R. E. Eskins No. 1(680) Well.

By the Owens, Libbey-Owens Gas Dept., Box 2111, Charleston 28, W. Va.

Located A.Ol Mi. S. fo 38° 15' and 1.91 Mi. W. of 81° 35'

Peytona Quadrangle - N C (Loudon District - Kanawha County

Elevation 1112.71' L

Permit - Kan 1176

Drilling commenced March 23, 1945; completed July 11, 1945

Shot July 12, 1945 at 4785-4822', with 450# Detonite

Gas well; Volume 48,000 cu. ft.

Open flow, 38/10th W. in 1"

Fresh water, 725', hole filling; 766' hole filling.

Salt water, 430', standing at 400'; 1224' standing at 400'; 1363', standing at 400'; 1557', 25 bailers 4 hrs.; 1560' hole filling stood at 200'.

10-3/4" casing, 401'; \$\frac{1}{2}-5/8\,\text{#}, 1374' (pulled); 7\,\text{#}, 1570'.

Oil well ancher packer, 3 x 2 x 16, set at 4753-4758.

Perf. top, 4821'; perf. bot., 4851'.

Coal was encountered at 262-266.

Gas 1484-1486', 239M.

Gas 1505', 15M.

Gas 4790', 27M.

10 min R.P., 28#. turned into line

No larger R. P. taken.

Section based on samples from 4679 to 4851.

Examined by Russell R. Flowers, Mineralogist.

Top Bottom Thickness

4679 4690 11 Shale, black, very highly carbonaceous, calcareous in part, pyritic

HUNTERSVILLE CHERT, 99 Feet.

Limestone, brownish-gray with light-gray spots, shaly, somewhat cherty; a small amount of brown micaceous shale at the contact with the above shale (Top of Corniferous 4690 from driller's log)

| 4691 | 4701 | 10 | Limestone, brownish-gray to brownish-black with white |
|-------|-------|----|--|
| | | | to light-gray, very cherty spots, shaly, somewhat dolo- |
| | | | mitic, very cherty in the lower part |
| 4701 | 4712 | 11 | Limestone, brownish-gray, some brownish-black (shaly), |
| | | | cherty to chert, white to light-gray, dolomitic in part |
| 4712 | 4719 | 7 | Limestone, brownish-gray to brownish-black with very |
| | | | light to medium-gray spots, very shaly, very cherty |
| 4719 | 4724 | 5 | Limestone, brownish-black, very shaly to a calcareous |
| | | | chert, brownish-gray to medium-gray with light- to medium- |
| | | | gray spots of chert, dolomitic |
| 4724 | 4726 | 2 | Siltstone, medium-gray, highly calcareous, dolomitic |
| | | | to a dark-gray and grayish-black shale, glauconitic |
| 4726 | 4732 | 6 | Chert, light- to medium-gray and brownish-gray, highly |
| | | | calcareous, dolomitic, shaly |
| 4732 | 47 40 | 8 | Limestone (highly dolomitic, cherty) to chert (highly |
| | | | calcareous, dolomitic), brownish-gray with some brownish- |
| | | | black, some light- to medium-gray, shaly in part, trace |
| | | | of glauconite |
| 47 40 | 4756 | 16 | Limestone (very silty and shaly) to a calcareous chert, |
| | | | very light gray to light brownish gray, some medium-gray |
| | | | to tight brownish-gray in the lower part, highly dolo- |
| | | | mitic; contains a little glauconite |
| 4756 | 4764 | 8 | Limestone to calcareous chert, light-gray to medium- |
| | | | and brownish-gray, some brownish-black, very shaly and |
| | | | silty, very sandy and silty at the bottom, dolomitic, |
| | | | somewhat glauconitic |
| 4764 | 4771 | 7 | Limestone (sandy) and some sandstone, medium-gray to |
| | | | brownish-gray and brownish-black, the sand grains afvery |
| | | | fine to fine with some medium grains, subrounded to |
| | | | rounded, moderately to highly dolomitic, somewhat shaly, |
| | | | shaly and cherty at the bottom, contains some glauconite |
| 4771 | 4775 | 4 | Limestone (sandy) to sandstone (very fine, calcareous), |
| | | | medium-gray to brownish-gray, some brownish-black, shaly, |
| | | | highly dolomitic, glauconitic |
| 4775 | 4788 | 13 | Siltstone to sandstone (very fine), light- to medium- |
| | | | gray to brownish-gray, calcareous, dolomitic; contains |
| | | | some shaly material and some chert, some glauconite |
| | | | S_auconite |

4788 4789 1 Siltstone, light- to medium-gray and brownish-gray, very sandy (fine to very coarse, subrounded to rounded), highly dolomitic, calcareous, somewhat glauconitic; some dark-gray, silty, very highly glauconitic (greenish* black) shale

ORISKANY SANDSTONE, 7 Feet.

| 4789 | 4790 | 1 | Sandstone, very light-gray, fine- to coarse-grained, |
|---------------|-------|--------------|--|
| | | | rounded to well rounded, highly calcareous (Gam pay 27M) |
| 4790 | 47 90 | - | Limestone (very sandy) to sandstone (very highly calcar- |
| | | | eous), very light gray to pinkish-gray and light-gray, |
| | | | the sand grains are fine to medium (subrounded to rounded) |
| | | | with coarse (well rounded) grains |
| 47 9 0 | 4796 | 6 | Sandstone, very light gray, the sand grains are almost |
| | | | entirely quartz, fine- to medium-grained, angular (some |
| | | | secondary crystal facets) to rounded, some coarse well |
| | | | rounded and frosted grains, highly calcareous; contains |
| | | | some light brownish gray to brownish-gray, very sandy |
| | | | limestone at the bottom |
| | | | |

HELDERBERG FORMATION, 55, plus, Feet

- 4796 4802 6 Limestone (silty) to siltstone, light@ to dark-gray,
 some very fine sand, some dark-gray to grayish-black
 streaks (shaly), very cherty in part, some fossil fragm
 ments

 4802 4806 4 Siltstone and sandstone (very fine) to chert, very light
- 4802 4806 4 Siltstone and sandstone (very fine) to chert, very light to medium-gray (somewhat shaly) highly calcareous, contains a small amount of glauconite
- 4806 4810 4 Chert, very light to medium light gray, some medium-gray in the lower part, calcareous, silty to siltstone (in lower part), somewhat dolomitic
- 4810 4817 7 Chert, light- to dark-gray, highly calcareous, highly calcareous chert to a calcareous shale at the bottom, silty
- 4817 4822 5 Chert (calcareous) to a highly calcareous, siliceous shale, dark-gray to grayish-black with light- to medium-gray spots, dolomitic

| 4822 | 483 6 | 14 | Limestone (very shaly) to shale, calcareous, brownish- |
|------|--------------|----|--|
| | | | gray and dark-gray to brownish- and grayish-black, dolo- |
| | | | mitic, somewhat cherty |
| 4836 | 4842 | 6 | Limestone (shaly) to shale (calcareous), brownish- |
| | | | gray to brownish- and grayish-black with medium-gray |
| | | | spots, dolomitic, very cherty |
| 4842 | 4851 | 9 | Shale, dark-gray to brownish- and grayish-black (darker |
| | | | than the above interval), very highly calcareous, dolo- |
| | | | mitic |
| | 4851 | | TOTAL DEPTH |

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