Cross Creek District, Brooke County, W. Va.

ERE-32

By Wheeling Steel Corporation, Wheeling, W. Va. Located 0.6 mi. W. of 80\*35' and 5.26 mi. S. of 40\*25' -C- Steubenville Quadrangle. Elevation, 720.5' L. Permit, (Bro-22. Drilling commenced, June 12, 1940; completed July 2, 1940. 10" casing 85'; 81", 672'; 6 5/8", 870'; 2" tubing, 1334'. Shot July 5, 1940 at 1318-1338\*. (il well; 3 bbls. in first 24 hours. Fresh water at 100'; salt water at 350'; soal at 240-245'. Samples start at 755'. Top Bottom Thickness Pleistocene and Recent, 85 feet 0 85 85 Sand and gravel, brown, soft Pennsylvanian, 581+ feet 85 95 10 Shale, white, medium 95 120 25 Sand, light, soft (large supply of fresh water at 100\*) 120 240 120 Shale, black, medium 240 245 Cod, black 6 245 275 30 Fire clay, light, soft 275 280 5 Sand, light, medium 280 \$60 Slate, black and gray, medium 70 350 450 100 Sand, light, soft 450 546 96 Slate, dark, medium 546 690 44 Sand, hard 590 623 33 Slate, gray, hard 623 650 27 Sand, white, hard 650 666 Slate, black, medium 18 Greenbrier Limestone, 99 feet 666 Top of "Big Lime" from drillers' record (possibly too high) 755 765 10 Sandstone, nearly white, medium-grained, calcareous, with grains well rounded and frosted; most of rounded grains are loose, but some are enclosed in light-green matrix consisting of calcits, dolomits, and very fine sand with a little glauconite (Lyalhanna Linestone, basal portion only shown

by samples)

Top	Botten	Thickness	
			Pocono Formation, 568 feet
765	810	45	Sandstone, light grayish green to mearly white, fine; contains
			small amounts of biotite, massovite and chlorite
810	847	37	No samples (reported as sand)
847	867	10	Sandstone, white, medium-grained, nearly all quarts
857	862	Б	Siltstone, dark-gray, shaly, micaceous
862	962	100	Sandstone, light-gray to white, fine to medium-grained (water
			and gas 893 to 898*)
962	1046	84	Siltstone and shale, gray (samples incomplete and depths only
			approximate for this interval)
1046	1120	74	Siltstone and shale, gray; also some thin streaks of light-
			gray very fine candstone; on the whole this interval is
			much more siltatons than true shale although the proportions
			vary greatly in individual samples
1120	1185	15	Siltstone, gray, shaly
1185	1225	90	Siltatone and shale, gray; most of shale is silty and micaceous.
			laminated structure is well shown throughout
1225	1250	25	Shale, gray, very silty; contains some siltstone but much less
			than the interval above
1250	1275	25	Sandstone, gray, very fine; texture is mostly about on the
			border line between sandstone and siltetons
1275	1312	37	Shale, dark-gray, partly silty and micaceous; contains muscovite
			biotite and small specks of carbonaceous matter (Sunbury
**	1		Shale)
1312	1333	21	Sandstone, light-gray, fine, with much pyrite at top (last
			sample available is labelled 1310-1315'; oil pay 1316-1330')
****	1990		seissippian or Devonian Shales, 5+ feet
1222	1338	5	"Slate, dark"
	1388		<sup>3</sup> otal depth

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