Assessing Suitability of Depleted Fields for Enhanced Oil Recovery in West Virginia
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In this part of the study area, the Gordon 'C' interval is the most extensive part of the Gordon sandstone and is commonly referred to as the "Gordon Stray". The repeated interval in the Gamma-Ray signature of well #1547 suggests tectonic influence. The Gordon sandstone is accompanied by the overlying Fifty-Foot and Thirty-Foot sands in addition to intermittent intervals of the underlying Fourth and Fifth sands. Thickening in the north is likely a result of increased accommodation space during deposition, while thinning to the west may be structurally related.

The overlying Fifty-Foot and Thirty-Foot sands grade to shales and siltstones while the Fourth and Fifth sands remain intermittent. The Gordon sandstone is consistently about 150ft thick in this field. The Gordon 'C' separation is apparent to the south as the reservoir becomes more compartmentalized.

Officially recognized as part of the Upper Devonian Hampshire Formation in West Virginia, most production is from the Gordon sandstone while the underlying Fifth sandstone also produces in the Mannington and Wolf Summit-Big Isaac fields. The sand units are gradually replaced by shales and siltstones to the west.

The Gordon interval maintains a consistent thickness across the Salem-Wallace field while the reservoir sands pinch out to the south. The entire interval grades westward into Devonian Huron shiltes and shales.

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