

TABLE 1

Density and Magnetic Susceptibility Measurements from Alum

Collected by Jeff Witter, SGP, 2009

| ID | DMS1 | DMS2 | DMS3 | DMS4 | DMS5 | DMS6 | DMS7 | DMS13 | DMS8 | DMS9 |
|--|--|----------------------------------|----------------------|-----------------------------------|----------------------------------|----------------------------------|--|-------------------------------------|----------------------------------|--|
| Rock Type | Ordovician to Cambrian Sed Rocks | Mesozoic Granite | Wyman Fmtn | Reed Dolomite? or Marlized Wyman? | Mesozoic Granite | Wyman Fmtn | ash flow tuff | ash flow tuff | silicified coarse ss/congl. | coarse ss/congl. Esmeralda Fmtn |
| Map unit | Lower Plate prT | Lower Plate prT | Lower Plate prT | Lower Plate prT | Lower Plate prT | Lower Plate prT | Upper Plate AFT | Upper Plate AFT | Upper Plate CCG | Upper Plate CG |
| Density Measurements (g/cm ³) | 2.57 2.57 2.6 | 2.56 2.58 2.59 | 2.66 2.63 | 2.68 2.68 | 2.53 2.58 | 2.74 2.67 | 1.68 | 1.75 1.78 1.84 | 2.51 2.53 | 2.29 2.29 |
| Ave. Density | 2.58 | 2.58 | 2.65 | 2.68 | 2.56 | 2.71 | 1.68 | 1.79 | 2.52 | 2.29 |
| Magnetic Susceptibility Measurements in SI units | 1.20E-05 2.80E-05 4.30E-05 2.20E-05 | 1.30E-05 3.20E-05 2.10E-05 | 2.83E-04 3.44E-04 | 8.00E-06 1.30E-05 | 2.30E-05 3.70E-05 2.30E-05 | 4.30E-04 4.80E-04 4.87E-04 | 3.00E-05 1.90E-05 5.00E-05 2.30E-05 3.70E-05 3.90E-05 | 1.71E-03 1.42E-03 1.44E-03 | 4.10E-05 5.00E-05 4.00E-05 | 1.98E-02 1.86E-02 1.94E-02 |
| Ave. Mag. Susc. | 2.6E-05 | 2.2E-05 | 3.1E-04 | 1.1E-05 | 2.8E-05 | 4.7E-04 | 3.3E-05 | 1.5E-03 | 4.4E-05 | 1.9E-02 |
| 1.25664E+07 Magnetic Susceptibility Measurements in cgs units (4*pi*SI) | 150.80 351.86 540.35 276.46 | 163.36 402.12 263.89 | 3,556.28 4,322.83 | 100.53 163.36 | 289.03 464.96 289.03 | 5,403.54 6,031.86 6,119.82 | 376.99 238.76 628.32 289.03 464.96 490.09 | 21,488.49 17,844.25 18,095.57 | 515.22 628.32 502.65 | 248,185.82 233,985.82 243,787.59 |
| Ave. Mag. Susc. | 329.87 | 276.46 | 3,939.56 | 131.95 | 347.67 | 5,851.74 | 414.69 | 19,142.77 | 548.73 | 241,986.41 |

TABLE 1

| ID | DMS10 | MS11 | DMS12 | DMS14 | DMS15 | DMS16 | DMS17 | MS18 |
|--|---|--|--------------------------------------|--|----------------------------------|----------------------------------|----------------------------------|-----------------------------------|
| Rock Type | volcaniclastic congl. of the Esmeralda Fmtn | ss/congl. of Esmeralda Fmtn | pebble congl. Esmeralda Fmtn | siltstone Esmeralda Fmtn | siltstone Esmeralda Fmtn | claystone Esmeralda Fmtn | siltstone Esmeralda Fmtn | silty sandstone Esmeralda Fmtn |
| Map unit | Upper Plate CG | Upper Plate CG | Upper Plate CG | Upper Plate MDS | Upper Plate MDS | Upper Plate TS | Upper Plate ST | Upper Plate TS |
| Density Measurements (g/cm ³) | 2.12 2.02 | | 2.34 2.33 | 1.67 2.04 | 1.58 | 2.34 | 1.72 | |
| Ave. Density | 2.07 | n/a | 2.34 | 1.86 | 1.58 | 2.34 | 1.72 | n/a |
| Magnetic Susceptibility Measurements in SI units | 4.75E-03 6.98E-03 5.60E-03 | 1.46E-02 1.11E-02 1.43E-02 | 8.30E-03 2.25E-03 6.98E-03 | 2.10E-04 2.50E-04 1.85E-04 4.50E-05 | 1.06E-04 7.00E-05 7.90E-05 | 6.20E-05 3.10E-05 5.60E-05 | 4.30E-05 3.10E-05 9.20E-05 | 3.36E-04 3.36E-04 5.30E-04 |
| Ave. Mag. Susc. | 5.8E-03 | 1.3E-02 | 5.8E-03 | 1.7E-04 | 8.5E-05 | 5.9E-05 | 5.5E-05 | 4.3E-04 |
| 1.25664E+07 Magnetic Susceptibility Measurements in cgs units (4*pi*SI) | 59,690.26 87,713.27 70,371.68 | 183,469.01 139,486.71 179,699.10 | 104,300.88 28,274.33 87,713.27 | 2,638.94 3,141.59 2,324.78 565.49 | 1,332.04 879.65 992.74 | 779.11 389.56 703.72 | 540.35 389.56 1,156.11 | 4,222.30 4,222.30 6,660.18 |
| Ave. Mag. Susc. | 72,591.73 | 167,551.61 | 73,429.49 | 2,167.70 | 1,068.14 | 741.42 | 695.34 | 5,441.24 |