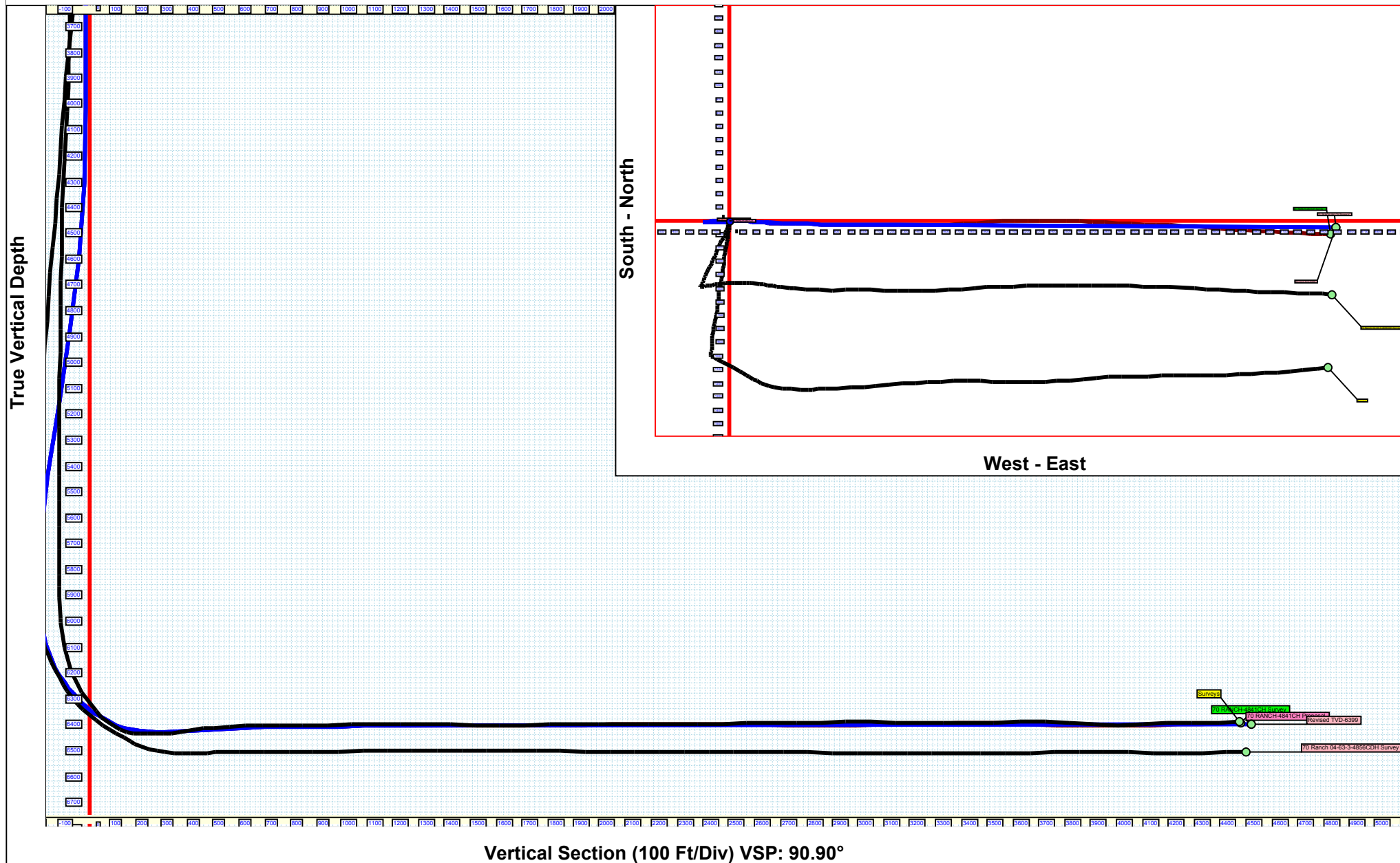
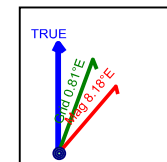




Job Number: 12262013
Company: Bill Barrett Corp
Lease/Well: 70 Ranch-4-63-3-4841CH
Location: Kersey
Rig Name: Nabors M-37
State/County: Colorado/ Weld
Country: USA
API Number: 15-123-37993

Elevation (To MSL): 0.00 ft
RKB: 0.00 ft
Projection System: US State Plane 1927 (Exact solution)
Projection Group: Colorado North 501
Projection Datum: CLARKE 1866
Magnetic Declination: 8.18
Grid Convergence: 0.80920 E
Date: Thursday, January 02, 2014





Job Number: 12262013
Company: Bill Barrett Corp
Lease/Well: 70 Ranch-4-63-3-4841CH
Location: Kersey
Rig Name: Nabors M-37
State/Country: Colorado/ Weld
Country: USA
API Number: 15-123-37993

Elevation GL: 0.00 ft **RKB:** 0.00 ft
Projection System: US State Plane 1927 (Exact solution)
Projection Group: Colorado North 501
Projection Datum: CLARKE 1866
Mag. Declination: 8.18° (C:\HawkEye\IGRF2005.MIF)
Grid Convergence: 0.80920 E
Date: Thursday, January 02, 2014

Calculated by HawkEye Software
 Minimum Curvature Method
 Vertical Section Plane 90.90°
 Northing (US ft): 414890.82 Easting (US ft): 2348480.73
 Latitude: 40°27'55.9500" N Longitude: -104°14'51.1800" W
 Well Location: 275.45 FNL, 1430.19 FEL, Section 30, T6N, R61W, Meridian 06, Weld County, CO
 Direction Reference: True North

| Measured Depth (Ft) | INC Deg | AZM Deg | TVD (Ft) | NS (Ft) | EW (Ft) | VS (Ft) | DLS %/100 Ft | Northing (US ft) | Easting (US ft) | Closure (Ft) |
|---------------------|---------|---------|----------|---------|---------|---------|--------------|------------------|-----------------|--------------|
| 691.00 | 0.33 | 189.29 | 690.99 | 0.56 | -1.49 | -1.50 | 0.00 | 414891.36 | 2348479.23 | 1.59 |
| 883.00 | 1.10 | 199.40 | 882.97 | -1.72 | -2.19 | -2.16 | 0.40 | 414889.07 | 2348478.56 | 2.79 |
| 1160.00 | 1.30 | 170.90 | 1159.92 | -7.33 | -2.58 | -2.46 | 0.22 | 414883.45 | 2348478.26 | 7.77 |
| 1438.00 | 1.00 | 154.60 | 1437.86 | -12.64 | -1.04 | -0.84 | 0.16 | 414878.17 | 2348479.87 | 12.68 |
| 1726.00 | 0.50 | 115.40 | 1725.84 | -15.45 | 1.17 | 1.42 | 0.24 | 414875.39 | 2348482.12 | 15.49 |
| 2012.00 | 0.70 | 98.00 | 2011.82 | -16.23 | 4.03 | 4.29 | 0.09 | 414874.65 | 2348484.99 | 16.72 |
| 2299.00 | 1.20 | 284.10 | 2298.80 | -15.74 | 2.85 | 3.10 | 0.66 | 414875.12 | 2348483.81 | 16.00 |
| 2585.00 | 1.20 | 272.00 | 2584.74 | -14.91 | -3.04 | -2.81 | 0.09 | 414875.87 | 2348477.90 | 15.21 |
| 2874.00 | 1.30 | 277.30 | 2873.67 | -14.38 | -9.32 | -9.09 | 0.05 | 414876.31 | 2348471.61 | 17.14 |
| 3161.00 | 0.50 | 251.10 | 3160.64 | -14.38 | -13.73 | -13.51 | 0.31 | 414876.25 | 2348467.20 | 19.88 |
| 3448.00 | 1.10 | 183.10 | 3447.61 | -17.53 | -15.07 | -14.79 | 0.36 | 414873.08 | 2348465.91 | 23.12 |
| 3736.00 | 0.10 | 129.50 | 3735.59 | -20.45 | -15.02 | -14.70 | 0.36 | 414870.16 | 2348466.00 | 25.38 |
| 4022.00 | 1.40 | 334.90 | 4021.57 | -17.45 | -16.31 | -16.04 | 0.52 | 414873.14 | 2348464.66 | 23.89 |
| 4310.00 | 2.20 | 287.00 | 4309.44 | -12.64 | -23.09 | -22.89 | 0.57 | 414877.85 | 2348457.82 | 26.33 |
| 4595.00 | 5.10 | 265.70 | 4593.84 | -11.99 | -40.96 | -40.77 | 1.11 | 414878.25 | 2348439.94 | 42.68 |
| 4882.00 | 8.80 | 271.30 | 4878.68 | -12.45 | -75.64 | -75.44 | 1.31 | 414877.30 | 2348405.27 | 76.66 |
| 5167.00 | 9.10 | 271.50 | 5160.21 | -11.37 | -119.97 | -119.77 | 0.11 | 414877.76 | 2348360.94 | 120.50 |
| 5262.00 | 8.80 | 271.10 | 5254.06 | -11.03 | -134.74 | -134.55 | 0.32 | 414877.89 | 2348346.16 | 135.19 |
| 5358.00 | 8.40 | 274.50 | 5348.98 | -10.34 | -149.07 | -148.89 | 0.67 | 414878.37 | 2348331.82 | 149.43 |
| 5454.00 | 8.40 | 270.80 | 5443.95 | -9.69 | -163.08 | -162.90 | 0.56 | 414878.82 | 2348317.81 | 163.36 |
| 5550.00 | 6.60 | 268.30 | 5539.12 | -9.76 | -175.60 | -175.43 | 1.91 | 414878.58 | 2348305.28 | 175.87 |
| 5645.00 | 5.60 | 263.40 | 5633.59 | -10.45 | -185.66 | -185.48 | 1.19 | 414877.75 | 2348295.23 | 185.96 |
| 5741.00 | 3.30 | 266.60 | 5729.29 | -11.16 | -193.08 | -192.88 | 2.41 | 414876.94 | 2348287.83 | 193.40 |
| 5836.00 | 1.20 | 253.00 | 5824.21 | -11.61 | -196.76 | -196.55 | 2.27 | 414876.43 | 2348284.16 | 197.10 |
| 5890.00 | 0.30 | 161.10 | 5878.21 | -11.91 | -197.25 | -197.04 | 2.31 | 414876.13 | 2348283.67 | 197.61 |
| 5919.00 | 0.10 | 8.00 | 5907.21 | -11.95 | -197.22 | -197.01 | 1.35 | 414876.08 | 2348283.69 | 197.59 |
| 6015.00 | 8.70 | 80.60 | 6002.84 | -10.68 | -190.04 | -189.84 | 9.03 | 414877.45 | 2348290.86 | 190.34 |
| 6111.00 | 18.30 | 81.60 | 6096.08 | -7.29 | -167.91 | -167.78 | 10.00 | 414881.16 | 2348312.94 | 168.07 |
| 6207.00 | 27.70 | 87.10 | 6184.36 | -3.95 | -130.63 | -130.55 | 10.03 | 414885.03 | 2348350.17 | 130.69 |
| 6237.00 | 30.90 | 88.00 | 6210.51 | -3.33 | -115.96 | -115.90 | 10.77 | 414885.85 | 2348364.83 | 116.01 |
| 6269.00 | 34.20 | 88.70 | 6237.48 | -2.84 | -98.76 | -98.70 | 10.38 | 414886.59 | 2348382.02 | 98.80 |
| 6299.00 | 37.70 | 88.80 | 6261.77 | -2.45 | -81.15 | -81.10 | 11.67 | 414887.22 | 2348399.62 | 81.19 |
| 6335.00 | 42.00 | 91.10 | 6289.40 | -2.45 | -58.09 | -58.05 | 12.62 | 414887.55 | 2348422.68 | 58.14 |
| 6367.00 | 46.10 | 91.00 | 6312.39 | -2.86 | -35.85 | -35.80 | 12.81 | 414887.45 | 2348444.92 | 35.96 |
| 6398.00 | 49.70 | 90.60 | 6333.17 | -3.18 | -12.86 | -12.80 | 11.65 | 414887.46 | 2348467.92 | 13.24 |
| 6430.00 | 54.30 | 90.30 | 6352.87 | -3.38 | 12.35 | 12.41 | 14.39 | 414887.62 | 2348493.13 | 12.81 |
| 6462.00 | 58.70 | 89.90 | 6370.53 | -3.42 | 39.03 | 39.08 | 13.79 | 414887.95 | 2348519.81 | 39.18 |
| 6504.00 | 63.60 | 90.30 | 6390.79 | -3.49 | 75.81 | 75.85 | 11.70 | 414888.40 | 2348556.58 | 75.89 |
| 6534.00 | 68.10 | 90.60 | 6403.06 | -3.70 | 103.17 | 103.22 | 15.03 | 414888.57 | 2348583.95 | 103.24 |
| 6567.00 | 73.20 | 92.50 | 6413.99 | -4.55 | 134.29 | 134.34 | 16.38 | 414888.16 | 2348615.07 | 134.36 |
| 6598.00 | 78.50 | 93.40 | 6421.57 | -6.10 | 164.29 | 164.37 | 17.33 | 414887.04 | 2348645.09 | 164.41 |
| 6627.00 | 82.60 | 94.80 | 6426.33 | -8.15 | 192.82 | 192.92 | 14.92 | 414885.39 | 2348673.65 | 192.99 |
| 6689.00 | 90.40 | 93.60 | 6430.11 | -12.68 | 254.49 | 254.66 | 12.73 | 414881.74 | 2348735.37 | 254.81 |

| Measured Depth (Ft) | INC Deg | AZM Deg | TVD (Ft) | NS (Ft) | EW (Ft) | VS (Ft) | DLS °/100 Ft | Northing (US ft) | Easting (US ft) | Closure (Ft) |
|---------------------------|------------|------------|-------------|------------|------------|------------|-----------------|---------------------|--------------------|-----------------|
| 6728.00 | 90.50 | 92.40 | 6429.80 | -14.72 | 293.43 | 293.63 | 3.09 | 414880.25 | 2348774.34 | 293.80 |
| 6825.00 | 94.20 | 91.00 | 6425.82 | -17.59 | 390.29 | 390.52 | 4.08 | 414878.74 | 2348871.23 | 390.69 |
| 6921.00 | 93.50 | 90.80 | 6419.38 | -19.10 | 486.06 | 486.30 | 0.76 | 414878.59 | 2348967.01 | 486.44 |
| 7017.00 | 91.00 | 92.50 | 6415.61 | -21.86 | 581.94 | 582.21 | 3.15 | 414877.18 | 2349062.92 | 582.35 |
| 7112.00 | 92.00 | 92.50 | 6413.12 | -26.00 | 676.81 | 677.14 | 1.05 | 414874.38 | 2349157.84 | 677.31 |
| 7207.00 | 90.00 | 91.10 | 6411.47 | -28.99 | 771.74 | 772.10 | 2.57 | 414872.74 | 2349252.81 | 772.29 |
| 7303.00 | 90.60 | 91.10 | 6410.96 | -30.83 | 867.73 | 868.10 | 0.62 | 414872.25 | 2349348.80 | 868.27 |
| 7398.00 | 91.60 | 90.10 | 6409.14 | -31.82 | 962.70 | 963.08 | 1.49 | 414872.60 | 2349443.78 | 963.23 |
| 7494.00 | 90.20 | 89.90 | 6407.63 | -31.82 | 1058.69 | 1059.05 | 1.47 | 414873.95 | 2349539.76 | 1059.16 |
| 7589.00 | 90.90 | 89.90 | 6406.72 | -31.66 | 1153.68 | 1154.04 | 0.74 | 414875.46 | 2349634.74 | 1154.11 |
| 7684.00 | 89.20 | 90.60 | 6406.64 | -32.07 | 1248.68 | 1249.03 | 1.94 | 414876.39 | 2349729.73 | 1249.09 |
| 7779.00 | 91.00 | 89.60 | 6406.47 | -32.24 | 1343.67 | 1344.01 | 2.17 | 414877.56 | 2349824.72 | 1344.06 |
| 7875.00 | 89.20 | 90.10 | 6406.30 | -31.99 | 1439.67 | 1439.99 | 1.95 | 414879.17 | 2349920.70 | 1440.02 |
| 7972.00 | 90.10 | 88.80 | 6406.90 | -31.06 | 1536.66 | 1536.95 | 1.63 | 414881.47 | 2350017.67 | 1536.97 |
| 8069.00 | 91.10 | 87.80 | 6405.88 | -28.18 | 1633.61 | 1633.85 | 1.46 | 414885.72 | 2350114.57 | 1633.85 |
| 8165.00 | 89.80 | 86.40 | 6405.13 | -23.32 | 1729.48 | 1729.63 | 1.99 | 414891.93 | 2350210.36 | 1729.63 |
| 8260.00 | 90.30 | 86.00 | 6405.04 | -17.03 | 1824.27 | 1824.31 | 0.67 | 414899.56 | 2350305.05 | 1824.35 |
| 8355.00 | 91.50 | 85.50 | 6403.55 | -9.99 | 1918.99 | 1918.91 | 1.37 | 414907.94 | 2350399.67 | 1919.02 |
| 8451.00 | 90.80 | 86.60 | 6401.62 | -3.37 | 2014.74 | 2014.55 | 1.36 | 414915.90 | 2350495.32 | 2014.74 |
| 8547.00 | 89.10 | 88.80 | 6401.71 | 0.48 | 2110.65 | 2110.39 | 2.90 | 414921.11 | 2350591.17 | 2110.65 |
| 8642.00 | 90.70 | 89.00 | 6401.87 | 2.30 | 2205.63 | 2205.33 | 1.70 | 414924.27 | 2350686.11 | 2205.64 |
| 8738.00 | 89.80 | 90.40 | 6401.45 | 2.80 | 2301.63 | 2301.30 | 1.73 | 414926.13 | 2350782.09 | 2301.63 |
| 8834.00 | 91.00 | 90.30 | 6400.78 | 2.22 | 2397.62 | 2397.29 | 1.25 | 414926.90 | 2350878.08 | 2397.62 |
| 8931.00 | 89.90 | 91.10 | 6400.02 | 1.03 | 2494.61 | 2494.29 | 1.40 | 414927.08 | 2350975.08 | 2494.61 |
| 9026.00 | 87.80 | 93.10 | 6401.93 | -2.45 | 2589.52 | 2589.24 | 3.05 | 414924.94 | 2351070.02 | 2589.52 |
| 9122.00 | 89.00 | 92.50 | 6404.61 | -7.13 | 2685.36 | 2685.14 | 1.40 | 414921.61 | 2351165.93 | 2685.37 |
| 9217.00 | 90.00 | 92.90 | 6405.44 | -11.61 | 2780.25 | 2780.09 | 1.13 | 414918.48 | 2351260.87 | 2780.28 |
| 9312.00 | 90.80 | 93.10 | 6404.78 | -16.58 | 2875.12 | 2875.02 | 0.87 | 414914.85 | 2351355.80 | 2875.17 |
| 9408.00 | 90.40 | 93.10 | 6403.77 | -21.77 | 2970.97 | 2970.95 | 0.42 | 414911.01 | 2351451.71 | 2971.05 |
| 9504.00 | 90.70 | 92.40 | 6402.85 | -26.38 | 3066.86 | 3066.89 | 0.79 | 414907.76 | 2351547.65 | 3066.97 |
| 9600.00 | 91.10 | 91.70 | 6401.34 | -29.81 | 3162.78 | 3162.86 | 0.84 | 414905.68 | 2351643.62 | 3162.92 |
| 9696.00 | 91.20 | 91.70 | 6399.41 | -32.66 | 3258.72 | 3258.83 | 0.10 | 414904.19 | 2351739.59 | 3258.89 |
| 9791.00 | 91.10 | 92.20 | 6397.51 | -35.89 | 3353.65 | 3353.80 | 0.54 | 414902.30 | 2351834.55 | 3353.84 |
| 9885.00 | 90.60 | 94.60 | 6396.11 | -41.46 | 3447.46 | 3447.69 | 2.61 | 414898.05 | 2351928.44 | 3447.71 |
| 9981.00 | 87.80 | 95.00 | 6397.45 | -49.50 | 3543.11 | 3543.45 | 2.95 | 414891.37 | 2352024.18 | 3543.45 |
| 10076.00 | 87.80 | 94.50 | 6401.10 | -57.36 | 3637.71 | 3638.16 | 0.53 | 414884.84 | 2352118.89 | 3638.16 |
| 10172.00 | 88.60 | 93.90 | 6404.12 | -64.38 | 3733.41 | 3733.96 | 1.04 | 414879.17 | 2352214.67 | 3733.96 |
| 10268.00 | 89.50 | 93.60 | 6405.71 | -70.66 | 3829.19 | 3829.82 | 0.99 | 414874.24 | 2352310.53 | 3829.84 |
| 10362.00 | 90.00 | 93.40 | 6406.12 | -76.40 | 3923.01 | 3923.73 | 0.57 | 414869.83 | 2352404.43 | 3923.75 |
| 10457.00 | 90.80 | 92.90 | 6405.45 | -81.62 | 4017.86 | 4018.65 | 0.99 | 414865.95 | 2352499.34 | 4018.69 |
| 10553.00 | 91.20 | 92.50 | 6403.78 | -86.14 | 4113.74 | 4114.59 | 0.59 | 414862.78 | 2352595.28 | 4114.64 |
| 10649.00 | 92.30 | 92.00 | 6400.85 | -89.91 | 4209.62 | 4210.51 | 1.26 | 414860.37 | 2352691.20 | 4210.58 |
| 10744.00 | 90.70 | 91.70 | 6398.36 | -92.97 | 4304.54 | 4305.46 | 1.71 | 414858.65 | 2352786.15 | 4305.54 |
| 10829.00 | 90.90 | 91.10 | 6397.17 | -95.05 | 4389.50 | 4390.45 | 0.74 | 414857.77 | 2352871.14 | 4390.53 |
| PTB-EOW | | | | | | | | | | |
| 10889.00 | 90.90 | 91.10 | 6396.23 | -96.20 | 4449.48 | 4450.44 | 0.00 | 414857.46 | 2352931.13 | 4450.52 |