

**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*  
DALLAS, TEXAS

March 6, 1959

REPLY TO  
P. O. BOX ~~XX~~ 4337  
MIDLAND, TEXAS

Santiago Oil & Gas, Inc.  
P. O. Box 1205  
Midland, Texas

<b>BEFORE EXAMINER NUTTER</b>	
OIL CONSERVATION COMMISSION	
<i>Santiago</i>	EXHIBIT NO. <u>5</u>
CASE NO. <u>1612</u>	

Attention: Mr. Leland Redline

Subject: Gas-Liquid Ratio Measurement  
New Mexico State No. 1-30 Well  
Wildcat (Bagley Area)  
Lea County, New Mexico

Gentlemen:

On February 24, 1959 thru March 3, 1959, gas-liquid ratio measurements were made in subject well and the results are presented to you herein.

The well was opened to flow thru an xx31.5 positive choke bean into the production system. The system consisted of a two pass heater operating at an average temperature of 140°F, a high pressure spherical separator operating at an average pressure and temperature of 700 psig and 90°F, a low pressure spherical separator at 50 psig and 67°F and a 1000 BBL. stock tank at atmospheric pressure and 54°F.

A stabilized ratio of high pressure gas to stock tank liquid was obtained throughout the last 48 hours of testing. The rates were 28.46 BBLs. stock tank liquid and 5948 MSCF gas or a ratio of 20,900 cubic feet of gas per barrel of stock tank liquid for the 24 hour period from 8:00 A. M. March 1, 1959 to 8:00 A. M. March 2, 1959. For the period from 8:00 A. M. March 2, to 8:00 A. M. March 3, 1959, the rates were 25.07 BBLs. stock tank liquid and 5252 MSCF gas for a ratio of 20,950 cubic feet per barrel of stock tank liquid.

Separator gas and liquid samples were collected the afternoon of March 1, 1959 and transmitted to our Reservoir Fluid laboratories in Dallas, Texas, for analysis.

It was a pleasure to make these measurements for you. When field testing and the laboratory study is completed, formal reports will be issued.

Very truly yours,

Core Laboratories, Inc.  
Reservoir Fluid Division

*P. L. Moses*  
P. L. Moses  
Operations Supervisor

REC'D MAR 9 1959