

Graphic copy of 1930 study  
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Jack - 43

Dr. P. Curry No. 1 Well.

Ravenwood District, Jackson County, W. Va.

By Joe Rubin, Harwood Johnston et. al.

Located 2.6 mi. N. of 31° 35' and 2.22 mi. S. of 39° 00' -80-Ripley

Quadrangle.

Elevation, 600.0 ft. L.

Gas well 14 Criskany; gauge 2,500,000 cu. ft. per day after shot.

Completed May 1930.

Record Based on Examination of Samples.

Ferrian and Pennsylvanian, 1000 feet.

0	195	195	No samples.
190	195	8	Sandstone, light-gray, medium-grained, loosely cemented; contains muscovite, biotite, chlorite and kaolin
195	210	15	Sandstone, white, coarse; with some gray silty shale
210	215	5	Shale, green, sandy
215	220	6	Shale, red, calcareous
220	227	7	Siltstone, green; with some light-brown, fine textured limestone
227	235	11	Sandstone, light-green, fine, micaceous; with some limestone as above; also some red and green shale and coarse white sand in bottom 4 feet
235	245	7	Shale, red, very soft, slightly calcareous
245	265	20	Siltstone, grayish-green, calcareous; sample missing from 250 to 255
265	287	22	Shale, red, soft, calcareous
287	304	17	Siltstone, green, micaceous
304	330	26	Shale, red, very soft, calcareous; contains nodules or streaks of very fine textured light-gray to green limestone

330	362	38	Siltstone, and very fine sandstone, green, micaceous
362	390	33	Shale, red, soft, calcareous; with some impure limestone; samples contain aggregates of pyrite crystals, but none of these were seen actually enclosed in the shale
390	398	6	Siltstone, green, micaceous; sample also contains considerable amounts of fine sand, red and green shale, light-brown limestone, and pyrite crystals
398	408	12	Shale, red, soft, calcareous; some green siltstone in lower part of interval
408	454	45	Sandstone, light-gray to slightly greenish, loosely cemented, medium-grained at top, grading into coarse at bottom; samples also contain some limestone, red shale, and green siltstone, which may be mostly coverings
454	480	8	Shale, grayish-green, sandy; with considerable sandstone like that above
480	512	52	Sandstone, light-gray to greenish, medium-grained, loosely cemented; contains muscovite, biotite, chlorite, pyrite, and kaolin
512	519	7	Limestone, light-brown, pyritic <sup>ic</sup> ; with considerable green siltstone
519	526	7	Siltstone, green, micaceous
526	537	11	Shale, red, very soft, calcareous
537	568	29	Siltstone, green, micaceous; individual fragments vary from shale to very fine sandstone in texture
568	583	17	Shale, grayish-green, slightly calcareous, partly silty
583	590	7	Shale, red and green; with a little gray limestone
590	597	7	Shale, grayish-green, silty
597	611	14	Shale, gray and greenish; with small amounts of limestone, coal, and soft gray clay
611	617	6	Clay, gray, with some limestone
617	621	4	Siltstone, green, calcareous; with considerable yellow, fine textured limestone and some red shale
621	634	15	Shale, grayish-green, silty; with some very fine textured yellow limestone

634	643	9	Sandstone, light-gray, medium-grained, containing some mica and kaolin
634	656	13	Siltstone, grayish-green, micaceous; with some gray and green clay and a little limestone
656	675	19	Clay and shale, green, calcareous; with considerable green siltstone
675	700	25	Clay and soft shale, red, yellow and green, highly calcareous; some limestone
700	730	50	Sandstone, grayish-green, fine to very fine, shaly
730	744	14	Shale, red, soft, calcareous
744	759	16	Shale, green, micaceous
759	791	32	Shale and clay, gray, calcareous; also some gray and green shale and gray limestone
791	855	64	Shale, red, soft, calcareous; besides red there is also some yellow, green, and gray; a large proportion of the fragments slake quickly when wet and might be called clay rather than shale; a small proportion of limestone, probably occurring as nodules in the shale, is present throughout
855	861	6	Shale, gray, silty
861	885	7	Shale, red, soft, calcareous
885	875	7	No sample
875	882	7	Sandstone, grayish-green, very fine; with considerable shale of various colors and some limestone
882	889	7	Limestone, nearly white; with large proportion of green siltstone and some red, yellow and green shale
889	902	13	Shale, gray to green, silty; with some light-gray to white limestone
902	937	35	Clay and soft shale, mixed gray, yellow and red; contains some small limestone nodules
937	944	7	Siltstone, green, with some soft shale as above
944	960	18	Clay, yellow and gray
960	985	26	Sandstone, light-gray, fine, micaceous; samples contain considerable shale and siltstone, perhaps mostly cavings
985	1074	69	Sandstone, light-gray, mostly medium-grained, some coarse; contains a little mica, chlorite and kaolin
1074	1088	14	Shale, gray to greenish, silty; with some red and gray clay and small limestone nodules
1088	1096	8	Sandstone, fine, grayish-green, micaceous

1090	1120	24	Shale, gray, silty
1120	1126	6	Shale, dark-gray, sandy, micaceous
1126	1139	13	Sandstone, light-gray, fine, containing a little mica and kaolin
1139	1140	9	No sample
1140	1153	14	Sandstone, gray, fine; lower half is finer, shaly and micaceous; all contains some gray shale
1153	1217	55	Sandstone, light-gray to white, medium-grained; many of quartz grains have crystal faces and there is a smaller proportion of other minerals than in most of the sandstones above
1217	1228	9	Sandstone, light-gray, fine, and dark-gray shale with traces of coal
1228	1234	6	No sample
1234	1236	4	Sandstone, light-gray, fine; with much red shale, probablyavings
1236	1300	62	Sandstone, light-gray, medium-grained, containing mica, otlierite and kaolin and in some samples traces of coal
1300	1313	13	Shale, gray, silty
1313	1316	6	Shale, dark-gray
1316	1325	7	Sandstone, dark-gray, very fine, shaly
1325	1375	50	Shale and siltstone, gray to dark-gray, micaceous; a little coal in last 3 feet
1375	1400	25	Sandstone, light-gray, fine; contains muscovite and biotite and small brown specks which are probably altered siderite
1400	1419	11	Shale, dark-gray, silty
1419	1424	15	Sandstone, light-gray, fine, micaceous
1441			Depth corrected from 1424 to 1441 by steel line measurement
1441	1471	30	Shale, black, carbonaceous and pyritic; most of this is coarse enough to be practically a siltstone
1471	1503	32	Siltstone, dark-gray, micaceous
1503	1511	8	Sandstone, light-gray, fine, with streaks of mica and carbonaceous material
1511	1530	19	Shale and siltstone, dark-gray, micaceous

1890	1890	50	Sandstone, light-gray; 17 feet at the top is fine and the rest medium-grained; all contains a little mica and kaolin
<u>Greenbrier Limestone, 180 feet</u>			
1890	1890	6	Limestone, light-brown (gray when dry), very fine textured; with large amount of green shale containing round dark spots
1898	1891	15	Limestone, nearly white, very fine textured
1891	1840	19	Limestone, light brownish gray; mostly very fine textured but a few fragments are obviously crystalline
1840	1890	50	Limestone, light brownish gray to nearly white, mostly very fine textured; contains a little fine sand with some of grains fairly well rounded and surfaces frosted or etched; from 1840 to 1890 contains some indistinct small round masses which suggest corals but are probably not true corals
1660	1682	22	Limestone, nearly white to light brownish gray, mostly very fine textured, slightly sandy
1682	1888	6	Sandstone, light-gray, calcareous, with larger grains rounded and frosted; sample also contains some limestone like that above
1888	1690	10	Sandstone, white, calcareous, with larger grains rounded and frosted; considerable limestone in bottom 3 feet
1690	1710	12	Limestone, light-gray, sandy, with larger sand grains rounded and frosted; contains bright-green glauconite and in upper 4 feet a few corals
1710	1720	10	Limestone, light-brown, silty, slightly dolomitic
1720	1730	10	Siltstone, light-gray, dolomitic, containing a little glauconite; at the bottom is a small amount of sandstone with some coarse rounded grains and dolomite cement; it is considered as marking the base of the Greenbrier Limestone
<u>Roscoe Formation, 163 feet</u>			
1730	1767	37	Shale, gray, silty, interstratified with grayish-green micaceous siltstone
1767	1789	22	Sandstone, nearly white, medium-grained, almost all quartz; some pyrite at top

1769	1815	24	Sandstone, gray, fine to very fine; with some dark or gray micaceous shale and siltstone
1815	1822	9	No sample
1822	1849	27	Sandstone, gray, fine; with streaks of darker gray silty shale
1849	1903	59	Shale, gray, silty, micaceous, interstratified with lighter gray micaceous siltstone; most of the siltstone is slightly calcareous, and below 1892 it contains fossil shell fragments
1903	1915	10	Siltstone, gray, calcareous, highly fossiliferous, with some darker gray shale
1915	1936	18	Shale, gray; with nearly equal amount of lighter gray, somewhat calcareous siltstone
1936	1953	17	Siltstone, gray, slightly calcareous; with some darker gray shale
1953	2152	199	Shale, gray, silty, micaceous, interstratified with light-gray to greenish-gray siltstone which decreases in amount toward the bottom of the interval; siltstone is calcareous in sample from 1963 to 1961 and slightly so in some other samples
2152	2190	28	Shale, dark-gray to black, pyritic (Sumbury Shale)
2190	2193	3	Sandstone, light-gray, very fine, pyritic (Sera sandstone)
<u>Devonian Shales, 2405 feet</u>			
2193	2203	10	Shale, gray, silty; contains some fossil shells in which small amounts of pyrite, galena and yellow sphalerite are associated with the calcite
2203	2265	50	No samples
2265	2471	215	Shale, gray to greenish-gray interbedded with siltstone of about the same color; mica, pyrite and small specks of carbonaceous material are present throughout
2471	2493	27	Siltstone, light-gray, pyritic, slightly calcareous; individual fragments vary in texture all the way from shale to very fine sandstone
2493	2525	325	Shale, gray to slightly greenish, with varying amounts of gray, slightly calcareous siltstone; several fossil fragments in siltstone from 2541

to 2881 and a few in all samples from 2805 to 2820; both shale and siltstone are micaceous and contain some pyrite and carbonaceous material

- 2822 2805 545 Shale, gray, with some siltstone; similar to the interval above but color is mostly a little darker and average amount of siltstone less; fossil fragments seen only in samples from 2876 to 2885 and 2972 to 2982
- 2868 2750 412 Shale, gray, with some dark-gray to black in most samples; most samples contain small amounts of slightly calcareous siltstone; considerable pyrite is present throughout and some of it is in small spherical concretions
- 2780 2600 122 Shale, dark-gray to black, with considerable amount of lighter gray shale; contains considerable pyrite, partly in very small spherical concretions; also some small spores; sample from 2805 to 2816 contains some light-brown to gray, partly crystalline limestone and other samples from 2800 to 2807 contain a very little of this limestone
- 2808 4292 505 Shale, gray to slightly greenish; in several samples in the upper part there are fragments of black shale with spores, perhapsavings from above; small amounts of calcareous material are present throughout and all of the shale contains some pyrite
- 4228 4440 148 Shale, medium-gray 80 to 90 per cent, dark-gray to black 40 to 50 percent; all samples contain abundant pyrite, some in good octahedral crystals; at 4224 to 4243 is a little fine-textured gray dolomite, at 4245 to 4265 some brown vein calcite and at 4227 to 4233 a little gray limestone
- 4440 4450 10 Shale, dark-gray to black, with considerable pyrite
- 4450 4465 15 No sample
- 4465 4477 12 Shale, dark-gray to black, with considerable pyrite
- 4477 4490 15 Limestone, light-gray to brownish, very fine textured; sample much stained by iron rust
- 4490 4514 24 Shale, dark-gray; all samples from 4440 to 4514 appear to be somewhat contaminated; besides metallic iron they contain some sand and limestone

- 4614 4602 36 Shale, medium-gray, slightly calcareous, with some pyrite  
 4662 4598 46 Shale, dark-gray to black, slightly calcareous, pyritic

Hamberville Chert, 100 (180?) feet

- 4693 4606 7 Limestone, brownish-gray, fine textured except for fossil shells; fragments not reduced in size by acid treatment, and are brown and porous
- 4606 4606 8 Limestone, brownish-gray, cherty, fine textured; with considerable amount of siltstone, rich in micrite; there is some dolomite in the chert
- 4608 4600 12 Limestone, gray, cherty, very fine textured; a little glauconite from 4612 to 4620
- 4620 4647 27 Limestone, light-gray to brown, cherty; most of the calcite is obviously crystalline, nearly all the chert is of the translucent solid type; a little dolomite is present; in samples from 4630 to 4632 and 4639 to 4641 there are many small black spots which are perhaps a solid petroleum residue
- 4647 4655 8 Limestone, light-gray, cherty, silty and dolomitic; contains a little glauconite; most of the calcite is distinctly crystalline
- 4655 Depth corrected by steel line measurement from 4655 to 4641, which would make total thickness of Hamberville Chert 120 feet if applied to the top
- 4641 4670 29 Limestone, light-gray, same as 4647 to 4655 above; some fragments are siltstone rather than limestone
- 4670 4674 4 Limestone, gray, a little darker than last, very cherty, with some dolomite rhombs embedded in the chert
- 4674 4684 10 Limestone, light-gray to brownish, cherty, with some dolomite, silt (quartz) and a little glauconite
- 4684 4688 4 Limestone, brownish-gray, cherty, with dolomite rhombs in the chert
- 4688 4689 1 Sandstone, gray, fine, calcareous, glauconitic; many of sandy grains are well rounded
- 4689 4690 1 Limestone, sandy, cherty and glauconitic
- 4690 4691 1 Siltstone, gray, highly calcareous, and glauconitic; with considerable compact chert



4591 4704 15 Limestone, light-gray, cherty, with small amount  
of dolomite and glauconite

Ordinary Sandstone, 17+ feet

4704 4705 8 Sandstone, light-gray, medium-grained, moderately  
calcareous, with grains rounded and frosted or  
etched; in the spaces between the sand grains  
there is a black material with pitchy luster  
which may be a solidified petroleum residue

4706 4821 15 Sandstone, light-gray, medium to fine-grained,  
slightly calcareous; gas pay at except  
in sample from 4707 to 4709 which consists of  
chips up to  $\frac{1}{2}$  inch, most of this sandstone is  
broken up fine

4821

Total depth