KANSAS DRILLERS LOG

API No. 15 — 193 —- 20,109 -
County Number

Operator
Gulf Oil Corporation

Address
P. O. Box 12116

Well No.
3-24

Footage Location
1980 feet from (S) line 1980 feet from (E) line

Principal Contractor
Raing & Williamson

Spud Date
1/10/77

Date Completed
1/17/77

Total Depth
4310'
P.B.T.D.
4272'

Geologist
H. O. Arnold

Oil Purchaser
Koch Oil

CASING RECORD

Report of all strings set — surface, intermediate, production, etc.

<table>
<thead>
<tr>
<th>Purpose of string</th>
<th>Size hole drilled</th>
<th>Size casing set (in O.D.)</th>
<th>Weight lbs./ft.</th>
<th>Setting depth</th>
<th>Type cement</th>
<th>Sacks</th>
<th>Type and percent additives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface</td>
<td>12-1/4&quot;</td>
<td>8-5/8&quot;</td>
<td>24</td>
<td>490'</td>
<td>50-50 Poz Cl A</td>
<td>175</td>
<td>2% gel, 3% CC</td>
</tr>
<tr>
<td>Production</td>
<td>7-7/8&quot;</td>
<td>5-1/2&quot;</td>
<td>15.5</td>
<td>4309'</td>
<td>50-50 Poz</td>
<td>200</td>
<td>3/4 of 1% CFR2</td>
</tr>
</tbody>
</table>

LINER RECORD

Top, ft.

Bottom, ft.

Sacks cement

Shots per ft.

PERFORATION RECORD

Size & type

Depth interval

4" Golden Jet 4178-86'

TUBING RECORD

Size

Setting depth

Packer set at

2-3/8" 4178'

ACID, FRACTURE, SHOT, CEMENT, SQUEEZE RECORD

Amount and kind of material used

2000 gallons 15% NE acid

Depth interval treated

AUG 5 1994 4178-86'

INITIAL PRODUCTION

Date of first production

2/4/77

Producing method (flowing, pumping, gas lift, etc.)
Pumping

RATE OF PRODUCTION PER 24 HOURS

Oil 12 bbls.

Gas

Water 8 bbls.

Gas-oil ratio

Producing interval(s)

L-KC 4178-86'

INSTRUCTIONS: As provided in KCC Rule 82-2-125, within 90 days after completion of a well, one completed copy of this Drillers Log shall be transmitted to the State Geological Survey of Kansas, 4150 Monroe Street, Wichita, Kansas 67209. Copies of this form are available from the Conservation Division, State Corporation Commission, 3830 S. Meridian (P.O. Box 17027), Wichita, Kansas 66217. Phone AC 316-532-2206. If confidential custody is desired, please note Rule 82-2-125. Drillers Logs will be on open file in the Oil and Gas Division, State Geological Survey of Kansas, Lawrence, Kansas 66044.
<table>
<thead>
<tr>
<th>Formation Description, Contents, Etc.</th>
<th>Top</th>
<th>Bottom</th>
<th>Name</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shale</td>
<td>65'</td>
<td>1170'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale, Sand, &amp; Shale</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td>1170'</td>
<td>1820'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale &amp; Sand</td>
<td>1820'</td>
<td>2124'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sand, Shale, &amp; Sand</td>
<td>2124'</td>
<td>2460'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale &amp; Redbed</td>
<td>2400'</td>
<td>3120'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Redbed &amp; Shale</td>
<td>3120'</td>
<td>3380'</td>
<td></td>
<td></td>
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<tr>
<td>Shale</td>
<td>3380'</td>
<td>3550'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale &amp; Lime</td>
<td>3550'</td>
<td>3715'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Redbed &amp; Shale</td>
<td>3715'</td>
<td>3900'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lime</td>
<td>3900'</td>
<td>4310'</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

USE ADDITIONAL SHEETS, IF NECESSARY, TO COMPLETE WELL RECORD.
DRILLER'S LOG


WELL NAME: McCormick #3-24

RIG NO. #4

TOTAL DEPTH 4310'

COMMENCED: 1-10-77 COMPLETED: 1-17-77

CONTRACTOR: Rains & Williamson Oil Co., Inc.

CASING RECORD:
SURFACE: 8 5/8" @ 490' w/175 sx. 50/50 poz., 2% gel, 3% cc. and 100 sx. Class A 3% cc.

PRODUCTION: 5 1/2" @ 4309' w/200 sx. 50/50 poz., 10% salt, 2% gel, 3/4 of 1% CFR2.

LOG
(Figures Indicate Bottom of Formations)

Shale 65
Shale, Sand & Shale 1170
Shale 1820
Shale & Sand 2124
Sand, Shale & Sand 2400
Shale & Redbed 3120
Redbed & Shale 3380
Shale 3550
Shale & Lime 3715
Redbed & Shale 3900
Lime 4310

ROTARY TOTAL DEPTH 4310

STATE OF Kansas )
COUNTY OF Sedgwick ) SS:

I, Wilson Rains, President of Rains & Williamson Oil Co., Inc. upon oath state that the above and foregoing is a true and correct copy of the log of the McCormick #3-24 well.

Wilson Rains

Subscribed and sworn to before me this 19 day of January, 1977.

Juanita M. Green

My Appointment Expires: 10-4-79

RECEIVED
KANSAS CORPORATION COMMISSION:
CONSERVATION DIVISION:
WICHITA, KANSAS
AUG. 4 1984