

39°50'00"

Latitude

80°32'30"

Longitude



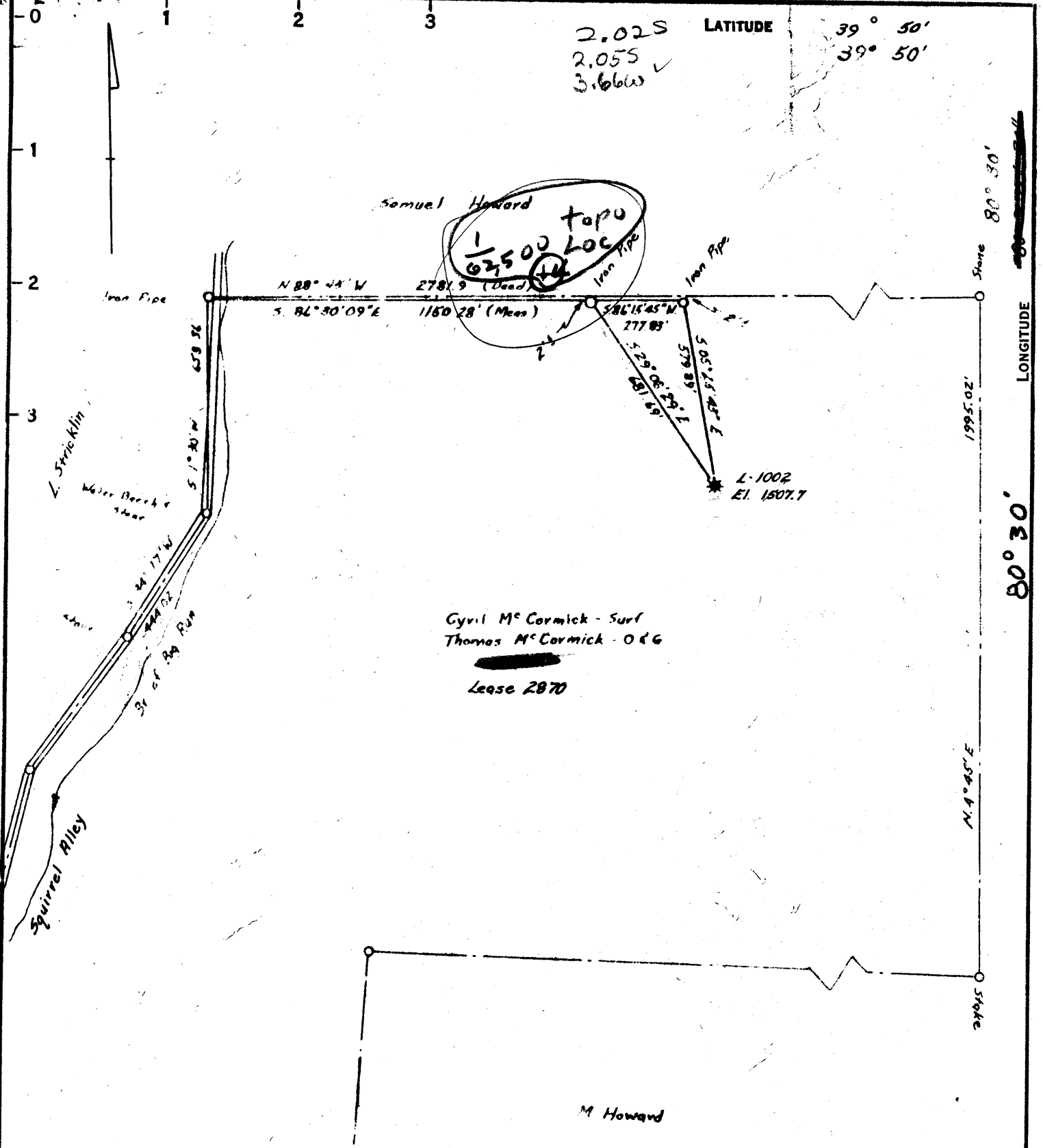
Topo Location

7.5' Loc. _____ 15' Loc. _____
 _____ (calc.) _____

Company Manufact H&H
Farm LH McCormick #1
15' Quad _____
 (sec.)
7.5' Quad Cameron
District Liberty

WELL LOCATION PLAT

County OSI **Permit** 120



Reconditioned & Partially Plugged

COAL OWNED BY _____
 NEW LOCATION
 DRILL DEEPER
 ABANDONMENT

I, the undersigned, have carefully examined the location of the well shown on this map and find it to be in accordance with the location shown on the original location map. I hereby certify that the location of the well is correct and that the well is in good condition and is capable of producing oil and gas in accordance with the provisions of the oil and gas lease thereunder.
 Robert M. Heil 3615 (JF)

COMPANY The Manufacturers Light And Heat Company
 ADDRESS 800 Union Trust Bldg. Pittsburgh, Penna.
 FARM L. H. & E. M. McCormick
0-25/24 ACRES 177 LEASE No. 2870
 WELL (FARM) No. 1 SERIAL No. L-1002
 ELEVATION (SPIRIT LEVEL) 1507.7'
 QUADRANGLE Cameron Wb. & P. 7 1/2' (1/62500) S.E.
 COUNTY Marshall DISTRICT Liberty
 POINT OF REFERENCE Highest Point On Knob At Well (See U.S.G.S. Topo.)
 FILE No. _____ DRAWING No. 4-25-701
 DATE March 29, 1963 SCALE 1" = 400'

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

WELL LOCATION MAP

FILE No. MARS-120-P

+ 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.

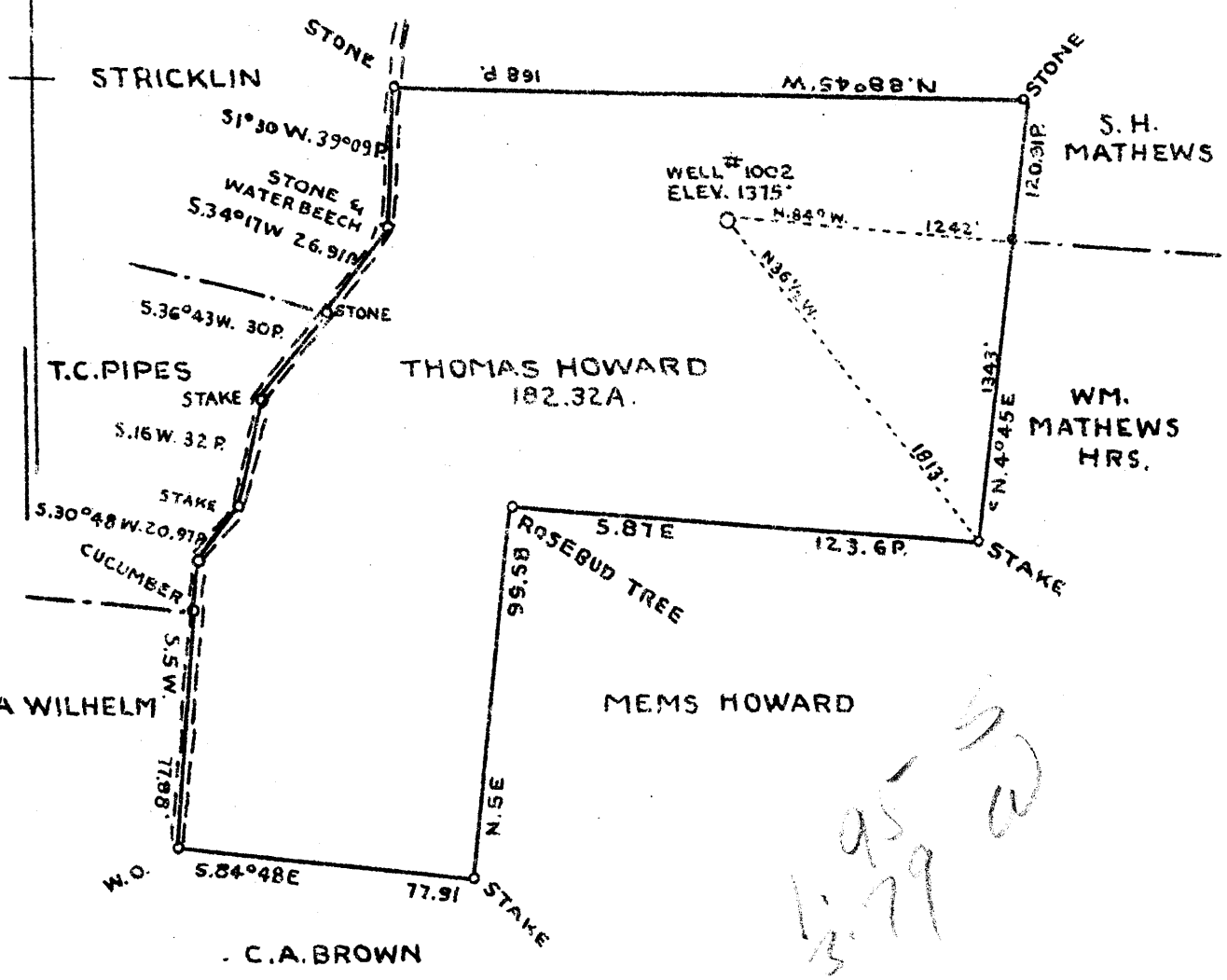
0 1 2 3

1

2

3

SAML. HOWARD



COAL OWNED BY STATE OF WEST VIRGINIA

- New Location...
- Drill Deeper.....
- Abandonment.....

Company **THE MANUFACTURERS LIGHT AND HEAT CO**
 Address **800 UNION TRUST BLDG. PITTSBURGH PA.**
 Farm **THOMAS HOWARD**
 Tract _____ Acres **182.32** Lease No. **2870**
 Well (Farm) No. **1** Serial No. **1002**
 Elevation (Spirit Level) **1315'**
 Quadrangle **CAMERON S.E.**
 County **MARSHALL** District **LIBERTY**
 Engineer *J. L. ...*
 Engineer's Registration No. _____
 File No. **F. 8. 28 P. 14** Drawing No. **Y-10: 219**
 Date **JULY-23-1941** Scale **1" = 800'**

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

WELL LOCATION MAP
 File No. **MARS-120**

+ 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.



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Storage

Quadrangle _____

Permit No. Partial Plugging MARS-120-P

WELL RECORD

Oil or Gas Well _____

(KIND)

Company The Mfrs. Lt. and Ht. Co.
Address 800 Union Trust Bldg. Pittsburgh, Pennsylvania 15219
Farm L.H. & E.M. McCormick Acres 177

Location (waters) _____

Well No. 1002 Elev. 1507.7'

District Liberty County Marshall

The surface of tract is owned in fee by _____

Address _____

Mineral rights are owned by _____

Address _____

Drilling commenced September 27, 1963

Drilling completed November 29, 1963

Date Shot 11/29/63 From Big Injun.

With Orifice Well Tester

Open Flow 4.6 /10ths Water in 3/4 Inch

/10ths Merc. in _____ Inch

Volume 28,282 Cu. Ft.

Rock Pressure 30 lbs. 24 hrs.

Oil _____ bbls., 1st 24 hrs.

Fresh water _____ feet

Salt water _____ feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
18			
10 3/4"	507'	507'	Size of
8 5/8"	1187'	1547'	
7"	1498'	2232'	Depth set
5 3/16			
4 1/2"	2262'	2262'	Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____

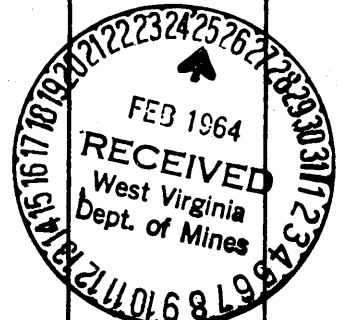
COAL WAS ENCOUNTERED AT 1128 FEET _____ INCHES

_____ FEET _____ INCHES _____ FEET _____ INCHES

_____ FEET _____ INCHES _____ FEET _____ INCHES

Formation	Color	THICKNESS	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
✓ Pittsburgh Coal		8	1128	1136			
✓ 1st Salt Sand		24	1796	1820			
✓ 3rd Salt Sand		24	1934	1958			
✓ Maxton Sand		26	2132	2158			
✓ Lower Maxton Sand		22	2208	2230			
✓ Big Lime		30	2236	2266			
✓ Big Injun Sand		265	2270	2535			
Total Depth				2519			
4 1/2" Formation Packer							
Shoe set at			2263'				

2236
1508
728



WEST VIRGINIA DEPARTMENT OF MINES
OIL & GAS DIVISION
W E L L R E C O R D

Permit No. Mars-120
Cameron Quad.
Company
Address
Farm
Well No.
District
Surface
Commenced Deeper
Completed Deeper
Flow
Volume
Rock Pressure

Manufacturers Light & Heat Co.,
800 Union Bldg., Pittsburgh, Pa.
Thomas Howard Estate Acres 182
1 - 1002 Elev. 1375'
Liberty Marshall County
Denton McCormick, Cameron, W. Va.
6-24-41
7-15-41
32/10ths Water in 1½"
260,000 Cu.Ft.
62 lbs 48 hrs.

Gas Well

Packer - Spang Anchor
Size 6-58X 4
Depth set 3085
Coal 1130' 72"

Pittsburgh Coal 1130 1136

DRILLING DEEPER

Big Injun	2366	2525	
Slate & Shells	2525	2888	
30 Foot Sand <i>See</i>	2888	2930	
Light Slate	2930	2950	
Pink Rock	2950	2960	
Slate & Shells	2960	3066	
50 Foot Sand	3066	3115	
Slate	3115	3135	
Stray & Gordon	3135	3174	Gas 3139-3145
Light Slate	3174	3205	
4th Sand	3205	3212	Gas 3207-3209
Slate	3212	3232	
5th Sand	3232	3237	
Slate	3237	3263	
Total Depth	3263		

3263
2366

897-

THOMAS HOWARD NO. 1002 WELL.

Liberty District, Marshall County, W. Va.
By Manufacturers Light & Heat Co.
Completed June 8, 1910.
Record from Mr. Schillhalm Sept. 30, 1939.

	Top.	Bottom.
Pittsburgh Coal	1130	- 1136
Little Dunkard Sand	1450	- 1580
Big Dunkard Sand	1630	- 1650
Salt Sand (show gas)	1905	- 1985
Maxton Sand (show gas)	2210	- 2225
Big Lime	2228	- 2275
Big Injun Sand	2273	- 2346
Total depth		2366