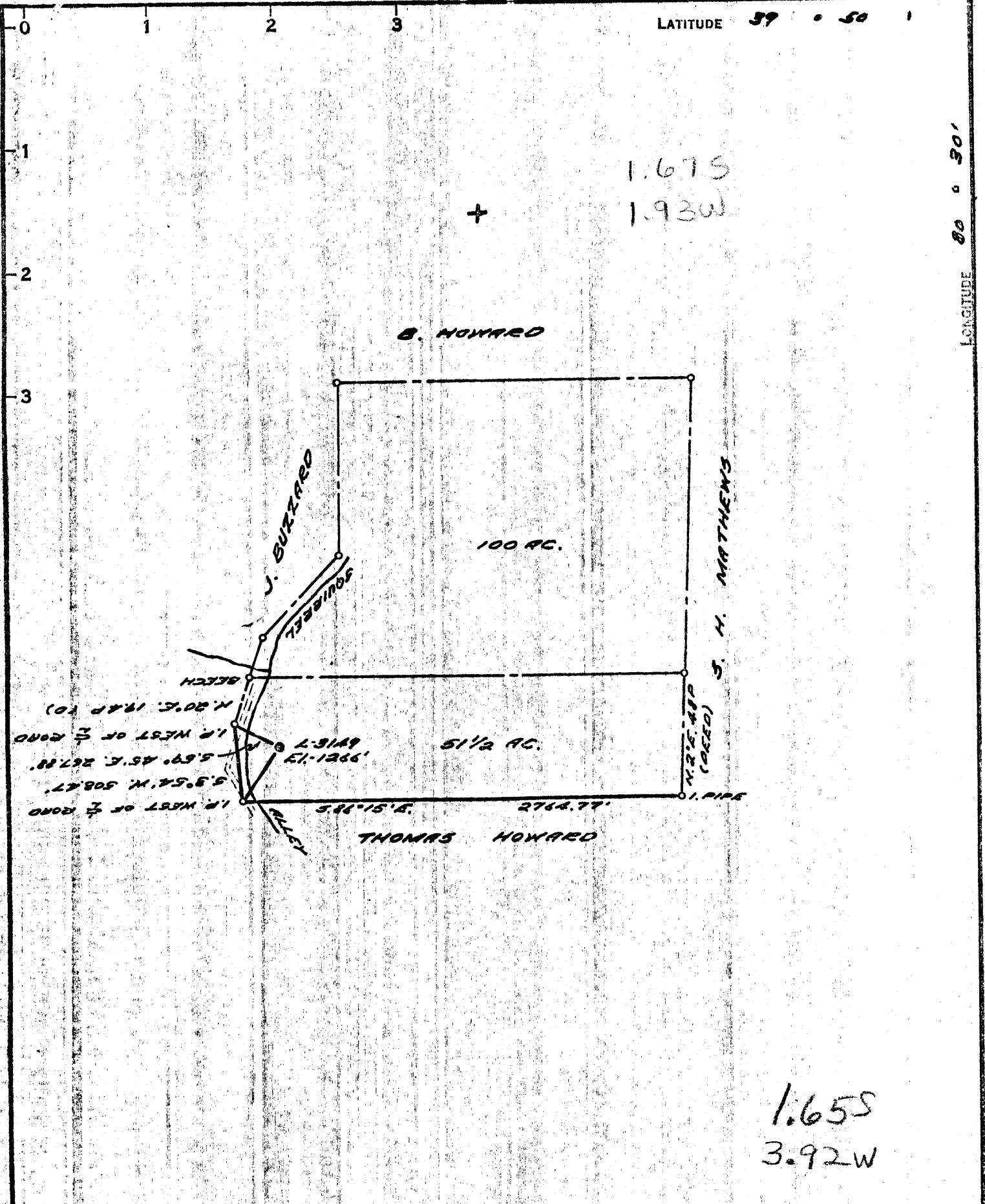


LATITUDE 39 0 50 1

LONGITUDE 80 0 30'



1.65S
3.92W

COAL OWNED BY M. A. HANNA
PART. PLUG 1

- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT 8-22-69

"I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia."
Minimum degree of accuracy is one part in 2265

Signed Robert M. Hill 3615

COMPANY THE MANUFACTURERS LIGHT & HEAT
ADDRESS 800 UNION TRUST BLDG., PSH. PA.
FARM S. HOWARD
MAP 0-25/34 ACRES 155 LEASE NO. 2270
WELL (FARM) NO. 2 SERIAL NO. 3149
ELEVATION (SPIRIT LEVEL) 1266'
QUADRANGLE CAMERON 15' 5E
COUNTY MARSHALL DISTRICT LIBERTY
POINT OF PROVEN ELEVATION 4565 G.M. AT FISH CR.

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION
CHARLESTON
WELL LOCATION MAP

FILE NO. MARS-483-B-PPT

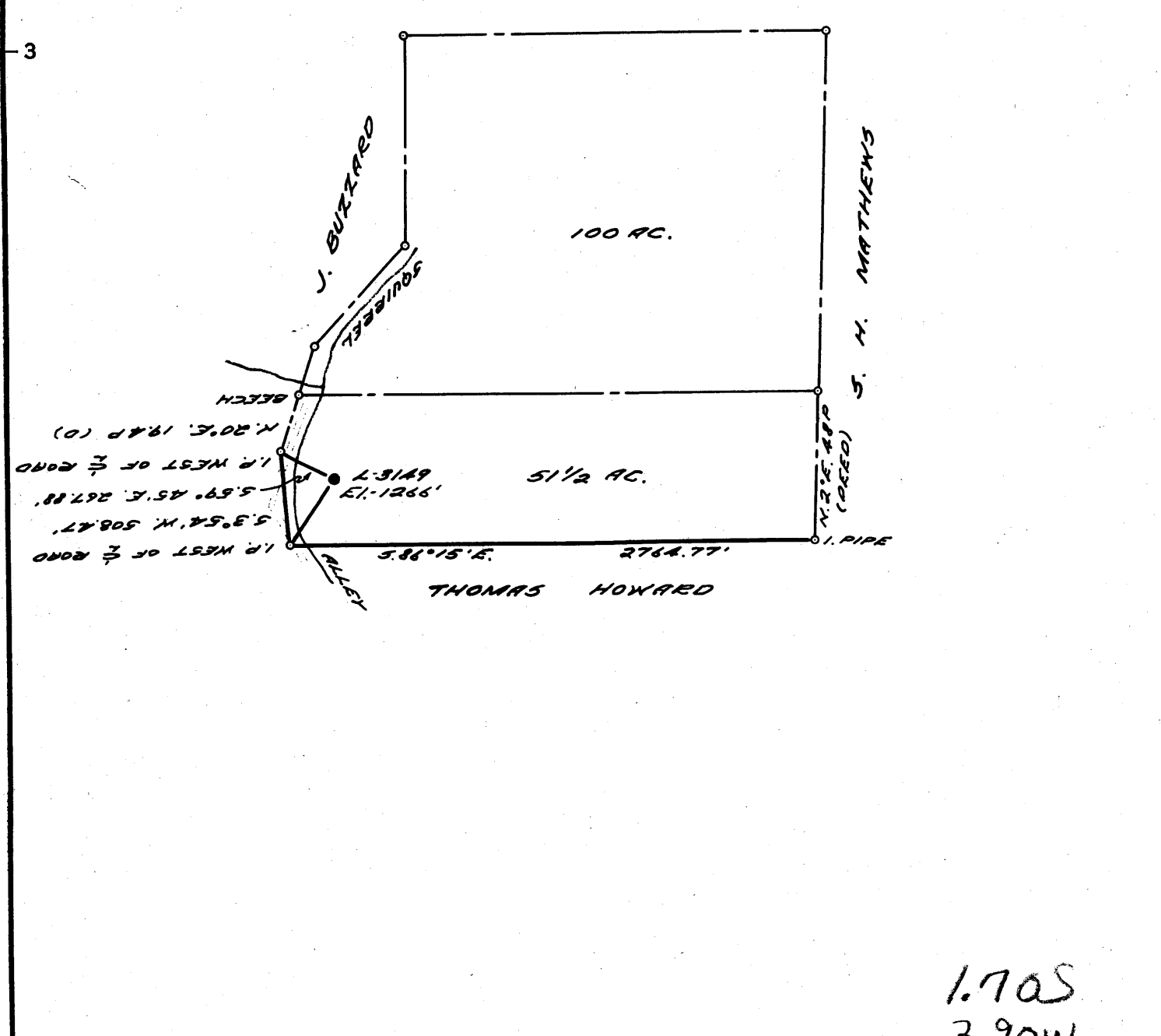
FILE NO. 1-29-9
DATE 7 MAY 1965 SCALE 1" = 800'

+ 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 LATITUDE 39 ° 50 ' 1

1
2
3 LONGITUDE 80 ° 30 ' P



1.70S
3.90W

COAL OWNED BY M. A. HANNA
PART. PLUG

- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT

"I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia."
Minimum degree of accuracy is one part in 2265

Signed Robert M. Haill 3615
J.F.

COMPANY THE MANUFACTURERS LIGHT & HEAT
 ADDRESS 800 UNION TRUST BLDG., PGH. PA.
 FARM S. HOWARD
 MAP 0-25/24 ACRES 155 LEASE NO. 2270
 WELL (FARM) NO. 2 SERIAL NO. 31A9
 ELEVATION (SPIRIT LEVEL) 1266'
 QUADRANGLE CAMERON 15' SE
 COUNTY MARSHALL DISTRICT LIBERTY
 POINT OF PROVEN ELEVATION USGS B.M. AT FISH CR.
 FILE NO. _____ DRAWING NO. Y-28-9
 DATE 7 MAY 1965 SCALE 1" = 800'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON
 WELL LOCATION MAP
 FILE NO. MARS-483-A
 + 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.

SAMUEL HOWARD NO. 3149 WELL.

Liberty District, Marshall County, W. Va.
By Manufacturers Light & Heat Co.
Completed May 29, 1927.
Record from Mr. Schillhalm Sept. 30, 1939.

A

	Top.	Bottom.
Pittsburgh Coal	898	904
Murphy Sand	1090	1105
Little Dunkard Sand	1300	1328
Big Dunkard Sand	1390	1438
Little Lime (water, 1585')/////	1980	1990
Big Lime	2005	2060
Big Injun Sand (gas, 2150')	2060	2310
50-Foot Sand	2850	2880
Gordon Sand (gas, 2908-2921')	2908	2948
Total depth		3059



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Rotary
Spudder
Cable Tools
Storage

Quadrangle Cameron

WELL RECORD

Oil or Gas Well Storage
(KIND)

Permit No. MARS-183 ^{PP}

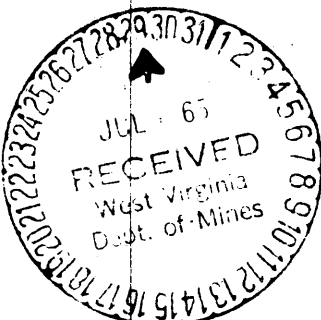
Company The Manufacturers Light & Heat Company
Address 800 Union Trust Building, Pgh. 19, Pa.
Farm Samuel Howard Acres 155
Location (waters) Big Run
Well No. 3119 Elev. 1266.00'
District Liberty County Marshall
The surface of tract is owned in fee by Joseph Shaphard
Star Route 2 Address Cameron, W.Va.
Mineral rights are owned by N.H. Hinerman, O.E. Burge
and M. Richards Address Cameron, W.Va.
Drilling commenced May 27, 1965
Drilling completed June 14, 1965
Date Shot Not Shot From N/A To N/A
With N/A
Open Flow 2.2"/10ths Water in 1 Inch
—"/10ths Merc. in — Inch
Volume 36.53 MCF Cu. Ft.
Rock Pressure 33 lbs. 24 hrs.
Oil No Oil bbls., 1st 24 hrs.
WELL ACIDIZED No
WELL FRACTURED No

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size <u>OD</u>			
16			Kind of Packer <u>Anchor</u>
13			Size of <u>1 1/2" X 7"</u>
10			Depth set <u>2083'</u>
8 3/4" <u>8-5/8"</u>	<u>00</u>	<u>1398'</u>	
6 5/8" <u>7"</u>	<u>00</u>	<u>2004'</u>	
5 3/16"			
3" <u>4-1/2"</u>	<u>00</u>	<u>193'</u>	Perf. top <u>N/A</u>
2" <u>2-3/8"</u>	<u>00</u>	<u>2089'</u>	Perf. bottom <u>N/A</u>
Liners Used			Perf. top <u>N/A</u>
			Perf. bottom <u>N/A</u>

CASING CEMENTED — SIZE — No. Ft. — Date —
No Tubing or Casing Cemented.
COAL WAS ENCOUNTERED AT 894 FEET 00 INCHES
894 FEET 00 INCHES 902 FEET 00 INCHES
— FEET — INCHES — FEET — INCHES

RESULT AFTER TREATMENT N/A
ROCK PRESSURE AFTER TREATMENT N/A
Fresh Water N/A Feet N/A Salt Water N/A Feet N/A

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Pittsburgh Coal			894	902			
Big Dunkard			1380	1430			
st Salt			1550	1584			
rd Salt			1705	1734			
axton Sand			1894	1914			
ig Lime			1997	2033			
ig Injun			2036	2300 (Assumed)			
Total Depth				2281'			2138' to 2151' @ 17% Porosity and 60% Water Saturation.



Notes: The 8-5/8" and 7" Casing was not disturbed, not cemented. Well plugged back from original Total Depth of 3059' as follows: 3059' to 2833' Aquagel, 2833' to 2750' Cement, 2750' to 2330' Aquagel, 2330' to 2281' Cement. Plugged back by Well Service Inc. using the original 4-1/2" Tubing. Well logged to 2282' by Schlumberger Well Survey Corp..

atg

J.M.F.

APPROVED BY
D.T. Cable
D. T. CABLE
SUPERVISOR