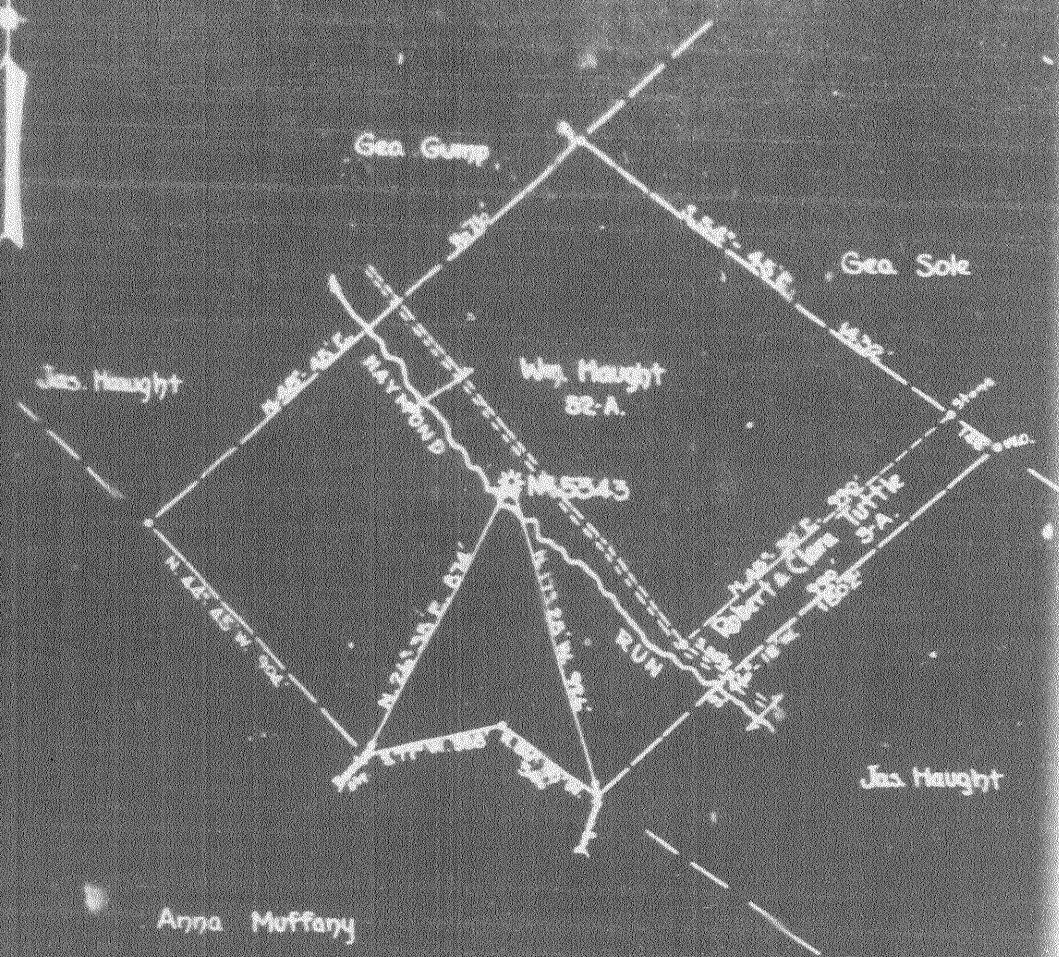


30181

PETTERSON & BIRD, CIVIL ENGINEERS
 LOCATION NO. 2844, CORNER OF LITTLETON ST.
 DISTRICT GRANT, COUNTY BUTTE, MONTANA
 CITY QUADRETT, LITTLETON, S.P. 28, APR. 22, 1933, SECTION 5



Anna Muffany

Jas. Haught

ENGINEER'S CERTIFICATE

SCALE 1"=400'

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS MAP IS CORRECT AND SHOWS ALL THE INFORMATION TO THE BEST OF MY KNOWLEDGE AND BELIEF, REQUIRED BY THE OIL AND GAS SECTION OF THE MINES, LAND, AND WATER DEPARTMENT.

Grant District, Wetzel County, W. Va.

By Pittsburgh & W. Va. Gas Co., Clarksburg, W. Va.

Abandoned under permit Wet-181.

On 55 acres; map ref., Littleton S.E. 2-3.

Surface owned by William Haight, Durshfield, W. Va., and 1/2 minerals
by F. M. Tuttle, New Martinsville, W. Va., and 1/2 by John Tuttle,
Molton, W. Va.

Well completed Sept. 29, 1923.

Elevation, 906' L.

13" conductor, 16'; 10" casing, 154'; 8", 1042'; 6 3/4", 1576';
5 3/8", 1882'.

Coal was encountered at 553-558 and 650-660'.

Abandonment reported to Dept. of Mines Oct. 15, 1935.

Located April 24, 1923; began drilling, June 13, 1923; completed
drilling, Sept. 29, 1923.

Well was not shot.

Fresh water at 25, 125, and 335'.

Salt water at 1416, 1565, 1598, and 1650'.

5 3/8" hole. Gas well.

Record to RCF from Mrs. Griffith Sept. 10, 1938.

	Top.	Bottom.	Thickness.
Clay, brown, soft	0	20	20
Slate, white, soft (water, 25')	20	30	10
Red rock, soft	30	80	50
Lime, white, hard	80	120	40
Sand, dark, soft (water, 125')	120	135	15
Slate, black, soft	135	200	65
Lime, white, hard	200	250	50
Slate, dark, soft	250	290	40
Lime, white, hard	290	315	25
Slate, white, soft	315	330	15
Shells, white, hard (water, 335')	330	340	10
Slate, white, soft	340	370	30
Lime, white, hard	370	553	183
Mapletown (Sewickley) Coal, black, soft	553	558	5
Lime, white, hard	558	650	92
Pittsburgh Coal, black, soft	650	660	10
Slate, dark, soft	660	670	10
Lime, white, medium	670	725	55
Red rock, soft	725	740	15
Slate, blue, soft	740	770	30
Murphy Sand, white, hard (show gas, 785')	770	810	40
Lime, white, hard	810	825	15
Red rock, soft	825	830	5
Lime, white, hard	830	860	30
Red rock, soft	860	885	25
Lime, dark, medium	885	940	55
Red rock, soft	940	960	20
Lime, white, hard	960	970	10
Slate, black, soft	970	1000	30
Little Dunkard Sand, white, soft (show gas, 1005')	1000	1015	15
Slate, black, soft	1015	1025	10
Lime, white, hard	1025	1060	35
Slate, black, soft	1060	1090	30

(OVER)

	Top.	Bottom.	Thickness.
Big Bunkard Sand, white, soft	1090	- 1115	25
Lime, white, hard	1115	- 1170	55
Slate, black, soft	1170	- 1175	5
Lime, dark, medium	1175	- 1200	25
Slate, white, soft	1200	- 1210	10
Lime, white, hard	1210	- 1250	40
Gas Sand, white, hard	1250	- 1275	25
Lime, white, hard	1275	- 1285	10
1st Salt Sand, white, hard	1285	- 1325	40
Lime, black, soft	1325	- 1340	15
Sand, black, soft	1340	- 1370	30
Slate, black, soft	1370	- 1400	30
2nd Salt Sand, white, hard (gas, 1415'; water, 1416')	1400	- 1435	35
Slate, black, soft	1435	- 1450	15
Lime, white, hard	1450	- 1530	80
3rd Salt Sand, white, hard (water at 1565, 1598, and 1650')	1530	- 1750	220
Lime, white, hard	1750	- 1765	15
Red rock, soft	1765	- 1768	3
Lime, white, hard	1768	- 1775	7
Red rock, soft	1775	- 1780	5
Unrecorded	1780	- 1835	55
Little Lime, dark, hard	1835	- 1846	11
Pencil Cove, black	1846	- 1850	4
Big Lime, white	1850	- 1938	88
Big Injun Sand (gas, 1970 and 2000')	1938	- 2130	192
Slate and shells	2130	- 2200	70
Lime, white, hard	2200	- 2280	80
Slate, white, soft	2280	- 2300	20
Slate and shells, soft	2300	- 2435	135
Sand, dark, hard	2435	- 2490	55
Slate, dark, soft	2490	- 2515	25
Sand, white, hard	2515	- 2535	20
Red rock, soft	2535	- 2537	2
Lime, white, hard	2537	- 2565	28
Slate and shells	2565	- 2657	92
Gordon Stray Sand, dark, hard	2657	- 2675	18
Gordon Sand, red	2675	- 2715	40
Unrecorded	2715	- 2745	30
4th Sand, gray (show oil, 2771')	2745	- 2780	35
Slate, white	2780	- 2795	15
? 5 th Sand, white (gas, 2795')	2795	- 2802	7
Slate and shells	2802	- 2936	134
Total depth			8936