ABSTRACT

The Uteland Butte Play, located in the northeastern part of the Uinta Basin, Utah, is a significant source of tight oil, with major operators including Bill Barrett, QEP Resources, and Enfire Energy. The play is named after the Uteland Butte formation, which is composed of dolomitic wackestone and wackestone-shale facies. These facies are characterized by a high organic content, which provides a potential source of oil. The Uteland Butte formation is divided into three member units: the Uteland Butte, Cane Creek, and Paradox formations, each with their own distinctive geologic characteristics.

The Uteland Butte member is the uppermost formation within the Uteland Butte Play and is composed of dolomitic wackestone and wackestone-shale facies. This member is divided into three intervals, each with a different thickness and depth. The Uteland Butte member is underlain by the Cane Creek formation and overlain by the Paradox formation. The Uteland Butte Play is currently undergoing active exploration and development, with several operators targeting this formation for oil production.
Analyzing Core from Two Emerging Tight Oil Plays in Utah: The Uteland Butte Member of the Green River Formation in the Uinta Basin and the Cane Creek Shale within the Paradox Formation in the Paradox Basin

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ABSTRACT

The Uteland Butte Member of the Green River Formation is a significant petroleum play within the Uinta Basin of Utah. Understanding the source potential of the basin, and the paragenesis of hydrocarbons and other fluids, is critical to understanding the basin's petroleum potential. This study focuses on the geologic setting of the Uteland Butte Member, its hydrocarbon content, and the geologic history of the basin. The study was conducted in the Uinta Basin, Utah, and included detailed mapping, core analysis, and fluid inclusion analysis. The results of the study suggest that the Uteland Butte Member is a promising petroleum play in the Uinta Basin.

The Cane Creek Shale within the Paradox Formation is a tight oil play in the Utah region. Understanding the geologic setting of the basin, and the paragenesis of hydrocarbons and other fluids, is critical to understanding the basin's petroleum potential. This study focuses on the geologic setting of the Cane Creek Shale, its hydrocarbon content, and the geologic history of the basin. The study was conducted in the Paradox Basin, Utah, and included detailed mapping, core analysis, and fluid inclusion analysis. The results of the study suggest that the Cane Creek Shale is a promising petroleum play in the Paradox Basin.