H. C. Ballard No. 4 (565) Well

Scott District, Boone County, W. Va.

By The Owens, Libbey-Owens Gas Dept., Charleston, W. Va.

Located 0.75 mi. 5. of 38°05' and 1.52 mi. W. of 81°50' -SC- Madison Quadrangle; 2 mi.

W. of East Madison.

Elevation, 936.1' L.

Permit, Boo 451.

Drilling commenced April 24, 1940; completed June 13, 1940.

Shot June 4, 1940; depth 1968-1994'.

Gas well; volume 133,000 cu. ft. per day.

Rock pressure 290 lbs. in 64 hrs.

Fresh water at 75'; salt water at 920'.

Coal at 105', 60"; at 311', 36".

81", casing, 546'; 6-5/8", 1338'; 3" tubing, 2029'

Samples from 1213 to 1524' described by Constantin Apsouri.

Top	Bottom	Thickness	Hauch Chunk Croup, 33+ feet
1213	1241	28	Limestone, darkebrown; also some gray shale
1241	1848	7	Siltstone, gray and brownish
1248	1283	35	Limestone, dark-brown; also some gray shale and calcareous
			siltstone
1283	1296	13	Shale gray; also brown limestone and greenish calcareous siltston
Mary Control			Greenbrier Limestone, 196 feet
1296	1492	196	Limestone, light-brown; a large part of it is colitic; not
			described in detail (gas at 1458', 26,000 cu. ft.)
			Maccrady Formation, 24 feet
1492	1517	25	Siltstone, grayish-red
			Pocono Formation, 482 feet
1517	1524	7	Siltstone, dark-gray
1959	1969	10	Shale, brown, soft (Sumbury Shale)
1969	1999	30	Berea sand, gray, hard (gas at 1972-1975', 80,000 cu. ft.)
			Devonian Shales, 31+ feet
	2030		Total depth