



PetroShare Corp

Project: ADAMS COUNTY, CO
Site: S19-T1S-R65W
Well: CONNER 19-18-1NBH
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_FILE

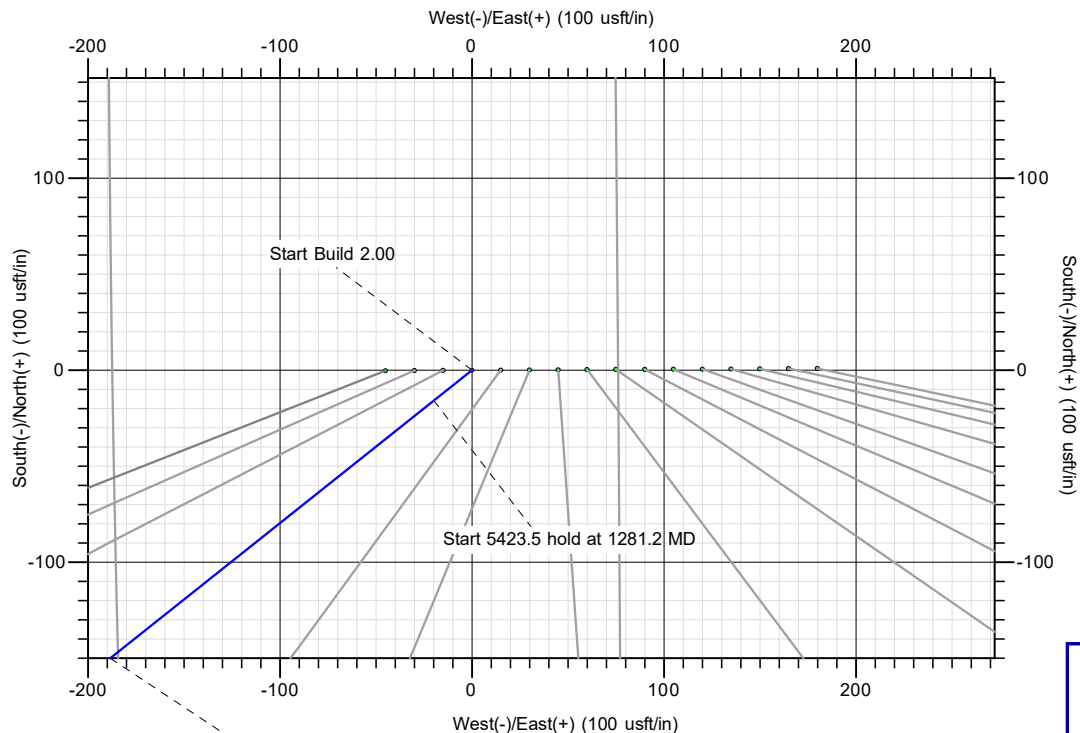


DESIGN TARGET DETAILS

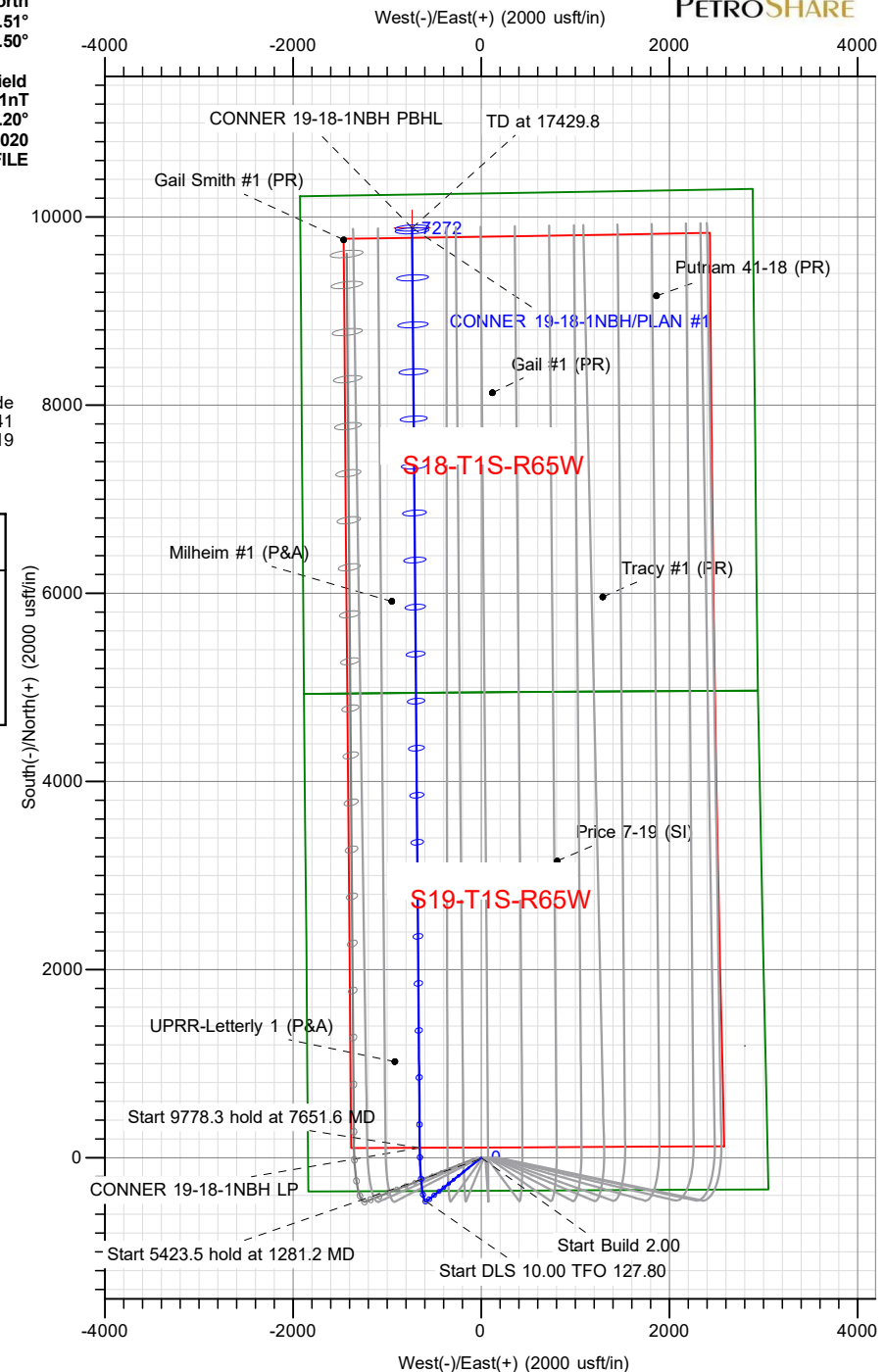
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
CONNER 19-18-1NBH LP	7272.0	106.6	-652.5	1223661.21	3221402.37	39.944625	-104.710341
CONNER 19-18-1NBH PBHL	7272.0	9884.5	-733.4	1233439.13	3221321.49	39.971469	-104.710319

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	900.0	0.00	0.00	900.0	0.0	0.0	0.00	0.00	0.0	
3	1281.2	7.62	231.48	1280.1	-15.8	-19.8	2.00	231.48	-14.3	
4	6704.7	7.62	231.48	6655.6	-463.9	-582.8	0.00	0.00	-419.5	
5	7651.6	90.00	359.53	7272.0	106.6	-652.5	10.00	127.80	154.6	CONNER 19-18-1NBH LP
6	17429.8	90.00	359.53	7272.0	9884.5	-733.4	0.00	0.00	9911.7	CONNER 19-18-1NBH PBHL



CONNER 19-18-1NBH/PLAN #1



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

Plan: PLAN #1 (CONNER 19-18-1NBH/OH)
S19-T1S-R65W
Created By: Lance Roybal
Date: 14:50, March 12 2021
Approved: _____
Date: _____



PetroShare Corp

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



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

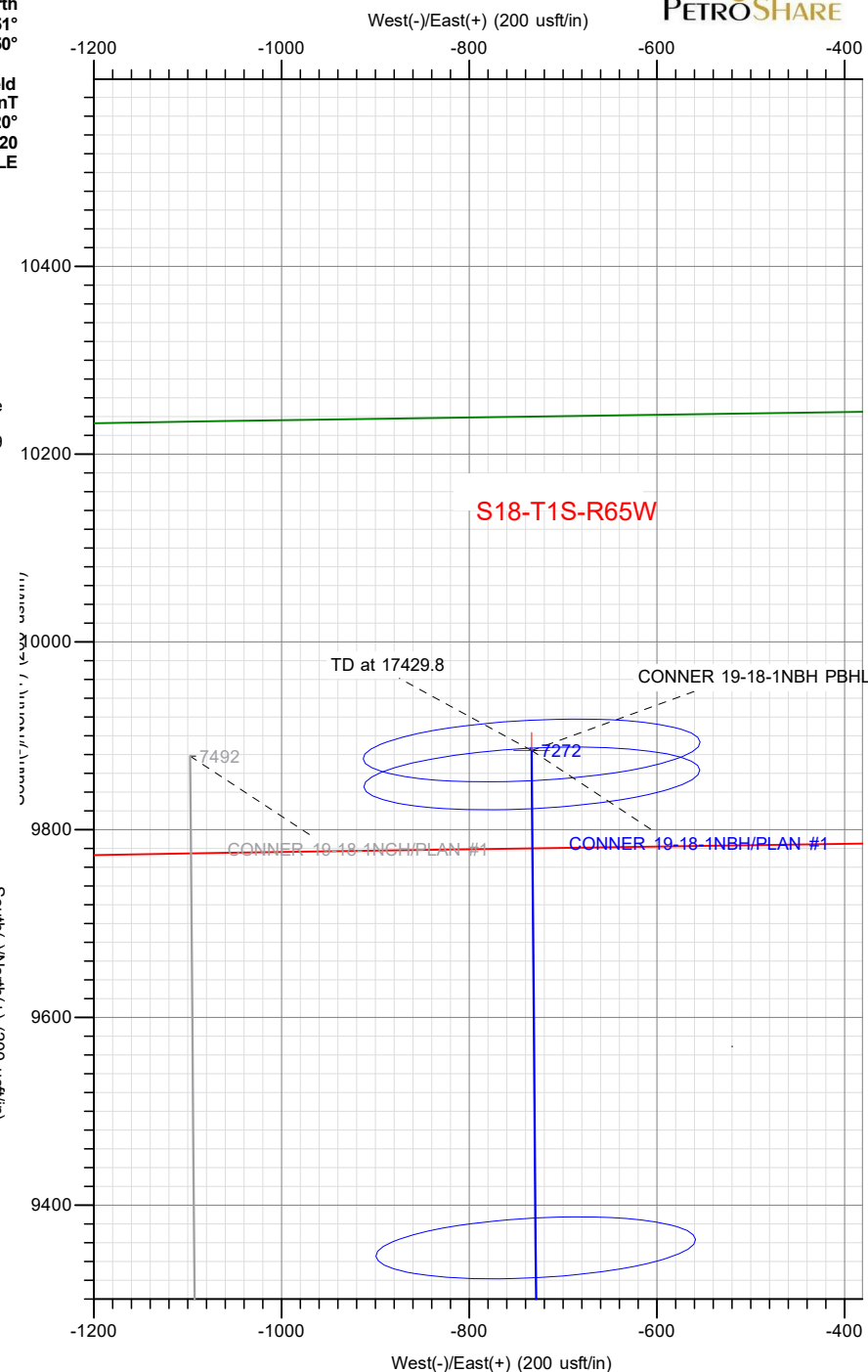
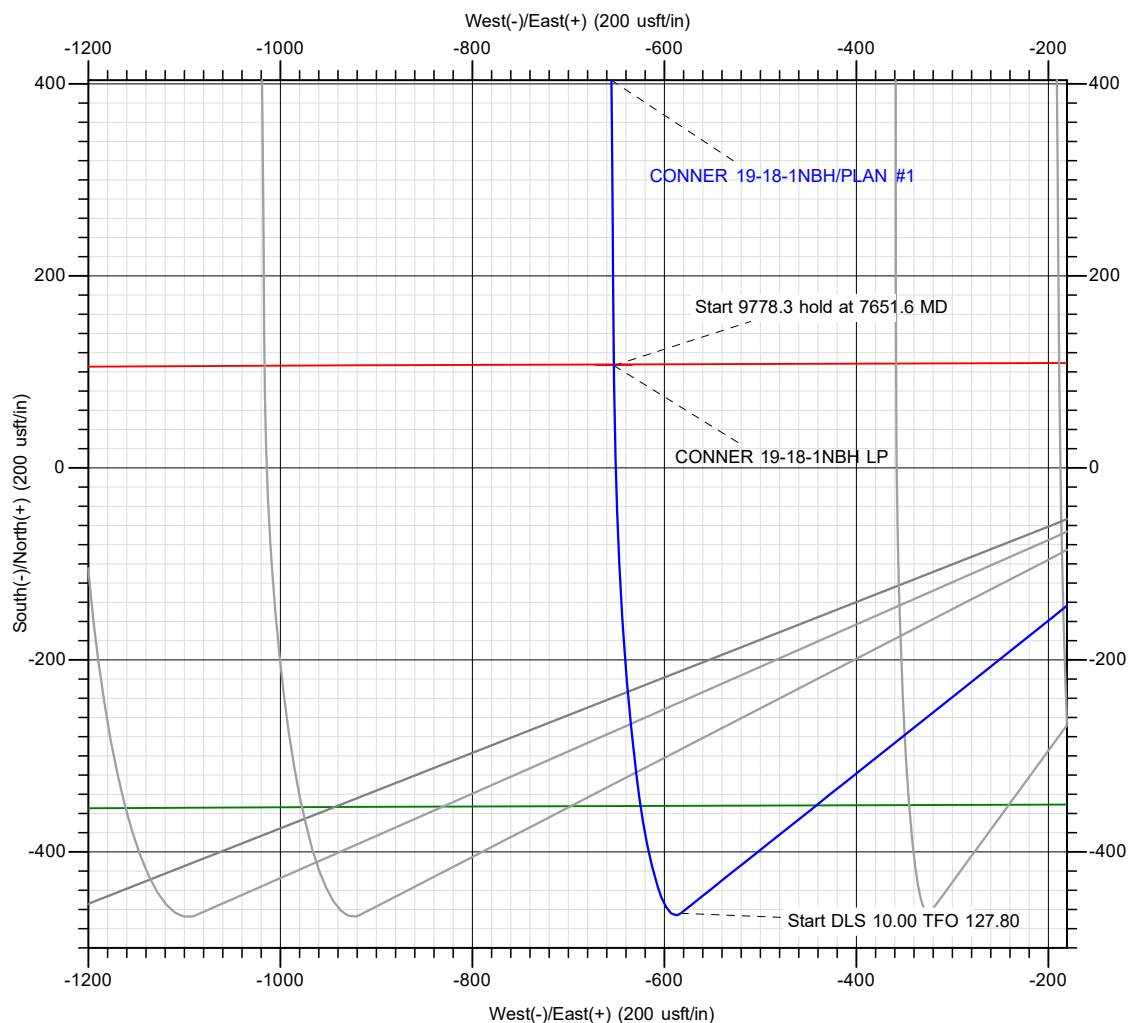
Magnetic Field
Strength: 51671.1nT
Dip Angle: 66.20°
Date: 12/31/2020
Model: HDGM2020_FILE



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 19-18-1NBH LP	7272.0	106.6	-652.5	1223661.21	3221402.37	39.944625	-104.710341
CONNER 19-18-1NBH PBHL	7272.0	9884.5	-733.4	1233439.13	3221321.49	39.971469	-104.710319



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

Plan: PLAN #1 (CONNER 19-18-1NBH/OH)
S19-T1S-R65W
Created By: Lance Roybal
Date: 14:53, March 12 2021
Approved: _____
Date: _____



PetroShare Corp

ADAMS COUNTY, CO

S19-T1S-R65W

CONNER 19-18-1NBH

OH

Plan: PLAN #1

Standard Planning Report

12 March, 2021



Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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 19-18-1NBH					
Well Position	+N/-S	0.3 usft	Northing:	1,223,554.61 usft	Latitude:	39.944317
	+E/-W	45.0 usft	Easting:	3,222,054.89 usft	Longitude:	-104.708018
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	355.76

Plan Survey Tool Program	Date	3/8/2021		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,429.8	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	
900.0	0.00	0.00	900.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,281.2	7.62	231.48	1,280.1	-15.8	-19.8	2.00	2.00	0.00	231.48	
6,704.7	7.62	231.48	6,655.6	-463.9	-582.8	0.00	0.00	0.00	0.00	
7,651.6	90.00	359.53	7,272.0	106.6	-652.5	10.00	8.70	13.52	127.80	CONNER 19-18-1NBH
17,429.8	90.00	359.53	7,272.0	9,884.5	-733.4	0.00	0.00	0.00	0.00	CONNER 19-18-1NBH

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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	2.00	231.48	1,000.0	-1.1	-1.4	-1.0	2.00	2.00	0.00
1,100.0	4.00	231.48	1,099.8	-4.3	-5.5	-3.9	2.00	2.00	0.00
1,200.0	6.00	231.48	1,199.5	-9.8	-12.3	-8.8	2.00	2.00	0.00
1,281.2	7.62	231.48	1,280.1	-15.8	-19.8	-14.3	2.00	2.00	0.00
1,300.0	7.62	231.48	1,298.7	-17.3	-21.8	-15.7	0.00	0.00	0.00
1,400.0	7.62	231.48	1,397.8	-25.6	-32.1	-23.1	0.00	0.00	0.00
1,500.0	7.62	231.48	1,496.9	-33.8	-42.5	-30.6	0.00	0.00	0.00
1,600.0	7.62	231.48	1,596.1	-42.1	-52.9	-38.1	0.00	0.00	0.00
1,700.0	7.62	231.48	1,695.2	-50.4	-63.3	-45.6	0.00	0.00	0.00
1,800.0	7.62	231.48	1,794.3	-58.6	-73.7	-53.0	0.00	0.00	0.00
1,900.0	7.62	231.48	1,893.4	-66.9	-84.1	-60.5	0.00	0.00	0.00
2,000.0	7.62	231.48	1,992.5	-75.2	-94.4	-68.0	0.00	0.00	0.00
2,100.0	7.62	231.48	2,091.6	-83.4	-104.8	-75.4	0.00	0.00	0.00
2,200.0	7.62	231.48	2,190.8	-91.7	-115.2	-82.9	0.00	0.00	0.00
2,300.0	7.62	231.48	2,289.9	-99.9	-125.6	-90.4	0.00	0.00	0.00
2,400.0	7.62	231.48	2,389.0	-108.2	-136.0	-97.9	0.00	0.00	0.00
2,500.0	7.62	231.48	2,488.1	-116.5	-146.3	-105.3	0.00	0.00	0.00
2,600.0	7.62	231.48	2,587.2	-124.7	-156.7	-112.8	0.00	0.00	0.00
2,700.0	7.62	231.48	2,686.3	-133.0	-167.1	-120.3	0.00	0.00	0.00
2,800.0	7.62	231.48	2,785.4	-141.3	-177.5	-127.7	0.00	0.00	0.00
2,900.0	7.62	231.48	2,884.6	-149.5	-187.9	-135.2	0.00	0.00	0.00
3,000.0	7.62	231.48	2,983.7	-157.8	-198.2	-142.7	0.00	0.00	0.00
3,100.0	7.62	231.48	3,082.8	-166.0	-208.6	-150.2	0.00	0.00	0.00
3,200.0	7.62	231.48	3,181.9	-174.3	-219.0	-157.6	0.00	0.00	0.00
3,300.0	7.62	231.48	3,281.0	-182.6	-229.4	-165.1	0.00	0.00	0.00
3,400.0	7.62	231.48	3,380.1	-190.8	-239.8	-172.6	0.00	0.00	0.00
3,500.0	7.62	231.48	3,479.3	-199.1	-250.1	-180.0	0.00	0.00	0.00
3,600.0	7.62	231.48	3,578.4	-207.4	-260.5	-187.5	0.00	0.00	0.00
3,700.0	7.62	231.48	3,677.5	-215.6	-270.9	-195.0	0.00	0.00	0.00
3,800.0	7.62	231.48	3,776.6	-223.9	-281.3	-202.5	0.00	0.00	0.00
3,900.0	7.62	231.48	3,875.7	-232.1	-291.7	-209.9	0.00	0.00	0.00
4,000.0	7.62	231.48	3,974.8	-240.4	-302.0	-217.4	0.00	0.00	0.00
4,100.0	7.62	231.48	4,074.0	-248.7	-312.4	-224.9	0.00	0.00	0.00
4,200.0	7.62	231.48	4,173.1	-256.9	-322.8	-232.3	0.00	0.00	0.00
4,300.0	7.62	231.48	4,272.2	-265.2	-333.2	-239.8	0.00	0.00	0.00
4,400.0	7.62	231.48	4,371.3	-273.5	-343.6	-247.3	0.00	0.00	0.00
4,500.0	7.62	231.48	4,470.4	-281.7	-354.0	-254.8	0.00	0.00	0.00
4,600.0	7.62	231.48	4,569.5	-290.0	-364.3	-262.2	0.00	0.00	0.00
4,700.0	7.62	231.48	4,668.7	-298.2	-374.7	-269.7	0.00	0.00	0.00
4,800.0	7.62	231.48	4,767.8	-306.5	-385.1	-277.2	0.00	0.00	0.00
4,900.0	7.62	231.48	4,866.9	-314.8	-395.5	-284.6	0.00	0.00	0.00
5,000.0	7.62	231.48	4,966.0	-323.0	-405.9	-292.1	0.00	0.00	0.00
5,100.0	7.62	231.48	5,065.1	-331.3	-416.2	-299.6	0.00	0.00	0.00
5,200.0	7.62	231.48	5,164.2	-339.6	-426.6	-307.1	0.00	0.00	0.00

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Site:	S19-T1S-R65W	North Reference:	Grid
Well:	CONNER 19-18-1NBH	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	7.62	231.48	5,263.3	-347.8	-437.0	-314.5	0.00	0.00	0.00
5,400.0	7.62	231.48	5,362.5	-356.1	-447.4	-322.0	0.00	0.00	0.00
5,500.0	7.62	231.48	5,461.6	-364.3	-457.8	-329.5	0.00	0.00	0.00
5,600.0	7.62	231.48	5,560.7	-372.6	-468.1	-336.9	0.00	0.00	0.00
5,700.0	7.62	231.48	5,659.8	-380.9	-478.5	-344.4	0.00	0.00	0.00
5,800.0	7.62	231.48	5,758.9	-389.1	-488.9	-351.9	0.00	0.00	0.00
5,900.0	7.62	231.48	5,858.0	-397.4	-499.3	-359.4	0.00	0.00	0.00
6,000.0	7.62	231.48	5,957.2	-405.7	-509.7	-366.8	0.00	0.00	0.00
6,100.0	7.62	231.48	6,056.3	-413.9	-520.0	-374.3	0.00	0.00	0.00
6,200.0	7.62	231.48	6,155.4	-422.2	-530.4	-381.8	0.00	0.00	0.00
6,300.0	7.62	231.48	6,254.5	-430.4	-540.8	-389.2	0.00	0.00	0.00
6,400.0	7.62	231.48	6,353.6	-438.7	-551.2	-396.7	0.00	0.00	0.00
6,500.0	7.62	231.48	6,452.7	-447.0	-561.6	-404.2	0.00	0.00	0.00
6,600.0	7.62	231.48	6,551.9	-455.2	-572.0	-411.7	0.00	0.00	0.00
6,700.0	7.62	231.48	6,651.0	-463.5	-582.3	-419.1	0.00	0.00	0.00
6,704.7	7.62	231.48	6,655.6	-463.9	-582.8	-419.5	0.00	0.00	0.00
6,800.0	7.72	308.46	6,750.3	-463.8	-592.8	-418.7	10.00	0.10	80.76
6,900.0	15.99	337.94	6,848.2	-446.9	-603.3	-401.0	10.00	8.27	29.48
7,000.0	25.52	346.77	6,941.6	-413.0	-613.4	-366.5	10.00	9.53	8.83
7,100.0	35.29	350.96	7,027.7	-363.4	-622.9	-316.3	10.00	9.78	4.19
7,200.0	45.16	353.51	7,104.0	-299.5	-631.4	-252.0	10.00	9.87	2.55
7,300.0	55.06	355.30	7,168.0	-223.2	-638.8	-175.3	10.00	9.91	1.79
7,400.0	64.99	356.71	7,217.9	-136.9	-644.8	-88.8	10.00	9.93	1.40
7,500.0	74.93	357.90	7,252.2	-43.2	-649.2	5.0	10.00	9.94	1.19
7,600.0	84.87	358.98	7,269.7	55.1	-651.9	103.2	10.00	9.94	1.08
7,651.6	90.00	359.53	7,272.0	106.6	-652.5	154.6	10.00	9.94	1.05
CONNER 19-18-1NBH LP									
7,700.0	90.00	359.53	7,272.0	155.0	-652.9	202.9	0.00	0.00	0.00
7,800.0	90.00	359.53	7,272.0	255.0	-653.7	302.7	0.00	0.00	0.00
7,900.0	90.00	359.53	7,272.0	355.0	-654.6	402.5	0.00	0.00	0.00
8,000.0	90.00	359.53	7,272.0	455.0	-655.4	502.3	0.00	0.00	0.00
8,100.0	90.00	359.53	7,272.0	555.0	-656.2	602.0	0.00	0.00	0.00
8,200.0	90.00	359.53	7,272.0	655.0	-657.1	701.8	0.00	0.00	0.00
8,300.0	90.00	359.53	7,272.0	755.0	-657.9	801.6	0.00	0.00	0.00
8,400.0	90.00	359.53	7,272.0	855.0	-658.7	901.4	0.00	0.00	0.00
8,500.0	90.00	359.53	7,272.0	955.0	-659.5	1,001.2	0.00	0.00	0.00
8,600.0	90.00	359.53	7,272.0	1,055.0	-660.4	1,101.0	0.00	0.00	0.00
8,700.0	90.00	359.53	7,272.0	1,155.0	-661.2	1,200.7	0.00	0.00	0.00
8,800.0	90.00	359.53	7,272.0	1,255.0	-662.0	1,300.5	0.00	0.00	0.00
8,900.0	90.00	359.53	7,272.0	1,355.0	-662.8	1,400.3	0.00	0.00	0.00
9,000.0	90.00	359.53	7,272.0	1,455.0	-663.7	1,500.1	0.00	0.00	0.00
9,100.0	90.00	359.53	7,272.0	1,555.0	-664.5	1,599.9	0.00	0.00	0.00
9,200.0	90.00	359.53	7,272.0	1,655.0	-665.3	1,699.7	0.00	0.00	0.00
9,300.0	90.00	359.53	7,272.0	1,755.0	-666.2	1,799.4	0.00	0.00	0.00
9,400.0	90.00	359.53	7,272.0	1,855.0	-667.0	1,899.2	0.00	0.00	0.00
9,500.0	90.00	359.53	7,272.0	1,955.0	-667.8	1,999.0	0.00	0.00	0.00
9,600.0	90.00	359.53	7,272.0	2,055.0	-668.6	2,098.8	0.00	0.00	0.00
9,700.0	90.00	359.53	7,272.0	2,154.9	-669.5	2,198.6	0.00	0.00	0.00
9,800.0	90.00	359.53	7,272.0	2,254.9	-670.3	2,298.4	0.00	0.00	0.00
9,900.0	90.00	359.53	7,272.0	2,354.9	-671.1	2,398.1	0.00	0.00	0.00
10,000.0	90.00	359.53	7,272.0	2,454.9	-671.9	2,497.9	0.00	0.00	0.00
10,100.0	90.00	359.53	7,272.0	2,554.9	-672.8	2,597.7	0.00	0.00	0.00
10,200.0	90.00	359.53	7,272.0	2,654.9	-673.6	2,697.5	0.00	0.00	0.00

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,300.0	90.00	359.53	7,272.0	2,754.9	-674.4	2,797.3	0.00	0.00	0.00
10,400.0	90.00	359.53	7,272.0	2,854.9	-675.3	2,897.1	0.00	0.00	0.00
10,500.0	90.00	359.53	7,272.0	2,954.9	-676.1	2,996.8	0.00	0.00	0.00
10,600.0	90.00	359.53	7,272.0	3,054.9	-676.9	3,096.6	0.00	0.00	0.00
10,700.0	90.00	359.53	7,272.0	3,154.9	-677.7	3,196.4	0.00	0.00	0.00
10,800.0	90.00	359.53	7,272.0	3,254.9	-678.6	3,296.2	0.00	0.00	0.00
10,900.0	90.00	359.53	7,272.0	3,354.9	-679.4	3,396.0	0.00	0.00	0.00
11,000.0	90.00	359.53	7,272.0	3,454.9	-680.2	3,495.8	0.00	0.00	0.00
11,100.0	90.00	359.53	7,272.0	3,554.9	-681.0	3,595.5	0.00	0.00	0.00
11,200.0	90.00	359.53	7,272.0	3,654.9	-681.9	3,695.3	0.00	0.00	0.00
11,300.0	90.00	359.53	7,272.0	3,754.9	-682.7	3,795.1	0.00	0.00	0.00
11,400.0	90.00	359.53	7,272.0	3,854.9	-683.5	3,894.9	0.00	0.00	0.00
11,500.0	90.00	359.53	7,272.0	3,954.9	-684.4	3,994.7	0.00	0.00	0.00
11,600.0	90.00	359.53	7,272.0	4,054.9	-685.2	4,094.5	0.00	0.00	0.00
11,700.0	90.00	359.53	7,272.0	4,154.9	-686.0	4,194.3	0.00	0.00	0.00
11,800.0	90.00	359.53	7,272.0	4,254.9	-686.8	4,294.0	0.00	0.00	0.00
11,900.0	90.00	359.53	7,272.0	4,354.9	-687.7	4,393.8	0.00	0.00	0.00
12,000.0	90.00	359.53	7,272.0	4,454.9	-688.5	4,493.6	0.00	0.00	0.00
12,100.0	90.00	359.53	7,272.0	4,554.9	-689.3	4,593.4	0.00	0.00	0.00
12,200.0	90.00	359.53	7,272.0	4,654.9	-690.1	4,693.2	0.00	0.00	0.00
12,300.0	90.00	359.53	7,272.0	4,754.9	-691.0	4,793.0	0.00	0.00	0.00
12,400.0	90.00	359.53	7,272.0	4,854.9	-691.8	4,892.7	0.00	0.00	0.00
12,500.0	90.00	359.53	7,272.0	4,954.9	-692.6	4,992.5	0.00	0.00	0.00
12,600.0	90.00	359.53	7,272.0	5,054.8	-693.5	5,092.3	0.00	0.00	0.00
12,700.0	90.00	359.53	7,272.0	5,154.8	-694.3	5,192.1	0.00	0.00	0.00
12,800.0	90.00	359.53	7,272.0	5,254.8	-695.1	5,291.9	0.00	0.00	0.00
12,900.0	90.00	359.53	7,272.0	5,354.8	-695.9	5,391.7	0.00	0.00	0.00
13,000.0	90.00	359.53	7,272.0	5,454.8	-696.8	5,491.4	0.00	0.00	0.00
13,100.0	90.00	359.53	7,272.0	5,554.8	-697.6	5,591.2	0.00	0.00	0.00
13,200.0	90.00	359.53	7,272.0	5,654.8	-698.4	5,691.0	0.00	0.00	0.00
13,300.0	90.00	359.53	7,272.0	5,754.8	-699.2	5,790.8	0.00	0.00	0.00
13,400.0	90.00	359.53	7,272.0	5,854.8	-700.1	5,890.6	0.00	0.00	0.00
13,500.0	90.00	359.53	7,272.0	5,954.8	-700.9	5,990.4	0.00	0.00	0.00
13,600.0	90.00	359.53	7,272.0	6,054.8	-701.7	6,090.1	0.00	0.00	0.00
13,700.0	90.00	359.53	7,272.0	6,154.8	-702.5	6,189.9	0.00	0.00	0.00
13,800.0	90.00	359.53	7,272.0	6,254.8	-703.4	6,289.7	0.00	0.00	0.00
13,900.0	90.00	359.53	7,272.0	6,354.8	-704.2	6,389.5	0.00	0.00	0.00
14,000.0	90.00	359.53	7,272.0	6,454.8	-705.0	6,489.3	0.00	0.00	0.00
14,100.0	90.00	359.53	7,272.0	6,554.8	-705.9	6,589.1	0.00	0.00	0.00
14,200.0	90.00	359.53	7,272.0	6,654.8	-706.7	6,688.8	0.00	0.00	0.00
14,300.0	90.00	359.53	7,272.0	6,754.8	-707.5	6,788.6	0.00	0.00	0.00
14,400.0	90.00	359.53	7,272.0	6,854.8	-708.3	6,888.4	0.00	0.00	0.00
14,500.0	90.00	359.53	7,272.0	6,954.8	-709.2	6,988.2	0.00	0.00	0.00
14,600.0	90.00	359.53	7,272.0	7,054.8	-710.0	7,088.0	0.00	0.00	0.00
14,700.0	90.00	359.53	7,272.0	7,154.8	-710.8	7,187.8	0.00	0.00	0.00
14,800.0	90.00	359.53	7,272.0	7,254.8	-711.6	7,287.5	0.00	0.00	0.00
14,900.0	90.00	359.53	7,272.0	7,354.8	-712.5	7,387.3	0.00	0.00	0.00
15,000.0	90.00	359.53	7,272.0	7,454.8	-713.3	7,487.1	0.00	0.00	0.00
15,100.0	90.00	359.53	7,272.0	7,554.8	-714.1	7,586.9	0.00	0.00	0.00
15,200.0	90.00	359.53	7,272.0	7,654.8	-715.0	7,686.7	0.00	0.00	0.00
15,300.0	90.00	359.53	7,272.0	7,754.8	-715.8	7,786.5	0.00	0.00	0.00
15,400.0	90.00	359.53	7,272.0	7,854.8	-716.6	7,886.2	0.00	0.00	0.00
15,500.0	90.00	359.53	7,272.0	7,954.8	-717.4	7,986.0	0.00	0.00	0.00
15,600.0	90.00	359.53	7,272.0	8,054.7	-718.3	8,085.8	0.00	0.00	0.00

Database:	EDM 5000.15 Single User Db	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,700.0	90.00	359.53	7,272.0	8,154.7	-719.1	8,185.6	0.00	0.00	0.00
15,800.0	90.00	359.53	7,272.0	8,254.7	-719.9	8,285.4	0.00	0.00	0.00
15,900.0	90.00	359.53	7,272.0	8,354.7	-720.7	8,385.2	0.00	0.00	0.00
16,000.0	90.00	359.53	7,272.0	8,454.7	-721.6	8,484.9	0.00	0.00	0.00
16,100.0	90.00	359.53	7,272.0	8,554.7	-722.4	8,584.7	0.00	0.00	0.00
16,200.0	90.00	359.53	7,272.0	8,654.7	-723.2	8,684.5	0.00	0.00	0.00
16,300.0	90.00	359.53	7,272.0	8,754.7	-724.1	8,784.3	0.00	0.00	0.00
16,400.0	90.00	359.53	7,272.0	8,854.7	-724.9	8,884.1	0.00	0.00	0.00
16,500.0	90.00	359.53	7,272.0	8,954.7	-725.7	8,983.9	0.00	0.00	0.00
16,600.0	90.00	359.53	7,272.0	9,054.7	-726.5	9,083.7	0.00	0.00	0.00
16,700.0	90.00	359.53	7,272.0	9,154.7	-727.4	9,183.4	0.00	0.00	0.00
16,800.0	90.00	359.53	7,272.0	9,254.7	-728.2	9,283.2	0.00	0.00	0.00
16,900.0	90.00	359.53	7,272.0	9,354.7	-729.0	9,383.0	0.00	0.00	0.00
17,000.0	90.00	359.53	7,272.0	9,454.7	-729.8	9,482.8	0.00	0.00	0.00
17,100.0	90.00	359.53	7,272.0	9,554.7	-730.7	9,582.6	0.00	0.00	0.00
17,200.0	90.00	359.53	7,272.0	9,654.7	-731.5	9,682.4	0.00	0.00	0.00
17,300.0	90.00	359.53	7,272.0	9,754.7	-732.3	9,782.1	0.00	0.00	0.00
17,400.0	90.00	359.53	7,272.0	9,854.7	-733.2	9,881.9	0.00	0.00	0.00
17,429.8	90.00	359.53	7,272.0	9,884.5	-733.4	9,911.7	0.00	0.00	0.00
CONNER 19-18-1NBH PBHL									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
CONNER 19-18-1NBH F - plan hits target center - Point	0.00	0.00	7,272.0	9,884.5	-733.4	1,233,439.13	3,221,321.49	39.971469	-104.710320
CONNER 19-18-1NBH L - plan hits target center - Point	0.00	0.00	7,272.0	106.6	-652.5	1,223,661.21	3,221,402.37	39.944626	-104.710342



PetroShare Corp

ADAMS COUNTY, CO

S19-T1S-R65W

CONNER 19-18-1NBH

OH

PLAN #1

Anticollision Report

12 March, 2021



Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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	3/8/2021		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	17,429.8	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	45.0	40.3	9.487	CC, ES
CONNER 19-18-1CDH - OH - PLAN #1	17,200.0	17,630.0	800.1	486.3	2.550	SF
CONNER 19-18-1NCH - OH - PLAN #1	800.0	800.0	15.0	11.9	4.825	CC, ES
CONNER 19-18-1NCH - OH - PLAN #1	17,429.8	17,686.9	425.3	266.7	2.683	SF
CONNER 19-18-1NXH - OH - PLAN #1	700.0	700.0	30.0	27.3	10.939	CC, ES
CONNER 19-18-1NXH - OH - PLAN #1	17,429.8	17,496.2	627.9	448.2	3.494	SF
CONNER 19-18-2CDH - OH - PLAN #1	900.0	900.0	15.0	11.5	4.320	CC, ES
CONNER 19-18-2CDH - OH - PLAN #1	17,429.8	17,794.1	533.4	395.4	3.865	SF
CONNER 19-18-2NBH - OH - PLAN #1	900.0	900.0	60.0	56.5	17.262	CC, ES
CONNER 19-18-2NBH - OH - PLAN #1	17,429.8	17,542.6	1,099.5	920.6	6.146	SF
CONNER 19-18-2NCH - OH - PLAN #1	900.0	900.0	45.0	41.5	12.946	CC, ES
CONNER 19-18-2NCH - OH - PLAN #1	17,429.8	17,598.7	754.8	579.7	4.309	SF
CONNER 19-18-2NXH - OH - PLAN #1	900.0	900.0	30.0	26.5	8.628	CC, ES
CONNER 19-18-2NXH - OH - PLAN #1	17,429.8	17,382.1	464.3	284.9	2.588	SF
CONNER 19-18-3CDH - OH - PLAN #1	900.0	900.0	75.0	71.5	21.578	CC, ES
CONNER 19-18-3CDH - OH - PLAN #1	17,429.8	17,832.4	1,507.0	1,331.6	8.593	SF
CONNER 19-18-3NBH - OH - PLAN #1	900.0	900.0	120.0	116.5	34.542	CC, ES
CONNER 19-18-3NBH - OH - PLAN #1	17,429.8	17,665.4	2,186.0	2,006.4	12.173	SF
CONNER 19-18-3NCH - OH - PLAN #1	900.0	900.0	105.0	101.5	30.218	CC, ES
CONNER 19-18-3NCH - OH - PLAN #1	17,429.8	17,720.0	1,829.0	1,649.8	10.208	SF
CONNER 19-18-3NXH - OH - PLAN #1	900.0	900.0	90.0	86.5	25.907	CC, ES
CONNER 19-18-3NXH - OH - PLAN #1	17,429.8	17,437.5	1,720.2	1,540.7	9.582	SF
CONNER 19-18-4CDH - OH - PLAN #1	800.0	800.0	135.0	131.9	43.419	CC, ES
CONNER 19-18-4CDH - OH - PLAN #1	1,200.0	1,178.8	172.7	167.3	31.898	SF
CONNER 19-18-4NBH - OH - PLAN #1	500.0	500.0	180.0	178.0	90.031	CC, ES
CONNER 19-18-4NBH - OH - PLAN #1	1,200.0	1,145.7	269.8	264.5	50.994	SF
CONNER 19-18-4NCH - OH - PLAN #1	600.0	600.0	165.0	162.6	69.521	CC, ES
CONNER 19-18-4NCH - OH - PLAN #1	1,200.0	1,158.5	234.6	229.2	43.960	SF
CONNER 19-18-4NXH - OH - PLAN #1	700.0	700.0	150.0	147.2	54.686	CC, ES
CONNER 19-18-4NXH - OH - PLAN #1	1,200.0	1,169.5	202.1	196.8	37.599	SF
Gail #1 (PR) - EXISTING - NO SURVEYS (PR)	15,671.4	7,203.0	839.0	663.6	4.784	CC, ES
Gail #1 (PR) - EXISTING - NO SURVEYS (PR)	15,700.0	7,203.0	839.5	664.0	4.784	SF
Gail Smith #1 (PR) - EXISTING - NO SURVEYS (PR)	17,309.6	7,203.0	728.8	524.9	3.575	CC, ES, SF
Milheim #1 (P&A) - EXISTING - NO SURVEYS (P&A)	13,463.2	7,203.0	248.8	111.5	1.812	CC, ES, SF
Price 7-19 (SI) - EXISTING - NO SURVEYS (SI)	10,690.0	7,203.0	1,486.3	1,395.3	16.328	CC
Price 7-19 (SI) - EXISTING - NO SURVEYS (SI)	10,700.0	7,203.0	1,486.3	1,395.2	16.309	ES
Price 7-19 (SI) - EXISTING - NO SURVEYS (SI)	10,900.0	7,203.0	1,501.1	1,408.2	16.173	SF

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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						
Putnam 41-18 (PR) - EXISTING - NO SURVEYS (PR)						Out of range
Tracy #1 (PR) - EXISTING - NO SURVEYS (PR)	13,491.7	7,203.0	1,993.4	1,855.6	14.469	CC
Tracy #1 (PR) - EXISTING - NO SURVEYS (PR)	13,500.0	7,203.0	1,993.4	1,855.5	14.457	ES
Tracy #1 (PR) - EXISTING - NO SURVEYS (PR)	13,700.0	7,203.0	2,004.3	1,864.3	14.324	SF
UPRR-Letterly 1 (P&A) - EXISTING - NO SURVEYS (P&A)	8,571.0	7,203.0	257.0	195.9	4.206	CC, ES
UPRR-Letterly 1 (P&A) - EXISTING - NO SURVEYS (P&A)	8,600.0	7,203.0	258.6	196.7	4.180	SF

Offset Design													Offset Site Error: 0.0 usft
S19-T1S-R65W - CONNER 19-18-1CDH - OH - PLAN #1													Offset Well Error: 0.0 usft
Survey Program: 0-MWD													
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	-90.33	-0.3	-45.0	45.0				
100.0	100.0	100.0	100.0	0.4	0.4	-90.33	-0.3	-45.0	45.0	44.5	0.55	81.290	
200.0	200.0	200.0	200.0	1.0	1.0	-90.33	-0.3	-45.0	45.0	43.4	1.60	28.213	
300.0	300.0	300.0	300.0	1.5	1.5	-90.33	-0.3	-45.0	45.0	42.6	2.45	18.383	
400.0	400.0	400.0	400.0	1.9	1.9	-90.33	-0.3	-45.0	45.0	41.8	3.24	13.908	
500.0	500.0	500.0	500.0	2.3	2.3	-90.33	-0.3	-45.0	45.0	41.0	4.00	11.260	
600.0	600.0	600.0	600.0	2.7	2.7	-90.33	-0.3	-45.0	45.0	40.3	4.75	9.487	CC, ES
700.0	700.0	698.5	698.5	3.1	3.0	-91.08	-0.9	-46.6	46.6	41.1	5.56	8.381	
800.0	800.0	796.8	796.6	3.5	4.0	-93.05	-2.7	-51.3	51.5	44.4	7.04	7.310	
900.0	900.0	894.6	894.1	3.9	4.8	-95.60	-5.8	-59.1	59.7	51.4	8.32	7.171	
1,000.0	1,000.0	992.0	990.7	4.2	5.6	30.95	-10.0	-69.9	69.8	60.3	9.47	7.369	
1,100.0	1,099.8	1,088.9	1,086.6	5.1	6.2	30.15	-15.5	-83.8	80.2	69.2	11.00	7.290	
1,200.0	1,199.5	1,185.6	1,181.6	5.8	6.7	30.12	-22.1	-100.5	90.9	78.7	12.24	7.427	
1,300.0	1,298.7	1,285.2	1,279.1	6.3	7.0	30.88	-29.4	-119.3	100.2	87.3	12.95	7.737	
1,400.0	1,397.8	1,384.8	1,376.6	6.6	7.2	31.90	-36.8	-138.0	108.6	95.1	13.48	8.055	
1,500.0	1,496.9	1,484.4	1,474.2	6.9	7.5	32.77	-44.2	-156.8	117.0	102.9	14.07	8.311	
1,600.0	1,596.1	1,584.1	1,571.8	7.2	7.8	33.52	-51.5	-175.5	125.4	110.7	14.69	8.536	
1,700.0	1,695.2	1,683.7	1,669.3	7.5	8.1	34.18	-58.9	-194.3	133.8	118.5	15.32	8.732	
1,800.0	1,794.3	1,783.3	1,766.9	7.8	8.4	34.77	-66.3	-213.1	142.3	126.3	15.98	8.904	
1,900.0	1,893.4	1,883.0	1,864.5	8.1	8.7	35.28	-73.6	-231.8	150.7	134.1	16.64	9.055	
2,000.0	1,992.5	1,982.6	1,962.1	8.4	9.1	35.74	-81.0	-250.6	159.2	141.9	17.32	9.188	
2,100.0	2,091.6	2,082.2	2,059.6	8.8	9.4	36.16	-88.4	-269.3	167.7	149.6	18.02	9.306	
2,200.0	2,190.8	2,181.9	2,157.2	9.1	9.8	36.53	-95.7	-288.1	176.2	157.4	18.72	9.410	
2,300.0	2,289.9	2,281.5	2,254.8	9.4	10.2	36.87	-103.1	-306.8	184.7	165.2	19.43	9.503	
2,400.0	2,389.0	2,381.1	2,352.4	9.8	10.6	37.18	-110.5	-325.6	193.2	173.0	20.15	9.585	
2,500.0	2,488.1	2,480.8	2,449.9	10.1	11.0	37.47	-117.9	-344.3	201.7	180.8	20.88	9.659	
2,600.0	2,587.2	2,580.4	2,547.5	10.5	11.4	37.73	-125.2	-363.1	210.2	188.6	21.61	9.725	
2,700.0	2,686.3	2,680.0	2,645.1	10.9	11.9	37.97	-132.6	-381.9	218.7	196.3	22.35	9.784	
2,800.0	2,785.4	2,779.7	2,742.7	11.2	12.3	38.19	-140.0	-400.6	227.2	204.1	23.10	9.837	
2,900.0	2,884.6	2,879.3	2,840.2	11.6	12.8	38.40	-147.3	-419.4	235.7	211.9	23.84	9.886	
3,000.0	2,983.7	2,978.9	2,937.8	12.0	13.2	38.59	-154.7	-438.1	244.2	219.7	24.60	9.930	
3,100.0	3,082.8	3,078.6	3,035.4	12.4	13.7	38.77	-162.1	-456.9	252.8	227.4	25.36	9.969	
3,200.0	3,181.9	3,178.2	3,133.0	12.8	14.2	38.94	-169.4	-475.6	261.3	235.2	26.12	10.006	
3,300.0	3,281.0	3,277.8	3,230.5	13.2	14.7	39.10	-176.8	-494.4	269.8	243.0	26.88	10.039	
3,400.0	3,380.1	3,377.5	3,328.1	13.5	15.2	39.24	-184.2	-513.1	278.4	250.7	27.65	10.069	
3,500.0	3,479.3	3,477.1	3,425.7	13.9	15.7	39.38	-191.5	-531.9	286.9	258.5	28.42	10.096	
3,600.0	3,578.4	3,576.7	3,523.2	14.4	16.1	39.51	-198.9	-550.7	295.4	266.3	29.19	10.122	

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 19-18-1NBH
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 19-18-1NBH	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		
3,700.0	3,677.5	3,676.4	3,620.8	14.8	16.6	39.64	-206.3	-569.4	304.0	274.0	29.96	10.145		
3,800.0	3,776.6	3,776.0	3,718.4	15.2	17.1	39.75	-213.6	-588.2	312.5	281.8	30.74	10.167		
3,900.0	3,875.7	3,875.6	3,816.0	15.6	17.6	39.86	-221.0	-606.9	321.1	289.5	31.52	10.187		
4,000.0	3,974.8	3,975.3	3,913.5	16.0	18.1	39.97	-228.4	-625.7	329.6	297.3	32.30	10.205		
4,100.0	4,074.0	4,074.9	4,011.1	16.4	18.6	40.07	-235.7	-644.4	338.1	305.1	33.08	10.222		
4,200.0	4,173.1	4,174.5	4,108.7	16.8	19.1	40.16	-243.1	-663.2	346.7	312.8	33.86	10.238		
4,300.0	4,272.2	4,274.2	4,206.3	17.2	19.6	40.25	-250.5	-681.9	355.2	320.6	34.65	10.253		
4,400.0	4,371.3	4,373.8	4,303.8	17.6	20.1	40.34	-257.9	-700.7	363.8	328.3	35.43	10.267		
4,500.0	4,470.4	4,473.4	4,401.4	18.1	20.6	40.42	-265.2	-719.5	372.3	336.1	36.22	10.280		
4,600.0	4,569.5	4,573.1	4,499.0	18.5	21.1	40.50	-272.6	-738.2	380.9	343.9	37.01	10.292		
4,700.0	4,668.7	4,672.7	4,596.6	18.9	21.6	40.57	-280.0	-757.0	389.4	351.6	37.80	10.303		
4,800.0	4,767.8	4,772.3	4,694.1	19.3	22.1	40.64	-287.3	-775.7	398.0	359.4	38.59	10.313		
4,900.0	4,866.9	4,872.0	4,791.7	19.7	22.6	40.71	-294.7	-794.5	406.5	367.1	39.38	10.323		
5,000.0	4,966.0	4,971.6	4,889.3	20.2	23.1	40.78	-302.1	-813.2	415.1	374.9	40.17	10.332		
5,100.0	5,065.1	5,071.2	4,986.9	20.6	23.6	40.84	-309.4	-832.0	423.6	382.7	40.97	10.341		
5,200.0	5,164.2	5,170.9	5,084.4	21.0	24.1	40.90	-316.8	-850.7	432.2	390.4	41.76	10.349		
5,300.0	5,263.3	5,270.5	5,182.0	21.4	24.5	40.96	-324.2	-869.5	440.7	398.2	42.55	10.357		
5,400.0	5,362.5	5,370.1	5,279.6	21.8	25.0	41.02	-331.5	-888.3	449.3	405.9	43.35	10.364		
5,500.0	5,461.6	5,469.8	5,377.1	22.3	25.5	41.07	-338.9	-907.0	457.8	413.7	44.15	10.371		
5,600.0	5,560.7	5,569.4	5,474.7	22.7	26.0	41.12	-346.3	-925.8	466.4	421.4	44.94	10.377		
5,700.0	5,659.8	5,669.0	5,572.3	23.1	26.5	41.17	-353.6	-944.5	474.9	429.2	45.74	10.383		
5,800.0	5,758.9	5,768.7	5,669.9	23.5	27.0	41.22	-361.0	-963.3	483.5	436.9	46.54	10.389		
5,900.0	5,858.0	5,868.3	5,767.4	24.0	27.5	41.27	-368.4	-982.0	492.0	444.7	47.34	10.395		
6,000.0	5,957.2	5,967.9	5,865.0	24.4	28.0	41.31	-375.7	-1,000.8	500.6	452.5	48.13	10.400		
6,100.0	6,056.3	6,067.6	5,962.6	24.8	28.5	41.36	-383.1	-1,019.5	509.1	460.2	48.93	10.405		
6,200.0	6,155.4	6,167.2	6,060.2	25.2	29.0	41.40	-390.5	-1,038.3	517.7	468.0	49.73	10.409		
6,300.0	6,254.5	6,266.8	6,157.7	25.6	29.5	41.44	-397.8	-1,057.1	526.3	475.7	50.53	10.414		
6,400.0	6,353.6	6,366.4	6,255.3	26.1	30.0	41.48	-405.2	-1,075.8	534.8	483.5	51.34	10.418		
6,500.0	6,452.7	6,466.1	6,352.9	26.5	30.5	41.52	-412.6	-1,094.6	543.4	491.2	52.14	10.422		
6,600.0	6,551.9	6,565.7	6,450.5	26.9	31.0	41.55	-420.0	-1,113.3	551.9	499.0	52.94	10.426		
6,700.0	6,651.0	6,665.3	6,548.0	27.3	31.5	41.59	-427.3	-1,132.1	560.5	506.7	53.74	10.429		
6,800.0	6,750.3	6,764.6	6,645.2	27.8	32.0	-34.88	-434.7	-1,150.8	568.5	514.1	54.38	10.454		
6,900.0	6,848.2	6,861.2	6,739.8	28.1	32.5	-65.45	-441.8	-1,168.9	576.0	521.3	54.71	10.528		
7,000.0	6,941.6	6,952.1	6,828.8	28.5	33.0	-76.51	-448.5	-1,186.1	584.7	530.0	54.76	10.679		
7,100.0	7,027.7	7,034.6	6,909.6	28.7	33.4	-83.29	-454.6	-1,201.6	597.6	543.0	54.66	10.933		
7,200.0	7,104.0	7,106.1	6,979.7	28.9	33.7	-87.87	-459.9	-1,215.1	617.9	563.3	54.60	11.317		
7,300.0	7,168.0	7,164.6	7,037.0	29.0	34.0	-90.24	-464.2	-1,226.1	648.2	593.4	54.74	11.841		
7,400.0	7,217.9	7,239.2	7,110.1	29.1	34.4	-92.54	-467.2	-1,240.1	689.3	633.9	55.40	12.443		
7,500.0	7,252.2	7,337.9	7,206.3	29.0	35.0	-95.24	-456.2	-1,258.8	737.8	681.4	56.38	13.085		
7,600.0	7,269.7	7,686.3	7,502.2	29.0	36.2	-111.29	-292.9	-1,317.2	786.0	731.8	54.23	14.495		
7,700.0	7,272.0	8,170.7	7,660.0	29.1	36.4	-119.05	149.2	-1,351.3	798.9	748.6	50.33	15.875		
7,800.0	7,272.0	8,270.7	7,660.0	29.4	36.4	-119.05	249.2	-1,352.1	798.9	748.0	50.91	15.694		
7,900.0	7,272.0	8,370.7	7,660.0	29.8	36.6	-119.05	349.2	-1,353.0	798.9	747.3	51.67	15.461		
8,000.0	7,272.0	8,470.7	7,660.0	30.4	36.8	-119.05	449.2	-1,353.8	798.9	746.3	52.62	15.182		
8,100.0	7,272.0	8,570.7	7,660.0	31.1	37.1	-119.05	549.2	-1,354.6	798.9	745.2	53.75	14.865		
8,200.0	7,272.0	8,670.7	7,660.0	31.8	37.5	-119.05	649.2	-1,355.4	798.9	743.9	55.03	14.519		
8,300.0	7,272.0	8,770.7	7,660.0	32.7	38.1	-119.05	749.2	-1,356.3	798.9	742.5	56.46	14.151		
8,400.0	7,272.0	8,870.7	7,660.0	33.6	38.7	-119.05	849.2	-1,357.1	798.9	740.9	58.03	13.768		
8,500.0	7,272.0	8,970.7	7,660.0	34.6	39.4	-119.05	949.2	-1,357.9	798.9	739.2	59.73	13.376		
8,600.0	7,272.0	9,070.7	7,660.0	35.7	40.2	-119.05	1,049.2	-1,358.7	798.9	737.4	61.55	12.981		
8,700.0	7,272.0	9,170.7	7,660.0	36.8	41.1	-119.05	1,149.2	-1,359.6	798.9	735.5	63.47	12.588		
8,800.0	7,272.0	9,270.7	7,660.0	37.9	42.1	-119.05	1,249.2	-1,360.4	799.0	733.5	65.49	12.199		

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 19-18-1NBH
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 19-18-1NBH	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		
8,900.0	7,272.0	9,370.7	7,660.0	39.1	43.1	-119.05	1,349.2	-1,361.2	799.0	731.3	67.61	11.818		
9,000.0	7,272.0	9,470.7	7,660.0	40.4	44.2	-119.05	1,449.2	-1,362.1	799.0	729.2	69.80	11.447		
9,100.0	7,272.0	9,570.7	7,660.0	41.7	45.3	-119.05	1,549.2	-1,362.9	799.0	726.9	72.06	11.087		
9,200.0	7,272.0	9,670.7	7,660.0	43.0	46.5	-119.05	1,649.2	-1,363.7	799.0	724.6	74.40	10.739		
9,300.0	7,272.0	9,770.7	7,660.0	44.3	47.7	-119.05	1,749.2	-1,364.5	799.0	722.2	76.79	10.404		
9,400.0	7,272.0	9,870.7	7,660.0	45.7	48.9	-119.05	1,849.2	-1,365.4	799.0	719.7	79.24	10.083		
9,500.0	7,272.0	9,970.7	7,660.0	47.1	50.2	-119.05	1,949.2	-1,366.2	799.0	717.2	81.74	9.774		
9,600.0	7,272.0	10,070.7	7,660.0	48.5	51.5	-119.05	2,049.2	-1,367.0	799.0	714.7	84.29	9.479		
9,700.0	7,272.0	10,170.7	7,660.0	49.9	52.9	-119.05	2,149.2	-1,367.9	799.0	712.1	86.87	9.197		
9,800.0	7,272.0	10,270.7	7,660.0	51.4	54.2	-119.05	2,249.2	-1,368.7	799.0	709.5	89.50	8.927		
9,900.0	7,272.0	10,370.7	7,660.0	52.9	55.6	-119.05	2,349.2	-1,369.5	799.0	706.8	92.16	8.669		
10,000.0	7,272.0	10,470.7	7,660.0	54.4	57.0	-119.05	2,449.2	-1,370.3	799.0	704.1	94.85	8.423		
10,100.0	7,272.0	10,570.7	7,660.0	55.9	58.5	-119.05	2,549.1	-1,371.2	799.0	701.4	97.57	8.188		
10,200.0	7,272.0	10,670.7	7,660.0	57.4	59.9	-119.05	2,649.1	-1,372.0	799.0	698.6	100.32	7.964		
10,300.0	7,272.0	10,770.7	7,660.0	59.0	61.4	-119.05	2,749.1	-1,372.8	799.0	695.9	103.10	7.750		
10,400.0	7,272.0	10,870.7	7,660.0	60.5	62.9	-119.05	2,849.1	-1,373.7	799.0	693.1	105.89	7.545		
10,500.0	7,272.0	10,970.7	7,660.0	62.1	64.3	-119.05	2,949.1	-1,374.5	799.0	690.3	108.71	7.349		
10,600.0	7,272.0	11,070.7	7,660.0	63.7	65.9	-119.05	3,049.1	-1,375.3	799.0	687.4	111.55	7.162		
10,700.0	7,272.0	11,170.7	7,660.0	65.2	67.4	-119.05	3,149.1	-1,376.1	799.0	684.6	114.41	6.984		
10,800.0	7,272.0	11,270.7	7,660.0	66.8	68.9	-119.05	3,249.1	-1,377.0	799.0	681.7	117.28	6.813		
10,900.0	7,272.0	11,370.7	7,660.0	68.4	70.4	-119.05	3,349.1	-1,377.8	799.0	678.8	120.17	6.649		
11,000.0	7,272.0	11,470.7	7,660.0	70.1	72.0	-119.05	3,449.1	-1,378.6	799.0	675.9	123.07	6.492		
11,100.0	7,272.0	11,570.7	7,660.0	71.7	73.6	-119.05	3,549.1	-1,379.5	799.0	673.0	125.98	6.342		
11,200.0	7,272.0	11,670.7	7,660.0	73.3	75.1	-119.05	3,649.1	-1,380.3	799.0	670.1	128.91	6.198		
11,300.0	7,272.0	11,770.7	7,660.0	74.9	76.7	-119.05	3,749.1	-1,381.1	799.0	667.1	131.85	6.060		
11,400.0	7,272.0	11,870.7	7,660.0	76.6	78.3	-119.05	3,849.1	-1,381.9	799.0	664.2	134.80	5.927		
11,500.0	7,272.0	11,970.7	7,660.0	78.2	79.9	-119.05	3,949.1	-1,382.8	799.0	661.2	137.76	5.800		
11,600.0	7,272.0	12,070.7	7,660.0	79.8	81.5	-119.05	4,049.1	-1,383.6	799.0	658.2	140.74	5.677		
11,700.0	7,272.0	12,170.7	7,660.0	81.5	83.1	-119.05	4,149.1	-1,384.4	799.0	655.3	143.72	5.559		
11,800.0	7,272.0	12,270.7	7,660.0	83.2	84.7	-119.05	4,249.1	-1,385.3	799.0	652.3	146.70	5.446		
11,900.0	7,272.0	12,370.7	7,660.0	84.8	86.3	-119.05	4,349.1	-1,386.1	799.0	649.3	149.70	5.337		
12,000.0	7,272.0	12,470.7	7,660.0	86.5	88.0	-119.05	4,449.1	-1,386.9	799.0	646.3	152.70	5.232		
12,100.0	7,272.0	12,570.7	7,660.0	88.2	89.6	-119.05	4,549.1	-1,387.7	799.0	643.3	155.71	5.131		
12,200.0	7,272.0	12,670.7	7,660.0	89.8	91.2	-119.05	4,649.1	-1,388.6	799.0	640.3	158.73	5.034		
12,300.0	7,272.0	12,770.7	7,660.0	91.5	92.9	-119.05	4,749.1	-1,389.4	799.0	637.2	161.75	4.939		
12,400.0	7,272.0	12,870.7	7,660.0	93.2	94.5	-119.05	4,849.1	-1,390.2	799.0	634.2	164.78	4.849		
12,500.0	7,272.0	12,970.7	7,660.0	94.9	96.2	-119.05	4,949.1	-1,391.1	799.0	631.2	167.82	4.761		
12,600.0	7,272.0	13,070.7	7,660.0	96.5	97.8	-119.05	5,049.1	-1,391.9	799.0	628.1	170.86	4.676		
12,700.0	7,272.0	13,170.7	7,660.0	98.2	99.5	-119.05	5,149.1	-1,392.7	799.0	625.1	173.91	4.594		
12,800.0	7,272.0	13,270.7	7,660.0	99.9	101.1	-119.05	5,249.1	-1,393.5	799.0	622.0	176.96	4.515		
12,900.0	7,272.0	13,370.7	7,660.0	101.6	102.8	-119.05	5,349.1	-1,394.4	799.0	619.0	180.01	4.439		
13,000.0	7,272.0	13,470.7	7,660.0	103.3	104.5	-119.05	5,449.1	-1,395.2	799.0	615.9	183.07	4.364		
13,100.0	7,272.0	13,570.7	7,660.0	105.0	106.2	-119.05	5,549.0	-1,396.0	799.0	612.9	186.13	4.293		
13,200.0	7,272.0	13,670.7	7,660.0	106.7	107.8	-119.05	5,649.0	-1,396.9	799.0	609.8	189.20	4.223		
13,300.0	7,272.0	13,770.7	7,660.0	108.4	109.5	-119.05	5,749.0	-1,397.7	799.0	606.7	192.27	4.156		
13,400.0	7,272.0	13,870.7	7,660.0	110.1	111.2	-119.05	5,849.0	-1,398.5	799.0	603.7	195.34	4.090		
13,500.0	7,272.0	13,970.7	7,660.0	111.8	112.9	-119.05	5,949.0	-1,399.3	799.0	600.6	198.42	4.027		
13,600.0	7,272.0	14,070.7	7,660.0	113.5	114.5	-119.05	6,049.0	-1,400.2	799.0	597.5	201.50	3.965		
13,700.0	7,272.0	14,170.7	7,660.0	115.2	116.2	-119.05	6,149.0	-1,401.0	799.0	594.4	204.59	3.905		
13,800.0	7,272.0	14,270.7	7,660.0	117.0	117.9	-119.05	6,249.0	-1,401.8	799.0	591.3	207.67	3.847		
13,900.0	7,272.0	14,370.7	7,660.0	118.7	119.6	-119.05	6,349.0	-1,402.7	799.0	588.2	210.76	3.791		
14,000.0	7,272.0	14,470.7	7,660.0	120.4	121.3	-119.05	6,449.0	-1,403.5	799.0	585.2	213.86	3.736		

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 19-18-1NBH
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 19-18-1NBH	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		
14,100.0	7,272.0	14,570.7	7,660.0	122.1	123.0	-119.05	6,549.0	-1,404.3	799.0	582.1	216.95	3.683		
14,200.0	7,272.0	14,670.7	7,660.0	123.8	124.7	-119.05	6,649.0	-1,405.1	799.0	579.0	220.05	3.631		
14,300.0	7,272.0	14,770.7	7,660.0	125.5	126.4	-119.05	6,749.0	-1,406.0	799.0	575.9	223.15	3.581		
14,400.0	7,272.0	14,870.7	7,660.0	127.3	128.1	-119.05	6,849.0	-1,406.8	799.0	572.8	226.25	3.532		
14,500.0	7,272.0	14,970.7	7,660.0	129.0	129.8	-119.05	6,949.0	-1,407.6	799.0	569.7	229.35	3.484		
14,600.0	7,272.0	15,070.7	7,660.0	130.7	131.5	-119.05	7,049.0	-1,408.5	799.0	566.6	232.46	3.437		
14,700.0	7,272.0	15,170.7	7,660.0	132.4	133.2	-119.05	7,149.0	-1,409.3	799.0	563.4	235.57	3.392		
14,800.0	7,272.0	15,270.7	7,660.0	134.2	134.9	-119.05	7,249.0	-1,410.1	799.0	560.3	238.68	3.348		
14,900.0	7,272.0	15,370.7	7,660.0	135.9	136.6	-119.05	7,349.0	-1,410.9	799.0	557.2	241.79	3.305		
15,000.0	7,272.0	15,470.7	7,660.0	137.6	138.3	-119.05	7,449.0	-1,411.8	799.0	554.1	244.90	3.263		
15,100.0	7,272.0	15,570.7	7,660.0	139.3	140.1	-119.05	7,549.0	-1,412.6	799.0	551.0	248.02	3.222		
15,200.0	7,272.0	15,670.7	7,660.0	141.1	141.8	-119.05	7,649.0	-1,413.4	799.0	547.9	251.14	3.182		
15,300.0	7,272.0	15,770.7	7,660.0	142.8	143.5	-119.05	7,749.0	-1,414.2	799.0	544.8	254.25	3.143		
15,400.0	7,272.0	15,870.7	7,660.0	144.5	145.2	-119.05	7,849.0	-1,415.1	799.0	541.6	257.37	3.105		
15,500.0	7,272.0	15,970.7	7,660.0	146.3	146.9	-119.05	7,949.0	-1,415.9	799.0	538.5	260.50	3.067		
15,600.0	7,272.0	16,070.7	7,660.0	148.0	148.6	-119.05	8,049.0	-1,416.7	799.0	535.4	263.62	3.031		
15,700.0	7,272.0	16,170.7	7,660.0	149.7	150.4	-119.05	8,149.0	-1,417.6	799.0	532.3	266.74	2.995		
15,800.0	7,272.0	16,270.7	7,660.0	151.4	152.1	-119.05	8,249.0	-1,418.4	799.0	529.2	269.87	2.961		
15,900.0	7,272.0	16,370.7	7,660.0	153.2	153.8	-119.05	8,349.0	-1,419.2	799.0	526.0	273.00	2.927		
16,000.0	7,272.0	16,470.7	7,660.0	154.9	155.5	-119.05	8,448.9	-1,420.0	799.0	522.9	276.12	2.894		
16,100.0	7,272.0	16,570.7	7,660.0	156.7	157.2	-119.05	8,548.9	-1,420.9	799.0	519.8	279.25	2.861		
16,200.0	7,272.0	16,670.7	7,660.0	158.4	159.0	-119.05	8,648.9	-1,421.7	799.0	516.6	282.38	2.830		
16,300.0	7,272.0	16,770.7	7,660.0	160.1	160.7	-119.05	8,748.9	-1,422.5	799.0	513.5	285.52	2.799		
16,400.0	7,272.0	16,870.7	7,660.0	161.9	162.4	-119.05	8,848.9	-1,423.4	799.0	510.4	288.65	2.768		
16,500.0	7,272.0	16,970.7	7,660.0	163.6	164.1	-119.05	8,948.9	-1,424.2	799.0	507.2	291.78	2.738		
16,600.0	7,272.0	17,070.7	7,660.0	165.3	165.9	-119.05	9,048.9	-1,425.0	799.0	504.1	294.92	2.709		
16,700.0	7,272.0	17,170.7	7,660.0	167.1	167.6	-119.05	9,148.9	-1,425.8	799.0	501.0	298.05	2.681		
16,800.0	7,272.0	17,270.7	7,660.0	168.8	169.3	-119.05	9,248.9	-1,426.7	799.0	497.8	301.19	2.653		
16,900.0	7,272.0	17,370.7	7,660.0	170.6	171.1	-119.05	9,348.9	-1,427.5	799.0	494.7	304.33	2.626		
17,000.0	7,272.0	17,470.7	7,660.0	172.3	172.8	-119.05	9,448.9	-1,428.3	799.0	491.6	307.47	2.599		
17,100.0	7,272.0	17,570.7	7,660.0	174.0	174.5	-119.05	9,548.9	-1,429.2	799.0	488.4	310.61	2.573		
17,100.2	7,272.0	17,570.9	7,660.0	174.0	174.5	-119.05	9,549.1	-1,429.2	799.0	488.4	310.61	2.572		
17,200.0	7,272.0	17,630.0	7,660.0	175.8	175.5	-119.05	9,608.2	-1,429.7	800.1	486.3	313.80	2.550 SF		
17,300.0	7,272.0	17,630.0	7,660.0	177.5	175.5	-119.05	9,608.2	-1,429.7	811.3	497.5	313.83	2.585		
17,400.0	7,272.0	17,630.0	7,660.0	179.3	175.5	-119.05	9,608.2	-1,429.7	834.5	524.9	309.59	2.696		
17,429.8	7,272.0	17,630.0	7,660.0	179.8	175.5	-119.05	9,608.2	-1,429.7	843.6	536.0	307.61	2.742		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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	-90.27	-0.1	-15.0	15.0					
100.0	100.0	100.0	100.0	0.4	0.0	-90.27	-0.1	-15.0	15.0	14.7	0.28	54.170		
200.0	200.0	200.0	200.0	1.0	0.0	-90.27	-0.1	-15.0	15.0	14.2	0.80	18.807		
300.0	300.0	300.0	300.0	1.5	0.0	-90.27	-0.1	-15.0	15.0	13.8	1.22	12.254		
400.0	400.0	400.0	400.0	1.9	0.0	-90.27	-0.1	-15.0	15.0	13.4	1.62	9.271		
500.0	500.0	500.0	500.0	2.3	0.0	-90.27	-0.1	-15.0	15.0	13.0	2.00	7.506		
600.0	600.0	600.0	600.0	2.7	0.0	-90.27	-0.1	-15.0	15.0	12.6	2.37	6.323		
700.0	700.0	700.0	700.0	3.1	0.0	-90.27	-0.1	-15.0	15.0	12.3	2.74	5.471		
800.0	800.0	800.0	800.0	3.5	0.0	-90.27	-0.1	-15.0	15.0	11.9	3.11	4.825 CC, ES		
900.0	900.0	899.5	899.5	3.9	0.0	-92.99	-0.9	-16.5	16.6	13.1	3.51	4.716		
1,000.0	1,000.0	998.8	998.7	4.2	0.0	32.26	-3.2	-21.1	19.9	16.0	3.94	5.063		
1,100.0	1,099.8	1,098.1	1,097.5	5.1	0.0	31.45	-7.2	-28.8	23.6	18.8	4.81	4.906		
1,200.0	1,199.5	1,197.2	1,195.9	5.8	0.0	32.13	-12.7	-39.4	27.5	22.0	5.54	4.967		
1,300.0	1,298.7	1,296.2	1,293.7	6.3	0.0	33.68	-19.7	-53.1	31.8	25.8	5.99	5.312		
1,400.0	1,397.8	1,396.0	1,392.1	6.6	0.0	34.91	-27.6	-68.3	36.7	30.4	6.24	5.870		
1,500.0	1,496.9	1,495.9	1,490.5	6.9	0.0	35.84	-35.4	-83.5	41.5	35.0	6.55	6.334		
1,600.0	1,596.1	1,595.8	1,588.9	7.2	0.0	36.58	-43.3	-98.7	46.4	39.5	6.88	6.744		
1,700.0	1,695.2	1,695.7	1,687.3	7.5	0.0	37.18	-51.1	-113.9	51.3	44.0	7.21	7.109		
1,800.0	1,794.3	1,795.6	1,785.7	7.8	0.0	37.67	-59.0	-129.1	56.1	48.6	7.55	7.433		
1,900.0	1,893.4	1,895.4	1,884.1	8.1	0.0	38.09	-66.8	-144.4	61.0	53.1	7.90	7.724		
2,000.0	1,992.5	1,995.3	1,982.5	8.4	0.0	38.44	-74.7	-159.6	65.9	57.7	8.25	7.985		
2,100.0	2,091.6	2,095.2	2,080.9	8.8	0.0	38.75	-82.6	-174.8	70.8	62.2	8.61	8.220		
2,200.0	2,190.8	2,195.1	2,179.3	9.1	0.0	39.01	-90.4	-190.0	75.7	66.7	8.97	8.433		
2,300.0	2,289.9	2,295.0	2,277.7	9.4	0.0	39.25	-98.3	-205.2	80.6	71.2	9.34	8.626		
2,400.0	2,389.0	2,394.8	2,376.1	9.8	0.0	39.45	-106.1	-220.4	85.5	75.8	9.71	8.802		
2,500.0	2,488.1	2,494.7	2,474.5	10.1	0.0	39.64	-114.0	-235.6	90.4	80.3	10.08	8.963		
2,600.0	2,587.2	2,594.6	2,572.9	10.5	0.0	39.80	-121.8	-250.8	95.3	84.8	10.45	9.111		
2,700.0	2,686.3	2,694.5	2,671.3	10.9	0.0	39.95	-129.7	-266.1	100.1	89.3	10.83	9.247		
2,800.0	2,785.4	2,794.4	2,769.7	11.2	0.0	40.09	-137.5	-281.3	105.0	93.8	11.21	9.373		
2,900.0	2,884.6	2,894.2	2,868.1	11.6	0.0	40.21	-145.4	-296.5	109.9	98.4	11.59	9.488		
3,000.0	2,983.7	2,994.1	2,966.5	12.0	0.0	40.32	-153.2	-311.7	114.8	102.9	11.97	9.596		
3,100.0	3,082.8	3,094.0	3,064.9	12.4	0.0	40.43	-161.1	-326.9	119.7	107.4	12.35	9.696		
3,200.0	3,181.9	3,193.9	3,163.3	12.8	0.0	40.52	-168.9	-342.1	124.6	111.9	12.73	9.789		
3,300.0	3,281.0	3,293.7	3,261.7	13.2	0.0	40.61	-176.8	-357.3	129.5	116.4	13.12	9.876		
3,400.0	3,380.1	3,393.6	3,360.1	13.5	0.0	40.69	-184.6	-372.5	134.4	120.9	13.50	9.957		
3,500.0	3,479.3	3,493.5	3,458.5	13.9	0.0	40.77	-192.5	-387.8	139.3	125.4	13.89	10.034		
3,600.0	3,578.4	3,593.4	3,556.9	14.4	0.0	40.84	-200.3	-403.0	144.2	129.9	14.27	10.105		
3,700.0	3,677.5	3,693.3	3,655.3	14.8	0.0	40.90	-208.2	-418.2	149.1	134.5	14.66	10.173		
3,800.0	3,776.6	3,793.1	3,753.7	15.2	0.0	40.97	-216.0	-433.4	154.0	139.0	15.05	10.236		
3,900.0	3,875.7	3,893.0	3,852.1	15.6	0.0	41.02	-223.9	-448.6	158.9	143.5	15.43	10.296		
4,000.0	3,974.8	3,992.9	3,950.5	16.0	0.0	41.08	-231.8	-463.8	163.8	148.0	15.82	10.352		
4,100.0	4,074.0	4,092.8	4,048.9	16.4	0.0	41.13	-239.6	-479.0	168.7	152.5	16.21	10.406		
4,200.0	4,173.1	4,192.7	4,147.3	16.8	0.0	41.18	-247.5	-494.2	173.6	157.0	16.60	10.457		
4,300.0	4,272.2	4,292.5	4,245.7	17.2	0.0	41.23	-255.3	-509.5	178.5	161.5	16.99	10.505		
4,400.0	4,371.3	4,392.4	4,344.1	17.6	0.0	41.27	-263.2	-524.7	183.4	166.0	17.38	10.551		
4,500.0	4,470.4	4,492.3	4,442.5	18.1	0.0	41.31	-271.0	-539.9	188.3	170.5	17.77	10.594		
4,600.0	4,569.5	4,592.2	4,540.9	18.5	0.0	41.35	-278.9	-555.1	193.2	175.0	18.17	10.636		
4,700.0	4,668.7	4,692.1	4,639.3	18.9	0.0	41.39	-286.7	-570.3	198.1	179.5	18.56	10.675		
4,800.0	4,767.8	4,791.9	4,737.7	19.3	0.0	41.42	-294.6	-585.5	203.0	184.1	18.95	10.713		
4,900.0	4,866.9	4,891.8	4,836.1	19.7	0.0	41.46	-302.4	-600.7	207.9	188.6	19.34	10.749		
5,000.0	4,966.0	4,991.7	4,934.5	20.2	0.0	41.49	-310.3	-615.9	212.8	193.1	19.73	10.784		
5,100.0	5,065.1	5,091.6	5,032.9	20.6	0.0	41.52	-318.1	-631.2	217.7	197.6	20.13	10.817		

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 19-18-1NBH
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 19-18-1NBH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-1NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
5,200.0	5,164.2	5,191.5	5,131.3	21.0	0.0	41.55	-326.0	-646.4	222.6	202.1	20.52	10.848		
5,300.0	5,263.3	5,291.3	5,229.7	21.4	0.0	41.58	-333.8	-661.6	227.5	206.6	20.91	10.878		
5,400.0	5,362.5	5,391.2	5,328.1	21.8	0.0	41.60	-341.7	-676.8	232.4	211.1	21.31	10.908		
5,500.0	5,461.6	5,491.1	5,426.5	22.3	0.0	41.63	-349.5	-692.0	237.3	215.6	21.70	10.935		
5,600.0	5,560.7	5,591.0	5,525.0	22.7	0.0	41.65	-357.4	-707.2	242.2	220.1	22.09	10.962		
5,700.0	5,659.8	5,690.9	5,623.4	23.1	0.0	41.68	-365.3	-722.4	247.1	224.6	22.49	10.988		
5,800.0	5,758.9	5,790.7	5,721.8	23.5	0.0	41.70	-373.1	-737.6	252.0	229.1	22.88	11.013		
5,900.0	5,858.0	5,890.6	5,820.2	24.0	0.0	41.72	-381.0	-752.9	256.9	233.6	23.28	11.037		
6,000.0	5,957.2	5,990.5	5,918.6	24.4	0.0	41.74	-388.8	-768.1	261.8	238.1	23.67	11.060		
6,100.0	6,056.3	6,090.4	6,017.0	24.8	0.0	41.76	-396.7	-783.3	266.7	242.6	24.07	11.082		
6,200.0	6,155.4	6,190.3	6,115.4	25.2	0.0	41.78	-404.5	-798.5	271.6	247.1	24.46	11.104		
6,300.0	6,254.5	6,290.1	6,213.8	25.6	0.0	41.80	-412.4	-813.7	276.5	251.7	24.86	11.124		
6,400.0	6,353.6	6,390.0	6,312.2	26.1	0.0	41.82	-420.2	-828.9	281.4	256.2	25.25	11.144		
6,500.0	6,452.7	6,489.9	6,410.6	26.5	0.0	41.84	-428.1	-844.1	286.3	260.7	25.65	11.164		
6,600.0	6,551.9	6,589.8	6,509.0	26.9	0.0	41.86	-435.9	-859.3	291.2	265.2	26.04	11.183		
6,700.0	6,651.0	6,689.7	6,607.4	27.3	0.0	41.87	-443.8	-874.5	296.1	269.7	26.44	11.200		
6,800.0	6,750.3	6,789.1	6,705.4	27.8	0.0	-35.67	-451.6	-889.7	300.5	273.8	26.72	11.248		
6,900.0	6,848.2	6,885.8	6,800.6	28.1	0.0	-68.67	-459.2	-904.4	305.1	278.4	26.79	11.388		
7,000.0	6,941.6	6,977.5	6,891.0	28.5	0.0	-83.00	-466.3	-918.4	313.7	287.0	26.73	11.737		
7,100.0	7,027.7	7,078.7	6,990.7	28.7	0.0	-93.48	-463.8	-933.9	328.9	302.1	26.78	12.282		
7,200.0	7,104.0	7,191.1	7,099.1	28.9	0.0	-101.80	-440.2	-950.9	349.1	322.2	26.88	12.987		
7,300.0	7,168.0	7,318.2	7,213.5	29.0	0.0	-108.71	-388.4	-969.1	372.1	345.3	26.76	13.906		
7,400.0	7,217.9	7,463.7	7,326.8	29.1	0.0	-114.34	-299.6	-987.4	394.6	368.4	26.14	15.094		
7,500.0	7,252.2	7,629.3	7,424.1	29.0	0.0	-118.51	-167.2	-1,003.6	413.0	387.9	25.09	16.459		
7,600.0	7,269.7	7,812.4	7,483.3	29.0	0.0	-120.82	4.9	-1,014.3	423.7	399.5	24.22	17.492		
7,700.0	7,272.0	7,960.1	7,492.0	29.1	0.0	-121.15	152.0	-1,016.8	425.2	401.0	24.28	17.515		
7,800.0	7,272.0	8,060.1	7,492.0	29.4	0.0	-121.15	252.0	-1,017.6	425.2	400.6	24.60	17.284		
7,900.0	7,272.0	8,160.1	7,492.0	29.8	0.0	-121.15	352.0	-1,018.5	425.2	400.2	25.03	16.991		
8,000.0	7,272.0	8,260.1	7,492.0	30.4	0.0	-121.15	452.0	-1,019.3	425.2	399.7	25.54	16.649		
8,100.0	7,272.0	8,360.1	7,492.0	31.1	0.0	-121.15	552.0	-1,020.1	425.2	399.1	26.14	16.269		
8,200.0	7,272.0	8,460.1	7,492.0	31.8	0.0	-121.15	652.0	-1,021.0	425.2	398.4	26.81	15.859		
8,300.0	7,272.0	8,560.1	7,492.0	32.7	0.0	-121.15	752.0	-1,021.8	425.2	397.7	27.56	15.429		
8,400.0	7,272.0	8,660.1	7,492.0	33.6	0.0	-121.15	852.0	-1,022.6	425.2	396.9	28.38	14.986		
8,500.0	7,272.0	8,760.1	7,492.0	34.6	0.0	-121.15	952.0	-1,023.4	425.2	396.0	29.25	14.537		
8,600.0	7,272.0	8,860.1	7,492.0	35.7	0.0	-121.15	1,052.0	-1,024.3	425.2	395.1	30.18	14.088		
8,700.0	7,272.0	8,960.1	7,492.0	36.8	0.0	-121.15	1,152.0	-1,025.1	425.2	394.1	31.17	13.644		
8,800.0	7,272.0	9,060.1	7,492.0	37.9	0.0	-121.15	1,252.0	-1,025.9	425.2	393.0	32.19	13.208		
8,900.0	7,272.0	9,160.1	7,492.0	39.1	0.0	-121.15	1,352.0	-1,026.7	425.2	392.0	33.27	12.783		
9,000.0	7,272.0	9,260.1	7,492.0	40.4	0.0	-121.15	1,452.0	-1,027.6	425.2	390.9	34.37	12.371		
9,100.0	7,272.0	9,360.1	7,492.0	41.7	0.0	-121.15	1,552.0	-1,028.4	425.2	389.7	35.52	11.973		
9,200.0	7,272.0	9,460.1	7,492.0	43.0	0.0	-121.15	1,652.0	-1,029.2	425.2	388.6	36.69	11.590		
9,300.0	7,272.0	9,560.1	7,492.0	44.3	0.0	-121.15	1,752.0	-1,030.1	425.2	387.4	37.89	11.222		
9,400.0	7,272.0	9,660.1	7,492.0	45.7	0.0	-121.15	1,851.9	-1,030.9	425.2	386.1	39.12	10.870		
9,500.0	7,272.0	9,760.1	7,492.0	47.1	0.0	-121.15	1,951.9	-1,031.7	425.2	384.9	40.37	10.533		
9,600.0	7,272.0	9,860.1	7,492.0	48.5	0.0	-121.15	2,051.9	-1,032.5	425.2	383.6	41.64	10.211		
9,700.0	7,272.0	9,960.1	7,492.0	49.9	0.0	-121.15	2,151.9	-1,033.4	425.2	382.3	42.94	9.904		
9,800.0	7,272.0	10,060.1	7,492.0	51.4	0.0	-121.15	2,251.9	-1,034.2	425.2	381.0	44.25	9.611		
9,900.0	7,272.0	10,160.1	7,492.0	52.9	0.0	-121.15	2,351.9	-1,035.0	425.2	379.7	45.57	9.331		
10,000.0	7,272.0	10,260.1	7,492.0	54.4	0.0	-121.15	2,451.9	-1,035.8	425.2	378.3	46.91	9.065		
10,100.0	7,272.0	10,360.1	7,492.0	55.9	0.0	-121.15	2,551.9	-1,036.7	425.2	377.0	48.27	8.811		
10,200.0	7,272.0	10,460.1	7,492.0	57.4	0.0	-121.15	2,651.9	-1,037.5	425.2	375.6	49.63	8.568		
10,300.0	7,272.0	10,560.1	7,492.0	59.0	0.0	-121.15	2,751.9	-1,038.3	425.2	374.2	51.01	8.337		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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	7,272.0	10,660.1	7,492.0	60.5	0.0	-121.15	2,851.9	-1,039.2	425.2	372.8	52.40	8.116		
10,500.0	7,272.0	10,760.1	7,492.0	62.1	0.0	-121.15	2,951.9	-1,040.0	425.2	371.4	53.80	7.905		
10,600.0	7,272.0	10,860.1	7,492.0	63.7	0.0	-121.15	3,051.9	-1,040.8	425.2	370.0	55.20	7.703		
10,700.0	7,272.0	10,960.1	7,492.0	65.2	0.0	-121.15	3,151.9	-1,041.6	425.2	368.6	56.62	7.511		
10,800.0	7,272.0	11,060.1	7,492.0	66.8	0.0	-121.15	3,251.9	-1,042.5	425.2	367.2	58.04	7.327		
10,900.0	7,272.0	11,160.1	7,492.0	68.4	0.0	-121.15	3,351.9	-1,043.3	425.2	365.8	59.47	7.150		
11,000.0	7,272.0	11,260.1	7,492.0	70.1	0.0	-121.15	3,451.9	-1,044.1	425.2	364.3	60.91	6.982		
11,100.0	7,272.0	11,360.1	7,492.0	71.7	0.0	-121.15	3,551.9	-1,044.9	425.2	362.9	62.35	6.820		
11,200.0	7,272.0	11,460.1	7,492.0	73.3	0.0	-121.15	3,651.9	-1,045.8	425.2	361.4	63.80	6.665		
11,300.0	7,272.0	11,560.1	7,492.0	74.9	0.0	-121.15	3,751.9	-1,046.6	425.2	360.0	65.25	6.517		
11,400.0	7,272.0	11,660.1	7,492.0	76.6	0.0	-121.15	3,851.9	-1,047.4	425.2	358.5	66.71	6.374		
11,500.0	7,272.0	11,760.1	7,492.0	78.2	0.0	-121.15	3,951.9	-1,048.3	425.2	357.1	68.18	6.237		
11,600.0	7,272.0	11,860.1	7,492.0	79.8	0.0	-121.15	4,051.9	-1,049.1	425.2	355.6	69.65	6.106		
11,700.0	7,272.0	11,960.1	7,492.0	81.5	0.0	-121.15	4,151.9	-1,049.9	425.2	354.1	71.12	5.979		
11,800.0	7,272.0	12,060.1	7,492.0	83.2	0.0	-121.15	4,251.9	-1,050.7	425.2	352.7	72.59	5.858		
11,900.0	7,272.0	12,160.1	7,492.0	84.8	0.0	-121.15	4,351.9	-1,051.6	425.2	351.2	74.07	5.741		
12,000.0	7,272.0	12,260.1	7,492.0	86.5	0.0	-121.15	4,451.9	-1,052.4	425.2	349.7	75.56	5.628		
12,100.0	7,272.0	12,360.1	7,492.0	88.2	0.0	-121.15	4,551.9	-1,053.2	425.2	348.2	77.04	5.520		
12,200.0	7,272.0	12,460.1	7,492.0	89.8	0.0	-121.15	4,651.9	-1,054.0	425.2	346.7	78.53	5.415		
12,300.0	7,272.0	12,560.1	7,492.0	91.5	0.0	-121.15	4,751.9	-1,054.9	425.2	345.2	80.03	5.314		
12,400.0	7,272.0	12,660.1	7,492.0	93.2	0.0	-121.15	4,851.8	-1,055.7	425.2	343.7	81.52	5.216		
12,500.0	7,272.0	12,760.1	7,492.0	94.9	0.0	-121.15	4,951.8	-1,056.5	425.2	342.2	83.02	5.122		
12,600.0	7,272.0	12,860.1	7,492.0	96.5	0.0	-121.15	5,051.8	-1,057.4	425.2	340.7	84.52	5.031		
12,700.0	7,272.0	12,960.1	7,492.0	98.2	0.0	-121.15	5,151.8	-1,058.2	425.2	339.2	86.02	4.943		
12,800.0	7,272.0	13,060.1	7,492.0	99.9	0.0	-121.15	5,251.8	-1,059.0	425.2	337.7	87.53	4.858		
12,900.0	7,272.0	13,160.1	7,492.0	101.6	0.0	-121.15	5,351.8	-1,059.8	425.2	336.2	89.03	4.776		
13,000.0	7,272.0	13,260.1	7,492.0	103.3	0.0	-121.15	5,451.8	-1,060.7	425.2	334.7	90.54	4.697		
13,100.0	7,272.0	13,360.1	7,492.0	105.0	0.0	-121.15	5,551.8	-1,061.5	425.2	333.2	92.05	4.620		
13,200.0	7,272.0	13,460.1	7,492.0	106.7	0.0	-121.15	5,651.8	-1,062.3	425.2	331.7	93.57	4.545		
13,300.0	7,272.0	13,560.1	7,492.0	108.4	0.0	-121.15	5,751.8	-1,063.1	425.2	330.2	95.08	4.473		
13,400.0	7,272.0	13,660.1	7,492.0	110.1	0.0	-121.15	5,851.8	-1,064.0	425.2	328.7	96.60	4.402		
13,500.0	7,272.0	13,760.1	7,492.0	111.8	0.0	-121.15	5,951.8	-1,064.8	425.2	327.1	98.11	4.334		
13,600.0	7,272.0	13,860.1	7,492.0	113.5	0.0	-121.15	6,051.8	-1,065.6	425.2	325.6	99.63	4.268		
13,700.0	7,272.0	13,960.1	7,492.0	115.2	0.0	-121.15	6,151.8	-1,066.5	425.2	324.1	101.15	4.204		
13,800.0	7,272.0	14,060.1	7,492.0	117.0	0.0	-121.15	6,251.8	-1,067.3	425.2	322.6	102.67	4.142		
13,900.0	7,272.0	14,160.1	7,492.0	118.7	0.0	-121.15	6,351.8	-1,068.1	425.2	321.0	104.20	4.081		
14,000.0	7,272.0	14,260.1	7,492.0	120.4	0.0	-121.15	6,451.8	-1,068.9	425.2	319.5	105.72	4.022		
14,100.0	7,272.0	14,360.1	7,492.0	122.1	0.0	-121.15	6,551.8	-1,069.8	425.2	318.0	107.25	3.965		
14,200.0	7,272.0	14,460.1	7,492.0	123.8	0.0	-121.15	6,651.8	-1,070.6	425.2	316.5	108.77	3.910		
14,300.0	7,272.0	14,560.1	7,492.0	125.5	0.0	-121.15	6,751.8	-1,071.4	425.2	314.9	110.30	3.855		
14,400.0	7,272.0	14,660.1	7,492.0	127.3	0.0	-121.15	6,851.8	-1,072.2	425.2	313.4	111.83	3.803		
14,500.0	7,272.0	14,760.1	7,492.0	129.0	0.0	-121.15	6,951.8	-1,073.1	425.2	311.9	113.36	3.751		
14,600.0	7,272.0	14,860.1	7,492.0	130.7	0.0	-121.15	7,051.8	-1,073.9	425.2	310.4	114.89	3.701		
14,700.0	7,272.0	14,960.1	7,492.0	132.4	0.0	-121.15	7,151.8	-1,074.7	425.2	308.8	116.42	3.653		
14,800.0	7,272.0	15,060.1	7,492.0	134.2	0.0	-121.15	7,251.8	-1,075.6	425.2	307.3	117.95	3.605		
14,900.0	7,272.0	15,160.1	7,492.0	135.9	0.0	-121.15	7,351.8	-1,076.4	425.2	305.8	119.49	3.559		
15,000.0	7,272.0	15,260.1	7,492.0	137.6	0.0	-121.15	7,451.8	-1,077.2	425.2	304.2	121.02	3.514		
15,100.0	7,272.0	15,360.1	7,492.0	139.3	0.0	-121.15	7,551.8	-1,078.0	425.2	302.7	122.55	3.470		
15,200.0	7,272.0	15,460.1	7,492.0	141.1	0.0	-121.15	7,651.8	-1,078.9	425.2	301.2	124.09	3.427		
15,300.0	7,272.0	15,560.1	7,492.0	142.8	0.0	-121.15	7,751.7	-1,079.7	425.2	299.6	125.63	3.385		
15,400.0	7,272.0	15,660.1	7,492.0	144.5	0.0	-121.15	7,851.7	-1,080.5	425.2	298.1	127.16	3.344		
15,500.0	7,272.0	15,760.1	7,492.0	146.3	0.0	-121.15	7,951.7	-1,081.3	425.2	296.5	128.70	3.304		

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 19-18-1NBH
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 19-18-1NBH	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	7,272.0	15,860.1	7,492.0	148.0	0.0	-121.15	8,051.7	-1,082.2	425.2	295.0	130.24	3.265		
15,700.0	7,272.0	15,960.1	7,492.0	149.7	0.0	-121.15	8,151.7	-1,083.0	425.2	293.5	131.78	3.227		
15,800.0	7,272.0	16,060.1	7,492.0	151.4	0.0	-121.15	8,251.7	-1,083.8	425.2	291.9	133.32	3.190		
15,900.0	7,272.0	16,160.1	7,492.0	153.2	0.0	-121.15	8,351.7	-1,084.7	425.2	290.4	134.86	3.153		
16,000.0	7,272.0	16,260.1	7,492.0	154.9	0.0	-121.15	8,451.7	-1,085.5	425.2	288.8	136.40	3.118		
16,100.0	7,272.0	16,360.1	7,492.0	156.7	0.0	-121.15	8,551.7	-1,086.3	425.2	287.3	137.94	3.083		
16,200.0	7,272.0	16,460.1	7,492.0	158.4	0.0	-121.15	8,651.7	-1,087.1	425.2	285.8	139.48	3.049		
16,300.0	7,272.0	16,560.1	7,492.0	160.1	0.0	-121.15	8,751.7	-1,088.0	425.2	284.2	141.02	3.015		
16,400.0	7,272.0	16,660.1	7,492.0	161.9	0.0	-121.15	8,851.7	-1,088.8	425.2	282.7	142.57	2.983		
16,500.0	7,272.0	16,760.1	7,492.0	163.6	0.0	-121.15	8,951.7	-1,089.6	425.2	281.1	144.11	2.951		
16,600.0	7,272.0	16,860.1	7,492.0	165.3	0.0	-121.15	9,051.7	-1,090.4	425.2	279.6	145.65	2.920		
16,700.0	7,272.0	16,960.1	7,492.0	167.1	0.0	-121.15	9,151.7	-1,091.3	425.2	278.0	147.20	2.889		
16,800.0	7,272.0	17,060.1	7,492.0	168.8	0.0	-121.15	9,251.7	-1,092.1	425.2	276.5	148.74	2.859		
16,900.0	7,272.0	17,160.1	7,492.0	170.6	0.0	-121.15	9,351.7	-1,092.9	425.2	275.0	150.29	2.830		
17,000.0	7,272.0	17,260.1	7,492.0	172.3	0.0	-121.15	9,451.7	-1,093.7	425.2	273.4	151.83	2.801		
17,100.0	7,272.0	17,360.1	7,492.0	174.0	0.0	-121.15	9,551.7	-1,094.6	425.2	271.9	153.38	2.773		
17,200.0	7,272.0	17,460.1	7,492.0	175.8	0.0	-121.15	9,651.7	-1,095.4	425.2	270.3	154.93	2.745		
17,300.0	7,272.0	17,560.1	7,492.0	177.5	0.0	-121.15	9,751.7	-1,096.2	425.2	268.8	156.47	2.718		
17,400.0	7,272.0	17,660.1	7,492.0	179.3	0.0	-121.15	9,851.7	-1,097.1	425.2	267.2	158.02	2.691		
17,402.2	7,272.0	17,662.3	7,492.0	179.3	0.0	-121.15	9,853.9	-1,097.1	425.2	267.2	158.05	2.691		
17,429.8	7,272.0	17,686.9	7,492.0	179.8	0.0	-121.15	9,878.5	-1,097.3	425.3	266.7	158.52	2.683 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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	-90.30	-0.2	-30.0	30.0					
100.0	100.0	100.0	100.0	0.4	0.0	-90.30	-0.2	-30.0	30.0	29.7	0.28	108.284		
200.0	200.0	200.0	200.0	1.0	0.0	-90.30	-0.2	-30.0	30.0	29.2	0.80	37.597		
300.0	300.0	300.0	300.0	1.5	0.0	-90.30	-0.2	-30.0	30.0	28.8	1.22	24.498		
400.0	400.0	400.0	400.0	1.9	0.0	-90.30	-0.2	-30.0	30.0	28.4	1.62	18.536		
500.0	500.0	500.0	500.0	2.3	0.0	-90.30	-0.2	-30.0	30.0	28.0	2.00	15.007		
600.0	600.0	600.0	600.0	2.7	0.0	-90.30	-0.2	-30.0	30.0	27.6	2.37	12.643		
700.0	700.0	700.0	700.0	3.1	0.0	-90.30	-0.2	-30.0	30.0	27.3	2.74	10.939	CC, ES	
800.0	800.0	799.0	799.0	3.5	0.0	-91.54	-0.8	-31.6	31.6	28.5	3.13	10.105		
900.0	900.0	897.8	897.6	3.9	0.0	-94.59	-2.9	-36.2	36.4	32.9	3.53	10.315		
1,000.0	1,000.0	996.2	995.7	4.2	0.0	31.42	-6.3	-44.0	43.2	39.2	3.94	10.960		
1,100.0	1,099.8	1,094.4	1,093.2	5.1	0.0	30.53	-11.1	-54.8	50.2	45.4	4.81	10.447		
1,200.0	1,199.5	1,192.4	1,190.0	5.8	0.0	30.66	-17.2	-68.6	57.6	52.1	5.55	10.382		
1,300.0	1,298.7	1,290.4	1,286.2	6.3	0.0	31.47	-24.6	-85.4	65.3	59.3	6.01	10.866		
1,400.0	1,397.8	1,390.1	1,383.9	6.6	0.0	32.36	-32.6	-103.6	73.2	66.9	6.27	11.671		
1,500.0	1,496.9	1,489.8	1,481.6	6.9	0.0	33.07	-40.6	-121.8	81.1	74.5	6.58	12.321		
1,600.0	1,596.1	1,589.5	1,579.3	7.2	0.0	33.66	-48.6	-140.1	89.0	82.1	6.90	12.893		
1,700.0	1,695.2	1,689.1	1,677.0	7.5	0.0	34.16	-56.6	-158.3	96.9	89.7	7.23	13.398		
1,800.0	1,794.3	1,788.8	1,774.6	7.8	0.0	34.57	-64.7	-176.5	104.8	97.2	7.57	13.847		
1,900.0	1,893.4	1,888.5	1,872.3	8.1	0.0	34.93	-72.7	-194.7	112.7	104.8	7.91	14.246		
2,000.0	1,992.5	1,988.2	1,970.0	8.4	0.0	35.25	-80.7	-212.9	120.7	112.4	8.26	14.604		
2,100.0	2,091.6	2,087.9	2,067.7	8.8	0.0	35.52	-88.7	-231.1	128.6	120.0	8.62	14.925		
2,200.0	2,190.8	2,187.6	2,165.4	9.1	0.0	35.76	-96.7	-249.3	136.5	127.6	8.97	15.215		
2,300.0	2,289.9	2,287.2	2,263.0	9.4	0.0	35.98	-104.7	-267.5	144.5	135.1	9.34	15.477		
2,400.0	2,389.0	2,386.9	2,360.7	9.8	0.0	36.17	-112.8	-285.7	152.4	142.7	9.70	15.714		
2,500.0	2,488.1	2,486.6	2,458.4	10.1	0.0	36.34	-120.8	-303.9	160.4	150.3	10.07	15.931		
2,600.0	2,587.2	2,586.3	2,556.1	10.5	0.0	36.50	-128.8	-322.1	168.3	157.9	10.44	16.129		
2,700.0	2,686.3	2,686.0	2,653.7	10.9	0.0	36.64	-136.8	-340.3	176.3	165.4	10.81	16.311		
2,800.0	2,785.4	2,785.7	2,751.4	11.2	0.0	36.77	-144.8	-358.5	184.2	173.0	11.18	16.478		
2,900.0	2,884.6	2,885.3	2,849.1	11.6	0.0	36.89	-152.8	-376.7	192.1	180.6	11.55	16.632		
3,000.0	2,983.7	2,985.0	2,946.8	12.0	0.0	37.00	-160.9	-394.9	200.1	188.2	11.93	16.775		
3,100.0	3,082.8	3,084.7	3,044.5	12.4	0.0	37.11	-168.9	-413.1	208.0	195.7	12.31	16.907		
3,200.0	3,181.9	3,184.4	3,142.1	12.8	0.0	37.20	-176.9	-431.3	216.0	203.3	12.68	17.029		
3,300.0	3,281.0	3,284.1	3,239.8	13.2	0.0	37.29	-184.9	-449.5	223.9	210.9	13.06	17.143		
3,400.0	3,380.1	3,383.8	3,337.5	13.5	0.0	37.37	-192.9	-467.7	231.9	218.4	13.44	17.250		
3,500.0	3,479.3	3,483.4	3,435.2	13.9	0.0	37.45	-200.9	-485.9	239.8	226.0	13.82	17.350		
3,600.0	3,578.4	3,583.1	3,532.9	14.4	0.0	37.52	-209.0	-504.1	247.8	233.6	14.21	17.443		
3,700.0	3,677.5	3,682.8	3,630.5	14.8	0.0	37.59	-217.0	-522.3	255.7	241.2	14.59	17.530		
3,800.0	3,776.6	3,782.5	3,728.2	15.2	0.0	37.65	-225.0	-540.5	263.7	248.7	14.97	17.613		
3,900.0	3,875.7	3,882.2	3,825.9	15.6	0.0	37.71	-233.0	-558.7	271.6	256.3	15.36	17.690		
4,000.0	3,974.8	3,981.9	3,923.6	16.0	0.0	37.76	-241.0	-576.9	279.6	263.9	15.74	17.763		
4,100.0	4,074.0	4,081.5	4,021.3	16.4	0.0	37.82	-249.0	-595.1	287.5	271.4	16.12	17.832		
4,200.0	4,173.1	4,181.2	4,118.9	16.8	0.0	37.87	-257.1	-613.3	295.5	279.0	16.51	17.898		
4,300.0	4,272.2	4,280.9	4,216.6	17.2	0.0	37.91	-265.1	-631.5	303.4	286.6	16.90	17.959		
4,400.0	4,371.3	4,380.6	4,314.3	17.6	0.0	37.96	-273.1	-649.7	311.4	294.1	17.28	18.018		
4,500.0	4,470.4	4,480.3	4,412.0	18.1	0.0	38.00	-281.1	-667.9	319.4	301.7	17.67	18.074		
4,600.0	4,569.5	4,580.0	4,509.6	18.5	0.0	38.04	-289.1	-686.1	327.3	309.3	18.06	18.127		
4,700.0	4,668.7	4,679.6	4,607.3	18.9	0.0	38.08	-297.1	-704.3	335.3	316.8	18.44	18.177		
4,800.0	4,767.8	4,779.3	4,705.0	19.3	0.0	38.12	-305.2	-722.5	343.2	324.4	18.83	18.225		
4,900.0	4,866.9	4,879.0	4,802.7	19.7	0.0	38.15	-313.2	-740.7	351.2	331.9	19.22	18.271		
5,000.0	4,966.0	4,978.7	4,900.4	20.2	0.0	38.19	-321.2	-758.9	359.1	339.5	19.61	18.314		
5,100.0	5,065.1	5,078.4	4,998.0	20.6	0.0	38.22	-329.2	-777.1	367.1	347.1	20.00	18.356		

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 19-18-1NBH
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 19-18-1NBH	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-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
5,200.0	5,164.2	5,178.0	5,095.7	21.0	0.0	38.25	-337.2	-795.3	375.0	354.6	20.39	18.396		
5,300.0	5,263.3	5,277.7	5,193.4	21.4	0.0	38.28	-345.2	-813.5	383.0	362.2	20.78	18.434		
5,400.0	5,362.5	5,377.4	5,291.1	21.8	0.0	38.31	-353.3	-831.7	390.9	369.8	21.16	18.471		
5,500.0	5,461.6	5,477.1	5,388.8	22.3	0.0	38.33	-361.3	-849.9	398.9	377.3	21.55	18.506		
5,600.0	5,560.7	5,576.8	5,486.4	22.7	0.0	38.36	-369.3	-868.1	406.8	384.9	21.94	18.540		
5,700.0	5,659.8	5,676.5	5,584.1	23.1	0.0	38.39	-377.3	-886.3	414.8	392.5	22.33	18.572		
5,800.0	5,758.9	5,776.1	5,681.8	23.5	0.0	38.41	-385.3	-904.5	422.8	400.0	22.72	18.603		
5,900.0	5,858.0	5,875.8	5,779.5	24.0	0.0	38.43	-393.3	-922.7	430.7	407.6	23.11	18.633		
6,000.0	5,957.2	5,975.5	5,877.1	24.4	0.0	38.46	-401.4	-940.9	438.7	415.2	23.51	18.662		
6,100.0	6,056.3	6,075.2	5,974.8	24.8	0.0	38.48	-409.4	-959.1	446.6	422.7	23.90	18.690		
6,200.0	6,155.4	6,174.9	6,072.5	25.2	0.0	38.50	-417.4	-977.3	454.6	430.3	24.29	18.717		
6,300.0	6,254.5	6,274.6	6,170.2	25.6	0.0	38.52	-425.4	-995.6	462.5	437.8	24.68	18.742		
6,400.0	6,353.6	6,374.2	6,267.9	26.1	0.0	38.54	-433.4	-1,013.8	470.5	445.4	25.07	18.767		
6,500.0	6,452.7	6,473.9	6,365.5	26.5	0.0	38.56	-441.4	-1,032.0	478.4	453.0	25.46	18.791		
6,600.0	6,551.9	6,573.6	6,463.2	26.9	0.0	38.58	-449.5	-1,050.2	486.4	460.5	25.85	18.815		
6,700.0	6,651.0	6,673.3	6,560.9	27.3	0.0	38.59	-457.5	-1,068.4	494.3	468.1	26.24	18.836		
6,800.0	6,750.3	6,772.6	6,658.2	27.8	0.0	-38.02	-465.5	-1,086.5	502.2	475.7	26.55	18.917		
6,900.0	6,848.2	6,871.2	6,755.0	28.1	0.0	-68.12	-466.1	-1,104.6	510.3	483.6	26.75	19.080		
7,000.0	6,941.6	6,973.0	6,853.4	28.5	0.0	-77.53	-449.1	-1,123.4	518.8	491.9	26.90	19.283		
7,100.0	7,027.7	7,078.2	6,950.4	28.7	0.0	-82.22	-413.2	-1,142.1	527.3	500.3	27.05	19.493		
7,200.0	7,104.0	7,187.0	7,042.1	28.9	0.0	-85.14	-357.8	-1,160.2	535.5	508.3	27.20	19.689		
7,300.0	7,168.0	7,299.5	7,124.2	29.0	0.0	-87.14	-283.0	-1,176.7	543.0	515.6	27.35	19.854		
7,400.0	7,217.9	7,415.3	7,192.1	29.1	0.0	-88.53	-190.5	-1,190.9	549.3	521.8	27.51	19.968		
7,500.0	7,252.2	7,534.1	7,241.3	29.0	0.0	-89.44	-83.2	-1,201.8	554.1	526.4	27.70	20.006		
7,600.0	7,269.7	7,654.9	7,267.9	29.0	0.0	-89.92	34.2	-1,208.6	557.1	529.2	27.93	19.948		
7,700.0	7,272.0	7,767.2	7,272.0	29.1	0.0	-90.00	146.4	-1,211.1	558.2	530.0	28.23	19.776		
7,800.0	7,272.0	7,867.2	7,272.0	29.4	0.0	-90.00	246.4	-1,212.6	559.0	530.3	28.64	19.518		
7,900.0	7,272.0	7,967.2	7,272.0	29.8	0.0	-90.00	346.4	-1,214.2	559.7	530.5	29.15	19.199		
8,000.0	7,272.0	8,067.2	7,272.0	30.4	0.0	-90.00	446.4	-1,215.7	560.4	530.6	29.76	18.830		
8,100.0	7,272.0	8,167.2	7,272.0	31.1	0.0	-90.00	546.3	-1,217.3	561.1	530.6	30.46	18.420		
8,200.0	7,272.0	8,267.2	7,272.0	31.8	0.0	-90.00	646.3	-1,218.8	561.8	530.6	31.25	17.981		
8,300.0	7,272.0	8,367.2	7,272.0	32.7	0.0	-90.00	746.3	-1,220.3	562.5	530.4	32.11	17.520		
8,400.0	7,272.0	8,467.2	7,272.0	33.6	0.0	-90.00	846.3	-1,221.9	563.2	530.2	33.04	17.046		
8,500.0	7,272.0	8,567.2	7,272.0	34.6	0.0	-90.00	946.3	-1,223.4	564.0	529.9	34.04	16.567		
8,600.0	7,272.0	8,667.2	7,272.0	35.7	0.0	-90.00	1,046.3	-1,225.0	564.7	529.6	35.10	16.086		
8,700.0	7,272.0	8,767.2	7,272.0	36.8	0.0	-90.00	1,146.3	-1,226.5	565.4	529.2	36.22	15.611		
8,800.0	7,272.0	8,867.2	7,272.0	37.9	0.0	-90.00	1,246.2	-1,228.1	566.1	528.7	37.38	15.143		
8,900.0	7,272.0	8,967.2	7,272.0	39.1	0.0	-90.00	1,346.2	-1,229.6	566.8	528.2	38.60	14.686		
9,000.0	7,272.0	9,067.2	7,272.0	40.4	0.0	-90.00	1,446.2	-1,231.1	567.5	527.7	39.85	14.243		
9,100.0	7,272.0	9,167.2	7,272.0	41.7	0.0	-90.00	1,546.2	-1,232.7	568.3	527.1	41.14	13.813		
9,200.0	7,272.0	9,267.2	7,272.0	43.0	0.0	-90.00	1,646.2	-1,234.2	569.0	526.5	42.46	13.399		
9,300.0	7,272.0	9,367.2	7,272.0	44.3	0.0	-90.00	1,746.2	-1,235.8	569.7	525.9	43.82	13.001		
9,400.0	7,272.0	9,467.2	7,272.0	45.7	0.0	-90.00	1,846.2	-1,237.3	570.4	525.2	45.20	12.619		
9,500.0	7,272.0	9,567.2	7,272.0	47.1	0.0	-90.00	1,946.1	-1,238.9	571.1	524.5	46.61	12.252		
9,600.0	7,272.0	9,667.2	7,272.0	48.5	0.0	-90.00	2,046.1	-1,240.4	571.8	523.8	48.05	11.902		
9,700.0	7,272.0	9,767.2	7,272.0	49.9	0.0	-90.00	2,146.1	-1,241.9	572.6	523.1	49.50	11.566		
9,800.0	7,272.0	9,867.2	7,272.0	51.4	0.0	-90.00	2,246.1	-1,243.5	573.3	522.3	50.98	11.246		
9,900.0	7,272.0	9,967.2	7,272.0	52.9	0.0	-90.00	2,346.1	-1,245.0	574.0	521.5	52.47	10.940		
10,000.0	7,272.0	10,067.2	7,272.0	54.4	0.0	-90.00	2,446.1	-1,246.6	574.7	520.7	53.98	10.647		
10,100.0	7,272.0	10,167.2	7,272.0	55.9	0.0	-90.00	2,546.1	-1,248.1	575.4	519.9	55.50	10.368		
10,200.0	7,272.0	10,267.2	7,272.0	57.4	0.0	-90.00	2,646.0	-1,249.7	576.1	519.1	57.04	10.101		
10,300.0	7,272.0	10,367.2	7,272.0	59.0	0.0	-90.00	2,746.0	-1,251.2	576.8	518.3	58.59	9.845		

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 19-18-1NBH
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 19-18-1NBH	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	7,272.0	10,467.2	7,272.0	60.5	0.0	-90.00	2,846.0	-1,252.7	577.6	517.4	60.15	9.602		
10,500.0	7,272.0	10,567.2	7,272.0	62.1	0.0	-90.00	2,946.0	-1,254.3	578.3	516.6	61.73	9.368		
10,600.0	7,272.0	10,667.2	7,272.0	63.7	0.0	-90.00	3,046.0	-1,255.8	579.0	515.7	63.31	9.145		
10,700.0	7,272.0	10,767.2	7,272.0	65.2	0.0	-90.00	3,146.0	-1,257.4	579.7	514.8	64.90	8.932		
10,800.0	7,272.0	10,867.2	7,272.0	66.8	0.0	-90.00	3,246.0	-1,258.9	580.4	513.9	66.51	8.728		
10,900.0	7,272.0	10,967.2	7,272.0	68.4	0.0	-90.00	3,345.9	-1,260.5	581.1	513.0	68.12	8.532		
11,000.0	7,272.0	11,067.2	7,272.0	70.1	0.0	-90.00	3,445.9	-1,262.0	581.9	512.1	69.73	8.344		
11,100.0	7,272.0	11,167.2	7,272.0	71.7	0.0	-90.00	3,545.9	-1,263.5	582.6	511.2	71.36	8.164		
11,200.0	7,272.0	11,267.2	7,272.0	73.3	0.0	-90.00	3,645.9	-1,265.1	583.3	510.3	72.99	7.992		
11,300.0	7,272.0	11,367.2	7,272.0	74.9	0.0	-90.00	3,745.9	-1,266.6	584.0	509.4	74.63	7.826		
11,400.0	7,272.0	11,467.2	7,272.0	76.6	0.0	-90.00	3,845.9	-1,268.2	584.7	508.5	76.27	7.667		
11,500.0	7,272.0	11,567.2	7,272.0	78.2	0.0	-90.00	3,945.9	-1,269.7	585.4	507.5	77.92	7.514		
11,600.0	7,272.0	11,667.1	7,272.0	79.8	0.0	-90.00	4,045.8	-1,271.3	586.2	506.6	79.57	7.367		
11,700.0	7,272.0	11,767.1	7,272.0	81.5	0.0	-90.00	4,145.8	-1,272.8	586.9	505.6	81.23	7.225		
11,800.0	7,272.0	11,867.1	7,272.0	83.2	0.0	-90.00	4,245.8	-1,274.3	587.6	504.7	82.89	7.089		
11,900.0	7,272.0	11,967.1	7,272.0	84.8	0.0	-90.00	4,345.8	-1,275.9	588.3	503.7	84.56	6.957		
12,000.0	7,272.0	12,067.1	7,272.0	86.5	0.0	-90.00	4,445.8	-1,277.4	589.0	502.8	86.23	6.831		
12,100.0	7,272.0	12,167.1	7,272.0	88.2	0.0	-90.00	4,545.8	-1,279.0	589.7	501.8	87.90	6.709		
12,200.0	7,272.0	12,267.1	7,272.0	89.8	0.0	-90.00	4,645.8	-1,280.5	590.4	500.9	89.58	6.591		
12,300.0	7,272.0	12,367.1	7,272.0	91.5	0.0	-90.00	4,745.7	-1,282.1	591.2	499.9	91.26	6.478		
12,400.0	7,272.0	12,467.1	7,272.0	93.2	0.0	-90.00	4,845.7	-1,283.6	591.9	498.9	92.95	6.368		
12,500.0	7,272.0	12,567.1	7,272.0	94.9	0.0	-90.00	4,945.7	-1,285.1	592.6	498.0	94.63	6.262		
12,600.0	7,272.0	12,667.1	7,272.0	96.5	0.0	-90.00	5,045.7	-1,286.7	593.3	497.0	96.32	6.160		
12,700.0	7,272.0	12,767.1	7,272.0	98.2	0.0	-90.00	5,145.7	-1,288.2	594.0	496.0	98.02	6.061		
12,800.0	7,272.0	12,867.1	7,272.0	99.9	0.0	-90.00	5,245.7	-1,289.8	594.7	495.0	99.71	5.965		
12,900.0	7,272.0	12,967.1	7,272.0	101.6	0.0	-90.00	5,345.7	-1,291.3	595.5	494.0	101.41	5.872		
13,000.0	7,272.0	13,067.1	7,272.0	103.3	0.0	-90.00	5,445.6	-1,292.9	596.2	493.1	103.11	5.782		
13,100.0	7,272.0	13,167.1	7,272.0	105.0	0.0	-90.00	5,545.6	-1,294.4	596.9	492.1	104.81	5.695		
13,200.0	7,272.0	13,267.1	7,272.0	106.7	0.0	-90.00	5,645.6	-1,295.9	597.6	491.1	106.51	5.611		
13,300.0	7,272.0	13,367.1	7,272.0	108.4	0.0	-90.00	5,745.6	-1,297.5	598.3	490.1	108.22	5.529		
13,400.0	7,272.0	13,467.1	7,272.0	110.1	0.0	-90.00	5,845.6	-1,299.0	599.0	489.1	109.93	5.449		
13,500.0	7,272.0	13,567.1	7,272.0	111.8	0.0	-90.00	5,945.6	-1,300.6	599.8	488.1	111.64	5.372		
13,600.0	7,272.0	13,667.1	7,272.0	113.5	0.0	-90.00	6,045.6	-1,302.1	600.5	487.1	113.35	5.297		
13,700.0	7,272.0	13,767.1	7,272.0	115.2	0.0	-90.00	6,145.5	-1,303.7	601.2	486.1	115.06	5.225		
13,800.0	7,272.0	13,867.1	7,272.0	117.0	0.0	-90.00	6,245.5	-1,305.2	601.9	485.1	116.78	5.154		
13,900.0	7,272.0	13,967.1	7,272.0	118.7	0.0	-90.00	6,345.5	-1,306.7	602.6	484.1	118.49	5.086		
14,000.0	7,272.0	14,067.1	7,272.0	120.4	0.0	-90.00	6,445.5	-1,308.3	603.3	483.1	120.21	5.019		
14,100.0	7,272.0	14,167.1	7,272.0	122.1	0.0	-90.00	6,545.5	-1,309.8	604.0	482.1	121.93	4.954		
14,200.0	7,272.0	14,267.1	7,272.0	123.8	0.0	-90.00	6,645.5	-1,311.4	604.8	481.1	123.65	4.891		
14,300.0	7,272.0	14,367.1	7,272.0	125.5	0.0	-90.00	6,745.4	-1,312.9	605.5	480.1	125.37	4.829		
14,400.0	7,272.0	14,467.1	7,272.0	127.3	0.0	-90.00	6,845.4	-1,314.5	606.2	479.1	127.09	4.770		
14,500.0	7,272.0	14,567.1	7,272.0	129.0	0.0	-90.00	6,945.4	-1,316.0	606.9	478.1	128.82	4.711		
14,600.0	7,272.0	14,667.1	7,272.0	130.7	0.0	-90.00	7,045.4	-1,317.5	607.6	477.1	130.54	4.655		
14,700.0	7,272.0	14,767.1	7,272.0	132.4	0.0	-90.00	7,145.4	-1,319.1	608.3	476.1	132.27	4.599		
14,800.0	7,272.0	14,867.1	7,272.0	134.2	0.0	-90.00	7,245.4	-1,320.6	609.1	475.1	134.00	4.545		
14,900.0	7,272.0	14,967.1	7,272.0	135.9	0.0	-90.00	7,345.4	-1,322.2	609.8	474.0	135.72	4.493		
15,000.0	7,272.0	15,067.1	7,272.0	137.6	0.0	-90.00	7,445.3	-1,323.7	610.5	473.0	137.45	4.441		
15,100.0	7,272.0	15,167.1	7,272.0	139.3	0.0	-90.00	7,545.3	-1,325.3	611.2	472.0	139.18	4.391		
15,200.0	7,272.0	15,267.1	7,272.0	141.1	0.0	-90.00	7,645.3	-1,326.8	611.9	471.0	140.91	4.342		
15,300.0	7,272.0	15,367.1	7,272.0	142.8	0.0	-90.00	7,745.3	-1,328.3	612.6	470.0	142.65	4.295		
15,400.0	7,272.0	15,467.1	7,272.0	144.5	0.0	-90.00	7,845.3	-1,329.9	613.4	469.0	144.38	4.248		
15,500.0	7,272.0	15,567.0	7,272.0	146.3	0.0	-90.00	7,945.3	-1,331.4	614.1	468.0	146.11	4.203		

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 19-18-1NBH
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 19-18-1NBH	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-													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	7,272.0	15,667.0	7,272.0	148.0	0.0	-90.00	8,045.3	-1,333.0	614.8	466.9	147.85	4.158		
15,700.0	7,272.0	15,767.0	7,272.0	149.7	0.0	-90.00	8,145.2	-1,334.5	615.5	465.9	149.58	4.115		
15,800.0	7,272.0	15,867.0	7,272.0	151.4	0.0	-90.00	8,245.2	-1,336.1	616.2	464.9	151.32	4.072		
15,900.0	7,272.0	15,967.0	7,272.0	153.2	0.0	-90.00	8,345.2	-1,337.6	616.9	463.9	153.05	4.031		
16,000.0	7,272.0	16,067.0	7,272.0	154.9	0.0	-90.00	8,445.2	-1,339.1	617.6	462.9	154.79	3.990		
16,100.0	7,272.0	16,167.0	7,272.0	156.7	0.0	-90.00	8,545.2	-1,340.7	618.4	461.8	156.53	3.950		
16,200.0	7,272.0	16,267.0	7,272.0	158.4	0.0	-90.00	8,645.2	-1,342.2	619.1	460.8	158.27	3.912		
16,300.0	7,272.0	16,367.0	7,272.0	160.1	0.0	-90.00	8,745.2	-1,343.8	619.8	459.8	160.00	3.874		
16,400.0	7,272.0	16,467.0	7,272.0	161.9	0.0	-90.00	8,845.1	-1,345.3	620.5	458.8	161.74	3.836		
16,500.0	7,272.0	16,567.0	7,272.0	163.6	0.0	-90.00	8,945.1	-1,346.9	621.2	457.7	163.48	3.800		
16,600.0	7,272.0	16,667.0	7,272.0	165.3	0.0	-90.00	9,045.1	-1,348.4	621.9	456.7	165.22	3.764		
16,700.0	7,272.0	16,767.0	7,272.0	167.1	0.0	-90.00	9,145.1	-1,349.9	622.7	455.7	166.97	3.729		
16,800.0	7,272.0	16,867.0	7,272.0	168.8	0.0	-90.00	9,245.1	-1,351.5	623.4	454.7	168.71	3.695		
16,900.0	7,272.0	16,967.0	7,272.0	170.6	0.0	-90.00	9,345.1	-1,353.0	624.1	453.6	170.45	3.661		
17,000.0	7,272.0	17,067.0	7,272.0	172.3	0.0	-90.00	9,445.1	-1,354.6	624.8	452.6	172.19	3.629		
17,100.0	7,272.0	17,167.0	7,272.0	174.0	0.0	-90.00	9,545.0	-1,356.1	625.5	451.6	173.93	3.596		
17,200.0	7,272.0	17,267.0	7,272.0	175.8	0.0	-90.00	9,645.0	-1,357.7	626.2	450.6	175.68	3.565		
17,300.0	7,272.0	17,367.0	7,272.0	177.5	0.0	-90.00	9,745.0	-1,359.2	627.0	449.5	177.42	3.534		
17,400.0	7,272.0	17,467.0	7,272.0	179.3	0.0	-90.00	9,845.0	-1,360.7	627.7	448.5	179.17	3.503		
17,429.8	7,272.0	17,496.2	7,272.0	179.8	0.0	-90.00	9,874.2	-1,361.2	627.9	448.2	179.69	3.494 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
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	89.77	0.1	15.0	15.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.77	0.1	15.0	15.0	14.7	0.28	54.210		
200.0	200.0	200.0	200.0	1.0	0.0	89.77	0.1	15.0	15.0	14.2	0.80	18.820		
300.0	300.0	300.0	300.0	1.5	0.0	89.77	0.1	15.0	15.0	13.8	1.22	12.262		
400.0	400.0	400.0	400.0	1.9	0.0	89.77	0.1	15.0	15.0	13.4	1.62	9.277		
500.0	500.0	500.0	500.0	2.3	0.0	89.77	0.1	15.0	15.0	13.0	2.00	7.510		
600.0	600.0	600.0	600.0	2.7	0.0	89.77	0.1	15.0	15.0	12.6	2.37	6.327		
700.0	700.0	700.0	700.0	3.1	0.0	89.77	0.1	15.0	15.0	12.3	2.74	5.474		
800.0	800.0	800.0	800.0	3.5	0.0	89.77	0.1	15.0	15.0	11.9	3.11	4.827		
900.0	900.0	900.0	900.0	3.9	0.0	89.77	0.1	15.0	15.0	11.5	3.47	4.320 CC, ES		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	0.0	-145.48	0.1	15.0	16.4	12.5	3.91	4.195		
1,100.0	1,099.8	1,100.3	1,100.3	5.1	0.0	-150.21	-1.4	14.0	19.7	14.8	4.85	4.054		
1,200.0	1,199.5	1,200.8	1,200.6	5.8	0.0	-151.67	-5.6	10.9	23.5	17.9	5.64	4.174		
1,300.0	1,298.7	1,301.2	1,300.6	6.3	0.0	-151.20	-12.6	5.7	28.0	21.8	6.13	4.563		
1,400.0	1,397.8	1,401.1	1,400.1	6.6	0.0	-150.63	-20.4	0.1	32.7	26.3	6.39	5.113		
1,500.0	1,496.9	1,501.0	1,499.5	6.9	0.0	-150.21	-28.2	-5.6	37.4	30.7	6.71	5.580		
1,600.0	1,596.1	1,600.9	1,598.9	7.2	0.0	-149.88	-36.0	-11.3	42.1	35.1	7.03	5.998		
1,700.0	1,695.2	1,700.7	1,698.3	7.5	0.0	-149.61	-43.8	-17.0	46.9	39.5	7.35	6.373		
1,800.0	1,794.3	1,800.6	1,797.8	7.8	0.0	-149.40	-51.6	-22.7	51.6	43.9	7.69	6.710		
1,900.0	1,893.4	1,900.5	1,897.2	8.1	0.0	-149.22	-59.4	-28.4	56.3	48.3	8.03	7.014		
2,000.0	1,992.5	2,000.4	1,996.6	8.4	0.0	-149.07	-67.2	-34.0	61.0	52.7	8.37	7.290		
2,100.0	2,091.6	2,100.3	2,096.0	8.8	0.0	-148.94	-75.0	-39.7	65.8	57.1	8.72	7.540		
2,200.0	2,190.8	2,200.2	2,195.4	9.1	0.0	-148.83	-82.7	-45.4	70.5	61.4	9.08	7.768		
2,300.0	2,289.9	2,300.1	2,294.9	9.4	0.0	-148.73	-90.5	-51.1	75.2	65.8	9.43	7.977		
2,400.0	2,389.0	2,400.0	2,394.3	9.8	0.0	-148.64	-98.3	-56.8	80.0	70.2	9.79	8.168		
2,500.0	2,488.1	2,499.9	2,493.7	10.1	0.0	-148.57	-106.1	-62.5	84.7	74.5	10.15	8.344		
2,600.0	2,587.2	2,599.7	2,593.1	10.5	0.0	-148.50	-113.9	-68.2	89.4	78.9	10.51	8.506		
2,700.0	2,686.3	2,699.6	2,692.6	10.9	0.0	-148.44	-121.7	-73.8	94.2	83.3	10.88	8.655		
2,800.0	2,785.4	2,799.5	2,792.0	11.2	0.0	-148.38	-129.5	-79.5	98.9	87.6	11.24	8.794		
2,900.0	2,884.6	2,899.4	2,891.4	11.6	0.0	-148.33	-137.3	-85.2	103.6	92.0	11.61	8.923		
3,000.0	2,983.7	2,999.3	2,990.8	12.0	0.0	-148.28	-145.1	-90.9	108.3	96.4	11.98	9.042		
3,100.0	3,082.8	3,099.2	3,090.2	12.4	0.0	-148.24	-152.8	-96.6	113.1	100.7	12.35	9.154		
3,200.0	3,181.9	3,199.1	3,189.7	12.8	0.0	-148.20	-160.6	-102.3	117.8	105.1	12.72	9.259		
3,300.0	3,281.0	3,299.0	3,289.1	13.2	0.0	-148.16	-168.4	-107.9	122.5	109.4	13.10	9.356		
3,400.0	3,380.1	3,398.8	3,388.5	13.5	0.0	-148.13	-176.2	-113.6	127.3	113.8	13.47	9.448		
3,500.0	3,479.3	3,498.7	3,487.9	13.9	0.0	-148.10	-184.0	-119.3	132.0	118.1	13.84	9.534		
3,600.0	3,578.4	3,598.6	3,587.3	14.4	0.0	-148.07	-191.8	-125.0	136.7	122.5	14.22	9.615		
3,700.0	3,677.5	3,698.5	3,686.8	14.8	0.0	-148.05	-199.6	-130.7	141.4	126.9	14.60	9.691		
3,800.0	3,776.6	3,798.4	3,786.2	15.2	0.0	-148.02	-207.4	-136.4	146.2	131.2	14.97	9.763		
3,900.0	3,875.7	3,898.3	3,885.6	15.6	0.0	-148.00	-215.2	-142.0	150.9	135.6	15.35	9.832		
4,000.0	3,974.8	3,998.2	3,985.0	16.0	0.0	-147.97	-223.0	-147.7	155.6	139.9	15.73	9.896		
4,100.0	4,074.0	4,098.1	4,084.5	16.4	0.0	-147.95	-230.7	-153.4	160.4	144.3	16.11	9.957		
4,200.0	4,173.1	4,197.9	4,183.9	16.8	0.0	-147.93	-238.5	-159.1	165.1	148.6	16.48	10.015		
4,300.0	4,272.2	4,297.8	4,283.3	17.2	0.0	-147.92	-246.3	-164.8	169.8	153.0	16.86	10.070		
4,400.0	4,371.3	4,397.7	4,382.7	17.6	0.0	-147.90	-254.1	-170.5	174.6	157.3	17.24	10.123		
4,500.0	4,470.4	4,497.6	4,482.1	18.1	0.0	-147.88	-261.9	-176.1	179.3	161.7	17.62	10.173		
4,600.0	4,569.5	4,597.5	4,581.6	18.5	0.0	-147.87	-269.7	-181.8	184.0	166.0	18.01	10.220		
4,700.0	4,668.7	4,697.4	4,681.0	18.9	0.0	-147.85	-277.5	-187.5	188.8	170.4	18.39	10.266		
4,800.0	4,767.8	4,797.3	4,780.4	19.3	0.0	-147.84	-285.3	-193.2	193.5	174.7	18.77	10.309		
4,900.0	4,866.9	4,897.2	4,879.8	19.7	0.0	-147.82	-293.1	-198.9	198.2	179.1	19.15	10.351		
5,000.0	4,966.0	4,997.1	4,979.2	20.2	0.0	-147.81	-300.8	-204.6	202.9	183.4	19.53	10.391		
5,100.0	5,065.1	5,096.9	5,078.7	20.6	0.0	-147.80	-308.6	-210.3	207.7	187.8	19.91	10.429		

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 19-18-1NBH
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 19-18-1NBH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,164.2	5,196.8	5,178.1	21.0	0.0	-147.79	-316.4	-215.9	212.4	192.1	20.30	10.465		
5,300.0	5,263.3	5,296.7	5,277.5	21.4	0.0	-147.77	-324.2	-221.6	217.1	196.5	20.68	10.500		
5,400.0	5,362.5	5,396.6	5,376.9	21.8	0.0	-147.76	-332.0	-227.3	221.9	200.8	21.06	10.534		
5,500.0	5,461.6	5,496.5	5,476.4	22.3	0.0	-147.75	-339.8	-233.0	226.6	205.1	21.44	10.566		
5,600.0	5,560.7	5,596.4	5,575.8	22.7	0.0	-147.74	-347.6	-238.7	231.3	209.5	21.83	10.598		
5,700.0	5,659.8	5,696.3	5,675.2	23.1	0.0	-147.73	-355.4	-244.4	236.1	213.8	22.21	10.628		
5,800.0	5,758.9	5,796.2	5,774.6	23.5	0.0	-147.72	-363.2	-250.0	240.8	218.2	22.60	10.656		
5,900.0	5,858.0	5,896.0	5,874.0	24.0	0.0	-147.72	-371.0	-255.7	245.5	222.5	22.98	10.684		
6,000.0	5,957.2	5,995.9	5,973.5	24.4	0.0	-147.71	-378.7	-261.4	250.2	226.9	23.36	10.711		
6,100.0	6,056.3	6,095.8	6,072.9	24.8	0.0	-147.70	-386.5	-267.1	255.0	231.2	23.75	10.737		
6,200.0	6,155.4	6,195.7	6,172.3	25.2	0.0	-147.69	-394.3	-272.8	259.7	235.6	24.13	10.762		
6,300.0	6,254.5	6,295.6	6,271.7	25.6	0.0	-147.68	-402.1	-278.5	264.4	239.9	24.52	10.786		
6,400.0	6,353.6	6,395.5	6,371.1	26.1	0.0	-147.68	-409.9	-284.1	269.2	244.3	24.90	10.809		
6,500.0	6,452.7	6,495.4	6,470.6	26.5	0.0	-147.67	-417.7	-289.8	273.9	248.6	25.29	10.832		
6,600.0	6,551.9	6,595.3	6,570.0	26.9	0.0	-147.66	-425.5	-295.5	278.6	253.0	25.67	10.854		
6,700.0	6,651.0	6,695.1	6,669.4	27.3	0.0	-147.66	-433.3	-301.2	283.4	257.3	26.06	10.874		
6,800.0	6,750.3	6,794.6	6,768.4	27.8	0.0	137.05	-441.0	-306.9	287.4	261.0	26.47	10.899		
6,900.0	6,848.2	6,891.3	6,864.7	28.1	0.0	112.44	-448.6	-312.4	291.4	264.4	26.95	10.910		
7,000.0	6,941.6	6,982.2	6,955.2	28.5	0.0	110.57	-455.7	-317.5	299.2	271.8	27.43	10.909		
7,100.0	7,027.7	7,064.7	7,037.2	28.7	0.0	113.70	-462.1	-322.2	316.6	288.7	27.89	11.350		
7,200.0	7,104.0	7,161.8	7,134.0	28.9	0.0	119.44	-462.8	-327.8	346.1	317.8	28.30	12.230		
7,300.0	7,168.0	7,228.9	7,248.9	29.0	0.0	125.73	-441.9	-334.4	383.5	355.2	28.31	13.544		
7,400.0	7,217.9	7,425.5	7,382.8	29.1	0.0	132.17	-383.7	-342.1	423.9	396.4	27.49	15.422		
7,500.0	7,252.2	7,617.7	7,528.3	29.0	0.0	138.27	-259.7	-350.6	460.7	435.4	25.38	18.154		
7,600.0	7,269.7	7,867.7	7,642.5	29.0	0.0	142.41	-39.7	-357.4	484.5	461.8	22.68	21.361		
7,700.0	7,272.0	8,064.5	7,662.0	29.1	0.0	142.97	155.3	-358.7	488.5	466.1	22.40	21.810		
7,800.0	7,272.0	8,164.5	7,662.0	29.4	0.0	142.90	255.3	-358.8	489.0	466.2	22.79	21.453		
7,900.0	7,272.0	8,264.5	7,662.0	29.8	0.0	142.83	355.3	-358.9	489.4	466.2	23.25	21.053		
8,000.0	7,272.0	8,364.5	7,662.0	30.4	0.0	142.77	455.3	-359.0	489.8	466.1	23.76	20.620		
8,100.0	7,272.0	8,464.5	7,662.0	31.1	0.0	142.70	555.3	-359.1	490.3	466.0	24.32	20.160		
8,200.0	7,272.0	8,564.5	7,662.0	31.8	0.0	142.63	655.3	-359.2	490.7	465.8	24.93	19.681		
8,300.0	7,272.0	8,664.5	7,662.0	32.7	0.0	142.57	755.3	-359.4	491.1	465.5	25.59	19.190		
8,400.0	7,272.0	8,764.5	7,662.0	33.6	0.0	142.50	855.3	-359.5	491.6	465.3	26.30	18.692		
8,500.0	7,272.0	8,864.5	7,662.0	34.6	0.0	142.44	955.3	-359.6	492.0	465.0	27.04	18.193		
8,600.0	7,272.0	8,964.5	7,662.0	35.7	0.0	142.37	1,055.3	-359.7	492.4	464.6	27.83	17.697		
8,700.0	7,272.0	9,064.5	7,662.0	36.8	0.0	142.30	1,155.3	-359.8	492.9	464.2	28.64	17.207		
8,800.0	7,272.0	9,164.5	7,662.0	37.9	0.0	142.24	1,255.3	-359.9	493.3	463.8	29.49	16.726		
8,900.0	7,272.0	9,264.5	7,662.0	39.1	0.0	142.17	1,355.3	-360.0	493.8	463.4	30.37	16.256		
9,000.0	7,272.0	9,364.5	7,662.0	40.4	0.0	142.11	1,455.3	-360.1	494.2	462.9	31.28	15.799		
9,100.0	7,272.0	9,464.5	7,662.0	41.7	0.0	142.04	1,555.3	-360.2	494.6	462.4	32.21	15.355		
9,200.0	7,272.0	9,564.5	7,662.0	43.0	0.0	141.98	1,655.3	-360.4	495.1	461.9	33.17	14.925		
9,300.0	7,272.0	9,664.5	7,662.0	44.3	0.0	141.91	1,755.3	-360.5	495.5	461.4	34.15	14.511		
9,400.0	7,272.0	9,764.4	7,662.0	45.7	0.0	141.85	1,855.3	-360.6	496.0	460.8	35.15	14.111		
9,500.0	7,272.0	9,864.4	7,662.0	47.1	0.0	141.78	1,955.3	-360.7	496.4	460.2	36.16	13.726		
9,600.0	7,272.0	9,964.4	7,662.0	48.5	0.0	141.72	2,055.3	-360.8	496.9	459.7	37.20	13.357		
9,700.0	7,272.0	10,064.4	7,662.0	49.9	0.0	141.65	2,155.3	-360.9	497.3	459.0	38.25	13.001		
9,800.0	7,272.0	10,164.4	7,662.0	51.4	0.0	141.59	2,255.3	-361.0	497.7	458.4	39.32	12.660		
9,900.0	7,272.0	10,264.4	7,662.0	52.9	0.0	141.52	2,355.3	-361.1	498.2	457.8	40.40	12.332		
10,000.0	7,272.0	10,364.4	7,662.0	54.4	0.0	141.46	2,455.3	-361.2	498.6	457.1	41.49	12.018		
10,100.0	7,272.0	10,464.4	7,662.0	55.9	0.0	141.39	2,555.3	-361.4	499.1	456.5	42.60	11.717		
10,200.0	7,272.0	10,564.4	7,662.0	57.4	0.0	141.33	2,655.3	-361.5	499.5	455.8	43.71	11.427		
10,300.0	7,272.0	10,664.4	7,662.0	59.0	0.0	141.27	2,755.3	-361.6	500.0	455.1	44.84	11.150		

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 19-18-1NBH
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 19-18-1NBH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,272.0	10,764.4	7,662.0	60.5	0.0	141.20	2,855.3	-361.7	500.4	454.4	45.98	10.883		
10,500.0	7,272.0	10,864.4	7,662.0	62.1	0.0	141.14	2,955.3	-361.8	500.9	453.7	47.13	10.628		
10,600.0	7,272.0	10,964.4	7,662.0	63.7	0.0	141.07	3,055.3	-361.9	501.3	453.0	48.29	10.382		
10,700.0	7,272.0	11,064.4	7,662.0	65.2	0.0	141.01	3,155.3	-362.0	501.8	452.3	49.45	10.146		
10,800.0	7,272.0	11,164.4	7,662.0	66.8	0.0	140.95	3,255.3	-362.1	502.2	451.6	50.63	9.920		
10,900.0	7,272.0	11,264.4	7,662.0	68.4	0.0	140.88	3,355.3	-362.2	502.7	450.9	51.81	9.702		
11,000.0	7,272.0	11,364.4	7,662.0	70.1	0.0	140.82	3,455.3	-362.4	503.1	450.1	53.00	9.493		
11,100.0	7,272.0	11,464.4	7,662.0	71.7	0.0	140.76	3,555.3	-362.5	503.6	449.4	54.20	9.291		
11,200.0	7,272.0	11,564.4	7,662.0	73.3	0.0	140.69	3,655.3	-362.6	504.0	448.6	55.40	9.098		
11,300.0	7,272.0	11,664.4	7,662.0	74.9	0.0	140.63	3,755.3	-362.7	504.5	447.9	56.61	8.911		
11,400.0	7,272.0	11,764.4	7,662.0	76.6	0.0	140.57	3,855.2	-362.8	504.9	447.1	57.83	8.731		
11,500.0	7,272.0	11,864.4	7,662.0	78.2	0.0	140.51	3,955.2	-362.9	505.4	446.3	59.05	8.558		
11,600.0	7,272.0	11,964.4	7,662.0	79.8	0.0	140.44	4,055.2	-363.0	505.8	445.6	60.28	8.392		
11,700.0	7,272.0	12,064.4	7,662.0	81.5	0.0	140.38	4,155.2	-363.1	506.3	444.8	61.51	8.231		
11,800.0	7,272.0	12,164.4	7,662.0	83.2	0.0	140.32	4,255.2	-363.3	506.8	444.0	62.75	8.075		
11,900.0	7,272.0	12,264.4	7,662.0	84.8	0.0	140.26	4,355.2	-363.4	507.2	443.2	64.00	7.926		
12,000.0	7,272.0	12,364.4	7,662.0	86.5	0.0	140.19	4,455.2	-363.5	507.7	442.4	65.25	7.781		
12,100.0	7,272.0	12,464.4	7,662.0	88.2	0.0	140.13	4,555.2	-363.6	508.1	441.6	66.50	7.641		
12,200.0	7,272.0	12,564.4	7,662.0	89.8	0.0	140.07	4,655.2	-363.7	508.6	440.8	67.76	7.506		
12,300.0	7,272.0	12,664.4	7,662.0	91.5	0.0	140.01	4,755.2	-363.8	509.1	440.0	69.02	7.375		
12,400.0	7,272.0	12,764.4	7,662.0	93.2	0.0	139.95	4,855.2	-363.9	509.5	439.2	70.29	7.249		
12,500.0	7,272.0	12,864.4	7,662.0	94.9	0.0	139.89	4,955.2	-364.0	510.0	438.4	71.56	7.126		
12,600.0	7,272.0	12,964.4	7,662.0	96.5	0.0	139.82	5,055.2	-364.1	510.4	437.6	72.84	7.008		
12,700.0	7,272.0	13,064.4	7,662.0	98.2	0.0	139.76	5,155.2	-364.3	510.9	436.8	74.12	6.893		
12,800.0	7,272.0	13,164.4	7,662.0	99.9	0.0	139.70	5,255.2	-364.4	511.4	436.0	75.40	6.782		
12,900.0	7,272.0	13,264.4	7,662.0	101.6	0.0	139.64	5,355.2	-364.5	511.8	435.1	76.69	6.674		
13,000.0	7,272.0	13,364.4	7,662.0	103.3	0.0	139.58	5,455.2	-364.6	512.3	434.3	77.98	6.570		
13,100.0	7,272.0	13,464.4	7,662.0	105.0	0.0	139.52	5,555.2	-364.7	512.8	433.5	79.27	6.468		
13,200.0	7,272.0	13,564.4	7,662.0	106.7	0.0	139.46	5,655.2	-364.8	513.2	432.6	80.57	6.370		
13,300.0	7,272.0	13,664.3	7,662.0	108.4	0.0	139.40	5,755.2	-364.9	513.7	431.8	81.87	6.274		
13,400.0	7,272.0	13,764.3	7,662.0	110.1	0.0	139.34	5,855.2	-365.0	514.1	431.0	83.18	6.181		
13,500.0	7,272.0	13,864.3	7,662.0	111.8	0.0	139.28	5,955.2	-365.1	514.6	430.1	84.49	6.091		
13,600.0	7,272.0	13,964.3	7,662.0	113.5	0.0	139.22	6,055.2	-365.3	515.1	429.3	85.80	6.003		
13,700.0	7,272.0	14,064.3	7,662.0	115.2	0.0	139.15	6,155.2	-365.4	515.6	428.4	87.11	5.918		
13,800.0	7,272.0	14,164.3	7,662.0	117.0	0.0	139.09	6,255.2	-365.5	516.0	427.6	88.43	5.835		
13,900.0	7,272.0	14,264.3	7,662.0	118.7	0.0	139.03	6,355.2	-365.6	516.5	426.7	89.75	5.755		
14,000.0	7,272.0	14,364.3	7,662.0	120.4	0.0	138.97	6,455.2	-365.7	517.0	425.9	91.07	5.676		
14,100.0	7,272.0	14,464.3	7,662.0	122.1	0.0	138.92	6,555.2	-365.8	517.4	425.0	92.40	5.600		
14,200.0	7,272.0	14,564.3	7,662.0	123.8	0.0	138.86	6,655.2	-365.9	517.9	424.2	93.73	5.525		
14,300.0	7,272.0	14,664.3	7,662.0	125.5	0.0	138.80	6,755.2	-366.0	518.4	423.3	95.06	5.453		
14,400.0	7,272.0	14,764.3	7,662.0	127.3	0.0	138.74	6,855.2	-366.1	518.8	422.4	96.40	5.382		
14,500.0	7,272.0	14,864.3	7,662.0	129.0	0.0	138.68	6,955.2	-366.3	519.3	421.6	97.73	5.314		
14,600.0	7,272.0	14,964.3	7,662.0	130.7	0.0	138.62	7,055.2	-366.4	519.8	420.7	99.07	5.246		
14,700.0	7,272.0	15,064.3	7,662.0	132.4	0.0	138.56	7,155.2	-366.5	520.3	419.8	100.42	5.181		
14,800.0	7,272.0	15,164.3	7,662.0	134.2	0.0	138.50	7,255.2	-366.6	520.7	419.0	101.76	5.117		
14,900.0	7,272.0	15,264.3	7,662.0	135.9	0.0	138.44	7,355.2	-366.7	521.2	418.1	103.11	5.055		
15,000.0	7,272.0	15,364.3	7,662.0	137.6	0.0	138.38	7,455.2	-366.8	521.7	417.2	104.46	4.994		
15,100.0	7,272.0	15,464.3	7,662.0	139.3	0.0	138.32	7,555.2	-366.9	522.2	416.3	105.82	4.935		
15,200.0	7,272.0	15,564.3	7,662.0	141.1	0.0	138.26	7,655.1	-367.0	522.6	415.5	107.17	4.877		
15,300.0	7,272.0	15,664.3	7,662.0	142.8	0.0	138.21	7,755.1	-367.1	523.1	414.6	108.53	4.820		
15,400.0	7,272.0	15,764.3	7,662.0	144.5	0.0	138.15	7,855.1	-367.3	523.6	413.7	109.89	4.765		
15,500.0	7,272.0	15,864.3	7,662.0	146.3	0.0	138.09	7,955.1	-367.4	524.1	412.8	111.25	4.711		

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 19-18-1NBH
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 19-18-1NBH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2CDH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,272.0	15,964.3	7,662.0	148.0	0.0	138.03	8,055.1	-367.5	524.5	411.9	112.62	4.658		
15,700.0	7,272.0	16,064.3	7,662.0	149.7	0.0	137.97	8,155.1	-367.6	525.0	411.0	113.99	4.606		
15,800.0	7,272.0	16,164.3	7,662.0	151.4	0.0	137.92	8,255.1	-367.7	525.5	410.1	115.36	4.556		
15,900.0	7,272.0	16,264.3	7,662.0	153.2	0.0	137.86	8,355.1	-367.8	526.0	409.3	116.73	4.506		
16,000.0	7,272.0	16,364.3	7,662.0	154.9	0.0	137.80	8,455.1	-367.9	526.5	408.4	118.10	4.458		
16,100.0	7,272.0	16,464.3	7,662.0	156.7	0.0	137.74	8,555.1	-368.0	526.9	407.5	119.48	4.410		
16,200.0	7,272.0	16,564.3	7,662.0	158.4	0.0	137.68	8,655.1	-368.1	527.4	406.6	120.86	4.364		
16,300.0	7,272.0	16,664.3	7,662.0	160.1	0.0	137.63	8,755.1	-368.3	527.9	405.7	122.24	4.319		
16,400.0	7,272.0	16,764.3	7,662.0	161.9	0.0	137.57	8,855.1	-368.4	528.4	404.8	123.62	4.274		
16,500.0	7,272.0	16,864.3	7,662.0	163.6	0.0	137.51	8,955.1	-368.5	528.9	403.9	125.01	4.231		
16,600.0	7,272.0	16,964.3	7,662.0	165.3	0.0	137.46	9,055.1	-368.6	529.4	403.0	126.40	4.188		
16,700.0	7,272.0	17,064.3	7,662.0	167.1	0.0	137.40	9,155.1	-368.7	529.8	402.1	127.79	4.146		
16,800.0	7,272.0	17,164.3	7,662.0	168.8	0.0	137.34	9,255.1	-368.8	530.3	401.2	129.18	4.105		
16,900.0	7,272.0	17,264.3	7,662.0	170.6	0.0	137.28	9,355.1	-368.9	530.8	400.2	130.57	4.065		
17,000.0	7,272.0	17,364.3	7,662.0	172.3	0.0	137.23	9,455.1	-369.0	531.3	399.3	131.97	4.026		
17,100.0	7,272.0	17,464.3	7,662.0	174.0	0.0	137.17	9,555.1	-369.2	531.8	398.4	133.36	3.987		
17,200.0	7,272.0	17,564.2	7,662.0	175.8	0.0	137.11	9,655.1	-369.3	532.3	397.5	134.76	3.950		
17,300.0	7,272.0	17,664.2	7,662.0	177.5	0.0	137.06	9,755.1	-369.4	532.8	396.6	136.17	3.913		
17,400.0	7,272.0	17,764.2	7,662.0	179.3	0.0	137.00	9,855.1	-369.5	533.2	395.7	137.57	3.876		
17,429.8	7,272.0	17,794.1	7,662.0	179.8	0.0	136.98	9,884.9	-369.5	533.4	395.4	137.99	3.865 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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
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	0.3	60.0	60.0				
100.0	100.0	100.0	100.0	0.4	0.0	89.70	0.3	60.0	60.0	59.7	0.28	216.509	
200.0	200.0	200.0	200.0	1.0	0.0	89.70	0.3	60.0	60.0	59.2	0.80	75.174	
300.0	300.0	300.0	300.0	1.5	0.0	89.70	0.3	60.0	60.0	58.8	1.22	48.983	
400.0	400.0	400.0	400.0	1.9	0.0	89.70	0.3	60.0	60.0	58.4	1.62	37.061	
500.0	500.0	500.0	500.0	2.3	0.0	89.70	0.3	60.0	60.0	58.0	2.00	30.005	
600.0	600.0	600.0	600.0	2.7	0.0	89.70	0.3	60.0	60.0	57.6	2.37	25.279	
700.0	700.0	700.0	700.0	3.1	0.0	89.70	0.3	60.0	60.0	57.2	2.74	21.871	
800.0	800.0	800.0	800.0	3.5	0.0	89.70	0.3	60.0	60.0	56.9	3.11	19.290	
900.0	900.0	900.0	900.0	3.9	0.0	89.70	0.3	60.0	60.0	56.5	3.47	17.262 CC, ES	
1,000.0	1,000.0	1,000.0	1,000.0	4.2	0.0	-142.78	0.3	60.0	61.4	57.5	3.88	15.833	
1,100.0	1,099.8	1,099.8	1,099.8	5.1	0.0	-145.49	0.3	60.0	65.6	60.8	4.77	13.743	
1,200.0	1,199.5	1,199.5	1,199.5	5.8	0.0	-149.29	0.3	60.0	73.0	67.4	5.60	13.027	
1,300.0	1,298.7	1,298.7	1,298.7	6.3	0.0	-153.46	0.3	60.0	83.6	77.5	6.17	13.546	
1,400.0	1,397.8	1,396.6	1,396.6	6.6	0.0	-156.06	-1.0	61.0	96.3	89.8	6.48	14.872	
1,500.0	1,496.9	1,494.3	1,494.2	6.9	0.0	-156.41	-5.0	63.9	110.3	103.6	6.78	16.269	
1,600.0	1,596.1	1,591.6	1,591.1	7.2	0.0	-155.25	-11.5	68.9	125.7	118.6	7.08	17.753	
1,700.0	1,695.2	1,689.9	1,688.9	7.5	0.0	-153.53	-19.9	75.2	141.9	134.5	7.38	19.230	
1,800.0	1,794.3	1,788.5	1,786.9	7.8	0.0	-152.14	-28.4	81.5	158.3	150.6	7.69	20.573	
1,900.0	1,893.4	1,887.1	1,884.9	8.1	0.0	-151.01	-36.8	87.8	174.7	166.7	8.02	21.793	
2,000.0	1,992.5	1,985.7	1,982.9	8.4	0.0	-150.07	-45.3	94.2	191.2	182.8	8.35	22.904	
2,100.0	2,091.6	2,084.3	2,080.9	8.8	0.0	-149.29	-53.7	100.5	207.7	199.0	8.69	23.917	
2,200.0	2,190.8	2,182.8	2,178.9	9.1	0.0	-148.62	-62.2	106.8	224.3	215.3	9.03	24.841	
2,300.0	2,289.9	2,281.4	2,277.0	9.4	0.0	-148.04	-70.6	113.2	240.9	231.5	9.38	25.688	
2,400.0	2,389.0	2,380.0	2,375.0	9.8	0.0	-147.53	-79.1	119.5	257.5	247.8	9.73	26.464	
2,500.0	2,488.1	2,478.6	2,473.0	10.1	0.0	-147.09	-87.5	125.8	274.1	264.0	10.09	27.179	
2,600.0	2,587.2	2,577.2	2,571.0	10.5	0.0	-146.70	-96.0	132.2	290.8	280.3	10.44	27.838	
2,700.0	2,686.3	2,675.8	2,669.0	10.9	0.0	-146.35	-104.4	138.5	307.4	296.6	10.81	28.447	
2,800.0	2,785.4	2,774.4	2,767.1	11.2	0.0	-146.04	-112.9	144.8	324.1	312.9	11.17	29.012	
2,900.0	2,884.6	2,873.0	2,865.1	11.6	0.0	-145.75	-121.3	151.2	340.8	329.2	11.54	29.536	
3,000.0	2,983.7	2,971.5	2,963.1	12.0	0.0	-145.50	-129.8	157.5	357.4	345.5	11.91	30.024	
3,100.0	3,082.8	3,070.1	3,061.1	12.4	0.0	-145.26	-138.2	163.8	374.1	361.9	12.28	30.479	
3,200.0	3,181.9	3,168.7	3,159.1	12.8	0.0	-145.05	-146.7	170.2	390.8	378.2	12.65	30.904	
3,300.0	3,281.0	3,267.3	3,257.2	13.2	0.0	-144.85	-155.1	176.5	407.5	394.5	13.02	31.302	
3,400.0	3,380.1	3,365.9	3,355.2	13.5	0.0	-144.67	-163.6	182.8	424.2	410.8	13.39	31.675	
3,500.0	3,479.3	3,464.5	3,453.2	13.9	0.0	-144.50	-172.0	189.2	440.9	427.2	13.77	32.026	
3,600.0	3,578.4	3,563.1	3,551.2	14.4	0.0	-144.35	-180.5	195.5	457.6	443.5	14.14	32.356	
3,700.0	3,677.5	3,661.7	3,649.2	14.8	0.0	-144.21	-188.9	201.9	474.4	459.8	14.52	32.667	
3,800.0	3,776.6	3,760.2	3,747.3	15.2	0.0	-144.07	-197.4	208.2	491.1	476.2	14.90	32.961	
3,900.0	3,875.7	3,858.8	3,845.3	15.6	0.0	-143.95	-205.8	214.5	507.8	492.5	15.28	33.238	
4,000.0	3,974.8	3,957.4	3,943.3	16.0	0.0	-143.83	-214.3	220.9	524.5	508.8	15.66	33.501	
4,100.0	4,074.0	4,056.0	4,041.3	16.4	0.0	-143.72	-222.7	227.2	541.2	525.2	16.04	33.750	
4,200.0	4,173.1	4,154.6	4,139.3	16.8	0.0	-143.62	-231.2	233.5	557.9	541.5	16.42	33.987	
4,300.0	4,272.2	4,253.2	4,237.4	17.2	0.0	-143.52	-239.6	239.9	574.7	557.9	16.80	34.212	
4,400.0	4,371.3	4,351.8	4,335.4	17.6	0.0	-143.43	-248.1	246.2	591.4	574.2	17.18	34.426	
4,500.0	4,470.4	4,450.3	4,433.4	18.1	0.0	-143.34	-256.5	252.5	608.1	590.6	17.56	34.629	
4,600.0	4,569.5	4,548.9	4,531.4	18.5	0.0	-143.26	-265.0	258.9	624.9	606.9	17.94	34.823	
4,700.0	4,668.7	4,647.5	4,629.4	18.9	0.0	-143.18	-273.4	265.2	641.6	623.3	18.33	35.009	
4,800.0	4,767.8	4,746.1	4,727.5	19.3	0.0	-143.10	-281.9	271.5	658.3	639.6	18.71	35.186	
4,900.0	4,866.9	4,844.7	4,825.5	19.7	0.0	-143.03	-290.3	277.9	675.1	656.0	19.09	35.355	
5,000.0	4,966.0	4,943.3	4,923.5	20.2	0.0	-142.97	-298.8	284.2	691.8	672.3	19.48	35.517	
5,100.0	5,065.1	5,041.9	5,021.5	20.6	0.0	-142.90	-307.2	290.5	708.5	688.7	19.86	35.672	

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 19-18-1NBH
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 19-18-1NBH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
5,200.0	5,164.2	5,140.5	5,119.5	21.0	0.0	-142.84	-315.7	296.9	725.3	705.0	20.25	35.821		
5,300.0	5,263.3	5,239.0	5,217.6	21.4	0.0	-142.79	-324.1	303.2	742.0	721.4	20.63	35.963		
5,400.0	5,362.5	5,337.6	5,315.6	21.8	0.0	-142.73	-332.6	309.5	758.7	737.7	21.02	36.101		
5,500.0	5,461.6	5,436.2	5,413.6	22.3	0.0	-142.68	-341.0	315.9	775.5	754.1	21.40	36.232		
5,600.0	5,560.7	5,534.8	5,511.6	22.7	0.0	-142.63	-349.5	322.2	792.2	770.4	21.79	36.359		
5,700.0	5,659.8	5,633.4	5,609.6	23.1	0.0	-142.58	-357.9	328.5	808.9	786.8	22.17	36.481		
5,800.0	5,758.9	5,732.0	5,707.7	23.5	0.0	-142.53	-366.4	334.9	825.7	803.1	22.56	36.598		
5,900.0	5,858.0	5,830.6	5,805.7	24.0	0.0	-142.49	-374.8	341.2	842.4	819.5	22.95	36.711		
6,000.0	5,957.2	5,929.1	5,903.7	24.4	0.0	-142.44	-383.3	347.5	859.2	835.8	23.33	36.820		
6,100.0	6,056.3	6,027.7	6,001.7	24.8	0.0	-142.40	-391.7	353.9	875.9	852.2	23.72	36.925		
6,200.0	6,155.4	6,126.3	6,099.7	25.2	0.0	-142.36	-400.2	360.2	892.6	868.5	24.11	37.027		
6,300.0	6,254.5	6,224.9	6,197.7	25.6	0.0	-142.32	-408.6	366.5	909.4	884.9	24.50	37.125		
6,400.0	6,353.6	6,323.5	6,295.8	26.1	0.0	-142.28	-417.1	372.9	926.1	901.2	24.88	37.219		
6,500.0	6,452.7	6,422.1	6,393.8	26.5	0.0	-142.25	-425.5	379.2	942.9	917.6	25.27	37.311		
6,600.0	6,551.9	6,520.7	6,491.8	26.9	0.0	-142.21	-434.0	385.5	959.6	934.0	25.66	37.400		
6,700.0	6,651.0	6,619.3	6,589.8	27.3	0.0	-142.18	-442.4	391.9	976.4	950.3	26.05	37.483		
6,800.0	6,750.3	6,717.4	6,687.4	27.8	0.0	140.22	-450.9	398.2	993.1	966.7	26.41	37.607		
6,900.0	6,848.2	6,812.6	6,782.0	28.1	0.0	110.98	-459.0	404.3	1,009.8	983.1	26.74	37.770		
7,000.0	6,941.6	6,911.9	6,881.0	28.5	0.0	102.88	-468.7	410.6	1,026.8	999.8	27.01	38.018		
7,100.0	7,027.7	7,018.2	6,985.2	28.7	0.0	99.51	-439.5	417.1	1,043.7	1,016.4	27.24	38.313		
7,200.0	7,104.0	7,132.9	7,091.6	28.9	0.0	97.90	-397.5	423.6	1,059.6	1,032.2	27.43	38.632		
7,300.0	7,168.0	7,257.4	7,195.0	29.0	0.0	97.16	-329.1	429.6	1,074.0	1,046.4	27.58	38.946		
7,400.0	7,217.9	7,392.0	7,287.5	29.1	0.0	96.88	-231.8	434.7	1,085.9	1,058.2	27.70	39.204		
7,500.0	7,252.2	7,536.2	7,358.6	29.0	0.0	96.82	-106.8	438.2	1,094.5	1,066.6	27.84	39.318		
7,600.0	7,269.7	7,687.1	7,397.3	29.0	0.0	96.81	38.6	439.5	1,098.9	1,070.9	28.04	39.185		
7,700.0	7,272.0	7,812.7	7,402.0	29.1	0.0	96.79	164.0	438.8	1,099.4	1,071.1	28.35	38.776		
7,800.0	7,272.0	7,912.7	7,402.0	29.4	0.0	96.79	264.0	438.0	1,099.4	1,070.7	28.77	38.215		
7,900.0	7,272.0	8,012.7	7,402.0	29.8	0.0	96.79	364.0	437.1	1,099.5	1,070.2	29.29	37.540		
8,000.0	7,272.0	8,112.7	7,402.0	30.4	0.0	96.79	464.0	436.3	1,099.5	1,069.6	29.90	36.772		
8,100.0	7,272.0	8,212.7	7,402.0	31.1	0.0	96.79	564.0	435.5	1,099.5	1,068.9	30.60	35.930		
8,200.0	7,272.0	8,312.7	7,402.0	31.8	0.0	96.79	664.0	434.6	1,099.5	1,068.1	31.38	35.034		
8,300.0	7,272.0	8,412.7	7,402.0	32.7	0.0	96.79	764.0	433.8	1,099.5	1,067.2	32.24	34.099		
8,400.0	7,272.0	8,512.7	7,402.0	33.6	0.0	96.79	864.0	433.0	1,099.5	1,066.3	33.17	33.143		
8,500.0	7,272.0	8,612.7	7,402.0	34.6	0.0	96.79	964.0	432.2	1,099.5	1,065.3	34.17	32.177		
8,600.0	7,272.0	8,712.7	7,402.0	35.7	0.0	96.79	1,064.0	431.3	1,099.5	1,064.2	35.22	31.214		
8,700.0	7,272.0	8,812.7	7,402.0	36.8	0.0	96.79	1,164.0	430.5	1,099.5	1,063.1	36.33	30.261		
8,800.0	7,272.0	8,912.7	7,402.0	37.9	0.0	96.79	1,264.0	429.7	1,099.5	1,062.0	37.49	29.326		
8,900.0	7,272.0	9,012.7	7,402.0	39.1	0.0	96.79	1,364.0	428.9	1,099.5	1,060.8	38.69	28.414		
9,000.0	7,272.0	9,112.7	7,402.0	40.4	0.0	96.79	1,464.0	428.0	1,099.5	1,059.5	39.94	27.528		
9,100.0	7,272.0	9,212.7	7,402.0	41.7	0.0	96.79	1,564.0	427.2	1,099.5	1,058.2	41.22	26.672		
9,200.0	7,272.0	9,312.7	7,402.0	43.0	0.0	96.79	1,664.0	426.4	1,099.5	1,056.9	42.54	25.848		
9,300.0	7,272.0	9,412.7	7,402.0	44.3	0.0	96.79	1,764.0	425.6	1,099.5	1,055.6	43.88	25.055		
9,400.0	7,272.0	9,512.7	7,402.0	45.7	0.0	96.79	1,864.0	424.7	1,099.5	1,054.2	45.26	24.294		
9,500.0	7,272.0	9,612.7	7,402.0	47.1	0.0	96.79	1,964.0	423.9	1,099.5	1,052.8	46.66	23.565		
9,600.0	7,272.0	9,712.7	7,402.0	48.5	0.0	96.79	2,064.0	423.1	1,099.5	1,051.4	48.08	22.867		
9,700.0	7,272.0	9,812.7	7,402.0	49.9	0.0	96.79	2,164.0	422.2	1,099.5	1,049.9	49.52	22.200		
9,800.0	7,272.0	9,912.7	7,402.0	51.4	0.0	96.79	2,264.0	421.4	1,099.5	1,048.5	50.99	21.563		
9,900.0	7,272.0	10,012.7	7,402.0	52.9	0.0	96.79	2,364.0	420.6	1,099.5	1,047.0	52.47	20.954		
10,000.0	7,272.0	10,112.7	7,402.0	54.4	0.0	96.79	2,464.0	419.8	1,099.5	1,045.5	53.97	20.372		
10,100.0	7,272.0	10,212.7	7,402.0	55.9	0.0	96.79	2,564.0	418.9	1,099.5	1,044.0	55.48	19.816		
10,200.0	7,272.0	10,312.7	7,402.0	57.4	0.0	96.79	2,664.0	418.1	1,099.5	1,042.5	57.01	19.285		
10,300.0	7,272.0	10,412.7	7,402.0	59.0	0.0	96.79	2,764.0	417.3	1,099.5	1,040.9	58.55	18.778		

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 19-18-1NBH
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 19-18-1NBH	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		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
10,400.0	7,272.0	10,512.7	7,402.0	60.5	0.0	96.79	2,863.9	416.5	1,099.5	1,039.4	60.10	18.293		
10,500.0	7,272.0	10,612.7	7,402.0	62.1	0.0	96.79	2,963.9	415.6	1,099.5	1,037.8	61.67	17.830		
10,600.0	7,272.0	10,712.7	7,402.0	63.7	0.0	96.79	3,063.9	414.8	1,099.5	1,036.2	63.24	17.386		
10,700.0	7,272.0	10,812.7	7,402.0	65.2	0.0	96.79	3,163.9	414.0	1,099.5	1,034.6	64.82	16.962		
10,800.0	7,272.0	10,912.7	7,402.0	66.8	0.0	96.79	3,263.9	413.2	1,099.5	1,033.1	66.41	16.555		
10,900.0	7,272.0	11,012.7	7,402.0	68.4	0.0	96.79	3,363.9	412.3	1,099.5	1,031.5	68.01	16.166		
11,000.0	7,272.0	11,112.7	7,402.0	70.1	0.0	96.79	3,463.9	411.5	1,099.5	1,029.9	69.62	15.793		
11,100.0	7,272.0	11,212.7	7,402.0	71.7	0.0	96.79	3,563.9	410.7	1,099.5	1,028.2	71.23	15.435		
11,200.0	7,272.0	11,312.7	7,402.0	73.3	0.0	96.79	3,663.9	409.9	1,099.5	1,026.6	72.85	15.092		
11,300.0	7,272.0	11,412.7	7,402.0	74.9	0.0	96.79	3,763.9	409.0	1,099.5	1,025.0	74.48	14.762		
11,400.0	7,272.0	11,512.7	7,402.0	76.6	0.0	96.79	3,863.9	408.2	1,099.5	1,023.4	76.11	14.446		
11,500.0	7,272.0	11,612.7	7,402.0	78.2	0.0	96.79	3,963.9	407.4	1,099.5	1,021.7	77.75	14.141		
11,600.0	7,272.0	11,712.7	7,402.0	79.8	0.0	96.79	4,063.9	406.5	1,099.5	1,020.1	79.39	13.849		
11,700.0	7,272.0	11,812.7	7,402.0	81.5	0.0	96.79	4,163.9	405.7	1,099.5	1,018.4	81.04	13.567		
11,800.0	7,272.0	11,912.7	7,402.0	83.2	0.0	96.79	4,263.9	404.9	1,099.5	1,016.8	82.69	13.296		
11,900.0	7,272.0	12,012.7	7,402.0	84.8	0.0	96.79	4,363.9	404.1	1,099.5	1,015.1	84.35	13.035		
12,000.0	7,272.0	12,112.7	7,402.0	86.5	0.0	96.79	4,463.9	403.2	1,099.5	1,013.5	86.01	12.784		
12,100.0	7,272.0	12,212.7	7,402.0	88.2	0.0	96.79	4,563.9	402.4	1,099.5	1,011.8	87.67	12.541		
12,200.0	7,272.0	12,312.7	7,402.0	89.8	0.0	96.79	4,663.9	401.6	1,099.5	1,010.1	89.34	12.307		
12,300.0	7,272.0	12,412.7	7,402.0	91.5	0.0	96.79	4,763.9	400.8	1,099.5	1,008.5	91.01	12.081		
12,400.0	7,272.0	12,512.7	7,402.0	93.2	0.0	96.79	4,863.9	399.9	1,099.5	1,006.8	92.68	11.863		
12,500.0	7,272.0	12,612.7	7,402.0	94.9	0.0	96.79	4,963.9	399.1	1,099.5	1,005.1	94.36	11.652		
12,600.0	7,272.0	12,712.7	7,402.0	96.5	0.0	96.79	5,063.9	398.3	1,099.5	1,003.4	96.04	11.449		
12,700.0	7,272.0	12,812.7	7,402.0	98.2	0.0	96.79	5,163.9	397.5	1,099.5	1,001.8	97.72	11.251		
12,800.0	7,272.0	12,912.7	7,402.0	99.9	0.0	96.79	5,263.9	396.6	1,099.5	1,000.1	99.40	11.061		
12,900.0	7,272.0	13,012.7	7,402.0	101.6	0.0	96.79	5,363.9	395.8	1,099.5	998.4	101.09	10.876		
13,000.0	7,272.0	13,112.7	7,402.0	103.3	0.0	96.79	5,463.9	395.0	1,099.5	996.7	102.78	10.697		
13,100.0	7,272.0	13,212.7	7,402.0	105.0	0.0	96.79	5,563.9	394.1	1,099.5	995.0	104.47	10.524		
13,200.0	7,272.0	13,312.7	7,402.0	106.7	0.0	96.79	5,663.9	393.3	1,099.5	993.3	106.17	10.356		
13,300.0	7,272.0	13,412.7	7,402.0	108.4	0.0	96.79	5,763.8	392.5	1,099.5	991.6	107.86	10.194		
13,400.0	7,272.0	13,512.7	7,402.0	110.1	0.0	96.79	5,863.8	391.7	1,099.5	989.9	109.56	10.036		
13,500.0	7,272.0	13,612.7	7,402.0	111.8	0.0	96.79	5,963.8	390.8	1,099.5	988.2	111.26	9.882		
13,600.0	7,272.0	13,712.7	7,402.0	113.5	0.0	96.79	6,063.8	390.0	1,099.5	986.5	112.96	9.734		
13,700.0	7,272.0	13,812.7	7,402.0	115.2	0.0	96.79	6,163.8	389.2	1,099.5	984.8	114.66	9.589		
13,800.0	7,272.0	13,912.7	7,402.0	117.0	0.0	96.79	6,263.8	388.4	1,099.5	983.1	116.37	9.449		
13,900.0	7,272.0	14,012.7	7,402.0	118.7	0.0	96.79	6,363.8	387.5	1,099.5	981.4	118.07	9.312		
14,000.0	7,272.0	14,112.7	7,402.0	120.4	0.0	96.79	6,463.8	386.7	1,099.5	979.7	119.78	9.179		
14,100.0	7,272.0	14,212.7	7,402.0	122.1	0.0	96.79	6,563.8	385.9	1,099.5	978.0	121.49	9.050		
14,200.0	7,272.0	14,312.7	7,402.0	123.8	0.0	96.79	6,663.8	385.1	1,099.5	976.3	123.20	8.925		
14,300.0	7,272.0	14,412.7	7,402.0	125.5	0.0	96.79	6,763.8	384.2	1,099.5	974.6	124.91	8.802		
14,400.0	7,272.0	14,512.7	7,402.0	127.3	0.0	96.79	6,863.8	383.4	1,099.5	972.9	126.62	8.683		
14,500.0	7,272.0	14,612.7	7,402.0	129.0	0.0	96.79	6,963.8	382.6	1,099.5	971.2	128.33	8.567		
14,600.0	7,272.0	14,712.7	7,402.0	130.7	0.0	96.79	7,063.8	381.8	1,099.5	969.4	130.05	8.454		
14,700.0	7,272.0	14,812.7	7,402.0	132.4	0.0	96.79	7,163.8	380.9	1,099.5	967.7	131.76	8.344		
14,800.0	7,272.0	14,912.7	7,402.0	134.2	0.0	96.79	7,263.8	380.1	1,099.5	966.0	133.48	8.237		
14,900.0	7,272.0	15,012.7	7,402.0	135.9	0.0	96.79	7,363.8	379.3	1,099.5	964.3	135.20	8.132		
15,000.0	7,272.0	15,112.7	7,402.0	137.6	0.0	96.79	7,463.8	378.4	1,099.5	962.6	136.92	8.030		
15,100.0	7,272.0	15,212.7	7,402.0	139.3	0.0	96.79	7,563.8	377.6	1,099.5	960.9	138.64	7.931		
15,200.0	7,272.0	15,312.7	7,402.0	141.1	0.0	96.79	7,663.8	376.8	1,099.5	959.1	140.36	7.834		
15,300.0	7,272.0	15,412.7	7,402.0	142.8	0.0	96.79	7,763.8	376.0	1,099.5	957.4	142.08	7.739		
15,400.0	7,272.0	15,512.7	7,402.0	144.5	0.0	96.79	7,863.8	375.1	1,099.5	955.7	143.80	7.646		
15,500.0	7,272.0	15,612.7	7,402.0	146.3	0.0	96.79	7,963.8	374.3	1,099.5	954.0	145.52	7.555		

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 19-18-1NBH
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 19-18-1NBH	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	7,272.0	15,712.7	7,402.0	148.0	0.0	96.79	8,063.8	373.5	1,099.5	952.3	147.25	7.467		
15,700.0	7,272.0	15,812.7	7,402.0	149.7	0.0	96.79	8,163.8	372.7	1,099.5	950.5	148.97	7.381		
15,800.0	7,272.0	15,912.7	7,402.0	151.4	0.0	96.79	8,263.8	371.8	1,099.5	948.8	150.70	7.296		
15,900.0	7,272.0	16,012.7	7,402.0	153.2	0.0	96.79	8,363.8	371.0	1,099.5	947.1	152.42	7.213		
16,000.0	7,272.0	16,112.7	7,402.0	154.9	0.0	96.79	8,463.8	370.2	1,099.5	945.4	154.15	7.133		
16,100.0	7,272.0	16,212.7	7,402.0	156.7	0.0	96.79	8,563.8	369.4	1,099.5	943.6	155.88	7.054		
16,200.0	7,272.0	16,312.7	7,402.0	158.4	0.0	96.79	8,663.7	368.5	1,099.5	941.9	157.61	6.976		
16,300.0	7,272.0	16,412.7	7,402.0	160.1	0.0	96.79	8,763.7	367.7	1,099.5	940.2	159.33	6.901		
16,400.0	7,272.0	16,512.7	7,402.0	161.9	0.0	96.79	8,863.7	366.9	1,099.5	938.4	161.06	6.827		
16,500.0	7,272.0	16,612.7	7,402.0	163.6	0.0	96.79	8,963.7	366.0	1,099.5	936.7	162.79	6.754		
16,600.0	7,272.0	16,712.7	7,402.0	165.3	0.0	96.79	9,063.7	365.2	1,099.5	935.0	164.52	6.683		
16,700.0	7,272.0	16,812.7	7,402.0	167.1	0.0	96.79	9,163.7	364.4	1,099.5	933.3	166.25	6.613		
16,800.0	7,272.0	16,912.7	7,402.0	168.8	0.0	96.79	9,263.7	363.6	1,099.5	931.5	167.99	6.545		
16,900.0	7,272.0	17,012.7	7,402.0	170.6	0.0	96.79	9,363.7	362.7	1,099.5	929.8	169.72	6.479		
17,000.0	7,272.0	17,112.7	7,402.0	172.3	0.0	96.79	9,463.7	361.9	1,099.5	928.1	171.45	6.413		
17,100.0	7,272.0	17,212.7	7,402.0	174.0	0.0	96.79	9,563.7	361.1	1,099.5	926.3	173.18	6.349		
17,200.0	7,272.0	17,312.7	7,402.0	175.8	0.0	96.79	9,663.7	360.3	1,099.5	924.6	174.91	6.286		
17,300.0	7,272.0	17,412.7	7,402.0	177.5	0.0	96.79	9,763.7	359.4	1,099.5	922.9	176.65	6.224		
17,400.0	7,272.0	17,512.7	7,402.0	179.3	0.0	96.79	9,863.7	358.6	1,099.5	921.1	178.38	6.164		
17,429.8	7,272.0	17,542.6	7,402.0	179.8	0.0	96.79	9,893.5	358.4	1,099.5	920.6	178.90	6.146 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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	89.72	0.2	45.0	45.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.72	0.2	45.0	45.0	44.7	0.28	162.406		
200.0	200.0	200.0	200.0	1.0	0.0	89.72	0.2	45.0	45.0	44.2	0.80	56.387		
300.0	300.0	300.0	300.0	1.5	0.0	89.72	0.2	45.0	45.0	43.8	1.22	36.740		
400.0	400.0	400.0	400.0	1.9	0.0	89.72	0.2	45.0	45.0	43.4	1.62	27.797		
500.0	500.0	500.0	500.0	2.3	0.0	89.72	0.2	45.0	45.0	43.0	2.00	22.504		
600.0	600.0	600.0	600.0	2.7	0.0	89.72	0.2	45.0	45.0	42.6	2.37	18.959		
700.0	700.0	700.0	700.0	3.1	0.0	89.72	0.2	45.0	45.0	42.2	2.74	16.403		
800.0	800.0	800.0	800.0	3.5	0.0	89.72	0.2	45.0	45.0	41.9	3.11	14.467		
900.0	900.0	900.0	900.0	3.9	0.0	89.72	0.2	45.0	45.0	41.5	3.47	12.946 CC, ES		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	0.0	-143.08	0.2	45.0	46.4	42.5	3.88	11.950		
1,100.0	1,099.8	1,099.8	1,099.8	5.1	0.0	-146.59	0.2	45.0	50.6	45.9	4.79	10.567		
1,200.0	1,199.5	1,199.5	1,199.5	5.8	0.0	-151.25	0.2	45.0	58.1	52.5	5.64	10.314		
1,300.0	1,298.7	1,299.1	1,299.1	6.3	0.0	-154.63	-1.5	45.1	68.7	62.5	6.19	11.098		
1,400.0	1,397.8	1,398.9	1,398.8	6.6	0.0	-155.03	-6.7	45.5	79.9	73.4	6.47	12.354		
1,500.0	1,496.9	1,498.5	1,498.0	6.9	0.0	-153.55	-14.7	46.0	90.6	83.8	6.76	13.409		
1,600.0	1,596.1	1,597.9	1,597.1	7.2	0.0	-152.23	-22.9	46.6	101.3	94.3	7.06	14.354		
1,700.0	1,695.2	1,697.3	1,696.1	7.5	0.0	-151.17	-31.2	47.1	112.1	104.7	7.37	15.204		
1,800.0	1,794.3	1,796.7	1,795.2	7.8	0.0	-150.29	-39.4	47.7	122.9	115.2	7.70	15.968		
1,900.0	1,893.4	1,896.1	1,894.2	8.1	0.0	-149.55	-47.7	48.3	133.7	125.7	8.03	16.657		
2,000.0	1,992.5	1,995.5	1,993.3	8.4	0.0	-148.93	-55.9	48.9	144.6	136.2	8.37	17.279		
2,100.0	2,091.6	2,094.9	2,092.4	8.8	0.0	-148.39	-64.2	49.4	155.4	146.7	8.71	17.844		
2,200.0	2,190.8	2,194.3	2,191.4	9.1	0.0	-147.92	-72.4	50.0	166.3	157.3	9.06	18.356		
2,300.0	2,289.9	2,293.7	2,290.5	9.4	0.0	-147.51	-80.7	50.6	177.2	167.8	9.41	18.824		
2,400.0	2,389.0	2,393.1	2,389.5	9.8	0.0	-147.15	-88.9	51.1	188.1	178.3	9.77	19.251		
2,500.0	2,488.1	2,492.5	2,488.6	10.1	0.0	-146.82	-97.2	51.7	199.0	188.9	10.13	19.643		
2,600.0	2,587.2	2,591.9	2,587.6	10.5	0.0	-146.53	-105.4	52.3	209.9	199.4	10.49	20.003		
2,700.0	2,686.3	2,691.3	2,686.7	10.9	0.0	-146.27	-113.7	52.9	220.8	209.9	10.86	20.335		
2,800.0	2,785.4	2,790.7	2,785.7	11.2	0.0	-146.04	-121.9	53.4	231.7	220.5	11.23	20.642		
2,900.0	2,884.6	2,890.1	2,884.8	11.6	0.0	-145.82	-130.2	54.0	242.6	231.0	11.59	20.926		
3,000.0	2,983.7	2,989.5	2,983.8	12.0	0.0	-145.63	-138.4	54.6	253.5	241.6	11.97	21.190		
3,100.0	3,082.8	3,088.9	3,082.9	12.4	0.0	-145.45	-146.7	55.1	264.5	252.1	12.34	21.435		
3,200.0	3,181.9	3,188.3	3,181.9	12.8	0.0	-145.28	-154.9	55.7	275.4	262.7	12.71	21.664		
3,300.0	3,281.0	3,287.7	3,281.0	13.2	0.0	-145.13	-163.2	56.3	286.3	273.2	13.09	21.878		
3,400.0	3,380.1	3,387.1	3,380.1	13.5	0.0	-144.98	-171.4	56.9	297.3	283.8	13.46	22.078		
3,500.0	3,479.3	3,486.5	3,479.1	13.9	0.0	-144.85	-179.7	57.4	308.2	294.3	13.84	22.266		
3,600.0	3,578.4	3,585.9	3,578.2	14.4	0.0	-144.73	-187.9	58.0	319.1	304.9	14.22	22.443		
3,700.0	3,677.5	3,685.3	3,677.2	14.8	0.0	-144.61	-196.2	58.6	330.0	315.4	14.60	22.609		
3,800.0	3,776.6	3,784.7	3,776.3	15.2	0.0	-144.51	-204.4	59.1	341.0	326.0	14.98	22.766		
3,900.0	3,875.7	3,884.1	3,875.3	15.6	0.0	-144.41	-212.7	59.7	351.9	336.6	15.36	22.913		
4,000.0	3,974.8	3,983.5	3,974.4	16.0	0.0	-144.31	-221.0	60.3	362.8	347.1	15.74	23.053		
4,100.0	4,074.0	4,082.9	4,073.4	16.4	0.0	-144.22	-229.2	60.8	373.8	357.7	16.12	23.186		
4,200.0	4,173.1	4,182.3	4,172.5	16.8	0.0	-144.14	-237.5	61.4	384.7	368.2	16.50	23.311		
4,300.0	4,272.2	4,281.7	4,271.5	17.2	0.0	-144.06	-245.7	62.0	395.7	378.8	16.89	23.430		
4,400.0	4,371.3	4,381.1	4,370.6	17.6	0.0	-143.98	-254.0	62.6	406.6	389.3	17.27	23.543		
4,500.0	4,470.4	4,480.5	4,469.6	18.1	0.0	-143.91	-262.2	63.1	417.5	399.9	17.65	23.651		
4,600.0	4,569.5	4,579.9	4,568.7	18.5	0.0	-143.84	-270.5	63.7	428.5	410.4	18.04	23.754		
4,700.0	4,668.7	4,679.3	4,667.7	18.9	0.0	-143.78	-278.7	64.3	439.4	421.0	18.42	23.851		
4,800.0	4,767.8	4,778.7	4,766.8	19.3	0.0	-143.72	-287.0	64.8	450.4	431.6	18.81	23.945		
4,900.0	4,866.9	4,878.1	4,865.9	19.7	0.0	-143.66	-295.2	65.4	461.3	442.1	19.19	24.034		
5,000.0	4,966.0	4,977.5	4,964.9	20.2	0.0	-143.60	-303.5	66.0	472.3	452.7	19.58	24.119		
5,100.0	5,065.1	5,076.9	5,064.0	20.6	0.0	-143.55	-311.7	66.6	483.2	463.2	19.97	24.201		

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 19-18-1NBH
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 19-18-1NBH	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		
5,200.0	5,164.2	5,176.3	5,163.0	21.0	0.0	-143.50	-320.0	67.1	494.1	473.8	20.35	24.279		
5,300.0	5,263.3	5,275.7	5,262.1	21.4	0.0	-143.45	-328.2	67.7	505.1	484.3	20.74	24.354		
5,400.0	5,362.5	5,375.1	5,361.1	21.8	0.0	-143.41	-336.5	68.3	516.0	494.9	21.13	24.426		
5,500.0	5,461.6	5,474.5	5,460.2	22.3	0.0	-143.36	-344.7	68.8	527.0	505.5	21.51	24.495		
5,600.0	5,560.7	5,573.9	5,559.2	22.7	0.0	-143.32	-353.0	69.4	537.9	516.0	21.90	24.562		
5,700.0	5,659.8	5,673.2	5,658.3	23.1	0.0	-143.28	-361.2	70.0	548.9	526.6	22.29	24.625		
5,800.0	5,758.9	5,772.6	5,757.3	23.5	0.0	-143.24	-369.5	70.6	559.8	537.1	22.68	24.687		
5,900.0	5,858.0	5,872.0	5,856.4	24.0	0.0	-143.20	-377.7	71.1	570.8	547.7	23.06	24.746		
6,000.0	5,957.2	5,971.4	5,955.4	24.4	0.0	-143.16	-386.0	71.7	581.7	558.2	23.45	24.803		
6,100.0	6,056.3	6,070.8	6,054.5	24.8	0.0	-143.13	-394.2	72.3	592.6	568.8	23.84	24.858		
6,200.0	6,155.4	6,170.2	6,153.6	25.2	0.0	-143.09	-402.5	72.8	603.6	579.4	24.23	24.911		
6,300.0	6,254.5	6,269.6	6,252.6	25.6	0.0	-143.06	-410.7	73.4	614.5	589.9	24.62	24.962		
6,400.0	6,353.6	6,369.0	6,351.7	26.1	0.0	-143.03	-419.0	74.0	625.5	600.5	25.01	25.012		
6,500.0	6,452.7	6,468.4	6,450.7	26.5	0.0	-143.00	-427.2	74.5	636.4	611.0	25.40	25.060		
6,600.0	6,551.9	6,567.8	6,549.8	26.9	0.0	-142.97	-435.5	75.1	647.4	621.6	25.79	25.106		
6,700.0	6,651.0	6,667.2	6,648.8	27.3	0.0	-142.94	-443.7	75.7	658.3	632.1	26.18	25.150		
6,800.0	6,750.3	6,766.2	6,747.4	27.8	0.0	140.24	-452.0	76.3	669.2	642.6	26.55	25.207		
6,900.0	6,848.2	6,862.2	6,843.1	28.1	0.0	112.25	-459.9	76.8	680.2	653.3	26.91	25.282		
7,000.0	6,941.6	6,961.3	6,942.1	28.5	0.0	105.63	-461.0	77.3	692.4	665.2	27.21	25.445		
7,100.0	7,027.7	7,067.9	7,047.1	28.7	0.0	103.67	-443.2	77.7	705.4	677.9	27.46	25.688		
7,200.0	7,104.0	7,183.1	7,154.6	28.9	0.0	103.36	-402.4	77.9	718.6	691.0	27.63	26.008		
7,300.0	7,168.0	7,308.3	7,259.6	29.0	0.0	103.74	-334.9	77.9	731.1	703.4	27.70	26.392		
7,400.0	7,217.9	7,443.9	7,354.0	29.1	0.0	104.38	-237.9	77.6	742.0	714.3	27.70	26.789		
7,500.0	7,252.2	7,589.3	7,426.9	29.0	0.0	104.99	-112.5	76.9	750.0	722.3	27.69	27.088		
7,600.0	7,269.7	7,741.8	7,466.9	29.0	0.0	105.34	34.1	75.9	754.3	726.5	27.80	27.130		
7,700.0	7,272.0	7,868.9	7,472.0	29.1	0.0	105.37	161.0	74.9	754.8	726.7	28.11	26.850		
7,800.0	7,272.0	7,968.9	7,472.0	29.4	0.0	105.37	261.0	74.0	754.8	726.3	28.53	26.452		
7,900.0	7,272.0	8,068.9	7,472.0	29.8	0.0	105.37	361.0	73.2	754.8	725.7	29.05	25.979		
8,000.0	7,272.0	8,168.9	7,472.0	30.4	0.0	105.37	461.0	72.4	754.8	725.1	29.66	25.445		
8,100.0	7,272.0	8,268.9	7,472.0	31.1	0.0	105.37	561.0	71.6	754.8	724.4	30.36	24.864		
8,200.0	7,272.0	8,368.9	7,472.0	31.8	0.0	105.37	661.0	70.7	754.8	723.7	31.13	24.246		
8,300.0	7,272.0	8,468.9	7,472.0	32.7	0.0	105.37	761.0	69.9	754.8	722.8	31.98	23.604		
8,400.0	7,272.0	8,568.9	7,472.0	33.6	0.0	105.37	861.0	69.1	754.8	721.9	32.89	22.948		
8,500.0	7,272.0	8,668.9	7,472.0	34.6	0.0	105.37	961.0	68.3	754.8	720.9	33.87	22.286		
8,600.0	7,272.0	8,768.9	7,472.0	35.7	0.0	105.37	1,061.0	67.4	754.8	719.9	34.90	21.626		
8,700.0	7,272.0	8,868.9	7,472.0	36.8	0.0	105.37	1,161.0	66.6	754.8	718.8	35.99	20.974		
8,800.0	7,272.0	8,968.9	7,472.0	37.9	0.0	105.37	1,261.0	65.8	754.8	717.7	37.12	20.334		
8,900.0	7,272.0	9,068.9	7,472.0	39.1	0.0	105.37	1,361.0	64.9	754.8	716.5	38.30	19.709		
9,000.0	7,272.0	9,168.9	7,472.0	40.4	0.0	105.37	1,461.0	64.1	754.8	715.3	39.51	19.103		
9,100.0	7,272.0	9,268.9	7,472.0	41.7	0.0	105.37	1,561.0	63.3	754.8	714.0	40.76	18.516		
9,200.0	7,272.0	9,368.9	7,472.0	43.0	0.0	105.37	1,661.0	62.5	754.8	712.7	42.05	17.951		
9,300.0	7,272.0	9,468.9	7,472.0	44.3	0.0	105.37	1,761.0	61.6	754.8	711.4	43.36	17.407		
9,400.0	7,272.0	9,568.9	7,472.0	45.7	0.0	105.37	1,861.0	60.8	754.8	710.1	44.70	16.884		
9,500.0	7,272.0	9,668.9	7,472.0	47.1	0.0	105.37	1,961.0	60.0	754.8	708.7	46.07	16.384		
9,600.0	7,272.0	9,768.9	7,472.0	48.5	0.0	105.37	2,061.0	59.2	754.8	707.3	47.46	15.904		
9,700.0	7,272.0	9,868.9	7,472.0	49.9	0.0	105.37	2,161.0	58.3	754.8	705.9	48.87	15.446		
9,800.0	7,272.0	9,968.9	7,472.0	51.4	0.0	105.37	2,261.0	57.5	754.8	704.5	50.30	15.007		
9,900.0	7,272.0	10,068.9	7,472.0	52.9	0.0	105.37	2,361.0	56.7	754.8	703.1	51.74	14.588		
10,000.0	7,272.0	10,168.9	7,472.0	54.4	0.0	105.37	2,461.0	55.9	754.8	701.6	53.20	14.187		
10,100.0	7,272.0	10,268.9	7,472.0	55.9	0.0	105.37	2,561.0	55.0	754.8	700.1	54.68	13.804		
10,200.0	7,272.0	10,368.9	7,472.0	57.4	0.0	105.37	2,660.9	54.2	754.8	698.6	56.17	13.438		
10,300.0	7,272.0	10,468.9	7,472.0	59.0	0.0	105.37	2,760.9	53.4	754.8	697.1	57.67	13.087		

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 19-18-1NBH
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 19-18-1NBH	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	7,272.0	10,568.9	7,472.0	60.5	0.0	105.37	2,860.9	52.5	754.8	695.6	59.19	12.753		
10,500.0	7,272.0	10,668.9	7,472.0	62.1	0.0	105.37	2,960.9	51.7	754.8	694.1	60.71	12.432		
10,600.0	7,272.0	10,768.9	7,472.0	63.7	0.0	105.37	3,060.9	50.9	754.8	692.6	62.25	12.126		
10,700.0	7,272.0	10,868.9	7,472.0	65.2	0.0	105.37	3,160.9	50.1	754.8	691.0	63.79	11.832		
10,800.0	7,272.0	10,968.9	7,472.0	66.8	0.0	105.37	3,260.9	49.2	754.8	689.5	65.34	11.551		
10,900.0	7,272.0	11,068.9	7,472.0	68.4	0.0	105.37	3,360.9	48.4	754.8	687.9	66.90	11.282		
11,000.0	7,272.0	11,168.9	7,472.0	70.1	0.0	105.37	3,460.9	47.6	754.8	686.3	68.47	11.024		
11,100.0	7,272.0	11,268.9	7,472.0	71.7	0.0	105.37	3,560.9	46.8	754.8	684.8	70.05	10.776		
11,200.0	7,272.0	11,368.9	7,472.0	73.3	0.0	105.37	3,660.9	45.9	754.8	683.2	71.63	10.538		
11,300.0	7,272.0	11,468.9	7,472.0	74.9	0.0	105.37	3,760.9	45.1	754.8	681.6	73.21	10.310		
11,400.0	7,272.0	11,568.9	7,472.0	76.6	0.0	105.37	3,860.9	44.3	754.8	680.0	74.81	10.090		
11,500.0	7,272.0	11,668.9	7,472.0	78.2	0.0	105.37	3,960.9	43.5	754.8	678.4	76.40	9.879		
11,600.0	7,272.0	11,768.9	7,472.0	79.8	0.0	105.37	4,060.9	42.6	754.8	676.8	78.01	9.676		
11,700.0	7,272.0	11,868.9	7,472.0	81.5	0.0	105.37	4,160.9	41.8	754.8	675.2	79.62	9.481		
11,800.0	7,272.0	11,968.9	7,472.0	83.2	0.0	105.37	4,260.9	41.0	754.8	673.6	81.23	9.293		
11,900.0	7,272.0	12,068.9	7,472.0	84.8	0.0	105.37	4,360.9	40.1	754.8	672.0	82.84	9.111		
12,000.0	7,272.0	12,168.9	7,472.0	86.5	0.0	105.37	4,460.9	39.3	754.8	670.3	84.46	8.936		
12,100.0	7,272.0	12,268.9	7,472.0	88.2	0.0	105.37	4,560.9	38.5	754.8	668.7	86.09	8.768		
12,200.0	7,272.0	12,368.9	7,472.0	89.8	0.0	105.37	4,660.9	37.7	754.8	667.1	87.71	8.605		
12,300.0	7,272.0	12,468.9	7,472.0	91.5	0.0	105.37	4,760.9	36.8	754.8	665.5	89.35	8.448		
12,400.0	7,272.0	12,568.9	7,472.0	93.2	0.0	105.37	4,860.9	36.0	754.8	663.8	90.98	8.297		
12,500.0	7,272.0	12,668.9	7,472.0	94.9	0.0	105.37	4,960.9	35.2	754.8	662.2	92.62	8.150		
12,600.0	7,272.0	12,768.9	7,472.0	96.5	0.0	105.36	5,060.9	34.4	754.8	660.6	94.25	8.008		
12,700.0	7,272.0	12,868.9	7,472.0	98.2	0.0	105.36	5,160.9	33.5	754.8	658.9	95.90	7.871		
12,800.0	7,272.0	12,968.9	7,472.0	99.9	0.0	105.36	5,260.9	32.7	754.8	657.3	97.54	7.738		
12,900.0	7,272.0	13,068.9	7,472.0	101.6	0.0	105.36	5,360.9	31.9	754.8	655.6	99.19	7.610		
13,000.0	7,272.0	13,168.9	7,472.0	103.3	0.0	105.36	5,460.9	31.0	754.8	654.0	100.84	7.485		
13,100.0	7,272.0	13,268.9	7,472.0	105.0	0.0	105.36	5,560.9	30.2	754.8	652.3	102.49	7.365		
13,200.0	7,272.0	13,368.9	7,472.0	106.7	0.0	105.36	5,660.8	29.4	754.8	650.7	104.14	7.248		
13,300.0	7,272.0	13,468.9	7,472.0	108.4	0.0	105.36	5,760.8	28.6	754.8	649.0	105.80	7.135		
13,400.0	7,272.0	13,568.9	7,472.0	110.1	0.0	105.36	5,860.8	27.7	754.8	647.4	107.45	7.025		
13,500.0	7,272.0	13,668.9	7,472.0	111.8	0.0	105.36	5,960.8	26.9	754.8	645.7	109.11	6.918		
13,600.0	7,272.0	13,768.9	7,472.0	113.5	0.0	105.36	6,060.8	26.1	754.8	644.0	110.77	6.814		
13,700.0	7,272.0	13,868.9	7,472.0	115.2	0.0	105.36	6,160.8	25.3	754.8	642.4	112.44	6.713		
13,800.0	7,272.0	13,968.9	7,472.0	117.0	0.0	105.36	6,260.8	24.4	754.8	640.7	114.10	6.615		
13,900.0	7,272.0	14,068.9	7,472.0	118.7	0.0	105.36	6,360.8	23.6	754.8	639.1	115.76	6.520		
14,000.0	7,272.0	14,168.9	7,472.0	120.4	0.0	105.36	6,460.8	22.8	754.8	637.4	117.43	6.428		
14,100.0	7,272.0	14,268.9	7,472.0	122.1	0.0	105.36	6,560.8	22.0	754.8	635.7	119.10	6.338		
14,200.0	7,272.0	14,368.9	7,472.0	123.8	0.0	105.36	6,660.8	21.1	754.8	634.0	120.77	6.250		
14,300.0	7,272.0	14,468.9	7,472.0	125.5	0.0	105.36	6,760.8	20.3	754.8	632.4	122.44	6.165		
14,400.0	7,272.0	14,568.9	7,472.0	127.3	0.0	105.36	6,860.8	19.5	754.8	630.7	124.11	6.082		
14,500.0	7,272.0	14,668.9	7,472.0	129.0	0.0	105.36	6,960.8	18.6	754.8	629.0	125.78	6.001		
14,600.0	7,272.0	14,768.9	7,472.0	130.7	0.0	105.36	7,060.8	17.8	754.8	627.4	127.46	5.922		
14,700.0	7,272.0	14,868.9	7,472.0	132.4	0.0	105.36	7,160.8	17.0	754.8	625.7	129.13	5.845		
14,800.0	7,272.0	14,968.9	7,472.0	134.2	0.0	105.36	7,260.8	16.2	754.8	624.0	130.81	5.770		
14,900.0	7,272.0	15,068.9	7,472.0	135.9	0.0	105.36	7,360.8	15.3	754.8	622.3	132.49	5.697		
15,000.0	7,272.0	15,168.9	7,472.0	137.6	0.0	105.36	7,460.8	14.5	754.8	620.7	134.17	5.626		
15,100.0	7,272.0	15,268.9	7,472.0	139.3	0.0	105.36	7,560.8	13.7	754.8	619.0	135.84	5.557		
15,200.0	7,272.0	15,368.9	7,472.0	141.1	0.0	105.36	7,660.8	12.9	754.8	617.3	137.52	5.489		
15,300.0	7,272.0	15,468.9	7,472.0	142.8	0.0	105.36	7,760.8	12.0	754.8	615.6	139.21	5.422		
15,400.0	7,272.0	15,568.9	7,472.0	144.5	0.0	105.36	7,860.8	11.2	754.8	613.9	140.89	5.358		
15,500.0	7,272.0	15,668.9	7,472.0	146.3	0.0	105.36	7,960.8	10.4	754.8	612.3	142.57	5.294		

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 19-18-1NBH
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 19-18-1NBH	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		
15,600.0	7,272.0	15,768.9	7,472.0	148.0	0.0	105.36	8,060.8	9.6	754.8	610.6	144.25	5.233		
15,700.0	7,272.0	15,868.9	7,472.0	149.7	0.0	105.36	8,160.8	8.7	754.8	608.9	145.94	5.172		
15,800.0	7,272.0	15,968.9	7,472.0	151.4	0.0	105.36	8,260.8	7.9	754.8	607.2	147.62	5.113		
15,900.0	7,272.0	16,068.9	7,472.0	153.2	0.0	105.36	8,360.8	7.1	754.8	605.5	149.31	5.056		
16,000.0	7,272.0	16,168.9	7,472.0	154.9	0.0	105.36	8,460.8	6.2	754.8	603.8	150.99	4.999		
16,100.0	7,272.0	16,268.9	7,472.0	156.7	0.0	105.36	8,560.7	5.4	754.8	602.1	152.68	4.944		
16,200.0	7,272.0	16,368.9	7,472.0	158.4	0.0	105.36	8,660.7	4.6	754.8	600.5	154.37	4.890		
16,300.0	7,272.0	16,468.9	7,472.0	160.1	0.0	105.36	8,760.7	3.8	754.8	598.8	156.05	4.837		
16,400.0	7,272.0	16,568.9	7,472.0	161.9	0.0	105.36	8,860.7	2.9	754.8	597.1	157.74	4.785		
16,500.0	7,272.0	16,668.9	7,472.0	163.6	0.0	105.36	8,960.7	2.1	754.8	595.4	159.43	4.734		
16,600.0	7,272.0	16,768.9	7,472.0	165.3	0.0	105.36	9,060.7	1.3	754.8	593.7	161.12	4.685		
16,700.0	7,272.0	16,868.9	7,472.0	167.1	0.0	105.36	9,160.7	0.5	754.8	592.0	162.81	4.636		
16,800.0	7,272.0	16,968.9	7,472.0	168.8	0.0	105.36	9,260.7	-0.4	754.8	590.3	164.50	4.589		
16,900.0	7,272.0	17,068.9	7,472.0	170.6	0.0	105.36	9,360.7	-1.2	754.8	588.6	166.19	4.542		
17,000.0	7,272.0	17,168.9	7,472.0	172.3	0.0	105.36	9,460.7	-2.0	754.8	586.9	167.88	4.496		
17,100.0	7,272.0	17,268.9	7,472.0	174.0	0.0	105.36	9,560.7	-2.8	754.8	585.3	169.58	4.451		
17,200.0	7,272.0	17,368.9	7,472.0	175.8	0.0	105.36	9,660.7	-3.7	754.8	583.6	171.27	4.407		
17,300.0	7,272.0	17,468.9	7,472.0	177.5	0.0	105.36	9,760.7	-4.5	754.8	581.9	172.96	4.364		
17,400.0	7,272.0	17,568.9	7,472.0	179.3	0.0	105.36	9,860.7	-5.3	754.8	580.2	174.66	4.322		
17,429.8	7,272.0	17,598.7	7,472.0	179.8	0.0	105.36	9,890.5	-5.6	754.8	579.7	175.16	4.309 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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	89.70	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	108.214		
200.0	200.0	200.0	200.0	1.0	0.0	89.70	0.2	30.0	30.0	29.2	0.80	37.573		
300.0	300.0	300.0	300.0	1.5	0.0	89.70	0.2	30.0	30.0	28.8	1.22	24.482		
400.0	400.0	400.0	400.0	1.9	0.0	89.70	0.2	30.0	30.0	28.4	1.62	18.524		
500.0	500.0	500.0	500.0	2.3	0.0	89.70	0.2	30.0	30.0	28.0	2.00	14.997		
600.0	600.0	600.0	600.0	2.7	0.0	89.70	0.2	30.0	30.0	27.6	2.37	12.635		
700.0	700.0	700.0	700.0	3.1	0.0	89.70	0.2	30.0	30.0	27.2	2.74	10.932		
800.0	800.0	800.0	800.0	3.5	0.0	89.70	0.2	30.0	30.0	26.9	3.11	9.641		
900.0	900.0	900.0	900.0	3.9	0.0	89.70	0.2	30.0	30.0	26.5	3.47	8.628 CC, ES		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	0.0	-143.74	0.2	30.0	31.4	27.5	3.89	8.067		
1,100.0	1,099.8	1,099.8	1,099.8	5.1	0.0	-148.66	0.2	30.0	35.7	30.9	4.83	7.400		
1,200.0	1,199.5	1,200.3	1,200.3	5.8	0.0	-152.71	-1.5	29.3	42.4	36.8	5.66	7.494		
1,300.0	1,298.7	1,300.9	1,300.7	6.3	0.0	-154.03	-6.3	27.3	50.3	44.1	6.18	8.137		
1,400.0	1,397.8	1,401.3	1,400.8	6.6	0.0	-152.87	-14.3	24.0	57.4	50.9	6.43	8.916		
1,500.0	1,496.9	1,501.1	1,500.1	6.9	0.0	-151.44	-22.7	20.5	64.1	57.3	6.73	9.523		
1,600.0	1,596.1	1,600.8	1,599.5	7.2	0.0	-150.29	-31.2	17.0	70.8	63.8	7.03	10.063		
1,700.0	1,695.2	1,700.6	1,698.8	7.5	0.0	-149.33	-39.7	13.4	77.5	70.2	7.35	10.546		
1,800.0	1,794.3	1,800.4	1,798.1	7.8	0.0	-148.53	-48.2	9.9	84.3	76.6	7.68	10.977		
1,900.0	1,893.4	1,900.1	1,897.5	8.1	0.0	-147.84	-56.7	6.4	91.1	83.1	8.02	11.364		
2,000.0	1,992.5	1,999.9	1,996.8	8.4	0.0	-147.26	-65.2	2.9	97.9	89.5	8.36	11.712		
2,100.0	2,091.6	2,099.7	2,096.2	8.8	0.0	-146.74	-73.7	-0.7	104.7	96.0	8.71	12.026		
2,200.0	2,190.8	2,199.4	2,195.5	9.1	0.0	-146.30	-82.2	-4.2	111.5	102.5	9.06	12.310		
2,300.0	2,289.9	2,299.2	2,294.8	9.4	0.0	-145.90	-90.7	-7.7	118.3	108.9	9.42	12.568		
2,400.0	2,389.0	2,399.0	2,394.2	9.8	0.0	-145.54	-99.2	-11.2	125.2	115.4	9.78	12.803		
2,500.0	2,488.1	2,498.7	2,493.5	10.1	0.0	-145.23	-107.7	-14.7	132.0	121.9	10.14	13.018		
2,600.0	2,587.2	2,598.5	2,592.9	10.5	0.0	-144.94	-116.2	-18.3	138.8	128.3	10.51	13.214		
2,700.0	2,686.3	2,698.3	2,692.2	10.9	0.0	-144.68	-124.7	-21.8	145.7	134.8	10.87	13.395		
2,800.0	2,785.4	2,798.0	2,791.5	11.2	0.0	-144.44	-133.2	-25.3	152.5	141.3	11.25	13.562		
2,900.0	2,884.6	2,897.8	2,890.9	11.6	0.0	-144.23	-141.7	-28.8	159.3	147.7	11.62	13.716		
3,000.0	2,983.7	2,997.5	2,990.2	12.0	0.0	-144.03	-150.2	-32.4	166.2	154.2	11.99	13.858		
3,100.0	3,082.8	3,097.3	3,089.5	12.4	0.0	-143.85	-158.7	-35.9	173.0	160.7	12.37	13.991		
3,200.0	3,181.9	3,197.1	3,188.9	12.8	0.0	-143.68	-167.2	-39.4	179.9	167.1	12.74	14.114		
3,300.0	3,281.0	3,296.8	3,288.2	13.2	0.0	-143.52	-175.7	-42.9	186.7	173.6	13.12	14.229		
3,400.0	3,380.1	3,396.6	3,387.6	13.5	0.0	-143.38	-184.2	-46.4	193.6	180.1	13.50	14.336		
3,500.0	3,479.3	3,496.4	3,486.9	13.9	0.0	-143.24	-192.7	-50.0	200.4	186.5	13.88	14.437		
3,600.0	3,578.4	3,596.1	3,586.2	14.4	0.0	-143.12	-201.2	-53.5	207.3	193.0	14.26	14.531		
3,700.0	3,677.5	3,695.9	3,685.6	14.8	0.0	-143.00	-209.7	-57.0	214.1	199.5	14.65	14.620		
3,800.0	3,776.6	3,795.7	3,784.9	15.2	0.0	-142.89	-218.2	-60.5	221.0	206.0	15.03	14.703		
3,900.0	3,875.7	3,895.4	3,884.3	15.6	0.0	-142.78	-226.7	-64.1	227.8	212.4	15.41	14.782		
4,000.0	3,974.8	3,995.2	3,983.6	16.0	0.0	-142.68	-235.2	-67.6	234.7	218.9	15.80	14.856		
4,100.0	4,074.0	4,094.9	4,082.9	16.4	0.0	-142.59	-243.7	-71.1	241.6	225.4	16.18	14.926		
4,200.0	4,173.1	4,194.7	4,182.3	16.8	0.0	-142.50	-252.2	-74.6	248.4	231.8	16.57	14.993		
4,300.0	4,272.2	4,294.5	4,281.6	17.2	0.0	-142.42	-260.7	-78.1	255.3	238.3	16.95	15.056		
4,400.0	4,371.3	4,394.2	4,381.0	17.6	0.0	-142.34	-269.2	-81.7	262.1	244.8	17.34	15.115		
4,500.0	4,470.4	4,494.0	4,480.3	18.1	0.0	-142.27	-277.7	-85.2	269.0	251.3	17.73	15.172		
4,600.0	4,569.5	4,593.8	4,579.6	18.5	0.0	-142.20	-286.2	-88.7	275.8	257.7	18.12	15.226		
4,700.0	4,668.7	4,693.5	4,679.0	18.9	0.0	-142.13	-294.7	-92.2	282.7	264.2	18.50	15.278		
4,800.0	4,767.8	4,793.3	4,778.3	19.3	0.0	-142.07	-303.2	-95.8	289.6	270.7	18.89	15.327		
4,900.0	4,866.9	4,893.1	4,877.7	19.7	0.0	-142.01	-311.7	-99.3	296.4	277.1	19.28	15.374		
5,000.0	4,966.0	4,992.8	4,977.0	20.2	0.0	-141.95	-320.2	-102.8	303.3	283.6	19.67	15.418		
5,100.0	5,065.1	5,092.6	5,076.3	20.6	0.0	-141.89	-328.7	-106.3	310.1	290.1	20.06	15.461		

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 19-18-1NBH
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 19-18-1NBH	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								
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	5,164.2	5,192.4	5,175.7	21.0	0.0	-141.84	-337.2	-109.8	317.0	296.5	20.45	15.502		
5,300.0	5,263.3	5,292.1	5,275.0	21.4	0.0	-141.79	-345.7	-113.4	323.9	303.0	20.84	15.542		
5,400.0	5,362.5	5,391.9	5,374.3	21.8	0.0	-141.74	-354.2	-116.9	330.7	309.5	21.23	15.579		
5,500.0	5,461.6	5,491.6	5,473.7	22.3	0.0	-141.69	-362.7	-120.4	337.6	316.0	21.62	15.615		
5,600.0	5,560.7	5,591.4	5,573.0	22.7	0.0	-141.65	-371.2	-123.9	344.4	322.4	22.01	15.650		
5,700.0	5,659.8	5,691.2	5,672.4	23.1	0.0	-141.60	-379.7	-127.5	351.3	328.9	22.40	15.683		
5,800.0	5,758.9	5,790.9	5,771.7	23.5	0.0	-141.56	-388.2	-131.0	358.2	335.4	22.79	15.716		
5,900.0	5,858.0	5,890.7	5,871.0	24.0	0.0	-141.52	-396.7	-134.5	365.0	341.8	23.18	15.746		
6,000.0	5,957.2	5,990.5	5,970.4	24.4	0.0	-141.48	-405.2	-138.0	371.9	348.3	23.57	15.776		
6,100.0	6,056.3	6,090.2	6,069.7	24.8	0.0	-141.45	-413.6	-141.5	378.7	354.8	23.96	15.805		
6,200.0	6,155.4	6,190.0	6,169.1	25.2	0.0	-141.41	-422.1	-145.1	385.6	361.3	24.36	15.833		
6,300.0	6,254.5	6,289.8	6,268.4	25.6	0.0	-141.37	-430.6	-148.6	392.5	367.7	24.75	15.859		
6,400.0	6,353.6	6,389.5	6,367.7	26.1	0.0	-141.34	-439.1	-152.1	399.3	374.2	25.14	15.885		
6,500.0	6,452.7	6,489.3	6,467.1	26.5	0.0	-141.31	-447.6	-155.6	406.2	380.7	25.53	15.910		
6,600.0	6,551.9	6,589.0	6,566.4	26.9	0.0	-141.28	-456.1	-159.2	413.1	387.1	25.92	15.934		
6,700.0	6,651.0	6,689.1	6,666.1	27.3	0.0	-141.40	-463.6	-162.7	419.9	393.6	26.31	15.959		
6,800.0	6,750.3	6,788.6	6,765.3	27.8	0.0	140.57	-457.3	-166.3	426.8	400.2	26.61	16.037		
6,900.0	6,848.2	6,887.1	6,860.8	28.1	0.0	110.10	-434.3	-170.0	433.6	406.8	26.85	16.152		
7,000.0	6,941.6	6,984.6	6,950.1	28.5	0.0	100.40	-395.7	-173.5	440.3	413.3	27.00	16.306		
7,100.0	7,027.7	7,081.2	7,031.0	28.7	0.0	95.50	-343.1	-176.9	446.5	419.4	27.11	16.469		
7,200.0	7,104.0	7,177.0	7,101.3	28.9	0.0	92.44	-278.3	-180.0	452.0	424.8	27.20	16.618		
7,300.0	7,168.0	7,272.2	7,159.5	29.0	0.0	90.37	-203.2	-182.7	456.7	429.4	27.29	16.733		
7,400.0	7,217.9	7,366.9	7,204.3	29.1	0.0	88.96	-119.9	-185.0	460.3	432.9	27.41	16.793		
7,500.0	7,252.2	7,461.2	7,234.7	29.0	0.0	88.06	-30.8	-186.8	462.8	435.3	27.58	16.782		
7,600.0	7,269.7	7,555.3	7,250.1	29.0	0.0	87.60	61.9	-188.2	464.2	436.3	27.81	16.690		
7,700.0	7,272.0	7,652.2	7,252.0	29.1	0.0	87.53	158.9	-189.0	464.3	436.2	28.11	16.520		
7,800.0	7,272.0	7,752.2	7,252.0	29.4	0.0	87.53	258.9	-189.9	464.3	435.8	28.51	16.287		
7,900.0	7,272.0	7,852.2	7,252.0	29.8	0.0	87.53	358.8	-190.7	464.3	435.3	29.02	16.003		
8,000.0	7,272.0	7,952.2	7,252.0	30.4	0.0	87.53	458.8	-191.5	464.3	434.7	29.62	15.677		
8,100.0	7,272.0	8,052.2	7,252.0	31.1	0.0	87.53	558.8	-192.3	464.3	434.0	30.31	15.317		
8,200.0	7,272.0	8,152.2	7,252.0	31.8	0.0	87.53	658.8	-193.2	464.3	433.2	31.09	14.934		
8,300.0	7,272.0	8,252.2	7,252.0	32.7	0.0	87.53	758.8	-194.0	464.3	432.4	31.95	14.533		
8,400.0	7,272.0	8,352.2	7,252.0	33.6	0.0	87.53	858.8	-194.8	464.3	431.5	32.88	14.122		
8,500.0	7,272.0	8,452.2	7,252.0	34.6	0.0	87.53	958.8	-195.7	464.3	430.5	33.88	13.706		
8,600.0	7,272.0	8,552.2	7,252.0	35.7	0.0	87.53	1,058.8	-196.5	464.3	429.4	34.93	13.292		
8,700.0	7,272.0	8,652.2	7,252.0	36.8	0.0	87.53	1,158.8	-197.3	464.3	428.3	36.05	12.881		
8,800.0	7,272.0	8,752.2	7,252.0	37.9	0.0	87.53	1,258.8	-198.1	464.3	427.1	37.21	12.479		
8,900.0	7,272.0	8,852.2	7,252.0	39.1	0.0	87.53	1,358.8	-199.0	464.3	425.9	38.42	12.086		
9,000.0	7,272.0	8,952.2	7,252.0	40.4	0.0	87.53	1,458.8	-199.8	464.3	424.7	39.67	11.705		
9,100.0	7,272.0	9,052.2	7,252.0	41.7	0.0	87.53	1,558.8	-200.6	464.3	423.4	40.96	11.337		
9,200.0	7,272.0	9,152.2	7,252.0	43.0	0.0	87.53	1,658.8	-201.4	464.3	422.1	42.28	10.982		
9,300.0	7,272.0	9,252.2	7,252.0	44.3	0.0	87.53	1,758.8	-202.3	464.3	420.7	43.63	10.641		
9,400.0	7,272.0	9,352.2	7,252.0	45.7	0.0	87.53	1,858.8	-203.1	464.3	419.3	45.02	10.315		
9,500.0	7,272.0	9,452.2	7,252.0	47.1	0.0	87.53	1,958.8	-203.9	464.3	417.9	46.43	10.002		
9,600.0	7,272.0	9,552.2	7,252.0	48.5	0.0	87.53	2,058.8	-204.8	464.3	416.5	47.86	9.702		
9,700.0	7,272.0	9,652.2	7,252.0	49.9	0.0	87.53	2,158.8	-205.6	464.3	415.0	49.31	9.416		
9,800.0	7,272.0	9,752.2	7,252.0	51.4	0.0	87.53	2,258.8	-206.4	464.3	413.5	50.78	9.143		
9,900.0	7,272.0	9,852.2	7,252.0	52.9	0.0	87.53	2,358.8	-207.2	464.3	412.1	52.28	8.882		
10,000.0	7,272.0	9,952.2	7,252.0	54.4	0.0	87.53	2,458.8	-208.1	464.3	410.6	53.78	8.633		
10,100.0	7,272.0	10,052.2	7,252.0	55.9	0.0	87.53	2,558.8	-208.9	464.3	409.0	55.31	8.396		
10,200.0	7,272.0	10,152.2	7,252.0	57.4	0.0	87.53	2,658.8	-209.7	464.3	407.5	56.84	8.169		
10,300.0	7,272.0	10,252.2	7,252.0	59.0	0.0	87.53	2,758.8	-210.5	464.3	405.9	58.39	7.952		

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 19-18-1NBH
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 19-18-1NBH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
10,400.0	7,272.0	10,352.2	7,252.0	60.5	0.0	87.53	2,858.8	-211.4	464.3	404.4	59.95	7.745		
10,500.0	7,272.0	10,452.2	7,252.0	62.1	0.0	87.53	2,958.8	-212.2	464.3	402.8	61.53	7.547		
10,600.0	7,272.0	10,552.2	7,252.0	63.7	0.0	87.53	3,058.8	-213.0	464.3	401.2	63.11	7.358		
10,700.0	7,272.0	10,652.2	7,252.0	65.2	0.0	87.53	3,158.8	-213.8	464.3	399.6	64.70	7.177		
10,800.0	7,272.0	10,752.2	7,252.0	66.8	0.0	87.53	3,258.7	-214.7	464.3	398.0	66.30	7.003		
10,900.0	7,272.0	10,852.2	7,252.0	68.4	0.0	87.53	3,358.7	-215.5	464.3	396.4	67.91	6.837		
11,000.0	7,272.0	10,952.2	7,252.0	70.1	0.0	87.53	3,458.7	-216.3	464.3	394.8	69.53	6.678		
11,100.0	7,272.0	11,052.2	7,252.0	71.7	0.0	87.53	3,558.7	-217.2	464.3	393.2	71.15	6.526		
11,200.0	7,272.0	11,152.2	7,252.0	73.3	0.0	87.53	3,658.7	-218.0	464.3	391.6	72.78	6.380		
11,300.0	7,272.0	11,252.2	7,252.0	74.9	0.0	87.53	3,758.7	-218.8	464.3	389.9	74.42	6.240		
11,400.0	7,272.0	11,352.2	7,252.0	76.6	0.0	87.53	3,858.7	-219.6	464.3	388.3	76.06	6.105		
11,500.0	7,272.0	11,452.2	7,252.0	78.2	0.0	87.53	3,958.7	-220.5	464.3	386.6	77.71	5.975		
11,600.0	7,272.0	11,552.2	7,252.0	79.8	0.0	87.53	4,058.7	-221.3	464.3	385.0	79.36	5.851		
11,700.0	7,272.0	11,652.2	7,252.0	81.5	0.0	87.53	4,158.7	-222.1	464.3	383.3	81.02	5.731		
11,800.0	7,272.0	11,752.2	7,252.0	83.2	0.0	87.53	4,258.7	-222.9	464.3	381.7	82.68	5.616		
11,900.0	7,272.0	11,852.2	7,252.0	84.8	0.0	87.53	4,358.7	-223.8	464.3	380.0	84.34	5.505		
12,000.0	7,272.0	11,952.2	7,252.0	86.5	0.0	87.53	4,458.7	-224.6	464.3	378.3	86.01	5.398		
12,100.0	7,272.0	12,052.2	7,252.0	88.2	0.0	87.53	4,558.7	-225.4	464.3	376.6	87.69	5.295		
12,200.0	7,272.0	12,152.2	7,252.0	89.8	0.0	87.53	4,658.7	-226.3	464.3	375.0	89.36	5.196		
12,300.0	7,272.0	12,252.2	7,252.0	91.5	0.0	87.53	4,758.7	-227.1	464.3	373.3	91.04	5.100		
12,400.0	7,272.0	12,352.2	7,252.0	93.2	0.0	87.53	4,858.7	-227.9	464.3	371.6	92.73	5.008		
12,500.0	7,272.0	12,452.2	7,252.0	94.9	0.0	87.53	4,958.7	-228.7	464.3	369.9	94.41	4.918		
12,600.0	7,272.0	12,552.2	7,252.0	96.5	0.0	87.53	5,058.7	-229.6	464.3	368.2	96.10	4.832		
12,700.0	7,272.0	12,652.2	7,252.0	98.2	0.0	87.53	5,158.7	-230.4	464.3	366.5	97.79	4.748		
12,800.0	7,272.0	12,752.2	7,252.0	99.9	0.0	87.53	5,258.7	-231.2	464.3	364.8	99.49	4.667		
12,900.0	7,272.0	12,852.2	7,252.0	101.6	0.0	87.53	5,358.7	-232.0	464.3	363.1	101.18	4.589		
13,000.0	7,272.0	12,952.2	7,252.0	103.3	0.0	87.53	5,458.7	-232.9	464.3	361.5	102.88	4.513		
13,100.0	7,272.0	13,052.2	7,252.0	105.0	0.0	87.53	5,558.7	-233.7	464.3	359.7	104.58	4.440		
13,200.0	7,272.0	13,152.2	7,252.0	106.7	0.0	87.53	5,658.7	-234.5	464.3	358.0	106.29	4.369		
13,300.0	7,272.0	13,252.2	7,252.0	108.4	0.0	87.53	5,758.7	-235.4	464.3	356.3	107.99	4.300		
13,400.0	7,272.0	13,352.2	7,252.0	110.1	0.0	87.53	5,858.7	-236.2	464.3	354.6	109.70	4.233		
13,500.0	7,272.0	13,452.2	7,252.0	111.8	0.0	87.53	5,958.7	-237.0	464.3	352.9	111.41	4.168		
13,600.0	7,272.0	13,552.2	7,252.0	113.5	0.0	87.53	6,058.7	-237.8	464.3	351.2	113.12	4.105		
13,700.0	7,272.0	13,652.2	7,252.0	115.2	0.0	87.53	6,158.6	-238.7	464.3	349.5	114.83	4.044		
13,800.0	7,272.0	13,752.2	7,252.0	117.0	0.0	87.53	6,258.6	-239.5	464.3	347.8	116.54	3.984		
13,900.0	7,272.0	13,852.2	7,252.0	118.7	0.0	87.53	6,358.6	-240.3	464.3	346.1	118.26	3.926		
14,000.0	7,272.0	13,952.2	7,252.0	120.4	0.0	87.53	6,458.6	-241.1	464.3	344.4	119.98	3.870		
14,100.0	7,272.0	14,052.2	7,252.0	122.1	0.0	87.53	6,558.6	-242.0	464.3	342.6	121.69	3.816		
14,200.0	7,272.0	14,152.2	7,252.0	123.8	0.0	87.53	6,658.6	-242.8	464.3	340.9	123.41	3.762		
14,300.0	7,272.0	14,252.2	7,252.0	125.5	0.0	87.53	6,758.6	-243.6	464.3	339.2	125.13	3.711		
14,400.0	7,272.0	14,352.2	7,252.0	127.3	0.0	87.53	6,858.6	-244.5	464.3	337.5	126.86	3.660		
14,500.0	7,272.0	14,452.2	7,252.0	129.0	0.0	87.53	6,958.6	-245.3	464.3	335.8	128.58	3.611		
14,600.0	7,272.0	14,552.2	7,252.0	130.7	0.0	87.53	7,058.6	-246.1	464.3	334.0	130.30	3.564		
14,700.0	7,272.0	14,652.2	7,252.0	132.4	0.0	87.53	7,158.6	-246.9	464.3	332.3	132.03	3.517		
14,800.0	7,272.0	14,752.2	7,252.0	134.2	0.0	87.53	7,258.6	-247.8	464.3	330.6	133.75	3.472		
14,900.0	7,272.0	14,852.2	7,252.0	135.9	0.0	87.53	7,358.6	-248.6	464.3	328.9	135.48	3.427		
15,000.0	7,272.0	14,952.2	7,252.0	137.6	0.0	87.53	7,458.6	-249.4	464.3	327.1	137.21	3.384		
15,100.0	7,272.0	15,052.2	7,252.0	139.3	0.0	87.53	7,558.6	-250.2	464.3	325.4	138.94	3.342		
15,200.0	7,272.0	15,152.2	7,252.0	141.1	0.0	87.53	7,658.6	-251.1	464.3	323.7	140.67	3.301		
15,300.0	7,272.0	15,252.2	7,252.0	142.8	0.0	87.53	7,758.6	-251.9	464.3	321.9	142.40	3.261		
15,400.0	7,272.0	15,352.2	7,252.0	144.5	0.0	87.53	7,858.6	-252.7	464.3	320.2	144.13	3.222		
15,500.0	7,272.0	15,452.2	7,252.0	146.3	0.0	87.53	7,958.6	-253.5	464.3	318.5	145.86	3.183		

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 19-18-1NBH
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 19-18-1NBH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-2NXH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
15,600.0	7,272.0	15,552.2	7,252.0	148.0	0.0	87.53	8,058.6	-254.4	464.3	316.7	147.59	3.146		
15,700.0	7,272.0	15,652.2	7,252.0	149.7	0.0	87.53	8,158.6	-255.2	464.3	315.0	149.33	3.109		
15,800.0	7,272.0	15,752.2	7,252.0	151.4	0.0	87.53	8,258.6	-256.0	464.3	313.3	151.06	3.074		
15,900.0	7,272.0	15,852.2	7,252.0	153.2	0.0	87.53	8,358.6	-256.9	464.3	311.5	152.80	3.039		
16,000.0	7,272.0	15,952.2	7,252.0	154.9	0.0	87.53	8,458.6	-257.7	464.3	309.8	154.53	3.005		
16,100.0	7,272.0	16,052.2	7,252.0	156.7	0.0	87.53	8,558.6	-258.5	464.3	308.1	156.27	2.971		
16,200.0	7,272.0	16,152.2	7,252.0	158.4	0.0	87.53	8,658.6	-259.3	464.3	306.3	158.01	2.939		
16,300.0	7,272.0	16,252.2	7,252.0	160.1	0.0	87.53	8,758.6	-260.2	464.3	304.6	159.75	2.907		
16,400.0	7,272.0	16,352.2	7,252.0	161.9	0.0	87.53	8,858.6	-261.0	464.3	302.9	161.48	2.875		
16,500.0	7,272.0	16,452.2	7,252.0	163.6	0.0	87.53	8,958.6	-261.8	464.3	301.1	163.22	2.845		
16,600.0	7,272.0	16,552.2	7,252.0	165.3	0.0	87.53	9,058.5	-262.6	464.3	299.4	164.96	2.815		
16,700.0	7,272.0	16,652.2	7,252.0	167.1	0.0	87.53	9,158.5	-263.5	464.3	297.6	166.70	2.785		
16,800.0	7,272.0	16,752.2	7,252.0	168.8	0.0	87.53	9,258.5	-264.3	464.3	295.9	168.44	2.757		
16,900.0	7,272.0	16,852.2	7,252.0	170.6	0.0	87.53	9,358.5	-265.1	464.3	294.2	170.18	2.728		
17,000.0	7,272.0	16,952.2	7,252.0	172.3	0.0	87.53	9,458.5	-266.0	464.3	292.4	171.92	2.701		
17,100.0	7,272.0	17,052.2	7,252.0	174.0	0.0	87.53	9,558.5	-266.8	464.3	290.7	173.67	2.674		
17,200.0	7,272.0	17,152.2	7,252.0	175.8	0.0	87.53	9,658.5	-267.6	464.3	288.9	175.41	2.647		
17,300.0	7,272.0	17,252.2	7,252.0	177.5	0.0	87.53	9,758.5	-268.4	464.3	287.2	177.15	2.621		
17,400.0	7,272.0	17,352.2	7,252.0	179.3	0.0	87.53	9,858.5	-269.3	464.3	285.4	178.89	2.596		
17,429.8	7,272.0	17,382.1	7,252.0	179.8	0.0	87.53	9,888.4	-269.5	464.3	284.9	179.41	2.588 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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		
0.0	0.0	0.0	0.0	0.0	0.0	89.68	0.4	75.0	75.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.68	0.4	75.0	75.0	74.7	0.28	270.618		
200.0	200.0	200.0	200.0	1.0	0.0	89.68	0.4	75.0	75.0	74.2	0.80	93.963		
300.0	300.0	300.0	300.0	1.5	0.0	89.68	0.4	75.0	75.0	73.8	1.22	61.227		
400.0	400.0	400.0	400.0	1.9	0.0	89.68	0.4	75.0	75.0	73.4	1.62	46.326		
500.0	500.0	500.0	500.0	2.3	0.0	89.68	0.4	75.0	75.0	73.0	2.00	37.506		
600.0	600.0	600.0	600.0	2.7	0.0	89.68	0.4	75.0	75.0	72.6	2.37	31.599		
700.0	700.0	700.0	700.0	3.1	0.0	89.68	0.4	75.0	75.0	72.2	2.74	27.340		
800.0	800.0	800.0	800.0	3.5	0.0	89.68	0.4	75.0	75.0	71.9	3.11	24.113		
900.0	900.0	900.0	900.0	3.9	0.0	89.68	0.4	75.0	75.0	71.5	3.47	21.578 CC, ES		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	0.0	-142.59	0.4	75.0	76.4	72.5	3.87	19.717		
1,100.0	1,099.8	1,099.8	1,099.8	5.1	0.0	-144.80	0.4	75.0	80.6	75.8	4.76	16.924		
1,200.0	1,199.5	1,199.5	1,199.5	5.8	0.0	-148.00	0.4	75.0	87.8	82.3	5.58	15.754		
1,300.0	1,298.7	1,296.3	1,296.3	6.3	0.0	-150.91	-0.5	76.3	99.5	93.4	6.13	16.244		
1,400.0	1,397.8	1,392.6	1,392.5	6.6	0.0	-152.33	-3.3	80.3	114.8	108.3	6.41	17.890		
1,500.0	1,496.9	1,488.2	1,487.7	6.9	0.0	-152.39	-7.8	86.9	132.3	125.6	6.72	19.705		
1,600.0	1,596.1	1,582.9	1,581.7	7.2	0.0	-151.57	-14.1	96.0	152.2	145.2	7.00	21.724		
1,700.0	1,695.2	1,679.6	1,677.5	7.5	0.0	-150.38	-21.9	107.1	173.7	166.4	7.31	23.771		
1,800.0	1,794.3	1,777.2	1,774.1	7.8	0.0	-149.43	-29.7	118.4	195.3	187.7	7.62	25.622		
1,900.0	1,893.4	1,874.8	1,870.7	8.1	0.0	-148.66	-37.5	129.8	217.0	209.1	7.95	27.301		
2,000.0	1,992.5	1,972.4	1,967.3	8.4	0.0	-148.04	-45.4	141.1	238.7	230.4	8.28	28.826		
2,100.0	2,091.6	2,070.0	2,064.0	8.8	0.0	-147.51	-53.2	152.4	260.5	251.8	8.62	30.216		
2,200.0	2,190.8	2,167.5	2,160.6	9.1	0.0	-147.07	-61.1	163.7	282.2	273.2	8.96	31.486		
2,300.0	2,289.9	2,265.1	2,257.2	9.4	0.0	-146.69	-68.9	175.0	304.0	294.7	9.31	32.648		
2,400.0	2,389.0	2,362.7	2,353.8	9.8	0.0	-146.37	-76.7	186.4	325.8	316.1	9.66	33.715		
2,500.0	2,488.1	2,460.3	2,450.4	10.1	0.0	-146.08	-84.6	197.7	347.5	337.5	10.02	34.698		
2,600.0	2,587.2	2,557.9	2,547.0	10.5	0.0	-145.83	-92.4	209.0	369.3	359.0	10.37	35.605		
2,700.0	2,686.3	2,655.5	2,643.6	10.9	0.0	-145.60	-100.3	220.3	391.1	380.4	10.73	36.444		
2,800.0	2,785.4	2,753.0	2,740.2	11.2	0.0	-145.40	-108.1	231.6	412.9	401.8	11.09	37.223		
2,900.0	2,884.6	2,850.6	2,836.8	11.6	0.0	-145.22	-115.9	242.9	434.7	423.3	11.46	37.946		
3,000.0	2,983.7	2,948.2	2,933.4	12.0	0.0	-145.06	-123.8	254.3	456.6	444.7	11.82	38.620		
3,100.0	3,082.8	3,045.8	3,030.0	12.4	0.0	-144.91	-131.6	265.6	478.4	466.2	12.19	39.248		
3,200.0	3,181.9	3,143.4	3,126.6	12.8	0.0	-144.78	-139.5	276.9	500.2	487.6	12.56	39.837		
3,300.0	3,281.0	3,241.0	3,223.3	13.2	0.0	-144.65	-147.3	288.2	522.0	509.1	12.93	40.388		
3,400.0	3,380.1	3,338.5	3,319.9	13.5	0.0	-144.54	-155.1	299.5	543.8	530.5	13.30	40.905		
3,500.0	3,479.3	3,436.1	3,416.5	13.9	0.0	-144.43	-163.0	310.9	565.7	552.0	13.67	41.391		
3,600.0	3,578.4	3,533.7	3,513.1	14.4	0.0	-144.33	-170.8	322.2	587.5	573.5	14.04	41.849		
3,700.0	3,677.5	3,631.3	3,609.7	14.8	0.0	-144.24	-178.7	333.5	609.3	594.9	14.41	42.281		
3,800.0	3,776.6	3,728.9	3,706.3	15.2	0.0	-144.16	-186.5	344.8	631.1	616.4	14.78	42.689		
3,900.0	3,875.7	3,826.5	3,802.9	15.6	0.0	-144.08	-194.3	356.1	653.0	637.8	15.16	43.075		
4,000.0	3,974.8	3,924.1	3,899.5	16.0	0.0	-144.01	-202.2	367.5	674.8	659.3	15.53	43.440		
4,100.0	4,074.0	4,021.6	3,996.1	16.4	0.0	-143.94	-210.0	378.8	696.6	680.7	15.91	43.787		
4,200.0	4,173.1	4,119.2	4,092.7	16.8	0.0	-143.87	-217.8	390.1	718.5	702.2	16.29	44.116		
4,300.0	4,272.2	4,216.8	4,189.3	17.2	0.0	-143.81	-225.7	401.4	740.3	723.6	16.66	44.429		
4,400.0	4,371.3	4,314.4	4,285.9	17.6	0.0	-143.75	-233.5	412.7	762.1	745.1	17.04	44.727		
4,500.0	4,470.4	4,412.0	4,382.5	18.1	0.0	-143.70	-241.4	424.0	784.0	766.6	17.42	45.011		
4,600.0	4,569.5	4,509.6	4,479.2	18.5	0.0	-143.65	-249.2	435.4	805.8	788.0	17.80	45.281		
4,700.0	4,668.7	4,607.1	4,575.8	18.9	0.0	-143.60	-257.0	446.7	827.7	809.5	18.17	45.539		
4,800.0	4,767.8	4,704.7	4,672.4	19.3	0.0	-143.55	-264.9	458.0	849.5	830.9	18.55	45.786		
4,900.0	4,866.9	4,802.3	4,769.0	19.7	0.0	-143.51	-272.7	469.3	871.3	852.4	18.93	46.022		
5,000.0	4,966.0	4,899.9	4,865.6	20.2	0.0	-143.47	-280.6	480.6	893.2	873.9	19.31	46.248		
5,100.0	5,065.1	4,997.5	4,962.2	20.6	0.0	-143.43	-288.4	492.0	915.0	895.3	19.69	46.465		

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 19-18-1NBH
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 19-18-1NBH	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	5,164.2	5,095.1	5,058.8	21.0	0.0	-143.39	-296.2	503.3	936.9	916.8	20.07	46.672		
5,300.0	5,263.3	5,192.6	5,155.4	21.4	0.0	-143.36	-304.1	514.6	958.7	938.2	20.45	46.872		
5,400.0	5,362.5	5,290.2	5,252.0	21.8	0.0	-143.32	-311.9	525.9	980.5	959.7	20.83	47.063		
5,500.0	5,461.6	5,387.8	5,348.6	22.3	0.0	-143.29	-319.8	537.2	1,002.4	981.2	21.22	47.247		
5,600.0	5,560.7	5,485.4	5,445.2	22.7	0.0	-143.26	-327.6	548.5	1,024.2	1,002.6	21.60	47.424		
5,700.0	5,659.8	5,583.0	5,541.8	23.1	0.0	-143.23	-335.4	559.9	1,046.1	1,024.1	21.98	47.594		
5,800.0	5,758.9	5,680.6	5,638.4	23.5	0.0	-143.20	-343.3	571.2	1,067.9	1,045.5	22.36	47.758		
5,900.0	5,858.0	5,778.2	5,735.1	24.0	0.0	-143.17	-351.1	582.5	1,089.7	1,067.0	22.74	47.915		
6,000.0	5,957.2	5,875.7	5,831.7	24.4	0.0	-143.14	-359.0	593.8	1,111.6	1,088.5	23.13	48.068		
6,100.0	6,056.3	5,973.3	5,928.3	24.8	0.0	-143.12	-366.8	605.1	1,133.4	1,109.9	23.51	48.214		
6,200.0	6,155.4	6,070.9	6,024.9	25.2	0.0	-143.09	-374.6	616.5	1,155.3	1,131.4	23.89	48.356		
6,300.0	6,254.5	6,168.5	6,121.5	25.6	0.0	-143.07	-382.5	627.8	1,177.1	1,152.8	24.27	48.493		
6,400.0	6,353.6	6,266.1	6,218.1	26.1	0.0	-143.04	-390.3	639.1	1,198.9	1,174.3	24.66	48.625		
6,500.0	6,452.7	6,363.7	6,314.7	26.5	0.0	-143.02	-398.2	650.4	1,220.8	1,195.8	25.04	48.753		
6,600.0	6,551.9	6,461.2	6,411.3	26.9	0.0	-143.00	-406.0	661.7	1,242.6	1,217.2	25.42	48.876		
6,700.0	6,651.0	6,558.8	6,507.9	27.3	0.0	-142.98	-413.8	673.0	1,264.5	1,238.7	25.81	48.993		
6,800.0	6,750.3	6,656.0	6,604.1	27.8	0.0	138.80	-421.6	684.3	1,286.1	1,260.0	26.16	49.165		
6,900.0	6,848.2	6,750.3	6,697.5	28.1	0.0	108.78	-429.2	695.3	1,307.3	1,280.9	26.48	49.371		
7,000.0	6,941.6	6,838.9	6,785.2	28.5	0.0	100.01	-436.3	705.5	1,328.4	1,301.6	26.72	49.709		
7,100.0	7,027.7	6,919.1	6,864.6	28.7	0.0	96.16	-442.8	714.8	1,350.0	1,323.0	26.92	50.151		
7,200.0	7,104.0	6,988.4	6,933.2	28.9	0.0	93.93	-448.4	722.9	1,373.1	1,346.1	27.08	50.714		
7,300.0	7,168.0	7,044.9	6,989.1	29.0	0.0	92.07	-452.9	729.4	1,398.9	1,371.7	27.21	51.413		
7,400.0	7,217.9	7,086.6	7,030.5	29.1	0.0	89.93	-456.2	734.3	1,427.9	1,400.6	27.33	52.253		
7,500.0	7,252.2	7,140.6	7,083.9	29.0	0.0	88.29	-459.3	740.5	1,460.4	1,432.9	27.53	53.045		
7,600.0	7,269.7	7,325.6	7,265.0	29.0	0.0	91.68	-432.4	761.4	1,495.0	1,466.9	28.04	53.321		
7,700.0	7,272.0	8,102.6	7,662.0	29.1	0.0	105.00	167.1	802.7	1,507.0	1,478.9	28.13	53.570		
7,800.0	7,272.0	8,202.6	7,662.0	29.4	0.0	105.00	267.0	801.9	1,507.0	1,478.4	28.55	52.777		
7,900.0	7,272.0	8,302.6	7,662.0	29.8	0.0	105.00	367.0	801.0	1,507.0	1,477.9	29.07	51.834		
8,000.0	7,272.0	8,402.6	7,662.0	30.4	0.0	105.00	467.0	800.2	1,507.0	1,477.3	29.68	50.770		
8,100.0	7,272.0	8,502.6	7,662.0	31.1	0.0	105.00	567.0	799.4	1,507.0	1,476.6	30.38	49.609		
8,200.0	7,272.0	8,602.6	7,662.0	31.8	0.0	105.00	667.0	798.5	1,507.0	1,475.8	31.15	48.376		
8,300.0	7,272.0	8,702.6	7,662.0	32.7	0.0	105.00	767.0	797.7	1,507.0	1,475.0	32.00	47.095		
8,400.0	7,272.0	8,802.6	7,662.0	33.6	0.0	105.00	867.0	796.9	1,507.0	1,474.1	32.91	45.785		
8,500.0	7,272.0	8,902.6	7,662.0	34.6	0.0	105.00	967.0	796.1	1,507.0	1,473.1	33.89	44.464		
8,600.0	7,272.0	9,002.6	7,662.0	35.7	0.0	105.00	1,067.0	795.2	1,507.0	1,472.1	34.93	43.147		
8,700.0	7,272.0	9,102.6	7,662.0	36.8	0.0	105.00	1,167.0	794.4	1,507.0	1,471.0	36.01	41.845		
8,800.0	7,272.0	9,202.6	7,662.0	37.9	0.0	105.00	1,267.0	793.6	1,507.0	1,469.8	37.15	40.567		
8,900.0	7,272.0	9,302.6	7,662.0	39.1	0.0	105.00	1,367.0	792.8	1,507.0	1,468.7	38.33	39.320		
9,000.0	7,272.0	9,402.6	7,662.0	40.4	0.0	105.00	1,467.0	791.9	1,507.0	1,467.5	39.54	38.109		
9,100.0	7,272.0	9,502.6	7,662.0	41.7	0.0	105.00	1,567.0	791.1	1,507.0	1,466.2	40.80	36.939		
9,200.0	7,272.0	9,602.6	7,662.0	43.0	0.0	105.00	1,667.0	790.3	1,507.0	1,464.9	42.08	35.810		
9,300.0	7,272.0	9,702.6	7,662.0	44.3	0.0	105.00	1,767.0	789.5	1,507.0	1,463.6	43.40	34.724		
9,400.0	7,272.0	9,802.6	7,662.0	45.7	0.0	105.00	1,867.0	788.6	1,507.0	1,462.3	44.74	33.681		
9,500.0	7,272.0	9,902.6	7,662.0	47.1	0.0	105.00	1,967.0	787.8	1,507.0	1,460.9	46.11	32.682		
9,600.0	7,272.0	10,002.6	7,662.0	48.5	0.0	105.00	2,067.0	787.0	1,507.0	1,459.5	47.50	31.725		
9,700.0	7,272.0	10,102.6	7,662.0	49.9	0.0	105.00	2,167.0	786.1	1,507.0	1,458.1	48.91	30.810		
9,800.0	7,272.0	10,202.6	7,662.0	51.4	0.0	105.00	2,267.0	785.3	1,507.0	1,456.7	50.34	29.934		
9,900.0	7,272.0	10,302.6	7,662.0	52.9	0.0	105.00	2,367.0	784.5	1,507.0	1,455.2	51.79	29.097		
10,000.0	7,272.0	10,402.6	7,662.0	54.4	0.0	105.00	2,467.0	783.7	1,507.0	1,453.7	53.26	28.298		
10,100.0	7,272.0	10,502.6	7,662.0	55.9	0.0	105.00	2,567.0	782.8	1,507.0	1,452.3	54.73	27.533		
10,200.0	7,272.0	10,602.6	7,662.0	57.4	0.0	105.00	2,667.0	782.0	1,507.0	1,450.8	56.23	26.802		
10,300.0	7,272.0	10,702.6	7,662.0	59.0	0.0	105.00	2,767.0	781.2	1,507.0	1,449.3	57.73	26.104		

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

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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	7,272.0	10,802.6	7,662.0	60.5	0.0	105.00	2,867.0	780.4	1,507.0	1,447.8	59.25	25.436		
10,500.0	7,272.0	10,902.6	7,662.0	62.1	0.0	105.00	2,967.0	779.5	1,507.0	1,446.2	60.77	24.797		
10,600.0	7,272.0	11,002.6	7,662.0	63.7	0.0	105.00	3,067.0	778.7	1,507.0	1,444.7	62.31	24.185		
10,700.0	7,272.0	11,102.6	7,662.0	65.2	0.0	105.00	3,166.9	777.9	1,507.0	1,443.1	63.86	23.600		
10,800.0	7,272.0	11,202.6	7,662.0	66.8	0.0	105.00	3,266.9	777.0	1,507.0	1,441.6	65.41	23.039		
10,900.0	7,272.0	11,302.6	7,662.0	68.4	0.0	105.00	3,366.9	776.2	1,507.0	1,440.0	66.97	22.501		
11,000.0	7,272.0	11,402.6	7,662.0	70.1	0.0	105.00	3,466.9	775.4	1,507.0	1,438.5	68.54	21.986		
11,100.0	7,272.0	11,502.6	7,662.0	71.7	0.0	105.00	3,566.9	774.6	1,507.0	1,436.9	70.12	21.491		
11,200.0	7,272.0	11,602.6	7,662.0	73.3	0.0	105.00	3,666.9	773.7	1,507.0	1,435.3	71.70	21.017		
11,300.0	7,272.0	11,702.6	7,662.0	74.9	0.0	105.00	3,766.9	772.9	1,507.0	1,433.7	73.29	20.561		
11,400.0	7,272.0	11,802.6	7,662.0	76.6	0.0	105.00	3,866.9	772.1	1,507.0	1,432.1	74.89	20.123		
11,500.0	7,272.0	11,902.6	7,662.0	78.2	0.0	105.00	3,966.9	771.3	1,507.0	1,430.5	76.49	19.702		
11,600.0	7,272.0	12,002.6	7,662.0	79.8	0.0	105.00	4,066.9	770.4	1,507.0	1,428.9	78.09	19.297		
11,700.0	7,272.0	12,102.6	7,662.0	81.5	0.0	105.00	4,166.9	769.6	1,507.0	1,427.3	79.70	18.907		
11,800.0	7,272.0	12,202.6	7,662.0	83.2	0.0	105.00	4,266.9	768.8	1,507.0	1,425.7	81.32	18.532		
11,900.0	7,272.0	12,302.6	7,662.0	84.8	0.0	105.00	4,366.9	768.0	1,507.0	1,424.1	82.94	18.170		
12,000.0	7,272.0	12,402.6	7,662.0	86.5	0.0	105.00	4,466.9	767.1	1,507.0	1,422.4	84.56	17.822		
12,100.0	7,272.0	12,502.6	7,662.0	88.2	0.0	105.00	4,566.9	766.3	1,507.0	1,420.8	86.19	17.486		
12,200.0	7,272.0	12,602.6	7,662.0	89.8	0.0	105.00	4,666.9	765.5	1,507.0	1,419.2	87.81	17.161		
12,300.0	7,272.0	12,702.6	7,662.0	91.5	0.0	105.00	4,766.9	764.6	1,507.0	1,417.6	89.45	16.848		
12,400.0	7,272.0	12,802.6	7,662.0	93.2	0.0	105.00	4,866.9	763.8	1,507.0	1,415.9	91.08	16.545		
12,500.0	7,272.0	12,902.6	7,662.0	94.9	0.0	105.00	4,966.9	763.0	1,507.0	1,414.3	92.72	16.253		
12,600.0	7,272.0	13,002.6	7,662.0	96.5	0.0	105.00	5,066.9	762.2	1,507.0	1,412.6	94.36	15.970		
12,700.0	7,272.0	13,102.6	7,662.0	98.2	0.0	105.00	5,166.9	761.3	1,507.0	1,411.0	96.01	15.697		
12,800.0	7,272.0	13,202.6	7,662.0	99.9	0.0	105.00	5,266.9	760.5	1,507.0	1,409.4	97.65	15.432		
12,900.0	7,272.0	13,302.6	7,662.0	101.6	0.0	105.00	5,366.9	759.7	1,507.0	1,407.7	99.30	15.176		
13,000.0	7,272.0	13,402.6	7,662.0	103.3	0.0	105.00	5,466.9	758.9	1,507.0	1,406.1	100.96	14.927		
13,100.0	7,272.0	13,502.6	7,662.0	105.0	0.0	105.00	5,566.9	758.0	1,507.0	1,404.4	102.61	14.687		
13,200.0	7,272.0	13,602.6	7,662.0	106.7	0.0	105.00	5,666.9	757.2	1,507.0	1,402.7	104.26	14.454		
13,300.0	7,272.0	13,702.6	7,662.0	108.4	0.0	105.00	5,766.9	756.4	1,507.0	1,401.1	105.92	14.228		
13,400.0	7,272.0	13,802.6	7,662.0	110.1	0.0	105.00	5,866.9	755.6	1,507.0	1,399.4	107.58	14.008		
13,500.0	7,272.0	13,902.6	7,662.0	111.8	0.0	105.00	5,966.9	754.7	1,507.0	1,397.8	109.24	13.795		
13,600.0	7,272.0	14,002.6	7,662.0	113.5	0.0	105.00	6,066.9	753.9	1,507.0	1,396.1	110.91	13.588		
13,700.0	7,272.0	14,102.6	7,662.0	115.2	0.0	105.00	6,166.8	753.1	1,507.0	1,394.4	112.57	13.387		
13,800.0	7,272.0	14,202.6	7,662.0	117.0	0.0	105.00	6,266.8	752.2	1,507.0	1,392.8	114.24	13.192		
13,900.0	7,272.0	14,302.6	7,662.0	118.7	0.0	105.00	6,366.8	751.4	1,507.0	1,391.1	115.90	13.002		
14,000.0	7,272.0	14,402.6	7,662.0	120.4	0.0	105.00	6,466.8	750.6	1,507.0	1,389.4	117.57	12.818		
14,100.0	7,272.0	14,502.6	7,662.0	122.1	0.0	105.00	6,566.8	749.8	1,507.0	1,387.8	119.24	12.638		
14,200.0	7,272.0	14,602.6	7,662.0	123.8	0.0	105.00	6,666.8	748.9	1,507.0	1,386.1	120.92	12.463		
14,300.0	7,272.0	14,702.6	7,662.0	125.5	0.0	105.00	6,766.8	748.1	1,507.0	1,384.4	122.59	12.293		
14,400.0	7,272.0	14,802.6	7,662.0	127.3	0.0	105.00	6,866.8	747.3	1,507.0	1,382.7	124.26	12.128		
14,500.0	7,272.0	14,902.6	7,662.0	129.0	0.0	105.00	6,966.8	746.5	1,507.0	1,381.1	125.94	11.966		
14,600.0	7,272.0	15,002.6	7,662.0	130.7	0.0	105.00	7,066.8	745.6	1,507.0	1,379.4	127.61	11.809		
14,700.0	7,272.0	15,102.6	7,662.0	132.4	0.0	105.00	7,166.8	744.8	1,507.0	1,377.7	129.29	11.656		
14,800.0	7,272.0	15,202.6	7,662.0	134.2	0.0	105.00	7,266.8	744.0	1,507.0	1,376.0	130.97	11.506		
14,900.0	7,272.0	15,302.6	7,662.0	135.9	0.0	105.00	7,366.8	743.2	1,507.0	1,374.4	132.65	11.361		
15,000.0	7,272.0	15,402.6	7,662.0	137.6	0.0	105.00	7,466.8	742.3	1,507.0	1,372.7	134.33	11.219		
15,100.0	7,272.0	15,502.6	7,662.0	139.3	0.0	105.00	7,566.8	741.5	1,507.0	1,371.0	136.01	11.080		
15,200.0	7,272.0	15,602.6	7,662.0	141.1	0.0	105.00	7,666.8	740.7	1,507.0	1,369.3	137.69	10.945		
15,300.0	7,272.0	15,702.6	7,662.0	142.8	0.0	105.00	7,766.8	739.8	1,507.0	1,367.6	139.38	10.812		
15,400.0	7,272.0	15,802.6	7,662.0	144.5	0.0	105.00	7,866.8	739.0	1,507.0	1,366.0	141.06	10.683		
15,500.0	7,272.0	15,902.6	7,662.0	146.3	0.0	105.00	7,966.8	738.2	1,507.0	1,364.3	142.75	10.557		

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 19-18-1NBH
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 19-18-1NBH	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	7,272.0	16,002.6	7,662.0	148.0	0.0	105.00	8,066.8	737.4	1,507.0	1,362.6	144.43	10.434		
15,700.0	7,272.0	16,102.6	7,662.0	149.7	0.0	105.00	8,166.8	736.5	1,507.0	1,360.9	146.12	10.314		
15,800.0	7,272.0	16,202.6	7,662.0	151.4	0.0	105.00	8,266.8	735.7	1,507.0	1,359.2	147.81	10.196		
15,900.0	7,272.0	16,302.6	7,662.0	153.2	0.0	105.00	8,366.8	734.9	1,507.0	1,357.5	149.49	10.081		
16,000.0	7,272.0	16,402.6	7,662.0	154.9	0.0	105.00	8,466.8	734.1	1,507.0	1,355.8	151.18	9.968		
16,100.0	7,272.0	16,502.6	7,662.0	156.7	0.0	105.00	8,566.8	733.2	1,507.0	1,354.1	152.87	9.858		
16,200.0	7,272.0	16,602.6	7,662.0	158.4	0.0	105.00	8,666.8	732.4	1,507.0	1,352.5	154.56	9.750		
16,300.0	7,272.0	16,702.6	7,662.0	160.1	0.0	105.00	8,766.8	731.6	1,507.0	1,350.8	156.25	9.645		
16,400.0	7,272.0	16,802.6	7,662.0	161.9	0.0	105.00	8,866.8	730.7	1,507.0	1,349.1	157.94	9.542		
16,500.0	7,272.0	16,902.6	7,662.0	163.6	0.0	105.00	8,966.8	729.9	1,507.0	1,347.4	159.63	9.441		
16,600.0	7,272.0	17,002.6	7,662.0	165.3	0.0	105.00	9,066.7	729.1	1,507.0	1,345.7	161.32	9.342		
16,700.0	7,272.0	17,102.6	7,662.0	167.1	0.0	105.00	9,166.7	728.3	1,507.0	1,344.0	163.02	9.245		
16,800.0	7,272.0	17,202.6	7,662.0	168.8	0.0	105.00	9,266.7	727.4	1,507.0	1,342.3	164.71	9.150		
16,900.0	7,272.0	17,302.6	7,662.0	170.6	0.0	105.00	9,366.7	726.6	1,507.0	1,340.6	166.40	9.056		
17,000.0	7,272.0	17,402.6	7,662.0	172.3	0.0	105.00	9,466.7	725.8	1,507.0	1,338.9	168.10	8.965		
17,100.0	7,272.0	17,502.6	7,662.0	174.0	0.0	105.00	9,566.7	725.0	1,507.0	1,337.2	169.79	8.876		
17,200.0	7,272.0	17,602.6	7,662.0	175.8	0.0	105.00	9,666.7	724.1	1,507.0	1,335.5	171.49	8.788		
17,300.0	7,272.0	17,702.6	7,662.0	177.5	0.0	105.00	9,766.7	723.3	1,507.0	1,333.8	173.18	8.702		
17,400.0	7,272.0	17,802.6	7,662.0	179.3	0.0	105.00	9,866.7	722.5	1,507.0	1,332.1	174.88	8.618		
17,429.8	7,272.0	17,832.4	7,662.0	179.8	0.0	105.00	9,896.6	722.2	1,507.0	1,331.6	175.38	8.593 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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	0.6	120.0	120.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.71	0.6	120.0	120.0	119.7	0.28	433.297		
200.0	200.0	200.0	200.0	1.0	0.0	89.71	0.6	120.0	120.0	119.2	0.80	150.440		
300.0	300.0	300.0	300.0	1.5	0.0	89.71	0.6	120.0	120.0	118.8	1.22	98.024		
400.0	400.0	400.0	400.0	1.9	0.0	89.71	0.6	120.0	120.0	118.4	1.62	74.164		
500.0	500.0	500.0	500.0	2.3	0.0	89.71	0.6	120.0	120.0	118.0	2.00	60.043		
600.0	600.0	600.0	600.0	2.7	0.0	89.71	0.6	120.0	120.0	117.6	2.37	50.585		
700.0	700.0	700.0	700.0	3.1	0.0	89.71	0.6	120.0	120.0	117.3	2.74	43.766		
800.0	800.0	800.0	800.0	3.5	0.0	89.71	0.6	120.0	120.0	116.9	3.11	38.599		
900.0	900.0	900.0	900.0	3.9	0.0	89.71	0.6	120.0	120.0	116.5	3.47	34.542 CC, ES		
1,000.0	1,000.0	996.1	996.1	4.2	0.0	-141.96	0.1	121.5	123.0	119.1	3.86	31.823		
1,100.0	1,099.8	1,091.7	1,091.6	5.1	0.0	-142.48	-1.6	126.0	131.8	127.1	4.71	27.966		
1,200.0	1,199.5	1,186.3	1,185.9	5.8	0.0	-143.19	-4.2	133.5	146.5	141.0	5.46	26.850		
1,300.0	1,298.7	1,279.5	1,278.4	6.3	0.0	-143.98	-7.8	143.6	166.9	161.0	5.95	28.059		
1,400.0	1,397.8	1,371.2	1,369.1	6.6	0.0	-144.58	-12.4	156.4	191.2	185.0	6.22	30.764		
1,500.0	1,496.9	1,461.5	1,457.9	6.9	0.0	-144.72	-17.8	171.7	218.3	211.8	6.51	33.559		
1,600.0	1,596.1	1,550.3	1,544.8	7.2	0.0	-144.57	-24.1	189.2	248.2	241.4	6.79	36.568		
1,700.0	1,695.2	1,641.9	1,633.7	7.5	0.0	-144.24	-31.3	209.5	280.3	273.2	7.09	39.561		
1,800.0	1,794.3	1,736.5	1,725.6	7.8	0.0	-143.94	-38.9	230.8	312.7	305.3	7.41	42.215		
1,900.0	1,893.4	1,831.1	1,817.5	8.1	0.0	-143.71	-46.4	252.0	345.1	337.4	7.74	44.615		
2,000.0	1,992.5	1,925.7	1,909.4	8.4	0.0	-143.51	-54.0	273.2	377.5	369.4	8.07	46.792		
2,100.0	2,091.6	2,020.3	2,001.2	8.8	0.0	-143.34	-61.6	294.4	409.9	401.5	8.40	48.773		
2,200.0	2,190.8	2,114.9	2,093.1	9.1	0.0	-143.20	-69.1	315.6	442.3	433.6	8.75	50.581		
2,300.0	2,289.9	2,209.4	2,185.0	9.4	0.0	-143.08	-76.7	336.9	474.8	465.7	9.09	52.235		
2,400.0	2,389.0	2,304.0	2,276.8	9.8	0.0	-142.97	-84.3	358.1	507.2	497.7	9.44	53.754		
2,500.0	2,488.1	2,398.6	2,368.7	10.1	0.0	-142.88	-91.8	379.3	539.6	529.8	9.78	55.152		
2,600.0	2,587.2	2,493.2	2,460.6	10.5	0.0	-142.80	-99.4	400.5	572.0	561.9	10.13	56.441		
2,700.0	2,686.3	2,587.8	2,552.5	10.9	0.0	-142.72	-106.9	421.7	604.4	593.9	10.49	57.634		
2,800.0	2,785.4	2,682.4	2,644.3	11.2	0.0	-142.66	-114.5	443.0	636.8	626.0	10.84	58.741		
2,900.0	2,884.6	2,777.0	2,736.2	11.6	0.0	-142.59	-122.1	464.2	669.3	658.1	11.20	59.769		
3,000.0	2,983.7	2,871.6	2,828.1	12.0	0.0	-142.54	-129.6	485.4	701.7	690.1	11.55	60.726		
3,100.0	3,082.8	2,966.2	2,920.0	12.4	0.0	-142.49	-137.2	506.6	734.1	722.2	11.91	61.619		
3,200.0	3,181.9	3,060.8	3,011.8	12.8	0.0	-142.44	-144.8	527.8	766.5	754.3	12.27	62.455		
3,300.0	3,281.0	3,155.4	3,103.7	13.2	0.0	-142.40	-152.3	549.1	799.0	786.3	12.63	63.237		
3,400.0	3,380.1	3,250.0	3,195.6	13.5	0.0	-142.36	-159.9	570.3	831.4	818.4	13.00	63.972		
3,500.0	3,479.3	3,344.6	3,287.5	13.9	0.0	-142.33	-167.5	591.5	863.8	850.4	13.36	64.662		
3,600.0	3,578.4	3,439.2	3,379.3	14.4	0.0	-142.30	-175.0	612.7	896.2	882.5	13.72	65.312		
3,700.0	3,677.5	3,533.8	3,471.2	14.8	0.0	-142.26	-182.6	633.9	928.7	914.6	14.09	65.924		
3,800.0	3,776.6	3,628.4	3,563.1	15.2	0.0	-142.24	-190.1	655.2	961.1	946.6	14.45	66.503		
3,900.0	3,875.7	3,723.0	3,655.0	15.6	0.0	-142.21	-197.7	676.4	993.5	978.7	14.82	67.050		
4,000.0	3,974.8	3,817.6	3,746.8	16.0	0.0	-142.18	-205.3	697.6	1,025.9	1,010.7	15.18	67.567		
4,100.0	4,074.0	3,912.2	3,838.7	16.4	0.0	-142.16	-212.8	718.8	1,058.4	1,042.8	15.55	68.058		
4,200.0	4,173.1	4,006.8	3,930.6	16.8	0.0	-142.14	-220.4	740.0	1,090.8	1,074.9	15.92	68.524		
4,300.0	4,272.2	4,101.4	4,022.5	17.2	0.0	-142.12	-228.0	761.3	1,123.2	1,106.9	16.29	68.967		
4,400.0	4,371.3	4,196.0	4,114.3	17.6	0.0	-142.10	-235.5	782.5	1,155.6	1,139.0	16.65	69.388		
4,500.0	4,470.4	4,290.6	4,206.2	18.1	0.0	-142.08	-243.1	803.7	1,188.1	1,171.0	17.02	69.788		
4,600.0	4,569.5	4,385.2	4,298.1	18.5	0.0	-142.06	-250.7	824.9	1,220.5	1,203.1	17.39	70.170		
4,700.0	4,668.7	4,479.8	4,390.0	18.9	0.0	-142.04	-258.2	846.1	1,252.9	1,235.1	17.76	70.535		
4,800.0	4,767.8	4,574.4	4,481.8	19.3	0.0	-142.03	-265.8	867.4	1,285.3	1,267.2	18.13	70.883		
4,900.0	4,866.9	4,668.9	4,573.7	19.7	0.0	-142.01	-273.3	888.6	1,317.8	1,299.3	18.50	71.216		
5,000.0	4,966.0	4,763.5	4,665.6	20.2	0.0	-142.00	-280.9	909.8	1,350.2	1,331.3	18.87	71.534		
5,100.0	5,065.1	4,858.1	4,757.5	20.6	0.0	-141.98	-288.5	931.0	1,382.6	1,363.4	19.25	71.838		

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 19-18-1NBH
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 19-18-1NBH	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	5,164.2	4,952.7	4,849.3	21.0	0.0	-141.97	-296.0	952.3	1,415.0	1,395.4	19.62	72.130		
5,300.0	5,263.3	5,047.3	4,941.2	21.4	0.0	-141.96	-303.6	973.5	1,447.5	1,427.5	19.99	72.410		
5,400.0	5,362.5	5,141.9	5,033.1	21.8	0.0	-141.95	-311.2	994.7	1,479.9	1,459.5	20.36	72.678		
5,500.0	5,461.6	5,236.5	5,125.0	22.3	0.0	-141.94	-318.7	1,015.9	1,512.3	1,491.6	20.74	72.935		
5,600.0	5,560.7	5,331.1	5,216.8	22.7	0.0	-141.92	-326.3	1,037.1	1,544.7	1,523.6	21.11	73.183		
5,700.0	5,659.8	5,425.7	5,308.7	23.1	0.0	-141.91	-333.9	1,058.4	1,577.2	1,555.7	21.48	73.421		
5,800.0	5,758.9	5,520.3	5,400.6	23.5	0.0	-141.90	-341.4	1,079.6	1,609.6	1,587.7	21.85	73.650		
5,900.0	5,858.0	5,614.9	5,492.5	24.0	0.0	-141.89	-349.0	1,100.8	1,642.0	1,619.8	22.23	73.870		
6,000.0	5,957.2	5,709.5	5,584.3	24.4	0.0	-141.88	-356.5	1,122.0	1,674.5	1,651.9	22.60	74.082		
6,100.0	6,056.3	5,804.1	5,676.2	24.8	0.0	-141.88	-364.1	1,143.2	1,706.9	1,683.9	22.98	74.286		
6,200.0	6,155.4	5,898.7	5,768.1	25.2	0.0	-141.87	-371.7	1,164.5	1,739.3	1,716.0	23.35	74.483		
6,300.0	6,254.5	5,993.3	5,860.0	25.6	0.0	-141.86	-379.2	1,185.7	1,771.7	1,748.0	23.73	74.672		
6,400.0	6,353.6	6,087.9	5,951.8	26.1	0.0	-141.85	-386.8	1,206.9	1,804.2	1,780.1	24.10	74.856		
6,500.0	6,452.7	6,182.5	6,043.7	26.5	0.0	-141.84	-394.4	1,228.1	1,836.6	1,812.1	24.48	75.032		
6,600.0	6,551.9	6,277.1	6,135.6	26.9	0.0	-141.84	-401.9	1,249.3	1,869.0	1,844.2	24.85	75.203		
6,700.0	6,651.0	6,371.7	6,227.5	27.3	0.0	-141.83	-409.5	1,270.6	1,901.4	1,876.2	25.23	75.364		
6,800.0	6,750.3	6,465.8	6,318.9	27.8	0.0	138.69	-417.0	1,291.7	1,933.8	1,908.2	25.57	75.632		
6,900.0	6,848.2	6,557.2	6,407.6	28.1	0.0	107.14	-424.3	1,312.2	1,965.6	1,939.7	25.87	75.985		
7,000.0	6,941.6	6,642.9	6,490.9	28.5	0.0	96.75	-431.2	1,331.4	1,996.4	1,970.3	26.09	76.534		
7,100.0	7,027.7	6,720.5	6,566.2	28.7	0.0	91.36	-437.4	1,348.8	2,026.3	2,000.1	26.25	77.189		
7,200.0	7,104.0	6,787.5	6,631.3	28.9	0.0	87.80	-442.7	1,363.8	2,055.5	2,029.1	26.38	77.915		
7,300.0	7,168.0	6,842.0	6,684.2	29.0	0.0	84.99	-447.1	1,376.1	2,084.2	2,057.7	26.49	78.675		
7,400.0	7,217.9	6,882.2	6,723.3	29.1	0.0	82.44	-450.3	1,385.1	2,112.7	2,086.1	26.60	79.427		
7,500.0	7,252.2	6,907.0	6,747.4	29.0	0.0	79.87	-452.3	1,390.6	2,140.8	2,114.1	26.72	80.128		
7,600.0	7,269.7	6,915.5	6,755.7	29.0	0.0	77.17	-453.0	1,392.6	2,168.4	2,141.5	26.86	80.736		
7,700.0	7,272.0	7,935.6	7,777.0	29.1	0.0	92.75	173.1	1,530.5	2,186.0	2,157.7	28.31	77.214		
7,800.0	7,272.0	8,035.6	7,777.0	29.4	0.0	92.75	273.1	1,529.6	2,186.0	2,157.3	28.72	76.110		
7,900.0	7,272.0	8,135.6	7,777.0	29.8	0.0	92.75	373.1	1,528.8	2,186.0	2,156.8	29.24	74.771		
8,000.0	7,272.0	8,235.6	7,777.0	30.4	0.0	92.75	473.1	1,528.0	2,186.0	2,156.1	29.85	73.244		
8,100.0	7,272.0	8,335.6	7,777.0	31.1	0.0	92.75	573.1	1,527.2	2,186.0	2,155.4	30.54	71.567		
8,200.0	7,272.0	8,435.6	7,777.0	31.8	0.0	92.75	673.1	1,526.3	2,186.0	2,154.7	31.33	69.777		
8,300.0	7,272.0	8,535.6	7,777.0	32.7	0.0	92.75	773.1	1,525.5	2,186.0	2,153.8	32.19	67.911		
8,400.0	7,272.0	8,635.6	7,777.0	33.6	0.0	92.75	873.1	1,524.7	2,186.0	2,152.9	33.12	65.999		
8,500.0	7,272.0	8,735.6	7,777.0	34.6	0.0	92.75	973.0	1,523.9	2,186.0	2,151.9	34.12	64.068		
8,600.0	7,272.0	8,835.6	7,777.0	35.7	0.0	92.75	1,073.0	1,523.0	2,186.0	2,150.8	35.18	62.140		
8,700.0	7,272.0	8,935.6	7,777.0	36.8	0.0	92.75	1,173.0	1,522.2	2,186.0	2,149.7	36.29	60.233		
8,800.0	7,272.0	9,035.6	7,777.0	37.9	0.0	92.75	1,273.0	1,521.4	2,186.0	2,148.5	37.46	58.362		
8,900.0	7,272.0	9,135.6	7,777.0	39.1	0.0	92.75	1,373.0	1,520.5	2,186.0	2,147.3	38.66	56.537		
9,000.0	7,272.0	9,235.6	7,777.0	40.4	0.0	92.75	1,473.0	1,519.7	2,186.0	2,146.1	39.91	54.766		
9,100.0	7,272.0	9,335.6	7,777.0	41.7	0.0	92.75	1,573.0	1,518.9	2,186.0	2,144.8	41.20	53.055		
9,200.0	7,272.0	9,435.6	7,777.0	43.0	0.0	92.75	1,673.0	1,518.1	2,186.0	2,143.5	42.52	51.405		
9,300.0	7,272.0	9,535.6	7,777.0	44.3	0.0	92.75	1,773.0	1,517.2	2,186.0	2,142.1	43.88	49.820		
9,400.0	7,272.0	9,635.6	7,777.0	45.7	0.0	92.75	1,873.0	1,516.4	2,186.0	2,140.7	45.26	48.299		
9,500.0	7,272.0	9,735.6	7,777.0	47.1	0.0	92.75	1,973.0	1,515.6	2,186.0	2,139.3	46.67	46.843		
9,600.0	7,272.0	9,835.6	7,777.0	48.5	0.0	92.75	2,073.0	1,514.8	2,186.0	2,137.9	48.10	45.449		
9,700.0	7,272.0	9,935.6	7,777.0	49.9	0.0	92.75	2,173.0	1,513.9	2,186.0	2,136.4	49.55	44.117		
9,800.0	7,272.0	10,035.6	7,777.0	51.4	0.0	92.75	2,273.0	1,513.1	2,186.0	2,135.0	51.02	42.844		
9,900.0	7,272.0	10,135.6	7,777.0	52.9	0.0	92.75	2,373.0	1,512.3	2,186.0	2,133.5	52.51	41.629		
10,000.0	7,272.0	10,235.6	7,777.0	54.4	0.0	92.75	2,473.0	1,511.4	2,186.0	2,132.0	54.02	40.468		
10,100.0	7,272.0	10,335.6	7,777.0	55.9	0.0	92.75	2,573.0	1,510.6	2,186.0	2,130.5	55.54	39.359		
10,200.0	7,272.0	10,435.6	7,777.0	57.4	0.0	92.75	2,673.0	1,509.8	2,186.0	2,128.9	57.08	38.300		
10,300.0	7,272.0	10,535.6	7,777.0	59.0	0.0	92.75	2,773.0	1,509.0	2,186.0	2,127.4	58.62	37.289		

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 19-18-1NBH
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 19-18-1NBH	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	7,272.0	10,635.6	7,377.0	60.5	0.0	92.75	2,873.0	1,508.1	2,186.0	2,125.8	60.18	36.322		
10,500.0	7,272.0	10,735.6	7,377.0	62.1	0.0	92.75	2,973.0	1,507.3	2,186.0	2,124.2	61.75	35.398		
10,600.0	7,272.0	10,835.6	7,377.0	63.7	0.0	92.75	3,073.0	1,506.5	2,186.0	2,122.7	63.34	34.514		
10,700.0	7,272.0	10,935.6	7,377.0	65.2	0.0	92.75	3,173.0	1,505.7	2,186.0	2,121.1	64.93	33.668		
10,800.0	7,272.0	11,035.6	7,377.0	66.8	0.0	92.75	3,273.0	1,504.8	2,186.0	2,119.5	66.53	32.859		
10,900.0	7,272.0	11,135.6	7,377.0	68.4	0.0	92.75	3,373.0	1,504.0	2,186.0	2,117.9	68.13	32.084		
11,000.0	7,272.0	11,235.6	7,377.0	70.1	0.0	92.75	3,473.0	1,503.2	2,186.0	2,116.2	69.75	31.341		
11,100.0	7,272.0	11,335.6	7,377.0	71.7	0.0	92.75	3,573.0	1,502.4	2,186.0	2,114.6	71.37	30.628		
11,200.0	7,272.0	11,435.6	7,377.0	73.3	0.0	92.75	3,673.0	1,501.5	2,186.0	2,113.0	73.00	29.945		
11,300.0	7,272.0	11,535.6	7,377.0	74.9	0.0	92.75	3,773.0	1,500.7	2,186.0	2,111.4	74.64	29.289		
11,400.0	7,272.0	11,635.6	7,377.0	76.6	0.0	92.75	3,872.9	1,499.9	2,186.0	2,109.7	76.28	28.659		
11,500.0	7,272.0	11,735.6	7,377.0	78.2	0.0	92.75	3,972.9	1,499.0	2,186.0	2,108.1	77.92	28.054		
11,600.0	7,272.0	11,835.6	7,377.0	79.8	0.0	92.75	4,072.9	1,498.2	2,186.0	2,106.4	79.57	27.471		
11,700.0	7,272.0	11,935.6	7,377.0	81.5	0.0	92.75	4,172.9	1,497.4	2,186.0	2,104.8	81.23	26.911		
11,800.0	7,272.0	12,035.6	7,377.0	83.2	0.0	92.75	4,272.9	1,496.6	2,186.0	2,103.1	82.89	26.372		
11,900.0	7,272.0	12,135.6	7,377.0	84.8	0.0	92.75	4,372.9	1,495.7	2,186.0	2,101.4	84.55	25.853		
12,000.0	7,272.0	12,235.6	7,377.0	86.5	0.0	92.75	4,472.9	1,494.9	2,186.0	2,099.8	86.22	25.353		
12,100.0	7,272.0	12,335.6	7,377.0	88.2	0.0	92.75	4,572.9	1,494.1	2,186.0	2,098.1	87.89	24.871		
12,200.0	7,272.0	12,435.6	7,377.0	89.8	0.0	92.75	4,672.9	1,493.3	2,186.0	2,096.4	89.57	24.405		
12,300.0	7,272.0	12,535.6	7,377.0	91.5	0.0	92.75	4,772.9	1,492.4	2,186.0	2,094.7	91.25	23.956		
12,400.0	7,272.0	12,635.6	7,377.0	93.2	0.0	92.75	4,872.9	1,491.6	2,186.0	2,093.1	92.93	23.523		
12,500.0	7,272.0	12,735.6	7,377.0	94.9	0.0	92.75	4,972.9	1,490.8	2,186.0	2,091.4	94.62	23.104		
12,600.0	7,272.0	12,835.6	7,377.0	96.5	0.0	92.75	5,072.9	1,489.9	2,186.0	2,089.7	96.30	22.699		
12,700.0	7,272.0	12,935.6	7,377.0	98.2	0.0	92.75	5,172.9	1,489.1	2,186.0	2,088.0	98.00	22.307		
12,800.0	7,272.0	13,035.6	7,377.0	99.9	0.0	92.75	5,272.9	1,488.3	2,186.0	2,086.3	99.69	21.928		
12,900.0	7,272.0	13,135.6	7,377.0	101.6	0.0	92.75	5,372.9	1,487.5	2,186.0	2,084.6	101.38	21.561		
13,000.0	7,272.0	13,235.6	7,377.0	103.3	0.0	92.75	5,472.9	1,486.6	2,186.0	2,082.9	103.08	21.206		
13,100.0	7,272.0	13,335.6	7,377.0	105.0	0.0	92.75	5,572.9	1,485.8	2,186.0	2,081.2	104.78	20.862		
13,200.0	7,272.0	13,435.6	7,377.0	106.7	0.0	92.75	5,672.9	1,485.0	2,186.0	2,079.5	106.48	20.529		
13,300.0	7,272.0	13,535.6	7,377.0	108.4	0.0	92.75	5,772.9	1,484.2	2,186.0	2,077.8	108.19	20.205		
13,400.0	7,272.0	13,635.6	7,377.0	110.1	0.0	92.75	5,872.9	1,483.3	2,186.0	2,076.1	109.89	19.892		
13,500.0	7,272.0	13,735.6	7,377.0	111.8	0.0	92.75	5,972.9	1,482.5	2,186.0	2,074.4	111.60	19.587		
13,600.0	7,272.0	13,835.6	7,377.0	113.5	0.0	92.75	6,072.9	1,481.7	2,186.0	2,072.7	113.31	19.292		
13,700.0	7,272.0	13,935.6	7,377.0	115.2	0.0	92.75	6,172.9	1,480.8	2,186.0	2,071.0	115.02	19.005		
13,800.0	7,272.0	14,035.6	7,377.0	117.0	0.0	92.75	6,272.9	1,480.0	2,186.0	2,069.3	116.74	18.726		
13,900.0	7,272.0	14,135.6	7,377.0	118.7	0.0	92.75	6,372.9	1,479.2	2,186.0	2,067.5	118.45	18.455		
14,000.0	7,272.0	14,235.6	7,377.0	120.4	0.0	92.75	6,472.9	1,478.4	2,186.0	2,065.8	120.17	18.191		
14,100.0	7,272.0	14,335.6	7,377.0	122.1	0.0	92.75	6,572.9	1,477.5	2,186.0	2,064.1	121.88	17.935		
14,200.0	7,272.0	14,435.6	7,377.0	123.8	0.0	92.75	6,672.9	1,476.7	2,186.0	2,062.4	123.60	17.686		
14,300.0	7,272.0	14,535.6	7,377.0	125.5	0.0	92.75	6,772.8	1,475.9	2,186.0	2,060.7	125.32	17.443		
14,400.0	7,272.0	14,635.6	7,377.0	127.3	0.0	92.75	6,872.8	1,475.1	2,186.0	2,059.0	127.04	17.207		
14,500.0	7,272.0	14,735.6	7,377.0	129.0	0.0	92.75	6,972.8	1,474.2	2,186.0	2,057.2	128.76	16.977		
14,600.0	7,272.0	14,835.6	7,377.0	130.7	0.0	92.75	7,072.8	1,473.4	2,186.0	2,055.5	130.49	16.753		
14,700.0	7,272.0	14,935.6	7,377.0	132.4	0.0	92.75	7,172.8	1,472.6	2,186.0	2,053.8	132.21	16.534		
14,800.0	7,272.0	15,035.6	7,377.0	134.2	0.0	92.75	7,272.8	1,471.8	2,186.0	2,052.1	133.94	16.321		
14,900.0	7,272.0	15,135.6	7,377.0	135.9	0.0	92.75	7,372.8	1,470.9	2,186.0	2,050.3	135.66	16.113		
15,000.0	7,272.0	15,235.6	7,377.0	137.6	0.0	92.75	7,472.8	1,470.1	2,186.0	2,048.6	137.39	15.911		
15,100.0	7,272.0	15,335.6	7,377.0	139.3	0.0	92.75	7,572.8	1,469.3	2,186.0	2,046.9	139.12	15.713		
15,200.0	7,272.0	15,435.6	7,377.0	141.1	0.0	92.75	7,672.8	1,468.4	2,186.0	2,045.2	140.85	15.520		
15,300.0	7,272.0	15,535.6	7,377.0	142.8	0.0	92.75	7,772.8	1,467.6	2,186.0	2,043.4	142.58	15.332		
15,400.0	7,272.0	15,635.6	7,377.0	144.5	0.0	92.75	7,872.8	1,466.8	2,186.0	2,041.7	144.31	15.148		
15,500.0	7,272.0	15,735.6	7,377.0	146.3	0.0	92.75	7,972.8	1,466.0	2,186.0	2,040.0	146.04	14.969		

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 19-18-1NBH
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 19-18-1NBH	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	7,272.0	15,835.6	7,377.0	148.0	0.0	92.75	8,072.8	1,465.1	2,186.0	2,038.2	147.77	14.793		
15,700.0	7,272.0	15,935.6	7,377.0	149.7	0.0	92.75	8,172.8	1,464.3	2,186.0	2,036.5	149.50	14.622		
15,800.0	7,272.0	16,035.6	7,377.0	151.4	0.0	92.75	8,272.8	1,463.5	2,186.0	2,034.8	151.24	14.454		
15,900.0	7,272.0	16,135.6	7,377.0	153.2	0.0	92.75	8,372.8	1,462.7	2,186.0	2,033.0	152.97	14.290		
16,000.0	7,272.0	16,235.6	7,377.0	154.9	0.0	92.75	8,472.8	1,461.8	2,186.0	2,031.3	154.71	14.130		
16,100.0	7,272.0	16,335.6	7,377.0	156.7	0.0	92.75	8,572.8	1,461.0	2,186.0	2,029.6	156.44	13.973		
16,200.0	7,272.0	16,435.6	7,377.0	158.4	0.0	92.75	8,672.8	1,460.2	2,186.0	2,027.8	158.18	13.820		
16,300.0	7,272.0	16,535.6	7,377.0	160.1	0.0	92.75	8,772.8	1,459.3	2,186.0	2,026.1	159.92	13.670		
16,400.0	7,272.0	16,635.6	7,377.0	161.9	0.0	92.75	8,872.8	1,458.5	2,186.0	2,024.3	161.65	13.523		
16,500.0	7,272.0	16,735.6	7,377.0	163.6	0.0	92.75	8,972.8	1,457.7	2,186.0	2,022.6	163.39	13.379		
16,600.0	7,272.0	16,835.6	7,377.0	165.3	0.0	92.75	9,072.8	1,456.9	2,186.0	2,020.9	165.13	13.238		
16,700.0	7,272.0	16,935.6	7,377.0	167.1	0.0	92.75	9,172.8	1,456.0	2,186.0	2,019.1	166.87	13.100		
16,800.0	7,272.0	17,035.6	7,377.0	168.8	0.0	92.75	9,272.8	1,455.2	2,186.0	2,017.4	168.61	12.965		
16,900.0	7,272.0	17,135.6	7,377.0	170.6	0.0	92.75	9,372.8	1,454.4	2,186.0	2,015.6	170.35	12.832		
17,000.0	7,272.0	17,235.6	7,377.0	172.3	0.0	92.75	9,472.8	1,453.6	2,186.0	2,013.9	172.09	12.703		
17,100.0	7,272.0	17,335.6	7,377.0	174.0	0.0	92.75	9,572.8	1,452.7	2,186.0	2,012.2	173.83	12.575		
17,200.0	7,272.0	17,435.6	7,377.0	175.8	0.0	92.75	9,672.7	1,451.9	2,186.0	2,010.4	175.57	12.451		
17,300.0	7,272.0	17,535.6	7,377.0	177.5	0.0	92.75	9,772.7	1,451.1	2,186.0	2,008.7	177.32	12.328		
17,400.0	7,272.0	17,635.6	7,377.0	179.3	0.0	92.75	9,872.7	1,450.2	2,186.0	2,006.9	179.06	12.208		
17,429.8	7,272.0	17,665.4	7,377.0	179.8	0.0	92.75	9,902.6	1,450.0	2,186.0	2,006.4	179.58	12.173 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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		
0.0	0.0	0.0	0.0	0.0	0.0	89.73	0.5	105.0	105.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.73	0.5	105.0	105.0	104.7	0.28	379.093		
200.0	200.0	200.0	200.0	1.0	0.0	89.73	0.5	105.0	105.0	104.2	0.80	131.618		
300.0	300.0	300.0	300.0	1.5	0.0	89.73	0.5	105.0	105.0	103.8	1.22	85.758		
400.0	400.0	400.0	400.0	1.9	0.0	89.73	0.5	105.0	105.0	103.4	1.62	64.883		
500.0	500.0	500.0	500.0	2.3	0.0	89.73	0.5	105.0	105.0	103.0	2.00	52.528		
600.0	600.0	600.0	600.0	2.7	0.0	89.73	0.5	105.0	105.0	102.6	2.37	44.253		
700.0	700.0	700.0	700.0	3.1	0.0	89.73	0.5	105.0	105.0	102.2	2.74	38.288		
800.0	800.0	800.0	800.0	3.5	0.0	89.73	0.5	105.0	105.0	101.9	3.11	33.768		
900.0	900.0	900.0	900.0	3.9	0.0	89.73	0.5	105.0	105.0	101.5	3.47	30.218 CC, ES		
1,000.0	1,000.0	1,000.0	1,000.0	4.2	0.0	-142.32	0.5	105.0	106.4	102.5	3.87	27.489		
1,100.0	1,099.8	1,096.4	1,096.4	5.1	0.0	-143.50	-0.1	106.5	112.1	107.3	4.74	23.662		
1,200.0	1,199.5	1,192.2	1,192.0	5.8	0.0	-144.74	-2.0	110.9	123.7	118.2	5.50	22.483		
1,300.0	1,298.7	1,286.7	1,286.2	6.3	0.0	-145.89	-5.0	118.2	141.1	135.1	6.01	23.476		
1,400.0	1,397.8	1,380.0	1,378.9	6.6	0.0	-146.59	-9.2	128.2	162.3	156.0	6.28	25.841		
1,500.0	1,496.9	1,472.2	1,470.1	6.9	0.0	-146.67	-14.5	140.8	186.3	179.7	6.57	28.340		
1,600.0	1,596.1	1,563.0	1,559.4	7.2	0.0	-146.35	-20.8	155.8	213.0	206.2	6.86	31.064		
1,700.0	1,695.2	1,655.8	1,650.2	7.5	0.0	-145.80	-28.2	173.5	242.1	234.9	7.16	33.827		
1,800.0	1,794.3	1,751.4	1,743.7	7.8	0.0	-145.32	-35.9	192.0	271.4	263.9	7.48	36.300		
1,900.0	1,893.4	1,847.0	1,837.1	8.1	0.0	-144.93	-43.6	210.5	300.7	292.9	7.80	38.538		
2,000.0	1,992.5	1,942.6	1,930.6	8.4	0.0	-144.62	-51.3	228.9	330.1	322.0	8.14	40.568		
2,100.0	2,091.6	2,038.1	2,024.0	8.8	0.0	-144.35	-59.0	247.4	359.5	351.0	8.47	42.416		
2,200.0	2,190.8	2,133.7	2,117.5	9.1	0.0	-144.13	-66.8	265.9	388.8	380.0	8.82	44.103		
2,300.0	2,289.9	2,229.3	2,211.0	9.4	0.0	-143.93	-74.5	284.3	418.2	409.1	9.16	45.647		
2,400.0	2,389.0	2,324.9	2,304.4	9.8	0.0	-143.76	-82.2	302.8	447.6	438.1	9.51	47.065		
2,500.0	2,488.1	2,420.5	2,397.9	10.1	0.0	-143.62	-89.9	321.3	477.0	467.1	9.86	48.370		
2,600.0	2,587.2	2,516.0	2,491.3	10.5	0.0	-143.49	-97.7	339.8	506.4	496.2	10.21	49.575		
2,700.0	2,686.3	2,611.6	2,584.8	10.9	0.0	-143.37	-105.4	358.2	535.8	525.2	10.57	50.689		
2,800.0	2,785.4	2,707.2	2,678.3	11.2	0.0	-143.27	-113.1	376.7	565.1	554.2	10.93	51.723		
2,900.0	2,884.6	2,802.8	2,771.7	11.6	0.0	-143.17	-120.8	395.2	594.5	583.3	11.29	52.683		
3,000.0	2,983.7	2,898.3	2,865.2	12.0	0.0	-143.09	-128.5	413.6	623.9	612.3	11.65	53.578		
3,100.0	3,082.8	2,993.9	2,958.6	12.4	0.0	-143.01	-136.3	432.1	653.3	641.3	12.01	54.413		
3,200.0	3,181.9	3,089.5	3,052.1	12.8	0.0	-142.94	-144.0	450.6	682.7	670.4	12.37	55.194		
3,300.0	3,281.0	3,185.1	3,145.5	13.2	0.0	-142.88	-151.7	469.0	712.1	699.4	12.73	55.926		
3,400.0	3,380.1	3,280.7	3,239.0	13.5	0.0	-142.82	-159.4	487.5	741.5	728.4	13.10	56.612		
3,500.0	3,479.3	3,376.2	3,332.5	13.9	0.0	-142.76	-167.1	506.0	770.9	757.4	13.46	57.258		
3,600.0	3,578.4	3,471.8	3,425.9	14.4	0.0	-142.71	-174.9	524.5	800.3	786.5	13.83	57.866		
3,700.0	3,677.5	3,567.4	3,519.4	14.8	0.0	-142.66	-182.6	542.9	829.7	815.5	14.20	58.440		
3,800.0	3,776.6	3,663.0	3,612.8	15.2	0.0	-142.62	-190.3	561.4	859.1	844.5	14.57	58.981		
3,900.0	3,875.7	3,758.6	3,706.3	15.6	0.0	-142.58	-198.0	579.9	888.5	873.6	14.93	59.493		
4,000.0	3,974.8	3,854.1	3,799.8	16.0	0.0	-142.54	-205.8	598.3	917.9	902.6	15.30	59.978		
4,100.0	4,074.0	3,949.7	3,893.2	16.4	0.0	-142.50	-213.5	616.8	947.3	931.6	15.67	60.438		
4,200.0	4,173.1	4,045.3	3,986.7	16.8	0.0	-142.47	-221.2	635.3	976.7	960.7	16.04	60.875		
4,300.0	4,272.2	4,140.9	4,080.1	17.2	0.0	-142.44	-228.9	653.7	1,006.1	989.7	16.42	61.289		
4,400.0	4,371.3	4,236.5	4,173.6	17.6	0.0	-142.41	-236.6	672.2	1,035.5	1,018.7	16.79	61.684		
4,500.0	4,470.4	4,332.0	4,267.1	18.1	0.0	-142.38	-244.4	690.7	1,064.9	1,047.8	17.16	62.060		
4,600.0	4,569.5	4,427.6	4,360.5	18.5	0.0	-142.35	-252.1	709.2	1,094.3	1,076.8	17.53	62.419		
4,700.0	4,668.7	4,523.2	4,454.0	18.9	0.0	-142.33	-259.8	727.6	1,123.7	1,105.8	17.90	62.761		
4,800.0	4,767.8	4,618.8	4,547.4	19.3	0.0	-142.30	-267.5	746.1	1,153.1	1,134.8	18.28	63.088		
4,900.0	4,866.9	4,714.3	4,640.9	19.7	0.0	-142.28	-275.3	764.6	1,182.5	1,163.9	18.65	63.400		
5,000.0	4,966.0	4,809.9	4,734.3	20.2	0.0	-142.26	-283.0	783.0	1,211.9	1,192.9	19.03	63.699		
5,100.0	5,065.1	4,905.5	4,827.8	20.6	0.0	-142.24	-290.7	801.5	1,241.3	1,221.9	19.40	63.985		

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 19-18-1NBH
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 19-18-1NBH	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	5,164.2	5,001.1	4,921.3	21.0	0.0	-142.22	-298.4	820.0	1,270.7	1,251.0	19.77	64.259		
5,300.0	5,263.3	5,096.7	5,014.7	21.4	0.0	-142.20	-306.1	838.5	1,300.1	1,280.0	20.15	64.523		
5,400.0	5,362.5	5,192.2	5,108.2	21.8	0.0	-142.18	-313.9	856.9	1,329.5	1,309.0	20.53	64.775		
5,500.0	5,461.6	5,287.8	5,201.6	22.3	0.0	-142.16	-321.6	875.4	1,358.9	1,338.0	20.90	65.018		
5,600.0	5,560.7	5,383.4	5,295.1	22.7	0.0	-142.15	-329.3	893.9	1,388.3	1,367.1	21.28	65.251		
5,700.0	5,659.8	5,479.0	5,388.6	23.1	0.0	-142.13	-337.0	912.3	1,417.7	1,396.1	21.65	65.475		
5,800.0	5,758.9	5,574.6	5,482.0	23.5	0.0	-142.11	-344.8	930.8	1,447.1	1,425.1	22.03	65.691		
5,900.0	5,858.0	5,670.1	5,575.5	24.0	0.0	-142.10	-352.5	949.3	1,476.5	1,454.1	22.41	65.898		
6,000.0	5,957.2	5,765.7	5,668.9	24.4	0.0	-142.08	-360.2	967.7	1,506.0	1,483.2	22.78	66.098		
6,100.0	6,056.3	5,861.3	5,762.4	24.8	0.0	-142.07	-367.9	986.2	1,535.4	1,512.2	23.16	66.291		
6,200.0	6,155.4	5,956.9	5,855.9	25.2	0.0	-142.06	-375.6	1,004.7	1,564.8	1,541.2	23.54	66.477		
6,300.0	6,254.5	6,052.4	5,949.3	25.6	0.0	-142.05	-383.4	1,023.2	1,594.2	1,570.2	23.92	66.657		
6,400.0	6,353.6	6,148.0	6,042.8	26.1	0.0	-142.03	-391.1	1,041.6	1,623.6	1,599.3	24.29	66.830		
6,500.0	6,452.7	6,243.6	6,136.2	26.5	0.0	-142.02	-398.8	1,060.1	1,653.0	1,628.3	24.67	66.997		
6,600.0	6,551.9	6,339.2	6,229.7	26.9	0.0	-142.01	-406.5	1,078.6	1,682.4	1,657.3	25.05	67.159		
6,700.0	6,651.0	6,434.8	6,323.1	27.3	0.0	-142.00	-414.2	1,097.0	1,711.8	1,686.3	25.43	67.312		
6,800.0	6,750.3	6,529.9	6,416.2	27.8	0.0	138.88	-421.9	1,115.4	1,741.1	1,715.3	25.77	67.557		
6,900.0	6,848.2	6,622.2	6,506.4	28.1	0.0	107.75	-429.4	1,133.3	1,769.9	1,743.8	26.08	67.875		
7,000.0	6,941.6	6,708.9	6,591.2	28.5	0.0	97.78	-436.4	1,150.0	1,798.0	1,771.7	26.30	68.369		
7,100.0	7,027.7	6,787.2	6,667.8	28.7	0.0	92.78	-442.7	1,165.2	1,825.6	1,799.2	26.47	68.968		
7,200.0	7,104.0	6,855.0	6,734.1	28.9	0.0	89.55	-448.2	1,178.2	1,853.1	1,826.5	26.61	69.650		
7,300.0	7,168.0	6,910.0	6,787.9	29.0	0.0	86.98	-452.6	1,188.9	1,880.9	1,854.2	26.72	70.394		
7,400.0	7,217.9	6,950.7	6,827.6	29.1	0.0	84.53	-455.9	1,196.7	1,909.3	1,882.5	26.83	71.170		
7,500.0	7,252.2	6,997.3	6,873.3	29.0	0.0	82.56	-459.1	1,205.7	1,938.4	1,911.4	27.01	71.757		
7,600.0	7,269.7	7,000.0	7,241.5	29.0	0.0	90.30	-335.9	1,275.1	1,966.4	1,938.5	27.93	70.398		
7,700.0	7,272.0	8,002.5	7,457.0	29.1	0.0	95.40	199.2	1,305.2	1,967.3	1,939.0	28.36	69.378		
7,800.0	7,272.0	8,102.5	7,457.0	29.4	0.0	95.40	299.2	1,302.9	1,965.9	1,937.1	28.78	68.314		
7,900.0	7,272.0	8,202.5	7,457.0	29.8	0.0	95.40	399.1	1,300.7	1,964.5	1,935.2	29.30	67.046		
8,000.0	7,272.0	8,302.4	7,457.0	30.4	0.0	95.41	499.1	1,298.4	1,963.0	1,933.1	29.92	65.615		
8,100.0	7,272.0	8,402.4	7,457.0	31.1	0.0	95.41	599.0	1,296.1	1,961.6	1,931.0	30.62	64.056		
8,200.0	7,272.0	8,502.4	7,457.0	31.8	0.0	95.42	699.0	1,293.9	1,960.2	1,928.8	31.41	62.402		
8,300.0	7,272.0	8,602.4	7,457.0	32.7	0.0	95.42	799.0	1,291.6	1,958.8	1,926.5	32.28	60.685		
8,400.0	7,272.0	8,702.4	7,457.0	33.6	0.0	95.42	898.9	1,289.4	1,957.4	1,924.1	33.21	58.932		
8,500.0	7,272.0	8,802.4	7,457.0	34.6	0.0	95.43	998.9	1,287.1	1,955.9	1,921.7	34.21	57.166		
8,600.0	7,272.0	8,902.4	7,457.0	35.7	0.0	95.43	1,098.9	1,284.9	1,954.5	1,919.2	35.28	55.407		
8,700.0	7,272.0	9,002.4	7,457.0	36.8	0.0	95.44	1,198.8	1,282.6	1,953.1	1,916.7	36.39	53.671		
8,800.0	7,272.0	9,102.4	7,457.0	37.9	0.0	95.44	1,298.8	1,280.4	1,951.7	1,914.1	37.55	51.970		
8,900.0	7,272.0	9,202.4	7,457.0	39.1	0.0	95.44	1,398.8	1,278.1	1,950.2	1,911.5	38.76	50.313		
9,000.0	7,272.0	9,302.3	7,457.0	40.4	0.0	95.45	1,498.7	1,275.9	1,948.8	1,908.8	40.01	48.706		
9,100.0	7,272.0	9,402.3	7,457.0	41.7	0.0	95.45	1,598.7	1,273.6	1,947.4	1,906.1	41.30	47.154		
9,200.0	7,272.0	9,502.3	7,457.0	43.0	0.0	95.46	1,698.7	1,271.3	1,946.0	1,903.4	42.62	45.660		
9,300.0	7,272.0	9,602.3	7,457.0	44.3	0.0	95.46	1,798.6	1,269.1	1,944.6	1,900.6	43.97	44.224		
9,400.0	7,272.0	9,702.3	7,457.0	45.7	0.0	95.46	1,898.6	1,266.8	1,943.1	1,897.8	45.35	42.848		
9,500.0	7,272.0	9,802.3	7,457.0	47.1	0.0	95.47	1,998.5	1,264.6	1,941.7	1,895.0	46.75	41.531		
9,600.0	7,272.0	9,902.3	7,457.0	48.5	0.0	95.47	2,098.5	1,262.3	1,940.3	1,892.1	48.18	40.270		
9,700.0	7,272.0	10,002.3	7,457.0	49.9	0.0	95.48	2,198.5	1,260.1	1,938.9	1,889.2	49.63	39.066		
9,800.0	7,272.0	10,102.3	7,457.0	51.4	0.0	95.48	2,298.4	1,257.8	1,937.4	1,886.3	51.10	37.915		
9,900.0	7,272.0	10,202.3	7,457.0	52.9	0.0	95.48	2,398.4	1,255.6	1,936.0	1,883.4	52.59	36.817		
10,000.0	7,272.0	10,302.2	7,457.0	54.4	0.0	95.49	2,498.4	1,253.3	1,934.6	1,880.5	54.09	35.768		
10,100.0	7,272.0	10,402.2	7,457.0	55.9	0.0	95.49	2,598.3	1,251.0	1,933.2	1,877.6	55.61	34.766		
10,200.0	7,272.0	10,502.2	7,457.0	57.4	0.0	95.50	2,698.3	1,248.8	1,931.8	1,874.6	57.14	33.809		
10,300.0	7,272.0	10,602.2	7,457.0	59.0	0.0	95.50	2,798.3	1,246.5	1,930.3	1,871.7	58.68	32.895		

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 19-18-1NBH
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 19-18-1NBH	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	7,272.0	10,702.2	7,457.0	60.5	0.0	95.50	2,898.2	1,244.3	1,928.9	1,868.7	60.24	32.022		
10,500.0	7,272.0	10,802.2	7,457.0	62.1	0.0	95.51	2,998.2	1,242.0	1,927.5	1,865.7	61.80	31.187		
10,600.0	7,272.0	10,902.2	7,457.0	63.7	0.0	95.51	3,098.2	1,239.8	1,926.1	1,862.7	63.38	30.389		
10,700.0	7,272.0	11,002.2	7,457.0	65.2	0.0	95.52	3,198.1	1,237.5	1,924.7	1,859.7	64.97	29.625		
10,800.0	7,272.0	11,102.2	7,457.0	66.8	0.0	95.52	3,298.1	1,235.3	1,923.2	1,856.7	66.56	28.894		
10,900.0	7,272.0	11,202.2	7,457.0	68.4	0.0	95.52	3,398.0	1,233.0	1,921.8	1,853.6	68.16	28.194		
11,000.0	7,272.0	11,302.1	7,457.0	70.1	0.0	95.53	3,498.0	1,230.8	1,920.4	1,850.6	69.77	27.523		
11,100.0	7,272.0	11,402.1	7,457.0	71.7	0.0	95.53	3,598.0	1,228.5	1,919.0	1,847.6	71.39	26.879		
11,200.0	7,272.0	11,502.1	7,457.0	73.3	0.0	95.54	3,697.9	1,226.2	1,917.5	1,844.5	73.02	26.262		
11,300.0	7,272.0	11,602.1	7,457.0	74.9	0.0	95.54	3,797.9	1,224.0	1,916.1	1,841.5	74.65	25.669		
11,400.0	7,272.0	11,702.1	7,457.0	76.6	0.0	95.55	3,897.9	1,221.7	1,914.7	1,838.4	76.28	25.100		
11,500.0	7,272.0	11,802.1	7,457.0	78.2	0.0	95.55	3,997.8	1,219.5	1,913.3	1,835.4	77.92	24.554		
11,600.0	7,272.0	11,902.1	7,457.0	79.8	0.0	95.55	4,097.8	1,217.2	1,911.9	1,832.3	79.57	24.028		
11,700.0	7,272.0	12,002.1	7,457.0	81.5	0.0	95.56	4,197.8	1,215.0	1,910.4	1,829.2	81.22	23.522		
11,800.0	7,272.0	12,102.1	7,457.0	83.2	0.0	95.56	4,297.7	1,212.7	1,909.0	1,826.1	82.87	23.035		
11,900.0	7,272.0	12,202.0	7,457.0	84.8	0.0	95.57	4,397.7	1,210.5	1,907.6	1,823.1	84.53	22.566		
12,000.0	7,272.0	12,302.0	7,457.0	86.5	0.0	95.57	4,497.7	1,208.2	1,906.2	1,820.0	86.20	22.114		
12,100.0	7,272.0	12,402.0	7,457.0	88.2	0.0	95.57	4,597.6	1,205.9	1,904.7	1,816.9	87.86	21.679		
12,200.0	7,272.0	12,502.0	7,457.0	89.8	0.0	95.58	4,697.6	1,203.7	1,903.3	1,813.8	89.53	21.258		
12,300.0	7,272.0	12,602.0	7,457.0	91.5	0.0	95.58	4,797.6	1,201.4	1,901.9	1,810.7	91.21	20.853		
12,400.0	7,272.0	12,702.0	7,457.0	93.2	0.0	95.59	4,897.5	1,199.2	1,900.5	1,807.6	92.88	20.461		
12,500.0	7,272.0	12,802.0	7,457.0	94.9	0.0	95.59	4,997.5	1,196.9	1,899.1	1,804.5	94.56	20.082		
12,600.0	7,272.0	12,902.0	7,457.0	96.5	0.0	95.60	5,097.4	1,194.7	1,897.6	1,801.4	96.25	19.717		
12,700.0	7,272.0	13,002.0	7,457.0	98.2	0.0	95.60	5,197.4	1,192.4	1,896.2	1,798.3	97.93	19.363		
12,800.0	7,272.0	13,102.0	7,457.0	99.9	0.0	95.60	5,297.4	1,190.2	1,894.8	1,795.2	99.62	19.021		
12,900.0	7,272.0	13,201.9	7,457.0	101.6	0.0	95.61	5,397.3	1,187.9	1,893.4	1,792.1	101.31	18.689		
13,000.0	7,272.0	13,301.9	7,457.0	103.3	0.0	95.61	5,497.3	1,185.7	1,892.0	1,789.0	103.00	18.368		
13,100.0	7,272.0	13,401.9	7,457.0	105.0	0.0	95.62	5,597.3	1,183.4	1,890.5	1,785.8	104.69	18.058		
13,200.0	7,272.0	13,501.9	7,457.0	106.7	0.0	95.62	5,697.2	1,181.1	1,889.1	1,782.7	106.39	17.756		
13,300.0	7,272.0	13,601.9	7,457.0	108.4	0.0	95.62	5,797.2	1,178.9	1,887.7	1,779.6	108.09	17.464		
13,400.0	7,272.0	13,701.9	7,457.0	110.1	0.0	95.63	5,897.2	1,176.6	1,886.3	1,776.5	109.79	17.181		
13,500.0	7,272.0	13,801.9	7,457.0	111.8	0.0	95.63	5,997.1	1,174.4	1,884.8	1,773.4	111.49	16.906		
13,600.0	7,272.0	13,901.9	7,457.0	113.5	0.0	95.64	6,097.1	1,172.1	1,883.4	1,770.2	113.20	16.639		
13,700.0	7,272.0	14,001.9	7,457.0	115.2	0.0	95.64	6,197.1	1,169.9	1,882.0	1,767.1	114.90	16.379		
13,800.0	7,272.0	14,101.9	7,457.0	117.0	0.0	95.65	6,297.0	1,167.6	1,880.6	1,764.0	116.61	16.127		
13,900.0	7,272.0	14,201.8	7,457.0	118.7	0.0	95.65	6,397.0	1,165.4	1,879.2	1,760.8	118.32	15.883		
14,000.0	7,272.0	14,301.8	7,457.0	120.4	0.0	95.65	6,496.9	1,163.1	1,877.7	1,757.7	120.03	15.644		
14,100.0	7,272.0	14,401.8	7,457.0	122.1	0.0	95.66	6,596.9	1,160.8	1,876.3	1,754.6	121.74	15.413		
14,200.0	7,272.0	14,501.8	7,457.0	123.8	0.0	95.66	6,696.9	1,158.6	1,874.9	1,751.4	123.45	15.188		
14,300.0	7,272.0	14,601.8	7,457.0	125.5	0.0	95.67	6,796.8	1,156.3	1,873.5	1,748.3	125.16	14.968		
14,400.0	7,272.0	14,701.8	7,457.0	127.3	0.0	95.67	6,896.8	1,154.1	1,872.1	1,745.2	126.88	14.755		
14,500.0	7,272.0	14,801.8	7,457.0	129.0	0.0	95.68	6,996.8	1,151.8	1,870.6	1,742.0	128.59	14.547		
14,600.0	7,272.0	14,901.8	7,457.0	130.7	0.0	95.68	7,096.7	1,149.6	1,869.2	1,738.9	130.31	14.344		
14,700.0	7,272.0	15,001.8	7,457.0	132.4	0.0	95.68	7,196.7	1,147.3	1,867.8	1,735.8	132.03	14.147		
14,800.0	7,272.0	15,101.8	7,457.0	134.2	0.0	95.69	7,296.7	1,145.1	1,866.4	1,732.6	133.75	13.954		
14,900.0	7,272.0	15,201.7	7,457.0	135.9	0.0	95.69	7,396.6	1,142.8	1,864.9	1,729.5	135.47	13.767		
15,000.0	7,272.0	15,301.7	7,457.0	137.6	0.0	95.70	7,496.6	1,140.5	1,863.5	1,726.3	137.19	13.584		
15,100.0	7,272.0	15,401.7	7,457.0	139.3	0.0	95.70	7,596.6	1,138.3	1,862.1	1,723.2	138.91	13.405		
15,200.0	7,272.0	15,501.7	7,457.0	141.1	0.0	95.71	7,696.6	1,136.0	1,860.7	1,720.1	140.63	13.231		
15,300.0	7,272.0	15,601.7	7,457.0	142.8	0.0	95.71	7,796.5	1,133.8	1,859.3	1,716.9	142.36	13.061		
15,400.0	7,272.0	15,701.7	7,457.0	144.5	0.0	95.72	7,896.4	1,131.5	1,857.8	1,713.8	144.08	12.894		
15,500.0	7,272.0	15,801.7	7,457.0	146.3	0.0	95.72	7,996.4	1,129.3	1,856.4	1,710.6	145.81	12.732		

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 19-18-1NBH
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 19-18-1NBH	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		
15,600.0	7,272.0	15,901.7	7,457.0	148.0	0.0	95.72	8,096.4	1,127.0	1,855.0	1,707.5	147.53	12.574		
15,700.0	7,272.0	16,001.7	7,457.0	149.7	0.0	95.73	8,196.3	1,124.8	1,853.6	1,704.3	149.26	12.419		
15,800.0	7,272.0	16,101.7	7,457.0	151.4	0.0	95.73	8,296.3	1,122.5	1,852.2	1,701.2	150.99	12.267		
15,900.0	7,272.0	16,201.6	7,457.0	153.2	0.0	95.74	8,396.3	1,120.3	1,850.7	1,698.0	152.71	12.119		
16,000.0	7,272.0	16,301.6	7,457.0	154.9	0.0	95.74	8,496.2	1,118.0	1,849.3	1,694.9	154.44	11.974		
16,100.0	7,272.0	16,401.6	7,457.0	156.7	0.0	95.75	8,596.2	1,115.7	1,847.9	1,691.7	156.17	11.832		
16,200.0	7,272.0	16,501.6	7,457.0	158.4	0.0	95.75	8,696.2	1,113.5	1,846.5	1,688.6	157.90	11.694		
16,300.0	7,272.0	16,601.6	7,457.0	160.1	0.0	95.76	8,796.1	1,111.2	1,845.1	1,685.4	159.63	11.558		
16,400.0	7,272.0	16,701.6	7,457.0	161.9	0.0	95.76	8,896.1	1,109.0	1,843.6	1,682.3	161.36	11.425		
16,500.0	7,272.0	16,801.6	7,457.0	163.6	0.0	95.76	8,996.1	1,106.7	1,842.2	1,679.1	163.09	11.295		
16,600.0	7,272.0	16,901.6	7,457.0	165.3	0.0	95.77	9,096.0	1,104.5	1,840.8	1,676.0	164.83	11.168		
16,700.0	7,272.0	17,001.6	7,457.0	167.1	0.0	95.77	9,196.0	1,102.2	1,839.4	1,672.8	166.56	11.043		
16,800.0	7,272.0	17,101.5	7,457.0	168.8	0.0	95.78	9,295.9	1,100.0	1,837.9	1,669.7	168.29	10.921		
16,900.0	7,272.0	17,201.5	7,457.0	170.6	0.0	95.78	9,395.9	1,097.7	1,836.5	1,666.5	170.03	10.801		
17,000.0	7,272.0	17,301.5	7,457.0	172.3	0.0	95.79	9,495.9	1,095.4	1,835.1	1,663.3	171.76	10.684		
17,100.0	7,272.0	17,401.5	7,457.0	174.0	0.0	95.79	9,595.8	1,093.2	1,833.7	1,660.2	173.49	10.569		
17,200.0	7,272.0	17,501.5	7,457.0	175.8	0.0	95.80	9,695.8	1,090.9	1,832.3	1,657.0	175.23	10.456		
17,300.0	7,272.0	17,601.5	7,457.0	177.5	0.0	95.80	9,795.8	1,088.7	1,830.8	1,653.9	176.96	10.346		
17,400.0	7,272.0	17,701.5	7,457.0	179.3	0.0	95.80	9,895.7	1,086.4	1,829.4	1,650.7	178.70	10.237		
17,429.8	7,272.0	17,720.0	7,457.0	179.8	0.0	95.81	9,914.2	1,086.0	1,829.0	1,649.8	179.18	10.208 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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
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	324.998	
200.0	200.0	200.0	200.0	1.0	0.0	89.72	0.4	90.0	90.0	89.2	0.80	112.838	
300.0	300.0	300.0	300.0	1.5	0.0	89.72	0.4	90.0	90.0	88.8	1.22	73.522	
400.0	400.0	400.0	400.0	1.9	0.0	89.72	0.4	90.0	90.0	88.4	1.62	55.626	
500.0	500.0	500.0	500.0	2.3	0.0	89.72	0.4	90.0	90.0	88.0	2.00	45.034	
600.0	600.0	600.0	600.0	2.7	0.0	89.72	0.4	90.0	90.0	87.6	2.37	37.940	
700.0	700.0	700.0	700.0	3.1	0.0	89.72	0.4	90.0	90.0	87.3	2.74	32.826	
800.0	800.0	800.0	800.0	3.5	0.0	89.72	0.4	90.0	90.0	86.9	3.11	28.950	
900.0	900.0	900.0	900.0	3.9	0.0	89.72	0.4	90.0	90.0	86.5	3.47	25.907 CC, ES	
1,000.0	1,000.0	1,000.0	1,000.0	4.2	0.0	-142.42	0.4	90.0	91.4	87.5	3.87	23.611	
1,100.0	1,099.8	1,099.8	1,099.8	5.1	0.0	-144.29	0.4	90.0	95.6	90.8	4.75	20.116	
1,200.0	1,199.5	1,196.5	1,196.5	5.8	0.0	-146.46	-0.3	91.4	104.2	98.7	5.54	18.798	
1,300.0	1,298.7	1,292.3	1,292.2	6.3	0.0	-148.21	-2.5	95.7	118.6	112.5	6.07	19.542	
1,400.0	1,397.8	1,387.2	1,386.7	6.6	0.0	-149.12	-6.2	102.8	136.8	130.4	6.35	21.546	
1,500.0	1,496.9	1,481.1	1,479.9	6.9	0.0	-149.14	-11.2	112.5	157.6	150.9	6.64	23.715	
1,600.0	1,596.1	1,573.8	1,571.6	7.2	0.0	-148.58	-17.6	124.7	180.9	174.0	6.93	26.109	
1,700.0	1,695.2	1,667.0	1,663.4	7.5	0.0	-147.68	-25.3	139.5	206.8	199.6	7.22	28.637	
1,800.0	1,794.3	1,763.4	1,758.1	7.8	0.0	-146.86	-33.5	155.4	233.2	225.7	7.54	30.943	
1,900.0	1,893.4	1,859.8	1,852.8	8.1	0.0	-146.20	-41.8	171.2	259.7	251.9	7.86	33.033	
2,000.0	1,992.5	1,956.2	1,947.5	8.4	0.0	-145.67	-50.0	187.1	286.2	278.0	8.19	34.931	
2,100.0	2,091.6	2,052.6	2,042.2	8.8	0.0	-145.23	-58.2	203.0	312.8	304.2	8.53	36.658	
2,200.0	2,190.8	2,149.0	2,136.9	9.1	0.0	-144.85	-66.5	218.9	339.3	330.4	8.87	38.236	
2,300.0	2,289.9	2,245.4	2,231.7	9.4	0.0	-144.53	-74.7	234.8	365.9	356.7	9.22	39.680	
2,400.0	2,389.0	2,341.8	2,326.4	9.8	0.0	-144.26	-83.0	250.6	392.4	382.9	9.57	41.007	
2,500.0	2,488.1	2,438.1	2,421.1	10.1	0.0	-144.01	-91.2	266.5	419.0	409.1	9.92	42.227	
2,600.0	2,587.2	2,534.5	2,515.8	10.5	0.0	-143.80	-99.5	282.4	445.6	435.3	10.28	43.354	
2,700.0	2,686.3	2,630.9	2,610.5	10.9	0.0	-143.61	-107.7	298.3	472.2	461.5	10.64	44.397	
2,800.0	2,785.4	2,727.3	2,705.2	11.2	0.0	-143.44	-116.0	314.2	498.8	487.8	11.00	45.363	
2,900.0	2,884.6	2,823.7	2,799.9	11.6	0.0	-143.29	-124.2	330.0	525.4	514.0	11.36	46.262	
3,000.0	2,983.7	2,920.1	2,894.7	12.0	0.0	-143.16	-132.5	345.9	552.0	540.2	11.72	47.099	
3,100.0	3,082.8	3,016.5	2,989.4	12.4	0.0	-143.03	-140.7	361.8	578.6	566.5	12.08	47.880	
3,200.0	3,181.9	3,112.9	3,084.1	12.8	0.0	-142.92	-149.0	377.7	605.2	592.7	12.45	48.611	
3,300.0	3,281.0	3,209.3	3,178.8	13.2	0.0	-142.81	-157.2	393.5	631.8	619.0	12.82	49.295	
3,400.0	3,380.1	3,305.7	3,273.5	13.5	0.0	-142.72	-165.5	409.4	658.4	645.2	13.18	49.938	
3,500.0	3,479.3	3,402.0	3,368.2	13.9	0.0	-142.63	-173.7	425.3	685.0	671.4	13.55	50.542	
3,600.0	3,578.4	3,498.4	3,462.9	14.4	0.0	-142.55	-181.9	441.2	711.6	697.7	13.92	51.111	
3,700.0	3,677.5	3,594.8	3,557.7	14.8	0.0	-142.47	-190.2	457.1	738.2	723.9	14.29	51.647	
3,800.0	3,776.6	3,691.2	3,652.4	15.2	0.0	-142.40	-198.4	472.9	764.8	750.1	14.66	52.154	
3,900.0	3,875.7	3,787.6	3,747.1	15.6	0.0	-142.34	-206.7	488.8	791.4	776.4	15.04	52.634	
4,000.0	3,974.8	3,884.0	3,841.8	16.0	0.0	-142.28	-214.9	504.7	818.0	802.6	15.41	53.088	
4,100.0	4,074.0	3,980.4	3,936.5	16.4	0.0	-142.22	-223.2	520.6	844.7	828.9	15.78	53.518	
4,200.0	4,173.1	4,076.8	4,031.2	16.8	0.0	-142.16	-231.4	536.5	871.3	855.1	16.16	53.927	
4,300.0	4,272.2	4,173.2	4,126.0	17.2	0.0	-142.11	-239.7	552.3	897.9	881.3	16.53	54.316	
4,400.0	4,371.3	4,269.6	4,220.7	17.6	0.0	-142.07	-247.9	568.2	924.5	907.6	16.91	54.685	
4,500.0	4,470.4	4,366.0	4,315.4	18.1	0.0	-142.02	-256.2	584.1	951.1	933.8	17.28	55.038	
4,600.0	4,569.5	4,462.3	4,410.1	18.5	0.0	-141.98	-264.4	600.0	977.7	960.1	17.66	55.374	
4,700.0	4,668.7	4,558.7	4,504.8	18.9	0.0	-141.94	-272.7	615.8	1,004.3	986.3	18.03	55.694	
4,800.0	4,767.8	4,655.1	4,599.5	19.3	0.0	-141.90	-280.9	631.7	1,031.0	1,012.6	18.41	56.001	
4,900.0	4,866.9	4,751.5	4,694.2	19.7	0.0	-141.86	-289.2	647.6	1,057.6	1,038.8	18.79	56.294	
5,000.0	4,966.0	4,847.9	4,789.0	20.2	0.0	-141.83	-297.4	663.5	1,084.2	1,065.0	19.16	56.574	
5,100.0	5,065.1	4,944.3	4,883.7	20.6	0.0	-141.80	-305.6	679.4	1,110.8	1,091.3	19.54	56.843	

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 19-18-1NBH
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 19-18-1NBH	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	5,164.2	5,040.7	4,978.4	21.0	0.0	-141.76	-313.9	695.2	1,137.4	1,117.5	19.92	57.100		
5,300.0	5,263.3	5,137.1	5,073.1	21.4	0.0	-141.73	-322.1	711.1	1,164.1	1,143.8	20.30	57.347		
5,400.0	5,362.5	5,233.5	5,167.8	21.8	0.0	-141.71	-330.4	727.0	1,190.7	1,170.0	20.68	57.585		
5,500.0	5,461.6	5,329.9	5,262.5	22.3	0.0	-141.68	-338.6	742.9	1,217.3	1,196.2	21.06	57.812		
5,600.0	5,560.7	5,426.2	5,357.2	22.7	0.0	-141.65	-346.9	758.8	1,243.9	1,222.5	21.44	58.032		
5,700.0	5,659.8	5,522.6	5,452.0	23.1	0.0	-141.63	-355.1	774.6	1,270.5	1,248.7	21.81	58.242		
5,800.0	5,758.9	5,619.0	5,546.7	23.5	0.0	-141.60	-363.4	790.5	1,297.2	1,275.0	22.19	58.445		
5,900.0	5,858.0	5,715.4	5,641.4	24.0	0.0	-141.58	-371.6	806.4	1,323.8	1,301.2	22.57	58.641		
6,000.0	5,957.2	5,811.8	5,736.1	24.4	0.0	-141.56	-379.9	822.3	1,350.4	1,327.4	22.95	58.829		
6,100.0	6,056.3	5,908.2	5,830.8	24.8	0.0	-141.54	-388.1	838.1	1,377.0	1,353.7	23.34	59.011		
6,200.0	6,155.4	6,004.6	5,925.5	25.2	0.0	-141.52	-396.4	854.0	1,403.6	1,379.9	23.72	59.186		
6,300.0	6,254.5	6,101.0	6,020.3	25.6	0.0	-141.50	-404.6	869.9	1,430.3	1,406.2	24.10	59.355		
6,400.0	6,353.6	6,197.4	6,115.0	26.1	0.0	-141.48	-412.9	885.8	1,456.9	1,432.4	24.48	59.518		
6,500.0	6,452.7	6,293.8	6,209.7	26.5	0.0	-141.46	-421.1	901.7	1,483.5	1,458.7	24.86	59.676		
6,600.0	6,551.9	6,390.1	6,304.4	26.9	0.0	-141.44	-429.4	917.5	1,510.1	1,484.9	25.24	59.829		
6,700.0	6,651.0	6,486.5	6,399.1	27.3	0.0	-141.42	-437.6	933.4	1,536.8	1,511.1	25.62	59.973		
6,800.0	6,750.3	6,582.4	6,493.3	27.8	0.0	139.78	-445.8	949.2	1,563.4	1,537.4	25.97	60.201		
6,900.0	6,848.2	6,675.4	6,584.7	28.1	0.0	109.01	-453.8	964.5	1,589.8	1,563.5	26.27	60.507		
7,000.0	6,941.6	6,769.4	6,677.3	28.5	0.0	99.39	-458.1	980.0	1,615.8	1,589.3	26.52	60.930		
7,100.0	7,027.7	6,872.3	6,777.9	28.7	0.0	94.68	-445.9	996.7	1,640.8	1,614.1	26.75	61.350		
7,200.0	7,104.0	6,985.3	6,884.1	28.9	0.0	91.91	-411.8	1,014.2	1,664.0	1,637.1	26.96	61.724		
7,300.0	7,168.0	7,111.2	6,991.9	29.0	0.0	90.22	-350.0	1,031.7	1,684.5	1,657.4	27.17	62.005		
7,400.0	7,217.9	7,251.8	7,093.5	29.1	0.0	89.25	-254.6	1,047.8	1,701.3	1,673.9	27.37	62.147		
7,500.0	7,252.2	7,407.5	7,175.6	29.0	0.0	88.76	-123.4	1,060.4	1,713.2	1,685.6	27.60	62.084		
7,600.0	7,269.7	7,574.7	7,221.6	29.0	0.0	88.55	36.6	1,066.8	1,719.4	1,691.6	27.85	61.736		
7,700.0	7,272.0	7,707.6	7,227.0	29.1	0.0	88.50	169.2	1,066.6	1,720.2	1,692.0	28.16	61.091		
7,800.0	7,272.0	7,807.6	7,227.0	29.4	0.0	88.50	269.2	1,065.8	1,720.2	1,691.6	28.56	60.228		
7,900.0	7,272.0	7,907.6	7,227.0	29.8	0.0	88.50	369.2	1,064.9	1,720.2	1,691.1	29.07	59.174		
8,000.0	7,272.0	8,007.6	7,227.0	30.4	0.0	88.50	469.2	1,064.1	1,720.2	1,690.5	29.67	57.968		
8,100.0	7,272.0	8,107.6	7,227.0	31.1	0.0	88.50	569.2	1,063.3	1,720.2	1,689.8	30.37	56.640		
8,200.0	7,272.0	8,207.6	7,227.0	31.8	0.0	88.50	669.2	1,062.5	1,720.2	1,689.0	31.15	55.221		
8,300.0	7,272.0	8,307.6	7,227.0	32.7	0.0	88.50	769.2	1,061.6	1,720.2	1,688.2	32.01	53.740		
8,400.0	7,272.0	8,407.6	7,227.0	33.6	0.0	88.50	869.2	1,060.8	1,720.2	1,687.2	32.94	52.221		
8,500.0	7,272.0	8,507.6	7,227.0	34.6	0.0	88.50	969.2	1,060.0	1,720.2	1,686.2	33.94	50.686		
8,600.0	7,272.0	8,607.6	7,227.0	35.7	0.0	88.50	1,069.2	1,059.2	1,720.2	1,685.2	35.00	49.154		
8,700.0	7,272.0	8,707.6	7,227.0	36.8	0.0	88.50	1,169.2	1,058.3	1,720.2	1,684.1	36.11	47.639		
8,800.0	7,272.0	8,807.6	7,227.0	37.9	0.0	88.50	1,269.2	1,057.5	1,720.2	1,682.9	37.27	46.151		
8,900.0	7,272.0	8,907.6	7,227.0	39.1	0.0	88.50	1,369.2	1,056.7	1,720.2	1,681.7	38.48	44.701		
9,000.0	7,272.0	9,007.6	7,227.0	40.4	0.0	88.50	1,469.2	1,055.9	1,720.2	1,680.4	39.73	43.293		
9,100.0	7,272.0	9,107.6	7,227.0	41.7	0.0	88.50	1,569.2	1,055.0	1,720.2	1,679.2	41.02	41.933		
9,200.0	7,272.0	9,207.6	7,227.0	43.0	0.0	88.50	1,669.2	1,054.2	1,720.2	1,677.8	42.35	40.623		
9,300.0	7,272.0	9,307.6	7,227.0	44.3	0.0	88.50	1,769.2	1,053.4	1,720.2	1,676.5	43.70	39.363		
9,400.0	7,272.0	9,407.6	7,227.0	45.7	0.0	88.50	1,869.2	1,052.5	1,720.2	1,675.1	45.08	38.156		
9,500.0	7,272.0	9,507.6	7,227.0	47.1	0.0	88.50	1,969.2	1,051.7	1,720.2	1,673.7	46.49	37.000		
9,600.0	7,272.0	9,607.6	7,227.0	48.5	0.0	88.50	2,069.2	1,050.9	1,720.2	1,672.3	47.92	35.894		
9,700.0	7,272.0	9,707.6	7,227.0	49.9	0.0	88.50	2,169.2	1,050.1	1,720.2	1,670.8	49.38	34.837		
9,800.0	7,272.0	9,807.6	7,227.0	51.4	0.0	88.50	2,269.2	1,049.2	1,720.2	1,669.3	50.85	33.827		
9,900.0	7,272.0	9,907.6	7,227.0	52.9	0.0	88.50	2,369.2	1,048.4	1,720.2	1,667.8	52.34	32.863		
10,000.0	7,272.0	10,007.6	7,227.0	54.4	0.0	88.50	2,469.2	1,047.6	1,720.2	1,666.3	53.85	31.943		
10,100.0	7,272.0	10,107.6	7,227.0	55.9	0.0	88.50	2,569.2	1,046.8	1,720.2	1,664.8	55.38	31.064		
10,200.0	7,272.0	10,207.6	7,227.0	57.4	0.0	88.50	2,669.1	1,045.9	1,720.2	1,663.3	56.91	30.225		
10,300.0	7,272.0	10,307.6	7,227.0	59.0	0.0	88.50	2,769.1	1,045.1	1,720.2	1,661.7	58.46	29.423		

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 19-18-1NBH
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 19-18-1NBH	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	7,272.0	10,407.6	7,227.0	60.5	0.0	88.50	2,869.1	1,044.3	1,720.2	1,660.2	60.03	28.658		
10,500.0	7,272.0	10,507.6	7,227.0	62.1	0.0	88.50	2,969.1	1,043.5	1,720.2	1,658.6	61.60	27.926		
10,600.0	7,272.0	10,607.6	7,227.0	63.7	0.0	88.50	3,069.1	1,042.6	1,720.2	1,657.0	63.18	27.226		
10,700.0	7,272.0	10,707.6	7,227.0	65.2	0.0	88.50	3,169.1	1,041.8	1,720.2	1,655.4	64.77	26.557		
10,800.0	7,272.0	10,807.6	7,227.0	66.8	0.0	88.50	3,269.1	1,041.0	1,720.2	1,653.8	66.38	25.916		
10,900.0	7,272.0	10,907.6	7,227.0	68.4	0.0	88.50	3,369.1	1,040.1	1,720.2	1,652.2	67.99	25.302		
11,000.0	7,272.0	11,007.6	7,227.0	70.1	0.0	88.50	3,469.1	1,039.3	1,720.2	1,650.6	69.60	24.714		
11,100.0	7,272.0	11,107.6	7,227.0	71.7	0.0	88.50	3,569.1	1,038.5	1,720.2	1,649.0	71.23	24.151		
11,200.0	7,272.0	11,207.6	7,227.0	73.3	0.0	88.50	3,669.1	1,037.7	1,720.2	1,647.3	72.86	23.610		
11,300.0	7,272.0	11,307.6	7,227.0	74.9	0.0	88.50	3,769.1	1,036.8	1,720.2	1,645.7	74.49	23.092		
11,400.0	7,272.0	11,407.6	7,227.0	76.6	0.0	88.50	3,869.1	1,036.0	1,720.2	1,644.0	76.14	22.593		
11,500.0	7,272.0	11,507.6	7,227.0	78.2	0.0	88.50	3,969.1	1,035.2	1,720.2	1,642.4	77.78	22.115		
11,600.0	7,272.0	11,607.6	7,227.0	79.8	0.0	88.50	4,069.1	1,034.4	1,720.2	1,640.7	79.44	21.655		
11,700.0	7,272.0	11,707.6	7,227.0	81.5	0.0	88.50	4,169.1	1,033.5	1,720.2	1,639.1	81.09	21.212		
11,800.0	7,272.0	11,807.6	7,227.0	83.2	0.0	88.50	4,269.1	1,032.7	1,720.2	1,637.4	82.76	20.786		
11,900.0	7,272.0	11,907.6	7,227.0	84.8	0.0	88.50	4,369.1	1,031.9	1,720.2	1,635.8	84.42	20.376		
12,000.0	7,272.0	12,007.6	7,227.0	86.5	0.0	88.50	4,469.1	1,031.1	1,720.2	1,634.1	86.09	19.980		
12,100.0	7,272.0	12,107.6	7,227.0	88.2	0.0	88.50	4,569.1	1,030.2	1,720.2	1,632.4	87.77	19.599		
12,200.0	7,272.0	12,207.6	7,227.0	89.8	0.0	88.50	4,669.1	1,029.4	1,720.2	1,630.7	89.45	19.232		
12,300.0	7,272.0	12,307.6	7,227.0	91.5	0.0	88.50	4,769.1	1,028.6	1,720.2	1,629.1	91.13	18.877		
12,400.0	7,272.0	12,407.6	7,227.0	93.2	0.0	88.50	4,869.1	1,027.7	1,720.2	1,627.4	92.81	18.535		
12,500.0	7,272.0	12,507.6	7,227.0	94.9	0.0	88.50	4,969.1	1,026.9	1,720.2	1,625.7	94.50	18.204		
12,600.0	7,272.0	12,607.6	7,227.0	96.5	0.0	88.50	5,069.1	1,026.1	1,720.2	1,624.0	96.19	17.884		
12,700.0	7,272.0	12,707.6	7,227.0	98.2	0.0	88.50	5,169.1	1,025.3	1,720.2	1,622.3	97.88	17.575		
12,800.0	7,272.0	12,807.6	7,227.0	99.9	0.0	88.50	5,269.1	1,024.4	1,720.2	1,620.6	99.57	17.276		
12,900.0	7,272.0	12,907.6	7,227.0	101.6	0.0	88.50	5,369.1	1,023.6	1,720.2	1,618.9	101.27	16.986		
13,000.0	7,272.0	13,007.6	7,227.0	103.3	0.0	88.50	5,469.1	1,022.8	1,720.2	1,617.2	102.97	16.706		
13,100.0	7,272.0	13,107.6	7,227.0	105.0	0.0	88.50	5,569.0	1,022.0	1,720.2	1,615.5	104.67	16.434		
13,200.0	7,272.0	13,207.6	7,227.0	106.7	0.0	88.50	5,669.0	1,021.1	1,720.2	1,613.8	106.38	16.171		
13,300.0	7,272.0	13,307.6	7,227.0	108.4	0.0	88.50	5,769.0	1,020.3	1,720.2	1,612.1	108.08	15.916		
13,400.0	7,272.0	13,407.6	7,227.0	110.1	0.0	88.50	5,869.0	1,019.5	1,720.2	1,610.4	109.79	15.668		
13,500.0	7,272.0	13,507.6	7,227.0	111.8	0.0	88.50	5,969.0	1,018.7	1,720.2	1,608.7	111.50	15.428		
13,600.0	7,272.0	13,607.6	7,227.0	113.5	0.0	88.50	6,069.0	1,017.8	1,720.2	1,607.0	113.21	15.195		
13,700.0	7,272.0	13,707.6	7,227.0	115.2	0.0	88.50	6,169.0	1,017.0	1,720.2	1,605.3	114.92	14.968		
13,800.0	7,272.0	13,807.6	7,227.0	117.0	0.0	88.50	6,269.0	1,016.2	1,720.2	1,603.6	116.64	14.748		
13,900.0	7,272.0	13,907.6	7,227.0	118.7	0.0	88.50	6,369.0	1,015.3	1,720.2	1,601.8	118.35	14.534		
14,000.0	7,272.0	14,007.6	7,227.0	120.4	0.0	88.50	6,469.0	1,014.5	1,720.2	1,600.1	120.07	14.327		
14,100.0	7,272.0	14,107.6	7,227.0	122.1	0.0	88.50	6,569.0	1,013.7	1,720.2	1,598.4	121.79	14.124		
14,200.0	7,272.0	14,207.6	7,227.0	123.8	0.0	88.50	6,669.0	1,012.9	1,720.2	1,596.7	123.51	13.928		
14,300.0	7,272.0	14,307.6	7,227.0	125.5	0.0	88.50	6,769.0	1,012.0	1,720.2	1,595.0	125.23	13.736		
14,400.0	7,272.0	14,407.6	7,227.0	127.3	0.0	88.50	6,869.0	1,011.2	1,720.2	1,593.2	126.95	13.550		
14,500.0	7,272.0	14,507.6	7,227.0	129.0	0.0	88.50	6,969.0	1,010.4	1,720.2	1,591.5	128.68	13.368		
14,600.0	7,272.0	14,607.6	7,227.0	130.7	0.0	88.50	7,069.0	1,009.6	1,720.2	1,589.8	130.40	13.192		
14,700.0	7,272.0	14,707.6	7,227.0	132.4	0.0	88.50	7,169.0	1,008.7	1,720.2	1,588.1	132.13	13.019		
14,800.0	7,272.0	14,807.6	7,227.0	134.2	0.0	88.50	7,269.0	1,007.9	1,720.2	1,586.3	133.85	12.851		
14,900.0	7,272.0	14,907.6	7,227.0	135.9	0.0	88.50	7,369.0	1,007.1	1,720.2	1,584.6	135.58	12.688		
15,000.0	7,272.0	15,007.6	7,227.0	137.6	0.0	88.50	7,469.0	1,006.2	1,720.2	1,582.9	137.31	12.528		
15,100.0	7,272.0	15,107.6	7,227.0	139.3	0.0	88.50	7,569.0	1,005.4	1,720.2	1,581.2	139.04	12.372		
15,200.0	7,272.0	15,207.6	7,227.0	141.1	0.0	88.50	7,669.0	1,004.6	1,720.2	1,579.4	140.77	12.220		
15,300.0	7,272.0	15,307.6	7,227.0	142.8	0.0	88.50	7,769.0	1,003.8	1,720.2	1,577.7	142.50	12.071		
15,400.0	7,272.0	15,407.6	7,227.0	144.5	0.0	88.50	7,869.0	1,002.9	1,720.2	1,576.0	144.23	11.926		
15,500.0	7,272.0	15,507.6	7,227.0	146.3	0.0	88.50	7,969.0	1,002.1	1,720.2	1,574.2	145.97	11.785		

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 19-18-1NBH
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 19-18-1NBH	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	7,272.0	15,607.6	7,227.0	148.0	0.0	88.50	8,069.0	1,001.3	1,720.2	1,572.5	147.70	11.647		
15,700.0	7,272.0	15,707.6	7,227.0	149.7	0.0	88.50	8,169.0	1,000.5	1,720.2	1,570.8	149.44	11.511		
15,800.0	7,272.0	15,807.6	7,227.0	151.4	0.0	88.50	8,269.0	999.6	1,720.2	1,569.0	151.17	11.379		
15,900.0	7,272.0	15,907.6	7,227.0	153.2	0.0	88.50	8,369.0	998.8	1,720.2	1,567.3	152.91	11.250		
16,000.0	7,272.0	16,007.6	7,227.0	154.9	0.0	88.50	8,469.0	998.0	1,720.2	1,565.6	154.64	11.124		
16,100.0	7,272.0	16,107.6	7,227.0	156.7	0.0	88.50	8,568.9	997.2	1,720.2	1,563.8	156.38	11.000		
16,200.0	7,272.0	16,207.6	7,227.0	158.4	0.0	88.50	8,668.9	996.3	1,720.2	1,562.1	158.12	10.879		
16,300.0	7,272.0	16,307.6	7,227.0	160.1	0.0	88.50	8,768.9	995.5	1,720.2	1,560.3	159.86	10.761		
16,400.0	7,272.0	16,407.6	7,227.0	161.9	0.0	88.50	8,868.9	994.7	1,720.2	1,558.6	161.60	10.645		
16,500.0	7,272.0	16,507.6	7,227.0	163.6	0.0	88.50	8,968.9	993.8	1,720.2	1,556.9	163.33	10.532		
16,600.0	7,272.0	16,607.6	7,227.0	165.3	0.0	88.50	9,068.9	993.0	1,720.2	1,555.1	165.07	10.421		
16,700.0	7,272.0	16,707.6	7,227.0	167.1	0.0	88.50	9,168.9	992.2	1,720.2	1,553.4	166.82	10.312		
16,800.0	7,272.0	16,807.6	7,227.0	168.8	0.0	88.50	9,268.9	991.4	1,720.2	1,551.6	168.56	10.206		
16,900.0	7,272.0	16,907.6	7,227.0	170.6	0.0	88.50	9,368.9	990.5	1,720.2	1,549.9	170.30	10.101		
17,000.0	7,272.0	17,007.6	7,227.0	172.3	0.0	88.50	9,468.9	989.7	1,720.2	1,548.2	172.04	9.999		
17,100.0	7,272.0	17,107.6	7,227.0	174.0	0.0	88.50	9,568.9	988.9	1,720.2	1,546.4	173.78	9.899		
17,200.0	7,272.0	17,207.6	7,227.0	175.8	0.0	88.50	9,668.9	988.1	1,720.2	1,544.7	175.53	9.800		
17,300.0	7,272.0	17,307.6	7,227.0	177.5	0.0	88.50	9,768.9	987.2	1,720.2	1,542.9	177.27	9.704		
17,400.0	7,272.0	17,407.6	7,227.0	179.3	0.0	88.50	9,868.9	986.4	1,720.2	1,541.2	179.01	9.609		
17,429.8	7,272.0	17,437.5	7,227.0	179.8	0.0	88.50	9,898.7	986.2	1,720.2	1,540.7	179.53	9.582 SF		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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		
0.0	0.0	0.0	0.0	0.0	0.0	89.74	0.6	135.0	135.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.74	0.6	135.0	135.0	134.7	0.28	487.478		
200.0	200.0	200.0	200.0	1.0	0.0	89.74	0.6	135.0	135.0	134.2	0.80	169.246		
300.0	300.0	300.0	300.0	1.5	0.0	89.74	0.6	135.0	135.0	133.8	1.22	110.273		
400.0	400.0	400.0	400.0	1.9	0.0	89.74	0.6	135.0	135.0	133.4	1.62	83.430		
500.0	500.0	500.0	500.0	2.3	0.0	89.74	0.6	135.0	135.0	133.0	2.00	67.543		
600.0	600.0	600.0	600.0	2.7	0.0	89.74	0.6	135.0	135.0	132.6	2.37	56.903		
700.0	700.0	700.0	700.0	3.1	0.0	89.74	0.6	135.0	135.0	132.2	2.74	49.232		
800.0	800.0	800.0	800.0	3.5	0.0	89.74	0.6	135.0	135.0	131.9	3.11	43.419 CC, ES		
900.0	900.0	895.6	895.6	3.9	0.0	89.92	0.2	136.5	136.6	133.1	3.47	39.357		
1,000.0	1,000.0	991.0	990.8	4.2	0.0	-141.38	-1.1	141.1	142.8	138.9	3.85	37.051		
1,100.0	1,099.8	1,085.5	1,085.0	5.1	0.0	-141.58	-3.3	148.7	154.8	150.1	4.69	33.028		
1,200.0	1,199.5	1,178.8	1,177.7	5.8	0.0	-142.06	-6.2	159.0	172.7	167.3	5.42	31.898 SF		
1,300.0	1,298.7	1,270.3	1,268.2	6.3	0.0	-142.71	-9.9	172.0	196.3	190.4	5.90	33.291		
1,400.0	1,397.8	1,360.1	1,356.6	6.6	0.0	-143.34	-14.3	187.5	223.8	217.6	6.16	36.333		
1,500.0	1,496.9	1,448.5	1,442.9	6.9	0.0	-143.62	-19.3	205.3	254.1	247.6	6.45	39.416		
1,600.0	1,596.1	1,535.1	1,527.1	7.2	0.0	-143.65	-24.9	225.2	287.1	280.4	6.72	42.701		
1,700.0	1,695.2	1,622.3	1,611.1	7.5	0.0	-143.53	-31.3	247.7	322.7	315.7	7.01	46.058		
1,800.0	1,794.3	1,715.5	1,700.7	7.8	0.0	-143.38	-38.3	272.3	359.0	351.7	7.33	49.002		
1,900.0	1,893.4	1,808.7	1,790.3	8.1	0.0	-143.26	-45.3	297.0	395.3	387.7	7.65	51.666		
2,000.0	1,992.5	1,901.8	1,879.9	8.4	0.0	-143.16	-52.2	321.6	431.6	423.6	7.98	54.084		
2,100.0	2,091.6	1,995.0	1,969.4	8.8	0.0	-143.07	-59.2	346.2	467.9	459.6	8.31	56.285		
2,200.0	2,190.8	2,088.2	2,059.0	9.1	0.0	-143.00	-66.2	370.9	504.3	495.6	8.65	58.295		
2,300.0	2,289.9	2,181.3	2,148.6	9.4	0.0	-142.93	-73.2	395.5	540.6	531.6	8.99	60.135		
2,400.0	2,389.0	2,274.5	2,238.2	9.8	0.0	-142.88	-80.2	420.2	576.9	567.6	9.33	61.825		
2,500.0	2,488.1	2,367.7	2,327.7	10.1	0.0	-142.83	-87.2	444.8	613.2	603.5	9.68	63.380		
2,600.0	2,587.2	2,460.9	2,417.3	10.5	0.0	-142.79	-94.1	469.5	649.5	639.5	10.02	64.816		
2,700.0	2,686.3	2,554.0	2,506.9	10.9	0.0	-142.75	-101.1	494.1	685.9	675.5	10.37	66.145		
2,800.0	2,785.4	2,647.2	2,596.5	11.2	0.0	-142.71	-108.1	518.8	722.2	711.5	10.72	67.377		
2,900.0	2,884.6	2,740.4	2,686.1	11.6	0.0	-142.68	-115.1	543.4	758.5	747.4	11.07	68.522		
3,000.0	2,983.7	2,833.5	2,775.6	12.0	0.0	-142.65	-122.1	568.0	794.8	783.4	11.42	69.589		
3,100.0	3,082.8	2,926.7	2,865.2	12.4	0.0	-142.63	-129.0	592.7	831.1	819.4	11.78	70.584		
3,200.0	3,181.9	3,019.9	2,954.8	12.8	0.0	-142.60	-136.0	617.3	867.5	855.3	12.13	71.515		
3,300.0	3,281.0	3,113.0	3,044.4	13.2	0.0	-142.58	-143.0	642.0	903.8	891.3	12.49	72.387		
3,400.0	3,380.1	3,206.2	3,134.0	13.5	0.0	-142.56	-150.0	666.6	940.1	927.3	12.84	73.205		
3,500.0	3,479.3	3,299.4	3,223.5	13.9	0.0	-142.54	-157.0	691.3	976.4	963.2	13.20	73.974		
3,600.0	3,578.4	3,392.6	3,313.1	14.4	0.0	-142.52	-163.9	715.9	1,012.8	999.2	13.56	74.698		
3,700.0	3,677.5	3,485.7	3,402.7	14.8	0.0	-142.51	-170.9	740.6	1,049.1	1,035.2	13.92	75.380		
3,800.0	3,776.6	3,578.9	3,492.3	15.2	0.0	-142.49	-177.9	765.2	1,085.4	1,071.1	14.28	76.025		
3,900.0	3,875.7	3,672.1	3,581.9	15.6	0.0	-142.48	-184.9	789.8	1,121.7	1,107.1	14.64	76.634		
4,000.0	3,974.8	3,765.2	3,671.4	16.0	0.0	-142.46	-191.9	814.5	1,158.0	1,143.0	15.00	77.210		
4,100.0	4,074.0	3,858.4	3,761.0	16.4	0.0	-142.45	-198.9	839.1	1,194.4	1,179.0	15.36	77.757		
4,200.0	4,173.1	3,951.6	3,850.6	16.8	0.0	-142.44	-205.8	863.8	1,230.7	1,215.0	15.72	78.275		
4,300.0	4,272.2	4,044.7	3,940.2	17.2	0.0	-142.43	-212.8	888.4	1,267.0	1,250.9	16.09	78.768		
4,400.0	4,371.3	4,137.9	4,029.8	17.6	0.0	-142.42	-219.8	913.1	1,303.3	1,286.9	16.45	79.236		
4,500.0	4,470.4	4,231.1	4,119.3	18.1	0.0	-142.41	-226.8	937.7	1,339.7	1,322.8	16.81	79.682		
4,600.0	4,569.5	4,324.3	4,208.9	18.5	0.0	-142.40	-233.8	962.4	1,376.0	1,358.8	17.18	80.107		
4,700.0	4,668.7	4,417.4	4,298.5	18.9	0.0	-142.39	-240.7	987.0	1,412.3	1,394.8	17.54	80.512		
4,800.0	4,767.8	4,510.6	4,388.1	19.3	0.0	-142.38	-247.7	1,011.7	1,448.6	1,430.7	17.91	80.899		
4,900.0	4,866.9	4,603.8	4,477.7	19.7	0.0	-142.37	-254.7	1,036.3	1,484.9	1,466.7	18.27	81.268		
5,000.0	4,966.0	4,696.9	4,567.2	20.2	0.0	-142.37	-261.7	1,060.9	1,521.3	1,502.6	18.64	81.621		
5,100.0	5,065.1	4,790.1	4,656.8	20.6	0.0	-142.36	-268.7	1,085.6	1,557.6	1,538.6	19.00	81.959		

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 19-18-1NBH
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 19-18-1NBH	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									
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	5,164.2	4,883.3	4,746.4	21.0	0.0	-142.35	-275.7	1,110.2	1,593.9	1,574.5	19.37	82.283	
5,300.0	5,263.3	4,976.4	4,836.0	21.4	0.0	-142.35	-282.6	1,134.9	1,630.2	1,610.5	19.74	82.593	
5,400.0	5,362.5	5,069.6	4,925.6	21.8	0.0	-142.34	-289.6	1,159.5	1,666.6	1,646.5	20.11	82.890	
5,500.0	5,461.6	5,162.8	5,015.1	22.3	0.0	-142.33	-296.6	1,184.2	1,702.9	1,682.4	20.47	83.176	
5,600.0	5,560.7	5,256.0	5,104.7	22.7	0.0	-142.33	-303.6	1,208.8	1,739.2	1,718.4	20.84	83.449	
5,700.0	5,659.8	5,349.1	5,194.3	23.1	0.0	-142.32	-310.6	1,233.5	1,775.5	1,754.3	21.21	83.713	
5,800.0	5,758.9	5,442.3	5,283.9	23.5	0.0	-142.32	-317.5	1,258.1	1,811.9	1,790.3	21.58	83.966	
5,900.0	5,858.0	5,535.5	5,373.5	24.0	0.0	-142.31	-324.5	1,282.7	1,848.2	1,826.2	21.95	84.209	
6,000.0	5,957.2	5,628.6	5,463.0	24.4	0.0	-142.31	-331.5	1,307.4	1,884.5	1,862.2	22.32	84.443	
6,100.0	6,056.3	5,721.8	5,552.6	24.8	0.0	-142.30	-338.5	1,332.0	1,920.8	1,898.1	22.69	84.668	
6,200.0	6,155.4	5,815.0	5,642.2	25.2	0.0	-142.30	-345.5	1,356.7	1,957.1	1,934.1	23.06	84.885	
6,300.0	6,254.5	5,908.1	5,731.8	25.6	0.0	-142.29	-352.5	1,381.3	1,993.5	1,970.0	23.43	85.094	
6,400.0	6,353.6	6,001.3	5,821.4	26.1	0.0	-142.29	-359.4	1,406.0	2,029.8	2,006.0	23.80	85.296	
6,500.0	6,452.7	6,094.5	5,910.9	26.5	0.0	-142.28	-366.4	1,430.6	2,066.1	2,041.9	24.17	85.490	
6,600.0	6,551.9	6,187.7	6,000.5	26.9	0.0	-142.28	-373.4	1,455.3	2,102.4	2,077.9	24.54	85.678	
6,700.0	6,651.0	6,280.8	6,090.1	27.3	0.0	-142.28	-380.4	1,479.9	2,138.8	2,113.9	24.91	85.855	
6,800.0	6,750.3	6,373.6	6,179.3	27.8	0.0	137.77	-387.3	1,504.4	2,174.9	2,149.7	25.24	86.153	
6,900.0	6,848.2	6,463.6	6,265.9	28.1	0.0	105.73	-394.1	1,528.3	2,210.3	2,184.7	25.54	86.531	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - CONNER 19-18-4NBH - OH - PLAN #1													Offset Site Error:	0.0 usft
Survey Program: 0-													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	89.71	0.9	180.0	180.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.71	0.9	180.0	180.0	179.7	0.28	649.690		
200.0	200.0	200.0	200.0	1.0	0.0	89.71	0.9	180.0	180.0	179.2	0.80	225.574		
300.0	300.0	300.0	300.0	1.5	0.0	89.71	0.9	180.0	180.0	178.7	1.22	146.980		
400.0	400.0	400.0	400.0	1.9	0.0	89.71	0.9	180.0	180.0	178.3	1.62	111.206		
500.0	500.0	500.0	500.0	2.3	0.0	89.71	0.9	180.0	180.0	178.0	2.00	90.031 CC, ES		
600.0	600.0	594.2	594.2	2.7	0.0	89.81	0.6	181.5	181.6	179.2	2.37	76.571		
700.0	700.0	688.2	688.0	3.1	0.0	90.11	-0.3	186.0	186.4	183.6	2.74	68.137		
800.0	800.0	781.7	781.3	3.5	0.0	90.57	-1.9	193.5	194.4	191.3	3.09	62.883		
900.0	900.0	874.7	873.6	3.9	0.0	91.15	-4.1	203.9	205.6	202.2	3.44	59.780		
1,000.0	1,000.0	966.7	964.6	4.2	0.0	-139.74	-6.9	217.1	221.4	217.6	3.81	58.098		
1,100.0	1,099.8	1,057.2	1,053.7	5.1	0.0	-139.52	-10.1	232.8	242.8	238.2	4.61	52.707		
1,200.0	1,199.5	1,145.7	1,140.2	5.8	0.0	-139.55	-13.9	250.9	269.8	264.5	5.29	50.994 SF		
1,300.0	1,298.7	1,231.8	1,223.8	6.3	0.0	-139.82	-18.1	270.9	302.1	296.4	5.74	52.632		
1,400.0	1,397.8	1,315.8	1,304.9	6.6	0.0	-140.35	-22.7	292.9	338.1	332.1	5.99	56.486		
1,500.0	1,496.9	1,400.0	1,385.3	6.9	0.0	-140.70	-27.8	317.2	376.7	370.4	6.27	60.120		
1,600.0	1,596.1	1,478.3	1,459.4	7.2	0.0	-140.90	-33.0	341.9	417.9	411.3	6.52	64.080		
1,700.0	1,695.2	1,557.4	1,533.6	7.5	0.0	-141.00	-38.6	368.8	461.5	454.7	6.78	68.047		
1,800.0	1,794.3	1,646.9	1,617.1	7.8	0.0	-141.07	-45.2	400.2	506.1	499.0	7.10	71.325		
1,900.0	1,893.4	1,736.4	1,700.7	8.1	0.0	-141.13	-51.7	431.6	550.7	543.3	7.41	74.287		
2,000.0	1,992.5	1,825.9	1,784.2	8.4	0.0	-141.18	-58.3	463.1	595.4	587.6	7.74	76.972		
2,100.0	2,091.6	1,915.4	1,867.7	8.8	0.0	-141.22	-64.9	494.5	640.0	632.0	8.06	79.414		
2,200.0	2,190.8	2,004.9	1,951.2	9.1	0.0	-141.26	-71.4	525.9	684.7	676.3	8.39	81.640		
2,300.0	2,289.9	2,094.3	2,034.8	9.4	0.0	-141.29	-78.0	557.3	729.3	720.6	8.72	83.677		
2,400.0	2,389.0	2,183.8	2,118.3	9.8	0.0	-141.32	-84.6	588.7	773.9	764.9	9.05	85.545		
2,500.0	2,488.1	2,273.3	2,201.8	10.1	0.0	-141.35	-91.2	620.1	818.6	809.2	9.38	87.262		
2,600.0	2,587.2	2,362.8	2,285.4	10.5	0.0	-141.37	-97.7	651.5	863.2	853.5	9.72	88.846		
2,700.0	2,686.3	2,452.3	2,368.9	10.9	0.0	-141.39	-104.3	683.0	907.8	897.8	10.05	90.309		
2,800.0	2,785.4	2,541.8	2,452.4	11.2	0.0	-141.41	-110.9	714.4	952.5	942.1	10.39	91.664		
2,900.0	2,884.6	2,631.2	2,536.0	11.6	0.0	-141.43	-117.4	745.8	997.1	986.4	10.73	92.922		
3,000.0	2,983.7	2,720.7	2,619.5	12.0	0.0	-141.44	-124.0	777.2	1,041.8	1,030.7	11.07	94.093		
3,100.0	3,082.8	2,810.2	2,703.0	12.4	0.0	-141.46	-130.6	808.6	1,086.4	1,075.0	11.41	95.183		
3,200.0	3,181.9	2,899.7	2,786.5	12.8	0.0	-141.47	-137.2	840.0	1,131.0	1,119.3	11.76	96.202		
3,300.0	3,281.0	2,989.2	2,870.1	13.2	0.0	-141.48	-143.7	871.4	1,175.7	1,163.6	12.10	97.155		
3,400.0	3,380.1	3,078.7	2,953.6	13.5	0.0	-141.50	-150.3	902.9	1,220.3	1,207.9	12.45	98.047		
3,500.0	3,479.3	3,168.2	3,037.1	13.9	0.0	-141.51	-156.9	934.3	1,265.0	1,252.2	12.79	98.885		
3,600.0	3,578.4	3,257.6	3,120.7	14.4	0.0	-141.52	-163.4	965.7	1,309.6	1,296.5	13.14	99.673		
3,700.0	3,677.5	3,347.1	3,204.2	14.8	0.0	-141.52	-170.0	997.1	1,354.2	1,340.7	13.49	100.414		
3,800.0	3,776.6	3,436.6	3,287.7	15.2	0.0	-141.53	-176.6	1,028.5	1,398.9	1,385.0	13.83	101.113		
3,900.0	3,875.7	3,526.1	3,371.3	15.6	0.0	-141.54	-183.2	1,059.9	1,443.5	1,429.3	14.18	101.773		
4,000.0	3,974.8	3,615.6	3,454.8	16.0	0.0	-141.55	-189.7	1,091.3	1,488.1	1,473.6	14.53	102.396		
4,100.0	4,074.0	3,705.1	3,538.3	16.4	0.0	-141.56	-196.3	1,122.8	1,532.8	1,517.9	14.88	102.986		
4,200.0	4,173.1	3,794.5	3,621.9	16.8	0.0	-141.56	-202.9	1,154.2	1,577.4	1,562.2	15.23	103.545		
4,300.0	4,272.2	3,884.0	3,705.4	17.2	0.0	-141.57	-209.4	1,185.6	1,622.1	1,606.5	15.59	104.074		
4,400.0	4,371.3	3,973.5	3,788.9	17.6	0.0	-141.58	-216.0	1,217.0	1,666.7	1,650.8	15.94	104.577		
4,500.0	4,470.4	4,063.0	3,872.4	18.1	0.0	-141.58	-222.6	1,248.4	1,711.3	1,695.0	16.29	105.055		
4,600.0	4,569.5	4,152.5	3,956.0	18.5	0.0	-141.59	-229.2	1,279.8	1,756.0	1,739.3	16.64	105.509		
4,700.0	4,668.7	4,242.0	4,039.5	18.9	0.0	-141.59	-235.7	1,311.2	1,800.6	1,783.6	17.00	105.942		
4,800.0	4,767.8	4,331.4	4,123.0	19.3	0.0	-141.60	-242.3	1,342.7	1,845.3	1,827.9	17.35	106.354		
4,900.0	4,866.9	4,420.9	4,206.6	19.7	0.0	-141.60	-248.9	1,374.1	1,889.9	1,872.2	17.70	106.746		
5,000.0	4,966.0	4,510.4	4,290.1	20.2	0.0	-141.61	-255.4	1,405.5	1,934.5	1,916.5	18.06	107.121		
5,100.0	5,065.1	4,599.9	4,373.6	20.6	0.0	-141.61	-262.0	1,436.9	1,979.2	1,960.8	18.41	107.478		

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 19-18-1NBH
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 19-18-1NBH	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	5,164.2	4,689.4	4,457.2	21.0	0.0	-141.61	-268.6	1,468.3	2,023.8	2,005.0	18.77	107.820	
5,300.0	5,263.3	4,778.9	4,540.7	21.4	0.0	-141.62	-275.1	1,499.7	2,068.4	2,049.3	19.13	108.147	
5,400.0	5,362.5	4,868.3	4,624.2	21.8	0.0	-141.62	-281.7	1,531.1	2,113.1	2,093.6	19.48	108.459	
5,500.0	5,461.6	4,957.8	4,707.7	22.3	0.0	-141.63	-288.3	1,562.6	2,157.7	2,137.9	19.84	108.758	
5,600.0	5,560.7	5,047.3	4,791.3	22.7	0.0	-141.63	-294.9	1,594.0	2,202.4	2,182.2	20.20	109.044	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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		
0.0	0.0	0.0	0.0	0.0	0.0	89.69	0.9	165.0	165.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.69	0.9	165.0	165.0	164.7	0.28	595.408		
200.0	200.0	200.0	200.0	1.0	0.0	89.69	0.9	165.0	165.0	164.2	0.80	206.734		
300.0	300.0	300.0	300.0	1.5	0.0	89.69	0.9	165.0	165.0	163.7	1.22	134.708		
400.0	400.0	400.0	400.0	1.9	0.0	89.69	0.9	165.0	165.0	163.3	1.62	101.923		
500.0	500.0	500.0	500.0	2.3	0.0	89.69	0.9	165.0	165.0	163.0	2.00	82.517		
600.0	600.0	600.0	600.0	2.7	0.0	89.69	0.9	165.0	165.0	162.6	2.37	69.521	CC, ES	
700.0	700.0	694.6	694.6	3.1	0.0	89.81	0.6	166.5	166.6	163.8	2.74	60.781		
800.0	800.0	789.1	788.9	3.5	0.0	90.14	-0.4	171.1	171.4	168.3	3.10	55.281		
900.0	900.0	883.1	882.6	3.9	0.0	90.65	-2.0	178.6	179.5	176.0	3.45	51.976		
1,000.0	1,000.0	976.4	975.3	4.2	0.0	-140.34	-4.3	189.1	192.1	188.3	3.83	50.189		
1,100.0	1,099.8	1,068.3	1,066.2	5.1	0.0	-140.24	-7.1	202.3	210.5	205.8	4.64	45.393		
1,200.0	1,199.5	1,158.5	1,155.0	5.8	0.0	-140.41	-10.5	218.0	234.6	229.2	5.34	43.960	SF	
1,300.0	1,298.7	1,246.5	1,241.0	6.3	0.0	-140.82	-14.3	236.0	264.1	258.3	5.80	45.567		
1,400.0	1,397.8	1,332.5	1,324.5	6.6	0.0	-141.41	-18.6	256.0	297.4	291.4	6.05	49.184		
1,500.0	1,496.9	1,416.7	1,405.7	6.9	0.0	-141.77	-23.3	278.0	333.4	327.1	6.32	52.728		
1,600.0	1,596.1	1,500.0	1,485.3	7.2	0.0	-141.97	-28.5	302.1	372.1	365.5	6.60	56.407		
1,700.0	1,695.2	1,579.5	1,560.5	7.5	0.0	-142.05	-33.8	327.1	413.3	406.4	6.85	60.308		
1,800.0	1,794.3	1,662.1	1,638.0	7.8	0.0	-142.04	-39.8	355.1	456.8	449.6	7.13	64.081		
1,900.0	1,893.4	1,751.9	1,722.0	8.1	0.0	-142.02	-46.5	386.0	500.8	493.3	7.44	67.266		
2,000.0	1,992.5	1,841.7	1,806.1	8.4	0.0	-142.00	-53.1	417.0	544.8	537.0	7.76	70.158		
2,100.0	2,091.6	1,931.5	1,890.1	8.8	0.0	-141.98	-59.7	447.9	588.8	580.7	8.09	72.791		
2,200.0	2,190.8	2,021.3	1,974.2	9.1	0.0	-141.97	-66.3	478.8	632.8	624.4	8.42	75.195		
2,300.0	2,289.9	2,111.1	2,058.2	9.4	0.0	-141.96	-73.0	509.7	676.8	668.0	8.74	77.396		
2,400.0	2,389.0	2,200.9	2,142.3	9.8	0.0	-141.95	-79.6	540.7	720.8	711.7	9.08	79.417		
2,500.0	2,488.1	2,290.7	2,226.3	10.1	0.0	-141.94	-86.2	571.6	764.8	755.4	9.41	81.278		
2,600.0	2,587.2	2,380.5	2,310.4	10.5	0.0	-141.93	-92.8	602.5	808.8	799.0	9.74	82.995		
2,700.0	2,686.3	2,470.3	2,394.4	10.9	0.0	-141.92	-99.4	633.4	852.8	842.7	10.08	84.583		
2,800.0	2,785.4	2,560.1	2,478.5	11.2	0.0	-141.92	-106.1	664.4	896.8	886.3	10.42	86.056		
2,900.0	2,884.6	2,649.9	2,562.5	11.6	0.0	-141.91	-112.7	695.3	940.8	930.0	10.76	87.424		
3,000.0	2,983.7	2,739.7	2,646.6	12.0	0.0	-141.90	-119.3	726.2	984.8	973.6	11.10	88.699		
3,100.0	3,082.8	2,829.5	2,730.6	12.4	0.0	-141.90	-125.9	757.1	1,028.7	1,017.3	11.44	89.887		
3,200.0	3,181.9	2,919.3	2,814.7	12.8	0.0	-141.89	-132.6	788.1	1,072.7	1,061.0	11.79	90.998		
3,300.0	3,281.0	3,009.1	2,898.7	13.2	0.0	-141.89	-139.2	819.0	1,116.7	1,104.6	12.13	92.038		
3,400.0	3,380.1	3,098.9	2,982.8	13.5	0.0	-141.89	-145.8	849.9	1,160.7	1,148.3	12.48	93.014		
3,500.0	3,479.3	3,188.7	3,066.8	13.9	0.0	-141.88	-152.4	880.8	1,204.7	1,191.9	12.83	93.930		
3,600.0	3,578.4	3,278.5	3,150.9	14.4	0.0	-141.88	-159.1	911.8	1,248.7	1,235.6	13.17	94.792		
3,700.0	3,677.5	3,368.3	3,234.9	14.8	0.0	-141.88	-165.7	942.7	1,292.7	1,279.2	13.52	95.604		
3,800.0	3,776.6	3,458.1	3,319.0	15.2	0.0	-141.87	-172.3	973.6	1,336.7	1,322.9	13.87	96.370		
3,900.0	3,875.7	3,547.9	3,403.0	15.6	0.0	-141.87	-178.9	1,004.5	1,380.7	1,366.5	14.22	97.094		
4,000.0	3,974.8	3,637.7	3,487.0	16.0	0.0	-141.87	-185.5	1,035.5	1,424.7	1,410.2	14.57	97.779		
4,100.0	4,074.0	3,727.5	3,571.1	16.4	0.0	-141.87	-192.2	1,066.4	1,468.7	1,453.8	14.92	98.427		
4,200.0	4,173.1	3,817.3	3,655.1	16.8	0.0	-141.86	-198.8	1,097.3	1,512.7	1,497.5	15.27	99.042		
4,300.0	4,272.2	3,907.1	3,739.2	17.2	0.0	-141.86	-205.4	1,128.2	1,556.7	1,541.1	15.63	99.625		
4,400.0	4,371.3	3,996.9	3,823.2	17.6	0.0	-141.86	-212.0	1,159.2	1,600.7	1,584.7	15.98	100.179		
4,500.0	4,470.4	4,086.7	3,907.3	18.1	0.0	-141.86	-218.7	1,190.1	1,644.7	1,628.4	16.33	100.706		
4,600.0	4,569.5	4,176.5	3,991.3	18.5	0.0	-141.86	-225.3	1,221.0	1,688.7	1,672.0	16.69	101.208		
4,700.0	4,668.7	4,266.3	4,075.4	18.9	0.0	-141.85	-231.9	1,251.9	1,732.7	1,715.7	17.04	101.686		
4,800.0	4,767.8	4,356.1	4,159.4	19.3	0.0	-141.85	-238.5	1,282.8	1,776.7	1,759.3	17.39	102.141		
4,900.0	4,866.9	4,445.9	4,243.5	19.7	0.0	-141.85	-245.2	1,313.8	1,820.7	1,803.0	17.75	102.576		
5,000.0	4,966.0	4,535.7	4,327.5	20.2	0.0	-141.85	-251.8	1,344.7	1,864.7	1,846.6	18.11	102.991		
5,100.0	5,065.1	4,625.5	4,411.6	20.6	0.0	-141.85	-258.4	1,375.6	1,908.7	1,890.3	18.46	103.387		

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 19-18-1NBH
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 19-18-1NBH	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	5,164.2	4,715.3	4,495.6	21.0	0.0	-141.85	-265.0	1,406.5	1,952.7	1,933.9	18.82	103.767	
5,300.0	5,263.3	4,805.1	4,579.7	21.4	0.0	-141.85	-271.6	1,437.5	1,996.7	1,977.5	19.18	104.130	
5,400.0	5,362.5	4,894.9	4,663.7	21.8	0.0	-141.84	-278.3	1,468.4	2,040.7	2,021.2	19.53	104.477	
5,500.0	5,461.6	4,984.7	4,747.8	22.3	0.0	-141.84	-284.9	1,499.3	2,084.7	2,064.8	19.89	104.810	
5,600.0	5,560.7	5,074.5	4,831.8	22.7	0.0	-141.84	-291.5	1,530.2	2,128.7	2,108.5	20.25	105.129	
5,700.0	5,659.8	5,164.3	4,915.9	23.1	0.0	-141.84	-298.1	1,561.2	2,172.7	2,152.1	20.61	105.435	
5,800.0	5,758.9	5,254.1	4,999.9	23.5	0.0	-141.84	-304.8	1,592.1	2,216.7	2,195.7	20.97	105.728	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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		
0.0	0.0	0.0	0.0	0.0	0.0	89.71	0.8	150.0	150.0					
100.0	100.0	100.0	100.0	0.4	0.0	89.71	0.8	150.0	150.0	149.7	0.28	541.393		
200.0	200.0	200.0	200.0	1.0	0.0	89.71	0.8	150.0	150.0	149.2	0.80	187.972		
300.0	300.0	300.0	300.0	1.5	0.0	89.71	0.8	150.0	150.0	148.7	1.22	122.479		
400.0	400.0	400.0	400.0	1.9	0.0	89.71	0.8	150.0	150.0	148.3	1.62	92.668		
500.0	500.0	500.0	500.0	2.3	0.0	89.71	0.8	150.0	150.0	148.0	2.00	75.023		
600.0	600.0	600.0	600.0	2.7	0.0	89.71	0.8	150.0	150.0	147.6	2.37	63.206		
700.0	700.0	700.0	700.0	3.1	0.0	89.71	0.8	150.0	150.0	147.2	2.74	54.686 CC, ES		
800.0	800.0	795.1	795.1	3.5	0.0	89.85	0.4	151.5	151.6	148.5	3.11	48.790		
900.0	900.0	890.0	889.9	3.9	0.0	90.26	-0.7	156.1	156.4	152.9	3.46	45.166		
1,000.0	1,000.0	984.4	984.0	4.2	0.0	-140.85	-2.5	163.7	165.8	162.0	3.84	43.172		
1,100.0	1,099.8	1,077.7	1,076.6	5.1	0.0	-140.89	-5.0	174.1	181.1	176.4	4.66	38.835		
1,200.0	1,199.5	1,169.5	1,167.4	5.8	0.0	-141.21	-8.1	187.3	202.1	196.8	5.38	37.599 SF		
1,300.0	1,298.7	1,259.3	1,255.7	6.3	0.0	-141.74	-11.8	202.9	228.8	223.0	5.85	39.125		
1,400.0	1,397.8	1,347.2	1,341.8	6.6	0.0	-142.37	-16.0	220.8	259.3	253.2	6.10	42.472		
1,500.0	1,496.9	1,433.5	1,425.5	6.9	0.0	-142.72	-20.8	240.8	292.5	286.1	6.39	45.804		
1,600.0	1,596.1	1,518.0	1,507.0	7.2	0.0	-142.87	-26.0	262.8	328.5	321.8	6.66	49.324		
1,700.0	1,695.2	1,600.0	1,585.3	7.5	0.0	-142.87	-31.6	286.4	367.0	360.1	6.92	53.029		
1,800.0	1,794.3	1,681.3	1,662.2	7.8	0.0	-142.78	-37.6	311.9	408.1	400.9	7.18	56.818		
1,900.0	1,893.4	1,770.2	1,745.8	8.1	0.0	-142.64	-44.5	341.3	450.7	443.2	7.49	60.179		
2,000.0	1,992.5	1,860.6	1,830.9	8.4	0.0	-142.52	-51.6	371.1	493.4	485.6	7.81	63.173		
2,100.0	2,091.6	1,951.0	1,915.9	8.8	0.0	-142.42	-58.7	401.0	536.1	527.9	8.13	65.900		
2,200.0	2,190.8	2,041.5	2,001.0	9.1	0.0	-142.33	-65.8	430.9	578.7	570.3	8.46	68.392		
2,300.0	2,289.9	2,131.9	2,086.1	9.4	0.0	-142.26	-72.9	460.8	621.4	612.6	8.79	70.675		
2,400.0	2,389.0	2,222.4	2,171.1	9.8	0.0	-142.19	-79.9	490.7	664.1	654.9	9.13	72.772		
2,500.0	2,488.1	2,312.8	2,256.2	10.1	0.0	-142.14	-87.0	520.6	706.7	697.3	9.46	74.704		
2,600.0	2,587.2	2,403.2	2,341.2	10.5	0.0	-142.09	-94.1	550.5	749.4	739.6	9.80	76.487		
2,700.0	2,686.3	2,493.7	2,426.3	10.9	0.0	-142.04	-101.2	580.4	792.1	781.9	10.14	78.138		
2,800.0	2,785.4	2,584.1	2,511.4	11.2	0.0	-142.00	-108.3	610.3	834.7	824.3	10.48	79.670		
2,900.0	2,884.6	2,674.5	2,596.4	11.6	0.0	-141.97	-115.3	640.2	877.4	866.6	10.82	81.093		
3,000.0	2,983.7	2,765.0	2,681.5	12.0	0.0	-141.93	-122.4	670.1	920.1	908.9	11.16	82.419		
3,100.0	3,082.8	2,855.4	2,766.6	12.4	0.0	-141.90	-129.5	700.0	962.7	951.2	11.51	83.657		
3,200.0	3,181.9	2,945.9	2,851.6	12.8	0.0	-141.87	-136.6	729.8	1,005.4	993.5	11.85	84.815		
3,300.0	3,281.0	3,036.3	2,936.7	13.2	0.0	-141.85	-143.7	759.7	1,048.1	1,035.9	12.20	85.899		
3,400.0	3,380.1	3,126.7	3,021.7	13.5	0.0	-141.83	-150.7	789.6	1,090.7	1,078.2	12.55	86.917		
3,500.0	3,479.3	3,217.2	3,106.8	13.9	0.0	-141.80	-157.8	819.5	1,133.4	1,120.5	12.90	87.873		
3,600.0	3,578.4	3,307.6	3,191.9	14.4	0.0	-141.78	-164.9	849.4	1,176.1	1,162.8	13.25	88.773		
3,700.0	3,677.5	3,398.1	3,276.9	14.8	0.0	-141.77	-172.0	879.3	1,218.8	1,205.2	13.60	89.622		
3,800.0	3,776.6	3,488.5	3,362.0	15.2	0.0	-141.75	-179.1	909.2	1,261.4	1,247.5	13.95	90.423		
3,900.0	3,875.7	3,578.9	3,447.0	15.6	0.0	-141.73	-186.1	939.1	1,304.1	1,289.8	14.30	91.180		
4,000.0	3,974.8	3,669.4	3,532.1	16.0	0.0	-141.72	-193.2	969.0	1,346.8	1,332.1	14.66	91.897		
4,100.0	4,074.0	3,759.8	3,617.2	16.4	0.0	-141.70	-200.3	998.9	1,389.4	1,374.4	15.01	92.576		
4,200.0	4,173.1	3,850.3	3,702.2	16.8	0.0	-141.69	-207.4	1,028.8	1,432.1	1,416.7	15.36	93.220		
4,300.0	4,272.2	3,940.7	3,787.3	17.2	0.0	-141.68	-214.5	1,058.7	1,474.8	1,459.1	15.72	93.832		
4,400.0	4,371.3	4,031.1	3,872.4	17.6	0.0	-141.66	-221.5	1,088.6	1,517.4	1,501.4	16.07	94.413		
4,500.0	4,470.4	4,121.6	3,957.4	18.1	0.0	-141.65	-228.6	1,118.4	1,560.1	1,543.7	16.43	94.966		
4,600.0	4,569.5	4,212.0	4,042.5	18.5	0.0	-141.64	-235.7	1,148.3	1,602.8	1,586.0	16.78	95.493		
4,700.0	4,668.7	4,302.4	4,127.5	18.9	0.0	-141.63	-242.8	1,178.2	1,645.5	1,628.3	17.14	95.995		
4,800.0	4,767.8	4,392.9	4,212.6	19.3	0.0	-141.62	-249.9	1,208.1	1,688.1	1,670.6	17.50	96.474		
4,900.0	4,866.9	4,483.3	4,297.7	19.7	0.0	-141.61	-256.9	1,238.0	1,730.8	1,712.9	17.86	96.932		
5,000.0	4,966.0	4,573.8	4,382.7	20.2	0.0	-141.60	-264.0	1,267.9	1,773.5	1,755.2	18.21	97.369		
5,100.0	5,065.1	4,664.2	4,467.8	20.6	0.0	-141.60	-271.1	1,297.8	1,816.1	1,797.6	18.57	97.787		

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 19-18-1NBH
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 19-18-1NBH	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
5,200.0	5,164.2	4,754.6	4,552.9	21.0	0.0	-141.59	-278.2	1,327.7	1,858.8	1,839.9	18.93	98.187	
5,300.0	5,263.3	4,845.1	4,637.9	21.4	0.0	-141.58	-285.3	1,357.6	1,901.5	1,882.2	19.29	98.570	
5,400.0	5,362.5	4,935.5	4,723.0	21.8	0.0	-141.57	-292.3	1,387.5	1,944.1	1,924.5	19.65	98.937	
5,500.0	5,461.6	5,026.0	4,808.0	22.3	0.0	-141.57	-299.4	1,417.4	1,986.8	1,966.8	20.01	99.289	
5,600.0	5,560.7	5,116.4	4,893.1	22.7	0.0	-141.56	-306.5	1,447.3	2,029.5	2,009.1	20.37	99.627	
5,700.0	5,659.8	5,206.8	4,978.2	23.1	0.0	-141.55	-313.6	1,477.1	2,072.2	2,051.4	20.73	99.951	
5,800.0	5,758.9	5,297.3	5,063.2	23.5	0.0	-141.55	-320.7	1,507.0	2,114.8	2,093.7	21.09	100.262	
5,900.0	5,858.0	5,387.7	5,148.3	24.0	0.0	-141.54	-327.7	1,536.9	2,157.5	2,136.0	21.45	100.561	
6,000.0	5,957.2	5,478.2	5,233.3	24.4	0.0	-141.54	-334.8	1,566.8	2,200.2	2,178.4	21.82	100.848	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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		
13,700.0	7,272.0	7,203.0	7,203.0	115.2	26.8	90.00	8,133.1	120.1	2,142.5	2,057.4	85.08	25.183		
13,800.0	7,272.0	7,203.0	7,203.0	117.0	26.8	90.00	8,133.1	120.1	2,050.9	1,963.5	87.38	23.472		
13,900.0	7,272.0	7,203.0	7,203.0	118.7	26.8	90.00	8,133.1	120.1	1,960.0	1,870.1	89.89	21.804		
14,000.0	7,272.0	7,203.0	7,203.0	120.4	26.8	90.00	8,133.1	120.1	1,870.2	1,777.5	92.66	20.183		
14,100.0	7,272.0	7,203.0	7,203.0	122.1	26.8	90.00	8,133.1	120.1	1,781.4	1,685.7	95.70	18.614		
14,200.0	7,272.0	7,203.0	7,203.0	123.8	26.8	90.00	8,133.1	120.1	1,693.8	1,594.7	99.04	17.101		
14,300.0	7,272.0	7,203.0	7,203.0	125.5	26.8	90.00	8,133.1	120.1	1,607.7	1,505.0	102.73	15.650		
14,400.0	7,272.0	7,203.0	7,203.0	127.3	26.8	90.00	8,133.1	120.1	1,523.3	1,416.5	106.78	14.266		
14,500.0	7,272.0	7,203.0	7,203.0	129.0	26.8	90.00	8,133.1	120.1	1,440.9	1,329.6	111.24	12.953		
14,600.0	7,272.0	7,203.0	7,203.0	130.7	26.8	90.00	8,133.1	120.1	1,360.8	1,244.7	116.13	11.718		
14,700.0	7,272.0	7,203.0	7,203.0	132.4	26.8	90.00	8,133.1	120.1	1,283.6	1,162.1	121.48	10.566		
14,800.0	7,272.0	7,203.0	7,203.0	134.2	26.8	90.00	8,133.1	120.1	1,209.7	1,082.4	127.30	9.502		
14,900.0	7,272.0	7,203.0	7,203.0	135.9	26.8	90.00	8,133.1	120.1	1,139.7	1,006.2	133.56	8.534		
15,000.0	7,272.0	7,203.0	7,203.0	137.6	26.8	90.00	8,133.1	120.1	1,074.6	934.4	140.19	7.665		
15,100.0	7,272.0	7,203.0	7,203.0	139.3	26.8	90.00	8,133.1	120.1	1,015.1	868.0	147.06	6.902		
15,200.0	7,272.0	7,203.0	7,203.0	141.1	26.8	90.00	8,133.1	120.1	962.4	808.4	153.97	6.250		
15,300.0	7,272.0	7,203.0	7,203.0	142.8	26.8	90.00	8,133.1	120.1	917.5	757.0	160.58	5.714		
15,400.0	7,272.0	7,203.0	7,203.0	144.5	26.8	90.00	8,133.1	120.1	881.8	715.3	166.48	5.297		
15,500.0	7,272.0	7,203.0	7,203.0	146.3	26.8	90.00	8,133.1	120.1	856.3	685.1	171.20	5.002		
15,600.0	7,272.0	7,203.0	7,203.0	148.0	26.8	90.00	8,133.1	120.1	842.0	667.7	174.31	4.831		
15,671.4	7,272.0	7,203.0	7,203.0	149.2	26.8	90.00	8,133.1	120.1	839.0	663.6	175.37	4.784 CC, ES		
15,700.0	7,272.0	7,203.0	7,203.0	149.7	26.8	90.00	8,133.1	120.1	839.5	664.0	175.50	4.784 SF		
15,800.0	7,272.0	7,203.0	7,203.0	151.4	26.8	90.00	8,133.1	120.1	848.8	674.1	174.68	4.859		
15,900.0	7,272.0	7,203.0	7,203.0	153.2	26.8	90.00	8,133.1	120.1	869.6	697.6	172.03	5.055		
16,000.0	7,272.0	7,203.0	7,203.0	154.9	26.8	90.00	8,133.1	120.1	901.1	733.2	167.89	5.367		
16,100.0	7,272.0	7,203.0	7,203.0	156.7	26.8	90.00	8,133.1	120.1	942.1	779.4	162.72	5.790		
16,200.0	7,272.0	7,203.0	7,203.0	158.4	26.8	90.00	8,133.1	120.1	991.6	834.7	156.95	6.318		
16,300.0	7,272.0	7,203.0	7,203.0	160.1	26.8	90.00	8,133.1	120.1	1,048.4	897.4	150.94	6.946		
16,400.0	7,272.0	7,203.0	7,203.0	161.9	26.8	90.00	8,133.1	120.1	1,111.2	966.3	144.96	7.666		
16,500.0	7,272.0	7,203.0	7,203.0	163.6	26.8	90.00	8,133.1	120.1	1,179.2	1,040.0	139.20	8.472		
16,600.0	7,272.0	7,203.0	7,203.0	165.3	26.8	90.00	8,133.1	120.1	1,251.5	1,117.7	133.75	9.357		
16,700.0	7,272.0	7,203.0	7,203.0	167.1	26.8	90.00	8,133.1	120.1	1,327.4	1,198.7	128.68	10.315		
16,800.0	7,272.0	7,203.0	7,203.0	168.8	26.8	90.00	8,133.1	120.1	1,406.3	1,282.3	124.00	11.341		
16,900.0	7,272.0	7,203.0	7,203.0	170.6	26.8	90.00	8,133.1	120.1	1,487.8	1,368.1	119.70	12.429		
17,000.0	7,272.0	7,203.0	7,203.0	172.3	26.8	90.00	8,133.1	120.1	1,571.4	1,455.6	115.77	13.573		
17,100.0	7,272.0	7,203.0	7,203.0	174.0	26.8	90.00	8,133.1	120.1	1,656.8	1,544.6	112.19	14.768		
17,200.0	7,272.0	7,203.0	7,203.0	175.8	26.8	90.00	8,133.1	120.1	1,743.7	1,634.8	108.92	16.009		
17,300.0	7,272.0	7,203.0	7,203.0	177.5	26.8	90.00	8,133.1	120.1	1,832.0	1,726.1	105.94	17.293		
17,400.0	7,272.0	7,203.0	7,203.0	179.3	26.8	90.00	8,133.1	120.1	1,921.5	1,818.2	103.22	18.616		
17,429.8	7,272.0	7,203.0	7,203.0	179.8	26.8	90.00	8,133.1	120.1	1,948.3	1,845.9	102.45	19.017		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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
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	
15,300.0	7,272.0	7,203.0	7,203.0	142.8	26.8	-90.00	9,758.3	-1,461.2	2,137.7	2,060.8	76.86	27.812		
15,400.0	7,272.0	7,203.0	7,203.0	144.5	26.8	-90.00	9,758.3	-1,461.2	2,044.0	1,964.8	79.18	25.813		
15,500.0	7,272.0	7,203.0	7,203.0	146.3	26.8	-90.00	9,758.3	-1,461.2	1,950.9	1,869.1	81.77	23.859		
15,600.0	7,272.0	7,203.0	7,203.0	148.0	26.8	-90.00	9,758.3	-1,461.2	1,858.5	1,773.8	84.65	21.956		
15,700.0	7,272.0	7,203.0	7,203.0	149.7	26.8	-90.00	9,758.3	-1,461.2	1,766.9	1,679.1	87.86	20.110		
15,800.0	7,272.0	7,203.0	7,203.0	151.4	26.8	-90.00	9,758.3	-1,461.2	1,676.3	1,584.9	91.46	18.328		
15,900.0	7,272.0	7,203.0	7,203.0	153.2	26.8	-90.00	9,758.3	-1,461.2	1,586.9	1,491.4	95.49	16.618		
16,000.0	7,272.0	7,203.0	7,203.0	154.9	26.8	-90.00	9,758.3	-1,461.2	1,498.8	1,398.7	100.02	14.985		
16,100.0	7,272.0	7,203.0	7,203.0	156.7	26.8	-90.00	9,758.3	-1,461.2	1,412.2	1,307.1	105.10	13.437		
16,200.0	7,272.0	7,203.0	7,203.0	158.4	26.8	-90.00	9,758.3	-1,461.2	1,327.6	1,216.8	110.81	11.981		
16,300.0	7,272.0	7,203.0	7,203.0	160.1	26.8	-90.00	9,758.3	-1,461.2	1,245.2	1,128.0	117.21	10.623		
16,400.0	7,272.0	7,203.0	7,203.0	161.9	26.8	-90.00	9,758.3	-1,461.2	1,165.6	1,041.2	124.39	9.370		
16,500.0	7,272.0	7,203.0	7,203.0	163.6	26.8	-90.00	9,758.3	-1,461.2	1,089.3	956.9	132.39	8.228		
16,600.0	7,272.0	7,203.0	7,203.0	165.3	26.8	-90.00	9,758.3	-1,461.2	1,017.2	876.0	141.23	7.203		
16,700.0	7,272.0	7,203.0	7,203.0	167.1	26.8	-90.00	9,758.3	-1,461.2	950.2	799.3	150.87	6.298		
16,800.0	7,272.0	7,203.0	7,203.0	168.8	26.8	-90.00	9,758.3	-1,461.2	889.3	728.2	161.14	5.519		
16,900.0	7,272.0	7,203.0	7,203.0	170.6	26.8	-90.00	9,758.3	-1,461.2	836.0	664.3	171.72	4.869		
17,000.0	7,272.0	7,203.0	7,203.0	172.3	26.8	-90.00	9,758.3	-1,461.2	791.8	609.8	182.06	4.349		
17,100.0	7,272.0	7,203.0	7,203.0	174.0	26.8	-90.00	9,758.3	-1,461.2	758.4	567.0	191.40	3.962		
17,200.0	7,272.0	7,203.0	7,203.0	175.8	26.8	-90.00	9,758.3	-1,461.2	737.0	538.2	198.84	3.706		
17,300.0	7,272.0	7,203.0	7,203.0	177.5	26.8	-90.00	9,758.3	-1,461.2	728.9	525.3	203.58	3.580		
17,309.6	7,272.0	7,203.0	7,203.0	177.7	26.8	-90.00	9,758.3	-1,461.2	728.8	524.9	203.87	3.575 CC, ES, SF		
17,400.0	7,272.0	7,203.0	7,203.0	179.3	26.8	-90.00	9,758.3	-1,461.2	734.4	529.2	205.15	3.580		
17,429.8	7,272.0	7,203.0	7,203.0	179.8	26.8	-90.00	9,758.3	-1,461.2	738.7	533.7	204.99	3.603		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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		
11,300.0	7,272.0	7,203.0	7,203.0	74.9	26.8	-90.00	5,916.0	-949.4	2,177.5	2,122.4	55.01	39.583		
11,400.0	7,272.0	7,203.0	7,203.0	76.6	26.8	-90.00	5,916.0	-949.4	2,078.1	2,023.1	55.06	37.745		
11,500.0	7,272.0	7,203.0	7,203.0	78.2	26.8	-90.00	5,916.0	-949.4	1,978.9	1,923.8	55.12	35.901		
11,600.0	7,272.0	7,203.0	7,203.0	79.8	26.8	-90.00	5,916.0	-949.4	1,879.7	1,824.5	55.20	34.051		
11,700.0	7,272.0	7,203.0	7,203.0	81.5	26.8	-90.00	5,916.0	-949.4	1,780.7	1,725.4	55.31	32.192		
11,800.0	7,272.0	7,203.0	7,203.0	83.2	26.8	-90.00	5,916.0	-949.4	1,681.7	1,626.2	55.46	30.323		
11,900.0	7,272.0	7,203.0	7,203.0	84.8	26.8	-90.00	5,916.0	-949.4	1,582.9	1,527.2	55.65	28.443		
12,000.0	7,272.0	7,203.0	7,203.0	86.5	26.8	-90.00	5,916.0	-949.4	1,484.2	1,428.3	55.90	26.549		
12,100.0	7,272.0	7,203.0	7,203.0	88.2	26.8	-90.00	5,916.0	-949.4	1,385.7	1,329.5	56.24	24.641		
12,200.0	7,272.0	7,203.0	7,203.0	89.8	26.8	-90.00	5,916.0	-949.4	1,287.5	1,230.8	56.68	22.715		
12,300.0	7,272.0	7,203.0	7,203.0	91.5	26.8	-90.00	5,916.0	-949.4	1,189.5	1,132.2	57.27	20.770		
12,400.0	7,272.0	7,203.0	7,203.0	93.2	26.8	-90.00	5,916.0	-949.4	1,091.9	1,033.9	58.07	18.805		
12,500.0	7,272.0	7,203.0	7,203.0	94.9	26.8	-90.00	5,916.0	-949.4	994.8	935.7	59.15	16.818		
12,600.0	7,272.0	7,203.0	7,203.0	96.5	26.8	-90.00	5,916.0	-949.4	898.3	837.7	60.64	14.814		
12,700.0	7,272.0	7,203.0	7,203.0	98.2	26.8	-90.00	5,916.0	-949.4	802.7	740.0	62.72	12.799		
12,800.0	7,272.0	7,203.0	7,203.0	99.9	26.8	-90.00	5,916.0	-949.4	708.3	642.7	65.64	10.792		
12,900.0	7,272.0	7,203.0	7,203.0	101.6	26.8	-90.00	5,916.0	-949.4	615.7	545.9	69.81	8.820		
13,000.0	7,272.0	7,203.0	7,203.0	103.3	26.8	-90.00	5,916.0	-949.4	525.8	450.0	75.83	6.934		
13,100.0	7,272.0	7,203.0	7,203.0	105.0	26.8	-90.00	5,916.0	-949.4	440.3	355.7	84.60	5.204		
13,200.0	7,272.0	7,203.0	7,203.0	106.7	26.8	-90.00	5,916.0	-949.4	362.2	265.0	97.19	3.727		
13,300.0	7,272.0	7,203.0	7,203.0	108.4	26.8	-90.00	5,916.0	-949.4	297.6	183.6	113.98	2.611		
13,400.0	7,272.0	7,203.0	7,203.0	110.1	26.8	-90.00	5,916.0	-949.4	256.7	125.6	131.11	1.958		
13,463.2	7,272.0	7,203.0	7,203.0	111.2	26.8	-90.00	5,916.0	-949.4	248.8	111.5	137.29	1.812 CC, ES, SF		
13,500.0	7,272.0	7,203.0	7,203.0	111.8	26.8	-90.00	5,916.0	-949.4	251.5	113.6	137.98	1.823		
13,600.0	7,272.0	7,203.0	7,203.0	113.5	26.8	-90.00	5,916.0	-949.4	283.9	153.5	130.42	2.177		
13,700.0	7,272.0	7,203.0	7,203.0	115.2	26.8	-90.00	5,916.0	-949.4	343.5	226.1	117.37	2.927		
13,800.0	7,272.0	7,203.0	7,203.0	117.0	26.8	-90.00	5,916.0	-949.4	418.7	313.1	105.60	3.965		
13,900.0	7,272.0	7,203.0	7,203.0	118.7	26.8	-90.00	5,916.0	-949.4	502.7	406.1	96.56	5.206		
14,000.0	7,272.0	7,203.0	7,203.0	120.4	26.8	-90.00	5,916.0	-949.4	591.7	501.8	89.83	6.586		
14,100.0	7,272.0	7,203.0	7,203.0	122.1	26.8	-90.00	5,916.0	-949.4	683.7	598.9	84.81	8.062		
14,200.0	7,272.0	7,203.0	7,203.0	123.8	26.8	-90.00	5,916.0	-949.4	777.7	696.7	80.99	9.603		
14,300.0	7,272.0	7,203.0	7,203.0	125.5	26.8	-90.00	5,916.0	-949.4	873.0	795.0	78.03	11.189		
14,400.0	7,272.0	7,203.0	7,203.0	127.3	26.8	-90.00	5,916.0	-949.4	969.3	893.6	75.69	12.806		
14,500.0	7,272.0	7,203.0	7,203.0	129.0	26.8	-90.00	5,916.0	-949.4	1,066.2	992.4	73.82	14.444		
14,600.0	7,272.0	7,203.0	7,203.0	130.7	26.8	-90.00	5,916.0	-949.4	1,163.7	1,091.4	72.29	16.097		
14,700.0	7,272.0	7,203.0	7,203.0	132.4	26.8	-90.00	5,916.0	-949.4	1,261.6	1,190.5	71.03	17.760		
14,800.0	7,272.0	7,203.0	7,203.0	134.2	26.8	-90.00	5,916.0	-949.4	1,359.8	1,289.8	69.99	19.429		
14,900.0	7,272.0	7,203.0	7,203.0	135.9	26.8	-90.00	5,916.0	-949.4	1,458.2	1,389.1	69.10	21.102		
15,000.0	7,272.0	7,203.0	7,203.0	137.6	26.8	-90.00	5,916.0	-949.4	1,556.8	1,488.5	68.35	22.776		
15,100.0	7,272.0	7,203.0	7,203.0	139.3	26.8	-90.00	5,916.0	-949.4	1,655.6	1,587.9	67.71	24.451		
15,200.0	7,272.0	7,203.0	7,203.0	141.1	26.8	-90.00	5,916.0	-949.4	1,754.5	1,687.4	67.16	26.125		
15,300.0	7,272.0	7,203.0	7,203.0	142.8	26.8	-90.00	5,916.0	-949.4	1,853.6	1,786.9	66.68	27.798		
15,400.0	7,272.0	7,203.0	7,203.0	144.5	26.8	-90.00	5,916.0	-949.4	1,952.7	1,886.5	66.27	29.468		
15,500.0	7,272.0	7,203.0	7,203.0	146.3	26.8	-90.00	5,916.0	-949.4	2,051.9	1,986.0	65.90	31.137		
15,600.0	7,272.0	7,203.0	7,203.0	148.0	26.8	-90.00	5,916.0	-949.4	2,151.2	2,085.7	65.58	32.802		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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		
9,100.0	7,272.0	7,203.0	7,203.0	41.7	26.8	90.00	3,157.2	808.6	2,176.5	2,111.8	64.78	33.601		
9,200.0	7,272.0	7,203.0	7,203.0	43.0	26.8	90.00	3,157.2	808.6	2,104.6	2,038.6	66.03	31.874		
9,300.0	7,272.0	7,203.0	7,203.0	44.3	26.8	90.00	3,157.2	808.6	2,035.0	1,967.6	67.39	30.199		
9,400.0	7,272.0	7,203.0	7,203.0	45.7	26.8	90.00	3,157.2	808.6	1,968.1	1,899.2	68.85	28.584		
9,500.0	7,272.0	7,203.0	7,203.0	47.1	26.8	90.00	3,157.2	808.6	1,904.0	1,833.6	70.42	27.037		
9,600.0	7,272.0	7,203.0	7,203.0	48.5	26.8	90.00	3,157.2	808.6	1,843.2	1,771.1	72.09	25.567		
9,700.0	7,272.0	7,203.0	7,203.0	49.9	26.8	90.00	3,157.2	808.6	1,785.8	1,712.0	73.85	24.181		
9,800.0	7,272.0	7,203.0	7,203.0	51.4	26.8	90.00	3,157.2	808.6	1,732.4	1,656.7	75.69	22.888		
9,900.0	7,272.0	7,203.0	7,203.0	52.9	26.8	90.00	3,157.2	808.6	1,683.2	1,605.6	77.59	21.694		
10,000.0	7,272.0	7,203.0	7,203.0	54.4	26.8	90.00	3,157.2	808.6	1,638.7	1,559.1	79.52	20.606		
10,100.0	7,272.0	7,203.0	7,203.0	55.9	26.8	90.00	3,157.2	808.6	1,599.1	1,517.7	81.46	19.630		
10,200.0	7,272.0	7,203.0	7,203.0	57.4	26.8	90.00	3,157.2	808.6	1,565.0	1,481.6	83.37	18.771		
10,300.0	7,272.0	7,203.0	7,203.0	59.0	26.8	90.00	3,157.2	808.6	1,536.6	1,451.4	85.21	18.032		
10,400.0	7,272.0	7,203.0	7,203.0	60.5	26.8	90.00	3,157.2	808.6	1,514.3	1,427.4	86.95	17.416		
10,500.0	7,272.0	7,203.0	7,203.0	62.1	26.8	90.00	3,157.2	808.6	1,498.4	1,409.9	88.54	16.924		
10,600.0	7,272.0	7,203.0	7,203.0	63.7	26.8	90.00	3,157.2	808.6	1,489.0	1,399.1	89.94	16.555		
10,690.0	7,272.0	7,203.0	7,203.0	65.1	26.8	90.00	3,157.2	808.6	1,486.3	1,395.3	91.03	16.328 CC		
10,700.0	7,272.0	7,203.0	7,203.0	65.2	26.8	90.00	3,157.2	808.6	1,486.3	1,395.2	91.14	16.309 ES		
10,800.0	7,272.0	7,203.0	7,203.0	66.8	26.8	90.00	3,157.2	808.6	1,490.4	1,398.3	92.10	16.183		
10,900.0	7,272.0	7,203.0	7,203.0	68.4	26.8	90.00	3,157.2	808.6	1,501.1	1,408.2	92.81	16.173 SF		
11,000.0	7,272.0	7,203.0	7,203.0	70.1	26.8	90.00	3,157.2	808.6	1,518.3	1,425.0	93.28	16.276		
11,100.0	7,272.0	7,203.0	7,203.0	71.7	26.8	90.00	3,157.2	808.6	1,541.8	1,448.3	93.52	16.487		
11,200.0	7,272.0	7,203.0	7,203.0	73.3	26.8	90.00	3,157.2	808.6	1,571.3	1,477.8	93.54	16.799		
11,300.0	7,272.0	7,203.0	7,203.0	74.9	26.8	90.00	3,157.2	808.6	1,606.6	1,513.2	93.36	17.208		
11,400.0	7,272.0	7,203.0	7,203.0	76.6	26.8	90.00	3,157.2	808.6	1,647.2	1,554.1	93.02	17.707		
11,500.0	7,272.0	7,203.0	7,203.0	78.2	26.8	90.00	3,157.2	808.6	1,692.7	1,600.1	92.55	18.290		
11,600.0	7,272.0	7,203.0	7,203.0	79.8	26.8	90.00	3,157.2	808.6	1,742.7	1,650.8	91.96	18.951		
11,700.0	7,272.0	7,203.0	7,203.0	81.5	26.8	90.00	3,157.2	808.6	1,797.0	1,705.7	91.29	19.684		
11,800.0	7,272.0	7,203.0	7,203.0	83.2	26.8	90.00	3,157.2	808.6	1,855.0	1,764.5	90.56	20.484		
11,900.0	7,272.0	7,203.0	7,203.0	84.8	26.8	90.00	3,157.2	808.6	1,916.5	1,826.7	89.79	21.345		
12,000.0	7,272.0	7,203.0	7,203.0	86.5	26.8	90.00	3,157.2	808.6	1,981.2	1,892.2	88.99	22.263		
12,100.0	7,272.0	7,203.0	7,203.0	88.2	26.8	90.00	3,157.2	808.6	2,048.7	1,960.5	88.18	23.232		
12,200.0	7,272.0	7,203.0	7,203.0	89.8	26.8	90.00	3,157.2	808.6	2,118.7	2,031.4	87.38	24.249		
12,300.0	7,272.0	7,203.0	7,203.0	91.5	26.8	90.00	3,157.2	808.6	2,191.1	2,104.6	86.58	25.309		

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OH	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Offset Design S19-T1S-R65W - Tracy #1 (PR) - EXISTING - NO SURVEYS (PR)												Offset Site Error:	0.0 usft
Survey Program: 100-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			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
12,600.0	7,272.0	7,203.0	7,203.0	96.5	26.8	90.00	5,963.0	1,292.5	2,183.7	2,065.5	118.19	18.476	
12,700.0	7,272.0	7,203.0	7,203.0	98.2	26.8	90.00	5,963.0	1,292.5	2,144.8	2,023.9	120.90	17.741	
12,800.0	7,272.0	7,203.0	7,203.0	99.9	26.8	90.00	5,963.0	1,292.5	2,110.0	1,986.4	123.55	17.078	
12,900.0	7,272.0	7,203.0	7,203.0	101.6	26.8	90.00	5,963.0	1,292.5	2,079.4	1,953.2	126.10	16.489	
13,000.0	7,272.0	7,203.0	7,203.0	103.3	26.8	90.00	5,963.0	1,292.5	2,053.1	1,924.6	128.54	15.973	
13,100.0	7,272.0	7,203.0	7,203.0	105.0	26.8	90.00	5,963.0	1,292.5	2,031.5	1,900.7	130.82	15.530	
13,200.0	7,272.0	7,203.0	7,203.0	106.7	26.8	90.00	5,963.0	1,292.5	2,014.6	1,881.7	132.91	15.157	
13,300.0	7,272.0	7,203.0	7,203.0	108.4	26.8	90.00	5,963.0	1,292.5	2,002.6	1,867.8	134.81	14.855	
13,400.0	7,272.0	7,203.0	7,203.0	110.1	26.8	90.00	5,963.0	1,292.5	1,995.5	1,859.0	136.47	14.622	
13,491.7	7,272.0	7,203.0	7,203.0	111.7	26.8	90.00	5,963.0	1,292.5	1,993.4	1,855.6	137.78	14.469 CC	
13,500.0	7,272.0	7,203.0	7,203.0	111.8	26.8	90.00	5,963.0	1,292.5	1,993.4	1,855.5	137.88	14.457 ES	
13,600.0	7,272.0	7,203.0	7,203.0	113.5	26.8	90.00	5,963.0	1,292.5	1,996.3	1,857.3	139.04	14.358	
13,700.0	7,272.0	7,203.0	7,203.0	115.2	26.8	90.00	5,963.0	1,292.5	2,004.3	1,864.3	139.92	14.324 SF	
13,800.0	7,272.0	7,203.0	7,203.0	117.0	26.8	90.00	5,963.0	1,292.5	2,017.1	1,876.6	140.54	14.352	
13,900.0	7,272.0	7,203.0	7,203.0	118.7	26.8	90.00	5,963.0	1,292.5	2,034.8	1,893.9	140.90	14.441	
14,000.0	7,272.0	7,203.0	7,203.0	120.4	26.8	90.00	5,963.0	1,292.5	2,057.2	1,916.2	141.01	14.589	
14,100.0	7,272.0	7,203.0	7,203.0	122.1	26.8	90.00	5,963.0	1,292.5	2,084.2	1,943.3	140.88	14.793	
14,200.0	7,272.0	7,203.0	7,203.0	123.8	26.8	90.00	5,963.0	1,292.5	2,115.5	1,975.0	140.54	15.053	
14,300.0	7,272.0	7,203.0	7,203.0	125.5	26.8	90.00	5,963.0	1,292.5	2,151.1	2,011.1	140.01	15.364	
14,400.0	7,272.0	7,203.0	7,203.0	127.3	26.8	90.00	5,963.0	1,292.5	2,190.6	2,051.3	139.30	15.726	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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	-41.85	1,023.9	-917.1	1,376.3					
100.0	100.0	31.0	31.0	0.4	0.3	-41.85	1,023.9	-917.1	1,374.5	1,374.3	0.27	5,104.859		
200.0	200.0	131.0	131.0	1.0	1.1	-41.85	1,023.9	-917.1	1,374.5	1,373.6	0.99	1,383.212		
300.0	300.0	231.0	231.0	1.5	1.5	-41.85	1,023.9	-917.1	1,374.5	1,372.8	1.71	804.469		
400.0	400.0	331.0	331.0	1.9	1.9	-41.85	1,023.9	-917.1	1,374.5	1,372.1	2.42	566.857		
500.0	500.0	431.0	431.0	2.3	2.3	-41.85	1,023.9	-917.1	1,374.5	1,371.4	3.14	437.551		
600.0	600.0	531.0	531.0	2.7	2.7	-41.85	1,023.9	-917.1	1,374.5	1,370.7	3.86	356.265		
700.0	700.0	631.0	631.0	3.1	3.1	-41.85	1,023.9	-917.1	1,374.5	1,370.0	4.58	300.445		
800.0	800.0	731.0	731.0	3.5	3.5	-41.85	1,023.9	-917.1	1,374.5	1,369.3	5.29	259.745		
900.0	900.0	831.0	831.0	3.9	3.9	-41.85	1,023.9	-917.1	1,374.5	1,368.5	6.01	228.755		
1,000.0	1,000.0	931.0	931.0	4.2	4.2	86.74	1,023.9	-917.1	1,374.4	1,367.7	6.73	204.108		
1,100.0	1,099.8	1,030.8	1,030.8	5.1	4.6	86.96	1,023.9	-917.1	1,374.2	1,366.7	7.50	183.334		
1,200.0	1,199.5	1,130.5	1,130.5	5.8	5.0	87.33	1,023.9	-917.1	1,373.7	1,365.5	8.25	166.541		
1,300.0	1,298.7	1,229.7	1,229.7	6.3	5.3	87.84	1,023.9	-917.1	1,373.2	1,364.2	8.97	153.008		
1,400.0	1,397.8	1,328.8	1,328.8	6.6	5.7	88.39	1,023.9	-917.1	1,372.8	1,363.1	9.70	141.576		
1,500.0	1,496.9	1,427.9	1,427.9	6.9	6.0	88.94	1,023.9	-917.1	1,372.5	1,362.0	10.45	131.336		
1,600.0	1,596.1	1,527.1	1,527.1	7.2	6.4	89.49	1,023.9	-917.1	1,372.3	1,361.1	11.21	122.446		
1,692.9	1,688.1	1,619.1	1,619.1	7.4	6.7	90.00	1,023.9	-917.1	1,372.2	1,360.3	11.91	115.185		
1,700.0	1,695.2	1,626.2	1,626.2	7.5	6.8	90.04	1,023.9	-917.1	1,372.2	1,360.3	11.97	114.665		
1,800.0	1,794.3	1,725.3	1,725.3	7.8	7.1	90.59	1,023.9	-917.1	1,372.3	1,359.6	12.73	107.804		
1,900.0	1,893.4	1,824.4	1,824.4	8.1	7.5	91.14	1,023.9	-917.1	1,372.5	1,359.0	13.49	101.713		
2,000.0	1,992.5	1,923.5	1,923.5	8.4	7.8	91.69	1,023.9	-917.1	1,372.8	1,358.6	14.26	96.273		
2,100.0	2,091.6	2,022.6	2,022.6	8.8	8.2	92.23	1,023.9	-917.1	1,373.3	1,358.3	15.03	91.389		
2,200.0	2,190.8	2,121.8	2,121.8	9.1	8.6	92.78	1,023.9	-917.1	1,373.9	1,358.1	15.80	86.981		
2,300.0	2,289.9	2,220.9	2,220.9	9.4	8.9	93.33	1,023.9	-917.1	1,374.6	1,358.0	16.56	82.985		
2,400.0	2,389.0	2,320.0	2,320.0	9.8	9.3	93.88	1,023.9	-917.1	1,375.4	1,358.1	17.33	79.348		
2,500.0	2,488.1	2,419.1	2,419.1	10.1	9.6	94.42	1,023.9	-917.1	1,376.4	1,358.3	18.10	76.024		
2,600.0	2,587.2	2,518.2	2,518.2	10.5	10.0	94.97	1,023.9	-917.1	1,377.5	1,358.6	18.88	72.977		
2,700.0	2,686.3	2,617.3	2,617.3	10.9	10.3	95.51	1,023.9	-917.1	1,378.7	1,359.1	19.65	70.174		
2,800.0	2,785.4	2,716.4	2,716.4	11.2	10.7	96.06	1,023.9	-917.1	1,380.1	1,359.6	20.42	67.588		
2,900.0	2,884.6	2,815.6	2,815.6	11.6	11.1	96.60	1,023.9	-917.1	1,381.5	1,360.3	21.19	65.195		
3,000.0	2,983.7	2,914.7	2,914.7	12.0	11.4	97.14	1,023.9	-917.1	1,383.1	1,361.2	21.96	62.976		
3,100.0	3,082.8	3,013.8	3,013.8	12.4	11.8	97.68	1,023.9	-917.1	1,384.9	1,362.1	22.74	60.913		
3,200.0	3,181.9	3,112.9	3,112.9	12.8	12.1	98.22	1,023.9	-917.1	1,386.7	1,363.2	23.51	58.990		
3,300.0	3,281.0	3,212.0	3,212.0	13.2	12.5	98.76	1,023.9	-917.1	1,388.7	1,364.4	24.28	57.195		
3,400.0	3,380.1	3,311.1	3,311.1	13.5	12.8	99.29	1,023.9	-917.1	1,390.8	1,365.7	25.05	55.516		
3,500.0	3,479.3	3,410.3	3,410.3	13.9	13.2	99.83	1,023.9	-917.1	1,393.0	1,367.2	25.82	53.943		
3,600.0	3,578.4	3,509.4	3,509.4	14.4	13.6	100.36	1,023.9	-917.1	1,395.4	1,368.8	26.60	52.465		
3,700.0	3,677.5	3,608.5	3,608.5	14.8	13.9	100.89	1,023.9	-917.1	1,397.8	1,370.5	27.37	51.076		
3,800.0	3,776.6	3,707.6	3,707.6	15.2	14.3	101.42	1,023.9	-917.1	1,400.4	1,372.3	28.14	49.768		
3,900.0	3,875.7	3,806.7	3,806.7	15.6	14.6	101.94	1,023.9	-917.1	1,403.1	1,374.2	28.91	48.534		
4,000.0	3,974.8	3,905.8	3,905.8	16.0	15.0	102.47	1,023.9	-917.1	1,405.9	1,376.3	29.68	47.369		
4,100.0	4,074.0	4,005.0	4,005.0	16.4	15.3	102.99	1,023.9	-917.1	1,408.9	1,378.4	30.45	46.267		
4,200.0	4,173.1	4,104.1	4,104.1	16.8	15.7	103.51	1,023.9	-917.1	1,412.0	1,380.7	31.22	45.224		
4,300.0	4,272.2	4,203.2	4,203.2	17.2	16.0	104.03	1,023.9	-917.1	1,415.1	1,383.2	31.99	44.235		
4,400.0	4,371.3	4,302.3	4,302.3	17.6	16.4	104.54	1,023.9	-917.1	1,418.4	1,385.7	32.76	43.297		
4,500.0	4,470.4	4,401.4	4,401.4	18.1	16.8	105.06	1,023.9	-917.1	1,421.9	1,388.3	33.53	42.406		
4,600.0	4,569.5	4,500.5	4,500.5	18.5	17.1	105.57	1,023.9	-917.1	1,425.4	1,391.1	34.30	41.559		
4,700.0	4,668.7	4,599.7	4,599.7	18.9	17.5	106.08	1,023.9	-917.1	1,429.0	1,394.0	35.07	40.753		
4,800.0	4,767.8	4,698.8	4,698.8	19.3	17.8	106.58	1,023.9	-917.1	1,432.8	1,397.0	35.83	39.985		
4,900.0	4,866.9	4,797.9	4,797.9	19.7	18.2	107.08	1,023.9	-917.1	1,436.7	1,400.1	36.60	39.253		
5,000.0	4,966.0	4,897.0	4,897.0	20.2	18.5	107.59	1,023.9	-917.1	1,440.7	1,403.3	37.37	38.555		

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 19-18-1NBH
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 19-18-1NBH	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		
5,100.0	5,065.1	4,996.1	4,996.1	20.6	18.9	108.08	1,023.9	-917.1	1,444.8	1,406.6	38.13	37.888		
5,200.0	5,164.2	5,095.2	5,095.2	21.0	19.2	108.58	1,023.9	-917.1	1,449.0	1,410.1	38.90	37.251		
5,300.0	5,263.3	5,194.3	5,194.3	21.4	19.6	109.07	1,023.9	-917.1	1,453.3	1,413.6	39.66	36.641		
5,400.0	5,362.5	5,293.5	5,293.5	21.8	20.0	109.56	1,023.9	-917.1	1,457.7	1,417.3	40.43	36.058		
5,500.0	5,461.6	5,392.6	5,392.6	22.3	20.3	110.04	1,023.9	-917.1	1,462.2	1,421.0	41.19	35.500		
5,600.0	5,560.7	5,491.7	5,491.7	22.7	20.7	110.53	1,023.9	-917.1	1,466.9	1,424.9	41.95	34.965		
5,700.0	5,659.8	5,590.8	5,590.8	23.1	21.0	111.01	1,023.9	-917.1	1,471.6	1,428.9	42.71	34.452		
5,800.0	5,758.9	5,689.9	5,689.9	23.5	21.4	111.48	1,023.9	-917.1	1,476.5	1,433.0	43.48	33.960		
5,900.0	5,858.0	5,789.0	5,789.0	24.0	21.7	111.96	1,023.9	-917.1	1,481.4	1,437.2	44.24	33.488		
6,000.0	5,957.2	5,888.2	5,888.2	24.4	22.1	112.43	1,023.9	-917.1	1,486.5	1,441.5	45.00	33.034		
6,100.0	6,056.3	5,987.3	5,987.3	24.8	22.4	112.90	1,023.9	-917.1	1,491.6	1,445.9	45.76	32.598		
6,200.0	6,155.4	6,086.4	6,086.4	25.2	22.8	113.36	1,023.9	-917.1	1,496.9	1,450.3	46.52	32.179		
6,300.0	6,254.5	6,185.5	6,185.5	25.6	23.2	113.82	1,023.9	-917.1	1,502.2	1,454.9	47.27	31.776		
6,400.0	6,353.6	6,284.6	6,284.6	26.1	23.5	114.28	1,023.9	-917.1	1,507.7	1,459.6	48.03	31.389		
6,500.0	6,452.7	6,383.7	6,383.7	26.5	23.9	114.73	1,023.9	-917.1	1,513.2	1,464.4	48.79	31.015		
6,600.0	6,551.9	6,482.9	6,482.9	26.9	24.2	115.19	1,023.9	-917.1	1,518.8	1,469.3	49.54	30.656		
6,700.0	6,651.0	6,582.0	6,582.0	27.3	24.6	115.63	1,023.9	-917.1	1,524.6	1,474.3	50.30	30.309		
6,800.0	6,750.3	6,681.3	6,681.3	27.8	24.9	39.49	1,023.9	-917.1	1,522.6	1,471.5	51.18	29.751		
6,900.0	6,848.2	6,779.2	6,779.2	28.1	25.3	10.41	1,023.9	-917.1	1,503.8	1,451.7	52.13	28.847		
7,000.0	6,941.6	6,872.6	6,872.6	28.5	25.6	1.44	1,023.9	-917.1	1,468.7	1,415.7	52.98	27.720		
7,100.0	7,027.7	6,958.7	6,958.7	28.7	25.9	-3.59	1,023.9	-917.1	1,418.1	1,364.4	53.70	26.406		
7,200.0	7,104.0	7,035.0	7,035.0	28.9	26.2	-8.04	1,023.9	-917.1	1,353.8	1,299.6	54.28	24.942		
7,300.0	7,168.0	7,099.0	7,099.0	29.0	26.4	-13.59	1,023.9	-917.1	1,277.8	1,223.1	54.70	23.362		
7,400.0	7,217.9	7,148.9	7,148.9	29.1	26.6	-22.45	1,023.9	-917.1	1,192.3	1,137.3	54.95	21.697		
7,500.0	7,252.2	7,183.2	7,183.2	29.0	26.7	-39.25	1,023.9	-917.1	1,100.2	1,045.1	55.06	19.983		
7,600.0	7,269.7	7,200.7	7,200.7	29.0	26.8	-70.67	1,023.9	-917.1	1,004.4	949.4	55.03	18.254		
7,700.0	7,272.0	7,203.0	7,203.0	29.1	26.8	-90.00	1,023.9	-917.1	908.1	853.2	54.90	16.542		
7,800.0	7,272.0	7,203.0	7,203.0	29.4	26.8	-90.00	1,023.9	-917.1	812.7	758.0	54.74	14.846		
7,900.0	7,272.0	7,203.0	7,203.0	29.8	26.8	-90.00	1,023.9	-917.1	718.5	664.0	54.58	13.165		
8,000.0	7,272.0	7,203.0	7,203.0	30.4	26.8	-90.00	1,023.9	-917.1	626.2	571.8	54.42	11.506		
8,100.0	7,272.0	7,203.0	7,203.0	31.1	26.8	-90.00	1,023.9	-917.1	536.6	482.2	54.31	9.880		
8,200.0	7,272.0	7,203.0	7,203.0	31.8	26.8	-90.00	1,023.9	-917.1	451.3	397.0	54.35	8.304		
8,300.0	7,272.0	7,203.0	7,203.0	32.7	26.8	-90.00	1,023.9	-917.1	373.5	318.7	54.79	6.817		
8,400.0	7,272.0	7,203.0	7,203.0	33.6	26.8	-90.00	1,023.9	-917.1	308.7	252.5	56.14	5.499		
8,500.0	7,272.0	7,203.0	7,203.0	34.6	26.8	-90.00	1,023.9	-917.1	266.6	207.8	58.83	4.532		
8,571.0	7,272.0	7,203.0	7,203.0	35.4	26.8	-90.00	1,023.9	-917.1	257.0	195.9	61.10	4.206 CC, ES		
8,600.0	7,272.0	7,203.0	7,203.0	35.7	26.8	-90.00	1,023.9	-917.1	258.6	196.7	61.87	4.180 SF		
8,700.0	7,272.0	7,203.0	7,203.0	36.8	26.8	-90.00	1,023.9	-917.1	287.5	224.3	63.25	4.546		
8,800.0	7,272.0	7,203.0	7,203.0	37.9	26.8	-90.00	1,023.9	-917.1	344.2	281.2	63.03	5.461		
8,900.0	7,272.0	7,203.0	7,203.0	39.1	26.8	-90.00	1,023.9	-917.1	417.5	355.2	62.28	6.703		
9,000.0	7,272.0	7,203.0	7,203.0	40.4	26.8	-90.00	1,023.9	-917.1	500.1	438.6	61.52	8.129		
9,100.0	7,272.0	7,203.0	7,203.0	41.7	26.8	-90.00	1,023.9	-917.1	588.1	527.2	60.88	9.660		
9,200.0	7,272.0	7,203.0	7,203.0	43.0	26.8	-90.00	1,023.9	-917.1	679.5	619.1	60.37	11.255		
9,300.0	7,272.0	7,203.0	7,203.0	44.3	26.8	-90.00	1,023.9	-917.1	773.0	713.0	59.97	12.889		
9,400.0	7,272.0	7,203.0	7,203.0	45.7	26.8	-90.00	1,023.9	-917.1	867.9	808.3	59.65	14.549		
9,500.0	7,272.0	7,203.0	7,203.0	47.1	26.8	-90.00	1,023.9	-917.1	963.9	904.5	59.40	16.227		
9,600.0	7,272.0	7,203.0	7,203.0	48.5	26.8	-90.00	1,023.9	-917.1	1,060.6	1,001.4	59.19	17.918		
9,700.0	7,272.0	7,203.0	7,203.0	49.9	26.8	-90.00	1,023.9	-917.1	1,157.9	1,098.8	59.02	19.618		
9,800.0	7,272.0	7,203.0	7,203.0	51.4	26.8	-90.00	1,023.9	-917.1	1,255.6	1,196.7	58.88	21.324		
9,900.0	7,272.0	7,203.0	7,203.0	52.9	26.8	-90.00	1,023.9	-917.1	1,353.6	1,294.8	58.76	23.034		
10,000.0	7,272.0	7,203.0	7,203.0	54.4	26.8	-90.00	1,023.9	-917.1	1,451.9	1,393.2	58.67	24.748		
10,100.0	7,272.0	7,203.0	7,203.0	55.9	26.8	-90.00	1,023.9	-917.1	1,550.4	1,491.9	58.59	26.464		

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 19-18-1NBH
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 19-18-1NBH	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	
10,200.0	7,272.0	7,203.0	7,203.0	57.4	26.8	-90.00	1,023.9	-917.1	1,649.1	1,590.6	58.52	28.182	
10,300.0	7,272.0	7,203.0	7,203.0	59.0	26.8	-90.00	1,023.9	-917.1	1,748.0	1,689.5	58.46	29.901	
10,400.0	7,272.0	7,203.0	7,203.0	60.5	26.8	-90.00	1,023.9	-917.1	1,847.0	1,788.5	58.41	31.620	
10,500.0	7,272.0	7,203.0	7,203.0	62.1	26.8	-90.00	1,023.9	-917.1	1,946.0	1,887.7	58.37	33.339	
10,600.0	7,272.0	7,203.0	7,203.0	63.7	26.8	-90.00	1,023.9	-917.1	2,045.2	1,986.9	58.34	35.057	
10,700.0	7,272.0	7,203.0	7,203.0	65.2	26.8	-90.00	1,023.9	-917.1	2,144.4	2,086.1	58.31	36.775	

Company:	PetroShare Corp	Local Co-ordinate Reference:	Well CONNER 19-18-1NBH
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 19-18-1NBH	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

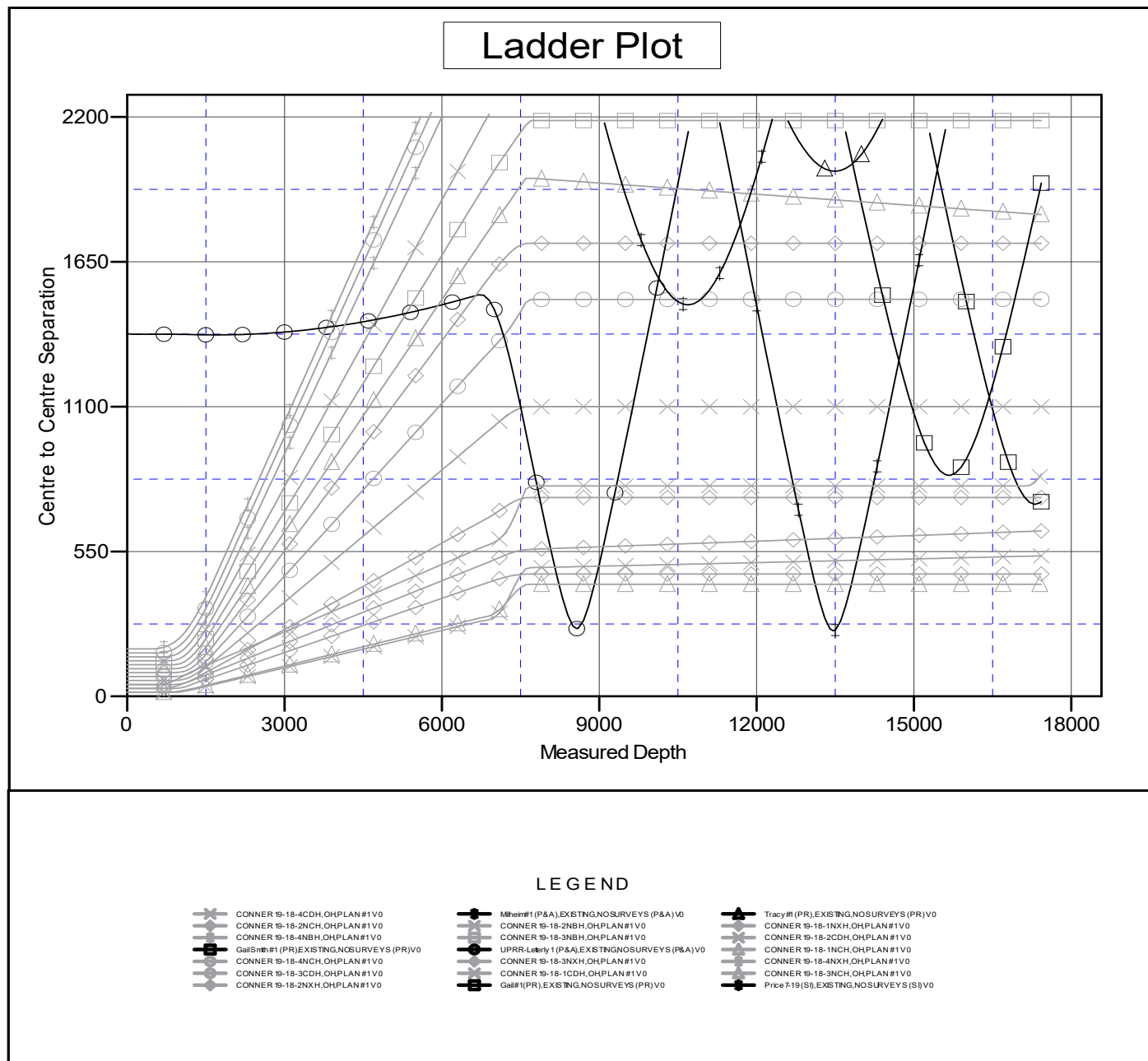
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000

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

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 19-18-1NBH
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 19-18-1NBH	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

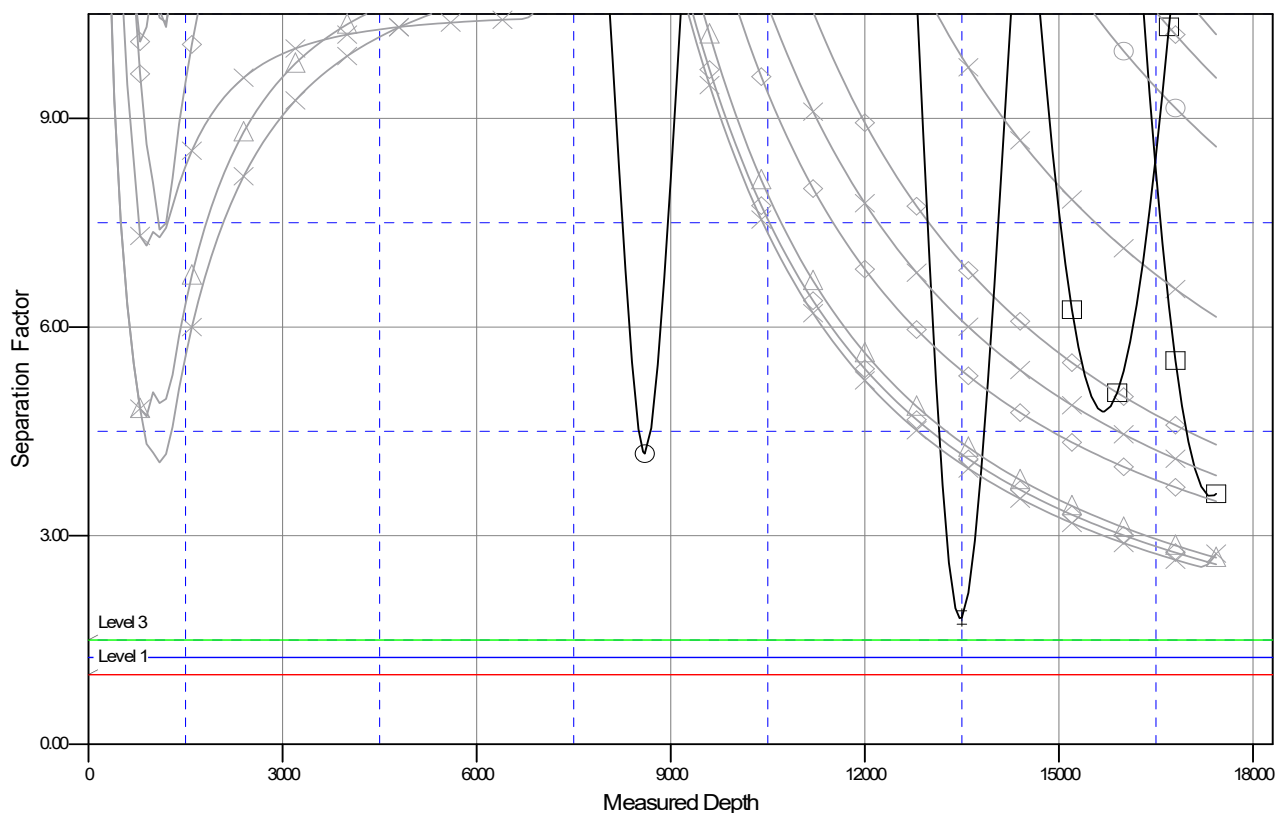
Central Meridian is -105.500000

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

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.51°

Separation Factor Plot



LEGEND

<ul style="list-style-type: none"> CONNER 19-18-4CDH, OHPLAN#1V0 CONNER 19-18-2NCH, OHPLAN#1V0 CONNER 19-18-4NBH, OHPLAN#1V0 GailSmith#1 (PR) EXISTING NOSURVEYS (PR) V0 CONNER 19-18-4NCH, OHPLAN#1V0 CONNER 19-18-3CDH, OHPLAN#1V0 CONNER 19-18-2NXH, OHPLAN#1V0 	<ul style="list-style-type: none"> Milheim#1 (P&A) EXISTING NOSURVEYS (P&A) V0 CONNER 19-18-2NBH, OHPLAN#1V0 CONNER 19-18-3NBH, OHPLAN#1V0 UPRR-Letorty 1 (P&A) EXISTING NOSURVEYS (P&A) V0 CONNER 19-18-3NXH, OHPLAN#1V0 CONNER 19-18-1CDH, OHPLAN#1V0 Gail#1 (PR) EXISTING NOSURVEYS (PR) V0 	<ul style="list-style-type: none"> Tracy#1 (PR) EXISTING NOSURVEYS (PR) V0 CONNER 19-18-1NXH, OHPLAN#1V0 CONNER 19-18-2CDH, OHPLAN#1V0 CONNER 19-18-1NCH, OHPLAN#1V0 CONNER 19-18-4NXH, OHPLAN#1V0 CONNER 19-18-3NCH, OHPLAN#1V0 Price 7-19 (S) EXISTING NOSURVEYS (S) V0
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