

ALLEN & PRIOR NO. 43

Scott District, Boone County, W. Va.

By Owens, Libbey-Owens Gas Dept. (701)

Located 4.03 mi. S. of 38° 10' Lat. and 1.53 mi. W. of 81° 45' Long.

Madison Quadrangle - EC.

Elevation 848.68'.

Drilling Completed: March 12, 1945.

Permit - Boone-685.

Gas show in Brown Shale

Section based on samples from 4373 to 4535; Examined by Russell R. Flowers  
(See log strip)

<u>Top</u>	<u>Bottom</u>	<u>Thickness</u>	
4373	4381	8'	SHALE, black, very highly carbonaceous, pyritic, calcareous in part.
			<u>HUNTERSVILLE CHERT, 91 Feet</u>
4381	4383	2'	LIMESTONE, brownish-gray to brownish-black, shaly, some brown, highly micaceous (altered biotite?) shale at the top in contact with the black shale.
4383	4388	5'	LIMESTONE, brownish-gray with light gray spots, some brownish-black, shaly, cherty at the bottom.
4388	4413	25'	CHERT, very light gray to brownish-gray (shaly?) highly calcareous, shaly. LIMESTONE, brownish-black, with light gray spots, some brownish gray, very shaly, very cherty.
4413	4415	2'	LIMESTONE, brownish-gray, shaly, cherty, silty to a calcareous siltstone (light-medium gray) somewhat dolomitic, trace of glauconite.
4415	4419	4'	LIMESTONE, brownish-gray with light gray spots, some brownish-black, shaly, cherty, silty to a calcareous, cherty and shaly siltstone, light to medium gray, somewhat dolomitic, slightly glauconitic.
4419	4432	13'	LIMESTONE, light to medium light gray and light brownish gray, some brownish-gray, very silty, very cherty, shaly (at top) to very shaly (at the bottom), somewhat sandy (very fine), slightly glauconitic, somewhat dolomitic.
4432	4435	3'	LIMESTONE, light brownish gray to brownish gray, with light gray spots, very shaly, very silty, cherty, somewhat sandy, moderately dolomitic, slightly glauconitic. (depth correction 4432-4438). Same as above interval with larger amount of sand grains).
4438	4444	6'	SANDSTONE, light brownish gray to brownish gray, very fine grained, subrounded to rounded with some very well rounded, medium grains, dolomitic, glauconitic, contains shaly material.

<u>Top</u>	<u>Bottom</u>	<u>Thickness</u>	
4444	4446	2'	LIMESTONE, (silty and sandy) to calcareous, silty sandstone light brownish gray, to brownish gray, shaly, somewhat dolomitic and cherty.
4446	4449	3'	SANDSTONE, brownish-gray, very fine grained, silty, highly glauconitic, phosphatic (collophane?) highly calcareous, dolomitic.
4449	4454	5'	SANDSTONE TO SANDY SHALE, light and medium gray to brownish gray, very fine grained, silty, highly calcareous, dolomitic, highly glauconitic, phosphatic (collophane?) somewhat cherty.
4454	4461	7'	SANDSTONE, (very fine) and siltstone, light-gray and medium light gray to light brownish-gray, highly dolomitic, calcareous, glauconitic, highly glauconitic and somewhat shaly at the bottom.
<u>ORISKANY SANDSTONE, 5 feet</u>			
4461	4466	5'	LIMESTONE, (very sandy) to a highly calcareous sandstone, very light gray to medium light gray, some medium-gray (contains shaly material), fine to medium-grained, rounded to well rounded.
<u>HELDERBERG FORMATION, 69 plus Feet</u>			
4466	4472	6'	LIMESTONE, medium light gray to dark gray with light gray spots, very sandy (fine to medium grained), silty, cherty, very shaly in part.
4472	4482	10'	LIMESTONE, brownish-gray to brownish-black, very silty and very shaly, cherty.
4482	4493	11'	LIMESTONE, (very shaly) to shaly (highly calcareous), brownish black to grayish-black, some brownish-gray, somewhat silty and cherty
4493	4499	6'	SHALE, grayish-black, some brownish-black to grayish black, highly calcareous, somewhat dolomitic, cherty, contains a few fossil fragments.
4499	4506	7'	LIMESTONE, medium-gray to grayish-black with light-gray spots, very shaly, very silty, sandy to a sandstone (very fine), contains some chert and pyrite, glauconitic, the sandstone chips are highly glauconitic, somewhat dolomitic.
4506	4518	12'	SILTSTONE AND SANDSTONE, (very fine), light to medium-gray, some brownish-gray, shaly, cherty, highly calcareous, highly glauconitic, slightly dolomitic.

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<u>Top</u>	<u>Bottom</u>	<u>Thickness</u>	
4518	4524	6'	SILTSTONE TO SANDSTONE, (very fine), very light-gray, to medium light-gray, some medium-gray, (shaly streaks), very cherty, highly glauconitic, calcareous, slightly dolomitic.
4524	4528	4'	SILTSTONE TO SANDSTONE (very fine), light to medium-gray, cherty, highly calcareous, somewhat dolomitic, glauconitic, some shaly material
4528	4533	5'	CHERT (calcareous) to limestone (very cherty), medium-gray with light-gray spots, some dark-gray (shaly), silty and sandy (very fine), dolomitic, somewhat glauconitic.
4533	4534	1'	LIMESTONE, light to medium-gray, some dark-gray (shaly) very cherty, very silty and sandy (very fine), dolomitic
			TOTAL DEPTH - 4538'