6	-167.24	-101.6	-152.0	340.1	324.0	16.12	21.102		
3,500.0	3,454.5	3,509.8	3,493.8	12.6	8.9	-166.84	-107.3	-163.7	346.4	329.8	16.67	20.784		
3,600.0	3,552.8	3,609.5	3,592.7	13.0	9.2	-166.46	-113.1	-175.4	352.8	335.6	17.22	20.483		
3,700.0	3,651.2	3,709.3	3,691.6	13.4	9.5	-166.09	-118.8	-187.1	359.2	341.4	17.78	20.199		
3,800.0	3,749.5	3,809.1	3,790.6	13.8	9.9	-165.73	-124.6	-198.8	365.6	347.2	18.34	19.931		
3,900.0	3,847.9	3,908.8	3,889.5	14.2	10.2	-165.39	-130.4	-210.5	372.0	353.1	18.90	19.676		
4,000.0	3,946.2	4,008.6	3,988.4	14.7	10.5	-165.05	-136.1	-222.2	378.4	358.9	19.47	19.434		
4,100.0	4,044.6	4,108.4	4,087.3	15.1	10.8	-164.73	-141.9	-233.9	384.8	364.8	20.04	19.205		
4,200.0	4,142.9	4,200.0	4,178.2	15.5	11.1	-164.48	-146.9	-244.2	391.7	371.2	20.56	19.050		
4,300.0	4,241.3	4,290.9	4,268.7	15.9	11.3	-164.45	-150.8	-252.1	401.1	380.1	21.03	19.074		
4,400.0	4,339.6	4,379.5	4,357.1	16.3	11.5	-164.62	-153.4	-257.3	413.1	391.6	21.46	19.249		
4,500.0	4,437.9	4,467.4	4,445.0	16.7	11.7	-164.97	-154.7	-260.0	427.7	405.8	21.86	19.562		
4,600.0	4,536.3	4,558.8	4,536.3	17.2	11.8	-165.50	-155.0	-260.5	444.7	422.5	22.26	19.982		
4,700.0	4,634.6	4,657.1	4,634.6	17.6	12.0	-166.06	-155.0	-260.5	462.3	439.6	22.66	20.403		
4,800.0	4,733.0	4,755.5	4,733.0	18.0	12.2	-166.58	-155.0	-260.5	479.9	456.8	23.07	20.806		
4,900.0	4,831.3	4,853.8	4,831.3	18.4	12.3	-167.06	-155.0	-260.5	497.6	474.1	23.48	21.192		
5,000.0	4,929.7	4,952.2	4,929.7	18.8	12.5	-167.51	-155.0	-260.5	515.2	491.3	23.90	21.562		

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-30-2N
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-30-2N	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 #3 (8-6-14)	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 #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)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,100.0	5,028.0	5,050.5	5,028.0	19.2	12.7	-167.94		-155.0	-260.5	532.9	508.6	24.32	21.918	
5,200.0	5,126.4	5,148.9	5,126.4	19.7	12.8	-168.33		-155.0	-260.5	550.7	525.9	24.74	22.259	
5,300.0	5,224.2	5,247.2	5,224.2	20.1	13.0	-168.70		-155.0	-260.5	568.4	543.3	25.17	22.588	
5,400.0	5,323.1	5,345.5	5,323.1	20.5	13.2	-169.04		-155.0	-260.5	586.2	560.6	25.60	22.903	
5,500.0	5,421.4	5,443.9	5,421.4	20.9	13.4	-169.37		-155.0	-260.5	604.0	578.0	26.03	23.207	
5,600.0	5,519.8	5,542.3	5,519.8	21.3	13.6	-169.70		-155.0	-260.5	621.6	595.1	26.47	23.487	
5,700.0	5,618.7	5,641.1	5,618.7	21.6	13.7	-169.99		-155.0	-260.5	636.4	609.5	26.86	23.693	
5,800.0	5,718.0	5,740.5	5,718.0	21.8	13.9	-170.21		-155.0	-260.5	647.8	620.6	27.23	23.791	
5,900.0	5,817.6	5,840.1	5,817.6	22.0	14.1	-170.36		-155.0	-260.5	655.8	628.2	27.57	23.787	
6,000.0	5,917.5	5,940.0	5,917.5	22.2	14.3	-170.44		-155.0	-260.5	660.4	632.5	27.88	23.686	
6,100.0	6,017.5	6,040.0	6,017.5	22.3	14.5	90.00		-155.0	-260.5	661.5	633.4	28.17	23.486	
6,200.0	6,117.5	6,140.0	6,117.5	22.4	14.7	90.00		-155.0	-260.5	661.5	633.0	28.54	23.176	
6,300.0	6,217.5	6,240.0	6,217.5	22.5	14.9	90.00		-155.0	-260.5	661.5	632.6	28.92	22.872	
6,400.0	6,317.5	6,340.0	6,317.5	22.6	15.1	90.00		-155.0	-260.5	661.5	632.2	29.30	22.575	
6,500.0	6,417.5	6,440.0	6,417.5	22.8	15.3	90.00		-155.0	-260.5	661.5	631.8	29.69	22.284	
6,600.0	6,517.5	6,540.0	6,517.5	22.9	15.5	90.00		-155.0	-260.5	661.5	631.5	30.07	21.999	
6,700.0	6,617.5	6,640.0	6,617.5	23.0	15.7	90.00		-155.0	-260.5	661.5	631.1	30.46	21.720	
6,800.0	6,717.5	6,740.0	6,717.5	23.2	15.9	90.00		-155.0	-260.5	661.5	630.7	30.85	21.447	
6,900.0	6,817.5	6,839.8	6,817.3	23.3	16.0	89.75		-153.4	-260.5	661.5	630.3	31.24	21.175	
7,000.0	6,915.8	6,939.4	6,915.2	23.4	16.2	89.76		-136.3	-260.4	661.5	630.0	31.52	20.985	
7,100.0	7,009.1	7,039.0	7,008.1	23.5	16.3	89.78		-101.0	-260.3	661.5	629.8	31.72	20.852	
7,200.0	7,093.8	7,138.6	7,092.7	23.5	16.4	89.81		-48.5	-260.1	661.4	629.5	31.91	20.726	
7,300.0	7,166.9	7,238.2	7,165.8	23.5	16.5	89.84		19.0	-259.9	661.4	629.2	32.20	20.539	
7,400.0	7,225.7	7,338.0	7,224.7	23.6	16.6	89.88		99.3	-259.6	661.3	628.6	32.70	20.226	
7,500.0	7,268.0	7,437.8	7,267.3	23.7	16.8	89.92		189.4	-259.3	661.3	627.8	33.49	19.744	
7,600.0	7,292.2	7,537.7	7,291.9	24.0	17.2	89.97		286.1	-258.9	661.2	626.6	34.63	19.093	
7,700.0	7,297.9	7,637.7	7,298.0	24.3	17.9	90.00		385.7	-258.6	661.1	625.0	36.11	18.311	
7,800.0	7,297.5	7,737.7	7,297.5	24.8	18.8	90.00		485.7	-258.2	661.1	623.2	37.90	17.442	
7,900.0	7,297.0	7,837.7	7,297.0	25.4	19.9	90.00		585.7	-257.9	661.0	621.0	39.97	16.537	
8,000.0	7,296.5	7,937.7	7,296.6	26.2	21.0	90.00		685.7	-257.5	660.9	618.6	42.29	15.629	
8,100.0	7,296.1	8,037.7	7,296.1	27.2	22.3	90.00		785.7	-257.2	660.8	616.0	44.81	14.746	
8,200.0	7,295.6	8,137.7	7,295.6	28.2	23.7	90.00		885.7	-256.8	660.8	613.3	47.51	13.907	
8,300.0	7,295.1	8,237.7	7,295.2	29.4	25.1	90.00		985.7	-256.5	660.7	610.3	50.36	13.120	
8,400.0	7,294.6	8,337.7	7,294.7	30.6	26.6	90.00		1,085.7	-256.1	660.6	607.3	53.33	12.388	
8,500.0	7,294.2	8,437.7	7,294.2	32.0	28.1	90.00		1,185.7	-255.8	660.6	604.2	56.40	11.712	
8,600.0	7,293.7	8,537.7	7,293.7	33.3	29.7	90.00		1,285.7	-255.4	660.5	600.9	59.56	11.089	
8,700.0	7,293.2	8,637.7	7,293.3	34.8	31.3	90.00		1,385.7	-255.0	660.4	597.6	62.80	10.517	
8,800.0	7,292.8	8,737.7	7,292.8	36.3	33.0	90.00		1,485.7	-254.7	660.3	594.2	66.09	9.991	
8,900.0	7,292.3	8,837.7	7,292.3	37.8	34.7	90.00		1,585.7	-254.3	660.3	590.8	69.45	9.508	
9,000.0	7,291.8	8,937.7	7,291.9	39.4	36.4	90.00		1,685.7	-254.0	660.2	587.3	72.85	9.063	
9,100.0	7,291.3	9,037.7	7,291.4	41.0	38.1	90.00		1,785.7	-253.6	660.1	583.8	76.29	8.653	
9,200.0	7,290.9	9,137.7	7,290.9	42.6	39.8	90.00		1,885.7	-253.3	660.1	580.3	79.76	8.275	
9,300.0	7,290.4	9,237.7	7,290.4	44.2	41.6	90.00		1,985.7	-252.9	660.0	576.7	83.27	7.926	
9,400.0	7,289.9	9,337.7	7,290.0	45.9	43.3	90.00		2,085.7	-252.6	659.9	573.1	86.80	7.603	
9,500.0	7,289.5	9,437.7	7,289.5	47.6	45.1	90.00		2,185.7	-252.2	659.8	569.5	90.36	7.302	
9,600.0	7,289.0	9,537.7	7,289.0	49.3	46.9	90.00		2,285.7	-251.9	659.8	565.8	93.94	7.023	
9,700.0	7,288.5	9,637.7	7,288.6	51.0	48.7	90.00		2,385.7	-251.5	659.7	562.2	97.54	6.764	
9,800.0	7,288.0	9,737.7	7,288.1	52.7	50.5	90.00		2,485.7	-251.2	659.6	558.5	101.15	6.521	
9,900.0	7,287.6	9,837.7	7,287.6	54.5	52.3	90.00		2,585.7	-250.8	659.6	554.8	104.78	6.295	
10,000.0	7,287.1	9,937.7	7,287.1	56.2	54.2	90.00		2,685.7	-250.5	659.5	551.1	108.42	6.082	
10,100.0	7,286.6	10,037.7	7,286.7	58.0	56.0	90.00		2,785.7	-250.1	659.4	547.3	112.08	5.883	

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-30-2N
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-30-2N	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 #3 (8-6-14)	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 #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	7,286.2	10,137.7	7,286.2	59.8	57.8	90.00	2,885.7	-249.8	659.3	543.6	115.75	5.696	
10,300.0	7,285.7	10,237.7	7,285.7	61.6	59.7	90.00	2,985.7	-249.4	659.3	539.8	119.42	5.520	
10,400.0	7,285.2	10,337.7	7,285.3	63.4	61.5	90.00	3,085.7	-249.1	659.2	536.1	123.11	5.355	
10,500.0	7,284.7	10,437.7	7,284.8	65.2	63.4	90.00	3,185.7	-248.7	659.1	532.3	126.80	5.198	
10,600.0	7,284.3	10,537.7	7,284.3	67.0	65.2	90.00	3,285.7	-248.4	659.0	528.5	130.51	5.050	
10,700.0	7,283.8	10,637.7	7,283.8	68.8	67.1	90.00	3,385.7	-248.0	659.0	524.8	134.22	4.910	
10,800.0	7,283.3	10,737.7	7,283.4	70.6	68.9	90.00	3,485.7	-247.6	658.9	521.0	137.93	4.777	
10,900.0	7,282.9	10,837.7	7,282.9	72.4	70.8	90.00	3,585.7	-247.3	658.8	517.2	141.65	4.651	
11,000.0	7,282.4	10,937.7	7,282.4	74.2	72.6	90.00	3,685.7	-246.9	658.8	513.4	145.38	4.531	
11,100.0	7,281.9	11,037.7	7,282.0	76.1	74.5	90.00	3,785.7	-246.6	658.7	509.6	149.11	4.417	
11,200.0	7,281.4	11,137.7	7,281.5	77.9	76.4	90.00	3,885.6	-246.2	658.6	505.8	152.85	4.309	
11,300.0	7,281.0	11,237.7	7,281.0	79.7	78.3	90.00	3,985.6	-245.9	658.5	502.0	156.59	4.206	
11,400.0	7,280.5	11,337.7	7,280.5	81.6	80.1	90.00	4,085.6	-245.5	658.5	498.1	160.34	4.107	
11,500.0	7,280.0	11,437.7	7,280.1	83.4	82.0	90.00	4,185.6	-245.2	658.4	494.3	164.09	4.013	
11,600.0	7,279.6	11,537.7	7,279.6	85.3	83.9	90.00	4,285.6	-244.8	658.3	490.5	167.84	3.922	
11,700.0	7,279.1	11,637.7	7,279.1	87.1	85.8	90.00	4,385.6	-244.5	658.3	486.7	171.60	3.836	
11,800.0	7,278.6	11,737.7	7,278.7	89.0	87.6	90.00	4,485.6	-244.1	658.2	482.8	175.35	3.753	
11,900.0	7,278.1	11,837.7	7,278.2	90.8	89.5	90.00	4,585.6	-243.8	658.1	479.0	179.12	3.674	
11,931.2	7,278.0	11,868.9	7,278.0	91.4	90.1	90.00	4,616.9	-243.7	658.1	477.8	180.29	3.650 SF	

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-2N
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-30-2N	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 #3 (8-6-14)	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 #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)	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	87.25	3.6	75.6	75.7					
100.0	100.0	99.0	99.0	0.1	0.1	87.25	3.6	75.6	75.7	75.5	0.22	338.549		
200.0	200.0	199.0	199.0	0.3	0.3	87.25	3.6	75.6	75.7	75.0	0.67	112.662		
300.0	300.0	299.0	299.0	0.6	0.6	87.25	3.6	75.6	75.7	74.6	1.12	67.507		
400.0	400.0	399.0	399.0	0.8	0.8	87.25	3.6	75.6	75.7	74.1	1.57	48.192 CC, ES		
500.0	500.0	499.0	499.0	1.0	1.0	-173.36	3.6	75.6	77.4	75.4	2.01	38.554		
600.0	599.8	598.8	598.8	1.2	1.2	-173.77	3.6	75.6	82.6	80.2	2.44	33.849		
700.0	699.5	698.5	698.5	1.4	1.5	-174.34	3.6	75.6	91.3	88.4	2.88	31.696		
800.0	798.7	797.7	797.7	1.7	1.7	-174.99	3.6	75.6	103.5	100.1	3.32	31.121		
900.0	897.5	896.5	896.5	2.0	1.9	-175.62	3.6	75.6	119.0	115.3	3.77	31.580		
1,000.0	995.8	994.8	994.8	2.4	2.1	-176.19	3.6	75.6	137.0	132.8	4.22	32.479		
1,100.0	1,094.2	1,093.2	1,093.2	2.8	2.3	-176.64	3.6	75.6	155.1	150.4	4.67	33.183		
1,200.0	1,192.5	1,191.5	1,191.5	3.1	2.6	-176.99	3.6	75.6	173.2	168.1	5.13	33.737		
1,300.0	1,290.9	1,289.9	1,289.9	3.5	2.8	-177.27	3.6	75.6	191.3	185.7	5.60	34.182		
1,400.0	1,389.2	1,388.2	1,388.2	3.9	3.0	-177.51	3.6	75.6	209.4	203.3	6.06	34.547		
1,500.0	1,487.6	1,486.6	1,486.6	4.3	3.2	-177.71	3.6	75.6	227.5	220.9	6.53	34.850		
1,600.0	1,585.9	1,584.9	1,584.9	4.7	3.4	-177.88	3.6	75.6	245.6	238.6	6.99	35.107		
1,700.0	1,684.3	1,683.2	1,683.2	5.1	3.7	-177.90	3.0	74.9	262.9	255.4	7.45	35.274		
1,800.0	1,782.6	1,781.2	1,781.2	5.6	3.9	-177.59	0.3	72.0	278.0	270.1	7.89	35.229		
1,900.0	1,880.9	1,879.7	1,879.7	6.0	4.1	-176.97	-4.2	67.0	290.9	282.6	8.34	34.889		
2,000.0	1,979.3	1,978.2	1,978.2	6.4	4.3	-176.07	-10.8	59.8	301.7	292.9	8.80	34.280		
2,100.0	2,077.6	2,076.2	2,076.2	6.8	4.5	-174.98	-18.9	51.0	310.5	301.2	9.27	33.492		
2,200.0	2,176.0	2,174.2	2,174.2	7.2	4.7	-173.94	-27.0	42.1	319.1	309.4	9.75	32.735		
2,300.0	2,274.3	2,272.6	2,272.6	7.6	5.0	-172.95	-35.0	33.3	327.9	317.6	10.24	32.023		
2,400.0	2,372.7	2,370.6	2,370.6	8.0	5.2	-172.02	-43.1	24.4	336.7	326.0	10.74	31.356		
2,500.0	2,471.0	2,468.6	2,468.6	8.4	5.5	-171.13	-51.2	15.6	345.6	334.4	11.25	30.729		
2,600.0	2,569.4	2,566.5	2,566.5	8.8	5.7	-170.29	-59.3	6.7	354.6	342.8	11.76	30.139		
2,700.0	2,667.7	2,664.5	2,664.5	9.3	6.0	-169.49	-67.4	-2.1	363.6	351.4	12.29	29.586		
2,800.0	2,766.1	2,762.3	2,762.3	9.7	6.3	-168.72	-75.4	-11.0	372.8	360.0	12.83	29.065		
2,900.0	2,864.4	2,860.4	2,860.4	10.1	6.6	-168.00	-83.5	-19.8	382.0	368.6	13.37	28.576		
3,000.0	2,962.8	2,958.9	2,958.9	10.5	6.8	-167.31	-91.6	-28.7	391.2	377.3	13.91	28.116		
3,100.0	3,061.1	3,056.3	3,056.3	10.9	7.1	-166.65	-99.7	-37.5	400.5	386.0	14.47	27.682		
3,200.0	3,159.4	3,153.8	3,153.8	11.3	7.4	-166.02	-107.8	-46.4	409.9	394.8	15.03	27.274		
3,300.0	3,257.8	3,251.3	3,251.3	11.8	7.7	-165.42	-115.8	-55.2	419.3	403.7	15.59	26.888		
3,400.0	3,356.1	3,348.7	3,348.7	12.2	8.0	-164.84	-123.9	-64.1	428.7	412.5	16.16	26.524		
3,500.0	3,454.5	3,446.2	3,446.2	12.6	8.3	-164.29	-132.0	-72.9	438.2	421.5	16.74	26.181		
3,600.0	3,552.8	3,543.6	3,543.6	13.0	8.6	-163.81	-139.6	-81.3	447.9	430.6	17.29	25.899		
3,700.0	3,651.2	3,641.4	3,641.4	13.4	8.8	-163.35	-145.7	-87.9	459.0	441.2	17.79	25.794		
3,800.0	3,749.5	3,738.3	3,738.3	13.8	9.0	-163.50	-150.2	-92.8	471.7	453.4	18.27	25.813		
3,900.0	3,847.9	3,835.7	3,835.7	14.2	9.2	-163.66	-153.2	-96.1	485.9	467.2	18.73	25.949		
4,000.0	3,946.2	3,932.7	3,932.7	14.7	9.4	-164.00	-154.7	-97.8	501.7	482.5	19.15	26.192		
4,100.0	4,044.6	4,029.6	4,029.6	15.1	9.5	-164.50	-155.0	-98.1	518.9	499.3	19.57	26.512		
4,200.0	4,142.9	4,126.5	4,126.5	15.5	9.7	-165.01	-155.0	-98.1	536.4	516.4	20.00	26.825		
4,300.0	4,241.3	4,223.3	4,223.3	15.9	9.9	-165.50	-155.0	-98.1	553.9	533.5	20.42	27.121		
4,400.0	4,339.6	4,319.7	4,319.7	16.3	10.1	-165.95	-155.0	-98.1	571.5	550.6	20.85	27.404		
4,500.0	4,437.9	4,416.0	4,416.0	16.7	10.3	-166.38	-155.0	-98.1	589.1	567.8	21.29	27.673		
4,600.0	4,536.3	4,513.4	4,513.4	17.2	10.5	-166.78	-155.0	-98.1	606.7	585.0	21.72	27.930		
4,700.0	4,634.6	4,610.7	4,610.7	17.6	10.7	-167.16	-155.0	-98.1	624.4	602.2	22.16	28.175		
4,800.0	4,733.0	4,708.1	4,708.1	18.0	10.9	-167.52	-155.0	-98.1	642.1	619.5	22.60	28.409		
4,900.0	4,831.3	4,805.3	4,805.3	18.4	11.0	-167.86	-155.0	-98.1	659.8	636.7	23.04	28.633		
5,000.0	4,929.7	4,902.8	4,902.8	18.8	11.2	-168.18	-155.0	-98.1	677.5	654.0	23.49	28.848		

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-30-2N
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-30-2N	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 #3 (8-6-14)	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 #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	5,028.0	5,040.1	5,027.0	19.2	11.4	-168.49		-155.0	-98.1	695.3	671.3	23.93	29.053	
5,200.0	5,126.4	5,138.5	5,125.4	19.7	11.6	-168.78		-155.0	-98.1	713.0	688.6	24.38	29.249	
5,300.0	5,224.7	5,236.8	5,223.7	20.1	11.8	-169.05		-155.0	-98.1	730.8	706.0	24.83	29.438	
5,400.0	5,323.1	5,335.2	5,322.1	20.5	12.0	-169.32		-155.0	-98.1	748.6	723.3	25.27	29.619	
5,500.0	5,421.4	5,433.5	5,420.4	20.9	12.2	-169.57		-155.0	-98.1	766.4	740.7	25.73	29.792	
5,600.0	5,519.8	5,531.9	5,518.8	21.3	12.4	-169.83		-155.0	-98.1	784.0	757.8	26.18	29.943	
5,700.0	5,618.7	5,630.8	5,617.7	21.6	12.6	-170.07		-155.0	-98.1	798.8	772.2	26.60	30.027	
5,800.0	5,718.0	5,730.1	5,717.0	21.8	12.8	-170.25		-155.0	-98.1	810.2	783.2	26.99	30.015	
5,900.0	5,817.6	5,829.7	5,816.6	22.0	13.0	-170.37		-155.0	-98.1	818.2	790.8	27.35	29.911	
6,000.0	5,917.5	5,929.6	5,916.5	22.2	13.2	-170.44		-155.0	-98.1	822.8	795.1	27.68	29.720	
6,100.0	6,017.5	6,029.6	6,016.5	22.3	13.5	90.00		-155.0	-98.1	823.9	795.9	27.99	29.437	
6,200.0	6,117.5	6,129.6	6,116.5	22.4	13.7	90.00		-155.0	-98.1	823.9	795.6	28.37	29.039	
6,300.0	6,217.5	6,229.6	6,216.5	22.5	13.9	90.00		-155.0	-98.1	823.9	795.2	28.76	28.650	
6,400.0	6,317.5	6,329.6	6,316.5	22.6	14.1	90.00		-155.0	-98.1	823.9	794.8	29.15	28.270	
6,500.0	6,417.5	6,429.6	6,416.5	22.8	14.3	90.00		-155.0	-98.1	823.9	794.4	29.53	27.898	
6,600.0	6,517.5	6,529.6	6,516.5	22.9	14.5	90.00		-155.0	-98.1	823.9	794.0	29.92	27.534	
6,700.0	6,617.5	6,629.6	6,616.5	23.0	14.7	90.00		-155.0	-98.1	823.9	793.6	30.32	27.178	
6,800.0	6,717.5	6,729.6	6,716.5	23.2	14.9	90.00		-155.0	-98.1	823.9	793.2	30.71	26.830	
6,900.0	6,817.5	6,829.6	6,816.2	23.3	15.1	89.76		-153.4	-98.1	823.9	792.8	31.11	26.487	
7,000.0	6,915.8	6,928.7	6,914.0	23.4	15.3	89.76		-136.4	-98.0	823.9	792.5	31.39	26.244	
7,100.0	7,009.1	7,028.1	7,006.7	23.5	15.4	89.78		-101.2	-97.9	823.9	792.3	31.60	26.074	
7,200.0	7,093.8	7,127.6	7,091.2	23.5	15.5	89.81		-48.9	-97.6	823.9	792.1	31.80	25.912	
7,300.0	7,166.9	7,227.1	7,164.2	23.5	15.6	89.84		18.4	-97.4	823.9	791.8	32.09	25.674	
7,400.0	7,225.7	7,326.7	7,223.2	23.6	15.7	89.88		98.5	-97.0	823.9	791.3	32.59	25.280	
7,500.0	7,268.0	7,426.4	7,265.9	23.7	16.1	89.92		188.5	-96.7	823.9	790.5	33.39	24.675	
7,600.0	7,292.2	7,526.3	7,290.8	24.0	16.7	89.97		285.0	-96.3	823.9	789.3	34.53	23.858	
7,700.0	7,297.9	7,626.2	7,297.0	24.3	17.5	90.00		384.7	-95.9	823.9	787.8	36.01	22.877	
7,800.0	7,297.5	7,726.2	7,296.5	24.8	18.4	90.00		484.6	-95.4	823.8	786.0	37.81	21.792	
7,900.0	7,297.0	7,826.2	7,296.0	25.4	19.4	90.00		584.6	-95.0	823.8	783.9	39.88	20.657	
8,000.0	7,296.5	7,926.2	7,295.6	26.2	20.6	90.00		684.6	-94.6	823.8	781.6	42.20	19.520	
8,100.0	7,296.1	8,026.2	7,295.1	27.2	21.9	90.00		784.6	-94.2	823.8	779.1	44.73	18.416	
8,200.0	7,295.6	8,126.2	7,294.6	28.2	23.3	90.00		884.6	-93.8	823.8	776.4	47.44	17.366	
8,300.0	7,295.1	8,226.2	7,294.2	29.4	24.7	90.00		984.6	-93.4	823.8	773.5	50.29	16.381	
8,400.0	7,294.6	8,326.2	7,293.7	30.6	26.3	90.00		1,084.6	-93.0	823.8	770.5	53.26	15.467	
8,500.0	7,294.2	8,426.2	7,293.2	32.0	27.8	90.00		1,184.6	-92.6	823.8	767.4	56.34	14.622	
8,600.0	7,293.7	8,526.2	7,292.7	33.3	29.4	90.00		1,284.6	-92.1	823.7	764.2	59.50	13.844	
8,700.0	7,293.2	8,626.2	7,292.3	34.8	31.0	90.00		1,384.6	-91.7	823.7	761.0	62.74	13.130	
8,800.0	7,292.8	8,726.2	7,291.8	36.3	32.7	90.00		1,484.6	-91.3	823.7	757.7	66.04	12.473	
8,900.0	7,292.3	8,826.2	7,291.3	37.8	34.4	90.00		1,584.6	-90.9	823.7	754.3	69.39	11.870	
9,000.0	7,291.8	8,926.2	7,290.9	39.4	36.1	90.00		1,684.6	-90.5	823.7	750.9	72.79	11.315	
9,100.0	7,291.3	9,026.2	7,290.4	41.0	37.8	90.00		1,784.6	-90.1	823.7	747.4	76.24	10.804	
9,200.0	7,290.9	9,126.2	7,289.9	42.6	39.6	90.00		1,884.6	-89.7	823.7	743.9	79.71	10.333	
9,300.0	7,290.4	9,226.2	7,289.4	44.2	41.3	90.00		1,984.6	-89.3	823.6	740.4	83.22	9.897	
9,400.0	7,289.9	9,326.2	7,289.0	45.9	43.1	90.00		2,084.6	-88.9	823.6	736.9	86.76	9.494	
9,500.0	7,289.5	9,426.2	7,288.5	47.6	44.9	90.00		2,184.6	-88.4	823.6	733.3	90.31	9.120	
9,600.0	7,289.0	9,526.2	7,288.0	49.3	46.7	90.00		2,284.6	-88.0	823.6	729.7	93.89	8.772	
9,700.0	7,288.5	9,626.2	7,287.6	51.0	48.5	90.00		2,384.6	-87.6	823.6	726.1	97.49	8.448	
9,800.0	7,288.0	9,726.2	7,287.1	52.7	50.3	90.00		2,484.6	-87.2	823.6	722.5	101.11	8.146	
9,900.0	7,287.6	9,826.2	7,286.6	54.5	52.2	90.00		2,584.6	-86.8	823.6	718.8	104.74	7.863	
10,000.0	7,287.1	9,926.2	7,286.2	56.2	54.0	90.00		2,684.6	-86.4	823.6	715.2	108.38	7.599	
10,100.0	7,286.6	10,026.2	7,285.7	58.0	55.8	90.00		2,784.6	-86.0	823.5	711.5	112.04	7.350	

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-30-2N
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-30-2N	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 #3 (8-6-14)	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 #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	7,286.2	10,126.2	7,285.2	59.8	57.7	90.00	2,884.6	-85.6	823.5	707.8	115.71	7.117	
10,300.0	7,285.7	10,226.2	7,284.7	61.6	59.5	90.00	2,984.6	-85.2	823.5	704.1	119.39	6.898	
10,400.0	7,285.2	10,326.2	7,284.3	63.4	61.3	90.00	3,084.6	-84.7	823.5	700.4	123.07	6.691	
10,500.0	7,284.7	10,426.2	7,283.8	65.2	63.2	90.00	3,184.6	-84.3	823.5	696.7	126.77	6.496	
10,600.0	7,284.3	10,526.2	7,283.3	67.0	65.0	90.00	3,284.6	-83.9	823.5	693.0	130.47	6.312	
10,700.0	7,283.8	10,626.2	7,282.9	68.8	66.9	90.00	3,384.6	-83.5	823.5	689.3	134.18	6.137	
10,800.0	7,283.3	10,726.2	7,282.4	70.6	68.8	90.00	3,484.6	-83.1	823.5	685.6	137.90	5.972	
10,900.0	7,282.9	10,826.2	7,281.9	72.4	70.6	90.00	3,584.6	-82.7	823.4	681.8	141.62	5.815	
11,000.0	7,282.4	10,926.2	7,281.4	74.2	72.5	90.00	3,684.6	-82.3	823.4	678.1	145.35	5.665	
11,100.0	7,281.9	11,026.2	7,281.0	76.1	74.4	90.00	3,784.6	-81.9	823.4	674.3	149.08	5.523	
11,200.0	7,281.4	11,126.2	7,280.5	77.9	76.2	90.00	3,884.6	-81.5	823.4	670.6	152.82	5.388	
11,300.0	7,281.0	11,226.2	7,280.0	79.7	78.1	90.00	3,984.6	-81.0	823.4	666.8	156.56	5.259	
11,400.0	7,280.5	11,326.2	7,279.6	81.6	80.0	90.00	4,084.6	-80.6	823.4	663.1	160.30	5.136	
11,500.0	7,280.0	11,426.2	7,279.1	83.4	81.9	90.00	4,184.6	-80.2	823.4	659.3	164.05	5.019	
11,600.0	7,279.6	11,526.2	7,278.6	85.3	83.7	90.00	4,284.6	-79.8	823.4	655.6	167.81	4.907	
11,700.0	7,279.1	11,626.2	7,278.1	87.1	85.6	90.00	4,384.6	-79.4	823.3	651.8	171.56	4.799	
11,800.0	7,278.6	11,726.2	7,277.7	89.0	87.5	90.00	4,484.6	-79.0	823.3	648.0	175.32	4.696	
11,900.0	7,278.1	11,826.2	7,277.2	90.8	89.3	90.00	4,584.6	-78.6	823.3	644.3	178.99	4.600	
11,931.2	7,278.0	11,857.5	7,277.1	91.4	89.8	90.00	4,615.8	-78.4	823.3	643.3	180.06	4.573 SF	

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-2N
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-30-2N	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 #3 (8-6-14)	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 #2 (8										Offset Site Error:		0.0 ft
Survey Program: 0-MWD												Offset Well Error:		0.0 ft
Reference		Offset		Semi Major Axis				Distance						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	87.74	3.6	92.4	92.5					
100.0	100.0	99.0	99.0	0.1	0.1	87.74	3.6	92.4	92.5	92.3	0.22	413.624		
200.0	200.0	199.0	199.0	0.3	0.3	87.74	3.6	92.4	92.5	91.8	0.67	137.645		
300.0	300.0	299.0	299.0	0.6	0.6	87.74	3.6	92.4	92.5	91.4	1.12	82.477		
400.0	400.0	399.0	399.0	0.8	0.8	87.74	3.6	92.4	92.5	90.9	1.57	58.878	CC, ES	
500.0	500.0	499.0	499.0	1.0	1.0	-172.84	3.6	92.4	94.2	92.2	2.01	46.912		
600.0	599.8	598.8	598.8	1.2	1.2	-173.21	3.6	92.4	99.4	97.0	2.44	40.722		
700.0	699.5	698.5	698.5	1.4	1.5	-173.74	3.6	92.4	108.1	105.2	2.88	37.517		
800.0	798.7	797.7	797.7	1.7	1.7	-174.34	3.6	92.4	120.2	116.9	3.32	36.161		
900.0	897.5	896.5	896.5	2.0	1.9	-174.97	3.6	92.4	135.8	132.0	3.77	36.018	SF	
1,000.0	895.8	894.8	894.8	2.4	2.1	-175.55	3.6	92.4	153.8	149.5	4.22	36.438		
1,100.0	1,094.2	1,093.2	1,093.2	2.8	2.3	-176.02	3.6	92.4	171.8	167.1	4.68	36.752		
1,200.0	1,192.5	1,191.5	1,191.5	3.1	2.6	-176.40	3.6	92.4	189.9	184.8	5.13	36.983		
1,300.0	1,290.9	1,289.9	1,289.9	3.5	2.8	-176.71	3.6	92.4	208.0	202.4	5.60	37.157		
1,400.0	1,389.2	1,388.2	1,388.2	3.9	3.0	-176.98	3.6	92.4	226.1	220.0	6.06	37.292		
1,500.0	1,487.6	1,486.6	1,486.6	4.3	3.2	-177.20	3.6	92.4	244.1	237.6	6.53	37.397		
1,600.0	1,585.9	1,584.9	1,584.9	4.7	3.4	-177.39	3.6	92.4	262.2	255.2	7.00	37.482		
1,700.0	1,684.3	1,683.3	1,683.3	5.1	3.7	-177.56	3.6	92.4	280.3	272.9	7.47	37.550		
1,800.0	1,782.6	1,781.6	1,781.6	5.6	3.9	-177.71	3.6	92.4	298.4	290.5	7.94	37.606		
1,900.0	1,880.9	1,879.9	1,879.9	6.0	4.1	-177.84	3.6	92.4	316.5	308.1	8.41	37.653		
2,000.0	1,979.3	1,978.3	1,978.3	6.4	4.3	-177.96	3.6	92.4	334.6	325.8	8.88	37.692		
2,100.0	2,077.6	2,076.6	2,076.6	6.8	4.6	-178.06	3.6	92.4	352.7	343.4	9.35	37.724		
2,200.0	2,176.0	2,175.0	2,175.0	7.2	4.8	-178.16	3.6	92.4	370.8	361.0	9.82	37.752		
2,300.0	2,274.3	2,273.3	2,273.3	7.6	5.0	-178.24	3.6	92.4	388.9	378.6	10.30	37.776		
2,400.0	2,372.7	2,371.7	2,371.7	8.0	5.2	-178.32	3.6	92.4	407.0	396.3	10.77	37.797		
2,500.0	2,471.0	2,470.0	2,470.0	8.4	5.4	-178.39	3.6	92.4	425.1	413.9	11.24	37.815		
2,600.0	2,569.4	2,568.2	2,568.2	8.8	5.6	-178.38	3.0	92.5	443.3	431.6	11.70	37.895		
2,700.0	2,667.7	2,666.3	2,666.2	9.3	5.8	-178.06	0.1	93.0	461.4	449.3	12.13	38.048		
2,800.0	2,766.1	2,764.1	2,763.9	9.7	6.0	-177.47	-5.4	93.9	479.7	467.1	12.56	38.206		
2,900.0	2,864.4	2,861.6	2,861.0	10.1	6.2	-176.62	-13.2	95.1	498.1	485.1	12.99	38.340		
3,000.0	2,962.8	2,959.5	2,958.5	10.5	6.3	-175.69	-22.5	96.6	516.7	503.3	13.44	38.439		
3,100.0	3,061.1	3,057.4	3,055.9	10.9	6.5	-174.81	-31.7	98.1	535.5	521.6	13.90	38.516		
3,200.0	3,159.4	3,155.3	3,153.4	11.3	6.7	-174.00	-41.0	99.6	554.4	540.0	14.37	38.572		
3,300.0	3,257.8	3,253.2	3,250.9	11.8	6.9	-173.24	-50.2	101.1	573.3	558.5	14.85	38.610		
3,400.0	3,356.1	3,351.1	3,348.3	12.2	7.1	-172.53	-59.5	102.5	592.4	577.0	15.33	38.634		
3,500.0	3,454.5	3,449.0	3,445.8	12.6	7.3	-171.86	-68.7	104.0	611.5	595.7	15.82	38.644		
3,600.0	3,552.8	3,546.9	3,543.2	13.0	7.6	-171.23	-78.0	105.5	630.7	614.4	16.32	38.644		
3,700.0	3,651.2	3,644.8	3,640.7	13.4	7.8	-170.64	-87.2	107.0	650.0	633.2	16.82	38.635		
3,800.0	3,749.5	3,742.7	3,738.2	13.8	8.0	-170.08	-96.5	108.4	669.3	652.0	17.33	38.619		
3,900.0	3,847.9	3,840.6	3,835.6	14.2	8.2	-169.56	-105.7	109.9	688.7	670.9	17.84	38.597		
4,000.0	3,946.2	3,938.6	3,933.1	14.7	8.5	-169.06	-114.9	111.4	708.2	689.8	18.36	38.571		
4,100.0	4,044.6	4,036.5	4,030.5	15.1	8.7	-168.59	-124.2	112.9	727.7	708.8	18.88	38.540		
4,200.0	4,142.9	4,134.4	4,128.0	15.5	9.0	-168.14	-133.4	114.4	747.2	727.8	19.41	38.506		
4,300.0	4,241.3	4,236.1	4,229.4	15.9	9.2	-167.79	-141.9	115.7	766.6	746.7	19.93	38.463		
4,400.0	4,339.6	4,338.5	4,331.6	16.3	9.4	-167.66	-147.7	116.6	785.4	765.0	20.44	38.431		
4,500.0	4,437.9	4,441.1	4,434.2	16.7	9.7	-167.72	-150.8	117.1	803.8	782.8	20.92	38.417		
4,600.0	4,536.3	4,542.3	4,535.3	17.2	9.9	-167.96	-151.4	117.2	821.6	800.2	21.38	38.425		
4,700.0	4,634.6	4,640.6	4,633.6	17.6	10.1	-168.22	-151.4	117.2	839.3	817.5	21.83	38.442		
4,800.0	4,733.0	4,738.9	4,732.0	18.0	10.3	-168.46	-151.4	117.2	857.1	834.8	22.29	38.452		
4,900.0	4,831.3	4,837.3	4,830.3	18.4	10.5	-168.70	-151.4	117.2	874.8	852.1	22.75	38.461		
5,000.0	4,929.7	4,935.6	4,928.7	18.8	10.7	-168.93	-151.4	117.2	892.6	869.4	23.20	38.469		

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-30-2N
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-30-2N	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 #3 (8-6-14)	Offset TVD Reference:	Offset Datum

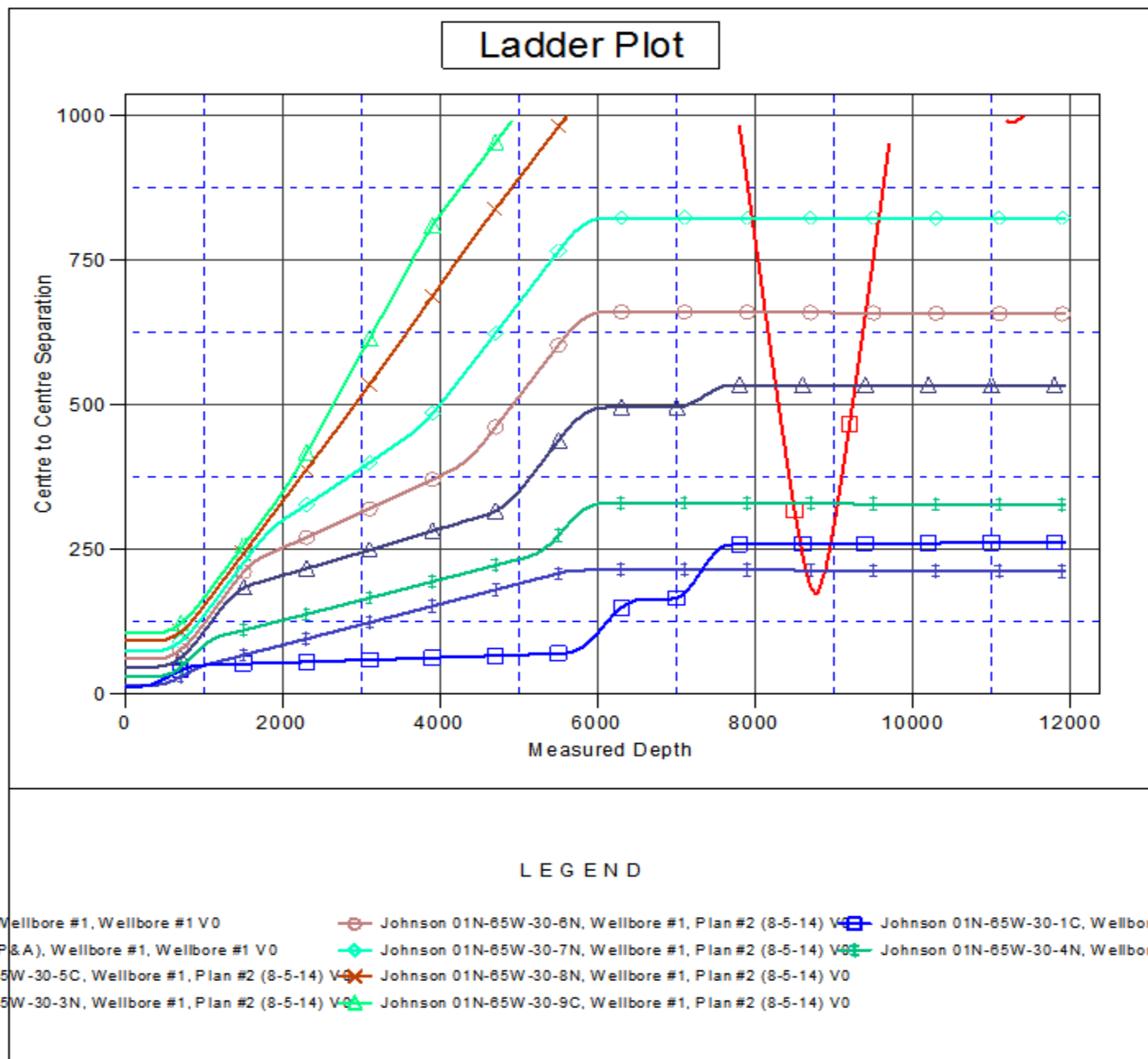
Offset Design Johnson 01N-65W-30-1C Pad Sec.30-T1N-R65W - Johnson 01N-65W-30-8N - Wellbore #1 - Plan #2 (8										Offset Site Error:		0.0 ft	
Survey Program: 0-MWD										Offset Well Error:		0.0 ft	
Reference		Offset		Semi Major Axis			Distance						
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
Depth (ft)	Depth (ft)	Depth (ft)	Depth (ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
5,100.0	5,028.0	5,034.0	5,027.0	19.2	10.9	-169.15	-151.4	117.2	910.4	886.7	23.66	38.476	
5,200.0	5,126.4	5,132.3	5,125.4	19.7	11.1	-169.36	-151.4	117.2	928.2	904.1	24.12	38.482	
5,300.0	5,224.7	5,230.7	5,223.7	20.1	11.3	-169.56	-151.4	117.2	946.0	921.4	24.58	38.488	
5,400.0	5,323.1	5,329.0	5,322.1	20.5	11.5	-169.75	-151.4	117.2	963.8	938.8	25.04	38.492	
5,500.0	5,421.4	5,427.4	5,420.4	20.9	11.7	-169.94	-151.4	117.2	981.7	956.2	25.50	38.496	
5,600.0	5,519.8	5,525.8	5,518.8	21.3	11.9	-170.14	-151.4	117.2	999.3	973.3	25.97	38.473	

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-2N
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-30-2N	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 #3 (8-6-14)	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 #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 (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	88.04		3.6	106.4	106.5				
100.0	100.0	99.0	99.0	0.1	0.1	88.04		3.6	106.4	106.5	106.3	0.22	476.204	
200.0	200.0	199.0	199.0	0.3	0.3	88.04		3.6	106.4	106.5	105.8	0.67	158.471	
300.0	300.0	299.0	299.0	0.6	0.6	88.04		3.6	106.4	106.5	105.4	1.12	94.955	
400.0	400.0	399.0	399.0	0.8	0.8	88.04		3.6	106.4	106.5	104.9	1.57	67.786 CC, ES	
500.0	500.0	499.0	499.0	1.0	1.0	-172.53		3.6	106.4	108.2	106.2	2.01	53.879	
600.0	599.8	598.8	598.8	1.2	1.2	-172.87		3.6	106.4	113.4	111.0	2.44	46.452	
700.0	699.5	698.5	698.5	1.4	1.5	-173.35		3.6	106.4	122.1	119.2	2.88	42.370	
800.0	798.7	797.7	797.7	1.7	1.7	-173.93		3.6	106.4	134.2	130.9	3.32	40.363	
900.0	897.5	896.5	896.5	2.0	1.9	-174.53		3.6	106.4	149.8	146.0	3.77	39.718	
1,000.0	995.8	994.8	994.8	2.4	2.1	-175.11		3.6	106.4	167.7	163.5	4.22	39.740	
1,100.0	1,094.2	1,093.2	1,093.2	2.8	2.3	-175.59		3.6	106.4	185.8	181.1	4.68	39.729	
1,200.0	1,192.5	1,191.5	1,191.5	3.1	2.6	-175.98		3.6	106.4	203.8	198.7	5.14	39.690	
1,300.0	1,290.9	1,289.9	1,289.9	3.5	2.8	-176.31		3.6	106.4	221.9	216.3	5.60	39.638	
1,400.0	1,389.2	1,388.2	1,388.2	3.9	3.0	-176.59		3.6	106.4	240.0	233.9	6.06	39.581	
1,500.0	1,487.6	1,486.6	1,486.6	4.3	3.2	-176.83		3.6	106.4	258.1	251.5	6.53	39.521	
1,600.0	1,585.9	1,584.9	1,584.9	4.7	3.4	-177.03		3.6	106.4	276.1	269.1	7.00	39.462	
1,700.0	1,684.3	1,683.3	1,683.3	5.1	3.7	-177.22		3.6	106.4	294.2	286.8	7.47	39.405	
1,800.0	1,782.6	1,781.6	1,781.6	5.6	3.9	-177.38		3.6	106.4	312.3	304.4	7.94	39.350 SF	
1,900.0	1,880.9	1,876.4	1,876.4	6.0	4.1	-177.40		3.0	106.9	330.8	322.5	8.38	39.470	
2,000.0	1,979.3	1,970.0	1,969.9	6.4	4.3	-177.10		0.7	108.8	350.6	341.8	8.81	39.803	
2,100.0	2,077.6	2,062.9	2,062.7	6.8	4.4	-176.54		-3.4	112.1	371.7	362.5	9.24	40.246	
2,200.0	2,176.0	2,155.1	2,154.6	7.2	4.6	-175.75		-9.2	116.8	394.1	384.5	9.67	40.755	
2,300.0	2,274.3	2,247.6	2,246.6	7.6	4.8	-174.79		-16.6	122.9	418.0	407.8	10.12	41.307	
2,400.0	2,372.7	2,344.3	2,342.7	8.0	5.0	-173.81		-25.1	129.8	442.3	431.7	10.58	41.798	
2,500.0	2,471.0	2,441.1	2,438.8	8.4	5.2	-172.93		-33.5	136.6	466.8	455.7	11.05	42.227	
2,600.0	2,569.4	2,537.8	2,534.9	8.8	5.4	-172.14		-41.9	143.5	491.3	479.8	11.53	42.597	
2,700.0	2,667.7	2,634.5	2,631.0	9.3	5.7	-171.43		-50.3	150.3	516.0	504.0	12.02	42.925	
2,800.0	2,766.1	2,731.2	2,727.2	9.7	5.9	-170.78		-58.7	157.1	540.7	528.2	12.51	43.212	
2,900.0	2,864.4	2,828.0	2,823.3	10.1	6.2	-170.18		-67.1	164.0	565.5	552.4	13.01	43.464	
3,000.0	2,962.8	2,924.7	2,919.4	10.5	6.4	-169.64		-75.6	170.8	590.3	576.8	13.51	43.687	
3,100.0	3,061.1	3,021.4	3,015.5	10.9	6.7	-169.14		-84.0	177.7	615.1	601.1	14.02	43.885	
3,200.0	3,159.4	3,118.1	3,111.6	11.3	6.9	-168.68		-92.4	184.5	640.1	625.5	14.53	44.062	
3,300.0	3,257.8	3,214.8	3,207.7	11.8	7.2	-168.25		-100.8	191.3	665.0	650.0	15.04	44.220	
3,400.0	3,356.1	3,311.6	3,303.8	12.2	7.4	-167.85		-109.2	198.2	690.0	674.4	15.55	44.362	
3,500.0	3,454.5	3,408.3	3,400.0	12.6	7.7	-167.49		-117.6	205.0	715.0	698.9	16.07	44.489	
3,600.0	3,552.8	3,505.0	3,496.1	13.0	8.0	-167.14		-126.0	211.9	740.0	723.4	16.59	44.605	
3,700.0	3,651.2	3,605.0	3,595.4	13.4	8.3	-166.82		-134.7	218.9	765.0	747.9	17.12	44.696	
3,800.0	3,749.5	3,717.6	3,707.6	13.8	8.5	-166.60		-142.7	225.4	788.7	771.1	17.64	44.709	
3,900.0	3,847.9	3,831.4	3,821.1	14.2	8.8	-166.57		-148.1	229.8	810.5	792.3	18.15	44.649	
4,000.0	3,946.2	3,946.1	3,935.8	14.7	9.0	-166.72		-150.9	232.1	830.2	811.6	18.65	44.522	
4,100.0	4,044.6	4,053.9	4,043.6	15.1	9.2	-167.00		-151.4	232.4	848.2	829.1	19.12	44.370	
4,200.0	4,142.9	4,152.2	4,141.9	15.5	9.4	-167.27		-151.4	232.4	865.9	846.3	19.57	44.245	
4,300.0	4,241.3	4,250.6	4,240.3	15.9	9.6	-167.53		-151.4	232.4	883.5	863.5	20.03	44.121	
4,400.0	4,339.6	4,348.9	4,338.6	16.3	9.8	-167.78		-151.4	232.4	901.2	880.8	20.48	44.002	
4,500.0	4,437.9	4,447.3	4,436.9	16.7	10.0	-168.02		-151.4	232.4	919.0	898.0	20.94	43.887	
4,600.0	4,536.3	4,545.6	4,535.3	17.2	10.2	-168.25		-151.4	232.4	936.7	915.3	21.40	43.777	
4,700.0	4,634.6	4,644.0	4,633.6	17.6	10.4	-168.47		-151.4	232.4	954.5	932.6	21.86	43.670	
4,800.0	4,733.0	4,742.3	4,732.0	18.0	10.6	-168.68		-151.4	232.4	972.2	949.9	22.32	43.568	
4,900.0	4,831.3	4,840.7	4,830.3	18.4	10.8	-168.89		-151.4	232.4	990.0	967.2	22.78	43.468	

Company:	Verdad Oil & Gas Corporation	Local Co-ordinate Reference:	Well Johnson 01N-65W-30-2N
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-30-2N	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 #3 (8-6-14)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5013.0ft (Original Well Elev) Coordinates are relative to: Johnson 01N-65W-30-2N
 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-30-2N
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-30-2N	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 #3 (8-6-14)	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5013.0ft (Original Well Elev) Coordinates are relative to: Johnson 01N-65W-30-2N
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 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.51°

