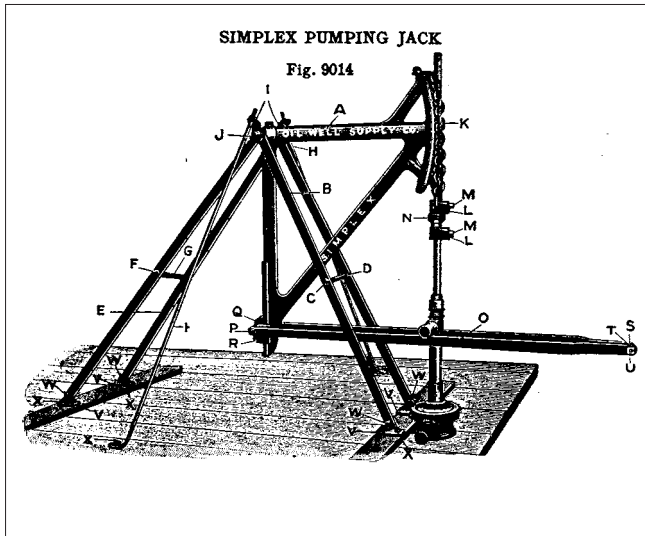


Allegheny National Forest Oil Heritage Documentation



Surface equipment for pumping wells: simplex pumping jack from the 1913 Oil Well Supply Company of Pittsburgh, U.S.A.: Catalogue Number 32, p.288.

Background

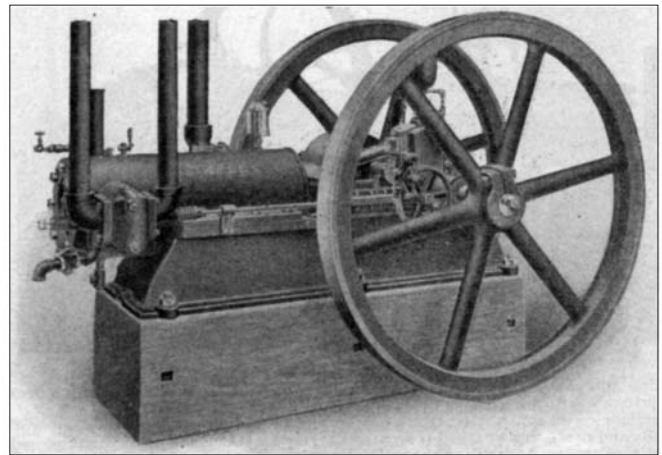
The Institute for the History of Technology and Industrial Archaeology (IHTIA) and the Historic American Engineering Record (HAER) have a long-standing interest in the early petroleum industry. Beginning with Colonel Edwin Drake's well at Titusville, Pennsylvania, in 1858 until the early twentieth century, most of the United States' oil supply was produced east of the Mississippi River in the Appalachian Mountains of Pennsylvania, West Virginia, and Kentucky, where the basic tools and machinery of industrialized petroleum production were perfected. Beginning around 1880, oil producers pumped much of this oil from the ground using a technique called *central power* pumping, by which a steam or gas engine provided the power to operate *pump jacks* located at dozens of distant wells. Transmitting power hundreds of yards, over and around obstacles, etc., to numerous jacks required an ingenious system of reciprocating rods or cables called *jerker lines*. Central power and jerker lines fell into disuse by ca. 1950. Allegheny National Forest (ANF), in the hills of northwestern Pennsylvania, is littered with the remains of central power systems and the buildings that housed them.

Scope

In 1997 IHTIA, HAER, and ANF entered into a tripartite agreement to record six central-power pumping systems within the Forest boundaries. The project team consisted of six members who spent one month on site collecting data, and approximately 10 months at IHTIA headquarters completing measured drawings and histories.

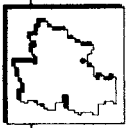
Results

The team produced fourteen measured drawings and 100 large-format photos documenting the six pumping installations. The project historian produced six site histories and an extended context recounting the history of Pennsylvania oil production and central power machinery. The completed material was accepted into the HAER Collection at the Library of Congress.



Gas engine for single well pumping from the 1913 Oil Well Supply Company of Pittsburgh, U.S.A.: Catalogue Number 32, p.127.

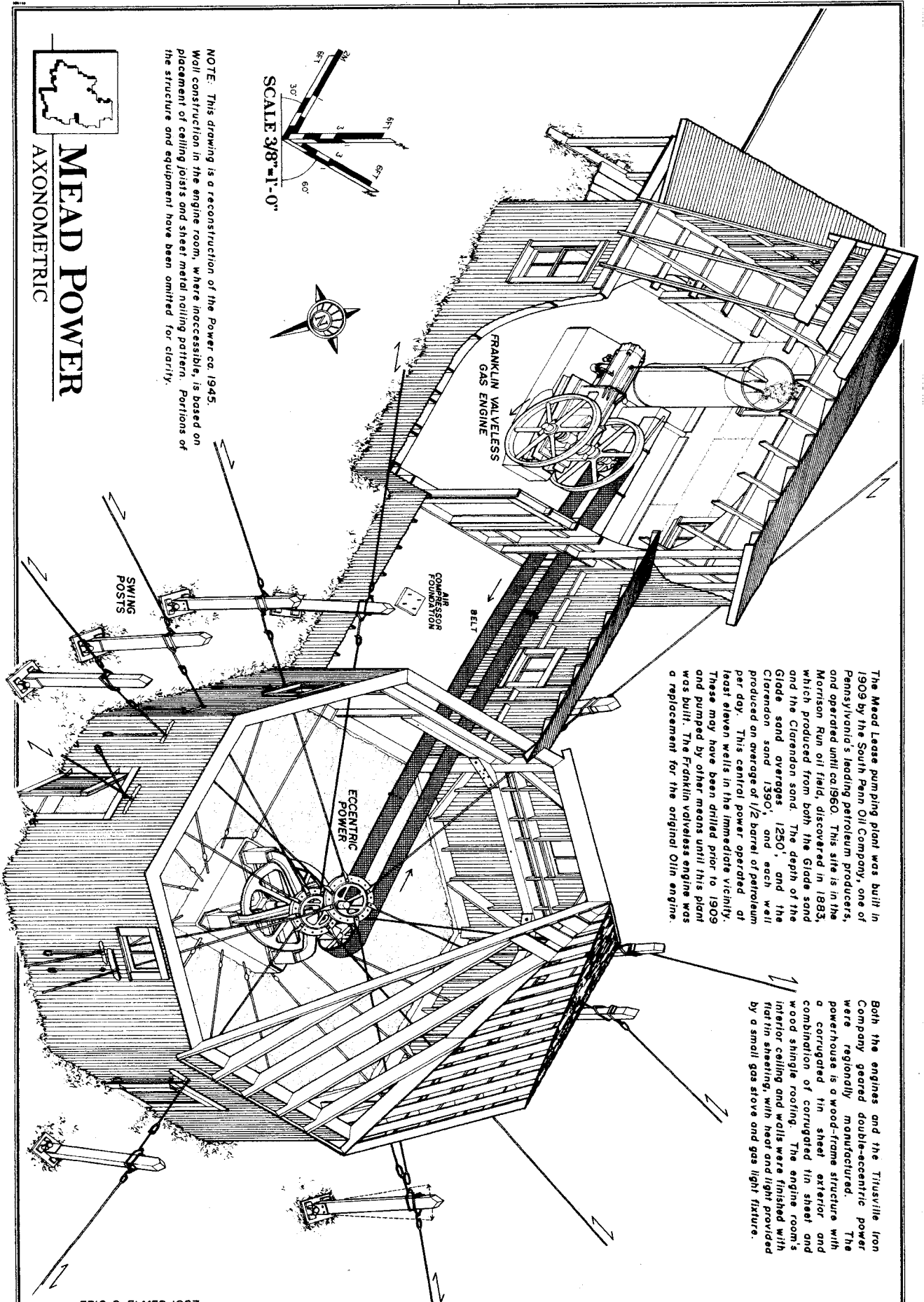
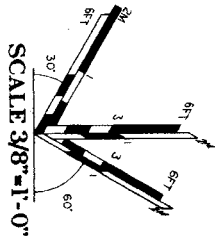
Principal Investigator: Michael W. Caplinger



MEAD POWER

AXONOMETRIC

NOTE: This drawing is a reconstruction of the Power ca. 1945. Wall construction in the engine room, where inaccessible, is based on placement of ceiling joists and steel metal nailing pattern. Portions of the structure and equipment have been omitted for clarity.



The Mead Lease pumping plant was built in 1909 by the South Penn Oil Company, one of Pennsylvania's leading petroleum producers, and operated until ca. 1960. This site is in the Morrison Run oil field, discovered in 1893, which produced from both the Glade sand and the Clarendon sand. The depth of the Glade sand averages 1250', and the Clarendon sand 1390', and each well produced an average of 1/2 barrel of petroleum per day. This central power operated at least eleven wells in the immediate vicinity. These may have been drilled prior to 1909 and pumped by other means until this plant was built. The Franklin valveless engine was a replacement for the original Olin engine.

Both the engines and the Titusville Iron Company geared double-eccentric power were regionally manufactured. The powerhouse is a wood-frame structure with a corrugated tin sheet exterior and a combination of corrugated tin sheet and wood shingle roofing. The engine room's interior ceiling and walls were finished with flat iron sheathing, with heat and light provided by a small gas stove and gas light fixture.

DELINEATED BY ERIC S. ELMER, 1997

ALLEGHENY NATIONAL FOREST
OIL HERITAGE RECORDING PROJECT
NATIONAL PARK SERVICE

CLARENDON VICINITY

MEAD POWER - 1909

WARREN COUNTY

PENNSYLVANIA

SHEET
2 - 3

HISTORIC AMERICAN
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