



PetroShare Corp

Project: ADAMS COUNTY, CO
Site: S19-T1S-R65W
Well: CONNER 19-18-3NCH
Wellbore: OH
Design: PLAN #1



Azimuths to Grid North
True North: -0.51°
Magnetic North: 7.50°
Magnetic Field
Strength: 51671.1nT
Dip Angle: 66.20°
Date: 12/31/2020
Model: HDGM2020_FILE

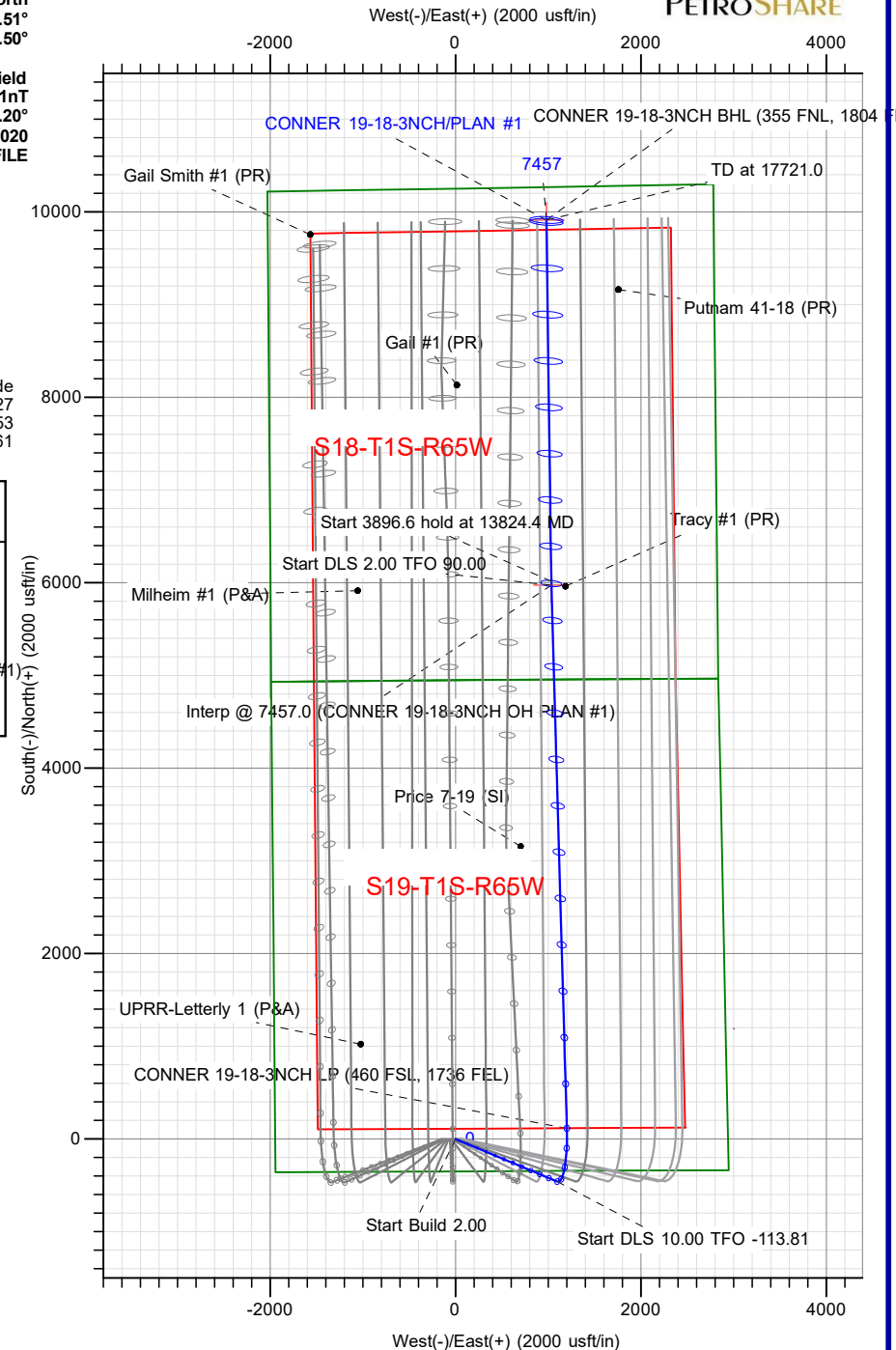
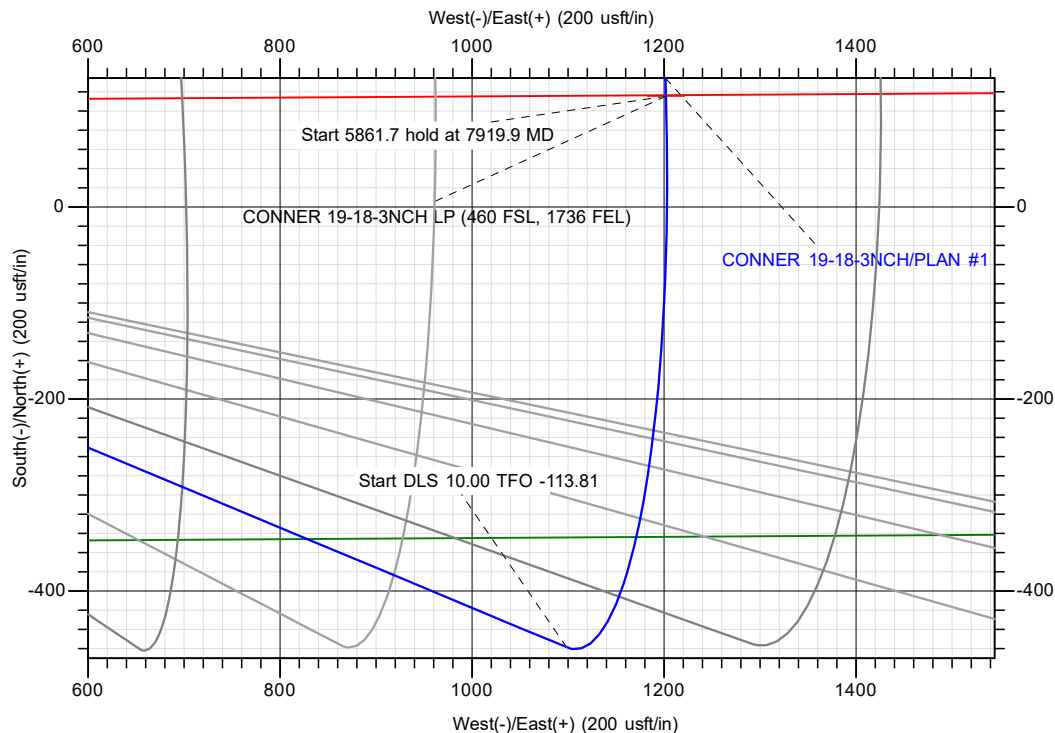
PROJECT DETAILS: ADAMS COUNTY, CO
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
CONNER 19-18-3NCH BHL (355 FNL, 1804 FEL)	7457.0	9913.7	981.0	1233468.84	3223140.90	39.971506	-104.703827
CONNER 19-18-3NCH LP (460 FSL, 1736 FEL)	7457.0	115.4	1202.1	1223670.52	3223361.94	39.944603	-104.703353
Interp @ 7457.0 (CONNER 19-18-3NCH OH PLAN #1)	7457.0	5974.7	1034.9	1229529.85	3223194.77	39.960691	-104.703761

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	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1606.3	12.13	112.65	1601.7	-24.6	59.0	2.00	112.65	-18.7	
4	6970.3	12.13	112.65	6846.1	-458.6	1098.8	0.00	0.00	-348.2	
5	7919.9	90.00	358.37	7457.0	115.4	1202.1	10.00	113.81	233.2	CONNER 19-18-3NCH LP (460 FSL, 1736 FEL)
6	13781.6	90.00	358.37	7457.0	5974.7	1034.9	0.00	0.00	6047.6	Interp @ 7457.0 (CONNER 19-18-3NCH OH PLAN #1)
7	13824.4	90.00	359.22	7457.0	6017.5	1034.0	2.00	90.00	6090.1	
8	17721.0	90.00	359.22	7457.0	9913.7	981.0	0.00	0.00	9962.2	CONNER 19-18-3NCH BHL (355 FNL, 1804 FEL)



TOTAL DIRECTIONAL SERVICES LLC
671 Academy Ct, Windsor, CO 80550
Phone: (970) 460-9402

Plan: PLAN #1 (CONNER 19-18-3NCH/OH)
S19-T1S-R65W
Created By: Lance Roybal
Date: 19:26, March 12 2021
Approved: _____
Date: _____



PetroShare Corp

Project: ADAMS COUNTY, CO
Site: S19-T1S-R65W
Well: CONNER 19-18-3NCH
Wellbore: OH
Design: PLAN #1



Azimuths to Grid North
True North: -0.51°
Magnetic North: 7.50°

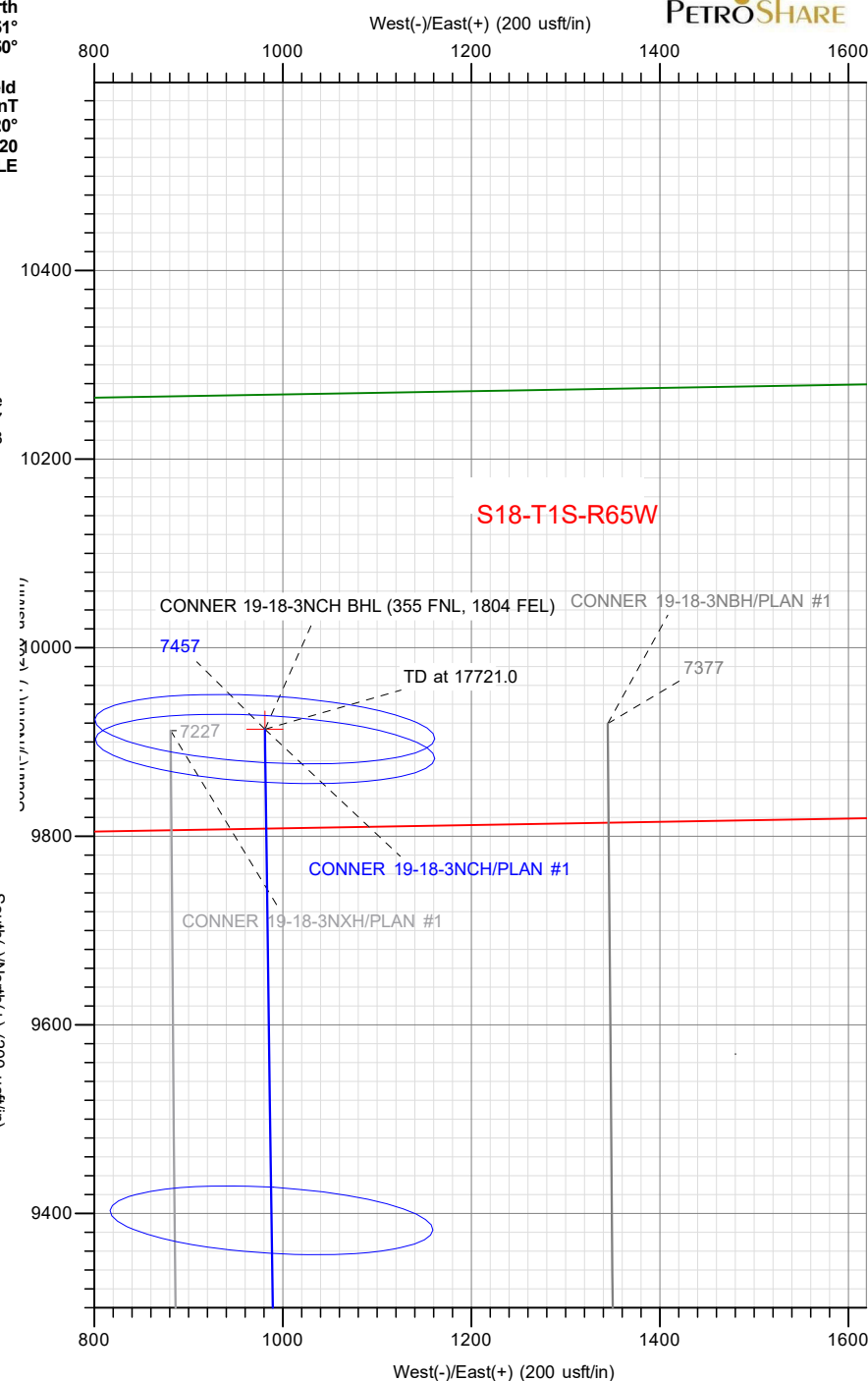
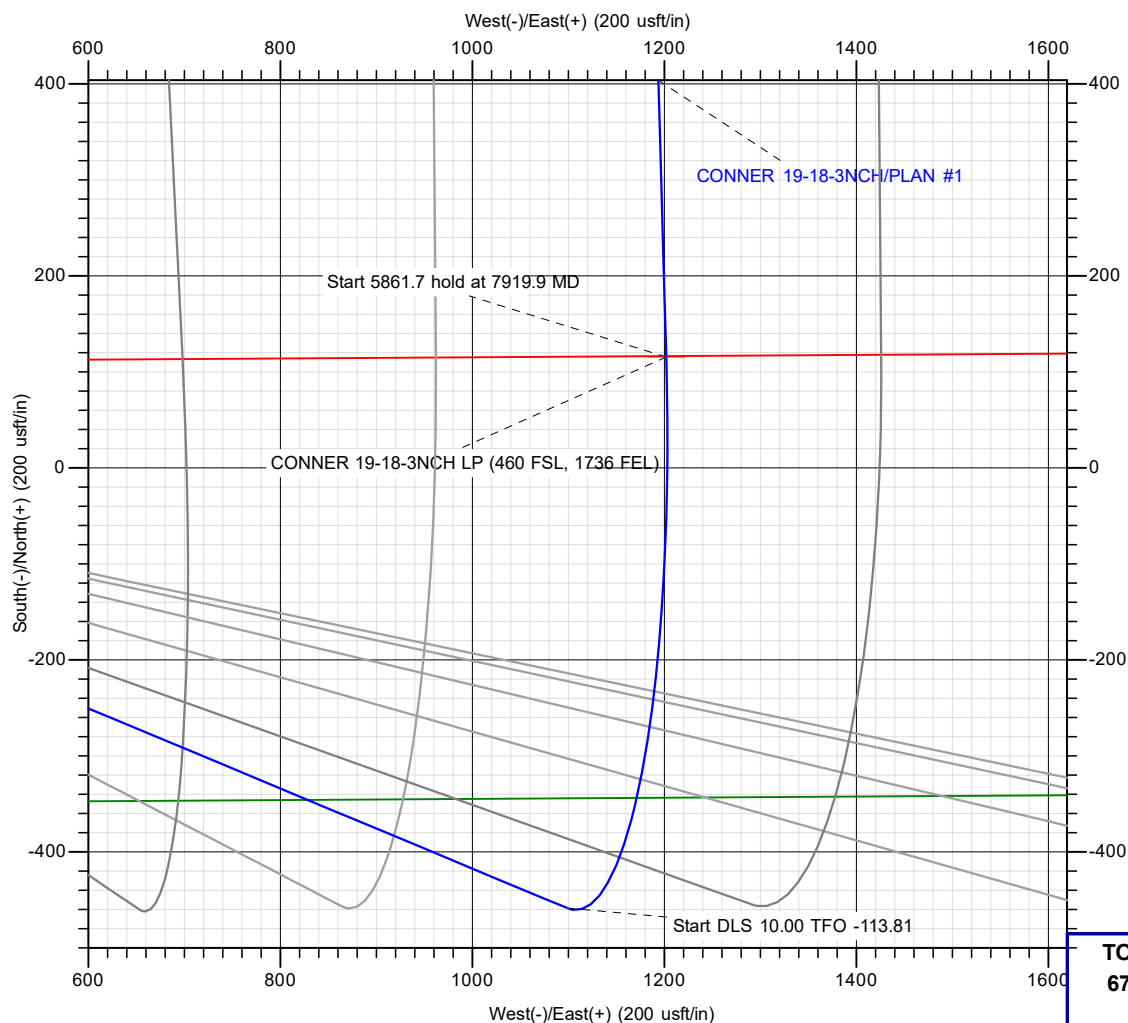
Magnetic Field
Strength: 51671.1nT
Dip Angle: 66.20°
Date: 12/31/2020
Model: HDGM2020_FILE



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Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone

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PetroShare Corp

ADAMS COUNTY, CO

S19-T1S-R65W

CONNER 19-18-3NCH

OH

Plan: PLAN #1

Standard Planning Report

12 March, 2021



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Company:	PetroShare Corp	TVD Reference:	13' KB @ 5155.0usft
Project:	ADAMS COUNTY, CO	MD Reference:	13' KB @ 5155.0usft
Site:	S19-T1S-R65W	North Reference:	Grid
Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Project	ADAMS COUNTY, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		S19-T1S-R65W			
Site Position:		Northing:	1,223,554.35 usft	Latitude:	39.944317
From:	Map	Easting:	3,222,009.87 usft	Longitude:	-104.708179
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.51

Well	CONNER 19-18-3NCH					
Well Position	+N/-S	0.8 usft	Northing:	1,223,555.11 usft	Latitude:	39.944316
	+E/-W	150.0 usft	Easting:	3,222,159.87 usft	Longitude:	-104.707644
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	5,142.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2020_FILE	12/31/2020	8.02	66.20	51,671.10000000

Design	PLAN #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	5.65

Plan Survey Tool Program	Date	3/12/2021		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,720.8	PLAN #1 (OH)	MWD
				OWSG MWD - Standard

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,606.3	12.13	112.65	1,601.7	-24.6	59.0	2.00	2.00	0.00	112.65	
6,970.3	12.13	112.65	6,846.1	-458.6	1,098.8	0.00	0.00	0.00	0.00	
7,919.9	90.00	358.37	7,457.0	115.4	1,202.1	10.00	8.20	-12.04	-113.81	CONNER 19-18-3NCH
13,781.6	90.00	358.37	7,457.0	5,974.7	1,034.9	0.00	0.00	0.00	0.00	Interp @ 7457.0 (CONNER 19-18-3NCH)
13,824.4	90.00	359.22	7,457.0	6,017.5	1,034.0	2.00	0.00	2.00	90.00	
17,721.0	90.00	359.22	7,457.0	9,913.7	981.0	0.00	0.00	0.00	0.00	CONNER 19-18-3NCH

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Company:	PetroShare Corp	TVD Reference:	13' KB @ 5155.0usft
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Site:	S19-T1S-R65W	North Reference:	Grid
Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	2.00	112.65	1,100.0	-0.7	1.6	-0.5	2.00	2.00	0.00
1,200.0	4.00	112.65	1,199.8	-2.7	6.4	-2.0	2.00	2.00	0.00
1,300.0	6.00	112.65	1,299.5	-6.0	14.5	-4.6	2.00	2.00	0.00
1,400.0	8.00	112.65	1,398.7	-10.7	25.7	-8.2	2.00	2.00	0.00
1,500.0	10.00	112.65	1,497.5	-16.8	40.2	-12.7	2.00	2.00	0.00
1,600.0	12.00	112.65	1,595.6	-24.1	57.8	-18.3	2.00	2.00	0.00
1,606.3	12.13	112.65	1,601.7	-24.6	59.0	-18.7	2.00	2.00	0.00
1,700.0	12.13	112.65	1,693.4	-32.2	77.2	-24.4	0.00	0.00	0.00
1,800.0	12.13	112.65	1,791.2	-40.3	96.5	-30.6	0.00	0.00	0.00
1,900.0	12.13	112.65	1,888.9	-48.4	115.9	-36.7	0.00	0.00	0.00
2,000.0	12.13	112.65	1,986.7	-56.5	135.3	-42.9	0.00	0.00	0.00
2,100.0	12.13	112.65	2,084.5	-64.6	154.7	-49.0	0.00	0.00	0.00
2,200.0	12.13	112.65	2,182.2	-72.7	174.1	-55.2	0.00	0.00	0.00
2,300.0	12.13	112.65	2,280.0	-80.7	193.5	-61.3	0.00	0.00	0.00
2,400.0	12.13	112.65	2,377.8	-88.8	212.8	-67.4	0.00	0.00	0.00
2,500.0	12.13	112.65	2,475.5	-96.9	232.2	-73.6	0.00	0.00	0.00
2,600.0	12.13	112.65	2,573.3	-105.0	251.6	-79.7	0.00	0.00	0.00
2,700.0	12.13	112.65	2,671.1	-113.1	271.0	-85.9	0.00	0.00	0.00
2,800.0	12.13	112.65	2,768.9	-121.2	290.4	-92.0	0.00	0.00	0.00
2,900.0	12.13	112.65	2,866.6	-129.3	309.8	-98.2	0.00	0.00	0.00
3,000.0	12.13	112.65	2,964.4	-137.4	329.1	-104.3	0.00	0.00	0.00
3,100.0	12.13	112.65	3,062.2	-145.5	348.5	-110.4	0.00	0.00	0.00
3,200.0	12.13	112.65	3,159.9	-153.6	367.9	-116.6	0.00	0.00	0.00
3,300.0	12.13	112.65	3,257.7	-161.6	387.3	-122.7	0.00	0.00	0.00
3,400.0	12.13	112.65	3,355.5	-169.7	406.7	-128.9	0.00	0.00	0.00
3,500.0	12.13	112.65	3,453.2	-177.8	426.1	-135.0	0.00	0.00	0.00
3,600.0	12.13	112.65	3,551.0	-185.9	445.5	-141.1	0.00	0.00	0.00
3,700.0	12.13	112.65	3,648.8	-194.0	464.8	-147.3	0.00	0.00	0.00
3,800.0	12.13	112.65	3,746.5	-202.1	484.2	-153.4	0.00	0.00	0.00
3,900.0	12.13	112.65	3,844.3	-210.2	503.6	-159.6	0.00	0.00	0.00
4,000.0	12.13	112.65	3,942.1	-218.3	523.0	-165.7	0.00	0.00	0.00
4,100.0	12.13	112.65	4,039.9	-226.4	542.4	-171.9	0.00	0.00	0.00
4,200.0	12.13	112.65	4,137.6	-234.5	561.8	-178.0	0.00	0.00	0.00
4,300.0	12.13	112.65	4,235.4	-242.5	581.1	-184.1	0.00	0.00	0.00
4,400.0	12.13	112.65	4,333.2	-250.6	600.5	-190.3	0.00	0.00	0.00
4,500.0	12.13	112.65	4,430.9	-258.7	619.9	-196.4	0.00	0.00	0.00
4,600.0	12.13	112.65	4,528.7	-266.8	639.3	-202.6	0.00	0.00	0.00
4,700.0	12.13	112.65	4,626.5	-274.9	658.7	-208.7	0.00	0.00	0.00
4,800.0	12.13	112.65	4,724.2	-283.0	678.1	-214.8	0.00	0.00	0.00
4,900.0	12.13	112.65	4,822.0	-291.1	697.5	-221.0	0.00	0.00	0.00
5,000.0	12.13	112.65	4,919.8	-299.2	716.8	-227.1	0.00	0.00	0.00
5,100.0	12.13	112.65	5,017.5	-307.3	736.2	-233.3	0.00	0.00	0.00
5,200.0	12.13	112.65	5,115.3	-315.4	755.6	-239.4	0.00	0.00	0.00

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5,300.0	12.13	112.65	5,213.1	-323.5	775.0	-245.6	0.00	0.00	0.00
5,400.0	12.13	112.65	5,310.8	-331.5	794.4	-251.7	0.00	0.00	0.00
5,500.0	12.13	112.65	5,408.6	-339.6	813.8	-257.8	0.00	0.00	0.00
5,600.0	12.13	112.65	5,506.4	-347.7	833.1	-264.0	0.00	0.00	0.00
5,700.0	12.13	112.65	5,604.2	-355.8	852.5	-270.1	0.00	0.00	0.00
5,800.0	12.13	112.65	5,701.9	-363.9	871.9	-276.3	0.00	0.00	0.00
5,900.0	12.13	112.65	5,799.7	-372.0	891.3	-282.4	0.00	0.00	0.00
6,000.0	12.13	112.65	5,897.5	-380.1	910.7	-288.6	0.00	0.00	0.00
6,100.0	12.13	112.65	5,995.2	-388.2	930.1	-294.7	0.00	0.00	0.00
6,200.0	12.13	112.65	6,093.0	-396.3	949.5	-300.8	0.00	0.00	0.00
6,300.0	12.13	112.65	6,190.8	-404.4	968.8	-307.0	0.00	0.00	0.00
6,400.0	12.13	112.65	6,288.5	-412.4	988.2	-313.1	0.00	0.00	0.00
6,500.0	12.13	112.65	6,386.3	-420.5	1,007.6	-319.3	0.00	0.00	0.00
6,600.0	12.13	112.65	6,484.1	-428.6	1,027.0	-325.4	0.00	0.00	0.00
6,700.0	12.13	112.65	6,581.8	-436.7	1,046.4	-331.5	0.00	0.00	0.00
6,800.0	12.13	112.65	6,679.6	-444.8	1,065.8	-337.7	0.00	0.00	0.00
6,900.0	12.13	112.65	6,777.4	-452.9	1,085.1	-343.8	0.00	0.00	0.00
6,970.3	12.13	112.65	6,846.1	-458.6	1,098.8	-348.2	0.00	0.00	0.00
7,000.0	11.25	98.61	6,875.2	-460.2	1,104.5	-349.2	10.00	-2.93	-47.33
7,100.0	13.64	52.15	6,973.1	-454.4	1,123.5	-341.6	10.00	2.39	-46.46
7,200.0	21.05	28.95	7,068.6	-431.4	1,141.6	-316.9	10.00	7.41	-23.20
7,300.0	29.96	18.23	7,158.8	-391.9	1,158.1	-275.9	10.00	8.91	-10.72
7,400.0	39.36	12.18	7,241.0	-337.0	1,172.7	-219.9	10.00	9.40	-6.05
7,500.0	48.97	8.18	7,312.6	-268.5	1,184.7	-150.6	10.00	9.61	-4.00
7,600.0	58.68	5.21	7,371.6	-188.5	1,194.0	-70.0	10.00	9.71	-2.97
7,700.0	68.44	2.80	7,416.1	-99.3	1,200.2	19.4	10.00	9.77	-2.41
7,800.0	78.24	0.70	7,444.7	-3.6	1,203.1	114.9	10.00	9.80	-2.10
7,900.0	88.05	358.75	7,456.7	95.5	1,202.6	213.5	10.00	9.81	-1.95
7,919.9	90.00	358.37	7,457.0	115.4	1,202.1	233.2	10.00	9.81	-1.92
CONNER 19-18-3NCH LP (460 FSL, 1736 FEL)									
8,000.0	90.00	358.37	7,457.0	195.5	1,199.8	312.7	0.00	0.00	0.00
8,100.0	90.00	358.37	7,457.0	295.4	1,196.9	411.9	0.00	0.00	0.00
8,200.0	90.00	358.37	7,457.0	395.4	1,194.1	511.1	0.00	0.00	0.00
8,300.0	90.00	358.37	7,457.0	495.4	1,191.2	610.3	0.00	0.00	0.00
8,400.0	90.00	358.37	7,457.0	595.3	1,188.4	709.5	0.00	0.00	0.00
8,500.0	90.00	358.37	7,457.0	695.3	1,185.5	808.6	0.00	0.00	0.00
8,600.0	90.00	358.37	7,457.0	795.2	1,182.7	907.8	0.00	0.00	0.00
8,700.0	90.00	358.37	7,457.0	895.2	1,179.8	1,007.0	0.00	0.00	0.00
8,800.0	90.00	358.37	7,457.0	995.2	1,177.0	1,106.2	0.00	0.00	0.00
8,900.0	90.00	358.37	7,457.0	1,095.1	1,174.1	1,205.4	0.00	0.00	0.00
9,000.0	90.00	358.37	7,457.0	1,195.1	1,171.3	1,304.6	0.00	0.00	0.00
9,100.0	90.00	358.37	7,457.0	1,295.0	1,168.4	1,403.8	0.00	0.00	0.00
9,200.0	90.00	358.37	7,457.0	1,395.0	1,165.6	1,503.0	0.00	0.00	0.00
9,300.0	90.00	358.37	7,457.0	1,495.0	1,162.7	1,602.2	0.00	0.00	0.00
9,400.0	90.00	358.37	7,457.0	1,594.9	1,159.9	1,701.4	0.00	0.00	0.00
9,500.0	90.00	358.37	7,457.0	1,694.9	1,157.0	1,800.6	0.00	0.00	0.00
9,600.0	90.00	358.37	7,457.0	1,794.8	1,154.2	1,899.8	0.00	0.00	0.00
9,700.0	90.00	358.37	7,457.0	1,894.8	1,151.3	1,999.0	0.00	0.00	0.00
9,800.0	90.00	358.37	7,457.0	1,994.8	1,148.5	2,098.2	0.00	0.00	0.00
9,900.0	90.00	358.37	7,457.0	2,094.7	1,145.6	2,197.3	0.00	0.00	0.00
10,000.0	90.00	358.37	7,457.0	2,194.7	1,142.7	2,296.5	0.00	0.00	0.00
10,100.0	90.00	358.37	7,457.0	2,294.6	1,139.9	2,395.7	0.00	0.00	0.00
10,200.0	90.00	358.37	7,457.0	2,394.6	1,137.0	2,494.9	0.00	0.00	0.00

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Company:	PetroShare Corp	TVD Reference:	13' KB @ 5155.0usft
Project:	ADAMS COUNTY, CO	MD Reference:	13' KB @ 5155.0usft
Site:	S19-T1S-R65W	North Reference:	Grid
Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,300.0	90.00	358.37	7,457.0	2,494.6	1,134.2	2,594.1	0.00	0.00	0.00
10,400.0	90.00	358.37	7,457.0	2,594.5	1,131.3	2,693.3	0.00	0.00	0.00
10,500.0	90.00	358.37	7,457.0	2,694.5	1,128.5	2,792.5	0.00	0.00	0.00
10,600.0	90.00	358.37	7,457.0	2,794.4	1,125.6	2,891.7	0.00	0.00	0.00
10,700.0	90.00	358.37	7,457.0	2,894.4	1,122.8	2,990.9	0.00	0.00	0.00
10,800.0	90.00	358.37	7,457.0	2,994.3	1,119.9	3,090.1	0.00	0.00	0.00
10,900.0	90.00	358.37	7,457.0	3,094.3	1,117.1	3,189.3	0.00	0.00	0.00
11,000.0	90.00	358.37	7,457.0	3,194.3	1,114.2	3,288.5	0.00	0.00	0.00
11,100.0	90.00	358.37	7,457.0	3,294.2	1,111.4	3,387.7	0.00	0.00	0.00
11,200.0	90.00	358.37	7,457.0	3,394.2	1,108.5	3,486.9	0.00	0.00	0.00
11,300.0	90.00	358.37	7,457.0	3,494.1	1,105.7	3,586.0	0.00	0.00	0.00
11,400.0	90.00	358.37	7,457.0	3,594.1	1,102.8	3,685.2	0.00	0.00	0.00
11,500.0	90.00	358.37	7,457.0	3,694.1	1,100.0	3,784.4	0.00	0.00	0.00
11,600.0	90.00	358.37	7,457.0	3,794.0	1,097.1	3,883.6	0.00	0.00	0.00
11,700.0	90.00	358.37	7,457.0	3,894.0	1,094.3	3,982.8	0.00	0.00	0.00
11,800.0	90.00	358.37	7,457.0	3,993.9	1,091.4	4,082.0	0.00	0.00	0.00
11,900.0	90.00	358.37	7,457.0	4,093.9	1,088.6	4,181.2	0.00	0.00	0.00
12,000.0	90.00	358.37	7,457.0	4,193.9	1,085.7	4,280.4	0.00	0.00	0.00
12,100.0	90.00	358.37	7,457.0	4,293.8	1,082.9	4,379.6	0.00	0.00	0.00
12,200.0	90.00	358.37	7,457.0	4,393.8	1,080.0	4,478.8	0.00	0.00	0.00
12,300.0	90.00	358.37	7,457.0	4,493.7	1,077.2	4,578.0	0.00	0.00	0.00
12,400.0	90.00	358.37	7,457.0	4,593.7	1,074.3	4,677.2	0.00	0.00	0.00
12,500.0	90.00	358.37	7,457.0	4,693.7	1,071.5	4,776.4	0.00	0.00	0.00
12,600.0	90.00	358.37	7,457.0	4,793.6	1,068.6	4,875.5	0.00	0.00	0.00
12,700.0	90.00	358.37	7,457.0	4,893.6	1,065.7	4,974.7	0.00	0.00	0.00
12,800.0	90.00	358.37	7,457.0	4,993.5	1,062.9	5,073.9	0.00	0.00	0.00
12,900.0	90.00	358.37	7,457.0	5,093.5	1,060.0	5,173.1	0.00	0.00	0.00
13,000.0	90.00	358.37	7,457.0	5,193.5	1,057.2	5,272.3	0.00	0.00	0.00
13,100.0	90.00	358.37	7,457.0	5,293.4	1,054.3	5,371.5	0.00	0.00	0.00
13,200.0	90.00	358.37	7,457.0	5,393.4	1,051.5	5,470.7	0.00	0.00	0.00
13,300.0	90.00	358.37	7,457.0	5,493.3	1,048.6	5,569.9	0.00	0.00	0.00
13,400.0	90.00	358.37	7,457.0	5,593.3	1,045.8	5,669.1	0.00	0.00	0.00
13,500.0	90.00	358.37	7,457.0	5,693.2	1,042.9	5,768.3	0.00	0.00	0.00
13,600.0	90.00	358.37	7,457.0	5,793.2	1,040.1	5,867.5	0.00	0.00	0.00
13,700.0	90.00	358.37	7,457.0	5,893.2	1,037.2	5,966.7	0.00	0.00	0.00
13,781.6	90.00	358.37	7,457.0	5,974.7	1,034.9	6,047.6	0.00	0.00	0.00
Interp @ 7457.0 (CONNER 19-18-3NCH OH PLAN #1)									
13,800.0	90.00	358.73	7,457.0	5,993.1	1,034.4	6,065.9	2.00	0.00	2.00
13,824.4	90.00	359.22	7,457.0	6,017.5	1,034.0	6,090.1	2.00	0.00	2.00
13,900.0	90.00	359.22	7,457.0	6,093.1	1,033.0	6,165.2	0.00	0.00	0.00
14,000.0	90.00	359.22	7,457.0	6,193.1	1,031.6	6,264.6	0.00	0.00	0.00
14,100.0	90.00	359.22	7,457.0	6,293.1	1,030.3	6,364.0	0.00	0.00	0.00
14,200.0	90.00	359.22	7,457.0	6,393.1	1,028.9	6,463.3	0.00	0.00	0.00
14,300.0	90.00	359.22	7,457.0	6,493.1	1,027.5	6,562.7	0.00	0.00	0.00
14,400.0	90.00	359.22	7,457.0	6,593.1	1,026.2	6,662.1	0.00	0.00	0.00
14,500.0	90.00	359.22	7,457.0	6,693.1	1,024.8	6,761.5	0.00	0.00	0.00
14,600.0	90.00	359.22	7,457.0	6,793.1	1,023.5	6,860.8	0.00	0.00	0.00
14,700.0	90.00	359.22	7,457.0	6,893.0	1,022.1	6,960.2	0.00	0.00	0.00
14,800.0	90.00	359.22	7,457.0	6,993.0	1,020.7	7,059.6	0.00	0.00	0.00
14,900.0	90.00	359.22	7,457.0	7,093.0	1,019.4	7,158.9	0.00	0.00	0.00
15,000.0	90.00	359.22	7,457.0	7,193.0	1,018.0	7,258.3	0.00	0.00	0.00
15,100.0	90.00	359.22	7,457.0	7,293.0	1,016.7	7,357.7	0.00	0.00	0.00
15,200.0	90.00	359.22	7,457.0	7,393.0	1,015.3	7,457.0	0.00	0.00	0.00
15,300.0	90.00	359.22	7,457.0	7,493.0	1,013.9	7,556.4	0.00	0.00	0.00

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Company:	PetroShare Corp	TVD Reference:	13' KB @ 5155.0usft
Project:	ADAMS COUNTY, CO	MD Reference:	13' KB @ 5155.0usft
Site:	S19-T1S-R65W	North Reference:	Grid
Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
15,400.0	90.00	359.22	7,457.0	7,593.0	1,012.6	7,655.8	0.00	0.00	0.00	
15,500.0	90.00	359.22	7,457.0	7,693.0	1,011.2	7,755.2	0.00	0.00	0.00	
15,600.0	90.00	359.22	7,457.0	7,793.0	1,009.9	7,854.5	0.00	0.00	0.00	
15,700.0	90.00	359.22	7,457.0	7,893.0	1,008.5	7,953.9	0.00	0.00	0.00	
15,800.0	90.00	359.22	7,457.0	7,992.9	1,007.1	8,053.3	0.00	0.00	0.00	
15,900.0	90.00	359.22	7,457.0	8,092.9	1,005.8	8,152.6	0.00	0.00	0.00	
16,000.0	90.00	359.22	7,457.0	8,192.9	1,004.4	8,252.0	0.00	0.00	0.00	
16,100.0	90.00	359.22	7,457.0	8,292.9	1,003.1	8,351.4	0.00	0.00	0.00	
16,200.0	90.00	359.22	7,457.0	8,392.9	1,001.7	8,450.8	0.00	0.00	0.00	
16,300.0	90.00	359.22	7,457.0	8,492.9	1,000.3	8,550.1	0.00	0.00	0.00	
16,400.0	90.00	359.22	7,457.0	8,592.9	999.0	8,649.5	0.00	0.00	0.00	
16,500.0	90.00	359.22	7,457.0	8,692.9	997.6	8,748.9	0.00	0.00	0.00	
16,600.0	90.00	359.22	7,457.0	8,792.9	996.3	8,848.2	0.00	0.00	0.00	
16,700.0	90.00	359.22	7,457.0	8,892.9	994.9	8,947.6	0.00	0.00	0.00	
16,800.0	90.00	359.22	7,457.0	8,992.9	993.5	9,047.0	0.00	0.00	0.00	
16,900.0	90.00	359.22	7,457.0	9,092.8	992.2	9,146.4	0.00	0.00	0.00	
17,000.0	90.00	359.22	7,457.0	9,192.8	990.8	9,245.7	0.00	0.00	0.00	
17,100.0	90.00	359.22	7,457.0	9,292.8	989.5	9,345.1	0.00	0.00	0.00	
17,200.0	90.00	359.22	7,457.0	9,392.8	988.1	9,444.5	0.00	0.00	0.00	
17,300.0	90.00	359.22	7,457.0	9,492.8	986.8	9,543.8	0.00	0.00	0.00	
17,400.0	90.00	359.22	7,457.0	9,592.8	985.4	9,643.2	0.00	0.00	0.00	
17,500.0	90.00	359.22	7,457.0	9,692.8	984.0	9,742.6	0.00	0.00	0.00	
17,600.0	90.00	359.22	7,457.0	9,792.8	982.7	9,841.9	0.00	0.00	0.00	
17,700.0	90.00	359.22	7,457.0	9,892.8	981.3	9,941.3	0.00	0.00	0.00	
17,721.0	90.00	359.22	7,457.0	9,913.7	981.0	9,962.2	0.00	0.00	0.00	
CONNER 19-18-3NCH BHL (355 FNL, 1804 FEL)										

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
CONNER 19-18-3NCH I - hit/miss target - Shape - Point	0.00	0.00	7,457.0	9,913.7	981.0	1,233,468.84	3,223,140.90	39.971506	-104.703827
Interp @ 7457.0 (CONN - plan hits target center - Point	0.00	0.00	7,457.0	5,974.7	1,034.9	1,229,529.85	3,223,194.77	39.960692	-104.703761
CONNER 19-18-3NCH I - plan hits target center - Point	0.00	0.00	7,457.0	115.4	1,202.1	1,223,670.52	3,223,361.94	39.944603	-104.703353



PetroShare Corp

ADAMS COUNTY, CO

S19-T1S-R65W

CONNER 19-18-3NCH

OH

PLAN #1

Anticollision Report

12 March, 2021



Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Reference	PLAN #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum ellipse separation of 1,000.0 usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	3/12/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	17,720.8	PLAN #1 (OH)	MWD	OWSG MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S19-T1S-R65W						
CONNER 19-18-1CDH - OH - PLAN #1	600.0	600.0	150.0	145.3	31.615	CC, ES
CONNER 19-18-1CDH - OH - PLAN #1	1,100.0	1,072.2	190.7	180.2	18.308	SF
CONNER 19-18-1NBH - OH - PLAN #1	900.0	900.0	105.0	101.5	30.218	CC, ES
CONNER 19-18-1NBH - OH - PLAN #1	17,721.0	17,429.8	1,829.0	1,650.2	10.226	SF
CONNER 19-18-1NCH - OH - PLAN #1	800.0	800.0	120.0	116.9	38.593	CC, ES
CONNER 19-18-1NCH - OH - PLAN #1	17,721.0	17,686.9	2,183.9	2,003.7	12.121	SF
CONNER 19-18-1NXH - OH - PLAN #1	700.0	700.0	135.0	129.5	24.615	CC, ES
CONNER 19-18-1NXH - OH - PLAN #1	1,200.0	1,174.0	179.9	168.7	15.958	SF
CONNER 19-18-2CDH - OH - PLAN #1	1,000.0	1,000.0	90.0	86.1	23.442	CC, ES
CONNER 19-18-2CDH - OH - PLAN #1	17,721.0	17,799.6	1,470.1	1,290.6	8.192	SF
CONNER 19-18-2NBH - OH - PLAN #1	1,000.0	1,000.0	45.0	41.2	11.727	CC, ES
CONNER 19-18-2NBH - OH - PLAN #1	17,721.0	17,551.4	729.9	550.6	4.070	SF
CONNER 19-18-2NCH - OH - PLAN #1	1,000.0	1,000.0	60.0	52.3	7.817	CC, ES
CONNER 19-18-2NCH - OH - PLAN #1	17,721.0	17,606.3	1,091.9	731.3	3.028	SF
CONNER 19-18-2NXH - OH - PLAN #1	1,000.0	1,000.0	75.0	71.2	19.543	CC, ES
CONNER 19-18-2NXH - OH - PLAN #1	17,721.0	17,385.9	1,371.1	1,193.4	7.714	SF
CONNER 19-18-3CDH - OH - PLAN #1	1,000.0	1,000.0	30.0	22.3	3.910	CC, ES
CONNER 19-18-3CDH - OH - PLAN #1	17,720.0	17,850.8	417.7	89.5	1.273	Level 3, SF
CONNER 19-18-3NBH - OH - PLAN #1	900.0	900.0	15.0	11.6	4.324	CC, ES
CONNER 19-18-3NBH - OH - PLAN #1	17,721.0	17,680.1	372.6	194.5	2.093	SF
CONNER 19-18-3NXH - OH - PLAN #1	1,000.0	1,000.0	15.0	11.1	3.902	CC, ES
CONNER 19-18-3NXH - OH - PLAN #1	17,719.1	17,450.2	250.8	148.7	2.457	SF
CONNER 19-18-4CDH - OH - PLAN #1	800.0	800.0	30.0	26.9	9.652	CC, ES
CONNER 19-18-4CDH - OH - PLAN #1	17,721.0	17,995.2	745.2	569.4	4.239	SF
CONNER 19-18-4NBH - OH - PLAN #1	500.0	500.0	75.0	73.0	37.504	CC, ES
CONNER 19-18-4NBH - OH - PLAN #1	17,721.0	17,945.2	1,317.2	1,137.1	7.312	SF
CONNER 19-18-4NCH - OH - PLAN #1	600.0	600.0	60.0	57.6	25.267	CC, ES
CONNER 19-18-4NCH - OH - PLAN #1	17,721.0	18,006.1	1,244.3	1,064.1	6.907	SF
CONNER 19-18-4NXH - OH - PLAN #1	700.0	700.0	45.0	42.2	16.398	CC, ES
CONNER 19-18-4NXH - OH - PLAN #1	17,721.0	17,714.4	1,117.8	939.8	6.279	SF
Gail #1 (PR) - EXISTING - NO SURVEYS (PR)	15,953.1	7,388.0	990.0	813.6	5.612	CC, ES, SF
Gail Smith #1 (PR) - EXISTING - NO SURVEYS (PR)						Out of range
Milheim #1 (P&A) - EXISTING - NO SURVEYS (P&A)	13,800.0	7,388.0	2,090.3	1,951.2	15.030	CC, ES
Milheim #1 (P&A) - EXISTING - NO SURVEYS (P&A)	14,000.0	7,388.0	2,104.4	1,963.6	14.951	SF
Price 7-19 (SI) - EXISTING - NO SURVEYS (SI)	10,974.2	7,388.0	411.5	319.3	4.464	CC, ES, SF
Putnam 41-18 (PR) - EXISTING - NO SURVEYS (PR)	16,960.2	7,388.0	767.0	573.1	3.956	CC
Putnam 41-18 (PR) - EXISTING - NO SURVEYS (PR)	17,000.0	7,388.0	768.0	573.1	3.940	ES, SF

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S19-T1S-R65W						
Tracy #1 (PR) - EXISTING - NO SURVEYS (PR)	13,765.6	7,388.0	152.1	13.4	1.097	Level 2, CC, ES, SF
UPRR-Letterly 1 (P&A) - EXISTING - NO SURVEYS (P&A)	1,000.0	931.0	1,446.4	1,439.6	215.238	CC, ES
UPRR-Letterly 1 (P&A) - EXISTING - NO SURVEYS (P&A)	9,200.0	7,388.0	2,219.0	2,153.3	33.763	SF

Offset Design S19-T1S-R65W - CONNER 19-18-1CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-90.29	-0.8	-150.0	150.0					
100.0	100.0	100.0	100.0	0.4	0.4	-90.29	-0.8	-150.0	150.0	149.4	0.55	270.973		
200.0	200.0	200.0	200.0	1.0	1.0	-90.29	-0.8	-150.0	150.0	148.4	1.60	94.038		
300.0	300.0	300.0	300.0	1.5	1.5	-90.29	-0.8	-150.0	150.0	147.6	2.45	61.268		
400.0	400.0	400.0	400.0	1.9	1.9	-90.29	-0.8	-150.0	150.0	146.8	3.24	46.354		
500.0	500.0	500.0	500.0	2.3	2.3	-90.29	-0.8	-150.0	150.0	146.0	4.00	37.527		
600.0	600.0	600.0	600.0	2.7	2.7	-90.29	-0.8	-150.0	150.0	145.3	4.74	31.615	CC, ES	
700.0	700.0	695.3	695.3	3.1	3.0	-90.51	-1.3	-151.5	151.6	146.0	5.54	27.376		
800.0	800.0	790.4	790.3	3.5	3.9	-91.13	-3.1	-155.9	156.2	149.3	6.93	22.545		
900.0	900.0	885.1	884.6	3.9	4.7	-92.09	-5.9	-163.2	164.0	155.9	8.16	20.093		
1,000.0	1,000.0	979.1	978.0	4.2	5.5	-93.28	-9.9	-173.3	175.0	165.7	9.28	18.863		
1,100.0	1,100.0	1,072.2	1,070.0	4.6	6.1	152.84	-15.0	-186.1	190.7	180.2	10.41	18.308	SF	
1,200.0	1,199.8	1,163.6	1,159.9	5.0	6.6	151.90	-21.0	-201.4	212.4	200.9	11.52	18.436		
1,300.0	1,299.5	1,258.4	1,252.9	5.7	6.9	151.29	-28.0	-219.2	239.3	227.0	12.35	19.383		
1,400.0	1,398.7	1,353.9	1,346.3	6.5	7.1	151.07	-35.0	-237.2	269.2	256.1	13.11	20.532		
1,500.0	1,497.5	1,448.3	1,438.8	7.1	7.4	151.14	-42.0	-255.0	302.0	288.1	13.87	21.765		
1,600.0	1,595.6	1,541.7	1,530.3	7.8	7.7	151.39	-48.9	-272.5	337.6	323.0	14.66	23.036		
1,700.0	1,693.4	1,634.4	1,621.0	8.2	8.0	152.03	-55.8	-290.0	374.9	359.6	15.30	24.509		
1,800.0	1,791.2	1,727.1	1,711.8	8.5	8.2	152.57	-62.6	-307.4	412.3	396.4	15.88	25.963		
1,900.0	1,888.9	1,819.8	1,802.6	8.8	8.5	153.01	-69.5	-324.9	449.7	433.2	16.48	27.290		
2,000.0	1,986.7	1,912.5	1,893.4	9.1	8.8	153.40	-76.3	-342.3	487.1	470.0	17.09	28.508		
2,100.0	2,084.5	2,005.2	1,984.2	9.4	9.2	153.72	-83.2	-359.8	524.5	506.8	17.71	29.624		
2,200.0	2,182.2	2,097.9	2,075.0	9.7	9.5	154.00	-90.0	-377.2	561.9	543.6	18.34	30.647		
2,300.0	2,280.0	2,190.6	2,165.7	10.1	9.8	154.25	-96.9	-394.7	599.4	580.4	18.98	31.587		
2,400.0	2,377.8	2,283.3	2,256.5	10.4	10.2	154.47	-103.7	-412.1	636.8	617.2	19.62	32.451		
2,500.0	2,475.5	2,376.0	2,347.3	10.8	10.6	154.66	-110.6	-429.6	674.3	654.0	20.28	33.248		
2,600.0	2,573.3	2,468.7	2,438.1	11.1	10.9	154.84	-117.5	-447.0	711.7	690.8	20.94	33.984		
2,700.0	2,671.1	2,561.4	2,528.9	11.5	11.3	154.99	-124.3	-464.5	749.2	727.6	21.61	34.664		
2,800.0	2,768.9	2,654.1	2,619.6	11.9	11.7	155.14	-131.2	-481.9	786.7	764.4	22.29	35.295		
2,900.0	2,866.6	2,746.8	2,710.4	12.4	12.2	155.26	-138.0	-499.4	824.1	801.2	22.97	35.879		
3,000.0	2,964.4	2,839.5	2,801.2	12.8	12.6	155.38	-144.9	-516.8	861.6	838.0	23.66	36.423		
3,100.0	3,062.2	2,932.2	2,892.0	13.3	13.0	155.49	-151.7	-534.3	899.1	874.8	24.35	36.929		
3,200.0	3,159.9	3,024.9	2,982.8	13.7	13.5	155.59	-158.6	-551.7	936.6	911.5	25.04	37.401		
3,300.0	3,257.7	3,117.6	3,073.6	14.2	13.9	155.68	-165.4	-569.2	974.1	948.3	25.74	37.842		
3,400.0	3,355.5	3,210.2	3,164.3	14.7	14.4	155.76	-172.3	-586.6	1,011.6	985.1	26.44	38.254		
3,500.0	3,453.2	3,302.9	3,255.1	15.2	14.8	155.84	-179.2	-604.1	1,049.0	1,021.9	27.15	38.641		
3,600.0	3,551.0	3,395.6	3,345.9	15.6	15.3	155.92	-186.0	-621.5	1,086.5	1,058.7	27.86	39.003		
3,700.0	3,648.8	3,488.3	3,436.7	16.1	15.7	155.98	-192.9	-639.0	1,124.0	1,095.5	28.57	39.343		
3,800.0	3,746.5	3,581.0	3,527.5	16.6	16.2	156.05	-199.7	-656.4	1,161.5	1,132.2	29.28	39.664		
3,900.0	3,844.3	3,673.7	3,618.2	17.1	16.6	156.11	-206.6	-673.9	1,199.0	1,169.0	30.00	39.965		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
4,000.0	3,942.1	3,766.4	3,709.0	17.6	17.1	156.16	-213.4	-691.3	1,236.5	1,205.8	30.72	40.250		
4,100.0	4,039.9	3,859.1	3,799.8	18.1	17.5	156.22	-220.3	-708.8	1,274.0	1,242.6	31.44	40.519		
4,200.0	4,137.6	3,951.8	3,890.6	18.6	18.0	156.27	-227.1	-726.2	1,311.5	1,279.3	32.17	40.773		
4,300.0	4,235.4	4,044.5	3,981.4	19.1	18.4	156.31	-234.0	-743.7	1,349.0	1,316.1	32.89	41.014		
4,400.0	4,333.2	4,137.2	4,072.2	19.6	18.9	156.36	-240.9	-761.1	1,386.5	1,352.9	33.62	41.242		
4,500.0	4,430.9	4,229.9	4,162.9	20.1	19.4	156.40	-247.7	-778.6	1,424.0	1,389.7	34.35	41.458		
4,600.0	4,528.7	4,322.6	4,253.7	20.6	19.8	156.44	-254.6	-796.0	1,461.5	1,426.4	35.08	41.663		
4,700.0	4,626.5	4,415.3	4,344.5	21.1	20.3	156.48	-261.4	-813.5	1,499.0	1,463.2	35.81	41.859		
4,800.0	4,724.2	4,508.0	4,435.3	21.6	20.7	156.51	-268.3	-830.9	1,536.5	1,500.0	36.54	42.044		
4,900.0	4,822.0	4,600.7	4,526.1	22.1	21.2	156.55	-275.1	-848.4	1,574.0	1,536.7	37.28	42.221		
5,000.0	4,919.8	4,693.4	4,616.8	22.6	21.7	156.58	-282.0	-865.8	1,611.5	1,573.5	38.02	42.390		
5,100.0	5,017.5	4,786.1	4,707.6	23.1	22.1	156.61	-288.8	-883.3	1,649.0	1,610.3	38.75	42.551		
5,200.0	5,115.3	4,878.8	4,798.4	23.6	22.6	156.64	-295.7	-900.7	1,686.5	1,647.0	39.49	42.705		
5,300.0	5,213.1	4,971.5	4,889.2	24.1	23.1	156.67	-302.6	-918.2	1,724.0	1,683.8	40.23	42.851		
5,400.0	5,310.8	5,064.2	4,980.0	24.6	23.5	156.70	-309.4	-935.6	1,761.5	1,720.5	40.97	42.992		
5,500.0	5,408.6	5,156.9	5,070.8	25.1	24.0	156.73	-316.3	-953.1	1,799.0	1,757.3	41.72	43.126		
5,600.0	5,506.4	5,249.6	5,161.5	25.6	24.4	156.75	-323.1	-970.5	1,836.5	1,794.1	42.46	43.255		
5,700.0	5,604.2	5,342.3	5,252.3	26.1	24.9	156.78	-330.0	-988.0	1,874.0	1,830.8	43.20	43.378		
5,800.0	5,701.9	5,435.0	5,343.1	26.7	25.4	156.80	-336.8	-1,005.4	1,911.5	1,867.6	43.95	43.497		
5,900.0	5,799.7	5,527.7	5,433.9	27.2	25.8	156.82	-343.7	-1,022.9	1,949.0	1,904.3	44.69	43.610		
6,000.0	5,897.5	5,620.4	5,524.7	27.7	26.3	156.84	-350.5	-1,040.3	1,986.5	1,941.1	45.44	43.719		
6,100.0	5,995.2	5,713.1	5,615.4	28.2	26.8	156.86	-357.4	-1,057.8	2,024.1	1,977.9	46.19	43.824		
6,200.0	6,093.0	5,805.8	5,706.2	28.7	27.2	156.88	-364.3	-1,075.2	2,061.6	2,014.6	46.93	43.924		
6,300.0	6,190.8	5,898.5	5,797.0	29.2	27.7	156.90	-371.1	-1,092.7	2,099.1	2,051.4	47.68	44.021		
6,400.0	6,288.5	5,991.2	5,887.8	29.7	28.2	156.92	-378.0	-1,110.1	2,136.6	2,088.1	48.43	44.114		
6,500.0	6,386.3	6,083.9	5,978.6	30.2	28.6	156.94	-384.8	-1,127.6	2,174.1	2,124.9	49.18	44.204		
6,600.0	6,484.1	6,176.6	6,069.4	30.7	29.1	156.96	-391.7	-1,145.0	2,211.6	2,161.7	49.93	44.290		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	-90.27	-0.5	-105.0	105.0					
100.0	100.0	100.0	100.0	0.4	0.0	-90.27	-0.5	-105.0	105.0	104.7	0.28	379.093		
200.0	200.0	200.0	200.0	1.0	0.0	-90.27	-0.5	-105.0	105.0	104.2	0.80	131.618		
300.0	300.0	300.0	300.0	1.5	0.0	-90.27	-0.5	-105.0	105.0	103.8	1.22	85.758		
400.0	400.0	400.0	400.0	1.9	0.0	-90.27	-0.5	-105.0	105.0	103.4	1.62	64.883		
500.0	500.0	500.0	500.0	2.3	0.0	-90.27	-0.5	-105.0	105.0	103.0	2.00	52.528		
600.0	600.0	600.0	600.0	2.7	0.0	-90.27	-0.5	-105.0	105.0	102.6	2.37	44.253		
700.0	700.0	700.0	700.0	3.1	0.0	-90.27	-0.5	-105.0	105.0	102.2	2.74	38.288		
800.0	800.0	800.0	800.0	3.5	0.0	-90.27	-0.5	-105.0	105.0	101.9	3.11	33.768		
900.0	900.0	900.0	900.0	3.9	0.0	-90.27	-0.5	-105.0	105.0	101.5	3.47	30.218 CC, ES		
1,000.0	1,000.0	997.2	997.1	4.2	0.0	-90.82	-1.5	-106.3	106.3	102.5	3.85	27.647		
1,100.0	1,100.0	1,094.0	1,093.9	4.6	0.0	155.28	-4.6	-110.1	112.0	107.6	4.35	25.750		
1,200.0	1,199.8	1,190.1	1,189.6	5.0	0.0	153.91	-9.6	-116.5	123.5	118.5	4.99	24.749		
1,300.0	1,299.5	1,285.1	1,283.9	5.7	0.0	152.59	-16.6	-125.2	140.9	135.4	5.55	25.393		
1,400.0	1,398.7	1,382.7	1,380.7	6.5	0.0	151.75	-24.7	-135.3	162.7	156.6	6.07	26.784		
1,500.0	1,497.5	1,479.6	1,476.7	7.1	0.0	151.55	-32.7	-145.4	187.4	180.8	6.58	28.490		
1,600.0	1,595.6	1,575.7	1,571.9	7.8	0.0	151.77	-40.6	-155.4	215.1	208.0	7.10	30.292		
1,700.0	1,693.4	1,671.2	1,666.6	8.2	0.0	152.36	-48.5	-165.3	244.4	237.0	7.47	32.725		
1,800.0	1,791.2	1,766.8	1,761.4	8.5	0.0	152.83	-56.4	-175.2	273.8	266.1	7.77	35.253		
1,900.0	1,888.9	1,862.3	1,856.1	8.8	0.0	153.21	-64.3	-185.1	303.2	295.2	8.07	37.566		
2,000.0	1,986.7	1,957.9	1,950.8	9.1	0.0	153.53	-72.2	-195.0	332.7	324.3	8.38	39.682		
2,100.0	2,084.5	2,053.5	2,045.5	9.4	0.0	153.79	-80.1	-205.0	362.1	353.4	8.70	41.619		
2,200.0	2,182.2	2,149.0	2,140.2	9.7	0.0	154.01	-88.0	-214.9	391.5	382.5	9.02	43.394		
2,300.0	2,280.0	2,244.6	2,234.9	10.1	0.0	154.21	-95.9	-224.8	421.0	411.6	9.35	45.023		
2,400.0	2,377.8	2,340.1	2,329.7	10.4	0.0	154.37	-103.8	-234.7	450.4	440.7	9.68	46.519		
2,500.0	2,475.5	2,435.7	2,424.4	10.8	0.0	154.52	-111.7	-244.6	479.8	469.8	10.02	47.895		
2,600.0	2,573.3	2,531.3	2,519.1	11.1	0.0	154.65	-119.6	-254.6	509.3	498.9	10.36	49.163		
2,700.0	2,671.1	2,626.8	2,613.8	11.5	0.0	154.77	-127.5	-264.5	538.7	528.0	10.70	50.334		
2,800.0	2,768.9	2,722.4	2,708.5	11.9	0.0	154.87	-135.3	-274.4	568.2	557.1	11.05	51.416		
2,900.0	2,866.6	2,817.9	2,803.2	12.4	0.0	154.96	-143.2	-284.3	597.6	586.2	11.40	52.418		
3,000.0	2,964.4	2,913.5	2,898.0	12.8	0.0	155.05	-151.1	-294.2	627.1	615.3	11.75	53.347		
3,100.0	3,062.2	3,009.1	2,992.7	13.3	0.0	155.12	-159.0	-304.2	656.5	644.4	12.11	54.210		
3,200.0	3,159.9	3,104.6	3,087.4	13.7	0.0	155.19	-166.9	-314.1	686.0	673.5	12.47	55.014		
3,300.0	3,257.7	3,200.2	3,182.1	14.2	0.0	155.26	-174.8	-324.0	715.4	702.6	12.83	55.763		
3,400.0	3,355.5	3,295.8	3,276.8	14.7	0.0	155.32	-182.7	-333.9	744.9	731.7	13.19	56.462		
3,500.0	3,453.2	3,391.3	3,371.5	15.2	0.0	155.37	-190.6	-343.8	774.3	760.8	13.56	57.116		
3,600.0	3,551.0	3,486.9	3,466.2	15.6	0.0	155.43	-198.5	-353.8	803.8	789.9	13.92	57.728		
3,700.0	3,648.8	3,582.4	3,561.0	16.1	0.0	155.47	-206.4	-363.7	833.3	819.0	14.29	58.303		
3,800.0	3,746.5	3,678.0	3,655.7	16.6	0.0	155.52	-214.3	-373.6	862.7	848.0	14.66	58.842		
3,900.0	3,844.3	3,773.6	3,750.4	17.1	0.0	155.56	-222.2	-383.5	892.2	877.1	15.03	59.349		
4,000.0	3,942.1	3,869.1	3,845.1	17.6	0.0	155.60	-230.1	-393.4	921.6	906.2	15.40	59.827		
4,100.0	4,039.9	3,964.7	3,939.8	18.1	0.0	155.63	-238.0	-403.4	951.1	935.3	15.78	60.277		
4,200.0	4,137.6	4,060.2	4,034.5	18.6	0.0	155.67	-245.9	-413.3	980.5	964.4	16.15	60.702		
4,300.0	4,235.4	4,155.8	4,129.3	19.1	0.0	155.70	-253.8	-423.2	1,010.0	993.5	16.53	61.104		
4,400.0	4,333.2	4,251.4	4,224.0	19.6	0.0	155.73	-261.7	-433.1	1,039.5	1,022.6	16.91	61.484		
4,500.0	4,430.9	4,346.9	4,318.7	20.1	0.0	155.76	-269.6	-443.0	1,068.9	1,051.6	17.28	61.844		
4,600.0	4,528.7	4,442.5	4,413.4	20.6	0.0	155.78	-277.5	-453.0	1,098.4	1,080.7	17.66	62.185		
4,700.0	4,626.5	4,538.0	4,508.1	21.1	0.0	155.81	-285.4	-462.9	1,127.8	1,109.8	18.04	62.510		
4,800.0	4,724.2	4,633.6	4,602.8	21.6	0.0	155.83	-293.3	-472.8	1,157.3	1,138.9	18.42	62.818		
4,900.0	4,822.0	4,729.2	4,697.6	22.1	0.0	155.86	-301.2	-482.7	1,186.8	1,168.0	18.80	63.111		
5,000.0	4,919.8	4,824.7	4,792.3	22.6	0.0	155.88	-309.1	-492.6	1,216.2	1,197.0	19.19	63.389		
5,100.0	5,017.5	4,920.3	4,887.0	23.1	0.0	155.90	-316.9	-502.6	1,245.7	1,226.1	19.57	63.655		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,115.3	5,015.8	4,981.7	23.6	0.0	155.92	-324.8	-512.5	1,275.1	1,255.2	19.95	63.909		
5,300.0	5,213.1	5,111.4	5,076.4	24.1	0.0	155.94	-332.7	-522.4	1,304.6	1,284.3	20.34	64.150		
5,400.0	5,310.8	5,207.0	5,171.1	24.6	0.0	155.96	-340.6	-532.3	1,334.1	1,313.3	20.72	64.381		
5,500.0	5,408.6	5,302.5	5,265.9	25.1	0.0	155.98	-348.5	-542.2	1,363.5	1,342.4	21.11	64.602		
5,600.0	5,506.4	5,398.1	5,360.6	25.6	0.0	155.99	-356.4	-552.2	1,393.0	1,371.5	21.49	64.813		
5,700.0	5,604.2	5,493.7	5,455.3	26.1	0.0	156.01	-364.3	-562.1	1,422.4	1,400.6	21.88	65.016		
5,800.0	5,701.9	5,589.2	5,550.0	26.7	0.0	156.02	-372.2	-572.0	1,451.9	1,429.6	22.27	65.209		
5,900.0	5,799.7	5,684.8	5,644.7	27.2	0.0	156.04	-380.1	-581.9	1,481.4	1,458.7	22.65	65.395		
6,000.0	5,897.5	5,780.3	5,739.4	27.7	0.0	156.05	-388.0	-591.8	1,510.8	1,487.8	23.04	65.573		
6,100.0	5,995.2	5,875.9	5,834.2	28.2	0.0	156.07	-395.9	-601.8	1,540.3	1,516.9	23.43	65.744		
6,200.0	6,093.0	5,971.5	5,928.9	28.7	0.0	156.08	-403.8	-611.7	1,569.8	1,545.9	23.82	65.908		
6,300.0	6,190.8	6,067.0	6,023.6	29.2	0.0	156.09	-411.7	-621.6	1,599.2	1,575.0	24.21	66.066		
6,400.0	6,288.5	6,162.6	6,118.3	29.7	0.0	156.10	-419.6	-631.5	1,628.7	1,604.1	24.60	66.218		
6,500.0	6,386.3	6,258.1	6,213.0	30.2	0.0	156.12	-427.5	-641.4	1,658.1	1,633.2	24.99	66.363		
6,600.0	6,484.1	6,353.7	6,307.7	30.7	0.0	156.13	-435.4	-651.4	1,687.6	1,662.2	25.38	66.504		
6,700.0	6,581.8	6,449.3	6,402.4	31.2	0.0	156.14	-443.3	-661.3	1,717.1	1,691.3	25.77	66.639		
6,800.0	6,679.6	6,544.8	6,497.2	31.7	0.0	156.15	-451.2	-671.2	1,746.5	1,720.4	26.16	66.769		
6,900.0	6,777.4	6,640.4	6,591.9	32.2	0.0	156.16	-459.1	-681.1	1,776.0	1,749.4	26.55	66.895		
7,000.0	6,875.2	6,735.5	6,686.2	32.7	0.0	170.84	-466.1	-691.0	1,805.5	1,778.5	26.93	67.033		
7,100.0	6,973.1	6,829.6	6,779.6	33.3	0.0	-140.64	-461.1	-700.9	1,834.7	1,807.4	27.31	67.172		
7,200.0	7,068.6	6,924.3	6,871.4	33.6	0.0	-115.57	-440.6	-710.7	1,862.8	1,835.0	27.83	66.943		
7,300.0	7,158.8	7,020.0	6,959.4	34.0	0.0	-103.28	-404.9	-720.3	1,889.0	1,860.9	28.16	67.070		
7,400.0	7,241.0	7,116.9	7,041.4	34.3	0.0	-96.05	-354.1	-729.4	1,912.6	1,884.2	28.36	67.435		
7,500.0	7,312.6	7,215.5	7,114.7	34.5	0.0	-91.31	-289.0	-737.7	1,932.7	1,904.2	28.49	67.841		
7,600.0	7,371.6	7,315.6	7,176.8	34.7	0.0	-88.12	-210.9	-744.8	1,948.7	1,920.2	28.59	68.159		
7,700.0	7,416.1	7,417.3	7,225.0	34.7	0.0	-86.05	-121.7	-750.7	1,960.3	1,931.6	28.70	68.296		
7,800.0	7,444.7	7,520.1	7,257.1	34.7	0.0	-84.90	-24.2	-754.8	1,967.0	1,938.1	28.85	68.183		
7,900.0	7,456.7	7,623.8	7,271.3	34.6	0.0	-84.58	78.3	-757.2	1,968.6	1,939.5	29.04	67.781		
8,000.0	7,457.0	7,724.8	7,272.0	34.6	0.0	-84.60	179.3	-758.1	1,966.7	1,937.4	29.30	67.111		
8,100.0	7,457.0	7,824.8	7,272.0	34.6	0.0	-84.60	279.3	-758.9	1,964.7	1,935.0	29.67	66.213		
8,200.0	7,457.0	7,924.7	7,272.0	34.8	0.0	-84.59	379.2	-759.8	1,962.6	1,932.5	30.14	65.120		
8,300.0	7,457.0	8,024.7	7,272.0	35.0	0.0	-84.58	479.2	-760.6	1,960.6	1,929.9	30.70	63.863		
8,400.0	7,457.0	8,124.7	7,272.0	35.3	0.0	-84.58	579.2	-761.4	1,958.6	1,927.3	31.35	62.472		
8,500.0	7,457.0	8,224.7	7,272.0	35.8	0.0	-84.57	679.2	-762.2	1,956.6	1,924.5	32.09	60.978		
8,600.0	7,457.0	8,324.7	7,272.0	36.3	0.0	-84.57	779.1	-763.1	1,954.6	1,921.7	32.90	59.409		
8,700.0	7,457.0	8,424.6	7,272.0	37.0	0.0	-84.56	879.1	-763.9	1,952.6	1,918.8	33.79	57.790		
8,800.0	7,457.0	8,524.6	7,272.0	37.9	0.0	-84.56	979.1	-764.7	1,950.5	1,915.8	34.74	56.146		
8,900.0	7,457.0	8,624.6	7,272.0	38.8	0.0	-84.55	1,079.1	-765.5	1,948.5	1,912.8	35.76	54.495		
9,000.0	7,457.0	8,724.6	7,272.0	39.7	0.0	-84.55	1,179.1	-766.4	1,946.5	1,909.7	36.83	52.854		
9,100.0	7,457.0	8,824.5	7,272.0	40.8	0.0	-84.54	1,279.0	-767.2	1,944.5	1,906.6	37.95	51.236		
9,200.0	7,457.0	8,924.5	7,272.0	41.9	0.0	-84.53	1,379.0	-768.0	1,942.5	1,903.4	39.12	49.650		
9,300.0	7,457.0	9,024.5	7,272.0	43.0	0.0	-84.53	1,479.0	-768.9	1,940.5	1,900.1	40.34	48.105		
9,400.0	7,457.0	9,124.5	7,272.0	44.2	0.0	-84.52	1,579.0	-769.7	1,938.5	1,896.9	41.59	46.606		
9,500.0	7,457.0	9,224.5	7,272.0	45.4	0.0	-84.52	1,678.9	-770.5	1,936.4	1,893.6	42.88	45.157		
9,600.0	7,457.0	9,324.4	7,272.0	46.7	0.0	-84.51	1,778.9	-771.3	1,934.4	1,890.2	44.21	43.760		
9,700.0	7,457.0	9,424.4	7,272.0	48.0	0.0	-84.51	1,878.9	-772.2	1,932.4	1,886.8	45.56	42.416		
9,800.0	7,457.0	9,524.4	7,272.0	49.3	0.0	-84.50	1,978.9	-773.0	1,930.4	1,883.5	46.94	41.126		
9,900.0	7,457.0	9,624.4	7,272.0	50.7	0.0	-84.49	2,078.8	-773.8	1,928.4	1,880.0	48.34	39.889		
10,000.0	7,457.0	9,724.4	7,272.0	52.1	0.0	-84.49	2,178.8	-774.6	1,926.4	1,876.6	49.77	38.704		
10,100.0	7,457.0	9,824.3	7,272.0	53.5	0.0	-84.48	2,278.8	-775.5	1,924.3	1,873.1	51.22	37.569		
10,200.0	7,457.0	9,924.3	7,272.0	54.9	0.0	-84.48	2,378.8	-776.3	1,922.3	1,869.6	52.69	36.484		
10,300.0	7,457.0	10,024.3	7,272.0	56.4	0.0	-84.47	2,478.7	-777.1	1,920.3	1,866.1	54.18	35.446		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,457.0	10,124.3	7,272.0	57.8	0.0	-84.46	2,578.7	-778.0	1,918.3	1,862.6	55.68	34.453		
10,500.0	7,457.0	10,224.3	7,272.0	59.3	0.0	-84.46	2,678.7	-778.8	1,916.3	1,859.1	57.20	33.504		
10,600.0	7,457.0	10,324.2	7,272.0	60.8	0.0	-84.45	2,778.7	-779.6	1,914.3	1,855.5	58.73	32.596		
10,700.0	7,457.0	10,424.2	7,272.0	62.3	0.0	-84.45	2,878.6	-780.4	1,912.3	1,852.0	60.27	31.727		
10,800.0	7,457.0	10,524.2	7,272.0	63.9	0.0	-84.44	2,978.6	-781.3	1,910.2	1,848.4	61.83	30.896		
10,900.0	7,457.0	10,624.2	7,272.0	65.4	0.0	-84.44	3,078.6	-782.1	1,908.2	1,844.8	63.39	30.101		
11,000.0	7,457.0	10,724.2	7,272.0	66.9	0.0	-84.43	3,178.6	-782.9	1,906.2	1,841.2	64.97	29.339		
11,100.0	7,457.0	10,824.1	7,272.0	68.5	0.0	-84.42	3,278.6	-783.7	1,904.2	1,837.6	66.56	28.609		
11,200.0	7,457.0	10,924.1	7,272.0	70.1	0.0	-84.42	3,378.5	-784.6	1,902.2	1,834.0	68.15	27.910		
11,300.0	7,457.0	11,024.1	7,272.0	71.7	0.0	-84.41	3,478.5	-785.4	1,900.2	1,830.4	69.76	27.240		
11,400.0	7,457.0	11,124.1	7,272.0	73.2	0.0	-84.41	3,578.5	-786.2	1,898.1	1,826.8	71.37	26.597		
11,500.0	7,457.0	11,224.1	7,272.0	74.8	0.0	-84.40	3,678.5	-787.0	1,896.1	1,823.1	72.99	25.980		
11,600.0	7,457.0	11,324.0	7,272.0	76.4	0.0	-84.39	3,778.4	-787.9	1,894.1	1,819.5	74.61	25.387		
11,700.0	7,457.0	11,424.0	7,272.0	78.1	0.0	-84.39	3,878.4	-788.7	1,892.1	1,815.9	76.24	24.817		
11,800.0	7,457.0	11,524.0	7,272.0	79.7	0.0	-84.38	3,978.4	-789.5	1,890.1	1,812.2	77.88	24.270		
11,900.0	7,457.0	11,624.0	7,272.0	81.3	0.0	-84.38	4,078.4	-790.4	1,888.1	1,808.5	79.52	23.743		
12,000.0	7,457.0	11,724.0	7,272.0	82.9	0.0	-84.37	4,178.3	-791.2	1,886.1	1,804.9	81.17	23.237		
12,100.0	7,457.0	11,823.9	7,272.0	84.6	0.0	-84.36	4,278.3	-792.0	1,884.0	1,801.2	82.82	22.749		
12,200.0	7,457.0	11,923.9	7,272.0	86.2	0.0	-84.36	4,378.3	-792.8	1,882.0	1,797.5	84.48	22.279		
12,300.0	7,457.0	12,023.9	7,272.0	87.9	0.0	-84.35	4,478.3	-793.7	1,880.0	1,793.9	86.14	21.826		
12,400.0	7,457.0	12,123.9	7,272.0	89.5	0.0	-84.35	4,578.2	-794.5	1,878.0	1,790.2	87.80	21.389		
12,500.0	7,457.0	12,223.9	7,272.0	91.2	0.0	-84.34	4,678.2	-795.3	1,876.0	1,786.5	89.47	20.968		
12,600.0	7,457.0	12,323.8	7,272.0	92.8	0.0	-84.33	4,778.2	-796.1	1,874.0	1,782.8	91.14	20.561		
12,700.0	7,457.0	12,423.8	7,272.0	94.5	0.0	-84.33	4,878.2	-797.0	1,871.9	1,779.1	92.82	20.168		
12,800.0	7,457.0	12,523.8	7,272.0	96.2	0.0	-84.32	4,978.1	-797.8	1,869.9	1,775.4	94.50	19.788		
12,900.0	7,457.0	12,623.8	7,272.0	97.8	0.0	-84.31	5,078.1	-798.6	1,867.9	1,771.7	96.18	19.421		
13,000.0	7,457.0	12,723.7	7,272.0	99.5	0.0	-84.31	5,178.1	-799.5	1,865.9	1,768.0	97.86	19.066		
13,100.0	7,457.0	12,823.7	7,272.0	101.2	0.0	-84.30	5,278.1	-800.3	1,863.9	1,764.3	99.55	18.723		
13,200.0	7,457.0	12,923.7	7,272.0	102.9	0.0	-84.30	5,378.0	-801.1	1,861.9	1,760.6	101.24	18.391		
13,300.0	7,457.0	13,023.7	7,272.0	104.6	0.0	-84.29	5,478.0	-801.9	1,859.9	1,756.9	102.93	18.069		
13,400.0	7,457.0	13,123.7	7,272.0	106.2	0.0	-84.28	5,578.0	-802.8	1,857.8	1,753.2	104.63	17.757		
13,500.0	7,457.0	13,223.6	7,272.0	107.9	0.0	-84.28	5,678.0	-803.6	1,855.8	1,749.5	106.33	17.454		
13,600.0	7,457.0	13,323.6	7,272.0	109.6	0.0	-84.27	5,778.0	-804.4	1,853.8	1,745.8	108.02	17.161		
13,700.0	7,457.0	13,423.6	7,272.0	111.3	0.0	-84.27	5,877.9	-805.2	1,851.8	1,742.1	109.73	16.877		
13,800.0	7,457.0	13,523.6	7,272.0	113.0	0.0	-84.26	5,977.9	-806.1	1,849.8	1,738.4	111.43	16.601		
13,900.0	7,457.0	13,623.6	7,272.0	114.7	0.0	-84.26	6,077.9	-806.9	1,849.2	1,736.1	113.13	16.346		
14,000.0	7,457.0	13,723.6	7,272.0	116.4	0.0	-84.26	6,177.9	-807.7	1,848.7	1,733.8	114.83	16.099		
14,100.0	7,457.0	13,823.6	7,272.0	118.1	0.0	-84.25	6,277.9	-808.6	1,848.1	1,731.6	116.53	15.860		
14,200.0	7,457.0	13,923.6	7,272.0	119.8	0.0	-84.25	6,377.9	-809.4	1,847.6	1,729.4	118.24	15.626		
14,300.0	7,457.0	14,023.6	7,272.0	121.5	0.0	-84.25	6,477.9	-810.2	1,847.1	1,727.1	119.95	15.399		
14,400.0	7,457.0	14,123.6	7,272.0	123.2	0.0	-84.25	6,577.9	-811.0	1,846.6	1,724.9	121.65	15.179		
14,500.0	7,457.0	14,223.6	7,272.0	124.9	0.0	-84.25	6,677.9	-811.9	1,846.0	1,722.7	123.36	14.964		
14,600.0	7,457.0	14,323.6	7,272.0	126.7	0.0	-84.25	6,777.9	-812.7	1,845.5	1,720.4	125.08	14.755		
14,700.0	7,457.0	14,423.6	7,272.0	128.4	0.0	-84.25	6,877.9	-813.5	1,845.0	1,718.2	126.79	14.552		
14,800.0	7,457.0	14,523.6	7,272.0	130.1	0.0	-84.24	6,977.9	-814.3	1,844.4	1,715.9	128.50	14.353		
14,900.0	7,457.0	14,623.6	7,272.0	131.8	0.0	-84.24	7,077.9	-815.2	1,843.9	1,713.7	130.22	14.160		
15,000.0	7,457.0	14,723.6	7,272.0	133.5	0.0	-84.24	7,177.8	-816.0	1,843.4	1,711.4	131.93	13.972		
15,100.0	7,457.0	14,823.6	7,272.0	135.2	0.0	-84.24	7,277.8	-816.8	1,842.9	1,709.2	133.65	13.789		
15,200.0	7,457.0	14,923.6	7,272.0	136.9	0.0	-84.24	7,377.8	-817.6	1,842.3	1,707.0	135.37	13.610		
15,300.0	7,457.0	15,023.6	7,272.0	138.7	0.0	-84.24	7,477.8	-818.5	1,841.8	1,704.7	137.09	13.435		
15,400.0	7,457.0	15,123.6	7,272.0	140.4	0.0	-84.23	7,577.8	-819.3	1,841.3	1,702.5	138.81	13.265		
15,500.0	7,457.0	15,223.6	7,272.0	142.1	0.0	-84.23	7,677.8	-820.1	1,840.7	1,700.2	140.53	13.098		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,457.0	15,323.6	7,272.0	143.8	0.0	-84.23	7,777.8	-821.0	1,840.2	1,698.0	142.25	12.936		
15,700.0	7,457.0	15,423.6	7,272.0	145.6	0.0	-84.23	7,877.8	-821.8	1,839.7	1,695.7	143.98	12.778		
15,800.0	7,457.0	15,523.6	7,272.0	147.3	0.0	-84.23	7,977.8	-822.6	1,839.1	1,693.4	145.70	12.623		
15,900.0	7,457.0	15,623.6	7,272.0	149.0	0.0	-84.23	8,077.8	-823.4	1,838.6	1,691.2	147.43	12.471		
16,000.0	7,457.0	15,723.6	7,272.0	150.7	0.0	-84.22	8,177.8	-824.3	1,838.1	1,688.9	149.15	12.324		
16,100.0	7,457.0	15,823.6	7,272.0	152.5	0.0	-84.22	8,277.8	-825.1	1,837.6	1,686.7	150.88	12.179		
16,200.0	7,457.0	15,923.6	7,272.0	154.2	0.0	-84.22	8,377.8	-825.9	1,837.0	1,684.4	152.61	12.038		
16,300.0	7,457.0	16,023.6	7,272.0	155.9	0.0	-84.22	8,477.8	-826.7	1,836.5	1,682.2	154.33	11.900		
16,400.0	7,457.0	16,123.5	7,272.0	157.6	0.0	-84.22	8,577.8	-827.6	1,836.0	1,679.9	156.06	11.764		
16,500.0	7,457.0	16,223.5	7,272.0	159.4	0.0	-84.22	8,677.8	-828.4	1,835.4	1,677.6	157.79	11.632		
16,600.0	7,457.0	16,323.5	7,272.0	161.1	0.0	-84.21	8,777.8	-829.2	1,834.9	1,675.4	159.52	11.503		
16,700.0	7,457.0	16,423.5	7,272.0	162.8	0.0	-84.21	8,877.8	-830.1	1,834.4	1,673.1	161.25	11.376		
16,800.0	7,457.0	16,523.5	7,272.0	164.6	0.0	-84.21	8,977.8	-830.9	1,833.8	1,670.9	162.98	11.252		
16,900.0	7,457.0	16,623.5	7,272.0	166.3	0.0	-84.21	9,077.8	-831.7	1,833.3	1,668.6	164.72	11.130		
17,000.0	7,457.0	16,723.5	7,272.0	168.0	0.0	-84.21	9,177.7	-832.5	1,832.8	1,666.3	166.45	11.011		
17,100.0	7,457.0	16,823.5	7,272.0	169.8	0.0	-84.20	9,277.7	-833.4	1,832.3	1,664.1	168.18	10.895		
17,200.0	7,457.0	16,923.5	7,272.0	171.5	0.0	-84.20	9,377.7	-834.2	1,831.7	1,661.8	169.92	10.780		
17,300.0	7,457.0	17,023.5	7,272.0	173.3	0.0	-84.20	9,477.7	-835.0	1,831.2	1,659.6	171.65	10.668		
17,400.0	7,457.0	17,123.5	7,272.0	175.0	0.0	-84.20	9,577.7	-835.8	1,830.7	1,657.3	173.38	10.558		
17,500.0	7,457.0	17,223.5	7,272.0	176.7	0.0	-84.20	9,677.7	-836.7	1,830.1	1,655.0	175.12	10.451		
17,600.0	7,457.0	17,323.5	7,272.0	178.5	0.0	-84.20	9,777.7	-837.5	1,829.6	1,652.8	176.85	10.345		
17,700.0	7,457.0	17,423.5	7,272.0	180.2	0.0	-84.19	9,877.7	-838.3	1,829.1	1,650.5	178.59	10.242		
17,716.0	7,457.0	17,429.8	7,272.0	180.5	0.0	-84.19	9,884.0	-838.4	1,829.0	1,650.2	178.81	10.229		
17,721.0	7,457.0	17,429.8	7,272.0	180.6	0.0	-84.19	9,884.0	-838.4	1,829.0	1,650.2	178.86	10.226 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NCH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.27	-0.6	-120.0	120.0					
100.0	100.0	100.0	100.0	0.4	0.0	-90.27	-0.6	-120.0	120.0	119.7	0.28	433.263		
200.0	200.0	200.0	200.0	1.0	0.0	-90.27	-0.6	-120.0	120.0	119.2	0.80	150.425		
300.0	300.0	300.0	300.0	1.5	0.0	-90.27	-0.6	-120.0	120.0	118.8	1.22	98.012		
400.0	400.0	400.0	400.0	1.9	0.0	-90.27	-0.6	-120.0	120.0	118.4	1.62	74.154		
500.0	500.0	500.0	500.0	2.3	0.0	-90.27	-0.6	-120.0	120.0	118.0	2.00	60.034		
600.0	600.0	600.0	600.0	2.7	0.0	-90.27	-0.6	-120.0	120.0	117.6	2.37	50.577		
700.0	700.0	700.0	700.0	3.1	0.0	-90.27	-0.6	-120.0	120.0	117.2	2.74	43.758		
800.0	800.0	800.0	800.0	3.5	0.0	-90.27	-0.6	-120.0	120.0	116.9	3.11	38.593 CC, ES		
900.0	900.0	896.4	896.3	3.9	0.0	-90.62	-1.3	-121.4	121.5	118.0	3.48	34.924		
1,000.0	1,000.0	992.5	992.4	4.2	0.0	-91.61	-3.5	-125.7	126.0	122.2	3.85	32.696		
1,100.0	1,100.0	1,088.1	1,087.6	4.6	0.0	154.47	-7.2	-132.8	135.2	130.8	4.35	31.083		
1,200.0	1,199.8	1,182.6	1,181.4	5.0	0.0	153.39	-12.3	-142.6	150.5	145.5	4.98	30.254		
1,300.0	1,299.5	1,275.4	1,273.3	5.7	0.0	152.55	-18.6	-155.0	171.9	166.4	5.52	31.121		
1,400.0	1,398.7	1,370.9	1,367.3	6.5	0.0	152.01	-26.1	-169.4	198.3	192.2	6.04	32.818		
1,500.0	1,497.5	1,466.5	1,461.5	7.1	0.0	151.93	-33.6	-184.0	227.7	221.1	6.54	34.790		
1,600.0	1,595.6	1,561.1	1,554.7	7.8	0.0	152.15	-41.1	-198.4	260.0	252.9	7.06	36.819		
1,700.0	1,693.4	1,655.1	1,647.3	8.2	0.0	152.74	-48.4	-212.7	294.0	286.5	7.43	39.592		
1,800.0	1,791.2	1,749.1	1,739.9	8.5	0.0	153.22	-55.8	-227.0	328.0	320.3	7.72	42.496		
1,900.0	1,888.9	1,843.1	1,832.5	8.8	0.0	153.61	-63.2	-241.4	362.0	354.0	8.02	45.153		
2,000.0	1,986.7	1,937.1	1,925.1	9.1	0.0	153.93	-70.6	-255.7	396.1	387.7	8.32	47.586		
2,100.0	2,084.5	2,031.1	2,017.7	9.4	0.0	154.20	-78.0	-270.0	430.1	421.5	8.63	49.815		
2,200.0	2,182.2	2,125.1	2,110.4	9.7	0.0	154.44	-85.4	-284.3	464.2	455.2	8.95	51.858		
2,300.0	2,280.0	2,219.1	2,203.0	10.1	0.0	154.64	-92.8	-298.6	498.2	489.0	9.27	53.732		
2,400.0	2,377.8	2,313.1	2,295.6	10.4	0.0	154.81	-100.2	-313.0	532.3	522.7	9.60	55.455		
2,500.0	2,475.5	2,407.1	2,388.2	10.8	0.0	154.97	-107.6	-327.3	566.4	556.4	9.93	57.041		
2,600.0	2,573.3	2,501.1	2,480.8	11.1	0.0	155.10	-115.0	-341.6	600.4	590.2	10.26	58.502		
2,700.0	2,671.1	2,595.1	2,573.4	11.5	0.0	155.22	-122.4	-355.9	634.5	623.9	10.60	59.851		
2,800.0	2,768.9	2,689.1	2,666.0	11.9	0.0	155.33	-129.7	-370.2	668.6	657.7	10.94	61.099		
2,900.0	2,866.6	2,783.1	2,758.7	12.4	0.0	155.43	-137.1	-384.5	702.7	691.4	11.29	62.254		
3,000.0	2,964.4	2,877.1	2,851.3	12.8	0.0	155.52	-144.5	-398.9	736.8	725.1	11.63	63.326		
3,100.0	3,062.2	2,971.2	2,943.9	13.3	0.0	155.60	-151.9	-413.2	770.9	758.9	11.98	64.322		
3,200.0	3,159.9	3,065.2	3,036.5	13.7	0.0	155.68	-159.3	-427.5	804.9	792.6	12.34	65.248		
3,300.0	3,257.7	3,159.2	3,129.1	14.2	0.0	155.75	-166.7	-441.8	839.0	826.3	12.69	66.113		
3,400.0	3,355.5	3,253.2	3,221.7	14.7	0.0	155.81	-174.1	-456.1	873.1	860.1	13.05	66.919		
3,500.0	3,453.2	3,347.2	3,314.3	15.2	0.0	155.87	-181.5	-470.4	907.2	893.8	13.41	67.673		
3,600.0	3,551.0	3,441.2	3,407.0	15.6	0.0	155.92	-188.9	-484.8	941.3	927.5	13.77	68.380		
3,700.0	3,648.8	3,535.2	3,499.6	16.1	0.0	155.97	-196.3	-499.1	975.4	961.3	14.13	69.042		
3,800.0	3,746.5	3,629.2	3,592.2	16.6	0.0	156.02	-203.7	-513.4	1,009.5	995.0	14.49	69.664		
3,900.0	3,844.3	3,723.2	3,684.8	17.1	0.0	156.06	-211.0	-527.7	1,043.6	1,028.7	14.86	70.249		
4,000.0	3,942.1	3,817.2	3,777.4	17.6	0.0	156.11	-218.4	-542.0	1,077.7	1,062.5	15.22	70.799		
4,100.0	4,039.9	3,911.2	3,870.0	18.1	0.0	156.14	-225.8	-556.4	1,111.8	1,096.2	15.59	71.318		
4,200.0	4,137.6	4,005.2	3,962.7	18.6	0.0	156.18	-233.2	-570.7	1,145.9	1,129.9	15.96	71.808		
4,300.0	4,235.4	4,099.2	4,055.3	19.1	0.0	156.22	-240.6	-585.0	1,180.0	1,163.6	16.33	72.271		
4,400.0	4,333.2	4,193.2	4,147.9	19.6	0.0	156.25	-248.0	-599.3	1,214.1	1,197.4	16.70	72.709		
4,500.0	4,430.9	4,287.2	4,240.5	20.1	0.0	156.28	-255.4	-613.6	1,248.2	1,231.1	17.07	73.124		
4,600.0	4,528.7	4,381.2	4,333.1	20.6	0.0	156.31	-262.8	-627.9	1,282.3	1,264.8	17.44	73.517		
4,700.0	4,626.5	4,475.2	4,425.7	21.1	0.0	156.34	-270.2	-642.3	1,316.3	1,298.5	17.82	73.890		
4,800.0	4,724.2	4,569.3	4,518.3	21.6	0.0	156.36	-277.6	-656.6	1,350.4	1,332.3	18.19	74.244		
4,900.0	4,822.0	4,663.3	4,611.0	22.1	0.0	156.39	-285.0	-670.9	1,384.5	1,366.0	18.56	74.581		
5,000.0	4,919.8	4,757.3	4,703.6	22.6	0.0	156.41	-292.3	-685.2	1,418.6	1,399.7	18.94	74.901		
5,100.0	5,017.5	4,851.3	4,796.2	23.1	0.0	156.43	-299.7	-699.5	1,452.7	1,433.4	19.32	75.206		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NCH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
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		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)	(usft)			
5,200.0	5,115.3	4,945.3	4,888.8	23.6	0.0	156.45	-307.1	-713.8	1,486.8	1,467.1	19.69	75.497		
5,300.0	5,213.1	5,039.3	4,981.4	24.1	0.0	156.47	-314.5	-728.2	1,520.9	1,500.9	20.07	75.774		
5,400.0	5,310.8	5,133.3	5,074.0	24.6	0.0	156.49	-321.9	-742.5	1,555.0	1,534.6	20.45	76.039		
5,500.0	5,408.6	5,227.3	5,166.6	25.1	0.0	156.51	-329.3	-756.8	1,589.1	1,568.3	20.83	76.292		
5,600.0	5,506.4	5,321.3	5,259.3	25.6	0.0	156.53	-336.7	-771.1	1,623.2	1,602.0	21.21	76.534		
5,700.0	5,604.2	5,415.3	5,351.9	26.1	0.0	156.55	-344.1	-785.4	1,657.3	1,635.7	21.59	76.766		
5,800.0	5,701.9	5,509.3	5,444.5	26.7	0.0	156.56	-351.5	-799.8	1,691.4	1,669.4	21.97	76.987		
5,900.0	5,799.7	5,603.3	5,537.1	27.2	0.0	156.58	-358.9	-814.1	1,725.5	1,703.2	22.35	77.199		
6,000.0	5,897.5	5,697.3	5,629.7	27.7	0.0	156.60	-366.3	-828.4	1,759.6	1,736.9	22.73	77.403		
6,100.0	5,995.2	5,791.3	5,722.3	28.2	0.0	156.61	-373.7	-842.7	1,793.7	1,770.6	23.12	77.598		
6,200.0	6,093.0	5,885.3	5,814.9	28.7	0.0	156.62	-381.0	-857.0	1,827.8	1,804.3	23.50	77.785		
6,300.0	6,190.8	5,979.3	5,907.6	29.2	0.0	156.64	-388.4	-871.3	1,861.9	1,838.0	23.88	77.965		
6,400.0	6,288.5	6,073.3	6,000.2	29.7	0.0	156.65	-395.8	-885.7	1,896.0	1,871.7	24.27	78.137		
6,500.0	6,386.3	6,167.4	6,092.8	30.2	0.0	156.66	-403.2	-900.0	1,930.1	1,905.5	24.65	78.303		
6,600.0	6,484.1	6,261.4	6,185.4	30.7	0.0	156.68	-410.6	-914.3	1,964.2	1,939.2	25.03	78.463		
6,700.0	6,581.8	6,355.4	6,278.0	31.2	0.0	156.69	-418.0	-928.6	1,998.3	1,972.9	25.42	78.616		
6,800.0	6,679.6	6,449.4	6,370.6	31.7	0.0	156.70	-425.4	-942.9	2,032.4	2,006.6	25.80	78.764		
6,900.0	6,777.4	6,543.4	6,463.2	32.2	0.0	156.71	-432.8	-957.2	2,066.5	2,040.3	26.19	78.906		
7,000.0	6,875.2	6,637.4	6,555.9	32.7	0.0	171.53	-440.2	-971.6	2,100.6	2,074.0	26.57	79.052		
7,100.0	6,973.1	6,730.5	6,647.6	33.3	0.0	-139.79	-447.5	-985.7	2,134.2	2,107.3	26.98	79.115		
7,200.0	7,068.6	6,820.0	6,735.8	33.6	0.0	-114.95	-454.5	-999.4	2,166.8	2,139.3	27.53	78.707		
7,300.0	7,158.8	6,903.2	6,817.8	34.0	0.0	-103.10	-461.1	-1,012.1	2,197.9	2,170.0	27.92	78.713		
12,900.0	7,457.0	12,883.9	7,492.0	97.8	0.0	-90.90	5,075.1	-1,162.5	2,222.9	2,125.7	97.19	22.871		
13,000.0	7,457.0	12,983.8	7,492.0	99.5	0.0	-90.90	5,175.1	-1,163.4	2,220.9	2,122.0	98.89	22.459		
13,100.0	7,457.0	13,083.8	7,492.0	101.2	0.0	-90.90	5,275.1	-1,164.2	2,218.9	2,118.3	100.58	22.061		
13,200.0	7,457.0	13,183.8	7,492.0	102.9	0.0	-90.90	5,375.0	-1,165.0	2,216.8	2,114.6	102.27	21.675		
13,300.0	7,457.0	13,283.8	7,492.0	104.6	0.0	-90.91	5,475.0	-1,165.8	2,214.8	2,110.9	103.97	21.302		
13,400.0	7,457.0	13,383.7	7,492.0	106.2	0.0	-90.91	5,575.0	-1,166.7	2,212.8	2,107.1	105.67	20.940		
13,500.0	7,457.0	13,483.7	7,492.0	107.9	0.0	-90.91	5,675.0	-1,167.5	2,210.8	2,103.4	107.38	20.589		
13,600.0	7,457.0	13,583.7	7,492.0	109.6	0.0	-90.91	5,774.9	-1,168.3	2,208.7	2,099.7	109.08	20.248		
13,700.0	7,457.0	13,683.7	7,492.0	111.3	0.0	-90.91	5,874.9	-1,169.1	2,206.7	2,095.9	110.79	19.918		
13,800.0	7,457.0	13,783.7	7,492.0	113.0	0.0	-90.91	5,974.9	-1,170.0	2,204.8	2,092.3	112.50	19.598		
13,900.0	7,457.0	13,883.7	7,492.0	114.7	0.0	-90.91	6,074.9	-1,170.8	2,204.1	2,089.9	114.20	19.300		
14,000.0	7,457.0	13,983.7	7,492.0	116.4	0.0	-90.91	6,174.9	-1,171.6	2,203.6	2,087.7	115.91	19.011		
14,100.0	7,457.0	14,083.7	7,492.0	118.1	0.0	-90.91	6,274.9	-1,172.5	2,203.1	2,085.4	117.62	18.730		
14,200.0	7,457.0	14,183.7	7,492.0	119.8	0.0	-90.91	6,374.9	-1,173.3	2,202.5	2,083.2	119.33	18.457		
14,300.0	7,457.0	14,283.7	7,492.0	121.5	0.0	-90.91	6,474.9	-1,174.1	2,202.0	2,081.0	121.04	18.192		
14,400.0	7,457.0	14,383.7	7,492.0	123.2	0.0	-90.91	6,574.9	-1,174.9	2,201.5	2,078.7	122.76	17.933		
14,500.0	7,457.0	14,483.7	7,492.0	124.9	0.0	-90.91	6,674.9	-1,175.8	2,200.9	2,076.5	124.47	17.682		
14,600.0	7,457.0	14,583.7	7,492.0	126.7	0.0	-90.91	6,774.9	-1,176.6	2,200.4	2,074.2	126.19	17.437		
14,700.0	7,457.0	14,683.7	7,492.0	128.4	0.0	-90.91	6,874.8	-1,177.4	2,199.9	2,072.0	127.91	17.199		
14,800.0	7,457.0	14,783.7	7,492.0	130.1	0.0	-90.91	6,974.8	-1,178.2	2,199.3	2,069.7	129.63	16.966		
14,900.0	7,457.0	14,883.7	7,492.0	131.8	0.0	-90.91	7,074.8	-1,179.1	2,198.8	2,067.5	131.35	16.740		
15,000.0	7,457.0	14,983.7	7,492.0	133.5	0.0	-90.91	7,174.8	-1,179.9	2,198.3	2,065.2	133.07	16.519		
15,100.0	7,457.0	15,083.6	7,492.0	135.2	0.0	-90.91	7,274.8	-1,180.7	2,197.7	2,062.9	134.80	16.304		
15,200.0	7,457.0	15,183.6	7,492.0	136.9	0.0	-90.91	7,374.8	-1,181.6	2,197.2	2,060.7	136.52	16.094		
15,300.0	7,457.0	15,283.6	7,492.0	138.7	0.0	-90.91	7,474.8	-1,182.4	2,196.7	2,058.4	138.25	15.890		
15,400.0	7,457.0	15,383.6	7,492.0	140.4	0.0	-90.91	7,574.8	-1,183.2	2,196.1	2,056.2	139.97	15.690		
15,500.0	7,457.0	15,483.6	7,492.0	142.1	0.0	-90.91	7,674.8	-1,184.0	2,195.6	2,053.9	141.70	15.495		
15,600.0	7,457.0	15,583.6	7,492.0	143.8	0.0	-90.91	7,774.8	-1,184.9	2,195.1	2,051.6	143.43	15.304		
15,700.0	7,457.0	15,683.6	7,492.0	145.6	0.0	-90.91	7,874.8	-1,185.7	2,194.5	2,049.4	145.16	15.118		
15,800.0	7,457.0	15,783.6	7,492.0	147.3	0.0	-90.91	7,974.8	-1,186.5	2,194.0	2,047.1	146.89	14.937		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NCH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,900.0	7,457.0	15,883.6	7,492.0	149.0	0.0	-90.91	8,074.8	-1,187.3	2,193.5	2,044.9	148.62	14.759		
16,000.0	7,457.0	15,983.6	7,492.0	150.7	0.0	-90.91	8,174.8	-1,188.2	2,192.9	2,042.6	150.35	14.585		
16,100.0	7,457.0	16,083.6	7,492.0	152.5	0.0	-90.91	8,274.8	-1,189.0	2,192.4	2,040.3	152.09	14.416		
16,200.0	7,457.0	16,183.6	7,492.0	154.2	0.0	-90.91	8,374.8	-1,189.8	2,191.9	2,038.1	153.82	14.250		
16,300.0	7,457.0	16,283.6	7,492.0	155.9	0.0	-90.92	8,474.8	-1,190.7	2,191.4	2,035.8	155.55	14.087		
16,400.0	7,457.0	16,383.6	7,492.0	157.6	0.0	-90.92	8,574.8	-1,191.5	2,190.8	2,033.5	157.29	13.929		
16,500.0	7,457.0	16,483.6	7,492.0	159.4	0.0	-90.92	8,674.8	-1,192.3	2,190.3	2,031.3	159.03	13.773		
16,600.0	7,457.0	16,583.6	7,492.0	161.1	0.0	-90.92	8,774.8	-1,193.1	2,189.8	2,029.0	160.76	13.621		
16,700.0	7,457.0	16,683.6	7,492.0	162.8	0.0	-90.92	8,874.8	-1,194.0	2,189.2	2,026.7	162.50	13.472		
16,800.0	7,457.0	16,783.6	7,492.0	164.6	0.0	-90.92	8,974.7	-1,194.8	2,188.7	2,024.5	164.24	13.326		
16,900.0	7,457.0	16,883.6	7,492.0	166.3	0.0	-90.92	9,074.7	-1,195.6	2,188.2	2,022.2	165.98	13.184		
17,000.0	7,457.0	16,983.6	7,492.0	168.0	0.0	-90.92	9,174.7	-1,196.4	2,187.6	2,019.9	167.71	13.044		
17,100.0	7,457.0	17,083.6	7,492.0	169.8	0.0	-90.92	9,274.7	-1,197.3	2,187.1	2,017.6	169.45	12.907		
17,200.0	7,457.0	17,183.6	7,492.0	171.5	0.0	-90.92	9,374.7	-1,198.1	2,186.6	2,015.4	171.20	12.772		
17,300.0	7,457.0	17,283.6	7,492.0	173.3	0.0	-90.92	9,474.7	-1,198.9	2,186.0	2,013.1	172.94	12.641		
17,400.0	7,457.0	17,383.6	7,492.0	175.0	0.0	-90.92	9,574.7	-1,199.7	2,185.5	2,010.8	174.68	12.512		
17,500.0	7,457.0	17,483.6	7,492.0	176.7	0.0	-90.92	9,674.7	-1,200.6	2,185.0	2,008.5	176.42	12.385		
17,600.0	7,457.0	17,583.6	7,492.0	178.5	0.0	-90.92	9,774.7	-1,201.4	2,184.4	2,006.3	178.16	12.261		
17,700.0	7,457.0	17,683.6	7,492.0	180.2	0.0	-90.92	9,874.7	-1,202.2	2,183.9	2,004.0	179.90	12.139		
17,714.9	7,457.0	17,686.9	7,492.0	180.5	0.0	-90.92	9,878.0	-1,202.3	2,183.9	2,003.8	180.10	12.126		
17,721.0	7,457.0	17,686.9	7,492.0	180.6	0.0	-90.92	9,878.0	-1,202.3	2,183.9	2,003.7	180.17	12.121 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.28	-0.7	-135.0	135.0					
100.0	100.0	100.0	100.0	0.4	0.4	-90.28	-0.7	-135.0	135.0	134.4	0.55	243.865		
200.0	200.0	200.0	200.0	1.0	1.0	-90.28	-0.7	-135.0	135.0	133.4	1.59	84.629		
300.0	300.0	300.0	300.0	1.5	1.5	-90.28	-0.7	-135.0	135.0	132.5	2.45	55.137		
400.0	400.0	400.0	400.0	1.9	1.9	-90.28	-0.7	-135.0	135.0	131.7	3.24	41.715		
500.0	500.0	500.0	500.0	2.3	2.3	-90.28	-0.7	-135.0	135.0	131.0	4.00	33.771		
600.0	600.0	600.0	600.0	2.7	2.7	-90.28	-0.7	-135.0	135.0	130.2	4.74	28.451		
700.0	700.0	700.0	700.0	3.1	3.1	-90.28	-0.7	-135.0	135.0	129.5	5.48	24.615 CC, ES		
800.0	800.0	795.8	795.8	3.5	3.4	-90.55	-1.3	-136.4	136.5	130.3	6.26	21.799		
900.0	900.0	891.4	891.3	3.9	4.2	-91.32	-3.2	-140.8	141.1	133.5	7.60	18.569		
1,000.0	1,000.0	986.6	986.1	4.2	5.0	-92.49	-6.4	-148.1	148.9	140.1	8.81	16.903		
1,100.0	1,100.0	1,081.0	1,079.9	4.6	5.7	153.57	-10.9	-158.1	161.3	151.3	10.02	16.100		
1,200.0	1,199.8	1,174.0	1,171.8	5.0	6.4	152.57	-16.4	-170.8	179.9	168.7	11.28	15.958 SF		
1,300.0	1,299.5	1,265.1	1,261.4	5.7	6.9	151.83	-23.1	-185.8	204.6	192.3	12.28	16.654		
1,400.0	1,398.7	1,360.0	1,354.4	6.5	7.1	151.40	-30.7	-203.1	234.0	220.9	13.06	17.918		
1,500.0	1,497.5	1,454.6	1,447.1	7.1	7.4	151.34	-38.3	-220.4	266.3	252.4	13.81	19.280		
1,600.0	1,595.6	1,548.2	1,538.8	7.8	7.6	151.52	-45.8	-237.5	301.5	286.9	14.59	20.658		
1,700.0	1,693.4	1,641.1	1,629.9	8.2	7.9	152.10	-53.3	-254.5	338.3	323.1	15.23	22.207		
1,800.0	1,791.2	1,734.0	1,720.9	8.5	8.2	152.58	-60.8	-271.4	375.2	359.3	15.82	23.721		
1,900.0	1,888.9	1,826.9	1,812.0	8.8	8.5	152.97	-68.2	-288.4	412.0	395.6	16.41	25.107		
2,000.0	1,986.7	1,919.8	1,903.0	9.1	8.8	153.30	-75.7	-305.4	448.9	431.9	17.02	26.377		
2,100.0	2,084.5	2,012.7	1,994.1	9.4	9.1	153.58	-83.2	-322.3	485.9	468.2	17.64	27.540		
2,200.0	2,182.2	2,105.7	2,085.1	9.7	9.4	153.82	-90.6	-339.3	522.8	504.5	18.27	28.609		
2,300.0	2,280.0	2,198.6	2,176.1	10.1	9.7	154.03	-98.1	-356.3	559.7	540.8	18.91	29.591		
2,400.0	2,377.8	2,291.5	2,267.2	10.4	10.1	154.21	-105.6	-373.2	596.6	577.1	19.57	30.495		
2,500.0	2,475.5	2,384.4	2,358.2	10.8	10.4	154.38	-113.1	-390.2	633.6	613.4	20.22	31.328		
2,600.0	2,573.3	2,477.3	2,449.3	11.1	10.8	154.52	-120.5	-407.2	670.5	649.6	20.89	32.098		
2,700.0	2,671.1	2,570.2	2,540.3	11.5	11.2	154.65	-128.0	-424.1	707.5	685.9	21.56	32.810		
2,800.0	2,768.9	2,663.1	2,631.4	11.9	11.6	154.76	-135.5	-441.1	744.4	722.2	22.24	33.470		
2,900.0	2,866.6	2,756.1	2,722.4	12.4	12.0	154.87	-142.9	-458.0	781.4	758.4	22.93	34.083		
3,000.0	2,964.4	2,849.0	2,813.5	12.8	12.4	154.97	-150.4	-475.0	818.3	794.7	23.61	34.652		
3,100.0	3,062.2	2,941.9	2,904.5	13.3	12.8	155.05	-157.9	-492.0	855.3	831.0	24.31	35.183		
3,200.0	3,159.9	3,034.8	2,995.6	13.7	13.2	155.13	-165.4	-508.9	892.2	867.2	25.01	35.678		
3,300.0	3,257.7	3,127.7	3,086.6	14.2	13.7	155.21	-172.8	-525.9	929.2	903.5	25.71	36.141		
3,400.0	3,355.5	3,220.6	3,177.7	14.7	14.1	155.27	-180.3	-542.9	966.1	939.7	26.42	36.574		
3,500.0	3,453.2	3,313.5	3,268.7	15.2	14.6	155.34	-187.8	-559.8	1,003.1	976.0	27.13	36.980		
3,600.0	3,551.0	3,406.5	3,359.7	15.6	15.0	155.40	-195.3	-576.8	1,040.0	1,012.2	27.84	37.361		
3,700.0	3,648.8	3,499.4	3,450.8	16.1	15.5	155.45	-202.7	-593.8	1,077.0	1,048.5	28.55	37.719		
3,800.0	3,746.5	3,592.3	3,541.8	16.6	15.9	155.50	-210.2	-610.7	1,114.0	1,084.7	29.27	38.056		
3,900.0	3,844.3	3,685.2	3,632.9	17.1	16.4	155.55	-217.7	-627.7	1,150.9	1,120.9	29.99	38.374		
4,000.0	3,942.1	3,778.1	3,723.9	17.6	16.8	155.59	-225.1	-644.7	1,187.9	1,157.2	30.72	38.674		
4,100.0	4,039.9	3,871.0	3,815.0	18.1	17.3	155.64	-232.6	-661.6	1,224.9	1,193.4	31.44	38.957		
4,200.0	4,137.6	3,963.9	3,906.0	18.6	17.7	155.68	-240.1	-678.6	1,261.8	1,229.7	32.17	39.225		
4,300.0	4,235.4	4,056.9	3,997.1	19.1	18.2	155.71	-247.6	-695.6	1,298.8	1,265.9	32.90	39.479		
4,400.0	4,333.2	4,149.8	4,088.1	19.6	18.6	155.75	-255.0	-712.5	1,335.8	1,302.1	33.63	39.720		
4,500.0	4,430.9	4,242.7	4,179.2	20.1	19.1	155.78	-262.5	-729.5	1,372.7	1,338.4	34.36	39.948		
4,600.0	4,528.7	4,335.6	4,270.2	20.6	19.6	155.81	-270.0	-746.5	1,409.7	1,374.6	35.10	40.165		
4,700.0	4,626.5	4,428.5	4,361.2	21.1	20.0	155.84	-277.4	-763.4	1,446.6	1,410.8	35.83	40.372		
4,800.0	4,724.2	4,521.4	4,452.3	21.6	20.5	155.87	-284.9	-780.4	1,483.6	1,447.0	36.57	40.568		
4,900.0	4,822.0	4,614.3	4,543.3	22.1	20.9	155.90	-292.4	-797.4	1,520.6	1,483.3	37.31	40.755		
5,000.0	4,919.8	4,707.3	4,634.4	22.6	21.4	155.92	-299.9	-814.3	1,557.5	1,519.5	38.05	40.934		
5,100.0	5,017.5	4,800.2	4,725.4	23.1	21.8	155.95	-307.3	-831.3	1,594.5	1,555.7	38.79	41.104		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,115.3	4,893.1	4,816.5	23.6	22.3	155.97	-314.8	-848.3	1,631.5	1,591.9	39.53	41.267		
5,300.0	5,213.1	4,986.0	4,907.5	24.1	22.8	155.99	-322.3	-865.2	1,668.4	1,628.2	40.28	41.423		
5,400.0	5,310.8	5,078.9	4,998.6	24.6	23.2	156.02	-329.8	-882.2	1,705.4	1,664.4	41.02	41.572		
5,500.0	5,408.6	5,171.8	5,089.6	25.1	23.7	156.04	-337.2	-899.2	1,742.4	1,700.6	41.77	41.714		
5,600.0	5,506.4	5,264.7	5,180.7	25.6	24.1	156.06	-344.7	-916.1	1,779.4	1,736.8	42.52	41.851		
5,700.0	5,604.2	5,357.7	5,271.7	26.1	24.6	156.08	-352.2	-933.1	1,816.3	1,773.1	43.26	41.982		
5,800.0	5,701.9	5,450.6	5,362.8	26.7	25.1	156.09	-359.6	-950.1	1,853.3	1,809.3	44.01	42.108		
5,900.0	5,799.7	5,543.5	5,453.8	27.2	25.5	156.11	-367.1	-967.0	1,890.3	1,845.5	44.76	42.229		
6,000.0	5,897.5	5,636.4	5,544.8	27.7	26.0	156.13	-374.6	-984.0	1,927.2	1,881.7	45.51	42.344		
6,100.0	5,995.2	5,729.3	5,635.9	28.2	26.4	156.14	-382.1	-1,001.0	1,964.2	1,917.9	46.26	42.456		
6,200.0	6,093.0	5,822.2	5,726.9	28.7	26.9	156.16	-389.5	-1,017.9	2,001.2	1,954.1	47.02	42.563		
6,300.0	6,190.8	5,915.1	5,818.0	29.2	27.4	156.17	-397.0	-1,034.9	2,038.1	1,990.4	47.77	42.666		
6,400.0	6,288.5	6,008.1	5,909.0	29.7	27.8	156.19	-404.5	-1,051.9	2,075.1	2,026.6	48.52	42.766		
6,500.0	6,386.3	6,101.0	6,000.1	30.2	28.3	156.20	-411.9	-1,068.8	2,112.1	2,062.8	49.28	42.861		
6,600.0	6,484.1	6,193.9	6,091.1	30.7	28.8	156.22	-419.4	-1,085.8	2,149.0	2,099.0	50.03	42.954		
6,700.0	6,581.8	6,286.8	6,182.2	31.2	29.2	156.23	-426.9	-1,102.8	2,186.0	2,135.2	50.79	43.042		
6,800.0	6,679.6	6,379.7	6,273.2	31.7	29.7	156.24	-434.4	-1,119.7	2,223.0	2,171.4	51.54	43.128		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.28	-0.4	-90.0	90.0					
100.0	100.0	100.0	100.0	0.4	0.0	-90.28	-0.4	-90.0	90.0	89.7	0.28	324.882		
200.0	200.0	200.0	200.0	1.0	0.0	-90.28	-0.4	-90.0	90.0	89.2	0.80	112.798		
300.0	300.0	300.0	300.0	1.5	0.0	-90.28	-0.4	-90.0	90.0	88.8	1.22	73.496		
400.0	400.0	400.0	400.0	1.9	0.0	-90.28	-0.4	-90.0	90.0	88.4	1.62	55.606		
500.0	500.0	500.0	500.0	2.3	0.0	-90.28	-0.4	-90.0	90.0	88.0	2.00	45.018		
600.0	600.0	600.0	600.0	2.7	0.0	-90.28	-0.4	-90.0	90.0	87.6	2.37	37.927		
700.0	700.0	700.0	700.0	3.1	0.0	-90.28	-0.4	-90.0	90.0	87.2	2.74	32.814		
800.0	800.0	800.0	800.0	3.5	0.0	-90.28	-0.4	-90.0	90.0	86.9	3.11	28.940		
900.0	900.0	900.0	900.0	3.9	0.0	-90.28	-0.4	-90.0	90.0	86.5	3.47	25.898		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	0.0	-90.28	-0.4	-90.0	90.0	86.1	3.84	23.442 CC, ES		
1,100.0	1,100.0	1,098.1	1,098.1	4.6	0.0	156.62	-1.8	-91.0	92.6	88.3	4.34	21.350		
1,200.0	1,199.8	1,195.8	1,195.6	5.0	0.0	155.42	-5.8	-93.9	100.5	95.5	5.00	20.091		
1,300.0	1,299.5	1,293.0	1,292.5	5.7	0.0	153.80	-12.5	-98.8	113.7	108.1	5.58	20.362		
1,400.0	1,398.7	1,391.5	1,390.5	6.5	0.0	152.74	-20.2	-104.4	130.7	124.6	6.11	21.378		
1,500.0	1,497.5	1,489.4	1,488.0	7.1	0.0	152.49	-27.8	-110.0	150.8	144.2	6.63	22.757		
1,600.0	1,595.6	1,586.7	1,584.8	7.8	0.0	152.77	-35.4	-115.5	174.0	166.8	7.16	24.287		
1,700.0	1,693.4	1,683.6	1,681.2	8.2	0.0	153.39	-43.0	-121.0	198.8	191.3	7.54	26.372		
1,800.0	1,791.2	1,780.4	1,777.6	8.5	0.0	153.89	-50.5	-126.5	223.7	215.8	7.84	28.532		
1,900.0	1,888.9	1,877.2	1,874.0	8.8	0.0	154.29	-58.1	-132.0	248.6	240.4	8.15	30.511		
2,000.0	1,986.7	1,974.1	1,970.4	9.1	0.0	154.62	-65.6	-137.5	273.5	265.0	8.46	32.324		
2,100.0	2,084.5	2,070.9	2,066.8	9.4	0.0	154.89	-73.2	-143.0	298.4	289.6	8.78	33.985		
2,200.0	2,182.2	2,167.8	2,163.2	9.7	0.0	155.13	-80.7	-148.5	323.3	314.2	9.10	35.509		
2,300.0	2,280.0	2,264.6	2,259.6	10.1	0.0	155.32	-88.3	-154.1	348.2	338.8	9.43	36.909		
2,400.0	2,377.8	2,361.4	2,355.9	10.4	0.0	155.49	-95.8	-159.6	373.1	363.3	9.77	38.195		
2,500.0	2,475.5	2,458.3	2,452.3	10.8	0.0	155.64	-103.4	-165.1	398.0	387.9	10.11	39.380		
2,600.0	2,573.3	2,555.1	2,548.7	11.1	0.0	155.78	-110.9	-170.6	423.0	412.5	10.45	40.473		
2,700.0	2,671.1	2,652.0	2,645.1	11.5	0.0	155.89	-118.5	-176.1	447.9	437.1	10.80	41.483		
2,800.0	2,768.9	2,748.8	2,741.5	11.9	0.0	156.00	-126.0	-181.6	472.8	461.7	11.15	42.417		
2,900.0	2,866.6	2,845.6	2,837.9	12.4	0.0	156.09	-133.6	-187.1	497.7	486.2	11.50	43.282		
3,000.0	2,964.4	2,942.5	2,934.3	12.8	0.0	156.18	-141.1	-192.6	522.7	510.8	11.86	44.086		
3,100.0	3,062.2	3,039.3	3,030.7	13.3	0.0	156.26	-148.7	-198.1	547.6	535.4	12.21	44.833		
3,200.0	3,159.9	3,136.2	3,127.0	13.7	0.0	156.33	-156.2	-203.7	572.5	559.9	12.57	45.529		
3,300.0	3,257.7	3,233.0	3,223.4	14.2	0.0	156.39	-163.8	-209.2	597.5	584.5	12.94	46.178		
3,400.0	3,355.5	3,329.8	3,319.8	14.7	0.0	156.45	-171.3	-214.7	622.4	609.1	13.30	46.785		
3,500.0	3,453.2	3,426.7	3,416.2	15.2	0.0	156.51	-178.9	-220.2	647.3	633.6	13.67	47.352		
3,600.0	3,551.0	3,523.5	3,512.6	15.6	0.0	156.56	-186.4	-225.7	672.3	658.2	14.04	47.884		
3,700.0	3,648.8	3,620.4	3,609.0	16.1	0.0	156.61	-194.0	-231.2	697.2	682.8	14.41	48.383		
3,800.0	3,746.5	3,717.2	3,705.4	16.6	0.0	156.65	-201.5	-236.7	722.1	707.3	14.78	48.853		
3,900.0	3,844.3	3,814.0	3,801.8	17.1	0.0	156.69	-209.1	-242.2	747.1	731.9	15.16	49.294		
4,000.0	3,942.1	3,910.9	3,898.1	17.6	0.0	156.73	-216.6	-247.7	772.0	756.5	15.53	49.710		
4,100.0	4,039.9	4,007.7	3,994.5	18.1	0.0	156.77	-224.2	-253.3	796.9	781.0	15.91	50.103		
4,200.0	4,137.6	4,104.6	4,090.9	18.6	0.0	156.80	-231.7	-258.8	821.9	805.6	16.28	50.473		
4,300.0	4,235.4	4,201.4	4,187.3	19.1	0.0	156.83	-239.3	-264.3	846.8	830.1	16.66	50.824		
4,400.0	4,333.2	4,298.2	4,283.7	19.6	0.0	156.86	-246.9	-269.8	871.7	854.7	17.04	51.156		
4,500.0	4,430.9	4,395.1	4,380.1	20.1	0.0	156.89	-254.4	-275.3	896.7	879.2	17.42	51.471		
4,600.0	4,528.7	4,491.9	4,476.5	20.6	0.0	156.92	-262.0	-280.8	921.6	903.8	17.80	51.770		
4,700.0	4,626.5	4,588.8	4,572.9	21.1	0.0	156.94	-269.5	-286.3	946.5	928.4	18.18	52.054		
4,800.0	4,724.2	4,685.6	4,669.2	21.6	0.0	156.97	-277.1	-291.8	971.5	952.9	18.57	52.324		
4,900.0	4,822.0	4,782.4	4,765.6	22.1	0.0	156.99	-284.6	-297.3	996.4	977.5	18.95	52.580		
5,000.0	4,919.8	4,879.3	4,862.0	22.6	0.0	157.01	-292.2	-302.8	1,021.3	1,002.0	19.33	52.825		
5,100.0	5,017.5	4,976.1	4,958.4	23.1	0.0	157.03	-299.7	-308.4	1,046.3	1,026.6	19.72	53.059		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,115.3	5,073.0	5,054.8	23.6	0.0	157.05	-307.3	-313.9	1,071.2	1,051.1	20.10	53.281		
5,300.0	5,213.1	5,169.8	5,151.2	24.1	0.0	157.07	-314.8	-319.4	1,096.2	1,075.7	20.49	53.494		
5,400.0	5,310.8	5,266.6	5,247.6	24.6	0.0	157.09	-322.4	-324.9	1,121.1	1,100.2	20.88	53.697		
5,500.0	5,408.6	5,363.5	5,344.0	25.1	0.0	157.11	-329.9	-330.4	1,146.0	1,124.8	21.27	53.892		
5,600.0	5,506.4	5,460.3	5,440.4	25.6	0.0	157.12	-337.5	-335.9	1,171.0	1,149.3	21.65	54.078		
5,700.0	5,604.2	5,557.2	5,536.7	26.1	0.0	157.14	-345.0	-341.4	1,195.9	1,173.9	22.04	54.256		
5,800.0	5,701.9	5,654.0	5,633.1	26.7	0.0	157.16	-352.6	-346.9	1,220.8	1,198.4	22.43	54.427		
5,900.0	5,799.7	5,750.8	5,729.5	27.2	0.0	157.17	-360.1	-352.4	1,245.8	1,223.0	22.82	54.591		
6,000.0	5,897.5	5,847.7	5,825.9	27.7	0.0	157.18	-367.7	-358.0	1,270.7	1,247.5	23.21	54.749		
6,100.0	5,995.2	5,944.5	5,922.3	28.2	0.0	157.20	-375.2	-363.5	1,295.6	1,272.0	23.60	54.900		
6,200.0	6,093.0	6,041.4	6,018.7	28.7	0.0	157.21	-382.8	-369.0	1,320.6	1,296.6	23.99	55.046		
6,300.0	6,190.8	6,138.2	6,115.1	29.2	0.0	157.22	-390.3	-374.5	1,345.5	1,321.1	24.38	55.186		
6,400.0	6,288.5	6,235.0	6,211.5	29.7	0.0	157.24	-397.9	-380.0	1,370.5	1,345.7	24.77	55.320		
6,500.0	6,386.3	6,331.9	6,307.8	30.2	0.0	157.25	-405.4	-385.5	1,395.4	1,370.2	25.17	55.450		
6,600.0	6,484.1	6,428.7	6,404.2	30.7	0.0	157.26	-413.0	-391.0	1,420.3	1,394.8	25.56	55.575		
6,700.0	6,581.8	6,525.6	6,500.6	31.2	0.0	157.27	-420.5	-396.5	1,445.3	1,419.3	25.95	55.695		
6,800.0	6,679.6	6,622.4	6,597.0	31.7	0.0	157.28	-428.1	-402.0	1,470.2	1,443.9	26.34	55.811		
6,900.0	6,777.4	6,719.2	6,693.4	32.2	0.0	157.29	-435.6	-407.5	1,495.2	1,468.4	26.74	55.923		
7,000.0	6,875.2	6,816.1	6,789.8	32.7	0.0	171.79	-443.2	-413.1	1,520.1	1,492.9	27.13	56.037		
7,100.0	6,973.1	6,912.0	6,885.2	33.3	0.0	-140.72	-450.7	-418.5	1,544.5	1,517.0	27.55	56.066		
7,200.0	7,068.6	7,004.2	6,977.0	33.6	0.0	-117.15	-457.9	-423.8	1,568.2	1,540.1	28.14	55.726		
7,300.0	7,158.8	7,092.4	7,064.8	34.0	0.0	-106.61	-464.4	-428.8	1,591.3	1,562.7	28.60	55.639		
7,400.0	7,241.0	7,193.0	7,165.0	34.3	0.0	-101.24	-460.0	-434.5	1,613.7	1,584.7	28.99	55.672		
7,500.0	7,312.6	7,307.2	7,275.8	34.5	0.0	-98.31	-433.9	-440.9	1,634.4	1,605.1	29.32	55.744		
7,600.0	7,371.6	7,440.3	7,395.4	34.7	0.0	-96.88	-376.5	-447.8	1,652.7	1,623.1	29.61	55.816		
7,700.0	7,416.1	7,597.8	7,515.2	34.7	0.0	-96.47	-275.3	-454.8	1,667.2	1,637.4	29.84	55.869		
7,800.0	7,444.7	7,782.5	7,614.5	34.7	0.0	-96.66	-120.6	-460.6	1,676.4	1,646.4	30.03	55.826		
7,900.0	7,456.7	7,987.6	7,661.2	34.6	0.0	-96.97	78.0	-463.5	1,678.7	1,648.5	30.24	55.504		
8,000.0	7,457.0	8,103.3	7,662.0	34.6	0.0	-97.03	193.6	-463.7	1,676.1	1,645.5	30.55	54.861		
8,100.0	7,457.0	8,203.2	7,662.0	34.6	0.0	-97.04	293.6	-463.8	1,673.4	1,642.4	30.96	54.046		
8,200.0	7,457.0	8,303.2	7,662.0	34.8	0.0	-97.05	393.6	-463.9	1,670.6	1,639.2	31.47	53.091		
8,300.0	7,457.0	8,403.2	7,662.0	35.0	0.0	-97.06	493.5	-464.0	1,667.9	1,635.9	32.06	52.022		
8,400.0	7,457.0	8,503.1	7,662.0	35.3	0.0	-97.07	593.5	-464.2	1,665.2	1,632.5	32.74	50.861		
8,500.0	7,457.0	8,603.1	7,662.0	35.8	0.0	-97.09	693.4	-464.3	1,662.5	1,629.0	33.50	49.630		
8,600.0	7,457.0	8,703.1	7,662.0	36.3	0.0	-97.10	793.4	-464.4	1,659.8	1,625.4	34.33	48.349		
8,700.0	7,457.0	8,803.0	7,662.0	37.0	0.0	-97.11	893.4	-464.5	1,657.0	1,621.8	35.23	47.036		
8,800.0	7,457.0	8,903.0	7,662.0	37.9	0.0	-97.12	993.3	-464.6	1,654.3	1,618.1	36.19	45.709		
8,900.0	7,457.0	9,002.9	7,662.0	38.8	0.0	-97.13	1,093.3	-464.7	1,651.6	1,614.4	37.21	44.381		
9,000.0	7,457.0	9,102.9	7,662.0	39.7	0.0	-97.14	1,193.3	-464.8	1,648.9	1,610.6	38.29	43.063		
9,100.0	7,457.0	9,202.9	7,662.0	40.8	0.0	-97.16	1,293.2	-464.9	1,646.2	1,606.7	39.42	41.765		
9,200.0	7,457.0	9,302.8	7,662.0	41.9	0.0	-97.17	1,393.2	-465.0	1,643.4	1,602.9	40.59	40.493		
9,300.0	7,457.0	9,402.8	7,662.0	43.0	0.0	-97.18	1,493.1	-465.2	1,640.7	1,598.9	41.80	39.254		
9,400.0	7,457.0	9,502.8	7,662.0	44.2	0.0	-97.19	1,593.1	-465.3	1,638.0	1,595.0	43.05	38.051		
9,500.0	7,457.0	9,602.7	7,662.0	45.4	0.0	-97.20	1,693.1	-465.4	1,635.3	1,591.0	44.33	36.887		
9,600.0	7,457.0	9,702.7	7,662.0	46.7	0.0	-97.22	1,793.0	-465.5	1,632.6	1,586.9	45.65	35.764		
9,700.0	7,457.0	9,802.6	7,662.0	48.0	0.0	-97.23	1,893.0	-465.6	1,629.8	1,582.9	46.99	34.682		
9,800.0	7,457.0	9,902.6	7,662.0	49.3	0.0	-97.24	1,993.0	-465.7	1,627.1	1,578.8	48.37	33.642		
9,900.0	7,457.0	10,002.6	7,662.0	50.7	0.0	-97.25	2,092.9	-465.8	1,624.4	1,574.6	49.76	32.643		
10,000.0	7,457.0	10,102.5	7,662.0	52.1	0.0	-97.26	2,192.9	-465.9	1,621.7	1,570.5	51.18	31.685		
10,100.0	7,457.0	10,202.5	7,662.0	53.5	0.0	-97.28	2,292.8	-466.0	1,619.0	1,566.4	52.62	30.766		
10,200.0	7,457.0	10,302.5	7,662.0	54.9	0.0	-97.29	2,392.8	-466.2	1,616.3	1,562.2	54.08	29.886		
10,300.0	7,457.0	10,402.4	7,662.0	56.4	0.0	-97.30	2,492.8	-466.3	1,613.5	1,558.0	55.56	29.043		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,457.0	10,502.4	7,662.0	57.8	0.0	-97.31	2,592.7	-466.4	1,610.8	1,553.8	57.05	28.236		
10,500.0	7,457.0	10,602.3	7,662.0	59.3	0.0	-97.33	2,692.7	-466.5	1,608.1	1,549.5	58.56	27.462		
10,600.0	7,457.0	10,702.3	7,662.0	60.8	0.0	-97.34	2,792.7	-466.6	1,605.4	1,545.3	60.08	26.722		
10,700.0	7,457.0	10,802.3	7,662.0	62.3	0.0	-97.35	2,892.6	-466.7	1,602.7	1,541.1	61.61	26.013		
10,800.0	7,457.0	10,902.2	7,662.0	63.9	0.0	-97.36	2,992.6	-466.8	1,599.9	1,536.8	63.16	25.333		
10,900.0	7,457.0	11,002.2	7,662.0	65.4	0.0	-97.38	3,092.5	-466.9	1,597.2	1,532.5	64.71	24.682		
11,000.0	7,457.0	11,102.2	7,662.0	66.9	0.0	-97.39	3,192.5	-467.0	1,594.5	1,528.2	66.28	24.057		
11,100.0	7,457.0	11,202.1	7,662.0	68.5	0.0	-97.40	3,292.5	-467.2	1,591.8	1,523.9	67.86	23.459		
11,200.0	7,457.0	11,302.1	7,662.0	70.1	0.0	-97.41	3,392.4	-467.3	1,589.1	1,519.6	69.44	22.884		
11,300.0	7,457.0	11,402.0	7,662.0	71.7	0.0	-97.43	3,492.4	-467.4	1,586.4	1,515.3	71.03	22.333		
11,400.0	7,457.0	11,502.0	7,662.0	73.2	0.0	-97.44	3,592.4	-467.5	1,583.6	1,511.0	72.63	21.803		
11,500.0	7,457.0	11,602.0	7,662.0	74.8	0.0	-97.45	3,692.3	-467.6	1,580.9	1,506.7	74.24	21.294		
11,600.0	7,457.0	11,701.9	7,662.0	76.4	0.0	-97.47	3,792.3	-467.7	1,578.2	1,502.3	75.86	20.805		
11,700.0	7,457.0	11,801.9	7,662.0	78.1	0.0	-97.48	3,892.2	-467.8	1,575.5	1,498.0	77.48	20.335		
11,800.0	7,457.0	11,901.9	7,662.0	79.7	0.0	-97.49	3,992.2	-467.9	1,572.8	1,493.7	79.10	19.883		
11,900.0	7,457.0	12,001.8	7,662.0	81.3	0.0	-97.51	4,092.2	-468.0	1,570.1	1,489.3	80.73	19.447		
12,000.0	7,457.0	12,101.8	7,662.0	82.9	0.0	-97.52	4,192.1	-468.2	1,567.3	1,485.0	82.37	19.027		
12,100.0	7,457.0	12,201.7	7,662.0	84.6	0.0	-97.53	4,292.1	-468.3	1,564.6	1,480.6	84.01	18.623		
12,200.0	7,457.0	12,301.7	7,662.0	86.2	0.0	-97.54	4,392.1	-468.4	1,561.9	1,476.2	85.66	18.234		
12,300.0	7,457.0	12,401.7	7,662.0	87.9	0.0	-97.56	4,492.0	-468.5	1,559.2	1,471.9	87.31	17.858		
12,400.0	7,457.0	12,501.6	7,662.0	89.5	0.0	-97.57	4,592.0	-468.6	1,556.5	1,467.5	88.97	17.495		
12,500.0	7,457.0	12,601.6	7,662.0	91.2	0.0	-97.58	4,691.9	-468.7	1,553.8	1,463.1	90.63	17.145		
12,600.0	7,457.0	12,701.6	7,662.0	92.8	0.0	-97.60	4,791.9	-468.8	1,551.0	1,458.7	92.29	16.806		
12,700.0	7,457.0	12,801.5	7,662.0	94.5	0.0	-97.61	4,891.9	-468.9	1,548.3	1,454.4	93.95	16.479		
12,800.0	7,457.0	12,901.5	7,662.0	96.2	0.0	-97.62	4,991.8	-469.1	1,545.6	1,450.0	95.62	16.163		
12,900.0	7,457.0	13,001.4	7,662.0	97.8	0.0	-97.64	5,091.8	-469.2	1,542.9	1,445.6	97.30	15.858		
13,000.0	7,457.0	13,101.4	7,662.0	99.5	0.0	-97.65	5,191.8	-469.3	1,540.2	1,441.2	98.97	15.562		
13,100.0	7,457.0	13,201.4	7,662.0	101.2	0.0	-97.67	5,291.7	-469.4	1,537.5	1,436.8	100.65	15.275		
13,200.0	7,457.0	13,301.3	7,662.0	102.9	0.0	-97.68	5,391.7	-469.5	1,534.7	1,432.4	102.33	14.998		
13,300.0	7,457.0	13,401.3	7,662.0	104.6	0.0	-97.69	5,491.6	-469.6	1,532.0	1,428.0	104.01	14.729		
13,400.0	7,457.0	13,501.3	7,662.0	106.2	0.0	-97.71	5,591.6	-469.7	1,529.3	1,423.6	105.70	14.469		
13,500.0	7,457.0	13,601.2	7,662.0	107.9	0.0	-97.72	5,691.6	-469.8	1,526.6	1,419.2	107.39	14.216		
13,600.0	7,457.0	13,701.2	7,662.0	109.6	0.0	-97.73	5,791.5	-469.9	1,523.9	1,414.8	109.08	13.971		
13,700.0	7,457.0	13,801.1	7,662.0	111.3	0.0	-97.75	5,891.5	-470.1	1,521.2	1,410.4	110.77	13.733		
13,800.0	7,457.0	13,901.1	7,662.0	113.0	0.0	-97.76	5,991.5	-470.2	1,518.5	1,406.0	112.46	13.503		
13,900.0	7,457.0	14,001.1	7,662.0	114.7	0.0	-97.77	6,091.4	-470.3	1,517.2	1,403.0	114.15	13.291		
14,000.0	7,457.0	14,101.1	7,662.0	116.4	0.0	-97.77	6,191.4	-470.4	1,515.9	1,400.1	115.84	13.086		
14,100.0	7,457.0	14,201.1	7,662.0	118.1	0.0	-97.78	6,291.4	-470.5	1,514.7	1,397.2	117.54	12.887		
14,200.0	7,457.0	14,301.1	7,662.0	119.8	0.0	-97.79	6,391.4	-470.6	1,513.5	1,394.2	119.23	12.693		
14,300.0	7,457.0	14,401.1	7,662.0	121.5	0.0	-97.79	6,491.4	-470.7	1,512.2	1,391.3	120.93	12.505		
14,400.0	7,457.0	14,501.1	7,662.0	123.2	0.0	-97.80	6,591.4	-470.8	1,511.0	1,388.3	122.63	12.321		
14,500.0	7,457.0	14,601.0	7,662.0	124.9	0.0	-97.80	6,691.4	-470.9	1,509.7	1,385.4	124.33	12.143		
14,600.0	7,457.0	14,701.0	7,662.0	126.7	0.0	-97.81	6,791.4	-471.1	1,508.5	1,382.5	126.03	11.969		
14,700.0	7,457.0	14,801.0	7,662.0	128.4	0.0	-97.82	6,891.4	-471.2	1,507.3	1,379.5	127.74	11.800		
14,800.0	7,457.0	14,901.0	7,662.0	130.1	0.0	-97.82	6,991.4	-471.3	1,506.0	1,376.6	129.44	11.635		
14,900.0	7,457.0	15,001.0	7,662.0	131.8	0.0	-97.83	7,091.4	-471.4	1,504.8	1,373.6	131.15	11.474		
15,000.0	7,457.0	15,101.0	7,662.0	133.5	0.0	-97.84	7,191.4	-471.5	1,503.6	1,370.7	132.85	11.317		
15,100.0	7,457.0	15,201.0	7,662.0	135.2	0.0	-97.84	7,291.4	-471.6	1,502.3	1,367.8	134.56	11.165		
15,200.0	7,457.0	15,301.0	7,662.0	136.9	0.0	-97.85	7,391.3	-471.7	1,501.1	1,364.8	136.27	11.015		
15,300.0	7,457.0	15,401.0	7,662.0	138.7	0.0	-97.86	7,491.3	-471.8	1,499.9	1,361.9	137.98	10.870		
15,400.0	7,457.0	15,501.0	7,662.0	140.4	0.0	-97.86	7,591.3	-471.9	1,498.6	1,358.9	139.69	10.728		
15,500.0	7,457.0	15,601.0	7,662.0	142.1	0.0	-97.87	7,691.3	-472.1	1,497.4	1,356.0	141.41	10.589		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,457.0	15,701.0	7,662.0	143.8	0.0	-97.88	7,791.3	-472.2	1,496.1	1,353.0	143.12	10.454		
15,700.0	7,457.0	15,801.0	7,662.0	145.6	0.0	-97.88	7,891.3	-472.3	1,494.9	1,350.1	144.83	10.322		
15,800.0	7,457.0	15,900.9	7,662.0	147.3	0.0	-97.89	7,991.3	-472.4	1,493.7	1,347.1	146.55	10.192		
15,900.0	7,457.0	16,000.9	7,662.0	149.0	0.0	-97.90	8,091.3	-472.5	1,492.4	1,344.2	148.27	10.066		
16,000.0	7,457.0	16,100.9	7,662.0	150.7	0.0	-97.90	8,191.3	-472.6	1,491.2	1,341.2	149.98	9.942		
16,100.0	7,457.0	16,200.9	7,662.0	152.5	0.0	-97.91	8,291.3	-472.7	1,490.0	1,338.3	151.70	9.822		
16,200.0	7,457.0	16,300.9	7,662.0	154.2	0.0	-97.92	8,391.3	-472.8	1,488.7	1,335.3	153.42	9.704		
16,300.0	7,457.0	16,400.9	7,662.0	155.9	0.0	-97.92	8,491.3	-472.9	1,487.5	1,332.4	155.14	9.588		
16,400.0	7,457.0	16,500.9	7,662.0	157.6	0.0	-97.93	8,591.2	-473.1	1,486.3	1,329.4	156.86	9.475		
16,500.0	7,457.0	16,600.9	7,662.0	159.4	0.0	-97.94	8,691.2	-473.2	1,485.0	1,326.4	158.58	9.365		
16,600.0	7,457.0	16,700.9	7,662.0	161.1	0.0	-97.94	8,791.2	-473.3	1,483.8	1,323.5	160.30	9.256		
16,700.0	7,457.0	16,800.9	7,662.0	162.8	0.0	-97.95	8,891.2	-473.4	1,482.5	1,320.5	162.02	9.150		
16,800.0	7,457.0	16,900.9	7,662.0	164.6	0.0	-97.96	8,991.2	-473.5	1,481.3	1,317.6	163.74	9.047		
16,900.0	7,457.0	17,000.9	7,662.0	166.3	0.0	-97.96	9,091.2	-473.6	1,480.1	1,314.6	165.47	8.945		
17,000.0	7,457.0	17,100.9	7,662.0	168.0	0.0	-97.97	9,191.2	-473.7	1,478.8	1,311.6	167.19	8.845		
17,100.0	7,457.0	17,200.8	7,662.0	169.8	0.0	-97.98	9,291.2	-473.8	1,477.6	1,308.7	168.91	8.748		
17,200.0	7,457.0	17,300.8	7,662.0	171.5	0.0	-97.98	9,391.2	-473.9	1,476.4	1,305.7	170.64	8.652		
17,300.0	7,457.0	17,400.8	7,662.0	173.3	0.0	-97.99	9,491.2	-474.1	1,475.1	1,302.8	172.36	8.558		
17,400.0	7,457.0	17,500.8	7,662.0	175.0	0.0	-98.00	9,591.2	-474.2	1,473.9	1,299.8	174.09	8.466		
17,500.0	7,457.0	17,600.8	7,662.0	176.7	0.0	-98.00	9,691.2	-474.3	1,472.7	1,296.8	175.81	8.376		
17,600.0	7,457.0	17,700.8	7,662.0	178.5	0.0	-98.01	9,791.2	-474.4	1,471.4	1,293.9	177.54	8.288		
17,700.0	7,457.0	17,799.6	7,662.0	180.2	0.0	-98.02	9,890.0	-474.5	1,470.2	1,290.9	179.26	8.201		
17,717.0	7,457.0	17,799.6	7,662.0	180.5	0.0	-98.02	9,890.0	-474.5	1,470.1	1,290.7	179.42	8.194		
17,721.0	7,457.0	17,799.6	7,662.0	180.6	0.0	-98.02	9,890.0	-474.5	1,470.1	1,290.6	179.46	8.192 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.23	-0.2	-45.0	45.0					
100.0	100.0	100.0	100.0	0.4	0.0	-90.23	-0.2	-45.0	45.0	44.7	0.28	162.584		
200.0	200.0	200.0	200.0	1.0	0.0	-90.23	-0.2	-45.0	45.0	44.2	0.80	56.444		
300.0	300.0	300.0	300.0	1.5	0.0	-90.23	-0.2	-45.0	45.0	43.8	1.22	36.775		
400.0	400.0	400.0	400.0	1.9	0.0	-90.23	-0.2	-45.0	45.0	43.4	1.62	27.822		
500.0	500.0	500.0	500.0	2.3	0.0	-90.23	-0.2	-45.0	45.0	43.0	2.00	22.523		
600.0	600.0	600.0	600.0	2.7	0.0	-90.23	-0.2	-45.0	45.0	42.6	2.37	18.975		
700.0	700.0	700.0	700.0	3.1	0.0	-90.23	-0.2	-45.0	45.0	42.3	2.74	16.416		
800.0	800.0	800.0	800.0	3.5	0.0	-90.23	-0.2	-45.0	45.0	41.9	3.11	14.478		
900.0	900.0	900.0	900.0	3.9	0.0	-90.23	-0.2	-45.0	45.0	41.5	3.47	12.956		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	0.0	-90.23	-0.2	-45.0	45.0	41.2	3.84	11.727 CC, ES		
1,100.0	1,100.0	1,100.0	1,100.0	4.6	0.0	157.94	-0.2	-45.0	46.6	42.3	4.32	10.782		
1,200.0	1,199.8	1,199.8	1,199.8	5.0	0.0	160.09	-0.2	-45.0	51.5	46.5	5.01	10.287		
1,300.0	1,299.5	1,299.5	1,299.5	5.7	0.0	162.89	-0.2	-45.0	59.8	54.1	5.67	10.544		
1,400.0	1,398.7	1,400.4	1,400.4	6.5	0.0	164.73	-1.6	-43.9	70.3	64.0	6.31	11.142		
1,500.0	1,497.5	1,501.7	1,501.5	7.1	0.0	164.93	-5.9	-40.7	81.7	74.8	6.90	11.844		
1,600.0	1,595.6	1,603.1	1,602.5	7.8	0.0	164.06	-13.0	-35.4	94.1	86.6	7.48	12.578		
1,700.0	1,693.4	1,702.3	1,701.2	8.2	0.0	163.00	-21.5	-29.0	107.0	99.2	7.83	13.657		
1,800.0	1,791.2	1,801.5	1,799.8	8.5	0.0	162.17	-30.0	-22.7	119.9	111.8	8.10	14.813		
1,900.0	1,888.9	1,900.6	1,898.3	8.8	0.0	161.51	-38.5	-16.3	132.9	124.5	8.37	15.870		
2,000.0	1,986.7	1,999.7	1,996.9	9.1	0.0	160.96	-47.0	-9.9	145.9	137.2	8.67	16.835		
2,100.0	2,084.5	2,098.9	2,095.5	9.4	0.0	160.50	-55.5	-3.5	158.9	149.9	8.97	17.718		
2,200.0	2,182.2	2,198.0	2,194.1	9.7	0.0	160.11	-64.0	2.8	171.9	162.6	9.28	18.525		
2,300.0	2,280.0	2,297.2	2,292.6	10.1	0.0	159.78	-72.5	9.2	184.9	175.3	9.60	19.262		
2,400.0	2,377.8	2,396.3	2,391.2	10.4	0.0	159.49	-81.0	15.6	197.9	188.0	9.92	19.938		
2,500.0	2,475.5	2,495.5	2,489.8	10.8	0.0	159.24	-89.5	21.9	210.9	200.6	10.26	20.558		
2,600.0	2,573.3	2,594.6	2,588.4	11.1	0.0	159.01	-98.0	28.3	223.9	213.3	10.60	21.127		
2,700.0	2,671.1	2,693.8	2,686.9	11.5	0.0	158.81	-106.5	34.7	236.9	226.0	10.94	21.650		
2,800.0	2,768.9	2,792.9	2,785.5	11.9	0.0	158.63	-115.0	41.1	250.0	238.7	11.29	22.132		
2,900.0	2,866.6	2,892.1	2,884.1	12.4	0.0	158.47	-123.5	47.4	263.0	251.3	11.65	22.577		
3,000.0	2,964.4	2,991.2	2,982.7	12.8	0.0	158.32	-132.0	53.8	276.0	264.0	12.01	22.988		
3,100.0	3,062.2	3,090.3	3,081.2	13.3	0.0	158.19	-140.5	60.2	289.0	276.7	12.37	23.369		
3,200.0	3,159.9	3,189.5	3,179.8	13.7	0.0	158.07	-149.0	66.5	302.1	289.3	12.73	23.722		
3,300.0	3,257.7	3,288.6	3,278.4	14.2	0.0	157.96	-157.5	72.9	315.1	302.0	13.10	24.050		
3,400.0	3,355.5	3,387.8	3,377.0	14.7	0.0	157.86	-166.0	79.3	328.1	314.7	13.47	24.356		
3,500.0	3,453.2	3,486.9	3,475.5	15.2	0.0	157.76	-174.5	85.6	341.2	327.3	13.85	24.641		
3,600.0	3,551.0	3,586.1	3,574.1	15.6	0.0	157.67	-183.0	92.0	354.2	340.0	14.22	24.907		
3,700.0	3,648.8	3,685.2	3,672.7	16.1	0.0	157.59	-191.5	98.4	367.2	352.6	14.60	25.155		
3,800.0	3,746.5	3,784.4	3,771.3	16.6	0.0	157.52	-200.0	104.8	380.3	365.3	14.98	25.388		
3,900.0	3,844.3	3,883.5	3,869.8	17.1	0.0	157.45	-208.5	111.1	393.3	378.0	15.36	25.607		
4,000.0	3,942.1	3,982.7	3,968.4	17.6	0.0	157.38	-217.0	117.5	406.4	390.6	15.74	25.812		
4,100.0	4,039.9	4,081.8	4,067.0	18.1	0.0	157.32	-225.5	123.9	419.4	403.3	16.13	26.005		
4,200.0	4,137.6	4,180.9	4,165.6	18.6	0.0	157.26	-234.0	130.2	432.4	415.9	16.51	26.187		
4,300.0	4,235.4	4,280.1	4,264.1	19.1	0.0	157.20	-242.4	136.6	445.5	428.6	16.90	26.359		
4,400.0	4,333.2	4,379.2	4,362.7	19.6	0.0	157.15	-250.9	143.0	458.5	441.2	17.29	26.521		
4,500.0	4,430.9	4,478.4	4,461.3	20.1	0.0	157.10	-259.4	149.3	471.5	453.9	17.68	26.674		
4,600.0	4,528.7	4,577.5	4,559.9	20.6	0.0	157.06	-267.9	155.7	484.6	466.5	18.07	26.819		
4,700.0	4,626.5	4,676.7	4,658.4	21.1	0.0	157.01	-276.4	162.1	497.6	479.2	18.46	26.956		
4,800.0	4,724.2	4,775.8	4,757.0	21.6	0.0	156.97	-284.9	168.5	510.7	491.8	18.85	27.087		
4,900.0	4,822.0	4,875.0	4,855.6	22.1	0.0	156.93	-293.4	174.8	523.7	504.5	19.25	27.211		
5,000.0	4,919.8	4,974.1	4,954.2	22.6	0.0	156.89	-301.9	181.2	536.7	517.1	19.64	27.328		
5,100.0	5,017.5	5,073.3	5,052.7	23.1	0.0	156.86	-310.4	187.6	549.8	529.8	20.04	27.441		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,115.3	5,172.4	5,151.3	23.6	0.0	156.82	-318.9	193.9	562.8	542.4	20.43	27.547		
5,300.0	5,213.1	5,271.5	5,249.9	24.1	0.0	156.79	-327.4	200.3	575.9	555.0	20.83	27.649		
5,400.0	5,310.8	5,370.7	5,348.5	24.6	0.0	156.76	-335.9	206.7	588.9	567.7	21.22	27.746		
5,500.0	5,408.6	5,469.8	5,447.0	25.1	0.0	156.73	-344.4	213.1	602.0	580.3	21.62	27.839		
5,600.0	5,506.4	5,569.0	5,545.6	25.6	0.0	156.70	-352.9	219.4	615.0	593.0	22.02	27.928		
5,700.0	5,604.2	5,668.1	5,644.2	26.1	0.0	156.67	-361.4	225.8	628.0	605.6	22.42	28.013		
5,800.0	5,701.9	5,767.3	5,742.7	26.7	0.0	156.65	-369.9	232.2	641.1	618.3	22.82	28.094		
5,900.0	5,799.7	5,866.4	5,841.3	27.2	0.0	156.62	-378.4	238.5	654.1	630.9	23.22	28.172		
6,000.0	5,897.5	5,965.6	5,939.9	27.7	0.0	156.60	-386.9	244.9	667.2	643.5	23.62	28.247		
6,100.0	5,995.2	6,064.7	6,038.5	28.2	0.0	156.57	-395.4	251.3	680.2	656.2	24.02	28.318		
6,200.0	6,093.0	6,163.9	6,137.0	28.7	0.0	156.55	-403.9	257.6	693.3	668.8	24.42	28.387		
6,300.0	6,190.8	6,263.0	6,235.6	29.2	0.0	156.53	-412.4	264.0	706.3	681.5	24.82	28.453		
6,400.0	6,288.5	6,362.1	6,334.2	29.7	0.0	156.51	-420.9	270.4	719.3	694.1	25.22	28.517		
6,500.0	6,386.3	6,461.3	6,432.8	30.2	0.0	156.49	-429.4	276.8	732.4	706.8	25.63	28.578		
6,600.0	6,484.1	6,560.4	6,531.3	30.7	0.0	156.47	-437.9	283.1	745.4	719.4	26.03	28.637		
6,700.0	6,581.8	6,659.6	6,629.9	31.2	0.0	156.45	-446.4	289.5	758.5	732.0	26.43	28.694		
6,800.0	6,679.6	6,758.7	6,728.5	31.7	0.0	156.43	-454.9	295.9	771.5	744.7	26.84	28.749		
6,900.0	6,777.4	6,858.1	6,827.4	32.2	0.0	156.55	-461.5	302.2	784.5	757.3	27.23	28.811		
7,000.0	6,875.2	6,955.2	6,923.9	32.7	0.0	171.80	-453.7	308.3	797.7	770.1	27.54	28.863		
7,100.0	6,973.1	7,050.0	7,015.5	33.3	0.0	-140.11	-430.5	314.0	811.0	783.1	27.84	29.135		
7,200.0	7,068.6	7,140.2	7,098.0	33.6	0.0	-115.52	-394.7	319.0	823.9	795.7	28.28	29.132		
7,300.0	7,158.8	7,229.4	7,173.1	34.0	0.0	-103.68	-346.9	323.4	836.1	807.5	28.56	29.276		
7,400.0	7,241.0	7,317.0	7,238.8	34.3	0.0	-96.84	-289.2	327.1	846.9	818.2	28.70	29.510		
7,500.0	7,312.6	7,400.0	7,292.3	34.5	0.0	-92.47	-225.8	330.0	856.0	827.3	28.78	29.748		
7,600.0	7,371.6	7,488.7	7,338.7	34.7	0.0	-89.52	-150.4	332.3	863.1	834.3	28.85	29.919		
7,700.0	7,416.1	7,573.3	7,371.6	34.7	0.0	-87.65	-72.6	333.8	867.9	839.0	28.94	29.991		
7,800.0	7,444.7	7,657.4	7,392.7	34.7	0.0	-86.62	8.8	334.5	870.2	841.1	29.08	29.929		
7,900.0	7,456.7	7,741.3	7,401.7	34.6	0.0	-86.34	92.1	334.4	869.9	840.7	29.28	29.715		
8,000.0	7,457.0	7,837.5	7,402.0	34.6	0.0	-86.37	188.3	333.6	868.0	838.4	29.54	29.378		
8,100.0	7,457.0	7,937.5	7,402.0	34.6	0.0	-86.36	288.3	332.8	865.9	836.0	29.92	28.945		
8,200.0	7,457.0	8,037.5	7,402.0	34.8	0.0	-86.35	388.3	331.9	863.9	833.5	30.39	28.429		
8,300.0	7,457.0	8,137.5	7,402.0	35.0	0.0	-86.34	488.3	331.1	861.9	830.9	30.95	27.844		
8,400.0	7,457.0	8,237.4	7,402.0	35.3	0.0	-86.33	588.2	330.3	859.9	828.3	31.61	27.203		
8,500.0	7,457.0	8,337.4	7,402.0	35.8	0.0	-86.32	688.2	329.5	857.9	825.5	32.35	26.519		
8,600.0	7,457.0	8,437.4	7,402.0	36.3	0.0	-86.31	788.2	328.6	855.8	822.7	33.16	25.805		
8,700.0	7,457.0	8,537.4	7,402.0	37.0	0.0	-86.31	888.2	327.8	853.8	819.8	34.05	25.072		
8,800.0	7,457.0	8,637.4	7,402.0	37.9	0.0	-86.30	988.1	327.0	851.8	816.8	35.01	24.330		
8,900.0	7,457.0	8,737.3	7,402.0	38.8	0.0	-86.29	1,088.1	326.2	849.8	813.7	36.03	23.587		
9,000.0	7,457.0	8,837.3	7,402.0	39.7	0.0	-86.28	1,188.1	325.3	847.7	810.6	37.10	22.850		
9,100.0	7,457.0	8,937.3	7,402.0	40.8	0.0	-86.27	1,288.1	324.5	845.7	807.5	38.23	22.124		
9,200.0	7,457.0	9,037.3	7,402.0	41.9	0.0	-86.26	1,388.0	323.7	843.7	804.3	39.40	21.414		
9,300.0	7,457.0	9,137.3	7,402.0	43.0	0.0	-86.25	1,488.0	322.9	841.7	801.1	40.61	20.724		
9,400.0	7,457.0	9,237.2	7,402.0	44.2	0.0	-86.24	1,588.0	322.0	839.7	797.8	41.87	20.054		
9,500.0	7,457.0	9,337.2	7,402.0	45.4	0.0	-86.23	1,688.0	321.2	837.6	794.5	43.16	19.407		
9,600.0	7,457.0	9,437.2	7,402.0	46.7	0.0	-86.23	1,787.9	320.4	835.6	791.1	44.49	18.784		
9,700.0	7,457.0	9,537.2	7,402.0	48.0	0.0	-86.22	1,887.9	319.5	833.6	787.8	45.84	18.185		
9,800.0	7,457.0	9,637.1	7,402.0	49.3	0.0	-86.21	1,987.9	318.7	831.6	784.4	47.22	17.610		
9,900.0	7,457.0	9,737.1	7,402.0	50.7	0.0	-86.20	2,087.9	317.9	829.6	780.9	48.63	17.059		
10,000.0	7,457.0	9,837.1	7,402.0	52.1	0.0	-86.19	2,187.8	317.1	827.5	777.5	50.06	16.532		
10,100.0	7,457.0	9,937.1	7,402.0	53.5	0.0	-86.18	2,287.8	316.2	825.5	774.0	51.51	16.027		
10,200.0	7,457.0	10,037.1	7,402.0	54.9	0.0	-86.17	2,387.8	315.4	823.5	770.5	52.98	15.544		
10,300.0	7,457.0	10,137.0	7,402.0	56.4	0.0	-86.16	2,487.8	314.6	821.5	767.0	54.46	15.083		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,457.0	10,237.0	7,402.0	57.8	0.0	-86.15	2,587.8	313.8	819.5	763.5	55.97	14.641		
10,500.0	7,457.0	10,337.0	7,402.0	59.3	0.0	-86.14	2,687.7	312.9	817.4	759.9	57.49	14.219		
10,600.0	7,457.0	10,437.0	7,402.0	60.8	0.0	-86.13	2,787.7	312.1	815.4	756.4	59.02	13.816		
10,700.0	7,457.0	10,537.0	7,402.0	62.3	0.0	-86.12	2,887.7	311.3	813.4	752.8	60.57	13.430		
10,800.0	7,457.0	10,636.9	7,402.0	63.9	0.0	-86.11	2,987.7	310.5	811.4	749.2	62.12	13.061		
10,900.0	7,457.0	10,736.9	7,402.0	65.4	0.0	-86.10	3,087.6	309.6	809.3	745.7	63.69	12.707		
11,000.0	7,457.0	10,836.9	7,402.0	66.9	0.0	-86.09	3,187.6	308.8	807.3	742.1	65.27	12.369		
11,100.0	7,457.0	10,936.9	7,402.0	68.5	0.0	-86.08	3,287.6	308.0	805.3	738.4	66.86	12.045		
11,200.0	7,457.0	11,036.9	7,402.0	70.1	0.0	-86.07	3,387.6	307.2	803.3	734.8	68.45	11.735		
11,300.0	7,457.0	11,136.8	7,402.0	71.7	0.0	-86.06	3,487.5	306.3	801.3	731.2	70.06	11.437		
11,400.0	7,457.0	11,236.8	7,402.0	73.2	0.0	-86.05	3,587.5	305.5	799.2	727.6	71.67	11.151		
11,500.0	7,457.0	11,336.8	7,402.0	74.8	0.0	-86.04	3,687.5	304.7	797.2	723.9	73.29	10.877		
11,600.0	7,457.0	11,436.8	7,402.0	76.4	0.0	-86.03	3,787.5	303.8	795.2	720.3	74.92	10.614		
11,700.0	7,457.0	11,536.8	7,402.0	78.1	0.0	-86.02	3,887.4	303.0	793.2	716.6	76.55	10.361		
11,800.0	7,457.0	11,636.7	7,402.0	79.7	0.0	-86.01	3,987.4	302.2	791.2	713.0	78.19	10.118		
11,900.0	7,457.0	11,736.7	7,402.0	81.3	0.0	-86.00	4,087.4	301.4	789.1	709.3	79.83	9.885		
12,000.0	7,457.0	11,836.7	7,402.0	82.9	0.0	-85.99	4,187.4	300.5	787.1	705.6	81.48	9.660		
12,100.0	7,457.0	11,936.7	7,402.0	84.6	0.0	-85.98	4,287.3	299.7	785.1	702.0	83.14	9.443		
12,200.0	7,457.0	12,036.7	7,402.0	86.2	0.0	-85.97	4,387.3	298.9	783.1	698.3	84.79	9.235		
12,300.0	7,457.0	12,136.6	7,402.0	87.9	0.0	-85.96	4,487.3	298.1	781.1	694.6	86.46	9.034		
12,400.0	7,457.0	12,236.6	7,402.0	89.5	0.0	-85.95	4,587.3	297.2	779.0	690.9	88.12	8.840		
12,500.0	7,457.0	12,336.6	7,402.0	91.2	0.0	-85.94	4,687.3	296.4	777.0	687.2	89.80	8.653		
12,600.0	7,457.0	12,436.6	7,402.0	92.8	0.0	-85.93	4,787.2	295.6	775.0	683.5	91.47	8.473		
12,700.0	7,457.0	12,536.6	7,402.0	94.5	0.0	-85.92	4,887.2	294.8	773.0	679.8	93.15	8.298		
12,800.0	7,457.0	12,636.5	7,402.0	96.2	0.0	-85.91	4,987.2	293.9	771.0	676.1	94.83	8.130		
12,900.0	7,457.0	12,736.5	7,402.0	97.8	0.0	-85.90	5,087.2	293.1	768.9	672.4	96.51	7.967		
13,000.0	7,457.0	12,836.5	7,402.0	99.5	0.0	-85.89	5,187.1	292.3	766.9	668.7	98.20	7.810		
13,100.0	7,457.0	12,936.5	7,402.0	101.2	0.0	-85.88	5,287.1	291.5	764.9	665.0	99.89	7.658		
13,200.0	7,457.0	13,036.5	7,402.0	102.9	0.0	-85.86	5,387.1	290.6	762.9	661.3	101.58	7.510		
13,300.0	7,457.0	13,136.4	7,402.0	104.6	0.0	-85.85	5,487.1	289.8	760.9	657.6	103.27	7.367		
13,400.0	7,457.0	13,236.4	7,402.0	106.2	0.0	-85.84	5,587.0	289.0	758.8	653.9	104.97	7.229		
13,500.0	7,457.0	13,336.4	7,402.0	107.9	0.0	-85.83	5,687.0	288.1	756.8	650.1	106.67	7.095		
13,600.0	7,457.0	13,436.4	7,402.0	109.6	0.0	-85.82	5,787.0	287.3	754.8	646.4	108.37	6.965		
13,700.0	7,457.0	13,536.3	7,402.0	111.3	0.0	-85.81	5,887.0	286.5	752.8	642.7	110.07	6.839		
13,800.0	7,457.0	13,636.3	7,402.0	113.0	0.0	-85.80	5,986.9	285.7	750.8	639.0	111.78	6.717		
13,900.0	7,457.0	13,736.3	7,402.0	114.7	0.0	-85.80	6,086.9	284.8	750.2	636.7	113.48	6.611		
14,000.0	7,457.0	13,836.3	7,402.0	116.4	0.0	-85.79	6,186.9	284.0	749.6	634.5	115.18	6.508		
14,100.0	7,457.0	13,936.3	7,402.0	118.1	0.0	-85.79	6,286.9	283.2	749.1	632.2	116.89	6.409		
14,200.0	7,457.0	14,036.3	7,402.0	119.8	0.0	-85.79	6,386.9	282.4	748.6	630.0	118.60	6.312		
14,300.0	7,457.0	14,136.3	7,402.0	121.5	0.0	-85.78	6,486.9	281.5	748.0	627.7	120.31	6.218		
14,400.0	7,457.0	14,236.3	7,402.0	123.2	0.0	-85.78	6,586.9	280.7	747.5	625.5	122.02	6.126		
14,500.0	7,457.0	14,336.3	7,402.0	124.9	0.0	-85.78	6,686.9	279.9	747.0	623.3	123.73	6.037		
14,600.0	7,457.0	14,436.3	7,402.0	126.7	0.0	-85.77	6,786.9	279.1	746.5	621.0	125.45	5.950		
14,700.0	7,457.0	14,536.3	7,402.0	128.4	0.0	-85.77	6,886.9	278.2	745.9	618.8	127.16	5.866		
14,800.0	7,457.0	14,636.3	7,402.0	130.1	0.0	-85.77	6,986.9	277.4	745.4	616.5	128.88	5.784		
14,900.0	7,457.0	14,736.3	7,402.0	131.8	0.0	-85.77	7,086.9	276.6	744.9	614.3	130.60	5.704		
15,000.0	7,457.0	14,836.3	7,402.0	133.5	0.0	-85.76	7,186.9	275.8	744.3	612.0	132.32	5.625		
15,100.0	7,457.0	14,936.3	7,402.0	135.2	0.0	-85.76	7,286.9	274.9	743.8	609.8	134.04	5.549		
15,200.0	7,457.0	15,036.3	7,402.0	136.9	0.0	-85.76	7,386.9	274.1	743.3	607.5	135.76	5.475		
15,300.0	7,457.0	15,136.3	7,402.0	138.7	0.0	-85.75	7,486.9	273.3	742.7	605.3	137.48	5.403		
15,400.0	7,457.0	15,236.3	7,402.0	140.4	0.0	-85.75	7,586.9	272.4	742.2	603.0	139.20	5.332		
15,500.0	7,457.0	15,336.3	7,402.0	142.1	0.0	-85.75	7,686.9	271.6	741.7	600.7	140.93	5.263		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,457.0	15,436.3	7,402.0	143.8	0.0	-85.74	7,786.9	270.8	741.1	598.5	142.65	5.195		
15,700.0	7,457.0	15,536.3	7,402.0	145.6	0.0	-85.74	7,886.8	270.0	740.6	596.2	144.38	5.130		
15,800.0	7,457.0	15,636.3	7,402.0	147.3	0.0	-85.74	7,986.8	269.1	740.1	594.0	146.10	5.065		
15,900.0	7,457.0	15,736.3	7,402.0	149.0	0.0	-85.73	8,086.8	268.3	739.5	591.7	147.83	5.003		
16,000.0	7,457.0	15,836.3	7,402.0	150.7	0.0	-85.73	8,186.8	267.5	739.0	589.5	149.56	4.941		
16,100.0	7,457.0	15,936.3	7,402.0	152.5	0.0	-85.73	8,286.8	266.7	738.5	587.2	151.29	4.881		
16,200.0	7,457.0	16,036.3	7,402.0	154.2	0.0	-85.73	8,386.8	265.8	737.9	584.9	153.02	4.823		
16,300.0	7,457.0	16,136.3	7,402.0	155.9	0.0	-85.72	8,486.8	265.0	737.4	582.7	154.75	4.765		
16,400.0	7,457.0	16,236.3	7,402.0	157.6	0.0	-85.72	8,586.8	264.2	736.9	580.4	156.48	4.709		
16,500.0	7,457.0	16,336.3	7,402.0	159.4	0.0	-85.72	8,686.8	263.4	736.4	578.1	158.21	4.654		
16,600.0	7,457.0	16,436.3	7,402.0	161.1	0.0	-85.71	8,786.8	262.5	735.8	575.9	159.95	4.600		
16,700.0	7,457.0	16,536.3	7,402.0	162.8	0.0	-85.71	8,886.8	261.7	735.3	573.6	161.68	4.548		
16,800.0	7,457.0	16,636.3	7,402.0	164.6	0.0	-85.71	8,986.8	260.9	734.8	571.3	163.42	4.496		
16,900.0	7,457.0	16,736.3	7,402.0	166.3	0.0	-85.70	9,086.8	260.0	734.2	569.1	165.15	4.446		
17,000.0	7,457.0	16,836.3	7,402.0	168.0	0.0	-85.70	9,186.8	259.2	733.7	566.8	166.89	4.396		
17,100.0	7,457.0	16,936.3	7,402.0	169.8	0.0	-85.70	9,286.8	258.4	733.2	564.5	168.62	4.348		
17,200.0	7,457.0	17,036.3	7,402.0	171.5	0.0	-85.69	9,386.8	257.6	732.6	562.3	170.36	4.301		
17,300.0	7,457.0	17,136.3	7,402.0	173.3	0.0	-85.69	9,486.8	256.7	732.1	560.0	172.09	4.254		
17,400.0	7,457.0	17,236.3	7,402.0	175.0	0.0	-85.69	9,586.8	255.9	731.6	557.7	173.83	4.209		
17,500.0	7,457.0	17,336.3	7,402.0	176.7	0.0	-85.69	9,686.8	255.1	731.0	555.5	175.57	4.164		
17,600.0	7,457.0	17,436.3	7,402.0	178.5	0.0	-85.68	9,786.8	254.3	730.5	553.2	177.31	4.120		
17,700.0	7,457.0	17,536.3	7,402.0	180.2	0.0	-85.68	9,886.8	253.4	730.0	550.9	179.05	4.077		
17,719.1	7,457.0	17,551.4	7,402.0	180.5	0.0	-85.68	9,901.9	253.3	729.9	550.6	179.32	4.070		
17,721.0	7,457.0	17,551.4	7,402.0	180.6	0.0	-85.68	9,901.9	253.3	729.9	550.6	179.32	4.070 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NCH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.27	-0.3	-60.0	60.0					
100.0	100.0	100.0	100.0	0.4	0.4	-90.27	-0.3	-60.0	60.0	59.4	0.55	108.422		
200.0	200.0	200.0	200.0	1.0	1.0	-90.27	-0.3	-60.0	60.0	58.4	1.59	37.625		
300.0	300.0	300.0	300.0	1.5	1.5	-90.27	-0.3	-60.0	60.0	57.6	2.45	24.513		
400.0	400.0	400.0	400.0	1.9	1.9	-90.27	-0.3	-60.0	60.0	56.8	3.24	18.545		
500.0	500.0	500.0	500.0	2.3	2.3	-90.27	-0.3	-60.0	60.0	56.0	4.00	15.013		
600.0	600.0	600.0	600.0	2.7	2.7	-90.27	-0.3	-60.0	60.0	55.3	4.74	12.648		
700.0	700.0	700.0	700.0	3.1	3.1	-90.27	-0.3	-60.0	60.0	54.5	5.48	10.943		
800.0	800.0	800.0	800.0	3.5	3.5	-90.27	-0.3	-60.0	60.0	53.8	6.22	9.651		
900.0	900.0	900.0	900.0	3.9	3.9	-90.27	-0.3	-60.0	60.0	53.1	6.95	8.636		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	4.2	-90.27	-0.3	-60.0	60.0	52.3	7.68	7.817 CC, ES		
1,100.0	1,100.0	1,100.0	1,100.0	4.6	4.6	157.70	-0.3	-60.0	61.6	53.1	8.52	7.234		
1,200.0	1,199.8	1,199.8	1,199.8	5.0	5.0	159.37	-0.3	-60.0	66.5	57.0	9.53	6.974		
1,300.0	1,299.5	1,299.8	1,299.8	5.7	5.3	160.36	-2.0	-59.9	74.5	64.0	10.47	7.111		
1,400.0	1,398.7	1,399.5	1,399.4	6.5	6.0	159.56	-7.2	-59.5	85.3	73.9	11.38	7.497		
1,500.0	1,497.5	1,498.7	1,498.2	7.1	6.3	157.99	-15.2	-59.0	99.2	86.9	12.24	8.098		
1,600.0	1,595.6	1,597.2	1,596.4	7.8	6.6	157.30	-23.4	-58.4	116.2	103.1	13.13	8.851		
1,700.0	1,693.4	1,695.4	1,694.2	8.2	6.9	157.21	-31.5	-57.8	135.0	121.2	13.84	9.757		
1,800.0	1,791.2	1,793.6	1,792.1	8.5	7.3	157.15	-39.7	-57.3	153.8	139.3	14.47	10.631		
1,900.0	1,888.9	1,891.8	1,890.0	8.8	7.6	157.10	-47.8	-56.7	172.6	157.5	15.12	11.421		
2,000.0	1,986.7	1,990.0	1,987.8	9.1	7.9	157.07	-56.0	-56.1	191.5	175.7	15.78	12.137		
2,100.0	2,084.5	2,088.2	2,085.7	9.4	8.3	157.03	-64.1	-55.6	210.3	193.8	16.45	12.787		
2,200.0	2,182.2	2,186.5	2,183.6	9.7	8.6	157.01	-72.3	-55.0	229.1	212.0	17.12	13.378		
2,300.0	2,280.0	2,284.7	2,281.5	10.1	8.9	156.99	-80.4	-54.5	247.9	230.1	17.81	13.918		
2,400.0	2,377.8	2,382.9	2,379.3	10.4	9.3	156.97	-88.6	-53.9	266.7	248.2	18.51	14.411		
2,500.0	2,475.5	2,481.1	2,477.2	10.8	9.6	156.95	-96.7	-53.3	285.6	266.3	19.21	14.864		
2,600.0	2,573.3	2,579.3	2,575.1	11.1	10.0	156.94	-104.9	-52.8	304.4	284.5	19.92	15.280		
2,700.0	2,671.1	2,677.5	2,673.0	11.5	10.3	156.92	-113.0	-52.2	323.2	302.6	20.63	15.663		
2,800.0	2,768.9	2,775.7	2,770.8	11.9	10.7	156.91	-121.2	-51.6	342.0	320.7	21.35	16.017		
2,900.0	2,866.6	2,874.0	2,868.7	12.4	11.1	156.90	-129.3	-51.1	360.8	338.8	22.08	16.344		
3,000.0	2,964.4	2,972.2	2,966.6	12.8	11.4	156.89	-137.5	-50.5	379.7	356.9	22.81	16.647		
3,100.0	3,062.2	3,070.4	3,064.4	13.3	11.8	156.88	-145.7	-49.9	398.5	374.9	23.54	16.929		
3,200.0	3,159.9	3,168.6	3,162.3	13.7	12.1	156.88	-153.8	-49.4	417.3	393.0	24.27	17.192		
3,300.0	3,257.7	3,266.8	3,260.2	14.2	12.5	156.87	-162.0	-48.8	436.1	411.1	25.01	17.437		
3,400.0	3,355.5	3,365.0	3,358.1	14.7	12.8	156.86	-170.1	-48.3	454.9	429.2	25.75	17.666		
3,500.0	3,453.2	3,463.2	3,455.9	15.2	13.2	156.86	-178.3	-47.7	473.8	447.3	26.50	17.880		
3,600.0	3,551.0	3,561.4	3,553.8	15.6	13.6	156.85	-186.4	-47.1	492.6	465.3	27.24	18.081		
3,700.0	3,648.8	3,659.7	3,651.7	16.1	13.9	156.85	-194.6	-46.6	511.4	483.4	27.99	18.270		
3,800.0	3,746.5	3,757.9	3,749.5	16.6	14.3	156.84	-202.7	-46.0	530.2	501.5	28.74	18.447		
3,900.0	3,844.3	3,856.1	3,847.4	17.1	14.6	156.84	-210.9	-45.4	549.1	519.6	29.50	18.614		
4,000.0	3,942.1	3,954.3	3,945.3	17.6	15.0	156.83	-219.0	-44.9	567.9	537.6	30.25	18.772		
4,100.0	4,039.9	4,052.5	4,043.2	18.1	15.4	156.83	-227.2	-44.3	586.7	555.7	31.01	18.922		
4,200.0	4,137.6	4,150.7	4,141.0	18.6	15.7	156.83	-235.3	-43.7	605.5	573.7	31.76	19.063		
4,300.0	4,235.4	4,248.9	4,238.9	19.1	16.1	156.82	-243.5	-43.2	624.3	591.8	32.52	19.197		
4,400.0	4,333.2	4,347.1	4,336.8	19.6	16.5	156.82	-251.6	-42.6	643.2	609.9	33.28	19.323		
4,500.0	4,430.9	4,445.4	4,434.7	20.1	16.8	156.82	-259.8	-42.0	662.0	627.9	34.05	19.444		
4,600.0	4,528.7	4,543.6	4,532.5	20.6	17.2	156.81	-267.9	-41.5	680.8	646.0	34.81	19.558		
4,700.0	4,626.5	4,641.8	4,630.4	21.1	17.6	156.81	-276.1	-40.9	699.6	664.0	35.57	19.668		
4,800.0	4,724.2	4,740.0	4,728.3	21.6	17.9	156.81	-284.3	-40.4	718.4	682.1	36.34	19.771		
4,900.0	4,822.0	4,838.2	4,826.1	22.1	18.3	156.81	-292.4	-39.8	737.3	700.2	37.10	19.870		
5,000.0	4,919.8	4,936.4	4,924.0	22.6	18.7	156.80	-300.6	-39.2	756.1	718.2	37.87	19.965		
5,100.0	5,017.5	5,034.6	5,021.9	23.1	19.1	156.80	-308.7	-38.7	774.9	736.3	38.64	20.055		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NCH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,115.3	5,132.8	5,119.8	23.6	19.4	156.80	-316.9	-38.1	793.7	754.3	39.41	20.142		
5,300.0	5,213.1	5,231.1	5,217.6	24.1	19.8	156.80	-325.0	-37.5	812.5	772.4	40.18	20.225		
5,400.0	5,310.8	5,329.3	5,315.5	24.6	20.2	156.80	-333.2	-37.0	831.4	790.4	40.95	20.304		
5,500.0	5,408.6	5,427.5	5,413.4	25.1	20.5	156.79	-341.3	-36.4	850.2	808.5	41.72	20.380		
5,600.0	5,506.4	5,525.7	5,511.2	25.6	20.9	156.79	-349.5	-35.8	869.0	826.5	42.49	20.453		
5,700.0	5,604.2	5,623.9	5,609.1	26.1	21.3	156.79	-357.6	-35.3	887.8	844.6	43.26	20.523		
5,800.0	5,701.9	5,722.1	5,707.0	26.7	21.7	156.79	-365.8	-34.7	906.6	862.6	44.03	20.590		
5,900.0	5,799.7	5,820.3	5,804.9	27.2	22.0	156.79	-373.9	-34.2	925.5	880.7	44.81	20.655		
6,000.0	5,897.5	5,918.6	5,902.7	27.7	22.4	156.79	-382.1	-33.6	944.3	898.7	45.58	20.717		
6,100.0	5,995.2	6,016.8	6,000.6	28.2	22.8	156.78	-390.2	-33.0	963.1	916.8	46.35	20.777		
6,200.0	6,093.0	6,115.0	6,098.5	28.7	23.2	156.78	-398.4	-32.5	981.9	934.8	47.13	20.835		
6,300.0	6,190.8	6,213.2	6,196.4	29.2	23.5	156.78	-406.6	-31.9	1,000.7	952.8	47.90	20.890		
6,400.0	6,288.5	6,311.4	6,294.2	29.7	23.9	156.78	-414.7	-31.3	1,019.6	970.9	48.68	20.944		
6,500.0	6,386.3	6,409.6	6,392.1	30.2	24.3	156.78	-422.9	-30.8	1,038.4	988.9	49.46	20.996		
6,600.0	6,484.1	6,507.8	6,490.0	30.7	24.6	156.78	-431.0	-30.2	1,057.2	1,007.0	50.23	21.046		
6,700.0	6,581.8	6,606.0	6,587.8	31.2	25.0	156.78	-439.2	-29.6	1,076.0	1,025.0	51.01	21.094		
6,800.0	6,679.6	6,704.3	6,685.7	31.7	25.4	156.78	-447.3	-29.1	1,094.9	1,043.1	51.79	21.141		
6,900.0	6,777.4	6,802.5	6,783.6	32.2	25.8	156.78	-455.5	-28.5	1,113.7	1,061.1	52.57	21.186		
7,000.0	6,875.2	6,900.3	6,881.2	32.7	26.1	171.10	-462.8	-28.0	1,132.5	1,079.2	53.33	21.236		
7,100.0	6,973.1	6,997.5	6,978.0	33.3	26.7	-141.55	-457.6	-27.5	1,151.0	1,096.7	54.30	21.197		
7,200.0	7,068.6	7,094.9	7,072.9	33.6	27.0	-117.60	-436.1	-27.2	1,168.8	1,113.7	55.07	21.223		
7,300.0	7,158.8	7,192.7	7,163.2	34.0	27.3	-106.32	-398.6	-27.1	1,185.2	1,129.6	55.62	21.309		
7,400.0	7,241.0	7,291.2	7,246.3	34.3	27.6	-99.97	-345.9	-27.1	1,199.8	1,143.8	56.00	21.425		
7,500.0	7,312.6	7,390.4	7,319.6	34.5	27.8	-95.98	-279.3	-27.2	1,212.1	1,155.8	56.29	21.532		
7,600.0	7,371.6	7,490.3	7,380.7	34.7	28.0	-93.37	-200.4	-27.6	1,221.7	1,165.1	56.57	21.595		
7,700.0	7,416.1	7,590.9	7,427.5	34.7	28.1	-91.74	-111.6	-28.1	1,228.4	1,171.5	56.90	21.589		
7,800.0	7,444.7	7,691.9	7,458.1	34.7	28.3	-90.87	-15.4	-28.7	1,231.9	1,174.6	57.31	21.496		
7,900.0	7,456.7	7,793.3	7,471.5	34.6	28.4	-90.66	85.0	-29.5	1,232.2	1,174.4	57.83	21.307		
8,000.0	7,457.0	7,893.7	7,472.0	34.6	28.7	-90.70	185.3	-30.3	1,230.2	1,171.8	58.48	21.035		
8,100.0	7,457.0	7,993.7	7,472.0	34.6	29.1	-90.70	285.3	-31.1	1,228.2	1,168.9	59.35	20.695		
8,200.0	7,457.0	8,093.6	7,472.0	34.8	29.6	-90.70	385.3	-32.0	1,226.2	1,165.8	60.41	20.299		
8,300.0	7,457.0	8,193.6	7,472.0	35.0	30.2	-90.70	485.2	-32.8	1,224.2	1,162.5	61.65	19.856		
8,400.0	7,457.0	8,293.6	7,472.0	35.3	31.0	-90.70	585.2	-33.6	1,222.1	1,159.1	63.07	19.377		
8,500.0	7,457.0	8,393.6	7,472.0	35.8	31.8	-90.70	685.2	-34.4	1,220.1	1,155.5	64.65	18.872		
8,600.0	7,457.0	8,493.6	7,472.0	36.3	32.7	-90.71	785.2	-35.3	1,218.1	1,151.7	66.38	18.349		
8,700.0	7,457.0	8,593.5	7,472.0	37.0	33.7	-90.71	885.1	-36.1	1,216.1	1,147.8	68.26	17.816		
8,800.0	7,457.0	8,693.5	7,472.0	37.9	34.7	-90.71	985.1	-36.9	1,214.0	1,143.8	70.26	17.280		
8,900.0	7,457.0	8,793.5	7,472.0	38.8	35.8	-90.71	1,085.1	-37.8	1,212.0	1,139.6	72.37	16.746		
9,000.0	7,457.0	8,893.5	7,472.0	39.7	36.9	-90.71	1,185.1	-38.6	1,210.0	1,135.4	74.60	16.220		
9,100.0	7,457.0	8,993.5	7,472.0	40.8	38.1	-90.71	1,285.1	-39.4	1,208.0	1,131.0	76.92	15.703		
9,200.0	7,457.0	9,093.4	7,472.0	41.9	39.4	-90.71	1,385.0	-40.2	1,205.9	1,126.6	79.34	15.200		
9,300.0	7,457.0	9,193.4	7,472.0	43.0	40.6	-90.71	1,485.0	-41.1	1,203.9	1,122.1	81.83	14.712		
9,400.0	7,457.0	9,293.4	7,472.0	44.2	41.9	-90.72	1,585.0	-41.9	1,201.9	1,117.5	84.40	14.240		
9,500.0	7,457.0	9,393.4	7,472.0	45.4	43.3	-90.72	1,685.0	-42.7	1,199.9	1,112.8	87.04	13.785		
9,600.0	7,457.0	9,493.4	7,472.0	46.7	44.7	-90.72	1,784.9	-43.5	1,197.8	1,108.1	89.74	13.348		
9,700.0	7,457.0	9,593.3	7,472.0	48.0	46.1	-90.72	1,884.9	-44.4	1,195.8	1,103.3	92.49	12.928		
9,800.0	7,457.0	9,693.3	7,472.0	49.3	47.5	-90.72	1,984.9	-45.2	1,193.8	1,098.5	95.30	12.526		
9,900.0	7,457.0	9,793.3	7,472.0	50.7	48.9	-90.72	2,084.9	-46.0	1,191.8	1,093.6	98.16	12.141		
10,000.0	7,457.0	9,893.3	7,472.0	52.1	50.4	-90.72	2,184.8	-46.8	1,189.7	1,088.7	101.06	11.773		
10,100.0	7,457.0	9,993.2	7,472.0	53.5	51.9	-90.72	2,284.8	-47.7	1,187.7	1,083.7	103.99	11.421		
10,200.0	7,457.0	10,093.2	7,472.0	54.9	53.4	-90.73	2,384.8	-48.5	1,185.7	1,078.7	106.97	11.085		
10,300.0	7,457.0	10,193.2	7,472.0	56.4	54.9	-90.73	2,484.8	-49.3	1,183.7	1,073.7	109.97	10.763		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NCH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,457.0	10,293.2	7,472.0	57.8	56.4	-90.73	2,584.7	-50.2	1,181.6	1,068.6	113.01	10.456		
10,500.0	7,457.0	10,393.2	7,472.0	59.3	58.0	-90.73	2,684.7	-51.0	1,179.6	1,063.5	116.08	10.162		
10,600.0	7,457.0	10,493.1	7,472.0	60.8	59.5	-90.73	2,784.7	-51.8	1,177.6	1,058.4	119.17	9.881		
10,700.0	7,457.0	10,593.1	7,472.0	62.3	61.1	-90.73	2,884.7	-52.6	1,175.6	1,053.3	122.29	9.613		
10,800.0	7,457.0	10,693.1	7,472.0	63.9	62.7	-90.73	2,984.6	-53.5	1,173.5	1,048.1	125.43	9.356		
10,900.0	7,457.0	10,793.1	7,472.0	65.4	64.3	-90.73	3,084.6	-54.3	1,171.5	1,042.9	128.59	9.111		
11,000.0	7,457.0	10,893.1	7,472.0	66.9	65.9	-90.74	3,184.6	-55.1	1,169.5	1,037.7	131.77	8.875		
11,100.0	7,457.0	10,993.0	7,472.0	68.5	67.5	-90.74	3,284.6	-55.9	1,167.5	1,032.5	134.96	8.650		
11,200.0	7,457.0	11,093.0	7,472.0	70.1	69.1	-90.74	3,384.6	-56.8	1,165.4	1,027.3	138.18	8.434		
11,300.0	7,457.0	11,193.0	7,472.0	71.7	70.7	-90.74	3,484.5	-57.6	1,163.4	1,022.0	141.41	8.227		
11,400.0	7,457.0	11,293.0	7,472.0	73.2	72.4	-90.74	3,584.5	-58.4	1,161.4	1,016.7	144.65	8.029		
11,500.0	7,457.0	11,393.0	7,472.0	74.8	74.0	-90.74	3,684.5	-59.2	1,159.4	1,011.4	147.91	7.838		
11,600.0	7,457.0	11,492.9	7,472.0	76.4	75.6	-90.74	3,784.5	-60.1	1,157.3	1,006.2	151.18	7.656		
11,700.0	7,457.0	11,592.9	7,472.0	78.1	77.3	-90.74	3,884.4	-60.9	1,155.3	1,000.8	154.46	7.480		
11,800.0	7,457.0	11,692.9	7,472.0	79.7	78.9	-90.75	3,984.4	-61.7	1,153.3	995.5	157.75	7.311		
11,900.0	7,457.0	11,792.9	7,472.0	81.3	80.6	-90.75	4,084.4	-62.6	1,151.3	990.2	161.05	7.148		
12,000.0	7,457.0	11,892.9	7,472.0	82.9	82.2	-90.75	4,184.4	-63.4	1,149.2	984.9	164.36	6.992		
12,100.0	7,457.0	11,992.8	7,472.0	84.6	83.9	-90.75	4,284.3	-64.2	1,147.2	979.5	167.69	6.841		
12,200.0	7,457.0	12,092.8	7,472.0	86.2	85.6	-90.75	4,384.3	-65.0	1,145.2	974.2	171.02	6.696		
12,300.0	7,457.0	12,192.8	7,472.0	87.9	87.2	-90.75	4,484.3	-65.9	1,143.2	968.8	174.36	6.556		
12,400.0	7,457.0	12,292.8	7,472.0	89.5	88.9	-90.75	4,584.3	-66.7	1,141.1	963.4	177.70	6.422		
12,500.0	7,457.0	12,392.8	7,472.0	91.2	90.6	-90.75	4,684.2	-67.5	1,139.1	958.0	181.06	6.291		
12,600.0	7,457.0	12,492.7	7,472.0	92.8	92.3	-90.76	4,784.2	-68.3	1,137.1	952.7	184.42	6.166		
12,700.0	7,457.0	12,592.7	7,472.0	94.5	94.0	-90.76	4,884.2	-69.2	1,135.0	947.3	187.78	6.044		
12,800.0	7,457.0	12,692.7	7,472.0	96.2	95.7	-90.76	4,984.2	-70.0	1,133.0	941.9	191.16	5.927		
12,900.0	7,457.0	12,792.7	7,472.0	97.8	97.4	-90.76	5,084.1	-70.8	1,131.0	936.5	194.54	5.814		
13,000.0	7,457.0	12,892.7	7,472.0	99.5	99.0	-90.76	5,184.1	-71.6	1,129.0	931.1	197.92	5.704		
13,100.0	7,457.0	12,992.6	7,472.0	101.2	100.7	-90.76	5,284.1	-72.5	1,126.9	925.6	201.31	5.598		
13,200.0	7,457.0	13,092.6	7,472.0	102.9	102.4	-90.76	5,384.1	-73.3	1,124.9	920.2	204.71	5.495		
13,300.0	7,457.0	13,192.6	7,472.0	104.6	104.1	-90.77	5,484.0	-74.1	1,122.9	914.8	208.11	5.396		
13,400.0	7,457.0	13,292.6	7,472.0	106.2	105.8	-90.77	5,584.0	-75.0	1,120.9	909.4	211.51	5.299		
13,500.0	7,457.0	13,392.6	7,472.0	107.9	107.6	-90.77	5,684.0	-75.8	1,118.8	903.9	214.92	5.206		
13,600.0	7,457.0	13,492.5	7,472.0	109.6	109.3	-90.77	5,784.0	-76.6	1,116.8	898.5	218.33	5.115		
13,700.0	7,457.0	13,592.5	7,472.0	111.3	111.0	-90.77	5,884.0	-77.4	1,114.8	893.1	221.75	5.027		
13,800.0	7,457.0	13,692.5	7,472.0	113.0	112.7	-90.77	5,983.9	-78.3	1,112.8	887.7	225.17	4.942		
13,900.0	7,457.0	13,792.5	7,472.0	114.7	114.4	-90.77	6,083.9	-79.1	1,112.2	883.6	228.58	4.866		
14,000.0	7,457.0	13,892.5	7,472.0	116.4	116.1	-90.77	6,183.9	-79.9	1,111.7	879.7	232.00	4.792		
14,100.0	7,457.0	13,992.5	7,472.0	118.1	117.8	-90.77	6,283.9	-80.7	1,111.1	875.7	235.43	4.720		
14,200.0	7,457.0	14,092.5	7,472.0	119.8	119.5	-90.77	6,383.9	-81.6	1,110.6	871.7	238.86	4.650		
14,228.7	7,457.0	14,115.3	7,472.0	120.3	119.9	-90.77	6,406.7	-81.8	1,110.5	870.8	239.68	4.633		
14,300.0	7,457.0	14,166.6	7,472.0	121.5	120.8	-90.77	6,458.1	-83.0	1,111.1	869.6	241.53	4.600		
14,400.0	7,457.0	14,260.0	7,472.0	123.2	122.4	-90.77	6,551.3	-86.4	1,113.5	868.7	244.75	4.549		
14,500.0	7,457.0	14,359.9	7,472.0	124.9	124.2	-90.77	6,651.2	-90.2	1,115.9	867.7	248.20	4.496		
14,600.0	7,457.0	14,459.9	7,472.0	126.7	125.9	-90.77	6,751.1	-93.9	1,118.2	866.6	251.64	4.444		
14,700.0	7,457.0	14,559.9	7,472.0	128.4	127.6	-90.77	6,851.0	-97.7	1,120.6	865.5	255.09	4.393		
14,800.0	7,457.0	14,659.8	7,472.0	130.1	129.4	-90.77	6,950.9	-101.4	1,123.0	864.5	258.55	4.344		
14,900.0	7,457.0	14,759.8	7,472.0	131.8	131.1	-90.76	7,050.8	-105.2	1,125.4	863.4	262.00	4.296		
15,000.0	7,457.0	14,859.8	7,472.0	133.5	132.8	-90.76	7,150.7	-108.9	1,127.8	862.4	265.46	4.249		
15,100.0	7,457.0	14,959.8	7,472.0	135.2	134.6	-90.76	7,250.6	-112.7	1,130.2	861.3	268.92	4.203		
15,200.0	7,457.0	15,059.7	7,472.0	136.9	136.3	-90.76	7,350.5	-116.4	1,132.6	860.2	272.38	4.158		
15,300.0	7,457.0	15,159.7	7,472.0	138.7	138.0	-90.76	7,450.4	-120.2	1,135.0	859.2	275.84	4.115		
15,400.0	7,457.0	15,259.7	7,472.0	140.4	139.8	-90.76	7,550.3	-123.9	1,137.4	858.1	279.31	4.072		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NCH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,500.0	7,457.0	15,359.6	7,472.0	142.1	141.5	-90.75	7,650.2	-127.7	1,139.8	857.0	282.78	4.031		
15,600.0	7,457.0	15,459.6	7,472.0	143.8	143.3	-90.75	7,750.1	-131.4	1,142.2	855.9	286.25	3.990		
15,700.0	7,457.0	15,559.6	7,472.0	145.6	145.0	-90.75	7,850.0	-135.2	1,144.6	854.9	289.72	3.951		
15,800.0	7,457.0	15,659.6	7,472.0	147.3	146.7	-90.75	7,949.9	-138.9	1,147.0	853.8	293.19	3.912		
15,900.0	7,457.0	15,759.5	7,472.0	149.0	148.5	-90.75	8,049.8	-142.7	1,149.4	852.7	296.66	3.874		
16,000.0	7,457.0	15,859.5	7,472.0	150.7	150.2	-90.75	8,149.7	-146.4	1,151.8	851.6	300.14	3.837		
16,100.0	7,457.0	15,983.5	7,472.0	152.5	152.4	-90.74	8,273.7	-150.5	1,153.8	849.4	304.37	3.791		
16,200.0	7,457.0	16,132.9	7,472.0	154.2	155.0	-90.75	8,423.0	-149.2	1,151.4	842.4	308.99	3.726		
16,300.0	7,457.0	16,232.8	7,472.0	155.9	156.7	-90.75	8,522.9	-146.6	1,147.4	834.9	312.45	3.672		
16,400.0	7,457.0	16,332.8	7,472.0	157.6	158.4	-90.75	8,622.8	-143.9	1,143.4	827.5	315.91	3.619		
16,500.0	7,457.0	16,432.7	7,472.0	159.4	160.2	-90.75	8,722.7	-141.3	1,139.4	820.1	319.37	3.568		
16,600.0	7,457.0	16,532.6	7,472.0	161.1	161.9	-90.76	8,822.6	-138.7	1,135.5	812.6	322.83	3.517		
16,700.0	7,457.0	16,632.5	7,472.0	162.8	163.6	-90.76	8,922.5	-136.1	1,131.5	805.2	326.29	3.468		
16,800.0	7,457.0	16,732.4	7,472.0	164.6	165.3	-90.76	9,022.4	-133.5	1,127.5	797.8	329.76	3.419		
16,900.0	7,457.0	16,832.4	7,472.0	166.3	167.1	-90.77	9,122.2	-130.9	1,123.5	790.3	333.22	3.372		
17,000.0	7,457.0	16,932.3	7,472.0	168.0	168.8	-90.77	9,222.1	-128.2	1,119.6	782.9	336.69	3.325		
17,100.0	7,457.0	17,032.2	7,472.0	169.8	170.5	-90.77	9,322.0	-125.6	1,115.6	775.4	340.15	3.280		
17,200.0	7,457.0	17,132.1	7,472.0	171.5	172.3	-90.77	9,421.9	-123.0	1,111.6	768.0	343.62	3.235		
17,300.0	7,457.0	17,232.0	7,472.0	173.3	174.0	-90.78	9,521.8	-120.4	1,107.6	760.5	347.09	3.191		
17,400.0	7,457.0	17,332.0	7,472.0	175.0	175.7	-90.78	9,621.7	-117.8	1,103.7	753.1	350.56	3.148		
17,500.0	7,457.0	17,431.9	7,472.0	176.7	177.4	-90.78	9,721.6	-115.2	1,099.7	745.6	354.03	3.106		
17,600.0	7,457.0	17,531.8	7,472.0	178.5	179.2	-90.79	9,821.5	-112.6	1,095.7	738.2	357.50	3.065		
17,700.0	7,457.0	17,606.3	7,472.0	180.2	180.5	-90.79	9,895.9	-110.6	1,092.0	731.6	360.45	3.030		
17,718.0	7,457.0	17,606.3	7,472.0	180.5	180.5	-90.79	9,895.9	-110.6	1,091.9	731.3	360.60	3.028		
17,721.0	7,457.0	17,606.3	7,472.0	180.6	180.5	-90.79	9,895.9	-110.6	1,091.9	731.3	360.61	3.028 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.26	-0.3	-75.0	75.0					
100.0	100.0	100.0	100.0	0.4	0.0	-90.26	-0.3	-75.0	75.0	74.7	0.28	270.879		
200.0	200.0	200.0	200.0	1.0	0.0	-90.26	-0.3	-75.0	75.0	74.2	0.80	94.045		
300.0	300.0	300.0	300.0	1.5	0.0	-90.26	-0.3	-75.0	75.0	73.8	1.22	61.275		
400.0	400.0	400.0	400.0	1.9	0.0	-90.26	-0.3	-75.0	75.0	73.4	1.62	46.359		
500.0	500.0	500.0	500.0	2.3	0.0	-90.26	-0.3	-75.0	75.0	73.0	2.00	37.531		
600.0	600.0	600.0	600.0	2.7	0.0	-90.26	-0.3	-75.0	75.0	72.6	2.37	31.619		
700.0	700.0	700.0	700.0	3.1	0.0	-90.26	-0.3	-75.0	75.0	72.3	2.74	27.356		
800.0	800.0	800.0	800.0	3.5	0.0	-90.26	-0.3	-75.0	75.0	71.9	3.11	24.126		
900.0	900.0	900.0	900.0	3.9	0.0	-90.26	-0.3	-75.0	75.0	71.5	3.47	21.590		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	0.0	-90.26	-0.3	-75.0	75.0	71.2	3.84	19.543 CC, ES		
1,100.0	1,100.0	1,100.0	1,100.0	4.6	0.0	157.58	-0.3	-75.0	76.6	72.3	4.33	17.704		
1,200.0	1,199.8	1,198.8	1,198.8	5.0	0.0	157.82	-1.9	-75.7	82.1	77.1	5.01	16.401		
1,300.0	1,299.5	1,297.1	1,297.0	5.7	0.0	156.82	-6.6	-77.6	92.1	86.5	5.62	16.399		
1,400.0	1,398.7	1,395.1	1,394.6	6.5	0.0	155.13	-14.2	-80.8	106.6	100.5	6.16	17.306		
1,500.0	1,497.5	1,493.5	1,492.6	7.1	0.0	154.15	-22.6	-84.2	124.6	118.0	6.67	18.675		
1,600.0	1,595.6	1,591.2	1,589.9	7.8	0.0	153.96	-30.9	-87.7	145.7	138.5	7.21	20.220		
1,700.0	1,693.4	1,688.6	1,686.8	8.2	0.0	154.25	-39.2	-91.1	168.5	161.0	7.58	22.245		
1,800.0	1,791.2	1,785.9	1,783.8	8.5	0.0	154.48	-47.5	-94.6	191.4	183.5	7.87	24.315		
1,900.0	1,888.9	1,883.3	1,880.7	8.8	0.0	154.66	-55.8	-98.0	214.2	206.0	8.17	26.208		
2,000.0	1,986.7	1,980.7	1,977.7	9.1	0.0	154.81	-64.1	-101.4	237.0	228.5	8.48	27.941		
2,100.0	2,084.5	2,078.0	2,074.6	9.4	0.0	154.93	-72.4	-104.9	259.9	251.1	8.80	29.528		
2,200.0	2,182.2	2,175.4	2,171.5	9.7	0.0	155.03	-80.7	-108.3	282.7	273.6	9.12	30.983		
2,300.0	2,280.0	2,272.7	2,268.5	10.1	0.0	155.12	-89.0	-111.7	305.5	296.1	9.45	32.318		
2,400.0	2,377.8	2,370.1	2,365.4	10.4	0.0	155.19	-97.3	-115.2	328.4	318.6	9.79	33.544		
2,500.0	2,475.5	2,467.4	2,462.4	10.8	0.0	155.26	-105.6	-118.6	351.2	341.1	10.13	34.673		
2,600.0	2,573.3	2,564.8	2,559.3	11.1	0.0	155.31	-113.9	-122.1	374.0	363.6	10.47	35.713		
2,700.0	2,671.1	2,662.2	2,656.3	11.5	0.0	155.36	-122.1	-125.5	396.9	386.0	10.82	36.673		
2,800.0	2,768.9	2,759.5	2,753.2	11.9	0.0	155.41	-130.4	-128.9	419.7	408.5	11.17	37.561		
2,900.0	2,866.6	2,856.9	2,850.1	12.4	0.0	155.45	-138.7	-132.4	442.5	431.0	11.53	38.384		
3,000.0	2,964.4	2,954.2	2,947.1	12.8	0.0	155.49	-147.0	-135.8	465.4	453.5	11.89	39.147		
3,100.0	3,062.2	3,051.6	3,044.0	13.3	0.0	155.52	-155.3	-139.2	488.2	476.0	12.25	39.856		
3,200.0	3,159.9	3,148.9	3,141.0	13.7	0.0	155.55	-163.6	-142.7	511.0	498.4	12.61	40.516		
3,300.0	3,257.7	3,246.3	3,237.9	14.2	0.0	155.58	-171.9	-146.1	533.9	520.9	12.98	41.131		
3,400.0	3,355.5	3,343.7	3,334.8	14.7	0.0	155.60	-180.2	-149.6	556.7	543.4	13.35	41.706		
3,500.0	3,453.2	3,441.0	3,431.8	15.2	0.0	155.62	-188.5	-153.0	579.6	565.8	13.72	42.244		
3,600.0	3,551.0	3,538.4	3,528.7	15.6	0.0	155.65	-196.8	-156.4	602.4	588.3	14.09	42.748		
3,700.0	3,648.8	3,635.7	3,625.7	16.1	0.0	155.67	-205.1	-159.9	625.2	610.8	14.47	43.221		
3,800.0	3,746.5	3,733.1	3,722.6	16.6	0.0	155.68	-213.4	-163.3	648.1	633.2	14.84	43.665		
3,900.0	3,844.3	3,830.4	3,819.6	17.1	0.0	155.70	-221.7	-166.7	670.9	655.7	15.22	44.083		
4,000.0	3,942.1	3,927.8	3,916.5	17.6	0.0	155.72	-230.0	-170.2	693.7	678.1	15.60	44.476		
4,100.0	4,039.9	4,025.2	4,013.4	18.1	0.0	155.73	-238.2	-173.6	716.6	700.6	15.98	44.848		
4,200.0	4,137.6	4,122.5	4,110.4	18.6	0.0	155.75	-246.5	-177.0	739.4	723.1	16.36	45.199		
4,300.0	4,235.4	4,219.9	4,207.3	19.1	0.0	155.76	-254.8	-180.5	762.2	745.5	16.74	45.530		
4,400.0	4,333.2	4,317.2	4,304.3	19.6	0.0	155.77	-263.1	-183.9	785.1	768.0	17.13	45.844		
4,500.0	4,430.9	4,414.6	4,401.2	20.1	0.0	155.78	-271.4	-187.4	807.9	790.4	17.51	46.142		
4,600.0	4,528.7	4,511.9	4,498.2	20.6	0.0	155.79	-279.7	-190.8	830.8	812.9	17.89	46.425		
4,700.0	4,626.5	4,609.3	4,595.1	21.1	0.0	155.81	-288.0	-194.2	853.6	835.3	18.28	46.693		
4,800.0	4,724.2	4,706.7	4,692.0	21.6	0.0	155.81	-296.3	-197.7	876.4	857.8	18.67	46.948		
4,900.0	4,822.0	4,804.0	4,789.0	22.1	0.0	155.82	-304.6	-201.1	899.3	880.2	19.06	47.191		
5,000.0	4,919.8	4,901.4	4,885.9	22.6	0.0	155.83	-312.9	-204.5	922.1	902.7	19.44	47.422		
5,100.0	5,017.5	4,998.7	4,982.9	23.1	0.0	155.84	-321.2	-208.0	944.9	925.1	19.83	47.643		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
5,200.0	5,115.3	5,096.1	5,079.8	23.6	0.0	155.85	-329.5	-211.4	967.8	947.6	20.22	47.853		
5,300.0	5,213.1	5,193.4	5,176.8	24.1	0.0	155.86	-337.8	-214.9	990.6	970.0	20.61	48.054		
5,400.0	5,310.8	5,290.8	5,273.7	24.6	0.0	155.87	-346.1	-218.3	1,013.5	992.5	21.01	48.247		
5,500.0	5,408.6	5,388.2	5,370.6	25.1	0.0	155.87	-354.3	-221.7	1,036.3	1,014.9	21.40	48.431		
5,600.0	5,506.4	5,485.5	5,467.6	25.6	0.0	155.88	-362.6	-225.2	1,059.1	1,037.3	21.79	48.607		
5,700.0	5,604.2	5,582.9	5,564.5	26.1	0.0	155.89	-370.9	-228.6	1,082.0	1,059.8	22.18	48.775		
5,800.0	5,701.9	5,680.2	5,661.5	26.7	0.0	155.89	-379.2	-232.0	1,104.8	1,082.2	22.58	48.937		
5,900.0	5,799.7	5,777.6	5,758.4	27.2	0.0	155.90	-387.5	-235.5	1,127.6	1,104.7	22.97	49.092		
6,000.0	5,897.5	5,874.9	5,855.4	27.7	0.0	155.90	-395.8	-238.9	1,150.5	1,127.1	23.36	49.241		
6,100.0	5,995.2	5,972.3	5,952.3	28.2	0.0	155.91	-404.1	-242.4	1,173.3	1,149.6	23.76	49.385		
6,200.0	6,093.0	6,069.7	6,049.2	28.7	0.0	155.91	-412.4	-245.8	1,196.2	1,172.0	24.15	49.522		
6,300.0	6,190.8	6,167.0	6,146.2	29.2	0.0	155.92	-420.7	-249.2	1,219.0	1,194.4	24.55	49.655		
6,400.0	6,288.5	6,264.4	6,243.1	29.7	0.0	155.92	-429.0	-252.7	1,241.8	1,216.9	24.95	49.782		
6,500.0	6,386.3	6,361.7	6,340.1	30.2	0.0	155.93	-437.3	-256.1	1,264.7	1,239.3	25.34	49.905		
6,600.0	6,484.1	6,459.1	6,437.0	30.7	0.0	155.93	-445.6	-259.5	1,287.5	1,261.8	25.74	50.023		
6,700.0	6,581.8	6,556.4	6,534.0	31.2	0.0	155.94	-453.9	-263.0	1,310.3	1,284.2	26.14	50.137		
6,800.0	6,679.6	6,653.8	6,630.9	31.7	0.0	155.94	-462.2	-266.4	1,333.2	1,306.6	26.53	50.247		
6,900.0	6,777.4	6,751.3	6,728.2	32.2	0.0	156.31	-462.2	-269.9	1,356.0	1,329.1	26.90	50.401		
7,000.0	6,875.2	6,843.7	6,819.2	32.7	0.0	171.72	-446.9	-273.4	1,379.1	1,351.9	27.20	50.692		
7,100.0	6,973.1	6,931.8	6,902.6	33.3	0.0	-139.44	-419.0	-276.6	1,402.3	1,374.9	27.49	51.019		
7,200.0	7,068.6	7,017.3	6,978.5	33.6	0.0	-114.11	-380.0	-279.7	1,425.0	1,397.1	27.91	51.061		
7,300.0	7,158.8	7,100.0	7,045.6	34.0	0.0	-101.59	-331.8	-282.5	1,446.3	1,418.2	28.15	51.383		
7,400.0	7,241.0	7,182.8	7,105.2	34.3	0.0	-94.15	-274.5	-285.1	1,465.4	1,437.2	28.25	51.869		
7,500.0	7,312.6	7,263.8	7,154.9	34.5	0.0	-89.25	-210.6	-287.5	1,481.8	1,453.5	28.30	52.360		
7,600.0	7,371.6	7,344.1	7,194.8	34.7	0.0	-85.93	-141.1	-289.5	1,494.7	1,466.4	28.34	52.747		
7,700.0	7,416.1	7,423.8	7,224.4	34.7	0.0	-83.75	-67.2	-291.1	1,503.9	1,475.5	28.40	52.954		
7,800.0	7,444.7	7,500.0	7,242.9	34.7	0.0	-82.53	6.7	-292.4	1,509.1	1,480.6	28.51	52.926		
7,900.0	7,456.7	7,582.3	7,251.6	34.6	0.0	-82.17	88.4	-293.4	1,510.0	1,481.3	28.69	52.629		
8,000.0	7,457.0	7,677.0	7,252.0	34.6	0.0	-82.19	183.1	-294.2	1,508.1	1,479.1	28.94	52.102		
8,100.0	7,457.0	7,777.0	7,252.0	34.6	0.0	-82.18	283.1	-295.0	1,506.0	1,476.7	29.30	51.397		
8,200.0	7,457.0	7,877.0	7,252.0	34.8	0.0	-82.16	383.1	-295.9	1,504.0	1,474.3	29.76	50.538		
8,300.0	7,457.0	7,976.9	7,252.0	35.0	0.0	-82.15	483.1	-296.7	1,502.0	1,471.7	30.31	49.548		
8,400.0	7,457.0	8,076.9	7,252.0	35.3	0.0	-82.14	583.0	-297.5	1,500.0	1,469.1	30.96	48.453		
8,500.0	7,457.0	8,176.9	7,252.0	35.8	0.0	-82.13	683.0	-298.4	1,498.0	1,466.3	31.69	47.276		
8,600.0	7,457.0	8,276.9	7,252.0	36.3	0.0	-82.12	783.0	-299.2	1,496.0	1,463.5	32.49	46.039		
8,700.0	7,457.0	8,376.9	7,252.0	37.0	0.0	-82.11	883.0	-300.0	1,494.0	1,460.6	33.37	44.765		
8,800.0	7,457.0	8,476.8	7,252.0	37.9	0.0	-82.10	982.9	-300.8	1,492.0	1,457.7	34.32	43.470		
8,900.0	7,457.0	8,576.8	7,252.0	38.8	0.0	-82.09	1,082.9	-301.7	1,490.0	1,454.7	35.33	42.170		
9,000.0	7,457.0	8,676.8	7,252.0	39.7	0.0	-82.08	1,182.9	-302.5	1,488.0	1,451.6	36.40	40.879		
9,100.0	7,457.0	8,776.8	7,252.0	40.8	0.0	-82.07	1,282.9	-303.3	1,486.0	1,448.5	37.52	39.607		
9,200.0	7,457.0	8,876.8	7,252.0	41.9	0.0	-82.06	1,382.8	-304.1	1,484.0	1,445.3	38.68	38.361		
9,300.0	7,457.0	8,976.7	7,252.0	43.0	0.0	-82.05	1,482.8	-305.0	1,482.0	1,442.1	39.89	37.147		
9,400.0	7,457.0	9,076.7	7,252.0	44.2	0.0	-82.04	1,582.8	-305.8	1,480.0	1,438.8	41.14	35.971		
9,500.0	7,457.0	9,176.7	7,252.0	45.4	0.0	-82.03	1,682.8	-306.6	1,478.0	1,435.5	42.43	34.834		
9,600.0	7,457.0	9,276.7	7,252.0	46.7	0.0	-82.01	1,782.7	-307.5	1,476.0	1,432.2	43.75	33.739		
9,700.0	7,457.0	9,376.7	7,252.0	48.0	0.0	-82.00	1,882.7	-308.3	1,474.0	1,428.9	45.09	32.686		
9,800.0	7,457.0	9,476.6	7,252.0	49.3	0.0	-81.99	1,982.7	-309.1	1,472.0	1,425.5	46.47	31.675		
9,900.0	7,457.0	9,576.6	7,252.0	50.7	0.0	-81.98	2,082.7	-309.9	1,469.9	1,422.1	47.87	30.707		
10,000.0	7,457.0	9,676.6	7,252.0	52.1	0.0	-81.97	2,182.7	-310.8	1,467.9	1,418.6	49.29	29.780		
10,100.0	7,457.0	9,776.6	7,252.0	53.5	0.0	-81.96	2,282.6	-311.6	1,465.9	1,415.2	50.74	28.893		
10,200.0	7,457.0	9,876.6	7,252.0	54.9	0.0	-81.95	2,382.6	-312.4	1,463.9	1,411.7	52.20	28.045		
10,300.0	7,457.0	9,976.5	7,252.0	56.4	0.0	-81.94	2,482.6	-313.2	1,461.9	1,408.2	53.68	27.234		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,457.0	10,076.5	7,252.0	57.8	0.0	-81.93	2,582.6	-314.1	1,459.9	1,404.7	55.18	26.459		
10,500.0	7,457.0	10,176.5	7,252.0	59.3	0.0	-81.92	2,682.5	-314.9	1,457.9	1,401.2	56.69	25.718		
10,600.0	7,457.0	10,276.5	7,252.0	60.8	0.0	-81.90	2,782.5	-315.7	1,455.9	1,397.7	58.21	25.010		
10,700.0	7,457.0	10,376.5	7,252.0	62.3	0.0	-81.89	2,882.5	-316.5	1,453.9	1,394.2	59.75	24.333		
10,800.0	7,457.0	10,476.4	7,252.0	63.9	0.0	-81.88	2,982.5	-317.4	1,451.9	1,390.6	61.30	23.685		
10,900.0	7,457.0	10,576.4	7,252.0	65.4	0.0	-81.87	3,082.4	-318.2	1,449.9	1,387.0	62.86	23.065		
11,000.0	7,457.0	10,676.4	7,252.0	66.9	0.0	-81.86	3,182.4	-319.0	1,447.9	1,383.5	64.43	22.472		
11,100.0	7,457.0	10,776.4	7,252.0	68.5	0.0	-81.85	3,282.4	-319.9	1,445.9	1,379.9	66.01	21.904		
11,200.0	7,457.0	10,876.4	7,252.0	70.1	0.0	-81.84	3,382.4	-320.7	1,443.9	1,376.3	67.60	21.359		
11,300.0	7,457.0	10,976.3	7,252.0	71.7	0.0	-81.82	3,482.3	-321.5	1,441.9	1,372.7	69.20	20.838		
11,400.0	7,457.0	11,076.3	7,252.0	73.2	0.0	-81.81	3,582.3	-322.3	1,439.9	1,369.1	70.80	20.337		
11,500.0	7,457.0	11,176.3	7,252.0	74.8	0.0	-81.80	3,682.3	-323.2	1,437.9	1,365.5	72.41	19.857		
11,600.0	7,457.0	11,276.3	7,252.0	76.4	0.0	-81.79	3,782.3	-324.0	1,435.9	1,361.8	74.03	19.396		
11,700.0	7,457.0	11,376.3	7,252.0	78.1	0.0	-81.78	3,882.2	-324.8	1,433.9	1,358.2	75.65	18.954		
11,800.0	7,457.0	11,476.2	7,252.0	79.7	0.0	-81.77	3,982.2	-325.6	1,431.9	1,354.6	77.28	18.528		
11,900.0	7,457.0	11,576.2	7,252.0	81.3	0.0	-81.76	4,082.2	-326.5	1,429.9	1,350.9	78.91	18.119		
12,000.0	7,457.0	11,676.2	7,252.0	82.9	0.0	-81.74	4,182.2	-327.3	1,427.8	1,347.3	80.55	17.726		
12,100.0	7,457.0	11,776.2	7,252.0	84.6	0.0	-81.73	4,282.1	-328.1	1,425.8	1,343.6	82.20	17.347		
12,200.0	7,457.0	11,876.1	7,252.0	86.2	0.0	-81.72	4,382.1	-329.0	1,423.8	1,340.0	83.85	16.982		
12,300.0	7,457.0	11,976.1	7,252.0	87.9	0.0	-81.71	4,482.1	-329.8	1,421.8	1,336.3	85.50	16.630		
12,400.0	7,457.0	12,076.1	7,252.0	89.5	0.0	-81.70	4,582.1	-330.6	1,419.8	1,332.7	87.15	16.291		
12,500.0	7,457.0	12,176.1	7,252.0	91.2	0.0	-81.68	4,682.1	-331.4	1,417.8	1,329.0	88.82	15.964		
12,600.0	7,457.0	12,276.1	7,252.0	92.8	0.0	-81.67	4,782.0	-332.3	1,415.8	1,325.3	90.48	15.648		
12,700.0	7,457.0	12,376.0	7,252.0	94.5	0.0	-81.66	4,882.0	-333.1	1,413.8	1,321.7	92.15	15.343		
12,800.0	7,457.0	12,476.0	7,252.0	96.2	0.0	-81.65	4,982.0	-333.9	1,411.8	1,318.0	93.82	15.049		
12,900.0	7,457.0	12,576.0	7,252.0	97.8	0.0	-81.64	5,082.0	-334.7	1,409.8	1,314.3	95.49	14.764		
13,000.0	7,457.0	12,676.0	7,252.0	99.5	0.0	-81.63	5,181.9	-335.6	1,407.8	1,310.6	97.16	14.489		
13,100.0	7,457.0	12,776.0	7,252.0	101.2	0.0	-81.61	5,281.9	-336.4	1,405.8	1,307.0	98.84	14.223		
13,200.0	7,457.0	12,875.9	7,252.0	102.9	0.0	-81.60	5,381.9	-337.2	1,403.8	1,303.3	100.52	13.965		
13,300.0	7,457.0	12,975.9	7,252.0	104.6	0.0	-81.59	5,481.9	-338.0	1,401.8	1,299.6	102.21	13.715		
13,400.0	7,457.0	13,075.9	7,252.0	106.2	0.0	-81.58	5,581.8	-338.9	1,399.8	1,295.9	103.89	13.473		
13,500.0	7,457.0	13,175.9	7,252.0	107.9	0.0	-81.56	5,681.8	-339.7	1,397.8	1,292.2	105.58	13.239		
13,600.0	7,457.0	13,275.9	7,252.0	109.6	0.0	-81.55	5,781.8	-340.5	1,395.8	1,288.5	107.27	13.012		
13,700.0	7,457.0	13,375.8	7,252.0	111.3	0.0	-81.54	5,881.8	-341.4	1,393.8	1,284.8	108.96	12.791		
13,800.0	7,457.0	13,475.8	7,252.0	113.0	0.0	-81.53	5,981.7	-342.2	1,391.8	1,281.2	110.65	12.578		
13,900.0	7,457.0	13,575.8	7,252.0	114.7	0.0	-81.53	6,081.7	-343.0	1,391.2	1,278.9	112.35	12.383		
14,000.0	7,457.0	13,675.8	7,252.0	116.4	0.0	-81.52	6,181.7	-343.8	1,390.7	1,276.6	114.04	12.195		
14,100.0	7,457.0	13,775.8	7,252.0	118.1	0.0	-81.52	6,281.7	-344.7	1,390.2	1,274.4	115.74	12.012		
14,200.0	7,457.0	13,875.8	7,252.0	119.8	0.0	-81.52	6,381.7	-345.5	1,389.6	1,272.2	117.43	11.833		
14,300.0	7,457.0	13,975.8	7,252.0	121.5	0.0	-81.51	6,481.7	-346.3	1,389.1	1,270.0	119.13	11.660		
14,400.0	7,457.0	14,075.8	7,252.0	123.2	0.0	-81.51	6,581.7	-347.1	1,388.6	1,267.7	120.83	11.492		
14,500.0	7,457.0	14,175.8	7,252.0	124.9	0.0	-81.51	6,681.7	-348.0	1,388.1	1,265.5	122.53	11.328		
14,600.0	7,457.0	14,275.8	7,252.0	126.7	0.0	-81.50	6,781.7	-348.8	1,387.5	1,263.3	124.24	11.168		
14,700.0	7,457.0	14,375.8	7,252.0	128.4	0.0	-81.50	6,881.7	-349.6	1,387.0	1,261.1	125.94	11.013		
14,800.0	7,457.0	14,475.8	7,252.0	130.1	0.0	-81.50	6,981.7	-350.5	1,386.5	1,258.8	127.65	10.862		
14,900.0	7,457.0	14,575.8	7,252.0	131.8	0.0	-81.49	7,081.7	-351.3	1,385.9	1,256.6	129.35	10.714		
15,000.0	7,457.0	14,675.8	7,252.0	133.5	0.0	-81.49	7,181.7	-352.1	1,385.4	1,254.4	131.06	10.571		
15,100.0	7,457.0	14,775.8	7,252.0	135.2	0.0	-81.49	7,281.7	-352.9	1,384.9	1,252.1	132.77	10.431		
15,200.0	7,457.0	14,875.8	7,252.0	136.9	0.0	-81.48	7,381.7	-353.8	1,384.4	1,249.9	134.48	10.294		
15,300.0	7,457.0	14,975.8	7,252.0	138.7	0.0	-81.48	7,481.7	-354.6	1,383.8	1,247.7	136.19	10.161		
15,400.0	7,457.0	15,075.8	7,252.0	140.4	0.0	-81.48	7,581.7	-355.4	1,383.3	1,245.4	137.90	10.031		
15,500.0	7,457.0	15,175.8	7,252.0	142.1	0.0	-81.47	7,681.7	-356.2	1,382.8	1,243.2	139.62	9.904		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,457.0	15,275.8	7,252.0	143.8	0.0	-81.47	7,781.7	-357.1	1,382.3	1,240.9	141.33	9.780		
15,700.0	7,457.0	15,375.8	7,252.0	145.6	0.0	-81.47	7,881.6	-357.9	1,381.7	1,238.7	143.05	9.659		
15,800.0	7,457.0	15,475.8	7,252.0	147.3	0.0	-81.46	7,981.6	-358.7	1,381.2	1,236.5	144.76	9.541		
15,900.0	7,457.0	15,575.8	7,252.0	149.0	0.0	-81.46	8,081.6	-359.6	1,380.7	1,234.2	146.48	9.426		
16,000.0	7,457.0	15,675.8	7,252.0	150.7	0.0	-81.46	8,181.6	-360.4	1,380.2	1,232.0	148.19	9.313		
16,100.0	7,457.0	15,775.8	7,252.0	152.5	0.0	-81.45	8,281.6	-361.2	1,379.6	1,229.7	149.91	9.203		
16,200.0	7,457.0	15,875.8	7,252.0	154.2	0.0	-81.45	8,381.6	-362.0	1,379.1	1,227.5	151.63	9.095		
16,300.0	7,457.0	15,975.8	7,252.0	155.9	0.0	-81.45	8,481.6	-362.9	1,378.6	1,225.2	153.35	8.990		
16,400.0	7,457.0	16,075.8	7,252.0	157.6	0.0	-81.44	8,581.6	-363.7	1,378.1	1,223.0	155.07	8.887		
16,500.0	7,457.0	16,175.8	7,252.0	159.4	0.0	-81.44	8,681.6	-364.5	1,377.5	1,220.7	156.79	8.786		
16,600.0	7,457.0	16,275.8	7,252.0	161.1	0.0	-81.44	8,781.6	-365.3	1,377.0	1,218.5	158.51	8.687		
16,700.0	7,457.0	16,375.8	7,252.0	162.8	0.0	-81.43	8,881.6	-366.2	1,376.5	1,216.2	160.23	8.590		
16,800.0	7,457.0	16,475.8	7,252.0	164.6	0.0	-81.43	8,981.6	-367.0	1,375.9	1,214.0	161.96	8.496		
16,900.0	7,457.0	16,575.8	7,252.0	166.3	0.0	-81.43	9,081.6	-367.8	1,375.4	1,211.7	163.68	8.403		
17,000.0	7,457.0	16,675.8	7,252.0	168.0	0.0	-81.42	9,181.6	-368.6	1,374.9	1,209.5	165.40	8.312		
17,100.0	7,457.0	16,775.8	7,252.0	169.8	0.0	-81.42	9,281.6	-369.5	1,374.4	1,207.2	167.13	8.224		
17,200.0	7,457.0	16,875.8	7,252.0	171.5	0.0	-81.42	9,381.6	-370.3	1,373.8	1,205.0	168.85	8.136		
17,300.0	7,457.0	16,975.8	7,252.0	173.3	0.0	-81.42	9,481.6	-371.1	1,373.3	1,202.7	170.58	8.051		
17,400.0	7,457.0	17,075.8	7,252.0	175.0	0.0	-81.41	9,581.6	-372.0	1,372.8	1,200.5	172.30	7.967		
17,500.0	7,457.0	17,175.8	7,252.0	176.7	0.0	-81.41	9,681.6	-372.8	1,372.3	1,198.2	174.03	7.885		
17,600.0	7,457.0	17,275.8	7,252.0	178.5	0.0	-81.41	9,781.6	-373.6	1,371.7	1,196.0	175.75	7.805		
17,700.0	7,457.0	17,375.8	7,252.0	180.2	0.0	-81.40	9,881.6	-374.4	1,371.2	1,193.7	177.48	7.726		
17,717.3	7,457.0	17,385.9	7,252.0	180.5	0.0	-81.40	9,891.6	-374.5	1,371.1	1,193.4	177.72	7.715		
17,721.0	7,457.0	17,385.9	7,252.0	180.6	0.0	-81.40	9,891.6	-374.5	1,371.1	1,193.4	177.75	7.714 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.16	-0.1	-30.0	30.0					
100.0	100.0	100.0	100.0	0.4	0.4	-90.16	-0.1	-30.0	30.0	29.4	0.55	54.277		
200.0	200.0	200.0	200.0	1.0	1.0	-90.16	-0.1	-30.0	30.0	28.4	1.59	18.832		
300.0	300.0	300.0	300.0	1.5	1.5	-90.16	-0.1	-30.0	30.0	27.6	2.45	12.267		
400.0	400.0	400.0	400.0	1.9	1.9	-90.16	-0.1	-30.0	30.0	26.8	3.23	9.280		
500.0	500.0	500.0	500.0	2.3	2.3	-90.16	-0.1	-30.0	30.0	26.0	3.99	7.512		
600.0	600.0	600.0	600.0	2.7	2.7	-90.16	-0.1	-30.0	30.0	25.3	4.74	6.328		
700.0	700.0	700.0	700.0	3.1	3.1	-90.16	-0.1	-30.0	30.0	24.5	5.48	5.474		
800.0	800.0	800.0	800.0	3.5	3.5	-90.16	-0.1	-30.0	30.0	23.8	6.21	4.828		
900.0	900.0	900.0	900.0	3.9	3.9	-90.16	-0.1	-30.0	30.0	23.1	6.94	4.320		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	4.2	-90.16	-0.1	-30.0	30.0	22.3	7.67	3.910 CC, ES		
1,100.0	1,100.0	1,100.0	1,100.0	4.6	4.6	158.40	-0.1	-30.0	31.6	23.1	8.50	3.720		
1,200.0	1,199.8	1,199.8	1,199.8	5.0	5.0	161.39	-0.1	-30.0	36.5	27.0	9.50	3.845		
1,300.0	1,299.5	1,300.8	1,300.8	5.7	5.3	163.90	-1.1	-28.5	43.3	32.7	10.60	4.088		
1,400.0	1,398.7	1,402.1	1,401.9	6.5	5.6	164.97	-4.1	-24.1	50.4	38.5	11.83	4.257		
1,500.0	1,497.5	1,503.5	1,502.9	7.1	6.3	165.10	-9.1	-16.7	57.6	44.6	12.99	4.435		
1,600.0	1,595.6	1,605.2	1,603.8	7.8	7.0	164.60	-16.1	-6.3	65.1	51.0	14.10	4.616		
1,700.0	1,693.4	1,705.1	1,702.7	8.2	7.3	163.89	-24.1	5.7	72.5	57.8	14.74	4.918		
1,800.0	1,791.2	1,804.8	1,801.4	8.5	7.6	163.32	-32.2	17.7	79.9	64.6	15.31	5.222		
1,900.0	1,888.9	1,904.6	1,900.1	8.8	7.9	162.84	-40.2	29.6	87.4	71.5	15.90	5.497		
2,000.0	1,986.7	2,004.3	1,998.7	9.1	8.2	162.44	-48.3	41.6	94.8	78.3	16.50	5.746		
2,100.0	2,084.5	2,104.0	2,097.4	9.4	8.6	162.10	-56.3	53.6	102.3	85.1	17.13	5.971		
2,200.0	2,182.2	2,203.7	2,196.1	9.7	8.9	161.80	-64.4	65.5	109.7	92.0	17.77	6.175		
2,300.0	2,280.0	2,303.4	2,294.7	10.1	9.3	161.54	-72.4	77.5	117.2	98.8	18.42	6.361		
2,400.0	2,377.8	2,403.2	2,393.4	10.4	9.6	161.31	-80.5	89.5	124.6	105.5	19.09	6.529		
2,500.0	2,475.5	2,502.9	2,492.1	10.8	10.0	161.11	-88.6	101.4	132.1	112.3	19.76	6.683		
2,600.0	2,573.3	2,602.6	2,590.8	11.1	10.4	160.93	-96.6	113.4	139.6	119.1	20.45	6.824		
2,700.0	2,671.1	2,702.3	2,689.4	11.5	10.7	160.77	-104.7	125.4	147.0	125.9	21.15	6.952		
2,800.0	2,768.9	2,802.0	2,788.1	11.9	11.1	160.62	-112.7	137.3	154.5	132.6	21.85	7.070		
2,900.0	2,866.6	2,901.8	2,886.8	12.4	11.5	160.49	-120.8	149.3	161.9	139.4	22.56	7.179		
3,000.0	2,964.4	3,001.5	2,985.4	12.8	11.9	160.36	-128.8	161.3	169.4	146.1	23.27	7.279		
3,100.0	3,062.2	3,101.2	3,084.1	13.3	12.3	160.25	-136.9	173.2	176.9	152.9	24.00	7.371		
3,200.0	3,159.9	3,200.9	3,182.8	13.7	12.7	160.15	-144.9	185.2	184.3	159.6	24.72	7.456		
3,300.0	3,257.7	3,300.6	3,281.5	14.2	13.1	160.06	-153.0	197.2	191.8	166.3	25.46	7.535		
3,400.0	3,355.5	3,400.4	3,380.1	14.7	13.5	159.97	-161.0	209.1	199.3	173.1	26.19	7.608		
3,500.0	3,453.2	3,500.1	3,478.8	15.2	13.9	159.89	-169.1	221.1	206.7	179.8	26.93	7.676		
3,600.0	3,551.0	3,599.8	3,577.5	15.6	14.3	159.81	-177.1	233.1	214.2	186.5	27.68	7.740		
3,700.0	3,648.8	3,699.5	3,676.2	16.1	14.7	159.74	-185.2	245.0	221.7	193.2	28.42	7.799		
3,800.0	3,746.5	3,799.2	3,774.8	16.6	15.1	159.68	-193.3	257.0	229.1	200.0	29.17	7.854		
3,900.0	3,844.3	3,899.0	3,873.5	17.1	15.6	159.62	-201.3	269.0	236.6	206.7	29.93	7.906		
4,000.0	3,942.1	3,998.7	3,972.2	17.6	16.0	159.56	-209.4	280.9	244.1	213.4	30.68	7.955		
4,100.0	4,039.9	4,098.4	4,070.8	18.1	16.4	159.51	-217.4	292.9	251.5	220.1	31.44	8.000		
4,200.0	4,137.6	4,198.1	4,169.5	18.6	16.8	159.45	-225.5	304.9	259.0	226.8	32.20	8.043		
4,300.0	4,235.4	4,297.8	4,268.2	19.1	17.2	159.41	-233.5	316.8	266.5	233.5	32.97	8.084		
4,400.0	4,333.2	4,397.6	4,366.9	19.6	17.6	159.36	-241.6	328.8	273.9	240.2	33.73	8.122		
4,500.0	4,430.9	4,497.3	4,465.5	20.1	18.1	159.32	-249.6	340.8	281.4	246.9	34.50	8.158		
4,600.0	4,528.7	4,597.0	4,564.2	20.6	18.5	159.28	-257.7	352.7	288.9	253.6	35.27	8.192		
4,700.0	4,626.5	4,696.7	4,662.9	21.1	18.9	159.24	-265.7	364.7	296.4	260.3	36.04	8.224		
4,800.0	4,724.2	4,796.4	4,761.5	21.6	19.3	159.20	-273.8	376.7	303.8	267.0	36.81	8.255		
4,900.0	4,822.0	4,896.2	4,860.2	22.1	19.8	159.16	-281.8	388.6	311.3	273.7	37.58	8.284		
5,000.0	4,919.8	4,995.9	4,958.9	22.6	20.2	159.13	-289.9	400.6	318.8	280.4	38.35	8.311		
5,100.0	5,017.5	5,095.6	5,057.6	23.1	20.6	159.10	-298.0	412.6	326.2	287.1	39.13	8.337		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,115.3	5,195.3	5,156.2	23.6	21.0	159.07	-306.0	424.5	333.7	293.8	39.91	8.362		
5,300.0	5,213.1	5,295.1	5,254.9	24.1	21.5	159.04	-314.1	436.5	341.2	300.5	40.68	8.386		
5,400.0	5,310.8	5,394.8	5,353.6	24.6	21.9	159.01	-322.1	448.5	348.6	307.2	41.46	8.408		
5,500.0	5,408.6	5,494.5	5,452.2	25.1	22.3	158.98	-330.2	460.4	356.1	313.9	42.24	8.430		
5,600.0	5,506.4	5,594.2	5,550.9	25.6	22.7	158.96	-338.2	472.4	363.6	320.6	43.02	8.451		
5,700.0	5,604.2	5,693.9	5,649.6	26.1	23.2	158.93	-346.3	484.4	371.1	327.3	43.81	8.470		
5,800.0	5,701.9	5,793.7	5,748.3	26.7	23.6	158.91	-354.3	496.4	378.5	333.9	44.59	8.489		
5,900.0	5,799.7	5,893.4	5,846.9	27.2	24.0	158.89	-362.4	508.3	386.0	340.6	45.37	8.507		
6,000.0	5,897.5	5,993.1	5,945.6	27.7	24.5	158.87	-370.4	520.3	393.5	347.3	46.16	8.525		
6,100.0	5,995.2	6,092.8	6,044.3	28.2	24.9	158.84	-378.5	532.3	400.9	354.0	46.94	8.541		
6,200.0	6,093.0	6,192.5	6,142.9	28.7	25.3	158.82	-386.6	544.2	408.4	360.7	47.73	8.557		
6,300.0	6,190.8	6,292.3	6,241.6	29.2	25.8	158.80	-394.6	556.2	415.9	367.4	48.51	8.573		
6,400.0	6,288.5	6,392.0	6,340.3	29.7	26.2	158.79	-402.7	568.2	423.4	374.1	49.30	8.587		
6,500.0	6,386.3	6,491.7	6,439.0	30.2	26.6	158.77	-410.7	580.1	430.8	380.7	50.09	8.601		
6,600.0	6,484.1	6,591.4	6,537.6	30.7	27.0	158.75	-418.8	592.1	438.3	387.4	50.88	8.615		
6,700.0	6,581.8	6,691.1	6,636.3	31.2	27.5	158.73	-426.8	604.1	445.8	394.1	51.66	8.628		
6,800.0	6,679.6	6,790.9	6,735.0	31.7	27.9	158.72	-434.9	616.0	453.2	400.8	52.45	8.641		
6,900.0	6,777.4	6,890.6	6,833.6	32.2	28.3	158.70	-442.9	628.0	460.7	407.5	53.24	8.653		
7,000.0	6,875.2	6,990.3	6,932.3	32.7	28.8	172.57	-451.0	640.0	468.2	414.1	54.04	8.663		
7,100.0	6,973.1	7,088.9	7,029.9	33.3	29.2	-142.91	-459.0	651.8	475.2	420.2	55.01	8.638		
7,200.0	7,068.6	7,184.9	7,125.1	33.6	29.6	-122.79	-468.0	663.0	482.8	426.5	56.27	8.579		
7,300.0	7,158.8	7,284.6	7,223.0	34.0	30.0	-115.14	-446.1	673.8	491.5	434.0	57.52	8.545		
7,400.0	7,241.0	7,389.2	7,321.4	34.3	30.5	-112.12	-412.5	683.7	501.2	442.8	58.43	8.577		
7,500.0	7,312.6	7,499.3	7,416.7	34.5	30.8	-111.07	-358.4	692.3	511.3	452.4	58.95	8.674		
7,600.0	7,371.6	7,615.2	7,504.1	34.7	31.1	-110.95	-282.9	698.9	521.2	462.1	59.11	8.818		
7,700.0	7,416.1	7,737.0	7,577.9	34.7	31.2	-111.23	-186.4	702.8	530.2	471.1	59.05	8.979		
7,800.0	7,444.7	7,864.2	7,631.6	34.7	31.2	-111.65	-71.3	703.5	537.6	478.6	59.00	9.112		
7,900.0	7,456.7	7,995.7	7,659.2	34.6	31.1	-112.02	57.0	700.6	542.7	483.5	59.25	9.159		
8,000.0	7,457.0	8,110.0	7,662.0	34.6	31.0	-112.10	171.0	695.4	545.1	485.2	59.88	9.102		
8,100.0	7,457.0	8,210.0	7,662.0	34.6	31.0	-112.02	270.9	690.5	546.9	486.2	60.70	9.011		
8,200.0	7,457.0	8,309.9	7,662.0	34.8	31.1	-111.94	370.7	685.7	548.8	487.1	61.68	8.897		
8,300.0	7,457.0	8,409.9	7,662.0	35.0	31.4	-111.86	470.6	680.8	550.6	487.8	62.83	8.764		
8,400.0	7,457.0	8,509.9	7,662.0	35.3	32.0	-111.78	570.4	676.0	552.5	488.3	64.13	8.614		
8,500.0	7,457.0	8,609.9	7,662.0	35.8	32.7	-111.71	670.3	671.1	554.3	488.7	65.59	8.452		
8,600.0	7,457.0	8,709.9	7,662.0	36.3	33.6	-111.63	770.2	666.3	556.2	489.0	67.17	8.280		
8,700.0	7,457.0	8,809.8	7,662.0	37.0	34.5	-111.56	870.0	661.4	558.0	489.2	68.89	8.100		
8,800.0	7,457.0	8,909.8	7,662.0	37.9	35.5	-111.48	969.9	656.6	559.9	489.2	70.73	7.916		
8,900.0	7,457.0	9,009.8	7,662.0	38.8	36.5	-111.41	1,069.7	651.7	561.8	489.1	72.67	7.730		
9,000.0	7,457.0	9,109.8	7,662.0	39.7	37.6	-111.33	1,169.6	646.9	563.6	488.9	74.72	7.543		
9,100.0	7,457.0	9,209.8	7,662.0	40.8	38.7	-111.26	1,269.5	642.0	565.5	488.6	76.87	7.357		
9,200.0	7,457.0	9,309.7	7,662.0	41.9	39.9	-111.19	1,369.3	637.2	567.4	488.3	79.10	7.173		
9,300.0	7,457.0	9,409.7	7,662.0	43.0	41.2	-111.11	1,469.2	632.3	569.2	487.8	81.41	6.992		
9,400.0	7,457.0	9,509.7	7,662.0	44.2	42.4	-111.04	1,569.1	627.5	571.1	487.3	83.79	6.816		
9,500.0	7,457.0	9,609.7	7,662.0	45.4	43.7	-110.97	1,668.9	622.6	573.0	486.7	86.24	6.644		
9,600.0	7,457.0	9,709.7	7,662.0	46.7	45.1	-110.90	1,768.8	617.8	574.8	486.1	88.76	6.477		
9,700.0	7,457.0	9,809.6	7,662.0	48.0	46.4	-110.83	1,868.6	612.9	576.7	485.4	91.33	6.315		
9,800.0	7,457.0	9,909.6	7,662.0	49.3	47.8	-110.76	1,968.5	608.1	578.6	484.6	93.95	6.158		
9,900.0	7,457.0	10,009.6	7,662.0	50.7	49.2	-110.69	2,068.4	603.2	580.4	483.8	96.63	6.007		
10,000.0	7,457.0	10,109.6	7,662.0	52.1	50.7	-110.62	2,168.2	598.4	582.3	483.0	99.35	5.861		
10,100.0	7,457.0	10,209.6	7,662.0	53.5	52.1	-110.55	2,268.1	593.5	584.2	482.1	102.11	5.721		
10,200.0	7,457.0	10,309.5	7,662.0	54.9	53.6	-110.48	2,368.0	588.7	586.1	481.2	104.91	5.586		
10,300.0	7,457.0	10,409.5	7,662.0	56.4	55.1	-110.41	2,467.8	583.8	587.9	480.2	107.74	5.457		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,457.0	10,509.5	7,662.0	57.8	56.6	-110.34	2,567.7	579.0	589.8	479.2	110.61	5.332		
10,500.0	7,457.0	10,609.5	7,662.0	59.3	58.1	-110.28	2,667.5	574.1	591.7	478.2	113.51	5.213		
10,600.0	7,457.0	10,709.5	7,662.0	60.8	59.7	-110.21	2,767.4	569.3	593.6	477.1	116.44	5.098		
10,700.0	7,457.0	10,809.4	7,662.0	62.3	61.2	-110.14	2,867.3	564.4	595.4	476.0	119.40	4.987		
10,800.0	7,457.0	10,909.4	7,662.0	63.9	62.8	-110.08	2,967.1	559.6	597.3	474.9	122.38	4.881		
10,900.0	7,457.0	11,009.4	7,662.0	65.4	64.3	-110.01	3,067.0	554.7	599.2	473.8	125.38	4.779		
11,000.0	7,457.0	11,110.1	7,662.0	66.9	65.9	-109.94	3,167.6	549.8	601.1	472.6	128.44	4.680		
11,100.0	7,457.0	11,234.7	7,662.0	68.5	67.9	-109.96	3,292.1	546.6	600.8	468.2	132.54	4.533		
11,200.0	7,457.0	11,342.8	7,662.0	70.1	69.7	-110.09	3,400.2	547.5	597.3	461.5	135.83	4.398		
11,300.0	7,457.0	11,442.7	7,662.0	71.7	71.3	-110.22	3,500.1	548.6	593.6	454.8	138.80	4.277		
11,400.0	7,457.0	11,542.6	7,662.0	73.2	72.9	-110.35	3,600.0	549.6	590.0	448.2	141.78	4.161		
11,500.0	7,457.0	11,642.5	7,662.0	74.8	74.5	-110.48	3,699.9	550.7	586.3	441.5	144.77	4.050		
11,600.0	7,457.0	11,742.5	7,662.0	76.4	76.1	-110.62	3,799.9	551.8	582.6	434.9	147.77	3.943		
11,700.0	7,457.0	11,842.4	7,662.0	78.1	77.7	-110.75	3,899.8	552.9	579.0	428.2	150.77	3.840		
11,800.0	7,457.0	11,942.3	7,662.0	79.7	79.3	-110.89	3,999.7	553.9	575.3	421.5	153.78	3.741		
11,900.0	7,457.0	12,042.2	7,662.0	81.3	81.0	-111.03	4,099.6	555.0	571.6	414.8	156.79	3.646		
12,000.0	7,457.0	12,142.2	7,662.0	82.9	82.6	-111.17	4,199.5	556.1	568.0	408.2	159.80	3.554		
12,100.0	7,457.0	12,242.1	7,662.0	84.6	84.3	-111.32	4,299.4	557.1	564.3	401.5	162.82	3.466		
12,200.0	7,457.0	12,342.0	7,662.0	86.2	85.9	-111.46	4,399.4	558.2	560.7	394.8	165.84	3.381		
12,300.0	7,457.0	12,441.9	7,662.0	87.9	87.6	-111.61	4,499.3	559.3	557.0	388.1	168.86	3.299		
12,400.0	7,457.0	12,541.9	7,662.0	89.5	89.2	-111.76	4,599.2	560.3	553.4	381.5	171.88	3.219		
12,500.0	7,457.0	12,641.8	7,662.0	91.2	90.9	-111.91	4,699.1	561.4	549.7	374.8	174.91	3.143		
12,600.0	7,457.0	12,741.7	7,662.0	92.8	92.5	-112.06	4,799.0	562.5	546.1	368.2	177.93	3.069		
12,700.0	7,457.0	12,841.6	7,662.0	94.5	94.2	-112.22	4,899.0	563.5	542.5	361.5	180.95	2.998		
12,800.0	7,457.0	12,941.5	7,662.0	96.2	95.9	-112.38	4,998.9	564.6	538.8	354.9	183.96	2.929		
12,900.0	7,457.0	13,041.5	7,662.0	97.8	97.6	-112.54	5,098.8	565.7	535.2	348.2	186.98	2.862		
13,000.0	7,457.0	13,141.4	7,662.0	99.5	99.2	-112.70	5,198.7	566.8	531.6	341.6	189.99	2.798		
13,100.0	7,457.0	13,241.3	7,662.0	101.2	100.9	-112.86	5,298.6	567.8	528.0	335.0	193.00	2.736		
13,200.0	7,457.0	13,341.2	7,662.0	102.9	102.6	-113.03	5,398.5	568.9	524.4	328.3	196.01	2.675		
13,300.0	7,457.0	13,441.2	7,662.0	104.6	104.3	-113.20	5,498.5	570.0	520.7	321.7	199.01	2.617		
13,400.0	7,457.0	13,541.1	7,662.0	106.2	106.0	-113.37	5,598.4	571.0	517.1	315.1	202.00	2.560		
13,500.0	7,457.0	13,641.0	7,662.0	107.9	107.7	-113.54	5,698.3	572.1	513.5	308.6	204.99	2.505		
13,600.0	7,457.0	13,740.9	7,662.0	109.6	109.3	-113.72	5,798.2	573.2	510.0	302.0	207.97	2.452		
13,700.0	7,457.0	13,840.9	7,662.0	111.3	111.0	-113.90	5,898.1	574.2	506.4	295.4	210.95	2.400		
13,800.0	7,457.0	13,940.8	7,662.0	113.0	112.7	-114.07	5,998.0	575.3	502.8	288.9	213.92	2.351		
13,900.0	7,457.0	14,040.7	7,662.0	114.7	114.4	-114.18	6,098.0	576.4	500.5	283.6	216.95	2.307		
14,000.0	7,457.0	14,140.7	7,662.0	116.4	116.1	-114.30	6,198.0	577.5	498.3	278.3	219.98	2.265		
14,100.0	7,457.0	14,240.7	7,662.0	118.1	117.8	-114.41	6,297.9	578.5	496.1	273.1	223.01	2.225		
14,200.0	7,457.0	14,340.7	7,662.0	119.8	119.5	-114.53	6,397.9	579.6	493.9	267.8	226.04	2.185		
14,300.0	7,457.0	14,440.6	7,662.0	121.5	121.2	-114.65	6,497.9	580.7	491.7	262.6	229.06	2.146		
14,400.0	7,457.0	14,540.6	7,662.0	123.2	122.9	-114.77	6,597.8	581.7	489.5	257.4	232.08	2.109		
14,500.0	7,457.0	14,640.6	7,662.0	124.9	124.7	-114.89	6,697.8	582.8	487.3	252.2	235.10	2.073		
14,600.0	7,457.0	14,740.5	7,662.0	126.7	126.4	-115.01	6,797.8	583.9	485.1	246.9	238.11	2.037		
14,700.0	7,457.0	14,840.5	7,662.0	128.4	128.1	-115.13	6,897.7	584.9	482.9	241.7	241.12	2.003		
14,800.0	7,457.0	14,940.5	7,662.0	130.1	129.8	-115.25	6,997.7	586.0	480.7	236.5	244.12	1.969		
14,900.0	7,457.0	15,040.4	7,662.0	131.8	131.5	-115.38	7,097.7	587.1	478.5	231.3	247.12	1.936		
15,000.0	7,457.0	15,140.4	7,662.0	133.5	133.2	-115.50	7,197.6	588.2	476.3	226.2	250.11	1.904		
15,100.0	7,457.0	15,240.4	7,662.0	135.2	134.9	-115.63	7,297.6	589.2	474.1	221.0	253.10	1.873		
15,200.0	7,457.0	15,340.4	7,662.0	136.9	136.6	-115.76	7,397.5	590.3	471.9	215.8	256.08	1.843		
15,300.0	7,457.0	15,440.3	7,662.0	138.7	138.4	-115.88	7,497.5	591.4	469.7	210.6	259.05	1.813		
15,400.0	7,457.0	15,540.3	7,662.0	140.4	140.1	-116.01	7,597.5	592.4	467.5	205.5	262.02	1.784		
15,500.0	7,457.0	15,640.3	7,662.0	142.1	141.8	-116.15	7,697.4	593.5	465.3	200.3	264.99	1.756		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,457.0	15,740.2	7,662.0	143.8	143.5	-116.28	7,797.4	594.6	463.2	195.2	267.95	1.729		
15,700.0	7,457.0	15,840.2	7,662.0	145.6	145.2	-116.41	7,897.4	595.6	461.0	190.1	270.90	1.702		
15,800.0	7,457.0	15,940.2	7,662.0	147.3	147.0	-116.55	7,997.3	596.7	458.8	185.0	273.84	1.675		
15,900.0	7,457.0	16,040.2	7,662.0	149.0	148.7	-116.68	8,097.3	597.8	456.6	179.9	276.77	1.650		
16,000.0	7,457.0	16,140.1	7,662.0	150.7	150.4	-116.82	8,197.3	598.9	454.5	174.8	279.70	1.625		
16,100.0	7,457.0	16,240.1	7,662.0	152.5	152.1	-116.96	8,297.2	599.9	452.3	169.7	282.62	1.600		
16,200.0	7,457.0	16,340.1	7,662.0	154.2	153.9	-117.10	8,397.2	601.0	450.1	164.6	285.54	1.576		
16,300.0	7,457.0	16,440.0	7,662.0	155.9	155.6	-117.24	8,497.2	602.1	448.0	159.5	288.44	1.553		
16,400.0	7,457.0	16,540.0	7,662.0	157.6	157.3	-117.38	8,597.1	603.1	445.8	154.5	291.34	1.530		
16,500.0	7,457.0	16,640.0	7,662.0	159.4	159.0	-117.53	8,697.1	604.2	443.7	149.4	294.23	1.508		
16,600.0	7,457.0	16,739.9	7,662.0	161.1	160.8	-117.67	8,797.1	605.3	441.5	144.4	297.10	1.486 Level 3		
16,700.0	7,457.0	16,839.9	7,662.0	162.8	162.5	-117.82	8,897.0	606.3	439.3	139.4	299.97	1.465 Level 3		
16,800.0	7,457.0	16,939.9	7,662.0	164.6	164.2	-117.97	8,997.0	607.4	437.2	134.4	302.83	1.444 Level 3		
16,900.0	7,457.0	17,039.9	7,662.0	166.3	166.0	-118.12	9,096.9	608.5	435.1	129.4	305.68	1.423 Level 3		
17,000.0	7,457.0	17,139.8	7,662.0	168.0	167.7	-118.27	9,196.9	609.5	432.9	124.4	308.52	1.403 Level 3		
17,100.0	7,457.0	17,239.8	7,662.0	169.8	169.4	-118.42	9,296.9	610.6	430.8	119.4	311.35	1.384 Level 3		
17,200.0	7,457.0	17,339.8	7,662.0	171.5	171.2	-118.58	9,396.8	611.7	428.6	114.5	314.17	1.364 Level 3		
17,300.0	7,457.0	17,439.7	7,662.0	173.3	172.9	-118.73	9,496.8	612.8	426.5	109.5	316.98	1.346 Level 3		
17,400.0	7,457.0	17,539.7	7,662.0	175.0	174.6	-118.89	9,596.8	613.8	424.4	104.6	319.78	1.327 Level 3		
17,500.0	7,457.0	17,639.7	7,662.0	176.7	176.4	-119.05	9,696.7	614.9	422.3	99.7	322.57	1.309 Level 3		
17,600.0	7,457.0	17,739.7	7,662.0	178.5	178.1	-119.21	9,796.7	616.0	420.1	94.8	325.34	1.291 Level 3		
17,700.0	7,457.0	17,839.6	7,662.0	180.2	179.8	-119.37	9,896.7	617.0	418.0	89.9	328.10	1.274 Level 3		
17,720.0	7,457.0	17,850.8	7,662.0	180.6	180.0	-119.39	9,907.8	617.2	417.7	89.5	328.16	1.273 Level 3, SF		
17,721.0	7,457.0	17,850.8	7,662.0	180.6	180.0	-119.39	9,907.8	617.2	417.7	89.6	328.12	1.273 Level 3		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	89.63	0.1	15.0	15.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.63	0.1	15.0	15.0	14.8	0.28	54.204		
200.0	200.0	200.0	200.0	1.0	0.0	89.63	0.1	15.0	15.0	14.2	0.80	18.822		
300.0	300.0	300.0	300.0	1.5	0.0	89.63	0.1	15.0	15.0	13.8	1.23	12.266		
400.0	400.0	400.0	400.0	1.9	0.0	89.63	0.1	15.0	15.0	13.4	1.62	9.281		
500.0	500.0	500.0	500.0	2.3	0.0	89.63	0.1	15.0	15.0	13.0	2.00	7.515		
600.0	600.0	600.0	600.0	2.7	0.0	89.63	0.1	15.0	15.0	12.7	2.37	6.331		
700.0	700.0	700.0	700.0	3.1	0.0	89.63	0.1	15.0	15.0	12.3	2.74	5.478		
800.0	800.0	800.0	800.0	3.5	0.0	89.63	0.1	15.0	15.0	11.9	3.11	4.832		
900.0	900.0	900.0	900.0	3.9	0.0	89.63	0.1	15.0	15.0	11.6	3.48	4.324 CC, ES		
1,000.0	1,000.0	999.5	999.4	4.2	0.0	91.66	-0.5	16.7	16.7	12.9	3.81	4.377		
1,100.0	1,100.0	1,098.8	1,098.6	4.6	0.0	-18.19	-2.2	21.5	20.0	15.7	4.27	4.683		
1,200.0	1,199.8	1,198.0	1,197.5	5.0	0.0	-16.63	-5.1	29.6	23.4	18.4	4.99	4.695		
1,300.0	1,299.5	1,297.1	1,295.8	5.7	0.0	-15.86	-9.1	40.9	26.9	21.2	5.65	4.754		
1,400.0	1,398.7	1,396.1	1,393.6	6.5	0.0	-15.61	-14.3	55.4	30.3	24.0	6.26	4.844		
1,500.0	1,497.5	1,494.9	1,490.7	7.1	0.0	-15.72	-20.6	73.0	33.8	26.9	6.82	4.952		
1,600.0	1,595.6	1,593.8	1,587.0	7.8	0.0	-16.09	-28.0	93.8	37.2	29.8	7.38	5.044		
1,700.0	1,693.4	1,693.7	1,684.1	8.2	0.0	-16.68	-36.0	116.2	40.3	32.6	7.74	5.204		
1,800.0	1,791.2	1,793.7	1,781.1	8.5	0.0	-17.20	-43.9	138.6	43.4	35.4	8.02	5.414		
1,900.0	1,888.9	1,893.6	1,878.2	8.8	0.0	-17.65	-51.9	161.0	46.5	38.2	8.30	5.601		
2,000.0	1,986.7	1,993.6	1,975.3	9.1	0.0	-18.04	-59.9	183.5	49.6	41.0	8.60	5.769		
2,100.0	2,084.5	2,093.5	2,072.4	9.4	0.0	-18.38	-67.9	205.9	52.7	43.8	8.90	5.919		
2,200.0	2,182.2	2,193.5	2,169.4	9.7	0.0	-18.69	-75.9	228.3	55.8	46.6	9.22	6.054		
2,300.0	2,280.0	2,293.4	2,266.5	10.1	0.0	-18.96	-83.9	250.7	58.9	49.4	9.54	6.175		
2,400.0	2,377.8	2,393.4	2,363.6	10.4	0.0	-19.21	-91.9	273.1	62.0	52.1	9.87	6.284		
2,500.0	2,475.5	2,493.3	2,460.7	10.8	0.0	-19.43	-99.9	295.6	65.1	54.9	10.21	6.381		
2,600.0	2,573.3	2,593.3	2,557.7	11.1	0.0	-19.63	-107.9	318.0	68.2	57.7	10.55	6.469		
2,700.0	2,671.1	2,693.2	2,654.8	11.5	0.0	-19.82	-115.9	340.4	71.3	60.4	10.89	6.549		
2,800.0	2,768.9	2,793.2	2,751.9	11.9	0.0	-19.99	-123.9	362.8	74.4	63.2	11.24	6.621		
2,900.0	2,866.6	2,893.1	2,849.0	12.4	0.0	-20.14	-131.9	385.2	77.6	66.0	11.60	6.686		
3,000.0	2,964.4	2,993.1	2,946.1	12.8	0.0	-20.29	-139.8	407.7	80.7	68.7	11.96	6.745		
3,100.0	3,062.2	3,093.0	3,043.1	13.3	0.0	-20.42	-147.8	430.1	83.8	71.5	12.32	6.799		
3,200.0	3,159.9	3,193.0	3,140.2	13.7	0.0	-20.54	-155.8	452.5	86.9	74.2	12.69	6.848		
3,300.0	3,257.7	3,292.9	3,237.3	14.2	0.0	-20.66	-163.8	474.9	90.0	76.9	13.06	6.893		
3,400.0	3,355.5	3,392.9	3,334.4	14.7	0.0	-20.77	-171.8	497.4	93.1	79.7	13.43	6.934		
3,500.0	3,453.2	3,492.8	3,431.4	15.2	0.0	-20.87	-179.8	519.8	96.2	82.4	13.80	6.972		
3,600.0	3,551.0	3,592.8	3,528.5	15.6	0.0	-20.96	-187.8	542.2	99.3	85.2	14.18	7.006		
3,700.0	3,648.8	3,692.7	3,625.6	16.1	0.0	-21.05	-195.8	564.6	102.5	87.9	14.56	7.038		
3,800.0	3,746.5	3,792.7	3,722.7	16.6	0.0	-21.13	-203.8	587.0	105.6	90.6	14.94	7.067		
3,900.0	3,844.3	3,892.6	3,819.7	17.1	0.0	-21.21	-211.8	609.5	108.7	93.4	15.32	7.094		
4,000.0	3,942.1	3,992.6	3,916.8	17.6	0.0	-21.29	-219.8	631.9	111.8	96.1	15.70	7.119		
4,100.0	4,039.9	4,092.5	4,013.9	18.1	0.0	-21.36	-227.8	654.3	114.9	98.8	16.09	7.142		
4,200.0	4,137.6	4,192.5	4,111.0	18.6	0.0	-21.42	-235.8	676.7	118.0	101.5	16.48	7.163		
4,300.0	4,235.4	4,292.4	4,208.0	19.1	0.0	-21.49	-243.7	699.2	121.1	104.3	16.86	7.183		
4,400.0	4,333.2	4,392.4	4,305.1	19.6	0.0	-21.55	-251.7	721.6	124.3	107.0	17.25	7.201		
4,500.0	4,430.9	4,492.3	4,402.2	20.1	0.0	-21.60	-259.7	744.0	127.4	109.7	17.64	7.218		
4,600.0	4,528.7	4,592.3	4,499.3	20.6	0.0	-21.66	-267.7	766.4	130.5	112.4	18.04	7.234		
4,700.0	4,626.5	4,692.2	4,596.3	21.1	0.0	-21.71	-275.7	788.8	133.6	115.2	18.43	7.249		
4,800.0	4,724.2	4,792.2	4,693.4	21.6	0.0	-21.76	-283.7	811.3	136.7	117.9	18.82	7.263		
4,900.0	4,822.0	4,892.1	4,790.5	22.1	0.0	-21.80	-291.7	833.7	139.8	120.6	19.22	7.276		
5,000.0	4,919.8	4,992.1	4,887.6	22.6	0.0	-21.85	-299.7	856.1	142.9	123.3	19.61	7.288		
5,100.0	5,017.5	5,092.1	4,984.6	23.1	0.0	-21.89	-307.7	878.5	146.1	126.0	20.01	7.300		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,115.3	5,192.0	5,081.7	23.6	0.0	-21.93	-315.7	900.9	149.2	128.8	20.40	7.311		
5,300.0	5,213.1	5,292.0	5,178.8	24.1	0.0	-21.97	-323.7	923.4	152.3	131.5	20.80	7.321		
5,400.0	5,310.8	5,391.9	5,275.9	24.6	0.0	-22.01	-331.7	945.8	155.4	134.2	21.20	7.330		
5,500.0	5,408.6	5,491.9	5,372.9	25.1	0.0	-22.05	-339.6	968.2	158.5	136.9	21.60	7.339		
5,600.0	5,506.4	5,591.8	5,470.0	25.6	0.0	-22.08	-347.6	990.6	161.6	139.6	22.00	7.348		
5,700.0	5,604.2	5,691.8	5,567.1	26.1	0.0	-22.12	-355.6	1,013.1	164.7	142.4	22.40	7.356		
5,800.0	5,701.9	5,791.7	5,664.2	26.7	0.0	-22.15	-363.6	1,035.5	167.9	145.1	22.80	7.363		
5,900.0	5,799.7	5,891.7	5,761.2	27.2	0.0	-22.18	-371.6	1,057.9	171.0	147.8	23.20	7.370		
6,000.0	5,897.5	5,991.6	5,858.3	27.7	0.0	-22.21	-379.6	1,080.3	174.1	150.5	23.60	7.377		
6,100.0	5,995.2	6,091.6	5,955.4	28.2	0.0	-22.24	-387.6	1,102.7	177.2	153.2	24.00	7.383		
6,200.0	6,093.0	6,191.5	6,052.5	28.7	0.0	-22.27	-395.6	1,125.2	180.3	155.9	24.40	7.389		
6,300.0	6,190.8	6,291.5	6,149.5	29.2	0.0	-22.30	-403.6	1,147.6	183.4	158.6	24.81	7.395		
6,400.0	6,288.5	6,391.4	6,246.6	29.7	0.0	-22.32	-411.6	1,170.0	186.6	161.3	25.21	7.400		
6,500.0	6,386.3	6,491.4	6,343.7	30.2	0.0	-22.35	-419.6	1,192.4	189.7	164.1	25.61	7.405		
6,600.0	6,484.1	6,591.3	6,440.8	30.7	0.0	-22.37	-427.6	1,214.9	192.8	166.8	26.02	7.410		
6,700.0	6,581.8	6,691.3	6,537.9	31.2	0.0	-22.40	-435.5	1,237.3	195.9	169.5	26.42	7.415		
6,800.0	6,679.6	6,791.2	6,634.9	31.7	0.0	-22.42	-443.5	1,259.7	199.0	172.2	26.82	7.419		
6,900.0	6,777.4	6,891.2	6,732.0	32.2	0.0	-22.44	-451.5	1,282.1	202.1	174.9	27.23	7.424		
7,000.0	6,875.2	6,991.0	6,829.1	32.7	0.0	-9.40	-459.6	1,304.5	205.3	177.6	27.67	7.419		
7,100.0	6,973.1	7,090.1	6,925.0	33.3	0.0	34.42	-446.0	1,326.5	208.8	180.6	28.14	7.419		
7,200.0	7,068.6	7,188.3	7,017.0	33.6	0.0	55.05	-419.0	1,347.5	212.6	183.9	28.73	7.401		
7,300.0	7,158.8	7,285.9	7,102.5	34.0	0.0	63.32	-376.6	1,366.8	216.7	187.5	29.14	7.435		
7,400.0	7,241.0	7,382.7	7,179.4	34.3	0.0	67.03	-320.4	1,384.1	220.8	191.4	29.40	7.512		
7,500.0	7,312.6	7,479.1	7,245.6	34.5	0.0	68.82	-252.2	1,398.7	224.9	195.3	29.55	7.608		
7,600.0	7,371.6	7,575.0	7,299.6	34.7	0.0	69.70	-173.9	1,410.5	228.6	199.0	29.68	7.703		
7,700.0	7,416.1	7,670.6	7,340.0	34.7	0.0	70.12	-87.9	1,419.1	232.1	202.2	29.83	7.779		
7,800.0	7,444.7	7,766.0	7,365.9	34.7	0.0	70.30	3.7	1,424.3	235.0	205.0	30.05	7.820		
7,900.0	7,456.7	7,861.3	7,376.7	34.6	0.0	70.34	98.3	1,426.0	237.4	207.0	30.36	7.818		
8,000.0	7,457.0	7,960.4	7,377.0	34.6	0.0	70.46	197.4	1,425.3	239.3	208.6	30.71	7.792		
8,100.0	7,457.0	8,060.4	7,377.0	34.6	0.0	70.62	297.3	1,424.5	241.2	210.0	31.14	7.745		
8,200.0	7,457.0	8,160.3	7,377.0	34.8	0.0	70.78	397.3	1,423.6	243.1	211.4	31.66	7.678		
8,300.0	7,457.0	8,260.3	7,377.0	35.0	0.0	70.94	497.3	1,422.8	245.0	212.7	32.26	7.594		
8,400.0	7,457.0	8,360.3	7,377.0	35.3	0.0	71.09	597.3	1,422.0	246.9	214.0	32.94	7.496		
8,500.0	7,457.0	8,460.3	7,377.0	35.8	0.0	71.24	697.2	1,421.2	248.8	215.2	33.69	7.387		
8,600.0	7,457.0	8,560.3	7,377.0	36.3	0.0	71.39	797.2	1,420.3	250.8	216.3	34.51	7.267		
8,700.0	7,457.0	8,660.2	7,377.0	37.0	0.0	71.54	897.2	1,419.5	252.7	217.3	35.39	7.141		
8,800.0	7,457.0	8,760.2	7,377.0	37.9	0.0	71.68	997.2	1,418.7	254.6	218.3	36.33	7.009		
8,900.0	7,457.0	8,860.2	7,377.0	38.8	0.0	71.83	1,097.1	1,417.8	256.5	219.2	37.32	6.874		
9,000.0	7,457.0	8,960.2	7,377.0	39.7	0.0	71.97	1,197.1	1,417.0	258.5	220.1	38.37	6.737		
9,100.0	7,457.0	9,060.2	7,377.0	40.8	0.0	72.10	1,297.1	1,416.2	260.4	220.9	39.46	6.599		
9,200.0	7,457.0	9,160.1	7,377.0	41.9	0.0	72.24	1,397.1	1,415.4	262.3	221.7	40.59	6.462		
9,300.0	7,457.0	9,260.1	7,377.0	43.0	0.0	72.37	1,497.0	1,414.5	264.2	222.5	41.77	6.326		
9,400.0	7,457.0	9,360.1	7,377.0	44.2	0.0	72.51	1,597.0	1,413.7	266.2	223.2	42.98	6.192		
9,500.0	7,457.0	9,460.1	7,377.0	45.4	0.0	72.64	1,697.0	1,412.9	268.1	223.9	44.23	6.061		
9,600.0	7,457.0	9,560.1	7,377.0	46.7	0.0	72.76	1,797.0	1,412.1	270.0	224.5	45.51	5.933		
9,700.0	7,457.0	9,660.0	7,377.0	48.0	0.0	72.89	1,896.9	1,411.2	272.0	225.1	46.82	5.809		
9,800.0	7,457.0	9,760.0	7,377.0	49.3	0.0	73.01	1,996.9	1,410.4	273.9	225.8	48.15	5.688		
9,900.0	7,457.0	9,860.0	7,377.0	50.7	0.0	73.14	2,096.9	1,409.6	275.8	226.3	49.51	5.571		
10,000.0	7,457.0	9,960.0	7,377.0	52.1	0.0	73.26	2,196.9	1,408.7	277.8	226.9	50.89	5.458		
10,100.0	7,457.0	10,059.9	7,377.0	53.5	0.0	73.38	2,296.8	1,407.9	279.7	227.4	52.30	5.349		
10,200.0	7,457.0	10,159.9	7,377.0	54.9	0.0	73.50	2,396.8	1,407.1	281.7	227.9	53.72	5.243		
10,300.0	7,457.0	10,259.9	7,377.0	56.4	0.0	73.61	2,496.8	1,406.3	283.6	228.4	55.16	5.141		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,457.0	10,359.9	7,377.0	57.8	0.0	73.73	2,596.8	1,405.4	285.5	228.9	56.62	5.043		
10,500.0	7,457.0	10,459.9	7,377.0	59.3	0.0	73.84	2,696.8	1,404.6	287.5	229.4	58.10	4.949		
10,600.0	7,457.0	10,559.8	7,377.0	60.8	0.0	73.95	2,796.7	1,403.8	289.4	229.9	59.59	4.858		
10,700.0	7,457.0	10,659.8	7,377.0	62.3	0.0	74.06	2,896.7	1,403.0	291.4	230.3	61.09	4.770		
10,800.0	7,457.0	10,759.8	7,377.0	63.9	0.0	74.17	2,996.7	1,402.1	293.3	230.7	62.60	4.686		
10,900.0	7,457.0	10,859.8	7,377.0	65.4	0.0	74.28	3,096.7	1,401.3	295.3	231.1	64.13	4.604		
11,000.0	7,457.0	10,959.8	7,377.0	66.9	0.0	74.38	3,196.6	1,400.5	297.2	231.6	65.67	4.526		
11,100.0	7,457.0	11,059.7	7,377.0	68.5	0.0	74.49	3,296.6	1,399.7	299.2	232.0	67.22	4.451		
11,200.0	7,457.0	11,159.7	7,377.0	70.1	0.0	74.59	3,396.6	1,398.8	301.1	232.4	68.78	4.378		
11,300.0	7,457.0	11,259.7	7,377.0	71.7	0.0	74.69	3,496.6	1,398.0	303.1	232.7	70.34	4.309		
11,400.0	7,457.0	11,359.7	7,377.0	73.2	0.0	74.79	3,596.5	1,397.2	305.0	233.1	71.92	4.241		
11,500.0	7,457.0	11,459.7	7,377.0	74.8	0.0	74.89	3,696.5	1,396.3	307.0	233.5	73.51	4.176		
11,600.0	7,457.0	11,559.6	7,377.0	76.4	0.0	74.99	3,796.5	1,395.5	308.9	233.9	75.10	4.114		
11,700.0	7,457.0	11,659.6	7,377.0	78.1	0.0	75.09	3,896.5	1,394.7	310.9	234.2	76.70	4.054		
11,800.0	7,457.0	11,759.6	7,377.0	79.7	0.0	75.18	3,996.4	1,393.9	312.9	234.6	78.30	3.996		
11,900.0	7,457.0	11,859.6	7,377.0	81.3	0.0	75.28	4,096.4	1,393.0	314.8	234.9	79.92	3.939		
12,000.0	7,457.0	11,959.6	7,377.0	82.9	0.0	75.37	4,196.4	1,392.2	316.8	235.2	81.53	3.885		
12,100.0	7,457.0	12,059.5	7,377.0	84.6	0.0	75.46	4,296.4	1,391.4	318.7	235.6	83.16	3.833		
12,200.0	7,457.0	12,159.5	7,377.0	86.2	0.0	75.55	4,396.3	1,390.6	320.7	235.9	84.79	3.782		
12,300.0	7,457.0	12,259.5	7,377.0	87.9	0.0	75.64	4,496.3	1,389.7	322.7	236.2	86.42	3.733		
12,400.0	7,457.0	12,359.5	7,377.0	89.5	0.0	75.73	4,596.3	1,388.9	324.6	236.6	88.06	3.686		
12,500.0	7,457.0	12,459.5	7,377.0	91.2	0.0	75.82	4,696.3	1,388.1	326.6	236.9	89.71	3.641		
12,600.0	7,457.0	12,559.4	7,377.0	92.8	0.0	75.90	4,796.3	1,387.3	328.6	237.2	91.36	3.596		
12,700.0	7,457.0	12,659.4	7,377.0	94.5	0.0	75.99	4,896.2	1,386.4	330.5	237.5	93.01	3.553		
12,800.0	7,457.0	12,759.4	7,377.0	96.2	0.0	76.07	4,996.2	1,385.6	332.5	237.8	94.67	3.512		
12,900.0	7,457.0	12,859.4	7,377.0	97.8	0.0	76.16	5,096.2	1,384.8	334.4	238.1	96.33	3.472		
13,000.0	7,457.0	12,959.4	7,377.0	99.5	0.0	76.24	5,196.2	1,383.9	336.4	238.4	98.00	3.433		
13,100.0	7,457.0	13,059.3	7,377.0	101.2	0.0	76.32	5,296.1	1,383.1	338.4	238.7	99.66	3.395		
13,200.0	7,457.0	13,159.3	7,377.0	102.9	0.0	76.40	5,396.1	1,382.3	340.4	239.0	101.34	3.359		
13,300.0	7,457.0	13,259.3	7,377.0	104.6	0.0	76.48	5,496.1	1,381.5	342.3	239.3	103.01	3.323		
13,400.0	7,457.0	13,359.3	7,377.0	106.2	0.0	76.56	5,596.1	1,380.6	344.3	239.6	104.69	3.289		
13,500.0	7,457.0	13,459.3	7,377.0	107.9	0.0	76.64	5,696.0	1,379.8	346.3	239.9	106.37	3.255		
13,600.0	7,457.0	13,559.2	7,377.0	109.6	0.0	76.72	5,796.0	1,379.0	348.2	240.2	108.05	3.223		
13,700.0	7,457.0	13,659.2	7,377.0	111.3	0.0	76.79	5,896.0	1,378.2	350.2	240.5	109.74	3.191		
13,800.0	7,457.0	13,759.2	7,377.0	113.0	0.0	76.87	5,996.0	1,377.3	352.1	240.7	111.43	3.160		
13,900.0	7,457.0	13,859.2	7,377.0	114.7	0.0	76.89	6,096.0	1,376.5	352.7	239.6	113.10	3.119		
14,000.0	7,457.0	13,959.2	7,377.0	116.4	0.0	76.91	6,196.0	1,375.7	353.3	238.5	114.77	3.078		
14,100.0	7,457.0	14,059.2	7,377.0	118.1	0.0	76.93	6,295.9	1,374.8	353.8	237.3	116.45	3.038		
14,200.0	7,457.0	14,159.2	7,377.0	119.8	0.0	76.95	6,395.9	1,374.0	354.3	236.2	118.13	2.999		
14,300.0	7,457.0	14,259.2	7,377.0	121.5	0.0	76.97	6,495.9	1,373.2	354.8	235.0	119.81	2.962		
14,400.0	7,457.0	14,359.2	7,377.0	123.2	0.0	76.99	6,595.9	1,372.4	355.3	233.8	121.49	2.925		
14,500.0	7,457.0	14,459.2	7,377.0	124.9	0.0	77.01	6,695.9	1,371.5	355.8	232.7	123.17	2.889		
14,600.0	7,457.0	14,559.2	7,377.0	126.7	0.0	77.03	6,795.9	1,370.7	356.4	231.5	124.86	2.854		
14,700.0	7,457.0	14,659.2	7,377.0	128.4	0.0	77.05	6,895.9	1,369.9	356.9	230.3	126.54	2.820		
14,800.0	7,457.0	14,759.2	7,377.0	130.1	0.0	77.07	6,995.9	1,369.1	357.4	229.2	128.23	2.787		
14,900.0	7,457.0	14,859.2	7,377.0	131.8	0.0	77.08	7,095.9	1,368.2	357.9	228.0	129.92	2.755		
15,000.0	7,457.0	14,959.2	7,377.0	133.5	0.0	77.10	7,195.9	1,367.4	358.4	226.8	131.61	2.723		
15,100.0	7,457.0	15,059.2	7,377.0	135.2	0.0	77.12	7,295.9	1,366.6	359.0	225.7	133.30	2.693		
15,200.0	7,457.0	15,159.2	7,377.0	136.9	0.0	77.14	7,395.9	1,365.8	359.5	224.5	135.00	2.663		
15,300.0	7,457.0	15,259.2	7,377.0	138.7	0.0	77.16	7,495.9	1,364.9	360.0	223.3	136.69	2.634		
15,400.0	7,457.0	15,359.2	7,377.0	140.4	0.0	77.18	7,595.9	1,364.1	360.5	222.1	138.39	2.605		
15,500.0	7,457.0	15,459.2	7,377.0	142.1	0.0	77.20	7,695.9	1,363.3	361.0	220.9	140.09	2.577		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,457.0	15,559.2	7,377.0	143.8	0.0	77.22	7,795.9	1,362.4	361.6	219.8	141.78	2.550		
15,700.0	7,457.0	15,659.2	7,377.0	145.6	0.0	77.24	7,895.9	1,361.6	362.1	218.6	143.48	2.523		
15,800.0	7,457.0	15,759.2	7,377.0	147.3	0.0	77.25	7,995.9	1,360.8	362.6	217.4	145.19	2.497		
15,900.0	7,457.0	15,859.2	7,377.0	149.0	0.0	77.27	8,095.9	1,360.0	363.1	216.2	146.89	2.472		
16,000.0	7,457.0	15,959.2	7,377.0	150.7	0.0	77.29	8,195.9	1,359.1	363.6	215.0	148.59	2.447		
16,100.0	7,457.0	16,059.2	7,377.0	152.5	0.0	77.31	8,295.9	1,358.3	364.2	213.9	150.29	2.423		
16,200.0	7,457.0	16,159.2	7,377.0	154.2	0.0	77.33	8,395.8	1,357.5	364.7	212.7	152.00	2.399		
16,300.0	7,457.0	16,259.2	7,377.0	155.9	0.0	77.35	8,495.8	1,356.7	365.2	211.5	153.71	2.376		
16,400.0	7,457.0	16,359.2	7,377.0	157.6	0.0	77.36	8,595.8	1,355.8	365.7	210.3	155.41	2.353		
16,500.0	7,457.0	16,459.2	7,377.0	159.4	0.0	77.38	8,695.8	1,355.0	366.2	209.1	157.12	2.331		
16,600.0	7,457.0	16,559.1	7,377.0	161.1	0.0	77.40	8,795.8	1,354.2	366.7	207.9	158.83	2.309		
16,700.0	7,457.0	16,659.1	7,377.0	162.8	0.0	77.42	8,895.8	1,353.3	367.3	206.7	160.54	2.288		
16,800.0	7,457.0	16,759.1	7,377.0	164.6	0.0	77.44	8,995.8	1,352.5	367.8	205.5	162.25	2.267		
16,900.0	7,457.0	16,859.1	7,377.0	166.3	0.0	77.45	9,095.8	1,351.7	368.3	204.3	163.96	2.246		
17,000.0	7,457.0	16,959.1	7,377.0	168.0	0.0	77.47	9,195.8	1,350.9	368.8	203.2	165.67	2.226		
17,100.0	7,457.0	17,059.1	7,377.0	169.8	0.0	77.49	9,295.8	1,350.0	369.3	202.0	167.38	2.207		
17,200.0	7,457.0	17,159.1	7,377.0	171.5	0.0	77.51	9,395.8	1,349.2	369.9	200.8	169.10	2.187		
17,300.0	7,457.0	17,259.1	7,377.0	173.3	0.0	77.53	9,495.8	1,348.4	370.4	199.6	170.81	2.168		
17,400.0	7,457.0	17,359.1	7,377.0	175.0	0.0	77.54	9,595.8	1,347.6	370.9	198.4	172.53	2.150		
17,500.0	7,457.0	17,459.1	7,377.0	176.7	0.0	77.56	9,695.8	1,346.7	371.4	197.2	174.24	2.132		
17,600.0	7,457.0	17,559.1	7,377.0	178.5	0.0	77.58	9,795.8	1,345.9	371.9	196.0	175.96	2.114		
17,700.0	7,457.0	17,659.1	7,377.0	180.2	0.0	77.60	9,895.8	1,345.1	372.5	194.8	177.68	2.096		
17,721.0	7,457.0	17,680.1	7,377.0	180.6	0.0	77.60	9,916.7	1,344.9	372.6	194.5	178.03	2.093 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.23	-0.1	-15.0	15.0					
100.0	100.0	100.0	100.0	0.4	0.0	-90.23	-0.1	-15.0	15.0	14.7	0.28	54.094		
200.0	200.0	200.0	200.0	1.0	0.0	-90.23	-0.1	-15.0	15.0	14.2	0.80	18.780		
300.0	300.0	300.0	300.0	1.5	0.0	-90.23	-0.1	-15.0	15.0	13.7	1.22	12.236		
400.0	400.0	400.0	400.0	1.9	0.0	-90.23	-0.1	-15.0	15.0	13.4	1.62	9.257		
500.0	500.0	500.0	500.0	2.3	0.0	-90.23	-0.1	-15.0	15.0	13.0	2.00	7.494		
600.0	600.0	600.0	600.0	2.7	0.0	-90.23	-0.1	-15.0	15.0	12.6	2.37	6.313		
700.0	700.0	700.0	700.0	3.1	0.0	-90.23	-0.1	-15.0	15.0	12.2	2.74	5.462		
800.0	800.0	800.0	800.0	3.5	0.0	-90.23	-0.1	-15.0	15.0	11.9	3.11	4.817		
900.0	900.0	900.0	900.0	3.9	0.0	-90.23	-0.1	-15.0	15.0	11.5	3.47	4.311		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	0.0	-90.23	-0.1	-15.0	15.0	11.1	3.84	3.902 CC, ES		
1,100.0	1,100.0	1,100.0	1,100.0	4.6	0.0	159.45	-0.1	-15.0	16.6	12.3	4.31	3.853		
1,200.0	1,199.8	1,200.5	1,200.5	5.0	0.0	162.57	-0.9	-13.4	19.9	14.9	5.00	3.985		
1,300.0	1,299.5	1,301.2	1,301.0	5.7	0.0	164.09	-3.3	-8.7	23.4	17.7	5.67	4.125		
1,400.0	1,398.7	1,401.9	1,401.4	6.5	0.0	164.60	-7.4	-0.9	26.9	20.6	6.29	4.279		
1,500.0	1,497.5	1,502.8	1,501.5	7.1	0.0	164.44	-13.1	10.1	30.5	23.7	6.87	4.445		
1,600.0	1,595.6	1,603.8	1,601.2	7.8	0.0	163.83	-20.4	24.2	34.2	26.8	7.44	4.597		
1,700.0	1,693.4	1,704.1	1,699.8	8.2	0.0	162.72	-28.9	40.6	37.2	29.5	7.79	4.782		
1,800.0	1,791.2	1,804.1	1,798.0	8.5	0.0	161.69	-37.5	57.1	40.1	32.1	8.05	4.989		
1,900.0	1,888.9	1,904.0	1,896.2	8.8	0.0	160.80	-46.0	73.5	43.1	34.7	8.32	5.174		
2,000.0	1,986.7	2,004.0	1,994.5	9.1	0.0	160.02	-54.6	90.0	46.0	37.4	8.61	5.341		
2,100.0	2,084.5	2,103.9	2,092.7	9.4	0.0	159.34	-63.1	106.5	48.9	40.0	8.91	5.490		
2,200.0	2,182.2	2,203.9	2,190.9	9.7	0.0	158.73	-71.7	122.9	51.9	42.6	9.22	5.623		
2,300.0	2,280.0	2,303.8	2,289.1	10.1	0.0	158.19	-80.2	139.4	54.8	45.3	9.54	5.742		
2,400.0	2,377.8	2,403.8	2,387.3	10.4	0.0	157.70	-88.8	155.9	57.8	47.9	9.87	5.849		
2,500.0	2,475.5	2,503.8	2,485.5	10.8	0.0	157.26	-97.3	172.3	60.7	50.5	10.21	5.945		
2,600.0	2,573.3	2,603.7	2,583.8	11.1	0.0	156.86	-105.9	188.8	63.7	53.1	10.56	6.031		
2,700.0	2,671.1	2,703.7	2,682.0	11.5	0.0	156.50	-114.4	205.3	66.6	55.7	10.91	6.109		
2,800.0	2,768.9	2,803.6	2,780.2	11.9	0.0	156.17	-123.0	221.7	69.6	58.3	11.26	6.178		
2,900.0	2,866.6	2,903.6	2,878.4	12.4	0.0	155.86	-131.6	238.2	72.6	60.9	11.63	6.241		
3,000.0	2,964.4	3,003.5	2,976.6	12.8	0.0	155.58	-140.1	254.7	75.5	63.5	11.99	6.298		
3,100.0	3,062.2	3,103.5	3,074.9	13.3	0.0	155.32	-148.7	271.1	78.5	66.1	12.36	6.349		
3,200.0	3,159.9	3,203.4	3,173.1	13.7	0.0	155.08	-157.2	287.6	81.5	68.7	12.74	6.396		
3,300.0	3,257.7	3,303.4	3,271.3	14.2	0.0	154.86	-165.8	304.1	84.4	71.3	13.11	6.438		
3,400.0	3,355.5	3,403.3	3,369.5	14.7	0.0	154.65	-174.3	320.5	87.4	73.9	13.50	6.477		
3,500.0	3,453.2	3,503.3	3,467.7	15.2	0.0	154.46	-182.9	337.0	90.4	76.5	13.88	6.512		
3,600.0	3,551.0	3,603.3	3,565.9	15.6	0.0	154.27	-191.4	353.5	93.4	79.1	14.27	6.544		
3,700.0	3,648.8	3,703.2	3,664.2	16.1	0.0	154.10	-200.0	369.9	96.3	81.7	14.65	6.573		
3,800.0	3,746.5	3,803.2	3,762.4	16.6	0.0	153.94	-208.5	386.4	99.3	84.3	15.05	6.600		
3,900.0	3,844.3	3,903.1	3,860.6	17.1	0.0	153.79	-217.1	402.9	102.3	86.8	15.44	6.625		
4,000.0	3,942.1	4,003.1	3,958.8	17.6	0.0	153.65	-225.6	419.3	105.3	89.4	15.83	6.647		
4,100.0	4,039.9	4,103.0	4,057.0	18.1	0.0	153.51	-234.2	435.8	108.2	92.0	16.23	6.668		
4,200.0	4,137.6	4,203.0	4,155.3	18.6	0.0	153.38	-242.7	452.3	111.2	94.6	16.63	6.688		
4,300.0	4,235.4	4,302.9	4,253.5	19.1	0.0	153.26	-251.3	468.7	114.2	97.2	17.03	6.705		
4,400.0	4,333.2	4,402.9	4,351.7	19.6	0.0	153.15	-259.8	485.2	117.2	99.7	17.43	6.722		
4,500.0	4,430.9	4,502.9	4,449.9	20.1	0.0	153.04	-268.4	501.7	120.2	102.3	17.83	6.737		
4,600.0	4,528.7	4,602.8	4,548.1	20.6	0.0	152.93	-276.9	518.1	123.1	104.9	18.24	6.751		
4,700.0	4,626.5	4,702.8	4,646.3	21.1	0.0	152.83	-285.5	534.6	126.1	107.5	18.64	6.765		
4,800.0	4,724.2	4,802.7	4,744.6	21.6	0.0	152.74	-294.0	551.1	129.1	110.0	19.05	6.777		
4,900.0	4,822.0	4,902.7	4,842.8	22.1	0.0	152.65	-302.6	567.5	132.1	112.6	19.46	6.788		
5,000.0	4,919.8	5,002.6	4,941.0	22.6	0.0	152.56	-311.1	584.0	135.1	115.2	19.87	6.799		
5,100.0	5,017.5	5,102.6	5,039.2	23.1	0.0	152.48	-319.7	600.5	138.0	117.8	20.27	6.809		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,115.3	5,202.5	5,137.4	23.6	0.0	152.40	-328.2	616.9	141.0	120.3	20.68	6.818		
5,300.0	5,213.1	5,302.5	5,235.7	24.1	0.0	152.33	-336.8	633.4	144.0	122.9	21.09	6.827		
5,400.0	5,310.8	5,402.5	5,333.9	24.6	0.0	152.25	-345.3	649.9	147.0	125.5	21.51	6.835		
5,500.0	5,408.6	5,502.4	5,432.1	25.1	0.0	152.18	-353.9	666.3	150.0	128.1	21.92	6.842		
5,600.0	5,506.4	5,602.4	5,530.3	25.6	0.0	152.12	-362.5	682.8	153.0	130.6	22.33	6.850		
5,700.0	5,604.2	5,702.3	5,628.5	26.1	0.0	152.05	-371.0	699.3	155.9	133.2	22.74	6.856		
5,800.0	5,701.9	5,802.3	5,726.7	26.7	0.0	151.99	-379.6	715.7	158.9	135.8	23.16	6.863		
5,900.0	5,799.7	5,902.2	5,825.0	27.2	0.0	151.93	-388.1	732.2	161.9	138.3	23.57	6.869		
6,000.0	5,897.5	6,002.2	5,923.2	27.7	0.0	151.87	-396.7	748.7	164.9	140.9	23.99	6.874		
6,100.0	5,995.2	6,102.1	6,021.4	28.2	0.0	151.82	-405.2	765.1	167.9	143.5	24.40	6.879		
6,200.0	6,093.0	6,202.1	6,119.6	28.7	0.0	151.76	-413.8	781.6	170.9	146.0	24.82	6.884		
6,300.0	6,190.8	6,302.1	6,217.8	29.2	0.0	151.71	-422.3	798.1	173.8	148.6	25.24	6.889		
6,400.0	6,288.5	6,402.0	6,316.1	29.7	0.0	151.66	-430.9	814.5	176.8	151.2	25.65	6.894		
6,500.0	6,386.3	6,502.0	6,414.3	30.2	0.0	151.61	-439.4	831.0	179.8	153.7	26.07	6.898		
6,600.0	6,484.1	6,601.9	6,512.5	30.7	0.0	151.56	-448.0	847.4	182.8	156.3	26.49	6.902		
6,700.0	6,581.8	6,701.9	6,610.7	31.2	0.0	151.52	-456.5	863.9	185.8	158.9	26.90	6.905		
6,800.0	6,679.6	6,804.1	6,711.4	31.7	0.0	151.47	-465.0	880.7	188.8	161.0	27.31	6.908		
6,900.0	6,777.4	6,900.0	6,804.5	32.2	0.0	151.40	-473.5	896.1	191.4	164.4	27.72	6.911		
7,000.0	6,875.2	6,987.2	6,885.7	32.7	0.0	-174.57	-482.0	911.5	201.3	174.5	28.13	6.914		
7,100.0	6,973.1	7,067.8	6,956.3	33.3	0.0	-118.99	-490.5	926.9	211.4	184.7	28.54	6.917		
7,200.0	7,068.6	7,145.0	7,018.4	33.6	0.0	-88.58	-500.0	942.0	221.9	196.2	28.95	6.919		
7,300.0	7,158.8	7,219.6	7,072.3	34.0	0.0	-72.47	-509.5	957.5	232.4	207.7	29.36	6.921		
7,400.0	7,241.0	7,292.2	7,118.1	34.3	0.0	-62.59	-519.0	973.0	242.9	218.2	29.77	6.923		
7,500.0	7,312.6	7,363.3	7,155.9	34.5	0.0	-56.04	-528.5	988.5	253.4	228.7	30.18	6.925		
7,600.0	7,371.6	7,433.2	7,185.6	34.7	0.0	-51.62	-538.0	1004.0	263.9	239.2	30.59	6.927		
7,700.0	7,416.1	7,500.0	7,206.8	34.7	0.0	-48.74	-547.5	1019.5	274.4	249.7	31.00	6.929		
7,800.0	7,444.7	7,570.9	7,221.1	34.7	0.0	-46.97	-557.0	1035.0	284.9	260.2	31.41	6.931		
7,900.0	7,456.7	7,639.2	7,226.8	34.6	0.0	-46.24	-566.5	1050.5	295.4	270.7	31.82	6.933		
8,000.0	7,457.0	7,732.4	7,227.0	34.6	0.0	-46.02	-576.0	1066.0	305.9	281.2	32.23	6.935		
8,100.0	7,457.0	7,832.4	7,227.0	34.6	0.0	-45.77	-585.5	1081.5	316.4	291.7	32.64	6.937		
8,200.0	7,457.0	7,932.4	7,227.0	34.8	0.0	-45.53	-595.0	1097.0	326.9	302.2	33.05	6.939		
8,300.0	7,457.0	8,032.3	7,227.0	35.0	0.0	-45.28	-604.5	1112.5	337.4	312.7	33.46	6.941		
8,400.0	7,457.0	8,132.3	7,227.0	35.3	0.0	-45.03	-614.0	1128.0	347.9	323.2	33.87	6.943		
8,500.0	7,457.0	8,232.3	7,227.0	35.8	0.0	-44.78	-623.5	1143.5	358.4	333.7	34.28	6.945		
8,600.0	7,457.0	8,332.3	7,227.0	36.3	0.0	-44.52	-633.0	1159.0	368.9	344.2	34.69	6.947		
8,700.0	7,457.0	8,432.3	7,227.0	37.0	0.0	-44.26	-642.5	1174.5	379.4	354.7	35.10	6.949		
8,800.0	7,457.0	8,532.2	7,227.0	37.9	0.0	-44.00	-652.0	1190.0	389.9	365.2	35.51	6.951		
8,900.0	7,457.0	8,632.2	7,227.0	38.8	0.0	-43.74	-661.5	1205.5	399.4	375.7	35.92	6.953		
9,000.0	7,457.0	8,732.2	7,227.0	39.7	0.0	-43.48	-671.0	1221.0	409.9	386.2	36.33	6.955		
9,100.0	7,457.0	8,832.2	7,227.0	40.8	0.0	-43.21	-680.5	1236.5	419.4	396.7	36.74	6.957		
9,200.0	7,457.0	8,932.2	7,227.0	41.9	0.0	-42.94	-690.0	1252.0	429.9	407.2	37.15	6.959		
9,300.0	7,457.0	9,032.1	7,227.0	43.0	0.0	-42.67	-700.0	1267.5	439.4	417.7	37.56	6.961		
9,400.0	7,457.0	9,132.1	7,227.0	44.2	0.0	-42.39	-710.0	1283.0	449.9	428.2	37.97	6.963		
9,500.0	7,457.0	9,232.1	7,227.0	45.4	0.0	-42.12	-720.0	1298.5	459.4	438.7	38.38	6.965		
9,600.0	7,457.0	9,332.1	7,227.0	46.7	0.0	-41.84	-730.0	1314.0	469.9	449.2	38.79	6.967		
9,700.0	7,457.0	9,432.1	7,227.0	48.0	0.0	-41.56	-740.0	1329.5	479.4	459.7	39.20	6.969		
9,800.0	7,457.0	9,532.0	7,227.0	49.3	0.0	-41.27	-750.0	1345.0	489.9	470.2	39.61	6.971		
9,900.0	7,457.0	9,632.0	7,227.0	50.7	0.0	-40.99	-760.0	1360.5	499.4	480.7	40.02	6.973		
10,000.0	7,457.0	9,732.0	7,227.0	52.1	0.0	-40.70	-770.0	1376.0	509.9	491.2	40.43	6.975		
10,100.0	7,457.0	9,832.0	7,227.0	53.5	0.0	-40.41	-780.0	1391.5	519.4	501.7	40.84	6.977		
10,200.0	7,457.0	9,932.0	7,227.0	54.9	0.0	-40.11	-790.0	1407.0	529.9	512.2	41.25	6.979		
10,300.0	7,457.0	10,031.9	7,227.0	56.4	0.0	-39.82	-800.0	1422.5	539.4	522.7	41.66	6.981		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,457.0	10,131.9	7,227.0	57.8	0.0	-39.52	2,592.9	941.6	298.2	260.1	38.08	7.830		
10,500.0	7,457.0	10,231.9	7,227.0	59.3	0.0	-39.22	2,692.9	940.8	296.9	257.8	39.06	7.602		
10,600.0	7,457.0	10,331.9	7,227.0	60.8	0.0	-38.91	2,792.9	939.9	295.6	255.6	40.03	7.385		
10,700.0	7,457.0	10,431.8	7,227.0	62.3	0.0	-38.61	2,892.9	939.1	294.4	253.4	41.00	7.179		
10,800.0	7,457.0	10,531.8	7,227.0	63.9	0.0	-38.30	2,992.8	938.3	293.1	251.1	41.97	6.984		
10,900.0	7,457.0	10,631.8	7,227.0	65.4	0.0	-37.99	3,092.8	937.4	291.8	248.9	42.93	6.798		
11,000.0	7,457.0	10,731.8	7,227.0	66.9	0.0	-37.67	3,192.8	936.6	290.6	246.7	43.89	6.621		
11,100.0	7,457.0	10,831.8	7,227.0	68.5	0.0	-37.35	3,292.8	935.8	289.4	244.5	44.85	6.452		
11,200.0	7,457.0	10,931.7	7,227.0	70.1	0.0	-37.03	3,392.8	935.0	288.1	242.3	45.80	6.292		
11,300.0	7,457.0	11,031.7	7,227.0	71.7	0.0	-36.71	3,492.7	934.1	286.9	240.2	46.74	6.139		
11,400.0	7,457.0	11,131.7	7,227.0	73.2	0.0	-36.39	3,592.7	933.3	285.7	238.0	47.67	5.993		
11,500.0	7,457.0	11,231.7	7,227.0	74.8	0.0	-36.06	3,692.7	932.5	284.5	235.9	48.60	5.854		
11,600.0	7,457.0	11,331.7	7,227.0	76.4	0.0	-35.73	3,792.7	931.7	283.3	233.8	49.52	5.721		
11,700.0	7,457.0	11,431.6	7,227.0	78.1	0.0	-35.39	3,892.6	930.8	282.2	231.7	50.44	5.594		
11,800.0	7,457.0	11,531.6	7,227.0	79.7	0.0	-35.06	3,992.6	930.0	281.0	229.6	51.34	5.473		
11,900.0	7,457.0	11,631.6	7,227.0	81.3	0.0	-34.72	4,092.6	929.2	279.8	227.6	52.24	5.357		
12,000.0	7,457.0	11,731.6	7,227.0	82.9	0.0	-34.37	4,192.6	928.4	278.7	225.6	53.12	5.246		
12,100.0	7,457.0	11,831.6	7,227.0	84.6	0.0	-34.03	4,292.5	927.5	277.5	223.5	54.00	5.140		
12,200.0	7,457.0	11,931.5	7,227.0	86.2	0.0	-33.68	4,392.5	926.7	276.4	221.5	54.86	5.038		
12,300.0	7,457.0	12,031.5	7,227.0	87.9	0.0	-33.33	4,492.5	925.9	275.3	219.6	55.72	4.941		
12,400.0	7,457.0	12,131.5	7,227.0	89.5	0.0	-32.98	4,592.5	925.0	274.2	217.6	56.57	4.847		
12,500.0	7,457.0	12,231.5	7,227.0	91.2	0.0	-32.62	4,692.4	924.2	273.1	215.7	57.40	4.758		
12,600.0	7,457.0	12,331.5	7,227.0	92.8	0.0	-32.26	4,792.4	923.4	272.0	213.8	58.22	4.672		
12,700.0	7,457.0	12,431.4	7,227.0	94.5	0.0	-31.90	4,892.4	922.6	270.9	211.9	59.03	4.589		
12,800.0	7,457.0	12,531.4	7,227.0	96.2	0.0	-31.53	4,992.4	921.7	269.9	210.0	59.83	4.510		
12,900.0	7,457.0	12,631.4	7,227.0	97.8	0.0	-31.17	5,092.3	920.9	268.8	208.2	60.62	4.434		
13,000.0	7,457.0	12,731.4	7,227.0	99.5	0.0	-30.79	5,192.3	920.1	267.8	206.4	61.40	4.361		
13,100.0	7,457.0	12,831.4	7,227.0	101.2	0.0	-30.42	5,292.3	919.3	266.7	204.6	62.17	4.291		
13,200.0	7,457.0	12,931.3	7,227.0	102.9	0.0	-30.04	5,392.3	918.4	265.7	202.8	62.92	4.223		
13,300.0	7,457.0	13,031.3	7,227.0	104.6	0.0	-29.67	5,492.2	917.6	264.7	201.0	63.66	4.158		
13,400.0	7,457.0	13,131.3	7,227.0	106.2	0.0	-29.28	5,592.2	916.8	263.7	199.3	64.39	4.096		
13,500.0	7,457.0	13,231.3	7,227.0	107.9	0.0	-28.90	5,692.2	916.0	262.7	197.6	65.10	4.035		
13,600.0	7,457.0	13,331.3	7,227.0	109.6	0.0	-28.51	5,792.2	915.1	261.8	195.9	65.81	3.977		
13,700.0	7,457.0	13,431.2	7,227.0	111.3	0.0	-28.12	5,892.2	914.3	260.8	194.3	66.50	3.922		
13,800.0	7,457.0	13,531.2	7,227.0	113.0	0.0	-27.74	5,992.1	913.5	259.9	192.7	67.19	3.868		
13,900.0	7,457.0	13,631.2	7,227.0	114.7	0.0	-27.62	6,092.1	912.6	259.6	191.5	68.12	3.811		
14,000.0	7,457.0	13,731.2	7,227.0	116.4	0.0	-27.51	6,192.1	911.8	259.3	190.3	69.06	3.755		
14,100.0	7,457.0	13,831.2	7,227.0	118.1	0.0	-27.41	6,292.1	911.0	259.1	189.1	70.00	3.701		
14,200.0	7,457.0	13,931.2	7,227.0	119.8	0.0	-27.30	6,392.1	910.2	258.8	187.9	70.94	3.649		
14,300.0	7,457.0	14,031.2	7,227.0	121.5	0.0	-27.20	6,492.1	909.3	258.6	186.7	71.87	3.598		
14,400.0	7,457.0	14,131.2	7,227.0	123.2	0.0	-27.09	6,592.1	908.5	258.3	185.5	72.81	3.548		
14,500.0	7,457.0	14,231.2	7,227.0	124.9	0.0	-26.99	6,692.1	907.7	258.1	184.4	73.74	3.500		
14,600.0	7,457.0	14,331.2	7,227.0	126.7	0.0	-26.88	6,792.1	906.9	257.9	183.2	74.67	3.454		
14,700.0	7,457.0	14,431.2	7,227.0	128.4	0.0	-26.78	6,892.1	906.0	257.6	182.0	75.59	3.408		
14,800.0	7,457.0	14,531.2	7,227.0	130.1	0.0	-26.67	6,992.1	905.2	257.4	180.9	76.51	3.364		
14,900.0	7,457.0	14,631.2	7,227.0	131.8	0.0	-26.56	7,092.1	904.4	257.1	179.7	77.43	3.321		
15,000.0	7,457.0	14,731.2	7,227.0	133.5	0.0	-26.46	7,192.1	903.6	256.9	178.6	78.35	3.279		
15,100.0	7,457.0	14,831.2	7,227.0	135.2	0.0	-26.35	7,292.1	902.7	256.7	177.4	79.26	3.238		
15,200.0	7,457.0	14,931.2	7,227.0	136.9	0.0	-26.25	7,392.1	901.9	256.4	176.3	80.17	3.199		
15,300.0	7,457.0	15,031.2	7,227.0	138.7	0.0	-26.14	7,492.1	901.1	256.2	175.1	81.08	3.160		
15,400.0	7,457.0	15,131.2	7,227.0	140.4	0.0	-26.03	7,592.1	900.2	256.0	174.0	81.98	3.122		
15,500.0	7,457.0	15,231.2	7,227.0	142.1	0.0	-25.92	7,692.0	899.4	255.7	172.9	82.88	3.086		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,457.0	15,331.2	7,227.0	143.8	0.0	-25.82	7,792.0	898.6	255.5	171.7	83.78	3.050		
15,700.0	7,457.0	15,431.2	7,227.0	145.6	0.0	-25.71	7,892.0	897.8	255.3	170.6	84.68	3.015		
15,800.0	7,457.0	15,531.2	7,227.0	147.3	0.0	-25.60	7,992.0	896.9	255.0	169.5	85.57	2.981		
15,900.0	7,457.0	15,631.2	7,227.0	149.0	0.0	-25.49	8,092.0	896.1	254.8	168.4	86.46	2.947		
16,000.0	7,457.0	15,731.2	7,227.0	150.7	0.0	-25.39	8,192.0	895.3	254.6	167.2	87.34	2.915		
16,100.0	7,457.0	15,831.2	7,227.0	152.5	0.0	-25.28	8,292.0	894.5	254.4	166.1	88.23	2.883		
16,200.0	7,457.0	15,931.2	7,227.0	154.2	0.0	-25.17	8,392.0	893.6	254.1	165.0	89.11	2.852		
16,300.0	7,457.0	16,031.2	7,227.0	155.9	0.0	-25.06	8,492.0	892.8	253.9	163.9	89.98	2.822		
16,400.0	7,457.0	16,131.2	7,227.0	157.6	0.0	-24.95	8,592.0	892.0	253.7	162.8	90.86	2.792		
16,500.0	7,457.0	16,231.2	7,227.0	159.4	0.0	-24.84	8,692.0	891.2	253.5	161.7	91.73	2.763		
16,600.0	7,457.0	16,331.2	7,227.0	161.1	0.0	-24.73	8,792.0	890.3	253.2	160.6	92.59	2.735		
16,700.0	7,457.0	16,431.2	7,227.0	162.8	0.0	-24.62	8,892.0	889.5	253.0	159.5	93.46	2.707		
16,800.0	7,457.0	16,531.2	7,227.0	164.6	0.0	-24.51	8,992.0	888.7	252.8	158.5	94.32	2.680		
16,900.0	7,457.0	16,631.2	7,227.0	166.3	0.0	-24.40	9,092.0	887.8	252.6	157.4	95.18	2.654		
17,000.0	7,457.0	16,731.2	7,227.0	168.0	0.0	-24.29	9,192.0	887.0	252.3	156.3	96.03	2.628		
17,100.0	7,457.0	16,831.2	7,227.0	169.8	0.0	-24.18	9,292.0	886.2	252.1	155.2	96.88	2.602		
17,200.0	7,457.0	16,931.2	7,227.0	171.5	0.0	-24.07	9,392.0	885.4	251.9	154.2	97.73	2.578		
17,300.0	7,457.0	17,031.2	7,227.0	173.3	0.0	-23.96	9,492.0	884.5	251.7	153.1	98.58	2.553		
17,400.0	7,457.0	17,131.2	7,227.0	175.0	0.0	-23.85	9,592.0	883.7	251.5	152.1	99.42	2.529		
17,500.0	7,457.0	17,231.2	7,227.0	176.7	0.0	-23.74	9,691.9	882.9	251.3	151.0	100.26	2.506		
17,600.0	7,457.0	17,331.2	7,227.0	178.5	0.0	-23.63	9,791.9	882.1	251.0	150.0	101.10	2.483		
17,700.0	7,457.0	17,431.2	7,227.0	180.2	0.0	-23.52	9,891.9	881.2	250.8	148.9	101.93	2.461		
17,719.1	7,457.0	17,450.2	7,227.0	180.5	0.0	-23.49	9,911.0	881.1	250.8	148.7	102.09	2.457 SF		
17,721.0	7,457.0	17,451.3	7,227.0	180.6	0.0	-23.49	9,912.1	881.1	250.8	148.7	102.08	2.457		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	89.77	0.1	30.0	30.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.77	0.1	30.0	30.0	29.7	0.28	108.386		
200.0	200.0	200.0	200.0	1.0	0.0	89.77	0.1	30.0	30.0	29.2	0.80	37.628		
300.0	300.0	300.0	300.0	1.5	0.0	89.77	0.1	30.0	30.0	28.8	1.22	24.516		
400.0	400.0	400.0	400.0	1.9	0.0	89.77	0.1	30.0	30.0	28.4	1.62	18.547		
500.0	500.0	500.0	500.0	2.3	0.0	89.77	0.1	30.0	30.0	28.0	2.00	15.015		
600.0	600.0	600.0	600.0	2.7	0.0	89.77	0.1	30.0	30.0	27.6	2.37	12.649		
700.0	700.0	700.0	700.0	3.1	0.0	89.77	0.1	30.0	30.0	27.3	2.74	10.944		
800.0	800.0	800.0	800.0	3.5	0.0	89.77	0.1	30.0	30.0	26.9	3.11	9.652 CC, ES		
900.0	900.0	899.0	898.9	3.9	0.0	90.62	-0.3	31.6	31.7	28.2	3.46	9.151		
1,000.0	1,000.0	997.7	997.5	4.2	0.0	92.72	-1.7	36.6	36.7	32.9	3.79	9.682		
1,100.0	1,100.0	1,096.1	1,095.6	4.6	0.0	-18.13	-4.0	44.7	43.5	39.2	4.27	10.187		
1,200.0	1,199.8	1,194.3	1,193.1	5.0	0.0	-17.27	-7.3	56.1	50.3	45.3	4.98	10.108		
1,300.0	1,299.5	1,292.3	1,289.8	5.7	0.0	-17.01	-11.4	70.6	57.2	51.6	5.62	10.174		
1,400.0	1,398.7	1,390.0	1,385.8	6.5	0.0	-17.17	-16.4	88.2	64.1	57.9	6.21	10.323		
1,500.0	1,497.5	1,487.5	1,480.9	7.1	0.0	-17.62	-22.3	109.0	71.0	64.3	6.75	10.523		
1,600.0	1,595.6	1,584.8	1,575.0	7.8	0.0	-18.28	-29.0	132.8	77.9	70.7	7.28	10.703		
1,700.0	1,693.4	1,684.1	1,670.5	8.2	0.0	-19.00	-36.4	159.0	85.1	77.5	7.64	11.146		
1,800.0	1,791.2	1,783.9	1,766.4	8.5	0.0	-19.60	-43.9	185.4	92.3	84.4	7.91	11.676		
1,900.0	1,888.9	1,883.6	1,862.3	8.8	0.0	-20.13	-51.4	211.8	99.5	91.4	8.19	12.151		
2,000.0	1,986.7	1,983.3	1,958.2	9.1	0.0	-20.58	-58.9	238.2	106.8	98.3	8.49	12.577		
2,100.0	2,084.5	2,083.1	2,054.1	9.4	0.0	-20.97	-66.3	264.6	114.0	105.2	8.80	12.959		
2,200.0	2,182.2	2,182.8	2,150.0	9.7	0.0	-21.32	-73.8	290.9	121.2	112.1	9.11	13.302		
2,300.0	2,280.0	2,282.5	2,245.9	10.1	0.0	-21.62	-81.3	317.3	128.5	119.0	9.44	13.611		
2,400.0	2,377.8	2,382.3	2,341.8	10.4	0.0	-21.90	-88.7	343.7	135.7	125.9	9.77	13.889		
2,500.0	2,475.5	2,482.0	2,437.7	10.8	0.0	-22.14	-96.2	370.1	143.0	132.9	10.11	14.139		
2,600.0	2,573.3	2,581.8	2,533.6	11.1	0.0	-22.37	-103.7	396.5	150.2	139.8	10.46	14.365		
2,700.0	2,671.1	2,681.5	2,629.5	11.5	0.0	-22.57	-111.2	422.8	157.5	146.7	10.81	14.569		
2,800.0	2,768.9	2,781.2	2,725.4	11.9	0.0	-22.75	-118.6	449.2	164.7	153.6	11.16	14.754		
2,900.0	2,866.6	2,881.0	2,821.2	12.4	0.0	-22.92	-126.1	475.6	172.0	160.4	11.52	14.923		
3,000.0	2,964.4	2,980.7	2,917.1	12.8	0.0	-23.08	-133.6	502.0	179.2	167.3	11.89	15.076		
3,100.0	3,062.2	3,080.4	3,013.0	13.3	0.0	-23.22	-141.1	528.4	186.5	174.2	12.26	15.216		
3,200.0	3,159.9	3,180.2	3,108.9	13.7	0.0	-23.35	-148.5	554.8	193.7	181.1	12.63	15.343		
3,300.0	3,257.7	3,279.9	3,204.8	14.2	0.0	-23.48	-156.0	581.1	201.0	188.0	13.00	15.460		
3,400.0	3,355.5	3,379.6	3,300.7	14.7	0.0	-23.59	-163.5	607.5	208.3	194.9	13.38	15.567		
3,500.0	3,453.2	3,479.4	3,396.6	15.2	0.0	-23.70	-171.0	633.9	215.5	201.8	13.76	15.666		
3,600.0	3,551.0	3,579.1	3,492.5	15.6	0.0	-23.80	-178.4	660.3	222.8	208.6	14.14	15.756		
3,700.0	3,648.8	3,678.8	3,588.4	16.1	0.0	-23.89	-185.9	686.7	230.0	215.5	14.52	15.840		
3,800.0	3,746.5	3,778.6	3,684.3	16.6	0.0	-23.98	-193.4	713.0	237.3	222.4	14.91	15.917		
3,900.0	3,844.3	3,878.3	3,780.2	17.1	0.0	-24.06	-200.8	739.4	244.6	229.3	15.30	15.989		
4,000.0	3,942.1	3,978.0	3,876.1	17.6	0.0	-24.14	-208.3	765.8	251.8	236.1	15.68	16.056		
4,100.0	4,039.9	4,077.8	3,971.9	18.1	0.0	-24.21	-215.8	792.2	259.1	243.0	16.08	16.117		
4,200.0	4,137.6	4,177.5	4,067.8	18.6	0.0	-24.28	-223.3	818.6	266.4	249.9	16.47	16.175		
4,300.0	4,235.4	4,277.3	4,163.7	19.1	0.0	-24.35	-230.7	844.9	273.6	256.8	16.86	16.228		
4,400.0	4,333.2	4,377.0	4,259.6	19.6	0.0	-24.41	-238.2	871.3	280.9	263.6	17.26	16.278		
4,500.0	4,430.9	4,476.7	4,355.5	20.1	0.0	-24.47	-245.7	897.7	288.1	270.5	17.65	16.325		
4,600.0	4,528.7	4,576.5	4,451.4	20.6	0.0	-24.52	-253.2	924.1	295.4	277.4	18.05	16.368		
4,700.0	4,626.5	4,676.2	4,547.3	21.1	0.0	-24.58	-260.6	950.5	302.7	284.2	18.45	16.409		
4,800.0	4,724.2	4,775.9	4,643.2	21.6	0.0	-24.63	-268.1	976.9	309.9	291.1	18.84	16.447		
4,900.0	4,822.0	4,875.7	4,739.1	22.1	0.0	-24.68	-275.6	1,003.2	317.2	298.0	19.24	16.483		
5,000.0	4,919.8	4,975.4	4,835.0	22.6	0.0	-24.72	-283.1	1,029.6	324.5	304.8	19.64	16.517		
5,100.0	5,017.5	5,075.1	4,930.9	23.1	0.0	-24.77	-290.5	1,056.0	331.7	311.7	20.05	16.549		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,115.3	5,174.9	5,026.8	23.6	0.0	-24.81	-298.0	1,082.4	339.0	318.6	20.45	16.579		
5,300.0	5,213.1	5,274.6	5,122.7	24.1	0.0	-24.85	-305.5	1,108.8	346.3	325.4	20.85	16.608		
5,400.0	5,310.8	5,374.3	5,218.5	24.6	0.0	-24.89	-313.0	1,135.1	353.5	332.3	21.25	16.634		
5,500.0	5,408.6	5,474.1	5,314.4	25.1	0.0	-24.93	-320.4	1,161.5	360.8	339.1	21.66	16.660		
5,600.0	5,506.4	5,573.8	5,410.3	25.6	0.0	-24.96	-327.9	1,187.9	368.1	346.0	22.06	16.684		
5,700.0	5,604.2	5,673.6	5,506.2	26.1	0.0	-25.00	-335.4	1,214.3	375.3	352.9	22.47	16.707		
5,800.0	5,701.9	5,773.3	5,602.1	26.7	0.0	-25.03	-342.8	1,240.7	382.6	359.7	22.87	16.728		
5,900.0	5,799.7	5,873.0	5,698.0	27.2	0.0	-25.06	-350.3	1,267.1	389.9	366.6	23.28	16.749		
6,000.0	5,897.5	5,972.8	5,793.9	27.7	0.0	-25.09	-357.8	1,293.4	397.1	373.5	23.68	16.768		
6,100.0	5,995.2	6,072.5	5,899.8	28.2	0.0	-25.12	-365.3	1,319.8	404.4	380.3	24.09	16.786		
6,200.0	6,093.0	6,172.2	5,985.7	28.7	0.0	-25.15	-372.7	1,346.2	411.7	387.2	24.50	16.804		
6,300.0	6,190.8	6,272.0	6,081.6	29.2	0.0	-25.18	-380.2	1,372.6	418.9	394.0	24.91	16.821		
6,400.0	6,288.5	6,371.7	6,177.5	29.7	0.0	-25.21	-387.7	1,399.0	426.2	400.9	25.31	16.837		
6,500.0	6,386.3	6,471.4	6,273.4	30.2	0.0	-25.23	-395.2	1,425.3	433.5	407.8	25.72	16.852		
6,600.0	6,484.1	6,571.2	6,369.3	30.7	0.0	-25.26	-402.6	1,451.7	440.7	414.6	26.13	16.866		
6,700.0	6,581.8	6,670.9	6,465.1	31.2	0.0	-25.28	-410.1	1,478.1	448.0	421.5	26.54	16.880		
6,800.0	6,679.6	6,770.6	6,561.0	31.7	0.0	-25.31	-417.6	1,504.5	455.3	428.3	26.95	16.894		
6,900.0	6,777.4	6,870.4	6,656.9	32.2	0.0	-25.33	-425.1	1,530.9	462.6	435.2	27.36	16.906		
7,000.0	6,875.2	6,970.1	6,752.8	32.7	0.0	-11.72	-432.5	1,557.2	469.8	442.0	27.76	16.925		
7,100.0	6,973.1	7,068.8	6,847.7	33.3	0.0	34.69	-439.9	1,583.4	476.8	448.8	28.02	17.016		
7,200.0	7,068.6	7,163.7	6,938.9	33.6	0.0	59.54	-447.0	1,608.4	484.8	456.4	28.35	17.101		
7,300.0	7,158.8	7,252.1	7,023.9	34.0	0.0	72.84	-453.7	1,631.8	496.4	467.9	28.52	17.407		
7,400.0	7,241.0	7,352.4	7,120.5	34.3	0.0	82.16	-452.0	1,658.3	513.4	484.7	28.76	17.855		
7,500.0	7,312.6	7,466.2	7,227.9	34.5	0.0	89.28	-429.1	1,687.6	534.6	505.6	29.05	18.404		
7,600.0	7,371.6	7,598.7	7,344.5	34.7	0.0	95.17	-375.4	1,719.2	558.1	529.0	29.14	19.150		
7,700.0	7,416.1	7,756.3	7,463.3	34.7	0.0	100.10	-277.8	1,751.0	580.9	552.2	28.75	20.209		
7,800.0	7,444.7	7,942.9	7,564.7	34.7	0.0	103.72	-124.3	1,777.5	599.2	571.3	27.90	21.475		
7,900.0	7,456.7	8,153.5	7,615.6	34.6	0.0	105.24	78.4	1,789.8	608.6	581.2	27.40	22.216		
8,000.0	7,457.0	8,275.4	7,617.0	34.6	0.0	105.19	200.4	1,789.2	610.8	583.1	27.63	22.109		
8,100.0	7,457.0	8,375.4	7,617.0	34.6	0.0	105.14	300.3	1,788.4	612.7	584.8	27.97	21.907		
8,200.0	7,457.0	8,475.4	7,617.0	34.8	0.0	105.09	400.3	1,787.6	614.7	586.3	28.42	21.632		
8,300.0	7,457.0	8,575.4	7,617.0	35.0	0.0	105.04	500.3	1,786.7	616.6	587.7	28.96	21.295		
8,400.0	7,457.0	8,675.4	7,617.0	35.3	0.0	104.99	600.3	1,785.9	618.6	589.0	29.59	20.905		
8,500.0	7,457.0	8,775.3	7,617.0	35.8	0.0	104.94	700.2	1,785.1	620.6	590.2	30.31	20.474		
8,600.0	7,457.0	8,875.3	7,617.0	36.3	0.0	104.90	800.2	1,784.2	622.5	591.4	31.11	20.011		
8,700.0	7,457.0	8,975.3	7,617.0	37.0	0.0	104.85	900.2	1,783.4	624.5	592.5	31.98	19.526		
8,800.0	7,457.0	9,075.3	7,617.0	37.9	0.0	104.80	1,000.2	1,782.6	626.4	593.5	32.92	19.028		
8,900.0	7,457.0	9,175.3	7,617.0	38.8	0.0	104.75	1,100.1	1,781.8	628.4	594.5	33.93	18.522		
9,000.0	7,457.0	9,275.2	7,617.0	39.7	0.0	104.71	1,200.1	1,780.9	630.3	595.4	34.99	18.017		
9,100.0	7,457.0	9,375.2	7,617.0	40.8	0.0	104.66	1,300.1	1,780.1	632.3	596.2	36.10	17.516		
9,200.0	7,457.0	9,475.2	7,617.0	41.9	0.0	104.61	1,400.1	1,779.3	634.3	597.0	37.26	17.023		
9,300.0	7,457.0	9,575.2	7,617.0	43.0	0.0	104.57	1,500.1	1,778.5	636.2	597.8	38.46	16.541		
9,400.0	7,457.0	9,675.2	7,617.0	44.2	0.0	104.52	1,600.0	1,777.6	638.2	598.5	39.71	16.072		
9,500.0	7,457.0	9,775.1	7,617.0	45.4	0.0	104.48	1,700.0	1,776.8	640.1	599.2	40.99	15.618		
9,600.0	7,457.0	9,875.1	7,617.0	46.7	0.0	104.43	1,800.0	1,776.0	642.1	599.8	42.30	15.180		
9,700.0	7,457.0	9,975.1	7,617.0	48.0	0.0	104.39	1,900.0	1,775.2	644.1	600.4	43.64	14.758		
9,800.0	7,457.0	10,075.1	7,617.0	49.3	0.0	104.34	1,999.9	1,774.3	646.0	601.0	45.01	14.352		
9,900.0	7,457.0	10,175.1	7,617.0	50.7	0.0	104.30	2,099.9	1,773.5	648.0	601.6	46.41	13.963		
10,000.0	7,457.0	10,275.0	7,617.0	52.1	0.0	104.25	2,199.9	1,772.7	649.9	602.1	47.82	13.591		
10,100.0	7,457.0	10,375.0	7,617.0	53.5	0.0	104.21	2,299.9	1,771.8	651.9	602.7	49.26	13.234		
10,200.0	7,457.0	10,475.0	7,617.0	54.9	0.0	104.17	2,399.8	1,771.0	653.9	603.2	50.72	12.892		
10,300.0	7,457.0	10,575.0	7,617.0	56.4	0.0	104.12	2,499.8	1,770.2	655.8	603.6	52.19	12.566		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4CDH - OH - PLAN #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,400.0	7,457.0	10,675.0	7,617.0	57.8	0.0	104.08	2,599.8	1,769.4	657.8	604.1	53.68	12.253	
10,500.0	7,457.0	10,774.9	7,617.0	59.3	0.0	104.04	2,699.8	1,768.5	659.8	604.6	55.19	11.954	
10,600.0	7,457.0	10,874.9	7,617.0	60.8	0.0	103.99	2,799.7	1,767.7	661.7	605.0	56.71	11.669	
10,700.0	7,457.0	10,974.9	7,617.0	62.3	0.0	103.95	2,899.7	1,766.9	663.7	605.5	58.24	11.396	
10,800.0	7,457.0	11,074.9	7,617.0	63.9	0.0	103.91	2,999.7	1,766.1	665.7	605.9	59.79	11.134	
10,900.0	7,457.0	11,174.9	7,617.0	65.4	0.0	103.87	3,099.7	1,765.2	667.6	606.3	61.34	10.884	
11,000.0	7,457.0	11,274.8	7,617.0	66.9	0.0	103.83	3,199.6	1,764.4	669.6	606.7	62.91	10.644	
11,100.0	7,457.0	11,374.8	7,617.0	68.5	0.0	103.79	3,299.6	1,763.6	671.6	607.1	64.48	10.415	
11,200.0	7,457.0	11,474.8	7,617.0	70.1	0.0	103.74	3,399.6	1,762.8	673.5	607.5	66.06	10.195	
11,300.0	7,457.0	11,574.8	7,617.0	71.7	0.0	103.70	3,499.6	1,761.9	675.5	607.8	67.65	9.985	
11,400.0	7,457.0	11,674.8	7,617.0	73.2	0.0	103.66	3,599.5	1,761.1	677.5	608.2	69.25	9.782	
11,500.0	7,457.0	11,774.7	7,617.0	74.8	0.0	103.62	3,699.5	1,760.3	679.4	608.6	70.86	9.588	
11,600.0	7,457.0	11,874.7	7,617.0	76.4	0.0	103.58	3,799.5	1,759.4	681.4	608.9	72.47	9.402	
11,700.0	7,457.0	11,974.7	7,617.0	78.1	0.0	103.54	3,899.5	1,758.6	683.4	609.3	74.09	9.223	
11,800.0	7,457.0	12,074.7	7,617.0	79.7	0.0	103.50	3,999.5	1,757.8	685.3	609.6	75.72	9.051	
11,900.0	7,457.0	12,174.6	7,617.0	81.3	0.0	103.46	4,099.4	1,757.0	687.3	610.0	77.35	8.886	
12,000.0	7,457.0	12,274.6	7,617.0	82.9	0.0	103.42	4,199.4	1,756.1	689.3	610.3	78.98	8.727	
12,100.0	7,457.0	12,374.6	7,617.0	84.6	0.0	103.39	4,299.4	1,755.3	691.2	610.6	80.62	8.574	
12,200.0	7,457.0	12,474.6	7,617.0	86.2	0.0	103.35	4,399.4	1,754.5	693.2	610.9	82.27	8.426	
12,300.0	7,457.0	12,574.6	7,617.0	87.9	0.0	103.31	4,499.3	1,753.7	695.2	611.3	83.92	8.284	
12,400.0	7,457.0	12,674.5	7,617.0	89.5	0.0	103.27	4,599.3	1,752.8	697.2	611.6	85.57	8.147	
12,500.0	7,457.0	12,774.5	7,617.0	91.2	0.0	103.23	4,699.3	1,752.0	699.1	611.9	87.23	8.015	
12,600.0	7,457.0	12,874.5	7,617.0	92.8	0.0	103.19	4,799.3	1,751.2	701.1	612.2	88.89	7.887	
12,700.0	7,457.0	12,974.5	7,617.0	94.5	0.0	103.16	4,899.2	1,750.3	703.1	612.5	90.56	7.764	
12,800.0	7,457.0	13,074.5	7,617.0	96.2	0.0	103.12	4,999.2	1,749.5	705.0	612.8	92.22	7.645	
12,900.0	7,457.0	13,174.4	7,617.0	97.8	0.0	103.08	5,099.2	1,748.7	707.0	613.1	93.90	7.530	
13,000.0	7,457.0	13,274.4	7,617.0	99.5	0.0	103.05	5,199.2	1,747.9	709.0	613.4	95.57	7.419	
13,100.0	7,457.0	13,374.4	7,617.0	101.2	0.0	103.01	5,299.1	1,747.0	711.0	613.7	97.25	7.311	
13,200.0	7,457.0	13,474.4	7,617.0	102.9	0.0	102.97	5,399.1	1,746.2	712.9	614.0	98.93	7.207	
13,300.0	7,457.0	13,574.4	7,617.0	104.6	0.0	102.94	5,499.1	1,745.4	714.9	614.3	100.61	7.106	
13,400.0	7,457.0	13,674.3	7,617.0	106.2	0.0	102.90	5,599.1	1,744.6	716.9	614.6	102.30	7.008	
13,500.0	7,457.0	13,774.3	7,617.0	107.9	0.0	102.86	5,699.0	1,743.7	718.9	614.9	103.98	6.913	
13,600.0	7,457.0	13,874.3	7,617.0	109.6	0.0	102.83	5,799.0	1,742.9	720.8	615.2	105.67	6.821	
13,700.0	7,457.0	13,974.3	7,617.0	111.3	0.0	102.79	5,899.0	1,742.1	722.8	615.4	107.37	6.732	
13,800.0	7,457.0	14,074.3	7,617.0	113.0	0.0	102.76	5,999.0	1,741.3	724.7	615.7	109.06	6.645	
13,900.0	7,457.0	14,174.3	7,617.0	114.7	0.0	102.74	6,099.0	1,740.4	725.3	614.6	110.74	6.550	
14,000.0	7,457.0	14,274.3	7,617.0	116.4	0.0	102.73	6,199.0	1,739.6	725.9	613.4	112.42	6.457	
14,100.0	7,457.0	14,374.3	7,617.0	118.1	0.0	102.72	6,299.0	1,738.8	726.4	612.3	114.10	6.366	
14,200.0	7,457.0	14,474.3	7,617.0	119.8	0.0	102.72	6,399.0	1,737.9	726.9	611.1	115.79	6.278	
14,300.0	7,457.0	14,574.3	7,617.0	121.5	0.0	102.71	6,498.9	1,737.1	727.4	609.9	117.48	6.192	
14,400.0	7,457.0	14,674.3	7,617.0	123.2	0.0	102.70	6,598.9	1,736.3	727.9	608.8	119.16	6.109	
14,500.0	7,457.0	14,774.2	7,617.0	124.9	0.0	102.69	6,698.9	1,735.5	728.5	607.6	120.85	6.028	
14,600.0	7,457.0	14,874.2	7,617.0	126.7	0.0	102.68	6,798.9	1,734.6	729.0	606.4	122.54	5.949	
14,700.0	7,457.0	14,974.2	7,617.0	128.4	0.0	102.67	6,898.9	1,733.8	729.5	605.3	124.24	5.872	
14,800.0	7,457.0	15,074.2	7,617.0	130.1	0.0	102.66	6,998.9	1,733.0	730.0	604.1	125.93	5.797	
14,900.0	7,457.0	15,174.2	7,617.0	131.8	0.0	102.65	7,098.9	1,732.2	730.5	602.9	127.63	5.724	
15,000.0	7,457.0	15,274.2	7,617.0	133.5	0.0	102.64	7,198.9	1,731.3	731.1	601.7	129.32	5.653	
15,100.0	7,457.0	15,374.2	7,617.0	135.2	0.0	102.63	7,298.9	1,730.5	731.6	600.6	131.02	5.584	
15,200.0	7,457.0	15,474.2	7,617.0	136.9	0.0	102.62	7,398.9	1,729.7	732.1	599.4	132.72	5.516	
15,300.0	7,457.0	15,574.2	7,617.0	138.7	0.0	102.61	7,498.9	1,728.8	732.6	598.2	134.42	5.450	
15,400.0	7,457.0	15,674.2	7,617.0	140.4	0.0	102.61	7,598.9	1,728.0	733.1	597.0	136.12	5.386	
15,500.0	7,457.0	15,774.2	7,617.0	142.1	0.0	102.60	7,698.9	1,727.2	733.7	595.8	137.82	5.323	

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,457.0	15,874.2	7,617.0	143.8	0.0	102.59	7,798.9	1,726.4	734.2	594.7	139.52	5.262		
15,700.0	7,457.0	15,974.2	7,617.0	145.6	0.0	102.58	7,898.9	1,725.5	734.7	593.5	141.22	5.202		
15,800.0	7,457.0	16,074.2	7,617.0	147.3	0.0	102.57	7,998.9	1,724.7	735.2	592.3	142.93	5.144		
15,900.0	7,457.0	16,174.2	7,617.0	149.0	0.0	102.56	8,098.9	1,723.9	735.7	591.1	144.63	5.087		
16,000.0	7,457.0	16,274.2	7,617.0	150.7	0.0	102.55	8,198.9	1,723.1	736.3	589.9	146.34	5.031		
16,100.0	7,457.0	16,374.2	7,617.0	152.5	0.0	102.54	8,298.9	1,722.2	736.8	588.7	148.05	4.977		
16,200.0	7,457.0	16,474.2	7,617.0	154.2	0.0	102.53	8,398.9	1,721.4	737.3	587.5	149.75	4.923		
16,300.0	7,457.0	16,574.2	7,617.0	155.9	0.0	102.52	8,498.9	1,720.6	737.8	586.4	151.46	4.871		
16,400.0	7,457.0	16,674.2	7,617.0	157.6	0.0	102.52	8,598.8	1,719.8	738.3	585.2	153.17	4.820		
16,500.0	7,457.0	16,774.2	7,617.0	159.4	0.0	102.51	8,698.8	1,718.9	738.9	584.0	154.88	4.770		
16,600.0	7,457.0	16,874.2	7,617.0	161.1	0.0	102.50	8,798.8	1,718.1	739.4	582.8	156.59	4.722		
16,700.0	7,457.0	16,974.2	7,617.0	162.8	0.0	102.49	8,898.8	1,717.3	739.9	581.6	158.30	4.674		
16,800.0	7,457.0	17,074.2	7,617.0	164.6	0.0	102.48	8,998.8	1,716.4	740.4	580.4	160.01	4.627		
16,900.0	7,457.0	17,174.2	7,617.0	166.3	0.0	102.47	9,098.8	1,715.6	740.9	579.2	161.73	4.581		
17,000.0	7,457.0	17,274.2	7,617.0	168.0	0.0	102.46	9,198.8	1,714.8	741.5	578.0	163.44	4.537		
17,100.0	7,457.0	17,374.2	7,617.0	169.8	0.0	102.45	9,298.8	1,714.0	742.0	576.8	165.15	4.493		
17,200.0	7,457.0	17,474.2	7,617.0	171.5	0.0	102.44	9,398.8	1,713.1	742.5	575.6	166.87	4.450		
17,300.0	7,457.0	17,574.2	7,617.0	173.3	0.0	102.44	9,498.8	1,712.3	743.0	574.4	168.58	4.407		
17,400.0	7,457.0	17,674.2	7,617.0	175.0	0.0	102.43	9,598.8	1,711.5	743.5	573.2	170.30	4.366		
17,500.0	7,457.0	17,774.2	7,617.0	176.7	0.0	102.42	9,698.8	1,710.7	744.1	572.0	172.02	4.326		
17,600.0	7,457.0	17,874.2	7,617.0	178.5	0.0	102.41	9,798.8	1,709.8	744.6	570.8	173.73	4.286		
17,700.0	7,457.0	17,974.2	7,617.0	180.2	0.0	102.40	9,898.8	1,709.0	745.1	569.6	175.45	4.247		
17,721.0	7,457.0	17,995.2	7,617.0	180.6	0.0	102.40	9,919.7	1,708.8	745.2	569.4	175.81	4.239 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	89.68	0.4	75.0	75.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.68	0.4	75.0	75.0	74.7	0.28	270.597		
200.0	200.0	200.0	200.0	1.0	0.0	89.68	0.4	75.0	75.0	74.2	0.80	93.956		
300.0	300.0	300.0	300.0	1.5	0.0	89.68	0.4	75.0	75.0	73.7	1.22	61.223		
400.0	400.0	400.0	400.0	1.9	0.0	89.68	0.4	75.0	75.0	73.4	1.62	46.323		
500.0	500.0	500.0	500.0	2.3	0.0	89.68	0.4	75.0	75.0	73.0	2.00	37.504 CC, ES		
600.0	600.0	597.5	597.4	2.7	0.0	89.94	0.1	76.6	76.6	74.3	2.37	32.345		
700.0	700.0	694.7	694.6	3.1	0.0	90.66	-0.9	81.4	81.6	78.9	2.73	29.928		
800.0	800.0	791.5	791.0	3.5	0.0	91.68	-2.6	89.5	90.0	86.9	3.08	29.253		
900.0	900.0	887.6	886.5	3.9	0.0	92.81	-4.9	100.6	101.6	98.2	3.41	29.762		
1,000.0	1,000.0	982.9	980.6	4.2	0.0	93.94	-7.9	114.7	116.6	112.9	3.75	31.120		
1,100.0	1,100.0	1,077.4	1,073.5	4.6	0.0	-17.80	-11.5	131.7	133.2	129.0	4.22	31.549		
1,200.0	1,199.8	1,171.4	1,165.3	5.0	0.0	-17.32	-15.6	151.6	149.8	144.9	4.91	30.482		
1,300.0	1,299.5	1,264.9	1,255.9	5.7	0.0	-17.14	-20.4	174.3	166.3	160.8	5.54	30.042		
1,400.0	1,398.7	1,357.9	1,345.2	6.5	0.0	-17.18	-25.7	199.8	182.7	176.6	6.10	29.941		
1,500.0	1,497.5	1,450.5	1,433.1	7.1	0.0	-17.38	-31.6	227.9	199.0	192.4	6.62	30.039		
1,600.0	1,595.6	1,542.5	1,519.7	7.8	0.0	-17.69	-38.0	258.6	215.2	208.0	7.15	30.106		
1,700.0	1,693.4	1,640.6	1,611.2	8.2	0.0	-18.16	-45.2	293.0	231.4	223.8	7.50	30.827		
1,800.0	1,791.2	1,739.2	1,703.3	8.5	0.0	-18.57	-52.4	327.7	247.6	239.8	7.78	31.831		
1,900.0	1,888.9	1,837.9	1,795.4	8.8	0.0	-18.94	-59.7	362.3	263.8	255.7	8.06	32.718		
2,000.0	1,986.7	1,936.6	1,887.5	9.1	0.0	-19.26	-66.9	396.9	280.0	271.6	8.36	33.501		
2,100.0	2,084.5	2,035.2	1,979.6	9.4	0.0	-19.54	-74.2	431.6	296.2	287.6	8.66	34.195		
2,200.0	2,182.2	2,133.9	2,071.7	9.7	0.0	-19.80	-81.4	466.2	312.5	303.5	8.98	34.809		
2,300.0	2,280.0	2,232.5	2,163.8	10.1	0.0	-20.03	-88.7	500.8	328.7	319.4	9.30	35.352		
2,400.0	2,377.8	2,331.2	2,255.9	10.4	0.0	-20.24	-95.9	535.5	345.0	335.3	9.63	35.834		
2,500.0	2,475.5	2,429.9	2,348.0	10.8	0.0	-20.43	-103.2	570.1	361.2	351.3	9.96	36.262		
2,600.0	2,573.3	2,528.5	2,440.1	11.1	0.0	-20.60	-110.4	604.7	377.5	367.2	10.30	36.643		
2,700.0	2,671.1	2,627.2	2,532.2	11.5	0.0	-20.76	-117.6	639.4	393.7	383.1	10.65	36.982		
2,800.0	2,768.9	2,725.9	2,624.3	11.9	0.0	-20.91	-124.9	674.0	410.0	399.0	11.00	37.285		
2,900.0	2,866.6	2,824.5	2,716.4	12.4	0.0	-21.04	-132.1	708.7	426.3	414.9	11.35	37.555		
3,000.0	2,964.4	2,923.2	2,808.5	12.8	0.0	-21.17	-139.4	743.3	442.5	430.8	11.71	37.797		
3,100.0	3,062.2	3,021.9	2,900.6	13.3	0.0	-21.28	-146.6	777.9	458.8	446.7	12.07	38.015		
3,200.0	3,159.9	3,120.5	2,992.7	13.7	0.0	-21.39	-153.9	812.6	475.1	462.6	12.43	38.210		
3,300.0	3,257.7	3,219.2	3,084.8	14.2	0.0	-21.49	-161.1	847.2	491.3	478.5	12.80	38.385		
3,400.0	3,355.5	3,317.8	3,176.9	14.7	0.0	-21.59	-168.4	881.8	507.6	494.4	13.17	38.544		
3,500.0	3,453.2	3,416.5	3,269.0	15.2	0.0	-21.68	-175.6	916.5	523.9	510.3	13.54	38.686		
3,600.0	3,551.0	3,515.2	3,361.1	15.6	0.0	-21.76	-182.9	951.1	540.2	526.3	13.92	38.816		
3,700.0	3,648.8	3,613.8	3,453.2	16.1	0.0	-21.84	-190.1	985.8	556.4	542.2	14.29	38.932		
3,800.0	3,746.5	3,712.5	3,545.3	16.6	0.0	-21.91	-197.3	1,020.4	572.7	558.1	14.67	39.038		
3,900.0	3,844.3	3,811.2	3,637.4	17.1	0.0	-21.98	-204.6	1,055.0	589.0	574.0	15.05	39.135		
4,000.0	3,942.1	3,909.8	3,729.5	17.6	0.0	-22.05	-211.8	1,089.7	605.3	589.9	15.43	39.222		
4,100.0	4,039.9	4,008.5	3,821.6	18.1	0.0	-22.11	-219.1	1,124.3	621.6	605.7	15.82	39.302		
4,200.0	4,137.6	4,107.2	3,913.7	18.6	0.0	-22.17	-226.3	1,158.9	637.8	621.6	16.20	39.374		
4,300.0	4,235.4	4,205.8	4,005.8	19.1	0.0	-22.23	-233.6	1,193.6	654.1	637.5	16.59	39.440		
4,400.0	4,333.2	4,304.5	4,097.9	19.6	0.0	-22.28	-240.8	1,228.2	670.4	653.4	16.97	39.501		
4,500.0	4,430.9	4,403.1	4,190.0	20.1	0.0	-22.34	-248.1	1,262.9	686.7	669.3	17.36	39.556		
4,600.0	4,528.7	4,501.8	4,282.1	20.6	0.0	-22.38	-255.3	1,297.5	703.0	685.2	17.75	39.606		
4,700.0	4,626.5	4,600.5	4,374.2	21.1	0.0	-22.43	-262.5	1,332.1	719.3	701.1	18.14	39.652		
4,800.0	4,724.2	4,699.1	4,466.3	21.6	0.0	-22.48	-269.8	1,366.8	735.5	717.0	18.53	39.694		
4,900.0	4,822.0	4,797.8	4,558.4	22.1	0.0	-22.52	-277.0	1,401.4	751.8	732.9	18.92	39.733		
5,000.0	4,919.8	4,896.5	4,650.5	22.6	0.0	-22.56	-284.3	1,436.0	768.1	748.8	19.31	39.768		
5,100.0	5,017.5	4,995.1	4,742.6	23.1	0.0	-22.60	-291.5	1,470.7	784.4	764.7	19.71	39.801		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,115.3	5,093.8	4,834.7	23.6	0.0	-22.64	-298.8	1,505.3	800.7	780.6	20.10	39.831		
5,300.0	5,213.1	5,192.5	4,926.8	24.1	0.0	-22.67	-306.0	1,540.0	817.0	796.5	20.50	39.858		
5,400.0	5,310.8	5,291.1	5,018.9	24.6	0.0	-22.71	-313.3	1,574.6	833.3	812.4	20.89	39.883		
5,500.0	5,408.6	5,389.8	5,111.0	25.1	0.0	-22.74	-320.5	1,609.2	849.5	828.3	21.29	39.906		
5,600.0	5,506.4	5,488.4	5,203.1	25.6	0.0	-22.77	-327.8	1,643.9	865.8	844.2	21.69	39.927		
5,700.0	5,604.2	5,587.1	5,295.2	26.1	0.0	-22.80	-335.0	1,678.5	882.1	860.0	22.08	39.947		
5,800.0	5,701.9	5,685.8	5,387.3	26.7	0.0	-22.83	-342.2	1,713.1	898.4	875.9	22.48	39.964		
5,900.0	5,799.7	5,784.4	5,479.4	27.2	0.0	-22.86	-349.5	1,747.8	914.7	891.8	22.88	39.981		
6,000.0	5,897.5	5,883.1	5,571.5	27.7	0.0	-22.89	-356.7	1,782.4	931.0	907.7	23.28	39.996		
6,100.0	5,995.2	5,981.8	5,663.6	28.2	0.0	-22.92	-364.0	1,817.0	947.3	923.6	23.68	40.009		
6,200.0	6,093.0	6,080.4	5,755.7	28.7	0.0	-22.94	-371.2	1,851.7	963.6	939.5	24.08	40.022		
6,300.0	6,190.8	6,179.1	5,847.8	29.2	0.0	-22.97	-378.5	1,886.3	979.9	955.4	24.48	40.033		
6,400.0	6,288.5	6,277.8	5,939.9	29.7	0.0	-22.99	-385.7	1,921.0	996.1	971.3	24.88	40.044		
6,500.0	6,386.3	6,376.4	6,032.0	30.2	0.0	-23.02	-393.0	1,955.6	1,012.4	987.2	25.28	40.053		
6,600.0	6,484.1	6,475.1	6,124.1	30.7	0.0	-23.04	-400.2	1,990.2	1,028.7	1,003.0	25.68	40.062		
6,700.0	6,581.8	6,573.7	6,216.1	31.2	0.0	-23.06	-407.5	2,024.9	1,045.0	1,018.9	26.08	40.070		
6,800.0	6,679.6	6,672.4	6,308.2	31.7	0.0	-23.08	-414.7	2,059.5	1,061.3	1,034.8	26.48	40.077		
6,900.0	6,777.4	6,771.1	6,400.3	32.2	0.0	-23.10	-421.9	2,094.1	1,077.6	1,050.7	26.88	40.083		
7,000.0	6,875.2	6,869.7	6,492.4	32.7	0.0	-9.82	-429.2	2,128.8	1,093.9	1,066.6	27.28	40.101		
7,100.0	6,973.1	6,967.3	6,583.6	33.3	0.0	34.71	-436.4	2,163.0	1,110.3	1,082.6	27.62	40.199		
7,200.0	7,068.6	7,061.1	6,671.1	33.6	0.0	56.72	-443.2	2,196.0	1,126.9	1,098.8	28.08	40.136		
7,300.0	7,158.8	7,148.2	6,752.4	34.0	0.0	66.69	-449.6	2,226.6	1,144.6	1,116.2	28.38	40.329		
7,400.0	7,241.0	7,238.1	6,836.5	34.3	0.0	72.36	-453.9	2,258.1	1,164.3	1,135.7	28.62	40.676		
7,500.0	7,312.6	7,348.5	6,939.0	34.5	0.0	76.35	-441.5	2,296.4	1,185.4	1,156.5	28.96	40.937		
7,600.0	7,371.6	7,481.5	7,057.0	34.7	0.0	79.56	-399.1	2,340.0	1,206.9	1,177.5	29.35	41.124		
7,700.0	7,416.1	7,648.8	7,187.4	34.7	0.0	82.48	-306.7	2,387.4	1,226.7	1,197.0	29.68	41.329		
7,800.0	7,444.7	7,839.8	7,298.6	34.7	0.0	84.65	-157.6	2,426.7	1,242.0	1,212.1	29.88	41.560		
7,900.0	7,456.7	8,089.7	7,365.2	34.6	0.0	85.87	80.0	2,448.0	1,248.9	1,218.8	30.05	41.554		
8,000.0	7,457.0	8,224.7	7,367.0	34.6	0.0	85.87	214.9	2,446.6	1,250.2	1,219.8	30.35	41.189		
8,100.0	7,457.0	8,324.7	7,367.0	34.6	0.0	85.88	314.9	2,445.0	1,251.5	1,220.7	30.74	40.708		
8,200.0	7,457.0	8,424.7	7,367.0	34.8	0.0	85.88	414.9	2,443.5	1,252.8	1,221.5	31.23	40.115		
8,300.0	7,457.0	8,524.7	7,367.0	35.0	0.0	85.88	514.9	2,441.9	1,254.1	1,222.2	31.81	39.427		
8,400.0	7,457.0	8,624.6	7,367.0	35.3	0.0	85.89	614.8	2,440.3	1,255.3	1,222.9	32.47	38.660		
8,500.0	7,457.0	8,724.6	7,367.0	35.8	0.0	85.89	714.8	2,438.8	1,256.6	1,223.4	33.22	37.832		
8,600.0	7,457.0	8,824.6	7,367.0	36.3	0.0	85.90	814.8	2,437.2	1,257.9	1,223.9	34.04	36.957		
8,700.0	7,457.0	8,924.6	7,367.0	37.0	0.0	85.90	914.8	2,435.7	1,259.2	1,224.3	34.93	36.051		
8,800.0	7,457.0	9,024.6	7,367.0	37.9	0.0	85.91	1,014.8	2,434.1	1,260.5	1,224.6	35.89	35.126		
8,900.0	7,457.0	9,124.6	7,367.0	38.8	0.0	85.91	1,114.7	2,432.5	1,261.8	1,224.9	36.90	34.193		
9,000.0	7,457.0	9,224.6	7,367.0	39.7	0.0	85.91	1,214.7	2,431.0	1,263.1	1,225.1	37.97	33.262		
9,100.0	7,457.0	9,324.6	7,367.0	40.8	0.0	85.92	1,314.7	2,429.4	1,264.4	1,225.3	39.10	32.340		
9,200.0	7,457.0	9,424.6	7,367.0	41.9	0.0	85.92	1,414.7	2,427.9	1,265.7	1,225.4	40.27	31.433		
9,300.0	7,457.0	9,524.6	7,367.0	43.0	0.0	85.93	1,514.7	2,426.3	1,267.0	1,225.5	41.48	30.546		
9,400.0	7,457.0	9,624.6	7,367.0	44.2	0.0	85.93	1,614.6	2,424.8	1,268.2	1,225.5	42.73	29.682		
9,500.0	7,457.0	9,724.6	7,367.0	45.4	0.0	85.93	1,714.6	2,423.2	1,269.5	1,225.5	44.01	28.844		
9,600.0	7,457.0	9,824.5	7,367.0	46.7	0.0	85.94	1,814.6	2,421.6	1,270.8	1,225.5	45.33	28.033		
9,700.0	7,457.0	9,924.5	7,367.0	48.0	0.0	85.94	1,914.6	2,420.1	1,272.1	1,225.4	46.68	27.251		
9,800.0	7,457.0	10,024.5	7,367.0	49.3	0.0	85.95	2,014.6	2,418.5	1,273.4	1,225.3	48.06	26.498		
9,900.0	7,457.0	10,124.5	7,367.0	50.7	0.0	85.95	2,114.5	2,417.0	1,274.7	1,225.2	49.46	25.773		
10,000.0	7,457.0	10,224.5	7,367.0	52.1	0.0	85.96	2,214.5	2,415.4	1,276.0	1,225.1	50.88	25.077		
10,100.0	7,457.0	10,324.5	7,367.0	53.5	0.0	85.96	2,314.5	2,413.8	1,277.3	1,224.9	52.33	24.409		
10,200.0	7,457.0	10,424.5	7,367.0	54.9	0.0	85.96	2,414.5	2,412.3	1,278.6	1,224.8	53.79	23.769		
10,300.0	7,457.0	10,524.5	7,367.0	56.4	0.0	85.97	2,514.5	2,410.7	1,279.9	1,224.6	55.27	23.155		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,457.0	10,624.5	7,367.0	57.8	0.0	85.97	2,614.4	2,409.2	1,281.1	1,224.4	56.77	22.566		
10,500.0	7,457.0	10,724.5	7,367.0	59.3	0.0	85.98	2,714.4	2,407.6	1,282.4	1,224.1	58.29	22.002		
10,600.0	7,457.0	10,824.5	7,367.0	60.8	0.0	85.98	2,814.4	2,406.0	1,283.7	1,223.9	59.81	21.462		
10,700.0	7,457.0	10,924.5	7,367.0	62.3	0.0	85.98	2,914.4	2,404.5	1,285.0	1,223.7	61.36	20.944		
10,800.0	7,457.0	11,024.4	7,367.0	63.9	0.0	85.99	3,014.4	2,402.9	1,286.3	1,223.4	62.91	20.447		
10,900.0	7,457.0	11,124.4	7,367.0	65.4	0.0	85.99	3,114.3	2,401.4	1,287.6	1,223.1	64.47	19.971		
11,000.0	7,457.0	11,224.4	7,367.0	66.9	0.0	86.00	3,214.3	2,399.8	1,288.9	1,222.8	66.05	19.515		
11,100.0	7,457.0	11,324.4	7,367.0	68.5	0.0	86.00	3,314.3	2,398.3	1,290.2	1,222.5	67.63	19.077		
11,200.0	7,457.0	11,424.4	7,367.0	70.1	0.0	86.00	3,414.3	2,396.7	1,291.5	1,222.2	69.22	18.656		
11,300.0	7,457.0	11,524.4	7,367.0	71.7	0.0	86.01	3,514.2	2,395.1	1,292.8	1,221.9	70.83	18.252		
11,400.0	7,457.0	11,624.4	7,367.0	73.2	0.0	86.01	3,614.2	2,393.6	1,294.0	1,221.6	72.44	17.865		
11,500.0	7,457.0	11,724.4	7,367.0	74.8	0.0	86.02	3,714.2	2,392.0	1,295.3	1,221.3	74.05	17.492		
11,600.0	7,457.0	11,824.4	7,367.0	76.4	0.0	86.02	3,814.2	2,390.5	1,296.6	1,220.9	75.68	17.134		
11,700.0	7,457.0	11,924.4	7,367.0	78.1	0.0	86.02	3,914.2	2,388.9	1,297.9	1,220.6	77.31	16.789		
11,800.0	7,457.0	12,024.4	7,367.0	79.7	0.0	86.03	4,014.1	2,387.3	1,299.2	1,220.3	78.94	16.458		
11,900.0	7,457.0	12,124.4	7,367.0	81.3	0.0	86.03	4,114.1	2,385.8	1,300.5	1,219.9	80.58	16.138		
12,000.0	7,457.0	12,224.3	7,367.0	82.9	0.0	86.04	4,214.1	2,384.2	1,301.8	1,219.6	82.23	15.831		
12,100.0	7,457.0	12,324.3	7,367.0	84.6	0.0	86.04	4,314.1	2,382.7	1,303.1	1,219.2	83.88	15.534		
12,200.0	7,457.0	12,424.3	7,367.0	86.2	0.0	86.04	4,414.1	2,381.1	1,304.4	1,218.8	85.54	15.249		
12,300.0	7,457.0	12,524.3	7,367.0	87.9	0.0	86.05	4,514.0	2,379.5	1,305.7	1,218.5	87.20	14.973		
12,400.0	7,457.0	12,624.3	7,367.0	89.5	0.0	86.05	4,614.0	2,378.0	1,306.9	1,218.1	88.87	14.707		
12,500.0	7,457.0	12,724.3	7,367.0	91.2	0.0	86.05	4,714.0	2,376.4	1,308.2	1,217.7	90.54	14.450		
12,600.0	7,457.0	12,824.3	7,367.0	92.8	0.0	86.06	4,814.0	2,374.9	1,309.5	1,217.3	92.21	14.202		
12,700.0	7,457.0	12,924.3	7,367.0	94.5	0.0	86.06	4,914.0	2,373.3	1,310.8	1,216.9	93.89	13.962		
12,800.0	7,457.0	13,024.3	7,367.0	96.2	0.0	86.07	5,013.9	2,371.8	1,312.1	1,216.5	95.57	13.730		
12,900.0	7,457.0	13,124.3	7,367.0	97.8	0.0	86.07	5,113.9	2,370.2	1,313.4	1,216.1	97.25	13.506		
13,000.0	7,457.0	13,224.3	7,367.0	99.5	0.0	86.07	5,213.9	2,368.6	1,314.7	1,215.8	98.94	13.288		
13,100.0	7,457.0	13,324.3	7,367.0	101.2	0.0	86.08	5,313.9	2,367.1	1,316.0	1,215.4	100.62	13.078		
13,200.0	7,457.0	13,424.2	7,367.0	102.9	0.0	86.08	5,413.9	2,365.5	1,317.3	1,215.0	102.32	12.874		
13,300.0	7,457.0	13,524.2	7,367.0	104.6	0.0	86.09	5,513.8	2,364.0	1,318.6	1,214.5	104.01	12.677		
13,400.0	7,457.0	13,624.2	7,367.0	106.2	0.0	86.09	5,613.8	2,362.4	1,319.8	1,214.1	105.71	12.486		
13,500.0	7,457.0	13,724.2	7,367.0	107.9	0.0	86.09	5,713.8	2,360.8	1,321.1	1,213.7	107.41	12.300		
13,600.0	7,457.0	13,824.2	7,367.0	109.6	0.0	86.10	5,813.8	2,359.3	1,322.4	1,213.3	109.11	12.120		
13,700.0	7,457.0	13,924.2	7,367.0	111.3	0.0	86.10	5,913.8	2,357.7	1,323.7	1,212.9	110.81	11.946		
13,800.0	7,457.0	14,024.2	7,367.0	113.0	0.0	86.10	6,013.7	2,356.2	1,325.0	1,212.4	112.52	11.776		
13,900.0	7,457.0	14,124.2	7,367.0	114.7	0.0	86.10	6,113.7	2,354.6	1,324.9	1,210.6	114.22	11.599		
14,000.0	7,457.0	14,224.2	7,367.0	116.4	0.0	86.10	6,213.7	2,353.0	1,324.7	1,208.7	115.92	11.427		
14,100.0	7,457.0	14,324.2	7,367.0	118.1	0.0	86.10	6,313.7	2,351.5	1,324.5	1,206.8	117.63	11.260		
14,200.0	7,457.0	14,424.2	7,367.0	119.8	0.0	86.10	6,413.7	2,349.9	1,324.3	1,204.9	119.33	11.097		
14,300.0	7,457.0	14,524.2	7,367.0	121.5	0.0	86.10	6,513.7	2,348.4	1,324.1	1,203.0	121.04	10.939		
14,400.0	7,457.0	14,624.2	7,367.0	123.2	0.0	86.10	6,613.7	2,346.8	1,323.9	1,201.1	122.75	10.785		
14,500.0	7,457.0	14,724.2	7,367.0	124.9	0.0	86.10	6,713.7	2,345.3	1,323.7	1,199.2	124.46	10.635		
14,600.0	7,457.0	14,824.2	7,367.0	126.7	0.0	86.10	6,813.6	2,343.7	1,323.5	1,197.3	126.18	10.489		
14,700.0	7,457.0	14,924.2	7,367.0	128.4	0.0	86.10	6,913.6	2,342.1	1,323.3	1,195.4	127.89	10.347		
14,800.0	7,457.0	15,024.2	7,367.0	130.1	0.0	86.10	7,013.6	2,340.6	1,323.1	1,193.5	129.61	10.208		
14,900.0	7,457.0	15,124.2	7,367.0	131.8	0.0	86.10	7,113.6	2,339.0	1,322.9	1,191.5	131.33	10.073		
15,000.0	7,457.0	15,224.2	7,367.0	133.5	0.0	86.10	7,213.6	2,337.5	1,322.7	1,189.6	133.04	9.942		
15,100.0	7,457.0	15,324.2	7,367.0	135.2	0.0	86.10	7,313.6	2,335.9	1,322.5	1,187.7	134.76	9.813		
15,200.0	7,457.0	15,424.2	7,367.0	136.9	0.0	86.10	7,413.6	2,334.3	1,322.3	1,185.8	136.48	9.688		
15,300.0	7,457.0	15,524.2	7,367.0	138.7	0.0	86.10	7,513.6	2,332.8	1,322.1	1,183.9	138.21	9.566		
15,400.0	7,457.0	15,624.2	7,367.0	140.4	0.0	86.10	7,613.5	2,331.2	1,321.9	1,181.9	139.93	9.447		
15,500.0	7,457.0	15,724.2	7,367.0	142.1	0.0	86.10	7,713.5	2,329.7	1,321.7	1,180.0	141.65	9.330		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NBH - OH - PLAN #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
15,600.0	7,457.0	15,824.2	7,367.0	143.8	0.0	86.09	7,813.5	2,328.1	1,321.5	1,178.1	143.38	9.217	
15,700.0	7,457.0	15,924.2	7,367.0	145.6	0.0	86.09	7,913.5	2,326.5	1,321.3	1,176.2	145.10	9.106	
15,800.0	7,457.0	16,024.2	7,367.0	147.3	0.0	86.09	8,013.5	2,325.0	1,321.1	1,174.2	146.83	8.997	
15,900.0	7,457.0	16,124.2	7,367.0	149.0	0.0	86.09	8,113.5	2,323.4	1,320.9	1,172.3	148.56	8.891	
16,000.0	7,457.0	16,224.2	7,367.0	150.7	0.0	86.09	8,213.5	2,321.9	1,320.7	1,170.4	150.29	8.788	
16,100.0	7,457.0	16,324.2	7,367.0	152.5	0.0	86.09	8,313.5	2,320.3	1,320.5	1,168.5	152.02	8.686	
16,200.0	7,457.0	16,424.2	7,367.0	154.2	0.0	86.09	8,413.4	2,318.7	1,320.3	1,166.5	153.75	8.587	
16,300.0	7,457.0	16,524.2	7,367.0	155.9	0.0	86.09	8,513.4	2,317.2	1,320.1	1,164.6	155.48	8.490	
16,400.0	7,457.0	16,624.2	7,367.0	157.6	0.0	86.09	8,613.4	2,315.6	1,319.9	1,162.7	157.21	8.396	
16,500.0	7,457.0	16,724.2	7,367.0	159.4	0.0	86.09	8,713.4	2,314.1	1,319.7	1,160.7	158.94	8.303	
16,600.0	7,457.0	16,824.2	7,367.0	161.1	0.0	86.09	8,813.4	2,312.5	1,319.5	1,158.8	160.67	8.212	
16,700.0	7,457.0	16,924.2	7,367.0	162.8	0.0	86.09	8,913.4	2,311.0	1,319.3	1,156.9	162.41	8.123	
16,800.0	7,457.0	17,024.2	7,367.0	164.6	0.0	86.09	9,013.4	2,309.4	1,319.1	1,154.9	164.14	8.036	
16,900.0	7,457.0	17,124.2	7,367.0	166.3	0.0	86.09	9,113.4	2,307.8	1,318.9	1,153.0	165.88	7.951	
17,000.0	7,457.0	17,224.2	7,367.0	168.0	0.0	86.09	9,213.3	2,306.3	1,318.7	1,151.1	167.61	7.867	
17,100.0	7,457.0	17,324.2	7,367.0	169.8	0.0	86.09	9,313.3	2,304.7	1,318.5	1,149.1	169.35	7.786	
17,200.0	7,457.0	17,424.2	7,367.0	171.5	0.0	86.09	9,413.3	2,303.2	1,318.3	1,147.2	171.09	7.705	
17,300.0	7,457.0	17,524.2	7,367.0	173.3	0.0	86.08	9,513.3	2,301.6	1,318.1	1,145.3	172.82	7.627	
17,400.0	7,457.0	17,624.2	7,367.0	175.0	0.0	86.08	9,613.3	2,300.0	1,317.9	1,143.3	174.56	7.550	
17,500.0	7,457.0	17,724.2	7,367.0	176.7	0.0	86.08	9,713.3	2,298.5	1,317.7	1,141.4	176.30	7.474	
17,600.0	7,457.0	17,824.2	7,367.0	178.5	0.0	86.08	9,813.3	2,296.9	1,317.5	1,139.4	178.04	7.400	
17,700.0	7,457.0	17,924.2	7,367.0	180.2	0.0	86.08	9,913.3	2,295.4	1,317.3	1,137.5	179.78	7.327	
17,721.0	7,457.0	17,945.2	7,367.0	180.6	0.0	86.08	9,934.2	2,295.0	1,317.2	1,137.1	180.14	7.312 SF	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NCH - OH - PLAN #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	89.63	0.4	60.0	60.0				
100.0	100.0	100.0	100.0	0.4	0.0	89.63	0.4	60.0	60.0	59.7	0.28	216.316	
200.0	200.0	200.0	200.0	1.0	0.0	89.63	0.4	60.0	60.0	59.2	0.80	75.116	
300.0	300.0	300.0	300.0	1.5	0.0	89.63	0.4	60.0	60.0	58.7	1.23	48.951	
400.0	400.0	400.0	400.0	1.9	0.0	89.63	0.4	60.0	60.0	58.4	1.62	37.040	
500.0	500.0	500.0	500.0	2.3	0.0	89.63	0.4	60.0	60.0	58.0	2.00	29.990	
600.0	600.0	600.0	600.0	2.7	0.0	89.63	0.4	60.0	60.0	57.6	2.37	25.267	CC, ES
700.0	700.0	698.0	697.9	3.1	0.0	89.96	0.0	61.6	61.6	58.9	2.74	22.512	
800.0	800.0	795.7	795.5	3.5	0.0	90.87	-1.0	66.5	66.7	63.6	3.09	21.573	
900.0	900.0	893.0	892.5	3.9	0.0	92.11	-2.7	74.6	75.0	71.6	3.43	21.869	
1,000.0	1,000.0	989.6	988.4	4.2	0.0	93.43	-5.1	85.8	86.8	83.0	3.76	23.050	
1,100.0	1,100.0	1,085.5	1,083.2	4.6	0.0	-18.18	-8.2	100.1	100.2	96.0	4.24	23.616	
1,200.0	1,199.8	1,181.1	1,177.1	5.0	0.0	-17.70	-11.9	117.4	113.6	108.7	4.94	23.012	
1,300.0	1,299.5	1,276.2	1,270.0	5.7	0.0	-17.58	-16.2	137.7	127.1	121.5	5.56	22.837	
1,400.0	1,398.7	1,370.9	1,361.7	6.5	0.0	-17.72	-21.2	160.8	140.4	134.3	6.13	22.898	
1,500.0	1,497.5	1,465.2	1,452.1	7.1	0.0	-18.06	-26.8	186.8	153.8	147.1	6.66	23.098	
1,600.0	1,595.6	1,559.1	1,541.3	7.8	0.0	-18.53	-32.9	215.5	167.1	159.9	7.18	23.269	
1,700.0	1,693.4	1,653.8	1,630.2	8.2	0.0	-19.06	-39.7	247.3	181.6	174.1	7.50	24.230	
1,800.0	1,791.2	1,752.6	1,722.7	8.5	0.0	-19.48	-47.0	281.3	197.2	189.4	7.77	25.377	
1,900.0	1,888.9	1,851.3	1,815.1	8.8	0.0	-19.85	-54.3	315.3	212.7	204.6	8.06	26.403	
2,000.0	1,986.7	1,950.1	1,907.6	9.1	0.0	-20.16	-61.6	349.3	228.2	219.9	8.35	27.325	
2,100.0	2,084.5	2,048.9	2,000.0	9.4	0.0	-20.44	-68.9	383.3	243.8	235.1	8.66	28.151	
2,200.0	2,182.2	2,147.7	2,092.5	9.7	0.0	-20.68	-76.1	417.4	259.3	250.4	8.98	28.894	
2,300.0	2,280.0	2,246.4	2,184.9	10.1	0.0	-20.90	-83.4	451.4	274.9	265.6	9.30	29.562	
2,400.0	2,377.8	2,345.2	2,277.4	10.4	0.0	-21.09	-90.7	485.4	290.5	280.8	9.63	30.164	
2,500.0	2,475.5	2,444.0	2,369.8	10.8	0.0	-21.26	-98.0	519.4	306.0	296.1	9.97	30.707	
2,600.0	2,573.3	2,542.8	2,462.2	11.1	0.0	-21.41	-105.3	553.4	321.6	311.3	10.31	31.197	
2,700.0	2,671.1	2,641.6	2,554.7	11.5	0.0	-21.56	-112.6	587.4	337.2	326.5	10.66	31.642	
2,800.0	2,768.9	2,740.3	2,647.1	11.9	0.0	-21.68	-119.9	621.4	352.7	341.7	11.01	32.046	
2,900.0	2,866.6	2,839.1	2,739.6	12.4	0.0	-21.80	-127.1	655.5	368.3	356.9	11.36	32.412	
3,000.0	2,964.4	2,937.9	2,832.0	12.8	0.0	-21.91	-134.4	689.5	383.9	372.2	11.72	32.747	
3,100.0	3,062.2	3,036.7	2,924.5	13.3	0.0	-22.01	-141.7	723.5	399.4	387.4	12.09	33.052	
3,200.0	3,159.9	3,135.4	3,016.9	13.7	0.0	-22.10	-149.0	757.5	415.0	402.6	12.45	33.332	
3,300.0	3,257.7	3,234.2	3,109.4	14.2	0.0	-22.19	-156.3	791.5	430.6	417.8	12.82	33.588	
3,400.0	3,355.5	3,333.0	3,201.8	14.7	0.0	-22.27	-163.6	825.5	446.2	433.0	13.19	33.824	
3,500.0	3,453.2	3,431.8	3,294.3	15.2	0.0	-22.34	-170.9	859.6	461.8	448.2	13.56	34.040	
3,600.0	3,551.0	3,530.5	3,386.7	15.6	0.0	-22.41	-178.1	893.6	477.3	463.4	13.94	34.240	
3,700.0	3,648.8	3,629.3	3,479.2	16.1	0.0	-22.48	-185.4	927.6	492.9	478.6	14.32	34.425	
3,800.0	3,746.5	3,728.1	3,571.6	16.6	0.0	-22.54	-192.7	961.6	508.5	493.8	14.70	34.596	
3,900.0	3,844.3	3,826.9	3,664.1	17.1	0.0	-22.60	-200.0	995.6	524.1	509.0	15.08	34.754	
4,000.0	3,942.1	3,925.7	3,756.5	17.6	0.0	-22.65	-207.3	1,029.6	539.7	524.2	15.46	34.901	
4,100.0	4,039.9	4,024.4	3,849.0	18.1	0.0	-22.70	-214.6	1,063.6	555.2	539.4	15.85	35.038	
4,200.0	4,137.6	4,123.2	3,941.4	18.6	0.0	-22.75	-221.9	1,097.7	570.8	554.6	16.23	35.165	
4,300.0	4,235.4	4,222.0	4,033.9	19.1	0.0	-22.79	-229.1	1,131.7	586.4	569.8	16.62	35.284	
4,400.0	4,333.2	4,320.8	4,126.3	19.6	0.0	-22.84	-236.4	1,165.7	602.0	585.0	17.01	35.395	
4,500.0	4,430.9	4,419.5	4,218.8	20.1	0.0	-22.88	-243.7	1,199.7	617.6	600.2	17.40	35.499	
4,600.0	4,528.7	4,518.3	4,311.2	20.6	0.0	-22.92	-251.0	1,233.7	633.2	615.4	17.79	35.597	
4,700.0	4,626.5	4,617.1	4,403.7	21.1	0.0	-22.96	-258.3	1,267.7	648.7	630.6	18.18	35.688	
4,800.0	4,724.2	4,715.9	4,496.1	21.6	0.0	-22.99	-265.6	1,301.8	664.3	645.7	18.57	35.774	
4,900.0	4,822.0	4,814.7	4,588.6	22.1	0.0	-23.03	-272.8	1,335.8	679.9	660.9	18.96	35.854	
5,000.0	4,919.8	4,913.4	4,681.0	22.6	0.0	-23.06	-280.1	1,369.8	695.5	676.1	19.36	35.930	
5,100.0	5,017.5	5,012.2	4,773.5	23.1	0.0	-23.09	-287.4	1,403.8	711.1	691.3	19.75	36.002	

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NCH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,115.3	5,111.0	4,865.9	23.6	0.0	-23.12	-294.7	1,437.8	726.7	706.5	20.15	36.069		
5,300.0	5,213.1	5,209.8	4,958.4	24.1	0.0	-23.15	-302.0	1,471.8	742.2	721.7	20.54	36.133		
5,400.0	5,310.8	5,308.5	5,050.8	24.6	0.0	-23.17	-309.3	1,505.8	757.8	736.9	20.94	36.193		
5,500.0	5,408.6	5,407.3	5,143.3	25.1	0.0	-23.20	-316.6	1,539.9	773.4	752.1	21.34	36.250		
5,600.0	5,506.4	5,506.1	5,235.7	25.6	0.0	-23.23	-323.8	1,573.9	789.0	767.3	21.73	36.304		
5,700.0	5,604.2	5,604.9	5,328.2	26.1	0.0	-23.25	-331.1	1,607.9	804.6	782.4	22.13	36.355		
5,800.0	5,701.9	5,703.7	5,420.6	26.7	0.0	-23.27	-338.4	1,641.9	820.2	797.6	22.53	36.404		
5,900.0	5,799.7	5,802.4	5,513.1	27.2	0.0	-23.29	-345.7	1,675.9	835.8	812.8	22.93	36.450		
6,000.0	5,897.5	5,901.2	5,605.5	27.7	0.0	-23.32	-353.0	1,709.9	851.3	828.0	23.33	36.493		
6,100.0	5,995.2	6,000.0	5,698.0	28.2	0.0	-23.34	-360.3	1,744.0	866.9	843.2	23.73	36.535		
6,200.0	6,093.0	6,098.8	5,790.4	28.7	0.0	-23.36	-367.6	1,778.0	882.5	858.4	24.13	36.575		
6,300.0	6,190.8	6,197.5	5,882.9	29.2	0.0	-23.38	-374.8	1,812.0	898.1	873.6	24.53	36.613		
6,400.0	6,288.5	6,296.3	5,975.3	29.7	0.0	-23.40	-382.1	1,846.0	913.7	888.8	24.93	36.649		
6,500.0	6,386.3	6,395.1	6,067.8	30.2	0.0	-23.41	-389.4	1,880.0	929.3	903.9	25.33	36.683		
6,600.0	6,484.1	6,493.9	6,160.2	30.7	0.0	-23.43	-396.7	1,914.0	944.9	919.1	25.73	36.716		
6,700.0	6,581.8	6,592.6	6,252.7	31.2	0.0	-23.45	-404.0	1,948.0	960.4	934.3	26.14	36.747		
6,800.0	6,679.6	6,691.4	6,345.1	31.7	0.0	-23.46	-411.3	1,982.1	976.0	949.5	26.54	36.777		
6,900.0	6,777.4	6,790.2	6,437.6	32.2	0.0	-23.48	-418.6	2,016.1	991.6	964.7	26.94	36.806		
7,000.0	6,875.2	6,889.0	6,530.0	32.7	0.0	-10.16	-425.8	2,050.1	1,007.2	979.9	27.34	36.844		
7,100.0	6,973.1	6,986.7	6,621.5	33.3	0.0	34.51	-433.0	2,083.7	1,022.8	995.1	27.67	36.963		
7,200.0	7,068.6	7,080.6	6,709.3	33.6	0.0	56.73	-440.0	2,116.1	1,038.6	1,010.5	28.12	36.938		
7,300.0	7,158.8	7,167.8	6,791.0	34.0	0.0	66.95	-446.4	2,146.1	1,055.6	1,027.2	28.41	37.157		
7,400.0	7,241.0	7,245.7	6,863.9	34.3	0.0	72.53	-452.1	2,172.9	1,075.2	1,046.6	28.59	37.601		
7,500.0	7,312.6	7,346.2	6,958.1	34.5	0.0	76.76	-451.2	2,207.5	1,097.8	1,068.8	28.91	37.976		
7,600.0	7,371.6	7,470.6	7,072.3	34.7	0.0	80.34	-425.9	2,249.0	1,122.0	1,092.7	29.32	38.265		
7,700.0	7,416.1	7,634.9	7,210.6	34.7	0.0	83.96	-353.7	2,298.6	1,146.0	1,116.4	29.68	38.610		
7,800.0	7,444.7	7,838.6	7,346.6	34.7	0.0	87.17	-211.2	2,346.2	1,166.0	1,136.2	29.79	39.135		
7,900.0	7,456.7	8,138.1	7,444.1	34.6	0.0	89.48	66.4	2,377.6	1,175.5	1,145.7	29.74	39.523		
8,000.0	7,457.0	8,285.6	7,447.0	34.6	0.0	89.51	213.8	2,376.4	1,176.8	1,146.8	30.02	39.196		
8,100.0	7,457.0	8,385.6	7,447.0	34.6	0.0	89.51	313.8	2,374.8	1,178.1	1,147.7	30.40	38.749		
8,200.0	7,457.0	8,485.6	7,447.0	34.8	0.0	89.51	413.8	2,373.3	1,179.4	1,148.5	30.88	38.190		
8,300.0	7,457.0	8,585.6	7,447.0	35.0	0.0	89.51	513.7	2,371.7	1,180.7	1,149.2	31.45	37.538		
8,400.0	7,457.0	8,685.6	7,447.0	35.3	0.0	89.52	613.7	2,370.2	1,182.0	1,149.9	32.11	36.808		
8,500.0	7,457.0	8,785.6	7,447.0	35.8	0.0	89.52	713.7	2,368.6	1,183.3	1,150.4	32.85	36.016		
8,600.0	7,457.0	8,885.6	7,447.0	36.3	0.0	89.52	813.7	2,367.1	1,184.6	1,150.9	33.67	35.179		
8,700.0	7,457.0	8,985.6	7,447.0	37.0	0.0	89.52	913.7	2,365.5	1,185.9	1,151.3	34.56	34.310		
8,800.0	7,457.0	9,085.6	7,447.0	37.9	0.0	89.52	1,013.6	2,364.0	1,187.2	1,151.6	35.52	33.423		
8,900.0	7,457.0	9,185.6	7,447.0	38.8	0.0	89.52	1,113.6	2,362.4	1,188.5	1,151.9	36.54	32.527		
9,000.0	7,457.0	9,285.6	7,447.0	39.7	0.0	89.52	1,213.6	2,360.8	1,189.8	1,152.1	37.61	31.633		
9,100.0	7,457.0	9,385.6	7,447.0	40.8	0.0	89.52	1,313.6	2,359.3	1,191.1	1,152.3	38.74	30.748		
9,200.0	7,457.0	9,485.5	7,447.0	41.9	0.0	89.52	1,413.6	2,357.7	1,192.4	1,152.4	39.91	29.877		
9,300.0	7,457.0	9,585.5	7,447.0	43.0	0.0	89.52	1,513.5	2,356.2	1,193.6	1,152.5	41.12	29.026		
9,400.0	7,457.0	9,685.5	7,447.0	44.2	0.0	89.52	1,613.5	2,354.6	1,194.9	1,152.6	42.38	28.197		
9,500.0	7,457.0	9,785.5	7,447.0	45.4	0.0	89.52	1,713.5	2,353.1	1,196.2	1,152.6	43.67	27.393		
9,600.0	7,457.0	9,885.5	7,447.0	46.7	0.0	89.52	1,813.5	2,351.5	1,197.5	1,152.5	44.99	26.616		
9,700.0	7,457.0	9,985.5	7,447.0	48.0	0.0	89.52	1,913.5	2,349.9	1,198.8	1,152.5	46.35	25.867		
9,800.0	7,457.0	10,085.5	7,447.0	49.3	0.0	89.52	2,013.4	2,348.4	1,200.1	1,152.4	47.73	25.146		
9,900.0	7,457.0	10,185.5	7,447.0	50.7	0.0	89.52	2,113.4	2,346.8	1,201.4	1,152.3	49.13	24.452		
10,000.0	7,457.0	10,285.5	7,447.0	52.1	0.0	89.52	2,213.4	2,345.3	1,202.7	1,152.2	50.56	23.787		
10,100.0	7,457.0	10,385.5	7,447.0	53.5	0.0	89.52	2,313.4	2,343.7	1,204.0	1,152.0	52.01	23.149		
10,200.0	7,457.0	10,485.5	7,447.0	54.9	0.0	89.52	2,413.4	2,342.2	1,205.3	1,151.8	53.48	22.537		
10,300.0	7,457.0	10,585.5	7,447.0	56.4	0.0	89.53	2,513.3	2,340.6	1,206.6	1,151.6	54.97	21.950		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NCH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,457.0	10,685.4	7,447.0	57.8	0.0	89.53	2,613.3	2,339.0	1,207.9	1,151.4	56.47	21.389		
10,500.0	7,457.0	10,785.4	7,447.0	59.3	0.0	89.53	2,713.3	2,337.5	1,209.2	1,151.2	57.99	20.851		
10,600.0	7,457.0	10,885.4	7,447.0	60.8	0.0	89.53	2,813.3	2,335.9	1,210.5	1,151.0	59.53	20.335		
10,700.0	7,457.0	10,985.4	7,447.0	62.3	0.0	89.53	2,913.3	2,334.4	1,211.8	1,150.7	61.07	19.842		
10,800.0	7,457.0	11,085.4	7,447.0	63.9	0.0	89.53	3,013.2	2,332.8	1,213.1	1,150.4	62.63	19.369		
10,900.0	7,457.0	11,185.4	7,447.0	65.4	0.0	89.53	3,113.2	2,331.3	1,214.4	1,150.2	64.20	18.915		
11,000.0	7,457.0	11,285.4	7,447.0	66.9	0.0	89.53	3,213.2	2,329.7	1,215.7	1,149.9	65.78	18.481		
11,100.0	7,457.0	11,385.4	7,447.0	68.5	0.0	89.53	3,313.2	2,328.2	1,217.0	1,149.6	67.37	18.064		
11,200.0	7,457.0	11,485.4	7,447.0	70.1	0.0	89.53	3,413.1	2,326.6	1,218.3	1,149.3	68.97	17.664		
11,300.0	7,457.0	11,585.4	7,447.0	71.7	0.0	89.53	3,513.1	2,325.0	1,219.6	1,149.0	70.58	17.280		
11,400.0	7,457.0	11,685.4	7,447.0	73.2	0.0	89.53	3,613.1	2,323.5	1,220.9	1,148.7	72.19	16.912		
11,500.0	7,457.0	11,785.4	7,447.0	74.8	0.0	89.53	3,713.1	2,321.9	1,222.1	1,148.3	73.81	16.558		
11,600.0	7,457.0	11,885.3	7,447.0	76.4	0.0	89.53	3,813.1	2,320.4	1,223.4	1,148.0	75.44	16.217		
11,700.0	7,457.0	11,985.3	7,447.0	78.1	0.0	89.53	3,913.0	2,318.8	1,224.7	1,147.7	77.08	15.890		
11,800.0	7,457.0	12,085.3	7,447.0	79.7	0.0	89.53	4,013.0	2,317.3	1,226.0	1,147.3	78.72	15.575		
11,900.0	7,457.0	12,185.3	7,447.0	81.3	0.0	89.53	4,113.0	2,315.7	1,227.3	1,147.0	80.36	15.272		
12,000.0	7,457.0	12,285.3	7,447.0	82.9	0.0	89.53	4,213.0	2,314.1	1,228.6	1,146.6	82.01	14.981		
12,100.0	7,457.0	12,385.3	7,447.0	84.6	0.0	89.53	4,313.0	2,312.6	1,229.9	1,146.3	83.67	14.699		
12,200.0	7,457.0	12,485.3	7,447.0	86.2	0.0	89.53	4,412.9	2,311.0	1,231.2	1,145.9	85.33	14.428		
12,300.0	7,457.0	12,585.3	7,447.0	87.9	0.0	89.54	4,512.9	2,309.5	1,232.5	1,145.5	87.00	14.167		
12,400.0	7,457.0	12,685.3	7,447.0	89.5	0.0	89.54	4,612.9	2,307.9	1,233.8	1,145.1	88.67	13.915		
12,500.0	7,457.0	12,785.3	7,447.0	91.2	0.0	89.54	4,712.9	2,306.4	1,235.1	1,144.8	90.34	13.671		
12,600.0	7,457.0	12,885.3	7,447.0	92.8	0.0	89.54	4,812.9	2,304.8	1,236.4	1,144.4	92.02	13.436		
12,700.0	7,457.0	12,985.3	7,447.0	94.5	0.0	89.54	4,912.8	2,303.3	1,237.7	1,144.0	93.70	13.209		
12,800.0	7,457.0	13,085.2	7,447.0	96.2	0.0	89.54	5,012.8	2,301.7	1,239.0	1,143.6	95.39	12.989		
12,900.0	7,457.0	13,185.2	7,447.0	97.8	0.0	89.54	5,112.8	2,300.1	1,240.3	1,143.2	97.07	12.777		
13,000.0	7,457.0	13,285.2	7,447.0	99.5	0.0	89.54	5,212.8	2,298.6	1,241.6	1,142.8	98.76	12.571		
13,100.0	7,457.0	13,385.2	7,447.0	101.2	0.0	89.54	5,312.8	2,297.0	1,242.9	1,142.4	100.46	12.372		
13,200.0	7,457.0	13,485.2	7,447.0	102.9	0.0	89.54	5,412.7	2,295.5	1,244.2	1,142.0	102.15	12.179		
13,300.0	7,457.0	13,585.2	7,447.0	104.6	0.0	89.54	5,512.7	2,293.9	1,245.5	1,141.6	103.85	11.993		
13,400.0	7,457.0	13,685.2	7,447.0	106.2	0.0	89.54	5,612.7	2,292.4	1,246.8	1,141.2	105.55	11.812		
13,500.0	7,457.0	13,785.2	7,447.0	107.9	0.0	89.54	5,712.7	2,290.8	1,248.1	1,140.8	107.26	11.636		
13,600.0	7,457.0	13,885.2	7,447.0	109.6	0.0	89.54	5,812.7	2,289.2	1,249.4	1,140.4	108.96	11.466		
13,700.0	7,457.0	13,985.2	7,447.0	111.3	0.0	89.54	5,912.6	2,287.7	1,250.7	1,140.0	110.67	11.301		
13,800.0	7,457.0	14,085.2	7,447.0	113.0	0.0	89.54	6,012.6	2,286.1	1,251.9	1,139.5	112.38	11.140		
13,900.0	7,457.0	14,185.2	7,447.0	114.7	0.0	89.54	6,112.6	2,284.6	1,251.8	1,137.7	114.08	10.973		
14,000.0	7,457.0	14,285.2	7,447.0	116.4	0.0	89.54	6,212.6	2,283.0	1,251.6	1,135.8	115.79	10.809		
14,100.0	7,457.0	14,385.2	7,447.0	118.1	0.0	89.54	6,312.6	2,281.5	1,251.4	1,133.9	117.50	10.650		
14,200.0	7,457.0	14,485.2	7,447.0	119.8	0.0	89.54	6,412.6	2,279.9	1,251.2	1,132.0	119.21	10.496		
14,300.0	7,457.0	14,585.2	7,447.0	121.5	0.0	89.54	6,512.6	2,278.3	1,251.0	1,130.1	120.92	10.345		
14,400.0	7,457.0	14,685.2	7,447.0	123.2	0.0	89.54	6,612.5	2,276.8	1,250.8	1,128.2	122.64	10.199		
14,500.0	7,457.0	14,785.2	7,447.0	124.9	0.0	89.54	6,712.5	2,275.2	1,250.6	1,126.3	124.35	10.057		
14,600.0	7,457.0	14,885.2	7,447.0	126.7	0.0	89.54	6,812.5	2,273.7	1,250.4	1,124.3	126.07	9.918		
14,700.0	7,457.0	14,985.2	7,447.0	128.4	0.0	89.54	6,912.5	2,272.1	1,250.2	1,122.4	127.79	9.783		
14,800.0	7,457.0	15,085.2	7,447.0	130.1	0.0	89.54	7,012.5	2,270.6	1,250.0	1,120.5	129.51	9.652		
14,900.0	7,457.0	15,185.2	7,447.0	131.8	0.0	89.54	7,112.5	2,269.0	1,249.8	1,118.6	131.23	9.524		
15,000.0	7,457.0	15,285.2	7,447.0	133.5	0.0	89.54	7,212.5	2,267.5	1,249.6	1,116.7	132.95	9.399		
15,100.0	7,457.0	15,385.2	7,447.0	135.2	0.0	89.54	7,312.5	2,265.9	1,249.4	1,114.7	134.68	9.277		
15,200.0	7,457.0	15,485.2	7,447.0	136.9	0.0	89.54	7,412.4	2,264.3	1,249.2	1,112.8	136.40	9.158		
15,300.0	7,457.0	15,585.2	7,447.0	138.7	0.0	89.54	7,512.4	2,262.8	1,249.0	1,110.9	138.13	9.043		
15,400.0	7,457.0	15,685.2	7,447.0	140.4	0.0	89.54	7,612.4	2,261.2	1,248.8	1,109.0	139.85	8.930		
15,500.0	7,457.0	15,785.2	7,447.0	142.1	0.0	89.54	7,712.4	2,259.7	1,248.6	1,107.1	141.58	8.819		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NCH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,457.0	15,885.2	7,447.0	143.8	0.0	89.54	7,812.4	2,258.1	1,248.4	1,105.1	143.31	8.711		
15,700.0	7,457.0	15,985.2	7,447.0	145.6	0.0	89.54	7,912.4	2,256.6	1,248.2	1,103.2	145.04	8.606		
15,800.0	7,457.0	16,085.2	7,447.0	147.3	0.0	89.54	8,012.4	2,255.0	1,248.0	1,101.3	146.77	8.503		
15,900.0	7,457.0	16,185.2	7,447.0	149.0	0.0	89.54	8,112.4	2,253.4	1,247.8	1,099.3	148.50	8.403		
16,000.0	7,457.0	16,285.2	7,447.0	150.7	0.0	89.54	8,212.3	2,251.9	1,247.7	1,097.4	150.24	8.305		
16,100.0	7,457.0	16,385.2	7,447.0	152.5	0.0	89.54	8,312.3	2,250.3	1,247.5	1,095.5	151.97	8.209		
16,200.0	7,457.0	16,485.2	7,447.0	154.2	0.0	89.54	8,412.3	2,248.8	1,247.3	1,093.6	153.70	8.115		
16,300.0	7,457.0	16,585.2	7,447.0	155.9	0.0	89.54	8,512.3	2,247.2	1,247.1	1,091.6	155.44	8.023		
16,400.0	7,457.0	16,685.2	7,447.0	157.6	0.0	89.54	8,612.3	2,245.7	1,246.9	1,089.7	157.17	7.933		
16,500.0	7,457.0	16,785.2	7,447.0	159.4	0.0	89.54	8,712.3	2,244.1	1,246.7	1,087.8	158.91	7.845		
16,600.0	7,457.0	16,885.2	7,447.0	161.1	0.0	89.54	8,812.3	2,242.5	1,246.5	1,085.8	160.65	7.759		
16,700.0	7,457.0	16,985.2	7,447.0	162.8	0.0	89.54	8,912.3	2,241.0	1,246.3	1,083.9	162.38	7.675		
16,800.0	7,457.0	17,085.2	7,447.0	164.6	0.0	89.54	9,012.2	2,239.4	1,246.1	1,082.0	164.12	7.592		
16,900.0	7,457.0	17,185.2	7,447.0	166.3	0.0	89.54	9,112.2	2,237.9	1,245.9	1,080.0	165.86	7.512		
17,000.0	7,457.0	17,285.2	7,447.0	168.0	0.0	89.54	9,212.2	2,236.3	1,245.7	1,078.1	167.60	7.433		
17,100.0	7,457.0	17,385.2	7,447.0	169.8	0.0	89.54	9,312.2	2,234.8	1,245.5	1,076.1	169.34	7.355		
17,200.0	7,457.0	17,485.2	7,447.0	171.5	0.0	89.54	9,412.2	2,233.2	1,245.3	1,074.2	171.08	7.279		
17,300.0	7,457.0	17,585.2	7,447.0	173.3	0.0	89.54	9,512.2	2,231.6	1,245.1	1,072.3	172.82	7.205		
17,400.0	7,457.0	17,685.2	7,447.0	175.0	0.0	89.54	9,612.2	2,230.1	1,244.9	1,070.3	174.56	7.132		
17,500.0	7,457.0	17,785.2	7,447.0	176.7	0.0	89.54	9,712.2	2,228.5	1,244.7	1,068.4	176.30	7.060		
17,600.0	7,457.0	17,885.2	7,447.0	178.5	0.0	89.54	9,812.1	2,227.0	1,244.5	1,066.4	178.05	6.990		
17,700.0	7,457.0	17,985.2	7,447.0	180.2	0.0	89.54	9,912.1	2,225.4	1,244.3	1,064.5	179.79	6.921		
17,721.0	7,457.0	18,006.1	7,447.0	180.6	0.0	89.54	9,933.1	2,225.1	1,244.3	1,064.1	180.15	6.907 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	89.67	0.3	45.0	45.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.67	0.3	45.0	45.0	44.7	0.28	162.300		
200.0	200.0	200.0	200.0	1.0	0.0	89.67	0.3	45.0	45.0	44.2	0.80	56.354		
300.0	300.0	300.0	300.0	1.5	0.0	89.67	0.3	45.0	45.0	43.7	1.22	36.722		
400.0	400.0	400.0	400.0	1.9	0.0	89.67	0.3	45.0	45.0	43.4	1.62	27.785		
500.0	500.0	500.0	500.0	2.3	0.0	89.67	0.3	45.0	45.0	43.0	2.00	22.495		
600.0	600.0	600.0	600.0	2.7	0.0	89.67	0.3	45.0	45.0	42.6	2.37	18.952		
700.0	700.0	700.0	700.0	3.1	0.0	89.67	0.3	45.0	45.0	42.2	2.74	16.398	CC, ES	
800.0	800.0	798.5	798.4	3.5	0.0	90.16	-0.1	46.6	46.6	43.5	3.10	15.037		
900.0	900.0	896.7	896.5	3.9	0.0	91.44	-1.3	51.5	51.7	48.2	3.45	14.998		
1,000.0	1,000.0	994.5	993.9	4.2	0.0	93.10	-3.2	59.7	60.1	56.3	3.78	15.905		
1,100.0	1,100.0	1,091.7	1,090.5	4.6	0.0	-18.27	-5.9	71.0	70.2	66.0	4.26	16.496		
1,200.0	1,199.8	1,188.7	1,186.3	5.0	0.0	-17.68	-9.3	85.4	80.4	75.5	4.96	16.217		
1,300.0	1,299.5	1,285.3	1,281.3	5.7	0.0	-17.57	-13.5	103.0	90.6	85.0	5.59	16.208		
1,400.0	1,398.7	1,381.6	1,375.2	6.5	0.0	-17.78	-18.3	123.5	100.8	94.7	6.17	16.351		
1,500.0	1,497.5	1,477.6	1,468.1	7.1	0.0	-18.23	-23.9	147.0	111.1	104.4	6.70	16.586		
1,600.0	1,595.6	1,573.2	1,559.8	7.8	0.0	-18.84	-30.2	173.5	121.3	114.1	7.22	16.794		
1,700.0	1,693.4	1,668.4	1,650.0	8.2	0.0	-19.43	-37.1	202.7	132.9	125.4	7.53	17.658		
1,800.0	1,791.2	1,766.3	1,742.1	8.5	0.0	-19.77	-44.7	235.0	146.9	139.1	7.79	18.863		
1,900.0	1,888.9	1,865.3	1,835.3	8.8	0.0	-20.05	-52.5	267.7	161.0	153.0	8.08	19.934		
2,000.0	1,986.7	1,964.3	1,928.4	9.1	0.0	-20.28	-60.2	300.4	175.2	166.8	8.38	20.905		
2,100.0	2,084.5	2,063.3	2,021.5	9.4	0.0	-20.48	-68.0	333.1	189.3	180.6	8.69	21.786		
2,200.0	2,182.2	2,162.2	2,114.6	9.7	0.0	-20.65	-75.7	365.9	203.4	194.4	9.01	22.585		
2,300.0	2,280.0	2,261.2	2,207.7	10.1	0.0	-20.80	-83.5	398.6	217.5	208.2	9.33	23.311		
2,400.0	2,377.8	2,360.2	2,300.8	10.4	0.0	-20.93	-91.2	431.3	231.6	222.0	9.66	23.972		
2,500.0	2,475.5	2,459.2	2,393.9	10.8	0.0	-21.05	-99.0	464.0	245.8	235.8	10.00	24.575		
2,600.0	2,573.3	2,558.2	2,487.0	11.1	0.0	-21.15	-106.7	496.7	259.9	249.5	10.34	25.125		
2,700.0	2,671.1	2,657.2	2,580.1	11.5	0.0	-21.24	-114.5	529.5	274.0	263.3	10.69	25.629		
2,800.0	2,768.9	2,756.2	2,673.2	11.9	0.0	-21.32	-122.2	562.2	288.1	277.1	11.04	26.090		
2,900.0	2,866.6	2,855.2	2,766.4	12.4	0.0	-21.40	-130.0	594.9	302.3	290.9	11.40	26.515		
3,000.0	2,964.4	2,954.2	2,859.5	12.8	0.0	-21.47	-137.7	627.6	316.4	304.6	11.76	26.905		
3,100.0	3,062.2	3,053.2	2,952.6	13.3	0.0	-21.53	-145.5	660.4	330.5	318.4	12.12	27.265		
3,200.0	3,159.9	3,152.2	3,045.7	13.7	0.0	-21.59	-153.2	693.1	344.6	332.1	12.49	27.598		
3,300.0	3,257.7	3,251.2	3,138.8	14.2	0.0	-21.64	-161.0	725.8	358.8	345.9	12.86	27.906		
3,400.0	3,355.5	3,350.2	3,231.9	14.7	0.0	-21.69	-168.7	758.5	372.9	359.7	13.23	28.192		
3,500.0	3,453.2	3,449.2	3,325.0	15.2	0.0	-21.74	-176.5	791.2	387.0	373.4	13.60	28.457		
3,600.0	3,551.0	3,548.2	3,418.1	15.6	0.0	-21.78	-184.2	824.0	401.1	387.2	13.98	28.704		
3,700.0	3,648.8	3,647.2	3,511.2	16.1	0.0	-21.82	-192.0	856.7	415.3	400.9	14.35	28.935		
3,800.0	3,746.5	3,746.2	3,604.4	16.6	0.0	-21.85	-199.7	889.4	429.4	414.7	14.73	29.150		
3,900.0	3,844.3	3,845.2	3,697.5	17.1	0.0	-21.89	-207.5	922.1	443.5	428.4	15.11	29.351		
4,000.0	3,942.1	3,944.2	3,790.6	17.6	0.0	-21.92	-215.2	954.8	457.7	442.2	15.49	29.539		
4,100.0	4,039.9	4,043.2	3,883.7	18.1	0.0	-21.95	-223.0	987.6	471.8	455.9	15.88	29.716		
4,200.0	4,137.6	4,142.2	3,976.8	18.6	0.0	-21.98	-230.7	1,020.3	485.9	469.7	16.26	29.882		
4,300.0	4,235.4	4,241.2	4,069.9	19.1	0.0	-22.01	-238.5	1,053.0	500.0	483.4	16.65	30.039		
4,400.0	4,333.2	4,340.2	4,163.0	19.6	0.0	-22.03	-246.2	1,085.7	514.2	497.1	17.03	30.186		
4,500.0	4,430.9	4,439.2	4,256.1	20.1	0.0	-22.06	-254.0	1,118.4	528.3	510.9	17.42	30.325		
4,600.0	4,528.7	4,538.2	4,349.2	20.6	0.0	-22.08	-261.7	1,151.2	542.4	524.6	17.81	30.456		
4,700.0	4,626.5	4,637.2	4,442.4	21.1	0.0	-22.10	-269.5	1,183.9	556.6	538.4	18.20	30.580		
4,800.0	4,724.2	4,736.2	4,535.5	21.6	0.0	-22.12	-277.2	1,216.6	570.7	552.1	18.59	30.698		
4,900.0	4,822.0	4,835.2	4,628.6	22.1	0.0	-22.14	-285.0	1,249.3	584.8	565.8	18.98	30.809		
5,000.0	4,919.8	4,934.2	4,721.7	22.6	0.0	-22.16	-292.7	1,282.0	598.9	579.6	19.37	30.914		
5,100.0	5,017.5	5,033.1	4,814.8	23.1	0.0	-22.18	-300.5	1,314.8	613.1	593.3	19.77	31.015		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,115.3	5,132.1	4,907.9	23.6	0.0	-22.19	-308.2	1,347.5	627.2	607.0	20.16	31.110		
5,300.0	5,213.1	5,231.1	5,001.0	24.1	0.0	-22.21	-316.0	1,380.2	641.3	620.8	20.55	31.201		
5,400.0	5,310.8	5,330.1	5,094.1	24.6	0.0	-22.23	-323.7	1,412.9	655.5	634.5	20.95	31.287		
5,500.0	5,408.6	5,429.1	5,187.2	25.1	0.0	-22.24	-331.5	1,445.6	669.6	648.2	21.35	31.370		
5,600.0	5,506.4	5,528.1	5,280.4	25.6	0.0	-22.26	-339.2	1,478.4	683.7	662.0	21.74	31.448		
5,700.0	5,604.2	5,627.1	5,373.5	26.1	0.0	-22.27	-347.0	1,511.1	697.8	675.7	22.14	31.523		
5,800.0	5,701.9	5,726.1	5,466.6	26.7	0.0	-22.28	-354.7	1,543.8	712.0	689.4	22.53	31.595		
5,900.0	5,799.7	5,825.1	5,559.7	27.2	0.0	-22.30	-362.5	1,576.5	726.1	703.2	22.93	31.664		
6,000.0	5,897.5	5,924.1	5,652.8	27.7	0.0	-22.31	-370.2	1,609.2	740.2	716.9	23.33	31.729		
6,100.0	5,995.2	6,023.1	5,745.9	28.2	0.0	-22.32	-378.0	1,642.0	754.4	730.6	23.73	31.792		
6,200.0	6,093.0	6,122.1	5,839.0	28.7	0.0	-22.33	-385.7	1,674.7	768.5	744.4	24.13	31.853		
6,300.0	6,190.8	6,221.1	5,932.1	29.2	0.0	-22.34	-393.5	1,707.4	782.6	758.1	24.53	31.911		
6,400.0	6,288.5	6,320.1	6,025.2	29.7	0.0	-22.35	-401.2	1,740.1	796.8	771.8	24.92	31.966		
6,500.0	6,386.3	6,419.1	6,118.4	30.2	0.0	-22.36	-409.0	1,772.8	810.9	785.6	25.32	32.020		
6,600.0	6,484.1	6,518.1	6,211.5	30.7	0.0	-22.37	-416.7	1,805.6	825.0	799.3	25.72	32.071		
6,700.0	6,581.8	6,617.1	6,304.6	31.2	0.0	-22.38	-424.5	1,838.3	839.1	813.0	26.12	32.120		
6,800.0	6,679.6	6,716.1	6,397.7	31.7	0.0	-22.39	-432.2	1,871.0	853.3	826.7	26.53	32.168		
6,900.0	6,777.4	6,815.1	6,490.8	32.2	0.0	-22.40	-440.0	1,903.7	867.4	840.5	26.93	32.214		
7,000.0	6,875.2	6,914.1	6,583.9	32.7	0.0	-9.03	-447.7	1,936.4	881.6	854.2	27.32	32.268		
7,100.0	6,973.1	7,012.5	6,676.6	33.3	0.0	35.76	-453.5	1,969.0	896.0	868.3	27.66	32.388		
7,200.0	7,068.6	7,112.7	6,770.7	33.6	0.0	57.42	-444.5	2,001.9	910.6	882.4	28.19	32.303		
7,300.0	7,158.8	7,215.7	6,864.3	34.0	0.0	66.60	-417.2	2,034.5	924.9	896.3	28.61	32.327		
7,400.0	7,241.0	7,321.6	6,954.3	34.3	0.0	71.08	-371.2	2,065.7	938.6	909.6	28.94	32.429		
7,500.0	7,312.6	7,430.5	7,036.9	34.5	0.0	73.50	-306.5	2,094.2	951.1	921.8	29.24	32.531		
7,600.0	7,371.6	7,542.4	7,108.2	34.7	0.0	74.84	-224.0	2,118.5	961.9	932.4	29.52	32.586		
7,700.0	7,416.1	7,657.0	7,164.2	34.7	0.0	75.57	-126.1	2,137.3	970.8	941.0	29.81	32.565		
7,800.0	7,444.7	7,773.6	7,201.2	34.7	0.0	75.88	-16.4	2,149.4	977.2	947.1	30.12	32.447		
7,900.0	7,456.7	7,891.4	7,216.6	34.6	0.0	75.88	100.2	2,153.8	981.1	950.6	30.45	32.222		
8,000.0	7,457.0	7,994.6	7,217.0	34.6	0.0	75.87	203.4	2,153.1	983.1	952.3	30.78	31.943		
8,100.0	7,457.0	8,094.6	7,217.0	34.6	0.0	75.90	303.3	2,152.3	985.1	953.9	31.20	31.576		
8,200.0	7,457.0	8,194.6	7,217.0	34.8	0.0	75.92	403.3	2,151.5	987.0	955.3	31.71	31.130		
8,300.0	7,457.0	8,294.6	7,217.0	35.0	0.0	75.95	503.3	2,150.6	989.0	956.7	32.30	30.617		
8,400.0	7,457.0	8,394.6	7,217.0	35.3	0.0	75.98	603.3	2,149.8	991.0	958.0	32.98	30.050		
8,500.0	7,457.0	8,494.5	7,217.0	35.8	0.0	76.01	703.3	2,149.0	992.9	959.2	33.73	29.440		
8,600.0	7,457.0	8,594.5	7,217.0	36.3	0.0	76.04	803.2	2,148.2	994.9	960.3	34.55	28.797		
8,700.0	7,457.0	8,694.5	7,217.0	37.0	0.0	76.07	903.2	2,147.3	996.9	961.4	35.43	28.132		
8,800.0	7,457.0	8,794.5	7,217.0	37.9	0.0	76.09	1,003.2	2,146.5	998.8	962.4	36.38	27.454		
8,900.0	7,457.0	8,894.4	7,217.0	38.8	0.0	76.12	1,103.2	2,145.7	1,000.8	963.4	37.39	26.769		
9,000.0	7,457.0	8,994.4	7,217.0	39.7	0.0	76.15	1,203.1	2,144.8	1,002.8	964.3	38.44	26.085		
9,100.0	7,457.0	9,094.4	7,217.0	40.8	0.0	76.18	1,303.1	2,144.0	1,004.7	965.2	39.55	25.407		
9,200.0	7,457.0	9,194.4	7,217.0	41.9	0.0	76.20	1,403.1	2,143.2	1,006.7	966.0	40.69	24.738		
9,300.0	7,457.0	9,294.4	7,217.0	43.0	0.0	76.23	1,503.1	2,142.4	1,008.7	966.8	41.88	24.084		
9,400.0	7,457.0	9,394.3	7,217.0	44.2	0.0	76.26	1,603.0	2,141.5	1,010.6	967.5	43.11	23.445		
9,500.0	7,457.0	9,494.3	7,217.0	45.4	0.0	76.29	1,703.0	2,140.7	1,012.6	968.2	44.37	22.824		
9,600.0	7,457.0	9,594.3	7,217.0	46.7	0.0	76.31	1,803.0	2,139.9	1,014.6	968.9	45.66	22.222		
9,700.0	7,457.0	9,694.3	7,217.0	48.0	0.0	76.34	1,903.0	2,139.1	1,016.5	969.6	46.98	21.639		
9,800.0	7,457.0	9,794.3	7,217.0	49.3	0.0	76.37	2,002.9	2,138.2	1,018.5	970.2	48.32	21.077		
9,900.0	7,457.0	9,894.2	7,217.0	50.7	0.0	76.39	2,102.9	2,137.4	1,020.5	970.8	49.69	20.536		
10,000.0	7,457.0	9,994.2	7,217.0	52.1	0.0	76.42	2,202.9	2,136.6	1,022.4	971.3	51.08	20.015		
10,100.0	7,457.0	10,094.2	7,217.0	53.5	0.0	76.45	2,302.9	2,135.8	1,024.4	971.9	52.50	19.513		
10,200.0	7,457.0	10,194.2	7,217.0	54.9	0.0	76.47	2,402.8	2,134.9	1,026.4	972.4	53.93	19.032		
10,300.0	7,457.0	10,294.2	7,217.0	56.4	0.0	76.50	2,502.8	2,134.1	1,028.3	973.0	55.38	18.569		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,457.0	10,394.1	7,217.0	57.8	0.0	76.53	2,602.8	2,133.3	1,030.3	973.5	56.84	18.125		
10,500.0	7,457.0	10,494.1	7,217.0	59.3	0.0	76.55	2,702.8	2,132.4	1,032.3	974.0	58.33	17.698		
10,600.0	7,457.0	10,594.1	7,217.0	60.8	0.0	76.58	2,802.7	2,131.6	1,034.2	974.4	59.82	17.289		
10,700.0	7,457.0	10,694.1	7,217.0	62.3	0.0	76.61	2,902.7	2,130.8	1,036.2	974.9	61.33	16.896		
10,800.0	7,457.0	10,794.1	7,217.0	63.9	0.0	76.63	3,002.7	2,130.0	1,038.2	975.3	62.85	16.519		
10,900.0	7,457.0	10,894.0	7,217.0	65.4	0.0	76.66	3,102.7	2,129.1	1,040.2	975.8	64.38	16.157		
11,000.0	7,457.0	10,994.0	7,217.0	66.9	0.0	76.68	3,202.7	2,128.3	1,042.1	976.2	65.92	15.809		
11,100.0	7,457.0	11,094.0	7,217.0	68.5	0.0	76.71	3,302.6	2,127.5	1,044.1	976.6	67.47	15.474		
11,200.0	7,457.0	11,194.0	7,217.0	70.1	0.0	76.73	3,402.6	2,126.7	1,046.1	977.0	69.03	15.153		
11,300.0	7,457.0	11,294.0	7,217.0	71.7	0.0	76.76	3,502.6	2,125.8	1,048.0	977.4	70.60	14.844		
11,400.0	7,457.0	11,393.9	7,217.0	73.2	0.0	76.78	3,602.6	2,125.0	1,050.0	977.8	72.18	14.547		
11,500.0	7,457.0	11,493.9	7,217.0	74.8	0.0	76.81	3,702.5	2,124.2	1,052.0	978.2	73.76	14.262		
11,600.0	7,457.0	11,593.9	7,217.0	76.4	0.0	76.83	3,802.5	2,123.4	1,054.0	978.6	75.36	13.986		
11,700.0	7,457.0	11,693.9	7,217.0	78.1	0.0	76.86	3,902.5	2,122.5	1,055.9	979.0	76.95	13.722		
11,800.0	7,457.0	11,793.9	7,217.0	79.7	0.0	76.88	4,002.5	2,121.7	1,057.9	979.3	78.56	13.467		
11,900.0	7,457.0	11,893.8	7,217.0	81.3	0.0	76.91	4,102.4	2,120.9	1,059.9	979.7	80.17	13.221		
12,000.0	7,457.0	11,993.8	7,217.0	82.9	0.0	76.93	4,202.4	2,120.0	1,061.8	980.1	81.78	12.984		
12,100.0	7,457.0	12,093.8	7,217.0	84.6	0.0	76.96	4,302.4	2,119.2	1,063.8	980.4	83.41	12.755		
12,200.0	7,457.0	12,193.8	7,217.0	86.2	0.0	76.98	4,402.4	2,118.4	1,065.8	980.8	85.03	12.534		
12,300.0	7,457.0	12,293.8	7,217.0	87.9	0.0	77.01	4,502.3	2,117.6	1,067.8	981.1	86.66	12.321		
12,400.0	7,457.0	12,393.7	7,217.0	89.5	0.0	77.03	4,602.3	2,116.7	1,069.7	981.4	88.30	12.115		
12,500.0	7,457.0	12,493.7	7,217.0	91.2	0.0	77.06	4,702.3	2,115.9	1,071.7	981.8	89.94	11.916		
12,600.0	7,457.0	12,593.7	7,217.0	92.8	0.0	77.08	4,802.3	2,115.1	1,073.7	982.1	91.58	11.724		
12,700.0	7,457.0	12,693.7	7,217.0	94.5	0.0	77.11	4,902.2	2,114.3	1,075.7	982.4	93.23	11.538		
12,800.0	7,457.0	12,793.6	7,217.0	96.2	0.0	77.13	5,002.2	2,113.4	1,077.6	982.8	94.88	11.358		
12,900.0	7,457.0	12,893.6	7,217.0	97.8	0.0	77.15	5,102.2	2,112.6	1,079.6	983.1	96.53	11.184		
13,000.0	7,457.0	12,993.6	7,217.0	99.5	0.0	77.18	5,202.2	2,111.8	1,081.6	983.4	98.19	11.015		
13,100.0	7,457.0	13,093.6	7,217.0	101.2	0.0	77.20	5,302.1	2,111.0	1,083.6	983.7	99.85	10.852		
13,200.0	7,457.0	13,193.6	7,217.0	102.9	0.0	77.22	5,402.1	2,110.1	1,085.5	984.0	101.51	10.694		
13,300.0	7,457.0	13,293.5	7,217.0	104.6	0.0	77.25	5,502.1	2,109.3	1,087.5	984.3	103.18	10.540		
13,400.0	7,457.0	13,393.5	7,217.0	106.2	0.0	77.27	5,602.1	2,108.5	1,089.5	984.6	104.85	10.391		
13,500.0	7,457.0	13,493.5	7,217.0	107.9	0.0	77.30	5,702.1	2,107.6	1,091.5	984.9	106.52	10.247		
13,600.0	7,457.0	13,593.5	7,217.0	109.6	0.0	77.32	5,802.0	2,106.8	1,093.4	985.2	108.19	10.106		
13,700.0	7,457.0	13,693.5	7,217.0	111.3	0.0	77.34	5,902.0	2,106.0	1,095.4	985.5	109.87	9.970		
13,800.0	7,457.0	13,793.4	7,217.0	113.0	0.0	77.37	6,002.0	2,105.2	1,097.3	985.8	111.55	9.837		
13,900.0	7,457.0	13,893.4	7,217.0	114.7	0.0	77.37	6,102.0	2,104.3	1,098.0	984.7	113.22	9.698		
14,000.0	7,457.0	13,993.4	7,217.0	116.4	0.0	77.38	6,202.0	2,103.5	1,098.5	983.6	114.89	9.561		
14,100.0	7,457.0	14,093.4	7,217.0	118.1	0.0	77.39	6,302.0	2,102.7	1,099.0	982.4	116.56	9.428		
14,200.0	7,457.0	14,193.4	7,217.0	119.8	0.0	77.39	6,402.0	2,101.9	1,099.5	981.3	118.24	9.299		
14,300.0	7,457.0	14,293.4	7,217.0	121.5	0.0	77.40	6,502.0	2,101.0	1,100.0	980.1	119.92	9.173		
14,400.0	7,457.0	14,393.4	7,217.0	123.2	0.0	77.40	6,602.0	2,100.2	1,100.6	979.0	121.60	9.051		
14,500.0	7,457.0	14,493.4	7,217.0	124.9	0.0	77.41	6,701.9	2,099.4	1,101.1	977.8	123.28	8.931		
14,600.0	7,457.0	14,593.4	7,217.0	126.7	0.0	77.42	6,801.9	2,098.6	1,101.6	976.6	124.97	8.815		
14,700.0	7,457.0	14,693.4	7,217.0	128.4	0.0	77.42	6,901.9	2,097.7	1,102.1	975.5	126.65	8.702		
14,800.0	7,457.0	14,793.4	7,217.0	130.1	0.0	77.43	7,001.9	2,096.9	1,102.6	974.3	128.34	8.592		
14,900.0	7,457.0	14,893.4	7,217.0	131.8	0.0	77.43	7,101.9	2,096.1	1,103.2	973.1	130.02	8.484		
15,000.0	7,457.0	14,993.4	7,217.0	133.5	0.0	77.44	7,201.9	2,095.2	1,103.7	972.0	131.71	8.379		
15,100.0	7,457.0	15,093.4	7,217.0	135.2	0.0	77.45	7,301.9	2,094.4	1,104.2	970.8	133.40	8.277		
15,200.0	7,457.0	15,193.4	7,217.0	136.9	0.0	77.45	7,401.9	2,093.6	1,104.7	969.6	135.09	8.177		
15,300.0	7,457.0	15,293.4	7,217.0	138.7	0.0	77.46	7,501.9	2,092.8	1,105.2	968.4	136.79	8.080		
15,400.0	7,457.0	15,393.4	7,217.0	140.4	0.0	77.46	7,601.9	2,091.9	1,105.8	967.3	138.48	7.985		
15,500.0	7,457.0	15,493.4	7,217.0	142.1	0.0	77.47	7,701.9	2,091.1	1,106.3	966.1	140.18	7.892		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,457.0	15,593.4	7,217.0	143.8	0.0	77.48	7,801.9	2,090.3	1,106.8	964.9	141.87	7.801		
15,700.0	7,457.0	15,693.4	7,217.0	145.6	0.0	77.48	7,901.9	2,089.5	1,107.3	963.7	143.57	7.713		
15,800.0	7,457.0	15,793.4	7,217.0	147.3	0.0	77.49	8,001.9	2,088.6	1,107.8	962.6	145.27	7.626		
15,900.0	7,457.0	15,893.4	7,217.0	149.0	0.0	77.49	8,101.9	2,087.8	1,108.4	961.4	146.96	7.542		
16,000.0	7,457.0	15,993.4	7,217.0	150.7	0.0	77.50	8,201.9	2,087.0	1,108.9	960.2	148.66	7.459		
16,100.0	7,457.0	16,093.4	7,217.0	152.5	0.0	77.51	8,301.9	2,086.1	1,109.4	959.0	150.37	7.378		
16,200.0	7,457.0	16,193.4	7,217.0	154.2	0.0	77.51	8,401.9	2,085.3	1,109.9	957.8	152.07	7.299		
16,300.0	7,457.0	16,293.4	7,217.0	155.9	0.0	77.52	8,501.9	2,084.5	1,110.4	956.7	153.77	7.221		
16,400.0	7,457.0	16,393.4	7,217.0	157.6	0.0	77.52	8,601.9	2,083.7	1,111.0	955.5	155.47	7.146		
16,500.0	7,457.0	16,493.4	7,217.0	159.4	0.0	77.53	8,701.9	2,082.8	1,111.5	954.3	157.18	7.072		
16,600.0	7,457.0	16,593.4	7,217.0	161.1	0.0	77.54	8,801.8	2,082.0	1,112.0	953.1	158.88	6.999		
16,700.0	7,457.0	16,693.4	7,217.0	162.8	0.0	77.54	8,901.8	2,081.2	1,112.5	951.9	160.59	6.928		
16,800.0	7,457.0	16,793.4	7,217.0	164.6	0.0	77.55	9,001.8	2,080.4	1,113.0	950.7	162.29	6.858		
16,900.0	7,457.0	16,893.4	7,217.0	166.3	0.0	77.55	9,101.8	2,079.5	1,113.6	949.6	164.00	6.790		
17,000.0	7,457.0	16,993.4	7,217.0	168.0	0.0	77.56	9,201.8	2,078.7	1,114.1	948.4	165.71	6.723		
17,100.0	7,457.0	17,093.4	7,217.0	169.8	0.0	77.57	9,301.8	2,077.9	1,114.6	947.2	167.41	6.658		
17,200.0	7,457.0	17,193.4	7,217.0	171.5	0.0	77.57	9,401.8	2,077.1	1,115.1	946.0	169.12	6.593		
17,300.0	7,457.0	17,293.4	7,217.0	173.3	0.0	77.58	9,501.8	2,076.2	1,115.6	944.8	170.83	6.531		
17,400.0	7,457.0	17,393.4	7,217.0	175.0	0.0	77.58	9,601.8	2,075.4	1,116.2	943.6	172.54	6.469		
17,500.0	7,457.0	17,493.4	7,217.0	176.7	0.0	77.59	9,701.8	2,074.6	1,116.7	942.4	174.25	6.408		
17,600.0	7,457.0	17,593.4	7,217.0	178.5	0.0	77.59	9,801.8	2,073.7	1,117.2	941.2	175.97	6.349		
17,700.0	7,457.0	17,693.4	7,217.0	180.2	0.0	77.60	9,901.8	2,072.9	1,117.7	940.0	177.68	6.291		
17,721.0	7,457.0	17,714.4	7,217.0	180.6	0.0	77.60	9,922.8	2,072.7	1,117.8	939.8	178.04	6.279 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - Gail #1 (PR) - EXISTING - NO SURVEYS (PR)													Offset Site Error:	0.0 usft
Survey Program: 100-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,000.0	7,457.0	7,388.0	7,388.0	116.4	27.5	-90.00	8,132.6	15.1	2,189.7	2,093.6	96.08	22.790		
14,100.0	7,457.0	7,388.0	7,388.0	118.1	27.5	-90.00	8,132.6	15.1	2,101.0	2,002.4	98.60	21.309		
14,200.0	7,457.0	7,388.0	7,388.0	119.8	27.5	-90.00	8,132.6	15.1	2,013.3	1,912.0	101.33	19.870		
14,300.0	7,457.0	7,388.0	7,388.0	121.5	27.5	-90.00	8,132.6	15.1	1,926.9	1,822.6	104.29	18.477		
14,400.0	7,457.0	7,388.0	7,388.0	123.2	27.5	-90.00	8,132.6	15.1	1,841.8	1,734.3	107.50	17.132		
14,500.0	7,457.0	7,388.0	7,388.0	124.9	27.5	-90.00	8,132.6	15.1	1,758.3	1,647.3	111.00	15.841		
14,600.0	7,457.0	7,388.0	7,388.0	126.7	27.5	-90.00	8,132.6	15.1	1,676.6	1,561.8	114.78	14.607		
14,700.0	7,457.0	7,388.0	7,388.0	128.4	27.5	-90.00	8,132.6	15.1	1,597.0	1,478.1	118.88	13.434		
14,800.0	7,457.0	7,388.0	7,388.0	130.1	27.5	-90.00	8,132.6	15.1	1,519.8	1,396.5	123.31	12.325		
14,900.0	7,457.0	7,388.0	7,388.0	131.8	27.5	-90.00	8,132.6	15.1	1,445.4	1,317.3	128.06	11.287		
15,000.0	7,457.0	7,388.0	7,388.0	133.5	27.5	-90.00	8,132.6	15.1	1,374.2	1,241.1	133.13	10.322		
15,100.0	7,457.0	7,388.0	7,388.0	135.2	27.5	-90.00	8,132.6	15.1	1,306.9	1,168.4	138.50	9.436		
15,200.0	7,457.0	7,388.0	7,388.0	136.9	27.5	-90.00	8,132.6	15.1	1,243.9	1,099.8	144.10	8.632		
15,300.0	7,457.0	7,388.0	7,388.0	138.7	27.5	-90.00	8,132.6	15.1	1,186.0	1,036.2	149.83	7.916		
15,400.0	7,457.0	7,388.0	7,388.0	140.4	27.5	-90.00	8,132.6	15.1	1,134.0	978.5	155.56	7.290		
15,500.0	7,457.0	7,388.0	7,388.0	142.1	27.5	-90.00	8,132.6	15.1	1,088.8	927.7	161.08	6.759		
15,600.0	7,457.0	7,388.0	7,388.0	143.8	27.5	-90.00	8,132.6	15.1	1,051.1	884.9	166.15	6.326		
15,700.0	7,457.0	7,388.0	7,388.0	145.6	27.5	-90.00	8,132.6	15.1	1,021.8	851.4	170.49	5.994		
15,800.0	7,457.0	7,388.0	7,388.0	147.3	27.5	-90.00	8,132.6	15.1	1,001.8	828.0	173.81	5.764		
15,900.0	7,457.0	7,388.0	7,388.0	149.0	27.5	-90.00	8,132.6	15.1	991.4	815.6	175.87	5.637		
15,953.1	7,457.0	7,388.0	7,388.0	149.9	27.5	-90.00	8,132.6	15.1	990.0	813.6	176.40	5.612 CC, ES, SF		
16,000.0	7,457.0	7,388.0	7,388.0	150.7	27.5	-90.00	8,132.6	15.1	991.1	814.6	176.53	5.614		
16,100.0	7,457.0	7,388.0	7,388.0	152.5	27.5	-90.00	8,132.6	15.1	1,000.8	825.1	175.76	5.694		
16,200.0	7,457.0	7,388.0	7,388.0	154.2	27.5	-90.00	8,132.6	15.1	1,020.3	846.7	173.66	5.875		
16,300.0	7,457.0	7,388.0	7,388.0	155.9	27.5	-90.00	8,132.6	15.1	1,049.0	878.6	170.44	6.155		
16,400.0	7,457.0	7,388.0	7,388.0	157.6	27.5	-90.00	8,132.6	15.1	1,086.2	919.8	166.35	6.530		
16,500.0	7,457.0	7,388.0	7,388.0	159.4	27.5	-90.00	8,132.6	15.1	1,131.0	969.3	161.68	6.995		
16,600.0	7,457.0	7,388.0	7,388.0	161.1	27.5	-90.00	8,132.6	15.1	1,182.6	1,025.9	156.68	7.548		
16,700.0	7,457.0	7,388.0	7,388.0	162.8	27.5	-90.00	8,132.6	15.1	1,240.1	1,088.6	151.55	8.183		
16,800.0	7,457.0	7,388.0	7,388.0	164.6	27.5	-90.00	8,132.6	15.1	1,302.8	1,156.4	146.46	8.896		
16,900.0	7,457.0	7,388.0	7,388.0	166.3	27.5	-90.00	8,132.6	15.1	1,369.9	1,228.4	141.51	9.681		
17,000.0	7,457.0	7,388.0	7,388.0	168.0	27.5	-90.00	8,132.6	15.1	1,440.9	1,304.1	136.78	10.534		
17,100.0	7,457.0	7,388.0	7,388.0	169.8	27.5	-90.00	8,132.6	15.1	1,515.1	1,382.8	132.31	11.451		
17,200.0	7,457.0	7,388.0	7,388.0	171.5	27.5	-90.00	8,132.6	15.1	1,592.1	1,464.0	128.12	12.427		
17,300.0	7,457.0	7,388.0	7,388.0	173.3	27.5	-90.00	8,132.6	15.1	1,671.6	1,547.4	124.22	13.457		
17,400.0	7,457.0	7,388.0	7,388.0	175.0	27.5	-90.00	8,132.6	15.1	1,753.2	1,632.6	120.59	14.538		
17,500.0	7,457.0	7,388.0	7,388.0	176.7	27.5	-90.00	8,132.6	15.1	1,836.6	1,719.3	117.24	15.665		
17,600.0	7,457.0	7,388.0	7,388.0	178.5	27.5	-90.00	8,132.6	15.1	1,921.6	1,807.4	114.14	16.835		
17,700.0	7,457.0	7,388.0	7,388.0	180.2	27.5	-90.00	8,132.6	15.1	2,007.9	1,896.6	111.28	18.044		
17,721.0	7,457.0	7,388.0	7,388.0	180.6	27.5	-90.00	8,132.6	15.1	2,026.2	1,915.5	110.71	18.302		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - Milheim #1 (P&A) - EXISTING - NO SURVEYS (P&A)													Offset Site Error: 0.0 usft
Survey Program: 100-MWD													Offset Well Error: 0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
13,100.0	7,457.0	7,388.0	7,388.0	101.2	27.5	-90.00	5,915.5	-1,054.4	2,198.6	2,072.0	126.58	17.369	
13,200.0	7,457.0	7,388.0	7,388.0	102.9	27.5	-90.00	5,915.5	-1,054.4	2,169.6	2,040.8	128.84	16.839	
13,300.0	7,457.0	7,388.0	7,388.0	104.6	27.5	-90.00	5,915.5	-1,054.4	2,145.0	2,014.0	130.99	16.375	
13,400.0	7,457.0	7,388.0	7,388.0	106.2	27.5	-90.00	5,915.5	-1,054.4	2,124.7	1,991.7	132.99	15.977	
13,500.0	7,457.0	7,388.0	7,388.0	107.9	27.5	-90.00	5,915.5	-1,054.4	2,109.1	1,974.2	134.81	15.644	
13,600.0	7,457.0	7,388.0	7,388.0	109.6	27.5	-90.00	5,915.5	-1,054.4	2,098.0	1,961.6	136.45	15.376	
13,700.0	7,457.0	7,388.0	7,388.0	111.3	27.5	-90.00	5,915.5	-1,054.4	2,091.7	1,953.9	137.88	15.171	
13,777.3	7,457.0	7,388.0	7,388.0	112.6	27.5	-90.00	5,915.5	-1,054.4	2,090.3	1,951.5	138.83	15.057	
13,800.0	7,457.0	7,388.0	7,388.0	113.0	27.5	-90.00	5,915.5	-1,054.4	2,090.3	1,951.2	139.08	15.030 CC, ES	
13,900.0	7,457.0	7,388.0	7,388.0	114.7	27.5	-90.00	5,915.5	-1,054.4	2,094.9	1,954.9	140.03	14.960	
14,000.0	7,457.0	7,388.0	7,388.0	116.4	27.5	-90.00	5,915.5	-1,054.4	2,104.4	1,963.6	140.75	14.951 SF	
14,100.0	7,457.0	7,388.0	7,388.0	118.1	27.5	-90.00	5,915.5	-1,054.4	2,118.6	1,977.3	141.23	15.001	
14,200.0	7,457.0	7,388.0	7,388.0	119.8	27.5	-90.00	5,915.5	-1,054.4	2,137.3	1,995.9	141.48	15.107	
14,300.0	7,457.0	7,388.0	7,388.0	121.5	27.5	-90.00	5,915.5	-1,054.4	2,160.6	2,019.1	141.50	15.269	
14,400.0	7,457.0	7,388.0	7,388.0	123.2	27.5	-90.00	5,915.5	-1,054.4	2,188.1	2,046.8	141.31	15.485	
14,500.0	7,457.0	7,388.0	7,388.0	124.9	27.5	-90.00	5,915.5	-1,054.4	2,219.8	2,078.9	140.93	15.752	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - Price 7-19 (SI) - EXISTING - NO SURVEYS (SI)													Offset Site Error:	0.0 usft
Survey Program: 100-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
8,800.0	7,457.0	7,388.0	7,388.0	37.9	27.5	-90.00	3,156.7	703.6	2,212.8	2,150.3	62.50	35.404		
8,900.0	7,457.0	7,388.0	7,388.0	38.8	27.5	-90.00	3,156.7	703.6	2,114.6	2,051.9	62.73	33.713		
9,000.0	7,457.0	7,388.0	7,388.0	39.7	27.5	-90.00	3,156.7	703.6	2,016.6	1,953.7	62.97	32.023		
9,100.0	7,457.0	7,388.0	7,388.0	40.8	27.5	-90.00	3,156.7	703.6	1,918.9	1,855.6	63.26	30.335		
9,200.0	7,457.0	7,388.0	7,388.0	41.9	27.5	-90.00	3,156.7	703.6	1,821.3	1,757.7	63.57	28.649		
9,300.0	7,457.0	7,388.0	7,388.0	43.0	27.5	-90.00	3,156.7	703.6	1,724.0	1,660.1	63.93	26.966		
9,400.0	7,457.0	7,388.0	7,388.0	44.2	27.5	-90.00	3,156.7	703.6	1,627.1	1,562.8	64.35	25.287		
9,500.0	7,457.0	7,388.0	7,388.0	45.4	27.5	-90.00	3,156.7	703.6	1,530.6	1,465.7	64.82	23.612		
9,600.0	7,457.0	7,388.0	7,388.0	46.7	27.5	-90.00	3,156.7	703.6	1,434.5	1,369.1	65.37	21.944		
9,700.0	7,457.0	7,388.0	7,388.0	48.0	27.5	-90.00	3,156.7	703.6	1,339.0	1,273.0	66.02	20.283		
9,800.0	7,457.0	7,388.0	7,388.0	49.3	27.5	-90.00	3,156.7	703.6	1,244.2	1,177.5	66.78	18.633		
9,900.0	7,457.0	7,388.0	7,388.0	50.7	27.5	-90.00	3,156.7	703.6	1,150.3	1,082.7	67.68	16.997		
10,000.0	7,457.0	7,388.0	7,388.0	52.1	27.5	-90.00	3,156.7	703.6	1,057.6	988.8	68.76	15.379		
10,100.0	7,457.0	7,388.0	7,388.0	53.5	27.5	-90.00	3,156.7	703.6	966.2	896.1	70.08	13.788		
10,200.0	7,457.0	7,388.0	7,388.0	54.9	27.5	-90.00	3,156.7	703.6	876.8	805.1	71.68	12.231		
10,300.0	7,457.0	7,388.0	7,388.0	56.4	27.5	-90.00	3,156.7	703.6	789.9	716.2	73.66	10.724		
10,400.0	7,457.0	7,388.0	7,388.0	57.8	27.5	-90.00	3,156.7	703.6	706.4	630.4	76.08	9.285		
10,500.0	7,457.0	7,388.0	7,388.0	59.3	27.5	-90.00	3,156.7	703.6	627.9	548.8	79.03	7.945		
10,600.0	7,457.0	7,388.0	7,388.0	60.8	27.5	-90.00	3,156.7	703.6	556.2	473.7	82.52	6.741		
10,700.0	7,457.0	7,388.0	7,388.0	62.3	27.5	-90.00	3,156.7	703.6	494.5	408.2	86.35	5.727		
10,800.0	7,457.0	7,388.0	7,388.0	63.9	27.5	-90.00	3,156.7	703.6	446.9	356.9	89.93	4.969		
10,900.0	7,457.0	7,388.0	7,388.0	65.4	27.5	-90.00	3,156.7	703.6	418.2	326.0	92.14	4.538		
10,974.2	7,457.0	7,388.0	7,388.0	66.5	27.5	-90.00	3,156.7	703.6	411.5	319.3	92.19	4.464	CC, ES, SF	
11,000.0	7,457.0	7,388.0	7,388.0	66.9	27.5	-90.00	3,156.7	703.6	412.3	320.5	91.83	4.490		
11,100.0	7,457.0	7,388.0	7,388.0	68.5	27.5	-90.00	3,156.7	703.6	430.3	341.5	88.83	4.844		
11,200.0	7,457.0	7,388.0	7,388.0	70.1	27.5	-90.00	3,156.7	703.6	469.4	385.1	84.25	5.572		
11,300.0	7,457.0	7,388.0	7,388.0	71.7	27.5	-90.00	3,156.7	703.6	524.9	445.5	79.41	6.609		
11,400.0	7,457.0	7,388.0	7,388.0	73.2	27.5	-90.00	3,156.7	703.6	592.2	517.0	75.14	7.881		
11,500.0	7,457.0	7,388.0	7,388.0	74.8	27.5	-90.00	3,156.7	703.6	667.7	596.0	71.68	9.315		
11,600.0	7,457.0	7,388.0	7,388.0	76.4	27.5	-90.00	3,156.7	703.6	749.0	680.0	68.99	10.857		
11,700.0	7,457.0	7,388.0	7,388.0	78.1	27.5	-90.00	3,156.7	703.6	834.3	767.4	66.93	12.466		
11,800.0	7,457.0	7,388.0	7,388.0	79.7	27.5	-90.00	3,156.7	703.6	922.6	857.3	65.37	14.115		
11,900.0	7,457.0	7,388.0	7,388.0	81.3	27.5	-90.00	3,156.7	703.6	1,013.1	949.0	64.18	15.787		
12,000.0	7,457.0	7,388.0	7,388.0	82.9	27.5	-90.00	3,156.7	703.6	1,105.3	1,042.0	63.26	17.470		
12,100.0	7,457.0	7,388.0	7,388.0	84.6	27.5	-90.00	3,156.7	703.6	1,198.6	1,136.1	62.56	19.159		
12,200.0	7,457.0	7,388.0	7,388.0	86.2	27.5	-90.00	3,156.7	703.6	1,293.0	1,231.0	62.02	20.847		
12,300.0	7,457.0	7,388.0	7,388.0	87.9	27.5	-90.00	3,156.7	703.6	1,388.2	1,326.6	61.60	22.535		
12,400.0	7,457.0	7,388.0	7,388.0	89.5	27.5	-90.00	3,156.7	703.6	1,484.0	1,422.7	61.27	24.219		
12,500.0	7,457.0	7,388.0	7,388.0	91.2	27.5	-90.00	3,156.7	703.6	1,580.3	1,519.3	61.02	25.899		
12,600.0	7,457.0	7,388.0	7,388.0	92.8	27.5	-90.00	3,156.7	703.6	1,677.1	1,616.2	60.82	27.575		
12,700.0	7,457.0	7,388.0	7,388.0	94.5	27.5	-90.00	3,156.7	703.6	1,774.2	1,713.5	60.66	29.246		
12,800.0	7,457.0	7,388.0	7,388.0	96.2	27.5	-90.00	3,156.7	703.6	1,871.6	1,811.1	60.54	30.913		
12,900.0	7,457.0	7,388.0	7,388.0	97.8	27.5	-90.00	3,156.7	703.6	1,969.3	1,908.8	60.45	32.575		
13,000.0	7,457.0	7,388.0	7,388.0	99.5	27.5	-90.00	3,156.7	703.6	2,067.2	2,006.8	60.38	34.233		
13,100.0	7,457.0	7,388.0	7,388.0	101.2	27.5	-90.00	3,156.7	703.6	2,165.3	2,104.9	60.34	35.887		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - Putnam 41-18 (PR) - EXISTING - NO SURVEYS (PR)													Offset Site Error:	0.0 usft
Survey Program: 100-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
14,900.0	7,457.0	7,388.0	7,388.0	131.8	27.5	90.00	9,163.5	1,758.3	2,198.4	2,124.1	74.25	29.607		
15,000.0	7,457.0	7,388.0	7,388.0	133.5	27.5	90.00	9,163.5	1,758.3	2,104.9	2,028.7	76.20	27.624		
15,100.0	7,457.0	7,388.0	7,388.0	135.2	27.5	90.00	9,163.5	1,758.3	2,012.1	1,933.8	78.39	25.668		
15,200.0	7,457.0	7,388.0	7,388.0	136.9	27.5	90.00	9,163.5	1,758.3	1,920.1	1,839.2	80.86	23.745		
15,300.0	7,457.0	7,388.0	7,388.0	138.7	27.5	90.00	9,163.5	1,758.3	1,828.8	1,745.2	83.65	21.863		
15,400.0	7,457.0	7,388.0	7,388.0	140.4	27.5	90.00	9,163.5	1,758.3	1,738.6	1,651.8	86.79	20.033		
15,500.0	7,457.0	7,388.0	7,388.0	142.1	27.5	90.00	9,163.5	1,758.3	1,649.4	1,559.1	90.33	18.261		
15,600.0	7,457.0	7,388.0	7,388.0	143.8	27.5	90.00	9,163.5	1,758.3	1,561.6	1,467.3	94.31	16.557		
15,700.0	7,457.0	7,388.0	7,388.0	145.6	27.5	90.00	9,163.5	1,758.3	1,475.3	1,376.5	98.81	14.930		
15,800.0	7,457.0	7,388.0	7,388.0	147.3	27.5	90.00	9,163.5	1,758.3	1,390.8	1,287.0	103.88	13.389		
15,900.0	7,457.0	7,388.0	7,388.0	149.0	27.5	90.00	9,163.5	1,758.3	1,308.6	1,199.0	109.58	11.942		
16,000.0	7,457.0	7,388.0	7,388.0	150.7	27.5	90.00	9,163.5	1,758.3	1,229.0	1,113.0	115.97	10.597		
16,100.0	7,457.0	7,388.0	7,388.0	152.5	27.5	90.00	9,163.5	1,758.3	1,152.5	1,029.4	123.11	9.362		
16,200.0	7,457.0	7,388.0	7,388.0	154.2	27.5	90.00	9,163.5	1,758.3	1,079.9	948.9	131.02	8.243		
16,300.0	7,457.0	7,388.0	7,388.0	155.9	27.5	90.00	9,163.5	1,758.3	1,012.0	872.4	139.66	7.246		
16,400.0	7,457.0	7,388.0	7,388.0	157.6	27.5	90.00	9,163.5	1,758.3	949.8	800.9	148.95	6.377		
16,500.0	7,457.0	7,388.0	7,388.0	159.4	27.5	90.00	9,163.5	1,758.3	894.5	735.8	158.66	5.638		
16,600.0	7,457.0	7,388.0	7,388.0	161.1	27.5	90.00	9,163.5	1,758.3	847.4	679.0	168.38	5.032		
16,700.0	7,457.0	7,388.0	7,388.0	162.8	27.5	90.00	9,163.5	1,758.3	809.9	632.4	177.57	4.561		
16,800.0	7,457.0	7,388.0	7,388.0	164.6	27.5	90.00	9,163.5	1,758.3	783.6	598.1	185.51	4.224		
16,900.0	7,457.0	7,388.0	7,388.0	166.3	27.5	90.00	9,163.5	1,758.3	769.4	577.9	191.48	4.018		
16,960.2	7,457.0	7,388.0	7,388.0	167.4	27.5	90.00	9,163.5	1,758.3	767.0	573.1	193.89	3.956 CC		
17,000.0	7,457.0	7,388.0	7,388.0	168.0	27.5	90.00	9,163.5	1,758.3	768.0	573.1	194.95	3.940 ES, SF		
17,100.0	7,457.0	7,388.0	7,388.0	169.8	27.5	90.00	9,163.5	1,758.3	779.6	583.9	195.70	3.984		
17,200.0	7,457.0	7,388.0	7,388.0	171.5	27.5	90.00	9,163.5	1,758.3	803.6	609.7	193.95	4.143		
17,300.0	7,457.0	7,388.0	7,388.0	173.3	27.5	90.00	9,163.5	1,758.3	838.9	648.7	190.19	4.411		
17,400.0	7,457.0	7,388.0	7,388.0	175.0	27.5	90.00	9,163.5	1,758.3	884.1	699.1	185.03	4.778		
17,500.0	7,457.0	7,388.0	7,388.0	176.7	27.5	90.00	9,163.5	1,758.3	937.9	758.8	179.08	5.237		
17,600.0	7,457.0	7,388.0	7,388.0	178.5	27.5	90.00	9,163.5	1,758.3	998.8	826.0	172.81	5.780		
17,700.0	7,457.0	7,388.0	7,388.0	180.2	27.5	90.00	9,163.5	1,758.3	1,065.6	899.1	166.56	6.398		
17,721.0	7,457.0	7,388.0	7,388.0	180.6	27.5	90.00	9,163.5	1,758.3	1,080.3	915.0	165.27	6.536		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - Tracy #1 (PR) - EXISTING - NO SURVEYS (PR)													Offset Site Error:	0.0 usft
Survey Program: 100-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
11,600.0	7,457.0	7,388.0	7,388.0	76.4	27.5	90.00	5,962.5	1,187.5	2,170.3	2,109.7	60.61	35.808		
11,700.0	7,457.0	7,388.0	7,388.0	78.1	27.5	90.00	5,962.5	1,187.5	2,070.6	2,010.0	60.55	34.197		
11,800.0	7,457.0	7,388.0	7,388.0	79.7	27.5	90.00	5,962.5	1,187.5	1,970.9	1,910.4	60.48	32.586		
11,900.0	7,457.0	7,388.0	7,388.0	81.3	27.5	90.00	5,962.5	1,187.5	1,871.2	1,810.8	60.41	30.974		
12,000.0	7,457.0	7,388.0	7,388.0	82.9	27.5	90.00	5,962.5	1,187.5	1,771.5	1,711.2	60.34	29.361		
12,100.0	7,457.0	7,388.0	7,388.0	84.6	27.5	90.00	5,962.5	1,187.5	1,671.9	1,611.7	60.26	27.746		
12,200.0	7,457.0	7,388.0	7,388.0	86.2	27.5	90.00	5,962.5	1,187.5	1,572.4	1,512.2	60.18	26.129		
12,300.0	7,457.0	7,388.0	7,388.0	87.9	27.5	90.00	5,962.5	1,187.5	1,472.9	1,412.8	60.09	24.509		
12,400.0	7,457.0	7,388.0	7,388.0	89.5	27.5	90.00	5,962.5	1,187.5	1,373.4	1,313.4	60.01	22.885		
12,500.0	7,457.0	7,388.0	7,388.0	91.2	27.5	90.00	5,962.5	1,187.5	1,274.1	1,214.2	59.94	21.256		
12,600.0	7,457.0	7,388.0	7,388.0	92.8	27.5	90.00	5,962.5	1,187.5	1,174.9	1,115.0	59.88	19.619		
12,700.0	7,457.0	7,388.0	7,388.0	94.5	27.5	90.00	5,962.5	1,187.5	1,075.8	1,015.9	59.86	17.972		
12,800.0	7,457.0	7,388.0	7,388.0	96.2	27.5	90.00	5,962.5	1,187.5	976.9	917.0	59.89	16.312		
12,900.0	7,457.0	7,388.0	7,388.0	97.8	27.5	90.00	5,962.5	1,187.5	878.3	818.2	60.02	14.633		
13,000.0	7,457.0	7,388.0	7,388.0	99.5	27.5	90.00	5,962.5	1,187.5	780.0	719.6	60.33	12.929		
13,100.0	7,457.0	7,388.0	7,388.0	101.2	27.5	90.00	5,962.5	1,187.5	682.2	621.2	60.96	11.191		
13,200.0	7,457.0	7,388.0	7,388.0	102.9	27.5	90.00	5,962.5	1,187.5	585.1	522.9	62.19	9.409		
13,300.0	7,457.0	7,388.0	7,388.0	104.6	27.5	90.00	5,962.5	1,187.5	489.3	424.7	64.57	7.577		
13,400.0	7,457.0	7,388.0	7,388.0	106.2	27.5	90.00	5,962.5	1,187.5	395.4	326.2	69.21	5.714		
13,500.0	7,457.0	7,388.0	7,388.0	107.9	27.5	90.00	5,962.5	1,187.5	305.6	227.2	78.34	3.901		
13,600.0	7,457.0	7,388.0	7,388.0	109.6	27.5	90.00	5,962.5	1,187.5	224.5	128.4	96.10	2.336		
13,700.0	7,457.0	7,388.0	7,388.0	111.3	27.5	90.00	5,962.5	1,187.5	165.5	40.8	124.67	1.328	Level 3	
13,765.6	7,457.0	7,388.0	7,388.0	112.4	27.5	90.00	5,962.5	1,187.5	152.1	13.4	138.65	1.097	Level 2, CC, ES, SF	
13,800.0	7,457.0	7,388.0	7,388.0	113.0	27.5	90.00	5,962.5	1,187.5	156.1	16.8	139.32	1.121	Level 2	
13,900.0	7,457.0	7,388.0	7,388.0	114.7	27.5	90.00	5,962.5	1,187.5	202.4	79.6	122.78	1.648		
14,000.0	7,457.0	7,388.0	7,388.0	116.4	27.5	90.00	5,962.5	1,187.5	278.4	173.4	104.98	2.652		
14,100.0	7,457.0	7,388.0	7,388.0	118.1	27.5	90.00	5,962.5	1,187.5	366.1	272.6	93.58	3.912		
14,200.0	7,457.0	7,388.0	7,388.0	119.8	27.5	90.00	5,962.5	1,187.5	458.9	372.5	86.46	5.308		
14,300.0	7,457.0	7,388.0	7,388.0	121.5	27.5	90.00	5,962.5	1,187.5	554.2	472.4	81.79	6.776		
14,400.0	7,457.0	7,388.0	7,388.0	123.2	27.5	90.00	5,962.5	1,187.5	650.9	572.4	78.58	8.284		
14,500.0	7,457.0	7,388.0	7,388.0	124.9	27.5	90.00	5,962.5	1,187.5	748.5	672.2	76.27	9.814		
14,600.0	7,457.0	7,388.0	7,388.0	126.7	27.5	90.00	5,962.5	1,187.5	846.6	772.1	74.55	11.356		
14,700.0	7,457.0	7,388.0	7,388.0	128.4	27.5	90.00	5,962.5	1,187.5	945.2	871.9	73.24	12.906		
14,800.0	7,457.0	7,388.0	7,388.0	130.1	27.5	90.00	5,962.5	1,187.5	1,044.0	971.8	72.21	14.459		
14,900.0	7,457.0	7,388.0	7,388.0	131.8	27.5	90.00	5,962.5	1,187.5	1,143.0	1,071.6	71.38	16.013		
15,000.0	7,457.0	7,388.0	7,388.0	133.5	27.5	90.00	5,962.5	1,187.5	1,242.2	1,171.5	70.71	17.566		
15,100.0	7,457.0	7,388.0	7,388.0	135.2	27.5	90.00	5,962.5	1,187.5	1,341.5	1,271.3	70.16	19.119		
15,200.0	7,457.0	7,388.0	7,388.0	136.9	27.5	90.00	5,962.5	1,187.5	1,440.9	1,371.2	69.71	20.671		
15,300.0	7,457.0	7,388.0	7,388.0	138.7	27.5	90.00	5,962.5	1,187.5	1,540.3	1,471.0	69.32	22.220		
15,400.0	7,457.0	7,388.0	7,388.0	140.4	27.5	90.00	5,962.5	1,187.5	1,639.9	1,570.9	69.00	23.767		
15,500.0	7,457.0	7,388.0	7,388.0	142.1	27.5	90.00	5,962.5	1,187.5	1,739.5	1,670.7	68.72	25.312		
15,600.0	7,457.0	7,388.0	7,388.0	143.8	27.5	90.00	5,962.5	1,187.5	1,839.1	1,770.6	68.49	26.854		
15,700.0	7,457.0	7,388.0	7,388.0	145.6	27.5	90.00	5,962.5	1,187.5	1,938.8	1,870.5	68.28	28.393		
15,800.0	7,457.0	7,388.0	7,388.0	147.3	27.5	90.00	5,962.5	1,187.5	2,038.5	1,970.4	68.11	29.929		
15,900.0	7,457.0	7,388.0	7,388.0	149.0	27.5	90.00	5,962.5	1,187.5	2,138.2	2,070.3	67.96	31.463		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - UPRR-Letterly 1 (P&A) - EXISTING - NO SURVEYS (P&A)													Offset Site Error:	0.0 usft
Survey Program: 100-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-44.96	1,023.4	-1,022.1	1,448.0					
100.0	100.0	31.0	31.0	0.4	0.3	-44.96	1,023.4	-1,022.1	1,446.4	1,446.1	0.27	5,410.342		
200.0	200.0	131.0	131.0	1.0	1.1	-44.96	1,023.4	-1,022.1	1,446.4	1,445.4	0.99	1,462.918		
300.0	300.0	231.0	231.0	1.5	1.5	-44.96	1,023.4	-1,022.1	1,446.4	1,444.6	1.70	849.229		
400.0	400.0	331.0	331.0	1.9	1.9	-44.96	1,023.4	-1,022.1	1,446.4	1,443.9	2.42	597.869		
500.0	500.0	431.0	431.0	2.3	2.3	-44.96	1,023.4	-1,022.1	1,446.4	1,443.2	3.14	461.255		
600.0	600.0	531.0	531.0	2.7	2.7	-44.96	1,023.4	-1,022.1	1,446.4	1,442.5	3.85	375.443		
700.0	700.0	631.0	631.0	3.1	3.1	-44.96	1,023.4	-1,022.1	1,446.4	1,441.8	4.57	316.545		
800.0	800.0	731.0	731.0	3.5	3.5	-44.96	1,023.4	-1,022.1	1,446.4	1,441.1	5.29	273.618		
900.0	900.0	831.0	831.0	3.9	3.9	-44.96	1,023.4	-1,022.1	1,446.4	1,440.3	6.00	240.942		
1,000.0	1,000.0	931.0	931.0	4.2	4.2	-44.96	1,023.4	-1,022.1	1,446.4	1,439.6	6.72	215.238 CC, ES		
1,100.0	1,100.0	1,031.0	1,031.0	4.6	4.6	-157.63	1,023.4	-1,022.1	1,448.0	1,440.4	7.61	190.255		
1,200.0	1,199.8	1,130.8	1,130.8	5.0	5.0	-157.67	1,023.4	-1,022.1	1,452.8	1,443.9	8.92	162.931		
1,300.0	1,299.5	1,230.5	1,230.5	5.7	5.3	-157.74	1,023.4	-1,022.1	1,460.9	1,450.8	10.09	144.822		
1,400.0	1,398.7	1,329.7	1,329.7	6.5	5.7	-157.84	1,023.4	-1,022.1	1,472.2	1,461.0	11.17	131.756		
1,500.0	1,497.5	1,428.5	1,428.5	7.1	6.0	-157.95	1,023.4	-1,022.1	1,486.7	1,474.5	12.20	121.856		
1,600.0	1,595.6	1,526.6	1,526.6	7.8	6.4	-158.09	1,023.4	-1,022.1	1,504.4	1,491.2	13.23	113.732		
1,700.0	1,693.4	1,624.4	1,624.4	8.2	6.8	-158.38	1,023.4	-1,022.1	1,524.0	1,510.0	14.00	108.831		
1,800.0	1,791.2	1,722.2	1,722.2	8.5	7.1	-158.66	1,023.4	-1,022.1	1,543.6	1,528.9	14.65	105.373		
1,900.0	1,888.9	1,819.9	1,819.9	8.8	7.5	-158.94	1,023.4	-1,022.1	1,563.2	1,547.9	15.30	102.147		
2,000.0	1,986.7	1,917.7	1,917.7	9.1	7.8	-159.21	1,023.4	-1,022.1	1,582.9	1,566.9	15.97	99.148		
2,100.0	2,084.5	2,015.5	2,015.5	9.4	8.2	-159.48	1,023.4	-1,022.1	1,602.6	1,586.0	16.63	96.358		
2,200.0	2,182.2	2,113.2	2,113.2	9.7	8.5	-159.74	1,023.4	-1,022.1	1,622.4	1,605.1	17.30	93.757		
2,300.0	2,280.0	2,211.0	2,211.0	10.1	8.9	-159.99	1,023.4	-1,022.1	1,642.1	1,624.2	17.98	91.330		
2,400.0	2,377.8	2,308.8	2,308.8	10.4	9.2	-160.24	1,023.4	-1,022.1	1,661.9	1,643.3	18.66	89.062		
2,500.0	2,475.5	2,406.5	2,406.5	10.8	9.6	-160.48	1,023.4	-1,022.1	1,681.8	1,662.4	19.34	86.938		
2,600.0	2,573.3	2,504.3	2,504.3	11.1	9.9	-160.72	1,023.4	-1,022.1	1,701.6	1,681.6	20.03	84.947		
2,700.0	2,671.1	2,602.1	2,602.1	11.5	10.3	-160.95	1,023.4	-1,022.1	1,721.5	1,700.8	20.72	83.078		
2,800.0	2,768.9	2,699.9	2,699.9	11.9	10.6	-161.17	1,023.4	-1,022.1	1,741.4	1,720.0	21.41	81.320		
2,900.0	2,866.6	2,797.6	2,797.6	12.4	11.0	-161.39	1,023.4	-1,022.1	1,761.4	1,739.3	22.11	79.665		
3,000.0	2,964.4	2,895.4	2,895.4	12.8	11.3	-161.61	1,023.4	-1,022.1	1,781.3	1,758.5	22.81	78.105		
3,100.0	3,062.2	2,993.2	2,993.2	13.3	11.7	-161.82	1,023.4	-1,022.1	1,801.3	1,777.8	23.51	76.631		
3,200.0	3,159.9	3,090.9	3,090.9	13.7	12.0	-162.02	1,023.4	-1,022.1	1,821.3	1,797.1	24.21	75.239		
3,300.0	3,257.7	3,188.7	3,188.7	14.2	12.4	-162.22	1,023.4	-1,022.1	1,841.4	1,816.5	24.91	73.920		
3,400.0	3,355.5	3,286.5	3,286.5	14.7	12.7	-162.42	1,023.4	-1,022.1	1,861.4	1,835.8	25.61	72.671		
3,500.0	3,453.2	3,384.2	3,384.2	15.2	13.1	-162.61	1,023.4	-1,022.1	1,881.5	1,855.2	26.32	71.485		
3,600.0	3,551.0	3,482.0	3,482.0	15.6	13.5	-162.80	1,023.4	-1,022.1	1,901.6	1,874.6	27.03	70.359		
3,700.0	3,648.8	3,579.8	3,579.8	16.1	13.8	-162.99	1,023.4	-1,022.1	1,921.7	1,894.0	27.74	69.288		
3,800.0	3,746.5	3,677.5	3,677.5	16.6	14.2	-163.17	1,023.4	-1,022.1	1,941.8	1,913.4	28.44	68.268		
3,900.0	3,844.3	3,775.3	3,775.3	17.1	14.5	-163.35	1,023.4	-1,022.1	1,962.0	1,932.8	29.15	67.296		
4,000.0	3,942.1	3,873.1	3,873.1	17.6	14.9	-163.52	1,023.4	-1,022.1	1,982.2	1,952.3	29.87	66.369		
4,100.0	4,039.9	3,970.9	3,970.9	18.1	15.2	-163.69	1,023.4	-1,022.1	2,002.3	1,971.8	30.58	65.484		
4,200.0	4,137.6	4,068.6	4,068.6	18.6	15.6	-163.86	1,023.4	-1,022.1	2,022.5	1,991.3	31.29	64.638		
4,300.0	4,235.4	4,166.4	4,166.4	19.1	15.9	-164.02	1,023.4	-1,022.1	2,042.8	2,010.8	32.00	63.829		
4,400.0	4,333.2	4,264.2	4,264.2	19.6	16.3	-164.18	1,023.4	-1,022.1	2,063.0	2,030.3	32.72	63.054		
4,500.0	4,430.9	4,361.9	4,361.9	20.1	16.6	-164.34	1,023.4	-1,022.1	2,083.2	2,049.8	33.43	62.311		
4,600.0	4,528.7	4,459.7	4,459.7	20.6	17.0	-164.49	1,023.4	-1,022.1	2,103.5	2,069.4	34.15	61.599		
4,700.0	4,626.5	4,557.5	4,557.5	21.1	17.3	-164.64	1,023.4	-1,022.1	2,123.8	2,088.9	34.86	60.915		
4,800.0	4,724.2	4,655.2	4,655.2	21.6	17.7	-164.79	1,023.4	-1,022.1	2,144.1	2,108.5	35.58	60.259		
4,900.0	4,822.0	4,753.0	4,753.0	22.1	18.0	-164.94	1,023.4	-1,022.1	2,164.4	2,128.1	36.30	59.628		
5,000.0	4,919.8	4,850.8	4,850.8	22.6	18.4	-165.08	1,023.4	-1,022.1	2,184.7	2,147.7	37.02	59.021		
5,100.0	5,017.5	4,948.5	4,948.5	23.1	18.7	-165.22	1,023.4	-1,022.1	2,205.0	2,167.3	37.73	58.436		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - UPRR-Letterly 1 (P&A) - EXISTING - NO SURVEYS (P&A)												Offset Site Error:	0.0 usft
Survey Program: 100-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
8,600.0	7,457.0	7,388.0	7,388.0	36.3	27.5	-90.00	1,023.4	-1,022.1	2,216.5	2,155.5	61.05	36.306	
8,700.0	7,457.0	7,388.0	7,388.0	37.0	27.5	-90.00	1,023.4	-1,022.1	2,205.6	2,143.8	61.81	35.682	
8,800.0	7,457.0	7,388.0	7,388.0	37.9	27.5	-90.00	1,023.4	-1,022.1	2,199.2	2,136.6	62.60	35.134	
8,890.9	7,457.0	7,388.0	7,388.0	38.7	27.5	-90.00	1,023.4	-1,022.1	2,197.4	2,134.0	63.32	34.703	
8,900.0	7,457.0	7,388.0	7,388.0	38.8	27.5	-90.00	1,023.4	-1,022.1	2,197.4	2,134.0	63.39	34.665	
9,000.0	7,457.0	7,388.0	7,388.0	39.7	27.5	-90.00	1,023.4	-1,022.1	2,200.1	2,135.9	64.18	34.280	
9,100.0	7,457.0	7,388.0	7,388.0	40.8	27.5	-90.00	1,023.4	-1,022.1	2,207.3	2,142.3	64.96	33.979	
9,200.0	7,457.0	7,388.0	7,388.0	41.9	27.5	-90.00	1,023.4	-1,022.1	2,219.0	2,153.3	65.72	33.763 SF	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 13' KB @ 5155.0usft

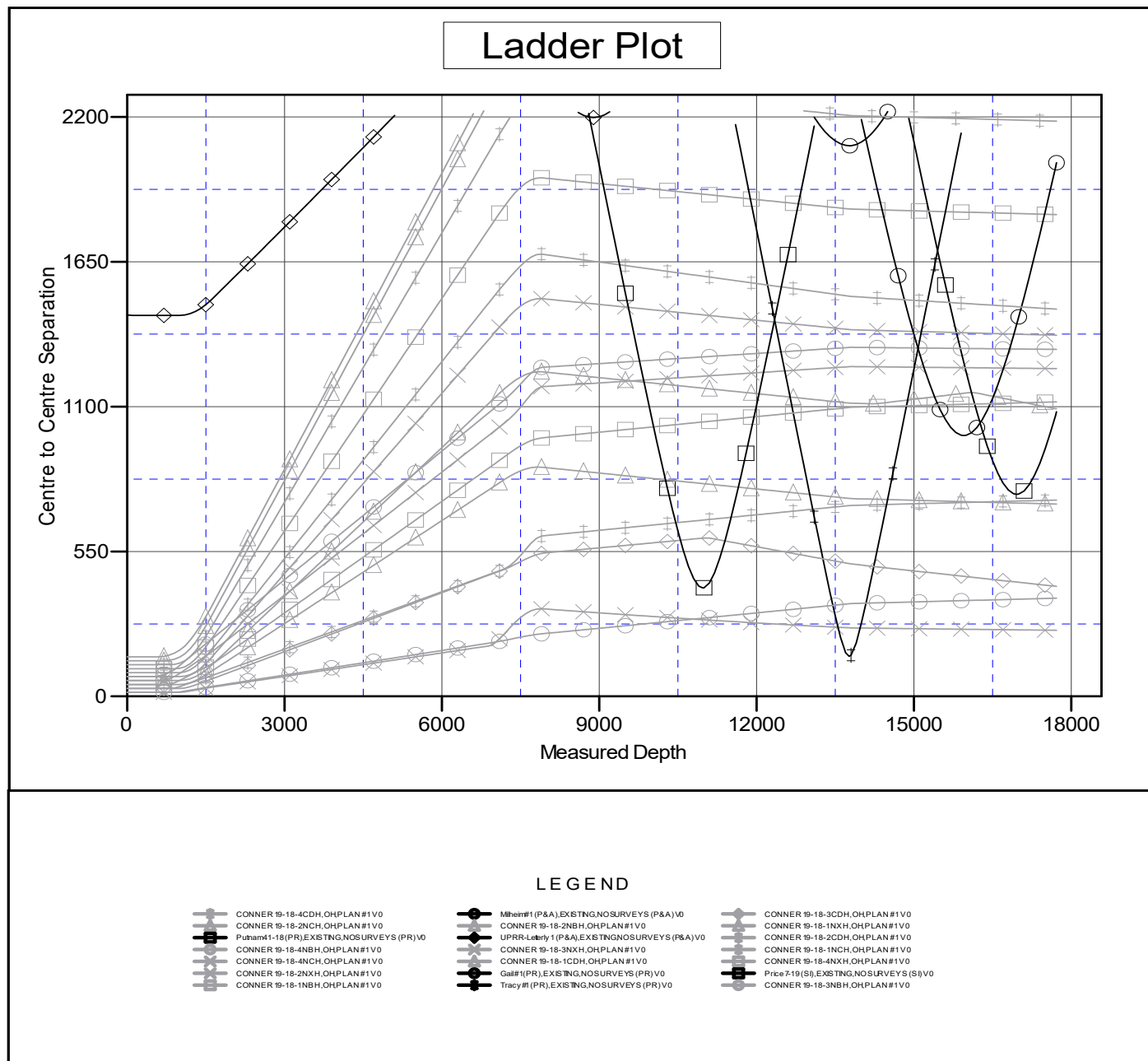
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000

Coordinates are relative to: CONNER 19-18-3NCH

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.51°



Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-3NCH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-3NCH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 13' KB @ 5155.0usft

Offset Depths are relative to Offset Datum

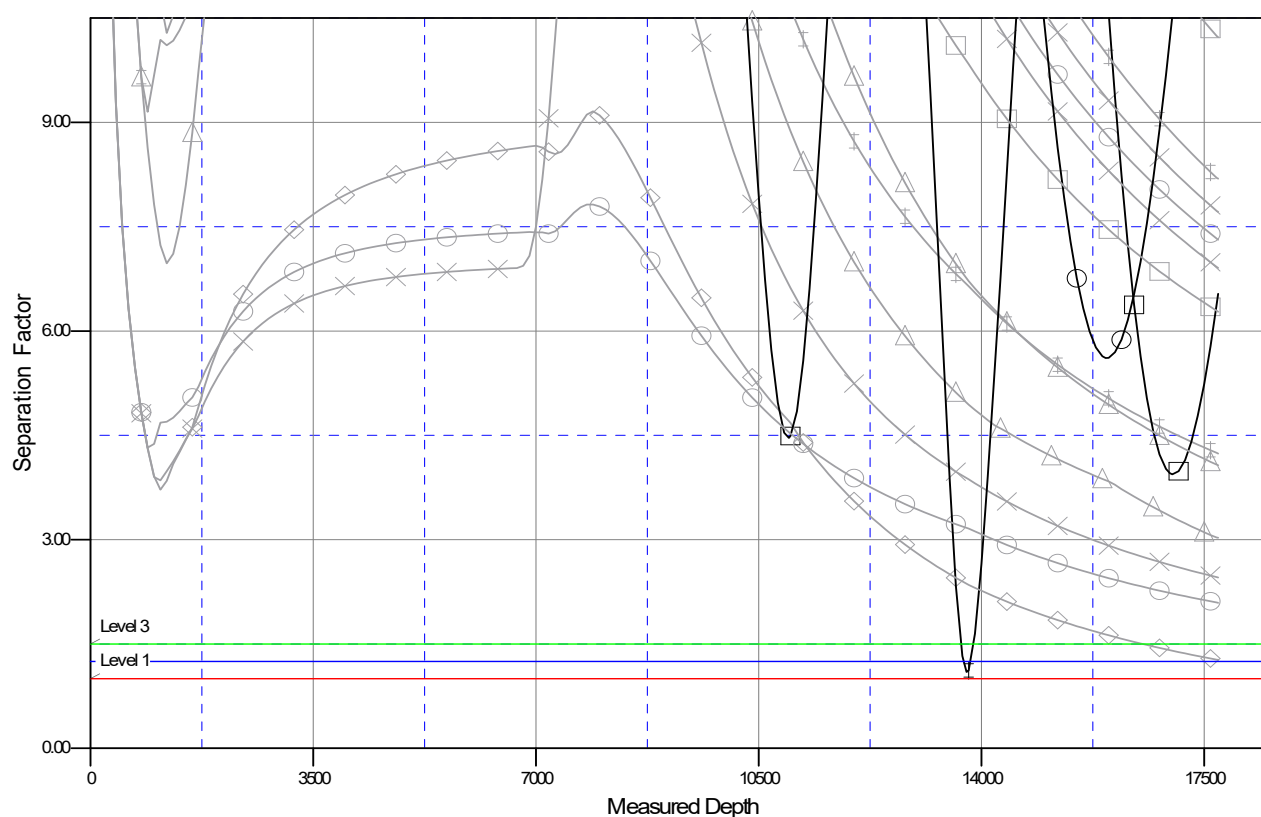
Central Meridian is -105.500000

Coordinates are relative to: CONNER 19-18-3NCH

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.51°

Separation Factor Plot



LEGEND

CONNER 19-18-4CDH,OH,PLAN#1V0
 CONNER 19-18-2NCH,OH,PLAN#1V0
 Putnam1-18(PR),EXISTING,NOSURVEYS (PR)V0
 CONNER 19-18-4NBH,OH,PLAN#1V0
 CONNER 19-18-4NCH,OH,PLAN#1V0
 CONNER 19-18-2NXH,OH,PLAN#1V0
 CONNER 19-18-1NBH,OH,PLAN#1V0

Milheim1 (P&A),EXISTING,NOSURVEYS (P&A)V0
 CONNER 19-18-2NBH,OH,PLAN#1V0
 UPRR-Letlery 1 (P&A),EXISTING,NOSURVEYS (P&A)V0
 CONNER 19-18-3NXH,OH,PLAN#1V0
 CONNER 19-18-1CDH,OH,PLAN#1V0
 Gal#1(PR),EXISTING,NOSURVEYS (PR)V0
 Tracy#1 (PR),EXISTING,NOSURVEYS (PR)V0

CONNER 19-18-3CDH,OH,PLAN#1V0
 CONNER 19-18-1NXH,OH,PLAN#1V0
 CONNER 19-18-2CDH,OH,PLAN#1V0
 CONNER 19-18-1NCH,OH,PLAN#1V0
 CONNER 19-18-4NXH,OH,PLAN#1V0
 Price 7-19(S),EXISTING,NOSURVEYS (S)V0
 CONNER 19-18-3NBH,OH,PLAN#1V0