WALLACE LAKE FIELD

CATAHOULA PARISH, LOUISIANA

By: A. J. Ferguson of R. A. Campbell Co.
    Tom Murphy of McGoldrick & Watson

LOCATION:

The Wallace Lake Field is located in Sections 14, 15, 22 and 23, Township 8 North, Range 6 East, approximately 2-1/2 miles north of Jonesville. The field is immediately adjacent to State Highway 124 which runs north from Jonesville to Harrisonburg in Catahoula Parish, Louisiana.

PRE-DISCOVERY DATA:

Subsurface mapping on the Tow Lake resistivity marker.

DISCOVERY WELL:

Well: McGoldrick & Watson - R. H. Alagood #1 J. A. McMillin Unit
Location: 597’ FW L & 453’ FSL of NW/4 SE/4 Section 15-T8N-R6E
Commenced: July 26, 1960    Completed: August 5, 1960
Total Depth: 5077 feet (Schl.) Elevation: 66 feet, D. F.
Producing Zone: Tow Lake Sand (Wilcox) Eocene
Perforations: 4371-4372 w/4 shots
I.P.F.: 209 BOPD on an 8/64” choke    F. T. P. 525#    C. P. 260#
Gravity: 42º API G.O.R.: 200:1

STRUCTURE AND PRODUCING ZONE:

The Wallace Lake Field produces from a very porous and permeable sand in the Middle Wilcox (Eocene). This sand is found at an average depth of 4400 feet and is known as the Tow Lake Sand.

The field is actually comprised of three reservoirs. These reservoirs are located on a strong structural nose separated by shale barriers (see structure map). Each reservoir has a different oil-water contact and the oil-water contacts are found at lower subsea elevations progressing down-dip. The downdip limits of production in the northernmost reservoir is established by a well defined oil-water contact at a subsea depth of -4367 feet, the oil-water contact in the second or middle reservoir is at a subsea depth of -4378 feet, and the third or southernmost reservoir has a subsea oil-water contact at -4402 feet.

CORE ANALYSIS DATA ON DISCOVERY WELL:

Lithology: Gray to tan, fine grained, porous and permeable, clean to slightly shaly sand, with traces of glauconite and mica in varying amounts.
Porosity: 35.1% average
Permeability: 550 md. per foot average
Oil Saturation: 17.5% (pore) average
Water Saturation: 50.3% average