

359-81 KEUFFEL & ESSER CO.
 Semi-Logarithmic, 4 Cycles X 10 to the inch.
 5th lines accented.

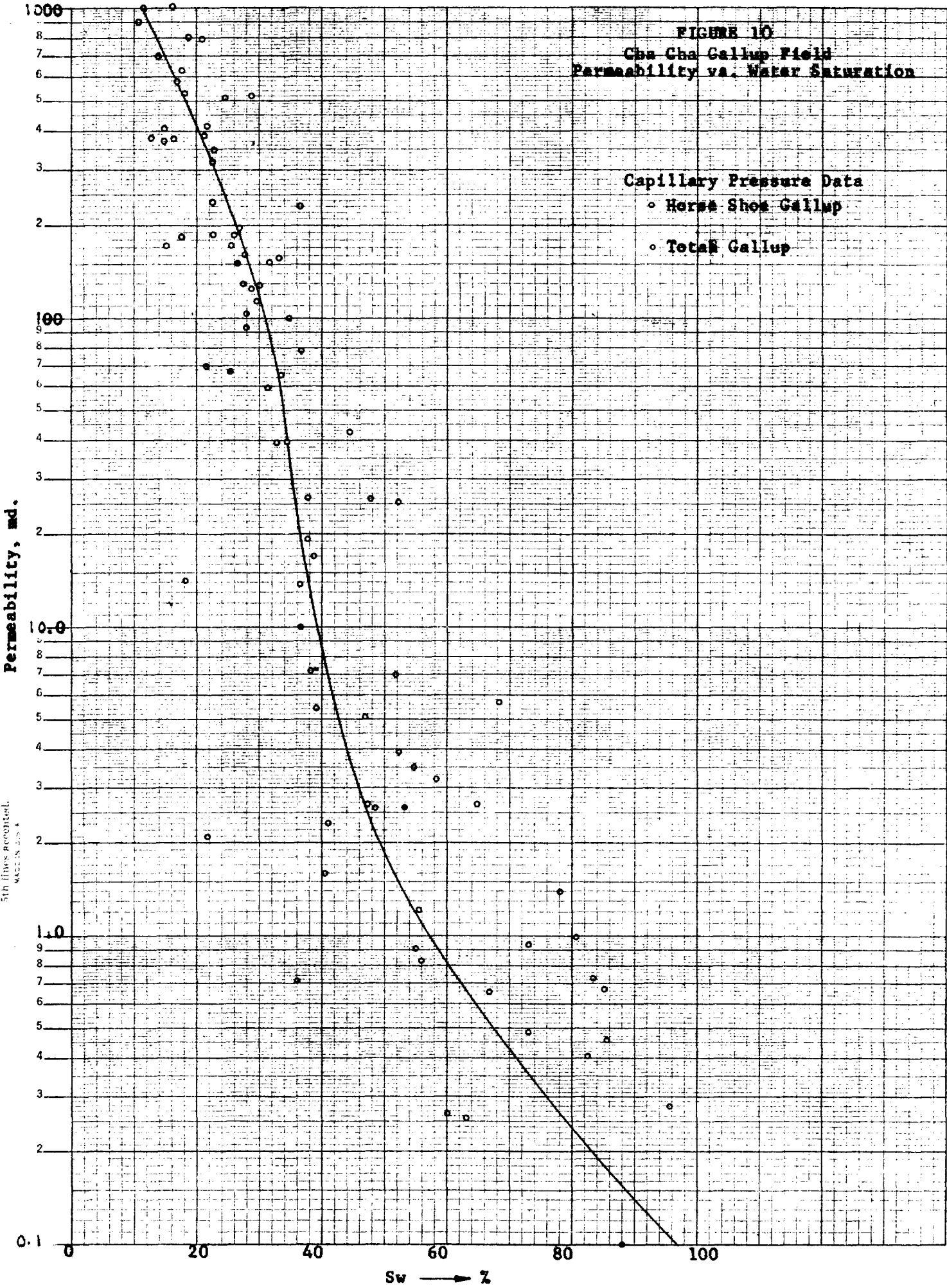
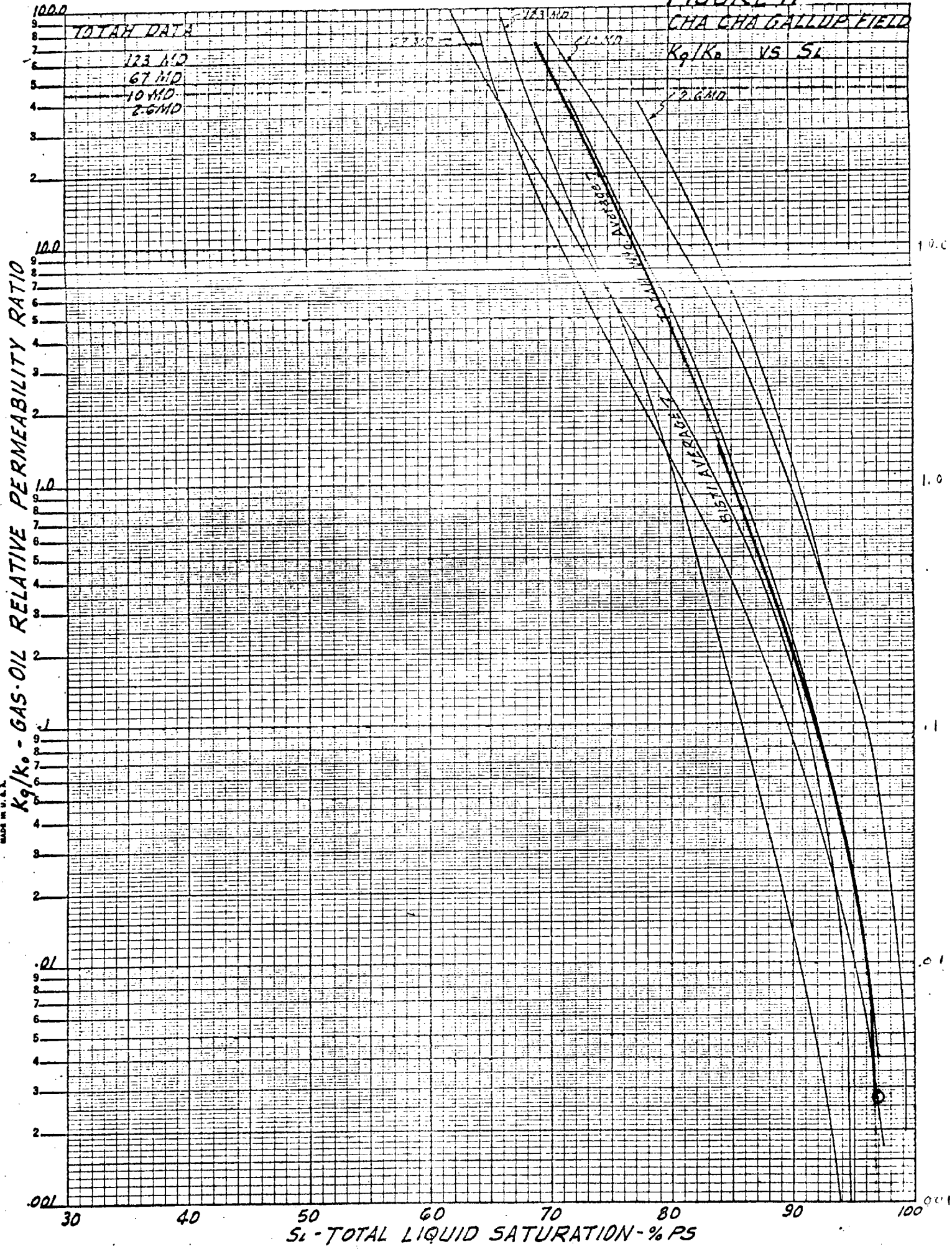


FIGURE 10
Cha Cha Gallup Field
Permeability vs. Water Saturation

FIGURE II
CHA CHA GALLUP FIELD
 K_g/K_o VS S_L



KEUFEL & ESSER CO., N. Y. NO. 360-81
 Semi-Logarithmic, 6 Cycles X in to the inch, 5th lines accented.
 MADE IN U.S.A.

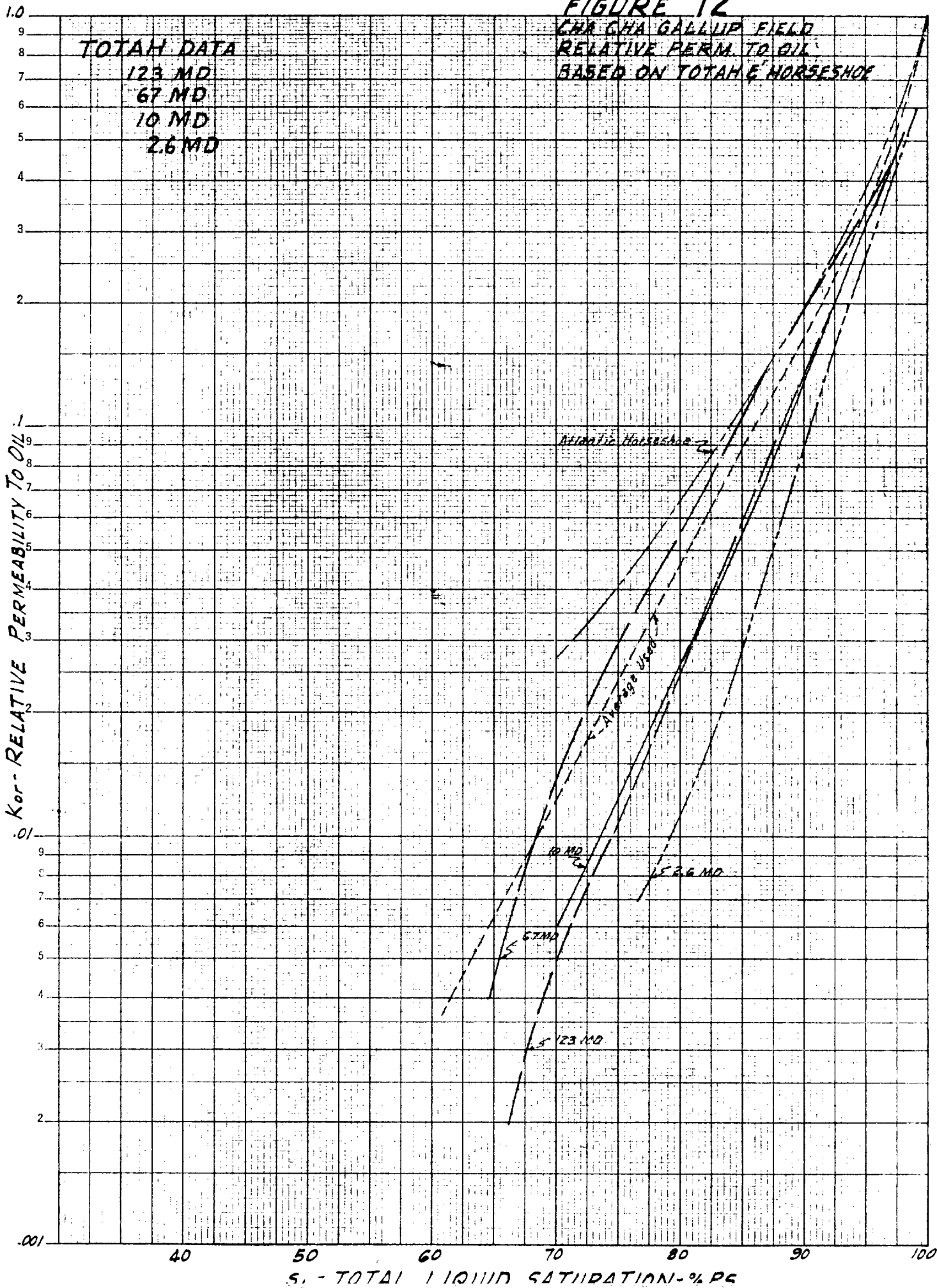
FIGURE 12

CHA CHA GALLUP FIELD
RELATIVE PERM. TO OIL
BASED ON TOTAH HORSESHOE

TOTAH DATA
123 MD
67 MD
10 MD
2.6 MD

K_{or} - RELATIVE PERMEABILITY TO OIL

SEMI-LOGARITHMIC 359-73
KEUFFEL & ESSER CO. MADE IN U.S.A.
3 CYCLES X 140 DIVISIONS



S_L - TOTAL LIQUID SATURATION - % PC

FIGURE 13
CHA CHA GALLUP FIELD
GAS PROPERTIES
BASED ON TOTAL DATA

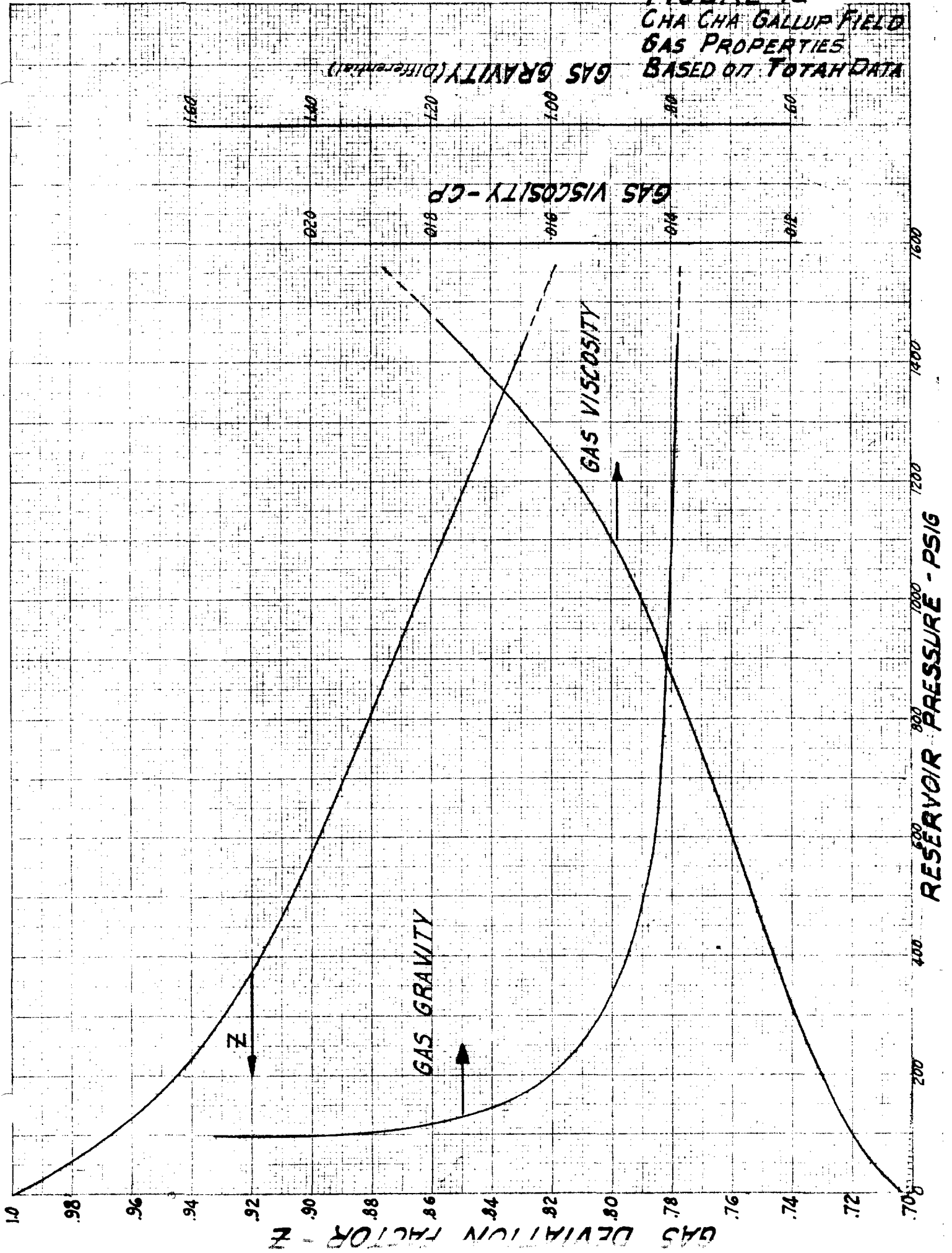


FIGURE 14
 CHA CHA GALLUP FIELD
 FVF & SOLN GOR
 BASED ON TOTAL DATA

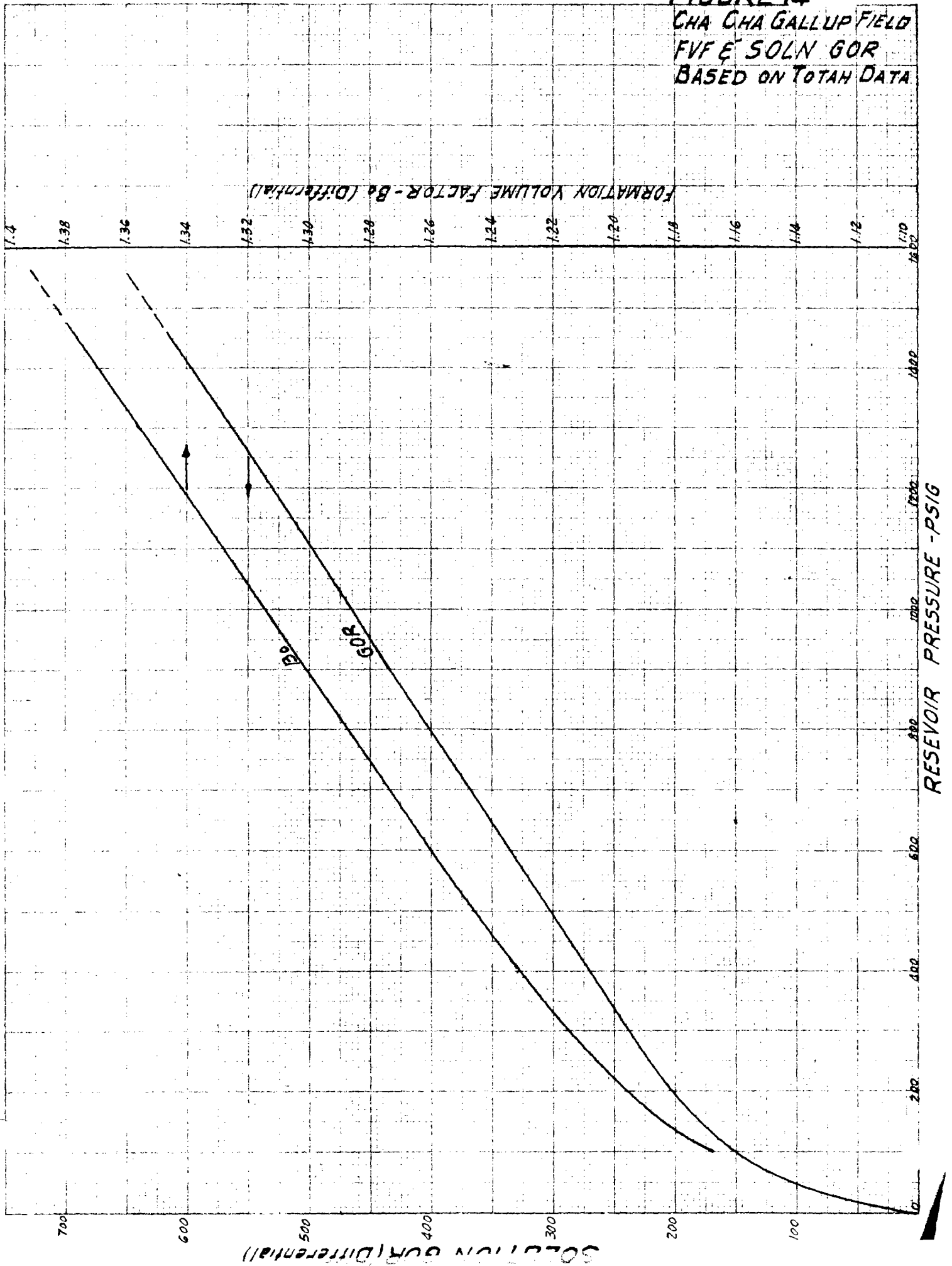
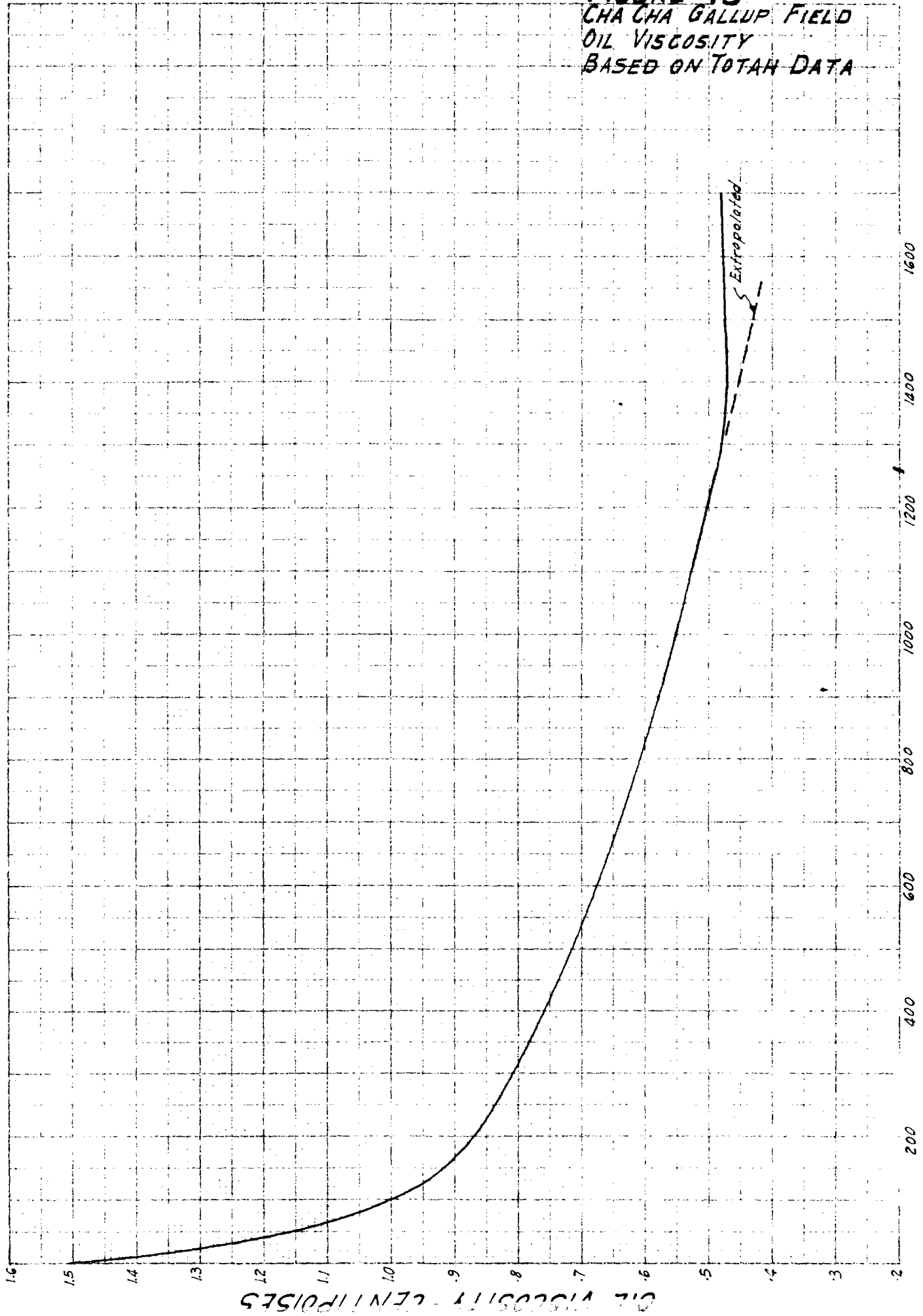


FIGURE 15
CHA CHA GALLUP FIELD
OIL VISCOSITY
BASED ON TOTAL DATA



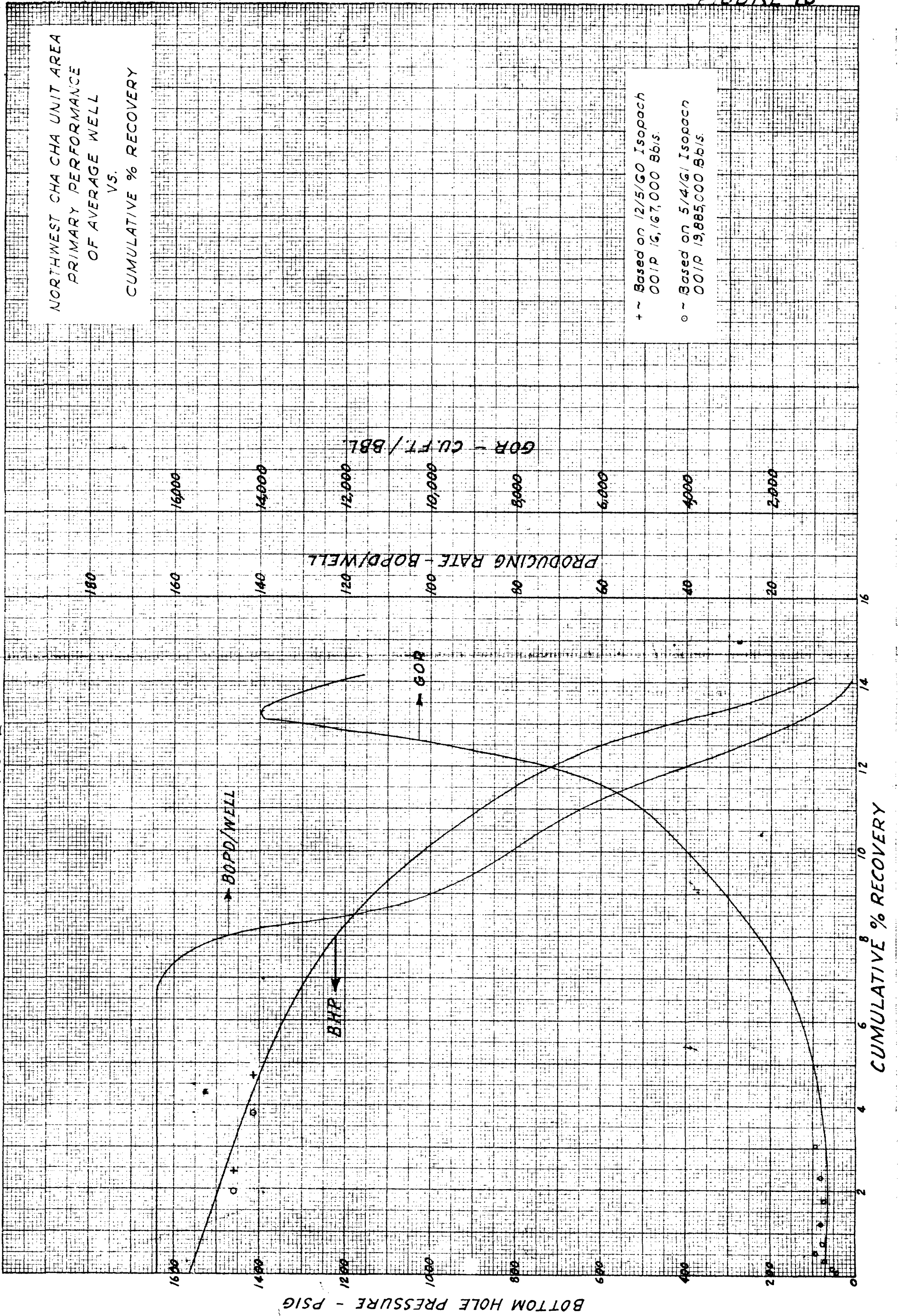
SCALE 10 X 10 TO THE 1.1 INCH 359-11
BY THE METHOD DESCRIBED

FIGURE 16

NORTHWEST CHA CHA UNIT AREA
PRIMARY PERFORMANCE
OF AVERAGE WELL
VS.
CUMULATIVE % RECOVERY

+ ~ Based on 12/5/60 Isopach
OOIP 16,167,000 Bbls.
o ~ Based on 5/4/61 Isopach
OOIP 19,885,000 Bbls.

FIGURE 76



BOTTOM HOLE PRESSURE - PSIG

PRODUCING RATE - BOPD/WELL

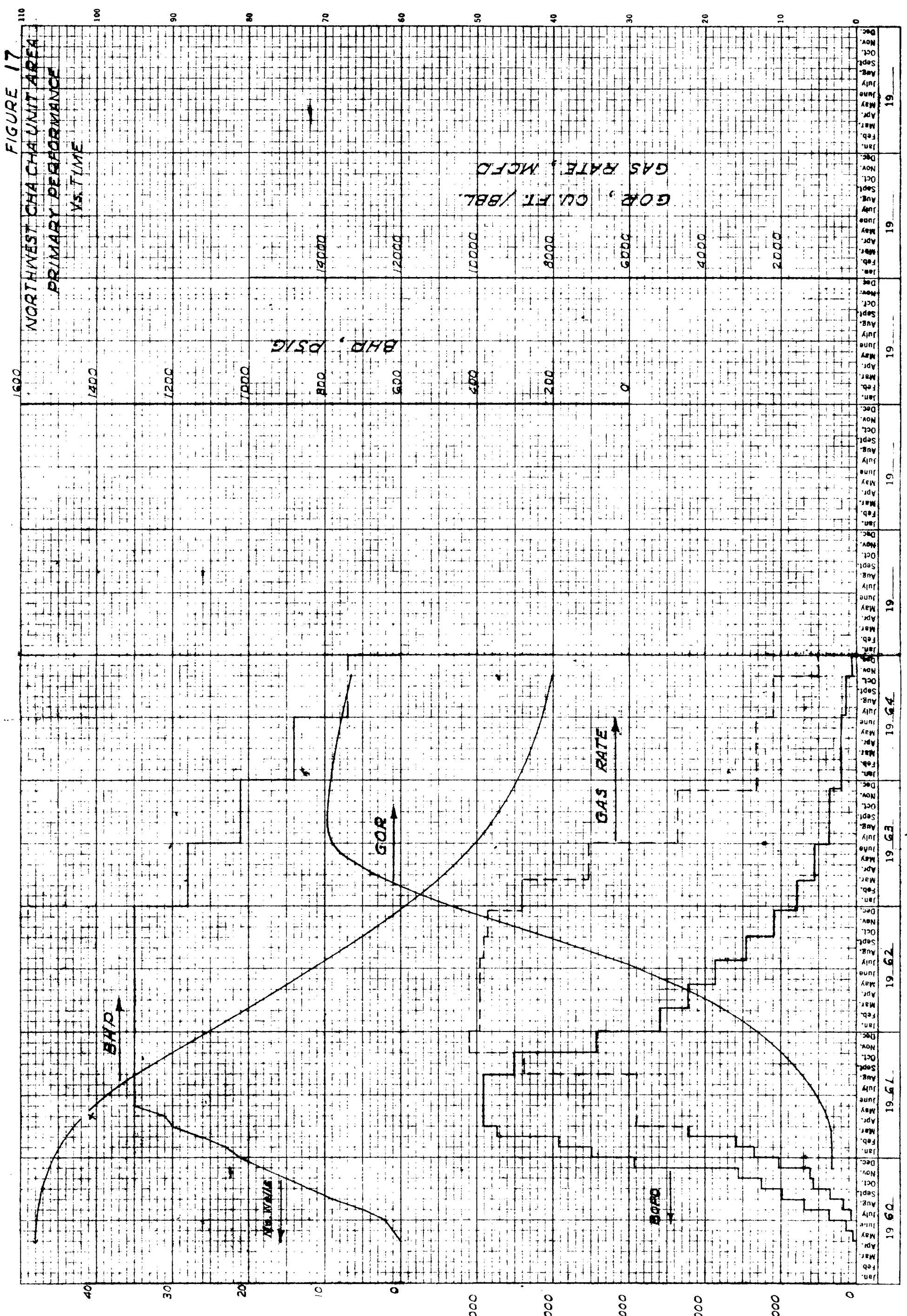
GOR - CU.FT./BBL

BOPD/WELL

BHP

GOR

OIL PRODUCTION - B/D
 NO. WELLS



LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE