To determine the significance of the AMS fabric and the origin of the ferruginous fluids that percolated through these rocks.

The anisotropy of magnetic susceptibility (AMS) in sandstones from these units in modern western Colorado (sic deposition in the Paradox Basin in southwest Laurentia. The Entrada Sandstone, Wanakah Formation, and the Tidwell Member of the Morrison Formation were Middle-Late Jurassic-}

grain boundaries using SEM-BSE images and X-ray energy dispersive analysis (EDAX).

This study utilizes low field AMS in sandstones, magnetic hysteresis measurements, isothermal remanent magnetization (IRM) acquisition, and thermal demagnetization of the natural remanent magnetization (NRM) to characterize the magnetic fabrics, determine the orientation of the magnetic lineations in prosses zones and along grain boundaries using SEM-BSE images and X-ray energy dispersive analysis (EDAX).

Observations at the outcrop scale and macroscopic specimens show that the AMS fabrics in these rocks are not primary (i.e., syndepositional) but might have been acquired due to secondary alterations by Fe-rich fluids. This study utilizes low field AMS in sandstones, magnetic hysteresis measurements, isothermal remanent magnetization (IRM) acquisition, and thermal demagnetization of the natural remanent magnetization (NRM) to characterize the magnetic fabrics, determine the orientation of the magnetic lineations in prosses zones and along grain boundaries using SEM-BSE images and X-ray energy dispersive analysis (EDAX).

4. Methods and Principles of AMS

5. Results

6. Discussion

7. Conclusion

8. Acknowledgments

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AMS fabrics are homogeneously distributed and are consistent between samples and across study sites (Fig. 4).

Results Continued

2. AMS fabrics (Fig. 4C) are predominantly planar (Fig. 4D) due to strong magnetic foliation. The AMS fabrics tilt ~ 50° from the sedimentary pole toward the SE for both localities (Fig. 5). Petrographic and macroscopic observations show AMS is not a tectonic fabric (Fig. 6).

1. Introduction

The Entrada Sandstone, Wanakah Formation, and the Tidwell Member of the Morrison Formation were Middle-Late Jurassic-