

Lusk Field Strawn Cores of Lea County, New Mexico

Chavelle Kent

Core Information:

Well: El Paso Gas Co. Lusk #5

Company: Tenneco

County: Lea

State: New Mexico

11,148-11,221

Well: El Paso Gas Co. Lusk #2

Company: Tenneco

County: Lea

State: New Mexico

11,180-11,250

My thesis project is based on four cores from the Strawn Formation in the Lusk Strawn field in Lea County, New Mexico. Two of these cores will be exhibited for the core workshop. The Lusk field produces from Pennsylvanian aged carbonates and was discovered in November 1942 by the drilling of the Byrd – Frost No 1 Miller well. The field was discovered as the result of drilling on a seismic anomaly. The Lusk Strawn Field is generally productive from limestones that contain phylloid algal buildups (biostromes). These algal buildups have an areal extent of 1,400 square miles. Structurally, the Lusk Strawn field is a northwest – southeast trending anticlinal feature, being a part of a regional northwest – southeast structural ridge extending from Chavez County southeastward to the margin of the Delaware Basin. My cores are still mostly limestone and contain only scattered dolomitized intervals. Thus the grain types are beautifully preserved and easy to see and recognize. Along with the phylloid algae there are also fusulinids, other foraminifera, crinoids, rugose corals, sponges, encrusting organisms, gastropods, brachiopods, and bryozoans.