

encountered at this bent are approximately 2.60' - 7.00' thick and consist of hard, sandy silt (A-4). Roadway fill soils were not encountered at this location.

Weathered, Triassic rock was encountered between elevation 223.40' - 227.30' across this bent. Hard, Triassic rock (auger refusal) was encountered at elevation 222.30' in the boring performed at B10-B. Rock core retrieved at this location consisted of slightly weathered and moderately hard, mudstone and sandstone. RQD's of the recovered core are 100%. The 24 hour groundwater level was between elevations 244.90' and 245.40'. Please refer to the appropriate corelog and cross-section for a detailed, run-by run analysis of the core retrieved at this location

#### Interior Bent Eleven (B11)

Alluvial soils encountered are 17.30' to 18.00' thick and consist of very soft to soft, silty clay (A-6) with gravel and loose to medium dense, coarse sand (A-2-4, A-1-b) with gravel. Residual soils encountered at this bent are approximately 0.80' - 1.70' thick and consist of medium dense, silty sand (A-2-4). Roadway fill soils were not encountered at this location.

Weathered, Triassic rock was initially encountered in the boring performed at B11-B at elevation 225.00' and then again at elevation 200.00'. A layer of hard, Triassic rock (auger refusal) was encountered in this boring from elevation 200.00' - 207.50'. In the boring performed at B11-A, hard Triassic rock was encountered at elevation 226.60'. Weathered, Triassic rock was not encountered in this boring (B11-A).

Rock core retrieved from B11-A consisted of severe to slightly weathered and very soft to medium hard, mudstone and sandstone. RQD's are between 0% and 75%. Please refer to the appropriate corelog and cross-section for a detailed, run-by run analysis of the core retrieved at this location. The 24-hour groundwater level coincided with the collar elevations at both borings along this bent (elevation 245.00' - 245.40', respectively).

#### Interior Bent Thirteen (B12)

Alluvial soils encountered are 15.00' to 17.50' thick and consist of very soft to medium stiff, silty clay (A-6) and very loose to medium dense, coarse sand (A-2-4, A-2-6). Residual soils encountered in the boring performed at B12-B are approximately 2.50' thick and consist of hard, silty clay (A-6). Roadway fill soils were not encountered at this location.

Weathered, Triassic rock was encountered between elevation 225.90' - 229.90' across this bent. Hard, Triassic rock (auger refusal) is present in the boring at B12-B at elevation 221.50'. An approximate three-foot lense of hard, Triassic rock was encountered at B12-A starting at elevation 212.10'. Rock core retrieved from the boring at B12-B consisted of moderately severe to slightly weathered and very soft to moderately hard mudstone. RQD's are between 40% and 100%. The 24-hour groundwater level coincided with the collar elevations at both borings along this bent (elevation 244.90' - 245.90', respectively).

#### Interior Bent Thirteen (B13)

Alluvial soils encountered are 15.60' to 16.70' thick and consist of very soft to medium stiff, silty clay (A-6) and very loose, coarse sand (A-2-4). Residual soils encountered at this bent are approximately 1.10' - 5.00' thick and consist of hard, sandy silt (A-4). Roadway fill soils were not encountered at this location.

3B/70  
Weathered, Triassic rock was encountered between elevation 223.90' - 227.30' across this bent. Hard, Triassic rock (auger refusal) was encountered at elevation 223.30' in the boring performed at B13-B. Rock core retrieved at this location consisted of moderately to slightly weathered and moderately hard, mudstone and sandstone. RQD's are between 91% and 100%. The groundwater/surface water levels across this location are between elevations 244.50' and 246.00'. Please refer to the appropriate corelog and cross-section for a detailed, run-by run analysis of the core retrieved at this location

#### End Bent Two (EB2)

Roadway fill soils encountered at this location are approximately 8.0 - 14.40' thick and consist of very soft to medium stiff, silty clay (A-7-6). Alluvial soils on this bent are 14.00' to 17.10' thick and consist of very dense, coarse sand (A-1-b) with quartz gravel as well as very soft to soft, silty clay (A-6). Wood debris was encountered in the boring performed at EB2-B near elevation 237.70'. Residual soils were not encountered at this location.

Weathered rock was encountered on this bent between elevation 224.50' - 230.70'. Hard, Triassic rock (tri-cone bit refusal) was encountered at elevation 227.80' in the boring performed at EB2-B. Based on the cave-in level observed in the boring at EB2-B, we estimate the groundwater elevation along this bent to be approximately 247.90'.

Respectfully submitted,



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