

Great Kanawha Petroleum, Coal and Lumber Co. No. 20(769)Well.

Loudin District, Kanawha County, W. Va.

By Owens, Libby-Owens Gas Department, Box 4158, Charleston, W. Va.

Located 3.5 Mi. S. of 38° 15' and 3.11 Mi. W. of 81° 35'

Peytona Quadrangle, - N. C.

Elevation, 1103.75' L.

Permit Kan-1401

Gas well; Volume 564 M. gas at 6073-6079' (*Newburg? sand*) *Dry in Ordovician*

R. P. 1680# in 20 hours

Section based on samples from 4638 to 4910

Examined by Russell R. Flowers, Mineralogist.

Top	Bottom	Thickness	
<u>HUNTERSVILLE CHERT, 97 Feet</u>			
4638	4639	1	Shale, black, highly carbonaceous, pyritic, calcareous in part, 60%; limestone, brownish-gray to brownish-black, shaly, contains a little chert, 40% ; <i>a very small amount of meta-bentonite</i>
4639	4641	2	Limestone, brownish-gray to brownish-black, shaly, cherty
4641	4644	3	Limestone, brownish-gray to brownish-black, shaly, cherty to chert, very light gray to brownish-gray
4644	4649	5	Chert, very light gray to light brownish gray and brownish-gray, highly calcareous, shaly in part, somewhat dolomitic
4649	4658	9	Chert (calcareous) to limestone (shaly), light-gray to brownish-gray, some brownish-black
4658	4669	11	Limestone, brownish-gray to brownish-black with light- to medium-gray spots, very shaly, very cherty, small amount is dolomitic
4669	4678	9	Limestone, to chert (calcareous), brownish-black, some brownish-gray and medium-gray, very shaly, dolomitic
4678	4682	4	Chert, very light to medium-gray and brownish-gray, some brownish-black (shaly), silty and sandy (very fine), highly calcareous, dolomitic, somewhat glauconitic

4682	4694	12	Limestone to chert (calcareous), light- to medium-gray and brownish-gray, mostly light- to medium-gray at the bottom, very silty to a calcareous siltstone at the bottom, dolomitic, slightly glauconitic
4694	4701	7	Limestone, light- to medium-gray, somewhat dolomitic, very silty, cherty; contains a little glauconite
4701	4711	10	Limestone (very silty) to chert (calcareous), brownish-gray with light-gray spots, medium-gray to brownish-gray in the upper part, medium-gray and highly glauconitic at 4707 to 4709', slightly dolomitic, sandy in the lower part
4711	4714	3	Sandstone, light brownish gray to brownish-gray, very fine to fine-grained, some medium (rounded and frosted) grains, highly calcareous, somewhat glauconitic, somewhat dolomitic
4714	4716	2	Limestone, brownish-gray, sandy (very fine to medium-grained), somewhat shaly and cherty
4716	4719	3	Limestone (shaly) to calcareous chert and sandstone, medium-gray to brownish-gray, glauconitic, some brown material (collophane ?), somewhat dolomitic (4719 corrected to 4717)
4717	4718	1	Limestone, medium dark gray, some brownish-gray, very silty and cherty, somewhat sandy, dolomitic, glauconitic
4718	4720	2	No sample
4720	4735	15	Siltstone to sandstone (very fine), medium dark gray to brownish-gray (in the upper part) to medium light gray and light brownish gray (in the lower part) calcareous, somewhat dolomitic, dolomitic at the bottom, glauconitic; at the bottom a thin very highly glauconitic, medium- to dark-gray, sandy siltstone

ORISKANY SANDSTONE, 9 Feet.

4735	4744	9	Sandstone, very light gray, some light gray, fine- to medium-grained in the upper part, many coarse (rounded and frosted) grains at the top, mostly fine-grained in the middle and lower parts, subrounded to rounded, mostly quartz grains with a calcite cement, highly calcareous; contains some medium-gray streaks of sandy limestone
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HELDERBERG FORMATION, 151 FEET.

4744	4748	4	Limestone to siltstone, light- to medium-gray, cherty
4748	4757	9	Chert, very light gray to light brownish gray, some medium-gray and brownish-gray, highly calcareous, slightly dolomitic, silty in part
4757	4764	7	Chert, (calcareous) to limestone (very shaly and silty), very light gray to dark-gray, a large amount of brownish- and grayish-black (very shaly), dolomitic in part
4764	4766	2	Limestone (shaly) to shale (calcareous), medium-gray to grayish-black, some brownish-gray to brownish-black, very cherty, dolomitic in part
4766	4771	5	Limestone (shaly) to shale (calcareous) dark-gray to brownish- and grayish-black, some medium-gray, cherty, dolomitic
4771	4773	2	No sample
4773	4785	12	Limestone (very shaly) to shale (highly calcareous), brownish-black, brownish-black to grayish-black in the lower part, silty and cherty in the lower part, dolomitic
4781	4785	4	(Depth correction?) Limestone, (shaly) to shale (calcareous), dark-gray to grayish-black with light- to medium-gray spots, very cherty, dolomitic
4785	4787	2	No sample
4787	4788	1	Limestone (very shaly) to calcareous shale, dark-gray to grayish-black with some light gray, cherty and silty, dolomitic
4788	4792	4	Shale, brownish- to grayish-black, calcareous, dolomitic
4792	4800	8	Shale, dark gray to grayish-black, highly calcareous, cherty with light- to medium-gray spots of sandy (very fine), highly calcareous, glauconitic siltstone
4800	4802	2	Siltstone to sandstone (very fine), light- to medium-gray with dark-gray (shaly) streaks, highly calcareous, slightly dolomitic, glauconitic, cherty at the bottom
4802	4810	8	Siltstone and sandstone (very fine), medium- to dark-gray (shaly) with light-gray spots, highly calcareous to a silty limestone, glauconitic, cherty

4810	4823	13	Siltstone and sandstone (very fine) to chert, light- to medium-gray with dark-gray to grayish-black streaks (shaly), highly calcareous, dolomitic in part, glauconitic
4823	4830	7	Limestone (silty) to siltstone (highly calcareous), light to dark-gray (shaly), sandy, very cherty, somewhat glauconitic
4830	4835	5	Chert (silty) to siltstone and sandstone (very fine), light-gray to light olive gray, highly calcareous, somewhat glauconitic
4835	4840	5	Limestone (silty and sandy) to a calcareous, sandy (very fine) siltstone, light- to medium-gray, some dark-gray streaks (shaly), cherty
4836	4839	3	(depth correction?) Limestone (silty) to siltstone (calcareous), medium- to dark-gray, sandy (very fine), cherty, shaly
4839	4844	5	Limestone, light- to dark-gray, very silty and sandy (very fine), shaly in the lower part
4844	4854	10	Shale (calcareous) to limestone (silty and sandy), dark-gray to grayish-black with light- to medium-gray spots, considerable medium to dark-gray (more highly calcareous) at the bottom, cherty, some fossil fragments, somewhat dolomitic
4854	4890	36	Limestone, medium dark gray to grayish-black with light, to medium-gray spots, sandy (mostly very fine), very shaly from 4782 to the bottom, somewhat pyritic (particularly in the upper part), fossiliferous
4890	4895	5 km	Limestone, medium dark gray to grayish-black with light- to medium-gray spots (the sample as a whole has a dark brownish cast), very sandy (very fine), shaly, somewhat pyritic, fossiliferous
<u>SALINE FORMATION, 15, plus, feet.</u>			
4895	4903	8	Limestone, brownish-gray to brownish-black with light-gray spots, some dark-gray to grayish-black, shaly, somewhat sandy (some very fine doubly terminated quartz crystals), dolomitic in part, contains a little pyrite
4903	4910	7	Limestone, brownish-gray to brownish-black