

Whipsaw 18-11-66

KB = 5,770'

KOP = 7,663'

TARGET = 8,140' TVD

| MD | Incl. | Azi. | TVD | Based on True North | | DLS | Vertical Section | UTM N | UTME |
|------------------|--------------|---------------|-----------------|---------------------|------------------|--------------|---------------------|-----------------|------------------------------|
| | | | | North | East | | | | |
| 0.00 | 0.00 | 341.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 605.00 | -605.00 |
| 7,600.00 | 0.00 | 341.00 | 7,600.00 | 0.00 | 0.00 | 0.00 | 0.00 | 605.00 | -605.00 |
| 7,662.50 | 0.00 | 341.00 | 7,662.50 | 0.00 | 0.00 | 0.00 | 0.00 | 605.00 | -605.00 KOP |
| 7,712.50 | 6.00 | 341.00 | 7,712.36 | 2.47 | -0.85 | 12.00 | 2.61 | 607.47 | -605.85 |
| 7,762.50 | 12.00 | 341.00 | 7,761.68 | 9.86 | -3.39 | 12.00 | 10.43 | 614.86 | -608.39 |
| 7,812.50 | 18.00 | 341.00 | 7,809.91 | 22.08 | -7.60 | 12.00 | 23.35 | 627.08 | -612.60 |
| 7,862.50 | 24.00 | 341.00 | 7,856.53 | 39.00 | -13.43 | 12.00 | 41.25 | 644.00 | -618.43 |
| 7,912.50 | 30.00 | 341.00 | 7,901.02 | 60.43 | -20.81 | 12.00 | 63.91 | 665.43 | -625.81 |
| 7,962.50 | 36.00 | 341.00 | 7,942.90 | 86.14 | -29.66 | 12.00 | 91.10 | 691.14 | -634.66 |
| 8,012.50 | 42.00 | 341.00 | 7,981.70 | 115.85 | -39.89 | 12.00 | 122.53 | 720.85 | -644.89 |
| 8,062.50 | 48.00 | 341.00 | 8,017.01 | 149.23 | -51.38 | 12.00 | 157.83 | 754.23 | -656.38 |
| 8,112.50 | 54.00 | 341.00 | 8,048.43 | 185.92 | -64.01 | 12.00 | 196.63 | 790.92 | -669.01 |
| 8,162.50 | 60.00 | 341.00 | 8,075.62 | 225.51 | -77.64 | 12.00 | 238.50 | 830.51 | -682.64 |
| 8,212.50 | 66.00 | 341.00 | 8,098.29 | 267.58 | -92.12 | 12.00 | 282.99 | 872.58 | -697.12 |
| 8,262.50 | 72.00 | 341.00 | 8,116.18 | 311.66 | -107.30 | 12.00 | 329.61 | 916.66 | -712.30 |
| 8,312.50 | 78.00 | 341.00 | 8,129.10 | 357.26 | -123.00 | 12.00 | 377.84 | 962.26 | -728.00 |
| 8,362.50 | 84.00 | 341.00 | 8,136.91 | 403.89 | -139.05 | 12.00 | 427.16 | 1,008.89 | -744.05 |
| 8,412.00 | 90.00 | 341.00 | 8,139.50 | 450.57 | -155.12 | 12.12 | 476.52 | 1,055.57 | -760.12 7" Csg Shoe |
| 8,412.00 | 90.00 | 341.00 | 8,139.50 | 450.57 | -155.12 | 12.12 | 476.52 | 1,055.57 | -760.12 7" Csg Shoe |
| 8,512.00 | 90.00 | 341.00 | 8,139.50 | 545.12 | -187.67 | 0.00 | 576.52 | 1,150.12 | -792.67 |
| 8,612.00 | 90.00 | 341.00 | 8,139.50 | 639.67 | -220.22 | 0.00 | 676.52 | 1,244.67 | -825.22 |
| 8,712.00 | 90.00 | 341.00 | 8,139.50 | 734.22 | -252.77 | 0.00 | 776.51 | 1,339.22 | -857.77 |
| 8,812.00 | 90.00 | 341.00 | 8,139.50 | 828.77 | -285.32 | 0.00 | 876.51 | 1,433.77 | -890.32 |
| 8,912.00 | 90.00 | 341.00 | 8,139.50 | 923.32 | -317.87 | 0.00 | 976.50 | 1,528.32 | -922.87 |
| 9,012.00 | 90.00 | 341.00 | 8,139.50 | 1,017.87 | -350.42 | 0.00 | 1,076.50 | 1,622.87 | -955.42 |
| 9,112.00 | 90.00 | 341.00 | 8,139.50 | 1,112.42 | -382.97 | 0.00 | 1,176.50 | 1,717.42 | -987.97 |
| 9,212.00 | 90.00 | 341.00 | 8,139.50 | 1,206.97 | -415.52 | 0.00 | 1,276.49 | 1,811.97 | -1,020.52 |
| 9,312.00 | 90.00 | 341.00 | 8,139.50 | 1,301.52 | -448.07 | 0.00 | 1,376.49 | 1,906.52 | -1,053.07 |
| 9,412.00 | 90.00 | 341.00 | 8,139.50 | 1,396.07 | -480.62 | 0.00 | 1,476.48 | 2,001.07 | -1,085.62 |
| 9,512.00 | 90.00 | 341.00 | 8,139.50 | 1,490.62 | -513.17 | 0.00 | 1,576.48 | 2,095.62 | -1,118.17 |
| 9,612.00 | 90.00 | 341.00 | 8,139.50 | 1,585.17 | -545.72 | 0.00 | 1,676.48 | 2,190.17 | -1,150.72 |
| 9,712.00 | 90.00 | 341.00 | 8,139.50 | 1,679.72 | -578.27 | 0.00 | 1,776.47 | 2,284.72 | -1,183.27 |
| 9,812.00 | 90.00 | 341.00 | 8,139.50 | 1,774.27 | -610.82 | 0.00 | 1,876.47 | 2,379.27 | -1,215.82 |
| 9,912.00 | 90.00 | 341.00 | 8,139.50 | 1,868.82 | -643.37 | 0.00 | 1,976.46 | 2,473.82 | -1,248.37 |
| 10,012.00 | 90.00 | 341.00 | 8,139.50 | 1,963.37 | -675.92 | 0.00 | 2,076.46 | 2,568.37 | -1,280.92 |
| 10,112.00 | 90.00 | 341.00 | 8,139.50 | 2,057.92 | -708.47 | 0.00 | 2,176.46 | 2,662.92 | -1,313.47 |
| 10,212.00 | 90.00 | 341.00 | 8,139.50 | 2,152.47 | -741.02 | 0.00 | 2,276.45 | 2,757.47 | -1,346.02 |
| 10,312.00 | 90.00 | 341.00 | 8,139.50 | 2,247.02 | -773.57 | 0.00 | 2,376.45 | 2,852.02 | -1,378.57 |
| 10,412.00 | 90.00 | 341.00 | 8,139.50 | 2,341.57 | -806.12 | 0.00 | 2,476.44 | 2,946.57 | -1,411.12 |
| 10,512.00 | 90.00 | 341.00 | 8,139.50 | 2,436.12 | -838.67 | 0.00 | 2,576.44 | 3,041.12 | -1,443.67 |
| 10,612.00 | 90.00 | 341.00 | 8,139.50 | 2,530.67 | -871.22 | 0.00 | 2,676.44 | 3,135.67 | -1,476.22 |
| 10,712.00 | 90.00 | 341.00 | 8,139.50 | 2,625.22 | -903.77 | 0.00 | 2,776.43 | 3,230.22 | -1,508.77 |
| 10,812.00 | 90.00 | 341.00 | 8,139.50 | 2,719.77 | -936.32 | 0.00 | 2,876.43 | 3,324.77 | -1,541.32 |
| 10,912.00 | 90.00 | 341.00 | 8,139.50 | 2,814.32 | -968.87 | 0.00 | 2,976.43 | 3,419.32 | -1,573.87 |
| 11,012.00 | 90.00 | 341.00 | 8,139.50 | 2,908.87 | -1,001.42 | 0.00 | 3,076.42 | 3,513.87 | -1,606.42 |
| 11,112.00 | 90.00 | 341.00 | 8,139.50 | 3,003.42 | -1,033.97 | 0.00 | 3,176.42 | 3,608.42 | -1,638.97 |
| 11,212.00 | 90.00 | 341.00 | 8,139.50 | 3,097.97 | -1,066.52 | 0.00 | 3,276.41 | 3,702.97 | -1,671.52 |
| 11,312.00 | 90.00 | 341.00 | 8,139.50 | 3,192.52 | -1,099.07 | 0.00 | 3,376.41 | 3,797.52 | -1,704.07 |
| 11,412.00 | 90.00 | 341.00 | 8,139.50 | 3,287.07 | -1,131.62 | 0.00 | 3,476.41 | 3,892.07 | -1,736.62 |
| 11,512.00 | 90.00 | 341.00 | 8,139.50 | 3,381.62 | -1,164.17 | 0.00 | 3,576.40 | 3,986.62 | -1,769.17 |
| 11,612.00 | 90.00 | 341.00 | 8,139.50 | 3,476.17 | -1,196.72 | 0.00 | 3,676.40 | 4,081.17 | -1,801.72 |
| 11,712.00 | 90.00 | 341.00 | 8,139.50 | 3,570.72 | -1,229.27 | 0.00 | 3,776.39 | 4,175.72 | -1,834.27 |
| 11,812.00 | 90.00 | 341.00 | 8,139.50 | 3,665.27 | -1,261.82 | 0.00 | 3,876.39 | 4,270.27 | -1,866.82 |
| 11,912.00 | 90.00 | 341.00 | 8,139.50 | 3,759.82 | -1,294.37 | 0.00 | 3,976.39 | 4,364.82 | -1,899.37 |
| 12,012.00 | 90.00 | 341.00 | 8,139.50 | 3,854.37 | -1,326.92 | 0.00 | 4,076.38 | 4,459.37 | -1,931.92 |
| 12,112.00 | 90.00 | 341.00 | 8,139.50 | 3,948.92 | -1,359.47 | 0.00 | 4,176.38 | 4,553.92 | -1,964.47 |
| 12,209.97 | 90.00 | 341.00 | 8,139.50 | 4,041.56 | -1,391.36 | 0.00 | 4,274.35 | 4,646.56 | -1,996.36 End Lateral |