PETROLEUM ENGINEERING RESERVOIR STUDIES EVALUATIONS GEOLOGICAL STUDIES

GEOLOGICAL STUDIES

EWELL N. WALSH. P.E. WA 11

ENGINEERING & PRODUCTION CORPORATION

PETROLEUM CLUB PLAZA BUILDING
P. O. BOX 254
FARMINGTON, NEW MEXICO 87401

LEASE MANAGEMENT
CONTRACT PUMPING
DRILLING SUPERVISION
WORKOVER SUPERVISION

TELEPHONE 325-8203

August 17, 1970

Mr. Emery Arnold New Mexico Oil Conservation Commission 1000 Rio Brazos Road Aztec, New Mexico 87410

Ref: Southern Gulf Production Co. Navajo DIST. 3

Tocito No. 4, L-Sec10-T26N-R18W,

San Juan County, New Mexico

Dear Mr. Arnold:

The above-referred-to well is drilled 990 ft. from the west line and 1980 ft. from the south line of Section 10. At the time the well was drilled, regulations required that the well be drilled at a location governed by the established pool rules for the Tocito Dome-Pennsylvanian "D" Fool. The Tocito Dome Fool is classified as an oil pool.

The completion of the above-referred-to well indicated the well to be a gas well with a G.O.R. of 35,480 cubic feet gas per barrel of liquid hydrocarbon.

At the time a test was conducted to determine an initial potential of the well, the well was flowed at rates of 2,393 MCF/D, 3,487 MCF/D, 5,217 MCF/D and 6,864 MCF/D through a production unit. The casing pressure was decreased only 3 psi during the highest flow rate. Due to limitations of the production test unit the well could not be flowed at sufficient rates to lower the casing pressure to the degree necessary to obtain a multipoint back pressure test.

A gas analysis, conducted by the United States Bureau of Mines, indicated the gas from the well to contain 5.40% helium. The calculated gross B.T.U. quality of the gas Southern Gulf Production Company has not been successful in obtaining an economical and satisfactory gas purchase contract with El Paso Natural Gas Company. Therefore, the well has been shut in since it was completed in January, 1969.

Eastern Petroleum Company has entered into a contractural agreement with Southern Gulf Production Company to purchase the gas from the well and transport the gas, by pipeline, to the Helium Plant at Shiprock, New Mexico. The Linde Company

(Division of Union Carbide) has installed some new equipment at the Helium Plant and desires to conduct tests, in relation to Helium removal, of the gas from the above-referred-to well.

On behalf of Southern Gulf Production Company it is requested that permission be given to produce the above-referred-to well, without admistrative approval or approval after a hearing of the unorthodox location of a gas well, for 30 days. During the 30 days the test should indicate if continued production is feasible, for the removal of helium, and if the test is satisfactory Southern Gulf Production Company will request approval of the unorthodox gas well location.

Your immediate approval is requested due to Eastern Petroleum Company, by virtue of contract with Linde Company, desires to take gas from the well on Friday, August 21, 1970.

Thank you for your consideration in this matter.

Very truly yours,

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Ewell N. Walsh, P.E.

President

Mr. Gordon Fuckett cc; Southern Gulf Production Company 840 Houston Natural Gas Bldg. Houston, Texas 77002

> Mr. Henry Fullop Eastern Petroleum Company P.O. Box 291 Carmi, Illinois 62821

Mr. Robert Fullop Eastern Petroleum Company 3001 Northwood Circle Farmington, New Mexico 87401