



PetroShare Corp

Project: ADAMS COUNTY, CO
Site: S19-T1S-R65W
Well: CONNER 19-18-2CDH
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: 7.50°

Magnetic Field
Strength: 51671.1nT
Dip Angle: 66.20°
Date: 12/31/2020
Model: HDGM2020_FIE

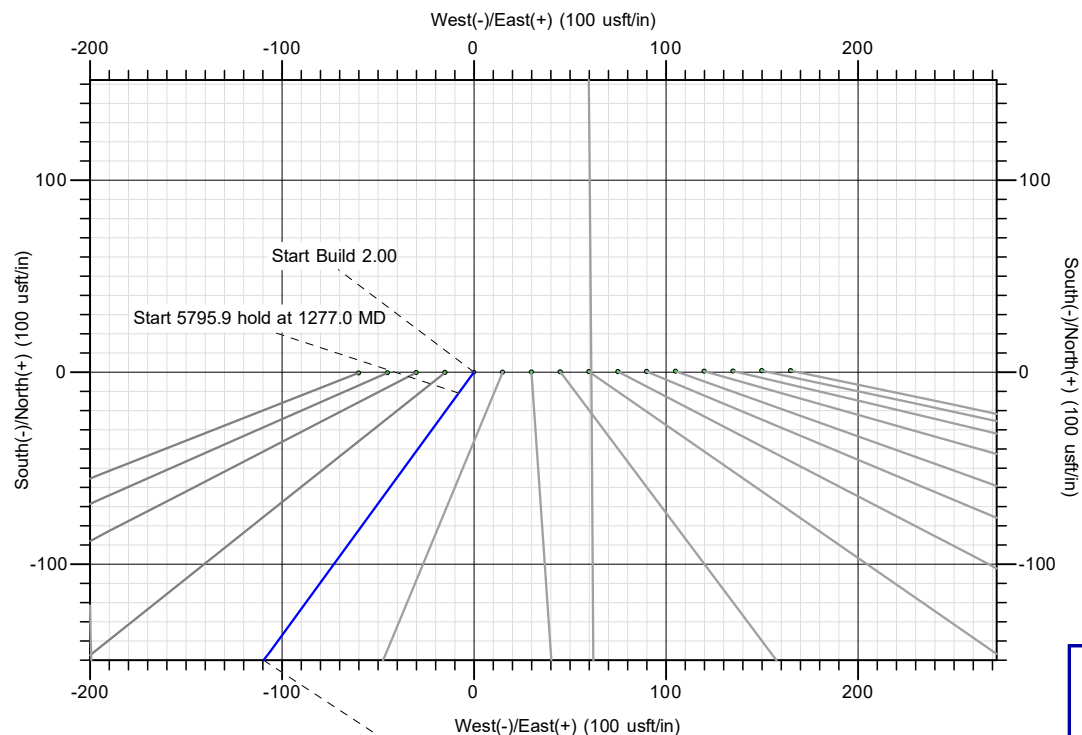


DESIGN TARGET DETAILS

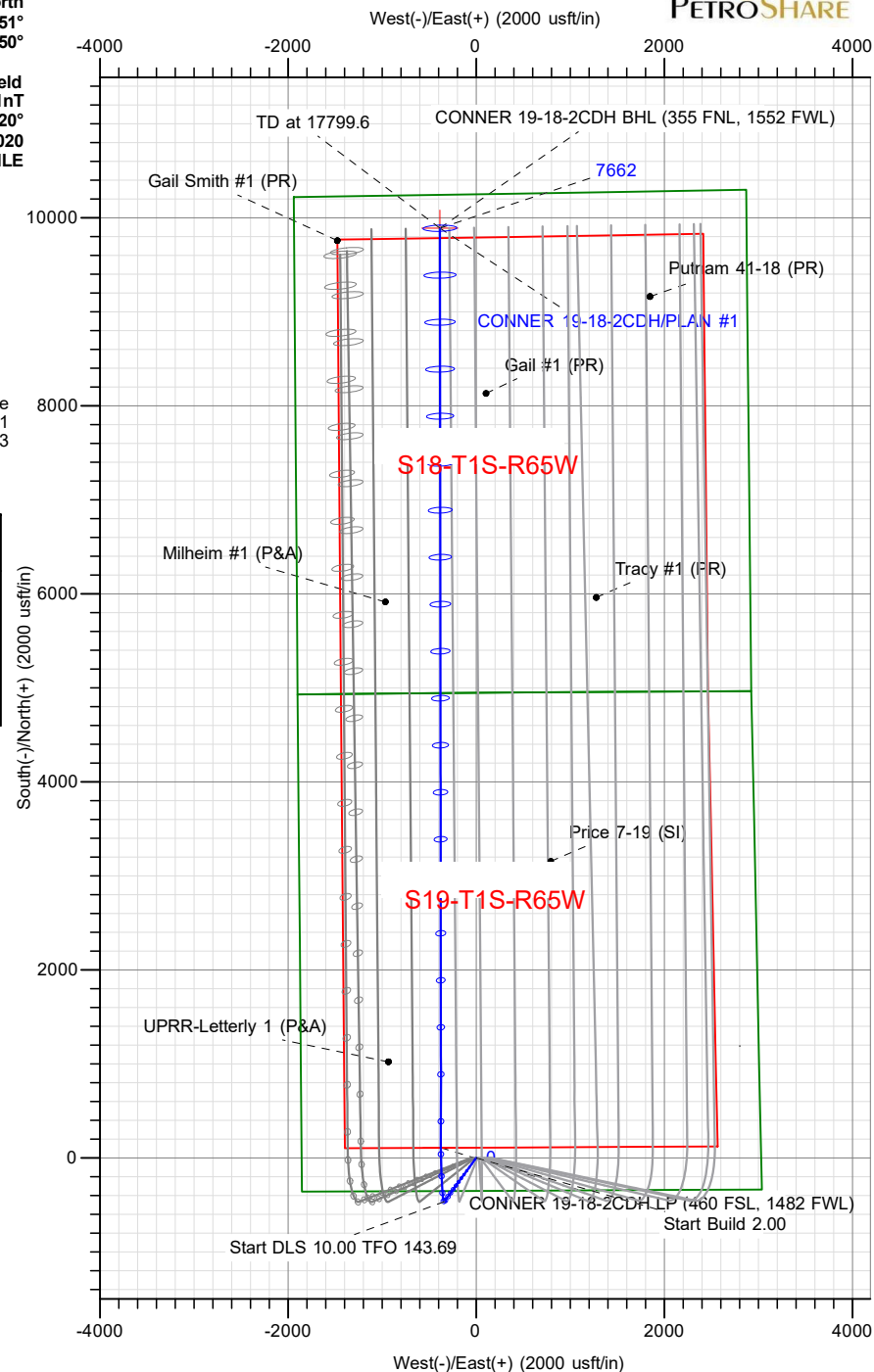
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
CONNER 19-18-2CDH BHL (355 FNL, 1552 FWL)	7662.0	9890.4	-384.5	1233445.07	3221685.37	39.971476	-104.709021
CONNER 19-18-2CDH LP (460 FSL, 1482 FWL)	7662.0	108.4	-373.6	1223663.06	3221696.25	39.944623	-104.709293

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1277.0	5.54	216.12	1276.6	-10.8	-7.9	2.00	216.12	-10.5	
4	7072.9	5.54	216.12	7045.4	-462.8	-337.7	0.00	0.00	-449.3	
5	8017.6	90.00	359.94	7662.0	108.4	-373.6	10.00	143.69	122.8	CONNER 19-18-2CDH LP (460 FSL, 1482 FWL)
6	17799.6	90.00	359.94	7662.0	9890.4	-384.5	0.00	0.00	9897.9	CONNER 19-18-2CDH BHL (355 FNL, 1552 FWL)



CONNER 19-18-2CDH/PLAN #1



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

Plan: PLAN #1 (CONNER 19-18-2CDH/OH)
S19-T1S-R65W
Created By: Lance Roybal
Date: 15:33, March 12 2021
Approved: _____
Date: _____



PetroShare Corp

Project: ADAMS COUNTY, CO
Site: S19-T1S-R65W
Well: CONNER 19-18-2CDH
Wellbore: OH
Design: PLAN #1



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

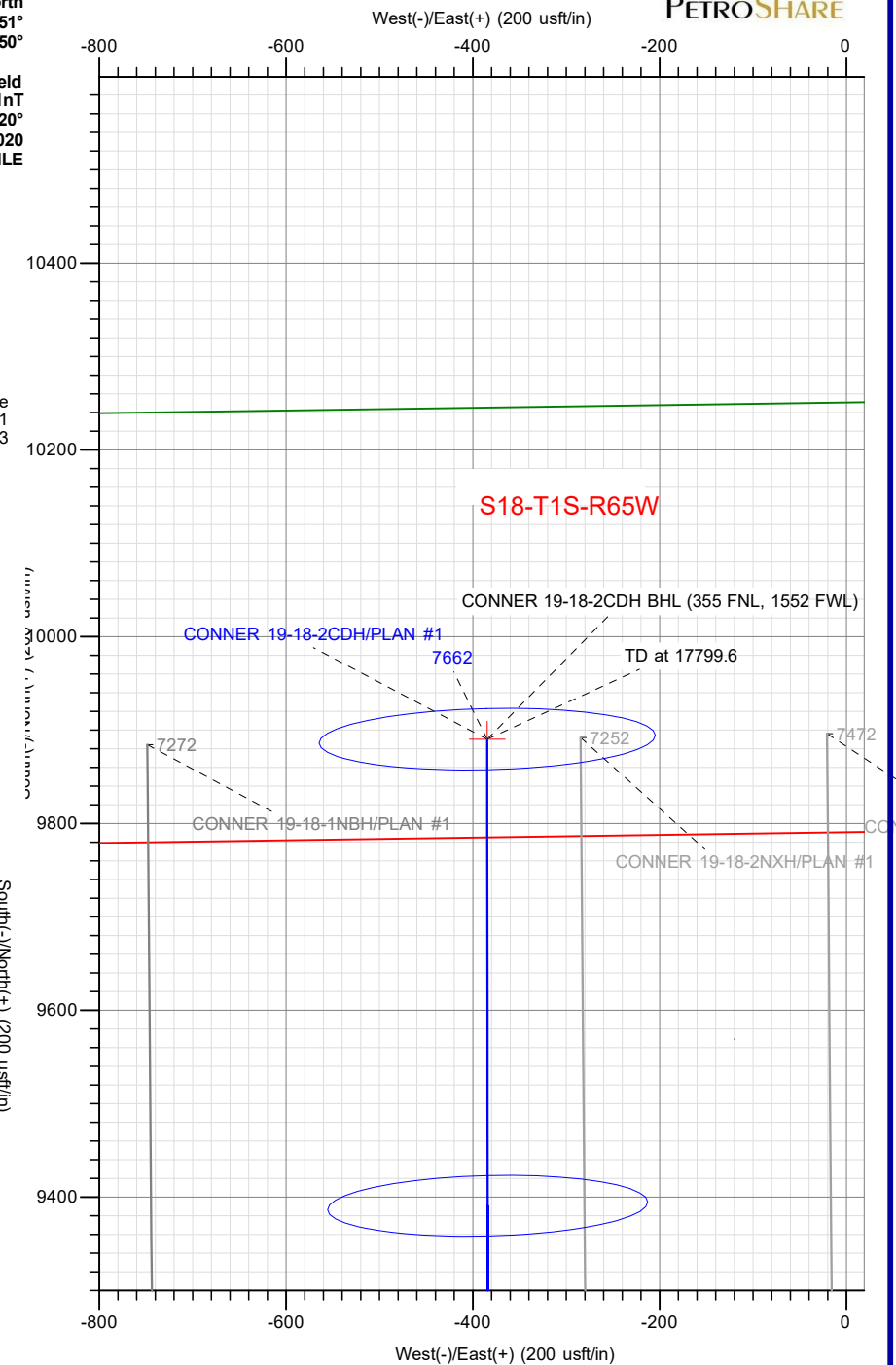
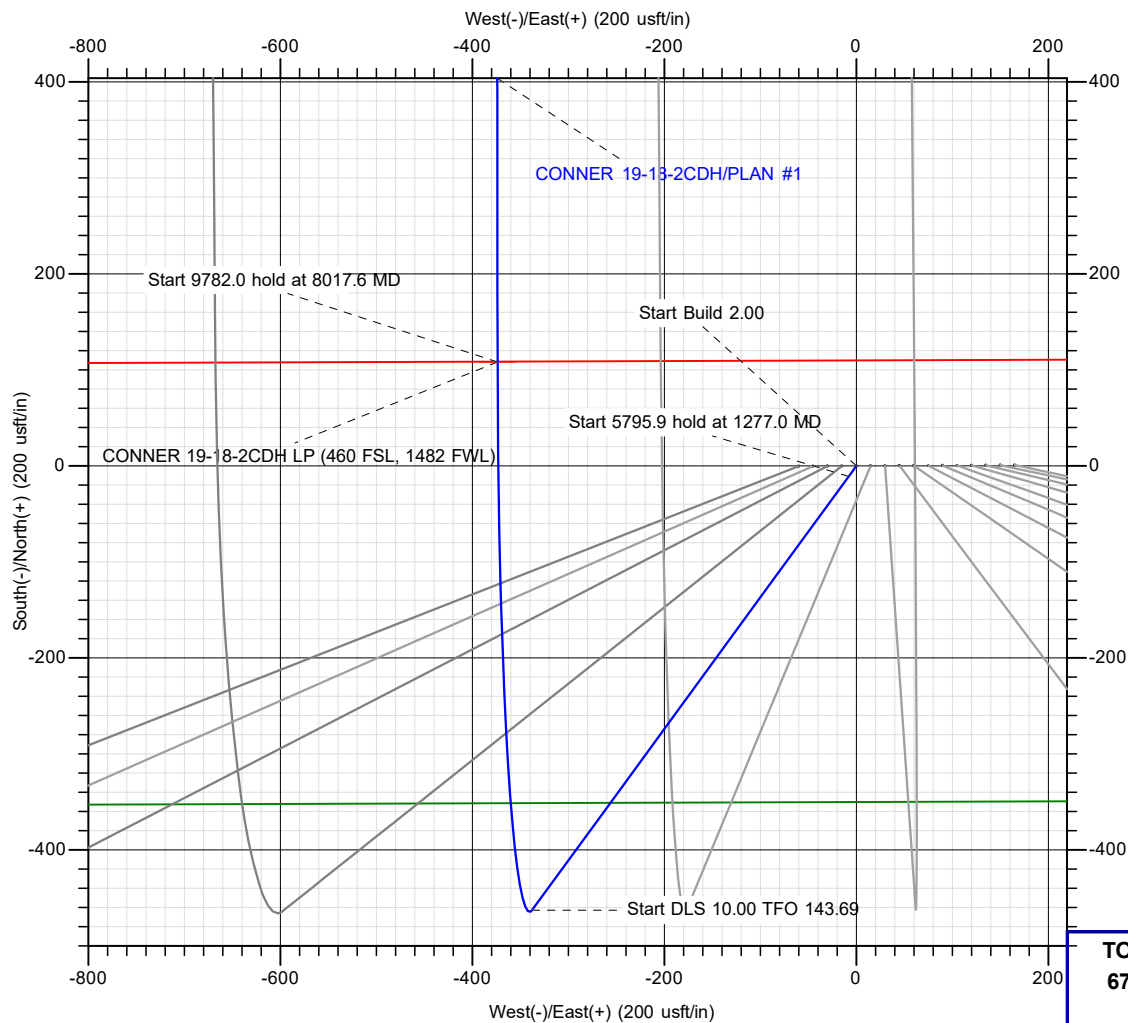
Magnetic Field
Strength: 51671.1nT
Dip Angle: 66.20°
Date: 12/31/2020
Model: HDGM2020_FILE



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

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
CONNER 19-18-2CDH BHL (355 FNL, 1552 FWL)	7662.0	9890.4	-384.5	1233445.07	3221685.37	39.971476	-104.709021
CONNER 19-18-2CDH LP (460 FSL, 1482 FWL)	7662.0	108.4	-373.6	1223663.06	3221696.25	39.944623	-104.709293



TOTAL DIRECTIONAL SERVICES LLC
671 Academy Ct, Windsor, CO 80550
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Plan: PLAN #1 (CONNER 19-18-2CDH/OH)
S19-T1S-R65W
Created By: Lance Roybal
Date: 15:38, March 12 2021
Approved: _____
Date: _____



PetroShare Corp

ADAMS COUNTY, CO

S19-T1S-R65W

CONNER 19-18-2CDH

OH

Plan: PLAN #1

Standard Planning Report

12 March, 2021



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Company:	PetroShare Corp	TVD Reference:	13' KB @ 5155.0usft
Project:	ADAMS COUNTY, CO	MD Reference:	13' KB @ 5155.0usft
Site:	S19-T1S-R65W	North Reference:	Grid
Well:	CONNER 19-18-2CDH	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 19-18-2CDH					
Well Position	+N/-S	0.3 usft	Northing:	1,223,554.67 usft	Latitude:	39.944317
	+E/-W	60.0 usft	Easting:	3,222,069.90 usft	Longitude:	-104.707964
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	357.77

Plan Survey Tool Program	Date	3/12/2021		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,799.6	PLAN #1 (OH)	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,277.0	5.54	216.12	1,276.6	-10.8	-7.9	2.00	2.00	0.00	216.12	
7,072.9	5.54	216.12	7,045.4	-462.8	-337.7	0.00	0.00	0.00	0.00	
8,017.6	90.00	359.94	7,662.0	108.4	-373.6	10.00	8.94	15.22	143.69	CONNER 19-18-2CD
17,799.6	90.00	359.94	7,662.0	9,890.4	-384.5	0.00	0.00	0.00	0.00	CONNER 19-18-2CD

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Company:	PetroShare Corp	TVD Reference:	13' KB @ 5155.0usft
Project:	ADAMS COUNTY, CO	MD Reference:	13' KB @ 5155.0usft
Site:	S19-T1S-R65W	North Reference:	Grid
Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	2.00	216.12	1,100.0	-1.4	-1.0	-1.4	2.00	2.00	0.00
1,200.0	4.00	216.12	1,199.8	-5.6	-4.1	-5.5	2.00	2.00	0.00
1,277.0	5.54	216.12	1,276.6	-10.8	-7.9	-10.5	2.00	2.00	0.00
1,300.0	5.54	216.12	1,299.5	-12.6	-9.2	-12.2	0.00	0.00	0.00
1,400.0	5.54	216.12	1,399.0	-20.4	-14.9	-19.8	0.00	0.00	0.00
1,500.0	5.54	216.12	1,498.5	-28.2	-20.6	-27.4	0.00	0.00	0.00
1,600.0	5.54	216.12	1,598.1	-36.0	-26.3	-34.9	0.00	0.00	0.00
1,700.0	5.54	216.12	1,697.6	-43.8	-32.0	-42.5	0.00	0.00	0.00
1,800.0	5.54	216.12	1,797.1	-51.6	-37.6	-50.1	0.00	0.00	0.00
1,900.0	5.54	216.12	1,896.7	-59.4	-43.3	-57.7	0.00	0.00	0.00
2,000.0	5.54	216.12	1,996.2	-67.2	-49.0	-65.2	0.00	0.00	0.00
2,100.0	5.54	216.12	2,095.7	-75.0	-54.7	-72.8	0.00	0.00	0.00
2,200.0	5.54	216.12	2,195.3	-82.8	-60.4	-80.4	0.00	0.00	0.00
2,300.0	5.54	216.12	2,294.8	-90.6	-66.1	-87.9	0.00	0.00	0.00
2,400.0	5.54	216.12	2,394.3	-98.4	-71.8	-95.5	0.00	0.00	0.00
2,500.0	5.54	216.12	2,493.9	-106.2	-77.5	-103.1	0.00	0.00	0.00
2,600.0	5.54	216.12	2,593.4	-114.0	-83.2	-110.7	0.00	0.00	0.00
2,700.0	5.54	216.12	2,692.9	-121.8	-88.9	-118.2	0.00	0.00	0.00
2,800.0	5.54	216.12	2,792.5	-129.6	-94.6	-125.8	0.00	0.00	0.00
2,900.0	5.54	216.12	2,892.0	-137.4	-100.2	-133.4	0.00	0.00	0.00
3,000.0	5.54	216.12	2,991.5	-145.2	-105.9	-140.9	0.00	0.00	0.00
3,100.0	5.54	216.12	3,091.1	-153.0	-111.6	-148.5	0.00	0.00	0.00
3,200.0	5.54	216.12	3,190.6	-160.8	-117.3	-156.1	0.00	0.00	0.00
3,300.0	5.54	216.12	3,290.1	-168.6	-123.0	-163.7	0.00	0.00	0.00
3,400.0	5.54	216.12	3,389.7	-176.4	-128.7	-171.2	0.00	0.00	0.00
3,500.0	5.54	216.12	3,489.2	-184.2	-134.4	-178.8	0.00	0.00	0.00
3,600.0	5.54	216.12	3,588.7	-192.0	-140.1	-186.4	0.00	0.00	0.00
3,700.0	5.54	216.12	3,688.3	-199.8	-145.8	-193.9	0.00	0.00	0.00
3,800.0	5.54	216.12	3,787.8	-207.6	-151.5	-201.5	0.00	0.00	0.00
3,900.0	5.54	216.12	3,887.3	-215.4	-157.1	-209.1	0.00	0.00	0.00
4,000.0	5.54	216.12	3,986.9	-223.2	-162.8	-216.7	0.00	0.00	0.00
4,100.0	5.54	216.12	4,086.4	-231.0	-168.5	-224.2	0.00	0.00	0.00
4,200.0	5.54	216.12	4,185.9	-238.8	-174.2	-231.8	0.00	0.00	0.00
4,300.0	5.54	216.12	4,285.4	-246.5	-179.9	-239.4	0.00	0.00	0.00
4,400.0	5.54	216.12	4,385.0	-254.3	-185.6	-246.9	0.00	0.00	0.00
4,500.0	5.54	216.12	4,484.5	-262.1	-191.3	-254.5	0.00	0.00	0.00
4,600.0	5.54	216.12	4,584.0	-269.9	-197.0	-262.1	0.00	0.00	0.00
4,700.0	5.54	216.12	4,683.6	-277.7	-202.7	-269.7	0.00	0.00	0.00
4,800.0	5.54	216.12	4,783.1	-285.5	-208.4	-277.2	0.00	0.00	0.00
4,900.0	5.54	216.12	4,882.6	-293.3	-214.1	-284.8	0.00	0.00	0.00
5,000.0	5.54	216.12	4,982.2	-301.1	-219.7	-292.4	0.00	0.00	0.00
5,100.0	5.54	216.12	5,081.7	-308.9	-225.4	-299.9	0.00	0.00	0.00
5,200.0	5.54	216.12	5,181.2	-316.7	-231.1	-307.5	0.00	0.00	0.00

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Project:	ADAMS COUNTY, CO	MD Reference:	13' KB @ 5155.0usft
Site:	S19-T1S-R65W	North Reference:	Grid
Well:	CONNER 19-18-2CDH	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	5.54	216.12	5,280.8	-324.5	-236.8	-315.1	0.00	0.00	0.00
5,400.0	5.54	216.12	5,380.3	-332.3	-242.5	-322.7	0.00	0.00	0.00
5,500.0	5.54	216.12	5,479.8	-340.1	-248.2	-330.2	0.00	0.00	0.00
5,600.0	5.54	216.12	5,579.4	-347.9	-253.9	-337.8	0.00	0.00	0.00
5,700.0	5.54	216.12	5,678.9	-355.7	-259.6	-345.4	0.00	0.00	0.00
5,800.0	5.54	216.12	5,778.4	-363.5	-265.3	-352.9	0.00	0.00	0.00
5,900.0	5.54	216.12	5,878.0	-371.3	-271.0	-360.5	0.00	0.00	0.00
6,000.0	5.54	216.12	5,977.5	-379.1	-276.6	-368.1	0.00	0.00	0.00
6,100.0	5.54	216.12	6,077.0	-386.9	-282.3	-375.7	0.00	0.00	0.00
6,200.0	5.54	216.12	6,176.6	-394.7	-288.0	-383.2	0.00	0.00	0.00
6,300.0	5.54	216.12	6,276.1	-402.5	-293.7	-390.8	0.00	0.00	0.00
6,400.0	5.54	216.12	6,375.6	-410.3	-299.4	-398.4	0.00	0.00	0.00
6,500.0	5.54	216.12	6,475.2	-418.1	-305.1	-405.9	0.00	0.00	0.00
6,600.0	5.54	216.12	6,574.7	-425.9	-310.8	-413.5	0.00	0.00	0.00
6,700.0	5.54	216.12	6,674.2	-433.7	-316.5	-421.1	0.00	0.00	0.00
6,800.0	5.54	216.12	6,773.8	-441.5	-322.2	-428.7	0.00	0.00	0.00
6,900.0	5.54	216.12	6,873.3	-449.3	-327.9	-436.2	0.00	0.00	0.00
7,000.0	5.54	216.12	6,972.8	-457.1	-333.6	-443.8	0.00	0.00	0.00
7,072.9	5.54	216.12	7,045.4	-462.8	-337.7	-449.3	0.00	0.00	0.00
7,100.0	3.72	241.68	7,072.4	-464.3	-339.2	-450.7	10.00	-6.72	94.35
7,200.0	8.86	338.40	7,172.0	-458.6	-344.9	-444.9	10.00	5.14	96.72
7,300.0	18.52	350.10	7,269.0	-435.8	-350.5	-421.8	10.00	9.66	11.70
7,400.0	28.41	353.86	7,360.6	-396.4	-355.8	-382.2	10.00	9.89	3.77
7,500.0	38.36	355.79	7,444.0	-341.6	-360.7	-327.3	10.00	9.94	1.93
7,600.0	48.32	357.01	7,516.7	-273.2	-364.9	-258.8	10.00	9.96	1.23
7,700.0	58.30	357.91	7,576.3	-193.2	-368.4	-178.7	10.00	9.97	0.90
7,800.0	68.28	358.63	7,621.2	-104.0	-371.1	-89.5	10.00	9.98	0.72
7,900.0	78.26	359.25	7,650.0	-8.4	-372.8	6.1	10.00	9.98	0.63
8,000.0	88.24	359.84	7,661.7	90.8	-373.6	105.2	10.00	9.98	0.58
8,017.6	90.00	359.94	7,662.0	108.4	-373.6	122.8	10.00	9.98	0.57
CONNER 19-18-2CDH PWB LP (460 FSL, 1482 FWL)									
8,100.0	90.00	359.94	7,662.0	190.8	-373.7	205.2	0.00	0.00	0.00
8,200.0	90.00	359.94	7,662.0	290.8	-373.8	305.1	0.00	0.00	0.00
8,300.0	90.00	359.94	7,662.0	390.8	-374.0	405.0	0.00	0.00	0.00
8,400.0	90.00	359.94	7,662.0	490.8	-374.1	505.0	0.00	0.00	0.00
8,500.0	90.00	359.94	7,662.0	590.8	-374.2	604.9	0.00	0.00	0.00
8,600.0	90.00	359.94	7,662.0	690.8	-374.3	704.8	0.00	0.00	0.00
8,700.0	90.00	359.94	7,662.0	790.8	-374.4	804.7	0.00	0.00	0.00
8,800.0	90.00	359.94	7,662.0	890.8	-374.5	904.7	0.00	0.00	0.00
8,900.0	90.00	359.94	7,662.0	990.8	-374.6	1,004.6	0.00	0.00	0.00
9,000.0	90.00	359.94	7,662.0	1,090.8	-374.7	1,104.5	0.00	0.00	0.00
9,100.0	90.00	359.94	7,662.0	1,190.8	-374.8	1,204.5	0.00	0.00	0.00
9,200.0	90.00	359.94	7,662.0	1,290.8	-375.0	1,304.4	0.00	0.00	0.00
9,300.0	90.00	359.94	7,662.0	1,390.8	-375.1	1,404.3	0.00	0.00	0.00
9,400.0	90.00	359.94	7,662.0	1,490.8	-375.2	1,504.2	0.00	0.00	0.00
9,500.0	90.00	359.94	7,662.0	1,590.8	-375.3	1,604.2	0.00	0.00	0.00
9,600.0	90.00	359.94	7,662.0	1,690.8	-375.4	1,704.1	0.00	0.00	0.00
9,700.0	90.00	359.94	7,662.0	1,790.8	-375.5	1,804.0	0.00	0.00	0.00
9,800.0	90.00	359.94	7,662.0	1,890.8	-375.6	1,904.0	0.00	0.00	0.00
9,900.0	90.00	359.94	7,662.0	1,990.8	-375.7	2,003.9	0.00	0.00	0.00
10,000.0	90.00	359.94	7,662.0	2,090.8	-375.8	2,103.8	0.00	0.00	0.00
10,100.0	90.00	359.94	7,662.0	2,190.8	-376.0	2,203.7	0.00	0.00	0.00
10,200.0	90.00	359.94	7,662.0	2,290.8	-376.1	2,303.7	0.00	0.00	0.00

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Company:	PetroShare Corp	TVD Reference:	13' KB @ 5155.0usft
Project:	ADAMS COUNTY, CO	MD Reference:	13' KB @ 5155.0usft
Site:	S19-T1S-R65W	North Reference:	Grid
Well:	CONNER 19-18-2CDH	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	359.94	7,662.0	2,390.8	-376.2	2,403.6	0.00	0.00	0.00
10,400.0	90.00	359.94	7,662.0	2,490.8	-376.3	2,503.5	0.00	0.00	0.00
10,500.0	90.00	359.94	7,662.0	2,590.8	-376.4	2,603.5	0.00	0.00	0.00
10,600.0	90.00	359.94	7,662.0	2,690.8	-376.5	2,703.4	0.00	0.00	0.00
10,700.0	90.00	359.94	7,662.0	2,790.8	-376.6	2,803.3	0.00	0.00	0.00
10,800.0	90.00	359.94	7,662.0	2,890.8	-376.7	2,903.2	0.00	0.00	0.00
10,900.0	90.00	359.94	7,662.0	2,990.8	-376.8	3,003.2	0.00	0.00	0.00
11,000.0	90.00	359.94	7,662.0	3,090.8	-377.0	3,103.1	0.00	0.00	0.00
11,100.0	90.00	359.94	7,662.0	3,190.8	-377.1	3,203.0	0.00	0.00	0.00
11,200.0	90.00	359.94	7,662.0	3,290.8	-377.2	3,303.0	0.00	0.00	0.00
11,300.0	90.00	359.94	7,662.0	3,390.8	-377.3	3,402.9	0.00	0.00	0.00
11,400.0	90.00	359.94	7,662.0	3,490.8	-377.4	3,502.8	0.00	0.00	0.00
11,500.0	90.00	359.94	7,662.0	3,590.8	-377.5	3,602.7	0.00	0.00	0.00
11,600.0	90.00	359.94	7,662.0	3,690.8	-377.6	3,702.7	0.00	0.00	0.00
11,700.0	90.00	359.94	7,662.0	3,790.8	-377.7	3,802.6	0.00	0.00	0.00
11,800.0	90.00	359.94	7,662.0	3,890.8	-377.9	3,902.5	0.00	0.00	0.00
11,900.0	90.00	359.94	7,662.0	3,990.8	-378.0	4,002.5	0.00	0.00	0.00
12,000.0	90.00	359.94	7,662.0	4,090.8	-378.1	4,102.4	0.00	0.00	0.00
12,100.0	90.00	359.94	7,662.0	4,190.8	-378.2	4,202.3	0.00	0.00	0.00
12,200.0	90.00	359.94	7,662.0	4,290.8	-378.3	4,302.2	0.00	0.00	0.00
12,300.0	90.00	359.94	7,662.0	4,390.8	-378.4	4,402.2	0.00	0.00	0.00
12,400.0	90.00	359.94	7,662.0	4,490.8	-378.5	4,502.1	0.00	0.00	0.00
12,500.0	90.00	359.94	7,662.0	4,590.8	-378.6	4,602.0	0.00	0.00	0.00
12,600.0	90.00	359.94	7,662.0	4,690.8	-378.7	4,702.0	0.00	0.00	0.00
12,700.0	90.00	359.94	7,662.0	4,790.8	-378.9	4,801.9	0.00	0.00	0.00
12,800.0	90.00	359.94	7,662.0	4,890.8	-379.0	4,901.8	0.00	0.00	0.00
12,900.0	90.00	359.94	7,662.0	4,990.8	-379.1	5,001.7	0.00	0.00	0.00
13,000.0	90.00	359.94	7,662.0	5,090.8	-379.2	5,101.7	0.00	0.00	0.00
13,100.0	90.00	359.94	7,662.0	5,190.8	-379.3	5,201.6	0.00	0.00	0.00
13,200.0	90.00	359.94	7,662.0	5,290.8	-379.4	5,301.5	0.00	0.00	0.00
13,300.0	90.00	359.94	7,662.0	5,390.8	-379.5	5,401.5	0.00	0.00	0.00
13,400.0	90.00	359.94	7,662.0	5,490.8	-379.6	5,501.4	0.00	0.00	0.00
13,500.0	90.00	359.94	7,662.0	5,590.8	-379.7	5,601.3	0.00	0.00	0.00
13,600.0	90.00	359.94	7,662.0	5,690.8	-379.9	5,701.2	0.00	0.00	0.00
13,700.0	90.00	359.94	7,662.0	5,790.8	-380.0	5,801.2	0.00	0.00	0.00
13,800.0	90.00	359.94	7,662.0	5,890.8	-380.1	5,901.1	0.00	0.00	0.00
13,900.0	90.00	359.94	7,662.0	5,990.8	-380.2	6,001.0	0.00	0.00	0.00
14,000.0	90.00	359.94	7,662.0	6,090.8	-380.3	6,101.0	0.00	0.00	0.00
14,100.0	90.00	359.94	7,662.0	6,190.8	-380.4	6,200.9	0.00	0.00	0.00
14,200.0	90.00	359.94	7,662.0	6,290.8	-380.5	6,300.8	0.00	0.00	0.00
14,300.0	90.00	359.94	7,662.0	6,390.8	-380.6	6,400.7	0.00	0.00	0.00
14,400.0	90.00	359.94	7,662.0	6,490.8	-380.7	6,500.7	0.00	0.00	0.00
14,500.0	90.00	359.94	7,662.0	6,590.8	-380.9	6,600.6	0.00	0.00	0.00
14,600.0	90.00	359.94	7,662.0	6,690.8	-381.0	6,700.5	0.00	0.00	0.00
14,700.0	90.00	359.94	7,662.0	6,790.8	-381.1	6,800.5	0.00	0.00	0.00
14,800.0	90.00	359.94	7,662.0	6,890.8	-381.2	6,900.4	0.00	0.00	0.00
14,900.0	90.00	359.94	7,662.0	6,990.8	-381.3	7,000.3	0.00	0.00	0.00
15,000.0	90.00	359.94	7,662.0	7,090.8	-381.4	7,100.3	0.00	0.00	0.00
15,100.0	90.00	359.94	7,662.0	7,190.8	-381.5	7,200.2	0.00	0.00	0.00
15,200.0	90.00	359.94	7,662.0	7,290.8	-381.6	7,300.1	0.00	0.00	0.00
15,300.0	90.00	359.94	7,662.0	7,390.8	-381.7	7,400.0	0.00	0.00	0.00
15,400.0	90.00	359.94	7,662.0	7,490.8	-381.9	7,500.0	0.00	0.00	0.00
15,500.0	90.00	359.94	7,662.0	7,590.8	-382.0	7,599.9	0.00	0.00	0.00
15,600.0	90.00	359.94	7,662.0	7,690.8	-382.1	7,699.8	0.00	0.00	0.00

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Company:	PetroShare Corp	TVD Reference:	13' KB @ 5155.0usft
Project:	ADAMS COUNTY, CO	MD Reference:	13' KB @ 5155.0usft
Site:	S19-T1S-R65W	North Reference:	Grid
Well:	CONNER 19-18-2CDH	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	359.94	7,662.0	7,790.8	-382.2	7,799.8	0.00	0.00	0.00
15,800.0	90.00	359.94	7,662.0	7,890.8	-382.3	7,899.7	0.00	0.00	0.00
15,900.0	90.00	359.94	7,662.0	7,990.8	-382.4	7,999.6	0.00	0.00	0.00
16,000.0	90.00	359.94	7,662.0	8,090.8	-382.5	8,099.5	0.00	0.00	0.00
16,100.0	90.00	359.94	7,662.0	8,190.8	-382.6	8,199.5	0.00	0.00	0.00
16,200.0	90.00	359.94	7,662.0	8,290.8	-382.7	8,299.4	0.00	0.00	0.00
16,300.0	90.00	359.94	7,662.0	8,390.8	-382.9	8,399.3	0.00	0.00	0.00
16,400.0	90.00	359.94	7,662.0	8,490.8	-383.0	8,499.3	0.00	0.00	0.00
16,500.0	90.00	359.94	7,662.0	8,590.8	-383.1	8,599.2	0.00	0.00	0.00
16,600.0	90.00	359.94	7,662.0	8,690.8	-383.2	8,699.1	0.00	0.00	0.00
16,700.0	90.00	359.94	7,662.0	8,790.8	-383.3	8,799.0	0.00	0.00	0.00
16,800.0	90.00	359.94	7,662.0	8,890.8	-383.4	8,899.0	0.00	0.00	0.00
16,900.0	90.00	359.94	7,662.0	8,990.8	-383.5	8,998.9	0.00	0.00	0.00
17,000.0	90.00	359.94	7,662.0	9,090.8	-383.6	9,098.8	0.00	0.00	0.00
17,100.0	90.00	359.94	7,662.0	9,190.8	-383.8	9,198.8	0.00	0.00	0.00
17,200.0	90.00	359.94	7,662.0	9,290.8	-383.9	9,298.7	0.00	0.00	0.00
17,300.0	90.00	359.94	7,662.0	9,390.8	-384.0	9,398.6	0.00	0.00	0.00
17,400.0	90.00	359.94	7,662.0	9,490.8	-384.1	9,498.5	0.00	0.00	0.00
17,500.0	90.00	359.94	7,662.0	9,590.8	-384.2	9,598.5	0.00	0.00	0.00
17,600.0	90.00	359.94	7,662.0	9,690.8	-384.3	9,698.4	0.00	0.00	0.00
17,700.0	90.00	359.94	7,662.0	9,790.8	-384.4	9,798.3	0.00	0.00	0.00
17,799.6	90.00	359.94	7,662.0	9,890.4	-384.5	9,897.9	0.00	0.00	0.00
CONNER 19-18-2CDH PWB BHL (355 FNL, 1552 FWL)									

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 19-18-2CDH f	0.00	0.00	7,662.0	108.4	-373.6	1,223,663.06	3,221,696.26	39.944623	-104.709294
- plan hits target center									
- Point									
CONNER 19-18-2CDH f	0.00	0.00	7,662.0	9,890.4	-384.5	1,233,445.07	3,221,685.37	39.971476	-104.709021
- plan hits target center									
- Point									



PetroShare Corp

ADAMS COUNTY, CO

S19-T1S-R65W

CONNER 19-18-2CDH

OH

PLAN #1

Anticollision Report

12 March, 2021



Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	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	17,799.6	PLAN #1 (OH)		

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S19-T1S-R65W						
CONNER 19-18-1CDH - OH - PLAN #1	600.0	600.0	60.0	55.3	12.650	CC, ES
CONNER 19-18-1CDH - OH - PLAN #1	17,600.0	17,630.0	1,063.6	711.8	3.023	SF
CONNER 19-18-1NBH - OH - PLAN #1	900.0	900.0	15.0	11.5	4.320	CC, ES
CONNER 19-18-1NBH - OH - PLAN #1	17,799.6	17,429.8	533.4	395.9	3.878	SF
CONNER 19-18-1NCH - OH - PLAN #1	800.0	800.0	30.0	26.9	9.652	CC, ES
CONNER 19-18-1NCH - OH - PLAN #1	17,799.6	17,686.9	747.4	570.9	4.233	SF
CONNER 19-18-1NXH - OH - PLAN #1	700.0	700.0	45.0	39.5	8.207	CC, ES
CONNER 19-18-1NXH - OH - PLAN #1	17,600.0	17,270.0	1,063.4	728.2	3.172	SF
CONNER 19-18-2NBH - OH - PLAN #1	1,000.0	1,000.0	45.0	41.1	11.715	CC, ES
CONNER 19-18-2NBH - OH - PLAN #1	17,799.6	17,545.5	772.9	601.5	4.510	SF
CONNER 19-18-2NCH - OH - PLAN #1	1,000.0	1,000.0	30.0	26.1	7.808	CC, ES
CONNER 19-18-2NCH - OH - PLAN #1	17,799.6	17,601.7	410.6	247.0	2.510	SF
CONNER 19-18-2NXH - OH - PLAN #1	1,000.0	1,000.0	15.0	11.1	3.899	CC, ES
CONNER 19-18-2NXH - OH - PLAN #1	1,200.0	1,200.2	18.9	13.8	3.686	SF
CONNER 19-18-3CDH - OH - PLAN #1	1,000.0	1,000.0	60.0	56.1	15.622	CC, ES
CONNER 19-18-3CDH - OH - PLAN #1	17,799.6	17,835.3	1,091.8	911.8	6.065	SF
CONNER 19-18-3NBH - OH - PLAN #1	900.0	900.0	105.0	101.5	30.222	CC, ES
CONNER 19-18-3NBH - OH - PLAN #1	17,799.6	17,668.4	1,841.8	1,663.6	10.339	SF
CONNER 19-18-3NCH - OH - PLAN #1	1,000.0	1,000.0	90.0	86.1	23.442	CC, ES
CONNER 19-18-3NCH - OH - PLAN #1	17,799.6	17,720.0	1,470.1	1,291.6	8.237	SF
CONNER 19-18-3NXH - OH - PLAN #1	1,000.0	1,000.0	75.0	71.2	19.540	CC, ES
CONNER 19-18-3NXH - OH - PLAN #1	17,799.6	17,440.4	1,423.8	1,250.9	8.235	SF
CONNER 19-18-4CDH - OH - PLAN #1	800.0	800.0	120.0	116.9	38.592	CC, ES
CONNER 19-18-4CDH - OH - PLAN #1	17,799.6	17,983.4	2,184.0	2,004.0	12.136	SF
CONNER 19-18-4NBH - OH - PLAN #1	500.0	500.0	164.9	163.0	82.522	CC, ES
CONNER 19-18-4NBH - OH - PLAN #1	1,200.0	1,150.5	247.4	242.6	52.440	SF
CONNER 19-18-4NCH - OH - PLAN #1	600.0	600.0	149.9	147.6	63.194	CC, ES
CONNER 19-18-4NCH - OH - PLAN #1	1,200.0	1,162.8	211.9	207.2	44.587	SF
CONNER 19-18-4NXH - OH - PLAN #1	700.0	700.0	134.9	132.2	49.212	CC, ES
CONNER 19-18-4NXH - OH - PLAN #1	1,200.0	1,173.2	179.3	174.6	37.480	SF
Gail #1 (PR) - EXISTING - NO SURVEYS (PR)	16,041.7	7,593.0	487.7	310.5	2.752	CC, ES, SF
Gail Smith #1 (PR) - EXISTING - NO SURVEYS (PR)	17,668.7	7,593.0	1,091.8	886.4	5.315	CC
Gail Smith #1 (PR) - EXISTING - NO SURVEYS (PR)	17,700.0	7,593.0	1,092.3	886.2	5.301	ES, SF
Milheim #1 (P&A) - EXISTING - NO SURVEYS (P&A)	13,825.8	7,593.0	584.3	445.2	4.201	CC, ES, SF
Price 7-19 (SI) - EXISTING - NO SURVEYS (SI)	11,065.1	7,593.0	1,170.6	1,077.4	12.552	CC, ES
Price 7-19 (SI) - EXISTING - NO SURVEYS (SI)	11,200.0	7,593.0	1,178.4	1,083.8	12.465	SF
Putnam 41-18 (PR) - EXISTING - NO SURVEYS (PR)						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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Summary

Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
S19-T1S-R65W						
Tracy #1 (PR) - EXISTING - NO SURVEYS (PR)	13,870.3	7,593.0	1,657.7	1,517.8	11.853	CC
Tracy #1 (PR) - EXISTING - NO SURVEYS (PR)	13,900.0	7,593.0	1,657.9	1,517.7	11.820	ES
Tracy #1 (PR) - EXISTING - NO SURVEYS (PR)	14,000.0	7,593.0	1,662.7	1,521.4	11.761	SF
UPRR-Letterly 1 (P&A) - EXISTING - NO SURVEYS (P&	8,933.6	7,593.0	557.4	494.0	8.784	CC, ES
UPRR-Letterly 1 (P&A) - EXISTING - NO SURVEYS (P&	9,000.0	7,593.0	561.4	496.9	8.709	SF

Offset Design S19-T1S-R65W - CONNER 19-18-1CDH - OH - PLAN #1													Offset Site Error: 0.0 usft
Survey Program: 0-MWD													Offset Well Error: 0.0 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-90.31	-0.3	-60.0	60.0				
100.0	100.0	100.0	100.0	0.4	0.4	-90.31	-0.3	-60.0	60.0	59.5	0.55	108.415	
200.0	200.0	200.0	200.0	1.0	1.0	-90.31	-0.3	-60.0	60.0	58.4	1.60	37.625	
300.0	300.0	300.0	300.0	1.5	1.5	-90.31	-0.3	-60.0	60.0	57.6	2.45	24.514	
400.0	400.0	400.0	400.0	1.9	1.9	-90.31	-0.3	-60.0	60.0	56.8	3.24	18.547	
500.0	500.0	500.0	500.0	2.3	2.3	-90.31	-0.3	-60.0	60.0	56.0	4.00	15.016	
600.0	600.0	600.0	600.0	2.7	2.7	-90.31	-0.3	-60.0	60.0	55.3	4.75	12.650	CC, ES
700.0	700.0	698.0	698.0	3.1	3.0	-90.87	-0.9	-61.6	61.6	56.1	5.56	11.090	
800.0	800.0	795.9	795.7	3.5	4.0	-92.39	-2.8	-66.3	66.5	59.4	7.02	9.467	
900.0	900.0	893.2	892.7	3.9	4.8	-94.49	-5.8	-74.0	74.6	66.3	8.29	8.997	
1,000.0	1,000.0	989.9	988.7	4.2	5.5	-96.74	-10.0	-84.7	86.0	76.6	9.43	9.124	
1,100.0	1,100.0	1,085.9	1,083.6	4.6	6.2	45.50	-15.4	-98.3	99.6	89.2	10.45	9.535	
1,200.0	1,199.8	1,181.4	1,177.4	5.4	6.7	45.06	-21.8	-114.8	114.0	102.4	11.66	9.782	
1,300.0	1,299.5	1,280.4	1,274.3	5.9	7.0	45.64	-29.1	-133.4	127.8	115.4	12.33	10.359	
1,400.0	1,399.0	1,379.5	1,371.4	6.2	7.2	46.53	-36.5	-152.0	140.8	127.9	12.88	10.932	
1,500.0	1,498.5	1,478.6	1,468.5	6.5	7.5	47.27	-43.8	-170.7	153.9	140.4	13.50	11.402	
1,600.0	1,598.1	1,577.7	1,565.6	6.8	7.8	47.90	-51.1	-189.4	167.0	152.9	14.13	11.817	
1,700.0	1,697.6	1,676.9	1,662.6	7.1	8.1	48.43	-58.5	-208.0	180.1	165.3	14.78	12.184	
1,800.0	1,797.1	1,776.0	1,759.7	7.4	8.4	48.89	-65.8	-226.7	193.2	177.8	15.44	12.511	
1,900.0	1,896.7	1,875.1	1,856.8	7.8	8.7	49.30	-73.1	-245.3	206.4	190.2	16.12	12.799	
2,000.0	1,996.2	1,974.2	1,953.9	8.1	9.0	49.65	-80.5	-264.0	219.5	202.7	16.81	13.059	
2,100.0	2,095.7	2,073.4	2,050.9	8.4	9.4	49.97	-87.8	-282.7	232.6	215.1	17.50	13.292	
2,200.0	2,195.3	2,172.5	2,148.0	8.8	9.8	50.25	-95.1	-301.3	245.8	227.6	18.21	13.501	
2,300.0	2,294.8	2,271.6	2,245.1	9.1	10.1	50.50	-102.4	-320.0	259.0	240.0	18.92	13.689	
2,400.0	2,394.3	2,370.7	2,342.2	9.5	10.5	50.73	-109.8	-338.6	272.1	252.5	19.63	13.860	
2,500.0	2,493.9	2,469.9	2,439.2	9.8	10.9	50.94	-117.1	-357.3	285.3	264.9	20.36	14.015	
2,600.0	2,593.4	2,569.0	2,536.3	10.2	11.4	51.13	-124.4	-376.0	298.5	277.4	21.08	14.156	
2,700.0	2,692.9	2,668.1	2,633.4	10.5	11.8	51.30	-131.8	-394.6	311.7	289.8	21.82	14.285	
2,800.0	2,792.5	2,767.2	2,730.5	10.9	12.3	51.46	-139.1	-413.3	324.8	302.3	22.55	14.404	
2,900.0	2,892.0	2,866.4	2,827.5	11.3	12.7	51.60	-146.4	-431.9	338.0	314.7	23.29	14.512	
3,000.0	2,991.5	2,965.5	2,924.6	11.6	13.2	51.74	-153.8	-450.6	351.2	327.2	24.03	14.612	
3,100.0	3,091.1	3,064.6	3,021.7	12.0	13.7	51.87	-161.1	-469.3	364.4	339.6	24.78	14.704	
3,200.0	3,190.6	3,163.7	3,118.8	12.4	14.1	51.98	-168.4	-487.9	377.6	352.0	25.53	14.790	
3,300.0	3,290.1	3,262.8	3,215.8	12.7	14.6	52.09	-175.8	-506.6	390.8	364.5	26.28	14.869	
3,400.0	3,389.7	3,362.0	3,312.9	13.1	15.1	52.19	-183.1	-525.2	403.9	376.9	27.03	14.943	
3,500.0	3,489.2	3,461.1	3,410.0	13.5	15.6	52.29	-190.4	-543.9	417.1	389.4	27.79	15.011	
3,600.0	3,588.7	3,560.2	3,507.1	13.9	16.1	52.38	-197.7	-562.6	430.3	401.8	28.55	15.075	
3,700.0	3,688.3	3,659.3	3,604.1	14.2	16.5	52.46	-205.1	-581.2	443.5	414.2	29.31	15.135	

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
3,800.0	3,787.8	3,758.5	3,701.2	14.6	17.0	52.54	-212.4	-599.9	456.7	426.7	30.07	15.191		
3,900.0	3,887.3	3,857.6	3,798.3	15.0	17.5	52.62	-219.7	-618.5	469.9	439.1	30.83	15.243		
4,000.0	3,986.9	3,956.7	3,895.4	15.4	18.0	52.69	-227.1	-637.2	483.1	451.5	31.59	15.292		
4,100.0	4,086.4	4,055.8	3,992.5	15.7	18.5	52.75	-234.4	-655.9	496.3	463.9	32.36	15.339		
4,200.0	4,185.9	4,155.0	4,089.5	16.1	19.0	52.82	-241.7	-674.5	509.5	476.4	33.12	15.382		
4,300.0	4,285.4	4,254.1	4,186.6	16.5	19.5	52.88	-249.1	-693.2	522.7	488.8	33.89	15.423		
4,400.0	4,385.0	4,353.2	4,283.7	16.9	20.0	52.94	-256.4	-711.8	535.9	501.2	34.66	15.462		
4,500.0	4,484.5	4,452.3	4,380.8	17.3	20.5	52.99	-263.7	-730.5	549.1	513.7	35.43	15.499		
4,600.0	4,584.0	4,551.5	4,477.8	17.7	21.0	53.04	-271.1	-749.2	562.3	526.1	36.20	15.534		
4,700.0	4,683.6	4,650.6	4,574.9	18.1	21.5	53.09	-278.4	-767.8	575.5	538.5	36.97	15.567		
4,800.0	4,783.1	4,749.7	4,672.0	18.4	21.9	53.14	-285.7	-786.5	588.7	551.0	37.74	15.598		
4,900.0	4,882.6	4,848.8	4,769.1	18.8	22.4	53.19	-293.0	-805.1	601.9	563.4	38.51	15.628		
5,000.0	4,982.2	4,948.0	4,866.1	19.2	22.9	53.23	-300.4	-823.8	615.1	575.8	39.29	15.656		
5,100.0	5,081.7	5,047.1	4,963.2	19.6	23.4	53.27	-307.7	-842.4	628.3	588.2	40.06	15.683		
5,200.0	5,181.2	5,146.2	5,060.3	20.0	23.9	53.31	-315.0	-861.1	641.5	600.7	40.84	15.709		
5,300.0	5,280.8	5,245.3	5,157.4	20.4	24.4	53.35	-322.4	-879.8	654.7	613.1	41.61	15.734		
5,400.0	5,380.3	5,344.4	5,254.4	20.8	24.9	53.39	-329.7	-898.4	667.9	625.5	42.39	15.757		
5,500.0	5,479.8	5,443.6	5,351.5	21.2	25.4	53.42	-337.0	-917.1	681.1	637.9	43.16	15.780		
5,600.0	5,579.4	5,542.7	5,448.6	21.6	25.9	53.45	-344.4	-935.7	694.3	650.4	43.94	15.801		
5,700.0	5,678.9	5,641.8	5,545.7	22.0	26.4	53.49	-351.7	-954.4	707.5	662.8	44.72	15.822		
5,800.0	5,778.4	5,740.9	5,642.7	22.3	26.9	53.52	-359.0	-973.1	720.7	675.2	45.50	15.841		
5,900.0	5,878.0	5,840.1	5,739.8	22.7	27.4	53.55	-366.3	-991.7	733.9	687.6	46.27	15.860		
6,000.0	5,977.5	5,939.2	5,836.9	23.1	27.9	53.58	-373.7	-1,010.4	747.1	700.1	47.05	15.878		
6,100.0	6,077.0	6,038.3	5,934.0	23.5	28.4	53.61	-381.0	-1,029.0	760.3	712.5	47.83	15.896		
6,200.0	6,176.6	6,137.4	6,031.0	23.9	28.9	53.63	-388.3	-1,047.7	773.5	724.9	48.61	15.913		
6,300.0	6,276.1	6,236.6	6,128.1	24.3	29.4	53.66	-395.7	-1,066.4	786.7	737.3	49.39	15.929		
6,400.0	6,375.6	6,335.7	6,225.2	24.7	29.9	53.69	-403.0	-1,085.0	799.9	749.8	50.17	15.944		
6,500.0	6,475.2	6,434.8	6,322.3	25.1	30.4	53.71	-410.3	-1,103.7	813.1	762.2	50.95	15.959		
6,600.0	6,574.7	6,533.9	6,419.3	25.5	30.9	53.74	-417.7	-1,122.3	826.3	774.6	51.73	15.973		
6,700.0	6,674.2	6,633.1	6,516.4	25.9	31.4	53.76	-425.0	-1,141.0	839.5	787.0	52.51	15.987		
6,800.0	6,773.8	6,732.2	6,613.5	26.3	31.9	53.78	-432.3	-1,159.7	852.7	799.5	53.30	16.000		
6,900.0	6,873.3	6,831.3	6,710.6	26.7	32.4	53.80	-439.7	-1,178.3	866.0	811.9	54.08	16.013		
7,000.0	6,972.8	6,930.4	6,807.6	27.1	32.9	53.82	-447.0	-1,197.0	879.2	824.3	54.86	16.026		
7,100.0	7,072.4	7,029.5	6,904.7	27.4	33.4	28.68	-454.3	-1,215.6	892.4	836.7	55.63	16.041		
7,200.0	7,172.0	7,127.7	7,000.8	27.8	33.8	-67.25	-461.6	-1,234.1	905.5	849.2	56.27	16.092		
7,300.0	7,269.0	7,223.8	7,095.0	28.0	34.3	-79.05	-467.4	-1,252.2	918.9	862.2	56.69	16.208		
7,400.0	7,360.6	7,324.9	7,193.8	28.2	34.9	-83.12	-459.1	-1,271.3	932.7	875.7	57.07	16.344		
7,500.0	7,444.0	7,432.7	7,295.7	28.3	35.4	-85.36	-430.9	-1,291.2	946.6	889.1	57.43	16.481		
7,600.0	7,516.7	7,548.4	7,397.3	28.5	35.8	-86.91	-379.7	-1,311.3	959.8	902.0	57.79	16.607		
7,700.0	7,576.3	7,672.8	7,492.8	28.6	36.1	-88.10	-302.6	-1,330.3	971.7	913.6	58.15	16.710		
7,800.0	7,621.2	7,806.0	7,574.4	28.7	36.3	-89.00	-199.0	-1,346.9	981.6	923.0	58.52	16.774		
7,900.0	7,650.0	7,947.1	7,632.7	28.9	36.4	-89.61	-71.5	-1,359.2	988.6	929.6	58.94	16.772		
8,000.0	7,661.7	8,093.5	7,659.1	29.2	36.3	-89.88	72.0	-1,365.5	992.1	932.6	59.49	16.677		
8,100.0	7,662.0	8,204.1	7,660.0	29.6	36.4	-89.88	182.6	-1,366.6	992.9	932.8	60.13	16.513		
8,200.0	7,662.0	8,304.1	7,660.0	30.0	36.5	-89.88	282.6	-1,367.4	993.6	932.6	60.95	16.301		
8,300.0	7,662.0	8,404.1	7,660.0	30.6	36.6	-89.88	382.6	-1,368.2	994.3	932.3	61.97	16.044		
8,400.0	7,662.0	8,504.1	7,660.0	31.2	36.9	-89.88	482.5	-1,369.1	995.0	931.9	63.17	15.751		
8,500.0	7,662.0	8,604.1	7,660.0	32.0	37.2	-89.88	582.5	-1,369.9	995.7	931.2	64.54	15.427		
8,600.0	7,662.0	8,704.1	7,660.0	32.8	37.7	-89.89	682.5	-1,370.7	996.5	930.4	66.08	15.081		
8,700.0	7,662.0	8,804.1	7,660.0	33.6	38.3	-89.89	782.5	-1,371.5	997.2	929.4	67.76	14.717		
8,800.0	7,662.0	8,904.1	7,660.0	34.6	38.9	-89.89	882.5	-1,372.4	997.9	928.3	69.57	14.343		
8,900.0	7,662.0	9,004.1	7,660.0	35.6	39.7	-89.89	982.5	-1,373.2	998.6	927.1	71.52	13.962		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,000.0	7,662.0	9,104.1	7,660.0	36.6	40.5	-89.89	1,082.5	-1,374.0	999.3	925.7	73.59	13.580		
9,100.0	7,662.0	9,204.1	7,660.0	37.8	41.4	-89.89	1,182.5	-1,374.9	1,000.1	924.3	75.76	13.200		
9,200.0	7,662.0	9,304.1	7,660.0	38.9	42.4	-89.89	1,282.5	-1,375.7	1,000.8	922.7	78.03	12.825		
9,300.0	7,662.0	9,404.1	7,660.0	40.1	43.5	-89.89	1,382.5	-1,376.5	1,001.5	921.1	80.39	12.457		
9,400.0	7,662.0	9,504.1	7,660.0	41.4	44.6	-89.89	1,482.5	-1,377.3	1,002.2	919.4	82.84	12.098		
9,500.0	7,662.0	9,604.1	7,660.0	42.6	45.7	-89.89	1,582.5	-1,378.2	1,002.9	917.6	85.36	11.749		
9,600.0	7,662.0	9,704.1	7,660.0	44.0	46.9	-89.89	1,682.5	-1,379.0	1,003.6	915.7	87.95	11.412		
9,700.0	7,662.0	9,804.1	7,660.0	45.3	48.1	-89.89	1,782.5	-1,379.8	1,004.4	913.7	90.60	11.085		
9,800.0	7,662.0	9,904.1	7,660.0	46.7	49.4	-89.89	1,882.5	-1,380.7	1,005.1	911.8	93.31	10.771		
9,900.0	7,662.0	10,004.1	7,660.0	48.1	50.7	-89.89	1,982.5	-1,381.5	1,005.8	909.7	96.08	10.468		
10,000.0	7,662.0	10,104.1	7,660.0	49.5	52.0	-89.89	2,082.5	-1,382.3	1,006.5	907.6	98.89	10.178		
10,100.0	7,662.0	10,204.1	7,660.0	50.9	53.3	-89.89	2,182.4	-1,383.1	1,007.2	905.5	101.75	9.899		
10,200.0	7,662.0	10,304.1	7,660.0	52.4	54.7	-89.89	2,282.4	-1,384.0	1,007.9	903.3	104.65	9.632		
10,300.0	7,662.0	10,404.1	7,660.0	53.9	56.1	-89.89	2,382.4	-1,384.8	1,008.7	901.1	107.59	9.375		
10,400.0	7,662.0	10,504.1	7,660.0	55.4	57.5	-89.89	2,482.4	-1,385.6	1,009.4	898.8	110.56	9.130		
10,500.0	7,662.0	10,604.1	7,660.0	56.9	58.9	-89.89	2,582.4	-1,386.5	1,010.1	896.5	113.56	8.895		
10,600.0	7,662.0	10,704.1	7,660.0	58.4	60.4	-89.89	2,682.4	-1,387.3	1,010.8	894.2	116.59	8.670		
10,700.0	7,662.0	10,804.1	7,660.0	59.9	61.9	-89.89	2,782.4	-1,388.1	1,011.5	891.9	119.65	8.454		
10,800.0	7,662.0	10,904.1	7,660.0	61.5	63.4	-89.89	2,882.4	-1,388.9	1,012.2	889.5	122.74	8.247		
10,900.0	7,662.0	11,004.1	7,660.0	63.1	64.8	-89.89	2,982.4	-1,389.8	1,013.0	887.1	125.85	8.049		
11,000.0	7,662.0	11,104.1	7,660.0	64.6	66.4	-89.89	3,082.4	-1,390.6	1,013.7	884.7	128.98	7.859		
11,100.0	7,662.0	11,204.1	7,660.0	66.2	67.9	-89.89	3,182.4	-1,391.4	1,014.4	882.3	132.13	7.677		
11,200.0	7,662.0	11,304.1	7,660.0	67.8	69.4	-89.89	3,282.4	-1,392.3	1,015.1	879.8	135.29	7.503		
11,300.0	7,662.0	11,404.1	7,660.0	69.4	71.0	-89.89	3,382.4	-1,393.1	1,015.8	877.3	138.48	7.336		
11,400.0	7,662.0	11,504.1	7,660.0	71.0	72.5	-89.89	3,482.4	-1,393.9	1,016.5	874.9	141.68	7.175		
11,500.0	7,662.0	11,604.0	7,660.0	72.6	74.1	-89.89	3,582.4	-1,394.7	1,017.3	872.4	144.90	7.020		
11,600.0	7,662.0	11,704.0	7,660.0	74.2	75.7	-89.89	3,682.4	-1,395.6	1,018.0	869.8	148.13	6.872		
11,700.0	7,662.0	11,804.0	7,660.0	75.9	77.2	-89.89	3,782.4	-1,396.4	1,018.7	867.3	151.38	6.730		
11,800.0	7,662.0	11,904.0	7,660.0	77.5	78.8	-89.89	3,882.3	-1,397.2	1,019.4	864.8	154.63	6.592		
11,900.0	7,662.0	12,004.0	7,660.0	79.1	80.4	-89.89	3,982.3	-1,398.1	1,020.1	862.2	157.90	6.460		
12,000.0	7,662.0	12,104.0	7,660.0	80.8	82.0	-89.89	4,082.3	-1,398.9	1,020.8	859.7	161.18	6.333		
12,100.0	7,662.0	12,204.0	7,660.0	82.4	83.6	-89.89	4,182.3	-1,399.7	1,021.6	857.1	164.47	6.211		
12,200.0	7,662.0	12,304.0	7,660.0	84.1	85.3	-89.89	4,282.3	-1,400.5	1,022.3	854.5	167.77	6.093		
12,300.0	7,662.0	12,404.0	7,660.0	85.7	86.9	-89.89	4,382.3	-1,401.4	1,023.0	851.9	171.08	5.980		
12,400.0	7,662.0	12,504.0	7,660.0	87.4	88.5	-89.89	4,482.3	-1,402.2	1,023.7	849.3	174.40	5.870		
12,500.0	7,662.0	12,604.0	7,660.0	89.1	90.1	-89.89	4,582.3	-1,403.0	1,024.4	846.7	177.73	5.764		
12,600.0	7,662.0	12,704.0	7,660.0	90.7	91.8	-89.89	4,682.3	-1,403.9	1,025.1	844.1	181.06	5.662		
12,700.0	7,662.0	12,804.0	7,660.0	92.4	93.4	-89.89	4,782.3	-1,404.7	1,025.9	841.5	184.40	5.563		
12,800.0	7,662.0	12,904.0	7,660.0	94.1	95.1	-89.89	4,882.3	-1,405.5	1,026.6	838.8	187.75	5.468		
12,900.0	7,662.0	13,004.0	7,660.0	95.8	96.7	-89.89	4,982.3	-1,406.3	1,027.3	836.2	191.10	5.376		
13,000.0	7,662.0	13,104.0	7,660.0	97.5	98.4	-89.89	5,082.3	-1,407.2	1,028.0	833.6	194.46	5.286		
13,100.0	7,662.0	13,204.0	7,660.0	99.1	100.0	-89.89	5,182.3	-1,408.0	1,028.7	830.9	197.83	5.200		
13,200.0	7,662.0	13,304.0	7,660.0	100.8	101.7	-89.89	5,282.3	-1,408.8	1,029.4	828.2	201.20	5.117		
13,300.0	7,662.0	13,404.0	7,660.0	102.5	103.4	-89.89	5,382.3	-1,409.6	1,030.2	825.6	204.58	5.036		
13,400.0	7,662.0	13,504.0	7,660.0	104.2	105.0	-89.89	5,482.2	-1,410.5	1,030.9	822.9	207.96	4.957		
13,500.0	7,662.0	13,604.0	7,660.0	105.9	106.7	-89.89	5,582.2	-1,411.3	1,031.6	820.3	211.35	4.881		
13,600.0	7,662.0	13,704.0	7,660.0	107.6	108.4	-89.89	5,682.2	-1,412.1	1,032.3	817.6	214.74	4.807		
13,700.0	7,662.0	13,804.0	7,660.0	109.3	110.1	-89.89	5,782.2	-1,413.0	1,033.0	814.9	218.13	4.736		
13,800.0	7,662.0	13,904.0	7,660.0	111.0	111.7	-89.89	5,882.2	-1,413.8	1,033.8	812.2	221.53	4.666		
13,900.0	7,662.0	14,004.0	7,660.0	112.7	113.4	-89.89	5,982.2	-1,414.6	1,034.5	809.5	224.94	4.599		
14,000.0	7,662.0	14,104.0	7,660.0	114.4	115.1	-89.89	6,082.2	-1,415.4	1,035.2	806.8	228.35	4.533		
14,100.0	7,662.0	14,204.0	7,660.0	116.1	116.8	-89.89	6,182.2	-1,416.3	1,035.9	804.1	231.76	4.470		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,200.0	7,662.0	14,304.0	7,660.0	117.8	118.5	-89.89	6,282.2	-1,417.1	1,036.6	801.4	235.17	4.408		
14,300.0	7,662.0	14,404.0	7,660.0	119.5	120.2	-89.89	6,382.2	-1,417.9	1,037.3	798.7	238.59	4.348		
14,400.0	7,662.0	14,504.0	7,660.0	121.3	121.9	-89.89	6,482.2	-1,418.8	1,038.1	796.0	242.01	4.289		
14,500.0	7,662.0	14,604.0	7,660.0	123.0	123.6	-89.89	6,582.2	-1,419.6	1,038.8	793.3	245.44	4.232		
14,600.0	7,662.0	14,704.0	7,660.0	124.7	125.3	-89.89	6,682.2	-1,420.4	1,039.5	790.6	248.86	4.177		
14,700.0	7,662.0	14,804.0	7,660.0	126.4	127.0	-89.89	6,782.2	-1,421.2	1,040.2	787.9	252.29	4.123		
14,800.0	7,662.0	14,904.0	7,660.0	128.1	128.7	-89.89	6,882.2	-1,422.1	1,040.9	785.2	255.73	4.070		
14,900.0	7,662.0	15,004.0	7,660.0	129.8	130.4	-89.89	6,982.2	-1,422.9	1,041.6	782.5	259.16	4.019		
15,000.0	7,662.0	15,104.0	7,660.0	131.6	132.1	-89.89	7,082.2	-1,423.7	1,042.4	779.8	262.60	3.969		
15,100.0	7,662.0	15,204.0	7,660.0	133.3	133.8	-89.89	7,182.1	-1,424.6	1,043.1	777.0	266.04	3.921		
15,200.0	7,662.0	15,304.0	7,660.0	135.0	135.5	-89.89	7,282.1	-1,425.4	1,043.8	774.3	269.48	3.873		
15,300.0	7,662.0	15,404.0	7,660.0	136.7	137.2	-89.89	7,382.1	-1,426.2	1,044.5	771.6	272.93	3.827		
15,400.0	7,662.0	15,503.9	7,660.0	138.4	138.9	-89.89	7,482.1	-1,427.0	1,045.2	768.9	276.37	3.782		
15,500.0	7,662.0	15,603.9	7,660.0	140.2	140.6	-89.89	7,582.1	-1,427.9	1,045.9	766.1	279.82	3.738		
15,600.0	7,662.0	15,703.9	7,660.0	141.9	142.3	-89.89	7,682.1	-1,428.7	1,046.7	763.4	283.27	3.695		
15,700.0	7,662.0	15,803.9	7,660.0	143.6	144.1	-89.89	7,782.1	-1,429.5	1,047.4	760.6	286.72	3.653		
15,800.0	7,662.0	15,903.9	7,660.0	145.3	145.8	-89.89	7,882.1	-1,430.4	1,048.1	757.9	290.18	3.612		
15,900.0	7,662.0	16,003.9	7,660.0	147.1	147.5	-89.89	7,982.1	-1,431.2	1,048.8	755.2	293.64	3.572		
16,000.0	7,662.0	16,103.9	7,660.0	148.8	149.2	-89.89	8,082.1	-1,432.0	1,049.5	752.4	297.09	3.533		
16,100.0	7,662.0	16,203.9	7,660.0	150.5	150.9	-89.89	8,182.1	-1,432.8	1,050.2	749.7	300.55	3.494		
16,200.0	7,662.0	16,303.9	7,660.0	152.3	152.6	-89.89	8,282.1	-1,433.7	1,051.0	746.9	304.01	3.457		
16,300.0	7,662.0	16,403.9	7,660.0	154.0	154.4	-89.89	8,382.1	-1,434.5	1,051.7	744.2	307.48	3.420		
16,400.0	7,662.0	16,503.9	7,660.0	155.7	156.1	-89.89	8,482.1	-1,435.3	1,052.4	741.5	310.94	3.385		
16,500.0	7,662.0	16,603.9	7,660.0	157.5	157.8	-89.89	8,582.1	-1,436.2	1,053.1	738.7	314.41	3.350		
16,600.0	7,662.0	16,703.9	7,660.0	159.2	159.5	-89.89	8,682.1	-1,437.0	1,053.8	736.0	317.87	3.315		
16,700.0	7,662.0	16,803.9	7,660.0	160.9	161.3	-89.89	8,782.1	-1,437.8	1,054.5	733.2	321.34	3.282		
16,800.0	7,662.0	16,903.9	7,660.0	162.7	163.0	-89.89	8,882.0	-1,438.6	1,055.3	730.4	324.81	3.249		
16,900.0	7,662.0	17,003.9	7,660.0	164.4	164.7	-89.89	8,982.0	-1,439.5	1,056.0	727.7	328.28	3.217		
17,000.0	7,662.0	17,103.9	7,660.0	166.1	166.4	-89.89	9,082.0	-1,440.3	1,056.7	724.9	331.76	3.185		
17,100.0	7,662.0	17,203.9	7,660.0	167.9	168.2	-89.89	9,182.0	-1,441.1	1,057.4	722.2	335.23	3.154		
17,200.0	7,662.0	17,303.9	7,660.0	169.6	169.9	-89.89	9,282.0	-1,442.0	1,058.1	719.4	338.70	3.124		
17,300.0	7,662.0	17,403.9	7,660.0	171.3	171.6	-89.89	9,382.0	-1,442.8	1,058.8	716.7	342.18	3.094		
17,400.0	7,662.0	17,503.9	7,660.0	173.1	173.4	-89.89	9,482.0	-1,443.6	1,059.6	713.9	345.66	3.065		
17,500.0	7,662.0	17,603.9	7,660.0	174.8	175.1	-89.89	9,582.0	-1,444.4	1,060.3	711.1	349.13	3.037		
17,600.0	7,662.0	17,630.0	7,660.0	176.6	175.5	-89.89	9,608.1	-1,444.7	1,063.6	711.8	351.81	3.023 SF		
17,700.0	7,662.0	17,630.0	7,660.0	178.3	175.5	-89.89	9,608.1	-1,444.7	1,075.9	724.2	351.62	3.060		
17,799.6	7,662.0	17,630.0	7,660.0	180.0	175.5	-89.89	9,608.1	-1,444.7	1,097.1	748.4	348.68	3.146		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.23	-0.1	-15.0	15.0					
100.0	100.0	100.0	100.0	0.4	0.0	-90.23	-0.1	-15.0	15.0	14.7	0.28	54.210		
200.0	200.0	200.0	200.0	1.0	0.0	-90.23	-0.1	-15.0	15.0	14.2	0.80	18.820		
300.0	300.0	300.0	300.0	1.5	0.0	-90.23	-0.1	-15.0	15.0	13.8	1.22	12.262		
400.0	400.0	400.0	400.0	1.9	0.0	-90.23	-0.1	-15.0	15.0	13.4	1.62	9.277		
500.0	500.0	500.0	500.0	2.3	0.0	-90.23	-0.1	-15.0	15.0	13.0	2.00	7.510		
600.0	600.0	600.0	600.0	2.7	0.0	-90.23	-0.1	-15.0	15.0	12.6	2.37	6.327		
700.0	700.0	700.0	700.0	3.1	0.0	-90.23	-0.1	-15.0	15.0	12.3	2.74	5.474		
800.0	800.0	800.0	800.0	3.5	0.0	-90.23	-0.1	-15.0	15.0	11.9	3.11	4.827		
900.0	900.0	900.0	900.0	3.9	0.0	-90.23	-0.1	-15.0	15.0	11.5	3.47	4.320 CC, ES		
1,000.0	1,000.0	999.6	999.5	4.2	0.0	-93.98	-1.1	-16.4	16.4	12.5	3.89	4.215		
1,100.0	1,100.0	1,099.0	1,098.8	4.6	0.0	45.15	-4.4	-20.4	19.6	15.3	4.31	4.562		
1,200.0	1,199.8	1,198.2	1,197.7	5.4	0.0	43.64	-9.7	-27.1	23.5	18.4	5.06	4.643		
1,300.0	1,299.5	1,297.5	1,296.2	5.9	0.0	44.06	-17.2	-36.5	27.9	22.4	5.50	5.069		
1,400.0	1,399.0	1,397.4	1,395.2	6.2	0.0	44.63	-25.4	-46.9	32.6	26.8	5.79	5.633		
1,500.0	1,498.5	1,497.3	1,494.2	6.5	0.0	45.05	-33.7	-57.2	37.3	31.2	6.13	6.093		
1,600.0	1,598.1	1,597.2	1,593.2	6.8	0.0	45.39	-41.9	-67.6	42.1	35.6	6.47	6.499		
1,700.0	1,697.6	1,697.0	1,692.2	7.1	0.0	45.65	-50.2	-78.0	46.8	40.0	6.82	6.858		
1,800.0	1,797.1	1,796.9	1,791.2	7.4	0.0	45.87	-58.4	-88.4	51.5	44.3	7.17	7.179		
1,900.0	1,896.7	1,896.8	1,890.2	7.8	0.0	46.04	-66.7	-98.7	56.2	48.7	7.53	7.466		
2,000.0	1,996.2	1,996.7	1,989.3	8.1	0.0	46.20	-74.9	-109.1	61.0	53.1	7.89	7.724		
2,100.0	2,095.7	2,096.6	2,088.3	8.4	0.0	46.33	-83.2	-119.5	65.7	57.4	8.25	7.957		
2,200.0	2,195.3	2,196.5	2,187.3	8.8	0.0	46.44	-91.5	-129.8	70.4	61.8	8.62	8.169		
2,300.0	2,294.8	2,296.4	2,286.3	9.1	0.0	46.54	-99.7	-140.2	75.1	66.2	8.99	8.363		
2,400.0	2,394.3	2,396.3	2,385.3	9.5	0.0	46.62	-108.0	-150.6	79.9	70.5	9.35	8.539		
2,500.0	2,493.9	2,496.1	2,484.3	9.8	0.0	46.70	-116.2	-160.9	84.6	74.9	9.72	8.701		
2,600.0	2,593.4	2,596.0	2,583.3	10.2	0.0	46.77	-124.5	-171.3	89.3	79.2	10.09	8.851		
2,700.0	2,692.9	2,695.9	2,682.3	10.5	0.0	46.83	-132.7	-181.7	94.1	83.6	10.46	8.989		
2,800.0	2,792.5	2,795.8	2,781.3	10.9	0.0	46.89	-141.0	-192.0	98.8	88.0	10.84	9.116		
2,900.0	2,892.0	2,895.7	2,880.3	11.3	0.0	46.94	-149.2	-202.4	103.5	92.3	11.21	9.235		
3,000.0	2,991.5	2,995.6	2,979.3	11.6	0.0	46.98	-157.5	-212.8	108.3	96.7	11.58	9.345		
3,100.0	3,091.1	3,095.5	3,078.3	12.0	0.0	47.03	-165.7	-223.2	113.0	101.0	11.96	9.448		
3,200.0	3,190.6	3,195.4	3,177.3	12.4	0.0	47.06	-174.0	-233.5	117.7	105.4	12.33	9.544		
3,300.0	3,290.1	3,295.2	3,276.3	12.7	0.0	47.10	-182.2	-243.9	122.4	109.7	12.71	9.635		
3,400.0	3,389.7	3,395.1	3,375.3	13.1	0.0	47.13	-190.5	-254.3	127.2	114.1	13.08	9.719		
3,500.0	3,489.2	3,495.0	3,474.3	13.5	0.0	47.17	-198.7	-264.6	131.9	118.4	13.46	9.799		
3,600.0	3,588.7	3,594.9	3,573.3	13.9	0.0	47.19	-207.0	-275.0	136.6	122.8	13.84	9.874		
3,700.0	3,688.3	3,694.8	3,672.3	14.2	0.0	47.22	-215.3	-285.4	141.4	127.1	14.21	9.945		
3,800.0	3,787.8	3,794.7	3,771.3	14.6	0.0	47.25	-223.5	-295.7	146.1	131.5	14.59	10.011		
3,900.0	3,887.3	3,894.6	3,870.3	15.0	0.0	47.27	-231.8	-306.1	150.8	135.9	14.97	10.075		
4,000.0	3,986.9	3,994.5	3,969.4	15.4	0.0	47.29	-240.0	-316.5	155.6	140.2	15.35	10.135		
4,100.0	4,086.4	4,094.4	4,068.4	15.7	0.0	47.31	-248.3	-326.8	160.3	144.6	15.73	10.192		
4,200.0	4,185.9	4,194.2	4,167.4	16.1	0.0	47.33	-256.5	-337.2	165.0	148.9	16.11	10.246		
4,300.0	4,285.4	4,294.1	4,266.4	16.5	0.0	47.35	-264.8	-347.6	169.7	153.3	16.48	10.297		
4,400.0	4,385.0	4,394.0	4,365.4	16.9	0.0	47.37	-273.0	-358.0	174.5	157.6	16.86	10.346		
4,500.0	4,484.5	4,493.9	4,464.4	17.3	0.0	47.39	-281.3	-368.3	179.2	162.0	17.24	10.393		
4,600.0	4,584.0	4,593.8	4,563.4	17.7	0.0	47.40	-289.5	-378.7	183.9	166.3	17.62	10.438		
4,700.0	4,683.6	4,693.7	4,662.4	18.1	0.0	47.42	-297.8	-389.1	188.7	170.7	18.00	10.480		
4,800.0	4,783.1	4,793.6	4,761.4	18.4	0.0	47.43	-306.0	-399.4	193.4	175.0	18.38	10.521		
4,900.0	4,882.6	4,893.5	4,860.4	18.8	0.0	47.44	-314.3	-409.8	198.1	179.4	18.76	10.560		
5,000.0	4,982.2	4,993.3	4,959.4	19.2	0.0	47.46	-322.5	-420.2	202.9	183.7	19.14	10.598		
5,100.0	5,081.7	5,093.2	5,058.4	19.6	0.0	47.47	-330.8	-430.5	207.6	188.1	19.52	10.634		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,181.2	5,193.1	5,157.4	20.0	0.0	47.48	-339.1	-440.9	212.3	192.4	19.90	10.668		
5,300.0	5,280.8	5,293.0	5,256.4	20.4	0.0	47.49	-347.3	-451.3	217.0	196.8	20.28	10.701		
5,400.0	5,380.3	5,392.9	5,355.4	20.8	0.0	47.50	-355.6	-461.6	221.8	201.1	20.66	10.733		
5,500.0	5,479.8	5,492.8	5,454.4	21.2	0.0	47.51	-363.8	-472.0	226.5	205.5	21.04	10.764		
5,600.0	5,579.4	5,592.7	5,553.4	21.6	0.0	47.52	-372.1	-482.4	231.2	209.8	21.42	10.793		
5,700.0	5,678.9	5,692.6	5,652.4	22.0	0.0	47.53	-380.3	-492.8	236.0	214.2	21.80	10.822		
5,800.0	5,778.4	5,792.4	5,751.4	22.3	0.0	47.54	-388.6	-503.1	240.7	218.5	22.19	10.849		
5,900.0	5,878.0	5,892.3	5,850.4	22.7	0.0	47.55	-396.8	-513.5	245.4	222.9	22.57	10.876		
6,000.0	5,977.5	5,992.2	5,949.5	23.1	0.0	47.56	-405.1	-523.9	250.2	227.2	22.95	10.901		
6,100.0	6,077.0	6,092.1	6,048.5	23.5	0.0	47.57	-413.3	-534.2	254.9	231.6	23.33	10.926		
6,200.0	6,176.6	6,192.0	6,147.5	23.9	0.0	47.57	-421.6	-544.6	259.6	235.9	23.71	10.950		
6,300.0	6,276.1	6,291.9	6,246.5	24.3	0.0	47.58	-429.8	-555.0	264.3	240.3	24.09	10.973		
6,400.0	6,375.6	6,391.8	6,345.5	24.7	0.0	47.59	-438.1	-565.3	269.1	244.6	24.47	10.995		
6,500.0	6,475.2	6,491.7	6,444.5	25.1	0.0	47.60	-446.3	-575.7	273.8	249.0	24.85	11.017		
6,600.0	6,574.7	6,591.6	6,543.5	25.5	0.0	47.60	-454.6	-586.1	278.5	253.3	25.24	11.037		
6,700.0	6,674.2	6,691.4	6,642.5	25.9	0.0	47.61	-462.8	-596.4	283.3	257.7	25.62	11.058		
6,800.0	6,773.8	6,794.9	6,745.3	26.3	0.0	49.02	-464.3	-607.3	287.4	261.4	26.04	11.039		
6,900.0	6,873.3	6,893.6	6,842.0	26.7	0.0	53.68	-448.5	-617.6	291.4	264.9	26.49	11.003		
7,000.0	6,972.8	6,982.0	6,925.2	27.1	0.0	60.36	-420.4	-626.6	299.2	272.3	26.84	11.145		
7,100.0	7,072.4	7,058.6	6,993.1	27.4	0.0	42.62	-385.8	-634.1	315.2	288.3	26.88	11.728		
7,200.0	7,172.0	7,129.4	7,051.3	27.8	0.0	-45.48	-346.1	-640.5	338.5	312.1	26.44	12.803		
7,300.0	7,269.0	7,200.0	7,104.0	28.0	0.0	-49.63	-299.6	-646.5	365.2	339.4	25.74	14.185		
7,400.0	7,360.6	7,263.7	7,146.3	28.2	0.0	-47.43	-252.3	-651.3	392.4	367.6	24.82	15.809		
7,500.0	7,444.0	7,328.4	7,183.7	28.3	0.0	-44.43	-199.7	-655.7	418.3	394.3	23.93	17.477		
7,600.0	7,516.7	7,400.0	7,217.9	28.5	0.0	-41.60	-137.0	-659.8	441.3	418.1	23.28	18.961		
7,700.0	7,576.3	7,450.0	7,237.1	28.6	0.0	-39.79	-90.9	-662.2	460.3	437.9	22.43	20.526		
7,800.0	7,621.2	7,516.9	7,256.3	28.7	0.0	-38.25	-26.9	-664.8	474.7	452.6	22.11	21.473		
7,900.0	7,650.0	7,578.7	7,267.4	28.9	0.0	-37.35	33.9	-666.4	484.1	462.1	22.03	21.978		
8,000.0	7,661.7	7,640.4	7,271.9	29.2	0.0	-37.00	95.3	-667.4	488.2	465.9	22.29	21.900		
8,100.0	7,662.0	7,733.4	7,272.0	29.6	0.0	-37.05	188.4	-668.2	488.7	466.1	22.62	21.605		
8,200.0	7,662.0	7,833.4	7,272.0	30.0	0.0	-37.12	288.3	-669.0	489.1	466.1	23.00	21.263		
8,300.0	7,662.0	7,933.4	7,272.0	30.6	0.0	-37.19	388.3	-669.9	489.6	466.1	23.45	20.879		
8,400.0	7,662.0	8,033.4	7,272.0	31.2	0.0	-37.26	488.3	-670.7	490.0	466.0	23.95	20.461		
8,500.0	7,662.0	8,133.4	7,272.0	32.0	0.0	-37.32	588.3	-671.5	490.4	465.9	24.50	20.016		
8,600.0	7,662.0	8,233.4	7,272.0	32.8	0.0	-37.39	688.3	-672.3	490.9	465.8	25.11	19.552		
8,700.0	7,662.0	8,333.4	7,272.0	33.6	0.0	-37.45	788.3	-673.2	491.3	465.5	25.76	19.074		
8,800.0	7,662.0	8,433.4	7,272.0	34.6	0.0	-37.52	888.3	-674.0	491.7	465.3	26.45	18.589		
8,900.0	7,662.0	8,533.4	7,272.0	35.6	0.0	-37.59	988.3	-674.8	492.2	465.0	27.19	18.102		
9,000.0	7,662.0	8,633.4	7,272.0	36.6	0.0	-37.65	1,088.3	-675.6	492.6	464.6	27.96	17.616		
9,100.0	7,662.0	8,733.4	7,272.0	37.8	0.0	-37.72	1,188.3	-676.5	493.0	464.3	28.77	17.136		
9,200.0	7,662.0	8,833.4	7,272.0	38.9	0.0	-37.78	1,288.3	-677.3	493.5	463.9	29.61	16.663		
9,300.0	7,662.0	8,933.4	7,272.0	40.1	0.0	-37.85	1,388.3	-678.1	493.9	463.4	30.49	16.201		
9,400.0	7,662.0	9,033.4	7,272.0	41.4	0.0	-37.92	1,488.3	-679.0	494.4	463.0	31.39	15.750		
9,500.0	7,662.0	9,133.4	7,272.0	42.6	0.0	-37.98	1,588.3	-679.8	494.8	462.5	32.31	15.312		
9,600.0	7,662.0	9,233.4	7,272.0	44.0	0.0	-38.05	1,688.3	-680.6	495.2	462.0	33.26	14.888		
9,700.0	7,662.0	9,333.4	7,272.0	45.3	0.0	-38.11	1,788.3	-681.4	495.7	461.4	34.24	14.478		
9,800.0	7,662.0	9,433.4	7,272.0	46.7	0.0	-38.18	1,888.3	-682.3	496.1	460.9	35.23	14.083		
9,900.0	7,662.0	9,533.4	7,272.0	48.1	0.0	-38.24	1,988.2	-683.1	496.6	460.3	36.24	13.702		
10,000.0	7,662.0	9,633.4	7,272.0	49.5	0.0	-38.31	2,088.2	-683.9	497.0	459.7	37.27	13.335		
10,100.0	7,662.0	9,733.3	7,272.0	50.9	0.0	-38.37	2,188.2	-684.7	497.4	459.1	38.32	12.983		
10,200.0	7,662.0	9,833.3	7,272.0	52.4	0.0	-38.44	2,288.2	-685.6	497.9	458.5	39.38	12.644		
10,300.0	7,662.0	9,933.3	7,272.0	53.9	0.0	-38.50	2,388.2	-686.4	498.3	457.9	40.45	12.319		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,662.0	10,033.3	7,272.0	55.4	0.0	-38.56	2,488.2	-687.2	498.8	457.2	41.54	12.006		
10,500.0	7,662.0	10,133.3	7,272.0	56.9	0.0	-38.63	2,588.2	-688.1	499.2	456.6	42.65	11.707		
10,600.0	7,662.0	10,233.3	7,272.0	58.4	0.0	-38.69	2,688.2	-688.9	499.7	455.9	43.76	11.419		
10,700.0	7,662.0	10,333.3	7,272.0	59.9	0.0	-38.76	2,788.2	-689.7	500.1	455.2	44.88	11.143		
10,800.0	7,662.0	10,433.3	7,272.0	61.5	0.0	-38.82	2,888.2	-690.5	500.6	454.6	46.02	10.877		
10,900.0	7,662.0	10,533.3	7,272.0	63.1	0.0	-38.88	2,988.2	-691.4	501.0	453.9	47.16	10.623		
11,000.0	7,662.0	10,633.3	7,272.0	64.6	0.0	-38.95	3,088.2	-692.2	501.5	453.2	48.32	10.378		
11,100.0	7,662.0	10,733.3	7,272.0	66.2	0.0	-39.01	3,188.2	-693.0	501.9	452.4	49.48	10.143		
11,200.0	7,662.0	10,833.3	7,272.0	67.8	0.0	-39.08	3,288.2	-693.8	502.4	451.7	50.66	9.918		
11,300.0	7,662.0	10,933.3	7,272.0	69.4	0.0	-39.14	3,388.2	-694.7	502.8	451.0	51.84	9.700		
11,400.0	7,662.0	11,033.3	7,272.0	71.0	0.0	-39.20	3,488.2	-695.5	503.3	450.3	53.02	9.492		
11,500.0	7,662.0	11,133.3	7,272.0	72.6	0.0	-39.26	3,588.2	-696.3	503.7	449.5	54.22	9.291		
11,600.0	7,662.0	11,233.3	7,272.0	74.2	0.0	-39.33	3,688.1	-697.2	504.2	448.8	55.42	9.098		
11,700.0	7,662.0	11,333.3	7,272.0	75.9	0.0	-39.39	3,788.1	-698.0	504.6	448.0	56.63	8.912		
11,800.0	7,662.0	11,433.3	7,272.0	77.5	0.0	-39.45	3,888.1	-698.8	505.1	447.3	57.84	8.732		
11,900.0	7,662.0	11,533.3	7,272.0	79.1	0.0	-39.52	3,988.1	-699.6	505.5	446.5	59.06	8.560		
12,000.0	7,662.0	11,633.3	7,272.0	80.8	0.0	-39.58	4,088.1	-700.5	506.0	445.7	60.29	8.393		
12,100.0	7,662.0	11,733.3	7,272.0	82.4	0.0	-39.64	4,188.1	-701.3	506.5	444.9	61.52	8.232		
12,200.0	7,662.0	11,833.3	7,272.0	84.1	0.0	-39.70	4,288.1	-702.1	506.9	444.2	62.76	8.077		
12,300.0	7,662.0	11,933.3	7,272.0	85.7	0.0	-39.77	4,388.1	-702.9	507.4	443.4	64.00	7.928		
12,400.0	7,662.0	12,033.3	7,272.0	87.4	0.0	-39.83	4,488.1	-703.8	507.8	442.6	65.25	7.783		
12,500.0	7,662.0	12,133.3	7,272.0	89.1	0.0	-39.89	4,588.1	-704.6	508.3	441.8	66.50	7.643		
12,600.0	7,662.0	12,233.3	7,272.0	90.7	0.0	-39.95	4,688.1	-705.4	508.8	441.0	67.76	7.508		
12,700.0	7,662.0	12,333.3	7,272.0	92.4	0.0	-40.01	4,788.1	-706.2	509.2	440.2	69.02	7.378		
12,800.0	7,662.0	12,433.3	7,272.0	94.1	0.0	-40.07	4,888.1	-707.1	509.7	439.4	70.29	7.251		
12,900.0	7,662.0	12,533.3	7,272.0	95.8	0.0	-40.14	4,988.1	-707.9	510.1	438.6	71.56	7.129		
13,000.0	7,662.0	12,633.3	7,272.0	97.5	0.0	-40.20	5,088.1	-708.7	510.6	437.8	72.83	7.011		
13,100.0	7,662.0	12,733.3	7,272.0	99.1	0.0	-40.26	5,188.1	-709.6	511.1	436.9	74.11	6.896		
13,200.0	7,662.0	12,833.3	7,272.0	100.8	0.0	-40.32	5,288.1	-710.4	511.5	436.1	75.39	6.785		
13,300.0	7,662.0	12,933.3	7,272.0	102.5	0.0	-40.38	5,388.0	-711.2	512.0	435.3	76.68	6.677		
13,400.0	7,662.0	13,033.3	7,272.0	104.2	0.0	-40.44	5,488.0	-712.0	512.4	434.5	77.97	6.573		
13,500.0	7,662.0	13,133.3	7,272.0	105.9	0.0	-40.50	5,588.0	-712.9	512.9	433.7	79.26	6.471		
13,600.0	7,662.0	13,233.3	7,272.0	107.6	0.0	-40.56	5,688.0	-713.7	513.4	432.8	80.56	6.373		
13,700.0	7,662.0	13,333.3	7,272.0	109.3	0.0	-40.62	5,788.0	-714.5	513.8	432.0	81.86	6.277		
13,800.0	7,662.0	13,433.3	7,272.0	111.0	0.0	-40.68	5,888.0	-715.3	514.3	431.1	83.16	6.184		
13,900.0	7,662.0	13,533.3	7,272.0	112.7	0.0	-40.75	5,988.0	-716.2	514.8	430.3	84.47	6.094		
14,000.0	7,662.0	13,633.2	7,272.0	114.4	0.0	-40.81	6,088.0	-717.0	515.2	429.5	85.78	6.007		
14,100.0	7,662.0	13,733.2	7,272.0	116.1	0.0	-40.87	6,188.0	-717.8	515.7	428.6	87.09	5.921		
14,200.0	7,662.0	13,833.2	7,272.0	117.8	0.0	-40.93	6,288.0	-718.7	516.2	427.8	88.41	5.838		
14,300.0	7,662.0	13,933.2	7,272.0	119.5	0.0	-40.99	6,388.0	-719.5	516.6	426.9	89.73	5.758		
14,400.0	7,662.0	14,033.2	7,272.0	121.3	0.0	-41.05	6,488.0	-720.3	517.1	426.1	91.05	5.679		
14,500.0	7,662.0	14,133.2	7,272.0	123.0	0.0	-41.11	6,588.0	-721.1	517.6	425.2	92.38	5.603		
14,600.0	7,662.0	14,233.2	7,272.0	124.7	0.0	-41.17	6,688.0	-722.0	518.1	424.4	93.71	5.529		
14,700.0	7,662.0	14,333.2	7,272.0	126.4	0.0	-41.22	6,788.0	-722.8	518.5	423.5	95.04	5.456		
14,800.0	7,662.0	14,433.2	7,272.0	128.1	0.0	-41.28	6,888.0	-723.6	519.0	422.6	96.37	5.385		
14,900.0	7,662.0	14,533.2	7,272.0	129.8	0.0	-41.34	6,987.9	-724.4	519.5	421.8	97.71	5.317		
15,000.0	7,662.0	14,633.2	7,272.0	131.6	0.0	-41.40	7,087.9	-725.3	519.9	420.9	99.05	5.249		
15,100.0	7,662.0	14,733.2	7,272.0	133.3	0.0	-41.46	7,187.9	-726.1	520.4	420.0	100.39	5.184		
15,200.0	7,662.0	14,833.2	7,272.0	135.0	0.0	-41.52	7,287.9	-726.9	520.9	419.2	101.74	5.120		
15,300.0	7,662.0	14,933.2	7,272.0	136.7	0.0	-41.58	7,387.9	-727.8	521.4	418.3	103.08	5.058		
15,400.0	7,662.0	15,033.2	7,272.0	138.4	0.0	-41.64	7,487.9	-728.6	521.8	417.4	104.43	4.997		
15,500.0	7,662.0	15,133.2	7,272.0	140.2	0.0	-41.70	7,587.9	-729.4	522.3	416.5	105.79	4.938		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,662.0	15,233.2	7,272.0	141.9	0.0	-41.76	7,687.9	-730.2	522.8	415.7	107.14	4.880		
15,700.0	7,662.0	15,333.2	7,272.0	143.6	0.0	-41.81	7,787.9	-731.1	523.3	414.8	108.50	4.823		
15,800.0	7,662.0	15,433.2	7,272.0	145.3	0.0	-41.87	7,887.9	-731.9	523.8	413.9	109.86	4.768		
15,900.0	7,662.0	15,533.2	7,272.0	147.1	0.0	-41.93	7,987.9	-732.7	524.2	413.0	111.22	4.713		
16,000.0	7,662.0	15,633.2	7,272.0	148.8	0.0	-41.99	8,087.9	-733.5	524.7	412.1	112.59	4.661		
16,100.0	7,662.0	15,733.2	7,272.0	150.5	0.0	-42.05	8,187.9	-734.4	525.2	411.2	113.95	4.609		
16,200.0	7,662.0	15,833.2	7,272.0	152.3	0.0	-42.10	8,287.9	-735.2	525.7	410.3	115.32	4.558		
16,300.0	7,662.0	15,933.2	7,272.0	154.0	0.0	-42.16	8,387.9	-736.0	526.2	409.5	116.69	4.509		
16,400.0	7,662.0	16,033.2	7,272.0	155.7	0.0	-42.22	8,487.9	-736.9	526.6	408.6	118.07	4.460		
16,500.0	7,662.0	16,133.2	7,272.0	157.5	0.0	-42.28	8,587.9	-737.7	527.1	407.7	119.44	4.413		
16,600.0	7,662.0	16,233.2	7,272.0	159.2	0.0	-42.34	8,687.8	-738.5	527.6	406.8	120.82	4.367		
16,700.0	7,662.0	16,333.2	7,272.0	160.9	0.0	-42.39	8,787.8	-739.3	528.1	405.9	122.20	4.321		
16,800.0	7,662.0	16,433.2	7,272.0	162.7	0.0	-42.45	8,887.8	-740.2	528.6	405.0	123.59	4.277		
16,900.0	7,662.0	16,533.2	7,272.0	164.4	0.0	-42.51	8,987.8	-741.0	529.0	404.1	124.97	4.233		
17,000.0	7,662.0	16,633.2	7,272.0	166.1	0.0	-42.56	9,087.8	-741.8	529.5	403.2	126.36	4.191		
17,100.0	7,662.0	16,733.2	7,272.0	167.9	0.0	-42.62	9,187.8	-742.6	530.0	402.3	127.75	4.149		
17,200.0	7,662.0	16,833.2	7,272.0	169.6	0.0	-42.68	9,287.8	-743.5	530.5	401.4	129.14	4.108		
17,300.0	7,662.0	16,933.2	7,272.0	171.3	0.0	-42.74	9,387.8	-744.3	531.0	400.5	130.53	4.068		
17,400.0	7,662.0	17,033.2	7,272.0	173.1	0.0	-42.79	9,487.8	-745.1	531.5	399.5	131.93	4.029		
17,500.0	7,662.0	17,133.2	7,272.0	174.8	0.0	-42.85	9,587.8	-746.0	532.0	398.6	133.32	3.990		
17,600.0	7,662.0	17,233.2	7,272.0	176.6	0.0	-42.90	9,687.8	-746.8	532.4	397.7	134.72	3.952		
17,700.0	7,662.0	17,333.2	7,272.0	178.3	0.0	-42.96	9,787.8	-747.6	532.9	396.8	136.12	3.915		
17,799.6	7,662.0	17,429.8	7,272.0	180.0	0.0	-43.02	9,884.5	-748.4	533.4	395.9	137.54	3.878 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NCH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	-90.25	-0.1	-30.0	30.0					
100.0	100.0	100.0	100.0	0.4	0.0	-90.25	-0.1	-30.0	30.0	29.7	0.28	108.381		
200.0	200.0	200.0	200.0	1.0	0.0	-90.25	-0.1	-30.0	30.0	29.2	0.80	37.627		
300.0	300.0	300.0	300.0	1.5	0.0	-90.25	-0.1	-30.0	30.0	28.8	1.22	24.516		
400.0	400.0	400.0	400.0	1.9	0.0	-90.25	-0.1	-30.0	30.0	28.4	1.62	18.548		
500.0	500.0	500.0	500.0	2.3	0.0	-90.25	-0.1	-30.0	30.0	28.0	2.00	15.016		
600.0	600.0	600.0	600.0	2.7	0.0	-90.25	-0.1	-30.0	30.0	27.6	2.37	12.650		
700.0	700.0	700.0	700.0	3.1	0.0	-90.25	-0.1	-30.0	30.0	27.3	2.74	10.945		
800.0	800.0	800.0	800.0	3.5	0.0	-90.25	-0.1	-30.0	30.0	26.9	3.11	9.652 CC, ES		
900.0	900.0	899.0	899.0	3.9	0.0	-91.66	-0.9	-31.5	31.6	28.1	3.49	9.032		
1,000.0	1,000.0	997.8	997.7	4.2	0.0	-95.17	-3.3	-36.1	36.3	32.4	3.91	9.294		
1,100.0	1,100.0	1,096.3	1,095.8	4.6	0.0	46.08	-7.2	-43.6	43.2	38.9	4.28	10.078		
1,200.0	1,199.8	1,194.5	1,193.2	5.4	0.0	45.68	-12.6	-54.1	50.9	45.9	5.00	10.179		
1,300.0	1,299.5	1,292.3	1,289.9	5.9	0.0	46.62	-19.5	-67.5	59.5	54.1	5.42	10.985		
1,400.0	1,399.0	1,391.9	1,388.0	6.2	0.0	47.53	-27.3	-82.7	69.0	63.3	5.70	12.113		
1,500.0	1,498.5	1,491.4	1,486.0	6.5	0.0	48.21	-35.1	-97.8	78.6	72.5	6.03	13.022		
1,600.0	1,598.1	1,590.9	1,584.1	6.8	0.0	48.75	-43.0	-113.0	88.1	81.7	6.38	13.818		
1,700.0	1,697.6	1,690.5	1,682.2	7.1	0.0	49.18	-50.8	-128.1	97.7	90.9	6.73	14.521		
1,800.0	1,797.1	1,790.0	1,780.2	7.4	0.0	49.54	-58.6	-143.3	107.2	100.1	7.08	15.144		
1,900.0	1,896.7	1,889.6	1,878.3	7.8	0.0	49.83	-66.4	-158.5	116.8	109.4	7.44	15.700		
2,000.0	1,996.2	1,989.1	1,976.4	8.1	0.0	50.09	-74.3	-173.6	126.4	118.6	7.80	16.199		
2,100.0	2,095.7	2,088.6	2,074.4	8.4	0.0	50.30	-82.1	-188.8	135.9	127.8	8.16	16.649		
2,200.0	2,195.3	2,188.2	2,172.5	8.8	0.0	50.49	-89.9	-203.9	145.5	137.0	8.53	17.056		
2,300.0	2,294.8	2,287.7	2,270.6	9.1	0.0	50.65	-97.7	-219.1	155.1	146.2	8.90	17.426		
2,400.0	2,394.3	2,387.3	2,368.6	9.5	0.0	50.80	-105.6	-234.3	164.7	155.4	9.27	17.763		
2,500.0	2,493.9	2,486.8	2,466.7	9.8	0.0	50.93	-113.4	-249.4	174.2	164.6	9.64	18.073		
2,600.0	2,593.4	2,586.3	2,564.8	10.2	0.0	51.05	-121.2	-264.6	183.8	173.8	10.01	18.357		
2,700.0	2,692.9	2,685.9	2,662.8	10.5	0.0	51.15	-129.1	-279.8	193.4	183.0	10.39	18.619		
2,800.0	2,792.5	2,785.4	2,760.9	10.9	0.0	51.24	-136.9	-294.9	203.0	192.2	10.76	18.861		
2,900.0	2,892.0	2,885.0	2,859.0	11.3	0.0	51.33	-144.7	-310.1	212.5	201.4	11.14	19.086		
3,000.0	2,991.5	2,984.5	2,957.0	11.6	0.0	51.41	-152.5	-325.2	222.1	210.6	11.51	19.295		
3,100.0	3,091.1	3,084.0	3,055.1	12.0	0.0	51.48	-160.4	-340.4	231.7	219.8	11.89	19.490		
3,200.0	3,190.6	3,183.6	3,153.2	12.4	0.0	51.55	-168.2	-355.6	241.3	229.0	12.27	19.672		
3,300.0	3,290.1	3,283.1	3,251.2	12.7	0.0	51.61	-176.0	-370.7	250.9	238.2	12.64	19.842		
3,400.0	3,389.7	3,382.7	3,349.3	13.1	0.0	51.67	-183.8	-385.9	260.4	247.4	13.02	20.001		
3,500.0	3,489.2	3,482.2	3,447.4	13.5	0.0	51.72	-191.7	-401.0	270.0	256.6	13.40	20.151		
3,600.0	3,588.7	3,581.7	3,545.4	13.9	0.0	51.77	-199.5	-416.2	279.6	265.8	13.78	20.293		
3,700.0	3,688.3	3,681.3	3,643.5	14.2	0.0	51.81	-207.3	-431.4	289.2	275.0	14.16	20.426		
3,800.0	3,787.8	3,780.8	3,741.6	14.6	0.0	51.86	-215.1	-446.5	298.8	284.2	14.54	20.552		
3,900.0	3,887.3	3,880.4	3,839.6	15.0	0.0	51.90	-223.0	-461.7	308.3	293.4	14.92	20.671		
4,000.0	3,986.9	3,979.9	3,937.7	15.4	0.0	51.94	-230.8	-476.8	317.9	302.6	15.30	20.783		
4,100.0	4,086.4	4,079.4	4,035.8	15.7	0.0	51.97	-238.6	-492.0	327.5	311.8	15.68	20.890		
4,200.0	4,185.9	4,179.0	4,133.8	16.1	0.0	52.00	-246.4	-507.2	337.1	321.0	16.06	20.992		
4,300.0	4,285.4	4,278.5	4,231.9	16.5	0.0	52.04	-254.3	-522.3	346.7	330.2	16.44	21.088		
4,400.0	4,385.0	4,378.1	4,330.0	16.9	0.0	52.07	-262.1	-537.5	356.2	339.4	16.82	21.180		
4,500.0	4,484.5	4,477.6	4,428.0	17.3	0.0	52.09	-269.9	-552.6	365.8	348.6	17.20	21.268		
4,600.0	4,584.0	4,577.1	4,526.1	17.7	0.0	52.12	-277.7	-567.8	375.4	357.8	17.58	21.351		
4,700.0	4,683.6	4,676.7	4,624.2	18.1	0.0	52.15	-285.6	-583.0	385.0	367.0	17.96	21.431		
4,800.0	4,783.1	4,776.2	4,722.2	18.4	0.0	52.17	-293.4	-598.1	394.6	376.2	18.35	21.508		
4,900.0	4,882.6	4,875.7	4,820.3	18.8	0.0	52.20	-301.2	-613.3	404.1	385.4	18.73	21.581		
5,000.0	4,982.2	4,975.3	4,918.4	19.2	0.0	52.22	-309.1	-628.4	413.7	394.6	19.11	21.651		
5,100.0	5,081.7	5,074.8	5,016.4	19.6	0.0	52.24	-316.9	-643.6	423.3	403.8	19.49	21.718		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NCH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,181.2	5,174.4	5,114.5	20.0	0.0	52.26	-324.7	-658.8	432.9	413.0	19.87	21.782		
5,300.0	5,280.8	5,273.9	5,212.6	20.4	0.0	52.28	-332.5	-673.9	442.5	422.2	20.26	21.844		
5,400.0	5,380.3	5,373.4	5,310.6	20.8	0.0	52.30	-340.4	-689.1	452.1	431.4	20.64	21.904		
5,500.0	5,479.8	5,473.0	5,408.7	21.2	0.0	52.31	-348.2	-704.2	461.6	440.6	21.02	21.961		
5,600.0	5,579.4	5,572.5	5,506.8	21.6	0.0	52.33	-356.0	-719.4	471.2	449.8	21.40	22.016		
5,700.0	5,678.9	5,672.1	5,604.8	22.0	0.0	52.35	-363.8	-734.6	480.8	459.0	21.79	22.069		
5,800.0	5,778.4	5,771.6	5,702.9	22.3	0.0	52.36	-371.7	-749.7	490.4	468.2	22.17	22.120		
5,900.0	5,878.0	5,871.1	5,801.0	22.7	0.0	52.38	-379.5	-764.9	500.0	477.4	22.55	22.169		
6,000.0	5,977.5	5,970.7	5,899.0	23.1	0.0	52.39	-387.3	-780.0	509.5	486.6	22.94	22.217		
6,100.0	6,077.0	6,070.2	5,997.1	23.5	0.0	52.41	-395.1	-795.2	519.1	495.8	23.32	22.263		
6,200.0	6,176.6	6,169.8	6,095.2	23.9	0.0	52.42	-403.0	-810.4	528.7	505.0	23.70	22.307		
6,300.0	6,276.1	6,269.3	6,193.2	24.3	0.0	52.43	-410.8	-825.5	538.3	514.2	24.08	22.350		
6,400.0	6,375.6	6,368.8	6,291.3	24.7	0.0	52.45	-418.6	-840.7	547.9	523.4	24.47	22.391		
6,500.0	6,475.2	6,468.4	6,389.4	25.1	0.0	52.46	-426.4	-855.9	557.5	532.6	24.85	22.432		
6,600.0	6,574.7	6,567.9	6,487.4	25.5	0.0	52.47	-434.3	-871.0	567.0	541.8	25.24	22.470		
6,700.0	6,674.2	6,667.5	6,585.5	25.9	0.0	52.48	-442.1	-886.2	576.6	551.0	25.62	22.508		
6,800.0	6,773.8	6,767.0	6,683.6	26.3	0.0	52.49	-449.9	-901.3	586.2	560.2	26.00	22.545		
6,900.0	6,873.3	6,866.5	6,781.6	26.7	0.0	52.50	-457.7	-916.5	595.8	569.4	26.39	22.580		
7,000.0	6,972.8	6,966.1	6,879.7	27.1	0.0	52.51	-465.6	-931.7	605.4	578.6	26.77	22.614		
7,100.0	7,072.4	7,065.4	6,977.7	27.4	0.0	28.01	-465.2	-946.9	615.0	587.8	27.16	22.646		
7,200.0	7,172.0	7,165.2	7,072.1	27.8	0.0	-66.36	-448.3	-961.7	624.8	597.3	27.49	22.727		
7,300.0	7,269.0	7,257.8	7,160.6	28.0	0.0	-75.83	-416.2	-975.7	634.8	607.1	27.71	22.912		
7,400.0	7,360.6	7,351.6	7,241.4	28.2	0.0	-77.51	-370.7	-988.6	644.4	616.6	27.84	23.145		
7,500.0	7,444.0	7,444.1	7,312.9	28.3	0.0	-77.54	-313.2	-1,000.2	653.4	625.5	27.94	23.391		
7,600.0	7,516.7	7,535.6	7,373.6	28.5	0.0	-77.09	-245.7	-1,010.2	661.5	633.5	28.01	23.614		
7,700.0	7,576.3	7,626.2	7,422.6	28.6	0.0	-76.53	-170.0	-1,018.4	668.3	640.2	28.11	23.779		
7,800.0	7,621.2	7,716.3	7,459.0	28.7	0.0	-76.03	-88.0	-1,024.7	673.7	645.4	28.24	23.853		
7,900.0	7,650.0	7,806.0	7,482.2	28.9	0.0	-75.68	-1.5	-1,029.0	677.4	648.9	28.45	23.811		
8,000.0	7,661.7	7,895.5	7,491.7	29.2	0.0	-75.52	87.4	-1,031.3	679.3	650.5	28.73	23.642		
8,100.0	7,662.0	7,993.5	7,492.0	29.6	0.0	-75.52	185.3	-1,032.1	680.0	650.9	29.09	23.379		
8,200.0	7,662.0	8,093.5	7,492.0	30.0	0.0	-75.54	285.3	-1,032.9	680.7	651.1	29.54	23.044		
8,300.0	7,662.0	8,193.5	7,492.0	30.6	0.0	-75.55	385.3	-1,033.8	681.4	651.3	30.08	22.650		
8,400.0	7,662.0	8,293.5	7,492.0	31.2	0.0	-75.57	485.3	-1,034.6	682.1	651.4	30.71	22.207		
8,500.0	7,662.0	8,393.5	7,492.0	32.0	0.0	-75.58	585.3	-1,035.4	682.8	651.3	31.43	21.725		
8,600.0	7,662.0	8,493.5	7,492.0	32.8	0.0	-75.60	685.3	-1,036.2	683.5	651.2	32.22	21.215		
8,700.0	7,662.0	8,593.5	7,492.0	33.6	0.0	-75.61	785.3	-1,037.1	684.1	651.1	33.08	20.684		
8,800.0	7,662.0	8,693.5	7,492.0	34.6	0.0	-75.63	885.3	-1,037.9	684.8	650.8	34.00	20.142		
8,900.0	7,662.0	8,793.5	7,492.0	35.6	0.0	-75.64	985.3	-1,038.7	685.5	650.5	34.99	19.595		
9,000.0	7,662.0	8,893.5	7,492.0	36.6	0.0	-75.66	1,085.3	-1,039.5	686.2	650.2	36.03	19.048		
9,100.0	7,662.0	8,993.5	7,492.0	37.8	0.0	-75.67	1,185.3	-1,040.4	686.9	649.8	37.12	18.507		
9,200.0	7,662.0	9,093.5	7,492.0	38.9	0.0	-75.69	1,285.3	-1,041.2	687.6	649.4	38.25	17.975		
9,300.0	7,662.0	9,193.5	7,492.0	40.1	0.0	-75.70	1,385.3	-1,042.0	688.3	648.9	39.43	17.455		
9,400.0	7,662.0	9,293.4	7,492.0	41.4	0.0	-75.72	1,485.3	-1,042.9	689.0	648.3	40.65	16.948		
9,500.0	7,662.0	9,393.4	7,492.0	42.6	0.0	-75.73	1,585.3	-1,043.7	689.7	647.8	41.91	16.458		
9,600.0	7,662.0	9,493.4	7,492.0	44.0	0.0	-75.74	1,685.3	-1,044.5	690.4	647.2	43.19	15.984		
9,700.0	7,662.0	9,593.4	7,492.0	45.3	0.0	-75.76	1,785.2	-1,045.3	691.1	646.6	44.51	15.527		
9,800.0	7,662.0	9,693.4	7,492.0	46.7	0.0	-75.77	1,885.2	-1,046.2	691.8	645.9	45.85	15.088		
9,900.0	7,662.0	9,793.4	7,492.0	48.1	0.0	-75.79	1,985.2	-1,047.0	692.5	645.3	47.22	14.665		
10,000.0	7,662.0	9,893.4	7,492.0	49.5	0.0	-75.80	2,085.2	-1,047.8	693.2	644.6	48.61	14.260		
10,100.0	7,662.0	9,993.4	7,492.0	50.9	0.0	-75.82	2,185.2	-1,048.6	693.9	643.8	50.02	13.872		
10,200.0	7,662.0	10,093.4	7,492.0	52.4	0.0	-75.83	2,285.2	-1,049.5	694.6	643.1	51.45	13.500		
10,300.0	7,662.0	10,193.4	7,492.0	53.9	0.0	-75.85	2,385.2	-1,050.3	695.2	642.4	52.90	13.144		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NCH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,662.0	10,293.4	7,492.0	55.4	0.0	-75.86	2,485.2	-1,051.1	695.9	641.6	54.36	12.803		
10,500.0	7,662.0	10,393.4	7,492.0	56.9	0.0	-75.88	2,585.2	-1,052.0	696.6	640.8	55.84	12.476		
10,600.0	7,662.0	10,493.4	7,492.0	58.4	0.0	-75.89	2,685.2	-1,052.8	697.3	640.0	57.33	12.164		
10,700.0	7,662.0	10,593.4	7,492.0	59.9	0.0	-75.90	2,785.2	-1,053.6	698.0	639.2	58.83	11.864		
10,800.0	7,662.0	10,693.4	7,492.0	61.5	0.0	-75.92	2,885.2	-1,054.4	698.7	638.4	60.35	11.578		
10,900.0	7,662.0	10,793.4	7,492.0	63.1	0.0	-75.93	2,985.2	-1,055.3	699.4	637.5	61.88	11.303		
11,000.0	7,662.0	10,893.4	7,492.0	64.6	0.0	-75.95	3,085.2	-1,056.1	700.1	636.7	63.42	11.040		
11,100.0	7,662.0	10,993.4	7,492.0	66.2	0.0	-75.96	3,185.2	-1,056.9	700.8	635.8	64.96	10.788		
11,200.0	7,662.0	11,093.4	7,492.0	67.8	0.0	-75.97	3,285.2	-1,057.7	701.5	635.0	66.52	10.546		
11,300.0	7,662.0	11,193.4	7,492.0	69.4	0.0	-75.99	3,385.2	-1,058.6	702.2	634.1	68.08	10.314		
11,400.0	7,662.0	11,293.4	7,492.0	71.0	0.0	-76.00	3,485.1	-1,059.4	702.9	633.2	69.65	10.091		
11,500.0	7,662.0	11,393.4	7,492.0	72.6	0.0	-76.02	3,585.1	-1,060.2	703.6	632.3	71.23	9.877		
11,600.0	7,662.0	11,493.4	7,492.0	74.2	0.0	-76.03	3,685.1	-1,061.1	704.3	631.5	72.82	9.672		
11,700.0	7,662.0	11,593.4	7,492.0	75.9	0.0	-76.05	3,785.1	-1,061.9	705.0	630.6	74.41	9.474		
11,800.0	7,662.0	11,693.4	7,492.0	77.5	0.0	-76.06	3,885.1	-1,062.7	705.7	629.7	76.01	9.284		
11,900.0	7,662.0	11,793.4	7,492.0	79.1	0.0	-76.07	3,985.1	-1,063.5	706.4	628.7	77.61	9.101		
12,000.0	7,662.0	11,893.4	7,492.0	80.8	0.0	-76.09	4,085.1	-1,064.4	707.1	627.8	79.22	8.925		
12,100.0	7,662.0	11,993.4	7,492.0	82.4	0.0	-76.10	4,185.1	-1,065.2	707.7	626.9	80.84	8.755		
12,200.0	7,662.0	12,093.4	7,492.0	84.1	0.0	-76.12	4,285.1	-1,066.0	708.4	626.0	82.45	8.592		
12,300.0	7,662.0	12,193.4	7,492.0	85.7	0.0	-76.13	4,385.1	-1,066.8	709.1	625.1	84.08	8.434		
12,400.0	7,662.0	12,293.4	7,492.0	87.4	0.0	-76.14	4,485.1	-1,067.7	709.8	624.1	85.70	8.282		
12,500.0	7,662.0	12,393.4	7,492.0	89.1	0.0	-76.16	4,585.1	-1,068.5	710.5	623.2	87.33	8.136		
12,600.0	7,662.0	12,493.4	7,492.0	90.7	0.0	-76.17	4,685.1	-1,069.3	711.2	622.3	88.97	7.994		
12,700.0	7,662.0	12,593.4	7,492.0	92.4	0.0	-76.18	4,785.1	-1,070.2	711.9	621.3	90.61	7.857		
12,800.0	7,662.0	12,693.4	7,492.0	94.1	0.0	-76.20	4,885.1	-1,071.0	712.6	620.4	92.25	7.725		
12,900.0	7,662.0	12,793.4	7,492.0	95.8	0.0	-76.21	4,985.1	-1,071.8	713.3	619.4	93.89	7.597		
13,000.0	7,662.0	12,893.4	7,492.0	97.5	0.0	-76.23	5,085.1	-1,072.6	714.0	618.5	95.54	7.473		
13,100.0	7,662.0	12,993.4	7,492.0	99.1	0.0	-76.24	5,185.0	-1,073.5	714.7	617.5	97.19	7.354		
13,200.0	7,662.0	13,093.4	7,492.0	100.8	0.0	-76.25	5,285.0	-1,074.3	715.4	616.6	98.84	7.238		
13,300.0	7,662.0	13,193.3	7,492.0	102.5	0.0	-76.27	5,385.0	-1,075.1	716.1	615.6	100.50	7.125		
13,400.0	7,662.0	13,293.3	7,492.0	104.2	0.0	-76.28	5,485.0	-1,075.9	716.8	614.6	102.16	7.017		
13,500.0	7,662.0	13,393.3	7,492.0	105.9	0.0	-76.29	5,585.0	-1,076.8	717.5	613.7	103.82	6.911		
13,600.0	7,662.0	13,493.3	7,492.0	107.6	0.0	-76.31	5,685.0	-1,077.6	718.2	612.7	105.48	6.809		
13,700.0	7,662.0	13,593.3	7,492.0	109.3	0.0	-76.32	5,785.0	-1,078.4	718.9	611.7	107.14	6.709		
13,800.0	7,662.0	13,693.3	7,492.0	111.0	0.0	-76.33	5,885.0	-1,079.3	719.6	610.8	108.81	6.613		
13,900.0	7,662.0	13,793.3	7,492.0	112.7	0.0	-76.35	5,985.0	-1,080.1	720.3	609.8	110.48	6.519		
14,000.0	7,662.0	13,893.3	7,492.0	114.4	0.0	-76.36	6,085.0	-1,080.9	721.0	608.8	112.15	6.428		
14,100.0	7,662.0	13,993.3	7,492.0	116.1	0.0	-76.37	6,185.0	-1,081.7	721.7	607.8	113.82	6.340		
14,200.0	7,662.0	14,093.3	7,492.0	117.8	0.0	-76.39	6,285.0	-1,082.6	722.3	606.9	115.50	6.254		
14,300.0	7,662.0	14,193.3	7,492.0	119.5	0.0	-76.40	6,385.0	-1,083.4	723.0	605.9	117.18	6.171		
14,400.0	7,662.0	14,293.3	7,492.0	121.3	0.0	-76.41	6,485.0	-1,084.2	723.7	604.9	118.85	6.089		
14,500.0	7,662.0	14,393.3	7,492.0	123.0	0.0	-76.43	6,585.0	-1,085.0	724.4	603.9	120.53	6.010		
14,600.0	7,662.0	14,493.3	7,492.0	124.7	0.0	-76.44	6,685.0	-1,085.9	725.1	602.9	122.21	5.933		
14,700.0	7,662.0	14,593.3	7,492.0	126.4	0.0	-76.45	6,784.9	-1,086.7	725.8	601.9	123.90	5.858		
14,800.0	7,662.0	14,693.3	7,492.0	128.1	0.0	-76.47	6,884.9	-1,087.5	726.5	600.9	125.58	5.785		
14,900.0	7,662.0	14,793.3	7,492.0	129.8	0.0	-76.48	6,984.9	-1,088.3	727.2	600.0	127.27	5.714		
15,000.0	7,662.0	14,893.3	7,492.0	131.6	0.0	-76.49	7,084.9	-1,089.2	727.9	599.0	128.95	5.645		
15,100.0	7,662.0	14,993.3	7,492.0	133.3	0.0	-76.51	7,184.9	-1,090.0	728.6	598.0	130.64	5.577		
15,200.0	7,662.0	15,093.3	7,492.0	135.0	0.0	-76.52	7,284.9	-1,090.8	729.3	597.0	132.33	5.511		
15,300.0	7,662.0	15,193.3	7,492.0	136.7	0.0	-76.53	7,384.9	-1,091.7	730.0	596.0	134.02	5.447		
15,400.0	7,662.0	15,293.3	7,492.0	138.4	0.0	-76.55	7,484.9	-1,092.5	730.7	595.0	135.71	5.384		
15,500.0	7,662.0	15,393.3	7,492.0	140.2	0.0	-76.56	7,584.9	-1,093.3	731.4	594.0	137.40	5.323		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NCH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,662.0	15,493.3	7,492.0	141.9	0.0	-76.57	7,684.9	-1,094.1	732.1	593.0	139.09	5.263		
15,700.0	7,662.0	15,593.3	7,492.0	143.6	0.0	-76.59	7,784.9	-1,095.0	732.8	592.0	140.79	5.205		
15,800.0	7,662.0	15,693.3	7,492.0	145.3	0.0	-76.60	7,884.9	-1,095.8	733.5	591.0	142.48	5.148		
15,900.0	7,662.0	15,793.3	7,492.0	147.1	0.0	-76.61	7,984.9	-1,096.6	734.2	590.0	144.18	5.092		
16,000.0	7,662.0	15,893.3	7,492.0	148.8	0.0	-76.62	8,084.9	-1,097.4	734.9	589.0	145.88	5.038		
16,100.0	7,662.0	15,993.3	7,492.0	150.5	0.0	-76.64	8,184.9	-1,098.3	735.6	588.0	147.58	4.984		
16,200.0	7,662.0	16,093.3	7,492.0	152.3	0.0	-76.65	8,284.9	-1,099.1	736.3	587.0	149.27	4.932		
16,300.0	7,662.0	16,193.3	7,492.0	154.0	0.0	-76.66	8,384.9	-1,099.9	737.0	586.0	150.97	4.881		
16,400.0	7,662.0	16,293.3	7,492.0	155.7	0.0	-76.68	8,484.8	-1,100.8	737.7	585.0	152.67	4.832		
16,500.0	7,662.0	16,393.3	7,492.0	157.5	0.0	-76.69	8,584.8	-1,101.6	738.4	584.0	154.38	4.783		
16,600.0	7,662.0	16,493.3	7,492.0	159.2	0.0	-76.70	8,684.8	-1,102.4	739.1	583.0	156.08	4.735		
16,700.0	7,662.0	16,593.3	7,492.0	160.9	0.0	-76.71	8,784.8	-1,103.2	739.8	582.0	157.78	4.688		
16,800.0	7,662.0	16,693.3	7,492.0	162.7	0.0	-76.73	8,884.8	-1,104.1	740.5	581.0	159.48	4.643		
16,900.0	7,662.0	16,793.3	7,492.0	164.4	0.0	-76.74	8,984.8	-1,104.9	741.1	580.0	161.19	4.598		
17,000.0	7,662.0	16,893.3	7,492.0	166.1	0.0	-76.75	9,084.8	-1,105.7	741.8	579.0	162.89	4.554		
17,100.0	7,662.0	16,993.3	7,492.0	167.9	0.0	-76.76	9,184.8	-1,106.5	742.5	577.9	164.60	4.511		
17,200.0	7,662.0	17,093.2	7,492.0	169.6	0.0	-76.78	9,284.8	-1,107.4	743.2	576.9	166.31	4.469		
17,300.0	7,662.0	17,193.2	7,492.0	171.3	0.0	-76.79	9,384.8	-1,108.2	743.9	575.9	168.01	4.428		
17,400.0	7,662.0	17,293.2	7,492.0	173.1	0.0	-76.80	9,484.8	-1,109.0	744.6	574.9	169.72	4.387		
17,500.0	7,662.0	17,393.2	7,492.0	174.8	0.0	-76.82	9,584.8	-1,109.9	745.3	573.9	171.43	4.348		
17,600.0	7,662.0	17,493.2	7,492.0	176.6	0.0	-76.83	9,684.8	-1,110.7	746.0	572.9	173.14	4.309		
17,700.0	7,662.0	17,593.2	7,492.0	178.3	0.0	-76.84	9,784.8	-1,111.5	746.7	571.9	174.85	4.271		
17,799.6	7,662.0	17,686.9	7,492.0	180.0	0.0	-76.85	9,878.5	-1,112.3	747.4	570.9	176.57	4.233 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.28	-0.2	-45.0	45.0					
100.0	100.0	100.0	100.0	0.4	0.4	-90.28	-0.2	-45.0	45.0	44.4	0.55	81.306		
200.0	200.0	200.0	200.0	1.0	1.0	-90.28	-0.2	-45.0	45.0	43.4	1.59	28.216		
300.0	300.0	300.0	300.0	1.5	1.5	-90.28	-0.2	-45.0	45.0	42.6	2.45	18.383		
400.0	400.0	400.0	400.0	1.9	1.9	-90.28	-0.2	-45.0	45.0	41.8	3.24	13.908		
500.0	500.0	500.0	500.0	2.3	2.3	-90.28	-0.2	-45.0	45.0	41.0	4.00	11.259		
600.0	600.0	600.0	600.0	2.7	2.7	-90.28	-0.2	-45.0	45.0	40.3	4.74	9.486		
700.0	700.0	700.0	700.0	3.1	3.1	-90.28	-0.2	-45.0	45.0	39.5	5.48	8.207	CC, ES	
800.0	800.0	798.5	798.5	3.5	3.4	-91.11	-0.9	-46.6	46.6	40.3	6.29	7.408		
900.0	900.0	896.8	896.7	3.9	4.3	-93.29	-2.9	-51.2	51.4	43.7	7.71	6.667		
1,000.0	1,000.0	994.7	994.2	4.2	5.1	-96.13	-6.3	-58.9	59.5	50.5	8.96	6.636		
1,100.0	1,100.0	1,092.0	1,090.8	4.6	5.8	45.73	-11.0	-69.5	69.8	59.7	10.07	6.929		
1,200.0	1,199.8	1,189.0	1,186.6	5.4	6.5	45.29	-17.0	-83.1	80.9	69.5	11.44	7.073		
1,300.0	1,299.5	1,285.7	1,281.7	5.9	6.9	45.89	-24.3	-99.6	92.9	80.6	12.29	7.557		
1,400.0	1,399.0	1,384.9	1,378.9	6.2	7.2	46.66	-32.2	-117.7	105.4	92.6	12.82	8.226		
1,500.0	1,498.5	1,484.1	1,476.1	6.5	7.4	47.27	-40.2	-135.8	118.0	104.6	13.43	8.788		
1,600.0	1,598.1	1,583.3	1,573.3	6.8	7.7	47.76	-48.2	-153.9	130.6	116.6	14.07	9.286		
1,700.0	1,697.6	1,682.5	1,670.5	7.1	8.0	48.17	-56.2	-172.0	143.2	128.5	14.72	9.731		
1,800.0	1,797.1	1,781.7	1,767.7	7.4	8.3	48.51	-64.2	-190.2	155.8	140.5	15.38	10.130		
1,900.0	1,896.7	1,880.9	1,864.9	7.8	8.6	48.80	-72.1	-208.3	168.5	152.4	16.06	10.488		
2,000.0	1,996.2	1,980.1	1,962.1	8.1	9.0	49.05	-80.1	-226.4	181.1	164.3	16.75	10.811		
2,100.0	2,095.7	2,079.3	2,059.3	8.4	9.3	49.26	-88.1	-244.5	193.7	176.2	17.45	11.102		
2,200.0	2,195.3	2,178.5	2,156.5	8.8	9.6	49.45	-96.1	-262.6	206.3	188.2	18.15	11.368		
2,300.0	2,294.8	2,277.7	2,253.7	9.1	10.0	49.62	-104.0	-280.7	218.9	200.1	18.86	11.609		
2,400.0	2,394.3	2,376.9	2,350.9	9.5	10.4	49.77	-112.0	-298.8	231.6	212.0	19.58	11.829		
2,500.0	2,493.9	2,476.1	2,448.1	9.8	10.8	49.90	-120.0	-317.0	244.2	223.9	20.30	12.030		
2,600.0	2,593.4	2,575.3	2,545.3	10.2	11.2	50.02	-128.0	-335.1	256.8	235.8	21.03	12.215		
2,700.0	2,692.9	2,674.5	2,642.5	10.5	11.6	50.13	-135.9	-353.2	269.5	247.7	21.76	12.385		
2,800.0	2,792.5	2,773.7	2,739.7	10.9	12.1	50.23	-143.9	-371.3	282.1	259.6	22.49	12.542		
2,900.0	2,892.0	2,872.9	2,836.9	11.3	12.5	50.32	-151.9	-389.4	294.7	271.5	23.23	12.687		
3,000.0	2,991.5	2,972.1	2,934.1	11.6	13.0	50.41	-159.9	-407.5	307.4	283.4	23.97	12.822		
3,100.0	3,091.1	3,071.3	3,031.3	12.0	13.4	50.49	-167.9	-425.6	320.0	295.3	24.72	12.947		
3,200.0	3,190.6	3,170.5	3,128.5	12.4	13.9	50.56	-175.8	-443.8	332.6	307.2	25.46	13.063		
3,300.0	3,290.1	3,269.7	3,225.7	12.7	14.4	50.62	-183.8	-461.9	345.3	319.0	26.21	13.172		
3,400.0	3,389.7	3,368.9	3,322.9	13.1	14.8	50.68	-191.8	-480.0	357.9	330.9	26.96	13.273		
3,500.0	3,489.2	3,468.1	3,420.1	13.5	15.3	50.74	-199.8	-498.1	370.5	342.8	27.72	13.368		
3,600.0	3,588.7	3,567.3	3,517.3	13.9	15.8	50.79	-207.7	-516.2	383.2	354.7	28.47	13.457		
3,700.0	3,688.3	3,666.5	3,614.5	14.2	16.3	50.84	-215.7	-534.3	395.8	366.6	29.23	13.541		
3,800.0	3,787.8	3,765.7	3,711.7	14.6	16.8	50.89	-223.7	-552.4	408.4	378.5	29.99	13.620		
3,900.0	3,887.3	3,864.9	3,808.9	15.0	17.2	50.94	-231.7	-570.5	421.1	390.3	30.75	13.694		
4,000.0	3,986.9	3,964.1	3,906.1	15.4	17.7	50.98	-239.7	-588.7	433.7	402.2	31.51	13.764		
4,100.0	4,086.4	4,063.3	4,003.3	15.7	18.2	51.02	-247.6	-606.8	446.4	414.1	32.27	13.831		
4,200.0	4,185.9	4,162.5	4,100.6	16.1	18.7	51.05	-255.6	-624.9	459.0	426.0	33.04	13.893		
4,300.0	4,285.4	4,261.7	4,197.8	16.5	19.2	51.09	-263.6	-643.0	471.6	437.8	33.80	13.953		
4,400.0	4,385.0	4,360.9	4,295.0	16.9	19.7	51.12	-271.6	-661.1	484.3	449.7	34.57	14.009		
4,500.0	4,484.5	4,460.1	4,392.2	17.3	20.2	51.15	-279.5	-679.2	496.9	461.6	35.33	14.063		
4,600.0	4,584.0	4,559.3	4,489.4	17.7	20.7	51.18	-287.5	-697.3	509.5	473.4	36.10	14.114		
4,700.0	4,683.6	4,658.5	4,586.6	18.1	21.1	51.21	-295.5	-715.5	522.2	485.3	36.87	14.163		
4,800.0	4,783.1	4,757.7	4,683.8	18.4	21.6	51.24	-303.5	-733.6	534.8	497.2	37.64	14.209		
4,900.0	4,882.6	4,856.8	4,781.0	18.8	22.1	51.26	-311.5	-751.7	547.5	509.0	38.41	14.253		
5,000.0	4,982.2	4,956.0	4,878.2	19.2	22.6	51.29	-319.4	-769.8	560.1	520.9	39.18	14.295		
5,100.0	5,081.7	5,055.2	4,975.4	19.6	23.1	51.31	-327.4	-787.9	572.7	532.8	39.95	14.336		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,181.2	5,154.4	5,072.6	20.0	23.6	51.34	-335.4	-806.0	585.4	544.7	40.72	14.374		
5,300.0	5,280.8	5,253.6	5,169.8	20.4	24.1	51.36	-343.4	-824.1	598.0	556.5	41.50	14.411		
5,400.0	5,380.3	5,352.8	5,267.0	20.8	24.6	51.38	-351.3	-842.2	610.7	568.4	42.27	14.447		
5,500.0	5,479.8	5,452.0	5,364.2	21.2	25.1	51.40	-359.3	-860.4	623.3	580.2	43.04	14.481		
5,600.0	5,579.4	5,551.2	5,461.4	21.6	25.6	51.42	-367.3	-878.5	635.9	592.1	43.82	14.513		
5,700.0	5,678.9	5,650.4	5,558.6	22.0	26.1	51.44	-375.3	-896.6	648.6	604.0	44.59	14.544		
5,800.0	5,778.4	5,749.6	5,655.8	22.3	26.5	51.45	-383.3	-914.7	661.2	615.8	45.37	14.575		
5,900.0	5,878.0	5,848.8	5,753.0	22.7	27.0	51.47	-391.2	-932.8	673.9	627.7	46.14	14.604		
6,000.0	5,977.5	5,948.0	5,850.2	23.1	27.5	51.49	-399.2	-950.9	686.5	639.6	46.92	14.631		
6,100.0	6,077.0	6,047.2	5,947.4	23.5	28.0	51.50	-407.2	-969.0	699.1	651.4	47.70	14.658		
6,200.0	6,176.6	6,146.4	6,044.6	23.9	28.5	51.52	-415.2	-987.2	711.8	663.3	48.47	14.684		
6,300.0	6,276.1	6,245.6	6,141.8	24.3	29.0	51.53	-423.1	-1,005.3	724.4	675.2	49.25	14.709		
6,400.0	6,375.6	6,344.8	6,239.0	24.7	29.5	51.55	-431.1	-1,023.4	737.0	687.0	50.03	14.733		
6,500.0	6,475.2	6,444.0	6,336.2	25.1	30.0	51.56	-439.1	-1,041.5	749.7	698.9	50.80	14.757		
6,600.0	6,574.7	6,543.2	6,433.4	25.5	30.5	51.57	-447.1	-1,059.6	762.3	710.7	51.58	14.779		
6,700.0	6,674.2	6,642.4	6,530.6	25.9	31.0	51.59	-455.1	-1,077.7	775.0	722.6	52.36	14.801		
6,800.0	6,773.8	6,741.6	6,627.8	26.3	31.5	51.60	-463.0	-1,095.8	787.6	734.5	53.14	14.822		
6,900.0	6,873.3	6,841.6	6,726.0	26.7	32.0	51.85	-467.7	-1,114.2	800.2	746.3	53.92	14.841		
7,000.0	6,972.8	6,938.5	6,820.5	27.1	32.5	53.18	-456.9	-1,132.1	812.9	758.2	54.71	14.858		
7,100.0	7,072.4	7,027.3	6,904.3	27.4	32.9	30.20	-432.9	-1,148.2	826.8	771.4	55.41	14.921		
7,200.0	7,172.0	7,110.3	6,978.5	27.8	33.3	-62.62	-398.8	-1,162.6	842.4	786.5	55.89	15.072		
7,300.0	7,269.0	7,190.2	7,044.6	28.0	33.5	-70.67	-356.0	-1,175.7	858.8	802.8	56.08	15.314		
7,400.0	7,360.6	7,267.5	7,102.4	28.2	33.7	-71.08	-306.0	-1,187.3	875.3	819.2	56.08	15.608		
7,500.0	7,444.0	7,343.0	7,151.9	28.3	33.8	-70.01	-250.0	-1,197.4	891.0	835.1	55.96	15.923		
7,600.0	7,516.7	7,417.0	7,193.0	28.5	33.8	-68.65	-189.1	-1,206.1	905.2	849.4	55.80	16.222		
7,700.0	7,576.3	7,490.0	7,225.6	28.6	33.9	-67.38	-124.3	-1,213.2	917.3	861.6	55.70	16.468		
7,800.0	7,621.2	7,562.3	7,249.7	28.7	33.9	-66.37	-56.4	-1,218.8	926.8	871.1	55.74	16.628		
7,900.0	7,650.0	7,634.1	7,265.1	28.9	33.9	-65.70	13.6	-1,222.7	933.3	877.3	55.97	16.675		
8,000.0	7,661.7	7,705.8	7,271.7	29.2	33.9	-65.41	84.9	-1,225.1	936.6	880.1	56.44	16.595		
8,100.0	7,662.0	7,798.5	7,272.0	29.6	33.9	-65.43	177.6	-1,226.6	937.9	880.7	57.13	16.415		
8,200.0	7,662.0	7,898.5	7,272.0	30.0	34.0	-65.46	277.6	-1,228.1	939.2	881.1	58.03	16.183		
8,300.0	7,662.0	7,998.5	7,272.0	30.6	34.2	-65.50	377.6	-1,229.7	940.5	881.4	59.10	15.912		
8,400.0	7,662.0	8,098.5	7,272.0	31.2	34.6	-65.53	477.6	-1,231.2	941.8	881.5	60.33	15.610		
8,500.0	7,662.0	8,198.5	7,272.0	32.0	35.0	-65.57	577.5	-1,232.7	943.1	881.4	61.71	15.282		
8,600.0	7,662.0	8,298.5	7,272.0	32.8	35.5	-65.61	677.5	-1,234.3	944.4	881.2	63.23	14.935		
8,700.0	7,662.0	8,398.5	7,272.0	33.6	36.1	-65.64	777.5	-1,235.8	945.7	880.8	64.89	14.575		
8,800.0	7,662.0	8,498.5	7,272.0	34.6	36.9	-65.68	877.5	-1,237.4	947.0	880.3	66.66	14.207		
8,900.0	7,662.0	8,598.5	7,272.0	35.6	37.7	-65.71	977.5	-1,238.9	948.3	879.8	68.54	13.835		
9,000.0	7,662.0	8,698.4	7,272.0	36.6	38.6	-65.75	1,077.4	-1,240.5	949.6	879.1	70.53	13.463		
9,100.0	7,662.0	8,798.4	7,272.0	37.8	39.6	-65.78	1,177.4	-1,242.0	950.9	878.3	72.62	13.095		
9,200.0	7,662.0	8,898.4	7,272.0	38.9	40.7	-65.82	1,277.4	-1,243.5	952.2	877.4	74.79	12.732		
9,300.0	7,662.0	8,998.4	7,272.0	40.1	41.8	-65.86	1,377.4	-1,245.1	953.5	876.5	77.04	12.377		
9,400.0	7,662.0	9,098.4	7,272.0	41.4	42.9	-65.89	1,477.3	-1,246.6	954.8	875.5	79.37	12.031		
9,500.0	7,662.0	9,198.4	7,272.0	42.6	44.1	-65.93	1,577.3	-1,248.2	956.1	874.4	81.76	11.694		
9,600.0	7,662.0	9,298.4	7,272.0	44.0	45.4	-65.96	1,677.3	-1,249.7	957.5	873.2	84.22	11.369		
9,700.0	7,662.0	9,398.4	7,272.0	45.3	46.7	-66.00	1,777.3	-1,251.3	958.8	872.0	86.73	11.055		
9,800.0	7,662.0	9,498.4	7,272.0	46.7	48.0	-66.03	1,877.3	-1,252.8	960.1	870.8	89.29	10.752		
9,900.0	7,662.0	9,598.4	7,272.0	48.1	49.3	-66.06	1,977.2	-1,254.3	961.4	869.5	91.90	10.461		
10,000.0	7,662.0	9,698.3	7,272.0	49.5	50.7	-66.10	2,077.2	-1,255.9	962.7	868.1	94.56	10.181		
10,100.0	7,662.0	9,798.3	7,272.0	50.9	52.1	-66.13	2,177.2	-1,257.4	964.0	866.7	97.25	9.912		
10,200.0	7,662.0	9,898.3	7,272.0	52.4	53.5	-66.17	2,277.2	-1,259.0	965.3	865.3	99.99	9.654		
10,300.0	7,662.0	9,998.3	7,272.0	53.9	54.9	-66.20	2,377.1	-1,260.5	966.6	863.9	102.75	9.407		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,662.0	10,098.3	7,272.0	55.4	56.4	-66.24	2,477.1	-1,262.1	967.9	862.4	105.55	9.170		
10,500.0	7,662.0	10,198.3	7,272.0	56.9	57.8	-66.27	2,577.1	-1,263.6	969.2	860.8	108.38	8.943		
10,600.0	7,662.0	10,298.3	7,272.0	58.4	59.3	-66.30	2,677.1	-1,265.1	970.5	859.3	111.24	8.725		
10,700.0	7,662.0	10,398.3	7,272.0	59.9	60.8	-66.34	2,777.1	-1,266.7	971.9	857.7	114.12	8.516		
10,800.0	7,662.0	10,498.3	7,272.0	61.5	62.3	-66.37	2,877.0	-1,268.2	973.2	856.1	117.03	8.316		
10,900.0	7,662.0	10,598.3	7,272.0	63.1	63.9	-66.41	2,977.0	-1,269.8	974.5	854.5	119.96	8.124		
11,000.0	7,662.0	10,698.2	7,272.0	64.6	65.4	-66.44	3,077.0	-1,271.3	975.8	852.9	122.91	7.939		
11,100.0	7,662.0	10,798.2	7,272.0	66.2	67.0	-66.47	3,177.0	-1,272.9	977.1	851.2	125.87	7.763		
11,200.0	7,662.0	10,898.2	7,272.0	67.8	68.5	-66.51	3,276.9	-1,274.4	978.4	849.6	128.86	7.593		
11,300.0	7,662.0	10,998.2	7,272.0	69.4	70.1	-66.54	3,376.9	-1,275.9	979.7	847.9	131.86	7.430		
11,400.0	7,662.0	11,098.2	7,272.0	71.0	71.7	-66.57	3,476.9	-1,277.5	981.0	846.2	134.88	7.273		
11,500.0	7,662.0	11,198.2	7,272.0	72.6	73.3	-66.61	3,576.9	-1,279.0	982.4	844.4	137.91	7.123		
11,600.0	7,662.0	11,298.2	7,272.0	74.2	74.9	-66.64	3,676.9	-1,280.6	983.7	842.7	140.96	6.978		
11,700.0	7,662.0	11,398.2	7,272.0	75.9	76.5	-66.67	3,776.8	-1,282.1	985.0	841.0	144.02	6.839		
11,800.0	7,662.0	11,498.2	7,272.0	77.5	78.1	-66.71	3,876.8	-1,283.7	986.3	839.2	147.09	6.705		
11,900.0	7,662.0	11,598.2	7,272.0	79.1	79.7	-66.74	3,976.8	-1,285.2	987.6	837.4	150.18	6.576		
12,000.0	7,662.0	11,698.1	7,272.0	80.8	81.3	-66.77	4,076.8	-1,286.7	988.9	835.7	153.27	6.452		
12,100.0	7,662.0	11,798.1	7,272.0	82.4	82.9	-66.80	4,176.7	-1,288.3	990.2	833.9	156.38	6.332		
12,200.0	7,662.0	11,898.1	7,272.0	84.1	84.6	-66.84	4,276.7	-1,289.8	991.6	832.1	159.50	6.217		
12,300.0	7,662.0	11,998.1	7,272.0	85.7	86.2	-66.87	4,376.7	-1,291.4	992.9	830.3	162.62	6.105		
12,400.0	7,662.0	12,098.1	7,272.0	87.4	87.9	-66.90	4,476.7	-1,292.9	994.2	828.4	165.76	5.998		
12,500.0	7,662.0	12,198.1	7,272.0	89.1	89.5	-66.93	4,576.7	-1,294.5	995.5	826.6	168.90	5.894		
12,600.0	7,662.0	12,298.1	7,272.0	90.7	91.2	-66.97	4,676.6	-1,296.0	996.8	824.8	172.05	5.794		
12,700.0	7,662.0	12,398.1	7,272.0	92.4	92.8	-67.00	4,776.6	-1,297.5	998.1	822.9	175.21	5.697		
12,800.0	7,662.0	12,498.1	7,272.0	94.1	94.5	-67.03	4,876.6	-1,299.1	999.5	821.1	178.38	5.603		
12,900.0	7,662.0	12,598.0	7,272.0	95.8	96.2	-67.06	4,976.6	-1,300.6	1,000.8	819.2	181.55	5.512		
13,000.0	7,662.0	12,698.0	7,272.0	97.5	97.8	-67.09	5,076.5	-1,302.2	1,002.1	817.4	184.73	5.425		
13,100.0	7,662.0	12,798.0	7,272.0	99.1	99.5	-67.13	5,176.5	-1,303.7	1,003.4	815.5	187.92	5.340		
13,200.0	7,662.0	12,898.0	7,272.0	100.8	101.2	-67.16	5,276.5	-1,305.3	1,004.7	813.6	191.11	5.257		
13,300.0	7,662.0	12,998.0	7,272.0	102.5	102.9	-67.19	5,376.5	-1,306.8	1,006.1	811.8	194.31	5.178		
13,400.0	7,662.0	13,098.0	7,272.0	104.2	104.5	-67.22	5,476.5	-1,308.3	1,007.4	809.9	197.51	5.100		
13,500.0	7,662.0	13,198.0	7,272.0	105.9	106.2	-67.25	5,576.4	-1,309.9	1,008.7	808.0	200.72	5.025		
13,600.0	7,662.0	13,298.0	7,272.0	107.6	107.9	-67.28	5,676.4	-1,311.4	1,010.0	806.1	203.94	4.953		
13,700.0	7,662.0	13,398.0	7,272.0	109.3	109.6	-67.32	5,776.4	-1,313.0	1,011.3	804.2	207.16	4.882		
13,800.0	7,662.0	13,498.0	7,272.0	111.0	111.3	-67.35	5,876.4	-1,314.5	1,012.7	802.3	210.38	4.813		
13,900.0	7,662.0	13,597.9	7,272.0	112.7	113.0	-67.38	5,976.3	-1,316.1	1,014.0	800.4	213.61	4.747		
14,000.0	7,662.0	13,697.9	7,272.0	114.4	114.7	-67.41	6,076.3	-1,317.6	1,015.3	798.5	216.85	4.682		
14,100.0	7,662.0	13,797.9	7,272.0	116.1	116.4	-67.44	6,176.3	-1,319.1	1,016.6	796.5	220.08	4.619		
14,200.0	7,662.0	13,897.9	7,272.0	117.8	118.1	-67.47	6,276.3	-1,320.7	1,017.9	794.6	223.33	4.558		
14,300.0	7,662.0	13,997.9	7,272.0	119.5	119.8	-67.50	6,376.3	-1,322.2	1,019.3	792.7	226.57	4.499		
14,400.0	7,662.0	14,097.9	7,272.0	121.3	121.5	-67.53	6,476.2	-1,323.8	1,020.6	790.8	229.82	4.441		
14,500.0	7,662.0	14,197.9	7,272.0	123.0	123.2	-67.56	6,576.2	-1,325.3	1,021.9	788.8	233.08	4.384		
14,600.0	7,662.0	14,297.9	7,272.0	124.7	124.9	-67.59	6,676.2	-1,326.9	1,023.2	786.9	236.34	4.330		
14,700.0	7,662.0	14,397.9	7,272.0	126.4	126.6	-67.62	6,776.2	-1,328.4	1,024.6	785.0	239.60	4.276		
14,800.0	7,662.0	14,497.9	7,272.0	128.1	128.3	-67.65	6,876.1	-1,329.9	1,025.9	783.0	242.86	4.224		
14,900.0	7,662.0	14,597.8	7,272.0	129.8	130.1	-67.68	6,976.1	-1,331.5	1,027.2	781.1	246.13	4.173		
15,000.0	7,662.0	14,697.8	7,272.0	131.6	131.8	-67.72	7,076.1	-1,333.0	1,028.5	779.1	249.40	4.124		
15,100.0	7,662.0	14,797.8	7,272.0	133.3	133.5	-67.75	7,176.1	-1,334.6	1,029.9	777.2	252.68	4.076		
15,200.0	7,662.0	14,897.8	7,272.0	135.0	135.2	-67.78	7,276.1	-1,336.1	1,031.2	775.2	255.96	4.029		
15,300.0	7,662.0	14,997.8	7,272.0	136.7	136.9	-67.81	7,376.0	-1,337.7	1,032.5	773.3	259.24	3.983		
15,400.0	7,662.0	15,097.8	7,272.0	138.4	138.6	-67.84	7,476.0	-1,339.2	1,033.8	771.3	262.52	3.938		
15,500.0	7,662.0	15,197.8	7,272.0	140.2	140.4	-67.87	7,576.0	-1,340.7	1,035.2	769.4	265.81	3.894		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,662.0	15,297.8	7,272.0	141.9	142.1	-67.90	7,676.0	-1,342.3	1,036.5	767.4	269.10	3.852		
15,700.0	7,662.0	15,397.8	7,272.0	143.6	143.8	-67.92	7,775.9	-1,343.8	1,037.8	765.4	272.39	3.810		
15,800.0	7,662.0	15,497.8	7,272.0	145.3	145.5	-67.95	7,875.9	-1,345.4	1,039.1	763.5	275.69	3.769		
15,900.0	7,662.0	15,597.7	7,272.0	147.1	147.3	-67.98	7,975.9	-1,346.9	1,040.5	761.5	278.98	3.729		
16,000.0	7,662.0	15,697.7	7,272.0	148.8	149.0	-68.01	8,075.9	-1,348.5	1,041.8	759.5	282.28	3.691		
16,100.0	7,662.0	15,797.7	7,272.0	150.5	150.7	-68.04	8,175.9	-1,350.0	1,043.1	757.5	285.59	3.653		
16,200.0	7,662.0	15,897.7	7,272.0	152.3	152.4	-68.07	8,275.8	-1,351.5	1,044.5	755.6	288.89	3.615		
16,300.0	7,662.0	15,997.7	7,272.0	154.0	154.2	-68.10	8,375.8	-1,353.1	1,045.8	753.6	292.20	3.579		
16,400.0	7,662.0	16,097.7	7,272.0	155.7	155.9	-68.13	8,475.8	-1,354.6	1,047.1	751.6	295.51	3.543		
16,500.0	7,662.0	16,197.7	7,272.0	157.5	157.6	-68.16	8,575.8	-1,356.2	1,048.4	749.6	298.82	3.509		
16,600.0	7,662.0	16,297.7	7,272.0	159.2	159.4	-68.19	8,675.7	-1,357.7	1,049.8	747.6	302.13	3.474		
16,700.0	7,662.0	16,397.7	7,272.0	160.9	161.1	-68.22	8,775.7	-1,359.3	1,051.1	745.6	305.45	3.441		
16,800.0	7,662.0	16,497.6	7,272.0	162.7	162.8	-68.25	8,875.7	-1,360.8	1,052.4	743.7	308.77	3.408		
16,900.0	7,662.0	16,597.6	7,272.0	164.4	164.6	-68.28	8,975.7	-1,362.3	1,053.8	741.7	312.09	3.376		
17,000.0	7,662.0	16,697.6	7,272.0	166.1	166.3	-68.30	9,075.7	-1,363.9	1,055.1	739.7	315.41	3.345		
17,100.0	7,662.0	16,797.6	7,272.0	167.9	168.0	-68.33	9,175.6	-1,365.4	1,056.4	737.7	318.74	3.314		
17,200.0	7,662.0	16,897.6	7,272.0	169.6	169.8	-68.36	9,275.6	-1,367.0	1,057.7	735.7	322.06	3.284		
17,300.0	7,662.0	16,997.6	7,272.0	171.3	171.5	-68.39	9,375.6	-1,368.5	1,059.1	733.7	325.39	3.255		
17,400.0	7,662.0	17,097.6	7,272.0	173.1	173.2	-68.42	9,475.6	-1,370.1	1,060.4	731.7	328.72	3.226		
17,500.0	7,662.0	17,197.6	7,272.0	174.8	175.0	-68.45	9,575.5	-1,371.6	1,061.7	729.7	332.05	3.198		
17,600.0	7,662.0	17,270.0	7,272.0	176.6	176.2	-68.47	9,648.0	-1,372.7	1,063.4	728.2	335.25	3.172 SF		
17,700.0	7,662.0	17,270.0	7,272.0	178.3	176.2	-68.47	9,648.0	-1,372.7	1,072.0	735.7	336.30	3.188		
17,799.6	7,662.0	17,270.0	7,272.0	180.0	176.2	-68.47	9,648.0	-1,372.7	1,089.7	755.1	334.62	3.256		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NBH - OH - PLAN #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							
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	89.67	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	162.299	
200.0	200.0	200.0	200.0	1.0	0.0	89.67	0.3	45.0	45.0	44.2	0.80	56.354	
300.0	300.0	300.0	300.0	1.5	0.0	89.67	0.3	45.0	45.0	43.7	1.22	36.721	
400.0	400.0	400.0	400.0	1.9	0.0	89.67	0.3	45.0	45.0	43.4	1.62	27.785	
500.0	500.0	500.0	500.0	2.3	0.0	89.67	0.3	45.0	45.0	43.0	2.00	22.495	
600.0	600.0	600.0	600.0	2.7	0.0	89.67	0.3	45.0	45.0	42.6	2.37	18.952	
700.0	700.0	700.0	700.0	3.1	0.0	89.67	0.3	45.0	45.0	42.2	2.74	16.398	
800.0	800.0	800.0	800.0	3.5	0.0	89.67	0.3	45.0	45.0	41.9	3.11	14.462	
900.0	900.0	900.0	900.0	3.9	0.0	89.67	0.3	45.0	45.0	41.5	3.47	12.942	
1,000.0	1,000.0	1,000.0	1,000.0	4.2	0.0	89.67	0.3	45.0	45.0	41.1	3.84	11.715 CC, ES	
1,100.0	1,100.0	1,100.0	1,100.0	4.6	0.0	-128.18	0.3	45.0	46.0	41.8	4.22	10.915	
1,200.0	1,199.8	1,199.8	1,199.8	5.4	0.0	-132.90	0.3	45.0	49.4	44.4	5.00	9.878	
1,300.0	1,299.5	1,299.5	1,299.5	5.9	0.0	-139.34	0.3	45.0	55.7	50.1	5.61	9.933	
1,400.0	1,399.0	1,398.3	1,398.3	6.2	0.0	-143.55	-1.1	46.0	63.9	57.9	5.97	10.690	
1,500.0	1,498.5	1,497.1	1,496.9	6.5	0.0	-144.23	-5.2	49.0	73.3	67.0	6.32	11.613	
1,600.0	1,598.1	1,595.6	1,595.1	6.8	0.0	-142.53	-11.9	54.1	84.0	77.3	6.63	12.673	
1,700.0	1,697.6	1,694.7	1,693.6	7.1	0.0	-140.04	-20.4	60.5	95.4	88.5	6.93	13.768	
1,800.0	1,797.1	1,794.0	1,792.3	7.4	0.0	-138.06	-28.9	66.8	107.0	99.8	7.25	14.762	
1,900.0	1,896.7	1,893.3	1,891.0	7.8	0.0	-136.47	-37.4	73.2	118.7	111.2	7.58	15.664	
2,000.0	1,996.2	1,992.5	1,989.7	8.1	0.0	-135.17	-45.9	79.6	130.5	122.6	7.92	16.482	
2,100.0	2,095.7	2,091.8	2,088.4	8.4	0.0	-134.09	-54.4	86.0	142.4	134.1	8.27	17.225	
2,200.0	2,195.3	2,191.0	2,187.1	8.8	0.0	-133.17	-63.0	92.4	154.3	145.6	8.62	17.902	
2,300.0	2,294.8	2,290.3	2,285.8	9.1	0.0	-132.38	-71.5	98.7	166.2	157.2	8.97	18.521	
2,400.0	2,394.3	2,389.6	2,384.5	9.5	0.0	-131.70	-80.0	105.1	178.1	168.8	9.33	19.088	
2,500.0	2,493.9	2,488.8	2,483.2	9.8	0.0	-131.10	-88.5	111.5	190.1	180.4	9.69	19.609	
2,600.0	2,593.4	2,588.1	2,581.9	10.2	0.0	-130.58	-97.0	117.9	202.1	192.0	10.06	20.089	
2,700.0	2,692.9	2,687.4	2,680.6	10.5	0.0	-130.11	-105.5	124.2	214.1	203.7	10.43	20.533	
2,800.0	2,792.5	2,786.6	2,779.2	10.9	0.0	-129.69	-114.0	130.6	226.1	215.3	10.80	20.944	
2,900.0	2,892.0	2,885.9	2,877.9	11.3	0.0	-129.32	-122.5	137.0	238.1	227.0	11.17	21.326	
3,000.0	2,991.5	2,985.1	2,976.6	11.6	0.0	-128.98	-131.0	143.4	250.2	238.6	11.54	21.682	
3,100.0	3,091.1	3,084.4	3,075.3	12.0	0.0	-128.67	-139.5	149.8	262.2	250.3	11.91	22.014	
3,200.0	3,190.6	3,183.7	3,174.0	12.4	0.0	-128.39	-148.0	156.1	274.2	262.0	12.28	22.324	
3,300.0	3,290.1	3,282.9	3,272.7	12.7	0.0	-128.13	-156.5	162.5	286.3	273.6	12.66	22.615	
3,400.0	3,389.7	3,382.2	3,371.4	13.1	0.0	-127.90	-165.0	168.9	298.4	285.3	13.04	22.887	
3,500.0	3,489.2	3,481.5	3,470.1	13.5	0.0	-127.68	-173.6	175.3	310.4	297.0	13.41	23.144	
3,600.0	3,588.7	3,580.7	3,568.8	13.9	0.0	-127.48	-182.1	181.6	322.5	308.7	13.79	23.386	
3,700.0	3,688.3	3,680.0	3,667.5	14.2	0.0	-127.29	-190.6	188.0	334.6	320.4	14.17	23.614	
3,800.0	3,787.8	3,779.3	3,766.2	14.6	0.0	-127.12	-199.1	194.4	346.6	332.1	14.55	23.830	
3,900.0	3,887.3	3,878.5	3,864.9	15.0	0.0	-126.95	-207.6	200.8	358.7	343.8	14.93	24.034	
4,000.0	3,986.9	3,977.8	3,963.5	15.4	0.0	-126.80	-216.1	207.2	370.8	355.5	15.30	24.227	
4,100.0	4,086.4	4,077.0	4,062.2	15.7	0.0	-126.66	-224.6	213.5	382.9	367.2	15.68	24.411	
4,200.0	4,185.9	4,176.3	4,160.9	16.1	0.0	-126.53	-233.1	219.9	395.0	378.9	16.06	24.586	
4,300.0	4,285.4	4,275.6	4,259.6	16.5	0.0	-126.40	-241.6	226.3	407.1	390.6	16.45	24.752	
4,400.0	4,385.0	4,374.8	4,358.3	16.9	0.0	-126.28	-250.1	232.7	419.1	402.3	16.83	24.910	
4,500.0	4,484.5	4,474.1	4,457.0	17.3	0.0	-126.17	-258.6	239.0	431.2	414.0	17.21	25.061	
4,600.0	4,584.0	4,573.4	4,555.7	17.7	0.0	-126.07	-267.1	245.4	443.3	425.7	17.59	25.205	
4,700.0	4,683.6	4,672.6	4,654.4	18.1	0.0	-125.97	-275.7	251.8	455.4	437.4	17.97	25.342	
4,800.0	4,783.1	4,771.9	4,753.1	18.4	0.0	-125.87	-284.2	258.2	467.5	449.2	18.35	25.474	
4,900.0	4,882.6	4,871.1	4,851.8	18.8	0.0	-125.78	-292.7	264.6	479.6	460.9	18.73	25.600	
5,000.0	4,982.2	4,970.4	4,950.5	19.2	0.0	-125.70	-301.2	270.9	491.7	472.6	19.12	25.721	
5,100.0	5,081.7	5,069.7	5,049.2	19.6	0.0	-125.61	-309.7	277.3	503.8	484.3	19.50	25.837	

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Minimum	Separation		
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)			Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor		
5,200.0	5,181.2	5,168.9	5,147.9	20.0	0.0	-125.54	-318.2	283.7	515.9	496.0	19.88	25.948		
5,300.0	5,280.8	5,268.2	5,246.5	20.4	0.0	-125.46	-326.7	290.1	528.0	507.7	20.27	26.055		
5,400.0	5,380.3	5,367.5	5,345.2	20.8	0.0	-125.39	-335.2	296.4	540.1	519.5	20.65	26.157		
5,500.0	5,479.8	5,466.7	5,443.9	21.2	0.0	-125.32	-343.7	302.8	552.2	531.2	21.03	26.256		
5,600.0	5,579.4	5,566.0	5,542.6	21.6	0.0	-125.26	-352.2	309.2	564.3	542.9	21.41	26.351		
5,700.0	5,678.9	5,665.2	5,641.3	22.0	0.0	-125.20	-360.7	315.6	576.4	554.6	21.80	26.443		
5,800.0	5,778.4	5,764.5	5,740.0	22.3	0.0	-125.14	-369.2	322.0	588.5	566.3	22.18	26.531		
5,900.0	5,878.0	5,863.8	5,838.7	22.7	0.0	-125.08	-377.8	328.3	600.6	578.0	22.57	26.616		
6,000.0	5,977.5	5,963.0	5,937.4	23.1	0.0	-125.03	-386.3	334.7	612.7	589.8	22.95	26.699		
6,100.0	6,077.0	6,062.3	6,036.1	23.5	0.0	-124.97	-394.8	341.1	624.8	601.5	23.33	26.778		
6,200.0	6,176.6	6,161.6	6,134.8	23.9	0.0	-124.92	-403.3	347.5	636.9	613.2	23.72	26.855		
6,300.0	6,276.1	6,260.8	6,233.5	24.3	0.0	-124.87	-411.8	353.8	649.0	624.9	24.10	26.929		
6,400.0	6,375.6	6,360.1	6,332.2	24.7	0.0	-124.83	-420.3	360.2	661.1	636.7	24.49	27.001		
6,500.0	6,475.2	6,459.4	6,430.8	25.1	0.0	-124.78	-428.8	366.6	673.2	648.4	24.87	27.070		
6,600.0	6,574.7	6,558.6	6,529.5	25.5	0.0	-124.74	-437.3	373.0	685.4	660.1	25.25	27.138		
6,700.0	6,674.2	6,657.9	6,628.2	25.9	0.0	-124.69	-445.8	379.4	697.5	671.8	25.64	27.203		
6,800.0	6,773.8	6,757.1	6,726.9	26.3	0.0	-124.65	-454.3	385.7	709.6	683.5	26.02	27.266		
6,900.0	6,873.3	6,857.9	6,827.2	26.7	0.0	-124.61	-461.1	392.2	721.6	695.2	26.41	27.323		
7,000.0	6,972.8	6,957.7	6,926.4	27.1	0.0	-126.04	-452.9	398.5	733.5	706.7	26.77	27.397		
7,100.0	7,072.4	7,050.0	7,015.5	27.4	0.0	-154.14	-430.1	404.0	746.2	719.1	27.07	27.567		
7,200.0	7,172.0	7,136.1	7,094.4	27.8	0.0	105.80	-396.1	408.7	760.2	732.9	27.30	27.848		
7,300.0	7,269.0	7,218.9	7,164.7	28.0	0.0	91.03	-352.7	412.9	775.0	747.6	27.40	28.279		
7,400.0	7,360.6	7,300.0	7,226.8	28.2	0.0	84.51	-300.7	416.4	789.6	762.1	27.42	28.791		
7,500.0	7,444.0	7,377.1	7,278.4	28.3	0.0	80.28	-243.7	419.2	803.3	775.9	27.39	29.332		
7,600.0	7,516.7	7,450.0	7,319.9	28.5	0.0	77.22	-183.7	421.4	815.5	788.1	27.32	29.849		
7,700.0	7,576.3	7,528.6	7,355.7	28.6	0.0	74.90	-113.8	423.1	825.5	798.2	27.30	30.236		
7,800.0	7,621.2	7,600.0	7,379.6	28.7	0.0	73.32	-46.6	424.1	833.0	805.7	27.32	30.489		
7,900.0	7,650.0	7,676.7	7,395.8	28.9	0.0	72.33	28.2	424.5	837.7	810.2	27.45	30.521		
8,000.0	7,661.7	7,750.0	7,401.9	29.2	0.0	71.95	101.3	424.3	839.2	811.5	27.66	30.336		
8,100.0	7,662.0	7,846.1	7,402.0	29.6	0.0	71.94	197.4	423.5	838.6	810.6	27.98	29.973		
8,200.0	7,662.0	7,946.1	7,402.0	30.0	0.0	71.92	297.4	422.7	837.9	809.5	28.40	29.506		
8,300.0	7,662.0	8,046.1	7,402.0	30.6	0.0	71.91	397.4	421.8	837.2	808.3	28.91	28.958		
8,400.0	7,662.0	8,146.1	7,402.0	31.2	0.0	71.89	497.4	421.0	836.5	807.0	29.51	28.344		
8,500.0	7,662.0	8,246.1	7,402.0	32.0	0.0	71.88	597.4	420.2	835.9	805.7	30.20	27.678		
8,600.0	7,662.0	8,346.1	7,402.0	32.8	0.0	71.86	697.4	419.4	835.2	804.2	30.96	26.974		
8,700.0	7,662.0	8,446.1	7,402.0	33.6	0.0	71.85	797.3	418.5	834.5	802.7	31.80	26.245		
8,800.0	7,662.0	8,546.1	7,402.0	34.6	0.0	71.83	897.3	417.7	833.8	801.1	32.70	25.501		
8,900.0	7,662.0	8,646.1	7,402.0	35.6	0.0	71.82	997.3	416.9	833.1	799.5	33.66	24.752		
9,000.0	7,662.0	8,746.1	7,402.0	36.6	0.0	71.80	1,097.3	416.1	832.5	797.8	34.68	24.006		
9,100.0	7,662.0	8,846.1	7,402.0	37.8	0.0	71.78	1,197.3	415.2	831.8	796.0	35.75	23.270		
9,200.0	7,662.0	8,946.1	7,402.0	38.9	0.0	71.77	1,297.3	414.4	831.1	794.2	36.86	22.548		
9,300.0	7,662.0	9,046.1	7,402.0	40.1	0.0	71.75	1,397.3	413.6	830.4	792.4	38.02	21.843		
9,400.0	7,662.0	9,146.1	7,402.0	41.4	0.0	71.74	1,497.3	412.8	829.7	790.5	39.21	21.160		
9,500.0	7,662.0	9,246.1	7,402.0	42.6	0.0	71.72	1,597.3	411.9	829.1	788.6	40.44	20.499		
9,600.0	7,662.0	9,346.1	7,402.0	44.0	0.0	71.71	1,697.3	411.1	828.4	786.7	41.71	19.862		
9,700.0	7,662.0	9,446.1	7,402.0	45.3	0.0	71.69	1,797.3	410.3	827.7	784.7	43.00	19.249		
9,800.0	7,662.0	9,546.1	7,402.0	46.7	0.0	71.68	1,897.3	409.4	827.0	782.7	44.32	18.661		
9,900.0	7,662.0	9,646.1	7,402.0	48.1	0.0	71.66	1,997.3	408.6	826.4	780.7	45.66	18.098		
10,000.0	7,662.0	9,746.1	7,402.0	49.5	0.0	71.65	2,097.3	407.8	825.7	778.6	47.03	17.558		
10,100.0	7,662.0	9,846.1	7,402.0	50.9	0.0	71.63	2,197.3	407.0	825.0	776.6	48.41	17.041		
10,200.0	7,662.0	9,946.1	7,402.0	52.4	0.0	71.61	2,297.3	406.1	824.3	774.5	49.82	16.547		
10,300.0	7,662.0	10,046.1	7,402.0	53.9	0.0	71.60	2,397.2	405.3	823.6	772.4	51.24	16.075		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NBH - OH - PLAN #1													Offset Site Error: 0.0 usft	
Survey Program: 0-													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Minimum	Separation		
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)			Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor		
10,400.0	7,662.0	10,146.1	7,402.0	55.4	0.0	71.58	2,497.2	404.5	823.0	770.3	52.67	15.624		
10,500.0	7,662.0	10,246.1	7,402.0	56.9	0.0	71.57	2,597.2	403.7	822.3	768.2	54.12	15.193		
10,600.0	7,662.0	10,346.1	7,402.0	58.4	0.0	71.55	2,697.2	402.8	821.6	766.0	55.59	14.780		
10,700.0	7,662.0	10,446.1	7,402.0	59.9	0.0	71.54	2,797.2	402.0	820.9	763.9	57.06	14.386		
10,800.0	7,662.0	10,546.1	7,402.0	61.5	0.0	71.52	2,897.2	401.2	820.2	761.7	58.55	14.009		
10,900.0	7,662.0	10,646.1	7,402.0	63.1	0.0	71.50	2,997.2	400.4	819.6	759.5	60.05	13.648		
11,000.0	7,662.0	10,746.1	7,402.0	64.6	0.0	71.49	3,097.2	399.5	818.9	757.3	61.56	13.303		
11,100.0	7,662.0	10,846.1	7,402.0	66.2	0.0	71.47	3,197.2	398.7	818.2	755.1	63.07	12.973		
11,200.0	7,662.0	10,946.1	7,402.0	67.8	0.0	71.46	3,297.2	397.9	817.5	752.9	64.60	12.656		
11,300.0	7,662.0	11,046.0	7,402.0	69.4	0.0	71.44	3,397.2	397.1	816.9	750.7	66.13	12.353		
11,400.0	7,662.0	11,146.0	7,402.0	71.0	0.0	71.42	3,497.2	396.2	816.2	748.5	67.67	12.062		
11,500.0	7,662.0	11,246.0	7,402.0	72.6	0.0	71.41	3,597.2	395.4	815.5	746.3	69.21	11.782		
11,600.0	7,662.0	11,346.0	7,402.0	74.2	0.0	71.39	3,697.2	394.6	814.8	744.1	70.76	11.515		
11,700.0	7,662.0	11,446.0	7,402.0	75.9	0.0	71.38	3,797.2	393.7	814.1	741.8	72.32	11.257		
11,800.0	7,662.0	11,546.0	7,402.0	77.5	0.0	71.36	3,897.2	392.9	813.5	739.6	73.88	11.010		
11,900.0	7,662.0	11,646.0	7,402.0	79.1	0.0	71.34	3,997.2	392.1	812.8	737.3	75.45	10.772		
12,000.0	7,662.0	11,746.0	7,402.0	80.8	0.0	71.33	4,097.1	391.3	812.1	735.1	77.03	10.543		
12,100.0	7,662.0	11,846.0	7,402.0	82.4	0.0	71.31	4,197.1	390.4	811.4	732.8	78.60	10.323		
12,200.0	7,662.0	11,946.0	7,402.0	84.1	0.0	71.29	4,297.1	389.6	810.8	730.6	80.18	10.111		
12,300.0	7,662.0	12,046.0	7,402.0	85.7	0.0	71.28	4,397.1	388.8	810.1	728.3	81.77	9.907		
12,400.0	7,662.0	12,146.0	7,402.0	87.4	0.0	71.26	4,497.1	388.0	809.4	726.0	83.36	9.710		
12,500.0	7,662.0	12,246.0	7,402.0	89.1	0.0	71.25	4,597.1	387.1	808.7	723.8	84.95	9.520		
12,600.0	7,662.0	12,346.0	7,402.0	90.7	0.0	71.23	4,697.1	386.3	808.0	721.5	86.54	9.337		
12,700.0	7,662.0	12,446.0	7,402.0	92.4	0.0	71.21	4,797.1	385.5	807.4	719.2	88.14	9.160		
12,800.0	7,662.0	12,546.0	7,402.0	94.1	0.0	71.20	4,897.1	384.7	806.7	717.0	89.74	8.989		
12,900.0	7,662.0	12,646.0	7,402.0	95.8	0.0	71.18	4,997.1	383.8	806.0	714.7	91.35	8.824		
13,000.0	7,662.0	12,746.0	7,402.0	97.5	0.0	71.16	5,097.1	383.0	805.3	712.4	92.95	8.664		
13,100.0	7,662.0	12,846.0	7,402.0	99.1	0.0	71.15	5,197.1	382.2	804.7	710.1	94.56	8.510		
13,200.0	7,662.0	12,946.0	7,402.0	100.8	0.0	71.13	5,297.1	381.3	804.0	707.8	96.17	8.360		
13,300.0	7,662.0	13,046.0	7,402.0	102.5	0.0	71.12	5,397.1	380.5	803.3	705.5	97.78	8.215		
13,400.0	7,662.0	13,146.0	7,402.0	104.2	0.0	71.10	5,497.1	379.7	802.6	703.2	99.40	8.075		
13,500.0	7,662.0	13,246.0	7,402.0	105.9	0.0	71.08	5,597.1	378.9	802.0	700.9	101.01	7.939		
13,600.0	7,662.0	13,346.0	7,402.0	107.6	0.0	71.07	5,697.1	378.0	801.3	698.6	102.63	7.807		
13,700.0	7,662.0	13,446.0	7,402.0	109.3	0.0	71.05	5,797.0	377.2	800.6	696.4	104.25	7.679		
13,800.0	7,662.0	13,546.0	7,402.0	111.0	0.0	71.03	5,897.0	376.4	799.9	694.1	105.87	7.555		
13,900.0	7,662.0	13,646.0	7,402.0	112.7	0.0	71.02	5,997.0	375.6	799.2	691.8	107.50	7.435		
14,000.0	7,662.0	13,746.0	7,402.0	114.4	0.0	71.00	6,097.0	374.7	798.6	689.5	109.12	7.318		
14,100.0	7,662.0	13,846.0	7,402.0	116.1	0.0	70.98	6,197.0	373.9	797.9	687.2	110.75	7.205		
14,200.0	7,662.0	13,946.0	7,402.0	117.8	0.0	70.97	6,297.0	373.1	797.2	684.8	112.37	7.094		
14,300.0	7,662.0	14,046.0	7,402.0	119.5	0.0	70.95	6,397.0	372.3	796.5	682.5	114.00	6.987		
14,400.0	7,662.0	14,146.0	7,402.0	121.3	0.0	70.93	6,497.0	371.4	795.9	680.2	115.63	6.883		
14,500.0	7,662.0	14,246.0	7,402.0	123.0	0.0	70.91	6,597.0	370.6	795.2	677.9	117.26	6.781		
14,600.0	7,662.0	14,346.0	7,402.0	124.7	0.0	70.90	6,697.0	369.8	794.5	675.6	118.89	6.683		
14,700.0	7,662.0	14,446.0	7,402.0	126.4	0.0	70.88	6,797.0	369.0	793.8	673.3	120.53	6.587		
14,800.0	7,662.0	14,546.0	7,402.0	128.1	0.0	70.86	6,897.0	368.1	793.2	671.0	122.16	6.493		
14,900.0	7,662.0	14,646.0	7,402.0	129.8	0.0	70.85	6,997.0	367.3	792.5	668.7	123.79	6.402		
15,000.0	7,662.0	14,746.0	7,402.0	131.6	0.0	70.83	7,097.0	366.5	791.8	666.4	125.43	6.313		
15,100.0	7,662.0	14,846.0	7,402.0	133.3	0.0	70.81	7,197.0	365.6	791.1	664.1	127.06	6.226		
15,200.0	7,662.0	14,945.9	7,402.0	135.0	0.0	70.80	7,297.0	364.8	790.5	661.8	128.70	6.142		
15,300.0	7,662.0	15,045.9	7,402.0	136.7	0.0	70.78	7,396.9	364.0	789.8	659.5	130.34	6.060		
15,400.0	7,662.0	15,145.9	7,402.0	138.4	0.0	70.76	7,496.9	363.2	789.1	657.1	131.98	5.979		
15,500.0	7,662.0	15,245.9	7,402.0	140.2	0.0	70.74	7,596.9	362.3	788.4	654.8	133.61	5.901		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,662.0	15,345.9	7,402.0	141.9	0.0	70.73	7,696.9	361.5	787.8	652.5	135.25	5.824		
15,700.0	7,662.0	15,445.9	7,402.0	143.6	0.0	70.71	7,796.9	360.7	787.1	650.2	136.89	5.750		
15,800.0	7,662.0	15,545.9	7,402.0	145.3	0.0	70.69	7,896.9	359.9	786.4	647.9	138.53	5.677		
15,900.0	7,662.0	15,645.9	7,402.0	147.1	0.0	70.68	7,996.9	359.0	785.7	645.6	140.17	5.605		
16,000.0	7,662.0	15,745.9	7,402.0	148.8	0.0	70.66	8,096.9	358.2	785.1	643.2	141.81	5.536		
16,100.0	7,662.0	15,845.9	7,402.0	150.5	0.0	70.64	8,196.9	357.4	784.4	640.9	143.46	5.468		
16,200.0	7,662.0	15,945.9	7,402.0	152.3	0.0	70.62	8,296.9	356.6	783.7	638.6	145.10	5.401		
16,300.0	7,662.0	16,045.9	7,402.0	154.0	0.0	70.61	8,396.9	355.7	783.0	636.3	146.74	5.336		
16,400.0	7,662.0	16,145.9	7,402.0	155.7	0.0	70.59	8,496.9	354.9	782.4	634.0	148.38	5.273		
16,500.0	7,662.0	16,245.9	7,402.0	157.5	0.0	70.57	8,596.9	354.1	781.7	631.7	150.03	5.210		
16,600.0	7,662.0	16,345.9	7,402.0	159.2	0.0	70.55	8,696.9	353.2	781.0	629.3	151.67	5.150		
16,700.0	7,662.0	16,445.9	7,402.0	160.9	0.0	70.54	8,796.9	352.4	780.3	627.0	153.31	5.090		
16,800.0	7,662.0	16,545.9	7,402.0	162.7	0.0	70.52	8,896.9	351.6	779.7	624.7	154.96	5.032		
16,900.0	7,662.0	16,645.9	7,402.0	164.4	0.0	70.50	8,996.9	350.8	779.0	622.4	156.60	4.974		
17,000.0	7,662.0	16,745.9	7,402.0	166.1	0.0	70.48	9,096.8	349.9	778.3	620.1	158.24	4.918		
17,100.0	7,662.0	16,845.9	7,402.0	167.9	0.0	70.47	9,196.8	349.1	777.6	617.8	159.89	4.864		
17,200.0	7,662.0	16,945.9	7,402.0	169.6	0.0	70.45	9,296.8	348.3	777.0	615.4	161.53	4.810		
17,300.0	7,662.0	17,045.9	7,402.0	171.3	0.0	70.43	9,396.8	347.5	776.3	613.1	163.18	4.757		
17,400.0	7,662.0	17,145.9	7,402.0	173.1	0.0	70.41	9,496.8	346.6	775.6	610.8	164.82	4.706		
17,500.0	7,662.0	17,245.9	7,402.0	174.8	0.0	70.40	9,596.8	345.8	775.0	608.5	166.47	4.655		
17,600.0	7,662.0	17,345.9	7,402.0	176.6	0.0	70.38	9,696.8	345.0	774.3	606.2	168.11	4.606		
17,700.0	7,662.0	17,445.9	7,402.0	178.3	0.0	70.36	9,796.8	344.2	773.6	603.8	169.76	4.557		
17,799.6	7,662.0	17,545.5	7,402.0	180.0	0.0	70.34	9,896.4	343.3	772.9	601.5	171.40	4.510 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NCH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													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	0.2	30.0	30.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.70	0.2	30.0	30.0	29.7	0.28	108.196		
200.0	200.0	200.0	200.0	1.0	0.0	89.70	0.2	30.0	30.0	29.2	0.80	37.567		
300.0	300.0	300.0	300.0	1.5	0.0	89.70	0.2	30.0	30.0	28.7	1.22	24.478		
400.0	400.0	400.0	400.0	1.9	0.0	89.70	0.2	30.0	30.0	28.4	1.62	18.521		
500.0	500.0	500.0	500.0	2.3	0.0	89.70	0.2	30.0	30.0	28.0	2.00	14.994		
600.0	600.0	600.0	600.0	2.7	0.0	89.70	0.2	30.0	30.0	27.6	2.37	12.632		
700.0	700.0	700.0	700.0	3.1	0.0	89.70	0.2	30.0	30.0	27.2	2.74	10.930		
800.0	800.0	800.0	800.0	3.5	0.0	89.70	0.2	30.0	30.0	26.9	3.11	9.640		
900.0	900.0	900.0	900.0	3.9	0.0	89.70	0.2	30.0	30.0	26.5	3.47	8.626		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	0.0	89.70	0.2	30.0	30.0	26.1	3.84	7.808 CC, ES		
1,100.0	1,100.0	1,100.0	1,100.0	4.6	0.0	-129.00	0.2	30.0	31.0	26.8	4.23	7.340		
1,200.0	1,199.8	1,199.8	1,199.8	5.4	0.0	-135.70	0.2	30.0	34.6	29.5	5.06	6.830		
1,300.0	1,299.5	1,299.8	1,299.7	5.9	0.0	-141.69	-1.6	30.1	40.8	35.2	5.65	7.222		
1,400.0	1,399.0	1,399.9	1,399.7	6.2	0.0	-142.74	-6.8	30.5	47.3	41.4	5.96	7.943		
1,500.0	1,498.5	1,499.8	1,499.3	6.5	0.0	-140.57	-14.8	31.0	53.3	47.0	6.26	8.514		
1,600.0	1,598.1	1,599.6	1,598.8	6.8	0.0	-138.58	-23.1	31.6	59.3	52.7	6.57	9.022		
1,700.0	1,697.6	1,699.4	1,698.3	7.1	0.0	-136.96	-31.4	32.2	65.3	58.4	6.89	9.474		
1,800.0	1,797.1	1,799.2	1,797.7	7.4	0.0	-135.62	-39.7	32.7	71.4	64.2	7.23	9.878		
1,900.0	1,896.7	1,899.0	1,897.2	7.8	0.0	-134.49	-48.0	33.3	77.5	69.9	7.57	10.241		
2,000.0	1,996.2	1,998.8	1,996.6	8.1	0.0	-133.52	-56.3	33.9	83.6	75.7	7.91	10.566		
2,100.0	2,095.7	2,098.6	2,096.1	8.4	0.0	-132.68	-64.5	34.4	89.8	81.5	8.27	10.860		
2,200.0	2,195.3	2,198.4	2,195.5	8.8	0.0	-131.95	-72.8	35.0	96.0	87.3	8.62	11.126		
2,300.0	2,294.8	2,298.3	2,295.0	9.1	0.0	-131.32	-81.1	35.6	102.1	93.2	8.98	11.368		
2,400.0	2,394.3	2,398.1	2,394.4	9.5	0.0	-130.75	-89.4	36.2	108.3	99.0	9.35	11.589		
2,500.0	2,493.9	2,497.9	2,493.9	9.8	0.0	-130.24	-97.7	36.7	114.5	104.8	9.71	11.791		
2,600.0	2,593.4	2,597.7	2,593.4	10.2	0.0	-129.79	-106.0	37.3	120.8	110.7	10.08	11.976		
2,700.0	2,692.9	2,697.5	2,692.8	10.5	0.0	-129.38	-114.3	37.9	127.0	116.5	10.45	12.147		
2,800.0	2,792.5	2,797.3	2,792.3	10.9	0.0	-129.01	-122.5	38.5	133.2	122.4	10.82	12.305		
2,900.0	2,892.0	2,897.1	2,891.7	11.3	0.0	-128.67	-130.8	39.0	139.4	128.2	11.20	12.451		
3,000.0	2,991.5	2,996.9	2,991.2	11.6	0.0	-128.36	-139.1	39.6	145.7	134.1	11.57	12.587		
3,100.0	3,091.1	3,096.7	3,090.6	12.0	0.0	-128.08	-147.4	40.2	151.9	140.0	11.95	12.713		
3,200.0	3,190.6	3,196.5	3,190.1	12.4	0.0	-127.82	-155.7	40.8	158.2	145.8	12.33	12.831		
3,300.0	3,290.1	3,296.3	3,289.6	12.7	0.0	-127.58	-164.0	41.3	164.4	151.7	12.70	12.942		
3,400.0	3,389.7	3,396.1	3,389.0	13.1	0.0	-127.35	-172.2	41.9	170.6	157.6	13.08	13.045		
3,500.0	3,489.2	3,495.9	3,488.5	13.5	0.0	-127.15	-180.5	42.5	176.9	163.4	13.46	13.142		
3,600.0	3,588.7	3,595.7	3,587.9	13.9	0.0	-126.95	-188.8	43.0	183.2	169.3	13.84	13.234		
3,700.0	3,688.3	3,695.5	3,687.4	14.2	0.0	-126.77	-197.1	43.6	189.4	175.2	14.22	13.320		
3,800.0	3,787.8	3,795.3	3,786.8	14.6	0.0	-126.60	-205.4	44.2	195.7	181.1	14.60	13.401		
3,900.0	3,887.3	3,895.1	3,886.3	15.0	0.0	-126.44	-213.7	44.8	201.9	186.9	14.98	13.478		
4,000.0	3,986.9	3,994.9	3,985.8	15.4	0.0	-126.30	-222.0	45.3	208.2	192.8	15.36	13.550		
4,100.0	4,086.4	4,094.7	4,085.2	15.7	0.0	-126.16	-230.2	45.9	214.4	198.7	15.75	13.619		
4,200.0	4,185.9	4,194.5	4,184.7	16.1	0.0	-126.02	-238.5	46.5	220.7	204.6	16.13	13.685		
4,300.0	4,285.4	4,294.3	4,284.1	16.5	0.0	-125.90	-246.8	47.1	227.0	210.5	16.51	13.747		
4,400.0	4,385.0	4,394.1	4,383.6	16.9	0.0	-125.78	-255.1	47.6	233.2	216.3	16.89	13.806		
4,500.0	4,484.5	4,493.9	4,483.0	17.3	0.0	-125.67	-263.4	48.2	239.5	222.2	17.28	13.863		
4,600.0	4,584.0	4,593.7	4,582.5	17.7	0.0	-125.56	-271.7	48.8	245.8	228.1	17.66	13.916		
4,700.0	4,683.6	4,693.5	4,681.9	18.1	0.0	-125.46	-280.0	49.4	252.0	234.0	18.04	13.968		
4,800.0	4,783.1	4,793.3	4,781.4	18.4	0.0	-125.36	-288.2	49.9	258.3	239.9	18.43	14.017		
4,900.0	4,882.6	4,893.1	4,880.9	18.8	0.0	-125.27	-296.5	50.5	264.6	245.8	18.81	14.064		
5,000.0	4,982.2	4,992.9	4,980.3	19.2	0.0	-125.18	-304.8	51.1	270.8	251.6	19.20	14.109		
5,100.0	5,081.7	5,092.7	5,079.8	19.6	0.0	-125.10	-313.1	51.6	277.1	257.5	19.58	14.152		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NCH - OH - PLAN #1													Offset Site Error: 0.0 usft	
Survey Program: 0-													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(usft)	(usft)	(usft)	(usft)	(usft)	(usft)	(°)	+N/-S (usft)	+E/-W (usft)	(usft)	(usft)	(usft)			
5,200.0	5,181.2	5,192.5	5,179.2	20.0	0.0	-125.02	-321.4	52.2	283.4	263.4	19.97	14.193		
5,300.0	5,280.8	5,292.3	5,278.7	20.4	0.0	-124.94	-329.7	52.8	289.7	269.3	20.35	14.233		
5,400.0	5,380.3	5,392.1	5,378.1	20.8	0.0	-124.87	-338.0	53.4	295.9	275.2	20.74	14.271		
5,500.0	5,479.8	5,491.9	5,477.6	21.2	0.0	-124.80	-346.2	53.9	302.2	281.1	21.12	14.308		
5,600.0	5,579.4	5,591.7	5,577.1	21.6	0.0	-124.73	-354.5	54.5	308.5	287.0	21.51	14.343		
5,700.0	5,678.9	5,691.5	5,676.5	22.0	0.0	-124.67	-362.8	55.1	314.7	292.9	21.89	14.377		
5,800.0	5,778.4	5,791.3	5,776.0	22.3	0.0	-124.61	-371.1	55.7	321.0	298.7	22.28	14.410		
5,900.0	5,878.0	5,891.1	5,875.4	22.7	0.0	-124.55	-379.4	56.2	327.3	304.6	22.66	14.441		
6,000.0	5,977.5	5,990.9	5,974.9	23.1	0.0	-124.49	-387.7	56.8	333.6	310.5	23.05	14.472		
6,100.0	6,077.0	6,090.7	6,074.3	23.5	0.0	-124.43	-395.9	57.4	339.8	316.4	23.44	14.501		
6,200.0	6,176.6	6,190.5	6,173.8	23.9	0.0	-124.38	-404.2	57.9	346.1	322.3	23.82	14.530		
6,300.0	6,276.1	6,290.3	6,273.2	24.3	0.0	-124.33	-412.5	58.5	352.4	328.2	24.21	14.557		
6,400.0	6,375.6	6,390.2	6,372.7	24.7	0.0	-124.28	-420.8	59.1	358.7	334.1	24.59	14.584		
6,500.0	6,475.2	6,490.0	6,472.2	25.1	0.0	-124.23	-429.1	59.7	364.9	340.0	24.98	14.610		
6,600.0	6,574.7	6,589.8	6,571.6	25.5	0.0	-124.19	-437.4	60.2	371.2	345.9	25.37	14.635		
6,700.0	6,674.2	6,689.6	6,671.1	25.9	0.0	-124.14	-445.7	60.8	377.5	351.7	25.75	14.659		
6,800.0	6,773.8	6,789.4	6,770.5	26.3	0.0	-124.10	-453.9	61.4	383.8	357.6	26.14	14.682		
6,900.0	6,873.3	6,889.7	6,870.5	26.7	0.0	-124.10	-462.0	62.0	390.0	363.5	26.53	14.704		
7,000.0	6,972.8	6,990.7	6,971.4	27.1	0.0	-125.83	-458.1	62.4	396.0	369.1	26.89	14.728		
7,100.0	7,072.4	7,085.2	7,063.6	27.4	0.0	-155.26	-438.5	62.7	402.9	375.7	27.17	14.831		
7,200.0	7,172.0	7,174.1	7,146.5	27.8	0.0	103.62	-406.5	62.9	412.0	384.6	27.37	15.052		
7,300.0	7,269.0	7,259.6	7,220.6	28.0	0.0	87.95	-363.9	62.9	422.4	395.0	27.42	15.405		
7,400.0	7,360.6	7,342.2	7,285.4	28.2	0.0	80.72	-312.8	62.8	433.5	406.1	27.34	15.854		
7,500.0	7,444.0	7,422.6	7,340.8	28.3	0.0	75.89	-254.6	62.6	444.3	417.1	27.18	16.346		
7,600.0	7,516.7	7,500.0	7,385.9	28.5	0.0	72.37	-191.8	62.3	454.2	427.2	26.96	16.844		
7,700.0	7,576.3	7,578.7	7,422.7	28.6	0.0	69.74	-122.3	62.0	462.4	435.7	26.78	17.265		
7,800.0	7,621.2	7,650.0	7,447.5	28.7	0.0	67.96	-55.5	61.5	468.7	442.1	26.64	17.595		
7,900.0	7,650.0	7,730.8	7,465.3	28.9	0.0	66.80	23.2	61.0	472.5	445.8	26.68	17.708		
8,000.0	7,661.7	7,806.2	7,471.9	29.2	0.0	66.36	98.3	60.4	473.8	446.9	26.85	17.644		
8,100.0	7,662.0	7,902.3	7,472.0	29.6	0.0	66.32	194.4	59.6	473.2	446.0	27.15	17.430		
8,200.0	7,662.0	8,002.3	7,472.0	30.0	0.0	66.29	294.4	58.8	472.5	445.0	27.55	17.152		
8,300.0	7,662.0	8,102.3	7,472.0	30.6	0.0	66.25	394.4	57.9	471.8	443.8	28.04	16.827		
8,400.0	7,662.0	8,202.3	7,472.0	31.2	0.0	66.22	494.4	57.1	471.2	442.6	28.62	16.463		
8,500.0	7,662.0	8,302.3	7,472.0	32.0	0.0	66.18	594.3	56.3	470.5	441.3	29.28	16.070		
8,600.0	7,662.0	8,402.3	7,472.0	32.8	0.0	66.15	694.3	55.5	469.9	439.9	30.02	15.654		
8,700.0	7,662.0	8,502.3	7,472.0	33.6	0.0	66.11	794.3	54.6	469.2	438.4	30.82	15.224		
8,800.0	7,662.0	8,602.3	7,472.0	34.6	0.0	66.08	894.3	53.8	468.6	436.9	31.69	14.786		
8,900.0	7,662.0	8,702.3	7,472.0	35.6	0.0	66.04	994.3	53.0	467.9	435.3	32.62	14.346		
9,000.0	7,662.0	8,802.3	7,472.0	36.6	0.0	66.01	1,094.3	52.1	467.3	433.7	33.60	13.907		
9,100.0	7,662.0	8,902.3	7,472.0	37.8	0.0	65.97	1,194.3	51.3	466.6	432.0	34.63	13.475		
9,200.0	7,662.0	9,002.3	7,472.0	38.9	0.0	65.94	1,294.3	50.5	466.0	430.3	35.70	13.050		
9,300.0	7,662.0	9,102.3	7,472.0	40.1	0.0	65.90	1,394.3	49.7	465.3	428.5	36.82	12.637		
9,400.0	7,662.0	9,202.3	7,472.0	41.4	0.0	65.86	1,494.3	48.8	464.7	426.7	37.98	12.236		
9,500.0	7,662.0	9,302.3	7,472.0	42.6	0.0	65.83	1,594.3	48.0	464.0	424.8	39.16	11.848		
9,600.0	7,662.0	9,402.3	7,472.0	44.0	0.0	65.79	1,694.3	47.2	463.3	423.0	40.38	11.475		
9,700.0	7,662.0	9,502.3	7,472.0	45.3	0.0	65.75	1,794.3	46.4	462.7	421.1	41.63	11.115		
9,800.0	7,662.0	9,602.3	7,472.0	46.7	0.0	65.72	1,894.3	45.5	462.0	419.1	42.90	10.771		
9,900.0	7,662.0	9,702.3	7,472.0	48.1	0.0	65.68	1,994.3	44.7	461.4	417.2	44.19	10.441		
10,000.0	7,662.0	9,802.3	7,472.0	49.5	0.0	65.65	2,094.3	43.9	460.7	415.2	45.51	10.124		
10,100.0	7,662.0	9,902.2	7,472.0	50.9	0.0	65.61	2,194.3	43.1	460.1	413.2	46.84	9.822		
10,200.0	7,662.0	10,002.2	7,472.0	52.4	0.0	65.57	2,294.2	42.2	459.4	411.2	48.20	9.533		
10,300.0	7,662.0	10,102.2	7,472.0	53.9	0.0	65.53	2,394.2	41.4	458.8	409.2	49.56	9.257		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NCH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,662.0	10,202.2	7,472.0	55.4	0.0	65.50	2,494.2	40.6	458.1	407.2	50.95	8.993		
10,500.0	7,662.0	10,302.2	7,472.0	56.9	0.0	65.46	2,594.2	39.7	457.5	405.1	52.34	8.740		
10,600.0	7,662.0	10,402.2	7,472.0	58.4	0.0	65.42	2,694.2	38.9	456.8	403.1	53.75	8.499		
10,700.0	7,662.0	10,502.2	7,472.0	59.9	0.0	65.39	2,794.2	38.1	456.2	401.0	55.17	8.269		
10,800.0	7,662.0	10,602.2	7,472.0	61.5	0.0	65.35	2,894.2	37.3	455.5	398.9	56.60	8.048		
10,900.0	7,662.0	10,702.2	7,472.0	63.1	0.0	65.31	2,994.2	36.4	454.9	396.8	58.04	7.837		
11,000.0	7,662.0	10,802.2	7,472.0	64.6	0.0	65.27	3,094.2	35.6	454.2	394.7	59.49	7.636		
11,100.0	7,662.0	10,902.2	7,472.0	66.2	0.0	65.24	3,194.2	34.8	453.6	392.6	60.95	7.442		
11,200.0	7,662.0	11,002.2	7,472.0	67.8	0.0	65.20	3,294.2	34.0	452.9	390.5	62.41	7.257		
11,300.0	7,662.0	11,102.2	7,472.0	69.4	0.0	65.16	3,394.2	33.1	452.3	388.4	63.88	7.080		
11,400.0	7,662.0	11,202.2	7,472.0	71.0	0.0	65.12	3,494.2	32.3	451.6	386.3	65.36	6.910		
11,500.0	7,662.0	11,302.2	7,472.0	72.6	0.0	65.08	3,594.2	31.5	451.0	384.1	66.84	6.747		
11,600.0	7,662.0	11,402.2	7,472.0	74.2	0.0	65.04	3,694.2	30.7	450.3	382.0	68.33	6.591		
11,700.0	7,662.0	11,502.2	7,472.0	75.9	0.0	65.01	3,794.2	29.8	449.7	379.9	69.82	6.440		
11,800.0	7,662.0	11,602.2	7,472.0	77.5	0.0	64.97	3,894.2	29.0	449.0	377.7	71.32	6.296		
11,900.0	7,662.0	11,702.2	7,472.0	79.1	0.0	64.93	3,994.1	28.2	448.4	375.6	72.82	6.157		
12,000.0	7,662.0	11,802.2	7,472.0	80.8	0.0	64.89	4,094.1	27.3	447.7	373.4	74.33	6.024		
12,100.0	7,662.0	11,902.2	7,472.0	82.4	0.0	64.85	4,194.1	26.5	447.1	371.3	75.84	5.895		
12,200.0	7,662.0	12,002.2	7,472.0	84.1	0.0	64.81	4,294.1	25.7	446.4	369.1	77.35	5.772		
12,300.0	7,662.0	12,102.2	7,472.0	85.7	0.0	64.77	4,394.1	24.9	445.8	366.9	78.87	5.653		
12,400.0	7,662.0	12,202.2	7,472.0	87.4	0.0	64.73	4,494.1	24.0	445.2	364.8	80.39	5.538		
12,500.0	7,662.0	12,302.2	7,472.0	89.1	0.0	64.69	4,594.1	23.2	444.5	362.6	81.91	5.427		
12,600.0	7,662.0	12,402.2	7,472.0	90.7	0.0	64.65	4,694.1	22.4	443.9	360.4	83.43	5.320		
12,700.0	7,662.0	12,502.2	7,472.0	92.4	0.0	64.62	4,794.1	21.6	443.2	358.3	84.96	5.217		
12,800.0	7,662.0	12,602.2	7,472.0	94.1	0.0	64.58	4,894.1	20.7	442.6	356.1	86.49	5.117		
12,900.0	7,662.0	12,702.2	7,472.0	95.8	0.0	64.54	4,994.1	19.9	441.9	353.9	88.02	5.021		
13,000.0	7,662.0	12,802.2	7,472.0	97.5	0.0	64.50	5,094.1	19.1	441.3	351.7	89.55	4.928		
13,100.0	7,662.0	12,902.2	7,472.0	99.1	0.0	64.46	5,194.1	18.3	440.6	349.5	91.08	4.838		
13,200.0	7,662.0	13,002.2	7,472.0	100.8	0.0	64.42	5,294.1	17.4	440.0	347.4	92.62	4.750		
13,300.0	7,662.0	13,102.2	7,472.0	102.5	0.0	64.38	5,394.1	16.6	439.3	345.2	94.16	4.666		
13,400.0	7,662.0	13,202.2	7,472.0	104.2	0.0	64.33	5,494.1	15.8	438.7	343.0	95.70	4.584		
13,500.0	7,662.0	13,302.2	7,472.0	105.9	0.0	64.29	5,594.1	14.9	438.1	340.8	97.23	4.505		
13,600.0	7,662.0	13,402.2	7,472.0	107.6	0.0	64.25	5,694.0	14.1	437.4	338.6	98.77	4.428		
13,700.0	7,662.0	13,502.2	7,472.0	109.3	0.0	64.21	5,794.0	13.3	436.8	336.4	100.32	4.354		
13,800.0	7,662.0	13,602.2	7,472.0	111.0	0.0	64.17	5,894.0	12.5	436.1	334.3	101.86	4.282		
13,900.0	7,662.0	13,702.2	7,472.0	112.7	0.0	64.13	5,994.0	11.6	435.5	332.1	103.40	4.211		
14,000.0	7,662.0	13,802.1	7,472.0	114.4	0.0	64.09	6,094.0	10.8	434.8	329.9	104.94	4.143		
14,100.0	7,662.0	13,902.1	7,472.0	116.1	0.0	64.05	6,194.0	10.0	434.2	327.7	106.49	4.077		
14,200.0	7,662.0	14,002.1	7,472.0	117.8	0.0	64.01	6,294.0	9.2	433.5	325.5	108.03	4.013		
14,300.0	7,662.0	14,102.1	7,472.0	119.5	0.0	63.97	6,394.0	8.3	432.9	323.3	109.58	3.951		
14,400.0	7,662.0	14,202.1	7,472.0	121.3	0.0	63.92	6,494.0	7.5	432.3	321.1	111.12	3.890		
14,500.0	7,662.0	14,302.1	7,472.0	123.0	0.0	63.88	6,594.0	6.7	431.6	318.9	112.67	3.831		
14,600.0	7,662.0	14,402.1	7,472.0	124.7	0.0	63.84	6,694.0	5.8	431.0	316.8	114.22	3.773		
14,700.0	7,662.0	14,502.1	7,472.0	126.4	0.0	63.80	6,794.0	5.0	430.3	314.6	115.76	3.717		
14,800.0	7,662.0	14,602.1	7,472.0	128.1	0.0	63.76	6,894.0	4.2	429.7	312.4	117.31	3.663		
14,900.0	7,662.0	14,702.1	7,472.0	129.8	0.0	63.71	6,994.0	3.4	429.0	310.2	118.85	3.610		
15,000.0	7,662.0	14,802.1	7,472.0	131.6	0.0	63.67	7,094.0	2.5	428.4	308.0	120.40	3.558		
15,100.0	7,662.0	14,902.1	7,472.0	133.3	0.0	63.63	7,194.0	1.7	427.8	305.8	121.95	3.508		
15,200.0	7,662.0	15,002.1	7,472.0	135.0	0.0	63.59	7,293.9	0.9	427.1	303.6	123.49	3.459		
15,300.0	7,662.0	15,102.1	7,472.0	136.7	0.0	63.54	7,393.9	0.1	426.5	301.4	125.04	3.411		
15,400.0	7,662.0	15,202.1	7,472.0	138.4	0.0	63.50	7,493.9	-0.8	425.8	299.3	126.59	3.364		
15,500.0	7,662.0	15,302.1	7,472.0	140.2	0.0	63.46	7,593.9	-1.6	425.2	297.1	128.13	3.318		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NCH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
15,600.0	7,662.0	15,402.1	7,472.0	141.9	0.0	63.41	7,693.9	-2.4	424.6	294.9	129.68	3.274		
15,700.0	7,662.0	15,502.1	7,472.0	143.6	0.0	63.37	7,793.9	-3.2	423.9	292.7	131.22	3.231		
15,800.0	7,662.0	15,602.1	7,472.0	145.3	0.0	63.33	7,893.9	-4.1	423.3	290.5	132.77	3.188		
15,900.0	7,662.0	15,702.1	7,472.0	147.1	0.0	63.28	7,993.9	-4.9	422.6	288.3	134.31	3.147		
16,000.0	7,662.0	15,802.1	7,472.0	148.8	0.0	63.24	8,093.9	-5.7	422.0	286.1	135.86	3.106		
16,100.0	7,662.0	15,902.1	7,472.0	150.5	0.0	63.20	8,193.9	-6.6	421.4	284.0	137.40	3.067		
16,200.0	7,662.0	16,002.1	7,472.0	152.3	0.0	63.15	8,293.9	-7.4	420.7	281.8	138.95	3.028		
16,300.0	7,662.0	16,102.1	7,472.0	154.0	0.0	63.11	8,393.9	-8.2	420.1	279.6	140.49	2.990		
16,400.0	7,662.0	16,202.1	7,472.0	155.7	0.0	63.06	8,493.9	-9.0	419.5	277.4	142.03	2.953		
16,500.0	7,662.0	16,302.1	7,472.0	157.5	0.0	63.02	8,593.9	-9.9	418.8	275.2	143.57	2.917		
16,600.0	7,662.0	16,402.1	7,472.0	159.2	0.0	62.98	8,693.9	-10.7	418.2	273.1	145.12	2.882		
16,700.0	7,662.0	16,502.1	7,472.0	160.9	0.0	62.93	8,793.9	-11.5	417.5	270.9	146.66	2.847		
16,800.0	7,662.0	16,602.1	7,472.0	162.7	0.0	62.89	8,893.9	-12.3	416.9	268.7	148.20	2.813		
16,900.0	7,662.0	16,702.1	7,472.0	164.4	0.0	62.84	8,993.8	-13.2	416.3	266.5	149.74	2.780		
17,000.0	7,662.0	16,802.1	7,472.0	166.1	0.0	62.80	9,093.8	-14.0	415.6	264.4	151.28	2.748		
17,100.0	7,662.0	16,902.1	7,472.0	167.9	0.0	62.75	9,193.8	-14.8	415.0	262.2	152.81	2.716		
17,200.0	7,662.0	17,002.1	7,472.0	169.6	0.0	62.71	9,293.8	-15.6	414.4	260.0	154.35	2.685		
17,300.0	7,662.0	17,102.1	7,472.0	171.3	0.0	62.66	9,393.8	-16.5	413.7	257.8	155.89	2.654		
17,400.0	7,662.0	17,202.1	7,472.0	173.1	0.0	62.62	9,493.8	-17.3	413.1	255.7	157.42	2.624		
17,500.0	7,662.0	17,302.1	7,472.0	174.8	0.0	62.57	9,593.8	-18.1	412.5	253.5	158.96	2.595		
17,600.0	7,662.0	17,402.1	7,472.0	176.6	0.0	62.52	9,693.8	-19.0	411.8	251.3	160.49	2.566		
17,700.0	7,662.0	17,502.1	7,472.0	178.3	0.0	62.48	9,793.8	-19.8	411.2	249.2	162.03	2.538		
17,799.6	7,662.0	17,601.7	7,472.0	180.0	0.0	62.43	9,893.4	-20.6	410.6	247.0	163.56	2.510 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	89.63	0.1	15.0	15.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.63	0.1	15.0	15.0	14.7	0.28	54.004		
200.0	200.0	200.0	200.0	1.0	0.0	89.63	0.1	15.0	15.0	14.2	0.80	18.753		
300.0	300.0	300.0	300.0	1.5	0.0	89.63	0.1	15.0	15.0	13.7	1.23	12.221		
400.0	400.0	400.0	400.0	1.9	0.0	89.63	0.1	15.0	15.0	13.4	1.62	9.247		
500.0	500.0	500.0	500.0	2.3	0.0	89.63	0.1	15.0	15.0	13.0	2.00	7.487		
600.0	600.0	600.0	600.0	2.7	0.0	89.63	0.1	15.0	15.0	12.6	2.37	6.308		
700.0	700.0	700.0	700.0	3.1	0.0	89.63	0.1	15.0	15.0	12.2	2.74	5.458		
800.0	800.0	800.0	800.0	3.5	0.0	89.63	0.1	15.0	15.0	11.9	3.11	4.814		
900.0	900.0	900.0	900.0	3.9	0.0	89.63	0.1	15.0	15.0	11.5	3.48	4.308		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	0.0	89.63	0.1	15.0	15.0	11.1	3.84	3.899 CC, ES		
1,100.0	1,100.0	1,100.0	1,100.0	4.6	0.0	-131.48	0.1	15.0	16.1	11.8	4.26	3.768		
1,200.0	1,199.8	1,200.2	1,200.2	5.4	0.0	-138.70	-1.5	14.3	18.9	13.8	5.12	3.686 SF		
1,300.0	1,299.5	1,300.6	1,300.4	5.9	0.0	-142.27	-6.4	12.3	22.4	16.7	5.66	3.957		
1,400.0	1,399.0	1,400.9	1,400.4	6.2	0.0	-140.56	-14.3	9.0	24.7	18.8	5.92	4.178		
1,500.0	1,498.5	1,500.9	1,499.9	6.5	0.0	-137.90	-22.8	5.5	26.7	20.4	6.21	4.294		
1,600.0	1,598.1	1,600.8	1,599.5	6.8	0.0	-135.61	-31.3	2.0	28.6	22.1	6.51	4.397		
1,700.0	1,697.6	1,700.8	1,699.0	7.1	0.0	-133.62	-39.8	-1.6	30.7	23.8	6.83	4.489		
1,800.0	1,797.1	1,800.8	1,798.6	7.4	0.0	-131.88	-48.3	-5.1	32.7	25.6	7.16	4.571		
1,900.0	1,896.7	1,900.8	1,898.1	7.8	0.0	-130.35	-56.9	-8.6	34.8	27.3	7.50	4.643		
2,000.0	1,996.2	2,000.7	1,997.7	8.1	0.0	-128.99	-65.4	-12.2	36.9	29.1	7.85	4.708		
2,100.0	2,095.7	2,100.7	2,097.2	8.4	0.0	-127.77	-73.9	-15.7	39.1	30.9	8.20	4.767		
2,200.0	2,195.3	2,200.7	2,196.8	8.8	0.0	-126.69	-82.4	-19.2	41.2	32.7	8.55	4.819		
2,300.0	2,294.8	2,300.7	2,296.3	9.1	0.0	-125.71	-90.9	-22.8	43.4	34.5	8.91	4.867		
2,400.0	2,394.3	2,400.6	2,395.8	9.5	0.0	-124.82	-99.4	-26.3	45.5	36.3	9.28	4.910		
2,500.0	2,493.9	2,500.6	2,495.4	9.8	0.0	-124.02	-107.9	-29.8	47.7	38.1	9.64	4.949		
2,600.0	2,593.4	2,600.6	2,594.9	10.2	0.0	-123.29	-116.5	-33.3	49.9	39.9	10.01	4.985		
2,700.0	2,692.9	2,700.6	2,694.5	10.5	0.0	-122.61	-125.0	-36.9	52.1	41.7	10.39	5.018		
2,800.0	2,792.5	2,800.5	2,794.0	10.9	0.0	-122.00	-133.5	-40.4	54.3	43.6	10.76	5.048		
2,900.0	2,892.0	2,900.5	2,893.6	11.3	0.0	-121.43	-142.0	-43.9	56.5	45.4	11.14	5.076		
3,000.0	2,991.5	3,000.5	2,993.1	11.6	0.0	-120.90	-150.5	-47.5	58.7	47.2	11.51	5.102		
3,100.0	3,091.1	3,100.5	3,092.7	12.0	0.0	-120.41	-159.0	-51.0	61.0	49.1	11.89	5.126		
3,200.0	3,190.6	3,200.4	3,192.2	12.4	0.0	-119.96	-167.6	-54.5	63.2	50.9	12.27	5.148		
3,300.0	3,290.1	3,300.4	3,291.8	12.7	0.0	-119.53	-176.1	-58.0	65.4	52.8	12.65	5.169		
3,400.0	3,389.7	3,400.4	3,391.3	13.1	0.0	-119.14	-184.6	-61.6	67.6	54.6	13.04	5.189		
3,500.0	3,489.2	3,500.4	3,490.9	13.5	0.0	-118.77	-193.1	-65.1	69.9	56.5	13.42	5.207		
3,600.0	3,588.7	3,600.3	3,590.4	13.9	0.0	-118.42	-201.6	-68.6	72.1	58.3	13.80	5.224		
3,700.0	3,688.3	3,700.3	3,690.0	14.2	0.0	-118.09	-210.1	-72.2	74.3	60.2	14.19	5.240		
3,800.0	3,787.8	3,800.3	3,789.5	14.6	0.0	-117.79	-218.7	-75.7	76.6	62.0	14.57	5.256		
3,900.0	3,887.3	3,900.2	3,889.1	15.0	0.0	-117.50	-227.2	-79.2	78.8	63.9	14.96	5.270		
4,000.0	3,986.9	4,000.2	3,988.6	15.4	0.0	-117.22	-235.7	-82.8	81.1	65.7	15.34	5.284		
4,100.0	4,086.4	4,100.2	4,088.2	15.7	0.0	-116.97	-244.2	-86.3	83.3	67.6	15.73	5.297		
4,200.0	4,185.9	4,200.2	4,187.7	16.1	0.0	-116.72	-252.7	-89.8	85.6	69.4	16.12	5.309		
4,300.0	4,285.4	4,300.1	4,287.3	16.5	0.0	-116.49	-261.2	-93.3	87.8	71.3	16.51	5.320		
4,400.0	4,385.0	4,400.1	4,386.8	16.9	0.0	-116.27	-269.7	-96.9	90.1	73.2	16.89	5.332		
4,500.0	4,484.5	4,500.1	4,486.4	17.3	0.0	-116.06	-278.3	-100.4	92.3	75.0	17.28	5.342		
4,600.0	4,584.0	4,600.1	4,585.9	17.7	0.0	-115.86	-286.8	-103.9	94.6	76.9	17.67	5.352		
4,700.0	4,683.6	4,700.0	4,685.5	18.1	0.0	-115.66	-295.3	-107.5	96.8	78.8	18.06	5.362		
4,800.0	4,783.1	4,800.0	4,785.0	18.4	0.0	-115.48	-303.8	-111.0	99.1	80.6	18.45	5.371		
4,900.0	4,882.6	4,900.0	4,884.6	18.8	0.0	-115.31	-312.3	-114.5	101.3	82.5	18.84	5.380		
5,000.0	4,982.2	5,000.0	4,984.1	19.2	0.0	-115.14	-320.8	-118.1	103.6	84.4	19.23	5.388		
5,100.0	5,081.7	5,099.9	5,083.6	19.6	0.0	-114.98	-329.4	-121.6	105.9	86.2	19.62	5.396		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,181.2	5,199.9	5,183.2	20.0	0.0	-114.83	-337.9	-125.1	108.1	88.1	20.01	5.404		
5,300.0	5,280.8	5,299.9	5,282.7	20.4	0.0	-114.68	-346.4	-128.6	110.4	90.0	20.40	5.411		
5,400.0	5,380.3	5,399.9	5,382.3	20.8	0.0	-114.54	-354.9	-132.2	112.6	91.8	20.79	5.418		
5,500.0	5,479.8	5,499.8	5,481.8	21.2	0.0	-114.41	-363.4	-135.7	114.9	93.7	21.18	5.425		
5,600.0	5,579.4	5,599.8	5,581.4	21.6	0.0	-114.28	-371.9	-139.2	117.2	95.6	21.57	5.432		
5,700.0	5,678.9	5,699.8	5,680.9	22.0	0.0	-114.15	-380.5	-142.8	119.4	97.5	21.96	5.438		
5,800.0	5,778.4	5,799.8	5,780.5	22.3	0.0	-114.03	-389.0	-146.3	121.7	99.3	22.35	5.444		
5,900.0	5,878.0	5,899.7	5,880.0	22.7	0.0	-113.92	-397.5	-149.8	123.9	101.2	22.74	5.450		
6,000.0	5,977.5	5,999.7	5,979.6	23.1	0.0	-113.80	-406.0	-153.4	126.2	103.1	23.13	5.456		
6,100.0	6,077.0	6,099.7	6,079.1	23.5	0.0	-113.70	-414.5	-156.9	128.5	104.9	23.52	5.461		
6,200.0	6,176.6	6,199.7	6,178.7	23.9	0.0	-113.59	-423.0	-160.4	130.7	106.8	23.91	5.467		
6,300.0	6,276.1	6,299.6	6,278.2	24.3	0.0	-113.49	-431.5	-163.9	133.0	108.7	24.31	5.472		
6,400.0	6,375.6	6,399.6	6,377.8	24.7	0.0	-113.39	-440.1	-167.5	135.3	110.6	24.70	5.477		
6,500.0	6,475.2	6,499.6	6,477.3	25.1	0.0	-113.30	-448.6	-171.0	137.5	112.4	25.09	5.482		
6,600.0	6,574.7	6,599.5	6,576.9	25.5	0.0	-113.21	-457.1	-174.5	139.8	114.3	25.48	5.486		
6,700.0	6,674.2	6,702.2	6,679.2	25.9	0.0	-113.93	-463.8	-178.2	141.6	115.8	25.87	5.474		
6,800.0	6,773.8	6,805.0	6,781.4	26.3	0.0	-120.90	-454.7	-181.9	141.0	114.8	26.21	5.382		
6,813.5	6,787.2	6,818.4	6,794.5	26.3	0.0	-122.34	-452.1	-182.4	141.0	114.8	26.25	5.373		
6,900.0	6,873.3	6,899.1	6,872.1	26.7	0.0	-133.50	-430.4	-185.4	143.7	117.3	26.35	5.454		
7,000.0	6,972.8	6,981.2	6,947.1	27.1	0.0	-147.88	-397.4	-188.4	159.0	133.2	25.83	6.157		
7,100.0	7,072.4	7,050.0	7,005.9	27.4	0.0	173.49	-361.7	-190.8	192.3	167.8	24.48	7.857		
7,200.0	7,172.0	7,115.8	7,057.6	27.8	0.0	65.20	-321.1	-193.0	234.6	211.5	23.18	10.124		
7,300.0	7,269.0	7,178.5	7,102.3	28.0	0.0	45.77	-277.2	-195.0	277.7	255.8	21.92	12.665		
7,400.0	7,360.6	7,239.8	7,141.1	28.2	0.0	36.80	-229.9	-196.8	318.1	297.4	20.72	15.352		
7,500.0	7,444.0	7,300.0	7,174.1	28.3	0.0	31.37	-179.6	-198.4	354.2	334.6	19.62	18.051		
7,600.0	7,516.7	7,350.0	7,197.3	28.5	0.0	27.97	-135.3	-199.6	385.1	366.7	18.38	20.951		
7,700.0	7,576.3	7,418.2	7,222.7	28.6	0.0	25.41	-72.1	-201.1	409.6	391.7	17.90	22.886		
7,800.0	7,621.2	7,476.6	7,238.3	28.7	0.0	23.85	-15.8	-202.1	427.8	410.4	17.41	24.575		
7,900.0	7,650.0	7,534.7	7,248.0	28.9	0.0	22.92	41.4	-202.9	439.2	422.0	17.25	25.464		
8,000.0	7,661.7	7,602.4	7,252.0	29.2	0.0	22.52	109.0	-203.6	444.0	426.5	17.51	25.356		
8,100.0	7,662.0	7,685.6	7,252.0	29.6	0.0	22.45	192.2	-204.3	443.6	426.0	17.66	25.117		
8,200.0	7,662.0	7,785.6	7,252.0	30.0	0.0	22.37	292.2	-205.1	443.4	425.4	17.91	24.750		
8,300.0	7,662.0	7,885.6	7,252.0	30.6	0.0	22.28	392.2	-206.0	443.1	424.9	18.22	24.324		
8,400.0	7,662.0	7,985.6	7,252.0	31.2	0.0	22.19	492.2	-206.8	442.8	424.2	18.57	23.851		
8,500.0	7,662.0	8,085.6	7,252.0	32.0	0.0	22.11	592.2	-207.6	442.5	423.6	18.96	23.343		
8,600.0	7,662.0	8,185.6	7,252.0	32.8	0.0	22.02	692.2	-208.5	442.3	422.9	19.39	22.807		
8,700.0	7,662.0	8,285.6	7,252.0	33.6	0.0	21.94	792.2	-209.3	442.0	422.1	19.86	22.253		
8,800.0	7,662.0	8,385.6	7,252.0	34.6	0.0	21.85	892.2	-210.1	441.7	421.4	20.37	21.688		
8,900.0	7,662.0	8,485.6	7,252.0	35.6	0.0	21.76	992.1	-210.9	441.5	420.6	20.90	21.118		
9,000.0	7,662.0	8,585.6	7,252.0	36.6	0.0	21.68	1,092.1	-211.8	441.2	419.7	21.47	20.550		
9,100.0	7,662.0	8,685.6	7,252.0	37.8	0.0	21.59	1,192.1	-212.6	440.9	418.9	22.06	19.986		
9,200.0	7,662.0	8,785.6	7,252.0	38.9	0.0	21.50	1,292.1	-213.4	440.7	418.0	22.68	19.432		
9,300.0	7,662.0	8,885.6	7,252.0	40.1	0.0	21.42	1,392.1	-214.2	440.4	417.1	23.32	18.889		
9,400.0	7,662.0	8,985.6	7,252.0	41.4	0.0	21.33	1,492.1	-215.1	440.2	416.2	23.97	18.361		
9,500.0	7,662.0	9,085.6	7,252.0	42.6	0.0	21.24	1,592.1	-215.9	439.9	415.2	24.65	17.847		
9,600.0	7,662.0	9,185.6	7,252.0	44.0	0.0	21.16	1,692.1	-216.7	439.6	414.3	25.34	17.350		
9,700.0	7,662.0	9,285.6	7,252.0	45.3	0.0	21.07	1,792.1	-217.5	439.4	413.3	26.04	16.871		
9,800.0	7,662.0	9,385.6	7,252.0	46.7	0.0	20.98	1,892.1	-218.4	439.1	412.4	26.76	16.408		
9,900.0	7,662.0	9,485.6	7,252.0	48.1	0.0	20.90	1,992.1	-219.2	438.9	411.4	27.49	15.963		
10,000.0	7,662.0	9,585.6	7,252.0	49.5	0.0	20.81	2,092.1	-220.0	438.6	410.4	28.23	15.535		
10,100.0	7,662.0	9,685.6	7,252.0	50.9	0.0	20.72	2,192.1	-220.9	438.4	409.4	28.98	15.124		
10,200.0	7,662.0	9,785.6	7,252.0	52.4	0.0	20.63	2,292.1	-221.7	438.1	408.4	29.74	14.729		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	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	7,662.0	9,885.6	7,252.0	53.9	0.0	20.55	2,392.1	-222.5	437.9	407.3	30.51	14.351		
10,400.0	7,662.0	9,985.6	7,252.0	55.4	0.0	20.46	2,492.1	-223.3	437.6	406.3	31.28	13.988		
10,500.0	7,662.0	10,085.6	7,252.0	56.9	0.0	20.37	2,592.0	-224.2	437.4	405.3	32.06	13.640		
10,600.0	7,662.0	10,185.6	7,252.0	58.4	0.0	20.28	2,692.0	-225.0	437.1	404.3	32.85	13.306		
10,700.0	7,662.0	10,285.6	7,252.0	59.9	0.0	20.19	2,792.0	-225.8	436.9	403.2	33.64	12.986		
10,800.0	7,662.0	10,385.6	7,252.0	61.5	0.0	20.11	2,892.0	-226.6	436.6	402.2	34.44	12.679		
10,900.0	7,662.0	10,485.6	7,252.0	63.1	0.0	20.02	2,992.0	-227.5	436.4	401.1	35.23	12.385		
11,000.0	7,662.0	10,585.6	7,252.0	64.6	0.0	19.93	3,092.0	-228.3	436.1	400.1	36.04	12.102		
11,100.0	7,662.0	10,685.6	7,252.0	66.2	0.0	19.84	3,192.0	-229.1	435.9	399.0	36.84	11.831		
11,200.0	7,662.0	10,785.6	7,252.0	67.8	0.0	19.75	3,292.0	-230.0	435.6	398.0	37.65	11.570		
11,300.0	7,662.0	10,885.6	7,252.0	69.4	0.0	19.66	3,392.0	-230.8	435.4	396.9	38.46	11.320		
11,400.0	7,662.0	10,985.5	7,252.0	71.0	0.0	19.58	3,492.0	-231.6	435.2	395.9	39.27	11.080		
11,500.0	7,662.0	11,085.5	7,252.0	72.6	0.0	19.49	3,592.0	-232.4	434.9	394.8	40.09	10.849		
11,600.0	7,662.0	11,185.5	7,252.0	74.2	0.0	19.40	3,692.0	-233.3	434.7	393.8	40.90	10.627		
11,700.0	7,662.0	11,285.5	7,252.0	75.9	0.0	19.31	3,792.0	-234.1	434.4	392.7	41.72	10.413		
11,800.0	7,662.0	11,385.5	7,252.0	77.5	0.0	19.22	3,892.0	-234.9	434.2	391.7	42.54	10.207		
11,900.0	7,662.0	11,485.5	7,252.0	79.1	0.0	19.13	3,992.0	-235.7	434.0	390.6	43.36	10.009		
12,000.0	7,662.0	11,585.5	7,252.0	80.8	0.0	19.04	4,092.0	-236.6	433.7	389.6	44.18	9.818		
12,100.0	7,662.0	11,685.5	7,252.0	82.4	0.0	18.95	4,192.0	-237.4	433.5	388.5	45.00	9.634		
12,200.0	7,662.0	11,785.5	7,252.0	84.1	0.0	18.86	4,291.9	-238.2	433.3	387.5	45.82	9.457		
12,300.0	7,662.0	11,885.5	7,252.0	85.7	0.0	18.77	4,391.9	-239.1	433.0	386.4	46.64	9.285		
12,400.0	7,662.0	11,985.5	7,252.0	87.4	0.0	18.68	4,491.9	-239.9	432.8	385.3	47.46	9.120		
12,500.0	7,662.0	12,085.5	7,252.0	89.1	0.0	18.59	4,591.9	-240.7	432.6	384.3	48.28	8.960		
12,600.0	7,662.0	12,185.5	7,252.0	90.7	0.0	18.50	4,691.9	-241.5	432.4	383.3	49.10	8.806		
12,700.0	7,662.0	12,285.5	7,252.0	92.4	0.0	18.41	4,791.9	-242.4	432.1	382.2	49.92	8.657		
12,800.0	7,662.0	12,385.5	7,252.0	94.1	0.0	18.32	4,891.9	-243.2	431.9	381.2	50.74	8.513		
12,900.0	7,662.0	12,485.5	7,252.0	95.8	0.0	18.23	4,991.9	-244.0	431.7	380.1	51.55	8.373		
13,000.0	7,662.0	12,585.5	7,252.0	97.5	0.0	18.14	5,091.9	-244.8	431.5	379.1	52.37	8.238		
13,100.0	7,662.0	12,685.5	7,252.0	99.1	0.0	18.05	5,191.9	-245.7	431.2	378.0	53.19	8.107		
13,200.0	7,662.0	12,785.5	7,252.0	100.8	0.0	17.96	5,291.9	-246.5	431.0	377.0	54.01	7.981		
13,300.0	7,662.0	12,885.5	7,252.0	102.5	0.0	17.87	5,391.9	-247.3	430.8	376.0	54.82	7.858		
13,400.0	7,662.0	12,985.5	7,252.0	104.2	0.0	17.78	5,491.9	-248.2	430.6	374.9	55.64	7.739		
13,500.0	7,662.0	13,085.5	7,252.0	105.9	0.0	17.69	5,591.9	-249.0	430.3	373.9	56.45	7.623		
13,600.0	7,662.0	13,185.5	7,252.0	107.6	0.0	17.60	5,691.9	-249.8	430.1	372.9	57.26	7.511		
13,700.0	7,662.0	13,285.5	7,252.0	109.3	0.0	17.51	5,791.9	-250.6	429.9	371.8	58.08	7.403		
13,800.0	7,662.0	13,385.5	7,252.0	111.0	0.0	17.42	5,891.9	-251.5	429.7	370.8	58.89	7.297		
13,900.0	7,662.0	13,485.5	7,252.0	112.7	0.0	17.33	5,991.8	-252.3	429.5	369.8	59.70	7.195		
14,000.0	7,662.0	13,585.5	7,252.0	114.4	0.0	17.23	6,091.8	-253.1	429.3	368.8	60.50	7.095		
14,100.0	7,662.0	13,685.5	7,252.0	116.1	0.0	17.14	6,191.8	-253.9	429.1	367.8	61.31	6.998		
14,200.0	7,662.0	13,785.5	7,252.0	117.8	0.0	17.05	6,291.8	-254.8	428.9	366.7	62.12	6.904		
14,300.0	7,662.0	13,885.5	7,252.0	119.5	0.0	16.96	6,391.8	-255.6	428.6	365.7	62.92	6.812		
14,400.0	7,662.0	13,985.5	7,252.0	121.3	0.0	16.87	6,491.8	-256.4	428.4	364.7	63.72	6.723		
14,500.0	7,662.0	14,085.5	7,252.0	123.0	0.0	16.78	6,591.8	-257.3	428.2	363.7	64.53	6.636		
14,600.0	7,662.0	14,185.5	7,252.0	124.7	0.0	16.69	6,691.8	-258.1	428.0	362.7	65.33	6.552		
14,700.0	7,662.0	14,285.5	7,252.0	126.4	0.0	16.59	6,791.8	-258.9	427.8	361.7	66.13	6.470		
14,800.0	7,662.0	14,385.5	7,252.0	128.1	0.0	16.50	6,891.8	-259.7	427.6	360.7	66.92	6.390		
14,900.0	7,662.0	14,485.5	7,252.0	129.8	0.0	16.41	6,991.8	-260.6	427.4	359.7	67.72	6.311		
15,000.0	7,662.0	14,585.5	7,252.0	131.6	0.0	16.32	7,091.8	-261.4	427.2	358.7	68.51	6.235		
15,100.0	7,662.0	14,685.5	7,252.0	133.3	0.0	16.23	7,191.8	-262.2	427.0	357.7	69.31	6.161		
15,200.0	7,662.0	14,785.5	7,252.0	135.0	0.0	16.13	7,291.8	-263.0	426.8	356.7	70.10	6.089		
15,300.0	7,662.0	14,885.4	7,252.0	136.7	0.0	16.04	7,391.8	-263.9	426.6	355.7	70.89	6.018		
15,400.0	7,662.0	14,985.4	7,252.0	138.4	0.0	15.95	7,491.8	-264.7	426.4	354.7	71.68	5.949		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,500.0	7,662.0	15,085.4	7,252.0	140.2	0.0	15.86	7,591.7	-265.5	426.2	353.8	72.47	5.882		
15,600.0	7,662.0	15,185.4	7,252.0	141.9	0.0	15.76	7,691.7	-266.3	426.0	352.8	73.25	5.816		
15,700.0	7,662.0	15,285.4	7,252.0	143.6	0.0	15.67	7,791.7	-267.2	425.8	351.8	74.04	5.752		
15,800.0	7,662.0	15,385.4	7,252.0	145.3	0.0	15.58	7,891.7	-268.0	425.6	350.8	74.82	5.689		
15,900.0	7,662.0	15,485.4	7,252.0	147.1	0.0	15.48	7,991.7	-268.8	425.4	349.8	75.60	5.627		
16,000.0	7,662.0	15,585.4	7,252.0	148.8	0.0	15.39	8,091.7	-269.7	425.3	348.9	76.38	5.568		
16,100.0	7,662.0	15,685.4	7,252.0	150.5	0.0	15.30	8,191.7	-270.5	425.1	347.9	77.16	5.509		
16,200.0	7,662.0	15,785.4	7,252.0	152.3	0.0	15.21	8,291.7	-271.3	424.9	346.9	77.94	5.452		
16,300.0	7,662.0	15,885.4	7,252.0	154.0	0.0	15.11	8,391.7	-272.1	424.7	346.0	78.71	5.396		
16,400.0	7,662.0	15,985.4	7,252.0	155.7	0.0	15.02	8,491.7	-273.0	424.5	345.0	79.48	5.341		
16,500.0	7,662.0	16,085.4	7,252.0	157.5	0.0	14.93	8,591.7	-273.8	424.3	344.1	80.26	5.287		
16,600.0	7,662.0	16,185.4	7,252.0	159.2	0.0	14.83	8,691.7	-274.6	424.1	343.1	81.03	5.234		
16,700.0	7,662.0	16,285.4	7,252.0	160.9	0.0	14.74	8,791.7	-275.4	424.0	342.2	81.80	5.183		
16,800.0	7,662.0	16,385.4	7,252.0	162.7	0.0	14.65	8,891.7	-276.3	423.8	341.2	82.56	5.133		
16,900.0	7,662.0	16,485.4	7,252.0	164.4	0.0	14.55	8,991.7	-277.1	423.6	340.3	83.33	5.083		
17,000.0	7,662.0	16,585.4	7,252.0	166.1	0.0	14.46	9,091.7	-277.9	423.4	339.3	84.10	5.035		
17,100.0	7,662.0	16,685.4	7,252.0	167.9	0.0	14.36	9,191.7	-278.8	423.2	338.4	84.86	4.988		
17,200.0	7,662.0	16,785.4	7,252.0	169.6	0.0	14.27	9,291.6	-279.6	423.1	337.4	85.62	4.941		
17,300.0	7,662.0	16,885.4	7,252.0	171.3	0.0	14.18	9,391.6	-280.4	422.9	336.5	86.38	4.896		
17,400.0	7,662.0	16,985.4	7,252.0	173.1	0.0	14.08	9,491.6	-281.2	422.7	335.6	87.14	4.851		
17,500.0	7,662.0	17,085.4	7,252.0	174.8	0.0	13.99	9,591.6	-282.1	422.5	334.6	87.90	4.807		
17,600.0	7,662.0	17,185.4	7,252.0	176.6	0.0	13.89	9,691.6	-282.9	422.4	333.7	88.65	4.764		
17,700.0	7,662.0	17,285.4	7,252.0	178.3	0.0	13.80	9,791.6	-283.7	422.2	332.8	89.41	4.722		
17,799.6	7,662.0	17,385.0	7,252.0	180.0	0.0	13.71	9,891.2	-284.5	422.0	331.9	90.16	4.681		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3CDH - OH - PLAN #1												Offset Site Error:	0.0 usft
Survey Program: 0-												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	89.66	0.4	60.0	60.0				
100.0	100.0	100.0	100.0	0.4	0.0	89.66	0.4	60.0	60.0	59.7	0.28	216.407	
200.0	200.0	200.0	200.0	1.0	0.0	89.66	0.4	60.0	60.0	59.2	0.80	75.143	
300.0	300.0	300.0	300.0	1.5	0.0	89.66	0.4	60.0	60.0	58.7	1.22	48.966	
400.0	400.0	400.0	400.0	1.9	0.0	89.66	0.4	60.0	60.0	58.4	1.62	37.050	
500.0	500.0	500.0	500.0	2.3	0.0	89.66	0.4	60.0	60.0	58.0	2.00	29.996	
600.0	600.0	600.0	600.0	2.7	0.0	89.66	0.4	60.0	60.0	57.6	2.37	25.272	
700.0	700.0	700.0	700.0	3.1	0.0	89.66	0.4	60.0	60.0	57.2	2.74	21.866	
800.0	800.0	800.0	800.0	3.5	0.0	89.66	0.4	60.0	60.0	56.9	3.11	19.285	
900.0	900.0	900.0	900.0	3.9	0.0	89.66	0.4	60.0	60.0	56.5	3.48	17.258	
1,000.0	1,000.0	1,000.0	1,000.0	4.2	0.0	89.66	0.4	60.0	60.0	56.1	3.84	15.622 CC, ES	
1,100.0	1,100.0	1,100.0	1,100.0	4.6	0.0	-127.76	0.4	60.0	61.0	56.8	4.21	14.493	
1,200.0	1,199.8	1,199.8	1,199.8	5.4	0.0	-131.39	0.4	60.0	64.4	59.4	4.97	12.944	
1,300.0	1,299.5	1,297.7	1,297.7	5.9	0.0	-135.55	-0.6	61.3	71.6	66.1	5.52	12.956	
1,400.0	1,399.0	1,395.3	1,395.1	6.2	0.0	-137.74	-3.4	65.4	82.2	76.3	5.86	14.018	
1,500.0	1,498.5	1,492.4	1,491.9	6.5	0.0	-137.92	-8.1	72.2	95.2	89.0	6.20	15.353	
1,600.0	1,598.1	1,588.8	1,587.6	6.8	0.0	-136.82	-14.6	81.6	110.5	104.0	6.51	16.969	
1,700.0	1,697.6	1,686.9	1,684.7	7.1	0.0	-135.26	-22.5	93.0	127.4	120.5	6.83	18.655	
1,800.0	1,797.1	1,785.4	1,782.2	7.4	0.0	-134.05	-30.4	104.4	144.4	137.2	7.16	20.169	
1,900.0	1,896.7	1,883.9	1,879.7	7.8	0.0	-133.10	-38.3	115.8	161.4	153.9	7.50	21.531	
2,000.0	1,996.2	1,982.4	1,977.2	8.1	0.0	-132.33	-46.2	127.2	178.5	170.7	7.84	22.760	
2,100.0	2,095.7	2,080.9	2,074.8	8.4	0.0	-131.69	-54.2	138.7	195.6	187.4	8.19	23.874	
2,200.0	2,195.3	2,179.4	2,172.3	8.8	0.0	-131.15	-62.1	150.1	212.8	204.2	8.55	24.886	
2,300.0	2,294.8	2,277.9	2,269.8	9.1	0.0	-130.70	-70.0	161.5	229.9	221.0	8.91	25.810	
2,400.0	2,394.3	2,376.4	2,367.3	9.5	0.0	-130.31	-77.9	172.9	247.1	237.8	9.27	26.656	
2,500.0	2,493.9	2,474.9	2,464.8	9.8	0.0	-129.97	-85.8	184.4	264.2	254.6	9.63	27.433	
2,600.0	2,593.4	2,573.4	2,562.4	10.2	0.0	-129.67	-93.7	195.8	281.4	271.4	10.00	28.150	
2,700.0	2,692.9	2,671.9	2,659.9	10.5	0.0	-129.40	-101.6	207.2	298.6	288.2	10.36	28.811	
2,800.0	2,792.5	2,770.4	2,757.4	10.9	0.0	-129.17	-109.5	218.6	315.8	305.1	10.73	29.424	
2,900.0	2,892.0	2,868.9	2,854.9	11.3	0.0	-128.95	-117.5	230.1	333.0	321.9	11.10	29.994	
3,000.0	2,991.5	2,967.4	2,952.4	11.6	0.0	-128.76	-125.4	241.5	350.2	338.7	11.47	30.524	
3,100.0	3,091.1	3,065.9	3,049.9	12.0	0.0	-128.59	-133.3	252.9	367.4	355.5	11.84	31.019	
3,200.0	3,190.6	3,164.4	3,147.5	12.4	0.0	-128.43	-141.2	264.3	384.6	372.4	12.22	31.483	
3,300.0	3,290.1	3,262.9	3,245.0	12.7	0.0	-128.29	-149.1	275.8	401.8	389.2	12.59	31.917	
3,400.0	3,389.7	3,361.4	3,342.5	13.1	0.0	-128.16	-157.0	287.2	419.0	406.0	12.96	32.324	
3,500.0	3,489.2	3,459.9	3,440.0	13.5	0.0	-128.03	-164.9	298.6	436.2	422.9	13.34	32.707	
3,600.0	3,588.7	3,558.4	3,537.5	13.9	0.0	-127.92	-172.9	310.0	453.4	439.7	13.71	33.069	
3,700.0	3,688.3	3,656.9	3,635.1	14.2	0.0	-127.82	-180.8	321.5	470.6	456.5	14.09	33.410	
3,800.0	3,787.8	3,755.4	3,732.6	14.6	0.0	-127.72	-188.7	332.9	487.8	473.4	14.46	33.732	
3,900.0	3,887.3	3,853.9	3,830.1	15.0	0.0	-127.63	-196.6	344.3	505.1	490.2	14.84	34.037	
4,000.0	3,986.9	3,952.4	3,927.6	15.4	0.0	-127.55	-204.5	355.7	522.3	507.1	15.22	34.326	
4,100.0	4,086.4	4,050.9	4,025.1	15.7	0.0	-127.47	-212.4	367.2	539.5	523.9	15.59	34.601	
4,200.0	4,185.9	4,149.4	4,122.6	16.1	0.0	-127.39	-220.3	378.6	556.7	540.8	15.97	34.862	
4,300.0	4,285.4	4,247.9	4,220.2	16.5	0.0	-127.32	-228.3	390.0	573.9	557.6	16.35	35.111	
4,400.0	4,385.0	4,346.5	4,317.7	16.9	0.0	-127.26	-236.2	401.4	591.2	574.4	16.72	35.347	
4,500.0	4,484.5	4,445.0	4,415.2	17.3	0.0	-127.20	-244.1	412.9	608.4	591.3	17.10	35.573	
4,600.0	4,584.0	4,543.5	4,512.7	17.7	0.0	-127.14	-252.0	424.3	625.6	608.1	17.48	35.788	
4,700.0	4,683.6	4,642.0	4,610.2	18.1	0.0	-127.08	-259.9	435.7	642.8	625.0	17.86	35.994	
4,800.0	4,783.1	4,740.5	4,707.8	18.4	0.0	-127.03	-267.8	447.1	660.1	641.8	18.24	36.191	
4,900.0	4,882.6	4,839.0	4,805.3	18.8	0.0	-126.98	-275.7	458.6	677.3	658.7	18.62	36.380	
5,000.0	4,982.2	4,937.5	4,902.8	19.2	0.0	-126.93	-283.6	470.0	694.5	675.5	19.00	36.561	
5,100.0	5,081.7	5,036.0	5,000.3	19.6	0.0	-126.89	-291.6	481.4	711.7	692.4	19.38	36.734	

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													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	5,181.2	5,134.5	5,097.8	20.0	0.0	-126.84	-299.5	492.8	729.0	709.2	19.75	36.900		
5,300.0	5,280.8	5,233.0	5,195.3	20.4	0.0	-126.80	-307.4	504.3	746.2	726.0	20.13	37.060		
5,400.0	5,380.3	5,331.5	5,292.9	20.8	0.0	-126.76	-315.3	515.7	763.4	742.9	20.51	37.214		
5,500.0	5,479.8	5,430.0	5,390.4	21.2	0.0	-126.73	-323.2	527.1	780.6	759.7	20.89	37.362		
5,600.0	5,579.4	5,528.5	5,487.9	21.6	0.0	-126.69	-331.1	538.5	797.9	776.6	21.27	37.504		
5,700.0	5,678.9	5,627.0	5,585.4	22.0	0.0	-126.66	-339.0	550.0	815.1	793.4	21.65	37.641		
5,800.0	5,778.4	5,725.5	5,682.9	22.3	0.0	-126.62	-347.0	561.4	832.3	810.3	22.03	37.773		
5,900.0	5,878.0	5,824.0	5,780.5	22.7	0.0	-126.59	-354.9	572.8	849.5	827.1	22.42	37.901		
6,000.0	5,977.5	5,922.5	5,878.0	23.1	0.0	-126.56	-362.8	584.2	866.8	844.0	22.80	38.024		
6,100.0	6,077.0	6,021.0	5,975.5	23.5	0.0	-126.53	-370.7	595.7	884.0	860.8	23.18	38.143		
6,200.0	6,176.6	6,119.5	6,073.0	23.9	0.0	-126.50	-378.6	607.1	901.2	877.7	23.56	38.257		
6,300.0	6,276.1	6,218.0	6,170.5	24.3	0.0	-126.48	-386.5	618.5	918.5	894.5	23.94	38.368		
6,400.0	6,375.6	6,316.5	6,268.0	24.7	0.0	-126.45	-394.4	629.9	935.7	911.4	24.32	38.476		
6,500.0	6,475.2	6,415.0	6,365.6	25.1	0.0	-126.43	-402.4	641.4	952.9	928.2	24.70	38.580		
6,600.0	6,574.7	6,513.5	6,463.1	25.5	0.0	-126.40	-410.3	652.8	970.1	945.1	25.08	38.680		
6,700.0	6,674.2	6,612.0	6,560.6	25.9	0.0	-126.38	-418.2	664.2	987.4	961.9	25.46	38.778		
6,800.0	6,773.8	6,710.5	6,658.1	26.3	0.0	-126.36	-426.1	675.6	1,004.6	978.8	25.84	38.872		
6,900.0	6,873.3	6,809.0	6,755.6	26.7	0.0	-126.34	-434.0	687.1	1,021.8	995.6	26.23	38.964		
7,000.0	6,972.8	6,907.6	6,853.2	27.1	0.0	-126.31	-441.9	698.5	1,039.1	1,012.5	26.61	39.052		
7,100.0	7,072.4	7,006.0	6,950.7	27.4	0.0	-152.22	-449.8	709.9	1,056.3	1,029.3	26.98	39.148		
7,200.0	7,172.0	7,103.5	7,047.1	27.8	0.0	110.35	-457.7	721.2	1,073.4	1,046.1	27.34	39.269		
7,300.0	7,269.0	7,202.8	7,145.7	28.0	0.0	98.41	-457.0	732.7	1,090.4	1,062.8	27.60	39.504		
7,400.0	7,360.6	7,306.6	7,246.9	28.2	0.0	94.50	-438.0	744.3	1,106.8	1,079.0	27.82	39.780		
7,500.0	7,444.0	7,415.3	7,347.5	28.3	0.0	92.53	-398.7	755.7	1,122.0	1,094.0	28.01	40.051		
7,600.0	7,516.7	7,529.4	7,443.1	28.5	0.0	91.38	-337.8	766.4	1,135.5	1,107.3	28.19	40.282		
7,700.0	7,576.3	7,648.9	7,528.4	28.6	0.0	90.68	-255.0	775.6	1,146.7	1,118.3	28.36	40.432		
7,800.0	7,621.2	7,773.3	7,597.1	28.7	0.0	90.27	-151.8	782.7	1,155.1	1,126.5	28.55	40.455		
7,900.0	7,650.0	7,901.5	7,643.1	28.9	0.0	90.06	-32.5	787.1	1,160.2	1,131.4	28.78	40.309		
8,000.0	7,661.7	8,031.8	7,661.7	29.2	0.0	90.00	96.2	788.2	1,161.8	1,132.8	29.07	39.969		
8,100.0	7,662.0	8,136.0	7,662.0	29.6	0.0	90.00	200.4	787.4	1,161.2	1,131.8	29.42	39.475		
8,200.0	7,662.0	8,236.0	7,662.0	30.0	0.0	90.00	300.4	786.6	1,160.5	1,130.6	29.87	38.856		
8,300.0	7,662.0	8,336.0	7,662.0	30.6	0.0	90.00	400.4	785.7	1,159.7	1,129.3	30.41	38.134		
8,400.0	7,662.0	8,436.0	7,662.0	31.2	0.0	90.00	500.4	784.9	1,159.0	1,128.0	31.05	37.328		
8,500.0	7,662.0	8,536.0	7,662.0	32.0	0.0	90.00	600.4	784.1	1,158.3	1,126.5	31.77	36.456		
8,600.0	7,662.0	8,636.0	7,662.0	32.8	0.0	90.00	700.4	783.3	1,157.6	1,125.0	32.57	35.537		
8,700.0	7,662.0	8,736.0	7,662.0	33.6	0.0	90.00	800.4	782.4	1,156.9	1,123.4	33.45	34.585		
8,800.0	7,662.0	8,836.0	7,662.0	34.6	0.0	90.00	900.3	781.6	1,156.2	1,121.8	34.39	33.615		
8,900.0	7,662.0	8,936.0	7,662.0	35.6	0.0	90.00	1,000.3	780.8	1,155.4	1,120.0	35.40	32.638		
9,000.0	7,662.0	9,036.0	7,662.0	36.6	0.0	90.00	1,100.3	780.0	1,154.7	1,118.3	36.47	31.666		
9,100.0	7,662.0	9,136.0	7,662.0	37.8	0.0	90.00	1,200.3	779.1	1,154.0	1,116.4	37.58	30.706		
9,200.0	7,662.0	9,236.0	7,662.0	38.9	0.0	90.00	1,300.3	778.3	1,153.3	1,114.6	38.75	29.764		
9,300.0	7,662.0	9,336.0	7,662.0	40.1	0.0	90.00	1,400.3	777.5	1,152.6	1,112.6	39.96	28.846		
9,400.0	7,662.0	9,435.9	7,662.0	41.4	0.0	90.00	1,500.3	776.7	1,151.9	1,110.7	41.21	27.954		
9,500.0	7,662.0	9,535.9	7,662.0	42.6	0.0	90.00	1,600.3	775.8	1,151.2	1,108.7	42.49	27.092		
9,600.0	7,662.0	9,635.9	7,662.0	44.0	0.0	90.00	1,700.3	775.0	1,150.4	1,106.6	43.81	26.260		
9,700.0	7,662.0	9,735.9	7,662.0	45.3	0.0	90.00	1,800.3	774.2	1,149.7	1,104.6	45.16	25.460		
9,800.0	7,662.0	9,835.9	7,662.0	46.7	0.0	90.00	1,900.3	773.3	1,149.0	1,102.5	46.53	24.691		
9,900.0	7,662.0	9,935.9	7,662.0	48.1	0.0	90.00	2,000.3	772.5	1,148.3	1,100.4	47.94	23.954		
10,000.0	7,662.0	10,035.9	7,662.0	49.5	0.0	90.00	2,100.3	771.7	1,147.6	1,098.2	49.36	23.248		
10,100.0	7,662.0	10,135.9	7,662.0	50.9	0.0	90.00	2,200.3	770.9	1,146.9	1,096.1	50.81	22.572		
10,200.0	7,662.0	10,235.9	7,662.0	52.4	0.0	90.00	2,300.3	770.0	1,146.1	1,093.9	52.27	21.926		
10,300.0	7,662.0	10,335.9	7,662.0	53.9	0.0	90.00	2,400.3	769.2	1,145.4	1,091.7	53.76	21.307		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,662.0	10,435.9	7,662.0	55.4	0.0	90.00	2,500.3	768.4	1,144.7	1,089.5	55.26	20.716		
10,500.0	7,662.0	10,535.9	7,662.0	56.9	0.0	90.00	2,600.2	767.6	1,144.0	1,087.2	56.77	20.150		
10,600.0	7,662.0	10,635.9	7,662.0	58.4	0.0	90.00	2,700.2	766.7	1,143.3	1,085.0	58.30	19.610		
10,700.0	7,662.0	10,735.9	7,662.0	59.9	0.0	90.00	2,800.2	765.9	1,142.6	1,082.7	59.84	19.092		
10,800.0	7,662.0	10,835.9	7,662.0	61.5	0.0	90.00	2,900.2	765.1	1,141.9	1,080.5	61.40	18.598		
10,900.0	7,662.0	10,935.9	7,662.0	63.1	0.0	90.00	3,000.2	764.2	1,141.1	1,078.2	62.96	18.124		
11,000.0	7,662.0	11,035.9	7,662.0	64.6	0.0	90.00	3,100.2	763.4	1,140.4	1,075.9	64.54	17.671		
11,100.0	7,662.0	11,135.9	7,662.0	66.2	0.0	90.00	3,200.2	762.6	1,139.7	1,073.6	66.12	17.236		
11,200.0	7,662.0	11,235.9	7,662.0	67.8	0.0	90.00	3,300.2	761.8	1,139.0	1,071.3	67.72	16.820		
11,300.0	7,662.0	11,335.9	7,662.0	69.4	0.0	90.00	3,400.2	760.9	1,138.3	1,069.0	69.32	16.421		
11,400.0	7,662.0	11,435.9	7,662.0	71.0	0.0	90.00	3,500.2	760.1	1,137.6	1,066.6	70.93	16.038		
11,500.0	7,662.0	11,535.9	7,662.0	72.6	0.0	90.00	3,600.2	759.3	1,136.8	1,064.3	72.54	15.671		
11,600.0	7,662.0	11,635.9	7,662.0	74.2	0.0	90.00	3,700.2	758.5	1,136.1	1,062.0	74.17	15.319		
11,700.0	7,662.0	11,735.9	7,662.0	75.9	0.0	90.00	3,800.2	757.6	1,135.4	1,059.6	75.80	14.980		
11,800.0	7,662.0	11,835.9	7,662.0	77.5	0.0	90.00	3,900.2	756.8	1,134.7	1,057.3	77.43	14.654		
11,900.0	7,662.0	11,935.9	7,662.0	79.1	0.0	90.00	4,000.2	756.0	1,134.0	1,054.9	79.07	14.341		
12,000.0	7,662.0	12,035.9	7,662.0	80.8	0.0	90.00	4,100.2	755.2	1,133.3	1,052.5	80.72	14.040		
12,100.0	7,662.0	12,135.9	7,662.0	82.4	0.0	90.00	4,200.2	754.3	1,132.6	1,050.2	82.37	13.750		
12,200.0	7,662.0	12,235.9	7,662.0	84.1	0.0	90.00	4,300.1	753.5	1,131.8	1,047.8	84.02	13.470		
12,300.0	7,662.0	12,335.9	7,662.0	85.7	0.0	90.00	4,400.1	752.7	1,131.1	1,045.4	85.68	13.201		
12,400.0	7,662.0	12,435.9	7,662.0	87.4	0.0	90.00	4,500.1	751.8	1,130.4	1,043.1	87.35	12.941		
12,500.0	7,662.0	12,535.9	7,662.0	89.1	0.0	90.00	4,600.1	751.0	1,129.7	1,040.7	89.02	12.691		
12,600.0	7,662.0	12,635.9	7,662.0	90.7	0.0	90.00	4,700.1	750.2	1,129.0	1,038.3	90.69	12.449		
12,700.0	7,662.0	12,735.9	7,662.0	92.4	0.0	90.00	4,800.1	749.4	1,128.3	1,035.9	92.36	12.216		
12,800.0	7,662.0	12,835.9	7,662.0	94.1	0.0	90.00	4,900.1	748.5	1,127.5	1,033.5	94.04	11.990		
12,900.0	7,662.0	12,935.9	7,662.0	95.8	0.0	90.00	5,000.1	747.7	1,126.8	1,031.1	95.72	11.772		
13,000.0	7,662.0	13,035.9	7,662.0	97.5	0.0	90.00	5,100.1	746.9	1,126.1	1,028.7	97.40	11.561		
13,100.0	7,662.0	13,135.9	7,662.0	99.1	0.0	90.00	5,200.1	746.1	1,125.4	1,026.3	99.09	11.357		
13,200.0	7,662.0	13,235.9	7,662.0	100.8	0.0	90.00	5,300.1	745.2	1,124.7	1,023.9	100.78	11.160		
13,300.0	7,662.0	13,335.8	7,662.0	102.5	0.0	90.00	5,400.1	744.4	1,124.0	1,021.5	102.47	10.969		
13,400.0	7,662.0	13,435.8	7,662.0	104.2	0.0	90.00	5,500.1	743.6	1,123.3	1,019.1	104.17	10.783		
13,500.0	7,662.0	13,535.8	7,662.0	105.9	0.0	90.00	5,600.1	742.8	1,122.5	1,016.7	105.86	10.604		
13,600.0	7,662.0	13,635.8	7,662.0	107.6	0.0	90.00	5,700.1	741.9	1,121.8	1,014.3	107.56	10.430		
13,700.0	7,662.0	13,735.8	7,662.0	109.3	0.0	90.00	5,800.1	741.1	1,121.1	1,011.8	109.26	10.261		
13,800.0	7,662.0	13,835.8	7,662.0	111.0	0.0	90.00	5,900.1	740.3	1,120.4	1,009.4	110.96	10.097		
13,900.0	7,662.0	13,935.8	7,662.0	112.7	0.0	90.00	6,000.0	739.4	1,119.7	1,007.0	112.67	9.938		
14,000.0	7,662.0	14,035.8	7,662.0	114.4	0.0	90.00	6,100.0	738.6	1,119.0	1,004.6	114.37	9.783		
14,100.0	7,662.0	14,135.8	7,662.0	116.1	0.0	90.00	6,200.0	737.8	1,118.2	1,002.2	116.08	9.633		
14,200.0	7,662.0	14,235.8	7,662.0	117.8	0.0	90.00	6,300.0	737.0	1,117.5	999.7	117.79	9.487		
14,300.0	7,662.0	14,335.8	7,662.0	119.5	0.0	90.00	6,400.0	736.1	1,116.8	997.3	119.50	9.346		
14,400.0	7,662.0	14,435.8	7,662.0	121.3	0.0	90.00	6,500.0	735.3	1,116.1	994.9	121.21	9.208		
14,500.0	7,662.0	14,535.8	7,662.0	123.0	0.0	90.00	6,600.0	734.5	1,115.4	992.5	122.93	9.073		
14,600.0	7,662.0	14,635.8	7,662.0	124.7	0.0	90.00	6,700.0	733.7	1,114.7	990.0	124.64	8.943		
14,700.0	7,662.0	14,735.8	7,662.0	126.4	0.0	90.00	6,800.0	732.8	1,113.9	987.6	126.36	8.816		
14,800.0	7,662.0	14,835.8	7,662.0	128.1	0.0	90.00	6,900.0	732.0	1,113.2	985.2	128.08	8.692		
14,900.0	7,662.0	14,935.8	7,662.0	129.8	0.0	90.00	7,000.0	731.2	1,112.5	982.7	129.80	8.571		
15,000.0	7,662.0	15,035.8	7,662.0	131.6	0.0	90.00	7,100.0	730.4	1,111.8	980.3	131.52	8.454		
15,100.0	7,662.0	15,135.8	7,662.0	133.3	0.0	90.00	7,200.0	729.5	1,111.1	977.8	133.24	8.339		
15,200.0	7,662.0	15,235.8	7,662.0	135.0	0.0	90.00	7,300.0	728.7	1,110.4	975.4	134.96	8.227		
15,300.0	7,662.0	15,335.8	7,662.0	136.7	0.0	90.00	7,400.0	727.9	1,109.7	973.0	136.68	8.118		
15,400.0	7,662.0	15,435.8	7,662.0	138.4	0.0	90.00	7,500.0	727.0	1,108.9	970.5	138.41	8.012		
15,500.0	7,662.0	15,535.8	7,662.0	140.2	0.0	90.00	7,599.9	726.2	1,108.2	968.1	140.13	7.908		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													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	7,662.0	15,635.8	7,662.0	141.9	0.0	90.00	7,699.9	725.4	1,107.5	965.6	141.86	7.807		
15,700.0	7,662.0	15,735.8	7,662.0	143.6	0.0	90.00	7,799.9	724.6	1,106.8	963.2	143.59	7.708		
15,800.0	7,662.0	15,835.8	7,662.0	145.3	0.0	90.00	7,899.9	723.7	1,106.1	960.8	145.32	7.612		
15,900.0	7,662.0	15,935.8	7,662.0	147.1	0.0	90.00	7,999.9	722.9	1,105.4	958.3	147.05	7.517		
16,000.0	7,662.0	16,035.8	7,662.0	148.8	0.0	90.00	8,099.9	722.1	1,104.6	955.9	148.78	7.425		
16,100.0	7,662.0	16,135.8	7,662.0	150.5	0.0	90.00	8,199.9	721.3	1,103.9	953.4	150.51	7.335		
16,200.0	7,662.0	16,235.8	7,662.0	152.3	0.0	90.00	8,299.9	720.4	1,103.2	951.0	152.24	7.247		
16,300.0	7,662.0	16,335.8	7,662.0	154.0	0.0	90.00	8,399.9	719.6	1,102.5	948.5	153.97	7.161		
16,400.0	7,662.0	16,435.8	7,662.0	155.7	0.0	90.00	8,499.9	718.8	1,101.8	946.1	155.70	7.076		
16,500.0	7,662.0	16,535.8	7,662.0	157.5	0.0	90.00	8,599.9	718.0	1,101.1	943.6	157.44	6.994		
16,600.0	7,662.0	16,635.8	7,662.0	159.2	0.0	90.00	8,699.9	717.1	1,100.4	941.2	159.17	6.913		
16,700.0	7,662.0	16,735.8	7,662.0	160.9	0.0	90.00	8,799.9	716.3	1,099.6	938.7	160.90	6.834		
16,800.0	7,662.0	16,835.8	7,662.0	162.7	0.0	90.00	8,899.9	715.5	1,098.9	936.3	162.64	6.757		
16,900.0	7,662.0	16,935.8	7,662.0	164.4	0.0	90.00	8,999.9	714.6	1,098.2	933.8	164.38	6.681		
17,000.0	7,662.0	17,035.8	7,662.0	166.1	0.0	90.00	9,099.9	713.8	1,097.5	931.4	166.11	6.607		
17,100.0	7,662.0	17,135.8	7,662.0	167.9	0.0	90.00	9,199.9	713.0	1,096.8	928.9	167.85	6.534		
17,200.0	7,662.0	17,235.7	7,662.0	169.6	0.0	90.00	9,299.8	712.2	1,096.1	926.5	169.59	6.463		
17,300.0	7,662.0	17,335.7	7,662.0	171.3	0.0	90.00	9,399.8	711.3	1,095.3	924.0	171.32	6.393		
17,400.0	7,662.0	17,435.7	7,662.0	173.1	0.0	90.00	9,499.8	710.5	1,094.6	921.6	173.06	6.325		
17,500.0	7,662.0	17,535.7	7,662.0	174.8	0.0	90.00	9,599.8	709.7	1,093.9	919.1	174.80	6.258		
17,600.0	7,662.0	17,635.7	7,662.0	176.6	0.0	90.00	9,699.8	708.9	1,093.2	916.7	176.54	6.192		
17,700.0	7,662.0	17,735.7	7,662.0	178.3	0.0	90.00	9,799.8	708.0	1,092.5	914.2	178.28	6.128		
17,799.6	7,662.0	17,835.3	7,662.0	180.0	0.0	90.00	9,899.4	707.2	1,091.8	911.8	180.02	6.065 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	89.71	0.5	105.0	105.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.71	0.5	105.0	105.0	104.7	0.28	379.087		
200.0	200.0	200.0	200.0	1.0	0.0	89.71	0.5	105.0	105.0	104.2	0.80	131.620		
300.0	300.0	300.0	300.0	1.5	0.0	89.71	0.5	105.0	105.0	103.8	1.22	85.762		
400.0	400.0	400.0	400.0	1.9	0.0	89.71	0.5	105.0	105.0	103.4	1.62	64.888		
500.0	500.0	500.0	500.0	2.3	0.0	89.71	0.5	105.0	105.0	103.0	2.00	52.533		
600.0	600.0	600.0	600.0	2.7	0.0	89.71	0.5	105.0	105.0	102.6	2.37	44.258		
700.0	700.0	700.0	700.0	3.1	0.0	89.71	0.5	105.0	105.0	102.3	2.74	38.292		
800.0	800.0	800.0	800.0	3.5	0.0	89.71	0.5	105.0	105.0	101.9	3.11	33.772		
900.0	900.0	900.0	900.0	3.9	0.0	89.71	0.5	105.0	105.0	101.5	3.47	30.222 CC, ES		
1,000.0	1,000.0	996.6	996.6	4.2	0.0	90.01	0.0	106.5	106.6	102.8	3.83	27.809		
1,100.0	1,100.0	1,093.0	1,092.8	4.6	0.0	-125.88	-1.6	111.1	112.4	108.2	4.18	26.886		
1,200.0	1,199.8	1,188.7	1,188.2	5.4	0.0	-126.35	-4.3	118.7	123.4	118.5	4.85	25.440		
1,300.0	1,299.5	1,283.3	1,282.1	5.9	0.0	-127.32	-8.1	129.1	139.5	134.2	5.31	26.282		
1,400.0	1,399.0	1,376.8	1,374.6	6.2	0.0	-128.10	-12.8	142.3	159.2	153.6	5.61	28.370		
1,500.0	1,498.5	1,469.1	1,465.3	6.5	0.0	-128.33	-18.4	158.1	182.0	176.0	5.94	30.627		
1,600.0	1,598.1	1,560.0	1,554.2	6.8	0.0	-128.19	-24.9	176.3	207.6	201.3	6.26	33.180		
1,700.0	1,697.6	1,654.1	1,645.6	7.1	0.0	-127.85	-32.4	197.3	235.3	228.7	6.58	35.738		
1,800.0	1,797.1	1,750.1	1,738.8	7.4	0.0	-127.57	-40.0	218.8	263.3	256.3	6.93	37.994		
1,900.0	1,896.7	1,846.1	1,832.1	7.8	0.0	-127.35	-47.7	240.3	291.2	283.9	7.28	40.016		
2,000.0	1,996.2	1,942.1	1,925.4	8.1	0.0	-127.16	-55.4	261.9	319.1	311.5	7.63	41.838		
2,100.0	2,095.7	2,038.2	2,018.6	8.4	0.0	-127.00	-63.1	283.4	347.0	339.1	7.98	43.486		
2,200.0	2,195.3	2,134.2	2,111.9	8.8	0.0	-126.87	-70.7	305.0	375.0	366.6	8.34	44.983		
2,300.0	2,294.8	2,230.2	2,205.1	9.1	0.0	-126.75	-78.4	326.5	402.9	394.2	8.69	46.348		
2,400.0	2,394.3	2,326.2	2,298.4	9.5	0.0	-126.65	-86.1	348.0	430.8	421.8	9.05	47.598		
2,500.0	2,493.9	2,422.2	2,391.6	9.8	0.0	-126.56	-93.8	369.6	458.8	449.4	9.41	48.745		
2,600.0	2,593.4	2,518.2	2,484.9	10.2	0.0	-126.48	-101.4	391.1	486.7	476.9	9.77	49.802		
2,700.0	2,692.9	2,614.2	2,578.1	10.5	0.0	-126.41	-109.1	412.7	514.6	504.5	10.14	50.779		
2,800.0	2,792.5	2,710.3	2,671.4	10.9	0.0	-126.35	-116.8	434.2	542.6	532.1	10.50	51.683		
2,900.0	2,892.0	2,806.3	2,764.6	11.3	0.0	-126.30	-124.5	455.7	570.5	559.7	10.86	52.524		
3,000.0	2,991.5	2,902.3	2,857.9	11.6	0.0	-126.24	-132.2	477.3	598.5	587.2	11.23	53.306		
3,100.0	3,091.1	2,998.3	2,951.1	12.0	0.0	-126.20	-139.8	498.8	626.4	614.8	11.59	54.036		
3,200.0	3,190.6	3,094.3	3,044.4	12.4	0.0	-126.16	-147.5	520.4	654.3	642.4	11.96	54.719		
3,300.0	3,290.1	3,190.3	3,137.6	12.7	0.0	-126.12	-155.2	541.9	682.3	670.0	12.32	55.359		
3,400.0	3,389.7	3,286.4	3,230.9	13.1	0.0	-126.08	-162.9	563.4	710.2	697.5	12.69	55.959		
3,500.0	3,489.2	3,382.4	3,324.2	13.5	0.0	-126.05	-170.5	585.0	738.2	725.1	13.06	56.524		
3,600.0	3,588.7	3,478.4	3,417.4	13.9	0.0	-126.02	-178.2	606.5	766.1	752.7	13.43	57.056		
3,700.0	3,688.3	3,574.4	3,510.7	14.2	0.0	-125.99	-185.9	628.1	794.1	780.3	13.80	57.558		
3,800.0	3,787.8	3,670.4	3,603.9	14.6	0.0	-125.96	-193.6	649.6	822.0	807.8	14.16	58.033		
3,900.0	3,887.3	3,766.4	3,697.2	15.0	0.0	-125.94	-201.2	671.1	849.9	835.4	14.53	58.482		
4,000.0	3,986.9	3,862.5	3,790.4	15.4	0.0	-125.91	-208.9	692.7	877.9	863.0	14.90	58.907		
4,100.0	4,086.4	3,958.5	3,883.7	15.7	0.0	-125.89	-216.6	714.2	905.8	890.6	15.27	59.311		
4,200.0	4,185.9	4,054.5	3,976.9	16.1	0.0	-125.87	-224.3	735.7	933.8	918.1	15.64	59.695		
4,300.0	4,285.4	4,150.5	4,070.2	16.5	0.0	-125.85	-232.0	757.3	961.7	945.7	16.01	60.060		
4,400.0	4,385.0	4,246.5	4,163.4	16.9	0.0	-125.83	-239.6	778.8	989.7	973.3	16.38	60.407		
4,500.0	4,484.5	4,342.5	4,256.7	17.3	0.0	-125.81	-247.3	800.4	1,017.6	1,000.8	16.75	60.738		
4,600.0	4,584.0	4,438.6	4,349.9	17.7	0.0	-125.80	-255.0	821.9	1,045.5	1,028.4	17.12	61.054		
4,700.0	4,683.6	4,534.6	4,443.2	18.1	0.0	-125.78	-262.7	843.4	1,073.5	1,056.0	17.50	61.356		
4,800.0	4,783.1	4,630.6	4,536.5	18.4	0.0	-125.77	-270.3	865.0	1,101.4	1,083.6	17.87	61.645		
4,900.0	4,882.6	4,726.6	4,629.7	18.8	0.0	-125.75	-278.0	886.5	1,129.4	1,111.1	18.24	61.921		
5,000.0	4,982.2	4,822.6	4,723.0	19.2	0.0	-125.74	-285.7	908.1	1,157.3	1,138.7	18.61	62.185		
5,100.0	5,081.7	4,918.6	4,816.2	19.6	0.0	-125.73	-293.4	929.6	1,185.3	1,166.3	18.98	62.438		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,181.2	5,014.7	4,909.5	20.0	0.0	-125.72	-301.0	951.1	1,213.2	1,193.8	19.35	62.681		
5,300.0	5,280.8	5,110.7	5,002.7	20.4	0.0	-125.70	-308.7	972.7	1,241.1	1,221.4	19.73	62.915		
5,400.0	5,380.3	5,206.7	5,096.0	20.8	0.0	-125.69	-316.4	994.2	1,269.1	1,249.0	20.10	63.139		
5,500.0	5,479.8	5,302.7	5,189.2	21.2	0.0	-125.68	-324.1	1,015.8	1,297.0	1,276.6	20.47	63.354		
5,600.0	5,579.4	5,398.7	5,282.5	21.6	0.0	-125.67	-331.8	1,037.3	1,325.0	1,304.1	20.85	63.561		
5,700.0	5,678.9	5,494.7	5,375.7	22.0	0.0	-125.66	-339.4	1,058.8	1,352.9	1,331.7	21.22	63.761		
5,800.0	5,778.4	5,590.8	5,469.0	22.3	0.0	-125.65	-347.1	1,080.4	1,380.9	1,359.3	21.59	63.953		
5,900.0	5,878.0	5,686.8	5,562.2	22.7	0.0	-125.64	-354.8	1,101.9	1,408.8	1,386.8	21.97	64.138		
6,000.0	5,977.5	5,782.8	5,655.5	23.1	0.0	-125.64	-362.5	1,123.4	1,436.7	1,414.4	22.34	64.316		
6,100.0	6,077.0	5,878.8	5,748.8	23.5	0.0	-125.63	-370.1	1,145.0	1,464.7	1,442.0	22.71	64.488		
6,200.0	6,176.6	5,974.8	5,842.0	23.9	0.0	-125.62	-377.8	1,166.5	1,492.6	1,469.5	23.09	64.654		
6,300.0	6,276.1	6,070.8	5,935.3	24.3	0.0	-125.61	-385.5	1,188.1	1,520.6	1,497.1	23.46	64.814		
6,400.0	6,375.6	6,166.8	6,028.5	24.7	0.0	-125.60	-393.2	1,209.6	1,548.5	1,524.7	23.83	64.969		
6,500.0	6,475.2	6,262.9	6,121.8	25.1	0.0	-125.60	-400.9	1,231.1	1,576.5	1,552.3	24.21	65.119		
6,600.0	6,574.7	6,358.9	6,215.0	25.5	0.0	-125.59	-408.5	1,252.7	1,604.4	1,579.8	24.58	65.264		
6,700.0	6,674.2	6,454.9	6,308.3	25.9	0.0	-125.58	-416.2	1,274.2	1,632.3	1,607.4	24.96	65.404		
6,800.0	6,773.8	6,550.9	6,401.5	26.3	0.0	-125.58	-423.9	1,295.8	1,660.3	1,635.0	25.33	65.539		
6,900.0	6,873.3	6,646.9	6,494.8	26.7	0.0	-125.57	-431.6	1,317.3	1,688.2	1,662.5	25.71	65.670		
7,000.0	6,972.8	6,742.9	6,588.0	27.1	0.0	-125.57	-439.2	1,338.8	1,716.2	1,690.1	26.08	65.797		
7,100.0	7,072.4	6,838.9	6,681.3	27.4	0.0	-151.81	-446.9	1,360.4	1,744.1	1,717.7	26.45	65.938		
7,200.0	7,172.0	6,933.9	6,773.5	27.8	0.0	109.31	-454.5	1,381.7	1,772.0	1,745.2	26.80	66.130		
7,300.0	7,269.0	7,031.1	6,868.1	28.0	0.0	95.82	-453.9	1,403.5	1,799.3	1,772.3	27.06	66.497		
7,400.0	7,360.6	7,132.9	6,965.6	28.2	0.0	90.46	-435.8	1,425.8	1,825.3	1,798.0	27.28	66.914		
7,500.0	7,444.0	7,240.2	7,063.3	28.3	0.0	87.20	-397.9	1,447.9	1,849.1	1,821.6	27.48	67.294		
7,600.0	7,516.7	7,353.6	7,157.3	28.5	0.0	84.94	-338.3	1,469.1	1,870.0	1,842.3	27.67	67.583		
7,700.0	7,576.3	7,473.7	7,242.2	28.6	0.0	83.36	-255.9	1,488.0	1,887.2	1,859.4	27.87	67.716		
7,800.0	7,621.2	7,600.0	7,311.5	28.7	0.0	82.29	-151.7	1,503.1	1,900.2	1,872.1	28.09	67.636		
7,900.0	7,650.0	7,731.2	7,358.2	28.9	0.0	81.66	-29.7	1,512.8	1,908.2	1,879.8	28.35	67.307		
8,000.0	7,661.7	7,865.1	7,376.8	29.2	0.0	81.42	102.5	1,516.0	1,911.0	1,882.4	28.64	66.715		
8,100.0	7,662.0	7,969.0	7,377.0	29.6	0.0	81.42	206.4	1,515.2	1,910.4	1,881.4	28.98	65.919		
8,200.0	7,662.0	8,069.0	7,377.0	30.0	0.0	81.42	306.4	1,514.4	1,909.7	1,880.2	29.42	64.909		
8,300.0	7,662.0	8,169.0	7,377.0	30.6	0.0	81.41	406.4	1,513.5	1,908.9	1,879.0	29.96	63.722		
8,400.0	7,662.0	8,269.0	7,377.0	31.2	0.0	81.41	506.4	1,512.7	1,908.2	1,877.7	30.58	62.392		
8,500.0	7,662.0	8,369.0	7,377.0	32.0	0.0	81.41	606.4	1,511.9	1,907.5	1,876.2	31.30	60.950		
8,600.0	7,662.0	8,469.0	7,377.0	32.8	0.0	81.40	706.4	1,511.1	1,906.8	1,874.7	32.09	59.424		
8,700.0	7,662.0	8,569.0	7,377.0	33.6	0.0	81.40	806.4	1,510.2	1,906.1	1,873.2	32.95	57.841		
8,800.0	7,662.0	8,669.0	7,377.0	34.6	0.0	81.40	906.4	1,509.4	1,905.4	1,871.5	33.89	56.227		
8,900.0	7,662.0	8,769.0	7,377.0	35.6	0.0	81.39	1,006.4	1,508.6	1,904.7	1,869.8	34.88	54.601		
9,000.0	7,662.0	8,869.0	7,377.0	36.6	0.0	81.39	1,106.4	1,507.7	1,904.0	1,868.1	35.94	52.981		
9,100.0	7,662.0	8,969.0	7,377.0	37.8	0.0	81.39	1,206.4	1,506.9	1,903.3	1,866.2	37.04	51.380		
9,200.0	7,662.0	9,069.0	7,377.0	38.9	0.0	81.38	1,306.3	1,506.1	1,902.6	1,864.4	38.20	49.809		
9,300.0	7,662.0	9,169.0	7,377.0	40.1	0.0	81.38	1,406.3	1,505.3	1,901.9	1,862.5	39.39	48.277		
9,400.0	7,662.0	9,269.0	7,377.0	41.4	0.0	81.38	1,506.3	1,504.4	1,901.2	1,860.5	40.63	46.790		
9,500.0	7,662.0	9,369.0	7,377.0	42.6	0.0	81.37	1,606.3	1,503.6	1,900.5	1,858.6	41.91	45.351		
9,600.0	7,662.0	9,469.0	7,377.0	44.0	0.0	81.37	1,706.3	1,502.8	1,899.7	1,856.5	43.21	43.963		
9,700.0	7,662.0	9,569.0	7,377.0	45.3	0.0	81.37	1,806.3	1,502.0	1,899.0	1,854.5	44.55	42.628		
9,800.0	7,662.0	9,669.0	7,377.0	46.7	0.0	81.37	1,906.3	1,501.1	1,898.3	1,852.4	45.91	41.345		
9,900.0	7,662.0	9,769.0	7,377.0	48.1	0.0	81.36	2,006.3	1,500.3	1,897.6	1,850.3	47.30	40.116		
10,000.0	7,662.0	9,869.0	7,377.0	49.5	0.0	81.36	2,106.3	1,499.5	1,896.9	1,848.2	48.72	38.938		
10,100.0	7,662.0	9,968.9	7,377.0	50.9	0.0	81.36	2,206.3	1,498.6	1,896.2	1,846.1	50.15	37.811		
10,200.0	7,662.0	10,068.9	7,377.0	52.4	0.0	81.35	2,306.3	1,497.8	1,895.5	1,843.9	51.60	36.732		
10,300.0	7,662.0	10,168.9	7,377.0	53.9	0.0	81.35	2,406.3	1,497.0	1,894.8	1,841.7	53.07	35.701		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,662.0	10,268.9	7,377.0	55.4	0.0	81.35	2,506.3	1,496.2	1,894.1	1,839.5	54.56	34.715		
10,500.0	7,662.0	10,368.9	7,377.0	56.9	0.0	81.34	2,606.3	1,495.3	1,893.4	1,837.3	56.06	33.773		
10,600.0	7,662.0	10,468.9	7,377.0	58.4	0.0	81.34	2,706.3	1,494.5	1,892.7	1,835.1	57.58	32.871		
10,700.0	7,662.0	10,568.9	7,377.0	59.9	0.0	81.34	2,806.3	1,493.7	1,892.0	1,832.9	59.11	32.009		
10,800.0	7,662.0	10,668.9	7,377.0	61.5	0.0	81.33	2,906.3	1,492.9	1,891.3	1,830.6	60.65	31.185		
10,900.0	7,662.0	10,768.9	7,377.0	63.1	0.0	81.33	3,006.2	1,492.0	1,890.6	1,828.4	62.20	30.396		
11,000.0	7,662.0	10,868.9	7,377.0	64.6	0.0	81.33	3,106.2	1,491.2	1,889.8	1,826.1	63.76	29.640		
11,100.0	7,662.0	10,968.9	7,377.0	66.2	0.0	81.32	3,206.2	1,490.4	1,889.1	1,823.8	65.33	28.917		
11,200.0	7,662.0	11,068.9	7,377.0	67.8	0.0	81.32	3,306.2	1,489.6	1,888.4	1,821.5	66.91	28.224		
11,300.0	7,662.0	11,168.9	7,377.0	69.4	0.0	81.32	3,406.2	1,488.7	1,887.7	1,819.2	68.50	27.559		
11,400.0	7,662.0	11,268.9	7,377.0	71.0	0.0	81.31	3,506.2	1,487.9	1,887.0	1,816.9	70.09	26.922		
11,500.0	7,662.0	11,368.9	7,377.0	72.6	0.0	81.31	3,606.2	1,487.1	1,886.3	1,814.6	71.69	26.311		
11,600.0	7,662.0	11,468.9	7,377.0	74.2	0.0	81.31	3,706.2	1,486.2	1,885.6	1,812.3	73.30	25.724		
11,700.0	7,662.0	11,568.9	7,377.0	75.9	0.0	81.30	3,806.2	1,485.4	1,884.9	1,810.0	74.92	25.160		
11,800.0	7,662.0	11,668.9	7,377.0	77.5	0.0	81.30	3,906.2	1,484.6	1,884.2	1,807.6	76.54	24.618		
11,900.0	7,662.0	11,768.9	7,377.0	79.1	0.0	81.30	4,006.2	1,483.8	1,883.5	1,805.3	78.16	24.097		
12,000.0	7,662.0	11,868.9	7,377.0	80.8	0.0	81.29	4,106.2	1,482.9	1,882.8	1,803.0	79.79	23.595		
12,100.0	7,662.0	11,968.9	7,377.0	82.4	0.0	81.29	4,206.2	1,482.1	1,882.1	1,800.6	81.43	23.113		
12,200.0	7,662.0	12,068.9	7,377.0	84.1	0.0	81.29	4,306.2	1,481.3	1,881.4	1,798.3	83.07	22.648		
12,300.0	7,662.0	12,168.9	7,377.0	85.7	0.0	81.28	4,406.2	1,480.5	1,880.6	1,795.9	84.72	22.200		
12,400.0	7,662.0	12,268.9	7,377.0	87.4	0.0	81.28	4,506.2	1,479.6	1,879.9	1,793.6	86.36	21.768		
12,500.0	7,662.0	12,368.9	7,377.0	89.1	0.0	81.28	4,606.1	1,478.8	1,879.2	1,791.2	88.02	21.351		
12,600.0	7,662.0	12,468.9	7,377.0	90.7	0.0	81.27	4,706.1	1,478.0	1,878.5	1,788.9	89.67	20.949		
12,700.0	7,662.0	12,568.9	7,377.0	92.4	0.0	81.27	4,806.1	1,477.1	1,877.8	1,786.5	91.33	20.561		
12,800.0	7,662.0	12,668.9	7,377.0	94.1	0.0	81.27	4,906.1	1,476.3	1,877.1	1,784.1	92.99	20.186		
12,900.0	7,662.0	12,768.9	7,377.0	95.8	0.0	81.26	5,006.1	1,475.5	1,876.4	1,781.7	94.66	19.823		
13,000.0	7,662.0	12,868.9	7,377.0	97.5	0.0	81.26	5,106.1	1,474.7	1,875.7	1,779.4	96.33	19.472		
13,100.0	7,662.0	12,968.9	7,377.0	99.1	0.0	81.26	5,206.1	1,473.8	1,875.0	1,777.0	98.00	19.133		
13,200.0	7,662.0	13,068.9	7,377.0	100.8	0.0	81.25	5,306.1	1,473.0	1,874.3	1,774.6	99.67	18.805		
13,300.0	7,662.0	13,168.9	7,377.0	102.5	0.0	81.25	5,406.1	1,472.2	1,873.6	1,772.2	101.35	18.487		
13,400.0	7,662.0	13,268.9	7,377.0	104.2	0.0	81.25	5,506.1	1,471.4	1,872.9	1,769.8	103.02	18.179		
13,500.0	7,662.0	13,368.9	7,377.0	105.9	0.0	81.24	5,606.1	1,470.5	1,872.2	1,767.5	104.70	17.880		
13,600.0	7,662.0	13,468.9	7,377.0	107.6	0.0	81.24	5,706.1	1,469.7	1,871.5	1,765.1	106.39	17.591		
13,700.0	7,662.0	13,568.9	7,377.0	109.3	0.0	81.24	5,806.1	1,468.9	1,870.7	1,762.7	108.07	17.310		
13,800.0	7,662.0	13,668.9	7,377.0	111.0	0.0	81.23	5,906.1	1,468.0	1,870.0	1,760.3	109.76	17.038		
13,900.0	7,662.0	13,768.9	7,377.0	112.7	0.0	81.23	6,006.1	1,467.2	1,869.3	1,757.9	111.45	16.773		
14,000.0	7,662.0	13,868.9	7,377.0	114.4	0.0	81.23	6,106.1	1,466.4	1,868.6	1,755.5	113.14	16.517		
14,100.0	7,662.0	13,968.9	7,377.0	116.1	0.0	81.22	6,206.1	1,465.6	1,867.9	1,753.1	114.83	16.267		
14,200.0	7,662.0	14,068.9	7,377.0	117.8	0.0	81.22	6,306.0	1,464.7	1,867.2	1,750.7	116.52	16.025		
14,300.0	7,662.0	14,168.9	7,377.0	119.5	0.0	81.22	6,406.0	1,463.9	1,866.5	1,748.3	118.22	15.789		
14,400.0	7,662.0	14,268.9	7,377.0	121.3	0.0	81.21	6,506.0	1,463.1	1,865.8	1,745.9	119.91	15.560		
14,500.0	7,662.0	14,368.9	7,377.0	123.0	0.0	81.21	6,606.0	1,462.3	1,865.1	1,743.5	121.61	15.337		
14,600.0	7,662.0	14,468.9	7,377.0	124.7	0.0	81.21	6,706.0	1,461.4	1,864.4	1,741.1	123.31	15.120		
14,700.0	7,662.0	14,568.9	7,377.0	126.4	0.0	81.20	6,806.0	1,460.6	1,863.7	1,738.7	125.01	14.908		
14,800.0	7,662.0	14,668.9	7,377.0	128.1	0.0	81.20	6,906.0	1,459.8	1,863.0	1,736.3	126.71	14.703		
14,900.0	7,662.0	14,768.9	7,377.0	129.8	0.0	81.20	7,006.0	1,459.0	1,862.3	1,733.8	128.41	14.502		
15,000.0	7,662.0	14,868.9	7,377.0	131.6	0.0	81.19	7,106.0	1,458.1	1,861.5	1,731.4	130.11	14.307		
15,100.0	7,662.0	14,968.9	7,377.0	133.3	0.0	81.19	7,206.0	1,457.3	1,860.8	1,729.0	131.82	14.117		
15,200.0	7,662.0	15,068.9	7,377.0	135.0	0.0	81.19	7,306.0	1,456.5	1,860.1	1,726.6	133.52	13.931		
15,300.0	7,662.0	15,168.9	7,377.0	136.7	0.0	81.18	7,406.0	1,455.6	1,859.4	1,724.2	135.23	13.750		
15,400.0	7,662.0	15,268.9	7,377.0	138.4	0.0	81.18	7,506.0	1,454.8	1,858.7	1,721.8	136.94	13.573		
15,500.0	7,662.0	15,368.9	7,377.0	140.2	0.0	81.18	7,606.0	1,454.0	1,858.0	1,719.4	138.65	13.401		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,662.0	15,468.8	7,377.0	141.9	0.0	81.17	7,706.0	1,453.2	1,857.3	1,716.9	140.36	13.233		
15,700.0	7,662.0	15,568.8	7,377.0	143.6	0.0	81.17	7,806.0	1,452.3	1,856.6	1,714.5	142.07	13.068		
15,800.0	7,662.0	15,668.8	7,377.0	145.3	0.0	81.17	7,906.0	1,451.5	1,855.9	1,712.1	143.78	12.908		
15,900.0	7,662.0	15,768.8	7,377.0	147.1	0.0	81.16	8,005.9	1,450.7	1,855.2	1,709.7	145.49	12.751		
16,000.0	7,662.0	15,868.8	7,377.0	148.8	0.0	81.16	8,105.9	1,449.9	1,854.5	1,707.3	147.20	12.598		
16,100.0	7,662.0	15,968.8	7,377.0	150.5	0.0	81.16	8,205.9	1,449.0	1,853.8	1,704.9	148.92	12.448		
16,200.0	7,662.0	16,068.8	7,377.0	152.3	0.0	81.15	8,305.9	1,448.2	1,853.1	1,702.4	150.63	12.302		
16,300.0	7,662.0	16,168.8	7,377.0	154.0	0.0	81.15	8,405.9	1,447.4	1,852.4	1,700.0	152.35	12.159		
16,400.0	7,662.0	16,268.8	7,377.0	155.7	0.0	81.15	8,505.9	1,446.5	1,851.6	1,697.6	154.06	12.019		
16,500.0	7,662.0	16,368.8	7,377.0	157.5	0.0	81.14	8,605.9	1,445.7	1,850.9	1,695.2	155.78	11.882		
16,600.0	7,662.0	16,468.8	7,377.0	159.2	0.0	81.14	8,705.9	1,444.9	1,850.2	1,692.7	157.49	11.748		
16,700.0	7,662.0	16,568.8	7,377.0	160.9	0.0	81.14	8,805.9	1,444.1	1,849.5	1,690.3	159.21	11.617		
16,800.0	7,662.0	16,668.8	7,377.0	162.7	0.0	81.13	8,905.9	1,443.2	1,848.8	1,687.9	160.93	11.488		
16,900.0	7,662.0	16,768.8	7,377.0	164.4	0.0	81.13	9,005.9	1,442.4	1,848.1	1,685.5	162.65	11.363		
17,000.0	7,662.0	16,868.8	7,377.0	166.1	0.0	81.13	9,105.9	1,441.6	1,847.4	1,683.0	164.37	11.240		
17,100.0	7,662.0	16,968.8	7,377.0	167.9	0.0	81.12	9,205.9	1,440.8	1,846.7	1,680.6	166.09	11.119		
17,200.0	7,662.0	17,068.8	7,377.0	169.6	0.0	81.12	9,305.9	1,439.9	1,846.0	1,678.2	167.81	11.001		
17,300.0	7,662.0	17,168.8	7,377.0	171.3	0.0	81.12	9,405.9	1,439.1	1,845.3	1,675.8	169.53	10.885		
17,400.0	7,662.0	17,268.8	7,377.0	173.1	0.0	81.11	9,505.9	1,438.3	1,844.6	1,673.3	171.25	10.771		
17,500.0	7,662.0	17,368.8	7,377.0	174.8	0.0	81.11	9,605.9	1,437.5	1,843.9	1,670.9	172.97	10.660		
17,600.0	7,662.0	17,468.8	7,377.0	176.6	0.0	81.10	9,705.8	1,436.6	1,843.2	1,668.5	174.69	10.551		
17,700.0	7,662.0	17,568.8	7,377.0	178.3	0.0	81.10	9,805.8	1,435.8	1,842.5	1,666.0	176.41	10.444		
17,799.6	7,662.0	17,668.4	7,377.0	180.0	0.0	81.10	9,905.4	1,435.0	1,841.8	1,663.6	178.13	10.339 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	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 - 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	89.72	0.4	90.0	90.0				
100.0	100.0	100.0	100.0	0.4	0.0	89.72	0.4	90.0	90.0	89.7	0.28	324.882	
200.0	200.0	200.0	200.0	1.0	0.0	89.72	0.4	90.0	90.0	89.2	0.80	112.798	
300.0	300.0	300.0	300.0	1.5	0.0	89.72	0.4	90.0	90.0	88.8	1.22	73.496	
400.0	400.0	400.0	400.0	1.9	0.0	89.72	0.4	90.0	90.0	88.4	1.62	55.606	
500.0	500.0	500.0	500.0	2.3	0.0	89.72	0.4	90.0	90.0	88.0	2.00	45.018	
600.0	600.0	600.0	600.0	2.7	0.0	89.72	0.4	90.0	90.0	87.6	2.37	37.927	
700.0	700.0	700.0	700.0	3.1	0.0	89.72	0.4	90.0	90.0	87.2	2.74	32.814	
800.0	800.0	800.0	800.0	3.5	0.0	89.72	0.4	90.0	90.0	86.9	3.11	28.940	
900.0	900.0	900.0	900.0	3.9	0.0	89.72	0.4	90.0	90.0	86.5	3.47	25.898	
1,000.0	1,000.0	1,000.0	1,000.0	4.2	0.0	89.72	0.4	90.0	90.0	86.1	3.84	23.442 CC, ES	
1,100.0	1,100.0	1,097.1	1,097.1	4.6	0.0	-126.80	-0.2	91.5	92.6	88.4	4.20	22.060	
1,200.0	1,199.8	1,193.8	1,193.7	5.4	0.0	-127.89	-2.1	96.0	100.4	95.5	4.89	20.524	
1,300.0	1,299.5	1,289.7	1,289.2	5.9	0.0	-129.35	-5.2	103.5	113.4	108.0	5.37	21.119	
1,400.0	1,399.0	1,384.7	1,383.5	6.2	0.0	-130.32	-9.5	113.8	130.0	124.4	5.68	22.884	
1,500.0	1,498.5	1,478.7	1,476.5	6.5	0.0	-130.49	-15.0	126.8	149.6	143.6	6.01	24.876	
1,600.0	1,598.1	1,571.5	1,567.7	6.8	0.0	-130.15	-21.5	142.4	172.0	165.7	6.33	27.173	
1,700.0	1,697.6	1,666.6	1,660.8	7.1	0.0	-129.54	-29.1	160.6	196.6	189.9	6.65	29.542	
1,800.0	1,797.1	1,763.5	1,755.5	7.4	0.0	-129.03	-36.9	179.3	221.4	214.4	7.00	31.649	
1,900.0	1,896.7	1,860.3	1,850.2	7.8	0.0	-128.63	-44.7	198.0	246.2	238.9	7.34	33.538	
2,000.0	1,996.2	1,957.2	1,944.9	8.1	0.0	-128.30	-52.6	216.8	271.1	263.4	7.69	35.239	
2,100.0	2,095.7	2,054.0	2,039.6	8.4	0.0	-128.02	-60.4	235.5	295.9	287.9	8.05	36.779	
2,200.0	2,195.3	2,150.9	2,134.3	8.8	0.0	-127.79	-68.2	254.2	320.8	312.4	8.40	38.178	
2,300.0	2,294.8	2,247.7	2,229.0	9.1	0.0	-127.59	-76.0	272.9	345.6	336.9	8.76	39.454	
2,400.0	2,394.3	2,344.6	2,323.7	9.5	0.0	-127.42	-83.9	291.6	370.5	361.4	9.12	40.621	
2,500.0	2,493.9	2,441.5	2,418.4	9.8	0.0	-127.27	-91.7	310.3	395.4	385.9	9.48	41.694	
2,600.0	2,593.4	2,538.3	2,513.1	10.2	0.0	-127.14	-99.5	329.1	420.2	410.4	9.85	42.681	
2,700.0	2,692.9	2,635.2	2,607.8	10.5	0.0	-127.02	-107.3	347.8	445.1	434.9	10.21	43.594	
2,800.0	2,792.5	2,732.0	2,702.5	10.9	0.0	-126.92	-115.2	366.5	469.9	459.4	10.57	44.440	
2,900.0	2,892.0	2,828.9	2,797.2	11.3	0.0	-126.82	-123.0	385.2	494.8	483.9	10.94	45.226	
3,000.0	2,991.5	2,925.7	2,891.9	11.6	0.0	-126.74	-130.8	403.9	519.7	508.4	11.31	45.957	
3,100.0	3,091.1	3,022.6	2,986.7	12.0	0.0	-126.66	-138.6	422.6	544.6	532.9	11.68	46.640	
3,200.0	3,190.6	3,119.4	3,081.4	12.4	0.0	-126.59	-146.5	441.4	569.4	557.4	12.04	47.278	
3,300.0	3,290.1	3,216.3	3,176.1	12.7	0.0	-126.52	-154.3	460.1	594.3	581.9	12.41	47.877	
3,400.0	3,389.7	3,313.1	3,270.8	13.1	0.0	-126.46	-162.1	478.8	619.2	606.4	12.78	48.438	
3,500.0	3,489.2	3,410.0	3,365.5	13.5	0.0	-126.41	-169.9	497.5	644.0	630.9	13.15	48.967	
3,600.0	3,588.7	3,506.9	3,460.2	13.9	0.0	-126.36	-177.8	516.2	668.9	655.4	13.52	49.465	
3,700.0	3,688.3	3,603.7	3,554.9	14.2	0.0	-126.31	-185.6	534.9	693.8	679.9	13.89	49.935	
3,800.0	3,787.8	3,700.6	3,649.6	14.6	0.0	-126.26	-193.4	553.7	718.7	704.4	14.27	50.379	
3,900.0	3,887.3	3,797.4	3,744.3	15.0	0.0	-126.22	-201.2	572.4	743.5	728.9	14.64	50.799	
4,000.0	3,986.9	3,894.3	3,839.0	15.4	0.0	-126.18	-209.1	591.1	768.4	753.4	15.01	51.198	
4,100.0	4,086.4	3,991.1	3,933.7	15.7	0.0	-126.15	-216.9	609.8	793.3	777.9	15.38	51.576	
4,200.0	4,185.9	4,088.0	4,028.4	16.1	0.0	-126.11	-224.7	628.5	818.2	802.4	15.75	51.935	
4,300.0	4,285.4	4,184.8	4,123.1	16.5	0.0	-126.08	-232.5	647.2	843.0	826.9	16.13	52.277	
4,400.0	4,385.0	4,281.7	4,217.8	16.9	0.0	-126.05	-240.4	666.0	867.9	851.4	16.50	52.603	
4,500.0	4,484.5	4,378.6	4,312.6	17.3	0.0	-126.02	-248.2	684.7	892.8	875.9	16.87	52.913	
4,600.0	4,584.0	4,475.4	4,407.3	17.7	0.0	-126.00	-256.0	703.4	917.7	900.4	17.25	53.210	
4,700.0	4,683.6	4,572.3	4,502.0	18.1	0.0	-125.97	-263.8	722.1	942.5	924.9	17.62	53.493	
4,800.0	4,783.1	4,669.1	4,596.7	18.4	0.0	-125.95	-271.7	740.8	967.4	949.4	17.99	53.763	
4,900.0	4,882.6	4,766.0	4,691.4	18.8	0.0	-125.92	-279.5	759.5	992.3	973.9	18.37	54.023	
5,000.0	4,982.2	4,862.8	4,786.1	19.2	0.0	-125.90	-287.3	778.3	1,017.2	998.4	18.74	54.271	
5,100.0	5,081.7	4,959.7	4,880.8	19.6	0.0	-125.88	-295.1	797.0	1,042.1	1,022.9	19.12	54.509	

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	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 - 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	5,181.2	5,056.5	4,975.5	20.0	0.0	-125.86	-303.0	815.7	1,066.9	1,047.4	19.49	54.737		
5,300.0	5,280.8	5,153.4	5,070.2	20.4	0.0	-125.84	-310.8	834.4	1,091.8	1,071.9	19.87	54.956		
5,400.0	5,380.3	5,250.3	5,164.9	20.8	0.0	-125.82	-318.6	853.1	1,116.7	1,096.4	20.24	55.167		
5,500.0	5,479.8	5,347.1	5,259.6	21.2	0.0	-125.81	-326.4	871.8	1,141.6	1,121.0	20.62	55.369		
5,600.0	5,579.4	5,444.0	5,354.3	21.6	0.0	-125.79	-334.3	890.6	1,166.4	1,145.5	20.99	55.564		
5,700.0	5,678.9	5,540.8	5,449.0	22.0	0.0	-125.77	-342.1	909.3	1,191.3	1,170.0	21.37	55.752		
5,800.0	5,778.4	5,637.7	5,543.7	22.3	0.0	-125.76	-349.9	928.0	1,216.2	1,194.5	21.74	55.933		
5,900.0	5,878.0	5,734.5	5,638.4	22.7	0.0	-125.74	-357.7	946.7	1,241.1	1,219.0	22.12	56.107		
6,000.0	5,977.5	5,831.4	5,733.2	23.1	0.0	-125.73	-365.6	965.4	1,266.0	1,243.5	22.50	56.275		
6,100.0	6,077.0	5,928.2	5,827.9	23.5	0.0	-125.72	-373.4	984.1	1,290.8	1,268.0	22.87	56.437		
6,200.0	6,176.6	6,025.1	5,922.6	23.9	0.0	-125.70	-381.2	1,002.9	1,315.7	1,292.5	23.25	56.594		
6,300.0	6,276.1	6,122.0	6,017.3	24.3	0.0	-125.69	-389.0	1,021.6	1,340.6	1,317.0	23.62	56.745		
6,400.0	6,375.6	6,218.8	6,112.0	24.7	0.0	-125.68	-396.9	1,040.3	1,365.5	1,341.5	24.00	56.892		
6,500.0	6,475.2	6,315.7	6,206.7	25.1	0.0	-125.67	-404.7	1,059.0	1,390.4	1,366.0	24.38	57.033		
6,600.0	6,574.7	6,412.5	6,301.4	25.5	0.0	-125.66	-412.5	1,077.7	1,415.2	1,390.5	24.75	57.170		
6,700.0	6,674.2	6,509.4	6,396.1	25.9	0.0	-125.65	-420.3	1,096.5	1,440.1	1,415.0	25.13	57.302		
6,800.0	6,773.8	6,606.2	6,490.8	26.3	0.0	-125.64	-428.2	1,115.2	1,465.0	1,439.5	25.51	57.430		
6,900.0	6,873.3	6,703.1	6,585.5	26.7	0.0	-125.63	-436.0	1,133.9	1,489.9	1,464.0	25.89	57.555		
7,000.0	6,972.8	6,799.9	6,680.2	27.1	0.0	-125.62	-443.8	1,152.6	1,514.7	1,488.5	26.26	57.675		
7,100.0	7,072.4	6,896.8	6,774.9	27.4	0.0	-151.76	-451.6	1,171.3	1,539.6	1,513.0	26.63	57.807		
7,200.0	7,172.0	6,994.0	6,870.0	27.8	0.0	109.75	-459.0	1,190.1	1,564.5	1,537.5	26.99	57.974		
7,300.0	7,269.0	7,097.4	6,971.2	28.0	0.0	96.57	-453.8	1,209.8	1,588.6	1,561.3	27.26	58.268		
7,400.0	7,360.6	7,205.1	7,074.0	28.2	0.0	91.49	-428.8	1,229.3	1,611.2	1,583.7	27.49	58.607		
7,500.0	7,444.0	7,317.5	7,174.4	28.3	0.0	88.47	-382.3	1,248.0	1,631.6	1,603.9	27.69	58.921		
7,600.0	7,516.7	7,434.7	7,267.7	28.5	0.0	86.39	-313.6	1,264.7	1,649.0	1,621.1	27.87	59.163		
7,700.0	7,576.3	7,556.4	7,348.0	28.6	0.0	84.90	-223.6	1,278.4	1,662.8	1,634.7	28.05	59.273		
7,800.0	7,621.2	7,681.4	7,409.3	28.7	0.0	83.87	-115.3	1,287.9	1,672.5	1,644.3	28.25	59.194		
7,900.0	7,650.0	7,808.3	7,446.5	28.9	0.0	83.23	5.6	1,292.5	1,677.7	1,649.3	28.49	58.889		
8,000.0	7,661.7	7,931.7	7,457.0	29.2	0.0	82.96	128.4	1,291.8	1,678.3	1,649.6	28.77	58.345		
8,100.0	7,662.0	8,031.7	7,457.0	29.6	0.0	82.97	228.3	1,289.5	1,676.2	1,647.1	29.10	57.593		
8,200.0	7,662.0	8,131.6	7,457.0	30.0	0.0	82.96	328.3	1,287.3	1,674.1	1,644.6	29.55	56.655		
8,300.0	7,662.0	8,231.6	7,457.0	30.6	0.0	82.96	428.2	1,285.0	1,672.0	1,641.9	30.09	55.565		
8,400.0	7,662.0	8,331.6	7,457.0	31.2	0.0	82.95	528.2	1,282.7	1,669.9	1,639.1	30.72	54.353		
8,500.0	7,662.0	8,431.6	7,457.0	32.0	0.0	82.94	628.1	1,280.5	1,667.7	1,636.3	31.44	53.046		
8,600.0	7,662.0	8,531.6	7,457.0	32.8	0.0	82.93	728.1	1,278.2	1,665.6	1,633.4	32.24	51.669		
8,700.0	7,662.0	8,631.5	7,457.0	33.6	0.0	82.92	828.0	1,276.0	1,663.5	1,630.4	33.11	50.247		
8,800.0	7,662.0	8,731.5	7,457.0	34.6	0.0	82.91	928.0	1,273.7	1,661.4	1,627.3	34.04	48.801		
8,900.0	7,662.0	8,831.5	7,457.0	35.6	0.0	82.90	1,027.9	1,271.5	1,659.2	1,624.2	35.04	47.347		
9,000.0	7,662.0	8,931.5	7,457.0	36.6	0.0	82.89	1,127.9	1,269.2	1,657.1	1,621.0	36.10	45.901		
9,100.0	7,662.0	9,031.4	7,457.0	37.8	0.0	82.88	1,227.8	1,267.0	1,655.0	1,617.8	37.21	44.475		
9,200.0	7,662.0	9,131.4	7,457.0	38.9	0.0	82.87	1,327.8	1,264.7	1,652.8	1,614.5	38.37	43.077		
9,300.0	7,662.0	9,231.4	7,457.0	40.1	0.0	82.86	1,427.7	1,262.4	1,650.7	1,611.1	39.57	41.716		
9,400.0	7,662.0	9,331.4	7,457.0	41.4	0.0	82.86	1,527.7	1,260.2	1,648.6	1,607.8	40.81	40.395		
9,500.0	7,662.0	9,431.3	7,457.0	42.6	0.0	82.85	1,627.6	1,257.9	1,646.5	1,604.4	42.09	39.118		
9,600.0	7,662.0	9,531.3	7,457.0	44.0	0.0	82.84	1,727.6	1,255.7	1,644.3	1,600.9	43.40	37.888		
9,700.0	7,662.0	9,631.3	7,457.0	45.3	0.0	82.83	1,827.5	1,253.4	1,642.2	1,597.5	44.74	36.705		
9,800.0	7,662.0	9,731.3	7,457.0	46.7	0.0	82.82	1,927.5	1,251.2	1,640.1	1,594.0	46.11	35.570		
9,900.0	7,662.0	9,831.3	7,457.0	48.1	0.0	82.81	2,027.4	1,248.9	1,637.9	1,590.4	47.50	34.482		
10,000.0	7,662.0	9,931.2	7,457.0	49.5	0.0	82.80	2,127.4	1,246.7	1,635.8	1,586.9	48.92	33.440		
10,100.0	7,662.0	10,031.2	7,457.0	50.9	0.0	82.79	2,227.3	1,244.4	1,633.7	1,583.3	50.36	32.443		
10,200.0	7,662.0	10,131.2	7,457.0	52.4	0.0	82.78	2,327.3	1,242.2	1,631.6	1,579.8	51.81	31.490		
10,300.0	7,662.0	10,231.2	7,457.0	53.9	0.0	82.77	2,427.2	1,239.9	1,629.4	1,576.2	53.29	30.579		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	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 - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,662.0	10,331.1	7,457.0	55.4	0.0	82.76	2,527.2	1,237.6	1,627.3	1,572.5	54.78	29.708		
10,500.0	7,662.0	10,431.1	7,457.0	56.9	0.0	82.75	2,627.1	1,235.4	1,625.2	1,568.9	56.28	28.876		
10,600.0	7,662.0	10,531.1	7,457.0	58.4	0.0	82.74	2,727.1	1,233.1	1,623.1	1,565.3	57.80	28.080		
10,700.0	7,662.0	10,631.1	7,457.0	59.9	0.0	82.73	2,827.1	1,230.9	1,620.9	1,561.6	59.33	27.320		
10,800.0	7,662.0	10,731.0	7,457.0	61.5	0.0	82.72	2,927.0	1,228.6	1,618.8	1,557.9	60.88	26.592		
10,900.0	7,662.0	10,831.0	7,457.0	63.1	0.0	82.71	3,027.0	1,226.4	1,616.7	1,554.2	62.43	25.896		
11,000.0	7,662.0	10,931.0	7,457.0	64.6	0.0	82.70	3,126.9	1,224.1	1,614.6	1,550.6	63.99	25.229		
11,100.0	7,662.0	11,031.0	7,457.0	66.2	0.0	82.69	3,226.9	1,221.9	1,612.4	1,546.9	65.57	24.591		
11,200.0	7,662.0	11,131.0	7,457.0	67.8	0.0	82.68	3,326.8	1,219.6	1,610.3	1,543.1	67.15	23.980		
11,300.0	7,662.0	11,230.9	7,457.0	69.4	0.0	82.67	3,426.8	1,217.4	1,608.2	1,539.4	68.74	23.394		
11,400.0	7,662.0	11,330.9	7,457.0	71.0	0.0	82.66	3,526.7	1,215.1	1,606.0	1,535.7	70.34	22.833		
11,500.0	7,662.0	11,430.9	7,457.0	72.6	0.0	82.66	3,626.7	1,212.8	1,603.9	1,532.0	71.94	22.294		
11,600.0	7,662.0	11,530.9	7,457.0	74.2	0.0	82.65	3,726.6	1,210.6	1,601.8	1,528.2	73.56	21.776		
11,700.0	7,662.0	11,630.8	7,457.0	75.9	0.0	82.64	3,826.6	1,208.3	1,599.7	1,524.5	75.17	21.279		
11,800.0	7,662.0	11,730.8	7,457.0	77.5	0.0	82.63	3,926.5	1,206.1	1,597.5	1,520.7	76.80	20.802		
11,900.0	7,662.0	11,830.8	7,457.0	79.1	0.0	82.62	4,026.5	1,203.8	1,595.4	1,517.0	78.43	20.343		
12,000.0	7,662.0	11,930.8	7,457.0	80.8	0.0	82.61	4,126.4	1,201.6	1,593.3	1,513.2	80.06	19.901		
12,100.0	7,662.0	12,030.7	7,457.0	82.4	0.0	82.60	4,226.4	1,199.3	1,591.2	1,509.5	81.70	19.476		
12,200.0	7,662.0	12,130.7	7,457.0	84.1	0.0	82.59	4,326.3	1,197.1	1,589.0	1,505.7	83.34	19.066		
12,300.0	7,662.0	12,230.7	7,457.0	85.7	0.0	82.58	4,426.3	1,194.8	1,586.9	1,501.9	84.99	18.672		
12,400.0	7,662.0	12,330.7	7,457.0	87.4	0.0	82.57	4,526.2	1,192.6	1,584.8	1,498.1	86.64	18.291		
12,500.0	7,662.0	12,430.7	7,457.0	89.1	0.0	82.56	4,626.2	1,190.3	1,582.7	1,494.4	88.30	17.925		
12,600.0	7,662.0	12,530.6	7,457.0	90.7	0.0	82.55	4,726.1	1,188.0	1,580.5	1,490.6	89.95	17.570		
12,700.0	7,662.0	12,630.6	7,457.0	92.4	0.0	82.54	4,826.1	1,185.8	1,578.4	1,486.8	91.62	17.229		
12,800.0	7,662.0	12,730.6	7,457.0	94.1	0.0	82.53	4,926.0	1,183.5	1,576.3	1,483.0	93.28	16.898		
12,900.0	7,662.0	12,830.6	7,457.0	95.8	0.0	82.52	5,026.0	1,181.3	1,574.2	1,479.2	94.95	16.579		
13,000.0	7,662.0	12,930.5	7,457.0	97.5	0.0	82.51	5,125.9	1,179.0	1,572.0	1,475.4	96.62	16.270		
13,100.0	7,662.0	13,030.5	7,457.0	99.1	0.0	82.50	5,225.9	1,176.8	1,569.9	1,471.6	98.29	15.972		
13,200.0	7,662.0	13,130.5	7,457.0	100.8	0.0	82.48	5,325.8	1,174.5	1,567.8	1,467.8	99.97	15.683		
13,300.0	7,662.0	13,230.5	7,457.0	102.5	0.0	82.47	5,425.8	1,172.3	1,565.7	1,464.0	101.65	15.403		
13,400.0	7,662.0	13,330.5	7,457.0	104.2	0.0	82.46	5,525.7	1,170.0	1,563.5	1,460.2	103.33	15.132		
13,500.0	7,662.0	13,430.4	7,457.0	105.9	0.0	82.45	5,625.7	1,167.7	1,561.4	1,456.4	105.01	14.869		
13,600.0	7,662.0	13,530.4	7,457.0	107.6	0.0	82.44	5,725.6	1,165.5	1,559.3	1,452.6	106.69	14.614		
13,700.0	7,662.0	13,630.4	7,457.0	109.3	0.0	82.43	5,825.6	1,163.2	1,557.1	1,448.8	108.38	14.367		
13,800.0	7,662.0	13,730.4	7,457.0	111.0	0.0	82.42	5,925.6	1,161.0	1,555.0	1,445.0	110.07	14.128		
13,900.0	7,662.0	13,830.3	7,457.0	112.7	0.0	82.41	6,025.5	1,158.7	1,552.9	1,441.1	111.76	13.895		
14,000.0	7,662.0	13,930.3	7,457.0	114.4	0.0	82.40	6,125.5	1,156.5	1,550.8	1,437.3	113.45	13.669		
14,100.0	7,662.0	14,030.3	7,457.0	116.1	0.0	82.39	6,225.4	1,154.2	1,548.6	1,433.5	115.15	13.449		
14,200.0	7,662.0	14,130.3	7,457.0	117.8	0.0	82.38	6,325.4	1,152.0	1,546.5	1,429.7	116.84	13.236		
14,300.0	7,662.0	14,230.2	7,457.0	119.5	0.0	82.37	6,425.3	1,149.7	1,544.4	1,425.9	118.54	13.029		
14,400.0	7,662.0	14,330.2	7,457.0	121.3	0.0	82.36	6,525.3	1,147.5	1,542.3	1,422.0	120.24	12.827		
14,500.0	7,662.0	14,430.2	7,457.0	123.0	0.0	82.35	6,625.2	1,145.2	1,540.1	1,418.2	121.93	12.631		
14,600.0	7,662.0	14,530.2	7,457.0	124.7	0.0	82.34	6,725.2	1,142.9	1,538.0	1,414.4	123.64	12.440		
14,700.0	7,662.0	14,630.2	7,457.0	126.4	0.0	82.33	6,825.1	1,140.7	1,535.9	1,410.6	125.34	12.254		
14,800.0	7,662.0	14,730.1	7,457.0	128.1	0.0	82.32	6,925.1	1,138.4	1,533.8	1,406.7	127.04	12.073		
14,900.0	7,662.0	14,830.1	7,457.0	129.8	0.0	82.31	7,025.0	1,136.2	1,531.6	1,402.9	128.74	11.897		
15,000.0	7,662.0	14,930.1	7,457.0	131.6	0.0	82.30	7,125.0	1,133.9	1,529.5	1,399.1	130.45	11.725		
15,100.0	7,662.0	15,030.1	7,457.0	133.3	0.0	82.29	7,224.9	1,131.7	1,527.4	1,395.2	132.16	11.558		
15,200.0	7,662.0	15,130.0	7,457.0	135.0	0.0	82.27	7,324.9	1,129.4	1,525.3	1,391.4	133.86	11.394		
15,300.0	7,662.0	15,230.0	7,457.0	136.7	0.0	82.26	7,424.8	1,127.2	1,523.2	1,387.6	135.57	11.235		
15,400.0	7,662.0	15,330.0	7,457.0	138.4	0.0	82.25	7,524.8	1,124.9	1,521.0	1,383.7	137.28	11.080		
15,500.0	7,662.0	15,430.0	7,457.0	140.2	0.0	82.24	7,624.7	1,122.7	1,518.9	1,379.9	138.99	10.928		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	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 - 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	7,662.0	15,529.9	7,457.0	141.9	0.0	82.23	7,724.7	1,120.4	1,516.8	1,376.1	140.70	10.780		
15,700.0	7,662.0	15,629.9	7,457.0	143.6	0.0	82.22	7,824.6	1,118.1	1,514.7	1,372.2	142.41	10.636		
15,800.0	7,662.0	15,729.9	7,457.0	145.3	0.0	82.21	7,924.6	1,115.9	1,512.5	1,368.4	144.12	10.495		
15,900.0	7,662.0	15,829.9	7,457.0	147.1	0.0	82.20	8,024.5	1,113.6	1,510.4	1,364.6	145.84	10.357		
16,000.0	7,662.0	15,929.9	7,457.0	148.8	0.0	82.19	8,124.5	1,111.4	1,508.3	1,360.7	147.55	10.222		
16,100.0	7,662.0	16,029.8	7,457.0	150.5	0.0	82.18	8,224.4	1,109.1	1,506.2	1,356.9	149.27	10.090		
16,200.0	7,662.0	16,129.8	7,457.0	152.3	0.0	82.16	8,324.4	1,106.9	1,504.0	1,353.1	150.98	9.962		
16,300.0	7,662.0	16,229.8	7,457.0	154.0	0.0	82.15	8,424.3	1,104.6	1,501.9	1,349.2	152.70	9.836		
16,400.0	7,662.0	16,329.8	7,457.0	155.7	0.0	82.14	8,524.3	1,102.4	1,499.8	1,345.4	154.41	9.713		
16,500.0	7,662.0	16,429.7	7,457.0	157.5	0.0	82.13	8,624.2	1,100.1	1,497.7	1,341.5	156.13	9.592		
16,600.0	7,662.0	16,529.7	7,457.0	159.2	0.0	82.12	8,724.2	1,097.8	1,495.5	1,337.7	157.85	9.475		
16,700.0	7,662.0	16,629.7	7,457.0	160.9	0.0	82.11	8,824.1	1,095.6	1,493.4	1,333.8	159.56	9.359		
16,800.0	7,662.0	16,729.7	7,457.0	162.7	0.0	82.10	8,924.1	1,093.3	1,491.3	1,330.0	161.28	9.246		
16,900.0	7,662.0	16,829.6	7,457.0	164.4	0.0	82.09	9,024.1	1,091.1	1,489.2	1,326.2	163.00	9.136		
17,000.0	7,662.0	16,929.6	7,457.0	166.1	0.0	82.07	9,124.0	1,088.8	1,487.0	1,322.3	164.72	9.028		
17,100.0	7,662.0	17,029.6	7,457.0	167.9	0.0	82.06	9,224.0	1,086.6	1,484.9	1,318.5	166.44	8.922		
17,200.0	7,662.0	17,129.6	7,457.0	169.6	0.0	82.05	9,323.9	1,084.3	1,482.8	1,314.6	168.16	8.818		
17,300.0	7,662.0	17,229.6	7,457.0	171.3	0.0	82.04	9,423.9	1,082.1	1,480.7	1,310.8	169.88	8.716		
17,400.0	7,662.0	17,329.5	7,457.0	173.1	0.0	82.03	9,523.8	1,079.8	1,478.5	1,306.9	171.60	8.616		
17,500.0	7,662.0	17,429.5	7,457.0	174.8	0.0	82.02	9,623.8	1,077.6	1,476.4	1,303.1	173.32	8.518		
17,600.0	7,662.0	17,529.5	7,457.0	176.6	0.0	82.01	9,723.7	1,075.3	1,474.3	1,299.3	175.05	8.422		
17,700.0	7,662.0	17,629.5	7,457.0	178.3	0.0	81.99	9,823.7	1,073.0	1,472.2	1,295.4	176.77	8.328		
17,799.6	7,662.0	17,720.0	7,457.0	180.0	0.0	81.98	9,914.2	1,071.0	1,470.1	1,291.6	178.48	8.237 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	89.71	0.4	75.0	75.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.71	0.4	75.0	75.0	74.7	0.28	270.788		
200.0	200.0	200.0	200.0	1.0	0.0	89.71	0.4	75.0	75.0	74.2	0.80	94.018		
300.0	300.0	300.0	300.0	1.5	0.0	89.71	0.4	75.0	75.0	73.8	1.22	61.260		
400.0	400.0	400.0	400.0	1.9	0.0	89.71	0.4	75.0	75.0	73.4	1.62	46.350		
500.0	500.0	500.0	500.0	2.3	0.0	89.71	0.4	75.0	75.0	73.0	2.00	37.524		
600.0	600.0	600.0	600.0	2.7	0.0	89.71	0.4	75.0	75.0	72.6	2.37	31.613		
700.0	700.0	700.0	700.0	3.1	0.0	89.71	0.4	75.0	75.0	72.3	2.74	27.352		
800.0	800.0	800.0	800.0	3.5	0.0	89.71	0.4	75.0	75.0	71.9	3.11	24.123		
900.0	900.0	900.0	900.0	3.9	0.0	89.71	0.4	75.0	75.0	71.5	3.47	21.587		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	0.0	89.71	0.4	75.0	75.0	71.2	3.84	19.540 CC, ES		
1,100.0	1,100.0	1,100.0	1,100.0	4.6	0.0	-127.45	0.4	75.0	76.1	71.8	4.21	18.080		
1,200.0	1,199.8	1,197.5	1,197.5	5.4	0.0	-129.69	-0.4	76.5	80.8	75.9	4.93	16.371		
1,300.0	1,299.5	1,294.5	1,294.3	5.9	0.0	-132.05	-2.7	80.9	90.7	85.3	5.44	16.678		
1,400.0	1,399.0	1,390.8	1,390.3	6.2	0.0	-133.38	-6.4	88.1	104.3	98.5	5.76	18.091		
1,500.0	1,498.5	1,486.4	1,485.3	6.5	0.0	-133.49	-11.6	98.1	120.6	114.5	6.10	19.772		
1,600.0	1,598.1	1,581.1	1,578.8	6.8	0.0	-132.82	-18.2	110.8	139.5	133.1	6.41	21.758		
1,700.0	1,697.6	1,676.5	1,672.6	7.1	0.0	-131.72	-26.1	126.0	160.9	154.2	6.73	23.926		
1,800.0	1,797.1	1,774.0	1,768.5	7.4	0.0	-130.76	-34.5	142.1	182.8	175.8	7.06	25.898		
1,900.0	1,896.7	1,871.5	1,864.3	7.8	0.0	-130.01	-42.8	158.2	204.8	197.4	7.40	27.667		
2,000.0	1,996.2	1,969.1	1,960.2	8.1	0.0	-129.40	-51.2	174.2	226.7	219.0	7.75	29.263		
2,100.0	2,095.7	2,066.6	2,056.0	8.4	0.0	-128.90	-59.5	190.3	248.7	240.6	8.10	30.707		
2,200.0	2,195.3	2,164.1	2,151.8	8.8	0.0	-128.49	-67.9	206.4	270.7	262.3	8.45	32.019		
2,300.0	2,294.8	2,261.7	2,247.7	9.1	0.0	-128.13	-76.2	222.4	292.7	283.9	8.81	33.216		
2,400.0	2,394.3	2,359.2	2,343.5	9.5	0.0	-127.83	-84.5	238.5	314.7	305.6	9.17	34.311		
2,500.0	2,493.9	2,456.7	2,439.3	9.8	0.0	-127.56	-92.9	254.6	336.8	327.2	9.54	35.317		
2,600.0	2,593.4	2,554.3	2,535.2	10.2	0.0	-127.33	-101.2	270.6	358.8	348.9	9.90	36.244		
2,700.0	2,692.9	2,651.8	2,631.0	10.5	0.0	-127.12	-109.6	286.7	380.8	370.6	10.26	37.100		
2,800.0	2,792.5	2,749.3	2,726.9	10.9	0.0	-126.94	-117.9	302.8	402.9	392.2	10.63	37.893		
2,900.0	2,892.0	2,846.9	2,822.7	11.3	0.0	-126.77	-126.3	318.8	424.9	413.9	11.00	38.630		
3,000.0	2,991.5	2,944.4	2,918.5	11.6	0.0	-126.63	-134.6	334.9	447.0	435.6	11.37	39.316		
3,100.0	3,091.1	3,041.9	3,014.4	12.0	0.0	-126.49	-143.0	351.0	469.0	457.3	11.74	39.957		
3,200.0	3,190.6	3,139.5	3,110.2	12.4	0.0	-126.37	-151.3	367.0	491.1	479.0	12.11	40.555		
3,300.0	3,290.1	3,237.0	3,206.0	12.7	0.0	-126.26	-159.6	383.1	513.1	500.6	12.48	41.117		
3,400.0	3,389.7	3,334.5	3,301.9	13.1	0.0	-126.16	-168.0	399.2	535.2	522.3	12.85	41.643		
3,500.0	3,489.2	3,432.1	3,397.7	13.5	0.0	-126.06	-176.3	415.2	557.2	544.0	13.22	42.139		
3,600.0	3,588.7	3,529.6	3,493.6	13.9	0.0	-125.97	-184.7	431.3	579.3	565.7	13.60	42.606		
3,700.0	3,688.3	3,627.1	3,589.4	14.2	0.0	-125.89	-193.0	447.4	601.4	587.4	13.97	43.047		
3,800.0	3,787.8	3,724.7	3,685.2	14.6	0.0	-125.82	-201.4	463.4	623.4	609.1	14.34	43.464		
3,900.0	3,887.3	3,822.2	3,781.1	15.0	0.0	-125.75	-209.7	479.5	645.5	630.8	14.72	43.858		
4,000.0	3,986.9	3,919.7	3,876.9	15.4	0.0	-125.68	-218.1	495.6	667.5	652.5	15.09	44.232		
4,100.0	4,086.4	4,017.3	3,972.8	15.7	0.0	-125.62	-226.4	511.6	689.6	674.1	15.47	44.587		
4,200.0	4,185.9	4,114.8	4,068.6	16.1	0.0	-125.56	-234.7	527.7	711.7	695.8	15.84	44.924		
4,300.0	4,285.4	4,212.3	4,164.4	16.5	0.0	-125.51	-243.1	543.8	733.7	717.5	16.22	45.245		
4,400.0	4,385.0	4,309.9	4,260.3	16.9	0.0	-125.46	-251.4	559.8	755.8	739.2	16.59	45.550		
4,500.0	4,484.5	4,407.4	4,356.1	17.3	0.0	-125.41	-259.8	575.9	777.9	760.9	16.97	45.842		
4,600.0	4,584.0	4,504.9	4,451.9	17.7	0.0	-125.37	-268.1	592.0	799.9	782.6	17.34	46.120		
4,700.0	4,683.6	4,602.5	4,547.8	18.1	0.0	-125.32	-276.5	608.0	822.0	804.3	17.72	46.386		
4,800.0	4,783.1	4,700.0	4,643.6	18.4	0.0	-125.28	-284.8	624.1	844.1	826.0	18.10	46.640		
4,900.0	4,882.6	4,797.5	4,739.5	18.8	0.0	-125.24	-293.2	640.2	866.1	847.7	18.47	46.883		
5,000.0	4,982.2	4,895.1	4,835.3	19.2	0.0	-125.21	-301.5	656.2	888.2	869.4	18.85	47.117		
5,100.0	5,081.7	4,992.6	4,931.1	19.6	0.0	-125.17	-309.8	672.3	910.3	891.1	19.23	47.340		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,181.2	5,090.1	5,027.0	20.0	0.0	-125.14	-318.2	688.4	932.4	912.8	19.61	47.555		
5,300.0	5,280.8	5,187.7	5,122.8	20.4	0.0	-125.11	-326.5	704.4	954.4	934.4	19.98	47.761		
5,400.0	5,380.3	5,285.2	5,218.6	20.8	0.0	-125.08	-334.9	720.5	976.5	956.1	20.36	47.959		
5,500.0	5,479.8	5,382.7	5,314.5	21.2	0.0	-125.05	-343.2	736.6	998.6	977.8	20.74	48.150		
5,600.0	5,579.4	5,480.3	5,410.3	21.6	0.0	-125.02	-351.6	752.6	1,020.6	999.5	21.12	48.333		
5,700.0	5,678.9	5,577.8	5,506.2	22.0	0.0	-125.00	-359.9	768.7	1,042.7	1,021.2	21.49	48.510		
5,800.0	5,778.4	5,675.3	5,602.0	22.3	0.0	-124.97	-368.3	784.8	1,064.8	1,042.9	21.87	48.680		
5,900.0	5,878.0	5,772.9	5,697.8	22.7	0.0	-124.95	-376.6	800.8	1,086.9	1,064.6	22.25	48.844		
6,000.0	5,977.5	5,870.4	5,793.7	23.1	0.0	-124.92	-384.9	816.9	1,108.9	1,086.3	22.63	49.002		
6,100.0	6,077.0	5,967.9	5,889.5	23.5	0.0	-124.90	-393.3	833.0	1,131.0	1,108.0	23.01	49.155		
6,200.0	6,176.6	6,065.4	5,985.3	23.9	0.0	-124.88	-401.6	849.0	1,153.1	1,129.7	23.39	49.303		
6,300.0	6,276.1	6,163.0	6,081.2	24.3	0.0	-124.86	-410.0	865.1	1,175.1	1,151.4	23.77	49.445		
6,400.0	6,375.6	6,260.5	6,177.0	24.7	0.0	-124.84	-418.3	881.2	1,197.2	1,173.1	24.15	49.583		
6,500.0	6,475.2	6,358.0	6,272.9	25.1	0.0	-124.82	-426.7	897.3	1,219.3	1,194.8	24.52	49.717		
6,600.0	6,574.7	6,455.6	6,368.7	25.5	0.0	-124.80	-435.0	913.3	1,241.4	1,216.4	24.90	49.846		
6,700.0	6,674.2	6,553.1	6,464.5	25.9	0.0	-124.78	-443.4	929.4	1,263.4	1,238.1	25.28	49.971		
6,800.0	6,773.8	6,650.6	6,560.4	26.3	0.0	-124.76	-451.7	945.5	1,285.5	1,259.8	25.66	50.092		
6,900.0	6,873.3	6,749.8	6,657.9	26.7	0.0	-124.83	-458.4	961.8	1,307.5	1,281.5	26.05	50.200		
7,000.0	6,972.8	6,848.3	6,754.6	27.1	0.0	-125.53	-450.5	977.9	1,329.5	1,303.0	26.41	50.330		
7,100.0	7,072.4	6,939.3	6,841.6	27.4	0.0	-152.88	-428.3	992.2	1,351.8	1,325.1	26.73	50.577		
7,200.0	7,172.0	7,024.9	6,919.4	27.8	0.0	107.12	-395.1	1,004.9	1,374.8	1,347.8	26.98	50.949		
7,300.0	7,269.0	7,107.3	6,988.9	28.0	0.0	92.35	-352.3	1,016.2	1,397.6	1,370.5	27.12	51.527		
7,400.0	7,360.6	7,187.4	7,049.9	28.2	0.0	85.83	-301.4	1,025.9	1,419.4	1,392.2	27.19	52.201		
7,500.0	7,444.0	7,265.8	7,102.3	28.3	0.0	81.53	-243.8	1,034.2	1,439.4	1,412.2	27.22	52.873		
7,600.0	7,516.7	7,342.9	7,145.8	28.5	0.0	78.38	-180.6	1,040.9	1,456.9	1,429.6	27.25	53.471		
7,700.0	7,576.3	7,419.0	7,180.2	28.6	0.0	76.04	-113.0	1,046.1	1,471.1	1,443.8	27.29	53.905		
7,800.0	7,621.2	7,500.0	7,206.8	28.7	0.0	74.39	-36.6	1,049.9	1,481.7	1,454.3	27.39	54.088		
7,900.0	7,650.0	7,569.5	7,220.9	28.9	0.0	73.41	31.4	1,051.7	1,488.3	1,460.7	27.55	54.015		
8,000.0	7,661.7	7,644.3	7,226.9	29.2	0.0	73.04	105.8	1,052.1	1,490.6	1,462.8	27.80	53.619		
8,100.0	7,662.0	7,741.0	7,227.0	29.6	0.0	73.03	202.6	1,051.3	1,490.0	1,461.9	28.12	52.988		
8,200.0	7,662.0	7,841.0	7,227.0	30.0	0.0	73.02	302.6	1,050.5	1,489.3	1,460.8	28.54	52.179		
8,300.0	7,662.0	7,941.0	7,227.0	30.6	0.0	73.01	402.6	1,049.7	1,488.6	1,459.6	29.06	51.225		
8,400.0	7,662.0	8,041.0	7,227.0	31.2	0.0	73.00	502.6	1,048.8	1,488.0	1,458.3	29.67	50.155		
8,500.0	7,662.0	8,141.0	7,227.0	32.0	0.0	72.99	602.5	1,048.0	1,487.3	1,456.9	30.36	48.992		
8,600.0	7,662.0	8,241.0	7,227.0	32.8	0.0	72.98	702.5	1,047.2	1,486.6	1,455.5	31.13	47.761		
8,700.0	7,662.0	8,341.0	7,227.0	33.6	0.0	72.98	802.5	1,046.4	1,485.9	1,453.9	31.97	46.485		
8,800.0	7,662.0	8,441.0	7,227.0	34.6	0.0	72.97	902.5	1,045.5	1,485.2	1,452.4	32.87	45.182		
8,900.0	7,662.0	8,541.0	7,227.0	35.6	0.0	72.96	1,002.5	1,044.7	1,484.5	1,450.7	33.84	43.870		
9,000.0	7,662.0	8,641.0	7,227.0	36.6	0.0	72.95	1,102.5	1,043.9	1,483.9	1,449.0	34.86	42.562		
9,100.0	7,662.0	8,741.0	7,227.0	37.8	0.0	72.94	1,202.5	1,043.1	1,483.2	1,447.2	35.94	41.269		
9,200.0	7,662.0	8,841.0	7,227.0	38.9	0.0	72.94	1,302.5	1,042.2	1,482.5	1,445.4	37.06	40.001		
9,300.0	7,662.0	8,941.0	7,227.0	40.1	0.0	72.93	1,402.5	1,041.4	1,481.8	1,443.6	38.23	38.765		
9,400.0	7,662.0	9,041.0	7,227.0	41.4	0.0	72.92	1,502.5	1,040.6	1,481.1	1,441.7	39.43	37.564		
9,500.0	7,662.0	9,141.0	7,227.0	42.6	0.0	72.91	1,602.5	1,039.7	1,480.4	1,439.8	40.67	36.403		
9,600.0	7,662.0	9,241.0	7,227.0	44.0	0.0	72.90	1,702.5	1,038.9	1,479.8	1,437.8	41.94	35.283		
9,700.0	7,662.0	9,341.0	7,227.0	45.3	0.0	72.90	1,802.5	1,038.1	1,479.1	1,435.8	43.24	34.206		
9,800.0	7,662.0	9,441.0	7,227.0	46.7	0.0	72.89	1,902.5	1,037.3	1,478.4	1,433.8	44.57	33.172		
9,900.0	7,662.0	9,541.0	7,227.0	48.1	0.0	72.88	2,002.5	1,036.4	1,477.7	1,431.8	45.92	32.180		
10,000.0	7,662.0	9,641.0	7,227.0	49.5	0.0	72.87	2,102.5	1,035.6	1,477.0	1,429.7	47.29	31.231		
10,100.0	7,662.0	9,741.0	7,227.0	50.9	0.0	72.86	2,202.5	1,034.8	1,476.3	1,427.6	48.69	30.322		
10,200.0	7,662.0	9,841.0	7,227.0	52.4	0.0	72.85	2,302.4	1,034.0	1,475.6	1,425.5	50.10	29.453		
10,300.0	7,662.0	9,941.0	7,227.0	53.9	0.0	72.85	2,402.4	1,033.1	1,475.0	1,423.4	51.53	28.622		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,662.0	10,041.0	7,227.0	55.4	0.0	72.84	2,502.4	1,032.3	1,474.3	1,421.3	52.98	27.828		
10,500.0	7,662.0	10,141.0	7,227.0	56.9	0.0	72.83	2,602.4	1,031.5	1,473.6	1,419.2	54.44	27.069		
10,600.0	7,662.0	10,241.0	7,227.0	58.4	0.0	72.82	2,702.4	1,030.7	1,472.9	1,417.0	55.91	26.343		
10,700.0	7,662.0	10,341.0	7,227.0	59.9	0.0	72.81	2,802.4	1,029.8	1,472.2	1,414.8	57.40	25.649		
10,800.0	7,662.0	10,441.0	7,227.0	61.5	0.0	72.81	2,902.4	1,029.0	1,471.5	1,412.6	58.90	24.985		
10,900.0	7,662.0	10,541.0	7,227.0	63.1	0.0	72.80	3,002.4	1,028.2	1,470.9	1,410.5	60.41	24.349		
11,000.0	7,662.0	10,640.9	7,227.0	64.6	0.0	72.79	3,102.4	1,027.3	1,470.2	1,408.3	61.92	23.741		
11,100.0	7,662.0	10,740.9	7,227.0	66.2	0.0	72.78	3,202.4	1,026.5	1,469.5	1,406.0	63.45	23.159		
11,200.0	7,662.0	10,840.9	7,227.0	67.8	0.0	72.77	3,302.4	1,025.7	1,468.8	1,403.8	64.99	22.601		
11,300.0	7,662.0	10,940.9	7,227.0	69.4	0.0	72.76	3,402.4	1,024.9	1,468.1	1,401.6	66.53	22.067		
11,400.0	7,662.0	11,040.9	7,227.0	71.0	0.0	72.76	3,502.4	1,024.0	1,467.4	1,399.4	68.08	21.554		
11,500.0	7,662.0	11,140.9	7,227.0	72.6	0.0	72.75	3,602.4	1,023.2	1,466.8	1,397.1	69.64	21.062		
11,600.0	7,662.0	11,240.9	7,227.0	74.2	0.0	72.74	3,702.4	1,022.4	1,466.1	1,394.9	71.20	20.590		
11,700.0	7,662.0	11,340.9	7,227.0	75.9	0.0	72.73	3,802.4	1,021.6	1,465.4	1,392.6	72.77	20.137		
11,800.0	7,662.0	11,440.9	7,227.0	77.5	0.0	72.72	3,902.4	1,020.7	1,464.7	1,390.4	74.35	19.701		
11,900.0	7,662.0	11,540.9	7,227.0	79.1	0.0	72.71	4,002.3	1,019.9	1,464.0	1,388.1	75.93	19.282		
12,000.0	7,662.0	11,640.9	7,227.0	80.8	0.0	72.71	4,102.3	1,019.1	1,463.3	1,385.8	77.51	18.879		
12,100.0	7,662.0	11,740.9	7,227.0	82.4	0.0	72.70	4,202.3	1,018.3	1,462.7	1,383.6	79.10	18.491		
12,200.0	7,662.0	11,840.9	7,227.0	84.1	0.0	72.69	4,302.3	1,017.4	1,462.0	1,381.3	80.70	18.117		
12,300.0	7,662.0	11,940.9	7,227.0	85.7	0.0	72.68	4,402.3	1,016.6	1,461.3	1,379.0	82.29	17.757		
12,400.0	7,662.0	12,040.9	7,227.0	87.4	0.0	72.67	4,502.3	1,015.8	1,460.6	1,376.7	83.90	17.410		
12,500.0	7,662.0	12,140.9	7,227.0	89.1	0.0	72.66	4,602.3	1,014.9	1,459.9	1,374.4	85.50	17.075		
12,600.0	7,662.0	12,240.9	7,227.0	90.7	0.0	72.66	4,702.3	1,014.1	1,459.3	1,372.1	87.11	16.752		
12,700.0	7,662.0	12,340.9	7,227.0	92.4	0.0	72.65	4,802.3	1,013.3	1,458.6	1,369.8	88.72	16.440		
12,800.0	7,662.0	12,440.9	7,227.0	94.1	0.0	72.64	4,902.3	1,012.5	1,457.9	1,367.5	90.34	16.138		
12,900.0	7,662.0	12,540.9	7,227.0	95.8	0.0	72.63	5,002.3	1,011.6	1,457.2	1,365.2	91.95	15.847		
13,000.0	7,662.0	12,640.9	7,227.0	97.5	0.0	72.62	5,102.3	1,010.8	1,456.5	1,362.9	93.57	15.565		
13,100.0	7,662.0	12,740.9	7,227.0	99.1	0.0	72.61	5,202.3	1,010.0	1,455.8	1,360.6	95.20	15.293		
13,200.0	7,662.0	12,840.9	7,227.0	100.8	0.0	72.61	5,302.3	1,009.2	1,455.2	1,358.3	96.82	15.029		
13,300.0	7,662.0	12,940.9	7,227.0	102.5	0.0	72.60	5,402.3	1,008.3	1,454.5	1,356.0	98.45	14.774		
13,400.0	7,662.0	13,040.9	7,227.0	104.2	0.0	72.59	5,502.3	1,007.5	1,453.8	1,353.7	100.08	14.526		
13,500.0	7,662.0	13,140.9	7,227.0	105.9	0.0	72.58	5,602.3	1,006.7	1,453.1	1,351.4	101.71	14.287		
13,600.0	7,662.0	13,240.9	7,227.0	107.6	0.0	72.57	5,702.2	1,005.9	1,452.4	1,349.1	103.34	14.054		
13,700.0	7,662.0	13,340.9	7,227.0	109.3	0.0	72.56	5,802.2	1,005.0	1,451.7	1,346.8	104.98	13.829		
13,800.0	7,662.0	13,440.9	7,227.0	111.0	0.0	72.56	5,902.2	1,004.2	1,451.1	1,344.4	106.62	13.610		
13,900.0	7,662.0	13,540.9	7,227.0	112.7	0.0	72.55	6,002.2	1,003.4	1,450.4	1,342.1	108.26	13.398		
14,000.0	7,662.0	13,640.9	7,227.0	114.4	0.0	72.54	6,102.2	1,002.5	1,449.7	1,339.8	109.90	13.192		
14,100.0	7,662.0	13,740.9	7,227.0	116.1	0.0	72.53	6,202.2	1,001.7	1,449.0	1,337.5	111.54	12.991		
14,200.0	7,662.0	13,840.9	7,227.0	117.8	0.0	72.52	6,302.2	1,000.9	1,448.3	1,335.1	113.18	12.797		
14,300.0	7,662.0	13,940.9	7,227.0	119.5	0.0	72.51	6,402.2	1,000.1	1,447.6	1,332.8	114.83	12.607		
14,400.0	7,662.0	14,040.9	7,227.0	121.3	0.0	72.50	6,502.2	999.2	1,447.0	1,330.5	116.47	12.423		
14,500.0	7,662.0	14,140.9	7,227.0	123.0	0.0	72.50	6,602.2	998.4	1,446.3	1,328.2	118.12	12.244		
14,600.0	7,662.0	14,240.9	7,227.0	124.7	0.0	72.49	6,702.2	997.6	1,445.6	1,325.8	119.77	12.070		
14,700.0	7,662.0	14,340.9	7,227.0	126.4	0.0	72.48	6,802.2	996.8	1,444.9	1,323.5	121.42	11.901		
14,800.0	7,662.0	14,440.9	7,227.0	128.1	0.0	72.47	6,902.2	995.9	1,444.2	1,321.2	123.07	11.735		
14,900.0	7,662.0	14,540.8	7,227.0	129.8	0.0	72.46	7,002.2	995.1	1,443.6	1,318.8	124.72	11.575		
15,000.0	7,662.0	14,640.8	7,227.0	131.6	0.0	72.45	7,102.2	994.3	1,442.9	1,316.5	126.37	11.418		
15,100.0	7,662.0	14,740.8	7,227.0	133.3	0.0	72.44	7,202.2	993.4	1,442.2	1,314.2	128.02	11.265		
15,200.0	7,662.0	14,840.8	7,227.0	135.0	0.0	72.44	7,302.1	992.6	1,441.5	1,311.8	129.68	11.116		
15,300.0	7,662.0	14,940.8	7,227.0	136.7	0.0	72.43	7,402.1	991.8	1,440.8	1,309.5	131.33	10.971		
15,400.0	7,662.0	15,040.8	7,227.0	138.4	0.0	72.42	7,502.1	991.0	1,440.1	1,307.2	132.99	10.829		
15,500.0	7,662.0	15,140.8	7,227.0	140.2	0.0	72.41	7,602.1	990.1	1,439.5	1,304.8	134.65	10.691		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-3NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,662.0	15,240.8	7,227.0	141.9	0.0	72.40	7,702.1	989.3	1,438.8	1,302.5	136.30	10.556		
15,700.0	7,662.0	15,340.8	7,227.0	143.6	0.0	72.39	7,802.1	988.5	1,438.1	1,300.1	137.96	10.424		
15,800.0	7,662.0	15,440.8	7,227.0	145.3	0.0	72.38	7,902.1	987.7	1,437.4	1,297.8	139.62	10.295		
15,900.0	7,662.0	15,540.8	7,227.0	147.1	0.0	72.38	8,002.1	986.8	1,436.7	1,295.5	141.28	10.169		
16,000.0	7,662.0	15,640.8	7,227.0	148.8	0.0	72.37	8,102.1	986.0	1,436.1	1,293.1	142.94	10.046		
16,100.0	7,662.0	15,740.8	7,227.0	150.5	0.0	72.36	8,202.1	985.2	1,435.4	1,290.8	144.60	9.926		
16,200.0	7,662.0	15,840.8	7,227.0	152.3	0.0	72.35	8,302.1	984.4	1,434.7	1,288.4	146.26	9.809		
16,300.0	7,662.0	15,940.8	7,227.0	154.0	0.0	72.34	8,402.1	983.5	1,434.0	1,286.1	147.93	9.694		
16,400.0	7,662.0	16,040.8	7,227.0	155.7	0.0	72.33	8,502.1	982.7	1,433.3	1,283.7	149.59	9.582		
16,500.0	7,662.0	16,140.8	7,227.0	157.5	0.0	72.32	8,602.1	981.9	1,432.6	1,281.4	151.25	9.472		
16,600.0	7,662.0	16,240.8	7,227.0	159.2	0.0	72.31	8,702.1	981.0	1,432.0	1,279.0	152.91	9.364		
16,700.0	7,662.0	16,340.8	7,227.0	160.9	0.0	72.31	8,802.1	980.2	1,431.3	1,276.7	154.58	9.259		
16,800.0	7,662.0	16,440.8	7,227.0	162.7	0.0	72.30	8,902.1	979.4	1,430.6	1,274.4	156.24	9.156		
16,900.0	7,662.0	16,540.8	7,227.0	164.4	0.0	72.29	9,002.0	978.6	1,429.9	1,272.0	157.91	9.055		
17,000.0	7,662.0	16,640.8	7,227.0	166.1	0.0	72.28	9,102.0	977.7	1,429.2	1,269.7	159.57	8.957		
17,100.0	7,662.0	16,740.8	7,227.0	167.9	0.0	72.27	9,202.0	976.9	1,428.6	1,267.3	161.24	8.860		
17,200.0	7,662.0	16,840.8	7,227.0	169.6	0.0	72.26	9,302.0	976.1	1,427.9	1,265.0	162.91	8.765		
17,300.0	7,662.0	16,940.8	7,227.0	171.3	0.0	72.25	9,402.0	975.3	1,427.2	1,262.6	164.57	8.672		
17,400.0	7,662.0	17,040.8	7,227.0	173.1	0.0	72.25	9,502.0	974.4	1,426.5	1,260.3	166.24	8.581		
17,500.0	7,662.0	17,140.8	7,227.0	174.8	0.0	72.24	9,602.0	973.6	1,425.8	1,257.9	167.91	8.492		
17,600.0	7,662.0	17,240.8	7,227.0	176.6	0.0	72.23	9,702.0	972.8	1,425.1	1,255.6	169.57	8.404		
17,700.0	7,662.0	17,340.8	7,227.0	178.3	0.0	72.22	9,802.0	972.0	1,424.5	1,253.2	171.24	8.319		
17,799.6	7,662.0	17,440.4	7,227.0	180.0	0.0	72.21	9,901.6	971.1	1,423.8	1,250.9	172.90	8.235 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre		Between	Between	Minimum	Separation		
Depth (usft)	Depth (usft)	Depth (usft)	Depth (usft)	(usft)	(usft)	Toolface (°)	+N/-S (usft)	+E/-W (usft)	Centres (usft)	Ellipses (usft)	Separation (usft)	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	89.73	0.6	120.0	120.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.73	0.6	120.0	120.0	119.7	0.28	433.268		
200.0	200.0	200.0	200.0	1.0	0.0	89.73	0.6	120.0	120.0	119.2	0.80	150.426		
300.0	300.0	300.0	300.0	1.5	0.0	89.73	0.6	120.0	120.0	118.8	1.22	98.012		
400.0	400.0	400.0	400.0	1.9	0.0	89.73	0.6	120.0	120.0	118.4	1.62	74.154		
500.0	500.0	500.0	500.0	2.3	0.0	89.73	0.6	120.0	120.0	118.0	2.00	60.033		
600.0	600.0	600.0	600.0	2.7	0.0	89.73	0.6	120.0	120.0	117.6	2.37	50.576		
700.0	700.0	700.0	700.0	3.1	0.0	89.73	0.6	120.0	120.0	117.2	2.74	43.758		
800.0	800.0	800.0	800.0	3.5	0.0	89.73	0.6	120.0	120.0	116.9	3.11	38.592	CC, ES	
900.0	900.0	896.1	896.1	3.9	0.0	89.94	0.1	121.5	121.6	118.1	3.47	35.039		
1,000.0	1,000.0	992.0	991.8	4.2	0.0	90.54	-1.2	126.2	126.4	122.6	3.82	33.083		
1,100.0	1,100.0	1,087.3	1,086.9	4.6	0.0	-125.11	-3.4	133.8	135.5	131.3	4.16	32.553		
1,200.0	1,199.8	1,181.8	1,180.7	5.4	0.0	-125.35	-6.4	144.4	149.8	144.9	4.82	31.102		
1,300.0	1,299.5	1,274.9	1,272.7	5.9	0.0	-126.12	-10.1	157.8	169.1	163.8	5.26	32.146		
1,400.0	1,399.0	1,366.6	1,362.9	6.2	0.0	-126.88	-14.7	173.7	192.1	186.5	5.56	34.540		
1,500.0	1,498.5	1,457.0	1,451.3	6.5	0.0	-127.25	-19.9	192.1	218.1	212.2	5.89	37.044		
1,600.0	1,598.1	1,545.9	1,537.5	6.8	0.0	-127.33	-25.8	212.9	246.9	240.7	6.20	39.832		
1,700.0	1,697.6	1,636.4	1,624.7	7.1	0.0	-127.22	-32.4	236.4	278.3	271.8	6.52	42.706		
1,800.0	1,797.1	1,731.2	1,715.8	7.4	0.0	-127.10	-39.5	261.5	310.2	303.3	6.86	45.221		
1,900.0	1,896.7	1,826.0	1,806.9	7.8	0.0	-127.00	-46.6	286.5	342.1	334.9	7.21	47.477		
2,000.0	1,996.2	1,920.7	1,898.0	8.1	0.0	-126.92	-53.7	311.6	374.0	366.4	7.55	49.510		
2,100.0	2,095.7	2,015.5	1,989.2	8.4	0.0	-126.85	-60.8	336.7	405.9	398.0	7.90	51.351		
2,200.0	2,195.3	2,110.3	2,080.3	8.8	0.0	-126.80	-67.9	361.7	437.8	429.5	8.26	53.024		
2,300.0	2,294.8	2,205.1	2,171.4	9.1	0.0	-126.75	-75.0	386.8	469.7	461.1	8.61	54.550		
2,400.0	2,394.3	2,299.9	2,262.5	9.5	0.0	-126.70	-82.1	411.9	501.6	492.6	8.96	55.948		
2,500.0	2,493.9	2,394.6	2,353.7	9.8	0.0	-126.66	-89.2	436.9	533.5	524.1	9.32	57.232		
2,600.0	2,593.4	2,489.4	2,444.8	10.2	0.0	-126.63	-96.3	462.0	565.4	555.7	9.68	58.415		
2,700.0	2,692.9	2,584.2	2,535.9	10.5	0.0	-126.60	-103.4	487.1	597.2	587.2	10.04	59.509		
2,800.0	2,792.5	2,679.0	2,627.0	10.9	0.0	-126.57	-110.5	512.2	629.1	618.7	10.40	60.522		
2,900.0	2,892.0	2,773.7	2,718.1	11.3	0.0	-126.55	-117.6	537.2	661.0	650.3	10.76	61.463		
3,000.0	2,991.5	2,868.5	2,809.3	11.6	0.0	-126.53	-124.7	562.3	692.9	681.8	11.12	62.339		
3,100.0	3,091.1	2,963.3	2,900.4	12.0	0.0	-126.51	-131.8	587.4	724.8	713.4	11.48	63.157		
3,200.0	3,190.6	3,058.1	2,991.5	12.4	0.0	-126.49	-138.9	612.4	756.7	744.9	11.84	63.922		
3,300.0	3,290.1	3,152.8	3,082.6	12.7	0.0	-126.47	-146.0	637.5	788.6	776.4	12.20	64.639		
3,400.0	3,389.7	3,247.6	3,173.8	13.1	0.0	-126.45	-153.1	662.6	820.5	808.0	12.56	65.312		
3,500.0	3,489.2	3,342.4	3,264.9	13.5	0.0	-126.44	-160.3	687.6	852.4	839.5	12.93	65.945		
3,600.0	3,588.7	3,437.2	3,356.0	13.9	0.0	-126.43	-167.4	712.7	884.3	871.0	13.29	66.541		
3,700.0	3,688.3	3,531.9	3,447.1	14.2	0.0	-126.41	-174.5	737.8	916.2	902.5	13.65	67.103		
3,800.0	3,787.8	3,626.7	3,538.3	14.6	0.0	-126.40	-181.6	762.8	948.1	934.1	14.02	67.635		
3,900.0	3,887.3	3,721.5	3,629.4	15.0	0.0	-126.39	-188.7	787.9	980.0	965.6	14.38	68.138		
4,000.0	3,986.9	3,816.3	3,720.5	15.4	0.0	-126.38	-195.8	813.0	1,011.9	997.1	14.75	68.614		
4,100.0	4,086.4	3,911.1	3,811.6	15.7	0.0	-126.37	-202.9	838.1	1,043.8	1,028.7	15.11	69.066		
4,200.0	4,185.9	4,005.8	3,902.8	16.1	0.0	-126.36	-210.0	863.1	1,075.7	1,060.2	15.48	69.495		
4,300.0	4,285.4	4,100.6	3,993.9	16.5	0.0	-126.35	-217.1	888.2	1,107.6	1,091.7	15.84	69.904		
4,400.0	4,385.0	4,195.4	4,085.0	16.9	0.0	-126.34	-224.2	913.3	1,139.5	1,123.3	16.21	70.292		
4,500.0	4,484.5	4,290.2	4,176.1	17.3	0.0	-126.34	-231.3	938.3	1,171.4	1,154.8	16.58	70.663		
4,600.0	4,584.0	4,384.9	4,267.3	17.7	0.0	-126.33	-238.4	963.4	1,203.3	1,186.3	16.94	71.016		
4,700.0	4,683.6	4,479.7	4,358.4	18.1	0.0	-126.32	-245.5	988.5	1,235.2	1,217.9	17.31	71.353		
4,800.0	4,783.1	4,574.5	4,449.5	18.4	0.0	-126.32	-252.6	1,013.5	1,267.1	1,249.4	17.68	71.676		
4,900.0	4,882.6	4,669.3	4,540.6	18.8	0.0	-126.31	-259.7	1,038.6	1,299.0	1,280.9	18.05	71.984		
5,000.0	4,982.2	4,764.0	4,631.8	19.2	0.0	-126.30	-266.8	1,063.7	1,330.8	1,312.4	18.41	72.279		
5,100.0	5,081.7	4,858.8	4,722.9	19.6	0.0	-126.30	-273.9	1,088.8	1,362.7	1,344.0	18.78	72.562		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,181.2	4,953.6	4,814.0	20.0	0.0	-126.29	-281.0	1,113.8	1,394.6	1,375.5	19.15	72.833		
5,300.0	5,280.8	5,048.4	4,905.1	20.4	0.0	-126.29	-288.1	1,138.9	1,426.5	1,407.0	19.52	73.093		
5,400.0	5,380.3	5,143.2	4,996.3	20.8	0.0	-126.28	-295.2	1,164.0	1,458.4	1,438.5	19.89	73.343		
5,500.0	5,479.8	5,237.9	5,087.4	21.2	0.0	-126.28	-302.3	1,189.0	1,490.3	1,470.1	20.25	73.583		
5,600.0	5,579.4	5,332.7	5,178.5	21.6	0.0	-126.27	-309.4	1,214.1	1,522.2	1,501.6	20.62	73.814		
5,700.0	5,678.9	5,427.5	5,269.6	22.0	0.0	-126.27	-316.5	1,239.2	1,554.1	1,533.1	20.99	74.036		
5,800.0	5,778.4	5,522.3	5,360.8	22.3	0.0	-126.26	-323.6	1,264.2	1,586.0	1,564.7	21.36	74.249		
5,900.0	5,878.0	5,617.0	5,451.9	22.7	0.0	-126.26	-330.7	1,289.3	1,617.9	1,596.2	21.73	74.455		
6,000.0	5,977.5	5,711.8	5,543.0	23.1	0.0	-126.26	-337.8	1,314.4	1,649.8	1,627.7	22.10	74.653		
6,100.0	6,077.0	5,806.6	5,634.1	23.5	0.0	-126.25	-344.9	1,339.5	1,681.7	1,659.2	22.47	74.844		
6,200.0	6,176.6	5,901.4	5,725.3	23.9	0.0	-126.25	-352.0	1,364.5	1,713.6	1,690.8	22.84	75.028		
6,300.0	6,276.1	5,996.1	5,816.4	24.3	0.0	-126.25	-359.1	1,389.6	1,745.5	1,722.3	23.21	75.206		
6,400.0	6,375.6	6,090.9	5,907.5	24.7	0.0	-126.24	-366.2	1,414.7	1,777.4	1,753.8	23.58	75.378		
6,500.0	6,475.2	6,185.7	5,998.6	25.1	0.0	-126.24	-373.3	1,439.7	1,809.3	1,785.3	23.95	75.543		
6,600.0	6,574.7	6,280.5	6,089.8	25.5	0.0	-126.24	-380.4	1,464.8	1,841.2	1,816.9	24.32	75.704		
6,700.0	6,674.2	6,375.2	6,180.9	25.9	0.0	-126.23	-387.5	1,489.9	1,873.1	1,848.4	24.69	75.858		
6,800.0	6,773.8	6,470.0	6,272.0	26.3	0.0	-126.23	-394.6	1,514.9	1,905.0	1,879.9	25.06	76.008		
6,900.0	6,873.3	6,564.8	6,363.1	26.7	0.0	-126.23	-401.7	1,540.0	1,936.9	1,911.4	25.43	76.153		
7,000.0	6,972.8	6,659.6	6,454.3	27.1	0.0	-126.23	-408.8	1,565.1	1,968.8	1,943.0	25.81	76.293		
7,100.0	7,072.4	6,754.3	6,545.4	27.4	0.0	-152.60	-415.9	1,590.2	2,000.7	1,974.5	26.17	76.448		
7,200.0	7,172.0	6,848.1	6,635.5	27.8	0.0	108.04	-423.0	1,615.0	2,032.3	2,005.8	26.52	76.647		
7,300.0	7,269.0	6,938.3	6,722.2	28.0	0.0	94.23	-429.7	1,638.8	2,063.1	2,036.4	26.76	77.091		
7,400.0	7,360.6	7,022.0	6,802.7	28.2	0.0	88.82	-436.0	1,660.9	2,092.9	2,066.0	26.94	77.680		
7,500.0	7,444.0	7,096.8	6,874.6	28.3	0.0	85.56	-441.6	1,680.7	2,121.7	2,094.6	27.08	78.348		
7,600.0	7,516.7	7,160.4	6,935.8	28.5	0.0	83.12	-446.4	1,697.6	2,149.7	2,122.5	27.19	79.062		
7,700.0	7,576.3	7,210.8	6,984.3	28.6	0.0	80.96	-450.1	1,710.9	2,177.2	2,149.9	27.29	79.768		
7,800.0	7,621.2	7,246.6	7,018.7	28.7	0.0	78.80	-452.8	1,720.4	2,204.3	2,176.9	27.41	80.413		
12,200.0	7,662.0	12,384.0	7,617.0	84.1	0.0	88.84	4,309.2	1,845.2	2,224.0	2,140.0	83.98	26.482		
12,300.0	7,662.0	12,484.0	7,617.0	85.7	0.0	88.84	4,409.2	1,844.4	2,223.3	2,137.7	85.64	25.960		
12,400.0	7,662.0	12,584.0	7,617.0	87.4	0.0	88.84	4,509.2	1,843.6	2,222.6	2,135.3	87.31	25.457		
12,500.0	7,662.0	12,684.0	7,617.0	89.1	0.0	88.84	4,609.2	1,842.7	2,221.9	2,132.9	88.97	24.972		
12,600.0	7,662.0	12,784.0	7,617.0	90.7	0.0	88.84	4,709.2	1,841.9	2,221.2	2,130.5	90.65	24.504		
12,700.0	7,662.0	12,884.0	7,617.0	92.4	0.0	88.84	4,809.1	1,841.1	2,220.5	2,128.1	92.32	24.052		
12,800.0	7,662.0	12,983.9	7,617.0	94.1	0.0	88.84	4,909.1	1,840.2	2,219.7	2,125.7	94.00	23.615		
12,900.0	7,662.0	13,083.9	7,617.0	95.8	0.0	88.84	5,009.1	1,839.4	2,219.0	2,123.3	95.68	23.193		
13,000.0	7,662.0	13,183.9	7,617.0	97.5	0.0	88.84	5,109.1	1,838.6	2,218.3	2,120.9	97.36	22.784		
13,100.0	7,662.0	13,283.9	7,617.0	99.1	0.0	88.84	5,209.1	1,837.8	2,217.6	2,118.5	99.05	22.389		
13,200.0	7,662.0	13,383.9	7,617.0	100.8	0.0	88.84	5,309.1	1,836.9	2,216.9	2,116.1	100.74	22.007		
13,300.0	7,662.0	13,483.9	7,617.0	102.5	0.0	88.84	5,409.1	1,836.1	2,216.2	2,113.7	102.43	21.636		
13,400.0	7,662.0	13,583.9	7,617.0	104.2	0.0	88.84	5,509.1	1,835.3	2,215.4	2,111.3	104.12	21.277		
13,500.0	7,662.0	13,683.9	7,617.0	105.9	0.0	88.84	5,609.1	1,834.5	2,214.7	2,108.9	105.82	20.930		
13,600.0	7,662.0	13,783.9	7,617.0	107.6	0.0	88.84	5,709.1	1,833.6	2,214.0	2,106.5	107.52	20.592		
13,700.0	7,662.0	13,883.9	7,617.0	109.3	0.0	88.83	5,809.1	1,832.8	2,213.3	2,104.1	109.22	20.265		
13,800.0	7,662.0	13,983.9	7,617.0	111.0	0.0	88.83	5,909.1	1,832.0	2,212.6	2,101.7	110.92	19.948		
13,900.0	7,662.0	14,083.9	7,617.0	112.7	0.0	88.83	6,009.1	1,831.1	2,211.9	2,099.2	112.62	19.640		
14,000.0	7,662.0	14,183.9	7,617.0	114.4	0.0	88.83	6,109.1	1,830.3	2,211.2	2,096.8	114.33	19.340		
14,100.0	7,662.0	14,283.9	7,617.0	116.1	0.0	88.83	6,209.1	1,829.5	2,210.4	2,094.4	116.04	19.049		
14,200.0	7,662.0	14,383.9	7,617.0	117.8	0.0	88.83	6,309.1	1,828.7	2,209.7	2,092.0	117.75	18.767		
14,300.0	7,662.0	14,483.9	7,617.0	119.5	0.0	88.83	6,409.1	1,827.8	2,209.0	2,089.6	119.46	18.492		
14,400.0	7,662.0	14,583.9	7,617.0	121.3	0.0	88.83	6,509.0	1,827.0	2,208.3	2,087.1	121.17	18.225		
14,500.0	7,662.0	14,683.9	7,617.0	123.0	0.0	88.83	6,609.0	1,826.2	2,207.6	2,084.7	122.88	17.965		
14,600.0	7,662.0	14,783.9	7,617.0	124.7	0.0	88.83	6,709.0	1,825.4	2,206.9	2,082.3	124.60	17.712		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
14,700.0	7,662.0	14,883.9	7,617.0	126.4	0.0	88.83	6,809.0	1,824.5	2,206.1	2,079.8	126.31	17.466		
14,800.0	7,662.0	14,983.9	7,617.0	128.1	0.0	88.83	6,909.0	1,823.7	2,205.4	2,077.4	128.03	17.226		
14,900.0	7,662.0	15,083.9	7,617.0	129.8	0.0	88.83	7,009.0	1,822.9	2,204.7	2,075.0	129.75	16.992		
15,000.0	7,662.0	15,183.9	7,617.0	131.6	0.0	88.83	7,109.0	1,822.1	2,204.0	2,072.5	131.47	16.764		
15,100.0	7,662.0	15,283.9	7,617.0	133.3	0.0	88.83	7,209.0	1,821.2	2,203.3	2,070.1	133.19	16.542		
15,200.0	7,662.0	15,383.9	7,617.0	135.0	0.0	88.83	7,309.0	1,820.4	2,202.6	2,067.7	134.91	16.326		
15,300.0	7,662.0	15,483.9	7,617.0	136.7	0.0	88.83	7,409.0	1,819.6	2,201.9	2,065.2	136.64	16.115		
15,400.0	7,662.0	15,583.9	7,617.0	138.4	0.0	88.83	7,509.0	1,818.7	2,201.1	2,062.8	138.36	15.909		
15,500.0	7,662.0	15,683.9	7,617.0	140.2	0.0	88.83	7,609.0	1,817.9	2,200.4	2,060.3	140.09	15.708		
15,600.0	7,662.0	15,783.9	7,617.0	141.9	0.0	88.83	7,709.0	1,817.1	2,199.7	2,057.9	141.81	15.511		
15,700.0	7,662.0	15,883.9	7,617.0	143.6	0.0	88.83	7,809.0	1,816.3	2,199.0	2,055.5	143.54	15.320		
15,800.0	7,662.0	15,983.9	7,617.0	145.3	0.0	88.83	7,909.0	1,815.4	2,198.3	2,053.0	145.27	15.133		
15,900.0	7,662.0	16,083.9	7,617.0	147.1	0.0	88.83	8,009.0	1,814.6	2,197.6	2,050.6	147.00	14.950		
16,000.0	7,662.0	16,183.9	7,617.0	148.8	0.0	88.83	8,108.9	1,813.8	2,196.8	2,048.1	148.73	14.771		
16,100.0	7,662.0	16,283.9	7,617.0	150.5	0.0	88.83	8,208.9	1,813.0	2,196.1	2,045.7	150.46	14.596		
16,200.0	7,662.0	16,383.9	7,617.0	152.3	0.0	88.83	8,308.9	1,812.1	2,195.4	2,043.2	152.19	14.426		
16,300.0	7,662.0	16,483.9	7,617.0	154.0	0.0	88.83	8,408.9	1,811.3	2,194.7	2,040.8	153.92	14.259		
16,400.0	7,662.0	16,583.9	7,617.0	155.7	0.0	88.82	8,508.9	1,810.5	2,194.0	2,038.3	155.65	14.095		
16,500.0	7,662.0	16,683.9	7,617.0	157.5	0.0	88.82	8,608.9	1,809.6	2,193.3	2,035.9	157.39	13.936		
16,600.0	7,662.0	16,783.9	7,617.0	159.2	0.0	88.82	8,708.9	1,808.8	2,192.6	2,033.4	159.12	13.779		
16,700.0	7,662.0	16,883.8	7,617.0	160.9	0.0	88.82	8,808.9	1,808.0	2,191.8	2,031.0	160.85	13.626		
16,800.0	7,662.0	16,983.8	7,617.0	162.7	0.0	88.82	8,908.9	1,807.2	2,191.1	2,028.5	162.59	13.476		
16,900.0	7,662.0	17,083.8	7,617.0	164.4	0.0	88.82	9,008.9	1,806.3	2,190.4	2,026.1	164.32	13.330		
17,000.0	7,662.0	17,183.8	7,617.0	166.1	0.0	88.82	9,108.9	1,805.5	2,189.7	2,023.6	166.06	13.186		
17,100.0	7,662.0	17,283.8	7,617.0	167.9	0.0	88.82	9,208.9	1,804.7	2,189.0	2,021.2	167.80	13.045		
17,200.0	7,662.0	17,383.8	7,617.0	169.6	0.0	88.82	9,308.9	1,803.9	2,188.3	2,018.7	169.53	12.907		
17,300.0	7,662.0	17,483.8	7,617.0	171.3	0.0	88.82	9,408.9	1,803.0	2,187.5	2,016.3	171.27	12.772		
17,400.0	7,662.0	17,583.8	7,617.0	173.1	0.0	88.82	9,508.9	1,802.2	2,186.8	2,013.8	173.01	12.640		
17,500.0	7,662.0	17,683.8	7,617.0	174.8	0.0	88.82	9,608.9	1,801.4	2,186.1	2,011.4	174.75	12.510		
17,600.0	7,662.0	17,783.8	7,617.0	176.6	0.0	88.82	9,708.9	1,800.6	2,185.4	2,008.9	176.49	12.383		
17,700.0	7,662.0	17,883.8	7,617.0	178.3	0.0	88.82	9,808.8	1,799.7	2,184.7	2,006.5	178.23	12.258		
17,799.6	7,662.0	17,983.4	7,617.0	180.0	0.0	88.82	9,908.5	1,798.9	2,184.0	2,004.0	179.96	12.136 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	89.70	0.9	164.9	164.9					
100.0	100.0	100.0	100.0	0.4	0.0	89.70	0.9	164.9	164.9	164.7	0.28	595.479		
200.0	200.0	200.0	200.0	1.0	0.0	89.70	0.9	164.9	164.9	164.2	0.80	206.754		
300.0	300.0	300.0	300.0	1.5	0.0	89.70	0.9	164.9	164.9	163.7	1.22	134.719		
400.0	400.0	400.0	400.0	1.9	0.0	89.70	0.9	164.9	164.9	163.3	1.62	101.929		
500.0	500.0	500.0	500.0	2.3	0.0	89.70	0.9	164.9	164.9	163.0	2.00	82.522 CC, ES		
600.0	600.0	594.6	594.6	2.7	0.0	89.82	0.5	166.5	166.6	164.2	2.37	70.248		
700.0	700.0	689.1	688.9	3.1	0.0	90.14	-0.4	171.1	171.4	168.7	2.73	62.674		
800.0	800.0	783.1	782.6	3.5	0.0	90.64	-2.0	178.6	179.5	176.4	3.09	58.074		
900.0	900.0	876.5	875.4	3.9	0.0	91.27	-4.2	189.1	190.8	187.3	3.44	55.487		
1,000.0	1,000.0	969.1	967.0	4.2	0.0	91.98	-7.0	202.5	205.2	201.5	3.78	54.332		
1,100.0	1,100.0	1,060.6	1,057.0	4.6	0.0	-123.45	-10.3	218.5	223.8	219.7	4.11	54.512		
1,200.0	1,199.8	1,150.5	1,144.9	5.4	0.0	-123.26	-14.2	236.9	247.4	242.6	4.72	52.440 SF		
1,300.0	1,299.5	1,238.4	1,230.3	5.9	0.0	-123.52	-18.5	257.6	275.7	270.5	5.13	53.747		
1,400.0	1,399.0	1,324.6	1,313.3	6.2	0.0	-124.10	-23.3	280.3	307.4	302.0	5.41	56.808		
1,500.0	1,498.5	1,409.1	1,393.9	6.5	0.0	-124.48	-28.4	304.9	341.9	336.2	5.72	59.779		
1,600.0	1,598.1	1,491.7	1,472.0	6.8	0.0	-124.71	-33.9	331.3	379.1	373.1	6.02	63.006		
1,700.0	1,697.6	1,575.5	1,550.4	7.1	0.0	-124.84	-40.0	360.1	418.8	412.5	6.32	66.284		
1,800.0	1,797.1	1,667.0	1,635.8	7.4	0.0	-124.94	-46.7	392.3	459.2	452.5	6.66	68.996		
1,900.0	1,896.7	1,758.4	1,721.2	7.8	0.0	-125.02	-53.4	424.4	499.6	492.6	6.99	71.427		
2,000.0	1,996.2	1,849.9	1,806.6	8.1	0.0	-125.09	-60.1	456.5	539.9	532.6	7.33	73.617		
2,100.0	2,095.7	1,941.4	1,892.0	8.4	0.0	-125.15	-66.8	488.6	580.3	572.6	7.68	75.599		
2,200.0	2,195.3	2,032.9	1,977.4	8.8	0.0	-125.20	-73.6	520.7	620.7	612.7	8.02	77.399		
2,300.0	2,294.8	2,124.4	2,062.8	9.1	0.0	-125.25	-80.3	552.8	661.1	652.7	8.36	79.040		
2,400.0	2,394.3	2,215.9	2,148.2	9.5	0.0	-125.29	-87.0	585.0	701.4	692.7	8.71	80.541		
2,500.0	2,493.9	2,307.4	2,233.6	9.8	0.0	-125.32	-93.7	617.1	741.8	732.8	9.06	81.919		
2,600.0	2,593.4	2,398.8	2,319.0	10.2	0.0	-125.36	-100.4	649.2	782.2	772.8	9.40	83.188		
2,700.0	2,692.9	2,490.3	2,404.4	10.5	0.0	-125.39	-107.2	681.3	822.6	812.8	9.75	84.359		
2,800.0	2,792.5	2,581.8	2,489.8	10.9	0.0	-125.41	-113.9	713.4	862.9	852.8	10.10	85.443		
2,900.0	2,892.0	2,673.3	2,575.2	11.3	0.0	-125.44	-120.6	745.5	903.3	892.9	10.45	86.450		
3,000.0	2,991.5	2,764.8	2,660.6	11.6	0.0	-125.46	-127.3	777.7	943.7	932.9	10.80	87.386		
3,100.0	3,091.1	2,856.3	2,746.0	12.0	0.0	-125.48	-134.0	809.8	984.1	972.9	11.15	88.258		
3,200.0	3,190.6	2,947.8	2,831.4	12.4	0.0	-125.50	-140.7	841.9	1,024.4	1,012.9	11.50	89.074		
3,300.0	3,290.1	3,039.2	2,916.8	12.7	0.0	-125.51	-147.5	874.0	1,064.8	1,053.0	11.85	89.837		
3,400.0	3,389.7	3,130.7	3,002.2	13.1	0.0	-125.53	-154.2	906.1	1,105.2	1,093.0	12.21	90.552		
3,500.0	3,489.2	3,222.2	3,087.6	13.5	0.0	-125.54	-160.9	938.3	1,145.6	1,133.0	12.56	91.224		
3,600.0	3,588.7	3,313.7	3,173.0	13.9	0.0	-125.56	-167.6	970.4	1,186.0	1,173.0	12.91	91.857		
3,700.0	3,688.3	3,405.2	3,258.4	14.2	0.0	-125.57	-174.3	1,002.5	1,226.3	1,213.1	13.26	92.452		
3,800.0	3,787.8	3,496.7	3,343.8	14.6	0.0	-125.58	-181.1	1,034.6	1,266.7	1,253.1	13.62	93.015		
3,900.0	3,887.3	3,588.2	3,429.2	15.0	0.0	-125.59	-187.8	1,066.7	1,307.1	1,293.1	13.97	93.546		
4,000.0	3,986.9	3,679.7	3,514.6	15.4	0.0	-125.60	-194.5	1,098.8	1,347.5	1,333.1	14.33	94.049		
4,100.0	4,086.4	3,771.1	3,600.0	15.7	0.0	-125.61	-201.2	1,131.0	1,387.8	1,373.2	14.68	94.525		
4,200.0	4,185.9	3,862.6	3,685.4	16.1	0.0	-125.62	-207.9	1,163.1	1,428.2	1,413.2	15.04	94.976		
4,300.0	4,285.4	3,954.1	3,770.8	16.5	0.0	-125.63	-214.6	1,195.2	1,468.6	1,453.2	15.39	95.405		
4,400.0	4,385.0	4,045.6	3,856.2	16.9	0.0	-125.64	-221.4	1,227.3	1,509.0	1,493.2	15.75	95.813		
4,500.0	4,484.5	4,137.1	3,941.6	17.3	0.0	-125.65	-228.1	1,259.4	1,549.3	1,533.2	16.11	96.200		
4,600.0	4,584.0	4,228.6	4,027.0	17.7	0.0	-125.66	-234.8	1,291.5	1,589.7	1,573.3	16.46	96.570		
4,700.0	4,683.6	4,320.1	4,112.4	18.1	0.0	-125.66	-241.5	1,323.7	1,630.1	1,613.3	16.82	96.921		
4,800.0	4,783.1	4,411.5	4,197.8	18.4	0.0	-125.67	-248.2	1,355.8	1,670.5	1,653.3	17.18	97.257		
4,900.0	4,882.6	4,503.0	4,283.2	18.8	0.0	-125.68	-255.0	1,387.9	1,710.9	1,693.3	17.53	97.577		
5,000.0	4,982.2	4,594.5	4,368.6	19.2	0.0	-125.68	-261.7	1,420.0	1,751.2	1,733.3	17.89	97.884		
5,100.0	5,081.7	4,686.0	4,454.0	19.6	0.0	-125.69	-268.4	1,452.1	1,791.6	1,773.4	18.25	98.176		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NBH - OH - PLAN #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
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	5,181.2	4,777.5	4,539.4	20.0	0.0	-125.70	-275.1	1,484.2	1,832.0	1,813.4	18.61	98.456	
5,300.0	5,280.8	4,869.0	4,624.8	20.4	0.0	-125.70	-281.8	1,516.4	1,872.4	1,853.4	18.97	98.724	
5,400.0	5,380.3	4,960.5	4,710.2	20.8	0.0	-125.71	-288.5	1,548.5	1,912.7	1,893.4	19.32	98.981	
5,500.0	5,479.8	5,051.9	4,795.6	21.2	0.0	-125.71	-295.3	1,580.6	1,953.1	1,933.4	19.68	99.227	
5,600.0	5,579.4	5,143.4	4,881.0	21.6	0.0	-125.72	-302.0	1,612.7	1,993.5	1,973.5	20.04	99.463	
5,700.0	5,678.9	5,234.9	4,966.4	22.0	0.0	-125.72	-308.7	1,644.8	2,033.9	2,013.5	20.40	99.689	
5,800.0	5,778.4	5,326.4	5,051.8	22.3	0.0	-125.73	-315.4	1,676.9	2,074.3	2,053.5	20.76	99.907	
5,900.0	5,878.0	5,417.9	5,137.2	22.7	0.0	-125.73	-322.1	1,709.1	2,114.6	2,093.5	21.12	100.115	
6,000.0	5,977.5	5,509.4	5,222.6	23.1	0.0	-125.73	-328.9	1,741.2	2,155.0	2,133.5	21.48	100.316	
6,100.0	6,077.0	5,600.9	5,308.0	23.5	0.0	-125.74	-335.6	1,773.3	2,195.4	2,173.5	21.84	100.509	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NCH - OH - PLAN #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							
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	89.68	0.8	149.9	149.9				
100.0	100.0	100.0	100.0	0.4	0.0	89.68	0.8	149.9	149.9	149.7	0.28	541.198	
200.0	200.0	200.0	200.0	1.0	0.0	89.68	0.8	149.9	149.9	149.2	0.80	187.914	
300.0	300.0	300.0	300.0	1.5	0.0	89.68	0.8	149.9	149.9	148.7	1.22	122.446	
400.0	400.0	400.0	400.0	1.9	0.0	89.68	0.8	149.9	149.9	148.3	1.62	92.646	
500.0	500.0	500.0	500.0	2.3	0.0	89.68	0.8	149.9	149.9	148.0	2.00	75.008	
600.0	600.0	600.0	600.0	2.7	0.0	89.68	0.8	149.9	149.9	147.6	2.37	63.194 CC, ES	
700.0	700.0	695.1	695.1	3.1	0.0	89.81	0.5	151.5	151.6	148.8	2.74	55.310	
800.0	800.0	790.0	789.9	3.5	0.0	90.18	-0.5	156.1	156.4	153.3	3.10	50.462	
900.0	900.0	884.5	884.0	3.9	0.0	90.74	-2.1	163.7	164.5	161.1	3.45	47.671	
1,000.0	1,000.0	978.3	977.2	4.2	0.0	91.44	-4.4	174.3	175.9	172.1	3.79	46.344	
1,100.0	1,100.0	1,071.3	1,069.1	4.6	0.0	-124.05	-7.3	187.8	191.4	187.3	4.13	46.364	
1,200.0	1,199.8	1,162.8	1,159.2	5.4	0.0	-124.01	-10.7	203.8	211.9	207.2	4.75	44.587 SF	
1,300.0	1,299.5	1,252.5	1,246.9	5.9	0.0	-124.44	-14.7	222.3	237.4	232.2	5.18	45.860	
1,400.0	1,399.0	1,340.6	1,332.4	6.2	0.0	-125.11	-19.1	243.0	266.4	260.9	5.47	48.741	
1,500.0	1,498.5	1,427.0	1,415.6	6.5	0.0	-125.52	-24.0	265.9	298.2	292.5	5.78	51.601	
1,600.0	1,598.1	1,511.7	1,496.4	6.8	0.0	-125.76	-29.3	290.6	332.9	326.8	6.08	54.723	
1,700.0	1,697.6	1,600.0	1,579.8	7.1	0.0	-125.86	-35.4	318.9	370.2	363.8	6.40	57.842	
1,800.0	1,797.1	1,681.8	1,666.4	7.4	0.0	-125.87	-41.4	346.9	409.6	402.9	6.69	61.250	
1,900.0	1,896.7	1,773.6	1,742.3	7.8	0.0	-125.88	-48.1	378.5	449.3	442.3	7.02	63.962	
2,000.0	1,996.2	1,865.4	1,828.2	8.1	0.0	-125.88	-54.9	410.1	489.1	481.7	7.36	66.407	
2,100.0	2,095.7	1,957.1	1,914.1	8.4	0.0	-125.89	-61.7	441.7	528.8	521.1	7.71	68.621	
2,200.0	2,195.3	2,048.9	2,000.0	8.8	0.0	-125.89	-68.4	473.3	568.5	560.4	8.05	70.634	
2,300.0	2,294.8	2,140.7	2,085.9	9.1	0.0	-125.89	-75.2	504.9	608.2	599.8	8.39	72.470	
2,400.0	2,394.3	2,232.4	2,171.8	9.5	0.0	-125.89	-82.0	536.5	647.9	639.2	8.74	74.152	
2,500.0	2,493.9	2,324.2	2,257.7	9.8	0.0	-125.90	-87.7	568.1	687.7	678.6	9.08	75.696	
2,600.0	2,593.4	2,416.0	2,343.6	10.2	0.0	-125.90	-95.5	599.7	727.4	718.0	9.43	77.119	
2,700.0	2,692.9	2,507.8	2,429.5	10.5	0.0	-125.90	-102.3	631.3	767.1	757.3	9.78	78.433	
2,800.0	2,792.5	2,599.5	2,515.4	10.9	0.0	-125.90	-109.0	662.9	806.8	796.7	10.13	79.651	
2,900.0	2,892.0	2,691.3	2,601.3	11.3	0.0	-125.90	-115.8	694.5	846.6	836.1	10.48	80.782	
3,000.0	2,991.5	2,783.1	2,687.2	11.6	0.0	-125.90	-122.6	726.1	886.3	875.5	10.83	81.835	
3,100.0	3,091.1	2,874.8	2,773.0	12.0	0.0	-125.90	-129.3	757.7	926.0	914.8	11.18	82.817	
3,200.0	3,190.6	2,966.6	2,858.9	12.4	0.0	-125.91	-136.1	789.3	965.7	954.2	11.53	83.735	
3,300.0	3,290.1	3,058.4	2,944.8	12.7	0.0	-125.91	-142.9	820.9	1,005.5	993.6	11.89	84.594	
3,400.0	3,389.7	3,150.2	3,030.7	13.1	0.0	-125.91	-149.6	852.6	1,045.2	1,032.9	12.24	85.401	
3,500.0	3,489.2	3,241.9	3,116.6	13.5	0.0	-125.91	-156.4	884.2	1,084.9	1,072.3	12.59	86.159	
3,600.0	3,588.7	3,333.7	3,202.5	13.9	0.0	-125.91	-163.2	915.8	1,124.6	1,111.7	12.95	86.873	
3,700.0	3,688.3	3,425.5	3,288.4	14.2	0.0	-125.91	-170.0	947.4	1,164.3	1,151.0	13.30	87.546	
3,800.0	3,787.8	3,517.2	3,374.3	14.6	0.0	-125.91	-176.7	979.0	1,204.1	1,190.4	13.65	88.182	
3,900.0	3,887.3	3,609.0	3,460.2	15.0	0.0	-125.91	-183.5	1,010.6	1,243.8	1,229.8	14.01	88.783	
4,000.0	3,986.9	3,700.8	3,546.1	15.4	0.0	-125.91	-190.3	1,042.2	1,283.5	1,269.1	14.36	89.352	
4,100.0	4,086.4	3,792.6	3,632.0	15.7	0.0	-125.91	-197.0	1,073.8	1,323.2	1,308.5	14.72	89.891	
4,200.0	4,185.9	3,884.3	3,717.9	16.1	0.0	-125.91	-203.8	1,105.4	1,363.0	1,347.9	15.08	90.403	
4,300.0	4,285.4	3,976.1	3,803.8	16.5	0.0	-125.91	-210.6	1,137.0	1,402.7	1,387.2	15.43	90.889	
4,400.0	4,385.0	4,067.9	3,889.6	16.9	0.0	-125.91	-217.3	1,168.6	1,442.4	1,426.6	15.79	91.352	
4,500.0	4,484.5	4,159.7	3,975.5	17.3	0.0	-125.91	-224.1	1,200.2	1,482.1	1,466.0	16.15	91.792	
4,600.0	4,584.0	4,251.4	4,061.4	17.7	0.0	-125.91	-230.9	1,231.8	1,521.9	1,505.3	16.50	92.212	
4,700.0	4,683.6	4,343.2	4,147.3	18.1	0.0	-125.91	-237.6	1,263.4	1,561.6	1,544.7	16.86	92.612	
4,800.0	4,783.1	4,435.0	4,233.2	18.4	0.0	-125.92	-244.4	1,295.0	1,601.3	1,584.1	17.22	92.994	
4,900.0	4,882.6	4,526.7	4,319.1	18.8	0.0	-125.92	-251.2	1,326.6	1,641.0	1,623.4	17.58	93.359	
5,000.0	4,982.2	4,618.5	4,405.0	19.2	0.0	-125.92	-257.9	1,358.2	1,680.7	1,662.8	17.94	93.708	
5,100.0	5,081.7	4,710.3	4,490.9	19.6	0.0	-125.92	-264.7	1,389.8	1,720.5	1,702.2	18.29	94.042	

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NCH - OH - PLAN #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
5,200.0	5,181.2	4,802.1	4,576.8	20.0	0.0	-125.92	-271.5	1,421.4	1,760.2	1,741.5	18.65	94.361	
5,300.0	5,280.8	4,893.8	4,662.7	20.4	0.0	-125.92	-278.2	1,453.0	1,799.9	1,780.9	19.01	94.668	
5,400.0	5,380.3	4,985.6	4,748.6	20.8	0.0	-125.92	-285.0	1,484.6	1,839.6	1,820.3	19.37	94.961	
5,500.0	5,479.8	5,077.4	4,834.5	21.2	0.0	-125.92	-291.8	1,516.2	1,879.4	1,859.6	19.73	95.243	
5,600.0	5,579.4	5,169.1	4,920.4	21.6	0.0	-125.92	-298.6	1,547.8	1,919.1	1,899.0	20.09	95.514	
5,700.0	5,678.9	5,260.9	5,006.2	22.0	0.0	-125.92	-305.3	1,579.4	1,958.8	1,938.4	20.45	95.773	
5,800.0	5,778.4	5,352.7	5,092.1	22.3	0.0	-125.92	-312.1	1,611.0	1,998.5	1,977.7	20.81	96.023	
5,900.0	5,878.0	5,444.5	5,178.0	22.7	0.0	-125.92	-318.9	1,642.6	2,038.3	2,017.1	21.17	96.263	
6,000.0	5,977.5	5,536.2	5,263.9	23.1	0.0	-125.92	-325.6	1,674.2	2,078.0	2,056.4	21.53	96.493	
6,100.0	6,077.0	5,628.0	5,349.8	23.5	0.0	-125.92	-332.4	1,705.8	2,117.7	2,095.8	21.90	96.715	
6,200.0	6,176.6	5,719.8	5,435.7	23.9	0.0	-125.92	-339.2	1,737.4	2,157.4	2,135.2	22.26	96.929	
6,300.0	6,276.1	5,811.5	5,521.6	24.3	0.0	-125.92	-345.9	1,769.0	2,197.1	2,174.5	22.62	97.135	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NXH - OH - PLAN #1												Offset Site Error:	0.0 usft
Survey Program: 0-												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							
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	0.7	134.9	134.9				
100.0	100.0	100.0	100.0	0.4	0.0	89.70	0.7	134.9	134.9	134.7	0.28	487.182	
200.0	200.0	200.0	200.0	1.0	0.0	89.70	0.7	134.9	134.9	134.2	0.80	169.152	
300.0	300.0	300.0	300.0	1.5	0.0	89.70	0.7	134.9	134.9	133.7	1.22	110.218	
400.0	400.0	400.0	400.0	1.9	0.0	89.70	0.7	134.9	134.9	133.3	1.62	83.391	
500.0	500.0	500.0	500.0	2.3	0.0	89.70	0.7	134.9	134.9	132.9	2.00	67.513	
600.0	600.0	600.0	600.0	2.7	0.0	89.70	0.7	134.9	134.9	132.6	2.37	56.879	
700.0	700.0	700.0	700.0	3.1	0.0	89.70	0.7	134.9	134.9	132.2	2.74	49.212 CC, ES	
800.0	800.0	795.6	795.6	3.5	0.0	89.86	0.3	136.5	136.6	133.5	3.11	43.965	
900.0	900.0	891.0	890.8	3.9	0.0	90.31	-0.8	141.1	141.4	138.0	3.46	40.853	
1,000.0	1,000.0	985.9	985.4	4.2	0.0	91.00	-2.6	148.8	149.6	145.7	3.81	39.260	
1,100.0	1,100.0	1,080.1	1,079.0	4.6	0.0	-124.57	-5.1	159.5	161.9	157.7	4.15	39.045	
1,200.0	1,199.8	1,173.2	1,171.0	5.4	0.0	-124.66	-8.3	172.9	179.3	174.6	4.79	37.480 SF	
1,300.0	1,299.5	1,264.6	1,261.0	5.9	0.0	-125.26	-12.1	188.9	201.8	196.6	5.22	38.667	
1,400.0	1,399.0	1,354.6	1,348.9	6.2	0.0	-125.99	-16.5	207.4	227.9	222.4	5.51	41.325	
1,500.0	1,498.5	1,443.0	1,434.7	6.5	0.0	-126.41	-21.4	228.2	256.9	251.1	5.83	44.030	
1,600.0	1,598.1	1,529.8	1,518.3	6.8	0.0	-126.61	-26.8	251.1	288.7	282.6	6.14	47.007	
1,700.0	1,697.6	1,614.9	1,599.4	7.1	0.0	-126.64	-32.7	275.9	323.3	316.9	6.44	50.211	
1,800.0	1,797.1	1,698.7	1,678.6	7.4	0.0	-126.56	-39.0	302.6	360.5	353.8	6.73	53.580	
1,900.0	1,896.7	1,791.0	1,765.4	7.8	0.0	-126.44	-46.2	333.1	398.9	391.8	7.07	56.456	
2,000.0	1,996.2	1,883.4	1,852.3	8.1	0.0	-126.34	-53.5	363.7	437.3	429.9	7.41	59.050	
2,100.0	2,095.7	1,975.7	1,939.2	8.4	0.0	-126.25	-60.7	394.2	475.6	467.9	7.75	61.399	
2,200.0	2,195.3	2,068.1	2,026.0	8.8	0.0	-126.18	-67.9	424.7	514.0	505.9	8.09	63.534	
2,300.0	2,294.8	2,160.4	2,112.9	9.1	0.0	-126.12	-75.2	455.2	552.4	543.9	8.44	65.484	
2,400.0	2,394.3	2,252.8	2,199.7	9.5	0.0	-126.07	-82.4	485.8	590.8	582.0	8.78	67.269	
2,500.0	2,493.9	2,345.1	2,286.6	9.8	0.0	-126.02	-89.6	516.3	629.1	620.0	9.13	68.909	
2,600.0	2,593.4	2,437.5	2,373.4	10.2	0.0	-125.98	-96.8	546.8	667.5	658.0	9.48	70.420	
2,700.0	2,692.9	2,529.8	2,460.3	10.5	0.0	-125.94	-104.1	577.3	705.9	696.0	9.83	71.817	
2,800.0	2,792.5	2,622.1	2,547.1	10.9	0.0	-125.91	-111.3	607.8	744.2	734.0	10.18	73.112	
2,900.0	2,892.0	2,714.5	2,634.0	11.3	0.0	-125.88	-118.5	638.4	782.6	772.1	10.53	74.314	
3,000.0	2,991.5	2,806.8	2,720.9	11.6	0.0	-125.86	-125.8	668.9	821.0	810.1	10.88	75.434	
3,100.0	3,091.1	2,899.2	2,807.7	12.0	0.0	-125.83	-133.0	699.4	859.3	848.1	11.24	76.479	
3,200.0	3,190.6	2,991.5	2,894.6	12.4	0.0	-125.81	-140.2	729.9	897.7	886.1	11.59	77.456	
3,300.0	3,290.1	3,083.9	2,981.4	12.7	0.0	-125.79	-147.4	760.5	936.1	924.1	11.94	78.372	
3,400.0	3,389.7	3,176.2	3,068.3	13.1	0.0	-125.77	-154.7	791.0	974.5	962.2	12.30	79.231	
3,500.0	3,489.2	3,268.6	3,155.1	13.5	0.0	-125.75	-161.9	821.5	1,012.8	1,000.2	12.65	80.039	
3,600.0	3,588.7	3,360.9	3,242.0	13.9	0.0	-125.74	-169.1	852.0	1,051.2	1,038.2	13.01	80.800	
3,700.0	3,688.3	3,453.3	3,328.8	14.2	0.0	-125.72	-176.4	882.5	1,089.6	1,076.2	13.37	81.518	
3,800.0	3,787.8	3,545.6	3,415.7	14.6	0.0	-125.71	-183.6	913.1	1,127.9	1,114.2	13.72	82.196	
3,900.0	3,887.3	3,637.9	3,502.5	15.0	0.0	-125.69	-190.8	943.6	1,166.3	1,152.2	14.08	82.837	
4,000.0	3,986.9	3,730.3	3,589.4	15.4	0.0	-125.68	-198.0	974.1	1,204.7	1,190.2	14.44	83.444	
4,100.0	4,086.4	3,822.6	3,676.3	15.7	0.0	-125.67	-205.3	1,004.6	1,243.1	1,228.3	14.79	84.020	
4,200.0	4,185.9	3,915.0	3,763.1	16.1	0.0	-125.66	-212.5	1,035.2	1,281.4	1,266.3	15.15	84.567	
4,300.0	4,285.4	4,007.3	3,850.0	16.5	0.0	-125.65	-219.7	1,065.7	1,319.8	1,304.3	15.51	85.087	
4,400.0	4,385.0	4,099.7	3,936.8	16.9	0.0	-125.64	-227.0	1,096.2	1,358.2	1,342.3	15.87	85.582	
4,500.0	4,484.5	4,192.0	4,023.7	17.3	0.0	-125.63	-234.2	1,126.7	1,396.5	1,380.3	16.23	86.053	
4,600.0	4,584.0	4,284.4	4,110.5	17.7	0.0	-125.62	-241.4	1,157.2	1,434.9	1,418.3	16.59	86.503	
4,700.0	4,683.6	4,376.7	4,197.4	18.1	0.0	-125.61	-248.7	1,187.8	1,473.3	1,456.3	16.95	86.931	
4,800.0	4,783.1	4,469.0	4,284.2	18.4	0.0	-125.61	-255.9	1,218.3	1,511.6	1,494.3	17.31	87.341	
4,900.0	4,882.6	4,561.4	4,371.1	18.8	0.0	-125.60	-263.1	1,248.8	1,550.0	1,532.4	17.67	87.732	
5,000.0	4,982.2	4,653.7	4,457.9	19.2	0.0	-125.59	-270.3	1,279.3	1,588.4	1,570.4	18.03	88.107	
5,100.0	5,081.7	4,746.1	4,544.8	19.6	0.0	-125.58	-277.6	1,309.9	1,626.8	1,608.4	18.39	88.465	

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,181.2	4,838.4	4,631.7	20.0	0.0	-125.58	-284.8	1,340.4	1,665.1	1,646.4	18.75	88.809		
5,300.0	5,280.8	4,930.8	4,718.5	20.4	0.0	-125.57	-292.0	1,370.9	1,703.5	1,684.4	19.11	89.138		
5,400.0	5,380.3	5,023.1	4,805.4	20.8	0.0	-125.57	-299.3	1,401.4	1,741.9	1,722.4	19.47	89.454		
5,500.0	5,479.8	5,115.5	4,892.2	21.2	0.0	-125.56	-306.5	1,431.9	1,780.3	1,760.4	19.83	89.758		
5,600.0	5,579.4	5,207.8	4,979.1	21.6	0.0	-125.55	-313.7	1,462.5	1,818.6	1,798.4	20.20	90.049		
5,700.0	5,678.9	5,300.2	5,065.9	22.0	0.0	-125.55	-320.9	1,493.0	1,857.0	1,836.4	20.56	90.329		
5,800.0	5,778.4	5,392.5	5,152.8	22.3	0.0	-125.54	-328.2	1,523.5	1,895.4	1,874.4	20.92	90.598		
5,900.0	5,878.0	5,484.8	5,239.6	22.7	0.0	-125.54	-335.4	1,554.0	1,933.7	1,912.5	21.28	90.857		
6,000.0	5,977.5	5,577.2	5,326.5	23.1	0.0	-125.54	-342.6	1,584.6	1,972.1	1,950.5	21.65	91.107		
6,100.0	6,077.0	5,669.5	5,413.3	23.5	0.0	-125.53	-349.9	1,615.1	2,010.5	1,988.5	22.01	91.347		
6,200.0	6,176.6	5,761.9	5,500.2	23.9	0.0	-125.53	-357.1	1,645.6	2,048.9	2,026.5	22.37	91.578		
6,300.0	6,276.1	5,854.2	5,587.1	24.3	0.0	-125.52	-364.3	1,676.1	2,087.2	2,064.5	22.74	91.801		
6,400.0	6,375.6	5,946.6	5,673.9	24.7	0.0	-125.52	-371.5	1,706.6	2,125.6	2,102.5	23.10	92.016		
6,500.0	6,475.2	6,038.9	5,760.8	25.1	0.0	-125.52	-378.8	1,737.2	2,164.0	2,140.5	23.46	92.224		
6,600.0	6,574.7	6,131.3	5,847.6	25.5	0.0	-125.51	-386.0	1,767.7	2,202.3	2,178.5	23.83	92.424		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - Gail #1 (PR) - EXISTING - NO SURVEYS (PR)													Offset Site Error:	0.0 usft
Survey Program: 100-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
13,900.0	7,662.0	7,593.0	7,593.0	112.7	28.2	90.00	8,133.0	105.1	2,196.5	2,127.5	69.03	31.822		
14,000.0	7,662.0	7,593.0	7,593.0	114.4	28.2	90.00	8,133.0	105.1	2,099.1	2,029.0	70.12	29.937		
14,100.0	7,662.0	7,593.0	7,593.0	116.1	28.2	90.00	8,133.0	105.1	2,002.0	1,930.7	71.34	28.062		
14,200.0	7,662.0	7,593.0	7,593.0	117.8	28.2	90.00	8,133.0	105.1	1,905.2	1,832.4	72.72	26.200		
14,300.0	7,662.0	7,593.0	7,593.0	119.5	28.2	90.00	8,133.0	105.1	1,808.7	1,734.4	74.27	24.354		
14,400.0	7,662.0	7,593.0	7,593.0	121.3	28.2	90.00	8,133.0	105.1	1,712.6	1,636.6	76.02	22.527		
14,500.0	7,662.0	7,593.0	7,593.0	123.0	28.2	90.00	8,133.0	105.1	1,617.0	1,539.0	78.02	20.725		
14,600.0	7,662.0	7,593.0	7,593.0	124.7	28.2	90.00	8,133.0	105.1	1,521.9	1,441.6	80.30	18.952		
14,700.0	7,662.0	7,593.0	7,593.0	126.4	28.2	90.00	8,133.0	105.1	1,427.6	1,344.6	82.92	17.215		
14,800.0	7,662.0	7,593.0	7,593.0	128.1	28.2	90.00	8,133.0	105.1	1,334.0	1,248.1	85.95	15.521		
14,900.0	7,662.0	7,593.0	7,593.0	129.8	28.2	90.00	8,133.0	105.1	1,241.5	1,152.0	89.46	13.877		
15,000.0	7,662.0	7,593.0	7,593.0	131.6	28.2	90.00	8,133.0	105.1	1,150.2	1,056.6	93.55	12.295		
15,100.0	7,662.0	7,593.0	7,593.0	133.3	28.2	90.00	8,133.0	105.1	1,060.5	962.1	98.35	10.783		
15,200.0	7,662.0	7,593.0	7,593.0	135.0	28.2	90.00	8,133.0	105.1	972.8	868.8	103.99	9.355		
15,300.0	7,662.0	7,593.0	7,593.0	136.7	28.2	90.00	8,133.0	105.1	887.7	777.0	110.63	8.024		
15,400.0	7,662.0	7,593.0	7,593.0	138.4	28.2	90.00	8,133.0	105.1	806.0	687.5	118.43	6.805		
15,500.0	7,662.0	7,593.0	7,593.0	140.2	28.2	90.00	8,133.0	105.1	728.9	601.3	127.54	5.715		
15,600.0	7,662.0	7,593.0	7,593.0	141.9	28.2	90.00	8,133.0	105.1	658.0	520.0	137.93	4.770		
15,700.0	7,662.0	7,593.0	7,593.0	143.6	28.2	90.00	8,133.0	105.1	595.5	446.2	149.30	3.988		
15,800.0	7,662.0	7,593.0	7,593.0	145.3	28.2	90.00	8,133.0	105.1	544.3	383.6	160.73	3.386		
15,900.0	7,662.0	7,593.0	7,593.0	147.1	28.2	90.00	8,133.0	105.1	507.9	337.3	170.51	2.978		
16,000.0	7,662.0	7,593.0	7,593.0	148.8	28.2	90.00	8,133.0	105.1	489.5	313.1	176.37	2.775		
16,041.7	7,662.0	7,593.0	7,593.0	149.5	28.2	90.00	8,133.0	105.1	487.7	310.5	177.19	2.752 CC, ES, SF		
16,100.0	7,662.0	7,593.0	7,593.0	150.5	28.2	90.00	8,133.0	105.1	491.2	314.6	176.61	2.781		
16,200.0	7,662.0	7,593.0	7,593.0	152.3	28.2	90.00	8,133.0	105.1	512.7	341.4	171.34	2.993		
16,300.0	7,662.0	7,593.0	7,593.0	154.0	28.2	90.00	8,133.0	105.1	551.9	389.5	162.35	3.399		
16,400.0	7,662.0	7,593.0	7,593.0	155.7	28.2	90.00	8,133.0	105.1	605.2	453.3	151.83	3.986		
16,500.0	7,662.0	7,593.0	7,593.0	157.5	28.2	90.00	8,133.0	105.1	669.3	527.9	141.37	4.734		
16,600.0	7,662.0	7,593.0	7,593.0	159.2	28.2	90.00	8,133.0	105.1	741.3	609.5	131.80	5.625		
16,700.0	7,662.0	7,593.0	7,593.0	160.9	28.2	90.00	8,133.0	105.1	819.3	695.9	123.38	6.640		
16,800.0	7,662.0	7,593.0	7,593.0	162.7	28.2	90.00	8,133.0	105.1	901.6	785.5	116.14	7.763		
16,900.0	7,662.0	7,593.0	7,593.0	164.4	28.2	90.00	8,133.0	105.1	987.2	877.2	109.96	8.978		
17,000.0	7,662.0	7,593.0	7,593.0	166.1	28.2	90.00	8,133.0	105.1	1,075.3	970.6	104.69	10.271		
17,100.0	7,662.0	7,593.0	7,593.0	167.9	28.2	90.00	8,133.0	105.1	1,165.3	1,065.1	100.19	11.631		
17,200.0	7,662.0	7,593.0	7,593.0	169.6	28.2	90.00	8,133.0	105.1	1,256.8	1,160.5	96.34	13.046		
17,300.0	7,662.0	7,593.0	7,593.0	171.3	28.2	90.00	8,133.0	105.1	1,349.5	1,256.5	93.02	14.508		
17,400.0	7,662.0	7,593.0	7,593.0	173.1	28.2	90.00	8,133.0	105.1	1,443.2	1,353.1	90.16	16.008		
17,500.0	7,662.0	7,593.0	7,593.0	174.8	28.2	90.00	8,133.0	105.1	1,537.7	1,450.0	87.67	17.541		
17,600.0	7,662.0	7,593.0	7,593.0	176.6	28.2	90.00	8,133.0	105.1	1,632.8	1,547.4	85.49	19.099		
17,700.0	7,662.0	7,593.0	7,593.0	178.3	28.2	90.00	8,133.0	105.1	1,728.5	1,645.0	83.59	20.679		
17,799.6	7,662.0	7,593.0	7,593.0	180.0	28.2	90.00	8,133.0	105.1	1,824.3	1,742.4	81.92	22.270		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	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 (PR) - EXISTING - NO SURVEYS (PR)													Offset Site Error:	0.0 usft
Survey Program: 100-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,800.0	7,662.0	7,593.0	7,593.0	145.3	28.2	-90.00	9,758.2	-1,476.2	2,164.2	2,061.9	102.29	21.158		
15,900.0	7,662.0	7,593.0	7,593.0	147.1	28.2	-90.00	9,758.2	-1,476.2	2,078.5	1,972.6	105.89	19.629		
16,000.0	7,662.0	7,593.0	7,593.0	148.8	28.2	-90.00	9,758.2	-1,476.2	1,994.1	1,884.3	109.78	18.165		
16,100.0	7,662.0	7,593.0	7,593.0	150.5	28.2	-90.00	9,758.2	-1,476.2	1,911.2	1,797.2	113.99	16.767		
16,200.0	7,662.0	7,593.0	7,593.0	152.3	28.2	-90.00	9,758.2	-1,476.2	1,830.0	1,711.5	118.54	15.438		
16,300.0	7,662.0	7,593.0	7,593.0	154.0	28.2	-90.00	9,758.2	-1,476.2	1,750.8	1,627.3	123.45	14.183		
16,400.0	7,662.0	7,593.0	7,593.0	155.7	28.2	-90.00	9,758.2	-1,476.2	1,673.8	1,545.0	128.73	13.002		
16,500.0	7,662.0	7,593.0	7,593.0	157.5	28.2	-90.00	9,758.2	-1,476.2	1,599.3	1,464.9	134.40	11.900		
16,600.0	7,662.0	7,593.0	7,593.0	159.2	28.2	-90.00	9,758.2	-1,476.2	1,527.8	1,387.3	140.46	10.877		
16,700.0	7,662.0	7,593.0	7,593.0	160.9	28.2	-90.00	9,758.2	-1,476.2	1,459.6	1,312.7	146.89	9.937		
16,800.0	7,662.0	7,593.0	7,593.0	162.7	28.2	-90.00	9,758.2	-1,476.2	1,395.2	1,241.6	153.65	9.080		
16,900.0	7,662.0	7,593.0	7,593.0	164.4	28.2	-90.00	9,758.2	-1,476.2	1,335.2	1,174.6	160.69	8.309		
17,000.0	7,662.0	7,593.0	7,593.0	166.1	28.2	-90.00	9,758.2	-1,476.2	1,280.3	1,112.4	167.89	7.626		
17,100.0	7,662.0	7,593.0	7,593.0	167.9	28.2	-90.00	9,758.2	-1,476.2	1,231.0	1,055.9	175.12	7.030		
17,200.0	7,662.0	7,593.0	7,593.0	169.6	28.2	-90.00	9,758.2	-1,476.2	1,188.1	1,006.0	182.17	6.522		
17,300.0	7,662.0	7,593.0	7,593.0	171.3	28.2	-90.00	9,758.2	-1,476.2	1,152.4	963.6	188.81	6.103		
17,400.0	7,662.0	7,593.0	7,593.0	173.1	28.2	-90.00	9,758.2	-1,476.2	1,124.4	929.6	194.77	5.773		
17,500.0	7,662.0	7,593.0	7,593.0	174.8	28.2	-90.00	9,758.2	-1,476.2	1,104.8	905.0	199.78	5.530		
17,600.0	7,662.0	7,593.0	7,593.0	176.6	28.2	-90.00	9,758.2	-1,476.2	1,094.0	890.4	203.60	5.373		
17,668.7	7,662.0	7,593.0	7,593.0	177.8	28.2	-90.00	9,758.2	-1,476.2	1,091.8	886.4	205.43	5.315 CC		
17,700.0	7,662.0	7,593.0	7,593.0	178.3	28.2	-90.00	9,758.2	-1,476.2	1,092.3	886.2	206.05	5.301 ES, SF		
17,799.6	7,662.0	7,593.0	7,593.0	180.0	28.2	-90.00	9,758.2	-1,476.2	1,099.6	892.6	207.05	5.311		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - Milheim #1 (P&A) - EXISTING - NO SURVEYS (P&A)													Offset Site Error:	0.0 usft
Survey Program: 100-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
11,700.0	7,662.0	7,593.0	7,593.0	75.9	28.2	-90.00	5,915.9	-964.4	2,204.6	2,144.4	60.16	36.647		
11,800.0	7,662.0	7,593.0	7,593.0	77.5	28.2	-90.00	5,915.9	-964.4	2,108.3	2,047.5	60.81	34.673		
11,900.0	7,662.0	7,593.0	7,593.0	79.1	28.2	-90.00	5,915.9	-964.4	2,012.5	1,950.9	61.56	32.691		
12,000.0	7,662.0	7,593.0	7,593.0	80.8	28.2	-90.00	5,915.9	-964.4	1,917.0	1,854.5	62.44	30.702		
12,100.0	7,662.0	7,593.0	7,593.0	82.4	28.2	-90.00	5,915.9	-964.4	1,822.0	1,758.5	63.46	28.711		
12,200.0	7,662.0	7,593.0	7,593.0	84.1	28.2	-90.00	5,915.9	-964.4	1,727.6	1,662.9	64.65	26.721		
12,300.0	7,662.0	7,593.0	7,593.0	85.7	28.2	-90.00	5,915.9	-964.4	1,633.8	1,567.8	66.05	24.737		
12,400.0	7,662.0	7,593.0	7,593.0	87.4	28.2	-90.00	5,915.9	-964.4	1,540.8	1,473.2	67.68	22.765		
12,500.0	7,662.0	7,593.0	7,593.0	89.1	28.2	-90.00	5,915.9	-964.4	1,448.8	1,379.2	69.61	20.815		
12,600.0	7,662.0	7,593.0	7,593.0	90.7	28.2	-90.00	5,915.9	-964.4	1,357.9	1,286.0	71.87	18.895		
12,700.0	7,662.0	7,593.0	7,593.0	92.4	28.2	-90.00	5,915.9	-964.4	1,268.4	1,193.8	74.53	17.019		
12,800.0	7,662.0	7,593.0	7,593.0	94.1	28.2	-90.00	5,915.9	-964.4	1,180.5	1,102.8	77.66	15.200		
12,900.0	7,662.0	7,593.0	7,593.0	95.8	28.2	-90.00	5,915.9	-964.4	1,094.7	1,013.4	81.36	13.455		
13,000.0	7,662.0	7,593.0	7,593.0	97.5	28.2	-90.00	5,915.9	-964.4	1,011.6	925.9	85.71	11.802		
13,100.0	7,662.0	7,593.0	7,593.0	99.1	28.2	-90.00	5,915.9	-964.4	931.7	840.9	90.82	10.260		
13,200.0	7,662.0	7,593.0	7,593.0	100.8	28.2	-90.00	5,915.9	-964.4	856.1	759.4	96.74	8.850		
13,300.0	7,662.0	7,593.0	7,593.0	102.5	28.2	-90.00	5,915.9	-964.4	786.0	682.5	103.52	7.593		
13,400.0	7,662.0	7,593.0	7,593.0	104.2	28.2	-90.00	5,915.9	-964.4	723.0	611.9	111.06	6.509		
13,500.0	7,662.0	7,593.0	7,593.0	105.9	28.2	-90.00	5,915.9	-964.4	669.0	549.9	119.07	5.619		
13,600.0	7,662.0	7,593.0	7,593.0	107.6	28.2	-90.00	5,915.9	-964.4	626.4	499.5	126.92	4.935		
13,700.0	7,662.0	7,593.0	7,593.0	109.3	28.2	-90.00	5,915.9	-964.4	597.7	464.0	133.70	4.470		
13,800.0	7,662.0	7,593.0	7,593.0	111.0	28.2	-90.00	5,915.9	-964.4	584.9	446.5	138.35	4.228		
13,825.8	7,662.0	7,593.0	7,593.0	111.4	28.2	-90.00	5,915.9	-964.4	584.3	445.2	139.10	4.201	CC, ES, SF	
13,900.0	7,662.0	7,593.0	7,593.0	112.7	28.2	-90.00	5,915.9	-964.4	589.0	448.9	140.13	4.203		
14,000.0	7,662.0	7,593.0	7,593.0	114.4	28.2	-90.00	5,915.9	-964.4	609.7	470.7	138.99	4.387		
14,100.0	7,662.0	7,593.0	7,593.0	116.1	28.2	-90.00	5,915.9	-964.4	645.5	509.9	135.54	4.762		
14,200.0	7,662.0	7,593.0	7,593.0	117.8	28.2	-90.00	5,915.9	-964.4	693.9	563.2	130.70	5.309		
14,300.0	7,662.0	7,593.0	7,593.0	119.5	28.2	-90.00	5,915.9	-964.4	752.5	627.3	125.27	6.007		
14,400.0	7,662.0	7,593.0	7,593.0	121.3	28.2	-90.00	5,915.9	-964.4	819.2	699.4	119.83	6.837		
14,500.0	7,662.0	7,593.0	7,593.0	123.0	28.2	-90.00	5,915.9	-964.4	892.2	777.5	114.70	7.778		
14,600.0	7,662.0	7,593.0	7,593.0	124.7	28.2	-90.00	5,915.9	-964.4	970.0	860.0	110.02	8.816		
14,700.0	7,662.0	7,593.0	7,593.0	126.4	28.2	-90.00	5,915.9	-964.4	1,051.5	945.7	105.84	9.935		
14,800.0	7,662.0	7,593.0	7,593.0	128.1	28.2	-90.00	5,915.9	-964.4	1,136.0	1,033.9	102.13	11.124		
14,900.0	7,662.0	7,593.0	7,593.0	129.8	28.2	-90.00	5,915.9	-964.4	1,222.9	1,124.0	98.85	12.371		
15,000.0	7,662.0	7,593.0	7,593.0	131.6	28.2	-90.00	5,915.9	-964.4	1,311.6	1,215.6	95.97	13.667		
15,100.0	7,662.0	7,593.0	7,593.0	133.3	28.2	-90.00	5,915.9	-964.4	1,401.8	1,308.4	93.42	15.005		
15,200.0	7,662.0	7,593.0	7,593.0	135.0	28.2	-90.00	5,915.9	-964.4	1,493.3	1,402.1	91.18	16.378		
15,300.0	7,662.0	7,593.0	7,593.0	136.7	28.2	-90.00	5,915.9	-964.4	1,585.8	1,496.6	89.18	17.782		
15,400.0	7,662.0	7,593.0	7,593.0	138.4	28.2	-90.00	5,915.9	-964.4	1,679.2	1,591.8	87.41	19.210		
15,500.0	7,662.0	7,593.0	7,593.0	140.2	28.2	-90.00	5,915.9	-964.4	1,773.3	1,687.4	85.83	20.660		
15,600.0	7,662.0	7,593.0	7,593.0	141.9	28.2	-90.00	5,915.9	-964.4	1,868.0	1,783.6	84.42	22.127		
15,700.0	7,662.0	7,593.0	7,593.0	143.6	28.2	-90.00	5,915.9	-964.4	1,963.2	1,880.1	83.15	23.609		
15,800.0	7,662.0	7,593.0	7,593.0	145.3	28.2	-90.00	5,915.9	-964.4	2,058.9	1,976.9	82.01	25.104		
15,900.0	7,662.0	7,593.0	7,593.0	147.1	28.2	-90.00	5,915.9	-964.4	2,155.0	2,074.0	80.98	26.610		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - Price 7-19 (SI) - EXISTING - NO SURVEYS (SI)													Offset Site Error:	0.0 usft
Survey Program: 100-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
9,200.0	7,662.0	7,593.0	7,593.0	38.9	28.2	90.00	3,157.2	793.6	2,202.0	2,140.6	61.46	35.828		
9,300.0	7,662.0	7,593.0	7,593.0	40.1	28.2	90.00	3,157.2	793.6	2,118.0	2,055.7	62.26	34.017		
9,400.0	7,662.0	7,593.0	7,593.0	41.4	28.2	90.00	3,157.2	793.6	2,035.4	1,972.2	63.17	32.221		
9,500.0	7,662.0	7,593.0	7,593.0	42.6	28.2	90.00	3,157.2	793.6	1,954.4	1,890.3	64.19	30.446		
9,600.0	7,662.0	7,593.0	7,593.0	44.0	28.2	90.00	3,157.2	793.6	1,875.3	1,810.0	65.34	28.700		
9,700.0	7,662.0	7,593.0	7,593.0	45.3	28.2	90.00	3,157.2	793.6	1,798.3	1,731.7	66.63	26.989		
9,800.0	7,662.0	7,593.0	7,593.0	46.7	28.2	90.00	3,157.2	793.6	1,723.6	1,655.5	68.07	25.323		
9,900.0	7,662.0	7,593.0	7,593.0	48.1	28.2	90.00	3,157.2	793.6	1,651.6	1,581.9	69.65	23.712		
10,000.0	7,662.0	7,593.0	7,593.0	49.5	28.2	90.00	3,157.2	793.6	1,582.6	1,511.2	71.40	22.166		
10,100.0	7,662.0	7,593.0	7,593.0	50.9	28.2	90.00	3,157.2	793.6	1,517.2	1,443.9	73.30	20.698		
10,200.0	7,662.0	7,593.0	7,593.0	52.4	28.2	90.00	3,157.2	793.6	1,455.6	1,380.2	75.35	19.319		
10,300.0	7,662.0	7,593.0	7,593.0	53.9	28.2	90.00	3,157.2	793.6	1,398.5	1,320.9	77.52	18.039		
10,400.0	7,662.0	7,593.0	7,593.0	55.4	28.2	90.00	3,157.2	793.6	1,346.4	1,266.6	79.80	16.871		
10,500.0	7,662.0	7,593.0	7,593.0	56.9	28.2	90.00	3,157.2	793.6	1,299.9	1,217.7	82.14	15.825		
10,600.0	7,662.0	7,593.0	7,593.0	58.4	28.2	90.00	3,157.2	793.6	1,259.6	1,175.1	84.48	14.910		
10,700.0	7,662.0	7,593.0	7,593.0	59.9	28.2	90.00	3,157.2	793.6	1,226.2	1,139.5	86.75	14.135		
10,800.0	7,662.0	7,593.0	7,593.0	61.5	28.2	90.00	3,157.2	793.6	1,200.3	1,111.4	88.88	13.504		
10,900.0	7,662.0	7,593.0	7,593.0	63.1	28.2	90.00	3,157.2	793.6	1,182.2	1,091.4	90.79	13.021		
11,000.0	7,662.0	7,593.0	7,593.0	64.6	28.2	90.00	3,157.2	793.6	1,172.4	1,080.0	92.40	12.688		
11,065.1	7,662.0	7,593.0	7,593.0	65.7	28.2	90.00	3,157.2	793.6	1,170.6	1,077.4	93.27	12.552 CC, ES		
11,100.0	7,662.0	7,593.0	7,593.0	66.2	28.2	90.00	3,157.2	793.6	1,171.1	1,077.5	93.66	12.504		
11,200.0	7,662.0	7,593.0	7,593.0	67.8	28.2	90.00	3,157.2	793.6	1,178.4	1,083.8	94.53	12.465 SF		
11,300.0	7,662.0	7,593.0	7,593.0	69.4	28.2	90.00	3,157.2	793.6	1,194.0	1,098.9	95.01	12.566		
11,400.0	7,662.0	7,593.0	7,593.0	71.0	28.2	90.00	3,157.2	793.6	1,217.6	1,122.5	95.12	12.800		
11,500.0	7,662.0	7,593.0	7,593.0	72.6	28.2	90.00	3,157.2	793.6	1,248.8	1,153.9	94.90	13.160		
11,600.0	7,662.0	7,593.0	7,593.0	74.2	28.2	90.00	3,157.2	793.6	1,287.0	1,192.6	94.39	13.635		
11,700.0	7,662.0	7,593.0	7,593.0	75.9	28.2	90.00	3,157.2	793.6	1,331.7	1,238.0	93.67	14.218		
11,800.0	7,662.0	7,593.0	7,593.0	77.5	28.2	90.00	3,157.2	793.6	1,382.2	1,289.4	92.78	14.898		
11,900.0	7,662.0	7,593.0	7,593.0	79.1	28.2	90.00	3,157.2	793.6	1,437.9	1,346.1	91.77	15.667		
12,000.0	7,662.0	7,593.0	7,593.0	80.8	28.2	90.00	3,157.2	793.6	1,498.1	1,407.4	90.70	16.517		
12,100.0	7,662.0	7,593.0	7,593.0	82.4	28.2	90.00	3,157.2	793.6	1,562.5	1,472.9	89.60	17.439		
12,200.0	7,662.0	7,593.0	7,593.0	84.1	28.2	90.00	3,157.2	793.6	1,630.4	1,542.0	88.49	18.425		
12,300.0	7,662.0	7,593.0	7,593.0	85.7	28.2	90.00	3,157.2	793.6	1,701.6	1,614.2	87.40	19.469		
12,400.0	7,662.0	7,593.0	7,593.0	87.4	28.2	90.00	3,157.2	793.6	1,775.5	1,689.1	86.33	20.566		
12,500.0	7,662.0	7,593.0	7,593.0	89.1	28.2	90.00	3,157.2	793.6	1,851.8	1,766.5	85.31	21.708		
12,600.0	7,662.0	7,593.0	7,593.0	90.7	28.2	90.00	3,157.2	793.6	1,930.4	1,846.0	84.33	22.892		
12,700.0	7,662.0	7,593.0	7,593.0	92.4	28.2	90.00	3,157.2	793.6	2,010.8	1,927.4	83.39	24.112		
12,800.0	7,662.0	7,593.0	7,593.0	94.1	28.2	90.00	3,157.2	793.6	2,092.9	2,010.4	82.51	25.365		
12,900.0	7,662.0	7,593.0	7,593.0	95.8	28.2	90.00	3,157.2	793.6	2,176.5	2,094.8	81.68	26.647		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - Tracy #1 (PR) - EXISTING - NO SURVEYS (PR)												Offset Site Error:	0.0 usft
Survey Program: 100-MWD												Offset Well Error:	0.0 usft
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
12,400.0	7,662.0	7,593.0	7,593.0	87.4	28.2	90.00	5,962.9	1,277.5	2,215.7	2,117.0	98.75	22.439	
12,500.0	7,662.0	7,593.0	7,593.0	89.1	28.2	90.00	5,962.9	1,277.5	2,150.7	2,049.1	101.60	21.169	
12,600.0	7,662.0	7,593.0	7,593.0	90.7	28.2	90.00	5,962.9	1,277.5	2,088.4	1,983.8	104.56	19.974	
12,700.0	7,662.0	7,593.0	7,593.0	92.4	28.2	90.00	5,962.9	1,277.5	2,029.1	1,921.5	107.61	18.856	
12,800.0	7,662.0	7,593.0	7,593.0	94.1	28.2	90.00	5,962.9	1,277.5	1,973.1	1,862.4	110.75	17.817	
12,900.0	7,662.0	7,593.0	7,593.0	95.8	28.2	90.00	5,962.9	1,277.5	1,920.7	1,806.8	113.94	16.858	
13,000.0	7,662.0	7,593.0	7,593.0	97.5	28.2	90.00	5,962.9	1,277.5	1,872.2	1,755.1	117.16	15.980	
13,100.0	7,662.0	7,593.0	7,593.0	99.1	28.2	90.00	5,962.9	1,277.5	1,827.9	1,707.5	120.37	15.186	
13,200.0	7,662.0	7,593.0	7,593.0	100.8	28.2	90.00	5,962.9	1,277.5	1,788.0	1,664.5	123.53	14.474	
13,300.0	7,662.0	7,593.0	7,593.0	102.5	28.2	90.00	5,962.9	1,277.5	1,753.0	1,626.4	126.60	13.847	
13,400.0	7,662.0	7,593.0	7,593.0	104.2	28.2	90.00	5,962.9	1,277.5	1,723.1	1,593.6	129.52	13.303	
13,500.0	7,662.0	7,593.0	7,593.0	105.9	28.2	90.00	5,962.9	1,277.5	1,698.5	1,566.3	132.25	12.843	
13,600.0	7,662.0	7,593.0	7,593.0	107.6	28.2	90.00	5,962.9	1,277.5	1,679.5	1,544.8	134.73	12.466	
13,700.0	7,662.0	7,593.0	7,593.0	109.3	28.2	90.00	5,962.9	1,277.5	1,666.4	1,529.5	136.91	12.171	
13,800.0	7,662.0	7,593.0	7,593.0	111.0	28.2	90.00	5,962.9	1,277.5	1,659.1	1,520.4	138.77	11.956	
13,870.3	7,662.0	7,593.0	7,593.0	112.2	28.2	90.00	5,962.9	1,277.5	1,657.7	1,517.8	139.86	11.853 CC	
13,900.0	7,662.0	7,593.0	7,593.0	112.7	28.2	90.00	5,962.9	1,277.5	1,657.9	1,517.7	140.26	11.820 ES	
14,000.0	7,662.0	7,593.0	7,593.0	114.4	28.2	90.00	5,962.9	1,277.5	1,662.7	1,521.4	141.37	11.761 SF	
14,100.0	7,662.0	7,593.0	7,593.0	116.1	28.2	90.00	5,962.9	1,277.5	1,673.5	1,531.4	142.10	11.777	
14,200.0	7,662.0	7,593.0	7,593.0	117.8	28.2	90.00	5,962.9	1,277.5	1,690.1	1,547.7	142.44	11.865	
14,300.0	7,662.0	7,593.0	7,593.0	119.5	28.2	90.00	5,962.9	1,277.5	1,712.5	1,570.0	142.43	12.023	
14,400.0	7,662.0	7,593.0	7,593.0	121.3	28.2	90.00	5,962.9	1,277.5	1,740.2	1,598.2	142.08	12.248	
14,500.0	7,662.0	7,593.0	7,593.0	123.0	28.2	90.00	5,962.9	1,277.5	1,773.2	1,631.8	141.44	12.537	
14,600.0	7,662.0	7,593.0	7,593.0	124.7	28.2	90.00	5,962.9	1,277.5	1,811.2	1,670.6	140.54	12.887	
14,700.0	7,662.0	7,593.0	7,593.0	126.4	28.2	90.00	5,962.9	1,277.5	1,853.7	1,714.3	139.42	13.296	
14,800.0	7,662.0	7,593.0	7,593.0	128.1	28.2	90.00	5,962.9	1,277.5	1,900.6	1,762.5	138.13	13.760	
14,900.0	7,662.0	7,593.0	7,593.0	129.8	28.2	90.00	5,962.9	1,277.5	1,951.5	1,814.8	136.69	14.276	
15,000.0	7,662.0	7,593.0	7,593.0	131.6	28.2	90.00	5,962.9	1,277.5	2,006.0	1,870.9	135.16	14.842	
15,100.0	7,662.0	7,593.0	7,593.0	133.3	28.2	90.00	5,962.9	1,277.5	2,064.0	1,930.5	133.55	15.455	
15,200.0	7,662.0	7,593.0	7,593.0	135.0	28.2	90.00	5,962.9	1,277.5	2,125.1	1,993.2	131.89	16.113	
15,300.0	7,662.0	7,593.0	7,593.0	136.7	28.2	90.00	5,962.9	1,277.5	2,189.1	2,058.9	130.21	16.812	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - UPRR-Letterly 1 (P&A) - EXISTING - NO SURVEYS (P&A)													Offset Site Error:	0.0 usft
Survey Program: 100-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-42.32	1,023.8	-932.1	1,386.3					
100.0	100.0	31.0	31.0	0.4	0.3	-42.32	1,023.8	-932.1	1,384.6	1,384.3	0.27	5,152.110		
200.0	200.0	131.0	131.0	1.0	1.1	-42.32	1,023.8	-932.1	1,384.6	1,383.6	0.99	1,395.224		
300.0	300.0	231.0	231.0	1.5	1.5	-42.32	1,023.8	-932.1	1,384.6	1,382.9	1.71	811.041		
400.0	400.0	331.0	331.0	1.9	1.9	-42.32	1,023.8	-932.1	1,384.6	1,382.1	2.42	571.351		
500.0	500.0	431.0	431.0	2.3	2.3	-42.32	1,023.8	-932.1	1,384.6	1,381.4	3.14	440.959		
600.0	600.0	531.0	531.0	2.7	2.7	-42.32	1,023.8	-932.1	1,384.6	1,380.7	3.86	359.008		
700.0	700.0	631.0	631.0	3.1	3.1	-42.32	1,023.8	-932.1	1,384.6	1,380.0	4.57	302.739		
800.0	800.0	731.0	731.0	3.5	3.5	-42.32	1,023.8	-932.1	1,384.6	1,379.3	5.29	261.716		
900.0	900.0	831.0	831.0	3.9	3.9	-42.32	1,023.8	-932.1	1,384.6	1,378.6	6.01	230.484		
1,000.0	1,000.0	931.0	931.0	4.2	4.2	-42.32	1,023.8	-932.1	1,384.6	1,377.8	6.72	205.910		
1,100.0	1,100.0	1,031.0	1,031.0	4.6	4.6	101.63	1,023.8	-932.1	1,384.9	1,377.5	7.43	186.502		
1,200.0	1,199.8	1,130.8	1,130.8	5.4	5.0	101.82	1,023.8	-932.1	1,386.0	1,377.9	8.12	170.747		
1,300.0	1,299.5	1,230.5	1,230.5	5.9	5.3	102.14	1,023.8	-932.1	1,387.8	1,379.0	8.82	157.427		
1,400.0	1,399.0	1,330.0	1,330.0	6.2	5.7	102.53	1,023.8	-932.1	1,389.8	1,380.3	9.53	145.844		
1,500.0	1,498.5	1,429.5	1,429.5	6.5	6.0	102.92	1,023.8	-932.1	1,392.0	1,381.7	10.26	135.647		
1,600.0	1,598.1	1,529.1	1,529.1	6.8	6.4	103.30	1,023.8	-932.1	1,394.2	1,383.2	11.00	126.789		
1,700.0	1,697.6	1,628.6	1,628.6	7.1	6.8	103.68	1,023.8	-932.1	1,396.4	1,384.7	11.73	119.028		
1,800.0	1,797.1	1,728.1	1,728.1	7.4	7.1	104.07	1,023.8	-932.1	1,398.8	1,386.3	12.47	112.176		
1,900.0	1,896.7	1,827.7	1,827.7	7.8	7.5	104.45	1,023.8	-932.1	1,401.2	1,387.9	13.21	106.085		
2,000.0	1,996.2	1,927.2	1,927.2	8.1	7.9	104.83	1,023.8	-932.1	1,403.6	1,389.7	13.95	100.637		
2,100.0	2,095.7	2,026.7	2,026.7	8.4	8.2	105.21	1,023.8	-932.1	1,406.1	1,391.4	14.69	95.736		
2,200.0	2,195.3	2,126.3	2,126.3	8.8	8.6	105.58	1,023.8	-932.1	1,408.7	1,393.3	15.43	91.306		
2,300.0	2,294.8	2,225.8	2,225.8	9.1	8.9	105.96	1,023.8	-932.1	1,411.3	1,395.2	16.17	87.283		
2,400.0	2,394.3	2,325.3	2,325.3	9.5	9.3	106.33	1,023.8	-932.1	1,414.0	1,397.1	16.91	83.614		
2,500.0	2,493.9	2,424.9	2,424.9	9.8	9.6	106.71	1,023.8	-932.1	1,416.8	1,399.1	17.65	80.256		
2,600.0	2,593.4	2,524.4	2,524.4	10.2	10.0	107.08	1,023.8	-932.1	1,419.6	1,401.2	18.40	77.170		
2,700.0	2,692.9	2,623.9	2,623.9	10.5	10.4	107.45	1,023.8	-932.1	1,422.5	1,403.3	19.14	74.326		
2,800.0	2,792.5	2,723.5	2,723.5	10.9	10.7	107.82	1,023.8	-932.1	1,425.4	1,405.5	19.88	71.697		
2,900.0	2,892.0	2,823.0	2,823.0	11.3	11.1	108.18	1,023.8	-932.1	1,428.4	1,407.8	20.62	69.260		
3,000.0	2,991.5	2,922.5	2,922.5	11.6	11.4	108.55	1,023.8	-932.1	1,431.5	1,410.1	21.37	66.994		
3,100.0	3,091.1	3,022.1	3,022.1	12.0	11.8	108.91	1,023.8	-932.1	1,434.6	1,412.5	22.11	64.883		
3,200.0	3,190.6	3,121.6	3,121.6	12.4	12.2	109.28	1,023.8	-932.1	1,437.7	1,414.9	22.85	62.912		
3,300.0	3,290.1	3,221.1	3,221.1	12.7	12.5	109.64	1,023.8	-932.1	1,441.0	1,417.4	23.60	61.068		
3,400.0	3,389.7	3,320.7	3,320.7	13.1	12.9	110.00	1,023.8	-932.1	1,444.3	1,419.9	24.34	59.338		
3,500.0	3,489.2	3,420.2	3,420.2	13.5	13.2	110.35	1,023.8	-932.1	1,447.6	1,422.5	25.08	57.714		
3,600.0	3,588.7	3,519.7	3,519.7	13.9	13.6	110.71	1,023.8	-932.1	1,451.0	1,425.2	25.83	56.185		
3,700.0	3,688.3	3,619.3	3,619.3	14.2	13.9	111.06	1,023.8	-932.1	1,454.5	1,427.9	26.57	54.743		
3,800.0	3,787.8	3,718.8	3,718.8	14.6	14.3	111.42	1,023.8	-932.1	1,458.0	1,430.7	27.31	53.383		
3,900.0	3,887.3	3,818.3	3,818.3	15.0	14.7	111.77	1,023.8	-932.1	1,461.5	1,433.5	28.05	52.096		
4,000.0	3,986.9	3,917.9	3,917.9	15.4	15.0	112.12	1,023.8	-932.1	1,465.2	1,436.4	28.80	50.878		
4,100.0	4,086.4	4,017.4	4,017.4	15.7	15.4	112.46	1,023.8	-932.1	1,468.8	1,439.3	29.54	49.724		
4,200.0	4,185.9	4,116.9	4,116.9	16.1	15.7	112.81	1,023.8	-932.1	1,472.6	1,442.3	30.28	48.628		
4,300.0	4,285.4	4,216.4	4,216.4	16.5	16.1	113.15	1,023.8	-932.1	1,476.4	1,445.3	31.02	47.586		
4,400.0	4,385.0	4,316.0	4,316.0	16.9	16.4	113.50	1,023.8	-932.1	1,480.2	1,448.4	31.77	46.595		
4,500.0	4,484.5	4,415.5	4,415.5	17.3	16.8	113.84	1,023.8	-932.1	1,484.1	1,451.6	32.51	45.651		
4,600.0	4,584.0	4,515.0	4,515.0	17.7	17.2	114.18	1,023.8	-932.1	1,488.0	1,454.8	33.25	44.751		
4,700.0	4,683.6	4,614.6	4,614.6	18.1	17.5	114.51	1,023.8	-932.1	1,492.0	1,458.0	33.99	43.892		
4,800.0	4,783.1	4,714.1	4,714.1	18.4	17.9	114.85	1,023.8	-932.1	1,496.1	1,461.3	34.73	43.071		
4,900.0	4,882.6	4,813.6	4,813.6	18.8	18.2	115.18	1,023.8	-932.1	1,500.2	1,464.7	35.48	42.286		
5,000.0	4,982.2	4,913.2	4,913.2	19.2	18.6	115.51	1,023.8	-932.1	1,504.3	1,468.1	36.22	41.535		
5,100.0	5,081.7	5,012.7	5,012.7	19.6	19.0	115.84	1,023.8	-932.1	1,508.5	1,471.5	36.96	40.816		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - UPRR-Letterly 1 (P&A) - EXISTING - NO SURVEYS (P&A)													Offset Site Error:	0.0 usft
Survey Program: 100-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,181.2	5,112.2	5,112.2	20.0	19.3	116.17	1,023.8	-932.1	1,512.8	1,475.1	37.70	40.126		
5,300.0	5,280.8	5,211.8	5,211.8	20.4	19.7	116.50	1,023.8	-932.1	1,517.1	1,478.6	38.44	39.465		
5,400.0	5,380.3	5,311.3	5,311.3	20.8	20.0	116.82	1,023.8	-932.1	1,521.4	1,482.2	39.18	38.830		
5,500.0	5,479.8	5,410.8	5,410.8	21.2	20.4	117.14	1,023.8	-932.1	1,525.8	1,485.9	39.92	38.220		
5,600.0	5,579.4	5,510.4	5,510.4	21.6	20.7	117.46	1,023.8	-932.1	1,530.2	1,489.6	40.66	37.633		
5,700.0	5,678.9	5,609.9	5,609.9	22.0	21.1	117.78	1,023.8	-932.1	1,534.7	1,493.3	41.40	37.069		
5,800.0	5,778.4	5,709.4	5,709.4	22.3	21.5	118.10	1,023.8	-932.1	1,539.3	1,497.1	42.14	36.526		
5,900.0	5,878.0	5,809.0	5,809.0	22.7	21.8	118.41	1,023.8	-932.1	1,543.9	1,501.0	42.88	36.003		
6,000.0	5,977.5	5,908.5	5,908.5	23.1	22.2	118.73	1,023.8	-932.1	1,548.5	1,504.9	43.62	35.499		
6,100.0	6,077.0	6,008.0	6,008.0	23.5	22.5	119.04	1,023.8	-932.1	1,553.2	1,508.8	44.36	35.013		
6,200.0	6,176.6	6,107.6	6,107.6	23.9	22.9	119.35	1,023.8	-932.1	1,557.9	1,512.8	45.10	34.544		
6,300.0	6,276.1	6,207.1	6,207.1	24.3	23.2	119.65	1,023.8	-932.1	1,562.7	1,516.8	45.84	34.091		
6,400.0	6,375.6	6,306.6	6,306.6	24.7	23.6	119.96	1,023.8	-932.1	1,567.5	1,520.9	46.58	33.654		
6,500.0	6,475.2	6,406.2	6,406.2	25.1	24.0	120.26	1,023.8	-932.1	1,572.3	1,525.0	47.32	33.231		
6,600.0	6,574.7	6,505.7	6,505.7	25.5	24.3	120.56	1,023.8	-932.1	1,577.2	1,529.2	48.05	32.823		
6,700.0	6,674.2	6,605.2	6,605.2	25.9	24.7	120.86	1,023.8	-932.1	1,582.2	1,533.4	48.79	32.428		
6,800.0	6,773.8	6,704.8	6,704.8	26.3	25.0	121.16	1,023.8	-932.1	1,587.2	1,537.7	49.53	32.046		
6,900.0	6,873.3	6,804.3	6,804.3	26.7	25.4	121.46	1,023.8	-932.1	1,592.2	1,542.0	50.27	31.676		
7,000.0	6,972.8	6,903.8	6,903.8	27.1	25.7	121.75	1,023.8	-932.1	1,597.3	1,546.3	51.00	31.317		
7,100.0	7,072.4	7,003.4	7,003.4	27.4	26.1	96.58	1,023.8	-932.1	1,601.8	1,550.1	51.74	30.959		
7,200.0	7,172.0	7,103.0	7,103.0	27.8	26.5	0.00	1,023.8	-932.1	1,594.5	1,541.9	52.55	30.342		
7,300.0	7,269.0	7,200.0	7,200.0	28.0	26.8	-12.45	1,023.8	-932.1	1,571.2	1,517.8	53.41	29.420		
7,400.0	7,360.6	7,291.6	7,291.6	28.2	27.1	-18.00	1,023.8	-932.1	1,532.6	1,478.5	54.17	28.294		
7,500.0	7,444.0	7,375.0	7,375.0	28.3	27.4	-23.10	1,023.8	-932.1	1,480.2	1,425.4	54.80	27.012		
7,600.0	7,516.7	7,447.7	7,447.7	28.5	27.7	-29.53	1,023.8	-932.1	1,415.6	1,360.3	55.28	25.606		
7,700.0	7,576.3	7,507.3	7,507.3	28.6	27.9	-38.61	1,023.8	-932.1	1,341.2	1,285.6	55.62	24.114		
7,800.0	7,621.2	7,552.2	7,552.2	28.7	28.1	-51.66	1,023.8	-932.1	1,259.7	1,203.8	55.81	22.569		
7,900.0	7,650.0	7,581.0	7,581.0	28.9	28.2	-68.82	1,023.8	-932.1	1,174.0	1,118.1	55.89	21.006		
8,000.0	7,661.7	7,592.7	7,592.7	29.2	28.2	-87.05	1,023.8	-932.1	1,087.4	1,031.5	55.88	19.459		
8,100.0	7,662.0	7,593.0	7,593.0	29.6	28.2	-90.00	1,023.8	-932.1	1,002.8	947.0	55.86	17.952		
8,200.0	7,662.0	7,593.0	7,593.0	30.0	28.2	-90.00	1,023.8	-932.1	921.4	865.5	55.92	16.477		
8,300.0	7,662.0	7,593.0	7,593.0	30.6	28.2	-90.00	1,023.8	-932.1	843.9	787.8	56.10	15.043		
8,400.0	7,662.0	7,593.0	7,593.0	31.2	28.2	-90.00	1,023.8	-932.1	771.7	715.2	56.47	13.665		
8,500.0	7,662.0	7,593.0	7,593.0	32.0	28.2	-90.00	1,023.8	-932.1	706.3	649.1	57.11	12.367		
8,600.0	7,662.0	7,593.0	7,593.0	32.8	28.2	-90.00	1,023.8	-932.1	649.7	591.6	58.09	11.184		
8,700.0	7,662.0	7,593.0	7,593.0	33.6	28.2	-90.00	1,023.8	-932.1	604.4	545.0	59.45	10.167		
8,800.0	7,662.0	7,593.0	7,593.0	34.6	28.2	-90.00	1,023.8	-932.1	573.2	512.1	61.12	9.379		
8,900.0	7,662.0	7,593.0	7,593.0	35.6	28.2	-90.00	1,023.8	-932.1	558.5	495.6	62.89	8.880		
8,933.6	7,662.0	7,593.0	7,593.0	35.9	28.2	-90.00	1,023.8	-932.1	557.4	494.0	63.46	8.784 CC, ES		
9,000.0	7,662.0	7,593.0	7,593.0	36.6	28.2	-90.00	1,023.8	-932.1	561.4	496.9	64.46	8.709 SF		
9,100.0	7,662.0	7,593.0	7,593.0	37.8	28.2	-90.00	1,023.8	-932.1	581.7	516.2	65.59	8.869		
9,200.0	7,662.0	7,593.0	7,593.0	38.9	28.2	-90.00	1,023.8	-932.1	617.8	551.6	66.21	9.331		
9,300.0	7,662.0	7,593.0	7,593.0	40.1	28.2	-90.00	1,023.8	-932.1	667.1	600.7	66.40	10.046		
9,400.0	7,662.0	7,593.0	7,593.0	41.4	28.2	-90.00	1,023.8	-932.1	726.8	660.5	66.30	10.962		
9,500.0	7,662.0	7,593.0	7,593.0	42.6	28.2	-90.00	1,023.8	-932.1	794.7	728.6	66.03	12.035		
9,600.0	7,662.0	7,593.0	7,593.0	44.0	28.2	-90.00	1,023.8	-932.1	868.8	803.1	65.68	13.227		
9,700.0	7,662.0	7,593.0	7,593.0	45.3	28.2	-90.00	1,023.8	-932.1	947.7	882.3	65.31	14.510		
9,800.0	7,662.0	7,593.0	7,593.0	46.7	28.2	-90.00	1,023.8	-932.1	1,030.2	965.3	64.95	15.862		
9,900.0	7,662.0	7,593.0	7,593.0	48.1	28.2	-90.00	1,023.8	-932.1	1,115.6	1,051.0	64.60	17.269		
10,000.0	7,662.0	7,593.0	7,593.0	49.5	28.2	-90.00	1,023.8	-932.1	1,203.3	1,139.0	64.29	18.717		
10,100.0	7,662.0	7,593.0	7,593.0	50.9	28.2	-90.00	1,023.8	-932.1	1,292.7	1,228.7	64.00	20.198		
10,200.0	7,662.0	7,593.0	7,593.0	52.4	28.2	-90.00	1,023.8	-932.1	1,383.6	1,319.9	63.75	21.705		

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - UPRR-Letterly 1 (P&A) - EXISTING - NO SURVEYS (P&A)												Offset Site Error:	0.0 usft
Survey Program: 100-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
10,300.0	7,662.0	7,593.0	7,593.0	53.9	28.2	-90.00	1,023.8	-932.1	1,475.7	1,412.2	63.52	23.233	
10,400.0	7,662.0	7,593.0	7,593.0	55.4	28.2	-90.00	1,023.8	-932.1	1,568.7	1,505.4	63.31	24.778	
10,500.0	7,662.0	7,593.0	7,593.0	56.9	28.2	-90.00	1,023.8	-932.1	1,662.6	1,599.5	63.13	26.337	
10,600.0	7,662.0	7,593.0	7,593.0	58.4	28.2	-90.00	1,023.8	-932.1	1,757.1	1,694.2	62.96	27.907	
10,700.0	7,662.0	7,593.0	7,593.0	59.9	28.2	-90.00	1,023.8	-932.1	1,852.2	1,789.4	62.82	29.486	
10,800.0	7,662.0	7,593.0	7,593.0	61.5	28.2	-90.00	1,023.8	-932.1	1,947.8	1,885.1	62.69	31.072	
10,900.0	7,662.0	7,593.0	7,593.0	63.1	28.2	-90.00	1,023.8	-932.1	2,043.8	1,981.3	62.57	32.665	
11,000.0	7,662.0	7,593.0	7,593.0	64.6	28.2	-90.00	1,023.8	-932.1	2,140.2	2,077.8	62.47	34.262	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 13' KB @ 5155.0usft

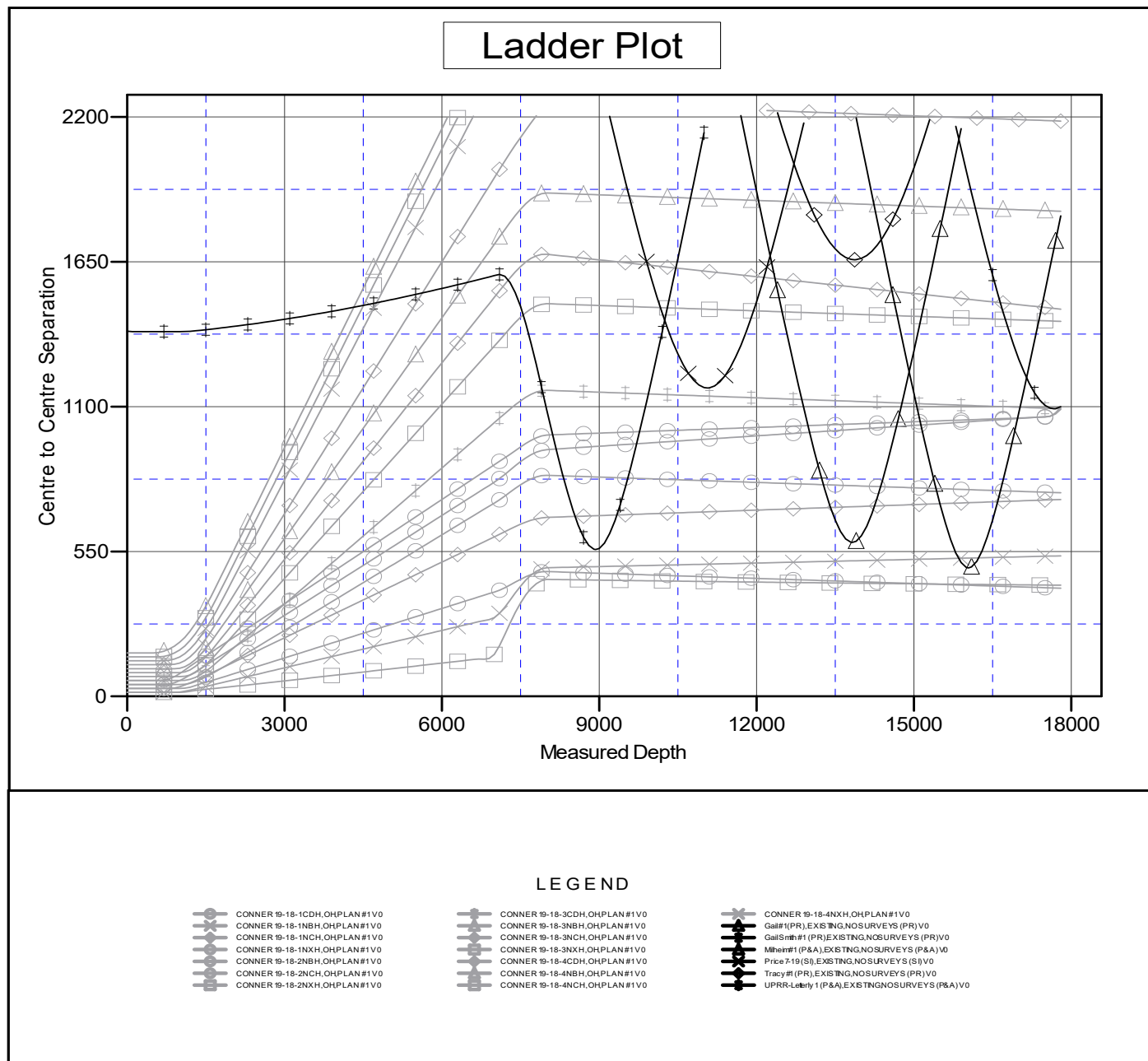
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000

Coordinates are relative to: CONNER 19-18-2CDH

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 19-18-2CDH
Project:	ADAMS COUNTY, CO	TVD Reference:	13' KB @ 5155.0usft
Reference Site:	S19-T1S-R65W	MD Reference:	13' KB @ 5155.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	CONNER 19-18-2CDH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to 13' KB @ 5155.0usft

Offset Depths are relative to Offset Datum

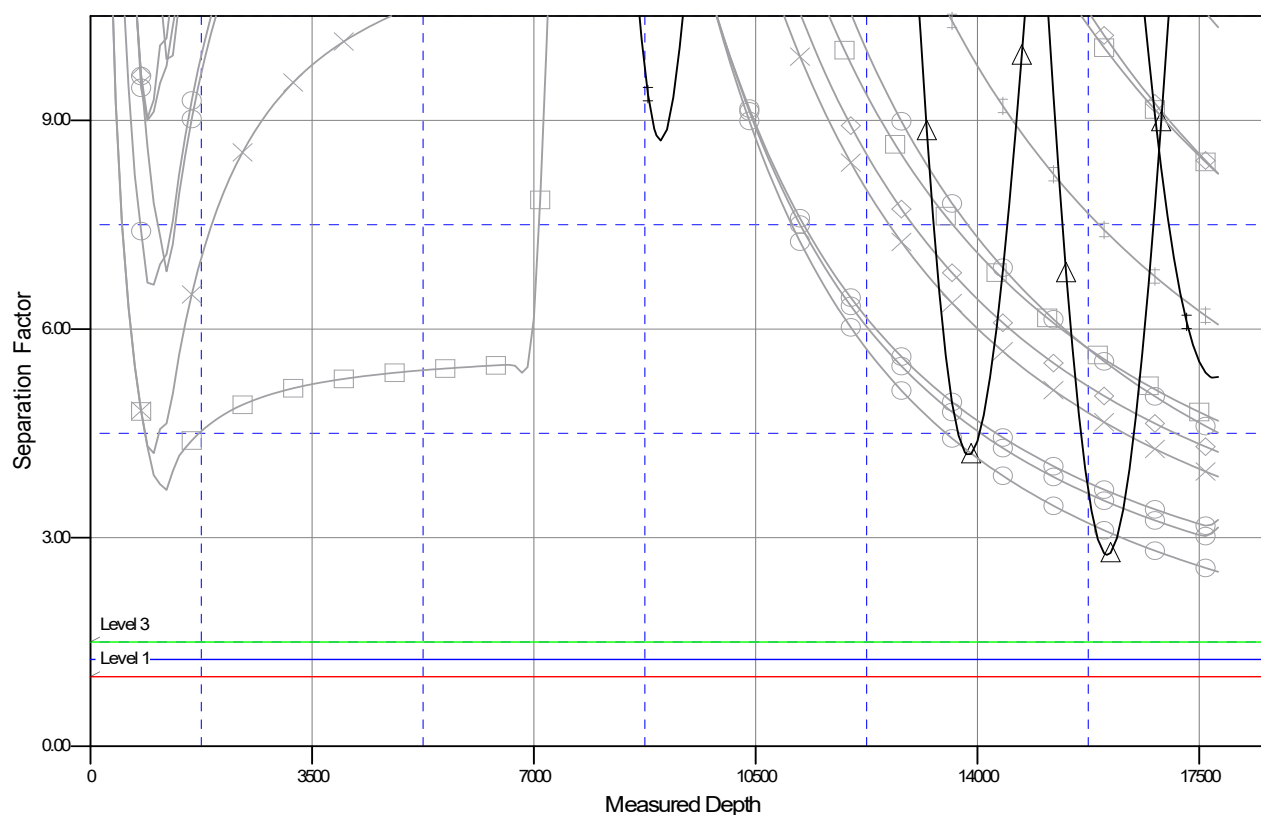
Central Meridian is -105.500000

Coordinates are relative to: CONNER 19-18-2CDH

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.51°








Separation Factor Plot



LEGEND

 CONNER 19-18-1CDH, OHPLAN#1V0
 CONNER 19-18-1NBH, OHPLAN#1V0
 CONNER 19-18-1NCH, OHPLAN#1V0
 CONNER 19-18-1NXH, OHPLAN#1V0
 CONNER 19-18-2NBH, OHPLAN#1V0
 CONNER 19-18-2NCH, OHPLAN#1V0
 CONNER 19-18-2NXH, OHPLAN#1V0

 CONNER 19-18-3CDH, OHPLAN#1V0
 CONNER 19-18-3NBH, OHPLAN#1V0
 CONNER 19-18-3NCH, OHPLAN#1V0
 CONNER 19-18-3NXH, OHPLAN#1V0
 CONNER 19-18-4CDH, OHPLAN#1V0
 CONNER 19-18-4NBH, OHPLAN#1V0
 CONNER 19-18-4NCH, OHPLAN#1V0

 CONNER 19-18-4NXH, OHPLAN#1V0
 Gail#1 (PR), EXISTING, NOSURVEYS (PR) V0
 Gail#1 (PR), EXISTING, NOSURVEYS (PR) V0
 Mithem#1 (P&A), EXISTING, NOSURVEYS (P&A) V0
 Price 7-19 (S), EXISTING, NOSURVEYS (S) V0
 Tracy#1 (PR), EXISTING, NOSURVEYS (PR) V0
 UPRR-Laterby 1 (P&A), EXISTING, NOSURVEYS (P&A) V0