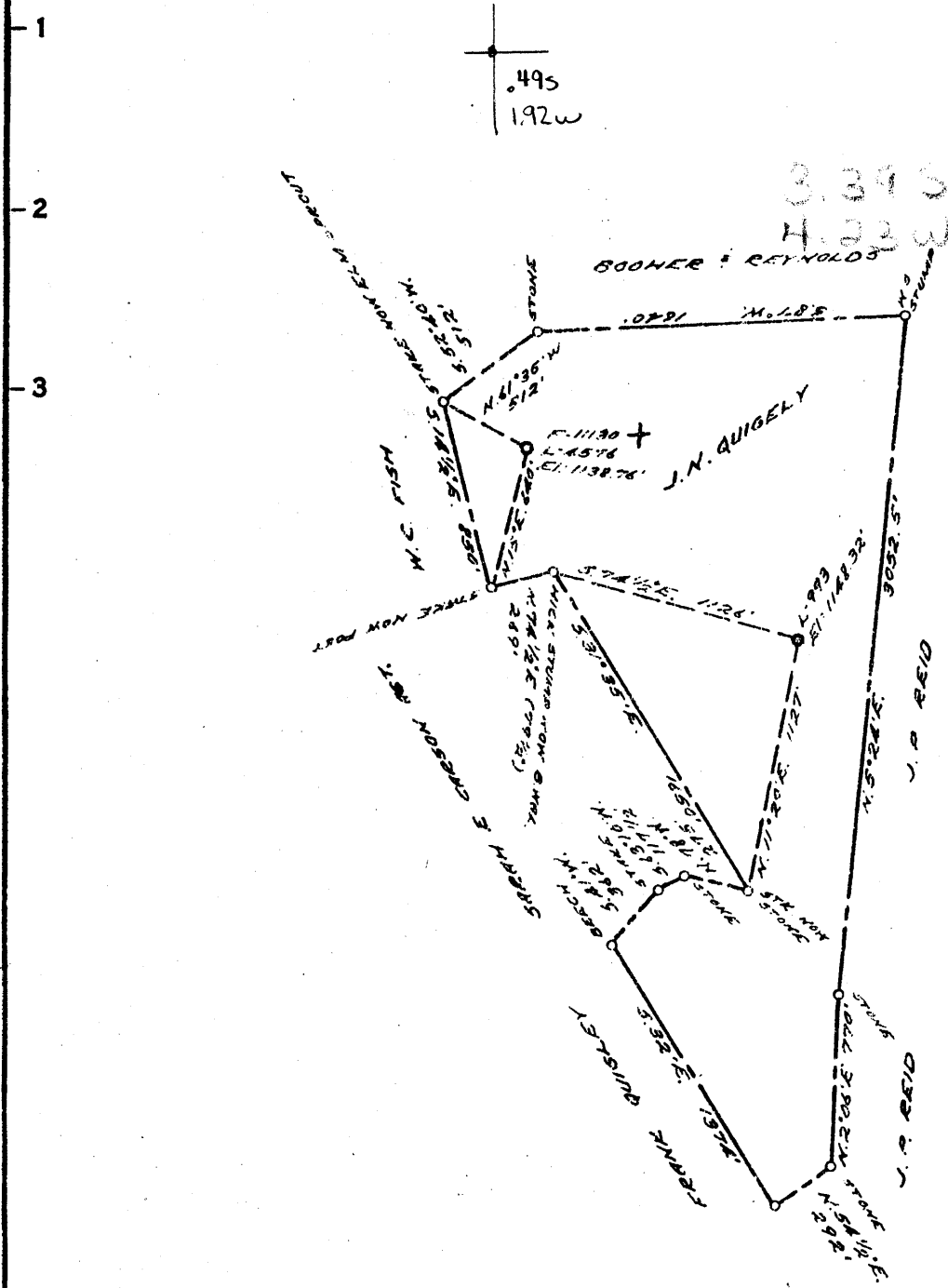


39 47 30

80 32 30

LONGITUDE 80 0 30



COAL OWNED BY _____
 RECONDITION _____
 NEW LOCATION...
 DRILL DEEPER...
 ABANDONMENT...

C, D
 30011
 0-25-29

COMPANY THE MANUFACTURERS LIGHT & HEAT CO
 ADDRESS 800 UNION TRUST BLDG. PCH. PA.
 FARM J. N. QUIGLEY
 TRACT _____ ACRES 116 LEASE No. 26952
 WELL (FARM) No. 12 SERIAL No. 1-993
 ELEVATION (SPIRIT LEVEL) 1148.32'
 QUADRANGLE CAMERON SE
 COUNTY MARSHALL DISTRICT LIBERTY
 ENGINEER Robert M. Hill
 ENGINEER'S REGISTRATION No. 361-E (J.F.)
 LE No. _____ DRAWING No. Y-25-176
 DATE 10 MAY 1960 SCALE 1" = 800'

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

WELL LOCATION MAP

FILE No. MARS-389-R

+ 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

Quadrangle CAMERON

Permit No. MARS-389-R

WELL RECORD

Oil or Gas Well GAS
STORAGE
(KIND)

Company The Manufacturers Light and Heat Company
 Address 800 Union Trust Bldg., Pittsburgh 19, Pa.
 Farm J. N. Quigley Acres 116
 Location (waters) _____
 Well No. L-993 Elev. 1148.32'
 District Liberty County Marshall
 The surface of tract is owned in fee by _____
 Address _____
 Mineral rights are owned by _____
 Address _____
 Drilling commenced July 8, 1960
 Drilling completed January 26, 1961
 Date Shot 1/31/61 From 1956 To 2180
 With Orifice Well Tester
 Open Flow 0 /10ths Water in _____ Inch
 _____ /10ths Merc. in _____ Inch
 Volume None Cu. Ft.
 Rock Pressure 20 lbs. 48 hrs.
 Oil _____ bbls., 1st 24 hrs.
 Fresh water _____ feet
 Salt water _____ feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16			Kind of Packer
18 3/8"	214'	214'	
10 3/4"	1198'	1198'	Size of
8 1/2 5/8"	1562'	1562'	
7 1/2 7"	1936'	1956'	Depth set
5 3/16			
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED SIZE No. Ft. Date

COAL WAS ENCOUNTERED AT 815 FEET INCHES

_____ FEET _____ INCHES FEET _____ INCHES

_____ FEET _____ INCHES FEET _____ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
		THICKNESS					
✓ Pittsburgh Coal		7	815	822	1930		
✓ Big Dunkard Sand		35	1315	1350	1148		
✓ Maxton Sand		22	1788	1810	782		
✓ Lower Maxton Sand		19	1908	1927			
✓ Big Lime			1930				
✓ Big Injun Sand				2228			
Old 7" Casing		20	1936	1956			
New 7" casing set at				1936			
Total Depth				2180			
					The 10" casing was cemented twice. First at 1198' second at 870' 1936' of new 7" casing was run on a steel shoe and set on top of 20' of old 7" casing, left in hole.		



Liberty District, Marshall County, W. Va. → 389
 Manufacturers Light & Heat Co., 800 Union Tr. Bldg., Pittsburgh, Pa.
 On 116 acres, surface owned by John and Annie Quigley, Wells, W. Va.,
 and mineral rights by ML&H Co., Pittsburgh, Pa.

Drilled prior to June 1, 1929.

Elevation, 1200'.

1 1/2" casing, 217'; 10", 1210'; 6-5/8", 1954'.

2 packers, 6-5/8" x 4; No. 1 set 62' from bottom; No. 2 set 88' 11"
 from bottom.

Coal was encountered at 815' and 1473-1478'.

Abandonment reported to Dept. of Mines June 25, 1931.

MAAS-11-A

	Top.	Bottom.
Bluff Sand	595	
Pittsburgh Coal	815	
Sand	900	
Gas? Sand	955	
Salt? Sand	1070	
Red rock	1090	
Black slate	1132	
Red rock	1185	
White lime	1210	1247
Little Dunkard Sand	1247	1272
Black slate	1272	1296
Lime	1296	1315
Slate	1315	1342
Big Dunkard Sand	1342	1400
Lime	1400	1409
Slate	1409	1473
Coal	1473	1478
Sand	1478	1538
Lime	1538	1552
Black slate	1552	1567
Lime, shells, slate	1567	1576
White slate	1576	1590
Sand	1590	1623
Lime	1623	1643
Slate	1643	1699
Gas Sand	1699	1745
White slate	1745	1760
Slate	1830	1841
Lime	1917	1926
Pencil Cave	1926	1931
Lime	1931	1954
Big Injun Sand	1954	2049
Black slate	2049	2068
Big Injun Sand	2078	2223
Slate	2223	2228
Squaw Sand	2228	2264
White slate	2264	2304
Lime	2304	2327
Slate	2327	2362
White sand	2362	2387
Slate	2387	2403
Lime	2403	2411
Dark slate	2411	2433
Lime	2433	2480

JOHN QUIGLEY NO. 993 WELL. (Continued)

	Top.	Bottom.
White slate	2480	- 2515
Lime	2515	- 2547
Slate	2547	- 2588
30-Ft. Lime	2588	- 2632
Black slate	2632	- 2668
Red rock	2668	- 2708
Sand and shells	2708	- 2727
Slate	2727	- 2761
Sand	2761	- 2806
White slate	2806	- 2819
First pay (steel line), 2822'		
Gordon Stray Sand	2825	- 2843
Total depth		2872