STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION
CHARLESTON

WELL LOCATION MAP
FILE NO. MARS-520

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.
## WELL RECORD

**Company:** Morris Frutchman  
**Address:** 805 Chicago St., Toledo, Ohio  
**Farm:** Herbert Kelley  
**Acres:** 249.07  
**Location (waters):**  
**Well No.:** No. 1 (One)  
**Elev.:** 1309'  
**District:** Franklin  
**County:** Marshall  
**The surface of the tract is owned in fee by:**  
**Address:**  
**Mineral rights are owned by:** Herbert F. Kelley  
**R.D.:** 95  
**Proctor, W.V.:** Address  
**Drilling commenced:** December 6, 1963  
**Drilling completed:** January 17, 1964  
**Date Shot:** Not From  
**To:**  
**With:**  
**Open Flow:** 1/10ths Water in  
**1/10ths Merc in:** Inch  
**Volume:** 254,140 Cu. Ft.  
**Rock Pressure:** 600 lbs. hrs.  
**Oil:** bbls., 1st 24 hrs.  
**WELL ACIDIZED:** Not  
**WELL FRACTURED:** Not  

### RESULT AFTER TREATMENT

**ROCK PRESSURE AFTER TREATMENT**

<table>
<thead>
<tr>
<th>Fresh Water.</th>
<th>Salt Water.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feet.</td>
<td>Feet.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Formation</th>
<th>Color</th>
<th>Hard or Soft</th>
<th>Top</th>
<th>Bottom</th>
<th>Oil, Gas or Water</th>
<th>Depth</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clay</td>
<td></td>
<td></td>
<td>0</td>
<td>16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td>16</td>
<td></td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td>25</td>
<td></td>
<td>42</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Rock</td>
<td>42</td>
<td></td>
<td>50</td>
<td>58</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td>58</td>
<td></td>
<td>78</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td>78</td>
<td></td>
<td>101</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Rock</td>
<td>87</td>
<td></td>
<td>116</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td>101</td>
<td></td>
<td>127</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soapstone</td>
<td>116</td>
<td></td>
<td>140</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone - gritty</td>
<td>140</td>
<td></td>
<td>148</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale - blue</td>
<td>148</td>
<td></td>
<td>155</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Rock</td>
<td>155</td>
<td></td>
<td>155</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td>155</td>
<td></td>
<td>161</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandstone</td>
<td>161</td>
<td></td>
<td>186</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Rock</td>
<td>186</td>
<td></td>
<td>202</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td>202</td>
<td></td>
<td>202</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale &amp; Red Rock</td>
<td>212</td>
<td></td>
<td>220</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td>220</td>
<td></td>
<td>260</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td>260</td>
<td></td>
<td>265</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Rock</td>
<td>265</td>
<td></td>
<td>310</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td>310</td>
<td></td>
<td>318</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td>318</td>
<td></td>
<td>324</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td>324</td>
<td></td>
<td>330</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandstone</td>
<td>330</td>
<td></td>
<td>342</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale &amp; Red Rock</td>
<td>342</td>
<td></td>
<td>370</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandy Shale</td>
<td>370</td>
<td></td>
<td>397</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CoAL WAS ENCOUNTERED AT 833-834 FEET INCHES 922-928 FEET INCHES FEET INCHES FEET INCHES**

**Packers.**

<table>
<thead>
<tr>
<th>Size</th>
<th>16'</th>
<th>16'</th>
<th>Kind of Packer. Anchor</th>
<th>Size of</th>
<th>Depth set 2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>295'</td>
<td>0</td>
<td></td>
<td>1384'</td>
<td>1384'</td>
</tr>
<tr>
<td>8 1/4</td>
<td>1798'</td>
<td>0</td>
<td></td>
<td>1384'</td>
<td>1384'</td>
</tr>
<tr>
<td>5 3/16</td>
<td></td>
<td></td>
<td></td>
<td>2090</td>
<td></td>
</tr>
</tbody>
</table>

**Perf. Top.**

**Perf. Bottom.**

**Liners Used.**

**Casing Cemented.**

**No. Ft.**

**Date.**

**RECEIVED**

West Virginia  
Dept. of Mines
<table>
<thead>
<tr>
<th>Formation</th>
<th>Color</th>
<th>Hard or Soft</th>
<th>Top</th>
<th>Bottom</th>
<th>Oil, Gas or Water</th>
<th>Depth Found</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>411</td>
<td>455</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td></td>
<td>455</td>
<td>468</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>468</td>
<td>515</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale &amp; Shells</td>
<td></td>
<td></td>
<td>515</td>
<td>595</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandstone</td>
<td></td>
<td></td>
<td>595</td>
<td>608</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>608</td>
<td>660</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td></td>
<td>660</td>
<td>665</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale &amp; Red Rock</td>
<td></td>
<td></td>
<td>665</td>
<td>688</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td></td>
<td>688</td>
<td>694</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>694</td>
<td>708</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td></td>
<td>708</td>
<td>716</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>716</td>
<td>723</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td></td>
<td>723</td>
<td>748</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>748</td>
<td>755</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone - gritty</td>
<td></td>
<td></td>
<td>755</td>
<td>767</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>767</td>
<td>776</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td></td>
<td>776</td>
<td>826</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>826</td>
<td>833</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coal (Mapletown)</td>
<td></td>
<td></td>
<td>833</td>
<td>834</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>834</td>
<td>838</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td></td>
<td>838</td>
<td>868</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale &amp; Limestone</td>
<td></td>
<td></td>
<td>868</td>
<td>884</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td></td>
<td>884</td>
<td>901</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slate</td>
<td></td>
<td></td>
<td>901</td>
<td>904</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td></td>
<td>904</td>
<td>909</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slate</td>
<td></td>
<td></td>
<td>910</td>
<td>922</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coal</td>
<td></td>
<td></td>
<td>922</td>
<td>928</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slate</td>
<td></td>
<td></td>
<td>928</td>
<td>950</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Rock</td>
<td></td>
<td></td>
<td>950</td>
<td>958</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slate</td>
<td></td>
<td></td>
<td>958</td>
<td>982</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td></td>
<td>982</td>
<td>992</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>992</td>
<td>1005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Rock</td>
<td></td>
<td></td>
<td>1003</td>
<td>1008</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>1008</td>
<td>1020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td></td>
<td>1020</td>
<td>1052</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Rock</td>
<td></td>
<td></td>
<td>1052</td>
<td>1070</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>1070</td>
<td>1080</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td></td>
<td>1080</td>
<td>1087</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>1087</td>
<td>1096</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Rock</td>
<td></td>
<td></td>
<td>1096</td>
<td>1110</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale &amp; Shells</td>
<td></td>
<td></td>
<td>1110</td>
<td>1150</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td></td>
<td>1150</td>
<td>1156</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>1156</td>
<td>1180</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandstone</td>
<td></td>
<td></td>
<td>1180</td>
<td>1192</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>1192</td>
<td>1201</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Rock</td>
<td></td>
<td></td>
<td>1201</td>
<td>1250</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>1250</td>
<td>1255</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td></td>
<td>1255</td>
<td>1260</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale &amp; Shells</td>
<td></td>
<td></td>
<td>1260</td>
<td>1298</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Rock</td>
<td></td>
<td></td>
<td>1298</td>
<td>1320</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td></td>
<td>1320</td>
<td>1332</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td></td>
<td>1332</td>
<td>1339</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale &amp; dark</td>
<td></td>
<td></td>
<td>1339</td>
<td>1371</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandstone</td>
<td></td>
<td></td>
<td>1371</td>
<td>1403</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>1403</td>
<td>1447</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandstone</td>
<td></td>
<td></td>
<td>1447</td>
<td>1466</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td></td>
<td></td>
<td>1466</td>
<td>1476</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandstone</td>
<td></td>
<td></td>
<td>1476</td>
<td>1508</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>1508</td>
<td>1567</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandstone</td>
<td></td>
<td></td>
<td>1567</td>
<td>1597</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale</td>
<td></td>
<td></td>
<td>1597</td>
<td>1608</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandstone</td>
<td></td>
<td></td>
<td>1608</td>
<td>1617</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shale &amp; Shells</td>
<td></td>
<td></td>
<td>1617</td>
<td>1639</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(continued on next page)
(continued)

STATE OF WEST VIRGINA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

Company: Morris Fruchtman
Address: 805 Chicago St., Toledo, Ohio
Farm: Harbert Kelley
Acres: 249.07

Casing and Tubing
Used in Drilling

Size

Left in Well

Packers

16.
13.
10.
8 1/2.
6 1/2.
5 3/16.
2.
2.
Perf. top.
Perf. bottom.
Perf. top.
Perf. bottom.

Kind of Packer:

Size of:

Depth set:

Perf. top:

Perf. bottom:

CASING CEMENTED

SIZE

No. Ft.

Date

COAL WAS ENCOUNTERED AT

FEET

INCHES

FEET

INCHES

FEET

INCHES

Open Flow

100ths Water in.

100ths Merc. in.

Volume

254,140

Liner Pressure

600

lbs.

hrs.

WELL ACIDIZED

WELL FRACTURED

Rotary

Spudder

Cable Tools

Storage

Oil or Gas Well

Gas

(Kind)

RESULT AFTER TREATMENT

ROCK PRESSURE AFTER TREATMENT

Fresh Water:

Salt Water:

Formation

Sandstone
Shale
Limestone
Shale
Sandy Shale
Sandstone
Sand
Sandstone
Shale
Big Lime
Sandstone
Total Depth

Color

Hard or Soft

Top

Bottom

Oil, Gas or Water

Depth

Remarks

1659
1743
1764
1770
1793
1840
1940
1956
1971
1976
2040

1743
1764
1770
1793
1840
1940
1956
1971
1976
2040
2091

1665'
1976
1359
1257

2040
2065

2010
2014
3931
731

Water

Gas

2 bailers/hour

Gas

2065-2080

(over)