

Data includes the following quads:

| STRAT | CROP |
|-----------------|----------------|
| Alton | Alton |
| Bethalto | Bethalto |
| Cahokia | Breese |
| Collinsville | Elsah |
| Columbia | French Village |
| Edwardsville | Grant Fork |
| Elsah | Highland |
| Freeburg | Marine |
| French Village | Mascoutah |
| Grafton | New Douglas |
| Grant Fork | Prairetown |
| Highland | Red Bud |
| Lebanon | St. Jacob |
| Marine | Trenton |
| Mascoutah | Worden |
| Millstadt | |
| Monk's Mound | |
| Morgan | |
| New Athens East | |
| New Athens West | |
| New Douglas | |
| O'Fallon | |
| Paderborn | |
| Pocahontas | |
| Prairetown | |
| Red Bud | |
| Renault | |
| St. Jacob | |
| Swarringin | |
| Waterloo | |
| Wood River | |
| Worden | |

Note: Comparing samples described as a diamicton. Banner also includes Omphghent. Particle Size is the only comparison that includes both calcareous and noncalcareous data.

| Particle Size | | | | | | | | | |
|---------------|------|------|------|--------|------------------|------|------|------|--------|
| Banner (n=94) | | | | | Glasford (n=277) | | | | |
| | Clay | Silt | Sand | Gravel | | Clay | Silt | Sand | Gravel |
| Mean | 33 | 44 | 24 | 3 | Mean | 26 | 44 | 30 | 4 |
| St Dev | 7 | 9 | 9 | 3 | St Dev | 8 | 9 | 12 | 4 |
| Max | 58 | 66 | 59 | 19 | Max | 77 | 70 | 55 | 55 |
| Min | 14 | 17 | 6 | 0 | Min | 11 | 19 | 1 | 0 |
| Median | 33 | 42 | 24 | 3 | Median | 24 | 43 | 31 | 3 |

| Carbonate (calcareous only) | | | |
|-----------------------------|-------------------|-----------|------------|
| Banner (n=160) | | | |
| | % Total Carbonate | % Calcite | % Dolomite |
| Mean | 10 | 4 | 5 |
| St Dev | 5 | 4 | 2 |
| Max | 25 | 14 | 11 |
| Min | 1 | 1 | 2 |
| Median | 9 | 3 | 5 |

| Glasford (n=257) | | | |
|------------------|-------------------|-----------|------------|
| | % Total Carbonate | % Calcite | % Dolomite |
| Mean | 17 | 6 | 9 |
| St Dev | 8 | 4 | 5 |
| Max | 39 | 20 | 21 |
| Min | 1 | 0 | 1 |
| Median | 17 | 5 | 9 |

| Clay Mineralogy (calcareous only) | | | |
|-----------------------------------|---------|--------|--------------|
| Banner (n=113) | | | |
| | Illite* | K + C* | Expandables* |
| Mean | 50 | 32 | 17 |
| St Dev | 9 | 8 | 12 |
| Max | 72 | 56 | 42 |
| Min | 21 | 16 | 0 |
| Median | 50 | 32 | 19 |
| Glasford (n=212) | | | |
| | Illite* | K + C* | Expandables* |
| Mean | 52 | 26 | 22 |
| St Dev | 12 | 7 | 13 |
| Max | 75 | 49 | 72 |
| Min | 16 | 8 | 0 |
| Median | 51 | 26 | 20 |

*corrected for differences in Scintag and GE

| Magnetic Susceptibility (calcareous only) | | | |
|---|----|------------------|----|
| Banner (n=387) | | Glasford (n=716) | |
| | MS | | MS |
| Mean | 29 | Mean | 24 |
| St Dev | 11 | St Dev | 15 |
| Max | 69 | Max | 94 |
| Min | 6 | Min | 3 |
| Median | 28 | Median | 22 |









