## FRANKLIN REAL ESTATE CO. No. 1(GW 796).

Nuttall District, Fayette County, W. Va.

By Columbian Carbon Company Located 36 mi Ry 39005' and 3, Wai. W. 1 800 85' 8W-Winona Quadrangle.

Elevation 2344 (2. F.)

Permit - Fay. 42

Drilling commenced May 1, 1945; completed November 8, 1947

Not shot

Dry hole

Fresh water 105' 2 - 14" blrs.; 133' hole full

Salt water 1990' Hole full; 7224-7227' 1/2 - 6" blr-hr; 7216' 1 blr - 2 hrs.

16" casing, 26' 8"; 13-3/8" 48#; 514' 11" (Pulled); 10-3/4" 40#; 1588' 10"

(Pulled); 8-1/4 24#, 2151' 11" (Pulled); 7" 23#, 7164.1"

Coal at 23 12 (drillers record)

Section based on samples from 7092! to 7403!,

Examined by Russell R. Flowers.

Top	Bottom	Thickness	MARCELLUS SHALE, 45+ FEET
7092	7131	39	Shale, black to grayish-black, very highly carbon-
			aceous, calcareous, highly calcareous and moder-
			ately dolomitic at 7104 to 7109', moderately
٠			dolomitic at the bottom, slightly pyritic
7131	7137	6 V	Shalle, black to grayish-black (with medium- to
			dark-gray spots, very highly calcarious to
			calcite), highly carbonaceous, a few of the
			pieces of shale show mlickensides, very highly
			pyritic; some brownish-gray to brownish-black,
			highly pyritic shale, containing a large amount
			of altered biotite
			eyt

Huntersville Chip, 79 Feet

7137 7141 4 Shale, (highly calcareous) to limestone (very

7137 2344 4793

shaly), brownish-black to dark brownish gray (with some medium gray spots), pyritic in part; some medium-gray to brownish-gray, highly pyritic shale containing a large amount of altered bio-

tite; large amount of grayish-black to black, (continued)

7116	7121	5	highly carbonaceous, calcareous shale (7140 DLM) 7115 SLM, top of Corniferous Lime - from drillers log)  Limestone, brownish-gray to brownish-black, some medium-gray spots, very shaly to a highly carbonaceous shale (brownish- and grayish-black to black); small amount of white to light-gray chert; a small amount of finely disseminated pyrite is scattered throughout the interval
7]121	7125	4	No sample
7125	7134	9	Shale (highly calcareous) to limestone (shaly),  brownish-gray to brownish-black with light- to  medium-gray spots; shale, grayish-black to black,  carbonaceous, silicified in part to a white to a  very light gray chert, pyritic in part
7134	7137	3	Shale, brownish- and grayish-black to black, some- what calcareous and dolomitic, silicified in part to cherty
7137	7138	1	No sample
7138	7147	9	Chert, light- to medium-gray, some brownish-gray, some dark-gray to black, (very shaly) somewhat calcareous, moderately dolomitic; small amount is highly glauconitic (probably a parting or thin layer)
7147	7158(?)		Chert, very light to medium-gray, somewhat cal- careous, moderately dolomitic, slightly glaucon- itic; some medium- to dark-gray, calcareous, shaly chert
7150	7154	4	Chert, very light to medium-gray, some light ol- ive gray, some dark-gray to grayish-black (shaly), somewhat calcareous and delomitic; trace of glau- conite

.

7154	<b>8</b> 170	16	Chert, mottled light- to medium-gray and dark- gray to grayish-black (shaly), moderately dolo- mitic (included rhombs), silty, moderately to  /highly glauconitic, an increas in the amount of dark-gray to grayish-black at the bottom; a  large amount of dark-gray to grayish-black shale at the top
7170	7175	5	Chert, light- to dark-gray, some grayish-black, moderately dolomitic at the top, slightly py-ritic and glauconitic
7175	7196	21.	Siltstone, medium- to dark-gray, some light-gray, some grayish-black to black (shaly), cherty, slightly to moderately dolomitic, highly glaucon-itic, very shaly and very highly glauconitic in the lower part; considerable dark-gray to grayish-black shale at the bottom (highly glauconitic)
7196	7210	14	Chert (medium light to dark-gray) to a silicified shale (grayish-black to black, carbonaceous), dolomitic in part, somewhat calcareous at the bottom, some glauconite, highly glauconitic at 7203-7207'
7210	7216	6	Chert, medium light to dark-gray, some grayish- black to black (very shaly) at the top, somewhat dolomitic, moderately calcareous at the top to a highly calcareous at the bottom; very small amount of glauconite  Oriskany Sandstone, 11 Feet
7216	7218	5	Chert, medium light to dark-gray, some grayish-black to black (carbonaceous, shaly), highly calcareous, the highly calcareous and shaly parts contain some fine to medium sand grains; a very large amount of sandstone, white to very light gray, fine- to medium-grained (Oriskany at 7216-7239 - drillers log)

7218	7222	4	Sandstone, white to very light gray, quartzose,
			fine- (glassy, clear) to medium- (rounded and fx
			frosted), subrounded to rounded, slightly to
			moderately calcareous
7222	79 <b>9</b> 3	2	Sandstone, white to light-gray, fine-grained,
			some medium and some very fine grains, quartzose,
			subrounded, some of the medium grains are rounded
			and frosted, moderately calcareous; some calcar-
			eous chert to silickous shale, medium-gray to
			grayish-black (cavings)
7224	7 <b>2</b> 27	3	Sandstone, very light gray, fine-grained, some
			very fine grains, calcareous; a very large
			amount of siltstone and sandstone (very fine,
			highly calcareous) to limestone (silty, sandy
			and shaly), medium- to dark-gray
			Helderberg Formation, 116, plus, Feet
7227	7239	12	Siltstone and sandstone (very fine) very highly
			calcareous and some limestone (sandy and silty),
			medium- to dark-gray (with light-gray spots),
			cherty, somewhat shaly, a few fossil fragments
7239	7244	5	Limestone (sandy and silty) to a fine sandstone and
			siltstone (highly calcareous), medium- to dark-
	-		gray, some grayish-black (very shaly), comtains
			many fossil fragments, cherty
724 <b>4</b>	7252	8	Limestone (very silty) to siltstone (very highly
			calcareous), dark-gray to grayish-black (very
			shaly), a moderate amount of medium-gray, very
			cherty, contains some fossil fragments
7252	7268	16	Sandstone, white to light-gray, some medium light
			to medium-gray, fine- to medium-grained, subround-
			ed to rounded, highly calcareous, contains some
			carbonaceous, shaly material and some chert; a very highly calcareous sandstone to a limestone (sandy and silty), medium- to dark-gray, shally cherty, some fossil fragments at the bottom and some at the top

7267	7268	1	No sample
7268	7276	8	Limestone, dark-gray to grayish-black, some medium-
			gray, silty, sandy, and shaly at the top to very
			silty, very shaly, very sandy at the bottom, cherty,
			some fossil gragments; a moderate amount of light-
			to medium-gray, highly calcareous sandstone at the
			bottom
7276	7280	4	Samdstone, light- to medium-gray (with dark-gray to
			$\checkmark$ greenish black, very shaly streaks), fine-grained,
			some medium grains, very highly calcareous
7280	7281	1	Sample too highly stained with iron rust for
			description
7281	7285	4	Sandstone, light- to medium-gray, fine-grained, some
			medium and some very fine grains, highly calcareous
			with some limestone (very sandy), somewhat shaly
7285	<b>72</b> 88	. 3	No sample
7288	7294	6	Sandstone, light- to medium-gray, fine-grained, sub-
			rounded, some rounded medium grains, highly calcar-
			eous to a very sandy limestone
7294	<b>7</b> 297	3	Limestone (very sandy) to sandstone (fine-grained
			highly calcareous), medium- to dark-gray, some light-
			gray, some grayish-black, very shaley, somewhat
			cherty
7297	7306	9	Sandstone, very light to light-gray, fine to very
			fine grained, mostly fine-grained at the top, highly
2000	w-0-0	_	calcareous; trace of carbonaceous material
7306	7308	2	Limestone (very sandy and silty) to chert (very shaly,
			highly calcareous), mottled light- to medium-gray and
7700	66.13	~	dark-gray to grayish-black
7308	7311	3	Limestone, mottled dark-gray to grayish-black (very
			shaly) and light- to medium-gray, very sandy, very
7311	7316	F	silty, cherty, some fossil fragments
1011	1910	5	Limestone (very sandy) to a sandstone (very fine),
	·		silty, highly calcareous), medium to dark-gray, some
			light-gray and some grayish-black, shaly, very
			cherty

7316	7321	5	No sample
7321	7325	4	Sandstone, light- to medium-gray, fine to very fine
			grained, very highly calcareous
7 <b>3</b> 25	7334	9	Limestone (very sandy and silty) to sandstone (very
			fine, silty, highly calcareous), light to medium
			dark gray, some dark-gray (shale and shaly limestone),
			cherty, fessil fragments at the bottom
7334	7353	19	No samples
<b>735</b> 3	7366	13	Limestone, medium- to dark-gray, some grayish-black
			(shaly to shale at the middle), fery sandy (fine) to
			sandstone (fine to medium-grained, highly calcareous
			at the bottom), cherty, moderately dolomitic
7366	7376	10	Sandstone, light-gray with a few streaks of medium-
			gray, fine to very fine grained, highly calcareous,
			dolomitic; contains a few fossil fragments and a
			trace of glauconite
7376	7379	3	Sandstone (very fime to fine, highly calcareous) to
			V limestone (very sandy), medium- to dark-gray, some
			grayish-black (shaly), some light-gray, somewhat
			dolomitic, cherty, contiins some fessil fragments
7379	7382	3	Limestone, medium-gray to grayish-black, very sandy
			(very fine to medium grains), moderately dolomitic,
			very highly fossiliferous, somewhat shaly and cherty
7382	7403	21	Chert to silicified shale, dark-gray to grayish-black,
			some medium-gray, highly calcareous and some lime-
			stone, very silty; some medium- to dark-gray, sandy,
			highly fossiliferous, limestone in the upper part
	7406		TOTAL DEPTH

184 g