

# DIRECTIONAL SURVEY CALCULATION

## MINIMUM CURVATURE METHOD

| Well Name        |            | Target Direction | Slot Coordinate | N / S               | E / W            | Hole Size        | Calculation by  | Date            |                   |                |  |
|------------------|------------|------------------|-----------------|---------------------|------------------|------------------|-----------------|-----------------|-------------------|----------------|--|
| Unruh 2629 1-17H |            | 1.45             |                 |                     |                  |                  |                 | 9/12/12         |                   |                |  |
| Job Number       |            | Type of Survey   | Tie-in Point    |                     |                  |                  | Directional Co. |                 |                   |                |  |
| 0                |            |                  |                 |                     |                  |                  |                 |                 |                   |                |  |
| Measured Depth   | Hole Angle | Hole Direction   | Course Length   | True Vertical Depth | Vertical Section | Total Coordinate |                 | Dogleg Severity | Build Up °/100 ft | Walk/ °/100 ft |  |
|                  |            |                  |                 |                     |                  | N + / S -        | E + / W -       |                 |                   |                |  |
| 0                | 0          | 0                | 0               | 0.00                | 0.00             |                  |                 |                 |                   |                |  |
| 0                | 0          | 0                |                 | 0.00                | 0.00             | 0.00             | 0.00            |                 |                   |                |  |
| 1621             | 2          | 350              | 1621            | 1,620.81            | 20.81            | 20.91            | -3.61           | 0.09            | 0.09              | 21.60          |  |
| 1908             | 2          | 18               | 287             | 1,907.71            | 28.34            | 28.42            | -3.01           | 0.26            | 0.03              | -115.75        |  |
| 2386             | 1          | 9                | 478             | 2,385.61            | 38.04            | 38.06            | -0.41           | 0.17            | -0.17             | -1.80          |  |
| 2864             | 1          | 8                | 478             | 2,863.56            | 44.24            | 44.25            | 0.53            | 0.02            | -0.02             | -0.36          |  |
| 3340             | 1          | 354              | 476             | 3,339.52            | 50.84            | 50.85            | 0.55            | 0.06            | 0.04              | 72.82          |  |
| 3529             | 1          | 351              | 189             | 3,528.50            | 53.61            | 53.62            | 0.18            | 0.06            | -0.05             | -2.01          |  |
| 3622             | 1          | 339              | 93              | 3,621.49            | 54.85            | 54.87            | -0.16           | 0.18            | 0.00              | -12.69         |  |
| 3716             | 1          | 348              | 94              | 3,715.48            | 56.17            | 56.20            | -0.55           | 0.18            | 0.11              | 9.89           |  |
| 3810             | 1          | 351              | 94              | 3,809.47            | 57.61            | 57.65            | -0.82           | 0.05            | 0.00              | 2.87           |  |
| 3905             | 1          | 347              | 95              | 3,904.45            | 59.15            | 59.20            | -1.13           | 0.12            | 0.11              | -3.47          |  |
| 4000             | 1          | 336              | 95              | 3,999.44            | 60.86            | 60.92            | -1.70           | 0.31            | 0.21              | -11.58         |  |
| 4063             | 2          | 331              | 63              | 4,062.42            | 62.21            | 62.29            | -2.40           | 0.67            | 0.63              | -9.21          |  |
| 4095             | 3          | 349              | 32              | 4,094.39            | 63.44            | 63.53            | -2.78           | 5.19            | 4.69              | 57.50          |  |
| 4127             | 6          | 357              | 32              | 4,126.30            | 65.81            | 65.91            | -3.04           | 7.70            | 7.50              | 24.06          |  |
| 4158             | 8          | 359              | 31              | 4,157.09            | 69.34            | 69.44            | -3.16           | 6.83            | 6.77              | 7.74           |  |
| 4189             | 10         | 359              | 31              | 4,187.74            | 74.00            | 74.10            | -3.22           | 6.77            | 6.77              | 0.32           |  |
| 4221             | 12         | 359              | 32              | 4,219.18            | 79.94            | 80.05            | -3.32           | 6.25            | 6.25              | -0.62          |  |
| 4253             | 14         | 1                | 32              | 4,250.40            | 86.94            | 87.05            | -3.32           | 6.08            | 5.94              | #####          |  |
| 4284             | 16         | 3                | 31              | 4,280.39            | 94.78            | 94.89            | -3.08           | 6.90            | 6.77              | 5.16           |  |
| 4315             | 18         | 3                | 31              | 4,310.08            | 103.71           | 103.81           | -2.61           | 6.83            | 6.77              | 2.90           |  |
| 4347             | 19         | 2                | 32              | 4,340.41            | 113.89           | 113.98           | -2.16           | 4.98            | 4.69              | -5.31          |  |
| 4378             | 21         | 0                | 31              | 4,369.52            | 124.54           | 124.63           | -2.00           | 5.46            | 5.16              | -5.16          |  |
| 4411             | 23         | 360              | 33              | 4,400.14            | 136.84           | 136.94           | -2.03           | 6.08            | 6.06              | 1,089.70       |  |
| 4443             | 24         | 1                | 32              | 4,429.48            | 149.62           | 149.72           | -1.93           | 4.42            | 4.06              | #####          |  |
| 4475             | 26         | 1                | 32              | 4,458.44            | 163.22           | 163.32           | -1.73           | 5.97            | 5.94              | -1.56          |  |
| 4508             | 29         | 1                | 33              | 4,487.74            | 178.41           | 178.50           | -1.51           | 7.91            | 7.88              | 1.52           |  |
| 4539             | 31         | 2                | 31              | 4,514.68            | 193.74           | 193.83           | -1.11           | 6.23            | 6.13              | 2.26           |  |
| 4571             | 33         | 3                | 32              | 4,541.89            | 210.58           | 210.65           | -0.43           | 7.37            | 7.19              | 3.13           |  |
| 4603             | 35         | 2                | 32              | 4,568.40            | 228.49           | 228.56           | 0.30            | 7.36            | 7.19              | -2.81          |  |
| 4634             | 38         | 2                | 31              | 4,593.35            | 246.88           | 246.94           | 0.84            | 7.78            | 7.74              | -1.29          |  |
| 4666             | 40         | 0                | 32              | 4,618.36            | 266.85           | 266.90           | 1.11            | 6.82            | 6.25              | -4.38          |  |
| 4699             | 42         | 2                | 33              | 4,643.30            | 288.45           | 288.50           | 1.48            | 8.57            | 7.88              | 5.15           |  |
| 4730             | 44         | 3                | 31              | 4,665.86            | 309.70           | 309.75           | 2.28            | 7.26            | 7.10              | 2.26           |  |
| 4762             | 46         | 3                | 32              | 4,688.39            | 332.42           | 332.45           | 3.33            | 5.35            | 5.31              | 0.94           |  |
| 4794             | 46         | 3                | 32              | 4,710.59            | 355.46           | 355.46           | 4.50            | 0.55            | -0.31             | 0.63           |  |
| 4826             | 46         | 3                | 32              | 4,732.88            | 378.41           | 378.38           | 5.72            | 0.96            | -0.94             | 0.31           |  |
| 4858             | 45         | 3                | 32              | 4,755.31            | 401.22           | 401.17           | 6.93            | 1.27            | -1.25             | -0.31          |  |
| 4890             | 45         | 2                | 32              | 4,777.86            | 423.92           | 423.86           | 7.98            | 1.67            | -0.62             | -2.19          |  |
| 4921             | 45         | 3                | 31              | 4,799.69            | 445.94           | 445.85           | 8.92            | 1.19            | 0.97              | 0.97           |  |
| 4953             | 47         | 3                | 32              | 4,821.77            | 469.08           | 468.98           | 9.95            | 5.94            | 5.94              | -0.31          |  |
| 4984             | 51         | 3                | 31              | 4,842.13            | 492.45           | 492.33           | 10.99           | 10.65           | 10.65             | 0.32           |  |
| 5016             | 53         | 2                | 32              | 4,861.85            | 517.65           | 517.51           | 11.94           | 8.72            | 8.44              | -2.81          |  |
| 5047             | 56         | 1                | 31              | 4,879.72            | 542.98           | 542.83           | 12.62           | 9.71            | 9.68              | -0.97          |  |
| 5080             | 59         | 1                | 33              | 4,897.28            | 570.91           | 570.76           | 13.18           | 9.48            | 9.39              | -1.52          |  |
| 5112             | 62         | 0                | 32              | 4,912.86            | 598.85           | 598.71           | 13.47           | 9.21            | 9.06              | -1.88          |  |
| 5144             | 66         | 0                | 32              | 4,926.89            | 627.61           | 627.46           | 13.59           | 10.63           | 10.63             | -0.31          |  |
| 5175             | 69         | 1                | 31              | 4,938.72            | 656.25           | 656.10           | 13.97           | 12.38           | 11.94             | 3.55           |  |
| 5207             | 72         | 1                | 32              | 4,949.30            | 686.45           | 686.30           | 14.61           | 8.15            | 8.12              | -0.63          |  |
| 5239             | 74         | 2                | 32              | 4,958.65            | 717.05           | 716.89           | 15.33           | 6.43            | 6.25              | 1.56           |  |
| 5271             | 78         | 1                | 32              | 4,966.50            | 748.06           | 747.90           | 16.11           | 11.29           | 11.25             | -0.94          |  |
| 5303             | 81         | 2                | 32              | 4,972.39            | 779.51           | 779.33           | 17.02           | 11.45           | 11.25             | 2.19           |  |
| 5335             | 83         | 2                | 32              | 4,976.68            | 811.22           | 811.02           | 18.04           | 6.94            | 6.88              | -0.94          |  |
| 5358             | 85         | 2                | 23              | 4,979.10            | 834.09           | 833.88           | 18.86           | 5.66            | 4.78              | 3.04           |  |
| 5389             | 87         | 2                | 31              | 4,981.34            | 865.00           | 864.77           | 20.13           | 8.72            | 8.71              | -0.32          |  |
| 5421             | 90         | 3                | 32              | 4,982.12            | 896.98           | 896.72           | 21.61           | 9.02            | 8.75              | 2.19           |  |
| 5517             | 92         | 4                | 96              | 4,980.62            | 992.92           | 992.55           | 27.05           | 1.95            | 1.88              | 0.52           |  |



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## MINIMUM CURVATURE METHOD

| Well Name        |            | Target Direction | Slot          | N / S               | E / W            | Hole Size        | Calculation by  | Date               |                   |                |  |
|------------------|------------|------------------|---------------|---------------------|------------------|------------------|-----------------|--------------------|-------------------|----------------|--|
| Unruh 2629 1-17H |            | 1.45             | Coordinate    |                     |                  |                  |                 | 9/12/12            |                   |                |  |
| Job Number       |            | Type of Survey   | Tie-in Point  |                     |                  |                  | Directional Co. |                    |                   |                |  |
| 0                |            |                  |               |                     |                  |                  |                 |                    |                   |                |  |
| Measured Depth   | Hole Angle | Hole Direction   | Course Length | True Vertical Depth | Vertical Section | Total Coordinate |                 | Dogleg Severity    | Build Up %/100 ft | Walk/ %/100 ft |  |
|                  |            |                  |               |                     |                  | N + / S -        | E + / W -       |                    |                   |                |  |
| 0                | 0          | 0                | 0             | 0.00                | 0.00             |                  |                 | << TIE-IN POINT >> |                   |                |  |
| 5549             | 92         | 4                | 32            | 4,979.44            | 1,024.87         | 1,024.46         | 29.11           | 2.25               | 1.88              | 1.25           |  |
| 5580             | 91         | 3                | 31            | 4,978.42            | 1,055.83         | 1,055.38         | 31.08           | 3.61               | -3.23             | -1.61          |  |
| 5613             | 91         | 3                | 33            | 4,977.73            | 1,088.81         | 1,088.33         | 32.90           | 1.94               | -1.21             | -1.52          |  |
| 5644             | 91         | 2                | 31            | 4,977.10            | 1,119.80         | 1,119.29         | 34.33           | 1.88               | 0.97              | -1.61          |  |
| 5676             | 90         | 3                | 32            | 4,976.85            | 1,151.79         | 1,151.25         | 35.89           | 5.87               | -5.31             | 2.50           |  |
| 5708             | 90         | 3                | 32            | 4,977.08            | 1,183.77         | 1,183.20         | 37.68           | 0.00               | 0.00              | 0.00           |  |
| 5739             | 90         | 4                | 31            | 4,977.26            | 1,214.75         | 1,214.14         | 39.52           | 1.33               | 0.32              | 1.29           |  |
| 5770             | 90         | 4                | 31            | 4,977.45            | 1,245.73         | 1,245.08         | 41.49           | 0.46               | -0.32             | 0.32           |  |
| 5802             | 90         | 4                | 32            | 4,977.71            | 1,277.70         | 1,277.01         | 43.53           | 0.44               | -0.31             | -0.31          |  |
| 5834             | 89         | 4                | 32            | 4,978.04            | 1,309.68         | 1,308.95         | 45.57           | 0.70               | -0.63             | 0.31           |  |
| 5866             | 89         | 3                | 32            | 4,978.60            | 1,341.65         | 1,340.88         | 47.52           | 2.25               | -1.87             | -1.25          |  |
| 5898             | 89         | 2                | 32            | 4,979.32            | 1,373.63         | 1,372.83         | 49.11           | 2.81               | 0.00              | -2.81          |  |
| 5931             | 89         | 2                | 33            | 4,980.07            | 1,406.62         | 1,405.80         | 50.26           | 2.42               | 0.00              | -2.42          |  |
| 5963             | 89         | 2                | 32            | 4,980.83            | 1,438.61         | 1,437.78         | 51.13           | 0.44               | -0.31             | -0.31          |  |
| 5995             | 89         | 1                | 32            | 4,981.39            | 1,470.61         | 1,469.77         | 51.91           | 2.58               | 2.50              | -0.63          |  |
| 6027             | 90         | 1                | 32            | 4,981.69            | 1,502.61         | 1,501.76         | 52.47           | 1.90               | 0.31              | -1.88          |  |
| 6058             | 90         | 0                | 31            | 4,981.88            | 1,533.60         | 1,532.76         | 52.76           | 1.37               | 0.97              | -0.97          |  |
| 6089             | 90         | 1                | 31            | 4,981.88            | 1,564.60         | 1,563.76         | 53.14           | 2.33               | 1.29              | 1.94           |  |
| 6121             | 91         | 1                | 32            | 4,981.69            | 1,596.60         | 1,595.75         | 53.78           | 1.33               | 0.94              | 0.94           |  |
| 6152             | 91         | 1                | 31            | 4,981.31            | 1,627.60         | 1,626.74         | 54.49           | 1.29               | 1.29              | 0.00           |  |
| 6183             | 91         | 2                | 31            | 4,980.69            | 1,658.59         | 1,657.72         | 55.43           | 3.32               | 1.61              | 2.90           |  |
| 6215             | 91         | 1                | 32            | 4,979.93            | 1,690.58         | 1,689.69         | 56.41           | 2.83               | -0.31             | -2.81          |  |
| 6247             | 90         | 0                | 32            | 4,979.71            | 1,722.58         | 1,721.69         | 56.86           | 6.43               | -5.62             | -3.13          |  |
| 6278             | 90         | 360              | 31            | 4,979.98            | 1,753.56         | 1,752.69         | 56.88           | 1.61               | 0.00              | 1,159.68       |  |
| 6309             | 90         | 360              | 31            | 4,980.20            | 1,784.55         | 1,783.69         | 56.80           | 0.72               | 0.65              | 0.32           |  |
| 6341             | 89         | 360              | 32            | 4,980.45            | 1,816.54         | 1,815.69         | 56.78           | 0.99               | -0.94             | 0.31           |  |
| 6373             | 89         | 360              | 32            | 4,980.84            | 1,848.53         | 1,847.68         | 56.78           | 0.62               | -0.63             | 0.00           |  |
| 6404             | 89         | 0                | 31            | 4,981.27            | 1,879.52         | 1,878.68         | 56.86           | 0.97               | 0.00              | #####          |  |
| 6436             | 89         | 360              | 32            | 4,981.80            | 1,911.50         | 1,910.68         | 56.91           | 1.56               | -0.94             | 1,123.75       |  |
| 6468             | 89         | 360              | 32            | 4,982.47            | 1,943.48         | 1,942.67         | 56.86           | 0.62               | -0.63             | 0.00           |  |
| 6500             | 88         | 360              | 32            | 4,983.31            | 1,975.46         | 1,974.66         | 56.77           | 1.29               | -1.25             | -0.31          |  |
| 6531             | 89         | 359              | 31            | 4,984.09            | 2,006.43         | 2,005.65         | 56.53           | 2.28               | 1.61              | -1.61          |  |
| 6563             | 89         | 360              | 32            | 4,984.76            | 2,038.41         | 2,037.64         | 56.25           | 1.25               | 0.00              | 1.25           |  |
| 6594             | 89         | 360              | 31            | 4,985.47            | 2,069.39         | 2,068.63         | 56.12           | 0.72               | -0.65             | 0.32           |  |
| 6626             | 89         | 360              | 32            | 4,986.19            | 2,101.37         | 2,100.62         | 56.00           | 0.62               | 0.63              | 0.00           |  |
| 6658             | 89         | 0                | 32            | 4,986.84            | 2,133.35         | 2,132.61         | 56.03           | 1.59               | 0.31              | #####          |  |
| 6690             | 90         | 1                | 32            | 4,987.25            | 2,165.34         | 2,164.61         | 56.34           | 2.69               | 2.19              | 1.56           |  |
| 6721             | 92         | 3                | 31            | 4,986.93            | 2,196.34         | 2,195.59         | 57.26           | 8.68               | 6.45              | 5.81           |  |
| 6753             | 92         | 3                | 32            | 4,985.92            | 2,228.31         | 2,227.54         | 58.79           | 1.56               | 1.25              | 0.94           |  |
| 6785             | 91         | 3                | 32            | 4,985.00            | 2,260.29         | 2,259.48         | 60.49           | 2.38               | -2.19             | 0.94           |  |
| 6817             | 91         | 3                | 32            | 4,984.36            | 2,292.27         | 2,291.43         | 62.20           | 1.33               | -0.94             | -0.94          |  |
| 6850             | 90         | 3                | 33            | 4,983.96            | 2,325.26         | 2,324.38         | 63.84           | 1.84               | -1.82             | -0.30          |  |
| 6881             | 90         | 4                | 31            | 4,983.85            | 2,356.24         | 2,355.33         | 65.62           | 3.47               | -1.29             | 3.23           |  |
| 6913             | 90         | 5                | 32            | 4,983.91            | 2,388.20         | 2,387.25         | 67.97           | 2.58               | -0.63             | 2.50           |  |
| 6944             | 90         | 4                | 31            | 4,983.96            | 2,419.16         | 2,418.15         | 70.37           | 1.16               | 0.65              | -0.97          |  |
| 6976             | 90         | 3                | 32            | 4,984.04            | 2,451.13         | 2,450.09         | 72.41           | 4.17               | -0.94             | -4.06          |  |
| 7007             | 90         | 2                | 31            | 4,984.23            | 2,482.13         | 2,481.06         | 73.68           | 4.21               | -0.32             | -4.19          |  |
| 7039             | 91         | 2                | 32            | 4,984.06            | 2,514.13         | 2,513.05         | 74.60           | 4.39               | 4.38              | -0.31          |  |
| 7070             | 90         | 2                | 31            | 4,983.69            | 2,545.12         | 2,544.03         | 75.49           | 1.96               | -1.94             | 0.32           |  |
| 7103             | 90         | 2                | 33            | 4,983.57            | 2,578.12         | 2,577.02         | 76.41           | 1.36               | -1.21             | -0.61          |  |
| 7134             | 90         | 2                | 31            | 4,983.63            | 2,609.12         | 2,608.01         | 77.25           | 0.72               | -0.65             | 0.32           |  |
| 7166             | 90         | 0                | 32            | 4,983.63            | 2,641.12         | 2,640.00         | 77.81           | 3.95               | 1.25              | -3.75          |  |
| 7198             | 90         | 0                | 32            | 4,983.46            | 2,673.12         | 2,672.00         | 78.03           | 0.62               | 0.63              | 0.00           |  |
| 7230             | 91         | 0                | 32            | 4,983.21            | 2,705.11         | 2,704.00         | 78.20           | 0.70               | 0.31              | -0.63          |  |
| 7261             | 91         | 1                | 31            | 4,982.94            | 2,736.10         | 2,735.00         | 78.45           | 1.61               | 0.00              | 1.61           |  |
| 7293             | 90         | 0                | 32            | 4,982.71            | 2,768.10         | 2,766.99         | 78.73           | 1.40               | -0.63             | -1.25          |  |
| 7325             | 90         | 1                | 32            | 4,982.57            | 2,800.09         | 2,798.99         | 78.98           | 0.99               | -0.31             | 0.94           |  |



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| Well Name        |            | Target Direction | Slot          | N / S               | E / W            | Hole Size        | Calculation by  | Date            |                   |                    |  |
|------------------|------------|------------------|---------------|---------------------|------------------|------------------|-----------------|-----------------|-------------------|--------------------|--|
| Unruh 2629 1-17H |            | 1.45             | Coordinate    |                     |                  |                  |                 | 9/12/12         |                   |                    |  |
| Job Number       |            | Type of Survey   | Tie-in Point  |                     |                  |                  | Directional Co. |                 |                   |                    |  |
| 0                |            |                  |               |                     |                  |                  |                 |                 |                   |                    |  |
| Measured Depth   | Hole Angle | Hole Direction   | Course Length | True Vertical Depth | Vertical Section | Total Coordinate |                 | Dogleg Severity | Build Up %/100 ft | Walk/ %/100 ft     |  |
|                  |            |                  |               |                     |                  | N + / S -        | E + / W -       |                 |                   |                    |  |
| 0                | 0          | 0                | 0             | 0.00                | 0.00             |                  |                 |                 |                   | << TIE-IN POINT >> |  |
| 7357             | 90         | 0                | 32            | 4,982.49            | 2,832.09         | 2,830.99         | 79.23           | 0.99            | -0.31             | -0.94              |  |
| 7389             | 90         | 0                | 32            | 4,982.38            | 2,864.08         | 2,862.99         | 79.37           | 0.70            | 0.63              | -0.31              |  |
| 7420             | 91         | 360              | 31            | 4,982.16            | 2,895.07         | 2,893.99         | 79.31           | 2.04            | 0.65              | 1,159.35           |  |
| 7451             | 90         | 360              | 31            | 4,982.00            | 2,926.06         | 2,924.99         | 79.20           | 1.82            | -1.29             | 1.29               |  |
| 7483             | 90         | 0                | 32            | 4,981.89            | 2,958.05         | 2,956.99         | 79.29           | 1.13            | 0.63              | #####              |  |
| 7515             | 91         | 1                | 32            | 4,981.66            | 2,990.04         | 2,988.99         | 79.57           | 1.40            | 0.63              | 1.25               |  |
| 7546             | 90         | 1                | 31            | 4,981.50            | 3,021.04         | 3,019.98         | 80.05           | 1.82            | -1.29             | 1.29               |  |
| 7578             | 90         | 1                | 32            | 4,981.50            | 3,053.04         | 3,051.98         | 80.56           | 1.40            | -0.62             | -1.25              |  |
| 7610             | 90         | 1                | 32            | 4,981.53            | 3,085.04         | 3,083.97         | 80.98           | 0.44            | 0.31              | 0.31               |  |
| 7641             | 90         | 1                | 31            | 4,981.50            | 3,116.04         | 3,114.97         | 81.52           | 1.33            | 0.32              | 1.29               |  |
| 7673             | 91         | 2                | 32            | 4,981.33            | 3,148.03         | 3,146.96         | 82.47           | 3.37            | 1.25              | 3.13               |  |
| 7705             | 91         | 2                | 32            | 4,981.03            | 3,180.03         | 3,178.93         | 83.64           | 0.70            | 0.31              | -0.63              |  |
| 7736             | 91         | 2                | 31            | 4,980.51            | 3,211.02         | 3,209.91         | 84.67           | 2.35            | 2.26              | -0.65              |  |
| 7768             | 91         | 2                | 32            | 4,979.87            | 3,243.02         | 3,241.89         | 85.70           | 0.99            | -0.94             | 0.31               |  |
| 7800             | 91         | 2                | 32            | 4,979.31            | 3,275.01         | 3,273.86         | 86.87           | 1.25            | 0.00              | 1.25               |  |
| 7863             | 89         | 1                | 63            | 4,979.48            | 3,338.00         | 3,336.83         | 88.80           | 4.05            | -3.65             | -1.75              |  |
| 7895             | 89         | 360              | 32            | 4,980.23            | 3,369.99         | 3,368.82         | 89.10           | 4.07            | -0.31             | 1,120.94           |  |
| 7926             | 91         | 1                | 31            | 4,980.37            | 3,400.98         | 3,399.81         | 89.27           | 7.86            | 7.42              | #####              |  |
| 7959             | 92         | 360              | 33            | 4,979.45            | 3,433.96         | 3,432.80         | 89.44           | 4.89            | 4.24              | 1,088.48           |  |
| 7990             | 92         | 358              | 31            | 4,978.31            | 3,464.91         | 3,463.77         | 88.95           | 5.32            | -1.29             | -5.16              |  |
| 8022             | 92         | 358              | 32            | 4,977.28            | 3,496.85         | 3,495.74         | 88.03           | 0.44            | -0.31             | 0.31               |  |
| 8053             | 92         | 359              | 31            | 4,976.25            | 3,527.79         | 3,526.71         | 87.19           | 0.72            | 0.65              | 0.32               |  |
| 8085             | 92         | 358              | 32            | 4,975.16            | 3,559.72         | 3,558.68         | 86.24           | 1.29            | -0.31             | -1.25              |  |
| 8116             | 92         | 358              | 31            | 4,974.19            | 3,590.66         | 3,589.65         | 85.30           | 1.16            | -0.65             | 0.97               |  |
| 8148             | 92         | 359              | 32            | 4,973.24            | 3,622.61         | 3,621.63         | 84.54           | 1.56            | 0.00              | 1.56               |  |
| 8179             | 92         | 359              | 31            | 4,972.21            | 3,653.56         | 3,652.61         | 83.98           | 1.33            | 1.29              | 0.32               |  |
| 8211             | 92         | 359              | 32            | 4,970.95            | 3,685.51         | 3,684.58         | 83.36           | 1.13            | 0.94              | -0.62              |  |
| 8243             | 93         | 358              | 32            | 4,969.58            | 3,717.43         | 3,716.53         | 82.53           | 1.90            | 0.31              | -1.88              |  |
| 8275             | 91         | 358              | 32            | 4,968.52            | 3,749.36         | 3,748.50         | 81.44           | 3.87            | -3.75             | -0.94              |  |
| 8306             | 91         | 358              | 31            | 4,967.87            | 3,780.29         | 3,779.47         | 80.22           | 1.16            | -0.65             | -0.97              |  |
| 8338             | 91         | 358              | 32            | 4,967.29            | 3,812.21         | 3,811.43         | 78.91           | 0.44            | -0.31             | 0.31               |  |
| 8370             | 90         | 358              | 32            | 4,967.04            | 3,844.15         | 3,843.41         | 77.74           | 3.66            | -3.44             | 1.25               |  |
| 8402             | 90         | 358              | 32            | 4,967.12            | 3,876.10         | 3,875.40         | 76.70           | 0.44            | -0.31             | 0.31               |  |
| 8433             | 90         | 358              | 31            | 4,967.26            | 3,907.04         | 3,906.38         | 75.68           | 0.72            | -0.32             | -0.65              |  |
| 8465             | 90         | 358              | 32            | 4,967.34            | 3,938.99         | 3,938.36         | 74.59           | 0.99            | 0.94              | 0.31               |  |
| 8496             | 90         | 359              | 31            | 4,967.37            | 3,969.95         | 3,969.35         | 73.80           | 2.92            | -0.32             | 2.90               |  |
| 8528             | 90         | 360              | 32            | 4,967.45            | 4,001.93         | 4,001.35         | 73.52           | 3.14            | -0.31             | 3.13               |  |
| 8560             | 90         | 360              | 32            | 4,967.53            | 4,033.92         | 4,033.35         | 73.47           | 0.70            | 0.31              | -0.62              |  |
| 8591             | 90         | 360              | 31            | 4,967.59            | 4,064.91         | 4,064.35         | 73.41           | 0.65            | 0.00              | 0.65               |  |
| 8623             | 90         | 360              | 32            | 4,967.64            | 4,096.89         | 4,096.35         | 73.33           | 0.94            | 0.00              | -0.94              |  |
| 8654             | 90         | 360              | 31            | 4,967.72            | 4,127.88         | 4,127.35         | 73.11           | 0.72            | -0.32             | -0.65              |  |
| 8686             | 90         | 359              | 32            | 4,967.89            | 4,159.85         | 4,159.34         | 72.72           | 1.40            | -0.63             | -1.25              |  |
| 8718             | 90         | 359              | 32            | 4,968.14            | 4,191.82         | 4,191.34         | 72.14           | 0.99            | -0.31             | -0.94              |  |
| 8749             | 91         | 359              | 31            | 4,968.14            | 4,222.79         | 4,222.33         | 71.62           | 3.61            | 3.23              | 1.61               |  |
| 8781             | 91         | 360              | 32            | 4,967.64            | 4,254.77         | 4,254.33         | 71.37           | 2.95            | 2.50              | 1.56               |  |
| 8812             | 91         | 0                | 31            | 4,966.96            | 4,285.76         | 4,285.32         | 71.37           | 1.33            | -0.32             | #####              |  |
| 8845             | 91         | 360              | 33            | 4,966.30            | 4,318.74         | 4,318.31         | 71.37           | 1.25            | -0.30             | 1,089.70           |  |
| 8876             | 91         | 360              | 31            | 4,965.79            | 4,349.72         | 4,349.31         | 71.23           | 1.02            | -0.97             | -0.32              |  |
| 8908             | 91         | 0                | 32            | 4,965.31            | 4,381.71         | 4,381.30         | 71.21           | 1.59            | 0.31              | #####              |  |
| 8939             | 91         | 1                | 31            | 4,964.94            | 4,412.70         | 4,412.30         | 71.61           | 3.78            | -1.29             | 3.55               |  |
| 8971             | 91         | 2                | 32            | 4,964.66            | 4,444.70         | 4,444.28         | 72.53           | 2.19            | 0.00              | 2.19               |  |
| 9003             | 90         | 2                | 32            | 4,964.40            | 4,476.70         | 4,476.26         | 73.71           | 0.70            | -0.31             | 0.63               |  |
| 9034             | 91         | 2                | 31            | 4,964.13            | 4,507.69         | 4,507.24         | 74.90           | 0.65            | 0.65              | 0.00               |  |
| 9066             | 91         | 2                | 32            | 4,963.80            | 4,539.69         | 4,539.21         | 76.10           | 0.31            | 0.00              | -0.31              |  |
| 9097             | 91         | 2                | 31            | 4,963.45            | 4,570.68         | 4,570.19         | 77.29           | 0.72            | 0.32              | 0.65               |  |
| 9130             | 91         | 2                | 33            | 4,962.99            | 4,603.68         | 4,603.16         | 78.44           | 1.92            | 0.61              | -1.82              |  |
| 9161             | 91         | 2                | 31            | 4,962.47            | 4,634.67         | 4,634.15         | 79.36           | 0.32            | 0.32              | 0.00               |  |

