



UNDERSTANDING THE WORLD...
A PIECE AT A TIME

Geological Report on

MESERVE RANCHES #1
SE NW SE 7-T15S-R20W
Ellis County, Kansas

of

MCNAMES & PATTERSON
Jackson, Mississippi

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25 July 1984

McNames & Patterson
P. O. Box 12781
Jackson, Mississippi 39211

Re: Meserve Ranches #1
SE NW SE 7-T15S-R20W
Ellis County, Kansas

Gentlemen,

The following manuscript letter and enclosed geologist's log are a summary of the referenced well.

DECISION

A decision was made to consider the well uncommercial. A recommendation was made to the operator that the well be plugged in accordance with state rules and regulations. All sample shows/odors were objectively analyzed from 3,380' to 3,910' (RTD).

A notable zone of interest is the Marmaton chert interval (3,788'-94') with secondary zones of interest in the Lansing Group (3,499'-3,512' & 3,536'-47').

GEOLOGICAL DATA

Formation Tops*:		
Top of Anhydrite	. . . 1,392'	(+705')
Base of Anhydrite	. . . 1,433'	(+664')
Heebner Shale 3,399'	(-1,302')
Toronto Limestone	. . . 3,422'	(-1,325')
Lansing Group 3,440'	(-1,343')
Base of Kansas City	. 3,690'	(-1,593')
Marmaton 3,772'	(-1,675')
Weathered Arbuckle	. 3,860'	(-1,763')
Arbuckle 3,875'	(-1,778')

* Log measured from Kelly Bushing; 5 feet
above Permanent Datum.



Sample examination used in conjunction with the electric logs' calculations suggests the following information.

MAJOR SHOW(S)

There were no major show(s) encountered during the drilling of the Meserve Ranches #1.

NOTABLE SHOW(S)

1. Marmaton chert Chert — Mostly White/Trace Tan. Mottled/Singular. Tripolitic in part (20%). Mostly fresh. Good visible porosity. No odor. Spotted dull yellow fluorescence. After crushing, free black dead oil. Spotted/Trace Uniform Medium brown stain. Positive cut/residual. Positive acid/residual.
- (3,788'-94')
- $\rho_{xp} = 24\% - 28\%$, $R_t = 5.4 - 6.5$,
 $R_{fa} = .3$ ohms &
 $S_w = 50\% - 60\%$. (Archies)
- Good/Excellent permeability as suggested by mudcake and DST #1.
- High invasion of the chert.

MINOR SHOW(S)

1. Lansing Group Limestone — Tan. Singular. XF/VF-XLN. XLN porosity. Chalky. Fair visible porosity. No odor. Spotted dull green fluorescence. Spotted black 'tarry' oil. No gas. Spotted medium brown stain. Positive cut/residual. Positive acid/residual.
- (3,499'-3,502')
- $\rho_{xp} = 4\% - 7\%$, $R_t = 70 - 80$,
 $R_w = .05$ ohms &
 $S_w = 40\% - 60\%$. (Archies).
- No/Trace permeability as suggested by mudcake.
2. Lansing Group Limestone — White/Tan. Mottled/Singular. Cypto/Micro-XLN. XLN porosity. Dense. Re-XLN. Argillaceous in part. No/Trace visible porosity. No odor. Spotted dull green fluorescence. Spotted black 'tarry' oil. No gas. Spotted medium brown stain. Positive cut/residual. Positive acid/residual.
- (3,536'-47')
- $\rho_{xp} = 2\%$, $R_t = 46 - 200$,
 $R_w = .05$ ohms &
 $S_w = 100\%$. (Archies)
- No/Trace permeability as suggested by mudcake.

DRILL STEM TEST(S)

1. Marmaton chert Interval: 3,776'-3,814'
Recovery: 60' SG&MWCO (5%G, 20%M, 28%W & 47%O)
120' SG&MWCO (8%G, 28%M, 22%W & 45%O)
60' SG&MWCO (5%M, 32%W, 10%G & 58%O)
60' SG&MWCO (5%G, 20%M, 20%W & 55%O)
IFP: 137#-147#/30" Cl⁻_{wtr} = 57M.
ISIP: 1,188#/45" Cl⁻_{mf} = 54M.
FFP: 157#-187#'60"
FSIP: 1,158#/90"
MH: 2,137#-2,117#. Temp: 117°F
R_w = 0.1 ohms @ 80°F.
2. Conglomerate Interval: 3,820' - 49'
Recovery: 10' Drilling Mud with oil scum
on top of tool.
IFP: 68#-68#/30"
ISIP: 68#/30"
FFP: 68#-68#/30"
FSIP: 68#/30"
MH: 2,137#-2,117#. TempL 117°F

GENERAL

Spudded: 17 July 1984. Completed: 25 July 1984.
Contractor: Shields Drilling Company — Rig #2.
Depth: Rotary - 3,910'. & Logger's - 3,911'.
Elevation: 2,097'KB, 2,095'DF & 2,092'GL.
Hole Deviations: 1/2° @ 252', 1° @ 3,814' & 1° @ 3,910'.

CASING

Surface: 8-5/8", New, Set @ 250' (Logger's) with 165 sx 60/40 Pozmix.
Production: None.

SURVEYS

Electric Log: Schlumberger. Mud Program: Davis Mud & Chemical.
Testing: Western Testing. Gas Detector: None.
Cores: None.

DISCLAIMER

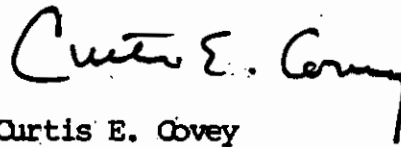
The service rendered on the Meserve Ranches #1 was done without any biasing influence, intentional or unintentional, from any employee or representative of McNames & Patterson. In this service, I am an independent petroleum geologist and subsequently, not an employee of the referenced company. I will not receive any financial benefit from the positive completion of the subject well.

The enclosed geologist's log is considered an integral part of this report and is not intended to be separated from the same.

The recommendations made hereon shall not be construed as absolute and are made without assumption of liability. The recommendations are statements of observation/research/training/opinion only.

Should you require the services of a petroleum geologist at any time in the future, every effort will be made to serve you in the most efficient manner available.

Respectfully submitted,



Curtis E. Covey

CEC:fyd

cc:file

ENCL: GEOLOGIST LOG
DST SERVICE TICKETS
E-LOG SERVICE TICKET
DRILLING MUD REPORTS
DRILLING TIME SHEETS
STRAIGHT HOLE TARGETS