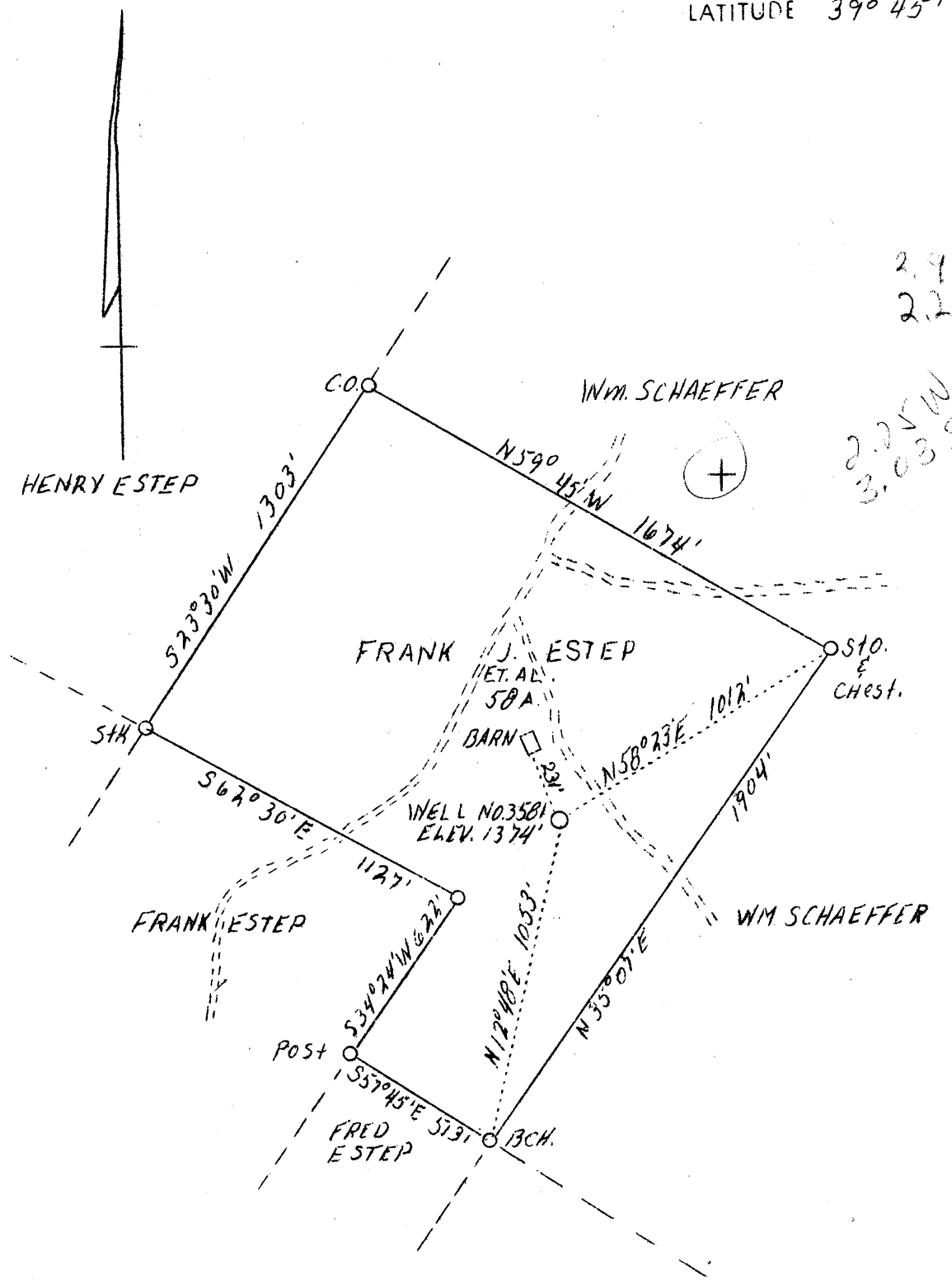


LATITUDE 39° 45'

LONGITUDE 80° 40'



2,913  
2,230

2,255  
3,035

COAL OWNED BY  
ROOSEVELT COAL & COKE CO.  
WILMERDING, PA.

Company	The Mfg. Light & Heat Co.
Address	800 Union Tr. Bldg. Pittsburgh, Pa.
Farm	Frank J. Estep et al
Tract	1
Acres	58
Lease No.	16970
Serial No.	3581
Well (Farm) No.	1874
El. (S. L.)	1374
Quadrangle	Littleton N.W.
County	Wetzel
District	Proctor
Eng.	A.J. Russell
Drawing No.	Y - 8 266
Date	4/11/39
Scale	" - 500'

STATE OF WEST VIRGINIA  
Department of Mines  
OIL AND GAS DIVISION  
Charleston

WELL LOCATION MAP

File No. WET-224

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

- Denotes one inch spaces on border lines of original tracing.

WEST VIRGINIA DEPARTMENT OF MINES

OIL & GAS DIVISION

WELL RECORD

Permit No. Wet-224

Gas Well

Littleton N. W. Quad.

CASING & TUBING

Company	Manufacturers Light & Heat Co.	10	510	510
Address	800 Union Tr. Bldg., Pittsburgh, Pa.	8-1/4	1725	1725
Farm	F. J. Estep ACRES 58	6-5/8	2200	2200
Well No.	3581 ELEV. 1374			
District	Proctor - Wetzel County			
Surface	F. J. Estep, R-1, B-57, Proctor, W.Va.			
Mineral	Mfr. Light & Heat Co., Pgh. Pa.			
Commenced	May 26, 1939	COAL AT:		
Completed	July 17, 1939	1100'	36"	
Shot	-	1199	60"	
Open Flow	12/10ths Merc. in 6-5/8 inch			
Volume	3,585,000 c.f.			
Rock Pressure	240 lbs. 48 hrs.			
Fresh Water	155 - 1199			
Salt Water	1350 - 1460			

Formation Color		Top	Base	Result	Formation Color		Top	Base	Result
Slate	s	0	14		Slate	h	1015	1025	
Sand	h	14	20		Lime	bkn	1025	1055	
Slate	s	20	70		Slate	s	1055	1065	
Red Rock	s	70	78		Lime	h	1065	1100	
Lime	h	78	100		Mapletown Coal	s	1100	1103	
Slate	s	100	150		Lime	h	1103	1135	
Gritty Lime	h	150	170	W 155	Slate	s	1135	1150	
Slate	s	170	235	1/2 b per	Lime	h	1150	1159	
Red Rock	s	235	245	hr	Slate	s	1159	1183	
Slate	s	245	260		Lime	h	1184	1199	
Red Rock	s	260	270		Pgh. Coal	s	1199	1204	3/4 B Water
Lime	h	270	278		Slate	s	1204	1240	
Slate	s	278	315		Sand	h	1240	1250	
Lime	h	315	325		Slate	s	1250	1282	
Slate	s	325	372		Sand	h	1282	1298	
Red Rock	s	372	430		Slate	s	1298	1306	
Gritty Lime	h	430	450		Sand	h	1306	1376	
Red Rock	s	450	456		Gas 1324-1329				
Slate	s	456	465		Water 1350-1376				
Red Rock	s	465	485		Slate	s	1376	1387	
Slate	s	485	525		Red Rock	s	1387	1400	
Gritty Lime	h	525	538		Slate	s	1400	1410	
Slate	s	538	555		Red Rock	s	1410	1422	Cave
Lime	h	555	567						1410-1422
Slate	s	567	650		Slate	s	1422	1445	
Red Rock	s	650	670		Lime	h	1445	1450	
Slate	s	670	700		Slate	s	1450	1460	
Lime	h	700	708		Red Rock	s	1460	1520	Cave
Slate	s	708	720						1460-1500
Red Rock	s	720	730		Slate	s	1520	1685	
Slate	s	730	740		Big Dunkard	s	1685	1725	
Lime	s	740	746		Slate	s	1725	1803	
Slate	s	746	758		Salt Sand	h	1803	1872	
Sand	sharp	758	764		Slate & Lime		1872	2058	
Slate	s	764	776		Water 1975-1985	Filled	400'	1000'	1 hr.
Lime	h	776	785						5 hr.
Sand	h	785	798		Sand	h	2058	2070	
Slate	s	798	820		Sand, Slate, Lime		2070	2198	
Lime	h	820	828		Maxon Sand	h	2198		
Slate	s	828	855		Gas 2214-2224				
Sand	h	860	870		" 2228-2236				
Slate	s	870	900		Total Depth			2238	
Lime	h	900	915						
Red Rock	s	915	925						
Lime	h	925	972						
Red Rock	s	972	978						
Lime	h	978	1015						

Frank J. Estep et al. No. 1-3581 Well (2701)  
 (Lease 16,970 - 58 acres)

Proctor Dist., Wetzel Co., W. Va.; on ridge between Whetstone Creek and Steenor Fork 1.5 miles S 5° E of Saint Joseph; begun May 26, 1939; completed July 17, 1939; by Manufacturers Light & Heat Co.; elevation, 1374' L.

	Top Feet	Bottom Feet
<u>Permian-Dunkard (270'+)</u>		
Slate, soft.....	0	14
Sand, <u>Gilmore</u> , hard.....	14	20
Slate, soft.....	20	70
Red rock.....	70	78
Lime, hard.....	78	100
Slate, soft.....	100	150
Lime (sand ?), <u>Taylor</u> , gritty (fresh water, 155' - $\frac{1}{2}$ bailer per hr.)..	150	170
Slate, soft.....	170	235
Red rock, soft.....	235	245
Slate, soft.....	245	260
Red rock.....	260	270
Lime, hard.....	270	278
Slate, soft.....	278	315
Lime, hard.....	315	325
Slate, soft.....	325	372
Red rock, soft.....	372	430
Lime, gritty, hard.....	430	450
Red rock, soft.....	450	456
Slate, soft.....	456	465
Red rock, soft.....	465	485
Slate, soft.....	485	525
Lime (sand ?) <u>Fish Creek</u> , gritty, hard.....	525	538
Slate, soft.....	538	555
Lime, hard.....	555	567
Slate, soft.....	567	650
Red rock, soft.....	650	670
Slate, soft.....	670	700
Lime, hard.....	700	708
Slate, soft.....	708	720
Red rock, soft.....	720	730
Slate, soft.....	730	740
Lime, soft.....	740	746
Slate, soft.....	746	758
Sand, <u>Lower Marietta</u> , sharp.....	758	764
Slate, soft.....	764	776
Lime, hard.....	776	785
Sand, <u>Mannington</u> , hard.....	785	798
Slate, soft.....	798	820
Lime, hard.....	820	828

	Top Feet	Bottom Feet
Slate, soft.....	828	855
Sand, <u>Waynesburg</u> , hard.....	860	870
<u>Pennsylvanian-Monongahela (334')</u>		
Slate, soft.....	870	900
Lime, hard..	900	915
Red rock, soft.....	915	925
Lime, hard.....	925	972
Red rock, soft.....	972	978
Lime, hard.....	978	1015
Slate, hard.....	1015	1025
Lime, broken.....	1025	1055
Slate, soft.....	1055	1065
Lime, hard.....	1065	1100
Coal, <u>Mapletown (Sewickley)</u> .....	1100	1103
Lime, hard.....	1103	1135
Slate, soft.....	1135	1150
Lime, hard.....	1150	1159
Slate, soft.....	1159	1183
Lime, hard.....	1183	1199
Coal, <u>Pittsburgh</u> (water, 3/4 bailer)...	1199	1204
<u>Pennsylvanian-Conemaugh (521')</u>		
Slate, soft.....	1204	1240
Sand, <u>Lower Pittsburgh</u> , hard.....	1240	1250
Slate, soft.....	1250	1282
Sand, <u>Minshall (Connellsville)</u> , hard...	1282	1298
Slate, soft.....	1298	1306
Sand, <u>Murphy (Morgantown)</u> , hard, (gas, 1324-1329'; salt water, 1350-1376)	1306	1376
Slate, soft.....	1376	1387
Red rock, soft.....	1387	1400
Slate, soft.....	1400	1410
Red rock, soft (caved).....	1410	1422
Slate, soft.....	1422	1445
Lime, <u>Ames</u> , hard.....	1445	1450
Slate, soft.....	1450	1460
Red rock, soft (cave, 1460-1500').....	1460	1520
Slate, soft.....	1520	1685
Sand, <u>Big Dunkard (Mahoning)</u> , soft.....	1685	1725
<u>Pennsylvanian-(Allegheny and Pottsville) and Mississippian-(Mauch Chunk) (513'+)</u>		
Slate, soft.....	1725	1803
Gas Sand ( <u>Lower Freeport</u> ), hard.....	1803	1872
Slate and lime..... (Water, 1975-1985 in Salt Sand - filled up 400' in 1 hr. and 1000' in 5 hrs.)	1872	2058
Sand, slate and lime.....	2078	2198
Sand, <u>Maxton (Droop)</u> , hard (gas, 2214-2224, and 2228-2236').....	2198	-

	Top Feet	Bottom Feet
Total depth.....		2238

10" casing, 510'; 8 $\frac{1}{4}$ " csg., 1725'; 6-5/8" csg., 2200';

Maxton Sand gas well; 12/10 Merc. in 6-5/8" - 3,585,000 cu. ft.

Rock pressure, 240 lbs. (48 hrs.)