Company: THE MANUFACTURERS LIGHT AND HEAT COMPANY

Address: 800 Union Trust Building, Pgh. 19, Penna.

Farm: J. M. Miller

Well No.: 2519

District: Liberty

County: Marshall

The surface of tract is owned in fee by:

Address: 2548 Altius St.

Mineral rights are owned by:

Address: 2548 Altius St.

Drilling commenced: April 8, 1920

Drilling completed: May 24, 1920

Date Shot: From To

With:

Open Flow 1/10ths Water in 1/10ths Merc. in

Inches

Volume

Cu. Ft.

Rock Pressure

In.

Oil

Gallons

Fresh water

Salt water

Casing and Tubing

Used in Drilling

Left in Well

Packers

Kind of Packer

Size

116

13

10 1/4

8 1/2

6 1/6

6 1/8 x 4

anchor

1625

1625

Depth set:

2399

Perf. top

Perf. bottom

Perf. top

Perf. bottom

Casing Cemented

Size

No. Ft.

Date

COAL WAS ENCOUNTERED AT

FEET

INCHES

FEET

INCHES

FEET

INCHES

FEET

INCHES

Formation

Clay

Native Coal

Appleton Coal

Red Rock

Big Dunkard

Salt Sand

Newcom Sand

Big Lime

Big Injun

Red Rock

Jack Rock

Lime

Jordan Stray

Total Depth

2460

2445

2460

Looking at the data, there are multiple layers of rock, with specific codes indicating their characteristics and properties.
<table>
<thead>
<tr>
<th>Formation</th>
<th>Color</th>
<th>Top</th>
<th>Bottom</th>
<th>Oil, Gas or Water</th>
<th>Depth Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slate white soft</td>
<td>13</td>
<td>527</td>
<td>540</td>
<td>Slate &amp; Shells soft</td>
<td>1978 2004 26</td>
</tr>
<tr>
<td>Lime white hard</td>
<td>20</td>
<td>540</td>
<td>560</td>
<td>Slate white soft</td>
<td>2004 2040 36</td>
</tr>
<tr>
<td>Red Rock red soft</td>
<td>40</td>
<td>560</td>
<td>600</td>
<td>Lime shells white</td>
<td>2040 2044  4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Slate dark soft</td>
<td>2044 2050  6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sand dark hard</td>
<td>2050 2080 30</td>
</tr>
<tr>
<td>Slate white soft</td>
<td>50</td>
<td>600</td>
<td>650</td>
<td>Slate &amp; shells soft</td>
<td>2080 2360 250</td>
</tr>
<tr>
<td>Lime white hard</td>
<td>50</td>
<td>650</td>
<td>700</td>
<td>Red Rock red soft</td>
<td>2360 2367  7</td>
</tr>
<tr>
<td>Slate dark soft</td>
<td>60</td>
<td>700</td>
<td>760</td>
<td>Gritty Lime hard</td>
<td>2367 2375  8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Slate dark soft</td>
<td>2375 2380  5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lime dark hard</td>
<td>2390 2410 20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Slate dark soft</td>
<td>2410 2438 28</td>
</tr>
</tbody>
</table>

Date: September 30, 1957

APPROVED

THE MANUFACTURERS LIGHT & HEAT CO. Owner

By: [Signature]

(Title) Land Agent
STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

Company: THE MANUFACTURERS LIGHT AND HEAT COMPANY
Address: 800 UNION TRUST BLDG., PUB., PENNA.
Farm: J. M. Miller

Location (water): No address
Well No.: 2519
Elev.: 860
District: Liberty
County: Marshall
The surface of the tract is owned in fee by:
Address:

Mineral rights are owned by:
Address:

Drilling commenced: April 8, 1920
Drilling completed: May 24, 1920
Date Shot:
From: To:

With:
Open Flow: 100% Water in:
100% Merc. in:
Volume:

Rock Pressure: 900 lbs.

Oil: hbls., 1st 24 hrs.
Fresh water:
Salt water:

Formation | Color | Hard or Soft | Top | Bottom | Oil, Gas or Water | Depth Found | Remarks
---|---|---|---|---|---|---|---
Clay | | | 0 | 20 | None | | |
Native Coal | | 70 | | | | |
Maplestown Coal | | 415 | | | | |
Pittsburgh Coal | | 520 | | | | |
Red Rock | | 815 | | | | |
Big Dunkard | | 1015 | | | | |
Salt Sand | | 1525 | | | | |
Maxon Sand | | 1568 | | | | |
Big Lime | | 1600 | | | | |
Big Injun | | 1647 | | | | |
Red Rock | | 2360 | | | | |
Pink Rock | | 2380 | | | | |
Lime | | 2438 | | | | |
Gordon Stray | | 2445 | | | | |
Total Depth | | | | 2460 | | |

Casing and Tubing | Used in Drilling | Left in Well | Packers
---|---|---|---
Size | Kind of Packer
10 | Anchor
12 | 6-5/8 x 4
10 | Size of
8 1/4 | 1040.6 | 1040.6 | 1040.6 | Depth set: 2395
5 5/16 | 1625 | 1625 | | 

Casing Cemented: Size: No. ft.

Coal was encountered at: 70 FEET 1 INCHES

415 FEET 3 1/2 INCHES 25 INCHES

Feet Inches

Formation | Color | Hard or Soft | Top | Bottom | Oil, Gas or Water | Depth Found | Remarks
---|---|---|---|---|---|---|---
Clay | | | 0 | 20 | None | | |
Native Coal | | 70 | | | | |
Maplestown Coal | | 415 | | | | |
Pittsburgh Coal | | 520 | | | | |
Red Rock | | 815 | | | | |
Big Dunkard | | 1015 | | | | |
Salt Sand | | 1525 | | | | |
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Big Lime | | 1600 | | | | |
Big Injun | | 1647 | | | | |
Red Rock | | 2360 | | | | |
Pink Rock | | 2380 | | | | |
Lime | | 2438 | | | | |
Gordon Stray | | 2445 | | | | |
Total Depth | | | | 2460 | | |

Bottom | Oil, Gas or Water | Depth Found | Remarks
---|---|---|---
20 | 74 | | Little Gas
421 | | | 
527 | 845 | | Gas 1535 - 1560
1065 | 1565 | | Little Gas at 1030
1592 | 1592 | | Gas 1752 - 1754
1647 | | | 
1910 | 2367 | | 
2395 | 2445 | | Gas at 2450
2460 | | | 

May 26, 1920 - Well packed in Lime at 2395 with 1 6-5/8 x 4 anchor packer. Anchor 65 ft. - 3 qts.
Above Packer 2400 ft. - 119 qts.
Screwage 25
Cage on first joint, Packer on 3rd joint.
1 Min. 2 Min. 3 Min. 4 Min. 5 Min.
150 250 340 460 490

(Over) DEC 20 1968
<table>
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<th>Remarks</th>
</tr>
</thead>
</table>

Date: May 5, 1954

Approved by: The Manufacturers Light and Heat Co.