ROTARY ENGINEERING COMPANY
WELL LOGGING SERVICE
1221 MILE HIGH CENTER DIAL ACOMA 2-4279
DENVER 2, COLORADO

August 10, 1956

Humble Oil & Refining Company
P. O. Box 1268
Farmington, New Mexico

ATT: Mr. C. A. Janes

Gentlemen:

We are submitting to you three copies of composite prints of our hydrocarbon analysis log, together with Schlumberger log, on your Navajo "C" 1 well in San Juan County, New Mexico. The section logged was from 1570' to 8681'.

A description of the data shown on this log is given on the attached sheet.

In reviewing the results of our log we feel that all pertinent data contained is self-explanatory. If we can be of further service in the interpretation of this log please notify us and we will be glad to call on you at your convenience.

We wish to thank you and your personnel for the consideration and cooperation shown us in securing the information on this well.

Yours very truly,

ROTARY ENGINEERING COMPANY

Olan T. Moore

OLAN T. MOORE
Rocky Mountain Manager

bl

Distribution:
2 - Mr. H. L. Beckmann
Humble Oil & Refining Company
Box 1600
Midland, Texas

2 - Mr. R. W. Bybee
Humble Oil & Refining Company
Box 1287
Roswell, New Mexico

ROTARY ENGINEERING COMPANY

WELL LOGGING SERVICE

1221 MILE HIGH CENTER — DIAL ACOMA 2-4379

DENVER 2, COLORADO

RECEIVED

August 15, 1956

Humble Oil & Refining Company
P. O. Box 1106
Farmington, New Mexico

ATTN: Mr. C. A. Jones

Gentlemen:

We are submitting to you three copies of correlation prints of our hydrocarbon analysis log, together with Schlumberger log, on your Navajo "G" 1 well in San Juan County, New Mexico. The section logged was from 1570' to 6681'.

A description of the data shown on this log is given on the attached sheet.

In reviewing the results of our log we feel that all pertinent data contained is self-explanatory. If we can be of further service in the interpretation of this log please notify us and we will be glad to call on you at your convenience.

We wish to thank you and your personnel for the consideration and cooperation shown us in securing the information on this well.

Yours very truly,

ROTARY ENGINEERING COMPANY

[illegible]

Rocky Mountain Manager

lb

Distribution:

2 - Mr. W. I. Buchanan
Humble Oil & Refining Company
Box 1600
Midland, Texas

2 - Mr. H. A. [illegible]
Humble Oil & Refining Company
Box 1447
Roswell, New Mexico

1 - Mr. H. C. Hougen
Houston Research Center
Box 2180
Houston, Texas

2 - U. S. Geological Survey
Farmington, New Mexico

1 - Mr. D. E. Ball
Humble Oil & Refining Company
Box 2180
Houston, Texas

1 - New Mexico Oil Conservation Commission
Aztec, New Mexico

1. Drilling mud characteristics.

2. BIT record.

3. The drilling rate curve plotted in minutes per foot. It will be noted this is plotted so that on fast drilling the curve approaches the left margin of the log.

4. Depth.

5. Lithology.

6. Vapor porosity column shown next to lithology column

7. Fluorescence residual oil units. This curve is obtained by applying solvent to the drill cuttings and evaluating by use of ultraviolet radiation the residual liquid hydrocarbons collected on the extraction plates

8. The percentage of sample showing oil fluorescence when viewed under ultraviolet radiation. All mineral fluorescence is excluded from this evaluation.

9. Two gas curves sourced from the cuttings and shown in "gas from cuttings" column. The dotted curve is obtained by analyzing the cuttings for all combustible gases. The dashed curve is obtained by burning the gas at a predetermined reduced temperature. This curve represents all combustible gases other than methane

10. Two gas curves sourced from the mud return stream are plotted from the left margin of "gas from mud" column with increasing values extending to the right. The dotted curve is obtained by analyzing the mud for all combustible gases. The dashed curve is obtained by burning the gas at a predetermined reduced temperature. This curve represents all combustible gases other than methane.

11. Oil analyses are run on each two feet of samples.

12. Gas analyses are run on each two feet of samples.

13. All cuttings and mud samples are corrected for up-the-hole lag time