

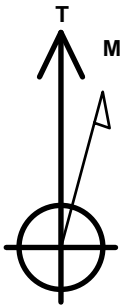
PDC Energy Inc. DJ Basin

Well Name: **High Plains 25N-241**

Surface Location: High Plains 5N65W25AF Pad Sec.25-T5N-R65W
 North American Datum 1983 , US State Plane 1983 Colorado Northern Zone
 Ground Elevation: 4639.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 0.0 1380464.34 3245642.82 40.374424 -104.618330
 Original Well Elev WELL @ 4662.0ft (Original Well Elev)

DESIGN TARGET DETAILS

| Name | TVD | +N/-S | +E/-W | Shape |
|-------------------------------|--------|--------|--------|-------|
| SHL 1099'FNL, 747'FWL, SEC.25 | 1.0 | 0.0 | 0.0 | Point |
| BHL 0'FNL, 2292'FWL, SEC.24 | 6762.0 | 6375.9 | 1533.2 | Point |
| LPL 241'FSL, 2280'FWL, SEC.24 | 6782.0 | 1339.9 | 1533.2 | Point |



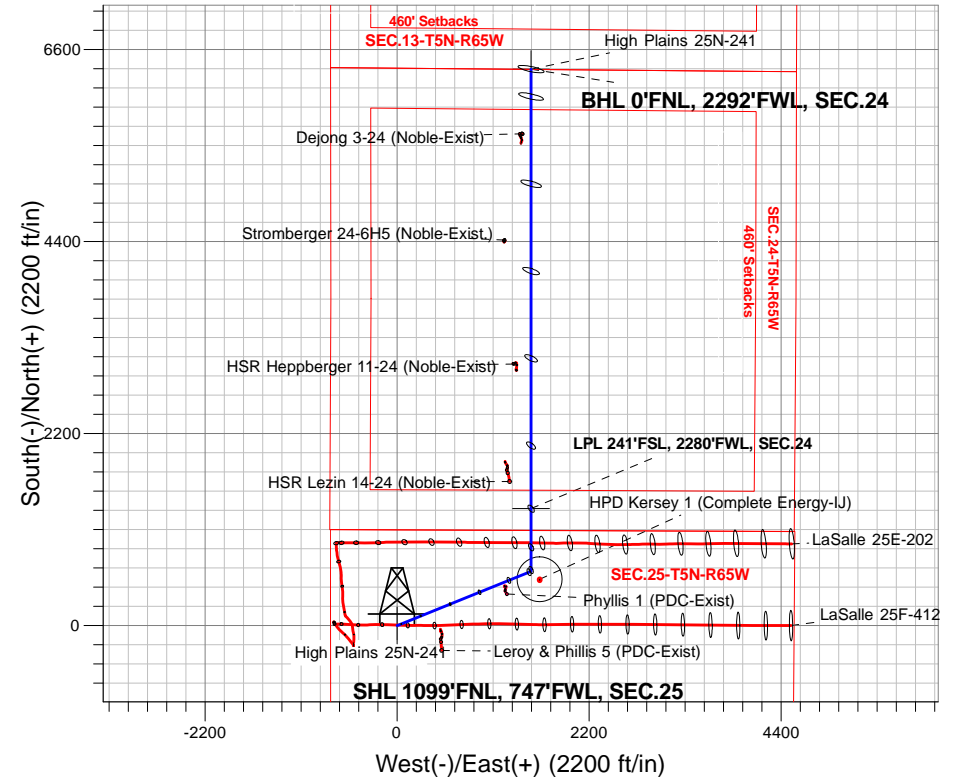
Azimuths to True North
 Magnetic North: 8.02°

Magnetic Field
 Strength: 52539.0snT
 Dip Angle: 66.86°
 Date: 2/8/2017
 Model: IGRF2010

High Plains 5N65W25AF Pad Sec.25-T5N-R65W
 High Plains 25N-241
 Plan #1 (2-03-17)
 13:59, February 08 2017

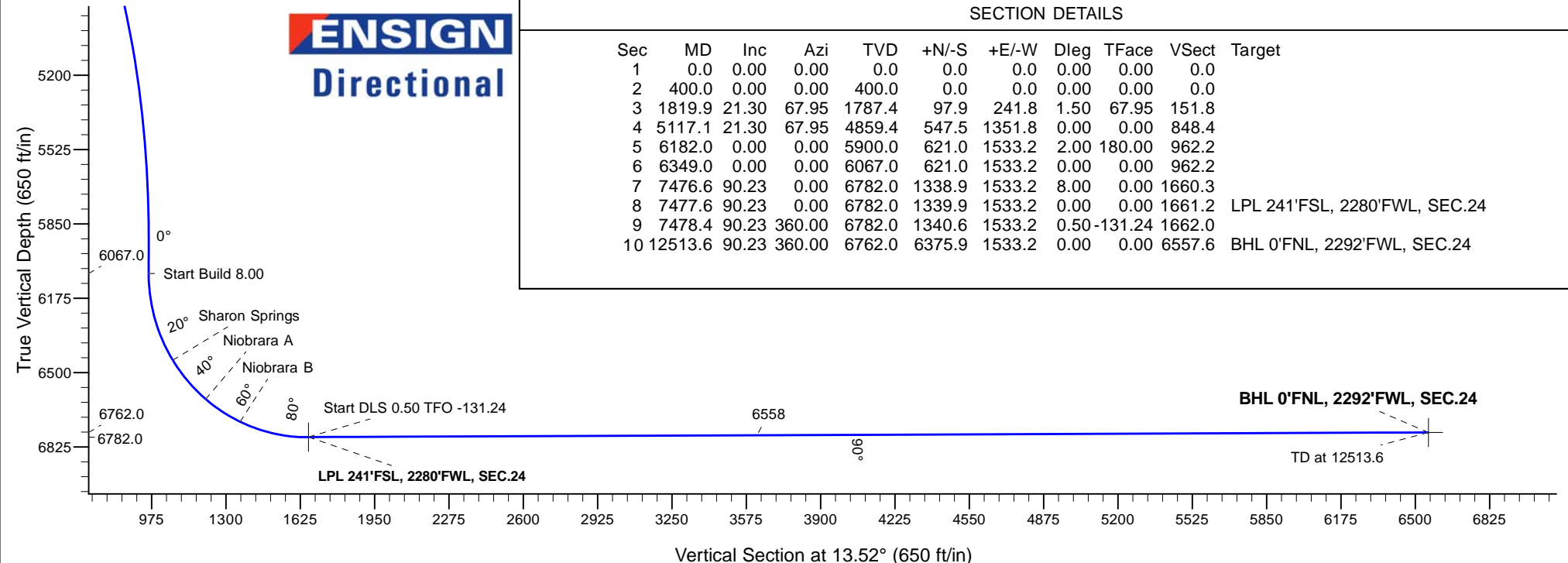
ANNOTATIONS

| TVD | MD | Annotation |
|--------|---------|--------------------------------|
| 400.0 | 400.0 | KOP - Start Build 1.50 |
| 4859.4 | 5117.1 | Start Drop -2.00 |
| 6067.0 | 6349.0 | Start Build 8.00 |
| 6782.0 | 7477.6 | Start DLS 0.50 TFO -131.24 |
| 6782.0 | 7478.4 | Start 5035.3 hold at 7478.4 MD |
| 6762.0 | 12513.6 | TD at 12513.6 |



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 | 400.0 | 0.00 | 0.00 | 400.0 | 0.0 | 0.0 | 0.00 | 0.00 | 0.0 | |
| 3 | 1819.9 | 21.30 | 67.95 | 1787.4 | 97.9 | 241.8 | 1.50 | 67.95 | 151.8 | |
| 4 | 5117.1 | 21.30 | 67.95 | 4859.4 | 547.5 | 1351.8 | 0.00 | 0.00 | 848.4 | |
| 5 | 6182.0 | 0.00 | 0.00 | 5900.0 | 621.0 | 1533.2 | 2.00 | 180.00 | 962.2 | |
| 6 | 6349.0 | 0.00 | 0.00 | 6067.0 | 621.0 | 1533.2 | 0.00 | 0.00 | 962.2 | |
| 7 | 7476.6 | 90.23 | 0.00 | 6782.0 | 1338.9 | 1533.2 | 8.00 | 0.00 | 1660.3 | |
| 8 | 7477.6 | 90.23 | 0.00 | 6782.0 | 1339.9 | 1533.2 | 0.00 | 0.00 | 1661.2 | LPL 241'FSL, 2280'FWL, SEC.24 |
| 9 | 7478.4 | 90.23 | 360.00 | 6782.0 | 1340.6 | 1533.2 | 0.50 | -131.24 | 1662.0 | |
| 10 | 12513.6 | 90.23 | 360.00 | 6762.0 | 6375.9 | 1533.2 | 0.00 | 0.00 | 6557.6 | BHL 0'FNL, 2292'FWL, SEC.24 |





PDC Energy Inc. DJ Basin

SEC.25-T5N-R65W

High Plains 5N65W25AF Pad Sec.25-T5N-R65W

High Plains 25N-241

Wellbore #1

Plan #1 (2-03-17)

Anticollision Report

08 February, 2017



| | | | |
|---------------------------|--|-------------------------------------|--------------------------------------|
| Company: | PDC Energy Inc. DJ Basin | Local Co-ordinate Reference: | Well High Plains 25N-241 |
| Project: | SEC.25-T5N-R65W | TVD Reference: | WELL @ 4662.0ft (Original Well Elev) |
| Reference Site: | High Plains 5N65W25AF Pad Sec.25-T5N-R65W | MD Reference: | WELL @ 4662.0ft (Original Well Elev) |
| Site Error: | 0.0 ft | North Reference: | True |
| Reference Well: | High Plains 25N-241 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 ft | Output errors are at | 2.45 sigma |
| Reference Wellbore | Wellbore #1 | Database: | US_EDM |
| Reference Design: | Plan #1 (2-03-17) | Offset TVD Reference: | Offset Datum |

| | | | |
|-------------------------------------|---|-----------------------|---------------------|
| Reference | Plan #1 (2-03-17) | | |
| Filter type: | NO GLOBAL FILTER: Using user defined selection & filtering criteria | | |
| Interpolation Method: | Stations | Error Model: | ISCWSA |
| Depth Range: | Unlimited | Scan Method: | Closest Approach 3D |
| Results Limited by: | Maximum center-center distance of 800.0 ft | Error Surface: | Elliptical Conic |
| Warning Levels Evaluated at: | 2.45 Sigma | Casing Method: | Not applied |

| | | | | |
|----------------------------|----------------------|---------------------------------|------------------|--------------------|
| Survey Tool Program | Date 2/8/2017 | | | |
| From (ft) | To (ft) | Survey (Wellbore) | Tool Name | Description |
| 0.0 | 12,513.6 | Plan #1 (2-03-17) (Wellbore #1) | MWD | MWD - Standard |

| Summary | | | | | | |
|--|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|---------------------|
| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
| Offset Well - Wellbore - Design | | | | | | |
| Existing Wells Sec.24-T5N-R65W (GRID) | | | | | | |
| Dejong 3-24 (Noble-Exist) - Wellbore #1 - Wellbore #1 | 11,771.9 | 6,741.1 | 99.0 | -50.7 | 0.661 | Level 1, CC, ES, SF |
| HSR Heppberger 11-24 (Noble-Exist) - Wellbore #1 - Wellbore #1 | 9,139.1 | 6,758.4 | 205.3 | 119.1 | 2.380 | CC, ES, SF |
| HSR Lezin 14-24 (Noble-Exist) - Wellbore #1 - Wellbore #1 | 7,828.8 | 6,767.8 | 253.1 | 188.2 | 3.899 | CC, ES, SF |
| Stromberger 24-6H5 (Noble-Exist) - Wellbore #1 - Wellbore #1 | 10,552.3 | 6,747.6 | 311.6 | 192.7 | 2.622 | CC, ES, SF |
| Existing Wells Sec.25-T5N-R65W | | | | | | |
| HPD Kersey 1 (Complete Energy-IJ) - Wellbore #1 - Wellbore #1 | 6,349.0 | 6,041.0 | 132.7 | -54.9 | 0.707 | Level 1, CC, ES, SF |
| Leroy & Phillis 5 (PDC-Exist) - Wellbore #1 - Wellbore #1 | 2,316.9 | 2,229.0 | 246.1 | 228.2 | 13.743 | CC, ES |
| Leroy & Phillis 5 (PDC-Exist) - Wellbore #1 - Wellbore #1 | 2,500.0 | 2,395.2 | 256.2 | 236.6 | 13.066 | SF |
| Phyllis 1 (PDC-Exist) - Wellbore #1 - Wellbore #1 | 4,671.6 | 4,418.8 | 85.7 | 42.2 | 1.971 | CC, ES, SF |
| High Plains 5N65W25AF Pad Sec.25-T5N-R65W | | | | | | |
| High Plains 25A-221 - Wellbore #1 - Plan #1 (2-03-17) | 696.1 | 695.8 | 27.6 | 24.0 | 7.783 | CC |
| High Plains 25A-221 - Wellbore #1 - Plan #1 (2-03-17) | 700.0 | 699.7 | 27.6 | 24.0 | 7.736 | ES |
| High Plains 25A-221 - Wellbore #1 - Plan #1 (2-03-17) | 12,513.6 | 12,343.2 | 631.8 | 334.3 | 2.123 | SF |
| High Plains 25A-241 - Wellbore #1 - Plan #1 (2-03-17) | 811.0 | 810.1 | 55.5 | 51.3 | 13.189 | CC, ES |
| High Plains 25A-241 - Wellbore #1 - Plan #1 (2-03-17) | 1,000.0 | 996.1 | 62.6 | 57.2 | 11.675 | SF |
| High Plains 25A-321 - Wellbore #1 - Plan #1 (2-03-17) | 615.2 | 615.1 | 13.7 | 10.6 | 4.441 | CC, ES |
| High Plains 25A-321 - Wellbore #1 - Plan #1 (2-03-17) | 12,513.6 | 12,797.1 | 362.2 | 68.4 | 1.233 | Level 2, SF |
| High Plains 25A-341 - Wellbore #1 - Plan #1 (2-03-17) | 675.8 | 674.2 | 72.5 | 69.1 | 21.147 | CC |
| High Plains 25A-341 - Wellbore #1 - Plan #1 (2-03-17) | 700.0 | 697.9 | 72.6 | 69.0 | 20.380 | ES |
| High Plains 25A-341 - Wellbore #1 - Plan #1 (2-03-17) | 1,000.0 | 990.2 | 90.8 | 85.5 | 16.888 | SF |
| High Plains 25A-401 - Wellbore #1 - Plan #1 (2-03-17) | 765.5 | 765.0 | 41.7 | 37.7 | 10.566 | CC |
| High Plains 25A-401 - Wellbore #1 - Plan #1 (2-03-17) | 800.0 | 799.3 | 41.8 | 37.7 | 10.093 | ES |
| High Plains 25A-401 - Wellbore #1 - Plan #1 (2-03-17) | 900.0 | 898.6 | 44.4 | 39.6 | 9.367 | SF |
| High Plains 25F-221 - Wellbore #1 - Plan #1 (2-03-17) | 400.0 | 400.0 | 90.0 | 88.1 | 46.690 | CC |
| High Plains 25F-221 - Wellbore #1 - Plan #1 (2-03-17) | 500.0 | 498.6 | 90.3 | 87.8 | 36.690 | ES |
| High Plains 25F-221 - Wellbore #1 - Plan #1 (2-03-17) | 1,000.0 | 985.4 | 124.8 | 119.5 | 23.208 | SF |
| High Plains 25F-301 - Wellbore #1 - Plan #1 (2-03-17) | 200.0 | 200.0 | 104.9 | 104.1 | 127.028 | CC |
| High Plains 25F-301 - Wellbore #1 - Plan #1 (2-03-17) | 300.0 | 299.0 | 105.4 | 104.0 | 77.118 | ES |
| High Plains 25F-301 - Wellbore #1 - Plan #1 (2-03-17) | 1,000.0 | 980.9 | 160.0 | 154.5 | 29.130 | SF |
| High Plains 25N-301 - Wellbore #1 - Plan #1 (2-03-17) | 334.1 | 334.1 | 14.8 | 13.2 | 9.506 | CC |
| High Plains 25N-301 - Wellbore #1 - Plan #1 (2-03-17) | 400.0 | 399.9 | 15.0 | 13.1 | 7.865 | ES |
| High Plains 25N-301 - Wellbore #1 - Plan #1 (2-03-17) | 12,513.6 | 12,991.0 | 331.8 | 42.8 | 1.148 | Level 2, SF |

| | | | |
|---------------------------|--|-------------------------------------|--------------------------------------|
| Company: | PDC Energy Inc. DJ Basin | Local Co-ordinate Reference: | Well High Plains 25N-241 |
| Project: | SEC.25-T5N-R65W | TVD Reference: | WELL @ 4662.0ft (Original Well Elev) |
| Reference Site: | High Plains 5N65W25AF Pad Sec.25-T5N-R65W | MD Reference: | WELL @ 4662.0ft (Original Well Elev) |
| Site Error: | 0.0 ft | North Reference: | True |
| Reference Well: | High Plains 25N-241 | Survey Calculation Method: | Minimum Curvature |
| Well Error: | 0.0 ft | Output errors are at | 2.45 sigma |
| Reference Wellbore | Wellbore #1 | Database: | US_EDM |
| Reference Design: | Plan #1 (2-03-17) | Offset TVD Reference: | Offset Datum |

| Summary | | | | | | |
|---|-------------------------------|----------------------------|-------------------------------|--------------------------------|-------------------|---------|
| Site Name | Reference Measured Depth (ft) | Offset Measured Depth (ft) | Distance Between Centres (ft) | Distance Between Ellipses (ft) | Separation Factor | Warning |
| Offset Well - Wellbore - Design | | | | | | |
| LaSalle 25F-HZ Pad Sec.25-T5N-R65W | | | | | | |
| LaSalle 25E-202 - Wellbore #1 - Wellbore #1 | 7,100.0 | 8,785.6 | 102.6 | 34.6 | 1.509 | ES, SF |
| LaSalle 25E-202 - Wellbore #1 - Wellbore #1 | 7,119.7 | 8,785.1 | 100.4 | 34.7 | 1.529 | CC |
| LaSalle 25F-412 - Wellbore #1 - Wellbore #1 | 0.0 | 0.0 | 550.5 | | | |
| LaSalle 25F-412 - Wellbore #1 - Wellbore #1 | 400.0 | 391.7 | 551.6 | 549.8 | 303.241 | ES |
| LaSalle 25F-412 - Wellbore #1 - Wellbore #1 | 1,700.0 | 1,640.5 | 789.6 | 780.6 | 87.952 | SF |

| Offset Design Existing Wells Sec.24-T5N-R65W (GRID) - Dejong 3-24 (Noble-Exist) - Wellbore #1 - Wellbore #1 | | | | | | | | | | | | | Offset Site Error: | 0.0 ft |
|---|----------------|----------------|----------------|-----------------|--------|-------------------|------------------------|------------|-----------------|------------------|--------------------|-------------------|---------------------|--------|
| Survey Program: 100-NS-GYRO-MS | | | | | | | | | | | | | Offset Well Error: | 0.0 ft |
| Reference | | Offset | | Semi Major Axis | | | Distance | | | | | | | |
| Measured Depth | Vertical Depth | Measured Depth | Vertical Depth | Reference | Offset | Highside Toolface | Offset Wellbore Centre | | Between Centres | Between Ellipses | Minimum Separation | Separation Factor | Warning | |
| (ft) | (ft) | (ft) | (ft) | (ft) | (ft) | (°) | +N/-S (ft) | +E/-W (ft) | (ft) | (ft) | (ft) | | | |
| 11,000.0 | 6,768.0 | 6,747.1 | 6,745.1 | 118.1 | 17.8 | -93.55 | 5,634.1 | 1,434.2 | 778.2 | 646.2 | 131.93 | 5.898 | | |
| 11,100.0 | 6,767.6 | 6,746.3 | 6,744.3 | 120.3 | 17.8 | -93.12 | 5,634.1 | 1,434.2 | 679.1 | 544.9 | 134.24 | 5.059 | | |
| 11,200.0 | 6,767.2 | 6,745.6 | 6,743.6 | 122.5 | 17.8 | -92.68 | 5,634.1 | 1,434.2 | 580.4 | 443.8 | 136.55 | 4.250 | | |
| 11,300.0 | 6,766.8 | 6,744.8 | 6,742.8 | 124.8 | 17.8 | -92.24 | 5,634.1 | 1,434.2 | 482.1 | 343.3 | 138.85 | 3.472 | | |
| 11,400.0 | 6,766.4 | 6,744.0 | 6,742.0 | 127.0 | 17.8 | -91.79 | 5,634.1 | 1,434.2 | 384.8 | 243.7 | 141.15 | 2.726 | | |
| 11,500.0 | 6,766.0 | 6,743.3 | 6,741.3 | 129.2 | 17.8 | -91.34 | 5,634.1 | 1,434.2 | 289.3 | 145.9 | 143.44 | 2.017 | | |
| 11,600.0 | 6,765.6 | 6,742.5 | 6,740.5 | 131.5 | 17.8 | -90.89 | 5,634.1 | 1,434.2 | 198.3 | 52.6 | 145.72 | 1.361 | Level 3 | |
| 11,700.0 | 6,765.2 | 6,741.7 | 6,739.7 | 133.7 | 17.8 | -90.44 | 5,634.1 | 1,434.2 | 122.3 | -25.7 | 148.00 | 0.826 | Level 1 | |
| 11,771.9 | 6,764.9 | 6,741.1 | 6,739.1 | 135.3 | 17.8 | -90.11 | 5,634.1 | 1,434.2 | 99.0 | -50.7 | 149.64 | 0.661 | Level 1, CC, ES, SF | |
| 11,800.0 | 6,764.8 | 6,740.9 | 6,738.9 | 136.0 | 17.8 | -89.98 | 5,634.1 | 1,434.2 | 102.9 | -47.4 | 150.28 | 0.685 | Level 1 | |
| 11,900.0 | 6,764.4 | 6,740.1 | 6,738.1 | 138.2 | 17.8 | -89.52 | 5,634.1 | 1,434.2 | 161.9 | 9.4 | 152.54 | 1.061 | Level 2 | |
| 12,000.0 | 6,764.0 | 6,739.3 | 6,737.3 | 140.5 | 17.8 | -89.05 | 5,634.1 | 1,434.2 | 248.7 | 93.9 | 154.80 | 1.606 | | |
| 12,100.0 | 6,763.6 | 6,738.5 | 6,736.5 | 142.7 | 17.8 | -88.59 | 5,634.1 | 1,434.2 | 342.7 | 185.7 | 157.05 | 2.182 | | |
| 12,200.0 | 6,763.2 | 6,737.7 | 6,735.7 | 145.0 | 17.8 | -88.12 | 5,634.1 | 1,434.2 | 439.4 | 280.1 | 159.29 | 2.759 | | |
| 12,300.0 | 6,762.8 | 6,736.9 | 6,734.9 | 147.3 | 17.8 | -87.64 | 5,634.1 | 1,434.2 | 537.3 | 375.8 | 161.52 | 3.327 | | |
| 12,400.0 | 6,762.5 | 6,736.0 | 6,734.0 | 149.5 | 17.8 | -87.17 | 5,634.2 | 1,434.2 | 635.9 | 472.1 | 163.74 | 3.883 | | |
| 12,500.0 | 6,762.1 | 6,735.2 | 6,733.2 | 151.8 | 17.8 | -86.69 | 5,634.2 | 1,434.2 | 734.8 | 568.9 | 165.94 | 4.428 | | |
| 12,513.6 | 6,762.0 | 6,735.1 | 6,733.1 | 152.1 | 17.8 | -86.62 | 5,634.2 | 1,434.2 | 748.3 | 582.0 | 166.24 | 4.501 | | |