Status of the Bedrock STATEMAP Projects

COMPLETED MAPS FY21, CURRENT MAPPING FY 21-22 & PROPOSED FY22-23
Completed Maps for FY 20-21

Coal Valley
Franck Delpomdor

Silvis
Frank Delpomdor

Wedron
Joe Devera & Joe Krienert
Findings in Coal Valley & Silvis

- Sphalerite was identified in veins of the Sweetland Creek Shale north of the village of Coal Valley

- The Muscatine Formation forms north-south trending paleo-channels or random paleo-karst features over the Devonian limestone

- The palynology indicates placement of the Rock Island (No.1) Coal bed in the late Atokan

- 260 feet of stratigraphic test boring was drilled through the Quaternary and Middle Devonian Wapsipinicon Limestone
Sphalerite

Fossil Spores from the Rock Island Coal yielding an Atokan Age
Findings in Wedron

- Mapped Ticona Preglacial River
- New Penn outliers found
- Found phosphate nodules
Phosphorite nodules in the Penn. Excello interval
Current Mapping FY21-22
1, Galena
2, Green Rock
3, Port Byron
4, Andalusia
2. Illinois bedrock geology
   2a. Bellevue, Hanover & Menominee
   2b. Illinois City, Muscatine, & Montpelier
• The lead-zinc deposits in the UMVD occur in the Middle-Late Ordovician Platteville, Decorah and Galena formations

• Proposed Rank 1 Magnetic Survey

• The Upper Ordovician Maquoketa Shale in the UMVD contain phosphate nodules

• Karst water-bearing formations in the Silurian dolomite, the Ordovician Galena-Platteville formations, and the St Peter sandstone are important groundwater resources in the area

Fig 1B. Magnetic anomaly map from regional magnetic data and Rank 1 magnetic survey (Drenth and Brown, 2020). The area outlined in white shows the extent of a proposed magnetic and radiometric survey. The area outlined in green shows the extent of the Phase 3 focus area.
Justification for Mapping
Muscatine
Illinois City
Montpelier

• Possible mineralization as seen in the magnetic high in Muscatine & Illinois City
• Working with the Iowa Survey on the Muscatine Formation and border Quads
• Potential of Phosphate nodules in the Devonian Black Shales for EMRI Project
• Paleo-Karst in the Middle Devonian Limestone that may yield mineralization
Magnetic high on IL side
2c. Gallatin & Saline
County compilations
Justification for County Compilations
Saline and Gallatin

Saline County

Gallatin County

Omaha Dome
Zeacrinites wortheni
Found in Johnson Co.