

Operator: Pipe Line Construction & Drilling Co.
 Farm: F. H. Curtis, et al
 Well No: 2-A
 Location: Buchanan County
 2,000' N of 37°20'
 8,550' W of 82°00'
 Elevation: 2010' Ground
 Total Depth: 6453 (in Huntersville chert)
 Commenced: September 1, 1949
 Completed: September 7, 1950
 Result: Gas well

Geologic log
 Samples studied by
 R. J. Voigtsberger
 Virginia Division of
 Mineral Resources
 October, 1959

Pottsville group - Thickness 2106' (+) - Depth Interval 187' - 2293'

DEPTH		
187' - 193'	6'	Sandstone, white, fine to medium-grained, quartzose, sub-angular, frosted, micaceous and glauconite.
193' - 199'	6'	Siltstone, light to medium gray, micaceous.
199' - 206'	7'	Sandstone, same as 187' - 193'.
206' - 215'	9'	Siltstone, same as 193' - 199'.
215' - 227'	12'	Same as above, but much more sandy.
227' - 240'	13'	Sandstone, light gray, very fine-grained micaceous.
240' - 296'	56'	Siltstone, light to medium gray, micaceous.
296' - 313'	17'	Sandstone, white to light gray, fine-grained micaceous.
313' - 323'	10'	Sandstone, as above, but more micaceous and frosted quartz grains.
323' - 333'	10'	Shale, medium gray to black, silty with coal.
333' - 339'	6'	Siltstone, light to medium gray.
339' - 400'	61'	Sandstone, white to light gray, fine-grained, micaceous, some large frosted quartz grains. Coal at 345' - 372'. Sand, fine to medium-grained in lower part of interval
400' - 474'	74'	Shale, medium gray, silty in lower 24'.
474' - 500'	26'	Sandstone, light gray, fine-grained, micaceous, with shale, siltstone, medium gray, and coal in lower 9'.

DEPTH			
500' - 521'	21'		Sandstone, as above, but becoming increasingly silty and shaly from 507' to 521'.
521' - 541'	20'		Shale, medium gray, silty.
541' - 564'	23'		Sandstone, light to medium gray, very fine-grained with some shale, medium gray.
564' - 575'	11'		Shale and siltstone, light to medium gray, with a trace of siltstone, red.
575' - 738'	163'		Shale, medium gray with samples missing at 586' to 593' and silt at 648' to 680' and 710' to 738'.
738' - 790'	52'		Sandstone, light gray, medium to coarse-grained, micaceous with siltstone, medium gray in lower half of interval and coal at 768' to 783'.
790' - 804'	14'		Sandstone, white, coarse-grained, conglomeratic and micaceous.
804' - 827'	23'		Shale, medium gray, silty, very micaceous, with siltstone, light gray, very micaceous at top and bottom of interval and also calcareous at bottom of interval.
827' - 844'	17'		Sandstone, light gray, very fine-grained, with increasing shale, medium gray.
844' - 860'	16'		Shale medium gray.
860' - 892'	32'		Siltstone, light to medium gray, very micaceous with a trace of sandstone, light gray, fine-grained at 882' to 888'.
892' - 1016'	124'		Shale, medium gray, silty with coal at 909' to 918' and sandstone, light gray, fine-grained at 918' to 933' and 950' to 984'.
1016' - 1050'	34'		Sandstone, light gray, very fine-grained, very micaceous with shale, medium gray. Sandstone becoming coarser grained toward bottom of interval.
1050' - 1063'	13'		Sandstone, white, medium to coarse-grained, micaceous.
1063' - 1080'	17'		As above, but fine-grained.
1080' - 1086'	6'		As above, but coarse-grained and conglomeratic.

DEPTH			
	1086' - 1094'	8'	Shale, medium gray.
	1094' - 1162'	68'	Sandstone, light brown gray, fine-grained, micaceous with some frosted quartz grains and a trace of shale, dark gray from 1136' to 1162'.
	1162' - 1200'	38'	Shale, medium gray, micaceous, with some coal and pyrite at bottom of interval.
5	1200' - 1213'	13'	Sandstone, light gray, fine to medium-grained, micaceous, siltstone, gray, and shale, medium gray, silty.
	1213' - 1220'	7'	Sandstone, white, medium-grained, micaceous, and shale, medium-gray.
	1220' - 1227'	7'	Sandstone, white to light gray, medium-grained, conglomerate micaceous with a trace of shale, medium gray and coal.
	1227' - 1233'	6'	Siltstone, medium gray and shale, medium gray, silty.
	1233' - 1237'	4'	Sandstone, white, fine-grained, micaceous, and shale medium-gray.
	1237' - 1345'	108'	Shale, medium gray with siltstone, light gray, and shale, medium gray with iron oxide inclusions at 1323'.
5	1345' - 1367'	22'	Sandstone, light gray, very fine-grained with shale, medium gray, micaceous.
5	1367' - 1376'	9'	Sandstone, white, very fine-grained, clean, sucrose..
	1376' - 1382'	6'	Sandstone, light gray, fine-grained, very micaceous.
	1382' - 1442'	60'	Shale, light to medium gray, micaceous with a trace of brown-gray shale at 1388' to 1393'.
5	1442' - 1492'	50'	Sandstone, very light gray, very fine-grained and shale, dark gray, with thin stringers of interbedded coaly matter.
	1492' - 1510'	18'	Shale, medium gray, silty with abundant coal in lower 10' of interval.
5	1510' - 1544'	34'	Sandstone, light gray, fine-grained, micaceous and shale, medium gray with coal at 1524' to 1544' and some very coarse quartz grains at 1538'.

DEPTH		
1544' - 1558'	14'	Shale, medium to dark gray with coal in upper part of interval.
1558' - 1562'	4'	Siltstone, light to medium gray, and shale, medium gray, silty.
1562' - 1578'	16'	Sandstone, light gray, very fine-grained, micaceous, and shale medium gray, micaceous.
1578' - 1634'	56'	Shale, medium gray, with siltstone, light to medium gray, micaceous at base of interval and no samples 1594' to 1597'.
1634' - 1775'	141'	Sandstone, light gray, fine-grained, micaceous, with a trace of shale, medium gray, micaceous. Coal at 1713' to 1729'. Coal and increasing shale, medium gray and gray-brown, silty at base of interval.
1775' - 1833'	58'	Shale, medium to dark gray.
1833' - 1896'	63'	Shale, medium gray and sandstone light gray, very fine-grained with siltstone, medium gray at base of interval.
1896' - 1903'	7'	Siltstone, light to medium gray, sandy, micaceous.
1903' - 1933'	30'	Sandstone, white, fine to medium-grained, with a trace of shale, medium gray.
1933' - 2032'	99'	Sandstone, white, fine-grained, conglomeratic with a trace of shale, medium gray from 1933' to 1972' and from 2000' to 2032'. Coal at 1947' to 1965' and no samples 1977' to 1980' and 1986' to 1992'.
2032' - 2047'	15'	Sandstone, white to light gray, fine to medium-grained, conglomeratic.
2047' - 2056'	9'	Siltstone, light to medium gray, and shale, medium gray.
2056' - 2067'	11'	Coal.
2067' - 2077'	10'	Sandstone, light gray, very fine to fine-grained, micaceous, and coal.
2077' - 2082'	5'	Sandstone, white, very fine-grained with a trace of coal.
2082' - 2088'	6'	Sandstone, light gray, fine-grained, micaceous.

DEPTH		
2088' - 2137'	49'	Shale, medium gray, with coal from 2088' to 2103'.
2137' - 2274'	137'	Sandstone, white, very fine-grained, and a trace of shale from 2137' to 2243' and coal from 2137' to 2153' and from 2184' to 2194'.
2274' - 2293'	19'	Shale, medium gray, with some gray-brown shale.
Bluestone formation - Top 2293'		
2293' - 2300'	7'	Shale, medium gray, and shale variegated, red and green.
2300' - 2314'	14'	Shale, red, green, and variegated red and green with a trace of sandstone, light gray, fine-grained, glauconitic from 2305' to 2314'.
2314' - 2323'	9'	Shale, red.
2323' - 2336'	13'	Shale, red, and shale, medium gray.
2336' - 2357'	21'	Shale, medium gray.
2357' - 2463'	106'	Shale, medium gray, and sandstone, light gray, very fine-grained.
2463' - 2507'	44'	Shale, dark gray.
2507' - 2546'	39'	Shale, dark gray with some sandstone, white, very fine-grained.
2546' - 2577'	31'	Shale, dark gray with coal from 2546' to 2555'.
2577' - 2594'	17'	Shale, medium gray and sandstone, white, fine-grained.
2594' - 2627'	33'	Sandstone, white, fine-grained and shale, medium gray.
2627' - 2630'	3'	Siltstone, medium gray, and sandstone, white, very fine-grained.
2630' - 2637'	7'	Sandstone, white, fine-grained, and shale, medium gray.
2637' - 2645'	8'	Sandstone, white, fine to medium-grained, conglomeratic.
2645' - 2814'	169'	Sandstone, white, fine to medium-grained with some shale, medium gray and conglomerate from 2666' to 2668' and from 2707' to 2712' and a trace of pyrite from 2689 to 2693'.

DEPTH		
2814' - 2870'	56'	Sandstone, light to medium gray, very fine-grained, micaceous, and shale, medium gray.
2870' - 2880'	10'	Sandstone, white, fine to medium-grained; siltstone, light to medium gray; shale, medium to dark gray; and limestone, tan-gray, dolomite, argillaceous.
2880' - 2892'	12'	Shale, red and siltstone, red, calcareous.
2892' - 2897'	5'	Shale, and siltstone, red and gray, calcareous.
2897' - 2905'	8'	Limestone, tan to gray, dolomitic, and argillaceous, and shale, red and gray.
2905' - 2910'	5'	Siltstone, light to medium gray, and red, and shale, gray.
2910' - 2928'	18'	Sandstone, pink-gray, and shale, red and gray.
2928' - 2933'	5'	Sandstone, light tan-gray, very fine-grained, silty, and micaceous, and shale, red and gray.
2933' - 2944'	11'	Sandstone, white, fine-grained with shale, medium gray.
2944' - 2967'	23'	Shale, medium gray with mica and silt in upper 6' of interval. Slightly dolomitic in lower 7' of interval.
2967' - 2985'	18'	Shale, gray, and olive-gray, dolomitic with sandstone, white, very fine-grained in lower 5' of interval.
2985' - 2997'	12'	Shale, medium gray.
2997' - 3012'	15'	Sandstone, light gray, fine-grained, and shale, medium to dark gray.
3012' - 3030'	18'	Shale, medium to dark gray.
3030' - 3076'	46'	Sandstone, light gray, very fine-grained and shale, medium gray and pyrite and abundant coal at base of interval.
3076' - 3088'	12'	Shale, medium gray with crystalline pyrite.
3088' - 3102'	14'	Shale, red, calcareous.
3102' - 3120'	18'	Shale, red and gray and sandstone, light pink-gray, very fine-grained.
3120' - 3132'	12'	Shale, medium gray.
3132' - 3165'	33'	Shale, red-brown-gray and gray.

DEPTH		
3165' - 3292'	127'	Shale, medium gray, and shale red-brown-gray with siltstone light to medium gray and pyrite in upper 10' of interval and sandstone, white, fine-grained from 3230' to 3248' and from 3273' to 3292'.
3292' - 3317'	25'	Shale, medium gray with a trace of sandstone, white, fine-grained from 3292' to 3303'.
3317' - 3336'	19'	Shale, medium gray, and limestone, medium gray, argillaceous.
3336' - 3418'	82'	Shale, medium gray and red-gray with pyrite and black spherulitic inclusions from 3394' to 3399' and plant fossils at base of interval.
3418' - 3480'	62'	Shale, medium gray.
3480' - 3540'	60'	Shale, medium gray and limestone, medium gray, argillaceous with crinoids. Black spherulitic inclusions from 3504' to 3512' and macrofossil fragments at base of interval.
Greenbriar limestone - Top 3550'		
3550' 3540' - 4007'	467'	Limestone, tan-gray, argillaceous with oolitic zones scattered throughout the interval and crinoid stems at 3570', and 3650'. Coal from 3702' to 3707', macrofossil fragments from 3784' to 3791', and a trace of shale, red, calcareous from 3942' to 3951'. With some shale, dark gray from 3552' to 3885' and from 3900' to 4007'.
Maccrady shale - Top (within interval 4007' - 4044')		
4007' - 4044'	37'	No samples.
4044' - 4100'	56'	Shale, medium gray with shale, red in increasing amount toward bottom of interval. Silt in lower half of interval.
4100' - 4115'	15'	Shale, medium gray, silty.
4115' - 4172'	57'	Shale, red with some shale, medium gray from 4130' 4172'.
4172' - 4194'	22'	Sandstone, light to medium gray, very fine-grained, with subordinate amounts of shale, medium gray and red.
4194' - 4206'	12'	Shale, light to medium gray, with well rounded, frosted, smokey quartz conglomerate.

DEPTH		
4206' - 4311'	105'	Sandstone, light gray, very fine-grained, silty with increasing amounts of shale, medium gray toward base of interval and a trace of shale, red from 4230' to 4258' and from 4301' to 4311'.
4311' - 6030'	719'	Shale, medium gray with siltstone, light gray from 4699' to 4716'; dolomite crystals (2 min.) from 4928' to 4980'; slightly silty from 4980' to 4989'; shale, light and medium gray, silty and micaceous from 5030' to 5034'; pyrite spherulites from 5594' to 5606'; pyrite scattered throughout section from 5900' to base of interval
6030' - 6100'	70'	Shale, medium gray, with isolated masses of dolomite, white and pyrite at base of interval.
6100' - 6240'	140'	Shale, medium gray.
6240' - 6316'	76'	Shale, medium gray with a trace of shale, tan, calcareous.
6316' - 6326'	10'	Shale, black, very graphitic.
6326' - 6437'	111'	Shale, medium gray with abundant pyrite throughout interval.
6437' - 6450'	13'	Shale, dark gray to black with some shale, black graphitic, and coal and pyrite.
Huntersville chert - Top 6450'		
6450' - 6453'	3'	Shale, black graphitic with coal; chert, white, tan and black; and coarse, crystalline, cherty limestone.
T. D. 6453'.		

Summary

Pennsylvanian	in	186'
	bottom	2295'
Bluestone fm., Princeton sandstone undifferentiated	top	2295'
	bottom	2870' ?
Avis limestone	top	2870' ?
	bottom	2905' ?
Hinton formation (proper)	top	2905' ?
	bottom	3030' ?
Stony Gap sandstone member	top	3030' ?
	bottom	3250' ?
Bluefield formation	top	3250' ?
	bottom	3540'
Greenbrier limestone	top	3540'
	bottom	4007' (+?)
No sample	top	4007'
	bottom	4044'
Maccrady shale	top	4044' (+?)
	bottom	4172' ?
Price sandstone	top	4172' ?
	bottom	4311'
Big Stone Gap shale & Devonian shale undifferentiated	top	4311'
	bottom	6450'
Huntersville chert	top	6450'
in Huntersville chert at	T. D.	6453'

