



RigTesters, Inc.
ABILENE - MIDLAND - GRAHAM
UMC PETROLEUM CORP.



Well identification

Well ID	SHUGART "22" #1	Well location	W. HOBBS
County/District	EDDY	State, Country	NEW MEXICO
Company	UMC PETROLEUM	Division	MIDLAND/DENVE

Fluid properties

Prod/Inj fluid	OIL	GOR	570:1
Water cut	0%	Condensate yield	UNKNOWN
API gravity	39.70	Gas spec. grav.	0.67
Viscosity	0.88152 cp	Pseudo-critical T	376 deg R
Pseudo-critical P	666.38 psia	H2S mole fraction	AT LEAST 1600 PP
CO2 mole fraction	UNKNOWN	N2 mole fraction	UNKNOWN
Compressibility(t)	13.252 e-6/psi	Formation vol factor	1.2961 RB/STB

Reservoir properties

Porosity	0.14 frac	Formation thickness	20 ft
Wellbore radius	0.32813 ft	Prod-observer distance	UNKNOWN
Water-Oil Contact	UNKNOWN	Gas-Oil Contact	N/A
Gas-Water Contact	N/A	Rock compressibility	
Reservoir temperature	113 deg F	Pressure for properties	2667.3 psia

Comments

THE DERIVATIVES INDICATES A HOMOGENEOUS RESERVOIR WITH LOW PERMEABILITY & MODERATE SKIN. THE FINAL SHUT-IN PERIOD WAS AFFECTED BY HYDROSTATIC PRESSURE COMMUNICATION; THE CALCULATIONS & DATA FROM IT ARE NOT RELIABLE. ALTHOUGH THE INITIAL SHUT-IN WAS ALSO PARTIALLY AFFECTED, IT HAD OBTAINED TRUE RADIAL FLOW REGIME AS INDICATED ON THE DERIVATIVE CURVE. THE PERMEABILITY & SKIN CALCULATIONS FROM IT ARE RELIABLE DATA. THE FIXED PARAMETERS USED WERE 14% POROSITY WITH 20 FT. OF NET PAY REPORTED & AVERAGE PRODUCTION OF 23 BOPD. RATES WERE BASED ON DENSITY OF FLUID RECOVERED VS. FLOWING PRESSURES. THE TOTAL RADIUS OF INVESTIGATION CALCULATED TO APPROX. 43 FT. FROM THE WELLBORE.