SOUTHWESTERN LABORATORIES

FORT WORTH · DALLAS · HOUSTON · MIDLAND · BEAUMONT · TEXARKANA

CONSULTING, ANALYTICAL CHEMISTS
AND TESTING ENGINEERS

Midland Texas 6-21-79 File No. C-1950-G

Report of tests on Gas

To Bennett Petroleum Corp. Date Rec'd. 5-30/6-6-79

Received from

Identification Marks Phelps Dodge Lease, Well No. 3-Y

Test Conditions:

	Well 3-Y	Well 3
Observed 18 hr. shut-in pressure	7.2" water (11.26 psia)	7.2" water (11.26 psia)
Reported shut-in pressure, 11-77	Approx. 30 oz/in.^{2}	Approx. 35 oz/in.^{2}
Stabalized flow, 0.75" orifice, 2" tester	0.20" water (11.007 psia)	0.20" water (11.007 psia)
Stabalized Flow Rate at 0.2" water (0.75" orifice)	5770 MSFCD	5770 MSFCD
Vacuum Test	4.0" Mercury (9.036 psia)	———
Duration of Vacuum Test	51 hrs.	

Gas Production:

30 MSCFD appears to be a reasonable estimate of production at 4.0 inches of mercury vacuum. This estimate was made by extrapolating the plot of, 1/Test hours vs. declining production rate, to zero. (Petroleum Production Handbook).

By the equation $Q = C\left(P_c^2 - P_t^2\right)^n$ it is estimated that 7.0 inches of Hg vacuum would produce 40 MSCFD and 50 MSCFD at 10.0 inches of mercury. The assumption that the reservoir is of a reasonable size has to be made for these estimates to have any validity. No estimate of reserves can be made from the low pressure test data available.

SOUTHWESTERN LABORATORIES

Jack H Barton

Lab. No. 43032