

**ATP Oil & Gas Corporation
Mississippi Canyon Block 941
OCS-G 16661 Well No. A-2**

BOTTOM HOLE PRESSURE CALCULATIONS

Yellow B Sand Perfs

17,302' MD – 17,401' MD

13,310' TVD – 13,374' TVD

Mid-Perf – 13,342'

BHP = 9040 psi

BHT = 132 deg F

Pore Pressure at Mid-Perf = $9040 / 13342 / .052 = 13.03$ ppg = $.6776$ psi/ft

MASP CALCULATIONS

7-5/8" to Surface & Production String

w/ Surface Production Tree on the Wellhead

Yellow B Sand

Maximum Anticipated Surface Pressure (MASP) during flowback

Anticipated BHP in MC 941 OCS-G 16661 #A-2 "Yellow B" Sand is expected to be 9040 psi with an oil gradient of 0.31 psi/ft. The calculated BHP gradient is 0.6776 psi/ft or 13.03 ppg EMW pore pressure. MASP at the proposed perforation midpoint of 13,342' tvd is:

With a 95% oil (.3 psi/ft) & 5% gas (.15 psi/ft) mix

Fluid column gradient = $(.95).3 + (.05).15 = 0.2925$ psi/ft

With 100% hydrocarbons at surface:

$$\begin{aligned} \text{MASP} &= (0.052)(13.03)(13,342) - (0.2925)(13,342) \\ &= 9040 - 3902 \end{aligned}$$

MASP = 5,138 psi (At the Surface Wellhead)

Casing Test Pressure = 5200 psi

BOP Test Pressure = 5200 +500 = 5700 psi