Operator: United Fuell Gas Company Farm: Kentland Coal & Coke Co. Well No.: 8295-T Location: Buchanan County 50' N. of 37°25' 5700' W. of 82°05' Elevation: 1242.10' Ground Total Depth: 5392' Drilling Commenced: August 4, 1957 Well Completed: January 29, 1958 Result: Gas well

## Geologic Summary

Formation	Top	Bottom	Thickness	
Pennsylvanian System				
Post Lee Formation "	in at surface Hagy coal Splash Da Lower Ban Kennedy c	" 500 at 110' m coal at 210' ner coal at 320' oal at 430'	500'	
Lee Formation	500 quartzose	1722 sand 500-?	1222' 90'?	approx.
	Jawbone c	oal at 700'		
	quartzose quartzose quartzose	sand 914-1019 sand 1096-1150 sand 1160-1190	105' 54' 30'	
	War Creek	coal absent		
	quartzose quartzose quartzose quartzose	sand 1352-1477 sand 1484-1527 sand 1536-1584 sand 1594-1722	125' 43' 48' 128'	
	total qua	rtzose sand	593'	

Pocahontas Formation "absent"

	-2-	VDMR Well No	D.: ₩-285
Mississippian System			
Bluestone Formation	1722	2005	283'
Pride Shale	1870	2005	135'
Princeton Interval	2005	2035	30'
Little Stone Gap Mem.	2035	2085	50'
Stony Gap Sand?	2388	2487	99'
Greenbrier Fm.	2670	3103	433'
MacCrady	3103		

Remarks: Elevation and location of well site with reference to coal geology along Pounding Mill, Lester Fork, and Paw Paw Creek, and measured sections Nos. 764, 765, and 741 in Bulletin 18 indicate that well spudded in about 100' below the Dorchester coal, about 110, above the Hagy coal, about 210' above the Splash Dam coal, about 320' above the Lower Banner coal, and 430' above the Kennedy coal. Formation boundaries not picked below top of MacCrady. Correlations by Marshall S. Miller, 1970-74, VDMR. Operator: United Fuel Gas Co. Farm: Kentland Coal & Coke Co. Well No.: 8295-T Location: Buchanan County 200' N of 37°25' 5600' W of 82°05' Elevation: 1242.10'

Total Depth: 5392'

Geologic log supplement by Marshall S. Miller: samples are from an air rotary, very powder-like and contaminated throughout; the geophysical logs are used for accurate boundary determination wherever available.

Depth	Thickness	Description
0-350	350'	No samples
350-410	.60'	Siltstone, gray, argillaceous, locally shaly
410-420	10'	Sandstone, light gray, very fine to medium grained, subangular to subround, poorly sorted, scattered micas and dark rock fragments, very silty with clay and silt matrix material, about 70% quartz
420-430	10'	No samples
430-480	5 0'	Siltstone, gray, sandy, micaceous, with scattered rounded argillaceous material, grades downward to a very fine grained, micaceous, silty sandstone
480-490	10'	Siltstone, brownish gray, argillaceous
490-500	10'	Siltstone, light gray, sandy, with reworked argillaceous material
500-510	1 0'	Sandstone, white, very fine to coarse grained, subangular, poorly sorted, with scattered quartz pebbles, abundant white, silty material, no micas or rock fragments, a quartzose sand
510-620	110'	No samples

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620-640	20'	Shale, dark gray, finely micaceous, locally pyritic
640-670	30'	Sandstone, light gray, fine to medium grained, subangular, poorly sorted, with abundant muscovite, biotite, chlorite, dark carbonaceous material, dark rock fragments, clay-silt matrix material, about 50 to 60% quartz
670-700	30'	Shale, dark gray to black, carbonaceous
700-740	40'	Sandstone, gray, very fine to medium grained, subangular, poorly sorted, with abundant micas, dark argillaceous and carbonaceous rock fragments, reddish iron minerals, clay-silt matrix material, traces of feldspar, 50% quartz
740-780	40'	Shale, gray to black, finely micaceous, locally carbonaceous
780-810	30'	Shale, as in 740-810, with minor sand stringers
810-880	70'	Shale, dark gray, finely micaceous, grades downward to a silty shale
880-914	34 <sup>†</sup>	Sandstone, light gray, fine to medium grained, subangular, poorly sorted, with abundant muscovite, biotite, chlorite, phlogopite, coaly material, and dark rock fragments about 70% quartz
914-1019	105'	Sandstone, white, quartzose, fine grained, to granular, subround to subangular, poorly sorted, little to no matrix material, rare dark rock fragments, conglomeratic in intervals 915-960 and 980-1019
1019-1045	26'	Shale, brownish gray, finely micaceous
1045-1096	51'	Sandstone, light gray to white, fine to medium, occasionally coarse grained, subangular, poorly sorted, with abundant muscovite, chlorite, phlogopite, limonite, coaly material, dark rock fragments, traces of feldspar, about 65 to 70% quartz, increases quartz percentage downward

1096-1150 .	54'	Sandstone, white, quartzose, fine to medium grained, occasionally coarse grained, subround and subangular, poorly sorted with little or no matrix material, rare muscovite and rare dark rock fragments, over 90% quartz
1150-1160	10'	Siltstone, dark gray, argillaceous
1160-1190	30'	Sandstone as in 1096-1150
1190-1252	62'	Sandstone, light gray, fine to medium grained, subangular, poorly sorted, abundant muscovite, coaly material, argillaceous rock fragments, traces of feldspar, clay-silt matrix, (X-ray verified presence of feldspar, siderite, illite, and kaolinite), about 75% quartz
1252-1262	10'	Shale, gray, silty, micaceous
1262-1285	23'	Sandstone, light gray, medium to coarse grained, subangular, poorly sorted, with large coarse grained muscovite, traces of feldspar, coaly and argillaceous rock fragments, clay-silt matrix, about 75% quartz, (X-ray verified presence of feldspar, illite, kaolinite, and siderite)
1285-1290	51	Coal, pure to impure, dull and silty in part
1290-1318	28'	Shale, dark gray to black, carbonaceous, with plant fossils
1318-1320	21	Coal, silty
1320-1342	22'	Shale, as in 1290-1318
1342-1352	10'	Siltstone, dark gray to light gray, argillaceous, more sandy downward
1352-1380	2 8'	Sandstone, white, quartzose, fine to coarse grained, subangular to subround, poorly sorted, rare dark rock fragments, little or no matrix material, over 90% quartz
1380-1400	20'	Sandstone, as in 1352-1380, and conglomeratic

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1400-1420	20'	Sandstone, as in 1352-1380
1420-1445	25'	Sandstone, as in 1352-1380, and conglomeratic
1445-1477	32'	Sandstone, as in 1352-1380
1477 <b>-1</b> 484	7'	Siltstone, gray, argillaceous
1484-1527	43'	Sandstone, white, quartzose, medium grained to granular and conglomeratic, subangular, poorly sorted, over 95% quartz
1527-1536	9'	Shale, dark gray to black, carbonaceous
1536-1584	48'	Sandstone, as in 1484-1527, no longer conglomeratic
1584-1594	10'	Shale, black, carbonaceous
1594-1650	56'	Sandstone, white, quartzose, fine to coarse grained, subangular to subround, poorly sorted, scattered dark rock fragments, little to no matrix material, 95% quartz
1650-1722	72'	Sandstone, as in 1594-1650, and conglomeratic
1722		Shale, gray, brown, reddish brown, and pastel green, generally calcareous

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