



PetroShare Corp

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

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



Azimuths to Grid North
True North: -0.51°
Magnetic North: 7.51°
Magnetic Field
Strength: 51671.1nT
Dip Angle: 66.20°
Date: 12/31/2020
Model: HDGM2020_FILE

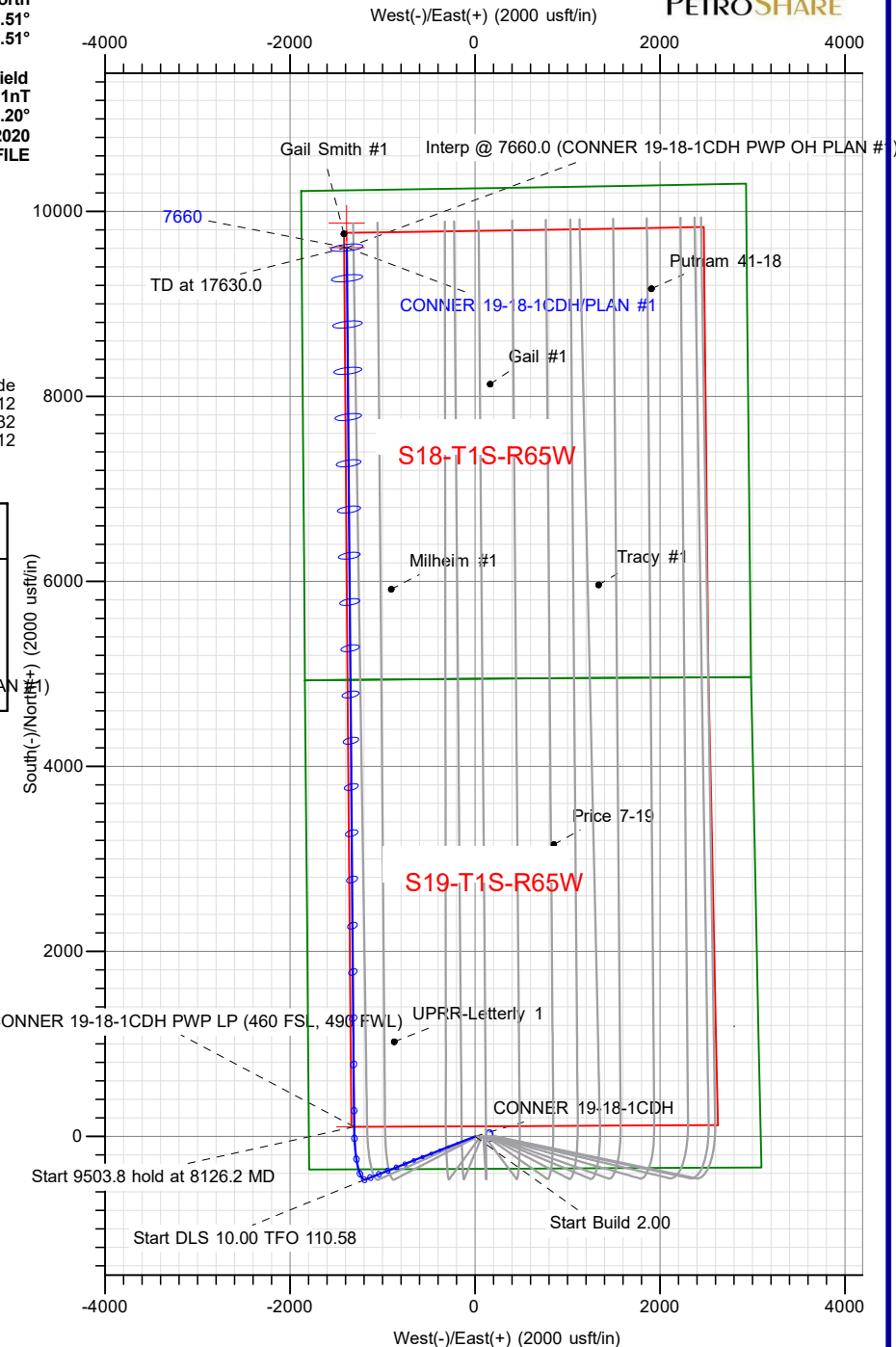
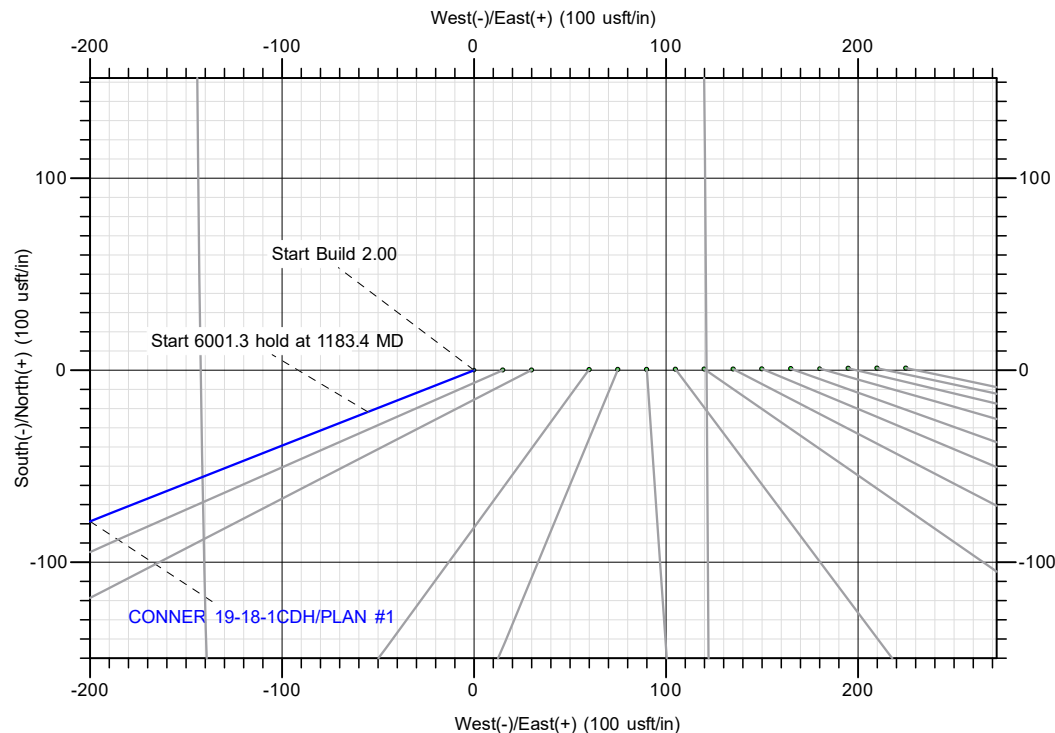


DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
CONNER 19-18-1CDH PWP BHL (355 FNL, 490 FWL)	7660.0	9874.2	-1386.8	1233428.59	3220623.04	39.971457	-104.712812
CONNER 19-18-1CDH PWP LP (460 FSL, 490 FWL)	7660.0	105.0	-1305.9	1223659.35	3220703.96	39.944637	-104.712832
Interp @ 7660.0 (CONNER 19-18-1CDH PWP OH PLAN #1)	7660.0	9608.4	-1384.6	1233162.78	3220625.24	39.970727	-104.712812

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	600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.0	
3	1183.4	11.67	248.55	1179.4	-21.6	-55.1	2.00	248.55	-13.6	
4	7184.7	11.67	248.55	7056.7	-465.5	-1184.8	0.00	0.00	-291.7	
5	8126.2	90.00	359.53	7660.0	105.0	-1305.9	10.00	110.58	290.2	CONNER 19-18-1CDH PWP LP (460 FSL, 490 FWL)
6	17630.0	90.00	359.53	7660.0	9608.4	-1384.6	0.00	0.00	9707.7	Interp @ 7660.0 (CONNER 19-18-1CDH PWP OH PLAN #1)



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

Plan: PLAN #1 (CONNER 19-18-1CDH/OH)
S19-T1S-R65W
Created By: Lance Roybal
Date: 14:07, March 12 2021
Approved: _____
Date: _____



PetroShare Corp

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



Azimuths to Grid North
True North: -0.51°
Magnetic North: 7.51°

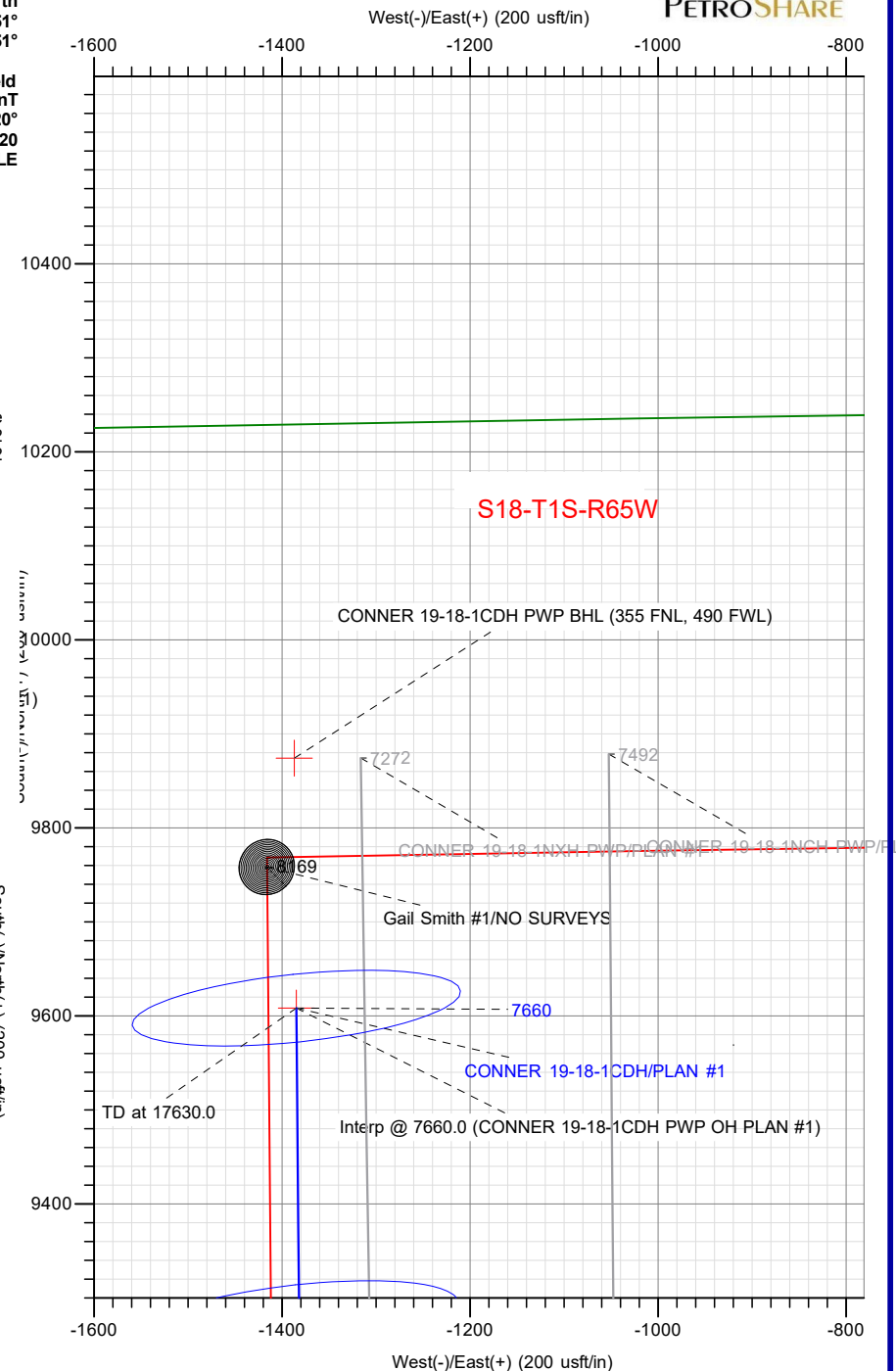
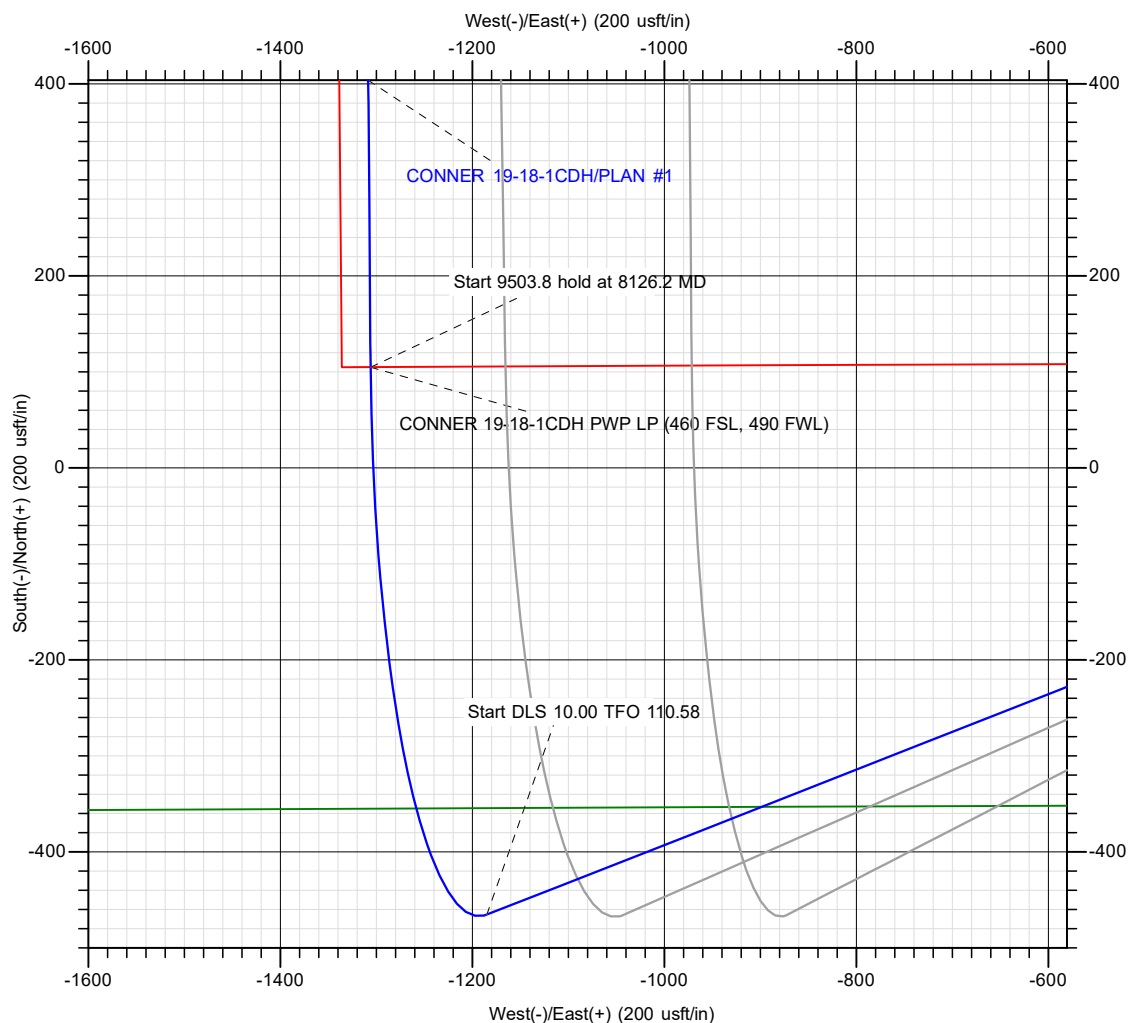
Magnetic Field
Strength: 51671.1nT
Dip Angle: 66.20°
Date: 12/31/2020
Model: HDGM2020_FILE



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
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CONNER 19-18-1CDH PWP LP (460 FSL, 490 FWL)	7660.0	105.0	-1305.9	1223659.35	3220703.96	39.944637	-104.712832



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

Plan: PLAN #1 (CONNER 19-18-1CDH/OH)
S19-T1S-R65W
Created By: Lance Roybal
Date: 14:08, March 12 2021
Approved: _____
Date: _____



PetroShare Corp

ADAMS COUNTY, CO

S19-T1S-R65W

CONNER 19-18-1CDH

OH

Plan: PLAN #1

Standard Planning Report

12 March, 2021



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Company:	PetroShare Corp	TVD Reference:	KB @ 5155.0usft
Project:	ADAMS COUNTY, CO	MD Reference:	KB @ 5155.0usft
Site:	S19-T1S-R65W	North Reference:	Grid
Well:	CONNER 19-18-1CDH	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 19-18-1CDH					
Well Position	+N/-S	0.0 usft	Northing:	1,223,554.35 usft	Latitude:	39.944317
	+E/-W	0.0 usft	Easting:	3,222,009.87 usft	Longitude:	-104.708179
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	351.80

Plan Survey Tool Program	Date	3/12/2021		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,630.0	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	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,183.4	11.67	248.55	1,179.4	-21.6	-55.1	2.00	2.00	0.00	248.55	
7,184.7	11.67	248.55	7,056.7	-465.5	-1,184.8	0.00	0.00	0.00	0.00	
8,126.2	90.00	359.53	7,660.0	105.0	-1,305.9	10.00	8.32	11.79	110.58	CONNER 19-18-1CD
17,630.0	90.00	359.53	7,660.0	9,608.4	-1,384.6	0.00	0.00	0.00	0.00	Interp @ 7660.0 (CO

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Company:	PetroShare Corp	TVD Reference:	KB @ 5155.0usft
Project:	ADAMS COUNTY, CO	MD Reference:	KB @ 5155.0usft
Site:	S19-T1S-R65W	North Reference:	Grid
Well:	CONNER 19-18-1CDH	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	2.00	248.55	700.0	-0.6	-1.6	-0.4	2.00	2.00	0.00
800.0	4.00	248.55	799.8	-2.6	-6.5	-1.6	2.00	2.00	0.00
900.0	6.00	248.55	899.5	-5.7	-14.6	-3.6	2.00	2.00	0.00
1,000.0	8.00	248.55	998.7	-10.2	-25.9	-6.4	2.00	2.00	0.00
1,100.0	10.00	248.55	1,097.5	-15.9	-40.5	-10.0	2.00	2.00	0.00
1,183.4	11.67	248.55	1,179.4	-21.6	-55.1	-13.6	2.00	2.00	0.00
1,200.0	11.67	248.55	1,195.6	-22.9	-58.2	-14.3	0.00	0.00	0.00
1,300.0	11.67	248.55	1,293.6	-30.3	-77.0	-19.0	0.00	0.00	0.00
1,400.0	11.67	248.55	1,391.5	-37.7	-95.9	-23.6	0.00	0.00	0.00
1,500.0	11.67	248.55	1,489.4	-45.1	-114.7	-28.2	0.00	0.00	0.00
1,600.0	11.67	248.55	1,587.4	-52.5	-133.5	-32.9	0.00	0.00	0.00
1,700.0	11.67	248.55	1,685.3	-59.9	-152.3	-37.5	0.00	0.00	0.00
1,800.0	11.67	248.55	1,783.2	-67.2	-171.2	-42.1	0.00	0.00	0.00
1,900.0	11.67	248.55	1,881.2	-74.6	-190.0	-46.8	0.00	0.00	0.00
2,000.0	11.67	248.55	1,979.1	-82.0	-208.8	-51.4	0.00	0.00	0.00
2,100.0	11.67	248.55	2,077.0	-89.4	-227.6	-56.0	0.00	0.00	0.00
2,200.0	11.67	248.55	2,175.0	-96.8	-246.5	-60.7	0.00	0.00	0.00
2,300.0	11.67	248.55	2,272.9	-104.2	-265.3	-65.3	0.00	0.00	0.00
2,400.0	11.67	248.55	2,370.8	-111.6	-284.1	-70.0	0.00	0.00	0.00
2,500.0	11.67	248.55	2,468.8	-119.0	-302.9	-74.6	0.00	0.00	0.00
2,600.0	11.67	248.55	2,566.7	-126.4	-321.8	-79.2	0.00	0.00	0.00
2,700.0	11.67	248.55	2,664.6	-133.8	-340.6	-83.9	0.00	0.00	0.00
2,800.0	11.67	248.55	2,762.6	-141.2	-359.4	-88.5	0.00	0.00	0.00
2,900.0	11.67	248.55	2,860.5	-148.6	-378.2	-93.1	0.00	0.00	0.00
3,000.0	11.67	248.55	2,958.4	-156.0	-397.1	-97.8	0.00	0.00	0.00
3,100.0	11.67	248.55	3,056.4	-163.4	-415.9	-102.4	0.00	0.00	0.00
3,200.0	11.67	248.55	3,154.3	-170.8	-434.7	-107.0	0.00	0.00	0.00
3,300.0	11.67	248.55	3,252.2	-178.2	-453.5	-111.7	0.00	0.00	0.00
3,400.0	11.67	248.55	3,350.2	-185.6	-472.4	-116.3	0.00	0.00	0.00
3,500.0	11.67	248.55	3,448.1	-193.0	-491.2	-120.9	0.00	0.00	0.00
3,600.0	11.67	248.55	3,546.0	-200.4	-510.0	-125.6	0.00	0.00	0.00
3,700.0	11.67	248.55	3,644.0	-207.8	-528.8	-130.2	0.00	0.00	0.00
3,800.0	11.67	248.55	3,741.9	-215.2	-547.7	-134.8	0.00	0.00	0.00
3,900.0	11.67	248.55	3,839.8	-222.6	-566.5	-139.5	0.00	0.00	0.00
4,000.0	11.67	248.55	3,937.8	-229.9	-585.3	-144.1	0.00	0.00	0.00
4,100.0	11.67	248.55	4,035.7	-237.3	-604.1	-148.7	0.00	0.00	0.00
4,200.0	11.67	248.55	4,133.6	-244.7	-623.0	-153.4	0.00	0.00	0.00
4,300.0	11.67	248.55	4,231.6	-252.1	-641.8	-158.0	0.00	0.00	0.00
4,400.0	11.67	248.55	4,329.5	-259.5	-660.6	-162.7	0.00	0.00	0.00
4,500.0	11.67	248.55	4,427.4	-266.9	-679.4	-167.3	0.00	0.00	0.00
4,600.0	11.67	248.55	4,525.4	-274.3	-698.3	-171.9	0.00	0.00	0.00
4,700.0	11.67	248.55	4,623.3	-281.7	-717.1	-176.6	0.00	0.00	0.00
4,800.0	11.67	248.55	4,721.2	-289.1	-735.9	-181.2	0.00	0.00	0.00
4,900.0	11.67	248.55	4,819.2	-296.5	-754.7	-185.8	0.00	0.00	0.00
5,000.0	11.67	248.55	4,917.1	-303.9	-773.6	-190.5	0.00	0.00	0.00
5,100.0	11.67	248.55	5,015.0	-311.3	-792.4	-195.1	0.00	0.00	0.00
5,200.0	11.67	248.55	5,113.0	-318.7	-811.2	-199.7	0.00	0.00	0.00

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Well:	CONNER 19-18-1CDH	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)
5,300.0	11.67	248.55	5,210.9	-326.1	-830.0	-204.4	0.00	0.00	0.00
5,400.0	11.67	248.55	5,308.8	-333.5	-848.9	-209.0	0.00	0.00	0.00
5,500.0	11.67	248.55	5,406.8	-340.9	-867.7	-213.6	0.00	0.00	0.00
5,600.0	11.67	248.55	5,504.7	-348.3	-886.5	-218.3	0.00	0.00	0.00
5,700.0	11.67	248.55	5,602.6	-355.7	-905.3	-222.9	0.00	0.00	0.00
5,800.0	11.67	248.55	5,700.6	-363.1	-924.2	-227.5	0.00	0.00	0.00
5,900.0	11.67	248.55	5,798.5	-370.5	-943.0	-232.2	0.00	0.00	0.00
6,000.0	11.67	248.55	5,896.4	-377.9	-961.8	-236.8	0.00	0.00	0.00
6,100.0	11.67	248.55	5,994.4	-385.3	-980.6	-241.4	0.00	0.00	0.00
6,200.0	11.67	248.55	6,092.3	-392.6	-999.5	-246.1	0.00	0.00	0.00
6,300.0	11.67	248.55	6,190.2	-400.0	-1,018.3	-250.7	0.00	0.00	0.00
6,400.0	11.67	248.55	6,288.2	-407.4	-1,037.1	-255.3	0.00	0.00	0.00
6,500.0	11.67	248.55	6,386.1	-414.8	-1,055.9	-260.0	0.00	0.00	0.00
6,600.0	11.67	248.55	6,484.0	-422.2	-1,074.8	-264.6	0.00	0.00	0.00
6,700.0	11.67	248.55	6,582.0	-429.6	-1,093.6	-269.3	0.00	0.00	0.00
6,800.0	11.67	248.55	6,679.9	-437.0	-1,112.4	-273.9	0.00	0.00	0.00
6,900.0	11.67	248.55	6,777.8	-444.4	-1,131.2	-278.5	0.00	0.00	0.00
7,000.0	11.67	248.55	6,875.8	-451.8	-1,150.1	-283.2	0.00	0.00	0.00
7,100.0	11.67	248.55	6,973.7	-459.2	-1,168.9	-287.8	0.00	0.00	0.00
7,184.7	11.67	248.55	7,056.7	-465.5	-1,184.8	-291.7	0.00	0.00	0.00
7,200.0	11.22	255.92	7,071.6	-466.4	-1,187.7	-292.2	10.00	-2.92	48.23
7,300.0	13.15	303.88	7,169.6	-462.4	-1,206.6	-285.6	10.00	1.93	47.97
7,400.0	20.43	328.35	7,265.4	-441.2	-1,225.3	-261.9	10.00	7.28	24.46
7,500.0	29.31	339.44	7,356.1	-403.3	-1,243.1	-221.9	10.00	8.88	11.09
7,600.0	38.71	345.60	7,438.9	-349.9	-1,259.5	-166.7	10.00	9.40	6.16
7,700.0	48.32	349.64	7,511.4	-282.8	-1,274.0	-98.1	10.00	9.61	4.04
7,800.0	58.04	352.61	7,571.2	-203.7	-1,286.2	-18.2	10.00	9.71	2.97
7,900.0	67.81	355.01	7,616.7	-115.3	-1,295.7	70.7	10.00	9.77	2.40
8,000.0	77.61	357.10	7,646.4	-20.2	-1,302.2	165.7	10.00	9.80	2.08
8,100.0	87.42	359.03	7,659.4	78.8	-1,305.6	264.2	10.00	9.82	1.93
8,126.2	90.00	359.53	7,660.0	105.0	-1,305.9	290.2	10.00	9.82	1.89
CONNER 19-18-1CDH PWP LP (460 FSL, 490 FWL)									
8,200.0	90.00	359.53	7,660.0	178.8	-1,306.5	363.3	0.00	0.00	0.00
8,300.0	90.00	359.53	7,660.0	278.7	-1,307.3	462.4	0.00	0.00	0.00
8,400.0	90.00	359.53	7,660.0	378.7	-1,308.2	561.5	0.00	0.00	0.00
8,500.0	90.00	359.53	7,660.0	478.7	-1,309.0	660.6	0.00	0.00	0.00
8,600.0	90.00	359.53	7,660.0	578.7	-1,309.8	759.6	0.00	0.00	0.00
8,700.0	90.00	359.53	7,660.0	678.7	-1,310.7	858.7	0.00	0.00	0.00
8,800.0	90.00	359.53	7,660.0	778.7	-1,311.5	957.8	0.00	0.00	0.00
8,900.0	90.00	359.53	7,660.0	878.7	-1,312.3	1,056.9	0.00	0.00	0.00
9,000.0	90.00	359.53	7,660.0	978.7	-1,313.1	1,156.0	0.00	0.00	0.00
9,100.0	90.00	359.53	7,660.0	1,078.7	-1,314.0	1,255.1	0.00	0.00	0.00
9,200.0	90.00	359.53	7,660.0	1,178.7	-1,314.8	1,354.2	0.00	0.00	0.00
9,300.0	90.00	359.53	7,660.0	1,278.7	-1,315.6	1,453.3	0.00	0.00	0.00
9,400.0	90.00	359.53	7,660.0	1,378.7	-1,316.5	1,552.4	0.00	0.00	0.00
9,500.0	90.00	359.53	7,660.0	1,478.7	-1,317.3	1,651.5	0.00	0.00	0.00
9,600.0	90.00	359.53	7,660.0	1,578.7	-1,318.1	1,750.6	0.00	0.00	0.00
9,700.0	90.00	359.53	7,660.0	1,678.7	-1,318.9	1,849.7	0.00	0.00	0.00
9,800.0	90.00	359.53	7,660.0	1,778.7	-1,319.8	1,948.8	0.00	0.00	0.00
9,900.0	90.00	359.53	7,660.0	1,878.7	-1,320.6	2,047.8	0.00	0.00	0.00
10,000.0	90.00	359.53	7,660.0	1,978.7	-1,321.4	2,146.9	0.00	0.00	0.00
10,100.0	90.00	359.53	7,660.0	2,078.7	-1,322.3	2,246.0	0.00	0.00	0.00
10,200.0	90.00	359.53	7,660.0	2,178.7	-1,323.1	2,345.1	0.00	0.00	0.00

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Company:	PetroShare Corp	TVD Reference:	KB @ 5155.0usft
Project:	ADAMS COUNTY, CO	MD Reference:	KB @ 5155.0usft
Site:	S19-T1S-R65W	North Reference:	Grid
Well:	CONNER 19-18-1CDH	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	359.53	7,660.0	2,278.7	-1,323.9	2,444.2	0.00	0.00	0.00	
10,400.0	90.00	359.53	7,660.0	2,378.7	-1,324.7	2,543.3	0.00	0.00	0.00	
10,500.0	90.00	359.53	7,660.0	2,478.7	-1,325.6	2,642.4	0.00	0.00	0.00	
10,600.0	90.00	359.53	7,660.0	2,578.7	-1,326.4	2,741.5	0.00	0.00	0.00	
10,700.0	90.00	359.53	7,660.0	2,678.7	-1,327.2	2,840.6	0.00	0.00	0.00	
10,800.0	90.00	359.53	7,660.0	2,778.7	-1,328.1	2,939.7	0.00	0.00	0.00	
10,900.0	90.00	359.53	7,660.0	2,878.7	-1,328.9	3,038.8	0.00	0.00	0.00	
11,000.0	90.00	359.53	7,660.0	2,978.7	-1,329.7	3,137.9	0.00	0.00	0.00	
11,100.0	90.00	359.53	7,660.0	3,078.7	-1,330.5	3,237.0	0.00	0.00	0.00	
11,200.0	90.00	359.53	7,660.0	3,178.6	-1,331.4	3,336.0	0.00	0.00	0.00	
11,300.0	90.00	359.53	7,660.0	3,278.6	-1,332.2	3,435.1	0.00	0.00	0.00	
11,400.0	90.00	359.53	7,660.0	3,378.6	-1,333.0	3,534.2	0.00	0.00	0.00	
11,500.0	90.00	359.53	7,660.0	3,478.6	-1,333.9	3,633.3	0.00	0.00	0.00	
11,600.0	90.00	359.53	7,660.0	3,578.6	-1,334.7	3,732.4	0.00	0.00	0.00	
11,700.0	90.00	359.53	7,660.0	3,678.6	-1,335.5	3,831.5	0.00	0.00	0.00	
11,800.0	90.00	359.53	7,660.0	3,778.6	-1,336.3	3,930.6	0.00	0.00	0.00	
11,900.0	90.00	359.53	7,660.0	3,878.6	-1,337.2	4,029.7	0.00	0.00	0.00	
12,000.0	90.00	359.53	7,660.0	3,978.6	-1,338.0	4,128.8	0.00	0.00	0.00	
12,100.0	90.00	359.53	7,660.0	4,078.6	-1,338.8	4,227.9	0.00	0.00	0.00	
12,200.0	90.00	359.53	7,660.0	4,178.6	-1,339.7	4,327.0	0.00	0.00	0.00	
12,300.0	90.00	359.53	7,660.0	4,278.6	-1,340.5	4,426.1	0.00	0.00	0.00	
12,400.0	90.00	359.53	7,660.0	4,378.6	-1,341.3	4,525.2	0.00	0.00	0.00	
12,500.0	90.00	359.53	7,660.0	4,478.6	-1,342.1	4,624.2	0.00	0.00	0.00	
12,600.0	90.00	359.53	7,660.0	4,578.6	-1,343.0	4,723.3	0.00	0.00	0.00	
12,700.0	90.00	359.53	7,660.0	4,678.6	-1,343.8	4,822.4	0.00	0.00	0.00	
12,800.0	90.00	359.53	7,660.0	4,778.6	-1,344.6	4,921.5	0.00	0.00	0.00	
12,900.0	90.00	359.53	7,660.0	4,878.6	-1,345.4	5,020.6	0.00	0.00	0.00	
13,000.0	90.00	359.53	7,660.0	4,978.6	-1,346.3	5,119.7	0.00	0.00	0.00	
13,100.0	90.00	359.53	7,660.0	5,078.6	-1,347.1	5,218.8	0.00	0.00	0.00	
13,200.0	90.00	359.53	7,660.0	5,178.6	-1,347.9	5,317.9	0.00	0.00	0.00	
13,300.0	90.00	359.53	7,660.0	5,278.6	-1,348.8	5,417.0	0.00	0.00	0.00	
13,400.0	90.00	359.53	7,660.0	5,378.6	-1,349.6	5,516.1	0.00	0.00	0.00	
13,500.0	90.00	359.53	7,660.0	5,478.6	-1,350.4	5,615.2	0.00	0.00	0.00	
13,600.0	90.00	359.53	7,660.0	5,578.6	-1,351.2	5,714.3	0.00	0.00	0.00	
13,700.0	90.00	359.53	7,660.0	5,678.6	-1,352.1	5,813.4	0.00	0.00	0.00	
13,800.0	90.00	359.53	7,660.0	5,778.6	-1,352.9	5,912.4	0.00	0.00	0.00	
13,900.0	90.00	359.53	7,660.0	5,878.6	-1,353.7	6,011.5	0.00	0.00	0.00	
14,000.0	90.00	359.53	7,660.0	5,978.6	-1,354.6	6,110.6	0.00	0.00	0.00	
14,100.0	90.00	359.53	7,660.0	6,078.5	-1,355.4	6,209.7	0.00	0.00	0.00	
14,200.0	90.00	359.53	7,660.0	6,178.5	-1,356.2	6,308.8	0.00	0.00	0.00	
14,300.0	90.00	359.53	7,660.0	6,278.5	-1,357.0	6,407.9	0.00	0.00	0.00	
14,400.0	90.00	359.53	7,660.0	6,378.5	-1,357.9	6,507.0	0.00	0.00	0.00	
14,500.0	90.00	359.53	7,660.0	6,478.5	-1,358.7	6,606.1	0.00	0.00	0.00	
14,600.0	90.00	359.53	7,660.0	6,578.5	-1,359.5	6,705.2	0.00	0.00	0.00	
14,700.0	90.00	359.53	7,660.0	6,678.5	-1,360.4	6,804.3	0.00	0.00	0.00	
14,800.0	90.00	359.53	7,660.0	6,778.5	-1,361.2	6,903.4	0.00	0.00	0.00	
14,900.0	90.00	359.53	7,660.0	6,878.5	-1,362.0	7,002.5	0.00	0.00	0.00	
15,000.0	90.00	359.53	7,660.0	6,978.5	-1,362.8	7,101.6	0.00	0.00	0.00	
15,100.0	90.00	359.53	7,660.0	7,078.5	-1,363.7	7,200.6	0.00	0.00	0.00	
15,200.0	90.00	359.53	7,660.0	7,178.5	-1,364.5	7,299.7	0.00	0.00	0.00	
15,300.0	90.00	359.53	7,660.0	7,278.5	-1,365.3	7,398.8	0.00	0.00	0.00	
15,400.0	90.00	359.53	7,660.0	7,378.5	-1,366.2	7,497.9	0.00	0.00	0.00	
15,500.0	90.00	359.53	7,660.0	7,478.5	-1,367.0	7,597.0	0.00	0.00	0.00	
15,600.0	90.00	359.53	7,660.0	7,578.5	-1,367.8	7,696.1	0.00	0.00	0.00	

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Company:	PetroShare Corp	TVD Reference:	KB @ 5155.0usft
Project:	ADAMS COUNTY, CO	MD Reference:	KB @ 5155.0usft
Site:	S19-T1S-R65W	North Reference:	Grid
Well:	CONNER 19-18-1CDH	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)	
15,700.0	90.00	359.53	7,660.0	7,678.5	-1,368.6	7,795.2	0.00	0.00	0.00	
15,800.0	90.00	359.53	7,660.0	7,778.5	-1,369.5	7,894.3	0.00	0.00	0.00	
15,900.0	90.00	359.53	7,660.0	7,878.5	-1,370.3	7,993.4	0.00	0.00	0.00	
16,000.0	90.00	359.53	7,660.0	7,978.5	-1,371.1	8,092.5	0.00	0.00	0.00	
16,100.0	90.00	359.53	7,660.0	8,078.5	-1,372.0	8,191.6	0.00	0.00	0.00	
16,200.0	90.00	359.53	7,660.0	8,178.5	-1,372.8	8,290.7	0.00	0.00	0.00	
16,300.0	90.00	359.53	7,660.0	8,278.5	-1,373.6	8,389.8	0.00	0.00	0.00	
16,400.0	90.00	359.53	7,660.0	8,378.5	-1,374.4	8,488.8	0.00	0.00	0.00	
16,500.0	90.00	359.53	7,660.0	8,478.5	-1,375.3	8,587.9	0.00	0.00	0.00	
16,600.0	90.00	359.53	7,660.0	8,578.5	-1,376.1	8,687.0	0.00	0.00	0.00	
16,700.0	90.00	359.53	7,660.0	8,678.5	-1,376.9	8,786.1	0.00	0.00	0.00	
16,800.0	90.00	359.53	7,660.0	8,778.5	-1,377.8	8,885.2	0.00	0.00	0.00	
16,900.0	90.00	359.53	7,660.0	8,878.5	-1,378.6	8,984.3	0.00	0.00	0.00	
17,000.0	90.00	359.53	7,660.0	8,978.4	-1,379.4	9,083.4	0.00	0.00	0.00	
17,100.0	90.00	359.53	7,660.0	9,078.4	-1,380.2	9,182.5	0.00	0.00	0.00	
17,200.0	90.00	359.53	7,660.0	9,178.4	-1,381.1	9,281.6	0.00	0.00	0.00	
17,300.0	90.00	359.53	7,660.0	9,278.4	-1,381.9	9,380.7	0.00	0.00	0.00	
17,400.0	90.00	359.53	7,660.0	9,378.4	-1,382.7	9,479.8	0.00	0.00	0.00	
17,500.0	90.00	359.53	7,660.0	9,478.4	-1,383.6	9,578.9	0.00	0.00	0.00	
17,600.0	90.00	359.53	7,660.0	9,578.4	-1,384.4	9,678.0	0.00	0.00	0.00	
17,630.0	90.00	359.53	7,660.0	9,608.4	-1,384.6	9,707.7	0.00	0.00	0.00	
CONNER 19-18-1CDH PWP BHL (355 FNL, 490 FWL) - Interp @ 7660.0 (CONNER 19-18-1CDH PWP OH PLAN #1)										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
CONNER 19-18-1CDH f	0.00	0.00	7,660.0	9,874.2	-1,386.8	1,233,428.59	3,220,623.04	39.971457	-104.712812	
- plan misses target center by 265.8usft at 17630.0usft MD (7660.0 TVD, 9608.4 N, -1384.6 E)										
- Point										
Interp @ 7660.0 (CONN	0.00	0.00	7,660.0	9,608.4	-1,384.6	1,233,162.77	3,220,625.24	39.970727	-104.712813	
- plan hits target center										
- Point										
CONNER 19-18-1CDH f	0.00	0.00	7,660.0	105.0	-1,305.9	1,223,659.35	3,220,703.97	39.944638	-104.712833	
- plan hits target center										
- Point										



PetroShare Corp

ADAMS COUNTY, CO

S19-T1S-R65W

CONNER 19-18-1CDH

OH

PLAN #1

Anticollision Report

12 March, 2021



Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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	17,630.0	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 19-18-1NBH PWP - OH - PLAN #1	600.0	600.0	45.0	42.6	18.972	CC, ES
CONNER 19-18-1NBH PWP - OH - PLAN #1	17,630.0	17,159.3	799.0	643.4	5.133	SF
CONNER 19-18-1NCH PWP - OH - PLAN #1	600.0	600.0	30.0	27.6	12.649	CC, ES
CONNER 19-18-1NCH PWP - OH - PLAN #1	17,630.0	17,419.3	374.4	216.0	2.364	SF
CONNER 19-18-1NXH PWP - OH - PLAN #1	600.0	600.0	15.0	12.6	6.329	CC, ES
CONNER 19-18-1NXH PWP - OH - PLAN #1	6,900.0	6,909.8	68.3	39.0	2.327	SF
CONNER 19-18-2CDH PWP - OH - PLAN #1	600.0	600.0	60.0	57.7	25.299	CC, ES
CONNER 19-18-2CDH PWP - OH - PLAN #1	17,630.0	17,518.5	1,060.4	885.8	6.071	SF
CONNER 19-18-2NBH PWP - OH - PLAN #1	600.0	600.0	105.0	102.6	44.251	CC, ES
CONNER 19-18-2NBH PWP - OH - PLAN #1	17,630.0	17,272.0	1,808.8	1,636.1	10.473	SF
CONNER 19-18-2NCH PWP - OH - PLAN #1	600.0	600.0	90.0	87.6	37.931	CC, ES
CONNER 19-18-2NCH PWP - OH - PLAN #1	17,630.0	17,328.1	1,438.7	1,265.7	8.317	SF
CONNER 19-18-2NXH PWP - OH - PLAN #1	600.0	600.0	75.0	72.6	31.606	CC, ES
CONNER 19-18-2NXH PWP - OH - PLAN #1	17,630.0	17,111.5	1,231.9	1,066.4	7.440	SF
CONNER 19-18-3CDH PWP - OH - PLAN #1	600.0	600.0	120.0	117.6	50.571	CC, ES
CONNER 19-18-3CDH PWP - OH - PLAN #1	17,630.0	17,561.8	2,154.2	1,979.4	12.325	SF
CONNER 19-18-3NBH PWP - OH - PLAN #1	600.0	600.0	165.0	162.7	69.557	CC, ES
CONNER 19-18-3NBH PWP - OH - PLAN #1	1,100.0	1,085.0	212.1	205.8	33.940	SF
CONNER 19-18-3NCH PWP - OH - PLAN #1	600.0	600.0	150.0	147.6	63.225	CC, ES
CONNER 19-18-3NCH PWP - OH - PLAN #1	1,100.0	1,092.0	192.6	186.4	30.720	SF
CONNER 19-18-3NXH PWP - OH - PLAN #1	600.0	600.0	135.0	132.7	56.912	CC, ES
CONNER 19-18-3NXH PWP - OH - PLAN #1	1,100.0	1,097.5	176.3	170.0	28.052	SF
CONNER 19-18-4CDH PWP - OH - PLAN #1	600.0	600.0	180.0	177.6	75.875	CC, ES
CONNER 19-18-4CDH PWP - OH - PLAN #1	1,100.0	1,076.5	234.7	228.5	37.739	SF
CONNER 19-18-4NBH PWP - OH - PLAN #1	500.0	500.0	225.0	223.0	112.550	CC, ES
CONNER 19-18-4NBH PWP - OH - PLAN #1	1,100.0	1,041.8	321.0	314.9	52.592	SF
CONNER 19-18-4NCH PWP - OH - PLAN #1	600.0	600.0	210.0	207.6	88.492	CC, ES
CONNER 19-18-4NCH PWP - OH - PLAN #1	1,100.0	1,054.9	289.3	283.2	47.070	SF
CONNER 19-18-4NXH PWP - OH - PLAN #1	600.0	600.0	195.0	192.6	82.178	CC, ES
CONNER 19-18-4NXH PWP - OH - PLAN #1	1,100.0	1,066.5	260.5	254.3	42.117	SF
Gail #1 - EXISTING - NO SURVEYS	16,142.1	7,591.0	1,537.5	1,360.8	8.702	CC, ES
Gail #1 - EXISTING - NO SURVEYS	16,200.0	7,591.0	1,538.6	1,361.6	8.695	SF
Gail Smith #1 - EXISTING - NO SURVEYS	17,630.0	7,591.0	153.4	85.7	2.266	CC, ES, SF
Milheim #1 - EXISTING - NO SURVEYS	13,933.9	7,591.0	449.6	310.9	3.240	CC, ES, SF
Price 7-19 - EXISTING - NO SURVEYS	11,160.8	7,591.0	2,184.7	2,091.7	23.484	CC, ES
Price 7-19 - EXISTING - NO SURVEYS	11,500.0	7,591.0	2,210.9	2,115.5	23.164	SF
Putnam 41-18 - EXISTING - NO SURVEYS						Out of range

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 - EXISTING - NO SURVEYS						Out of range
UPRR-Letterly 1 - EXISTING - NO SURVEYS	9,000.0	7,591.0	443.4	378.8	6.869	SF
UPRR-Letterly 1 - EXISTING - NO SURVEYS	9,041.8	7,591.0	441.4	377.2	6.876	CC, ES

Offset Design													Offset Site Error:	0.0 usft
S19-T1S-R65W - CONNER 19-18-1NBH PWP - OH - PLAN #1													Offset Well Error:	0.0 usft
Survey Program:	0-													
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	89.67	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	162.463		
200.0	200.0	200.0	200.0	1.0	0.0	89.67	0.3	45.0	45.0	44.2	0.80	56.411		
300.0	300.0	300.0	300.0	1.5	0.0	89.67	0.3	45.0	45.0	43.8	1.22	36.759		
400.0	400.0	400.0	400.0	1.9	0.0	89.67	0.3	45.0	45.0	43.4	1.62	27.813		
500.0	500.0	500.0	500.0	2.3	0.0	89.67	0.3	45.0	45.0	43.0	2.00	22.518		
600.0	600.0	600.0	600.0	2.7	0.0	89.67	0.3	45.0	45.0	42.6	2.37	18.972	CC, ES	
700.0	700.0	700.0	700.0	3.0	0.0	-159.64	0.3	45.0	46.7	43.8	2.82	16.550		
800.0	799.8	799.8	799.8	4.0	0.0	-161.63	0.3	45.0	51.6	47.7	3.94	13.101		
900.0	899.5	899.5	899.5	4.9	0.0	-164.21	0.3	45.0	59.9	55.1	4.84	12.391		
1,000.0	998.7	1,000.8	1,000.8	5.6	0.0	-166.13	-0.8	43.6	70.2	64.6	5.61	12.515		
1,100.0	1,097.5	1,102.6	1,102.4	6.3	0.0	-166.84	-4.2	39.4	80.9	74.6	6.31	12.831		
1,200.0	1,195.6	1,204.6	1,204.1	6.8	0.0	-166.73	-9.8	32.4	91.9	85.1	6.78	13.554		
1,300.0	1,293.6	1,306.4	1,305.1	7.0	0.0	-165.85	-17.6	22.6	101.1	94.1	7.01	14.417		
1,400.0	1,391.5	1,406.0	1,403.8	7.3	0.0	-164.85	-25.8	12.2	109.5	102.2	7.29	15.021		
1,500.0	1,489.4	1,505.7	1,502.6	7.6	0.0	-163.99	-34.1	1.9	117.9	110.3	7.57	15.560		
1,600.0	1,587.4	1,605.3	1,601.3	7.8	0.0	-163.24	-42.3	-8.4	126.3	118.4	7.87	16.038		
1,700.0	1,685.3	1,704.9	1,700.1	8.2	0.0	-162.59	-50.5	-18.8	134.7	126.5	8.18	16.464		
1,800.0	1,783.2	1,804.6	1,798.8	8.5	0.0	-162.02	-58.8	-29.1	143.2	134.7	8.50	16.842		
1,900.0	1,881.2	1,904.2	1,897.6	8.8	0.0	-161.51	-67.0	-39.5	151.6	142.8	8.83	17.178		
2,000.0	1,979.1	2,003.8	1,996.3	9.1	0.0	-161.05	-75.2	-49.8	160.1	150.9	9.16	17.478		
2,100.0	2,077.0	2,103.5	2,095.1	9.5	0.0	-160.64	-83.5	-60.2	168.6	159.1	9.50	17.745		
2,200.0	2,175.0	2,203.1	2,193.8	9.9	0.0	-160.27	-91.7	-70.5	177.1	167.2	9.85	17.984		
2,300.0	2,272.9	2,302.7	2,292.6	10.2	0.0	-159.93	-99.9	-80.8	185.6	175.4	10.20	18.198		
2,400.0	2,370.8	2,402.4	2,391.3	10.7	0.0	-159.63	-108.1	-91.2	194.1	183.5	10.55	18.391		
2,500.0	2,468.8	2,502.0	2,490.1	11.1	0.0	-159.34	-116.4	-101.5	202.6	191.7	10.91	18.563		
2,600.0	2,566.7	2,601.6	2,588.8	11.5	0.0	-159.08	-124.6	-111.9	211.1	199.8	11.28	18.719		
2,700.0	2,664.6	2,701.3	2,687.6	12.0	0.0	-158.85	-132.8	-122.2	219.6	207.9	11.64	18.860		
2,800.0	2,762.6	2,800.9	2,786.3	12.4	0.0	-158.62	-141.1	-132.6	228.1	216.1	12.01	18.988		
2,900.0	2,860.5	2,900.5	2,885.1	12.9	0.0	-158.42	-149.3	-142.9	236.6	224.2	12.39	19.103		
3,000.0	2,958.4	3,000.2	2,983.8	13.3	0.0	-158.23	-157.5	-153.2	245.2	232.4	12.76	19.209		
3,100.0	3,056.4	3,099.8	3,082.6	13.8	0.0	-158.05	-165.8	-163.6	253.7	240.5	13.14	19.304		
3,200.0	3,154.3	3,199.4	3,181.3	14.3	0.0	-157.88	-174.0	-173.9	262.2	248.7	13.52	19.392		
3,300.0	3,252.2	3,299.1	3,280.1	14.8	0.0	-157.73	-182.2	-184.3	270.7	256.8	13.90	19.472		
3,400.0	3,350.2	3,398.7	3,378.8	15.3	0.0	-157.58	-190.5	-194.6	279.3	265.0	14.29	19.546		
3,500.0	3,448.1	3,498.3	3,477.6	15.8	0.0	-157.44	-198.7	-205.0	287.8	273.1	14.67	19.613		
3,600.0	3,546.0	3,598.0	3,576.4	16.3	0.0	-157.31	-206.9	-215.3	296.4	281.3	15.06	19.675		
3,700.0	3,644.0	3,697.6	3,675.1	16.7	0.0	-157.19	-215.2	-225.6	304.9	289.4	15.45	19.733		
3,800.0	3,741.9	3,797.2	3,773.9	17.2	0.0	-157.08	-223.4	-236.0	313.4	297.6	15.84	19.786		
3,900.0	3,839.8	3,896.9	3,872.6	17.7	0.0	-156.97	-231.6	-246.3	322.0	305.7	16.23	19.834		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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		
4,000.0	3,937.8	3,996.5	3,971.4	18.2	0.0	-156.86	-239.9	-256.7	330.5	313.9	16.63	19.880		
4,100.0	4,035.7	4,096.1	4,070.1	18.7	0.0	-156.76	-248.1	-267.0	339.1	322.0	17.02	19.922		
4,200.0	4,133.6	4,195.8	4,168.9	19.2	0.0	-156.67	-256.3	-277.4	347.6	330.2	17.41	19.961		
4,300.0	4,231.6	4,295.4	4,267.6	19.7	0.0	-156.58	-264.6	-287.7	356.1	338.3	17.81	19.997		
4,400.0	4,329.5	4,395.0	4,366.4	20.2	0.0	-156.49	-272.8	-298.0	364.7	346.5	18.21	20.031		
4,500.0	4,427.4	4,494.7	4,465.1	20.7	0.0	-156.41	-281.0	-308.4	373.2	354.6	18.60	20.063		
4,600.0	4,525.4	4,594.3	4,563.9	21.2	0.0	-156.34	-289.3	-318.7	381.8	362.8	19.00	20.092		
4,700.0	4,623.3	4,693.9	4,662.6	21.7	0.0	-156.26	-297.5	-329.1	390.3	370.9	19.40	20.120		
4,800.0	4,721.2	4,793.6	4,761.4	22.2	0.0	-156.19	-305.7	-339.4	398.9	379.1	19.80	20.146		
4,900.0	4,819.2	4,893.2	4,860.1	22.7	0.0	-156.12	-313.9	-349.7	407.4	387.2	20.20	20.170		
5,000.0	4,917.1	4,992.8	4,958.9	23.2	0.0	-156.06	-322.2	-360.1	416.0	395.4	20.60	20.192		
5,100.0	5,015.0	5,092.4	5,057.6	23.7	0.0	-155.99	-330.4	-370.4	424.5	403.5	21.00	20.214		
5,200.0	5,113.0	5,192.1	5,156.4	24.2	0.0	-155.93	-338.6	-380.8	433.1	411.7	21.40	20.234		
5,300.0	5,210.9	5,291.7	5,255.1	24.7	0.0	-155.88	-346.9	-391.1	441.6	419.8	21.81	20.253		
5,400.0	5,308.8	5,391.3	5,353.9	25.2	0.0	-155.82	-355.1	-401.5	450.2	428.0	22.21	20.271		
5,500.0	5,406.8	5,491.0	5,452.6	25.7	0.0	-155.77	-363.3	-411.8	458.7	436.1	22.61	20.287		
5,600.0	5,504.7	5,590.6	5,551.4	26.2	0.0	-155.71	-371.6	-422.1	467.3	444.3	23.02	20.303		
5,700.0	5,602.6	5,690.2	5,650.1	26.7	0.0	-155.66	-379.8	-432.5	475.8	452.4	23.42	20.318		
5,800.0	5,700.6	5,789.9	5,748.9	27.2	0.0	-155.62	-388.0	-442.8	484.4	460.6	23.82	20.332		
5,900.0	5,798.5	5,889.5	5,847.6	27.7	0.0	-155.57	-396.3	-453.2	492.9	468.7	24.23	20.346		
6,000.0	5,896.4	5,989.1	5,946.4	28.2	0.0	-155.53	-404.5	-463.5	501.5	476.9	24.63	20.358		
6,100.0	5,994.4	6,088.8	6,045.2	28.7	0.0	-155.48	-412.7	-473.9	510.1	485.0	25.04	20.370		
6,200.0	6,092.3	6,188.4	6,143.9	29.2	0.0	-155.44	-421.0	-484.2	518.6	493.2	25.44	20.382		
6,300.0	6,190.2	6,288.0	6,242.7	29.7	0.0	-155.40	-429.2	-494.5	527.2	501.3	25.85	20.393		
6,400.0	6,288.2	6,387.7	6,341.4	30.2	0.0	-155.36	-437.4	-504.9	535.7	509.5	26.26	20.403		
6,500.0	6,386.1	6,487.3	6,440.2	30.7	0.0	-155.32	-445.7	-515.2	544.3	517.6	26.66	20.413		
6,600.0	6,484.0	6,586.9	6,538.9	31.2	0.0	-155.29	-453.9	-525.6	552.8	525.8	27.07	20.422		
6,700.0	6,582.0	6,686.6	6,637.7	31.7	0.0	-155.25	-462.1	-535.9	561.4	533.9	27.48	20.431		
6,800.0	6,679.9	6,791.4	6,741.7	32.2	0.0	-155.87	-464.2	-546.9	569.6	541.7	27.84	20.462		
6,900.0	6,777.8	6,892.1	6,840.6	32.7	0.0	-158.20	-448.6	-557.4	577.2	549.2	28.02	20.603		
7,000.0	6,875.8	6,982.5	6,925.7	33.2	0.0	-161.64	-419.9	-566.6	586.4	558.4	28.06	20.898		
7,100.0	6,973.7	7,060.3	6,994.6	33.7	0.0	-165.51	-384.7	-574.2	599.7	571.7	27.99	21.422		
7,200.0	7,071.6	7,125.9	7,048.5	34.2	0.0	-176.87	-347.9	-580.2	619.4	591.6	27.80	22.283		
7,300.0	7,169.6	7,186.0	7,094.0	34.8	0.0	130.30	-309.0	-585.3	644.5	616.9	27.52	23.422		
7,400.0	7,265.4	7,250.0	7,137.7	35.3	0.0	101.16	-262.5	-590.3	671.9	644.7	27.23	24.677		
7,500.0	7,356.1	7,300.0	7,168.0	35.7	0.0	86.55	-223.0	-593.8	699.6	672.8	26.80	26.109		
7,600.0	7,438.9	7,359.6	7,199.6	36.0	0.0	77.23	-172.6	-597.6	725.9	699.5	26.41	27.490		
7,700.0	7,511.4	7,416.1	7,224.5	36.2	0.0	70.94	-122.0	-600.6	749.4	723.4	26.02	28.804		
7,800.0	7,571.2	7,472.2	7,244.3	36.3	0.0	66.55	-69.6	-603.1	769.1	743.4	25.69	29.932		
7,900.0	7,616.7	7,528.0	7,258.8	36.4	0.0	63.58	-15.8	-605.1	784.2	758.7	25.48	30.775		
8,000.0	7,646.4	7,583.6	7,268.0	36.4	0.0	61.76	39.1	-606.5	794.2	768.8	25.42	31.249		
8,100.0	7,659.4	7,639.2	7,271.9	36.3	0.0	60.99	94.5	-607.4	798.7	773.2	25.52	31.297		
8,200.0	7,660.0	7,729.3	7,272.0	36.4	0.0	60.95	184.5	-608.1	798.9	773.2	25.70	31.091		
8,300.0	7,660.0	7,829.3	7,272.0	36.5	0.0	60.95	284.5	-609.0	798.9	773.0	25.96	30.772		
8,400.0	7,660.0	7,929.3	7,272.0	36.6	0.0	60.95	384.5	-609.8	798.9	772.6	26.33	30.347		
8,500.0	7,660.0	8,029.3	7,272.0	36.9	0.0	60.95	484.5	-610.6	798.9	772.2	26.78	29.834		
8,600.0	7,660.0	8,129.3	7,272.0	37.2	0.0	60.95	584.5	-611.5	798.9	771.6	27.32	29.246		
8,700.0	7,660.0	8,229.3	7,272.0	37.7	0.0	60.95	684.5	-612.3	798.9	771.0	27.94	28.598		
8,800.0	7,660.0	8,329.3	7,272.0	38.2	0.0	60.95	784.5	-613.1	798.9	770.3	28.63	27.906		
8,900.0	7,660.0	8,429.3	7,272.0	38.9	0.0	60.95	884.5	-613.9	798.9	769.6	29.39	27.181		
9,000.0	7,660.0	8,529.3	7,272.0	39.6	0.0	60.95	984.5	-614.8	798.9	768.7	30.22	26.436		
9,100.0	7,660.0	8,629.3	7,272.0	40.5	0.0	60.95	1,084.5	-615.6	798.9	767.8	31.11	25.682		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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		
9,200.0	7,660.0	8,729.3	7,272.0	41.4	0.0	60.95	1,184.5	-616.4	798.9	766.9	32.05	24.928		
9,300.0	7,660.0	8,829.3	7,272.0	42.4	0.0	60.95	1,284.5	-617.2	799.0	765.9	33.04	24.180		
9,400.0	7,660.0	8,929.3	7,272.0	43.4	0.0	60.95	1,384.5	-618.1	799.0	764.9	34.08	23.444		
9,500.0	7,660.0	9,029.3	7,272.0	44.5	0.0	60.95	1,484.5	-618.9	799.0	763.8	35.16	22.726		
9,600.0	7,660.0	9,129.3	7,272.0	45.6	0.0	60.95	1,584.5	-619.7	799.0	762.7	36.27	22.026		
9,700.0	7,660.0	9,229.3	7,272.0	46.8	0.0	60.95	1,684.5	-620.5	799.0	761.5	37.42	21.350		
9,800.0	7,660.0	9,329.3	7,272.0	48.1	0.0	60.95	1,784.5	-621.4	799.0	760.4	38.60	20.696		
9,900.0	7,660.0	9,429.3	7,272.0	49.3	0.0	60.95	1,884.5	-622.2	799.0	759.1	39.81	20.067		
10,000.0	7,660.0	9,529.3	7,272.0	50.6	0.0	60.95	1,984.5	-623.0	799.0	757.9	41.05	19.463		
10,100.0	7,660.0	9,629.3	7,272.0	51.9	0.0	60.95	2,084.5	-623.9	799.0	756.6	42.31	18.884		
10,200.0	7,660.0	9,729.3	7,272.0	53.3	0.0	60.95	2,184.5	-624.7	799.0	755.4	43.59	18.329		
10,300.0	7,660.0	9,829.3	7,272.0	54.6	0.0	60.95	2,284.5	-625.5	799.0	754.1	44.89	17.798		
10,400.0	7,660.0	9,929.3	7,272.0	56.0	0.0	60.95	2,384.5	-626.3	799.0	752.8	46.21	17.290		
10,500.0	7,660.0	10,029.3	7,272.0	57.5	0.0	60.95	2,484.4	-627.2	799.0	751.4	47.55	16.804		
10,600.0	7,660.0	10,129.3	7,272.0	58.9	0.0	60.95	2,584.4	-628.0	799.0	750.1	48.90	16.340		
10,700.0	7,660.0	10,229.3	7,272.0	60.3	0.0	60.95	2,684.4	-628.8	799.0	748.7	50.26	15.896		
10,800.0	7,660.0	10,329.3	7,272.0	61.8	0.0	60.95	2,784.4	-629.6	799.0	747.3	51.64	15.472		
10,900.0	7,660.0	10,429.3	7,272.0	63.3	0.0	60.95	2,884.4	-630.5	799.0	745.9	53.03	15.066		
11,000.0	7,660.0	10,529.3	7,272.0	64.8	0.0	60.95	2,984.4	-631.3	799.0	744.5	54.43	14.679		
11,100.0	7,660.0	10,629.3	7,272.0	66.3	0.0	60.95	3,084.4	-632.1	799.0	743.1	55.84	14.308		
11,200.0	7,660.0	10,729.3	7,272.0	67.8	0.0	60.95	3,184.4	-633.0	799.0	741.7	57.26	13.953		
11,300.0	7,660.0	10,829.3	7,272.0	69.4	0.0	60.95	3,284.4	-633.8	799.0	740.3	58.69	13.613		
11,400.0	7,660.0	10,929.3	7,272.0	70.9	0.0	60.95	3,384.4	-634.6	799.0	738.8	60.13	13.288		
11,500.0	7,660.0	11,029.3	7,272.0	72.5	0.0	60.95	3,484.4	-635.4	799.0	737.4	61.57	12.976		
11,600.0	7,660.0	11,129.3	7,272.0	74.0	0.0	60.95	3,584.4	-636.3	799.0	736.0	63.02	12.677		
11,700.0	7,660.0	11,229.3	7,272.0	75.6	0.0	60.95	3,684.4	-637.1	799.0	734.5	64.48	12.391		
11,800.0	7,660.0	11,329.3	7,272.0	77.2	0.0	60.95	3,784.4	-637.9	799.0	733.0	65.95	12.115		
11,900.0	7,660.0	11,429.3	7,272.0	78.8	0.0	60.95	3,884.4	-638.7	799.0	731.6	67.42	11.851		
12,000.0	7,660.0	11,529.3	7,272.0	80.4	0.0	60.95	3,984.4	-639.6	799.0	730.1	68.89	11.597		
12,100.0	7,660.0	11,629.3	7,272.0	82.0	0.0	60.95	4,084.4	-640.4	799.0	728.6	70.37	11.353		
12,200.0	7,660.0	11,729.3	7,272.0	83.6	0.0	60.95	4,184.4	-641.2	799.0	727.1	71.86	11.119		
12,300.0	7,660.0	11,829.3	7,272.0	85.2	0.0	60.95	4,284.4	-642.1	799.0	725.6	73.35	10.893		
12,400.0	7,660.0	11,929.3	7,272.0	86.8	0.0	60.95	4,384.4	-642.9	799.0	724.1	74.84	10.676		
12,500.0	7,660.0	12,029.3	7,272.0	88.4	0.0	60.95	4,484.4	-643.7	799.0	722.6	76.34	10.466		
12,600.0	7,660.0	12,129.3	7,272.0	90.1	0.0	60.95	4,584.4	-644.5	799.0	721.1	77.84	10.264		
12,700.0	7,660.0	12,229.3	7,272.0	91.7	0.0	60.95	4,684.4	-645.4	799.0	719.6	79.35	10.070		
12,800.0	7,660.0	12,329.3	7,272.0	93.4	0.0	60.95	4,784.4	-646.2	799.0	718.1	80.85	9.882		
12,900.0	7,660.0	12,429.3	7,272.0	95.0	0.0	60.95	4,884.4	-647.0	799.0	716.6	82.36	9.701		
13,000.0	7,660.0	12,529.3	7,272.0	96.7	0.0	60.95	4,984.4	-647.8	799.0	715.1	83.88	9.526		
13,100.0	7,660.0	12,629.3	7,272.0	98.3	0.0	60.95	5,084.4	-648.7	799.0	713.6	85.40	9.356		
13,200.0	7,660.0	12,729.3	7,272.0	100.0	0.0	60.95	5,184.4	-649.5	799.0	712.1	86.91	9.193		
13,300.0	7,660.0	12,829.3	7,272.0	101.6	0.0	60.95	5,284.4	-650.3	799.0	710.6	88.44	9.035		
13,400.0	7,660.0	12,929.3	7,272.0	103.3	0.0	60.95	5,384.3	-651.2	799.0	709.0	89.96	8.882		
13,500.0	7,660.0	13,029.3	7,272.0	105.0	0.0	60.95	5,484.3	-652.0	799.0	707.5	91.49	8.733		
13,600.0	7,660.0	13,129.3	7,272.0	106.6	0.0	60.95	5,584.3	-652.8	799.0	706.0	93.02	8.590		
13,700.0	7,660.0	13,229.3	7,272.0	108.3	0.0	60.95	5,684.3	-653.6	799.0	704.5	94.55	8.451		
13,800.0	7,660.0	13,329.3	7,272.0	110.0	0.0	60.95	5,784.3	-654.5	799.0	702.9	96.08	8.316		
13,900.0	7,660.0	13,429.3	7,272.0	111.7	0.0	60.95	5,884.3	-655.3	799.0	701.4	97.61	8.185		
14,000.0	7,660.0	13,529.3	7,272.0	113.4	0.0	60.95	5,984.3	-656.1	799.0	699.8	99.15	8.058		
14,100.0	7,660.0	13,629.3	7,272.0	115.0	0.0	60.95	6,084.3	-656.9	799.0	698.3	100.69	7.935		
14,200.0	7,660.0	13,729.3	7,272.0	116.7	0.0	60.95	6,184.3	-657.8	799.0	696.8	102.23	7.816		
14,300.0	7,660.0	13,829.3	7,272.0	118.4	0.0	60.95	6,284.3	-658.6	799.0	695.2	103.77	7.700		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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		
14,400.0	7,660.0	13,929.3	7,272.0	120.1	0.0	60.95	6,384.3	-659.4	799.0	693.7	105.31	7.587		
14,500.0	7,660.0	14,029.3	7,272.0	121.8	0.0	60.95	6,484.3	-660.3	799.0	692.1	106.86	7.477		
14,600.0	7,660.0	14,129.3	7,272.0	123.5	0.0	60.95	6,584.3	-661.1	799.0	690.6	108.40	7.371		
14,700.0	7,660.0	14,229.3	7,272.0	125.2	0.0	60.95	6,684.3	-661.9	799.0	689.1	109.95	7.267		
14,800.0	7,660.0	14,329.3	7,272.0	126.9	0.0	60.95	6,784.3	-662.7	799.0	687.5	111.50	7.166		
14,900.0	7,660.0	14,429.3	7,272.0	128.6	0.0	60.95	6,884.3	-663.6	799.0	686.0	113.05	7.068		
15,000.0	7,660.0	14,529.3	7,272.0	130.3	0.0	60.95	6,984.3	-664.4	799.0	684.4	114.60	6.972		
15,100.0	7,660.0	14,629.3	7,272.0	132.0	0.0	60.95	7,084.3	-665.2	799.0	682.9	116.15	6.879		
15,200.0	7,660.0	14,729.3	7,272.0	133.7	0.0	60.95	7,184.3	-666.0	799.0	681.3	117.70	6.789		
15,300.0	7,660.0	14,829.3	7,272.0	135.4	0.0	60.95	7,284.3	-666.9	799.0	679.8	119.25	6.700		
15,400.0	7,660.0	14,929.3	7,272.0	137.1	0.0	60.95	7,384.3	-667.7	799.0	678.2	120.81	6.614		
15,500.0	7,660.0	15,029.3	7,272.0	138.8	0.0	60.95	7,484.3	-668.5	799.0	676.7	122.36	6.530		
15,600.0	7,660.0	15,129.3	7,272.0	140.6	0.0	60.95	7,584.3	-669.4	799.0	675.1	123.92	6.448		
15,700.0	7,660.0	15,229.3	7,272.0	142.3	0.0	60.95	7,684.3	-670.2	799.0	673.5	125.47	6.368		
15,800.0	7,660.0	15,329.3	7,272.0	144.0	0.0	60.95	7,784.3	-671.0	799.0	672.0	127.03	6.290		
15,900.0	7,660.0	15,429.3	7,272.0	145.7	0.0	60.95	7,884.3	-671.8	799.0	670.4	128.59	6.214		
16,000.0	7,660.0	15,529.3	7,272.0	147.4	0.0	60.95	7,984.3	-672.7	799.0	668.9	130.15	6.139		
16,100.0	7,660.0	15,629.3	7,272.0	149.1	0.0	60.95	8,084.3	-673.5	799.0	667.3	131.71	6.067		
16,200.0	7,660.0	15,729.3	7,272.0	150.9	0.0	60.95	8,184.3	-674.3	799.0	665.8	133.27	5.995		
16,300.0	7,660.0	15,829.3	7,272.0	152.6	0.0	60.95	8,284.2	-675.1	799.0	664.2	134.83	5.926		
16,400.0	7,660.0	15,929.3	7,272.0	154.3	0.0	60.95	8,384.2	-676.0	799.0	662.6	136.40	5.858		
16,500.0	7,660.0	16,029.3	7,272.0	156.0	0.0	60.95	8,484.2	-676.8	799.0	661.1	137.96	5.792		
16,600.0	7,660.0	16,129.3	7,272.0	157.7	0.0	60.95	8,584.2	-677.6	799.0	659.5	139.52	5.727		
16,700.0	7,660.0	16,229.3	7,272.0	159.5	0.0	60.95	8,684.2	-678.4	799.0	657.9	141.09	5.663		
16,800.0	7,660.0	16,329.3	7,272.0	161.2	0.0	60.95	8,784.2	-679.3	799.0	656.4	142.65	5.601		
16,900.0	7,660.0	16,429.3	7,272.0	162.9	0.0	60.95	8,884.2	-680.1	799.0	654.8	144.22	5.541		
17,000.0	7,660.0	16,529.3	7,272.0	164.6	0.0	60.95	8,984.2	-680.9	799.0	653.3	145.78	5.481		
17,100.0	7,660.0	16,629.3	7,272.0	166.4	0.0	60.95	9,084.2	-681.8	799.0	651.7	147.35	5.423		
17,200.0	7,660.0	16,729.3	7,272.0	168.1	0.0	60.95	9,184.2	-682.6	799.0	650.1	148.91	5.366		
17,300.0	7,660.0	16,829.3	7,272.0	169.8	0.0	60.95	9,284.2	-683.4	799.0	648.6	150.48	5.310		
17,400.0	7,660.0	16,929.3	7,272.0	171.6	0.0	60.95	9,384.2	-684.2	799.0	647.0	152.05	5.255		
17,500.0	7,660.0	17,029.3	7,272.0	173.3	0.0	60.95	9,484.2	-685.1	799.0	645.4	153.62	5.201		
17,600.0	7,660.0	17,129.3	7,272.0	175.0	0.0	60.95	9,584.2	-685.9	799.0	643.9	155.19	5.149		
17,630.0	7,660.0	17,159.3	7,272.0	175.5	0.0	60.95	9,614.2	-686.1	799.0	643.4	155.66	5.133 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	89.64	0.2	30.0	30.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.64	0.2	30.0	30.0	29.7	0.28	108.293		
200.0	200.0	200.0	200.0	1.0	0.0	89.64	0.2	30.0	30.0	29.2	0.80	37.604		
300.0	300.0	300.0	300.0	1.5	0.0	89.64	0.2	30.0	30.0	28.8	1.23	24.505		
400.0	400.0	400.0	400.0	1.9	0.0	89.64	0.2	30.0	30.0	28.4	1.62	18.542		
500.0	500.0	500.0	500.0	2.3	0.0	89.64	0.2	30.0	30.0	28.0	2.00	15.013		
600.0	600.0	600.0	600.0	2.7	0.0	89.64	0.2	30.0	30.0	27.6	2.37	12.649 CC, ES		
700.0	700.0	700.0	700.0	3.0	0.0	-160.04	0.2	30.0	31.7	28.8	2.82	11.213		
800.0	799.8	799.8	799.8	4.0	0.0	-162.81	0.2	30.0	36.6	32.7	3.95	9.275		
900.0	899.5	900.9	900.9	4.9	0.0	-165.30	-0.6	28.4	43.4	38.5	4.84	8.953		
1,000.0	998.7	1,002.2	1,002.1	5.6	0.0	-166.70	-3.1	23.7	50.2	44.6	5.61	8.951		
1,100.0	1,097.5	1,103.8	1,103.2	6.3	0.0	-167.40	-7.2	15.7	57.2	50.9	6.30	9.071		
1,200.0	1,195.6	1,205.6	1,204.2	6.8	0.0	-167.62	-13.0	4.6	64.1	57.4	6.77	9.471		
1,300.0	1,293.6	1,307.4	1,304.8	7.0	0.0	-167.11	-20.4	-9.8	68.9	61.9	7.00	9.852		
1,400.0	1,391.5	1,407.3	1,403.2	7.3	0.0	-166.33	-28.2	-25.0	72.5	65.2	7.27	9.966		
1,500.0	1,489.4	1,507.3	1,501.7	7.6	0.0	-165.62	-36.1	-40.2	76.0	68.5	7.56	10.057		
1,600.0	1,587.4	1,607.2	1,600.1	7.8	0.0	-164.98	-43.9	-55.4	79.6	71.7	7.86	10.129		
1,700.0	1,685.3	1,707.1	1,698.6	8.2	0.0	-164.39	-51.8	-70.7	83.2	75.0	8.16	10.185		
1,800.0	1,783.2	1,807.1	1,797.0	8.5	0.0	-163.85	-59.6	-85.9	86.7	78.3	8.48	10.227		
1,900.0	1,881.2	1,907.0	1,895.5	8.8	0.0	-163.36	-67.5	-101.1	90.3	81.5	8.81	10.257		
2,000.0	1,979.1	2,006.9	1,993.9	9.1	0.0	-162.90	-75.4	-116.3	93.9	84.8	9.14	10.278		
2,100.0	2,077.0	2,106.9	2,092.4	9.5	0.0	-162.47	-83.2	-131.5	97.5	88.0	9.48	10.291		
2,200.0	2,175.0	2,206.8	2,190.8	9.9	0.0	-162.08	-91.1	-146.8	101.1	91.3	9.82	10.297		
2,300.0	2,272.9	2,306.7	2,289.3	10.2	0.0	-161.71	-98.9	-162.0	104.7	94.6	10.17	10.298		
2,400.0	2,370.8	2,406.7	2,387.7	10.7	0.0	-161.37	-106.8	-177.2	108.4	97.8	10.53	10.294		
2,500.0	2,468.8	2,506.6	2,486.2	11.1	0.0	-161.05	-114.6	-192.4	112.0	101.1	10.89	10.287		
2,600.0	2,566.7	2,606.5	2,584.7	11.5	0.0	-160.75	-122.5	-207.6	115.6	104.4	11.25	10.277		
2,700.0	2,664.6	2,706.5	2,683.1	12.0	0.0	-160.47	-130.3	-222.9	119.2	107.6	11.61	10.265		
2,800.0	2,762.6	2,806.4	2,781.6	12.4	0.0	-160.20	-138.2	-238.1	122.9	110.9	11.98	10.251		
2,900.0	2,860.5	2,906.3	2,880.0	12.9	0.0	-159.95	-146.1	-253.3	126.5	114.1	12.36	10.236		
3,000.0	2,958.4	3,006.3	2,978.5	13.3	0.0	-159.72	-153.9	-268.5	130.1	117.4	12.73	10.219		
3,100.0	3,056.4	3,106.2	3,076.9	13.8	0.0	-159.49	-161.8	-283.7	133.8	120.6	13.11	10.202		
3,200.0	3,154.3	3,206.1	3,175.4	14.3	0.0	-159.28	-169.6	-299.0	137.4	123.9	13.49	10.184		
3,300.0	3,252.2	3,306.1	3,273.8	14.8	0.0	-159.08	-177.5	-314.2	141.0	127.2	13.87	10.165		
3,400.0	3,350.2	3,406.0	3,372.3	15.3	0.0	-158.89	-185.3	-329.4	144.7	130.4	14.26	10.146		
3,500.0	3,448.1	3,505.9	3,470.7	15.8	0.0	-158.71	-193.2	-344.6	148.3	133.7	14.64	10.127		
3,600.0	3,546.0	3,605.9	3,569.2	16.3	0.0	-158.54	-201.1	-359.8	152.0	136.9	15.03	10.108		
3,700.0	3,644.0	3,705.8	3,667.6	16.7	0.0	-158.37	-208.9	-375.1	155.6	140.2	15.42	10.089		
3,800.0	3,741.9	3,805.7	3,766.1	17.2	0.0	-158.22	-216.8	-390.3	159.2	143.4	15.81	10.071		
3,900.0	3,839.8	3,905.6	3,864.6	17.7	0.0	-158.07	-224.6	-405.5	162.9	146.7	16.20	10.052		
4,000.0	3,937.8	4,005.6	3,963.0	18.2	0.0	-157.92	-232.5	-420.7	166.5	149.9	16.60	10.033		
4,100.0	4,035.7	4,105.5	4,061.5	18.7	0.0	-157.79	-240.3	-435.9	170.2	153.2	16.99	10.015		
4,200.0	4,133.6	4,205.4	4,159.9	19.2	0.0	-157.65	-248.2	-451.2	173.8	156.4	17.39	9.997		
4,300.0	4,231.6	4,305.4	4,258.4	19.7	0.0	-157.53	-256.1	-466.4	177.5	159.7	17.79	9.979		
4,400.0	4,329.5	4,405.3	4,356.8	20.2	0.0	-157.41	-263.9	-481.6	181.1	163.0	18.18	9.962		
4,500.0	4,427.4	4,505.2	4,455.3	20.7	0.0	-157.29	-271.8	-496.8	184.8	166.2	18.58	9.945		
4,600.0	4,525.4	4,605.2	4,553.7	21.2	0.0	-157.18	-279.6	-512.0	188.4	169.5	18.98	9.928		
4,700.0	4,623.3	4,705.1	4,652.2	21.7	0.0	-157.07	-287.5	-527.3	192.1	172.7	19.38	9.911		
4,800.0	4,721.2	4,805.0	4,750.6	22.2	0.0	-156.97	-295.3	-542.5	195.7	176.0	19.78	9.895		
4,900.0	4,819.2	4,905.0	4,849.1	22.7	0.0	-156.87	-303.2	-557.7	199.4	179.2	20.18	9.879		
5,000.0	4,917.1	5,004.9	4,947.5	23.2	0.0	-156.77	-311.1	-572.9	203.1	182.5	20.59	9.864		
5,100.0	5,015.0	5,104.8	5,046.0	23.7	0.0	-156.68	-318.9	-588.2	206.7	185.7	20.99	9.849		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	5,113.0	5,204.8	5,144.5	24.2	0.0	-156.59	-326.8	-603.4	210.4	189.0	21.39	9.834		
5,300.0	5,210.9	5,304.7	5,242.9	24.7	0.0	-156.51	-334.6	-618.6	214.0	192.2	21.80	9.819		
5,400.0	5,308.8	5,404.6	5,341.4	25.2	0.0	-156.42	-342.5	-633.8	217.7	195.5	22.20	9.805		
5,500.0	5,406.8	5,504.6	5,439.8	25.7	0.0	-156.34	-350.3	-649.0	221.3	198.7	22.61	9.791		
5,600.0	5,504.7	5,604.5	5,538.3	26.2	0.0	-156.26	-358.2	-664.3	225.0	202.0	23.01	9.778		
5,700.0	5,602.6	5,704.4	5,636.7	26.7	0.0	-156.19	-366.1	-679.5	228.7	205.2	23.42	9.765		
5,800.0	5,700.6	5,804.4	5,735.2	27.2	0.0	-156.11	-373.9	-694.7	232.3	208.5	23.82	9.752		
5,900.0	5,798.5	5,904.3	5,833.6	27.7	0.0	-156.04	-381.8	-709.9	236.0	211.7	24.23	9.739		
6,000.0	5,896.4	6,004.2	5,932.1	28.2	0.0	-155.97	-389.6	-725.1	239.6	215.0	24.64	9.727		
6,100.0	5,994.4	6,104.2	6,030.5	28.7	0.0	-155.91	-397.5	-740.4	243.3	218.3	25.04	9.714		
6,200.0	6,092.3	6,204.1	6,129.0	29.2	0.0	-155.84	-405.3	-755.6	247.0	221.5	25.45	9.703		
6,300.0	6,190.2	6,304.0	6,227.4	29.7	0.0	-155.78	-413.2	-770.8	250.6	224.8	25.86	9.691		
6,400.0	6,288.2	6,404.0	6,325.9	30.2	0.0	-155.72	-421.1	-786.0	254.3	228.0	26.27	9.680		
6,500.0	6,386.1	6,503.9	6,424.4	30.7	0.0	-155.66	-428.9	-801.2	257.9	231.3	26.68	9.669		
6,600.0	6,484.0	6,603.8	6,522.8	31.2	0.0	-155.60	-436.8	-816.5	261.6	234.5	27.09	9.658		
6,700.0	6,582.0	6,703.8	6,621.3	31.7	0.0	-155.55	-444.6	-831.7	265.3	237.8	27.50	9.647		
6,800.0	6,679.9	6,803.7	6,719.7	32.2	0.0	-155.49	-452.5	-846.9	268.9	241.0	27.91	9.637		
6,900.0	6,777.8	6,903.6	6,818.2	32.7	0.0	-155.44	-460.3	-862.1	272.6	244.3	28.32	9.627		
7,000.0	6,875.8	7,004.7	6,917.8	33.2	0.0	-155.62	-467.1	-877.5	276.2	247.5	28.70	9.621		
7,100.0	6,973.7	7,105.5	7,017.0	33.7	0.0	-158.68	-459.8	-893.0	279.3	250.5	28.81	9.693		
7,200.0	7,071.6	7,198.6	7,106.2	34.2	0.0	-171.82	-437.6	-907.0	284.3	255.6	28.66	9.918		
7,300.0	7,169.6	7,285.3	7,185.0	34.8	0.0	134.35	-404.0	-919.5	293.4	264.9	28.47	10.304		
7,400.0	7,265.4	7,368.3	7,255.0	35.3	0.0	104.76	-360.9	-930.8	305.5	277.2	28.30	10.795		
7,500.0	7,356.1	7,450.0	7,317.1	35.7	0.0	89.34	-308.9	-940.8	319.1	291.0	28.04	11.379		
7,600.0	7,438.9	7,526.0	7,367.8	36.0	0.0	79.94	-252.9	-949.2	332.8	305.2	27.61	12.053		
7,700.0	7,511.4	7,600.0	7,409.7	36.2	0.0	73.56	-192.4	-956.2	345.7	318.6	27.10	12.756		
7,800.0	7,571.2	7,676.6	7,444.6	36.3	0.0	69.04	-124.5	-962.1	356.9	330.2	26.66	13.384		
7,900.0	7,616.7	7,750.0	7,469.3	36.4	0.0	66.02	-55.6	-966.6	365.6	339.3	26.27	13.914		
8,000.0	7,646.4	7,823.2	7,485.1	36.4	0.0	64.18	15.7	-969.6	371.4	345.4	26.07	14.250		
8,100.0	7,659.4	7,900.0	7,491.9	36.3	0.0	63.37	92.2	-971.3	374.2	348.1	26.10	14.336		
8,100.3	7,659.4	7,900.0	7,491.9	36.3	0.0	63.37	92.2	-971.3	374.2	348.1	26.10	14.336		
8,200.0	7,660.0	7,989.3	7,492.0	36.4	0.0	63.33	181.5	-972.0	374.3	348.0	26.27	14.251		
8,300.0	7,660.0	8,089.3	7,492.0	36.5	0.0	63.33	281.5	-972.9	374.3	347.8	26.54	14.103		
8,400.0	7,660.0	8,189.3	7,492.0	36.6	0.0	63.33	381.5	-973.7	374.3	347.4	26.91	13.907		
8,500.0	7,660.0	8,289.3	7,492.0	36.9	0.0	63.33	481.5	-974.5	374.3	346.9	27.38	13.672		
8,600.0	7,660.0	8,389.3	7,492.0	37.2	0.0	63.33	581.5	-975.4	374.3	346.4	27.93	13.403		
8,700.0	7,660.0	8,489.3	7,492.0	37.7	0.0	63.33	681.5	-976.2	374.3	345.8	28.56	13.107		
8,800.0	7,660.0	8,589.3	7,492.0	38.2	0.0	63.33	781.5	-977.0	374.3	345.0	29.27	12.790		
8,900.0	7,660.0	8,689.3	7,492.0	38.9	0.0	63.33	881.5	-977.8	374.3	344.3	30.04	12.459		
9,000.0	7,660.0	8,789.3	7,492.0	39.6	0.0	63.33	981.5	-978.7	374.3	343.4	30.89	12.120		
9,100.0	7,660.0	8,889.3	7,492.0	40.5	0.0	63.33	1,081.5	-979.5	374.3	342.5	31.79	11.776		
9,200.0	7,660.0	8,989.3	7,492.0	41.4	0.0	63.33	1,181.5	-980.3	374.3	341.6	32.74	11.431		
9,300.0	7,660.0	9,089.3	7,492.0	42.4	0.0	63.33	1,281.5	-981.1	374.3	340.6	33.75	11.090		
9,400.0	7,660.0	9,189.3	7,492.0	43.4	0.0	63.33	1,381.5	-982.0	374.3	339.5	34.81	10.754		
9,500.0	7,660.0	9,289.3	7,492.0	44.5	0.0	63.33	1,481.5	-982.8	374.3	338.4	35.90	10.426		
9,600.0	7,660.0	9,389.3	7,492.0	45.6	0.0	63.33	1,581.5	-983.6	374.3	337.3	37.04	10.107		
9,700.0	7,660.0	9,489.3	7,492.0	46.8	0.0	63.33	1,681.5	-984.5	374.3	336.1	38.20	9.798		
9,800.0	7,660.0	9,589.3	7,492.0	48.1	0.0	63.33	1,781.5	-985.3	374.3	334.9	39.41	9.499		
9,900.0	7,660.0	9,689.3	7,492.0	49.3	0.0	63.33	1,881.5	-986.1	374.3	333.7	40.63	9.212		
10,000.0	7,660.0	9,789.3	7,492.0	50.6	0.0	63.33	1,981.5	-986.9	374.3	332.4	41.89	8.936		
10,100.0	7,660.0	9,889.3	7,492.0	51.9	0.0	63.33	2,081.5	-987.8	374.3	331.2	43.17	8.671		
10,200.0	7,660.0	9,989.3	7,492.0	53.3	0.0	63.33	2,181.4	-988.6	374.3	329.9	44.47	8.417		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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)			
10,300.0	7,660.0	10,089.3	7,492.0		54.6	0.0	63.33	2,281.4	-989.4	374.3	328.5	45.79	8.174	
10,400.0	7,660.0	10,189.3	7,492.0		56.0	0.0	63.33	2,381.4	-990.2	374.3	327.2	47.13	7.942	
10,500.0	7,660.0	10,289.3	7,492.0		57.5	0.0	63.33	2,481.4	-991.1	374.3	325.8	48.49	7.719	
10,600.0	7,660.0	10,389.3	7,492.0		58.9	0.0	63.33	2,581.4	-991.9	374.3	324.5	49.86	7.507	
10,700.0	7,660.0	10,489.3	7,492.0		60.3	0.0	63.33	2,681.4	-992.7	374.3	323.1	51.25	7.304	
10,800.0	7,660.0	10,589.3	7,492.0		61.8	0.0	63.33	2,781.4	-993.5	374.3	321.7	52.65	7.110	
10,900.0	7,660.0	10,689.3	7,492.0		63.3	0.0	63.33	2,881.4	-994.4	374.3	320.3	54.06	6.924	
11,000.0	7,660.0	10,789.3	7,492.0		64.8	0.0	63.33	2,981.4	-995.2	374.3	318.8	55.49	6.746	
11,100.0	7,660.0	10,889.3	7,492.0		66.3	0.0	63.33	3,081.4	-996.0	374.3	317.4	56.92	6.576	
11,200.0	7,660.0	10,989.3	7,492.0		67.8	0.0	63.33	3,181.4	-996.9	374.3	316.0	58.36	6.414	
11,300.0	7,660.0	11,089.3	7,492.0		69.4	0.0	63.33	3,281.4	-997.7	374.3	314.5	59.82	6.258	
11,400.0	7,660.0	11,189.3	7,492.0		70.9	0.0	63.33	3,381.4	-998.5	374.3	313.1	61.28	6.109	
11,500.0	7,660.0	11,289.3	7,492.0		72.5	0.0	63.33	3,481.4	-999.3	374.3	311.6	62.75	5.966	
11,600.0	7,660.0	11,389.3	7,492.0		74.0	0.0	63.33	3,581.4	-1,000.2	374.3	310.1	64.22	5.829	
11,700.0	7,660.0	11,489.3	7,492.0		75.6	0.0	63.33	3,681.4	-1,001.0	374.3	308.6	65.70	5.697	
11,800.0	7,660.0	11,589.3	7,492.0		77.2	0.0	63.33	3,781.4	-1,001.8	374.3	307.2	67.19	5.571	
11,900.0	7,660.0	11,689.3	7,492.0		78.8	0.0	63.33	3,881.4	-1,002.6	374.3	305.7	68.69	5.450	
12,000.0	7,660.0	11,789.3	7,492.0		80.4	0.0	63.33	3,981.4	-1,003.5	374.3	304.2	70.19	5.334	
12,100.0	7,660.0	11,889.3	7,492.0		82.0	0.0	63.33	4,081.4	-1,004.3	374.3	302.7	71.69	5.222	
12,200.0	7,660.0	11,989.3	7,492.0		83.6	0.0	63.33	4,181.4	-1,005.1	374.3	301.1	73.20	5.114	
12,300.0	7,660.0	12,089.3	7,492.0		85.2	0.0	63.33	4,281.4	-1,006.0	374.3	299.6	74.71	5.010	
12,400.0	7,660.0	12,189.3	7,492.0		86.8	0.0	63.33	4,381.4	-1,006.8	374.3	298.1	76.23	4.911	
12,500.0	7,660.0	12,289.3	7,492.0		88.4	0.0	63.33	4,481.4	-1,007.6	374.3	296.6	77.75	4.815	
12,600.0	7,660.0	12,389.3	7,492.0		90.1	0.0	63.33	4,581.4	-1,008.4	374.4	295.1	79.28	4.722	
12,700.0	7,660.0	12,489.3	7,492.0		91.7	0.0	63.33	4,681.4	-1,009.3	374.4	293.5	80.81	4.633	
12,800.0	7,660.0	12,589.3	7,492.0		93.4	0.0	63.33	4,781.4	-1,010.1	374.4	292.0	82.34	4.546	
12,900.0	7,660.0	12,689.3	7,492.0		95.0	0.0	63.34	4,881.4	-1,010.9	374.4	290.5	83.88	4.463	
13,000.0	7,660.0	12,789.3	7,492.0		96.7	0.0	63.34	4,981.4	-1,011.7	374.4	288.9	85.42	4.383	
13,100.0	7,660.0	12,889.3	7,492.0		98.3	0.0	63.34	5,081.3	-1,012.6	374.4	287.4	86.96	4.305	
13,200.0	7,660.0	12,989.3	7,492.0		100.0	0.0	63.34	5,181.3	-1,013.4	374.4	285.9	88.50	4.230	
13,300.0	7,660.0	13,089.3	7,492.0		101.6	0.0	63.34	5,281.3	-1,014.2	374.4	284.3	90.05	4.157	
13,400.0	7,660.0	13,189.3	7,492.0		103.3	0.0	63.34	5,381.3	-1,015.1	374.4	282.8	91.60	4.087	
13,500.0	7,660.0	13,289.3	7,492.0		105.0	0.0	63.34	5,481.3	-1,015.9	374.4	281.2	93.15	4.019	
13,600.0	7,660.0	13,389.3	7,492.0		106.6	0.0	63.34	5,581.3	-1,016.7	374.4	279.7	94.71	3.953	
13,700.0	7,660.0	13,489.3	7,492.0		108.3	0.0	63.34	5,681.3	-1,017.5	374.4	278.1	96.26	3.889	
13,800.0	7,660.0	13,589.3	7,492.0		110.0	0.0	63.34	5,781.3	-1,018.4	374.4	276.5	97.82	3.827	
13,900.0	7,660.0	13,689.3	7,492.0		111.7	0.0	63.34	5,881.3	-1,019.2	374.4	275.0	99.38	3.767	
14,000.0	7,660.0	13,789.3	7,492.0		113.4	0.0	63.34	5,981.3	-1,020.0	374.4	273.4	100.94	3.709	
14,100.0	7,660.0	13,889.3	7,492.0		115.0	0.0	63.34	6,081.3	-1,020.8	374.4	271.9	102.51	3.652	
14,200.0	7,660.0	13,989.3	7,492.0		116.7	0.0	63.34	6,181.3	-1,021.7	374.4	270.3	104.07	3.597	
14,300.0	7,660.0	14,089.3	7,492.0		118.4	0.0	63.34	6,281.3	-1,022.5	374.4	268.7	105.64	3.544	
14,400.0	7,660.0	14,189.3	7,492.0		120.1	0.0	63.34	6,381.3	-1,023.3	374.4	267.2	107.21	3.492	
14,500.0	7,660.0	14,289.3	7,492.0		121.8	0.0	63.34	6,481.3	-1,024.2	374.4	265.6	108.78	3.442	
14,600.0	7,660.0	14,389.3	7,492.0		123.5	0.0	63.34	6,581.3	-1,025.0	374.4	264.0	110.35	3.393	
14,700.0	7,660.0	14,489.3	7,492.0		125.2	0.0	63.34	6,681.3	-1,025.8	374.4	262.5	111.92	3.345	
14,800.0	7,660.0	14,589.3	7,492.0		126.9	0.0	63.34	6,781.3	-1,026.6	374.4	260.9	113.49	3.299	
14,900.0	7,660.0	14,689.3	7,492.0		128.6	0.0	63.34	6,881.3	-1,027.5	374.4	259.3	115.07	3.253	
15,000.0	7,660.0	14,789.3	7,492.0		130.3	0.0	63.34	6,981.3	-1,028.3	374.4	257.7	116.64	3.210	
15,100.0	7,660.0	14,889.3	7,492.0		132.0	0.0	63.34	7,081.3	-1,029.1	374.4	256.2	118.22	3.167	
15,200.0	7,660.0	14,989.3	7,492.0		133.7	0.0	63.34	7,181.3	-1,029.9	374.4	254.6	119.80	3.125	
15,300.0	7,660.0	15,089.3	7,492.0		135.4	0.0	63.34	7,281.3	-1,030.8	374.4	253.0	121.38	3.084	
15,400.0	7,660.0	15,189.3	7,492.0		137.1	0.0	63.34	7,381.3	-1,031.6	374.4	251.4	122.96	3.045	

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
15,500.0	7,660.0	15,289.3	7,492.0	138.8	0.0	63.34	7,481.3	-1,032.4	374.4	249.8	124.54	3.006		
15,600.0	7,660.0	15,389.3	7,492.0	140.6	0.0	63.34	7,581.3	-1,033.3	374.4	248.3	126.12	2.968		
15,700.0	7,660.0	15,489.3	7,492.0	142.3	0.0	63.34	7,681.3	-1,034.1	374.4	246.7	127.71	2.932		
15,800.0	7,660.0	15,589.3	7,492.0	144.0	0.0	63.34	7,781.3	-1,034.9	374.4	245.1	129.29	2.896		
15,900.0	7,660.0	15,689.3	7,492.0	145.7	0.0	63.34	7,881.3	-1,035.7	374.4	243.5	130.87	2.861		
16,000.0	7,660.0	15,789.3	7,492.0	147.4	0.0	63.34	7,981.2	-1,036.6	374.4	241.9	132.46	2.826		
16,100.0	7,660.0	15,889.3	7,492.0	149.1	0.0	63.34	8,081.2	-1,037.4	374.4	240.3	134.05	2.793		
16,200.0	7,660.0	15,989.3	7,492.0	150.9	0.0	63.34	8,181.2	-1,038.2	374.4	238.8	135.63	2.760		
16,300.0	7,660.0	16,089.3	7,492.0	152.6	0.0	63.34	8,281.2	-1,039.0	374.4	237.2	137.22	2.728		
16,400.0	7,660.0	16,189.3	7,492.0	154.3	0.0	63.34	8,381.2	-1,039.9	374.4	235.6	138.81	2.697		
16,500.0	7,660.0	16,289.3	7,492.0	156.0	0.0	63.34	8,481.2	-1,040.7	374.4	234.0	140.40	2.667		
16,600.0	7,660.0	16,389.3	7,492.0	157.7	0.0	63.34	8,581.2	-1,041.5	374.4	232.4	141.99	2.637		
16,700.0	7,660.0	16,489.3	7,492.0	159.5	0.0	63.34	8,681.2	-1,042.4	374.4	230.8	143.58	2.608		
16,800.0	7,660.0	16,589.3	7,492.0	161.2	0.0	63.34	8,781.2	-1,043.2	374.4	229.2	145.17	2.579		
16,900.0	7,660.0	16,689.3	7,492.0	162.9	0.0	63.34	8,881.2	-1,044.0	374.4	227.6	146.76	2.551		
17,000.0	7,660.0	16,789.3	7,492.0	164.6	0.0	63.34	8,981.2	-1,044.8	374.4	226.0	148.35	2.524		
17,100.0	7,660.0	16,889.3	7,492.0	166.4	0.0	63.34	9,081.2	-1,045.7	374.4	224.5	149.94	2.497		
17,200.0	7,660.0	16,989.3	7,492.0	168.1	0.0	63.34	9,181.2	-1,046.5	374.4	222.9	151.54	2.471		
17,300.0	7,660.0	17,089.3	7,492.0	169.8	0.0	63.34	9,281.2	-1,047.3	374.4	221.3	153.13	2.445		
17,400.0	7,660.0	17,189.3	7,492.0	171.6	0.0	63.34	9,381.2	-1,048.1	374.4	219.7	154.73	2.420		
17,500.0	7,660.0	17,289.3	7,492.0	173.3	0.0	63.34	9,481.2	-1,049.0	374.4	218.1	156.32	2.395		
17,600.0	7,660.0	17,389.3	7,492.0	175.0	0.0	63.34	9,581.2	-1,049.8	374.4	216.5	157.92	2.371		
17,630.0	7,660.0	17,419.3	7,492.0	175.5	0.0	63.34	9,611.2	-1,050.0	374.4	216.0	158.39	2.364 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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)			
0.0	0.0	0.0	0.0	0.0	0.0	89.61	0.1	15.0	15.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.61	0.1	15.0	15.0	14.7	0.28	54.179		
200.0	200.0	200.0	200.0	1.0	0.0	89.61	0.1	15.0	15.0	14.2	0.80	18.814		
300.0	300.0	300.0	300.0	1.5	0.0	89.61	0.1	15.0	15.0	13.8	1.23	12.261		
400.0	400.0	400.0	400.0	1.9	0.0	89.61	0.1	15.0	15.0	13.4	1.62	9.278		
500.0	500.0	500.0	500.0	2.3	0.0	89.61	0.1	15.0	15.0	13.0	2.00	7.512		
600.0	600.0	600.0	600.0	2.7	0.0	89.61	0.1	15.0	15.0	12.6	2.37	6.329	CC, ES	
700.0	700.0	700.0	700.0	3.0	0.0	-161.08	0.1	15.0	16.7	13.8	2.83	5.881		
800.0	799.8	800.5	800.5	4.0	0.0	-164.12	-0.6	13.4	20.0	16.1	3.96	5.056		
900.0	899.5	901.2	901.0	4.9	0.0	-165.94	-2.7	8.6	23.4	18.6	4.85	4.832		
1,000.0	998.7	1,002.0	1,001.4	5.6	0.0	-166.98	-6.3	0.5	26.8	21.2	5.61	4.786		
1,100.0	1,097.5	1,102.9	1,101.6	6.3	0.0	-167.51	-11.3	-10.9	30.3	24.0	6.29	4.811		
1,200.0	1,195.6	1,203.9	1,201.3	6.8	0.0	-167.67	-17.7	-25.4	33.7	26.9	6.75	4.986		
1,300.0	1,293.6	1,304.7	1,300.3	7.0	0.0	-166.84	-25.5	-43.0	35.0	28.0	6.98	5.016		
1,400.0	1,391.5	1,404.7	1,398.3	7.3	0.0	-165.67	-33.5	-61.3	35.5	28.2	7.25	4.892		
1,500.0	1,489.4	1,504.7	1,496.3	7.6	0.0	-164.54	-41.6	-79.6	36.0	28.4	7.54	4.770		
1,600.0	1,587.4	1,604.7	1,594.3	7.8	0.0	-163.44	-49.6	-97.8	36.5	28.6	7.84	4.652		
1,700.0	1,685.3	1,704.7	1,692.2	8.2	0.0	-162.37	-57.6	-116.1	37.0	28.8	8.15	4.538		
1,800.0	1,783.2	1,804.7	1,790.2	8.5	0.0	-161.33	-65.7	-134.3	37.5	29.1	8.47	4.429		
1,900.0	1,881.2	1,904.7	1,888.2	8.8	0.0	-160.32	-73.7	-152.6	38.1	29.3	8.80	4.324		
2,000.0	1,979.1	2,004.7	1,986.2	9.1	0.0	-159.34	-81.8	-170.9	38.6	29.5	9.14	4.224		
2,100.0	2,077.0	2,104.7	2,084.2	9.5	0.0	-158.38	-89.8	-189.1	39.2	29.7	9.49	4.129		
2,200.0	2,175.0	2,204.7	2,182.2	9.9	0.0	-157.46	-97.8	-207.4	39.8	29.9	9.85	4.039		
2,300.0	2,272.9	2,304.7	2,280.2	10.2	0.0	-156.56	-105.9	-225.6	40.4	30.1	10.21	3.953		
2,400.0	2,370.8	2,404.7	2,378.1	10.7	0.0	-155.68	-113.9	-243.9	40.9	30.4	10.58	3.871		
2,500.0	2,468.8	2,504.7	2,476.1	11.1	0.0	-154.84	-122.0	-262.2	41.6	30.6	10.96	3.793		
2,600.0	2,566.7	2,604.7	2,574.1	11.5	0.0	-154.01	-130.0	-280.4	42.2	30.8	11.34	3.719		
2,700.0	2,664.6	2,704.7	2,672.1	12.0	0.0	-153.21	-138.1	-298.7	42.8	31.1	11.73	3.650		
2,800.0	2,762.6	2,804.7	2,770.1	12.4	0.0	-152.43	-146.1	-316.9	43.4	31.3	12.12	3.583		
2,900.0	2,860.5	2,904.7	2,868.1	12.9	0.0	-151.68	-154.1	-335.2	44.1	31.5	12.52	3.520		
3,000.0	2,958.4	3,004.7	2,966.1	13.3	0.0	-150.95	-162.2	-353.5	44.7	31.8	12.92	3.460		
3,100.0	3,056.4	3,104.7	3,064.0	13.8	0.0	-150.23	-170.2	-371.7	45.4	32.0	13.33	3.404		
3,200.0	3,154.3	3,204.7	3,162.0	14.3	0.0	-149.54	-178.3	-390.0	46.0	32.3	13.74	3.350		
3,300.0	3,252.2	3,304.7	3,260.0	14.8	0.0	-148.87	-186.3	-408.2	46.7	32.5	14.16	3.298		
3,400.0	3,350.2	3,404.7	3,358.0	15.3	0.0	-148.22	-194.4	-426.5	47.4	32.8	14.58	3.249		
3,500.0	3,448.1	3,504.7	3,456.0	15.8	0.0	-147.58	-202.4	-444.7	48.0	33.0	15.00	3.203		
3,600.0	3,546.0	3,604.7	3,554.0	16.3	0.0	-146.97	-210.4	-463.0	48.7	33.3	15.43	3.159		
3,700.0	3,644.0	3,704.7	3,652.0	16.7	0.0	-146.37	-218.5	-481.3	49.4	33.6	15.85	3.117		
3,800.0	3,741.9	3,804.7	3,749.9	17.2	0.0	-145.78	-226.5	-499.5	50.1	33.8	16.29	3.077		
3,900.0	3,839.8	3,904.7	3,847.9	17.7	0.0	-145.22	-234.6	-517.8	50.8	34.1	16.72	3.038		
4,000.0	3,937.8	4,004.6	3,945.9	18.2	0.0	-144.67	-242.6	-536.0	51.5	34.4	17.16	3.002		
4,100.0	4,035.7	4,104.6	4,043.9	18.7	0.0	-144.13	-250.6	-554.3	52.2	34.6	17.60	2.967		
4,200.0	4,133.6	4,204.6	4,141.9	19.2	0.0	-143.61	-258.7	-572.6	52.9	34.9	18.05	2.934		
4,300.0	4,231.6	4,304.6	4,239.9	19.7	0.0	-143.10	-266.7	-590.8	53.7	35.2	18.49	2.902		
4,400.0	4,329.5	4,404.6	4,337.9	20.2	0.0	-142.60	-274.8	-609.1	54.4	35.4	18.94	2.872		
4,500.0	4,427.4	4,504.6	4,435.8	20.7	0.0	-142.12	-282.8	-627.3	55.1	35.7	19.39	2.843		
4,600.0	4,525.4	4,604.6	4,533.8	21.2	0.0	-141.65	-290.9	-645.6	55.8	36.0	19.84	2.815		
4,700.0	4,623.3	4,704.6	4,631.8	21.7	0.0	-141.20	-298.9	-663.9	56.6	36.3	20.29	2.788		
4,800.0	4,721.2	4,804.6	4,729.8	22.2	0.0	-140.75	-306.9	-682.1	57.3	36.6	20.75	2.762		
4,900.0	4,819.2	4,904.6	4,827.8	22.7	0.0	-140.32	-315.0	-700.4	58.1	36.9	21.20	2.738		
5,000.0	4,917.1	5,004.6	4,925.8	23.2	0.0	-139.89	-323.0	-718.6	58.8	37.1	21.66	2.714		
5,100.0	5,015.0	5,104.6	5,023.8	23.7	0.0	-139.48	-331.1	-736.9	59.5	37.4	22.12	2.692		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	5,113.0	5,204.6	5,121.7	24.2	0.0	-139.08	-339.1	-755.2	60.3	37.7	22.58	2.670		
5,300.0	5,210.9	5,304.6	5,219.7	24.7	0.0	-138.69	-347.1	-773.4	61.1	38.0	23.05	2.649		
5,400.0	5,308.8	5,404.6	5,317.7	25.2	0.0	-138.30	-355.2	-791.7	61.8	38.3	23.51	2.629		
5,500.0	5,406.8	5,504.6	5,415.7	25.7	0.0	-137.93	-363.2	-809.9	62.6	38.6	23.97	2.610		
5,600.0	5,504.7	5,604.6	5,513.7	26.2	0.0	-137.57	-371.3	-828.2	63.3	38.9	24.44	2.591		
5,700.0	5,602.6	5,704.6	5,611.7	26.7	0.0	-137.21	-379.3	-846.5	64.1	39.2	24.91	2.573		
5,800.0	5,700.6	5,804.6	5,709.7	27.2	0.0	-136.86	-387.4	-864.7	64.9	39.5	25.37	2.556		
5,900.0	5,798.5	5,904.6	5,807.6	27.7	0.0	-136.52	-395.4	-883.0	65.6	39.8	25.84	2.539		
6,000.0	5,896.4	6,004.6	5,905.6	28.2	0.0	-136.19	-403.4	-901.2	66.4	40.1	26.31	2.523		
6,100.0	5,994.4	6,104.6	6,003.6	28.7	0.0	-135.87	-411.5	-919.5	67.2	40.4	26.78	2.508		
6,200.0	6,092.3	6,204.6	6,101.6	29.2	0.0	-135.55	-419.5	-937.8	67.9	40.7	27.26	2.493		
6,300.0	6,190.2	6,304.6	6,199.6	29.7	0.0	-135.24	-427.6	-956.0	68.7	41.0	27.73	2.478		
6,400.0	6,288.2	6,404.6	6,297.6	30.2	0.0	-134.94	-435.6	-974.3	69.5	41.3	28.20	2.464		
6,500.0	6,386.1	6,504.6	6,395.5	30.7	0.0	-134.65	-443.6	-992.5	70.3	41.6	28.68	2.451		
6,600.0	6,484.0	6,604.6	6,493.5	31.2	0.0	-134.36	-451.7	-1,010.8	71.1	41.9	29.15	2.438		
6,700.0	6,582.0	6,704.5	6,591.5	31.7	0.0	-134.07	-459.7	-1,029.0	71.9	42.2	29.63	2.425		
6,800.0	6,679.9	6,806.0	6,691.0	32.2	0.0	-134.22	-467.3	-1,047.6	72.4	42.3	30.05	2.409		
6,900.0	6,777.8	6,909.8	6,792.6	32.7	0.0	-144.65	-461.5	-1,066.8	68.3	39.0	29.36	2.327 SF		
6,963.1	6,839.7	6,971.6	6,852.2	33.0	0.0	-158.87	-449.2	-1,078.1	66.2	38.0	28.24	2.344		
7,000.0	6,875.8	7,005.8	6,884.4	33.2	0.0	-169.14	-439.6	-1,084.3	67.4	39.9	27.56	2.447		
7,100.0	6,973.7	7,090.4	6,961.2	33.7	0.0	164.18	-407.6	-1,099.2	87.6	61.1	26.49	3.306		
7,200.0	7,071.6	7,162.5	7,022.4	34.2	0.0	139.45	-371.5	-1,111.2	131.4	105.7	25.77	5.100		
7,300.0	7,169.6	7,228.4	7,074.0	34.8	0.0	81.31	-331.9	-1,121.5	182.8	158.0	24.76	7.382		
7,400.0	7,265.4	7,292.2	7,119.4	35.3	0.0	51.80	-288.1	-1,130.7	231.7	208.2	23.49	9.864		
7,500.0	7,356.1	7,350.0	7,156.1	35.7	0.0	38.19	-244.2	-1,138.3	276.2	254.5	21.69	12.738		
7,600.0	7,438.9	7,415.3	7,192.1	36.0	0.0	30.62	-190.3	-1,145.9	315.2	294.7	20.45	15.410		
7,700.0	7,511.4	7,475.4	7,219.7	36.2	0.0	26.12	-137.3	-1,151.9	348.1	329.1	18.94	18.379		
7,800.0	7,571.2	7,534.8	7,241.5	36.3	0.0	23.27	-82.2	-1,156.8	374.5	356.9	17.60	21.274		
7,900.0	7,616.7	7,600.0	7,258.8	36.4	0.0	21.44	-19.6	-1,161.0	394.2	377.4	16.82	23.435		
8,000.0	7,646.4	7,650.0	7,267.3	36.4	0.0	20.41	29.7	-1,163.4	406.8	390.8	16.00	25.425		
8,100.0	7,659.4	7,710.9	7,271.8	36.3	0.0	19.94	90.4	-1,165.2	412.4	396.3	16.10	25.619		
8,200.0	7,660.0	7,801.5	7,272.0	36.4	0.0	19.83	180.9	-1,166.6	412.5	396.2	16.29	25.320		
8,300.0	7,660.0	7,901.5	7,272.0	36.5	0.0	19.74	280.9	-1,168.1	412.2	395.7	16.51	24.974		
8,400.0	7,660.0	8,001.5	7,272.0	36.6	0.0	19.64	380.9	-1,169.7	412.0	395.2	16.78	24.555		
8,500.0	7,660.0	8,101.5	7,272.0	36.9	0.0	19.55	480.9	-1,171.2	411.7	394.6	17.10	24.082		
8,600.0	7,660.0	8,201.5	7,272.0	37.2	0.0	19.46	580.9	-1,172.8	411.5	394.0	17.46	23.564		
8,700.0	7,660.0	8,301.5	7,272.0	37.7	0.0	19.36	680.8	-1,174.3	411.3	393.4	17.87	23.014		
8,800.0	7,660.0	8,401.5	7,272.0	38.2	0.0	19.27	780.8	-1,175.9	411.0	392.7	18.32	22.440		
8,900.0	7,660.0	8,501.5	7,272.0	38.9	0.0	19.18	880.8	-1,177.4	410.8	392.0	18.80	21.852		
9,000.0	7,660.0	8,601.5	7,272.0	39.6	0.0	19.08	980.8	-1,178.9	410.6	391.2	19.31	21.258		
9,100.0	7,660.0	8,701.5	7,272.0	40.5	0.0	18.99	1,080.8	-1,180.5	410.3	390.5	19.86	20.664		
9,200.0	7,660.0	8,801.5	7,272.0	41.4	0.0	18.89	1,180.8	-1,182.0	410.1	389.7	20.43	20.074		
9,300.0	7,660.0	8,901.5	7,272.0	42.4	0.0	18.80	1,280.8	-1,183.6	409.9	388.8	21.02	19.494		
9,400.0	7,660.0	9,001.5	7,272.0	43.4	0.0	18.70	1,380.7	-1,185.1	409.6	388.0	21.64	18.927		
9,500.0	7,660.0	9,101.5	7,272.0	44.5	0.0	18.61	1,480.7	-1,186.7	409.4	387.1	22.28	18.375		
9,600.0	7,660.0	9,201.5	7,272.0	45.6	0.0	18.51	1,580.7	-1,188.2	409.2	386.2	22.94	17.840		
9,700.0	7,660.0	9,301.5	7,272.0	46.8	0.0	18.42	1,680.7	-1,189.7	409.0	385.3	23.61	17.322		
9,800.0	7,660.0	9,401.5	7,272.0	48.1	0.0	18.32	1,780.7	-1,191.3	408.7	384.4	24.29	16.824		
9,900.0	7,660.0	9,501.5	7,272.0	49.3	0.0	18.23	1,880.7	-1,192.8	408.5	383.5	24.99	16.344		
10,000.0	7,660.0	9,601.5	7,272.0	50.6	0.0	18.13	1,980.6	-1,194.4	408.3	382.6	25.71	15.883		
10,100.0	7,660.0	9,701.4	7,272.0	51.9	0.0	18.04	2,080.6	-1,195.9	408.1	381.6	26.43	15.441		
10,200.0	7,660.0	9,801.4	7,272.0	53.3	0.0	17.94	2,180.6	-1,197.5	407.8	380.7	27.16	15.017		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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		
10,300.0	7,660.0	9,901.4	7,272.0	54.6	0.0	17.85	2,280.6	-1,199.0	407.6	379.7	27.90	14.611		
10,400.0	7,660.0	10,001.4	7,272.0	56.0	0.0	17.75	2,380.6	-1,200.5	407.4	378.8	28.65	14.222		
10,500.0	7,660.0	10,101.4	7,272.0	57.5	0.0	17.66	2,480.6	-1,202.1	407.2	377.8	29.40	13.850		
10,600.0	7,660.0	10,201.4	7,272.0	58.9	0.0	17.56	2,580.6	-1,203.6	407.0	376.8	30.16	13.493		
10,700.0	7,660.0	10,301.4	7,272.0	60.3	0.0	17.46	2,680.5	-1,205.2	406.7	375.8	30.93	13.152		
10,800.0	7,660.0	10,401.4	7,272.0	61.8	0.0	17.37	2,780.5	-1,206.7	406.5	374.8	31.70	12.826		
10,900.0	7,660.0	10,501.4	7,272.0	63.3	0.0	17.27	2,880.5	-1,208.3	406.3	373.9	32.47	12.513		
11,000.0	7,660.0	10,601.4	7,272.0	64.8	0.0	17.18	2,980.5	-1,209.8	406.1	372.9	33.25	12.214		
11,100.0	7,660.0	10,701.4	7,272.0	66.3	0.0	17.08	3,080.5	-1,211.3	405.9	371.9	34.03	11.927		
11,200.0	7,660.0	10,801.4	7,272.0	67.8	0.0	16.98	3,180.5	-1,212.9	405.7	370.9	34.82	11.652		
11,300.0	7,660.0	10,901.4	7,272.0	69.4	0.0	16.89	3,280.5	-1,214.4	405.5	369.9	35.60	11.389		
11,400.0	7,660.0	11,001.4	7,272.0	70.9	0.0	16.79	3,380.4	-1,216.0	405.3	368.9	36.39	11.136		
11,500.0	7,660.0	11,101.4	7,272.0	72.5	0.0	16.69	3,480.4	-1,217.5	405.1	367.9	37.18	10.893		
11,600.0	7,660.0	11,201.4	7,272.0	74.0	0.0	16.60	3,580.4	-1,219.1	404.9	366.9	37.98	10.661		
11,700.0	7,660.0	11,301.4	7,272.0	75.6	0.0	16.50	3,680.4	-1,220.6	404.7	365.9	38.77	10.437		
11,800.0	7,660.0	11,401.4	7,272.0	77.2	0.0	16.40	3,780.4	-1,222.1	404.5	364.9	39.57	10.222		
11,900.0	7,660.0	11,501.4	7,272.0	78.8	0.0	16.30	3,880.4	-1,223.7	404.3	363.9	40.37	10.015		
12,000.0	7,660.0	11,601.4	7,272.0	80.4	0.0	16.21	3,980.4	-1,225.2	404.1	362.9	41.16	9.816		
12,100.0	7,660.0	11,701.4	7,272.0	82.0	0.0	16.11	4,080.3	-1,226.8	403.9	361.9	41.96	9.625		
12,200.0	7,660.0	11,801.4	7,272.0	83.6	0.0	16.01	4,180.3	-1,228.3	403.7	360.9	42.76	9.440		
12,300.0	7,660.0	11,901.4	7,272.0	85.2	0.0	15.91	4,280.3	-1,229.9	403.5	359.9	43.56	9.263		
12,400.0	7,660.0	12,001.4	7,272.0	86.8	0.0	15.82	4,380.3	-1,231.4	403.3	358.9	44.36	9.091		
12,500.0	7,660.0	12,101.4	7,272.0	88.4	0.0	15.72	4,480.3	-1,232.9	403.1	357.9	45.16	8.926		
12,600.0	7,660.0	12,201.4	7,272.0	90.1	0.0	15.62	4,580.3	-1,234.5	402.9	356.9	45.96	8.767		
12,700.0	7,660.0	12,301.4	7,272.0	91.7	0.0	15.52	4,680.3	-1,236.0	402.7	355.9	46.75	8.613		
12,800.0	7,660.0	12,401.4	7,272.0	93.4	0.0	15.43	4,780.2	-1,237.6	402.5	354.9	47.55	8.464		
12,900.0	7,660.0	12,501.4	7,272.0	95.0	0.0	15.33	4,880.2	-1,239.1	402.3	354.0	48.35	8.321		
13,000.0	7,660.0	12,601.4	7,272.0	96.7	0.0	15.23	4,980.2	-1,240.7	402.1	353.0	49.15	8.182		
13,100.0	7,660.0	12,701.4	7,272.0	98.3	0.0	15.13	5,080.2	-1,242.2	401.9	352.0	49.95	8.047		
13,200.0	7,660.0	12,801.4	7,272.0	100.0	0.0	15.03	5,180.2	-1,243.7	401.7	351.0	50.74	7.917		
13,300.0	7,660.0	12,901.4	7,272.0	101.6	0.0	14.93	5,280.2	-1,245.3	401.6	350.0	51.54	7.792		
13,400.0	7,660.0	13,001.4	7,272.0	103.3	0.0	14.84	5,380.2	-1,246.8	401.4	349.0	52.33	7.670		
13,500.0	7,660.0	13,101.4	7,272.0	105.0	0.0	14.74	5,480.1	-1,248.4	401.2	348.1	53.13	7.552		
13,600.0	7,660.0	13,201.4	7,272.0	106.6	0.0	14.64	5,580.1	-1,249.9	401.0	347.1	53.92	7.437		
13,700.0	7,660.0	13,301.4	7,272.0	108.3	0.0	14.54	5,680.1	-1,251.5	400.8	346.1	54.71	7.326		
13,800.0	7,660.0	13,401.4	7,272.0	110.0	0.0	14.44	5,780.1	-1,253.0	400.7	345.2	55.51	7.218		
13,900.0	7,660.0	13,501.4	7,272.0	111.7	0.0	14.34	5,880.1	-1,254.5	400.5	344.2	56.30	7.114		
14,000.0	7,660.0	13,601.3	7,272.0	113.4	0.0	14.24	5,980.1	-1,256.1	400.3	343.2	57.09	7.012		
14,100.0	7,660.0	13,701.3	7,272.0	115.0	0.0	14.14	6,080.1	-1,257.6	400.1	342.3	57.88	6.914		
14,200.0	7,660.0	13,801.3	7,272.0	116.7	0.0	14.04	6,180.0	-1,259.2	400.0	341.3	58.66	6.818		
14,300.0	7,660.0	13,901.3	7,272.0	118.4	0.0	13.94	6,280.0	-1,260.7	399.8	340.3	59.45	6.725		
14,400.0	7,660.0	14,001.3	7,272.0	120.1	0.0	13.85	6,380.0	-1,262.3	399.6	339.4	60.24	6.634		
14,500.0	7,660.0	14,101.3	7,272.0	121.8	0.0	13.75	6,480.0	-1,263.8	399.4	338.4	61.02	6.546		
14,600.0	7,660.0	14,201.3	7,272.0	123.5	0.0	13.65	6,580.0	-1,265.3	399.3	337.5	61.81	6.460		
14,700.0	7,660.0	14,301.3	7,272.0	125.2	0.0	13.55	6,680.0	-1,266.9	399.1	336.5	62.59	6.377		
14,800.0	7,660.0	14,401.3	7,272.0	126.9	0.0	13.45	6,780.0	-1,268.4	398.9	335.6	63.37	6.295		
14,900.0	7,660.0	14,501.3	7,272.0	128.6	0.0	13.35	6,879.9	-1,270.0	398.8	334.6	64.15	6.216		
15,000.0	7,660.0	14,601.3	7,272.0	130.3	0.0	13.25	6,979.9	-1,271.5	398.6	333.7	64.93	6.139		
15,100.0	7,660.0	14,701.3	7,272.0	132.0	0.0	13.15	7,079.9	-1,273.1	398.4	332.7	65.71	6.064		
15,200.0	7,660.0	14,801.3	7,272.0	133.7	0.0	13.05	7,179.9	-1,274.6	398.3	331.8	66.48	5.991		
15,300.0	7,660.0	14,901.3	7,272.0	135.4	0.0	12.95	7,279.9	-1,276.1	398.1	330.9	67.26	5.919		
15,400.0	7,660.0	15,001.3	7,272.0	137.1	0.0	12.85	7,379.9	-1,277.7	398.0	329.9	68.03	5.850		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							
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	
15,500.0	7,660.0	15,101.3	7,272.0	138.8	0.0	12.75	7,479.9	-1,279.2	397.8	329.0	68.81	5.781		
15,600.0	7,660.0	15,201.3	7,272.0	140.6	0.0	12.65	7,579.8	-1,280.8	397.6	328.1	69.58	5.715		
15,700.0	7,660.0	15,301.3	7,272.0	142.3	0.0	12.55	7,679.8	-1,282.3	397.5	327.1	70.35	5.650		
15,800.0	7,660.0	15,401.3	7,272.0	144.0	0.0	12.44	7,779.8	-1,283.9	397.3	326.2	71.12	5.587		
15,900.0	7,660.0	15,501.3	7,272.0	145.7	0.0	12.34	7,879.8	-1,285.4	397.2	325.3	71.89	5.525		
16,000.0	7,660.0	15,601.3	7,272.0	147.4	0.0	12.24	7,979.8	-1,286.9	397.0	324.4	72.66	5.465		
16,100.0	7,660.0	15,701.3	7,272.0	149.1	0.0	12.14	8,079.8	-1,288.5	396.9	323.5	73.42	5.405		
16,200.0	7,660.0	15,801.3	7,272.0	150.9	0.0	12.04	8,179.8	-1,290.0	396.7	322.5	74.19	5.348		
16,300.0	7,660.0	15,901.3	7,272.0	152.6	0.0	11.94	8,279.7	-1,291.6	396.6	321.6	74.95	5.291		
16,400.0	7,660.0	16,001.3	7,272.0	154.3	0.0	11.84	8,379.7	-1,293.1	396.4	320.7	75.71	5.236		
16,500.0	7,660.0	16,101.3	7,272.0	156.0	0.0	11.74	8,479.7	-1,294.7	396.3	319.8	76.48	5.182		
16,600.0	7,660.0	16,201.3	7,272.0	157.7	0.0	11.64	8,579.7	-1,296.2	396.1	318.9	77.24	5.129		
16,700.0	7,660.0	16,301.3	7,272.0	159.5	0.0	11.54	8,679.7	-1,297.7	396.0	318.0	78.00	5.077		
16,800.0	7,660.0	16,401.3	7,272.0	161.2	0.0	11.43	8,779.7	-1,299.3	395.9	317.1	78.76	5.026		
16,900.0	7,660.0	16,501.3	7,272.0	162.9	0.0	11.33	8,879.7	-1,300.8	395.7	316.2	79.51	4.977		
17,000.0	7,660.0	16,601.3	7,272.0	164.6	0.0	11.23	8,979.6	-1,302.4	395.6	315.3	80.27	4.928		
17,100.0	7,660.0	16,701.3	7,272.0	166.4	0.0	11.13	9,079.6	-1,303.9	395.4	314.4	81.02	4.880		
17,200.0	7,660.0	16,801.3	7,272.0	168.1	0.0	11.03	9,179.6	-1,305.5	395.3	313.5	81.78	4.834		
17,300.0	7,660.0	16,901.3	7,272.0	169.8	0.0	10.93	9,279.6	-1,307.0	395.2	312.6	82.53	4.788		
17,400.0	7,660.0	17,001.3	7,272.0	171.6	0.0	10.83	9,379.6	-1,308.5	395.0	311.7	83.28	4.743		
17,500.0	7,660.0	17,101.3	7,272.0	173.3	0.0	10.72	9,479.6	-1,310.1	394.9	310.9	84.04	4.699		
17,600.0	7,660.0	17,201.3	7,272.0	175.0	0.0	10.62	9,579.6	-1,311.6	394.8	310.0	84.79	4.656		
17,630.0	7,660.0	17,231.3	7,272.0	175.5	0.0	10.59	9,609.5	-1,312.1	394.7	309.7	85.01	4.643		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	89.69	0.3	60.0	60.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.69	0.3	60.0	60.0	59.7	0.28	216.673		
200.0	200.0	200.0	200.0	1.0	0.0	89.69	0.3	60.0	60.0	59.2	0.80	75.231		
300.0	300.0	300.0	300.0	1.5	0.0	89.69	0.3	60.0	60.0	58.8	1.22	49.021		
400.0	400.0	400.0	400.0	1.9	0.0	89.69	0.3	60.0	60.0	58.4	1.62	37.090		
500.0	500.0	500.0	500.0	2.3	0.0	89.69	0.3	60.0	60.0	58.0	2.00	30.028		
600.0	600.0	600.0	600.0	2.7	0.0	89.69	0.3	60.0	60.0	57.7	2.37	25.299	CC, ES	
700.0	700.0	700.0	700.0	3.0	0.0	-159.43	0.3	60.0	61.7	58.8	2.82	21.889		
800.0	799.8	799.8	799.8	4.0	0.0	-160.98	0.3	60.0	66.6	62.7	3.93	16.933		
900.0	899.5	899.5	899.5	4.9	0.0	-163.11	0.3	60.0	74.9	70.0	4.83	15.506		
1,000.0	998.7	998.7	998.7	5.6	0.0	-165.39	0.3	60.0	86.6	81.0	5.61	15.453		
1,100.0	1,097.5	1,100.0	1,099.9	6.3	0.0	-166.89	-1.1	59.0	100.6	94.3	6.30	15.964		
1,200.0	1,195.6	1,201.5	1,201.4	6.8	0.0	-167.13	-5.4	55.8	115.5	108.8	6.78	17.039		
1,300.0	1,293.6	1,302.8	1,302.3	7.0	0.0	-166.39	-12.5	50.7	129.2	122.2	7.02	18.417		
1,400.0	1,391.5	1,401.9	1,400.9	7.3	0.0	-165.51	-20.2	45.0	142.3	135.0	7.29	19.517		
1,500.0	1,489.4	1,501.1	1,499.6	7.6	0.0	-164.78	-28.0	39.4	155.4	147.8	7.58	20.508		
1,600.0	1,587.4	1,600.2	1,598.2	7.8	0.0	-164.17	-35.7	33.7	168.5	160.6	7.87	21.401		
1,700.0	1,685.3	1,699.3	1,696.9	8.2	0.0	-163.64	-43.4	28.1	181.6	173.4	8.18	22.204		
1,800.0	1,783.2	1,798.4	1,795.6	8.5	0.0	-163.19	-51.2	22.5	194.7	186.2	8.49	22.928		
1,900.0	1,881.2	1,897.6	1,894.2	8.8	0.0	-162.79	-58.9	16.8	207.8	199.0	8.81	23.580		
2,000.0	1,979.1	1,996.7	1,992.9	9.1	0.0	-162.44	-66.6	11.2	221.0	211.8	9.14	24.169		
2,100.0	2,077.0	2,095.8	2,091.5	9.5	0.0	-162.13	-74.3	5.5	234.1	224.7	9.48	24.702		
2,200.0	2,175.0	2,194.9	2,190.2	9.9	0.0	-161.85	-82.1	-0.1	247.3	237.5	9.82	25.185		
2,300.0	2,272.9	2,294.1	2,288.9	10.2	0.0	-161.60	-89.8	-5.7	260.4	250.3	10.16	25.624		
2,400.0	2,370.8	2,393.2	2,387.5	10.7	0.0	-161.38	-97.5	-11.4	273.6	263.1	10.51	26.024		
2,500.0	2,468.8	2,492.3	2,486.2	11.1	0.0	-161.17	-105.3	-17.0	286.8	275.9	10.87	26.388		
2,600.0	2,566.7	2,591.4	2,584.9	11.5	0.0	-160.99	-113.0	-22.7	300.0	288.7	11.23	26.721		
2,700.0	2,664.6	2,690.5	2,683.5	12.0	0.0	-160.81	-120.7	-28.3	313.1	301.6	11.59	27.026		
2,800.0	2,762.6	2,789.7	2,782.2	12.4	0.0	-160.66	-128.4	-33.9	326.3	314.4	11.95	27.306		
2,900.0	2,860.5	2,888.8	2,880.8	12.9	0.0	-160.51	-136.2	-39.6	339.5	327.2	12.32	27.564		
3,000.0	2,958.4	2,987.9	2,979.5	13.3	0.0	-160.38	-143.9	-45.2	352.7	340.0	12.69	27.802		
3,100.0	3,056.4	3,087.0	3,078.2	13.8	0.0	-160.25	-151.6	-50.9	365.9	352.8	13.06	28.022		
3,200.0	3,154.3	3,186.2	3,176.8	14.3	0.0	-160.14	-159.4	-56.5	379.1	365.6	13.43	28.225		
3,300.0	3,252.2	3,285.3	3,275.5	14.8	0.0	-160.03	-167.1	-62.1	392.2	378.4	13.81	28.413		
3,400.0	3,350.2	3,384.4	3,374.1	15.3	0.0	-159.93	-174.8	-67.8	405.4	391.3	14.18	28.588		
3,500.0	3,448.1	3,483.5	3,472.8	15.8	0.0	-159.83	-182.6	-73.4	418.6	404.1	14.56	28.751		
3,600.0	3,546.0	3,582.7	3,571.5	16.3	0.0	-159.74	-190.3	-79.1	431.8	416.9	14.94	28.903		
3,700.0	3,644.0	3,681.8	3,670.1	16.7	0.0	-159.66	-198.0	-84.7	445.0	429.7	15.32	29.045		
3,800.0	3,741.9	3,780.9	3,768.8	17.2	0.0	-159.58	-205.7	-90.3	458.2	442.5	15.70	29.178		
3,900.0	3,839.8	3,880.0	3,867.4	17.7	0.0	-159.51	-213.5	-96.0	471.4	455.3	16.09	29.302		
4,000.0	3,937.8	3,979.2	3,966.1	18.2	0.0	-159.44	-221.2	-101.6	484.6	468.1	16.47	29.419		
4,100.0	4,035.7	4,078.3	4,064.8	18.7	0.0	-159.37	-228.9	-107.3	497.8	480.9	16.86	29.528		
4,200.0	4,133.6	4,177.4	4,163.4	19.2	0.0	-159.31	-236.7	-112.9	511.0	493.7	17.24	29.632		
4,300.0	4,231.6	4,276.5	4,262.1	19.7	0.0	-159.25	-244.4	-118.5	524.2	506.6	17.63	29.729		
4,400.0	4,329.5	4,375.7	4,360.7	20.2	0.0	-159.19	-252.1	-124.2	537.4	519.4	18.02	29.820		
4,500.0	4,427.4	4,474.8	4,459.4	20.7	0.0	-159.13	-259.9	-129.8	550.6	532.2	18.41	29.907		
4,600.0	4,525.4	4,573.9	4,558.1	21.2	0.0	-159.08	-267.6	-135.5	563.8	545.0	18.80	29.989		
4,700.0	4,623.3	4,673.0	4,656.7	21.7	0.0	-159.03	-275.3	-141.1	577.0	557.8	19.19	30.066		
4,800.0	4,721.2	4,772.1	4,755.4	22.2	0.0	-158.99	-283.0	-146.8	590.2	570.6	19.58	30.139		
4,900.0	4,819.2	4,871.3	4,854.1	22.7	0.0	-158.94	-290.8	-152.4	603.4	583.4	19.97	30.209		
5,000.0	4,917.1	4,970.4	4,952.7	23.2	0.0	-158.90	-298.5	-158.0	616.6	596.2	20.37	30.275		
5,100.0	5,015.0	5,069.5	5,051.4	23.7	0.0	-158.86	-306.2	-163.7	629.8	609.0	20.76	30.338		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	5,113.0	5,168.6	5,150.0	24.2	0.0	-158.82	-314.0	-169.3	643.0	621.8	21.15	30.398		
5,300.0	5,210.9	5,267.8	5,248.7	24.7	0.0	-158.78	-321.7	-175.0	656.2	634.6	21.55	30.454		
5,400.0	5,308.8	5,366.9	5,347.4	25.2	0.0	-158.74	-329.4	-180.6	669.4	647.4	21.94	30.509		
5,500.0	5,406.8	5,466.0	5,446.0	25.7	0.0	-158.71	-337.2	-186.2	682.6	660.3	22.34	30.560		
5,600.0	5,504.7	5,565.1	5,544.7	26.2	0.0	-158.67	-344.9	-191.9	695.8	673.1	22.73	30.610		
5,700.0	5,602.6	5,664.3	5,643.3	26.7	0.0	-158.64	-352.6	-197.5	709.0	685.9	23.13	30.657		
5,800.0	5,700.6	5,763.4	5,742.0	27.2	0.0	-158.61	-360.3	-203.2	722.2	698.7	23.52	30.702		
5,900.0	5,798.5	5,862.5	5,840.7	27.7	0.0	-158.58	-368.1	-208.8	735.4	711.5	23.92	30.745		
6,000.0	5,896.4	5,961.6	5,939.3	28.2	0.0	-158.55	-375.8	-214.4	748.6	724.3	24.32	30.787		
6,100.0	5,994.4	6,060.8	6,038.0	28.7	0.0	-158.52	-383.5	-220.1	761.8	737.1	24.71	30.826		
6,200.0	6,092.3	6,159.9	6,136.6	29.2	0.0	-158.49	-391.3	-225.7	775.0	749.9	25.11	30.864		
6,300.0	6,190.2	6,259.0	6,235.3	29.7	0.0	-158.47	-399.0	-231.4	788.2	762.7	25.51	30.901		
6,400.0	6,288.2	6,358.1	6,334.0	30.2	0.0	-158.44	-406.7	-237.0	801.4	775.5	25.91	30.936		
6,500.0	6,386.1	6,457.3	6,432.6	30.7	0.0	-158.42	-414.5	-242.6	814.6	788.3	26.30	30.969		
6,600.0	6,484.0	6,556.4	6,531.3	31.2	0.0	-158.39	-422.2	-248.3	827.8	801.1	26.70	31.002		
6,700.0	6,582.0	6,655.5	6,629.9	31.7	0.0	-158.37	-429.9	-253.9	841.0	813.9	27.10	31.033		
6,800.0	6,679.9	6,754.6	6,728.6	32.2	0.0	-158.35	-437.6	-259.6	854.2	826.7	27.50	31.063		
6,900.0	6,777.8	6,853.7	6,827.3	32.7	0.0	-158.33	-445.4	-265.2	867.4	839.5	27.90	31.092		
7,000.0	6,875.8	6,952.9	6,925.9	33.2	0.0	-158.31	-453.1	-270.8	880.6	852.3	28.30	31.119		
7,100.0	6,973.7	7,052.0	7,024.6	33.7	0.0	-158.28	-460.8	-276.5	893.8	865.2	28.70	31.146		
7,200.0	7,071.6	7,151.1	7,123.4	34.2	0.0	-158.26	-468.6	-282.1	907.1	878.0	29.06	31.171		
7,300.0	7,169.6	7,248.4	7,219.4	34.8	0.0	145.00	-449.4	-287.7	920.4	891.1	29.33	31.383		
7,400.0	7,265.4	7,344.2	7,310.4	35.3	0.0	119.61	-420.0	-292.9	933.7	904.2	29.53	31.624		
7,500.0	7,356.1	7,438.8	7,394.1	35.7	0.0	107.75	-376.6	-297.7	946.5	916.8	29.66	31.911		
7,600.0	7,438.9	7,532.2	7,468.7	36.0	0.0	101.03	-320.6	-302.1	958.3	928.6	29.76	32.205		
7,700.0	7,511.4	7,624.9	7,532.8	36.2	0.0	96.73	-253.9	-305.8	968.9	939.0	29.84	32.468		
7,800.0	7,571.2	7,717.0	7,585.1	36.3	0.0	93.82	-178.3	-308.9	977.8	947.8	29.93	32.667		
7,900.0	7,616.7	7,808.6	7,624.4	36.4	0.0	91.87	-95.7	-311.2	984.7	954.7	30.05	32.769		
8,000.0	7,646.4	7,900.0	7,650.0	36.4	0.0	90.68	-8.1	-312.8	989.5	959.3	30.21	32.754		
8,100.0	7,659.4	7,991.3	7,661.4	36.3	0.0	90.15	82.4	-313.6	992.0	961.6	30.42	32.609		
8,200.0	7,660.0	8,088.7	7,662.0	36.4	0.0	90.12	179.9	-313.7	992.8	962.1	30.69	32.352		
8,300.0	7,660.0	8,188.7	7,662.0	36.5	0.0	90.12	279.9	-313.8	993.5	962.5	31.05	31.993		
8,400.0	7,660.0	8,288.7	7,662.0	36.6	0.0	90.12	379.9	-313.9	994.3	962.7	31.52	31.547		
8,500.0	7,660.0	8,388.7	7,662.0	36.9	0.0	90.12	479.8	-314.0	995.0	962.9	32.07	31.025		
8,600.0	7,660.0	8,488.7	7,662.0	37.2	0.0	90.12	579.8	-314.1	995.7	963.0	32.71	30.441		
8,700.0	7,660.0	8,588.7	7,662.0	37.7	0.0	90.12	679.8	-314.3	996.4	963.0	33.43	29.807		
8,800.0	7,660.0	8,688.7	7,662.0	38.2	0.0	90.11	779.8	-314.4	997.1	962.9	34.23	29.134		
8,900.0	7,660.0	8,788.7	7,662.0	38.9	0.0	90.11	879.8	-314.5	997.8	962.8	35.09	28.435		
9,000.0	7,660.0	8,888.7	7,662.0	39.6	0.0	90.11	979.8	-314.6	998.6	962.5	36.02	27.719		
9,100.0	7,660.0	8,988.7	7,662.0	40.5	0.0	90.11	1,079.8	-314.7	999.3	962.3	37.02	26.994		
9,200.0	7,660.0	9,088.7	7,662.0	41.4	0.0	90.11	1,179.8	-314.8	1,000.0	961.9	38.07	26.269		
9,300.0	7,660.0	9,188.7	7,662.0	42.4	0.0	90.11	1,279.8	-314.9	1,000.7	961.5	39.17	25.549		
9,400.0	7,660.0	9,288.7	7,662.0	43.4	0.0	90.11	1,379.8	-315.0	1,001.4	961.1	40.32	24.839		
9,500.0	7,660.0	9,388.7	7,662.0	44.5	0.0	90.11	1,479.8	-315.1	1,002.1	960.6	41.51	24.143		
9,600.0	7,660.0	9,488.7	7,662.0	45.6	0.0	90.11	1,579.8	-315.3	1,002.9	960.1	42.74	23.464		
9,700.0	7,660.0	9,588.7	7,662.0	46.8	0.0	90.11	1,679.8	-315.4	1,003.6	959.6	44.01	22.805		
9,800.0	7,660.0	9,688.7	7,662.0	48.1	0.0	90.11	1,779.8	-315.5	1,004.3	959.0	45.31	22.166		
9,900.0	7,660.0	9,788.7	7,662.0	49.3	0.0	90.11	1,879.8	-315.6	1,005.0	958.4	46.64	21.548		
10,000.0	7,660.0	9,888.7	7,662.0	50.6	0.0	90.11	1,979.8	-315.7	1,005.7	957.7	48.00	20.953		
10,100.0	7,660.0	9,988.7	7,662.0	51.9	0.0	90.11	2,079.8	-315.8	1,006.4	957.1	49.39	20.379		
10,200.0	7,660.0	10,088.7	7,662.0	53.3	0.0	90.11	2,179.8	-315.9	1,007.2	956.4	50.79	19.828		
10,300.0	7,660.0	10,188.7	7,662.0	54.6	0.0	90.11	2,279.8	-316.0	1,007.9	955.7	52.23	19.299		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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)						
10,400.0	7,660.0	10,288.7	7,662.0	56.0	0.0	90.11	2,379.8	-316.1	1,008.6	954.9	53.68	18.791		
10,500.0	7,660.0	10,388.7	7,662.0	57.5	0.0	90.11	2,479.8	-316.3	1,009.3	954.2	55.14	18.303		
10,600.0	7,660.0	10,488.7	7,662.0	58.9	0.0	90.11	2,579.8	-316.4	1,010.0	953.4	56.63	17.835		
10,700.0	7,660.0	10,588.7	7,662.0	60.3	0.0	90.11	2,679.8	-316.5	1,010.8	952.6	58.13	17.387		
10,800.0	7,660.0	10,688.7	7,662.0	61.8	0.0	90.11	2,779.8	-316.6	1,011.5	951.8	59.65	16.957		
10,900.0	7,660.0	10,788.7	7,662.0	63.3	0.0	90.11	2,879.8	-316.7	1,012.2	951.0	61.18	16.545		
11,000.0	7,660.0	10,888.7	7,662.0	64.8	0.0	90.11	2,979.8	-316.8	1,012.9	950.2	62.72	16.150		
11,100.0	7,660.0	10,988.7	7,662.0	66.3	0.0	90.11	3,079.8	-316.9	1,013.6	949.3	64.27	15.771		
11,200.0	7,660.0	11,088.7	7,662.0	67.8	0.0	90.11	3,179.8	-317.0	1,014.3	948.5	65.84	15.407		
11,300.0	7,660.0	11,188.7	7,662.0	69.4	0.0	90.11	3,279.8	-317.1	1,015.1	947.6	67.41	15.058		
11,400.0	7,660.0	11,288.7	7,662.0	70.9	0.0	90.11	3,379.8	-317.3	1,015.8	946.8	68.99	14.723		
11,500.0	7,660.0	11,388.7	7,662.0	72.5	0.0	90.11	3,479.8	-317.4	1,016.5	945.9	70.59	14.401		
11,600.0	7,660.0	11,488.7	7,662.0	74.0	0.0	90.11	3,579.8	-317.5	1,017.2	945.0	72.19	14.091		
11,700.0	7,660.0	11,588.7	7,662.0	75.6	0.0	90.11	3,679.8	-317.6	1,017.9	944.1	73.79	13.794		
11,800.0	7,660.0	11,688.7	7,662.0	77.2	0.0	90.11	3,779.8	-317.7	1,018.6	943.2	75.41	13.508		
11,900.0	7,660.0	11,788.6	7,662.0	78.8	0.0	90.11	3,879.8	-317.8	1,019.4	942.3	77.03	13.233		
12,000.0	7,660.0	11,888.6	7,662.0	80.4	0.0	90.11	3,979.8	-317.9	1,020.1	941.4	78.66	12.969		
12,100.0	7,660.0	11,988.6	7,662.0	82.0	0.0	90.11	4,079.8	-318.0	1,020.8	940.5	80.29	12.714		
12,200.0	7,660.0	12,088.6	7,662.0	83.6	0.0	90.11	4,179.8	-318.1	1,021.5	939.6	81.93	12.468		
12,300.0	7,660.0	12,188.6	7,662.0	85.2	0.0	90.11	4,279.7	-318.3	1,022.2	938.7	83.57	12.232		
12,400.0	7,660.0	12,288.6	7,662.0	86.8	0.0	90.11	4,379.7	-318.4	1,022.9	937.7	85.22	12.003		
12,500.0	7,660.0	12,388.6	7,662.0	88.4	0.0	90.11	4,479.7	-318.5	1,023.7	936.8	86.87	11.783		
12,600.0	7,660.0	12,488.6	7,662.0	90.1	0.0	90.11	4,579.7	-318.6	1,024.4	935.8	88.53	11.571		
12,700.0	7,660.0	12,588.6	7,662.0	91.7	0.0	90.11	4,679.7	-318.7	1,025.1	934.9	90.19	11.365		
12,800.0	7,660.0	12,688.6	7,662.0	93.4	0.0	90.11	4,779.7	-318.8	1,025.8	933.9	91.86	11.167		
12,900.0	7,660.0	12,788.6	7,662.0	95.0	0.0	90.11	4,879.7	-318.9	1,026.5	933.0	93.53	10.975		
13,000.0	7,660.0	12,888.6	7,662.0	96.7	0.0	90.11	4,979.7	-319.0	1,027.2	932.0	95.20	10.790		
13,100.0	7,660.0	12,988.6	7,662.0	98.3	0.0	90.11	5,079.7	-319.1	1,028.0	931.1	96.88	10.611		
13,200.0	7,660.0	13,088.6	7,662.0	100.0	0.0	90.11	5,179.7	-319.3	1,028.7	930.1	98.56	10.437		
13,300.0	7,660.0	13,188.6	7,662.0	101.6	0.0	90.11	5,279.7	-319.4	1,029.4	929.2	100.24	10.269		
13,400.0	7,660.0	13,288.6	7,662.0	103.3	0.0	90.11	5,379.7	-319.5	1,030.1	928.2	101.92	10.107		
13,500.0	7,660.0	13,388.6	7,662.0	105.0	0.0	90.11	5,479.7	-319.6	1,030.8	927.2	103.61	9.949		
13,600.0	7,660.0	13,488.6	7,662.0	106.6	0.0	90.11	5,579.7	-319.7	1,031.5	926.2	105.30	9.796		
13,700.0	7,660.0	13,588.6	7,662.0	108.3	0.0	90.11	5,679.7	-319.8	1,032.3	925.3	107.00	9.648		
13,800.0	7,660.0	13,688.6	7,662.0	110.0	0.0	90.11	5,779.7	-319.9	1,033.0	924.3	108.69	9.504		
13,900.0	7,660.0	13,788.6	7,662.0	111.7	0.0	90.11	5,879.7	-320.0	1,033.7	923.3	110.39	9.364		
14,000.0	7,660.0	13,888.6	7,662.0	113.4	0.0	90.11	5,979.7	-320.2	1,034.4	922.3	112.09	9.229		
14,100.0	7,660.0	13,988.6	7,662.0	115.0	0.0	90.11	6,079.7	-320.3	1,035.1	921.3	113.79	9.097		
14,200.0	7,660.0	14,088.6	7,662.0	116.7	0.0	90.11	6,179.7	-320.4	1,035.8	920.4	115.49	8.969		
14,300.0	7,660.0	14,188.6	7,662.0	118.4	0.0	90.11	6,279.7	-320.5	1,036.6	919.4	117.20	8.845		
14,400.0	7,660.0	14,288.6	7,662.0	120.1	0.0	90.11	6,379.7	-320.6	1,037.3	918.4	118.90	8.724		
14,500.0	7,660.0	14,388.6	7,662.0	121.8	0.0	90.11	6,479.7	-320.7	1,038.0	917.4	120.61	8.606		
14,600.0	7,660.0	14,488.6	7,662.0	123.5	0.0	90.11	6,579.7	-320.8	1,038.7	916.4	122.32	8.492		
14,700.0	7,660.0	14,588.6	7,662.0	125.2	0.0	90.11	6,679.7	-320.9	1,039.4	915.4	124.03	8.380		
14,800.0	7,660.0	14,688.6	7,662.0	126.9	0.0	90.11	6,779.7	-321.0	1,040.1	914.4	125.75	8.272		
14,900.0	7,660.0	14,788.6	7,662.0	128.6	0.0	90.11	6,879.7	-321.2	1,040.9	913.4	127.46	8.166		
15,000.0	7,660.0	14,888.6	7,662.0	130.3	0.0	90.11	6,979.7	-321.3	1,041.6	912.4	129.18	8.063		
15,100.0	7,660.0	14,988.6	7,662.0	132.0	0.0	90.11	7,079.7	-321.4	1,042.3	911.4	130.90	7.963		
15,200.0	7,660.0	15,088.6	7,662.0	133.7	0.0	90.11	7,179.7	-321.5	1,043.0	910.4	132.61	7.865		
15,300.0	7,660.0	15,188.6	7,662.0	135.4	0.0	90.11	7,279.7	-321.6	1,043.7	909.4	134.33	7.770		
15,400.0	7,660.0	15,288.6	7,662.0	137.1	0.0	90.11	7,379.7	-321.7	1,044.5	908.4	136.05	7.677		
15,500.0	7,660.0	15,388.6	7,662.0	138.8	0.0	90.11	7,479.7	-321.8	1,045.2	907.4	137.78	7.586		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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 (°)	Offset Wellbore Centre		Distance		Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)				
15,600.0	7,660.0	15,488.6	7,662.0	140.6	0.0	90.11	7,579.7	-321.9	1,045.9	906.4	139.50	7.497		
15,700.0	7,660.0	15,588.6	7,662.0	142.3	0.0	90.11	7,679.7	-322.0	1,046.6	905.4	141.22	7.411		
15,800.0	7,660.0	15,688.5	7,662.0	144.0	0.0	90.11	7,779.7	-322.2	1,047.3	904.4	142.95	7.326		
15,900.0	7,660.0	15,788.5	7,662.0	145.7	0.0	90.11	7,879.7	-322.3	1,048.0	903.4	144.68	7.244		
16,000.0	7,660.0	15,888.5	7,662.0	147.4	0.0	90.11	7,979.6	-322.4	1,048.8	902.3	146.40	7.163		
16,100.0	7,660.0	15,988.5	7,662.0	149.1	0.0	90.11	8,079.6	-322.5	1,049.5	901.3	148.13	7.085		
16,200.0	7,660.0	16,088.5	7,662.0	150.9	0.0	90.11	8,179.6	-322.6	1,050.2	900.3	149.86	7.008		
16,300.0	7,660.0	16,188.5	7,662.0	152.6	0.0	90.11	8,279.6	-322.7	1,050.9	899.3	151.59	6.933		
16,400.0	7,660.0	16,288.5	7,662.0	154.3	0.0	90.11	8,379.6	-322.8	1,051.6	898.3	153.32	6.859		
16,500.0	7,660.0	16,388.5	7,662.0	156.0	0.0	90.11	8,479.6	-322.9	1,052.3	897.3	155.05	6.787		
16,600.0	7,660.0	16,488.5	7,662.0	157.7	0.0	90.11	8,579.6	-323.0	1,053.1	896.3	156.78	6.717		
16,700.0	7,660.0	16,588.5	7,662.0	159.5	0.0	90.11	8,679.6	-323.2	1,053.8	895.3	158.52	6.648		
16,800.0	7,660.0	16,688.5	7,662.0	161.2	0.0	90.11	8,779.6	-323.3	1,054.5	894.2	160.25	6.580		
16,900.0	7,660.0	16,788.5	7,662.0	162.9	0.0	90.11	8,879.6	-323.4	1,055.2	893.2	161.99	6.514		
17,000.0	7,660.0	16,888.5	7,662.0	164.6	0.0	90.11	8,979.6	-323.5	1,055.9	892.2	163.72	6.450		
17,100.0	7,660.0	16,988.5	7,662.0	166.4	0.0	90.11	9,079.6	-323.6	1,056.6	891.2	165.46	6.386		
17,200.0	7,660.0	17,088.5	7,662.0	168.1	0.0	90.11	9,179.6	-323.7	1,057.4	890.2	167.19	6.324		
17,300.0	7,660.0	17,188.5	7,662.0	169.8	0.0	90.11	9,279.6	-323.8	1,058.1	889.1	168.93	6.263		
17,400.0	7,660.0	17,288.5	7,662.0	171.6	0.0	90.11	9,379.6	-323.9	1,058.8	888.1	170.67	6.204		
17,500.0	7,660.0	17,388.5	7,662.0	173.3	0.0	90.11	9,479.6	-324.0	1,059.5	887.1	172.40	6.145		
17,600.0	7,660.0	17,488.5	7,662.0	175.0	0.0	90.11	9,579.6	-324.2	1,060.2	886.1	174.14	6.088		
17,630.0	7,660.0	17,518.5	7,662.0	175.5	0.0	90.11	9,609.6	-324.2	1,060.4	885.8	174.66	6.071 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	89.69	0.6	105.0	105.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.69	0.6	105.0	105.0	104.7	0.28	378.972		
200.0	200.0	200.0	200.0	1.0	0.0	89.69	0.6	105.0	105.0	104.2	0.80	131.585		
300.0	300.0	300.0	300.0	1.5	0.0	89.69	0.6	105.0	105.0	103.8	1.22	85.742		
400.0	400.0	400.0	400.0	1.9	0.0	89.69	0.6	105.0	105.0	103.4	1.62	64.875		
500.0	500.0	500.0	500.0	2.3	0.0	89.69	0.6	105.0	105.0	103.0	2.00	52.523		
600.0	600.0	600.0	600.0	2.7	0.0	89.69	0.6	105.0	105.0	102.6	2.37	44.251	CC, ES	
700.0	700.0	700.0	700.0	3.0	0.0	-159.19	0.6	105.0	106.6	103.8	2.81	37.887		
800.0	799.8	799.8	799.8	4.0	0.0	-160.11	0.6	105.0	111.5	107.6	3.92	28.424		
900.0	899.5	899.5	899.5	4.9	0.0	-161.48	0.6	105.0	119.8	115.0	4.82	24.870		
1,000.0	998.7	998.7	998.7	5.6	0.0	-163.10	0.6	105.0	131.4	125.8	5.59	23.496		
1,100.0	1,097.5	1,097.5	1,097.5	6.3	0.0	-164.80	0.6	105.0	146.4	140.1	6.29	23.278		
1,200.0	1,195.6	1,195.6	1,195.6	6.8	0.0	-166.46	0.6	105.0	164.9	158.1	6.77	24.366		
1,300.0	1,293.6	1,293.6	1,293.6	7.0	0.0	-167.93	0.6	105.0	184.6	177.6	7.00	26.372		
1,400.0	1,391.5	1,388.7	1,388.7	7.3	0.0	-168.73	-0.5	105.8	205.1	197.8	7.26	28.252		
1,500.0	1,489.4	1,483.1	1,483.0	7.6	0.0	-168.66	-4.1	108.5	227.0	219.5	7.53	30.164		
1,600.0	1,587.4	1,576.8	1,576.3	7.8	0.0	-167.95	-10.1	113.0	250.4	242.6	7.80	32.097		
1,700.0	1,685.3	1,672.3	1,671.4	8.2	0.0	-166.89	-18.2	119.1	274.9	266.8	8.09	33.973		
1,800.0	1,783.2	1,769.1	1,767.6	8.5	0.0	-165.96	-26.5	125.3	299.6	291.2	8.40	35.681		
1,900.0	1,881.2	1,865.9	1,863.8	8.8	0.0	-165.17	-34.8	131.5	324.4	315.7	8.71	37.244		
2,000.0	1,979.1	1,962.7	1,960.1	9.1	0.0	-164.49	-43.1	137.7	349.2	340.2	9.03	38.674		
2,100.0	2,077.0	2,059.5	2,056.3	9.5	0.0	-163.91	-51.4	143.9	374.1	364.7	9.36	39.984		
2,200.0	2,175.0	2,156.3	2,152.5	9.9	0.0	-163.40	-59.7	150.1	399.0	389.3	9.69	41.185		
2,300.0	2,272.9	2,253.1	2,248.8	10.2	0.0	-162.94	-67.9	156.4	423.9	413.9	10.02	42.287		
2,400.0	2,370.8	2,349.9	2,345.0	10.7	0.0	-162.54	-76.2	162.6	448.8	438.5	10.37	43.300		
2,500.0	2,468.8	2,446.7	2,441.3	11.1	0.0	-162.18	-84.5	168.8	473.8	463.1	10.71	44.233		
2,600.0	2,566.7	2,543.5	2,537.5	11.5	0.0	-161.85	-92.8	175.0	498.8	487.7	11.06	45.094		
2,700.0	2,664.6	2,640.3	2,633.7	12.0	0.0	-161.56	-101.1	181.2	523.8	512.4	11.41	45.889		
2,800.0	2,762.6	2,737.1	2,730.0	12.4	0.0	-161.29	-109.4	187.5	548.8	537.0	11.77	46.626		
2,900.0	2,860.5	2,833.8	2,826.2	12.9	0.0	-161.05	-117.7	193.7	573.8	561.7	12.13	47.309		
3,000.0	2,958.4	2,930.6	2,922.4	13.3	0.0	-160.83	-126.0	199.9	598.8	586.3	12.49	47.944		
3,100.0	3,056.4	3,027.4	3,018.7	13.8	0.0	-160.62	-134.3	206.1	623.8	611.0	12.85	48.534		
3,200.0	3,154.3	3,124.2	3,114.9	14.3	0.0	-160.43	-142.6	212.3	648.9	635.6	13.22	49.085		
3,300.0	3,252.2	3,221.0	3,211.1	14.8	0.0	-160.26	-150.9	218.6	673.9	660.3	13.59	49.599		
3,400.0	3,350.2	3,317.8	3,307.4	15.3	0.0	-160.10	-159.2	224.8	699.0	685.0	13.96	50.080		
3,500.0	3,448.1	3,414.6	3,403.6	15.8	0.0	-159.94	-167.5	231.0	724.0	709.7	14.33	50.531		
3,600.0	3,546.0	3,511.4	3,499.9	16.3	0.0	-159.80	-175.8	237.2	749.1	734.4	14.70	50.953		
3,700.0	3,644.0	3,608.2	3,596.1	16.7	0.0	-159.67	-184.1	243.4	774.1	759.0	15.08	51.350		
3,800.0	3,741.9	3,705.0	3,692.3	17.2	0.0	-159.55	-192.4	249.7	799.2	783.7	15.45	51.724		
3,900.0	3,839.8	3,801.8	3,788.6	17.7	0.0	-159.43	-200.7	255.9	824.3	808.4	15.83	52.076		
4,000.0	3,937.8	3,898.6	3,884.8	18.2	0.0	-159.32	-209.0	262.1	849.3	833.1	16.21	52.408		
4,100.0	4,035.7	3,995.4	3,981.0	18.7	0.0	-159.22	-217.3	268.3	874.4	857.8	16.58	52.722		
4,200.0	4,133.6	4,092.2	4,077.3	19.2	0.0	-159.12	-225.6	274.5	899.5	882.5	16.97	53.019		
4,300.0	4,231.6	4,189.0	4,173.5	19.7	0.0	-159.03	-233.9	280.8	924.5	907.2	17.35	53.300		
4,400.0	4,329.5	4,285.8	4,269.8	20.2	0.0	-158.94	-242.2	287.0	949.6	931.9	17.73	53.566		
4,500.0	4,427.4	4,382.6	4,366.0	20.7	0.0	-158.86	-250.5	293.2	974.7	956.6	18.11	53.819		
4,600.0	4,525.4	4,479.3	4,462.2	21.2	0.0	-158.78	-258.8	299.4	999.8	981.3	18.49	54.059		
4,700.0	4,623.3	4,576.1	4,558.5	21.7	0.0	-158.70	-267.1	305.6	1,024.9	1,006.0	18.88	54.287		
4,800.0	4,721.2	4,672.9	4,654.7	22.2	0.0	-158.63	-275.4	311.8	1,050.0	1,030.7	19.26	54.504		
4,900.0	4,819.2	4,769.7	4,750.9	22.7	0.0	-158.56	-283.7	318.1	1,075.0	1,055.4	19.65	54.711		
5,000.0	4,917.1	4,866.5	4,847.2	23.2	0.0	-158.50	-292.0	324.3	1,100.1	1,080.1	20.04	54.909		
5,100.0	5,015.0	4,963.3	4,943.4	23.7	0.0	-158.44	-300.2	330.5	1,125.2	1,104.8	20.42	55.097		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	5,113.0	5,060.1	5,039.7	24.2	0.0	-158.38	-308.5	336.7	1,150.3	1,129.5	20.81	55.277		
5,300.0	5,210.9	5,156.9	5,135.9	24.7	0.0	-158.32	-316.8	342.9	1,175.4	1,154.2	21.20	55.449		
5,400.0	5,308.8	5,253.7	5,232.1	25.2	0.0	-158.27	-325.1	349.2	1,200.5	1,178.9	21.59	55.613		
5,500.0	5,406.8	5,350.5	5,328.4	25.7	0.0	-158.22	-333.4	355.4	1,225.6	1,203.6	21.98	55.771		
5,600.0	5,504.7	5,447.3	5,424.6	26.2	0.0	-158.17	-341.7	361.6	1,250.7	1,228.3	22.37	55.922		
5,700.0	5,602.6	5,544.1	5,520.8	26.7	0.0	-158.12	-350.0	367.8	1,275.8	1,253.0	22.76	56.066		
5,800.0	5,700.6	5,640.9	5,617.1	27.2	0.0	-158.07	-358.3	374.0	1,300.9	1,277.7	23.15	56.205		
5,900.0	5,798.5	5,737.7	5,713.3	27.7	0.0	-158.03	-366.6	380.3	1,326.0	1,302.5	23.54	56.339		
6,000.0	5,896.4	5,834.5	5,809.6	28.2	0.0	-157.98	-374.9	386.5	1,351.1	1,327.2	23.93	56.467		
6,100.0	5,994.4	5,931.3	5,905.8	28.7	0.0	-157.94	-383.2	392.7	1,376.2	1,351.9	24.32	56.590		
6,200.0	6,092.3	6,028.1	6,002.0	29.2	0.0	-157.90	-391.5	398.9	1,401.3	1,376.6	24.71	56.708		
6,300.0	6,190.2	6,124.8	6,098.3	29.7	0.0	-157.86	-399.8	405.1	1,426.4	1,401.3	25.10	56.822		
6,400.0	6,288.2	6,221.6	6,194.5	30.2	0.0	-157.83	-408.1	411.4	1,451.5	1,426.0	25.50	56.932		
6,500.0	6,386.1	6,318.4	6,290.7	30.7	0.0	-157.79	-416.4	417.6	1,476.6	1,450.7	25.89	57.037		
6,600.0	6,484.0	6,415.2	6,387.0	31.2	0.0	-157.76	-424.7	423.8	1,501.7	1,475.4	26.28	57.139		
6,700.0	6,582.0	6,512.0	6,483.2	31.7	0.0	-157.72	-433.0	430.0	1,526.8	1,500.1	26.67	57.237		
6,800.0	6,679.9	6,608.8	6,579.5	32.2	0.0	-157.69	-441.3	436.2	1,551.9	1,524.8	27.07	57.332		
6,900.0	6,777.8	6,705.6	6,675.7	32.7	0.0	-157.66	-449.6	442.5	1,577.0	1,549.5	27.46	57.423		
7,000.0	6,875.8	6,802.4	6,771.9	33.2	0.0	-157.63	-457.9	448.7	1,602.1	1,574.3	27.86	57.511		
7,100.0	6,973.7	6,901.7	6,870.9	33.7	0.0	-157.60	-459.3	455.0	1,627.1	1,598.9	28.24	57.627		
7,200.0	7,071.6	6,996.6	6,964.3	34.2	0.0	-157.57	-467.7	460.9	1,652.2	1,623.7	28.63	57.739		
7,300.0	7,169.6	7,086.4	7,049.5	34.8	0.0	143.27	-416.8	466.1	1,677.6	1,648.9	28.75	58.356		
7,400.0	7,265.4	7,173.4	7,126.8	35.3	0.0	116.45	-377.5	470.7	1,702.8	1,673.9	28.89	58.936		
7,500.0	7,356.1	7,258.2	7,195.6	35.7	0.0	103.29	-328.3	474.7	1,726.9	1,697.9	28.98	59.596		
7,600.0	7,438.9	7,341.4	7,255.4	36.0	0.0	95.45	-270.6	478.0	1,749.0	1,720.0	29.02	60.259		
7,700.0	7,511.4	7,423.4	7,305.6	36.2	0.0	90.19	-205.9	480.7	1,768.4	1,739.4	29.06	60.849		
7,800.0	7,571.2	7,504.7	7,345.8	36.3	0.0	86.53	-135.3	482.7	1,784.5	1,755.4	29.11	61.296		
7,900.0	7,616.7	7,585.4	7,375.4	36.4	0.0	84.04	-60.3	484.0	1,796.8	1,767.6	29.20	61.539		
8,000.0	7,646.4	7,665.7	7,394.1	36.4	0.0	82.50	17.7	484.5	1,804.9	1,775.5	29.33	61.532		
8,100.0	7,659.4	7,750.0	7,401.9	36.3	0.0	81.83	101.6	484.3	1,808.5	1,778.9	29.52	61.253		
8,200.0	7,660.0	7,842.0	7,402.0	36.4	0.0	81.80	193.5	483.6	1,808.6	1,778.9	29.77	60.757		
8,300.0	7,660.0	7,942.0	7,402.0	36.5	0.0	81.80	293.5	482.7	1,808.6	1,778.5	30.11	60.061		
8,400.0	7,660.0	8,042.0	7,402.0	36.6	0.0	81.80	393.5	481.9	1,808.6	1,778.1	30.56	59.190		
8,500.0	7,660.0	8,142.0	7,402.0	36.9	0.0	81.80	493.5	481.1	1,808.6	1,777.5	31.09	58.170		
8,600.0	7,660.0	8,242.0	7,402.0	37.2	0.0	81.80	593.5	480.3	1,808.6	1,776.9	31.72	57.027		
8,700.0	7,660.0	8,342.0	7,402.0	37.7	0.0	81.80	693.5	479.4	1,808.6	1,776.2	32.42	55.784		
8,800.0	7,660.0	8,442.0	7,402.0	38.2	0.0	81.80	793.5	478.6	1,808.6	1,775.4	33.21	54.468		
8,900.0	7,660.0	8,542.0	7,402.0	38.9	0.0	81.80	893.5	477.8	1,808.6	1,774.6	34.06	53.100		
9,000.0	7,660.0	8,642.0	7,402.0	39.6	0.0	81.80	993.5	476.9	1,808.6	1,773.7	34.98	51.699		
9,100.0	7,660.0	8,742.0	7,402.0	40.5	0.0	81.80	1,093.5	476.1	1,808.6	1,772.7	35.97	50.285		
9,200.0	7,660.0	8,842.0	7,402.0	41.4	0.0	81.80	1,193.5	475.3	1,808.6	1,771.6	37.01	48.870		
9,300.0	7,660.0	8,942.0	7,402.0	42.4	0.0	81.80	1,293.5	474.5	1,808.7	1,770.5	38.10	47.468		
9,400.0	7,660.0	9,042.0	7,402.0	43.4	0.0	81.80	1,393.5	473.6	1,808.7	1,769.4	39.24	46.088		
9,500.0	7,660.0	9,142.0	7,402.0	44.5	0.0	81.80	1,493.5	472.8	1,808.7	1,768.2	40.43	44.738		
9,600.0	7,660.0	9,242.0	7,402.0	45.6	0.0	81.80	1,593.5	472.0	1,808.7	1,767.0	41.65	43.423		
9,700.0	7,660.0	9,342.0	7,402.0	46.8	0.0	81.80	1,693.5	471.2	1,808.7	1,765.7	42.91	42.147		
9,800.0	7,660.0	9,442.0	7,402.0	48.1	0.0	81.80	1,793.5	470.3	1,808.7	1,764.5	44.21	40.913		
9,900.0	7,660.0	9,542.0	7,402.0	49.3	0.0	81.80	1,893.5	469.5	1,808.7	1,763.1	45.53	39.722		
10,000.0	7,660.0	9,642.0	7,402.0	50.6	0.0	81.80	1,993.5	468.7	1,808.7	1,761.8	46.89	38.576		
10,100.0	7,660.0	9,742.0	7,402.0	51.9	0.0	81.80	2,093.5	467.9	1,808.7	1,760.4	48.26	37.474		
10,200.0	7,660.0	9,842.0	7,402.0	53.3	0.0	81.80	2,193.5	467.0	1,808.7	1,759.0	49.67	36.416		
10,300.0	7,660.0	9,942.0	7,402.0	54.6	0.0	81.80	2,293.5	466.2	1,808.7	1,757.6	51.09	35.402		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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)						
10,400.0	7,660.0	10,042.0	7,402.0	56.0	0.0	81.80	2,393.5	465.4	1,808.7	1,756.1	52.53	34.429		
10,500.0	7,660.0	10,142.0	7,402.0	57.5	0.0	81.80	2,493.5	464.5	1,808.7	1,754.7	54.00	33.497		
10,600.0	7,660.0	10,242.0	7,402.0	58.9	0.0	81.80	2,593.5	463.7	1,808.7	1,753.2	55.47	32.604		
10,700.0	7,660.0	10,342.0	7,402.0	60.3	0.0	81.80	2,693.5	462.9	1,808.7	1,751.7	56.97	31.749		
10,800.0	7,660.0	10,442.0	7,402.0	61.8	0.0	81.80	2,793.5	462.1	1,808.7	1,750.2	58.48	30.930		
10,900.0	7,660.0	10,542.0	7,402.0	63.3	0.0	81.80	2,893.5	461.2	1,808.7	1,748.7	60.00	30.146		
11,000.0	7,660.0	10,642.0	7,402.0	64.8	0.0	81.80	2,993.4	460.4	1,808.7	1,747.2	61.53	29.395		
11,100.0	7,660.0	10,742.0	7,402.0	66.3	0.0	81.80	3,093.4	459.6	1,808.7	1,745.6	63.08	28.675		
11,200.0	7,660.0	10,842.0	7,402.0	67.8	0.0	81.80	3,193.4	458.8	1,808.7	1,744.1	64.63	27.984		
11,300.0	7,660.0	10,942.0	7,402.0	69.4	0.0	81.80	3,293.4	457.9	1,808.7	1,742.5	66.20	27.323		
11,400.0	7,660.0	11,042.0	7,402.0	70.9	0.0	81.80	3,393.4	457.1	1,808.7	1,740.9	67.77	26.688		
11,500.0	7,660.0	11,142.0	7,402.0	72.5	0.0	81.80	3,493.4	456.3	1,808.7	1,739.3	69.35	26.079		
11,600.0	7,660.0	11,242.0	7,402.0	74.0	0.0	81.80	3,593.4	455.5	1,808.7	1,737.7	70.95	25.494		
11,700.0	7,660.0	11,342.0	7,402.0	75.6	0.0	81.80	3,693.4	454.6	1,808.7	1,736.2	72.54	24.933		
11,800.0	7,660.0	11,442.0	7,402.0	77.2	0.0	81.80	3,793.4	453.8	1,808.7	1,734.5	74.15	24.393		
11,900.0	7,660.0	11,542.0	7,402.0	78.8	0.0	81.80	3,893.4	453.0	1,808.7	1,732.9	75.76	23.874		
12,000.0	7,660.0	11,642.0	7,402.0	80.4	0.0	81.80	3,993.4	452.2	1,808.7	1,731.3	77.38	23.375		
12,100.0	7,660.0	11,742.0	7,402.0	82.0	0.0	81.80	4,093.4	451.3	1,808.7	1,729.7	79.00	22.895		
12,200.0	7,660.0	11,842.0	7,402.0	83.6	0.0	81.80	4,193.4	450.5	1,808.7	1,728.1	80.63	22.432		
12,300.0	7,660.0	11,942.0	7,402.0	85.2	0.0	81.80	4,293.4	449.7	1,808.7	1,726.4	82.26	21.987		
12,400.0	7,660.0	12,042.0	7,402.0	86.8	0.0	81.80	4,393.4	448.8	1,808.7	1,724.8	83.90	21.557		
12,500.0	7,660.0	12,142.0	7,402.0	88.4	0.0	81.80	4,493.4	448.0	1,808.7	1,723.2	85.55	21.143		
12,600.0	7,660.0	12,242.0	7,402.0	90.1	0.0	81.80	4,593.4	447.2	1,808.7	1,721.5	87.19	20.744		
12,700.0	7,660.0	12,342.0	7,402.0	91.7	0.0	81.80	4,693.4	446.4	1,808.7	1,719.9	88.84	20.358		
12,800.0	7,660.0	12,442.0	7,402.0	93.4	0.0	81.80	4,793.4	445.5	1,808.7	1,718.2	90.50	19.986		
12,900.0	7,660.0	12,542.0	7,402.0	95.0	0.0	81.80	4,893.4	444.7	1,808.7	1,716.6	92.16	19.626		
13,000.0	7,660.0	12,642.0	7,402.0	96.7	0.0	81.80	4,993.4	443.9	1,808.7	1,714.9	93.82	19.279		
13,100.0	7,660.0	12,742.0	7,402.0	98.3	0.0	81.80	5,093.4	443.1	1,808.7	1,713.2	95.48	18.943		
13,200.0	7,660.0	12,842.0	7,402.0	100.0	0.0	81.80	5,193.4	442.2	1,808.7	1,711.6	97.15	18.617		
13,300.0	7,660.0	12,942.0	7,402.0	101.6	0.0	81.80	5,293.4	441.4	1,808.7	1,709.9	98.82	18.303		
13,400.0	7,660.0	13,042.0	7,402.0	103.3	0.0	81.80	5,393.4	440.6	1,808.7	1,708.2	100.50	17.998		
13,500.0	7,660.0	13,142.0	7,402.0	105.0	0.0	81.80	5,493.4	439.8	1,808.7	1,706.6	102.17	17.703		
13,600.0	7,660.0	13,242.0	7,402.0	106.6	0.0	81.80	5,593.4	438.9	1,808.7	1,704.9	103.85	17.416		
13,700.0	7,660.0	13,342.0	7,402.0	108.3	0.0	81.80	5,693.4	438.1	1,808.7	1,703.2	105.53	17.139		
13,800.0	7,660.0	13,442.0	7,402.0	110.0	0.0	81.80	5,793.4	437.3	1,808.7	1,701.5	107.22	16.870		
13,900.0	7,660.0	13,542.0	7,402.0	111.7	0.0	81.80	5,893.4	436.4	1,808.7	1,699.8	108.90	16.609		
14,000.0	7,660.0	13,642.0	7,402.0	113.4	0.0	81.80	5,993.3	435.6	1,808.7	1,698.1	110.59	16.355		
14,100.0	7,660.0	13,742.0	7,402.0	115.0	0.0	81.80	6,093.3	434.8	1,808.7	1,696.5	112.28	16.109		
14,200.0	7,660.0	13,842.0	7,402.0	116.7	0.0	81.80	6,193.3	434.0	1,808.7	1,694.8	113.97	15.870		
14,300.0	7,660.0	13,942.0	7,402.0	118.4	0.0	81.80	6,293.3	433.1	1,808.7	1,693.1	115.66	15.638		
14,400.0	7,660.0	14,042.0	7,402.0	120.1	0.0	81.80	6,393.3	432.3	1,808.7	1,691.4	117.36	15.412		
14,500.0	7,660.0	14,142.0	7,402.0	121.8	0.0	81.80	6,493.3	431.5	1,808.7	1,689.7	119.06	15.192		
14,600.0	7,660.0	14,242.0	7,402.0	123.5	0.0	81.80	6,593.3	430.7	1,808.8	1,688.0	120.75	14.979		
14,700.0	7,660.0	14,342.0	7,402.0	125.2	0.0	81.80	6,693.3	429.8	1,808.8	1,686.3	122.45	14.771		
14,800.0	7,660.0	14,442.0	7,402.0	126.9	0.0	81.80	6,793.3	429.0	1,808.8	1,684.6	124.15	14.569		
14,900.0	7,660.0	14,542.0	7,402.0	128.6	0.0	81.80	6,893.3	428.2	1,808.8	1,682.9	125.86	14.372		
15,000.0	7,660.0	14,642.0	7,402.0	130.3	0.0	81.80	6,993.3	427.4	1,808.8	1,681.2	127.56	14.180		
15,100.0	7,660.0	14,742.0	7,402.0	132.0	0.0	81.80	7,093.3	426.5	1,808.8	1,679.5	129.27	13.993		
15,200.0	7,660.0	14,842.0	7,402.0	133.7	0.0	81.80	7,193.3	425.7	1,808.8	1,677.8	130.97	13.810		
15,300.0	7,660.0	14,942.0	7,402.0	135.4	0.0	81.80	7,293.3	424.9	1,808.8	1,676.1	132.68	13.633		
15,400.0	7,660.0	15,042.0	7,402.0	137.1	0.0	81.80	7,393.3	424.1	1,808.8	1,674.4	134.39	13.459		
15,500.0	7,660.0	15,142.0	7,402.0	138.8	0.0	81.80	7,493.3	423.2	1,808.8	1,672.7	136.10	13.290		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	7,660.0	15,242.0	7,402.0	140.6	0.0	81.80	7,593.3	422.4	1,808.8	1,671.0	137.81	13.125		
15,700.0	7,660.0	15,342.0	7,402.0	142.3	0.0	81.80	7,693.3	421.6	1,808.8	1,669.3	139.52	12.964		
15,800.0	7,660.0	15,442.0	7,402.0	144.0	0.0	81.80	7,793.3	420.7	1,808.8	1,667.5	141.23	12.807		
15,900.0	7,660.0	15,542.0	7,402.0	145.7	0.0	81.80	7,893.3	419.9	1,808.8	1,665.8	142.95	12.654		
16,000.0	7,660.0	15,642.0	7,402.0	147.4	0.0	81.80	7,993.3	419.1	1,808.8	1,664.1	144.66	12.504		
16,100.0	7,660.0	15,742.0	7,402.0	149.1	0.0	81.80	8,093.3	418.3	1,808.8	1,662.4	146.38	12.357		
16,200.0	7,660.0	15,842.0	7,402.0	150.9	0.0	81.80	8,193.3	417.4	1,808.8	1,660.7	148.09	12.214		
16,300.0	7,660.0	15,942.0	7,402.0	152.6	0.0	81.80	8,293.3	416.6	1,808.8	1,659.0	149.81	12.074		
16,400.0	7,660.0	16,042.0	7,402.0	154.3	0.0	81.80	8,393.3	415.8	1,808.8	1,657.3	151.53	11.937		
16,500.0	7,660.0	16,142.0	7,402.0	156.0	0.0	81.80	8,493.3	415.0	1,808.8	1,655.5	153.25	11.803		
16,600.0	7,660.0	16,242.0	7,402.0	157.7	0.0	81.80	8,593.3	414.1	1,808.8	1,653.8	154.96	11.672		
16,700.0	7,660.0	16,342.0	7,402.0	159.5	0.0	81.80	8,693.3	413.3	1,808.8	1,652.1	156.68	11.544		
16,800.0	7,660.0	16,442.0	7,402.0	161.2	0.0	81.80	8,793.3	412.5	1,808.8	1,650.4	158.41	11.419		
16,900.0	7,660.0	16,542.0	7,402.0	162.9	0.0	81.80	8,893.2	411.7	1,808.8	1,648.7	160.13	11.296		
17,000.0	7,660.0	16,642.0	7,402.0	164.6	0.0	81.80	8,993.2	410.8	1,808.8	1,646.9	161.85	11.176		
17,100.0	7,660.0	16,742.0	7,402.0	166.4	0.0	81.80	9,093.2	410.0	1,808.8	1,645.2	163.57	11.058		
17,200.0	7,660.0	16,842.0	7,402.0	168.1	0.0	81.80	9,193.2	409.2	1,808.8	1,643.5	165.29	10.943		
17,300.0	7,660.0	16,942.0	7,402.0	169.8	0.0	81.80	9,293.2	408.3	1,808.8	1,641.8	167.02	10.830		
17,400.0	7,660.0	17,042.0	7,402.0	171.6	0.0	81.80	9,393.2	407.5	1,808.8	1,640.1	168.74	10.719		
17,500.0	7,660.0	17,142.0	7,402.0	173.3	0.0	81.80	9,493.2	406.7	1,808.8	1,638.3	170.47	10.611		
17,600.0	7,660.0	17,242.0	7,402.0	175.0	0.0	81.80	9,593.2	405.9	1,808.8	1,636.6	172.19	10.504		
17,630.0	7,660.0	17,272.0	7,402.0	175.5	0.0	81.80	9,623.2	405.6	1,808.8	1,636.1	172.71	10.473 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	89.70	0.5	90.0	90.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.70	0.5	90.0	90.0	89.7	0.28	324.869		
200.0	200.0	200.0	200.0	1.0	0.0	89.70	0.5	90.0	90.0	89.2	0.80	112.798		
300.0	300.0	300.0	300.0	1.5	0.0	89.70	0.5	90.0	90.0	88.8	1.22	73.499		
400.0	400.0	400.0	400.0	1.9	0.0	89.70	0.5	90.0	90.0	88.4	1.62	55.611		
500.0	500.0	500.0	500.0	2.3	0.0	89.70	0.5	90.0	90.0	88.0	2.00	45.022		
600.0	600.0	600.0	600.0	2.7	0.0	89.70	0.5	90.0	90.0	87.6	2.37	37.931	CC, ES	
700.0	700.0	700.0	700.0	3.0	0.0	-159.24	0.5	90.0	91.6	88.8	2.81	32.552		
800.0	799.8	799.8	799.8	4.0	0.0	-160.31	0.5	90.0	96.5	92.6	3.93	24.591		
900.0	899.5	899.5	899.5	4.9	0.0	-161.86	0.5	90.0	104.8	100.0	4.82	21.745		
1,000.0	998.7	998.7	998.7	5.6	0.0	-163.66	0.5	90.0	116.4	110.8	5.60	20.809		
1,100.0	1,097.5	1,097.5	1,097.5	6.3	0.0	-165.50	0.5	90.0	131.5	125.2	6.29	20.899		
1,200.0	1,195.6	1,195.6	1,195.6	6.8	0.0	-167.25	0.5	90.0	150.0	143.3	6.77	22.169		
1,300.0	1,293.6	1,294.2	1,294.1	7.0	0.0	-168.23	-1.1	90.1	169.7	162.7	7.00	24.232		
1,400.0	1,391.5	1,392.9	1,392.8	7.3	0.0	-167.97	-6.0	90.4	189.0	181.7	7.27	25.988		
1,500.0	1,489.4	1,491.3	1,490.9	7.6	0.0	-166.95	-13.8	91.0	208.0	200.5	7.55	27.542		
1,600.0	1,587.4	1,589.4	1,588.6	7.8	0.0	-166.01	-21.9	91.5	227.1	219.3	7.85	28.951		
1,700.0	1,685.3	1,687.5	1,686.4	8.2	0.0	-165.21	-30.1	92.1	246.3	238.1	8.15	30.229		
1,800.0	1,783.2	1,785.6	1,784.1	8.5	0.0	-164.53	-38.2	92.7	265.4	257.0	8.46	31.389		
1,900.0	1,881.2	1,883.7	1,881.9	8.8	0.0	-163.94	-46.4	93.2	284.6	275.9	8.77	32.441		
2,000.0	1,979.1	1,981.8	1,979.6	9.1	0.0	-163.43	-54.5	93.8	303.9	294.8	9.10	33.396		
2,100.0	2,077.0	2,079.9	2,077.4	9.5	0.0	-162.98	-62.7	94.4	323.1	313.7	9.43	34.265		
2,200.0	2,175.0	2,178.0	2,175.2	9.9	0.0	-162.57	-70.8	94.9	342.4	332.6	9.77	35.057		
2,300.0	2,272.9	2,276.1	2,272.9	10.2	0.0	-162.21	-79.0	95.5	361.7	351.6	10.11	35.779		
2,400.0	2,370.8	2,374.2	2,370.7	10.7	0.0	-161.89	-87.1	96.1	381.0	370.5	10.45	36.439		
2,500.0	2,468.8	2,472.3	2,468.4	11.1	0.0	-161.60	-95.2	96.6	400.3	389.5	10.81	37.044		
2,600.0	2,566.7	2,570.4	2,566.2	11.5	0.0	-161.33	-103.4	97.2	419.6	408.4	11.16	37.599		
2,700.0	2,664.6	2,668.5	2,664.0	12.0	0.0	-161.09	-111.5	97.7	438.9	427.4	11.52	38.109		
2,800.0	2,762.6	2,766.6	2,761.7	12.4	0.0	-160.87	-119.7	98.3	458.2	446.4	11.88	38.579		
2,900.0	2,860.5	2,864.7	2,859.5	12.9	0.0	-160.67	-127.8	98.9	477.6	465.3	12.24	39.013		
3,000.0	2,958.4	2,962.8	2,957.2	13.3	0.0	-160.48	-136.0	99.4	496.9	484.3	12.61	39.415		
3,100.0	3,056.4	3,060.9	3,055.0	13.8	0.0	-160.31	-144.1	100.0	516.3	503.3	12.98	39.787		
3,200.0	3,154.3	3,159.0	3,152.8	14.3	0.0	-160.14	-152.2	100.6	535.6	522.3	13.35	40.132		
3,300.0	3,252.2	3,257.1	3,250.5	14.8	0.0	-160.00	-160.4	101.1	555.0	541.2	13.72	40.453		
3,400.0	3,350.2	3,355.2	3,348.3	15.3	0.0	-159.86	-168.5	101.7	574.3	560.2	14.09	40.753		
3,500.0	3,448.1	3,453.3	3,446.0	15.8	0.0	-159.72	-176.7	102.3	593.7	579.2	14.47	41.032		
3,600.0	3,546.0	3,551.4	3,543.8	16.3	0.0	-159.60	-184.8	102.8	613.0	598.2	14.85	41.293		
3,700.0	3,644.0	3,649.5	3,641.6	16.7	0.0	-159.49	-193.0	103.4	632.4	617.2	15.22	41.538		
3,800.0	3,741.9	3,747.6	3,739.3	17.2	0.0	-159.38	-201.1	103.9	651.8	636.2	15.60	41.767		
3,900.0	3,839.8	3,845.7	3,837.1	17.7	0.0	-159.28	-209.3	104.5	671.1	655.1	15.99	41.982		
4,000.0	3,937.8	3,943.8	3,934.8	18.2	0.0	-159.18	-217.4	105.1	690.5	674.1	16.37	42.185		
4,100.0	4,035.7	4,041.9	4,032.6	18.7	0.0	-159.09	-225.5	105.6	709.9	693.1	16.75	42.376		
4,200.0	4,133.6	4,140.0	4,130.4	19.2	0.0	-159.00	-233.7	106.2	729.3	712.1	17.14	42.555		
4,300.0	4,231.6	4,238.1	4,228.1	19.7	0.0	-158.92	-241.8	106.8	748.6	731.1	17.52	42.725		
4,400.0	4,329.5	4,336.2	4,325.9	20.2	0.0	-158.85	-250.0	107.3	768.0	750.1	17.91	42.886		
4,500.0	4,427.4	4,434.3	4,423.6	20.7	0.0	-158.77	-258.1	107.9	787.4	769.1	18.30	43.037		
4,600.0	4,525.4	4,532.4	4,521.4	21.2	0.0	-158.70	-266.3	108.5	806.8	788.1	18.68	43.181		
4,700.0	4,623.3	4,630.5	4,619.1	21.7	0.0	-158.64	-274.4	109.0	826.1	807.1	19.07	43.318		
4,800.0	4,721.2	4,728.6	4,716.9	22.2	0.0	-158.57	-282.5	109.6	845.5	826.1	19.46	43.447		
4,900.0	4,819.2	4,826.7	4,814.7	22.7	0.0	-158.51	-290.7	110.1	864.9	845.1	19.85	43.570		
5,000.0	4,917.1	4,924.8	4,912.4	23.2	0.0	-158.45	-298.8	110.7	884.3	864.1	20.24	43.687		
5,100.0	5,015.0	5,022.9	5,010.2	23.7	0.0	-158.40	-307.0	111.3	903.7	883.0	20.63	43.799		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	5,113.0	5,121.0	5,107.9	24.2	0.0	-158.34	-315.1	111.8	923.1	902.0	21.02	43.905		
5,300.0	5,210.9	5,219.1	5,205.7	24.7	0.0	-158.29	-323.3	112.4	942.4	921.0	21.42	44.006		
5,400.0	5,308.8	5,317.2	5,303.5	25.2	0.0	-158.24	-331.4	113.0	961.8	940.0	21.81	44.103		
5,500.0	5,406.8	5,415.3	5,401.2	25.7	0.0	-158.20	-339.6	113.5	981.2	959.0	22.20	44.195		
5,600.0	5,504.7	5,513.4	5,499.0	26.2	0.0	-158.15	-347.7	114.1	1,000.6	978.0	22.60	44.284		
5,700.0	5,602.6	5,611.5	5,596.7	26.7	0.0	-158.11	-355.8	114.6	1,020.0	997.0	22.99	44.368		
5,800.0	5,700.6	5,709.6	5,694.5	27.2	0.0	-158.06	-364.0	115.2	1,039.4	1,016.0	23.38	44.449		
5,900.0	5,798.5	5,807.7	5,792.3	27.7	0.0	-158.02	-372.1	115.8	1,058.8	1,035.0	23.78	44.527		
6,000.0	5,896.4	5,905.8	5,890.0	28.2	0.0	-157.99	-380.3	116.3	1,078.2	1,054.0	24.17	44.601		
6,100.0	5,994.4	6,003.9	5,987.8	28.7	0.0	-157.95	-388.4	116.9	1,097.6	1,073.0	24.57	44.673		
6,200.0	6,092.3	6,102.0	6,085.5	29.2	0.0	-157.91	-396.6	117.5	1,117.0	1,092.0	24.96	44.741		
6,300.0	6,190.2	6,200.1	6,183.3	29.7	0.0	-157.88	-404.7	118.0	1,136.3	1,111.0	25.36	44.807		
6,400.0	6,288.2	6,298.2	6,281.1	30.2	0.0	-157.84	-412.8	118.6	1,155.7	1,130.0	25.76	44.871		
6,500.0	6,386.1	6,396.3	6,378.8	30.7	0.0	-157.81	-421.0	119.2	1,175.1	1,149.0	26.15	44.931		
6,600.0	6,484.0	6,494.4	6,476.6	31.2	0.0	-157.78	-429.1	119.7	1,194.5	1,168.0	26.55	44.990		
6,700.0	6,582.0	6,592.5	6,574.3	31.7	0.0	-157.75	-437.3	120.3	1,213.9	1,187.0	26.95	45.046		
6,800.0	6,679.9	6,690.6	6,672.1	32.2	0.0	-157.72	-445.4	120.8	1,233.3	1,206.0	27.35	45.101		
6,900.0	6,777.8	6,788.7	6,769.9	32.7	0.0	-157.69	-453.6	121.4	1,252.7	1,225.0	27.74	45.153		
7,000.0	6,875.8	6,887.4	6,868.2	33.2	0.0	-157.67	-461.5	122.0	1,272.1	1,243.9	28.14	45.202		
7,100.0	6,973.7	6,987.7	6,968.3	33.7	0.0	-157.67	-469.1	122.5	1,291.3	1,262.9	28.50	45.316		
7,200.0	7,071.6	7,081.6	7,060.2	34.2	0.0	-157.64	-476.9	122.8	1,310.8	1,282.1	28.76	45.585		
7,300.0	7,169.6	7,169.7	7,142.5	34.8	0.0	142.88	-408.0	122.9	1,331.0	1,302.0	28.93	46.009		
7,400.0	7,265.4	7,254.5	7,216.3	35.3	0.0	116.29	-366.5	123.0	1,351.2	1,322.2	29.04	46.523		
7,500.0	7,356.1	7,336.7	7,281.3	35.7	0.0	103.34	-316.2	122.9	1,370.8	1,341.7	29.11	47.095		
7,600.0	7,438.9	7,416.9	7,337.1	36.0	0.0	95.68	-258.6	122.7	1,388.9	1,359.8	29.14	47.662		
7,700.0	7,511.4	7,500.0	7,385.9	36.2	0.0	90.56	-191.5	122.4	1,405.0	1,375.8	29.17	48.162		
7,800.0	7,571.2	7,573.5	7,420.5	36.3	0.0	87.05	-126.8	122.0	1,418.4	1,389.2	29.21	48.550		
7,900.0	7,616.7	7,650.0	7,447.5	36.4	0.0	84.65	-55.2	121.6	1,428.6	1,399.3	29.29	48.768		
8,000.0	7,646.4	7,726.8	7,464.7	36.4	0.0	83.17	19.6	121.0	1,435.4	1,405.9	29.43	48.780		
8,100.0	7,659.4	7,803.0	7,471.8	36.3	0.0	82.53	95.4	120.4	1,438.4	1,408.8	29.62	48.568		
8,200.0	7,660.0	7,898.1	7,472.0	36.4	0.0	82.49	190.5	119.6	1,438.5	1,408.7	29.86	48.173		
8,300.0	7,660.0	7,998.1	7,472.0	36.5	0.0	82.49	290.5	118.8	1,438.6	1,408.3	30.21	47.619		
8,400.0	7,660.0	8,098.1	7,472.0	36.6	0.0	82.49	390.5	118.0	1,438.6	1,407.9	30.66	46.927		
8,500.0	7,660.0	8,198.1	7,472.0	36.9	0.0	82.49	490.5	117.2	1,438.6	1,407.4	31.19	46.118		
8,600.0	7,660.0	8,298.1	7,472.0	37.2	0.0	82.49	590.5	116.3	1,438.6	1,406.7	31.82	45.211		
8,700.0	7,660.0	8,398.1	7,472.0	37.7	0.0	82.49	690.5	115.5	1,438.6	1,406.0	32.53	44.227		
8,800.0	7,660.0	8,498.1	7,472.0	38.2	0.0	82.49	790.5	114.7	1,438.6	1,405.2	33.31	43.184		
8,900.0	7,660.0	8,598.1	7,472.0	38.9	0.0	82.49	890.5	113.9	1,438.6	1,404.4	34.17	42.100		
9,000.0	7,660.0	8,698.1	7,472.0	39.6	0.0	82.49	990.5	113.0	1,438.6	1,403.5	35.09	40.991		
9,100.0	7,660.0	8,798.1	7,472.0	40.5	0.0	82.49	1,090.5	112.2	1,438.6	1,402.5	36.08	39.871		
9,200.0	7,660.0	8,898.1	7,472.0	41.4	0.0	82.49	1,190.5	111.4	1,438.6	1,401.4	37.12	38.751		
9,300.0	7,660.0	8,998.1	7,472.0	42.4	0.0	82.49	1,290.5	110.6	1,438.6	1,400.3	38.22	37.641		
9,400.0	7,660.0	9,098.1	7,472.0	43.4	0.0	82.49	1,390.5	109.7	1,438.6	1,399.2	39.36	36.549		
9,500.0	7,660.0	9,198.1	7,472.0	44.5	0.0	82.49	1,490.5	108.9	1,438.6	1,398.0	40.55	35.480		
9,600.0	7,660.0	9,298.1	7,472.0	45.6	0.0	82.49	1,590.5	108.1	1,438.6	1,396.8	41.77	34.438		
9,700.0	7,660.0	9,398.1	7,472.0	46.8	0.0	82.49	1,690.5	107.2	1,438.6	1,395.5	43.04	33.428		
9,800.0	7,660.0	9,498.1	7,472.0	48.1	0.0	82.49	1,790.5	106.4	1,438.6	1,394.2	44.33	32.451		
9,900.0	7,660.0	9,598.1	7,472.0	49.3	0.0	82.49	1,890.5	105.6	1,438.6	1,392.9	45.66	31.508		
10,000.0	7,660.0	9,698.1	7,472.0	50.6	0.0	82.49	1,990.5	104.8	1,438.6	1,391.6	47.01	30.600		
10,100.0	7,660.0	9,798.1	7,472.0	51.9	0.0	82.49	2,090.5	103.9	1,438.6	1,390.2	48.39	29.727		
10,200.0	7,660.0	9,898.1	7,472.0	53.3	0.0	82.49	2,190.5	103.1	1,438.6	1,388.8	49.80	28.889		
10,300.0	7,660.0	9,998.1	7,472.0	54.6	0.0	82.49	2,290.5	102.3	1,438.6	1,387.4	51.22	28.085		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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)						
10,400.0	7,660.0	10,098.1	7,472.0	56.0	0.0	82.49	2,390.5	101.5	1,438.6	1,385.9	52.67	27.315		
10,500.0	7,660.0	10,198.1	7,472.0	57.5	0.0	82.49	2,490.5	100.6	1,438.6	1,384.5	54.13	26.576		
10,600.0	7,660.0	10,298.1	7,472.0	58.9	0.0	82.49	2,590.5	99.8	1,438.6	1,383.0	55.61	25.869		
10,700.0	7,660.0	10,398.1	7,472.0	60.3	0.0	82.49	2,690.5	99.0	1,438.6	1,381.5	57.11	25.192		
10,800.0	7,660.0	10,498.1	7,472.0	61.8	0.0	82.49	2,790.5	98.2	1,438.6	1,380.0	58.62	24.543		
10,900.0	7,660.0	10,598.1	7,472.0	63.3	0.0	82.49	2,890.4	97.3	1,438.6	1,378.5	60.14	23.921		
11,000.0	7,660.0	10,698.1	7,472.0	64.8	0.0	82.49	2,990.4	96.5	1,438.6	1,376.9	61.67	23.326		
11,100.0	7,660.0	10,798.1	7,472.0	66.3	0.0	82.49	3,090.4	95.7	1,438.6	1,375.4	63.22	22.755		
11,200.0	7,660.0	10,898.1	7,472.0	67.8	0.0	82.49	3,190.4	94.8	1,438.6	1,373.8	64.78	22.208		
11,300.0	7,660.0	10,998.1	7,472.0	69.4	0.0	82.49	3,290.4	94.0	1,438.6	1,372.3	66.35	21.683		
11,400.0	7,660.0	11,098.1	7,472.0	70.9	0.0	82.49	3,390.4	93.2	1,438.6	1,370.7	67.92	21.180		
11,500.0	7,660.0	11,198.1	7,472.0	72.5	0.0	82.49	3,490.4	92.4	1,438.6	1,369.1	69.51	20.697		
11,600.0	7,660.0	11,298.1	7,472.0	74.0	0.0	82.49	3,590.4	91.5	1,438.6	1,367.5	71.10	20.234		
11,700.0	7,660.0	11,398.1	7,472.0	75.6	0.0	82.49	3,690.4	90.7	1,438.6	1,365.9	72.70	19.788		
11,800.0	7,660.0	11,498.1	7,472.0	77.2	0.0	82.49	3,790.4	89.9	1,438.6	1,364.3	74.31	19.360		
11,900.0	7,660.0	11,598.1	7,472.0	78.8	0.0	82.49	3,890.4	89.1	1,438.6	1,362.7	75.92	18.949		
12,000.0	7,660.0	11,698.1	7,472.0	80.4	0.0	82.49	3,990.4	88.2	1,438.6	1,361.1	77.54	18.553		
12,100.0	7,660.0	11,798.1	7,472.0	82.0	0.0	82.49	4,090.4	87.4	1,438.6	1,359.4	79.16	18.172		
12,200.0	7,660.0	11,898.1	7,472.0	83.6	0.0	82.49	4,190.4	86.6	1,438.6	1,357.8	80.80	17.806		
12,300.0	7,660.0	11,998.1	7,472.0	85.2	0.0	82.49	4,290.4	85.7	1,438.6	1,356.2	82.43	17.452		
12,400.0	7,660.0	12,098.1	7,472.0	86.8	0.0	82.49	4,390.4	84.9	1,438.6	1,354.5	84.07	17.112		
12,500.0	7,660.0	12,198.1	7,472.0	88.4	0.0	82.49	4,490.4	84.1	1,438.6	1,352.9	85.72	16.783		
12,600.0	7,660.0	12,298.1	7,472.0	90.1	0.0	82.49	4,590.4	83.3	1,438.6	1,351.3	87.37	16.467		
12,700.0	7,660.0	12,398.1	7,472.0	91.7	0.0	82.49	4,690.4	82.4	1,438.6	1,349.6	89.02	16.161		
12,800.0	7,660.0	12,498.1	7,472.0	93.4	0.0	82.49	4,790.4	81.6	1,438.6	1,347.9	90.68	15.865		
12,900.0	7,660.0	12,598.1	7,472.0	95.0	0.0	82.49	4,890.4	80.8	1,438.6	1,346.3	92.34	15.580		
13,000.0	7,660.0	12,698.1	7,472.0	96.7	0.0	82.49	4,990.4	80.0	1,438.6	1,344.6	94.00	15.304		
13,100.0	7,660.0	12,798.1	7,472.0	98.3	0.0	82.49	5,090.4	79.1	1,438.6	1,343.0	95.67	15.038		
13,200.0	7,660.0	12,898.1	7,472.0	100.0	0.0	82.49	5,190.4	78.3	1,438.6	1,341.3	97.34	14.780		
13,300.0	7,660.0	12,998.1	7,472.0	101.6	0.0	82.49	5,290.4	77.5	1,438.6	1,339.6	99.01	14.530		
13,400.0	7,660.0	13,098.1	7,472.0	103.3	0.0	82.49	5,390.4	76.7	1,438.6	1,337.9	100.69	14.288		
13,500.0	7,660.0	13,198.1	7,472.0	105.0	0.0	82.49	5,490.4	75.8	1,438.6	1,336.3	102.37	14.054		
13,600.0	7,660.0	13,298.1	7,472.0	106.6	0.0	82.49	5,590.4	75.0	1,438.6	1,334.6	104.05	13.827		
13,700.0	7,660.0	13,398.1	7,472.0	108.3	0.0	82.49	5,690.4	74.2	1,438.6	1,332.9	105.73	13.607		
13,800.0	7,660.0	13,498.1	7,472.0	110.0	0.0	82.49	5,790.4	73.3	1,438.6	1,331.2	107.41	13.393		
13,900.0	7,660.0	13,598.1	7,472.0	111.7	0.0	82.49	5,890.3	72.5	1,438.6	1,329.5	109.10	13.186		
14,000.0	7,660.0	13,698.1	7,472.0	113.4	0.0	82.49	5,990.3	71.7	1,438.6	1,327.8	110.79	12.985		
14,100.0	7,660.0	13,798.1	7,472.0	115.0	0.0	82.49	6,090.3	70.9	1,438.6	1,326.2	112.48	12.790		
14,200.0	7,660.0	13,898.1	7,472.0	116.7	0.0	82.49	6,190.3	70.0	1,438.6	1,324.5	114.18	12.600		
14,300.0	7,660.0	13,998.1	7,472.0	118.4	0.0	82.49	6,290.3	69.2	1,438.6	1,322.8	115.87	12.416		
14,400.0	7,660.0	14,098.1	7,472.0	120.1	0.0	82.49	6,390.3	68.4	1,438.6	1,321.1	117.57	12.237		
14,500.0	7,660.0	14,198.1	7,472.0	121.8	0.0	82.49	6,490.3	67.6	1,438.6	1,319.4	119.27	12.062		
14,600.0	7,660.0	14,298.1	7,472.0	123.5	0.0	82.49	6,590.3	66.7	1,438.7	1,317.7	120.97	11.893		
14,700.0	7,660.0	14,398.1	7,472.0	125.2	0.0	82.49	6,690.3	65.9	1,438.7	1,316.0	122.67	11.728		
14,800.0	7,660.0	14,498.1	7,472.0	126.9	0.0	82.49	6,790.3	65.1	1,438.7	1,314.3	124.37	11.567		
14,900.0	7,660.0	14,598.1	7,472.0	128.6	0.0	82.49	6,890.3	64.3	1,438.7	1,312.6	126.08	11.411		
15,000.0	7,660.0	14,698.1	7,472.0	130.3	0.0	82.49	6,990.3	63.4	1,438.7	1,310.9	127.78	11.259		
15,100.0	7,660.0	14,798.1	7,472.0	132.0	0.0	82.49	7,090.3	62.6	1,438.7	1,309.2	129.49	11.110		
15,200.0	7,660.0	14,898.1	7,472.0	133.7	0.0	82.49	7,190.3	61.8	1,438.7	1,307.5	131.20	10.965		
15,300.0	7,660.0	14,998.1	7,472.0	135.4	0.0	82.49	7,290.3	60.9	1,438.7	1,305.8	132.91	10.824		
15,400.0	7,660.0	15,098.1	7,472.0	137.1	0.0	82.49	7,390.3	60.1	1,438.7	1,304.0	134.62	10.687		
15,500.0	7,660.0	15,198.1	7,472.0	138.8	0.0	82.49	7,490.3	59.3	1,438.7	1,302.3	136.33	10.553		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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 (°)	Offset Wellbore Centre		Distance				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,660.0	15,298.1	7,472.0	140.6	0.0	82.49	7,590.3	58.5	1,438.7	1,300.6	138.04	10.422		
15,700.0	7,660.0	15,398.1	7,472.0	142.3	0.0	82.49	7,690.3	57.6	1,438.7	1,298.9	139.76	10.294		
15,800.0	7,660.0	15,498.1	7,472.0	144.0	0.0	82.49	7,790.3	56.8	1,438.7	1,297.2	141.47	10.169		
15,900.0	7,660.0	15,598.1	7,472.0	145.7	0.0	82.49	7,890.3	56.0	1,438.7	1,295.5	143.19	10.047		
16,000.0	7,660.0	15,698.1	7,472.0	147.4	0.0	82.49	7,990.3	55.2	1,438.7	1,293.8	144.91	9.928		
16,100.0	7,660.0	15,798.1	7,472.0	149.1	0.0	82.49	8,090.3	54.3	1,438.7	1,292.1	146.62	9.812		
16,200.0	7,660.0	15,898.1	7,472.0	150.9	0.0	82.49	8,190.3	53.5	1,438.7	1,290.3	148.34	9.698		
16,300.0	7,660.0	15,998.1	7,472.0	152.6	0.0	82.49	8,290.3	52.7	1,438.7	1,288.6	150.06	9.587		
16,400.0	7,660.0	16,098.1	7,472.0	154.3	0.0	82.49	8,390.3	51.9	1,438.7	1,286.9	151.78	9.479		
16,500.0	7,660.0	16,198.1	7,472.0	156.0	0.0	82.49	8,490.3	51.0	1,438.7	1,285.2	153.50	9.372		
16,600.0	7,660.0	16,298.1	7,472.0	157.7	0.0	82.49	8,590.3	50.2	1,438.7	1,283.5	155.22	9.268		
16,700.0	7,660.0	16,398.1	7,472.0	159.5	0.0	82.49	8,690.3	49.4	1,438.7	1,281.7	156.95	9.167		
16,800.0	7,660.0	16,498.1	7,472.0	161.2	0.0	82.49	8,790.2	48.5	1,438.7	1,280.0	158.67	9.067		
16,900.0	7,660.0	16,598.1	7,472.0	162.9	0.0	82.49	8,890.2	47.7	1,438.7	1,278.3	160.39	8.970		
17,000.0	7,660.0	16,698.1	7,472.0	164.6	0.0	82.49	8,990.2	46.9	1,438.7	1,276.6	162.12	8.874		
17,100.0	7,660.0	16,798.1	7,472.0	166.4	0.0	82.49	9,090.2	46.1	1,438.7	1,274.8	163.84	8.781		
17,200.0	7,660.0	16,898.1	7,472.0	168.1	0.0	82.49	9,190.2	45.2	1,438.7	1,273.1	165.57	8.690		
17,300.0	7,660.0	16,998.1	7,472.0	169.8	0.0	82.49	9,290.2	44.4	1,438.7	1,271.4	167.29	8.600		
17,400.0	7,660.0	17,098.1	7,472.0	171.6	0.0	82.49	9,390.2	43.6	1,438.7	1,269.7	169.02	8.512		
17,500.0	7,660.0	17,198.1	7,472.0	173.3	0.0	82.49	9,490.2	42.8	1,438.7	1,268.0	170.75	8.426		
17,600.0	7,660.0	17,298.1	7,472.0	175.0	0.0	82.49	9,590.2	41.9	1,438.7	1,266.2	172.47	8.342		
17,630.0	7,660.0	17,328.1	7,472.0	175.5	0.0	82.49	9,620.2	41.7	1,438.7	1,265.7	172.99	8.317 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	270.677		
200.0	200.0	200.0	200.0	1.0	0.0	89.68	0.4	75.0	75.0	74.2	0.80	93.984		
300.0	300.0	300.0	300.0	1.5	0.0	89.68	0.4	75.0	75.0	73.8	1.22	61.241		
400.0	400.0	400.0	400.0	1.9	0.0	89.68	0.4	75.0	75.0	73.4	1.62	46.337		
500.0	500.0	500.0	500.0	2.3	0.0	89.68	0.4	75.0	75.0	73.0	2.00	37.515		
600.0	600.0	600.0	600.0	2.7	0.0	89.68	0.4	75.0	75.0	72.6	2.37	31.606 CC, ES		
700.0	700.0	700.0	700.0	3.0	0.0	-159.33	0.4	75.0	76.6	73.8	2.82	27.214		
800.0	799.8	799.8	799.8	4.0	0.0	-160.60	0.4	75.0	81.5	77.6	3.93	20.757		
900.0	899.5	899.5	899.5	4.9	0.0	-162.39	0.4	75.0	89.8	85.0	4.82	18.621		
1,000.0	998.7	998.7	998.7	5.6	0.0	-164.41	0.4	75.0	101.5	95.9	5.60	18.125		
1,100.0	1,097.5	1,097.5	1,097.5	6.3	0.0	-166.40	0.4	75.0	116.7	110.4	6.30	18.527		
1,200.0	1,195.6	1,198.1	1,198.1	6.8	0.0	-167.66	-1.1	74.4	134.4	127.6	6.78	19.833		
1,300.0	1,293.6	1,299.3	1,299.1	7.0	0.0	-167.63	-6.0	72.3	151.5	144.4	7.01	21.594		
1,400.0	1,391.5	1,399.9	1,399.4	7.3	0.0	-166.62	-13.9	69.1	166.8	159.6	7.29	22.893		
1,500.0	1,489.4	1,498.7	1,497.8	7.6	0.0	-165.60	-22.3	65.6	181.9	174.3	7.57	24.026		
1,600.0	1,587.4	1,597.5	1,596.2	7.8	0.0	-164.73	-30.7	62.1	197.0	189.2	7.87	25.047		
1,700.0	1,685.3	1,696.3	1,694.6	8.2	0.0	-163.99	-39.1	58.6	212.2	204.0	8.17	25.968		
1,800.0	1,783.2	1,795.2	1,792.9	8.5	0.0	-163.35	-47.5	55.1	227.4	218.9	8.48	26.798		
1,900.0	1,881.2	1,894.0	1,891.3	8.8	0.0	-162.78	-56.0	51.6	242.6	233.8	8.81	27.547		
2,000.0	1,979.1	1,992.8	1,989.7	9.1	0.0	-162.29	-64.4	48.1	257.8	248.7	9.13	28.223		
2,100.0	2,077.0	2,091.6	2,088.1	9.5	0.0	-161.85	-72.8	44.7	273.0	263.6	9.47	28.833		
2,200.0	2,175.0	2,190.4	2,186.5	9.9	0.0	-161.45	-81.2	41.2	288.3	278.5	9.81	29.387		
2,300.0	2,272.9	2,289.2	2,284.9	10.2	0.0	-161.10	-89.6	37.7	303.6	293.4	10.16	29.889		
2,400.0	2,370.8	2,388.0	2,383.3	10.7	0.0	-160.78	-98.0	34.2	318.8	308.3	10.51	30.345		
2,500.0	2,468.8	2,486.8	2,481.7	11.1	0.0	-160.48	-106.5	30.7	334.1	323.3	10.86	30.761		
2,600.0	2,566.7	2,585.6	2,580.1	11.5	0.0	-160.22	-114.9	27.2	349.4	338.2	11.22	31.141		
2,700.0	2,664.6	2,684.4	2,678.5	12.0	0.0	-159.98	-123.3	23.7	364.7	353.1	11.58	31.489		
2,800.0	2,762.6	2,783.3	2,776.8	12.4	0.0	-159.75	-131.7	20.2	380.0	368.1	11.95	31.807		
2,900.0	2,860.5	2,882.1	2,875.2	12.9	0.0	-159.54	-140.1	16.7	395.4	383.0	12.32	32.100		
3,000.0	2,958.4	2,980.9	2,973.6	13.3	0.0	-159.35	-148.5	13.3	410.7	398.0	12.69	32.370		
3,100.0	3,056.4	3,079.7	3,072.0	13.8	0.0	-159.18	-157.0	9.8	426.0	412.9	13.06	32.618		
3,200.0	3,154.3	3,178.5	3,170.4	14.3	0.0	-159.01	-165.4	6.3	441.3	427.9	13.44	32.848		
3,300.0	3,252.2	3,277.3	3,268.8	14.8	0.0	-158.86	-173.8	2.8	456.7	442.8	13.81	33.061		
3,400.0	3,350.2	3,376.1	3,367.2	15.3	0.0	-158.71	-182.2	-0.7	472.0	457.8	14.19	33.259		
3,500.0	3,448.1	3,474.9	3,465.6	15.8	0.0	-158.58	-190.6	-4.2	487.3	472.8	14.57	33.443		
3,600.0	3,546.0	3,573.7	3,564.0	16.3	0.0	-158.45	-199.0	-7.7	502.7	487.7	14.95	33.614		
3,700.0	3,644.0	3,672.6	3,662.3	16.7	0.0	-158.33	-207.5	-11.2	518.0	502.7	15.34	33.773		
3,800.0	3,741.9	3,771.4	3,760.7	17.2	0.0	-158.22	-215.9	-14.7	533.3	517.6	15.72	33.922		
3,900.0	3,839.8	3,870.2	3,859.1	17.7	0.0	-158.11	-224.3	-18.1	548.7	532.6	16.11	34.061		
4,000.0	3,937.8	3,969.0	3,957.5	18.2	0.0	-158.01	-232.7	-21.6	564.0	547.5	16.50	34.192		
4,100.0	4,035.7	4,067.8	4,055.9	18.7	0.0	-157.92	-241.1	-25.1	579.4	562.5	16.88	34.315		
4,200.0	4,133.6	4,166.6	4,154.3	19.2	0.0	-157.83	-249.5	-28.6	594.7	577.5	17.27	34.430		
4,300.0	4,231.6	4,265.4	4,252.7	19.7	0.0	-157.74	-258.0	-32.1	610.1	592.4	17.66	34.538		
4,400.0	4,329.5	4,364.2	4,351.1	20.2	0.0	-157.66	-266.4	-35.6	625.4	607.4	18.06	34.640		
4,500.0	4,427.4	4,463.0	4,449.5	20.7	0.0	-157.58	-274.8	-39.1	640.8	622.3	18.45	34.737		
4,600.0	4,525.4	4,561.9	4,547.9	21.2	0.0	-157.51	-283.2	-42.6	656.1	637.3	18.84	34.828		
4,700.0	4,623.3	4,660.7	4,646.2	21.7	0.0	-157.44	-291.6	-46.1	671.5	652.3	19.23	34.914		
4,800.0	4,721.2	4,759.5	4,744.6	22.2	0.0	-157.37	-300.0	-49.5	686.9	667.2	19.63	34.995		
4,900.0	4,819.2	4,858.3	4,843.0	22.7	0.0	-157.31	-308.5	-53.0	702.2	682.2	20.02	35.072		
5,000.0	4,917.1	4,957.1	4,941.4	23.2	0.0	-157.24	-316.9	-56.5	717.6	697.2	20.42	35.145		
5,100.0	5,015.0	5,055.9	5,039.8	23.7	0.0	-157.19	-325.3	-60.0	732.9	712.1	20.81	35.215		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	5,113.0	5,154.7	5,138.2	24.2	0.0	-157.13	-333.7	-63.5	748.3	727.1	21.21	35.281		
5,300.0	5,210.9	5,253.5	5,236.6	24.7	0.0	-157.07	-342.1	-67.0	763.7	742.0	21.61	35.344		
5,400.0	5,308.8	5,352.3	5,335.0	25.2	0.0	-157.02	-350.5	-70.5	779.0	757.0	22.00	35.403		
5,500.0	5,406.8	5,451.1	5,433.4	25.7	0.0	-156.97	-359.0	-74.0	794.4	772.0	22.40	35.460		
5,600.0	5,504.7	5,550.0	5,531.8	26.2	0.0	-156.92	-367.4	-77.4	809.7	786.9	22.80	35.515		
5,700.0	5,602.6	5,648.8	5,630.1	26.7	0.0	-156.88	-375.8	-80.9	825.1	801.9	23.20	35.567		
5,800.0	5,700.6	5,747.6	5,728.5	27.2	0.0	-156.83	-384.2	-84.4	840.5	816.9	23.60	35.616		
5,900.0	5,798.5	5,846.4	5,826.9	27.7	0.0	-156.79	-392.6	-87.9	855.8	831.8	24.00	35.664		
6,000.0	5,896.4	5,945.2	5,925.3	28.2	0.0	-156.75	-401.0	-91.4	871.2	846.8	24.40	35.709		
6,100.0	5,994.4	6,044.0	6,023.7	28.7	0.0	-156.71	-409.5	-94.9	886.6	861.8	24.80	35.752		
6,200.0	6,092.3	6,142.8	6,122.1	29.2	0.0	-156.67	-417.9	-98.4	901.9	876.7	25.20	35.794		
6,300.0	6,190.2	6,241.6	6,220.5	29.7	0.0	-156.63	-426.3	-101.9	917.3	891.7	25.60	35.834		
6,400.0	6,288.2	6,340.4	6,318.9	30.2	0.0	-156.60	-434.7	-105.4	932.7	906.7	26.00	35.872		
6,500.0	6,386.1	6,439.3	6,417.3	30.7	0.0	-156.56	-443.1	-108.8	948.0	921.6	26.40	35.909		
6,600.0	6,484.0	6,538.1	6,515.7	31.2	0.0	-156.53	-451.5	-112.3	963.4	936.6	26.80	35.944		
6,700.0	6,582.0	6,636.9	6,614.0	31.7	0.0	-156.49	-460.0	-115.8	978.8	951.6	27.20	35.978		
6,800.0	6,679.9	6,741.1	6,718.1	32.2	0.0	-156.45	-468.4	-119.3	993.9	966.3	27.60	36.012		
6,900.0	6,777.8	6,841.4	6,816.9	32.7	0.0	-156.41	-476.8	-122.8	1,008.7	980.9	28.00	36.046		
7,000.0	6,875.8	6,931.4	6,902.2	33.2	0.0	-160.15	-418.4	-126.6	1,024.4	996.3	28.03	36.544		
7,100.0	6,973.7	7,009.1	6,971.5	33.7	0.0	-162.37	-383.4	-129.4	1,042.3	1,014.1	28.12	37.070		
7,200.0	7,071.6	7,074.6	7,025.7	34.2	0.0	-172.16	-346.9	-131.6	1,063.8	1,035.7	28.12	37.833		
7,300.0	7,169.6	7,134.8	7,071.6	34.8	0.0	136.35	-308.1	-133.6	1,088.5	1,060.4	28.06	38.789		
7,400.0	7,265.4	7,200.0	7,116.5	35.3	0.0	108.40	-260.8	-135.6	1,114.5	1,086.5	27.99	39.820		
7,500.0	7,356.1	7,250.0	7,147.1	35.7	0.0	94.56	-221.3	-137.1	1,140.2	1,112.4	27.85	40.947		
7,600.0	7,438.9	7,300.0	7,174.1	36.0	0.0	86.09	-179.2	-138.4	1,164.5	1,136.9	27.69	42.061		
7,700.0	7,511.4	7,365.7	7,203.8	36.2	0.0	80.09	-120.7	-140.0	1,186.2	1,158.6	27.57	43.018		
7,800.0	7,571.2	7,422.2	7,223.9	36.3	0.0	75.97	-67.9	-141.1	1,204.3	1,176.8	27.48	43.825		
7,900.0	7,616.7	7,478.5	7,238.7	36.4	0.0	73.16	-13.6	-142.1	1,218.2	1,190.8	27.45	44.381		
8,000.0	7,646.4	7,534.6	7,248.0	36.4	0.0	71.44	41.7	-142.9	1,227.5	1,199.9	27.51	44.626		
8,100.0	7,659.4	7,590.7	7,251.9	36.3	0.0	70.70	97.6	-143.5	1,231.6	1,203.9	27.66	44.529		
8,200.0	7,660.0	7,681.5	7,252.0	36.4	0.0	70.66	188.4	-144.3	1,231.8	1,204.0	27.87	44.206		
8,300.0	7,660.0	7,781.5	7,252.0	36.5	0.0	70.66	288.4	-145.1	1,231.8	1,203.7	28.17	43.730		
8,400.0	7,660.0	7,881.5	7,252.0	36.6	0.0	70.66	388.4	-145.9	1,231.8	1,203.3	28.57	43.114		
8,500.0	7,660.0	7,981.5	7,252.0	36.9	0.0	70.66	488.4	-146.7	1,231.8	1,202.8	29.07	42.380		
8,600.0	7,660.0	8,081.5	7,252.0	37.2	0.0	70.66	588.3	-147.6	1,231.8	1,202.2	29.65	41.547		
8,700.0	7,660.0	8,181.5	7,252.0	37.7	0.0	70.66	688.3	-148.4	1,231.8	1,201.5	30.31	40.635		
8,800.0	7,660.0	8,281.5	7,252.0	38.2	0.0	70.66	788.3	-149.2	1,231.8	1,200.8	31.06	39.663		
8,900.0	7,660.0	8,381.5	7,252.0	38.9	0.0	70.66	888.3	-150.0	1,231.8	1,200.0	31.87	38.650		
9,000.0	7,660.0	8,481.5	7,252.0	39.6	0.0	70.66	988.3	-150.9	1,231.8	1,199.1	32.75	37.609		
9,100.0	7,660.0	8,581.5	7,252.0	40.5	0.0	70.66	1,088.3	-151.7	1,231.8	1,198.1	33.70	36.557		
9,200.0	7,660.0	8,681.5	7,252.0	41.4	0.0	70.66	1,188.3	-152.5	1,231.8	1,197.1	34.70	35.504		
9,300.0	7,660.0	8,781.5	7,252.0	42.4	0.0	70.66	1,288.3	-153.4	1,231.8	1,196.1	35.75	34.461		
9,400.0	7,660.0	8,881.5	7,252.0	43.4	0.0	70.66	1,388.3	-154.2	1,231.8	1,195.0	36.84	33.433		
9,500.0	7,660.0	8,981.5	7,252.0	44.5	0.0	70.66	1,488.3	-155.0	1,231.8	1,193.9	37.99	32.429		
9,600.0	7,660.0	9,081.5	7,252.0	45.6	0.0	70.66	1,588.3	-155.8	1,231.8	1,192.7	39.17	31.451		
9,700.0	7,660.0	9,181.5	7,252.0	46.8	0.0	70.66	1,688.3	-156.7	1,231.8	1,191.5	40.38	30.504		
9,800.0	7,660.0	9,281.5	7,252.0	48.1	0.0	70.66	1,788.3	-157.5	1,231.8	1,190.2	41.63	29.588		
9,900.0	7,660.0	9,381.5	7,252.0	49.3	0.0	70.66	1,888.3	-158.3	1,231.8	1,188.9	42.91	28.706		
10,000.0	7,660.0	9,481.5	7,252.0	50.6	0.0	70.66	1,988.3	-159.1	1,231.9	1,187.6	44.22	27.858		
10,100.0	7,660.0	9,581.5	7,252.0	51.9	0.0	70.66	2,088.3	-160.0	1,231.9	1,186.3	45.55	27.044		
10,200.0	7,660.0	9,681.5	7,252.0	53.3	0.0	70.66	2,188.3	-160.8	1,231.9	1,184.9	46.90	26.263		
10,300.0	7,660.0	9,781.5	7,252.0	54.6	0.0	70.66	2,288.3	-161.6	1,231.9	1,183.6	48.28	25.515		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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)						
10,400.0	7,660.0	9,881.5	7,252.0	56.0	0.0	70.66	2,388.3	-162.5	1,231.9	1,182.2	49.67	24.798		
10,500.0	7,660.0	9,981.5	7,252.0	57.5	0.0	70.66	2,488.3	-163.3	1,231.9	1,180.8	51.09	24.113		
10,600.0	7,660.0	10,081.5	7,252.0	58.9	0.0	70.66	2,588.3	-164.1	1,231.9	1,179.3	52.52	23.457		
10,700.0	7,660.0	10,181.5	7,252.0	60.3	0.0	70.66	2,688.3	-164.9	1,231.9	1,177.9	53.96	22.830		
10,800.0	7,660.0	10,281.5	7,252.0	61.8	0.0	70.66	2,788.3	-165.8	1,231.9	1,176.4	55.42	22.229		
10,900.0	7,660.0	10,381.5	7,252.0	63.3	0.0	70.66	2,888.3	-166.6	1,231.9	1,175.0	56.89	21.655		
11,000.0	7,660.0	10,481.5	7,252.0	64.8	0.0	70.66	2,988.3	-167.4	1,231.9	1,173.5	58.37	21.106		
11,100.0	7,660.0	10,581.5	7,252.0	66.3	0.0	70.66	3,088.3	-168.2	1,231.9	1,172.0	59.86	20.579		
11,200.0	7,660.0	10,681.5	7,252.0	67.8	0.0	70.66	3,188.3	-169.1	1,231.9	1,170.5	61.36	20.076		
11,300.0	7,660.0	10,781.5	7,252.0	69.4	0.0	70.66	3,288.3	-169.9	1,231.9	1,169.0	62.87	19.593		
11,400.0	7,660.0	10,881.5	7,252.0	70.9	0.0	70.66	3,388.3	-170.7	1,231.9	1,167.5	64.39	19.130		
11,500.0	7,660.0	10,981.5	7,252.0	72.5	0.0	70.66	3,488.3	-171.6	1,231.9	1,165.9	65.92	18.687		
11,600.0	7,660.0	11,081.5	7,252.0	74.0	0.0	70.66	3,588.2	-172.4	1,231.9	1,164.4	67.46	18.261		
11,700.0	7,660.0	11,181.5	7,252.0	75.6	0.0	70.66	3,688.2	-173.2	1,231.9	1,162.9	69.00	17.853		
11,800.0	7,660.0	11,281.5	7,252.0	77.2	0.0	70.66	3,788.2	-174.0	1,231.9	1,161.3	70.55	17.461		
11,900.0	7,660.0	11,381.5	7,252.0	78.8	0.0	70.66	3,888.2	-174.9	1,231.9	1,159.8	72.11	17.084		
12,000.0	7,660.0	11,481.5	7,252.0	80.4	0.0	70.66	3,988.2	-175.7	1,231.9	1,158.2	73.67	16.722		
12,100.0	7,660.0	11,581.5	7,252.0	82.0	0.0	70.66	4,088.2	-176.5	1,231.9	1,156.6	75.23	16.374		
12,200.0	7,660.0	11,681.5	7,252.0	83.6	0.0	70.66	4,188.2	-177.3	1,231.9	1,155.1	76.81	16.039		
12,300.0	7,660.0	11,781.5	7,252.0	85.2	0.0	70.66	4,288.2	-178.2	1,231.9	1,153.5	78.38	15.716		
12,400.0	7,660.0	11,881.5	7,252.0	86.8	0.0	70.66	4,388.2	-179.0	1,231.9	1,151.9	79.96	15.405		
12,500.0	7,660.0	11,981.5	7,252.0	88.4	0.0	70.66	4,488.2	-179.8	1,231.9	1,150.3	81.55	15.106		
12,600.0	7,660.0	12,081.5	7,252.0	90.1	0.0	70.66	4,588.2	-180.6	1,231.9	1,148.7	83.14	14.817		
12,700.0	7,660.0	12,181.5	7,252.0	91.7	0.0	70.66	4,688.2	-181.5	1,231.9	1,147.1	84.73	14.538		
12,800.0	7,660.0	12,281.5	7,252.0	93.4	0.0	70.66	4,788.2	-182.3	1,231.9	1,145.6	86.33	14.270		
12,900.0	7,660.0	12,381.5	7,252.0	95.0	0.0	70.66	4,888.2	-183.1	1,231.9	1,144.0	87.93	14.010		
13,000.0	7,660.0	12,481.5	7,252.0	96.7	0.0	70.66	4,988.2	-184.0	1,231.9	1,142.4	89.53	13.759		
13,100.0	7,660.0	12,581.5	7,252.0	98.3	0.0	70.66	5,088.2	-184.8	1,231.9	1,140.7	91.14	13.517		
13,200.0	7,660.0	12,681.5	7,252.0	100.0	0.0	70.66	5,188.2	-185.6	1,231.9	1,139.1	92.75	13.282		
13,300.0	7,660.0	12,781.5	7,252.0	101.6	0.0	70.66	5,288.2	-186.4	1,231.9	1,137.5	94.36	13.055		
13,400.0	7,660.0	12,881.5	7,252.0	103.3	0.0	70.66	5,388.2	-187.3	1,231.9	1,135.9	95.97	12.836		
13,500.0	7,660.0	12,981.5	7,252.0	105.0	0.0	70.66	5,488.2	-188.1	1,231.9	1,134.3	97.59	12.623		
13,600.0	7,660.0	13,081.5	7,252.0	106.6	0.0	70.66	5,588.2	-188.9	1,231.9	1,132.7	99.21	12.417		
13,700.0	7,660.0	13,181.5	7,252.0	108.3	0.0	70.66	5,688.2	-189.7	1,231.9	1,131.1	100.83	12.217		
13,800.0	7,660.0	13,281.5	7,252.0	110.0	0.0	70.66	5,788.2	-190.6	1,231.9	1,129.4	102.45	12.024		
13,900.0	7,660.0	13,381.5	7,252.0	111.7	0.0	70.66	5,888.2	-191.4	1,231.9	1,127.8	104.08	11.836		
14,000.0	7,660.0	13,481.5	7,252.0	113.4	0.0	70.66	5,988.2	-192.2	1,231.9	1,126.2	105.71	11.654		
14,100.0	7,660.0	13,581.5	7,252.0	115.0	0.0	70.66	6,088.2	-193.1	1,231.9	1,124.6	107.34	11.477		
14,200.0	7,660.0	13,681.5	7,252.0	116.7	0.0	70.66	6,188.2	-193.9	1,231.9	1,122.9	108.97	11.305		
14,300.0	7,660.0	13,781.5	7,252.0	118.4	0.0	70.66	6,288.2	-194.7	1,231.9	1,121.3	110.60	11.138		
14,400.0	7,660.0	13,881.5	7,252.0	120.1	0.0	70.66	6,388.2	-195.5	1,231.9	1,119.7	112.23	10.976		
14,500.0	7,660.0	13,981.5	7,252.0	121.8	0.0	70.66	6,488.1	-196.4	1,231.9	1,118.0	113.87	10.818		
14,600.0	7,660.0	14,081.5	7,252.0	123.5	0.0	70.66	6,588.1	-197.2	1,231.9	1,116.4	115.51	10.665		
14,700.0	7,660.0	14,181.5	7,252.0	125.2	0.0	70.66	6,688.1	-198.0	1,231.9	1,114.8	117.15	10.516		
14,800.0	7,660.0	14,281.5	7,252.0	126.9	0.0	70.66	6,788.1	-198.8	1,231.9	1,113.1	118.79	10.371		
14,900.0	7,660.0	14,381.5	7,252.0	128.6	0.0	70.66	6,888.1	-199.7	1,231.9	1,111.5	120.43	10.229		
15,000.0	7,660.0	14,481.5	7,252.0	130.3	0.0	70.66	6,988.1	-200.5	1,231.9	1,109.8	122.07	10.092		
15,100.0	7,660.0	14,581.5	7,252.0	132.0	0.0	70.66	7,088.1	-201.3	1,231.9	1,108.2	123.71	9.958		
15,200.0	7,660.0	14,681.5	7,252.0	133.7	0.0	70.66	7,188.1	-202.2	1,231.9	1,106.6	125.36	9.827		
15,300.0	7,660.0	14,781.5	7,252.0	135.4	0.0	70.66	7,288.1	-203.0	1,231.9	1,104.9	127.00	9.700		
15,400.0	7,660.0	14,881.5	7,252.0	137.1	0.0	70.66	7,388.1	-203.8	1,231.9	1,103.3	128.65	9.576		
15,500.0	7,660.0	14,981.5	7,252.0	138.8	0.0	70.66	7,488.1	-204.6	1,231.9	1,101.6	130.30	9.455		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	7,660.0	15,081.5	7,252.0	140.6	0.0	70.66	7,588.1	-205.5	1,231.9	1,100.0	131.95	9.336		
15,700.0	7,660.0	15,181.5	7,252.0	142.3	0.0	70.66	7,688.1	-206.3	1,231.9	1,098.3	133.60	9.221		
15,800.0	7,660.0	15,281.5	7,252.0	144.0	0.0	70.66	7,788.1	-207.1	1,231.9	1,096.7	135.25	9.109		
15,900.0	7,660.0	15,381.5	7,252.0	145.7	0.0	70.66	7,888.1	-207.9	1,231.9	1,095.0	136.90	8.999		
16,000.0	7,660.0	15,481.5	7,252.0	147.4	0.0	70.66	7,988.1	-208.8	1,231.9	1,093.4	138.55	8.891		
16,100.0	7,660.0	15,581.5	7,252.0	149.1	0.0	70.66	8,088.1	-209.6	1,231.9	1,091.7	140.21	8.787		
16,200.0	7,660.0	15,681.5	7,252.0	150.9	0.0	70.66	8,188.1	-210.4	1,231.9	1,090.1	141.86	8.684		
16,300.0	7,660.0	15,781.5	7,252.0	152.6	0.0	70.66	8,288.1	-211.3	1,231.9	1,088.4	143.51	8.584		
16,400.0	7,660.0	15,881.5	7,252.0	154.3	0.0	70.66	8,388.1	-212.1	1,231.9	1,086.8	145.17	8.486		
16,500.0	7,660.0	15,981.5	7,252.0	156.0	0.0	70.66	8,488.1	-212.9	1,231.9	1,085.1	146.83	8.390		
16,600.0	7,660.0	16,081.5	7,252.0	157.7	0.0	70.66	8,588.1	-213.7	1,231.9	1,083.4	148.48	8.297		
16,700.0	7,660.0	16,181.5	7,252.0	159.5	0.0	70.66	8,688.1	-214.6	1,231.9	1,081.8	150.14	8.205		
16,800.0	7,660.0	16,281.5	7,252.0	161.2	0.0	70.66	8,788.1	-215.4	1,231.9	1,080.1	151.80	8.116		
16,900.0	7,660.0	16,381.5	7,252.0	162.9	0.0	70.66	8,888.1	-216.2	1,231.9	1,078.5	153.46	8.028		
17,000.0	7,660.0	16,481.5	7,252.0	164.6	0.0	70.66	8,988.1	-217.0	1,231.9	1,076.8	155.12	7.942		
17,100.0	7,660.0	16,581.5	7,252.0	166.4	0.0	70.66	9,088.1	-217.9	1,231.9	1,075.2	156.78	7.858		
17,200.0	7,660.0	16,681.5	7,252.0	168.1	0.0	70.66	9,188.1	-218.7	1,231.9	1,073.5	158.44	7.775		
17,300.0	7,660.0	16,781.5	7,252.0	169.8	0.0	70.66	9,288.1	-219.5	1,231.9	1,071.8	160.10	7.695		
17,400.0	7,660.0	16,881.5	7,252.0	171.6	0.0	70.66	9,388.0	-220.4	1,231.9	1,070.2	161.76	7.616		
17,500.0	7,660.0	16,981.5	7,252.0	173.3	0.0	70.66	9,488.0	-221.2	1,231.9	1,068.5	163.42	7.538		
17,600.0	7,660.0	17,081.5	7,252.0	175.0	0.0	70.66	9,588.0	-222.0	1,231.9	1,066.9	165.09	7.462		
17,630.0	7,660.0	17,111.5	7,252.0	175.5	0.0	70.66	9,618.0	-222.3	1,231.9	1,066.4	165.58	7.440 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	0.7	120.0	120.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.68	0.7	120.0	120.0	119.7	0.28	433.081		
200.0	200.0	200.0	200.0	1.0	0.0	89.68	0.7	120.0	120.0	119.2	0.80	150.375		
300.0	300.0	300.0	300.0	1.5	0.0	89.68	0.7	120.0	120.0	118.8	1.22	97.986		
400.0	400.0	400.0	400.0	1.9	0.0	89.68	0.7	120.0	120.0	118.4	1.62	74.140		
500.0	500.0	500.0	500.0	2.3	0.0	89.68	0.7	120.0	120.0	118.0	2.00	60.025		
600.0	600.0	600.0	600.0	2.7	0.0	89.68	0.7	120.0	120.0	117.6	2.37	50.571	CC, ES	
700.0	700.0	700.0	700.0	3.0	0.0	-159.16	0.7	120.0	121.6	118.8	2.81	43.223		
800.0	799.8	799.8	799.8	4.0	0.0	-159.97	0.7	120.0	126.5	122.6	3.92	32.258		
900.0	899.5	899.5	899.5	4.9	0.0	-161.18	0.7	120.0	134.8	129.9	4.81	27.997		
1,000.0	998.7	998.7	998.7	5.6	0.0	-162.65	0.7	120.0	146.4	140.8	5.59	26.187		
1,100.0	1,097.5	1,097.5	1,097.5	6.3	0.0	-164.22	0.7	120.0	161.4	155.1	6.29	25.661		
1,200.0	1,195.6	1,195.6	1,195.6	6.8	0.0	-165.80	0.7	120.0	179.8	173.0	6.77	26.570		
1,300.0	1,293.6	1,289.0	1,289.0	7.0	0.0	-166.88	-0.1	121.1	200.5	193.5	6.99	28.687		
1,400.0	1,391.5	1,381.4	1,381.3	7.3	0.0	-167.21	-2.6	124.7	223.6	216.4	7.24	30.879		
1,500.0	1,489.4	1,472.7	1,472.3	7.6	0.0	-167.00	-6.7	130.7	248.9	241.4	7.50	33.207		
1,600.0	1,587.4	1,562.7	1,561.8	7.8	0.0	-166.40	-12.4	138.9	276.5	268.7	7.75	35.655		
1,700.0	1,685.3	1,655.1	1,653.2	8.2	0.0	-165.56	-19.6	149.3	306.0	298.0	8.03	38.096		
1,800.0	1,783.2	1,750.4	1,747.6	8.5	0.0	-164.80	-27.3	160.4	335.8	327.5	8.33	40.301		
1,900.0	1,881.2	1,845.8	1,842.0	8.8	0.0	-164.17	-34.9	171.4	365.7	357.0	8.64	42.320		
2,000.0	1,979.1	1,941.2	1,936.5	9.1	0.0	-163.63	-42.6	182.5	395.6	386.6	8.96	44.170		
2,100.0	2,077.0	2,036.5	2,030.9	9.5	0.0	-163.17	-50.3	193.5	425.5	416.2	9.28	45.867		
2,200.0	2,175.0	2,131.9	2,125.3	9.9	0.0	-162.77	-57.9	204.6	455.5	445.9	9.60	47.425		
2,300.0	2,272.9	2,227.3	2,219.7	10.2	0.0	-162.42	-65.6	215.7	485.4	475.5	9.94	48.858		
2,400.0	2,370.8	2,322.6	2,314.1	10.7	0.0	-162.11	-73.3	226.7	515.4	505.1	10.27	50.179		
2,500.0	2,468.8	2,418.0	2,408.5	11.1	0.0	-161.83	-80.9	237.8	545.4	534.8	10.61	51.397		
2,600.0	2,566.7	2,513.4	2,502.9	11.5	0.0	-161.58	-88.6	248.8	575.4	564.5	10.96	52.523		
2,700.0	2,664.6	2,608.7	2,597.3	12.0	0.0	-161.36	-96.2	259.9	605.4	594.1	11.30	53.566		
2,800.0	2,762.6	2,704.1	2,691.7	12.4	0.0	-161.16	-103.9	271.0	635.5	623.8	11.65	54.533		
2,900.0	2,860.5	2,799.4	2,786.1	12.9	0.0	-160.97	-111.6	282.0	665.5	653.5	12.01	55.432		
3,000.0	2,958.4	2,894.8	2,880.6	13.3	0.0	-160.80	-119.2	293.1	695.5	683.2	12.36	56.269		
3,100.0	3,056.4	2,990.2	2,975.0	13.8	0.0	-160.65	-126.9	304.2	725.6	712.8	12.72	57.049		
3,200.0	3,154.3	3,085.5	3,069.4	14.3	0.0	-160.51	-134.5	315.2	755.6	742.5	13.08	57.778		
3,300.0	3,252.2	3,180.9	3,163.8	14.8	0.0	-160.38	-142.2	326.3	785.6	772.2	13.44	58.460		
3,400.0	3,350.2	3,276.3	3,258.2	15.3	0.0	-160.25	-149.9	337.3	815.7	801.9	13.80	59.099		
3,500.0	3,448.1	3,371.6	3,352.6	15.8	0.0	-160.14	-157.5	348.4	845.7	831.6	14.17	59.698		
3,600.0	3,546.0	3,467.0	3,447.0	16.3	0.0	-160.04	-165.2	359.5	875.8	861.3	14.53	60.261		
3,700.0	3,644.0	3,562.4	3,541.4	16.7	0.0	-159.94	-172.9	370.5	905.9	891.0	14.90	60.791		
3,800.0	3,741.9	3,657.7	3,635.8	17.2	0.0	-159.85	-180.5	381.6	935.9	920.7	15.27	61.291		
3,900.0	3,839.8	3,753.1	3,730.3	17.7	0.0	-159.76	-188.2	392.6	966.0	950.3	15.64	61.762		
4,000.0	3,937.8	3,848.5	3,824.7	18.2	0.0	-159.68	-195.8	403.7	996.0	980.0	16.01	62.207		
4,100.0	4,035.7	3,943.8	3,919.1	18.7	0.0	-159.60	-203.5	414.8	1,026.1	1,009.7	16.38	62.628		
4,200.0	4,133.6	4,039.2	4,013.5	19.2	0.0	-159.53	-211.2	425.8	1,056.2	1,039.4	16.76	63.026		
4,300.0	4,231.6	4,134.5	4,107.9	19.7	0.0	-159.46	-218.8	436.9	1,086.3	1,069.1	17.13	63.404		
4,400.0	4,329.5	4,229.9	4,202.3	20.2	0.0	-159.40	-226.5	447.9	1,116.3	1,098.8	17.51	63.763		
4,500.0	4,427.4	4,325.3	4,296.7	20.7	0.0	-159.34	-234.1	459.0	1,146.4	1,128.5	17.88	64.103		
4,600.0	4,525.4	4,420.6	4,391.1	21.2	0.0	-159.28	-241.8	470.1	1,176.5	1,158.2	18.26	64.427		
4,700.0	4,623.3	4,516.0	4,485.5	21.7	0.0	-159.23	-249.5	481.1	1,206.5	1,187.9	18.64	64.736		
4,800.0	4,721.2	4,611.4	4,579.9	22.2	0.0	-159.17	-257.1	492.2	1,236.6	1,217.6	19.02	65.029		
4,900.0	4,819.2	4,706.7	4,674.4	22.7	0.0	-159.12	-264.8	503.3	1,266.7	1,247.3	19.40	65.309		
5,000.0	4,917.1	4,802.1	4,768.8	23.2	0.0	-159.08	-272.5	514.3	1,296.8	1,277.0	19.77	65.577		
5,100.0	5,015.0	4,897.5	4,863.2	23.7	0.0	-159.03	-280.1	525.4	1,326.8	1,306.7	20.16	65.832		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	5,113.0	4,992.8	4,957.6	24.2	0.0	-158.99	-287.8	536.4	1,356.9	1,336.4	20.54	66.076		
5,300.0	5,210.9	5,088.2	5,052.0	24.7	0.0	-158.95	-295.4	547.5	1,387.0	1,366.1	20.92	66.310		
5,400.0	5,308.8	5,183.6	5,146.4	25.2	0.0	-158.91	-303.1	558.6	1,417.1	1,395.8	21.30	66.533		
5,500.0	5,406.8	5,278.9	5,240.8	25.7	0.0	-158.87	-310.8	569.6	1,447.2	1,425.5	21.68	66.747		
5,600.0	5,504.7	5,374.3	5,335.2	26.2	0.0	-158.83	-318.4	580.7	1,477.2	1,455.2	22.06	66.953		
5,700.0	5,602.6	5,469.6	5,429.6	26.7	0.0	-158.80	-326.1	591.7	1,507.3	1,484.9	22.45	67.149		
5,800.0	5,700.6	5,565.0	5,524.0	27.2	0.0	-158.77	-333.7	602.8	1,537.4	1,514.6	22.83	67.338		
5,900.0	5,798.5	5,660.4	5,618.5	27.7	0.0	-158.73	-341.4	613.9	1,567.5	1,544.3	23.22	67.520		
6,000.0	5,896.4	5,755.7	5,712.9	28.2	0.0	-158.70	-349.1	624.9	1,597.6	1,574.0	23.60	67.695		
6,100.0	5,994.4	5,851.1	5,807.3	28.7	0.0	-158.67	-356.7	636.0	1,627.7	1,603.7	23.98	67.862		
6,200.0	6,092.3	5,946.5	5,901.7	29.2	0.0	-158.64	-364.4	647.0	1,657.7	1,633.4	24.37	68.024		
6,300.0	6,190.2	6,041.8	5,996.1	29.7	0.0	-158.62	-372.0	658.1	1,687.8	1,663.1	24.76	68.179		
6,400.0	6,288.2	6,137.2	6,090.5	30.2	0.0	-158.59	-379.7	669.2	1,717.9	1,692.8	25.14	68.329		
6,500.0	6,386.1	6,232.6	6,184.9	30.7	0.0	-158.56	-387.4	680.2	1,748.0	1,722.5	25.53	68.473		
6,600.0	6,484.0	6,327.9	6,279.3	31.2	0.0	-158.54	-395.0	691.3	1,778.1	1,752.2	25.91	68.612		
6,700.0	6,582.0	6,423.3	6,373.7	31.7	0.0	-158.51	-402.7	702.3	1,808.2	1,781.9	26.30	68.746		
6,800.0	6,679.9	6,518.7	6,468.2	32.2	0.0	-158.49	-410.4	713.4	1,838.2	1,811.6	26.69	68.875		
6,900.0	6,777.8	6,614.0	6,562.6	32.7	0.0	-158.47	-418.0	724.5	1,868.3	1,841.3	27.08	69.000		
7,000.0	6,875.8	6,709.4	6,657.0	33.2	0.0	-158.45	-425.7	735.5	1,898.4	1,871.0	27.47	69.121		
7,100.0	6,973.7	6,804.7	6,751.4	33.7	0.0	-158.42	-433.3	746.6	1,928.5	1,900.7	27.85	69.237		
7,200.0	7,071.6	6,900.1	6,845.8	34.2	0.0	-158.40	-441.0	757.7	1,958.6	1,930.4	28.24	69.360		
7,300.0	7,169.6	6,994.6	6,939.3	34.8	0.0	144.10	-448.6	768.6	1,988.7	1,960.1	28.59	69.548		
7,400.0	7,265.4	7,085.6	7,029.4	35.3	0.0	118.31	-455.9	779.2	2,018.4	1,989.4	28.91	69.809		
7,500.0	7,356.1	7,180.1	7,123.2	35.7	0.0	106.37	-458.3	790.1	2,047.2	2,018.0	29.20	70.111		
7,600.0	7,438.9	7,284.4	7,225.5	36.0	0.0	99.69	-443.2	801.9	2,074.5	2,045.1	29.46	70.426		
7,700.0	7,511.4	7,400.2	7,333.9	36.2	0.0	95.54	-405.0	814.2	2,099.3	2,069.7	29.68	70.729		
7,800.0	7,571.2	7,530.6	7,444.0	36.3	0.0	92.91	-336.7	826.5	2,120.7	2,090.8	29.87	70.986		
7,900.0	7,616.7	7,678.1	7,546.5	36.4	0.0	91.32	-231.8	837.5	2,137.6	2,107.6	30.04	71.149		
8,000.0	7,646.4	7,842.3	7,625.2	36.4	0.0	90.46	-88.5	845.5	2,149.0	2,118.7	30.21	71.129		
8,100.0	7,659.4	8,017.9	7,661.1	36.3	0.0	90.08	82.7	848.3	2,153.9	2,123.5	30.42	70.812		
8,200.0	7,660.0	8,131.8	7,662.0	36.4	0.0	90.05	196.6	847.5	2,154.0	2,123.4	30.69	70.191		
8,300.0	7,660.0	8,231.8	7,662.0	36.5	0.0	90.05	296.6	846.6	2,154.1	2,123.0	31.06	69.349		
8,400.0	7,660.0	8,331.8	7,662.0	36.6	0.0	90.05	396.6	845.8	2,154.1	2,122.5	31.53	68.318		
8,500.0	7,660.0	8,431.8	7,662.0	36.9	0.0	90.05	496.5	845.0	2,154.1	2,122.0	32.09	67.128		
8,600.0	7,660.0	8,531.8	7,662.0	37.2	0.0	90.05	596.5	844.2	2,154.1	2,121.3	32.73	65.805		
8,700.0	7,660.0	8,631.8	7,662.0	37.7	0.0	90.05	696.5	843.3	2,154.1	2,120.6	33.46	64.378		
8,800.0	7,660.0	8,731.8	7,662.0	38.2	0.0	90.05	796.5	842.5	2,154.1	2,119.8	34.26	62.872		
8,900.0	7,660.0	8,831.8	7,662.0	38.9	0.0	90.05	896.5	841.7	2,154.1	2,118.9	35.13	61.312		
9,000.0	7,660.0	8,931.8	7,662.0	39.6	0.0	90.05	996.5	840.8	2,154.1	2,118.0	36.07	59.719		
9,100.0	7,660.0	9,031.8	7,662.0	40.5	0.0	90.05	1,096.5	840.0	2,154.1	2,117.0	37.07	58.111		
9,200.0	7,660.0	9,131.8	7,662.0	41.4	0.0	90.05	1,196.5	839.2	2,154.1	2,115.9	38.12	56.505		
9,300.0	7,660.0	9,231.8	7,662.0	42.4	0.0	90.05	1,296.5	838.4	2,154.1	2,114.8	39.23	54.914		
9,400.0	7,660.0	9,331.8	7,662.0	43.4	0.0	90.05	1,396.5	837.5	2,154.1	2,113.7	40.38	53.348		
9,500.0	7,660.0	9,431.8	7,662.0	44.5	0.0	90.05	1,496.5	836.7	2,154.1	2,112.5	41.57	51.814		
9,600.0	7,660.0	9,531.8	7,662.0	45.6	0.0	90.05	1,596.5	835.9	2,154.1	2,111.3	42.81	50.320		
9,700.0	7,660.0	9,631.8	7,662.0	46.8	0.0	90.05	1,696.5	835.1	2,154.1	2,110.0	44.08	48.870		
9,800.0	7,660.0	9,731.8	7,662.0	48.1	0.0	90.05	1,796.5	834.2	2,154.1	2,108.7	45.38	47.466		
9,900.0	7,660.0	9,831.8	7,662.0	49.3	0.0	90.05	1,896.5	833.4	2,154.1	2,107.4	46.72	46.111		
10,000.0	7,660.0	9,931.8	7,662.0	50.6	0.0	90.05	1,996.5	832.6	2,154.1	2,106.0	48.08	44.805		
10,100.0	7,660.0	10,031.8	7,662.0	51.9	0.0	90.05	2,096.5	831.7	2,154.1	2,104.6	49.46	43.548		
10,200.0	7,660.0	10,131.8	7,662.0	53.3	0.0	90.05	2,196.5	830.9	2,154.1	2,103.2	50.88	42.340		
10,300.0	7,660.0	10,231.8	7,662.0	54.6	0.0	90.05	2,296.5	830.1	2,154.1	2,101.8	52.31	41.181		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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)						
10,400.0	7,660.0	10,331.8	7,662.0	56.0	0.0	90.05	2,396.5	829.3	2,154.1	2,100.3	53.76	40.069		
10,500.0	7,660.0	10,431.8	7,662.0	57.5	0.0	90.05	2,496.5	828.4	2,154.1	2,098.9	55.23	39.002		
10,600.0	7,660.0	10,531.8	7,662.0	58.9	0.0	90.05	2,596.5	827.6	2,154.1	2,097.4	56.72	37.979		
10,700.0	7,660.0	10,631.8	7,662.0	60.3	0.0	90.05	2,696.5	826.8	2,154.1	2,095.9	58.22	36.999		
10,800.0	7,660.0	10,731.8	7,662.0	61.8	0.0	90.05	2,796.5	826.0	2,154.1	2,094.4	59.74	36.059		
10,900.0	7,660.0	10,831.8	7,662.0	63.3	0.0	90.05	2,896.5	825.1	2,154.1	2,092.8	61.27	35.158		
11,000.0	7,660.0	10,931.8	7,662.0	64.8	0.0	90.05	2,996.5	824.3	2,154.1	2,091.3	62.81	34.295		
11,100.0	7,660.0	11,031.8	7,662.0	66.3	0.0	90.05	3,096.5	823.5	2,154.1	2,089.7	64.37	33.467		
11,200.0	7,660.0	11,131.8	7,662.0	67.8	0.0	90.05	3,196.5	822.7	2,154.1	2,088.2	65.93	32.672		
11,300.0	7,660.0	11,231.8	7,662.0	69.4	0.0	90.05	3,296.5	821.8	2,154.1	2,086.6	67.51	31.910		
11,400.0	7,660.0	11,331.8	7,662.0	70.9	0.0	90.05	3,396.5	821.0	2,154.1	2,085.0	69.09	31.178		
11,500.0	7,660.0	11,431.8	7,662.0	72.5	0.0	90.05	3,496.4	820.2	2,154.1	2,083.4	70.68	30.476		
11,600.0	7,660.0	11,531.8	7,662.0	74.0	0.0	90.05	3,596.4	819.3	2,154.1	2,081.8	72.28	29.801		
11,700.0	7,660.0	11,631.8	7,662.0	75.6	0.0	90.05	3,696.4	818.5	2,154.1	2,080.2	73.89	29.152		
11,800.0	7,660.0	11,731.8	7,662.0	77.2	0.0	90.05	3,796.4	817.7	2,154.1	2,078.6	75.51	28.529		
11,900.0	7,660.0	11,831.8	7,662.0	78.8	0.0	90.05	3,896.4	816.9	2,154.1	2,077.0	77.13	27.929		
12,000.0	7,660.0	11,931.8	7,662.0	80.4	0.0	90.05	3,996.4	816.0	2,154.1	2,075.4	78.76	27.351		
12,100.0	7,660.0	12,031.8	7,662.0	82.0	0.0	90.05	4,096.4	815.2	2,154.1	2,073.7	80.39	26.796		
12,200.0	7,660.0	12,131.8	7,662.0	83.6	0.0	90.05	4,196.4	814.4	2,154.1	2,072.1	82.03	26.260		
12,300.0	7,660.0	12,231.8	7,662.0	85.2	0.0	90.05	4,296.4	813.6	2,154.1	2,070.4	83.67	25.744		
12,400.0	7,660.0	12,331.8	7,662.0	86.8	0.0	90.05	4,396.4	812.7	2,154.1	2,068.8	85.32	25.246		
12,500.0	7,660.0	12,431.8	7,662.0	88.4	0.0	90.05	4,496.4	811.9	2,154.1	2,067.1	86.98	24.766		
12,600.0	7,660.0	12,531.8	7,662.0	90.1	0.0	90.05	4,596.4	811.1	2,154.1	2,065.5	88.64	24.303		
12,700.0	7,660.0	12,631.8	7,662.0	91.7	0.0	90.05	4,696.4	810.3	2,154.1	2,063.8	90.30	23.856		
12,800.0	7,660.0	12,731.8	7,662.0	93.4	0.0	90.05	4,796.4	809.4	2,154.1	2,062.2	91.96	23.424		
12,900.0	7,660.0	12,831.8	7,662.0	95.0	0.0	90.05	4,896.4	808.6	2,154.1	2,060.5	93.63	23.006		
13,000.0	7,660.0	12,931.8	7,662.0	96.7	0.0	90.05	4,996.4	807.8	2,154.1	2,058.8	95.31	22.602		
13,100.0	7,660.0	13,031.8	7,662.0	98.3	0.0	90.05	5,096.4	806.9	2,154.1	2,057.1	96.98	22.211		
13,200.0	7,660.0	13,131.8	7,662.0	100.0	0.0	90.05	5,196.4	806.1	2,154.1	2,055.5	98.66	21.833		
13,300.0	7,660.0	13,231.8	7,662.0	101.6	0.0	90.05	5,296.4	805.3	2,154.1	2,053.8	100.35	21.467		
13,400.0	7,660.0	13,331.8	7,662.0	103.3	0.0	90.05	5,396.4	804.5	2,154.1	2,052.1	102.03	21.112		
13,500.0	7,660.0	13,431.8	7,662.0	105.0	0.0	90.05	5,496.4	803.6	2,154.1	2,050.4	103.72	20.769		
13,600.0	7,660.0	13,531.8	7,662.0	106.6	0.0	90.05	5,596.4	802.8	2,154.1	2,048.7	105.41	20.436		
13,700.0	7,660.0	13,631.8	7,662.0	108.3	0.0	90.05	5,696.4	802.0	2,154.1	2,047.0	107.10	20.113		
13,800.0	7,660.0	13,731.8	7,662.0	110.0	0.0	90.05	5,796.4	801.2	2,154.1	2,045.3	108.80	19.799		
13,900.0	7,660.0	13,831.8	7,662.0	111.7	0.0	90.05	5,896.4	800.3	2,154.1	2,043.6	110.50	19.495		
14,000.0	7,660.0	13,931.8	7,662.0	113.4	0.0	90.05	5,996.4	799.5	2,154.1	2,041.9	112.20	19.200		
14,100.0	7,660.0	14,031.8	7,662.0	115.0	0.0	90.05	6,096.4	798.7	2,154.1	2,040.2	113.90	18.913		
14,200.0	7,660.0	14,131.8	7,662.0	116.7	0.0	90.05	6,196.4	797.9	2,154.1	2,038.5	115.60	18.634		
14,300.0	7,660.0	14,231.8	7,662.0	118.4	0.0	90.05	6,296.4	797.0	2,154.1	2,036.8	117.31	18.364		
14,400.0	7,660.0	14,331.8	7,662.0	120.1	0.0	90.05	6,396.3	796.2	2,154.1	2,035.1	119.01	18.100		
14,500.0	7,660.0	14,431.8	7,662.0	121.8	0.0	90.05	6,496.3	795.4	2,154.1	2,033.4	120.72	17.844		
14,600.0	7,660.0	14,531.8	7,662.0	123.5	0.0	90.05	6,596.3	794.5	2,154.1	2,031.7	122.43	17.595		
14,700.0	7,660.0	14,631.8	7,662.0	125.2	0.0	90.05	6,696.3	793.7	2,154.2	2,030.0	124.14	17.352		
14,800.0	7,660.0	14,731.8	7,662.0	126.9	0.0	90.05	6,796.3	792.9	2,154.2	2,028.3	125.86	17.116		
14,900.0	7,660.0	14,831.8	7,662.0	128.6	0.0	90.05	6,896.3	792.1	2,154.2	2,026.6	127.57	16.886		
15,000.0	7,660.0	14,931.8	7,662.0	130.3	0.0	90.05	6,996.3	791.2	2,154.2	2,024.9	129.29	16.662		
15,100.0	7,660.0	15,031.8	7,662.0	132.0	0.0	90.05	7,096.3	790.4	2,154.2	2,023.2	131.01	16.443		
15,200.0	7,660.0	15,131.8	7,662.0	133.7	0.0	90.05	7,196.3	789.6	2,154.2	2,021.4	132.73	16.230		
15,300.0	7,660.0	15,231.8	7,662.0	135.4	0.0	90.05	7,296.3	788.8	2,154.2	2,019.7	134.45	16.023		
15,400.0	7,660.0	15,331.8	7,662.0	137.1	0.0	90.05	7,396.3	787.9	2,154.2	2,018.0	136.17	15.820		
15,500.0	7,660.0	15,431.8	7,662.0	138.8	0.0	90.05	7,496.3	787.1	2,154.2	2,016.3	137.89	15.622		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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)						
15,600.0	7,660.0	15,531.8	7,662.0	140.6	0.0	90.05	7,596.3	786.3	2,154.2	2,014.6	139.61	15.430		
15,700.0	7,660.0	15,631.8	7,662.0	142.3	0.0	90.05	7,696.3	785.4	2,154.2	2,012.8	141.34	15.241		
15,800.0	7,660.0	15,731.8	7,662.0	144.0	0.0	90.05	7,796.3	784.6	2,154.2	2,011.1	143.06	15.058		
15,900.0	7,660.0	15,831.8	7,662.0	145.7	0.0	90.05	7,896.3	783.8	2,154.2	2,009.4	144.79	14.878		
16,000.0	7,660.0	15,931.8	7,662.0	147.4	0.0	90.05	7,996.3	783.0	2,154.2	2,007.7	146.52	14.703		
16,100.0	7,660.0	16,031.8	7,662.0	149.1	0.0	90.05	8,096.3	782.1	2,154.2	2,005.9	148.24	14.531		
16,200.0	7,660.0	16,131.8	7,662.0	150.9	0.0	90.05	8,196.3	781.3	2,154.2	2,004.2	149.97	14.364		
16,300.0	7,660.0	16,231.8	7,662.0	152.6	0.0	90.05	8,296.3	780.5	2,154.2	2,002.5	151.70	14.200		
16,400.0	7,660.0	16,331.8	7,662.0	154.3	0.0	90.05	8,396.3	779.7	2,154.2	2,000.7	153.43	14.040		
16,500.0	7,660.0	16,431.8	7,662.0	156.0	0.0	90.05	8,496.3	778.8	2,154.2	1,999.0	155.17	13.883		
16,600.0	7,660.0	16,531.8	7,662.0	157.7	0.0	90.05	8,596.3	778.0	2,154.2	1,997.3	156.90	13.730		
16,700.0	7,660.0	16,631.8	7,662.0	159.5	0.0	90.05	8,696.3	777.2	2,154.2	1,995.6	158.63	13.580		
16,800.0	7,660.0	16,731.8	7,662.0	161.2	0.0	90.05	8,796.3	776.4	2,154.2	1,993.8	160.36	13.433		
16,900.0	7,660.0	16,831.8	7,662.0	162.9	0.0	90.05	8,896.3	775.5	2,154.2	1,992.1	162.10	13.289		
17,000.0	7,660.0	16,931.8	7,662.0	164.6	0.0	90.05	8,996.3	774.7	2,154.2	1,990.4	163.83	13.149		
17,100.0	7,660.0	17,031.8	7,662.0	166.4	0.0	90.05	9,096.3	773.9	2,154.2	1,988.6	165.57	13.011		
17,200.0	7,660.0	17,131.8	7,662.0	168.1	0.0	90.05	9,196.3	773.0	2,154.2	1,986.9	167.31	12.876		
17,300.0	7,660.0	17,231.8	7,662.0	169.8	0.0	90.05	9,296.2	772.2	2,154.2	1,985.1	169.04	12.743		
17,400.0	7,660.0	17,331.8	7,662.0	171.6	0.0	90.05	9,396.2	771.4	2,154.2	1,983.4	170.78	12.614		
17,500.0	7,660.0	17,431.8	7,662.0	173.3	0.0	90.05	9,496.2	770.6	2,154.2	1,981.7	172.52	12.487		
17,600.0	7,660.0	17,531.8	7,662.0	175.0	0.0	90.05	9,596.2	769.7	2,154.2	1,979.9	174.26	12.362		
17,630.0	7,660.0	17,561.8	7,662.0	175.5	0.0	90.05	9,626.2	769.5	2,154.2	1,979.4	174.78	12.325 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	89.70	0.9	165.0	165.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.70	0.9	165.0	165.0	164.8	0.28	595.760		
200.0	200.0	200.0	200.0	1.0	0.0	89.70	0.9	165.0	165.0	164.2	0.80	206.852		
300.0	300.0	300.0	300.0	1.5	0.0	89.70	0.9	165.0	165.0	163.8	1.22	134.783		
400.0	400.0	400.0	400.0	1.9	0.0	89.70	0.9	165.0	165.0	163.4	1.62	101.978		
500.0	500.0	500.0	500.0	2.3	0.0	89.70	0.9	165.0	165.0	163.0	2.00	82.561		
600.0	600.0	600.0	600.0	2.7	0.0	89.70	0.9	165.0	165.0	162.7	2.37	69.557 CC, ES		
700.0	700.0	700.0	700.0	3.0	0.0	-159.05	0.9	165.0	166.7	163.8	2.81	59.247		
800.0	799.8	799.8	799.8	4.0	0.0	-159.65	0.9	165.0	171.6	167.6	3.92	43.772		
900.0	899.5	899.5	899.5	4.9	0.0	-160.56	0.9	165.0	179.8	174.9	4.81	37.391		
1,000.0	998.7	993.0	992.9	5.6	0.0	-161.45	0.4	166.4	192.8	187.2	5.57	34.599		
1,100.0	1,097.5	1,085.0	1,084.9	6.3	0.0	-162.12	-1.1	170.7	212.1	205.8	6.25	33.940 SF		
1,200.0	1,195.6	1,175.3	1,174.9	6.8	0.0	-162.59	-3.6	177.5	237.4	230.7	6.70	35.452		
1,300.0	1,293.6	1,263.8	1,262.8	7.0	0.0	-162.89	-6.9	186.8	266.6	259.7	6.90	38.632		
1,400.0	1,391.5	1,350.8	1,348.9	7.3	0.0	-162.90	-11.0	198.4	298.5	291.4	7.13	41.845		
1,500.0	1,489.4	1,436.1	1,433.0	7.6	0.0	-162.71	-15.9	212.1	333.0	325.6	7.37	45.205		
1,600.0	1,587.4	1,519.7	1,514.8	7.8	0.0	-162.39	-21.6	227.9	369.9	362.3	7.60	48.693		
1,700.0	1,685.3	1,603.0	1,596.0	8.2	0.0	-161.98	-27.9	245.8	409.3	401.5	7.84	52.234		
1,800.0	1,783.2	1,694.5	1,684.8	8.5	0.0	-161.55	-35.3	266.4	449.6	441.5	8.13	55.319		
1,900.0	1,881.2	1,786.0	1,773.7	8.8	0.0	-161.20	-42.6	286.9	489.9	481.5	8.43	58.143		
2,000.0	1,979.1	1,877.4	1,862.5	9.1	0.0	-160.89	-49.9	307.4	530.2	521.5	8.73	60.729		
2,100.0	2,077.0	1,968.9	1,951.4	9.5	0.0	-160.63	-57.2	327.9	570.5	561.5	9.04	63.101		
2,200.0	2,175.0	2,060.4	2,040.2	9.9	0.0	-160.40	-64.5	348.4	610.8	601.5	9.36	65.280		
2,300.0	2,272.9	2,151.9	2,129.1	10.2	0.0	-160.21	-71.8	369.0	651.2	641.5	9.68	67.286		
2,400.0	2,370.8	2,243.4	2,217.9	10.7	0.0	-160.03	-79.1	389.5	691.5	681.5	10.00	69.134		
2,500.0	2,468.8	2,334.9	2,306.8	11.1	0.0	-159.88	-86.5	410.0	731.9	721.5	10.33	70.841		
2,600.0	2,566.7	2,426.3	2,395.6	11.5	0.0	-159.74	-93.8	430.5	772.2	761.5	10.66	72.420		
2,700.0	2,664.6	2,517.8	2,484.5	12.0	0.0	-159.61	-101.1	451.1	812.5	801.6	11.00	73.883		
2,800.0	2,762.6	2,609.3	2,573.3	12.4	0.0	-159.50	-108.4	471.6	852.9	841.6	11.34	75.241		
2,900.0	2,860.5	2,700.8	2,662.2	12.9	0.0	-159.39	-115.7	492.1	893.3	881.6	11.68	76.504		
3,000.0	2,958.4	2,792.3	2,751.0	13.3	0.0	-159.30	-123.0	512.6	933.6	921.6	12.02	77.680		
3,100.0	3,056.4	2,883.8	2,839.9	13.8	0.0	-159.21	-130.3	533.1	974.0	961.6	12.36	78.777		
3,200.0	3,154.3	2,975.2	2,928.7	14.3	0.0	-159.13	-137.7	553.7	1,014.3	1,001.6	12.71	79.803		
3,300.0	3,252.2	3,066.7	3,017.6	14.8	0.0	-159.06	-145.0	574.2	1,054.7	1,041.6	13.06	80.762		
3,400.0	3,350.2	3,158.2	3,106.4	15.3	0.0	-158.99	-152.3	594.7	1,095.1	1,081.7	13.41	81.662		
3,500.0	3,448.1	3,249.7	3,195.3	15.8	0.0	-158.93	-159.6	615.2	1,135.4	1,121.7	13.76	82.506		
3,600.0	3,546.0	3,341.2	3,284.1	16.3	0.0	-158.87	-166.9	635.8	1,175.8	1,161.7	14.12	83.300		
3,700.0	3,644.0	3,432.7	3,373.0	16.7	0.0	-158.81	-174.2	656.3	1,216.2	1,201.7	14.47	84.047		
3,800.0	3,741.9	3,524.1	3,461.8	17.2	0.0	-158.76	-181.6	676.8	1,256.5	1,241.7	14.83	84.751		
3,900.0	3,839.8	3,615.6	3,550.7	17.7	0.0	-158.71	-188.9	697.3	1,296.9	1,281.7	15.18	85.415		
4,000.0	3,937.8	3,707.1	3,639.6	18.2	0.0	-158.67	-196.2	717.8	1,337.3	1,321.7	15.54	86.042		
4,100.0	4,035.7	3,798.6	3,728.4	18.7	0.0	-158.62	-203.5	738.4	1,377.6	1,361.7	15.90	86.636		
4,200.0	4,133.6	3,890.1	3,817.3	19.2	0.0	-158.58	-210.8	758.9	1,418.0	1,401.8	16.26	87.197		
4,300.0	4,231.6	3,981.6	3,906.1	19.7	0.0	-158.55	-218.1	779.4	1,458.4	1,441.8	16.62	87.730		
4,400.0	4,329.5	4,073.1	3,995.0	20.2	0.0	-158.51	-225.4	799.9	1,498.8	1,481.8	16.99	88.235		
4,500.0	4,427.4	4,164.5	4,083.8	20.7	0.0	-158.48	-232.8	820.5	1,539.1	1,521.8	17.35	88.715		
4,600.0	4,525.4	4,256.0	4,172.7	21.2	0.0	-158.44	-240.1	841.0	1,579.5	1,561.8	17.71	89.171		
4,700.0	4,623.3	4,347.5	4,261.5	21.7	0.0	-158.41	-247.4	861.5	1,619.9	1,601.8	18.08	89.605		
4,800.0	4,721.2	4,439.0	4,350.4	22.2	0.0	-158.38	-254.7	882.0	1,660.3	1,641.8	18.44	90.018		
4,900.0	4,819.2	4,530.5	4,439.2	22.7	0.0	-158.35	-262.0	902.5	1,700.6	1,681.8	18.81	90.412		
5,000.0	4,917.1	4,622.0	4,528.1	23.2	0.0	-158.33	-269.3	923.1	1,741.0	1,721.8	19.18	90.788		
5,100.0	5,015.0	4,713.4	4,616.9	23.7	0.0	-158.30	-276.6	943.6	1,781.4	1,761.8	19.54	91.146		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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
5,200.0	5,113.0	4,804.9	4,705.8	24.2	0.0	-158.28	-284.0	964.1	1,821.8	1,801.8	19.91	91.489	
5,300.0	5,210.9	4,896.4	4,794.6	24.7	0.0	-158.26	-291.3	984.6	1,862.1	1,841.8	20.28	91.816	
5,400.0	5,308.8	4,987.9	4,883.5	25.2	0.0	-158.23	-298.6	1,005.2	1,902.5	1,881.9	20.65	92.129	
5,500.0	5,406.8	5,079.4	4,972.3	25.7	0.0	-158.21	-305.9	1,025.7	1,942.9	1,921.9	21.02	92.429	
5,600.0	5,504.7	5,170.9	5,061.2	26.2	0.0	-158.19	-313.2	1,046.2	1,983.3	1,961.9	21.39	92.716	
5,700.0	5,602.6	5,262.3	5,150.0	26.7	0.0	-158.17	-320.5	1,066.7	2,023.6	2,001.9	21.76	92.991	
5,800.0	5,700.6	5,353.8	5,238.9	27.2	0.0	-158.15	-327.8	1,087.2	2,064.0	2,041.9	22.13	93.255	
5,900.0	5,798.5	5,445.3	5,327.7	27.7	0.0	-158.13	-335.2	1,107.8	2,104.4	2,081.9	22.50	93.508	
6,000.0	5,896.4	5,536.8	5,416.6	28.2	0.0	-158.12	-342.5	1,128.3	2,144.8	2,121.9	22.88	93.751	
6,100.0	5,994.4	5,628.3	5,505.4	28.7	0.0	-158.10	-349.8	1,148.8	2,185.1	2,161.9	23.25	93.984	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 19-18-3NCH PWP - 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	89.71	0.8	150.0	150.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.71	0.8	150.0	150.0	149.7	0.28	541.556		
200.0	200.0	200.0	200.0	1.0	0.0	89.71	0.8	150.0	150.0	149.2	0.80	188.029		
300.0	300.0	300.0	300.0	1.5	0.0	89.71	0.8	150.0	150.0	148.8	1.22	122.517		
400.0	400.0	400.0	400.0	1.9	0.0	89.71	0.8	150.0	150.0	148.4	1.62	92.696		
500.0	500.0	500.0	500.0	2.3	0.0	89.71	0.8	150.0	150.0	148.0	2.00	75.046		
600.0	600.0	600.0	600.0	2.7	0.0	89.71	0.8	150.0	150.0	147.6	2.37	63.225 CC, ES		
700.0	700.0	700.0	700.0	3.0	0.0	-159.07	0.8	150.0	151.6	148.8	2.81	53.902		
800.0	799.8	799.8	799.8	4.0	0.0	-159.72	0.8	150.0	156.5	152.6	3.92	39.930		
900.0	899.5	899.5	899.5	4.9	0.0	-160.72	0.8	150.0	164.7	159.9	4.81	34.256		
1,000.0	998.7	998.7	998.7	5.6	0.0	-161.95	0.8	150.0	176.3	170.7	5.58	31.574		
1,100.0	1,097.5	1,092.0	1,092.0	6.3	0.0	-163.02	0.2	151.4	192.6	186.4	6.27	30.720 SF		
1,200.0	1,195.6	1,183.6	1,183.5	6.8	0.0	-163.76	-1.5	155.4	215.1	208.3	6.73	31.968		
1,300.0	1,293.6	1,273.8	1,273.4	7.0	0.0	-164.18	-4.3	162.1	241.4	234.4	6.94	34.785		
1,400.0	1,391.5	1,362.6	1,361.6	7.3	0.0	-164.21	-8.1	171.1	270.3	263.1	7.18	37.663		
1,500.0	1,489.4	1,449.8	1,448.0	7.6	0.0	-163.98	-12.8	182.5	301.8	294.4	7.42	40.698		
1,600.0	1,587.4	1,535.5	1,532.3	7.8	0.0	-163.57	-18.5	196.0	335.8	328.2	7.66	43.870		
1,700.0	1,685.3	1,621.0	1,616.2	8.2	0.0	-163.03	-25.1	211.8	372.3	364.4	7.90	47.107		
1,800.0	1,783.2	1,713.8	1,706.9	8.5	0.0	-162.49	-32.6	229.7	409.6	401.4	8.20	49.969		
1,900.0	1,881.2	1,806.5	1,797.5	8.8	0.0	-162.04	-40.1	247.7	446.9	438.4	8.50	52.589		
2,000.0	1,979.1	1,899.2	1,888.2	9.1	0.0	-161.66	-47.6	265.6	484.3	475.5	8.81	54.990		
2,100.0	2,077.0	1,991.9	1,978.9	9.5	0.0	-161.33	-55.0	283.5	521.6	512.5	9.12	57.193		
2,200.0	2,175.0	2,084.6	2,069.5	9.9	0.0	-161.04	-62.5	301.4	559.0	549.5	9.44	59.217		
2,300.0	2,272.9	2,177.4	2,160.2	10.2	0.0	-160.80	-70.0	319.3	596.4	586.6	9.76	61.079		
2,400.0	2,370.8	2,270.1	2,250.8	10.7	0.0	-160.58	-77.5	337.2	633.8	623.7	10.09	62.797		
2,500.0	2,468.8	2,362.8	2,341.5	11.1	0.0	-160.38	-85.0	355.2	671.2	660.7	10.42	64.382		
2,600.0	2,566.7	2,455.5	2,432.2	11.5	0.0	-160.21	-92.5	373.1	708.6	697.8	10.76	65.849		
2,700.0	2,664.6	2,548.3	2,522.8	12.0	0.0	-160.05	-100.0	391.0	746.0	734.9	11.10	67.209		
2,800.0	2,762.6	2,641.0	2,613.5	12.4	0.0	-159.91	-107.5	408.9	783.4	771.9	11.44	68.471		
2,900.0	2,860.5	2,733.7	2,704.2	12.9	0.0	-159.78	-115.0	426.8	820.8	809.0	11.79	69.645		
3,000.0	2,958.4	2,826.4	2,794.8	13.3	0.0	-159.66	-122.5	444.8	858.2	846.1	12.13	70.738		
3,100.0	3,056.4	2,919.1	2,885.5	13.8	0.0	-159.55	-130.0	462.7	895.7	883.2	12.48	71.758		
3,200.0	3,154.3	3,011.9	2,976.2	14.3	0.0	-159.45	-137.4	480.6	933.1	920.2	12.83	72.711		
3,300.0	3,252.2	3,104.6	3,066.8	14.8	0.0	-159.36	-144.9	498.5	970.5	957.3	13.19	73.604		
3,400.0	3,350.2	3,197.3	3,157.5	15.3	0.0	-159.28	-152.4	516.4	1,007.9	994.4	13.54	74.440		
3,500.0	3,448.1	3,290.0	3,248.2	15.8	0.0	-159.20	-159.9	534.3	1,045.4	1,031.5	13.90	75.226		
3,600.0	3,546.0	3,382.7	3,338.8	16.3	0.0	-159.13	-167.4	552.3	1,082.8	1,068.5	14.25	75.964		
3,700.0	3,644.0	3,475.5	3,429.5	16.7	0.0	-159.06	-174.9	570.2	1,120.2	1,105.6	14.61	76.659		
3,800.0	3,741.9	3,568.2	3,520.1	17.2	0.0	-158.99	-182.4	588.1	1,157.7	1,142.7	14.97	77.314		
3,900.0	3,839.8	3,660.9	3,610.8	17.7	0.0	-158.93	-189.9	606.0	1,195.1	1,179.8	15.34	77.932		
4,000.0	3,937.8	3,753.6	3,701.5	18.2	0.0	-158.88	-197.4	623.9	1,232.6	1,216.9	15.70	78.516		
4,100.0	4,035.7	3,846.3	3,792.1	18.7	0.0	-158.83	-204.9	641.9	1,270.0	1,253.9	16.06	79.069		
4,200.0	4,133.6	3,939.1	3,882.8	19.2	0.0	-158.78	-212.4	659.8	1,307.4	1,291.0	16.43	79.592		
4,300.0	4,231.6	4,031.8	3,973.5	19.7	0.0	-158.73	-219.8	677.7	1,344.9	1,328.1	16.79	80.088		
4,400.0	4,329.5	4,124.5	4,064.1	20.2	0.0	-158.68	-227.3	695.6	1,382.3	1,365.2	17.16	80.559		
4,500.0	4,427.4	4,217.2	4,154.8	20.7	0.0	-158.64	-234.8	713.5	1,419.8	1,402.2	17.53	81.007		
4,600.0	4,525.4	4,309.9	4,245.5	21.2	0.0	-158.60	-242.3	731.4	1,457.2	1,439.3	17.89	81.432		
4,700.0	4,623.3	4,402.7	4,336.1	21.7	0.0	-158.56	-249.8	749.4	1,494.6	1,476.4	18.26	81.837		
4,800.0	4,721.2	4,495.4	4,426.8	22.2	0.0	-158.53	-257.3	767.3	1,532.1	1,513.5	18.63	82.223		
4,900.0	4,819.2	4,588.1	4,517.4	22.7	0.0	-158.49	-264.8	785.2	1,569.5	1,550.5	19.00	82.590		
5,000.0	4,917.1	4,680.8	4,608.1	23.2	0.0	-158.46	-272.3	803.1	1,607.0	1,587.6	19.37	82.941		
5,100.0	5,015.0	4,773.5	4,698.8	23.7	0.0	-158.43	-279.8	821.0	1,644.4	1,624.7	19.75	83.276		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 19-18-3NCH PWP - OH - PLAN #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
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
5,200.0	5,113.0	4,866.3	4,789.4	24.2	0.0	-158.40	-287.3	839.0	1,681.9	1,661.8	20.12	83.597	
5,300.0	5,210.9	4,959.0	4,880.1	24.7	0.0	-158.37	-294.8	856.9	1,719.3	1,698.8	20.49	83.903	
5,400.0	5,308.8	5,051.7	4,970.8	25.2	0.0	-158.34	-302.2	874.8	1,756.8	1,735.9	20.87	84.196	
5,500.0	5,406.8	5,144.4	5,061.4	25.7	0.0	-158.32	-309.7	892.7	1,794.2	1,773.0	21.24	84.477	
5,600.0	5,504.7	5,237.1	5,152.1	26.2	0.0	-158.29	-317.2	910.6	1,831.7	1,810.0	21.61	84.745	
5,700.0	5,602.6	5,329.9	5,242.8	26.7	0.0	-158.27	-324.7	928.5	1,869.1	1,847.1	21.99	85.003	
5,800.0	5,700.6	5,422.6	5,333.4	27.2	0.0	-158.24	-332.2	946.5	1,906.6	1,884.2	22.36	85.251	
5,900.0	5,798.5	5,515.3	5,424.1	27.7	0.0	-158.22	-339.7	964.4	1,944.0	1,921.3	22.74	85.488	
6,000.0	5,896.4	5,608.0	5,514.8	28.2	0.0	-158.20	-347.2	982.3	1,981.5	1,958.3	23.12	85.716	
6,100.0	5,994.4	5,700.8	5,605.4	28.7	0.0	-158.18	-354.7	1,000.2	2,018.9	1,995.4	23.49	85.935	
6,200.0	6,092.3	5,793.5	5,696.1	29.2	0.0	-158.16	-362.2	1,018.1	2,056.4	2,032.5	23.87	86.146	
6,300.0	6,190.2	5,886.2	5,786.7	29.7	0.0	-158.14	-369.7	1,036.0	2,093.8	2,069.6	24.25	86.348	
6,400.0	6,288.2	5,978.9	5,877.4	30.2	0.0	-158.12	-377.2	1,054.0	2,131.3	2,106.6	24.63	86.543	
6,500.0	6,386.1	6,071.6	5,968.1	30.7	0.0	-158.10	-384.6	1,071.9	2,168.7	2,143.7	25.00	86.731	
6,600.0	6,484.0	6,164.4	6,058.7	31.2	0.0	-158.09	-392.1	1,089.8	2,206.2	2,180.8	25.38	86.912	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	89.70	0.7	135.0	135.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.70	0.7	135.0	135.0	134.8	0.28	487.461		
200.0	200.0	200.0	200.0	1.0	0.0	89.70	0.7	135.0	135.0	134.2	0.80	169.249		
300.0	300.0	300.0	300.0	1.5	0.0	89.70	0.7	135.0	135.0	133.8	1.22	110.281		
400.0	400.0	400.0	400.0	1.9	0.0	89.70	0.7	135.0	135.0	133.4	1.62	83.440		
500.0	500.0	500.0	500.0	2.3	0.0	89.70	0.7	135.0	135.0	133.0	2.00	67.552		
600.0	600.0	600.0	600.0	2.7	0.0	89.70	0.7	135.0	135.0	132.7	2.37	56.912 CC, ES		
700.0	700.0	700.0	700.0	3.0	0.0	-159.10	0.7	135.0	136.7	133.8	2.81	48.574		
800.0	799.8	799.8	799.8	4.0	0.0	-159.82	0.7	135.0	141.6	137.6	3.92	36.102		
900.0	899.5	899.5	899.5	4.9	0.0	-160.92	0.7	135.0	149.8	145.0	4.81	31.132		
1,000.0	998.7	998.7	998.7	5.6	0.0	-162.26	0.7	135.0	161.3	155.8	5.59	28.885		
1,100.0	1,097.5	1,097.5	1,097.5	6.3	0.0	-163.72	0.7	135.0	176.3	170.0	6.29	28.052 SF		
1,200.0	1,195.6	1,190.5	1,190.5	6.8	0.0	-164.89	0.0	136.3	195.9	189.2	6.75	29.023		
1,300.0	1,293.6	1,282.2	1,282.1	7.0	0.0	-165.54	-2.0	140.2	219.4	212.4	6.97	31.477		
1,400.0	1,391.5	1,372.8	1,372.4	7.3	0.0	-165.65	-5.3	146.5	245.3	238.1	7.21	34.008		
1,500.0	1,489.4	1,462.0	1,461.1	7.6	0.0	-165.39	-9.8	155.3	273.8	266.3	7.46	36.696		
1,600.0	1,587.4	1,549.8	1,547.9	7.8	0.0	-164.88	-15.5	166.3	304.6	296.9	7.71	39.520		
1,700.0	1,685.3	1,636.1	1,632.9	8.2	0.0	-164.19	-22.4	179.4	337.9	330.0	7.96	42.468		
1,800.0	1,783.2	1,729.8	1,725.1	8.5	0.0	-163.46	-30.4	194.9	372.4	364.2	8.25	45.124		
1,900.0	1,881.2	1,823.6	1,817.2	8.8	0.0	-162.85	-38.4	210.3	407.0	398.4	8.56	47.558		
2,000.0	1,979.1	1,917.4	1,909.3	9.1	0.0	-162.33	-46.4	225.7	441.6	432.7	8.87	49.789		
2,100.0	2,077.0	2,011.1	2,001.5	9.5	0.0	-161.89	-54.4	241.2	476.2	467.0	9.19	51.837		
2,200.0	2,175.0	2,104.9	2,093.6	9.9	0.0	-161.51	-62.5	256.6	510.8	501.3	9.51	53.720		
2,300.0	2,272.9	2,198.6	2,185.7	10.2	0.0	-161.18	-70.5	272.1	545.4	535.6	9.84	55.452		
2,400.0	2,370.8	2,292.4	2,277.9	10.7	0.0	-160.88	-78.5	287.5	580.1	569.9	10.17	57.049		
2,500.0	2,468.8	2,386.2	2,370.0	11.1	0.0	-160.62	-86.5	303.0	614.8	604.3	10.50	58.524		
2,600.0	2,566.7	2,479.9	2,462.1	11.5	0.0	-160.39	-94.5	318.4	649.5	638.6	10.84	59.888		
2,700.0	2,664.6	2,573.7	2,554.3	12.0	0.0	-160.18	-102.6	333.9	684.1	673.0	11.19	61.153		
2,800.0	2,762.6	2,667.5	2,646.4	12.4	0.0	-159.99	-110.6	349.3	718.8	707.3	11.53	62.327		
2,900.0	2,860.5	2,761.2	2,738.5	12.9	0.0	-159.82	-118.6	364.8	753.5	741.7	11.88	63.418		
3,000.0	2,958.4	2,855.0	2,830.7	13.3	0.0	-159.67	-126.6	380.2	788.2	776.0	12.23	64.435		
3,100.0	3,056.4	2,948.8	2,922.8	13.8	0.0	-159.52	-134.7	395.6	823.0	810.4	12.59	65.383		
3,200.0	3,154.3	3,042.5	3,014.9	14.3	0.0	-159.39	-142.7	411.1	857.7	844.7	12.94	66.270		
3,300.0	3,252.2	3,136.3	3,107.1	14.8	0.0	-159.27	-150.7	426.5	892.4	879.1	13.30	67.099		
3,400.0	3,350.2	3,230.0	3,199.2	15.3	0.0	-159.16	-158.7	442.0	927.1	913.5	13.66	67.877		
3,500.0	3,448.1	3,323.8	3,291.3	15.8	0.0	-159.05	-166.7	457.4	961.8	947.8	14.02	68.607		
3,600.0	3,546.0	3,417.6	3,383.5	16.3	0.0	-158.96	-174.8	472.9	996.6	982.2	14.38	69.294		
3,700.0	3,644.0	3,511.3	3,475.6	16.7	0.0	-158.87	-182.8	488.3	1,031.3	1,016.6	14.75	69.940		
3,800.0	3,741.9	3,605.1	3,567.7	17.2	0.0	-158.78	-190.8	503.8	1,066.0	1,050.9	15.11	70.549		
3,900.0	3,839.8	3,698.9	3,659.9	17.7	0.0	-158.70	-198.8	519.2	1,100.8	1,085.3	15.48	71.124		
4,000.0	3,937.8	3,792.6	3,752.0	18.2	0.0	-158.63	-206.9	534.7	1,135.5	1,119.7	15.84	71.668		
4,100.0	4,035.7	3,886.4	3,844.1	18.7	0.0	-158.56	-214.9	550.1	1,170.3	1,154.0	16.21	72.182		
4,200.0	4,133.6	3,980.1	3,936.3	19.2	0.0	-158.49	-222.9	565.6	1,205.0	1,188.4	16.58	72.669		
4,300.0	4,231.6	4,073.9	4,028.4	19.7	0.0	-158.43	-230.9	581.0	1,239.7	1,222.8	16.95	73.130		
4,400.0	4,329.5	4,167.7	4,120.5	20.2	0.0	-158.37	-238.9	596.4	1,274.5	1,257.2	17.32	73.569		
4,500.0	4,427.4	4,261.4	4,212.7	20.7	0.0	-158.32	-247.0	611.9	1,309.2	1,291.5	17.70	73.985		
4,600.0	4,525.4	4,355.2	4,304.8	21.2	0.0	-158.26	-255.0	627.3	1,344.0	1,325.9	18.07	74.381		
4,700.0	4,623.3	4,449.0	4,396.9	21.7	0.0	-158.21	-263.0	642.8	1,378.7	1,360.3	18.44	74.758		
4,800.0	4,721.2	4,542.7	4,489.1	22.2	0.0	-158.17	-271.0	658.2	1,413.5	1,394.6	18.82	75.118		
4,900.0	4,819.2	4,636.5	4,581.2	22.7	0.0	-158.12	-279.1	673.7	1,448.2	1,429.0	19.19	75.460		
5,000.0	4,917.1	4,730.2	4,673.3	23.2	0.0	-158.08	-287.1	689.1	1,483.0	1,463.4	19.57	75.787		
5,100.0	5,015.0	4,824.0	4,765.5	23.7	0.0	-158.04	-295.1	704.6	1,517.7	1,497.8	19.94	76.100		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	5,113.0	4,917.8	4,857.6	24.2	0.0	-158.00	-303.1	720.0	1,552.4	1,532.1	20.32	76.398	
5,300.0	5,210.9	5,011.5	4,949.7	24.7	0.0	-157.96	-311.1	735.5	1,587.2	1,566.5	20.70	76.684	
5,400.0	5,308.8	5,105.3	5,041.9	25.2	0.0	-157.92	-319.2	750.9	1,622.0	1,600.9	21.08	76.957	
5,500.0	5,406.8	5,199.1	5,134.0	25.7	0.0	-157.89	-327.2	766.4	1,656.7	1,635.2	21.45	77.219	
5,600.0	5,504.7	5,292.8	5,226.1	26.2	0.0	-157.85	-335.2	781.8	1,691.5	1,669.6	21.83	77.470	
5,700.0	5,602.6	5,386.6	5,318.3	26.7	0.0	-157.82	-343.2	797.2	1,726.2	1,704.0	22.21	77.711	
5,800.0	5,700.6	5,480.4	5,410.4	27.2	0.0	-157.79	-351.3	812.7	1,761.0	1,738.4	22.59	77.943	
5,900.0	5,798.5	5,574.1	5,502.5	27.7	0.0	-157.76	-359.3	828.1	1,795.7	1,772.7	22.97	78.165	
6,000.0	5,896.4	5,667.9	5,594.7	28.2	0.0	-157.73	-367.3	843.6	1,830.5	1,807.1	23.35	78.378	
6,100.0	5,994.4	5,761.6	5,686.8	28.7	0.0	-157.71	-375.3	859.0	1,865.2	1,841.5	23.74	78.583	
6,200.0	6,092.3	5,855.4	5,779.0	29.2	0.0	-157.68	-383.3	874.5	1,900.0	1,875.9	24.12	78.780	
6,300.0	6,190.2	5,949.2	5,871.1	29.7	0.0	-157.66	-391.4	889.9	1,934.7	1,910.2	24.50	78.970	
6,400.0	6,288.2	6,042.9	5,963.2	30.2	0.0	-157.63	-399.4	905.4	1,969.5	1,944.6	24.88	79.153	
6,500.0	6,386.1	6,136.7	6,055.4	30.7	0.0	-157.61	-407.4	920.8	2,004.2	1,979.0	25.26	79.329	
6,600.0	6,484.0	6,230.5	6,147.5	31.2	0.0	-157.59	-415.4	936.3	2,039.0	2,013.3	25.65	79.498	
6,700.0	6,582.0	6,324.2	6,239.6	31.7	0.0	-157.56	-423.5	951.7	2,073.7	2,047.7	26.03	79.662	
6,800.0	6,679.9	6,418.0	6,331.8	32.2	0.0	-157.54	-431.5	967.1	2,108.5	2,082.1	26.42	79.820	
6,900.0	6,777.8	6,511.7	6,423.9	32.7	0.0	-157.52	-439.5	982.6	2,143.3	2,116.5	26.80	79.972	
7,000.0	6,875.8	6,605.5	6,516.0	33.2	0.0	-157.50	-447.5	998.0	2,178.0	2,150.8	27.18	80.119	
7,100.0	6,973.7	6,699.3	6,608.2	33.7	0.0	-157.48	-455.5	1,013.5	2,212.8	2,185.2	27.57	80.261	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	89.72	0.9	180.0	180.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.72	0.9	180.0	180.0	179.7	0.28	649.941		
200.0	200.0	200.0	200.0	1.0	0.0	89.72	0.9	180.0	180.0	179.2	0.80	225.657		
300.0	300.0	300.0	300.0	1.5	0.0	89.72	0.9	180.0	180.0	178.8	1.22	147.032		
400.0	400.0	400.0	400.0	1.9	0.0	89.72	0.9	180.0	180.0	178.4	1.62	111.244		
500.0	500.0	500.0	500.0	2.3	0.0	89.72	0.9	180.0	180.0	178.0	2.00	90.061		
600.0	600.0	600.0	600.0	2.7	0.0	89.72	0.9	180.0	180.0	177.6	2.37	75.875 CC, ES		
700.0	700.0	700.0	700.0	3.0	0.0	-159.02	0.9	180.0	181.6	178.8	2.81	64.578		
800.0	799.8	799.8	799.8	4.0	0.0	-159.56	0.9	180.0	186.5	182.6	3.92	47.602		
900.0	899.5	893.4	893.4	4.9	0.0	-160.20	0.5	181.5	196.3	191.5	4.80	40.891		
1,000.0	998.7	985.8	985.6	5.6	0.0	-160.77	-0.8	185.8	212.4	206.8	5.55	38.238		
1,100.0	1,097.5	1,076.5	1,076.1	6.3	0.0	-161.22	-2.8	192.8	234.7	228.5	6.22	37.739 SF		
1,200.0	1,195.6	1,165.1	1,164.1	6.8	0.0	-161.58	-5.4	202.4	263.1	256.4	6.66	39.507		
1,300.0	1,293.6	1,251.8	1,249.9	7.0	0.0	-161.88	-8.8	214.2	295.3	288.4	6.86	43.062		
1,400.0	1,391.5	1,336.8	1,333.7	7.3	0.0	-161.95	-12.8	228.2	330.2	323.1	7.08	46.621		
1,500.0	1,489.4	1,420.0	1,415.2	7.6	0.0	-161.87	-17.3	244.3	367.6	360.3	7.31	50.314		
1,600.0	1,587.4	1,500.0	1,493.1	7.8	0.0	-161.69	-22.3	261.9	407.6	400.1	7.52	54.174		
1,700.0	1,685.3	1,580.7	1,571.0	8.2	0.0	-161.43	-27.9	281.7	450.0	442.2	7.75	58.040		
1,800.0	1,783.2	1,667.8	1,654.9	8.5	0.0	-161.12	-34.4	304.7	494.0	486.0	8.03	61.554		
1,900.0	1,881.2	1,757.6	1,741.1	8.8	0.0	-160.85	-41.2	328.5	538.1	529.8	8.32	64.683		
2,000.0	1,979.1	1,847.3	1,827.4	9.1	0.0	-160.62	-47.9	352.2	582.2	573.5	8.62	67.552		
2,100.0	2,077.0	1,937.0	1,913.7	9.5	0.0	-160.43	-54.6	375.9	626.3	617.3	8.92	70.184		
2,200.0	2,175.0	2,026.8	2,000.0	9.9	0.0	-160.26	-61.3	399.7	670.4	661.1	9.23	72.604		
2,300.0	2,272.9	2,116.5	2,086.2	10.2	0.0	-160.11	-68.1	423.4	714.5	704.9	9.55	74.831		
2,400.0	2,370.8	2,206.2	2,172.5	10.7	0.0	-159.98	-74.8	447.1	758.6	748.7	9.87	76.886		
2,500.0	2,468.8	2,296.0	2,258.8	11.1	0.0	-159.86	-81.5	470.9	802.7	792.5	10.19	78.784		
2,600.0	2,566.7	2,385.7	2,345.1	11.5	0.0	-159.75	-88.2	494.6	846.8	836.3	10.51	80.540		
2,700.0	2,664.6	2,475.4	2,431.4	12.0	0.0	-159.66	-95.0	518.3	890.9	880.1	10.84	82.169		
2,800.0	2,762.6	2,565.2	2,517.6	12.4	0.0	-159.57	-101.7	542.1	935.0	923.8	11.17	83.681		
2,900.0	2,860.5	2,654.9	2,603.9	12.9	0.0	-159.49	-108.4	565.8	979.1	967.6	11.51	85.087		
3,000.0	2,958.4	2,744.6	2,690.2	13.3	0.0	-159.42	-115.1	589.6	1,023.3	1,011.4	11.84	86.398		
3,100.0	3,056.4	2,834.4	2,776.5	13.8	0.0	-159.36	-121.9	613.3	1,067.4	1,055.2	12.18	87.621		
3,200.0	3,154.3	2,924.1	2,862.7	14.3	0.0	-159.30	-128.6	637.0	1,111.5	1,099.0	12.52	88.764		
3,300.0	3,252.2	3,013.8	2,949.0	14.8	0.0	-159.24	-135.3	660.8	1,155.6	1,142.8	12.86	89.834		
3,400.0	3,350.2	3,103.6	3,035.3	15.3	0.0	-159.19	-142.0	684.5	1,199.7	1,186.5	13.21	90.837		
3,500.0	3,448.1	3,193.3	3,121.6	15.8	0.0	-159.14	-148.8	708.2	1,243.9	1,230.3	13.55	91.778		
3,600.0	3,546.0	3,283.1	3,207.8	16.3	0.0	-159.10	-155.5	732.0	1,288.0	1,274.1	13.90	92.664		
3,700.0	3,644.0	3,372.8	3,294.1	16.7	0.0	-159.06	-162.2	755.7	1,332.1	1,317.9	14.25	93.497		
3,800.0	3,741.9	3,462.5	3,380.4	17.2	0.0	-159.02	-168.9	779.4	1,376.2	1,361.6	14.60	94.282		
3,900.0	3,839.8	3,552.3	3,466.7	17.7	0.0	-158.98	-175.7	803.2	1,420.4	1,405.4	14.95	95.023		
4,000.0	3,937.8	3,642.0	3,552.9	18.2	0.0	-158.95	-182.4	826.9	1,464.5	1,449.2	15.30	95.723		
4,100.0	4,035.7	3,731.7	3,639.2	18.7	0.0	-158.91	-189.1	850.6	1,508.6	1,493.0	15.65	96.384		
4,200.0	4,133.6	3,821.5	3,725.5	19.2	0.0	-158.88	-195.8	874.4	1,552.7	1,536.7	16.01	97.011		
4,300.0	4,231.6	3,911.2	3,811.8	19.7	0.0	-158.85	-202.6	898.1	1,596.9	1,580.5	16.36	97.605		
4,400.0	4,329.5	4,000.9	3,898.1	20.2	0.0	-158.83	-209.3	921.9	1,641.0	1,624.3	16.72	98.168		
4,500.0	4,427.4	4,090.7	3,984.3	20.7	0.0	-158.80	-216.0	945.6	1,685.1	1,668.1	17.07	98.703		
4,600.0	4,525.4	4,180.4	4,070.6	21.2	0.0	-158.78	-222.7	969.3	1,729.3	1,711.8	17.43	99.211		
4,700.0	4,623.3	4,270.1	4,156.9	21.7	0.0	-158.75	-229.4	993.1	1,773.4	1,755.6	17.79	99.695		
4,800.0	4,721.2	4,359.9	4,243.2	22.2	0.0	-158.73	-236.2	1,016.8	1,817.5	1,799.4	18.15	100.155		
4,900.0	4,819.2	4,449.6	4,329.4	22.7	0.0	-158.71	-242.9	1,040.5	1,861.6	1,843.1	18.51	100.594		
5,000.0	4,917.1	4,539.3	4,415.7	23.2	0.0	-158.69	-249.6	1,064.3	1,905.8	1,886.9	18.87	101.012		
5,100.0	5,015.0	4,629.1	4,502.0	23.7	0.0	-158.67	-256.3	1,088.0	1,949.9	1,930.7	19.23	101.411		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	5,113.0	4,718.8	4,588.3	24.2	0.0	-158.65	-263.1	1,111.7	1,994.0	1,974.4	19.59	101.791	
5,300.0	5,210.9	4,808.5	4,674.5	24.7	0.0	-158.64	-269.8	1,135.5	2,038.2	2,018.2	19.95	102.155	
5,400.0	5,308.8	4,898.3	4,760.8	25.2	0.0	-158.62	-276.5	1,159.2	2,082.3	2,062.0	20.31	102.503	
5,500.0	5,406.8	4,988.0	4,847.1	25.7	0.0	-158.60	-283.2	1,183.0	2,126.4	2,105.7	20.68	102.836	
5,600.0	5,504.7	5,077.7	4,933.4	26.2	0.0	-158.59	-290.0	1,206.7	2,170.6	2,149.5	21.04	103.155	
5,700.0	5,602.6	5,167.5	5,019.6	26.7	0.0	-158.57	-296.7	1,230.4	2,214.7	2,193.3	21.41	103.460	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	89.70	1.2	225.0	225.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.70	1.2	225.0	225.0	224.7	0.28	812.153		
200.0	200.0	200.0	200.0	1.0	0.0	89.70	1.2	225.0	225.0	224.2	0.80	281.985		
300.0	300.0	300.0	300.0	1.5	0.0	89.70	1.2	225.0	225.0	223.8	1.22	183.739		
400.0	400.0	400.0	400.0	1.9	0.0	89.70	1.2	225.0	225.0	223.4	1.62	139.019		
500.0	500.0	500.0	500.0	2.3	0.0	89.70	1.2	225.0	225.0	223.0	2.00	112.550 CC, ES		
600.0	600.0	592.8	592.8	2.7	0.0	89.78	0.9	226.4	226.6	224.2	2.37	95.532		
700.0	700.0	685.4	685.2	3.0	0.0	-158.64	-0.1	230.8	232.9	230.1	2.81	82.938		
800.0	799.8	777.1	776.6	4.0	0.0	-158.60	-1.6	238.1	245.7	241.8	3.90	63.049		
900.0	899.5	867.4	866.4	4.9	0.0	-158.63	-3.6	248.0	264.7	259.9	4.75	55.724		
1,000.0	998.7	955.8	953.9	5.6	0.0	-158.70	-6.2	260.4	289.9	284.4	5.47	52.968		
1,100.0	1,097.5	1,041.8	1,038.6	6.3	0.0	-158.79	-9.3	275.0	321.0	314.9	6.10	52.592 SF		
1,200.0	1,195.6	1,125.1	1,120.2	6.8	0.0	-158.91	-12.7	291.5	357.9	351.4	6.52	54.913		
1,300.0	1,293.6	1,206.1	1,199.0	7.0	0.0	-159.18	-16.6	309.7	398.4	391.7	6.70	59.467		
1,400.0	1,391.5	1,285.2	1,275.4	7.3	0.0	-159.32	-20.7	329.6	441.4	434.5	6.91	63.899		
1,500.0	1,489.4	1,362.2	1,349.2	7.6	0.0	-159.37	-25.2	351.0	486.8	479.6	7.12	68.412		
1,600.0	1,587.4	1,437.1	1,420.5	7.8	0.0	-159.36	-29.9	373.7	534.4	527.1	7.32	72.995		
1,700.0	1,685.3	1,510.0	1,489.2	8.2	0.0	-159.29	-34.9	397.4	584.2	576.7	7.53	77.637		
1,800.0	1,783.2	1,587.2	1,561.4	8.5	0.0	-159.19	-40.5	424.3	636.0	628.2	7.76	81.963		
1,900.0	1,881.2	1,672.6	1,641.1	8.8	0.0	-159.09	-46.8	454.2	688.1	680.1	8.04	85.568		
2,000.0	1,979.1	1,757.9	1,720.7	9.1	0.0	-159.00	-53.1	484.2	740.2	731.9	8.33	88.869		
2,100.0	2,077.0	1,843.3	1,800.4	9.5	0.0	-158.92	-59.3	514.2	792.3	783.7	8.62	91.895		
2,200.0	2,175.0	1,928.6	1,880.1	9.9	0.0	-158.85	-65.6	544.1	844.4	835.5	8.92	94.673		
2,300.0	2,272.9	2,014.0	1,959.8	10.2	0.0	-158.79	-71.9	574.1	896.5	887.3	9.22	97.228		
2,400.0	2,370.8	2,099.3	2,039.4	10.7	0.0	-158.74	-78.1	604.1	948.6	939.1	9.53	99.583		
2,500.0	2,468.8	2,184.7	2,119.1	11.1	0.0	-158.69	-84.4	634.0	1,000.7	990.9	9.83	101.755		
2,600.0	2,566.7	2,270.0	2,198.8	11.5	0.0	-158.65	-90.7	664.0	1,052.8	1,042.7	10.15	103.764		
2,700.0	2,664.6	2,355.4	2,278.5	12.0	0.0	-158.61	-96.9	694.0	1,104.9	1,094.4	10.46	105.624		
2,800.0	2,762.6	2,440.7	2,358.1	12.4	0.0	-158.57	-103.2	723.9	1,157.0	1,146.2	10.78	107.349		
2,900.0	2,860.5	2,526.1	2,437.8	12.9	0.0	-158.54	-109.5	753.9	1,209.1	1,198.0	11.10	108.952		
3,000.0	2,958.4	2,611.4	2,517.5	13.3	0.0	-158.51	-115.7	783.9	1,261.2	1,249.8	11.42	110.444		
3,100.0	3,056.4	2,696.8	2,597.1	13.8	0.0	-158.48	-122.0	813.8	1,313.3	1,301.6	11.74	111.834		
3,200.0	3,154.3	2,782.1	2,676.8	14.3	0.0	-158.46	-128.3	843.8	1,365.4	1,353.3	12.07	113.132		
3,300.0	3,252.2	2,867.5	2,756.5	14.8	0.0	-158.44	-134.5	873.7	1,417.5	1,405.1	12.40	114.345		
3,400.0	3,350.2	2,952.9	2,836.2	15.3	0.0	-158.41	-140.8	903.7	1,469.6	1,456.9	12.73	115.481		
3,500.0	3,448.1	3,038.2	2,915.8	15.8	0.0	-158.39	-147.1	933.7	1,521.7	1,508.7	13.06	116.545		
3,600.0	3,546.0	3,123.6	2,995.5	16.3	0.0	-158.37	-153.3	963.6	1,573.8	1,560.4	13.39	117.545		
3,700.0	3,644.0	3,208.9	3,075.2	16.7	0.0	-158.36	-159.6	993.6	1,625.9	1,612.2	13.72	118.484		
3,800.0	3,741.9	3,294.3	3,154.9	17.2	0.0	-158.34	-165.9	1,023.6	1,678.0	1,664.0	14.06	119.368		
3,900.0	3,839.8	3,379.6	3,234.5	17.7	0.0	-158.32	-172.1	1,053.5	1,730.1	1,715.7	14.39	120.200		
4,000.0	3,937.8	3,465.0	3,314.2	18.2	0.0	-158.31	-178.4	1,083.5	1,782.2	1,767.5	14.73	120.985		
4,100.0	4,035.7	3,550.3	3,393.9	18.7	0.0	-158.30	-184.7	1,113.5	1,834.4	1,819.3	15.07	121.726		
4,200.0	4,133.6	3,635.7	3,473.6	19.2	0.0	-158.28	-190.9	1,143.4	1,886.5	1,871.0	15.41	122.426		
4,300.0	4,231.6	3,721.0	3,553.2	19.7	0.0	-158.27	-197.2	1,173.4	1,938.6	1,922.8	15.75	123.089		
4,400.0	4,329.5	3,806.4	3,632.9	20.2	0.0	-158.26	-203.5	1,203.3	1,990.7	1,974.6	16.09	123.716		
4,500.0	4,427.4	3,891.7	3,712.6	20.7	0.0	-158.25	-209.7	1,233.3	2,042.8	2,026.3	16.43	124.310		
4,600.0	4,525.4	3,977.1	3,792.2	21.2	0.0	-158.24	-216.0	1,263.3	2,094.9	2,078.1	16.78	124.874		
4,700.0	4,623.3	4,062.4	3,871.9	21.7	0.0	-158.23	-222.3	1,293.2	2,147.0	2,129.9	17.12	125.408		
4,800.0	4,721.2	4,147.8	3,951.6	22.2	0.0	-158.22	-228.5	1,323.2	2,199.1	2,181.6	17.46	125.916		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - 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	89.69	1.2	210.0	210.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.69	1.2	210.0	210.0	209.7	0.28	757.871		
200.0	200.0	200.0	200.0	1.0	0.0	89.69	1.2	210.0	210.0	209.2	0.80	263.145		
300.0	300.0	300.0	300.0	1.5	0.0	89.69	1.2	210.0	210.0	208.8	1.22	171.467		
400.0	400.0	400.0	400.0	1.9	0.0	89.69	1.2	210.0	210.0	208.4	1.62	129.736		
500.0	500.0	500.0	500.0	2.3	0.0	89.69	1.2	210.0	210.0	208.0	2.00	105.036		
600.0	600.0	600.0	600.0	2.7	0.0	89.69	1.2	210.0	210.0	207.6	2.37	88.492 CC, ES		
700.0	700.0	693.2	693.2	3.0	0.0	-158.91	0.8	211.5	213.2	210.4	2.81	75.822		
800.0	799.8	785.9	785.7	4.0	0.0	-159.04	-0.1	215.9	222.8	218.9	3.91	57.025		
900.0	899.5	877.4	877.0	4.9	0.0	-159.23	-1.7	223.1	238.8	234.0	4.77	50.055		
1,000.0	998.7	967.2	966.2	5.6	0.0	-159.44	-3.8	233.0	261.0	255.5	5.50	47.425		
1,100.0	1,097.5	1,054.9	1,053.0	6.3	0.0	-159.64	-6.4	245.2	289.3	283.2	6.15	47.070 SF		
1,200.0	1,195.6	1,140.1	1,136.9	6.8	0.0	-159.84	-9.5	259.6	323.5	316.9	6.57	49.246		
1,300.0	1,293.6	1,223.0	1,218.1	7.0	0.0	-160.13	-13.0	275.9	361.4	354.6	6.76	53.491		
1,400.0	1,391.5	1,300.0	1,293.1	7.3	0.0	-160.27	-16.7	293.2	401.9	394.9	6.95	57.823		
1,500.0	1,489.4	1,383.0	1,373.3	7.6	0.0	-160.31	-21.1	314.0	444.8	437.6	7.18	61.929		
1,600.0	1,587.4	1,460.1	1,447.2	7.8	0.0	-160.27	-25.7	335.3	490.0	482.6	7.39	66.286		
1,700.0	1,685.3	1,535.0	1,518.5	8.2	0.0	-160.18	-30.5	357.9	537.6	530.0	7.60	70.718		
1,800.0	1,783.2	1,607.9	1,587.3	8.5	0.0	-160.04	-35.6	381.6	587.3	579.5	7.81	75.217		
1,900.0	1,881.2	1,689.1	1,663.2	8.8	0.0	-159.88	-41.6	409.4	638.7	630.6	8.07	79.183		
2,000.0	1,979.1	1,774.8	1,743.5	9.1	0.0	-159.72	-47.9	438.9	690.1	681.8	8.35	82.618		
2,100.0	2,077.0	1,860.5	1,823.7	9.5	0.0	-159.59	-54.2	468.5	741.6	733.0	8.65	85.773		
2,200.0	2,175.0	1,946.2	1,903.9	9.9	0.0	-159.47	-60.5	498.0	793.1	784.1	8.94	88.673		
2,300.0	2,272.9	2,031.9	1,984.1	10.2	0.0	-159.37	-66.9	527.5	844.6	835.3	9.25	91.345		
2,400.0	2,370.8	2,117.7	2,064.4	10.7	0.0	-159.28	-73.2	557.0	896.1	886.5	9.55	93.810		
2,500.0	2,468.8	2,203.4	2,144.6	11.1	0.0	-159.20	-79.5	586.5	947.5	937.7	9.86	96.088		
2,600.0	2,566.7	2,289.1	2,224.8	11.5	0.0	-159.13	-85.8	616.1	999.0	988.8	10.17	98.197		
2,700.0	2,664.6	2,374.8	2,305.1	12.0	0.0	-159.06	-92.1	645.6	1,050.5	1,040.0	10.49	100.153		
2,800.0	2,762.6	2,460.6	2,385.3	12.4	0.0	-159.00	-98.5	675.1	1,102.0	1,091.2	10.81	101.969		
2,900.0	2,860.5	2,546.3	2,465.5	12.9	0.0	-158.95	-104.8	704.6	1,153.5	1,142.4	11.13	103.658		
3,000.0	2,958.4	2,632.0	2,545.8	13.3	0.0	-158.90	-111.1	734.1	1,205.0	1,193.5	11.45	105.232		
3,100.0	3,056.4	2,717.7	2,626.0	13.8	0.0	-158.86	-117.4	763.7	1,256.5	1,244.7	11.78	106.701		
3,200.0	3,154.3	2,803.4	2,706.2	14.3	0.0	-158.81	-123.8	793.2	1,307.9	1,295.8	12.10	108.074		
3,300.0	3,252.2	2,889.2	2,786.4	14.8	0.0	-158.78	-130.1	822.7	1,359.4	1,347.0	12.43	109.359		
3,400.0	3,350.2	2,974.9	2,866.7	15.3	0.0	-158.74	-136.4	852.2	1,410.9	1,398.2	12.76	110.563		
3,500.0	3,448.1	3,060.6	2,946.9	15.8	0.0	-158.71	-142.7	881.7	1,462.4	1,449.3	13.09	111.693		
3,600.0	3,546.0	3,146.3	3,027.1	16.3	0.0	-158.68	-149.0	911.3	1,513.9	1,500.5	13.43	112.755		
3,700.0	3,644.0	3,232.1	3,107.4	16.7	0.0	-158.65	-155.4	940.8	1,565.4	1,551.6	13.76	113.754		
3,800.0	3,741.9	3,317.8	3,187.6	17.2	0.0	-158.62	-161.7	970.3	1,616.9	1,602.8	14.10	114.695		
3,900.0	3,839.8	3,403.5	3,267.8	17.7	0.0	-158.60	-168.0	999.8	1,668.4	1,653.9	14.43	115.583		
4,000.0	3,937.8	3,489.2	3,348.1	18.2	0.0	-158.57	-174.3	1,029.3	1,719.9	1,705.1	14.77	116.421		
4,100.0	4,035.7	3,574.9	3,428.3	18.7	0.0	-158.55	-180.7	1,058.9	1,771.4	1,756.2	15.11	117.213		
4,200.0	4,133.6	3,660.7	3,508.5	19.2	0.0	-158.53	-187.0	1,088.4	1,822.9	1,807.4	15.45	117.962		
4,300.0	4,231.6	3,746.4	3,588.7	19.7	0.0	-158.51	-193.3	1,117.9	1,874.3	1,858.5	15.79	118.671		
4,400.0	4,329.5	3,832.1	3,669.0	20.2	0.0	-158.49	-199.6	1,147.4	1,925.8	1,909.7	16.14	119.344		
4,500.0	4,427.4	3,917.8	3,749.2	20.7	0.0	-158.47	-205.9	1,176.9	1,977.3	1,960.8	16.48	119.982		
4,600.0	4,525.4	4,003.6	3,829.4	21.2	0.0	-158.45	-212.3	1,206.5	2,028.8	2,012.0	16.82	120.587		
4,700.0	4,623.3	4,089.3	3,909.7	21.7	0.0	-158.44	-218.6	1,236.0	2,080.3	2,063.1	17.17	121.163		
4,800.0	4,721.2	4,175.0	3,989.9	22.2	0.0	-158.42	-224.9	1,265.5	2,131.8	2,114.3	17.52	121.710		
4,900.0	4,819.2	4,260.7	4,070.1	22.7	0.0	-158.41	-231.2	1,295.0	2,183.3	2,165.4	17.86	122.230		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 PWP - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							
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	89.70	1.0	195.0	195.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.70	1.0	195.0	195.0	194.7	0.28	703.855		
200.0	200.0	200.0	200.0	1.0	0.0	89.70	1.0	195.0	195.0	194.2	0.80	244.384		
300.0	300.0	300.0	300.0	1.5	0.0	89.70	1.0	195.0	195.0	193.8	1.22	159.238		
400.0	400.0	400.0	400.0	1.9	0.0	89.70	1.0	195.0	195.0	193.4	1.62	120.481		
500.0	500.0	500.0	500.0	2.3	0.0	89.70	1.0	195.0	195.0	193.0	2.00	97.541		
600.0	600.0	600.0	600.0	2.7	0.0	89.70	1.0	195.0	195.0	192.6	2.37	82.178	CC, ES	
700.0	700.0	700.0	700.0	3.0	0.0	-159.02	1.0	195.0	196.6	193.8	2.81	69.901		
800.0	799.8	793.4	793.4	4.0	0.0	-159.37	0.7	196.5	203.1	199.2	3.91	51.874		
900.0	899.5	886.0	885.9	4.9	0.0	-159.75	-0.4	200.8	215.9	211.2	4.79	45.109		
1,000.0	998.7	977.2	976.8	5.6	0.0	-160.11	-2.1	208.0	235.1	229.6	5.53	42.512		
1,100.0	1,097.5	1,066.5	1,065.5	6.3	0.0	-160.42	-4.4	217.8	260.5	254.3	6.18	42.117	SF	
1,200.0	1,195.6	1,153.4	1,151.5	6.8	0.0	-160.70	-7.2	229.8	291.8	285.2	6.62	44.108		
1,300.0	1,293.6	1,238.2	1,235.0	7.0	0.0	-161.00	-10.6	244.0	327.0	320.1	6.81	48.020		
1,400.0	1,391.5	1,321.2	1,316.3	7.3	0.0	-161.13	-14.4	260.3	364.7	357.7	7.03	51.898		
1,500.0	1,489.4	1,400.0	1,393.1	7.6	0.0	-161.13	-18.6	277.8	405.0	397.8	7.23	55.985		
1,600.0	1,587.4	1,481.4	1,471.8	7.8	0.0	-161.03	-23.4	298.0	447.7	440.3	7.46	59.996		
1,700.0	1,685.3	1,558.5	1,545.7	8.2	0.0	-160.88	-28.4	319.2	492.8	485.1	7.68	64.187		
1,800.0	1,783.2	1,633.6	1,617.2	8.5	0.0	-160.68	-33.7	341.7	540.1	532.2	7.89	68.458		
1,900.0	1,881.2	1,709.4	1,688.6	8.8	0.0	-160.45	-39.5	366.2	589.6	581.5	8.11	72.665		
2,000.0	1,979.1	1,795.8	1,770.0	9.1	0.0	-160.20	-46.3	394.8	639.8	631.4	8.40	76.134		
2,100.0	2,077.0	1,882.3	1,851.3	9.5	0.0	-159.99	-53.1	423.3	690.0	681.3	8.70	79.323		
2,200.0	2,175.0	1,968.8	1,932.6	9.9	0.0	-159.81	-59.8	451.9	740.2	731.2	9.00	82.258		
2,300.0	2,272.9	2,055.2	2,013.9	10.2	0.0	-159.65	-66.6	480.5	790.4	781.1	9.30	84.964		
2,400.0	2,370.8	2,141.7	2,095.3	10.7	0.0	-159.51	-73.4	509.1	840.6	831.0	9.61	87.463		
2,500.0	2,468.8	2,228.2	2,176.6	11.1	0.0	-159.39	-80.1	537.7	890.8	880.9	9.92	89.774		
2,600.0	2,566.7	2,314.7	2,257.9	11.5	0.0	-159.28	-86.9	566.2	941.0	930.7	10.24	91.915		
2,700.0	2,664.6	2,401.1	2,339.3	12.0	0.0	-159.18	-93.7	594.8	991.2	980.6	10.56	93.901		
2,800.0	2,762.6	2,487.6	2,420.6	12.4	0.0	-159.09	-100.4	623.4	1,041.4	1,030.5	10.88	95.748		
2,900.0	2,860.5	2,574.1	2,501.9	12.9	0.0	-159.01	-107.2	652.0	1,091.6	1,080.4	11.20	97.467		
3,000.0	2,958.4	2,660.5	2,583.2	13.3	0.0	-158.93	-114.0	680.6	1,141.8	1,130.3	11.53	99.070		
3,100.0	3,056.4	2,747.0	2,664.6	13.8	0.0	-158.86	-120.8	709.1	1,192.1	1,180.2	11.85	100.566		
3,200.0	3,154.3	2,833.5	2,745.9	14.3	0.0	-158.80	-127.5	737.7	1,242.3	1,230.1	12.18	101.966		
3,300.0	3,252.2	2,919.9	2,827.2	14.8	0.0	-158.74	-134.3	766.3	1,292.5	1,280.0	12.51	103.277		
3,400.0	3,350.2	3,006.4	2,908.5	15.3	0.0	-158.69	-141.1	794.9	1,342.7	1,329.9	12.85	104.507		
3,500.0	3,448.1	3,092.9	2,989.9	15.8	0.0	-158.64	-147.8	823.5	1,392.9	1,379.8	13.18	105.662		
3,600.0	3,546.0	3,179.3	3,071.2	16.3	0.0	-158.60	-154.6	852.0	1,443.2	1,429.7	13.52	106.748		
3,700.0	3,644.0	3,265.8	3,152.5	16.7	0.0	-158.55	-161.4	880.6	1,493.4	1,479.5	13.86	107.770		
3,800.0	3,741.9	3,352.3	3,233.9	17.2	0.0	-158.51	-168.1	909.2	1,543.6	1,529.4	14.20	108.734		
3,900.0	3,839.8	3,438.7	3,315.2	17.7	0.0	-158.47	-174.9	937.8	1,593.8	1,579.3	14.54	109.644		
4,000.0	3,937.8	3,525.2	3,396.5	18.2	0.0	-158.44	-181.7	966.4	1,644.1	1,629.2	14.88	110.503		
4,100.0	4,035.7	3,611.7	3,477.8	18.7	0.0	-158.41	-188.4	994.9	1,694.3	1,679.1	15.22	111.316		
4,200.0	4,133.6	3,698.1	3,559.2	19.2	0.0	-158.37	-195.2	1,023.5	1,744.5	1,729.0	15.56	112.086		
4,300.0	4,231.6	3,784.6	3,640.5	19.7	0.0	-158.34	-202.0	1,052.1	1,794.7	1,778.8	15.91	112.815		
4,400.0	4,329.5	3,871.1	3,721.8	20.2	0.0	-158.32	-208.7	1,080.7	1,845.0	1,828.7	16.25	113.507		
4,500.0	4,427.4	3,957.5	3,803.1	20.7	0.0	-158.29	-215.5	1,109.2	1,895.2	1,878.6	16.60	114.164		
4,600.0	4,525.4	4,044.0	3,884.5	21.2	0.0	-158.27	-222.3	1,137.8	1,945.4	1,928.5	16.95	114.788		
4,700.0	4,623.3	4,130.5	3,965.8	21.7	0.0	-158.24	-229.1	1,166.4	1,995.7	1,978.4	17.30	115.381		
4,800.0	4,721.2	4,216.9	4,047.1	22.2	0.0	-158.22	-235.8	1,195.0	2,045.9	2,028.2	17.65	115.946		
4,900.0	4,819.2	4,303.4	4,128.4	22.7	0.0	-158.20	-242.6	1,223.6	2,096.1	2,078.1	17.99	116.484		
5,000.0	4,917.1	4,389.9	4,209.8	23.2	0.0	-158.18	-249.4	1,252.1	2,146.3	2,128.0	18.35	116.997		
5,100.0	5,015.0	4,476.3	4,291.1	23.7	0.0	-158.16	-256.1	1,280.7	2,196.6	2,177.9	18.70	117.486		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 - EXISTING - NO SURVEYS													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		
14,600.0	7,660.0	7,591.0	7,591.0	123.5	28.2	90.00	8,133.3	165.1	2,177.6	2,048.9	128.72	16.917		
14,700.0	7,660.0	7,591.0	7,591.0	125.2	28.2	90.00	8,133.3	165.1	2,108.0	1,975.8	132.17	15.949		
14,800.0	7,660.0	7,591.0	7,591.0	126.9	28.2	90.00	8,133.3	165.1	2,040.9	1,905.1	135.75	15.035		
14,900.0	7,660.0	7,591.0	7,591.0	128.6	28.2	90.00	8,133.3	165.1	1,976.6	1,837.1	139.43	14.176		
15,000.0	7,660.0	7,591.0	7,591.0	130.3	28.2	90.00	8,133.3	165.1	1,915.3	1,772.1	143.21	13.374		
15,100.0	7,660.0	7,591.0	7,591.0	132.0	28.2	90.00	8,133.3	165.1	1,857.4	1,710.4	147.04	12.632		
15,200.0	7,660.0	7,591.0	7,591.0	133.7	28.2	90.00	8,133.3	165.1	1,803.2	1,652.3	150.89	11.950		
15,300.0	7,660.0	7,591.0	7,591.0	135.4	28.2	90.00	8,133.3	165.1	1,753.0	1,598.3	154.72	11.330		
15,400.0	7,660.0	7,591.0	7,591.0	137.1	28.2	90.00	8,133.3	165.1	1,707.2	1,548.8	158.47	10.773		
15,500.0	7,660.0	7,591.0	7,591.0	138.8	28.2	90.00	8,133.3	165.1	1,666.2	1,504.1	162.06	10.281		
15,600.0	7,660.0	7,591.0	7,591.0	140.6	28.2	90.00	8,133.3	165.1	1,630.3	1,464.8	165.44	9.854		
15,700.0	7,660.0	7,591.0	7,591.0	142.3	28.2	90.00	8,133.3	165.1	1,599.8	1,431.3	168.51	9.494		
15,800.0	7,660.0	7,591.0	7,591.0	144.0	28.2	90.00	8,133.3	165.1	1,575.1	1,403.9	171.21	9.200		
15,900.0	7,660.0	7,591.0	7,591.0	145.7	28.2	90.00	8,133.3	165.1	1,556.5	1,383.0	173.46	8.973		
16,000.0	7,660.0	7,591.0	7,591.0	147.4	28.2	90.00	8,133.3	165.1	1,544.1	1,368.9	175.19	8.813		
16,100.0	7,660.0	7,591.0	7,591.0	149.1	28.2	90.00	8,133.3	165.1	1,538.1	1,361.7	176.37	8.721		
16,142.1	7,660.0	7,591.0	7,591.0	149.9	28.2	90.00	8,133.3	165.1	1,537.5	1,360.8	176.69	8.702 CC, ES		
16,200.0	7,660.0	7,591.0	7,591.0	150.9	28.2	90.00	8,133.3	165.1	1,538.6	1,361.6	176.95	8.695 SF		
16,300.0	7,660.0	7,591.0	7,591.0	152.6	28.2	90.00	8,133.3	165.1	1,545.6	1,368.6	176.94	8.735		
16,400.0	7,660.0	7,591.0	7,591.0	154.3	28.2	90.00	8,133.3	165.1	1,559.0	1,382.6	176.36	8.840		
16,500.0	7,660.0	7,591.0	7,591.0	156.0	28.2	90.00	8,133.3	165.1	1,578.6	1,403.4	175.23	9.009		
16,600.0	7,660.0	7,591.0	7,591.0	157.7	28.2	90.00	8,133.3	165.1	1,604.2	1,430.6	173.62	9.240		
16,700.0	7,660.0	7,591.0	7,591.0	159.5	28.2	90.00	8,133.3	165.1	1,635.6	1,464.0	171.58	9.532		
16,800.0	7,660.0	7,591.0	7,591.0	161.2	28.2	90.00	8,133.3	165.1	1,672.3	1,503.1	169.20	9.884		
16,900.0	7,660.0	7,591.0	7,591.0	162.9	28.2	90.00	8,133.3	165.1	1,714.1	1,547.6	166.55	10.292		
17,000.0	7,660.0	7,591.0	7,591.0	164.6	28.2	90.00	8,133.3	165.1	1,760.6	1,597.0	163.69	10.756		
17,100.0	7,660.0	7,591.0	7,591.0	166.4	28.2	90.00	8,133.3	165.1	1,811.5	1,650.8	160.69	11.273		
17,200.0	7,660.0	7,591.0	7,591.0	168.1	28.2	90.00	8,133.3	165.1	1,866.3	1,708.7	157.61	11.842		
17,300.0	7,660.0	7,591.0	7,591.0	169.8	28.2	90.00	8,133.3	165.1	1,924.7	1,770.2	154.49	12.459		
17,400.0	7,660.0	7,591.0	7,591.0	171.6	28.2	90.00	8,133.3	165.1	1,986.5	1,835.1	151.37	13.123		
17,500.0	7,660.0	7,591.0	7,591.0	173.3	28.2	90.00	8,133.3	165.1	2,051.3	1,903.0	148.29	13.833		
17,600.0	7,660.0	7,591.0	7,591.0	175.0	28.2	90.00	8,133.3	165.1	2,118.8	1,973.5	145.28	14.585		
17,630.0	7,660.0	7,591.0	7,591.0	175.5	28.2	90.00	8,133.3	165.1	2,139.6	1,995.2	144.39	14.818		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 Smith #1 - EXISTING - NO SURVEYS													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		
15,600.0	7,660.0	7,591.0	7,591.0	140.6	28.2	-90.00	9,758.5	-1,416.2	2,180.6	2,115.2	65.36	33.362		
15,700.0	7,660.0	7,591.0	7,591.0	142.3	28.2	-90.00	9,758.5	-1,416.2	2,080.6	2,015.2	65.37	31.828		
15,800.0	7,660.0	7,591.0	7,591.0	144.0	28.2	-90.00	9,758.5	-1,416.2	1,980.6	1,915.2	65.37	30.296		
15,900.0	7,660.0	7,591.0	7,591.0	145.7	28.2	-90.00	9,758.5	-1,416.2	1,880.6	1,815.2	65.38	28.766		
16,000.0	7,660.0	7,591.0	7,591.0	147.4	28.2	-90.00	9,758.5	-1,416.2	1,780.6	1,715.3	65.37	27.238		
16,100.0	7,660.0	7,591.0	7,591.0	149.1	28.2	-90.00	9,758.5	-1,416.2	1,680.6	1,615.3	65.36	25.712		
16,200.0	7,660.0	7,591.0	7,591.0	150.9	28.2	-90.00	9,758.5	-1,416.2	1,580.7	1,515.3	65.35	24.189		
16,300.0	7,660.0	7,591.0	7,591.0	152.6	28.2	-90.00	9,758.5	-1,416.2	1,480.7	1,415.4	65.32	22.667		
16,400.0	7,660.0	7,591.0	7,591.0	154.3	28.2	-90.00	9,758.5	-1,416.2	1,380.7	1,315.4	65.29	21.147		
16,500.0	7,660.0	7,591.0	7,591.0	156.0	28.2	-90.00	9,758.5	-1,416.2	1,280.7	1,215.5	65.25	19.630		
16,600.0	7,660.0	7,591.0	7,591.0	157.7	28.2	-90.00	9,758.5	-1,416.2	1,180.8	1,115.6	65.19	18.114		
16,700.0	7,660.0	7,591.0	7,591.0	159.5	28.2	-90.00	9,758.5	-1,416.2	1,080.8	1,015.7	65.11	16.600		
16,800.0	7,660.0	7,591.0	7,591.0	161.2	28.2	-90.00	9,758.5	-1,416.2	980.8	915.8	65.01	15.087		
16,900.0	7,660.0	7,591.0	7,591.0	162.9	28.2	-90.00	9,758.5	-1,416.2	880.9	816.0	64.89	13.576		
17,000.0	7,660.0	7,591.0	7,591.0	164.6	28.2	-90.00	9,758.5	-1,416.2	781.0	716.2	64.73	12.065		
17,100.0	7,660.0	7,591.0	7,591.0	166.4	28.2	-90.00	9,758.5	-1,416.2	681.1	616.5	64.53	10.554		
17,200.0	7,660.0	7,591.0	7,591.0	168.1	28.2	-90.00	9,758.5	-1,416.2	581.2	516.9	64.28	9.042		
17,300.0	7,660.0	7,591.0	7,591.0	169.8	28.2	-90.00	9,758.5	-1,416.2	481.3	417.4	63.97	7.524		
17,400.0	7,660.0	7,591.0	7,591.0	171.6	28.2	-90.00	9,758.5	-1,416.2	381.6	317.9	63.67	5.993		
17,500.0	7,660.0	7,591.0	7,591.0	173.3	28.2	-90.00	9,758.5	-1,416.2	282.0	218.4	63.62	4.433		
17,600.0	7,660.0	7,591.0	7,591.0	175.0	28.2	-90.00	9,758.5	-1,416.2	182.9	117.4	65.55	2.790		
17,630.0	7,660.0	7,591.0	7,591.0	175.5	28.2	-90.00	9,758.5	-1,416.2	153.4	85.7	67.68	2.266	CC, ES, SF	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 - EXISTING - NO SURVEYS													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		
11,800.0	7,660.0	7,591.0	7,591.0	77.2	28.2	90.00	5,916.2	-904.4	2,180.8	2,108.4	72.44	30.106	CC, ES, SF	
11,900.0	7,660.0	7,591.0	7,591.0	78.8	28.2	90.00	5,916.2	-904.4	2,083.1	2,009.9	73.15	28.476		
12,000.0	7,660.0	7,591.0	7,591.0	80.4	28.2	90.00	5,916.2	-904.4	1,985.5	1,911.6	73.94	26.852		
12,100.0	7,660.0	7,591.0	7,591.0	82.0	28.2	90.00	5,916.2	-904.4	1,888.3	1,813.4	74.83	25.235		
12,200.0	7,660.0	7,591.0	7,591.0	83.6	28.2	90.00	5,916.2	-904.4	1,791.3	1,715.5	75.82	23.626		
12,300.0	7,660.0	7,591.0	7,591.0	85.2	28.2	90.00	5,916.2	-904.4	1,694.7	1,617.8	76.93	22.028		
12,400.0	7,660.0	7,591.0	7,591.0	86.8	28.2	90.00	5,916.2	-904.4	1,598.5	1,520.3	78.20	20.441		
12,500.0	7,660.0	7,591.0	7,591.0	88.4	28.2	90.00	5,916.2	-904.4	1,502.8	1,423.2	79.64	18.870		
12,600.0	7,660.0	7,591.0	7,591.0	90.1	28.2	90.00	5,916.2	-904.4	1,407.7	1,326.4	81.29	17.317		
12,700.0	7,660.0	7,591.0	7,591.0	91.7	28.2	90.00	5,916.2	-904.4	1,313.3	1,230.1	83.20	15.786		
12,800.0	7,660.0	7,591.0	7,591.0	93.4	28.2	90.00	5,916.2	-904.4	1,219.8	1,134.4	85.41	14.282		
12,900.0	7,660.0	7,591.0	7,591.0	95.0	28.2	90.00	5,916.2	-904.4	1,127.5	1,039.5	87.99	12.813		
13,000.0	7,660.0	7,591.0	7,591.0	96.7	28.2	90.00	5,916.2	-904.4	1,036.5	945.5	91.03	11.386		
13,100.0	7,660.0	7,591.0	7,591.0	98.3	28.2	90.00	5,916.2	-904.4	947.4	852.8	94.63	10.012		
13,200.0	7,660.0	7,591.0	7,591.0	100.0	28.2	90.00	5,916.2	-904.4	860.7	761.8	98.89	8.704		
13,300.0	7,660.0	7,591.0	7,591.0	101.6	28.2	90.00	5,916.2	-904.4	777.2	673.3	103.94	7.477		
13,400.0	7,660.0	7,591.0	7,591.0	103.3	28.2	90.00	5,916.2	-904.4	698.1	588.2	109.88	6.353		
13,500.0	7,660.0	7,591.0	7,591.0	105.0	28.2	90.00	5,916.2	-904.4	624.9	508.2	116.70	5.355		
13,600.0	7,660.0	7,591.0	7,591.0	106.6	28.2	90.00	5,916.2	-904.4	560.1	436.0	124.14	4.512		
13,700.0	7,660.0	7,591.0	7,591.0	108.3	28.2	90.00	5,916.2	-904.4	506.9	375.4	131.43	3.856		
13,800.0	7,660.0	7,591.0	7,591.0	110.0	28.2	90.00	5,916.2	-904.4	469.2	332.1	137.09	3.422		
13,900.0	7,660.0	7,591.0	7,591.0	111.7	28.2	90.00	5,916.2	-904.4	450.9	311.8	139.16	3.240		
13,933.9	7,660.0	7,591.0	7,591.0	112.2	28.2	90.00	5,916.2	-904.4	449.6	310.9	138.79	3.240		
14,000.0	7,660.0	7,591.0	7,591.0	113.4	28.2	90.00	5,916.2	-904.4	454.5	318.0	136.44	3.331		
14,100.0	7,660.0	7,591.0	7,591.0	115.0	28.2	90.00	5,916.2	-904.4	479.3	349.8	129.57	3.700		
14,200.0	7,660.0	7,591.0	7,591.0	116.7	28.2	90.00	5,916.2	-904.4	522.5	401.9	120.53	4.335		
14,300.0	7,660.0	7,591.0	7,591.0	118.4	28.2	90.00	5,916.2	-904.4	579.8	468.6	111.25	5.212		
14,400.0	7,660.0	7,591.0	7,591.0	120.1	28.2	90.00	5,916.2	-904.4	647.6	544.8	102.83	6.298		
14,500.0	7,660.0	7,591.0	7,591.0	121.8	28.2	90.00	5,916.2	-904.4	722.9	627.2	95.67	7.556		
14,600.0	7,660.0	7,591.0	7,591.0	123.5	28.2	90.00	5,916.2	-904.4	803.6	713.9	89.76	8.953		
14,700.0	7,660.0	7,591.0	7,591.0	125.2	28.2	90.00	5,916.2	-904.4	888.3	803.3	84.96	10.456		
14,800.0	7,660.0	7,591.0	7,591.0	126.9	28.2	90.00	5,916.2	-904.4	975.8	894.8	81.07	12.037		
14,900.0	7,660.0	7,591.0	7,591.0	128.6	28.2	90.00	5,916.2	-904.4	1,065.6	987.7	77.92	13.676		
15,000.0	7,660.0	7,591.0	7,591.0	130.3	28.2	90.00	5,916.2	-904.4	1,157.0	1,081.6	75.36	15.352		
15,100.0	7,660.0	7,591.0	7,591.0	132.0	28.2	90.00	5,916.2	-904.4	1,249.7	1,176.5	73.29	17.053		
15,200.0	7,660.0	7,591.0	7,591.0	133.7	28.2	90.00	5,916.2	-904.4	1,343.5	1,271.9	71.59	18.767		
15,300.0	7,660.0	7,591.0	7,591.0	135.4	28.2	90.00	5,916.2	-904.4	1,438.2	1,368.0	70.20	20.487		
15,400.0	7,660.0	7,591.0	7,591.0	137.1	28.2	90.00	5,916.2	-904.4	1,533.5	1,464.4	69.05	22.207		
15,500.0	7,660.0	7,591.0	7,591.0	138.8	28.2	90.00	5,916.2	-904.4	1,629.3	1,561.2	68.11	23.922		
15,600.0	7,660.0	7,591.0	7,591.0	140.6	28.2	90.00	5,916.2	-904.4	1,725.7	1,658.3	67.33	25.630		
15,700.0	7,660.0	7,591.0	7,591.0	142.3	28.2	90.00	5,916.2	-904.4	1,822.4	1,755.7	66.68	27.330		
15,800.0	7,660.0	7,591.0	7,591.0	144.0	28.2	90.00	5,916.2	-904.4	1,919.5	1,853.3	66.14	29.020		
15,900.0	7,660.0	7,591.0	7,591.0	145.7	28.2	90.00	5,916.2	-904.4	2,016.8	1,951.1	65.70	30.699		
16,000.0	7,660.0	7,591.0	7,591.0	147.4	28.2	90.00	5,916.2	-904.4	2,114.4	2,049.1	65.32	32.368		
16,100.0	7,660.0	7,591.0	7,591.0	149.1	28.2	90.00	5,916.2	-904.4	2,212.2	2,147.2	65.02	34.026		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 - EXISTING - NO SURVEYS												Offset Site Error:	0.0 usft
Survey Program: 100-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance				Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,800.0	7,660.0	7,591.0	7,591.0	61.8	28.2	90.00	3,157.5	853.6	2,214.3	2,125.1	89.22	24.819	
10,900.0	7,660.0	7,591.0	7,591.0	63.3	28.2	90.00	3,157.5	853.6	2,200.2	2,109.9	90.38	24.343	
11,000.0	7,660.0	7,591.0	7,591.0	64.8	28.2	90.00	3,157.5	853.6	2,190.6	2,099.2	91.47	23.949	
11,100.0	7,660.0	7,591.0	7,591.0	66.3	28.2	90.00	3,157.5	853.6	2,185.6	2,093.1	92.47	23.636	
11,160.8	7,660.0	7,591.0	7,591.0	67.2	28.2	90.00	3,157.5	853.6	2,184.7	2,091.7	93.03	23.484 CC, ES	
11,200.0	7,660.0	7,591.0	7,591.0	67.8	28.2	90.00	3,157.5	853.6	2,185.1	2,091.7	93.37	23.402	
11,300.0	7,660.0	7,591.0	7,591.0	69.4	28.2	90.00	3,157.5	853.6	2,189.2	2,095.0	94.17	23.246	
11,400.0	7,660.0	7,591.0	7,591.0	70.9	28.2	90.00	3,157.5	853.6	2,197.8	2,102.9	94.86	23.168	
11,500.0	7,660.0	7,591.0	7,591.0	72.5	28.2	90.00	3,157.5	853.6	2,210.9	2,115.5	95.45	23.164 SF	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 - EXISTING - NO SURVEYS													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	-40.42	1,024.1	-872.1	1,346.9					
100.0	100.0	31.0	31.0	0.4	0.3	-40.42	1,024.1	-872.1	1,345.1	1,344.9	0.27	4,956.121		
200.0	200.0	131.0	131.0	1.0	1.1	-40.42	1,024.1	-872.1	1,345.1	1,344.1	1.00	1,345.980		
300.0	300.0	231.0	231.0	1.5	1.5	-40.42	1,024.1	-872.1	1,345.1	1,343.4	1.71	784.432		
400.0	400.0	331.0	331.0	1.9	1.9	-40.42	1,024.1	-872.1	1,345.1	1,342.7	2.43	553.279		
500.0	500.0	431.0	431.0	2.3	2.3	-40.42	1,024.1	-872.1	1,345.1	1,342.0	3.15	427.309		
600.0	600.0	531.0	531.0	2.7	2.7	-40.42	1,024.1	-872.1	1,345.1	1,341.3	3.86	348.053		
700.0	700.0	631.0	631.0	3.0	3.1	71.11	1,024.1	-872.1	1,344.6	1,339.9	4.67	287.751		
800.0	799.8	730.8	730.8	4.0	3.5	71.36	1,024.1	-872.1	1,342.9	1,337.2	5.66	237.240		
900.0	899.5	830.5	830.5	4.9	3.9	71.76	1,024.1	-872.1	1,340.1	1,333.5	6.57	203.962		
1,000.0	998.7	929.7	929.7	5.6	4.2	72.33	1,024.1	-872.1	1,336.3	1,328.9	7.43	179.740		
1,100.0	1,097.5	1,028.5	1,028.5	6.3	4.6	73.05	1,024.1	-872.1	1,331.6	1,323.3	8.27	160.984		
1,200.0	1,195.6	1,126.6	1,126.6	6.8	4.9	73.91	1,024.1	-872.1	1,326.1	1,317.1	9.03	146.805		
1,300.0	1,293.6	1,224.6	1,224.6	7.0	5.3	74.74	1,024.1	-872.1	1,320.5	1,310.8	9.74	135.554		
1,400.0	1,391.5	1,322.5	1,322.5	7.3	5.7	75.57	1,024.1	-872.1	1,315.3	1,304.8	10.50	125.215		
1,500.0	1,489.4	1,420.4	1,420.4	7.6	6.0	76.41	1,024.1	-872.1	1,310.3	1,299.0	11.28	116.157		
1,600.0	1,587.4	1,518.4	1,518.4	7.8	6.4	77.26	1,024.1	-872.1	1,305.6	1,293.5	12.07	108.187		
1,700.0	1,685.3	1,616.3	1,616.3	8.2	6.7	78.11	1,024.1	-872.1	1,301.2	1,288.3	12.86	101.141		
1,800.0	1,783.2	1,714.2	1,714.2	8.5	7.1	78.97	1,024.1	-872.1	1,297.1	1,283.4	13.67	94.883		
1,900.0	1,881.2	1,812.2	1,812.2	8.8	7.4	79.83	1,024.1	-872.1	1,293.3	1,278.8	14.48	89.299		
2,000.0	1,979.1	1,910.1	1,910.1	9.1	7.8	80.69	1,024.1	-872.1	1,289.8	1,274.5	15.30	84.297		
2,100.0	2,077.0	2,008.0	2,008.0	9.5	8.1	81.56	1,024.1	-872.1	1,286.6	1,270.5	16.12	79.796		
2,200.0	2,175.0	2,106.0	2,106.0	9.9	8.5	82.44	1,024.1	-872.1	1,283.7	1,266.8	16.95	75.732		
2,300.0	2,272.9	2,203.9	2,203.9	10.2	8.9	83.32	1,024.1	-872.1	1,281.2	1,263.4	17.78	72.049		
2,400.0	2,370.8	2,301.8	2,301.8	10.7	9.2	84.20	1,024.1	-872.1	1,278.9	1,260.3	18.62	68.700		
2,500.0	2,468.8	2,399.8	2,399.8	11.1	9.6	85.08	1,024.1	-872.1	1,277.0	1,257.5	19.45	65.646		
2,600.0	2,566.7	2,497.7	2,497.7	11.5	9.9	85.97	1,024.1	-872.1	1,275.4	1,255.1	20.29	62.853		
2,700.0	2,664.6	2,595.6	2,595.6	12.0	10.3	86.86	1,024.1	-872.1	1,274.1	1,253.0	21.13	60.291		
2,800.0	2,762.6	2,693.6	2,693.6	12.4	10.6	87.75	1,024.1	-872.1	1,273.1	1,251.1	21.97	57.937		
2,900.0	2,860.5	2,791.5	2,791.5	12.9	11.0	88.64	1,024.1	-872.1	1,272.5	1,249.6	22.82	55.768		
3,000.0	2,958.4	2,889.4	2,889.4	13.3	11.3	89.53	1,024.1	-872.1	1,272.1	1,248.5	23.66	53.765		
3,052.4	3,009.8	2,940.8	2,940.8	13.6	11.5	90.00	1,024.1	-872.1	1,272.1	1,248.0	24.10	52.776		
3,100.0	3,056.4	2,987.4	2,987.4	13.8	11.7	90.42	1,024.1	-872.1	1,272.1	1,247.6	24.51	51.912		
3,200.0	3,154.3	3,085.3	3,085.3	14.3	12.0	91.32	1,024.1	-872.1	1,272.4	1,247.1	25.35	50.196		
3,300.0	3,252.2	3,183.2	3,183.2	14.8	12.4	92.21	1,024.1	-872.1	1,273.1	1,246.9	26.19	48.602		
3,400.0	3,350.2	3,281.2	3,281.2	15.3	12.7	93.10	1,024.1	-872.1	1,274.0	1,247.0	27.04	47.121		
3,500.0	3,448.1	3,379.1	3,379.1	15.8	13.1	93.99	1,024.1	-872.1	1,275.3	1,247.4	27.88	45.741		
3,600.0	3,546.0	3,477.0	3,477.0	16.3	13.4	94.87	1,024.1	-872.1	1,276.9	1,248.2	28.72	44.455		
3,700.0	3,644.0	3,575.0	3,575.0	16.7	13.8	95.76	1,024.1	-872.1	1,278.8	1,249.3	29.56	43.255		
3,800.0	3,741.9	3,672.9	3,672.9	17.2	14.1	96.64	1,024.1	-872.1	1,281.0	1,250.6	30.40	42.133		
3,900.0	3,839.8	3,770.8	3,770.8	17.7	14.5	97.52	1,024.1	-872.1	1,283.6	1,252.3	31.24	41.083		
4,000.0	3,937.8	3,868.8	3,868.8	18.2	14.8	98.39	1,024.1	-872.1	1,286.4	1,254.4	32.08	40.100		
4,100.0	4,035.7	3,966.7	3,966.7	18.7	15.2	99.26	1,024.1	-872.1	1,289.6	1,256.7	32.92	39.179		
4,200.0	4,133.6	4,064.6	4,064.6	19.2	15.5	100.13	1,024.1	-872.1	1,293.1	1,259.3	33.75	38.314		
4,300.0	4,231.6	4,162.6	4,162.6	19.7	15.9	100.99	1,024.1	-872.1	1,296.9	1,262.3	34.58	37.502		
4,400.0	4,329.5	4,260.5	4,260.5	20.2	16.2	101.85	1,024.1	-872.1	1,301.0	1,265.6	35.41	36.739		
4,500.0	4,427.4	4,358.4	4,358.4	20.7	16.6	102.70	1,024.1	-872.1	1,305.4	1,269.1	36.24	36.022		
4,600.0	4,525.4	4,456.4	4,456.4	21.2	17.0	103.55	1,024.1	-872.1	1,310.0	1,273.0	37.06	35.347		
4,700.0	4,623.3	4,554.3	4,554.3	21.7	17.3	104.39	1,024.1	-872.1	1,315.0	1,277.1	37.88	34.711		
4,800.0	4,721.2	4,652.2	4,652.2	22.2	17.7	105.22	1,024.1	-872.1	1,320.3	1,281.6	38.70	34.112		
4,900.0	4,819.2	4,750.2	4,750.2	22.7	18.0	106.05	1,024.1	-872.1	1,325.8	1,286.3	39.52	33.548		
5,000.0	4,917.1	4,848.1	4,848.1	23.2	18.4	106.87	1,024.1	-872.1	1,331.7	1,291.3	40.34	33.016		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 - EXISTING - NO SURVEYS													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		
5,100.0	5,015.0	4,946.0	4,946.0	23.7	18.7	107.68	1,024.1	-872.1	1,337.8	1,296.7	41.15	32.513		
5,200.0	5,113.0	5,044.0	5,044.0	24.2	19.1	108.49	1,024.1	-872.1	1,344.2	1,302.3	41.96	32.039		
5,300.0	5,210.9	5,141.9	5,141.9	24.7	19.4	109.29	1,024.1	-872.1	1,350.9	1,308.1	42.76	31.591		
5,400.0	5,308.8	5,239.8	5,239.8	25.2	19.8	110.08	1,024.1	-872.1	1,357.8	1,314.3	43.56	31.168		
5,500.0	5,406.8	5,337.8	5,337.8	25.7	20.1	110.86	1,024.1	-872.1	1,365.0	1,320.7	44.36	30.768		
5,600.0	5,504.7	5,435.7	5,435.7	26.2	20.5	111.64	1,024.1	-872.1	1,372.5	1,327.3	45.16	30.391		
5,700.0	5,602.6	5,533.6	5,533.6	26.7	20.8	112.40	1,024.1	-872.1	1,380.2	1,334.2	45.96	30.033		
5,800.0	5,700.6	5,631.6	5,631.6	27.2	21.2	113.16	1,024.1	-872.1	1,388.2	1,341.4	46.75	29.695		
5,900.0	5,798.5	5,729.5	5,729.5	27.7	21.5	113.91	1,024.1	-872.1	1,396.4	1,348.9	47.54	29.375		
6,000.0	5,896.4	5,827.4	5,827.4	28.2	21.9	114.65	1,024.1	-872.1	1,404.9	1,356.5	48.32	29.073		
6,100.0	5,994.4	5,925.4	5,925.4	28.7	22.2	115.39	1,024.1	-872.1	1,413.6	1,364.5	49.11	28.786		
6,200.0	6,092.3	6,023.3	6,023.3	29.2	22.6	116.11	1,024.1	-872.1	1,422.5	1,372.6	49.89	28.515		
6,300.0	6,190.2	6,121.2	6,121.2	29.7	22.9	116.82	1,024.1	-872.1	1,431.7	1,381.0	50.66	28.259		
6,400.0	6,288.2	6,219.2	6,219.2	30.2	23.3	117.53	1,024.1	-872.1	1,441.1	1,389.6	51.44	28.015		
6,500.0	6,386.1	6,317.1	6,317.1	30.7	23.6	118.23	1,024.1	-872.1	1,450.7	1,398.5	52.21	27.785		
6,600.0	6,484.0	6,415.0	6,415.0	31.2	24.0	118.92	1,024.1	-872.1	1,460.5	1,407.5	52.98	27.567		
6,700.0	6,582.0	6,513.0	6,513.0	31.7	24.3	119.59	1,024.1	-872.1	1,470.5	1,416.8	53.75	27.361		
6,800.0	6,679.9	6,610.9	6,610.9	32.2	24.7	120.26	1,024.1	-872.1	1,480.8	1,426.3	54.51	27.165		
6,900.0	6,777.8	6,708.8	6,708.8	32.7	25.0	120.93	1,024.1	-872.1	1,491.2	1,436.0	55.27	26.979		
7,000.0	6,875.8	6,806.8	6,806.8	33.2	25.4	121.58	1,024.1	-872.1	1,501.9	1,445.9	56.03	26.804		
7,100.0	6,973.7	6,904.7	6,904.7	33.7	25.7	122.22	1,024.1	-872.1	1,512.7	1,456.0	56.79	26.637		
7,200.0	7,071.6	7,002.6	7,002.6	34.2	26.1	115.61	1,024.1	-872.1	1,523.6	1,466.0	57.55	26.476		
7,300.0	7,169.6	7,100.6	7,100.6	34.8	26.4	69.31	1,024.1	-872.1	1,523.7	1,465.2	58.48	26.054		
7,400.0	7,265.4	7,196.4	7,196.4	35.3	26.8	47.07	1,024.1	-872.1	1,507.3	1,447.8	59.47	25.344		
7,500.0	7,356.1	7,287.1	7,287.1	35.7	27.1	38.90	1,024.1	-872.1	1,474.9	1,414.5	60.36	24.435		
7,600.0	7,438.9	7,369.9	7,369.9	36.0	27.4	36.66	1,024.1	-872.1	1,427.7	1,366.5	61.13	23.354		
7,700.0	7,511.4	7,442.4	7,442.4	36.2	27.7	38.00	1,024.1	-872.1	1,367.3	1,305.5	61.79	22.129		
7,800.0	7,571.2	7,502.2	7,502.2	36.3	27.9	42.69	1,024.1	-872.1	1,295.8	1,233.5	62.33	20.790		
7,900.0	7,616.7	7,547.7	7,547.7	36.4	28.0	51.47	1,024.1	-872.1	1,215.7	1,152.9	62.76	19.370		
8,000.0	7,646.4	7,577.4	7,577.4	36.4	28.2	65.57	1,024.1	-872.1	1,129.5	1,066.4	63.10	17.900		
8,100.0	7,659.4	7,590.4	7,590.4	36.3	28.2	84.64	1,024.1	-872.1	1,040.0	976.7	63.36	16.415		
8,200.0	7,660.0	7,591.0	7,591.0	36.4	28.2	90.00	1,024.1	-872.1	950.5	886.9	63.58	14.949		
8,300.0	7,660.0	7,591.0	7,591.0	36.5	28.2	90.00	1,024.1	-872.1	863.2	799.3	63.83	13.522		
8,400.0	7,660.0	7,591.0	7,591.0	36.6	28.2	90.00	1,024.1	-872.1	778.9	714.8	64.12	12.148		
8,500.0	7,660.0	7,591.0	7,591.0	36.9	28.2	90.00	1,024.1	-872.1	698.8	634.4	64.44	10.844		
8,600.0	7,660.0	7,591.0	7,591.0	37.2	28.2	90.00	1,024.1	-872.1	624.5	559.7	64.78	9.641		
8,700.0	7,660.0	7,591.0	7,591.0	37.7	28.2	90.00	1,024.1	-872.1	558.3	493.2	65.07	8.579		
8,800.0	7,660.0	7,591.0	7,591.0	38.2	28.2	90.00	1,024.1	-872.1	503.3	438.1	65.23	7.716		
8,900.0	7,660.0	7,591.0	7,591.0	38.9	28.2	90.00	1,024.1	-872.1	463.6	398.5	65.10	7.122		
9,000.0	7,660.0	7,591.0	7,591.0	39.6	28.2	90.00	1,024.1	-872.1	443.4	378.8	64.55	6.869 SF		
9,041.8	7,660.0	7,591.0	7,591.0	40.0	28.2	90.00	1,024.1	-872.1	441.4	377.2	64.20	6.876 CC, ES		
9,100.0	7,660.0	7,591.0	7,591.0	40.5	28.2	90.00	1,024.1	-872.1	445.2	381.6	63.62	6.999		
9,200.0	7,660.0	7,591.0	7,591.0	41.4	28.2	90.00	1,024.1	-872.1	468.9	406.4	62.56	7.495		
9,300.0	7,660.0	7,591.0	7,591.0	42.4	28.2	90.00	1,024.1	-872.1	511.4	449.8	61.65	8.295		
9,400.0	7,660.0	7,591.0	7,591.0	43.4	28.2	90.00	1,024.1	-872.1	568.5	507.5	61.00	9.320		
9,500.0	7,660.0	7,591.0	7,591.0	44.5	28.2	90.00	1,024.1	-872.1	636.3	575.7	60.59	10.501		
9,600.0	7,660.0	7,591.0	7,591.0	45.6	28.2	90.00	1,024.1	-872.1	711.7	651.3	60.36	11.790		
9,700.0	7,660.0	7,591.0	7,591.0	46.8	28.2	90.00	1,024.1	-872.1	792.6	732.3	60.25	13.155		
9,800.0	7,660.0	7,591.0	7,591.0	48.1	28.2	90.00	1,024.1	-872.1	877.4	817.2	60.21	14.573		
9,900.0	7,660.0	7,591.0	7,591.0	49.3	28.2	90.00	1,024.1	-872.1	965.1	904.9	60.21	16.030		
10,000.0	7,660.0	7,591.0	7,591.0	50.6	28.2	90.00	1,024.1	-872.1	1,055.0	994.8	60.23	17.515		
10,100.0	7,660.0	7,591.0	7,591.0	51.9	28.2	90.00	1,024.1	-872.1	1,146.6	1,086.3	60.28	19.022		

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 - EXISTING - NO SURVEYS												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	
10,200.0	7,660.0	7,591.0	7,591.0	53.3	28.2	90.00	1,024.1	-872.1	1,239.5	1,179.2	60.33	20.546	
10,300.0	7,660.0	7,591.0	7,591.0	54.6	28.2	90.00	1,024.1	-872.1	1,333.4	1,273.0	60.38	22.083	
10,400.0	7,660.0	7,591.0	7,591.0	56.0	28.2	90.00	1,024.1	-872.1	1,428.2	1,367.7	60.44	23.630	
10,500.0	7,660.0	7,591.0	7,591.0	57.5	28.2	90.00	1,024.1	-872.1	1,523.6	1,463.1	60.50	25.185	
10,600.0	7,660.0	7,591.0	7,591.0	58.9	28.2	90.00	1,024.1	-872.1	1,619.6	1,559.0	60.55	26.746	
10,700.0	7,660.0	7,591.0	7,591.0	60.3	28.2	90.00	1,024.1	-872.1	1,716.0	1,655.4	60.61	28.312	
10,800.0	7,660.0	7,591.0	7,591.0	61.8	28.2	90.00	1,024.1	-872.1	1,812.8	1,752.1	60.67	29.882	
10,900.0	7,660.0	7,591.0	7,591.0	63.3	28.2	90.00	1,024.1	-872.1	1,910.0	1,849.2	60.72	31.455	
11,000.0	7,660.0	7,591.0	7,591.0	64.8	28.2	90.00	1,024.1	-872.1	2,007.4	1,946.6	60.77	33.030	
11,100.0	7,660.0	7,591.0	7,591.0	66.3	28.2	90.00	1,024.1	-872.1	2,105.0	2,044.2	60.83	34.607	
11,200.0	7,660.0	7,591.0	7,591.0	67.8	28.2	90.00	1,024.1	-872.1	2,202.9	2,142.0	60.88	36.185	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 KB @ 5155.0usft

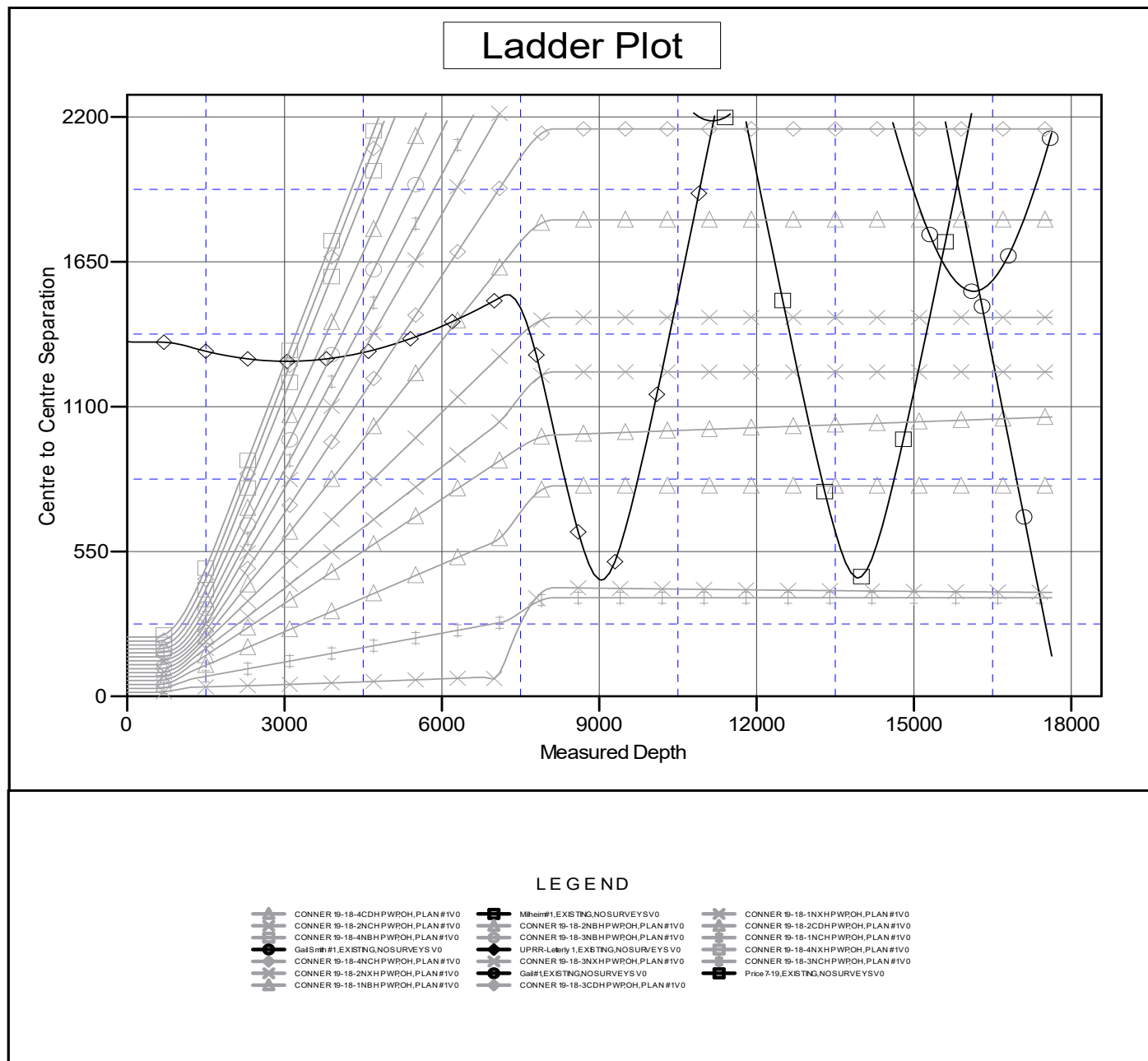
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000

Coordinates are relative to: CONNER 19-18-1CDH

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 19-18-1CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-1CDH	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 KB @ 5155.0usft

Offset Depths are relative to Offset Datum

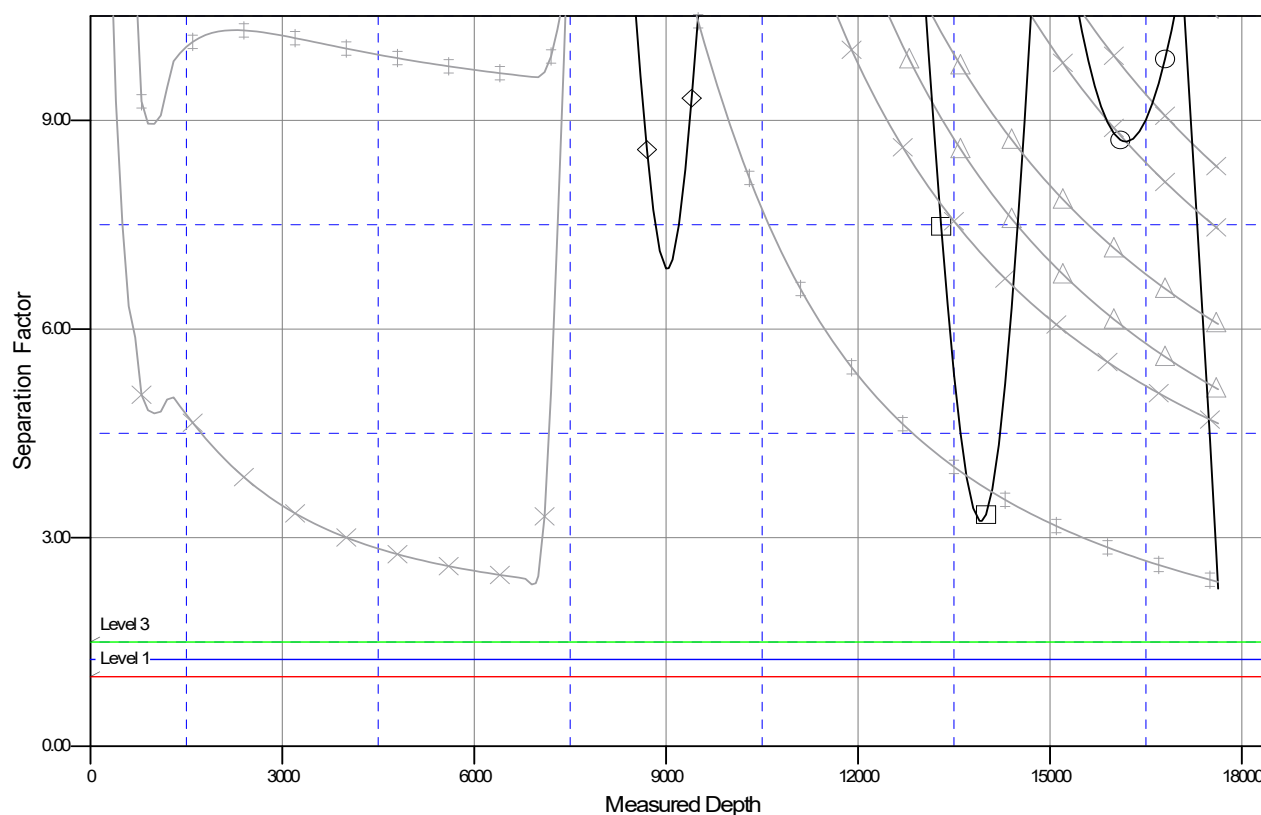
Central Meridian is -105.500000

Coordinates are relative to: CONNER 19-18-1CDH

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.51°

Separation Factor Plot



LEGEND

CONNER 19-18-4CDHPWROH,PLAN #1V0	Milheim#1,EXISTING,NOSURVEYSV0	CONNER 19-18-1NXHPWROH,PLAN #1V0
CONNER 19-18-2NXHPWROH,PLAN #1V0	CONNER 19-18-2NBHPWROH,PLAN #1V0	CONNER 19-18-2CDHPWROH,PLAN #1V0
CONNER 19-18-4NBHPWROH,PLAN #1V0	CONNER 19-18-3NBHPWROH,PLAN #1V0	CONNER 19-18-1NCHPWROH,PLAN #1V0
GailSmith#1,EXISTING,NOSURVEYSV0	UPRR-Letlerly 1,EXISTING,NOSURVEYSV0	CONNER 19-18-4NXHPWROH,PLAN #1V0
CONNER 19-18-4NCHPWROH,PLAN #1V0	CONNER 19-18-3NXHPWROH,PLAN #1V0	CONNER 19-18-3NCHPWROH,PLAN #1V0
CONNER 19-18-2NXHPWROH,PLAN #1V0	Gail#1,EXISTING,NOSURVEYSV0	Price #19,EXISTING,NOSURVEYSV0
CONNER 19-18-1NBHPWROH,PLAN #1V0	CONNER 19-18-3CDHPWROH,PLAN #1V0	