

T. D. Swiger No. 9 Well

West Union District, Doddridge County, W. Va.

By Braden and Creighton, Marietta, Ohio.

Located 0.6 mi. W. of 80°45' and 5.4 mi. S. of 38°25' -EC- West Union quadrangle;  
3.5 mi. N. N. E. of West Union.

Elevation, 1011', L.

Permit, Dod-111.

Commenced December 1940; completed January 13, 1941.

Shot January 13, 1941.

Gas, 173,000 cu. ft.; rock pressure 120 lbs.

Oil, 12 bbls. first 24 hours.

Water, None.

10" casing 700'; 8½", 1224'; 6-5/8", 1955'.

Coal at 413-416', 665-670' and 1190-1200'.

Section based on nearly complete samples from 800 to 2127', examined by J. H. C. Martens.

Top Bottom Thickness

Top	Bottom	Thickness	Description
665	670	5	Pittsburgh Coal (from driller's record) <u>Allegheny, and Pottsville</u> <u>Conemaugh Formation</u>
	670		Top of Conemaugh Formation
800	810	10	Siltstone, light-green, shaly, calcareous
810	828	18	Clay, red and yellow, calcareous
828	830	2	Siltstone, green, shaly, slightly calcareous
830	855	25	Clay, red, calcareous
855	875	20	Siltstone, green, highly calcareous; contains streaks or nodules of yellow limestone
875	885	10	Sandstone, green, fine
885	895	10	No sample
895	900	5	Sandstone, green, fine, 70%; light-gray to light-green shale and siltstone, 30%
900	907	7	Siltstone, very light green, slightly calcareous
907	916	9	Clay, red and light-gray, soft; contains many white limestone nodules
916	927	11	Shale, red, soft
927	935	8	Clay, white, gray and yellow

Top	Bottom	Thickness	
935	941	6	Clay, red, with abundant limestone nodules
941	954	13	Sandstone, light-green, fine, calcareous
954	964	10	Shale, green, silty micaceous; a few streaks or nodules of limestone (Ames Limestone horizon)
964	973	9	Siltstone, light-green; also one crinoid fragment and a few pieces of limestone
973	979	6	Siltstone, green, shaly
979	1015	36	Sandstone, nearly white, medium-grained (samples are mostly savings of red clay, etc.)
1015	1039	24	Clay, red, with limestone nodules
1039	1044	5	Limestone, light-brown and gray, 60%; green calcareous shale, 40%
1044	1058	14	Clay, red and yellow, with limestone nodules
1058	1078	20	Siltstone, light-green, sandy
1078	1100	22	Clay, red, gray and yellow; contains a few limestone nodules
1100	1105	5	Shale, green, silty
1105	1110	5	Siltstone, green, shaly
1110	1155	45	Sandstone, light-green, fine to very fine, micaceous, slightly calcareous
1155	1170	15	Siltstone, dark-gray, shaly, micaceous
1170	1183	13	Shale, dark-gray to black
1183	1192	9	Shale, black, 75%; coal, 5%; brown to black pyrite limestone with abundant fossil shells, 20%
1192	1195	3	No sample
1195	1200	6	Clay, gray, soft, 50%; white, medium-grained sandstone, 50%
1200	1211	11	Sandstone, as above, 70%; soft gray clay, 30%
1211	1215	4	Clay, gray, soft
1215	1232	17	Siltstone, light-gray to light-green, shaly, micaceous
1232	1240	8	Shale, light-green, soft, not distinctly laminated, 40%; soft gray shale, 40%; light-brown to gray limestone, 20%
1240	1250	10	Limestone, light-brown to gray, 40%; gray and green clay and shale, 60%; small amount of red clay
1250	1297	47	Siltstone, gray, shaly, micaceous
1297	1308	11	Clay, light-gray to slightly yellowish, 80%; has conchoidal

Top Bottom Thickness

			fracture and resembles flint; many of the clay fragments have thin streaks or veins which are nearly transparent and very soft; there are a few limestone fragments and a small proportion of the clay is calcareous; white to gray siltstone, 20%
1308	1324	16	Siltstone, nearly white, with some spots of intense green color, also a little red; there is a little gray clay as above and a very few fragments of intensely green somewhat translucent clay(?); also a few pieces of bright-red clay or shale
1324	1334	10	Shale, gray, soft, distinctly laminated, 50%; gray siltstone and silty shale, 45%; light-brown limestone, 5%
1334	1352	18	Siltstone, gray, shaly
1352	1365	13	Shale and siltstone, gray, small amount of black shale
1365	1373	8	Shale, dark-gray, with siderite concretions
1373	1383	10	Siltstone, gray, shaly, micaceous; contains siderite spherulites
1383	1400	17	Sandstone, white, with small green specks, fine; contains a little white clayey material between the grains and is not very strongly cemented
1400	1412	12	Shale, gray, soft
1412	1420	8	Siltstone, gray
1420	1435	15	Sandstone, gray, very fine
1435	1443	8	No sample; recorded as sand
1443	1456	13	Sandstone, gray, medium-grained, 60%; dark-gray siltstone, 20%; nearly white soft shale, 20%
1456	1465	9	Shale, light-gray, silty
1465	1468	3	Same as sample labelled 1443-1456'; a few samples here probably have incorrect depths
1468	1475	7	Siltstone and shale, gray; many siderite spherulites
1475	1485	10	Siltstone, light-gray, micaceous
1485	1495	10	Shale, gray, very silty
1495	1520	25	Sandstone, light-gray to white, medium-grained, not very strongly cemented; contains muscovite, chlorite, kaolin and siderite

Top	Bottom	Thickness	
1520	1542	22	Sandstone, gray, fine, shaly, micaceous
1542	1552	10	Shale, dark-gray, silty; contains siderite concretions
1552	1562	10	Shale, nearly white to gray, with traces of coal
1562	1580	18	Shale, dark-gray, silty
1580	1590	10	Siltstone and silty shale, light-gray
1590	1606	16	Sandstone, nearly white, fine, micaceous; has thin dark carbonaceous streaks
1606	1630	24	Shale, dark-gray, silty
1630	1645	15	Siltstone, gray
1645	1655	10	Sandstone, light-gray, very fine
1655	1675	20	Sandstone, white, fine; a little soft gray shale between 1665 and 1675'
1675	1690	15	Sandstone, light-brown, medium-grained; contains large amounts of siderite
1690	1710	20	Siltstone, darkgray, shaly
1710	1756	46	Sandstone, nearly white, medium-grained, not very strongly cemented
1756	1770	14	Shale, dark-gray, very silty
1770	1780	10	Siltstone, gray, shaly
1780	1810	30	Shale, dark-gray, silty
1810	1830	20	Shale, black; also a little siltstone and some pieces of siderite concretions
1830	1840	10	Shale, light-gray with siderite spherulites, 90%; black shale, 10%; trace of coal
<u>Maush Chunk Group, 90 feet</u>			
1840	1850	10	Siltstone, light greenish gray, micaceous
1850	1860	10	Shale, light greenish gray, soft, 70%; soft red shale, 30%; a few fragments are dolomitic
1860	1870	10	Shale, red, soft; some slightly dolomitic
1870	1880	10	Shale, gray to grayish-green, silty, micaceous
1880	1890	10	Shale, gray, soft, calcareous, 60%; red shale, 40%
1890	1904	14	Shale, gray, soft, calcareous; distinctly laminated, 70%; gray siltstone, 30%
1904	1914	10	Limestone, dark-brown

Top	Bottom	Thickness	
1914	1925	11	Shale, gray, soft, calcareous and fossiliferous, 60%; gray and brown limestone, 40%
1925	1930	5	Shale, gray and green, soft, partly sandy
<u>Greenbrier Limestone, 160 feet</u>			
1930	1935	5	Limestone, brown and light-gray (sample from 1925 to 1935' is half limestone and half shale)
1935	1946	11	Limestone, brown; a few fragments nearly white
1946	1990	44	Limestone; color varies from light-brown near top to medium-brown toward bottom
1990	2010	20	Limestone, dark-brown
2010	2021	11	Dolomite, gray, very fine textured, shaly, 90%; brown limestone, 10%; dolomite contains a few scattered sand grains
2021	2030	9	Sandstone, nearly white with some rust stain; moderately calcareous; many grains are rounded and frosted
2030	2042	12	Sandstone, light-gray, fine; soft and loosely cemented; appears highly porous and contains oil; moderately calcareous from 2030 to 2035' and slightly calcareous from 2035 to 2042' (oil pay 2029-2042')
2042	2046	4	Sandstone, very light brown, medium-grained, highly calcareous; contains a few oolites; larger quartz grains are rounded and frosted; thin streak of soft green shale at top
2046	2050	4	Limestone, light-brown, very sandy
2050	2065	15	Dolomite, nearly white, very finely crystalline; contains a little sand
2065	2075	10	Limestone, brown, dolomitic
2075	2090	15	Dolomite, nearly white, very sandy; larger sand grains are well rounded and frosted; smaller ones are angular
<u>Pocono Formation, 37+ feet</u>			
2090	2105	15	Sandstone, white, with moderate amount of rust stain, medium-grained; appears to be thoroughly cemented with quartz
2105	2120	15	Sandstone, white, fine; is broken smaller and appears to be less thoroughly cemented than sandstone above; contains small amount of mica
2120	2122	2	Sandstone, light-gray, medium- to fine-grained; sample consists of fragments up to 1 $\frac{1}{2}$ inch diameter; contains flat pebbles of gray shale (small amount of gas and oil 2117-2124')

Top Bottom Thickness

2122	2124	2	Sandstone, white, fine; broken small like samples from 2105 to 2120'
2124	2127	3	Siltstone, gray, shaly, micaceous
	2127		Total depth