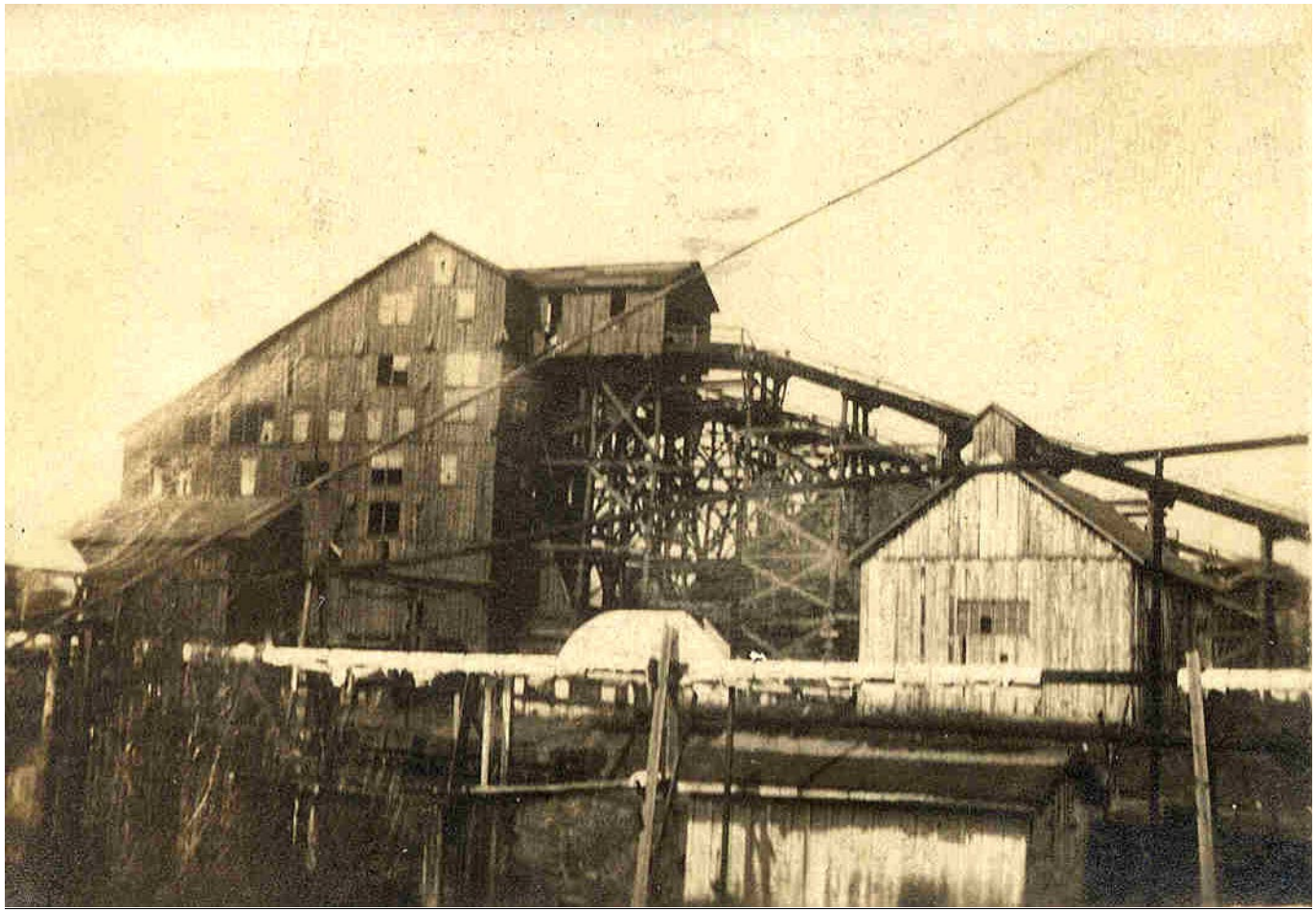
A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025



The Carbon Hill Coal Breaker circa 1912

Prepared by Dave Garlock from published works of other Researchers
February 2025

A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

TABLE OF CONTENTS

Table of Contents

A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

PREFACE

Second Edition

Since the first edition was issued in January 2025, one of our readers enlightened me on a photograph on page 104 for which I had questioned its true location. Based on the photographs provided and included in this edition, new questions have arisen as to the exact location of the Saunders Shaft which we will address in this second edition.

Purpose of this Publication

A Compilation of the History Coal Mining in Henrico County, VA ("**Compilation**") is intended to summarize other researcher's work highlighting the people, places, events, and timeline related to the two hundred years of coal mining operations in Henrico County. The Compilation contains the work of many researchers, historians, geologists and newspaper reporters from which this author has attempted to combine the key elements into a coherent presentation. This author has also conducted research to include maps and photographs to illustrate the past.

Coal mining in Henrico began in the early 1700's as local entrepreneurs worked surface mines on their land harvesting easy-to-access low grade bituminous coal. The first one hundred years of Henrico coal mining involved less than a dozen local small-scale miners excavating their acreage with shallow pits and shafts taking the easier to reach coal and coke. The next one hundred years involved these miners creating joint venture which it turn were replaced by better capitalized ventures under the control of a succession of New York and Boston investors looking for a fast return on their investment. As the story unfolds, we learn that those 19th and 20th century mining companies and their investors came and went until the dream of economic prosperity from the black gold laying underneath the Henrico soil was finally shattered by competition from western Virginia, disasters, insufficient capital and successive poor management of the mines.

By the late 1880's, coal mining in the Richmond Coal Basin lost its glow with the onset of competition from the western mines of Appalachia. Attempts would be made to revive Henrico mining over the next 60 years, but it was just a delay in the inevitable. There were many grand plans and schemes to exploit the coal fields of the Richmond Coal Basin as will be discussed in this **Compilation**.

Few of these economic dreams ever lasted more than a couple of years until they were abandoned when the money ran out or someone else with bigger dreams came along.

The **Compilation** is an aggregation of facts sourced from more authoritative and scholarly sources found in institutional and personal archives. The author has provided citation on the sources of the information used in this **Compilation** and credits all sources that have given permission for their materials to be reprinted. The author acknowledges and appreciates the help that has been provided by different individuals and institutions in making this information available.

Finally, the author has decided to frequently quote the source material rather than paraphrasing the content for this **Compilation**. The original writers have done exemplary jobs of conveying information to their reader. Paraphrasing that author's work would not do justice to the understanding of the content. Some source quotes are lengthy but reflect how facts as they were written in days of the past.

Acknowledgement of the People who supported this Compilation

First, the author is indebted to many different people, organizations, and websites that provided information for this **Compilation**.

The **Virginia Department of Energy** (formerly the Department of Mining, Minerals and Energy) conducted a statewide survey of abandoned coal pits, shafts and mines for the purposes of remediating the abandoned mining sites around 2012. The results of the survey have been published as an interactive map available online. The map is a very powerful tool which allows the user to drill down to the street level to identify where mining operations may have existed based on the survey. Another value tool is the ability to click on a symbol to obtain what survey information is available about the location on the map. Please note that some mines are not included as the shafts may already have been remediated or covered over with suburban development. The URL address is:

https://vadmme.maps.arcgis.com/home/webmap/viewer.html?webmap=d8ea5313fd0b4feea8ddd8a768c58b17

The Virginia Department of Historical Resources for providing surveys and photos of the Village of Gayton; William Trout's **Tuckahoe Creek Navigation: Coal to Richmond** published in 1964; and **Phase II and Supplemental Phase I Cultural Resource Survey for the Northern Portion of Proposed Route 288, Richmond, Virginia** by Robert F Hoffman, Jerome D Traver, Jacqueline Hernigle, Stephen Hinks, Harding Polk, Esther White, MaryAnna Ralph, et. al. published in 1988 by the Virginia Department of Historical Resources.

A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

Authors Jack Bruce and Gerry Wilkes wrote two very authoritative books that were used extensively in this Compilation. They met with this author to provide further insight for inclusion in this **Compilation**.

Rob Timmins for collaborating on interpreting maps to determine where rail lines, coal mines and villages were located as many roads and landscapes have changed over the last 150 years making it difficult to use current day landmarks when looking at old maps. Rob's grandfather was the owner of the collection of the circa 1910 – 1914 Carbon Hill Coal Tipple / Breaker photographs used in this Compilation as provided by Henrico County.

Mary Ann Soldano and Kim Sicola of County of Henrico Department of Parks and Recreation and Dave Letourneau of Henrico County Public Relations and Media Services for the photographs of the circa 1910 – 1914 Carbon Hill Coal Tipple / Breaker. Also, great appreciation to the County of Henrico for the invaluable video From the Mines of Henrico: The Beginning of Our Nation's Coal Industry. This twenty-minute video is found on YouTube and was produced by the Henrico County Public Relations and Media Services. To view this video, please use your favorite web browser and search for https://www.youtube.com/watch?v=tU7E2WpfVrA.

The Tuckahoe branch of the Henrico County Public Library for having Jack Bruce's research work In the hands of reasonable and practical men: the lure of the Henrico Coalfields and Louis Manarin and Charles Peple's History of Henrico County in its reference section.

Jason Kramer of the Virginia Department of Historical Resources for providing photographs of the Gayton Village and other research materials for the Department's archives.

Cassandra Farrell in the Special Collections in the Special Collections department of the Library of Virginia who identified valuable maps, provided links to the online resources available and facilitated this author's research at the Library of Virginia. The author also what to thank other archivists at the Library of Virginia who helped identify additional records for this **Compilation.** The Library of Virginia is a great resource for researching anything Virginia related including old company and organization records.

The Hagley Museum of Wilmington Delaware for permission to use 1857 Report of the Properties of the Richmond and New York Coal Company.

Kenneth Thacker for providing his 1982 college freshman year English term paper “An Exercise in Futility: Coal Mining in Henrico County”.

Jack Bruce, Ken Thacker, Brandy Martin, and Chuck McIntyre for providing photographs, maps, and other information from their archives.

The Virginia Museum of History and Culture for access to the Old Dominion Development Company photo album.

The Goochland County Historical Society for permission to use two articles from their magazine and providing photographs that are reprinted herein. They provided valuable insights into the Dover Mining operations that were intertwined with the Carbon Hill mining operations of western Henrico.

A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

Coal Formations in Central Virginia

Most Americans and many Virginians are not aware that the Richmond Coal Basin was the home to the earliest large scale mining operations in the United States. There are bituminous coal seams found north and south of the James River in an area west of the Bosher Dam on the James in what are today known as Henrico, Chesterfield, Powhatan, and Goochland Counties. There was also a small deposit outside of Farmville in Prince Edward County.

In summary, what we know as the topography of Virginia and the world today was radically different 250 million years ago. At that time there was a supercontinent called Pangea from which Africa, North America and South America would emerge over time. Over millions of years, the tectonic plates that float on earth's molten core moved apart, separating Pangea into the continents as we know them today. Oceans were formed and land masses rose and were submerged as ice ages came and went. Collisions with meteors and other extra-terrestrial objects also further contorted the earth's surface ejecting millions of tons of debris into the atmosphere creating periods of "nuclear" winters and ice ages for millenniums. The land was further changed by earthquakes, volcanic eruptions, and resulting tidal waves due to the dynamics of the earth's mantle. New layers of sediment were constantly added to earth's surface and older layers containing vegetation, remnants of life, and inorganic materials became buried beneath the surface. These carbon deposits would become the source of coal and oil today. Life in different forms flourished for hundreds of millions of years and then is wiped out by one or more of these geological changes. Geologists have developed a timeline of the earth's history into defined periods of time when certain forms of life flourished then vanished due to environmental changes.

(Source: http://www.virginiaplaces.org/geology/triassic.html)

"The Richmond Area is the most important of the Triassic coal fields. It has been the longest known and most extensively worked.

The area is situated on the eastern margin of the Piedmont district, and its eastern outcrop is but 13 miles from the head of the tide in the James River at Richmond. It lies in Goochland, Henrico, Powhatan, and Chesterfield Counties, and extends about 31 miles north and south, beginning 9 ½ miles north of the James River and extending to beyond the Appomattox on the south. Its greatest width is nearly 10 miles in the southern middle portion, from which it tapers toward with end. It has an area of approximately 150 square miles, the greater part of which is believed to be coal bearing, though the central portions are unexplored."

(Source: **The Atlantic Coast Triassic Coal Field,** Jay Backus Woodworth, 1897)

A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

In Gerald Wilkes' **Mining History of the Richmond Coalfield of Virginia,** there is very detailed description of the dynamics that shaped the coal fields of central Virginia and other facets that made central Virginia unique in its geological structure and composition. Mr. Wilkes discusses the geological formation that made mining possible, provides mining locations in maps, describes mining operations including the history of individual mines, contributed photographs of the mining operations and sets forth other interesting statistics of the area. He will be quoted in the following paragraphs interspersed with information from other sources.

"The Richmond coalfield, located in a structural basin filled with Triassic-age sediments, is in parts of Amelia, Chesterfield, Goochland, Henrico, and Powhatan counties, Virginia. The basin occupies parts of the Glen Allen, Hylas, Fine Creek Mills, Midlothian, Bon Air, Clayville, Hallsboro, Mannboro, Winterpock, Hebron, and Church Road quadrangles.

Sediment deposition and lithification in the Richmond basin occurred in a tectonically unstable area. As the early Triassic land surface subsided, sediments poured in to fill the lowlands. Favorable climate, topography, geography, and abundant flora contributed to formation of peat swamps. Occasional lowering of the land surface or runoff from storms introduced silt and sand to the swamp.

Eventually, the swamps were covered by sand, silt, and clay and the conversion of peat to coal began. Contemporaneous tectonic activity affected the lithification process by distorting the less competent beds. The coals found in the trough of a flexure are blocky, bright, and attain a maximum thickness, whereas near or at the crest of a flexure, the coals become part of a distorted structural framework."

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

The Richmond Coal Basin extends twenty-three miles east to west along the James River and is approximately nine and one-half miles wide at its widest point. Approximately 20% of the Coal Basis lies north of the James River. The Tuckahoe Creek Basin is the largest of the Coal Basin areas in Henrico and Goochland Counties while the Deep Run Basin located three miles to the northeast measures two miles and one-quarter long and one-quarter mile wide.

The coal in the Richmond Coal Basin is bituminous coal. There are five principal beds of coal and two of coke in the region that were interspersed with sandstone, shale (some would say slate), granite, and other rocky substances which had to be dug through to get to the coal seams. There are four grades of coal ranked from most preferred to least desirable:

- Anthracite: The highest rank of coal. It is a hard, brittle, and black lustrous coal, often referred to as hard coal, containing a high percentage of fixed carbon and a low percentage of volatile matter.
- Bituminous: Bituminous coal is a middle rank coal between subbituminous and anthracite. Bituminous coal usually has a high heating (Btu) value and is used in electricity generation and steel making in the United States. Bituminous coal is blocky and appears shiny and smooth when you first see it but look closer and you might see it has thin, alternating, shiny and dull layers.
- Subbituminous: Subbituminous coal is black in color and is mainly dull (not shiny). Subbituminous coal has low-to-moderate heating values and is mainly used in electricity generation.
- Lignite: Lignite coal, aka brown coal, is the lowest grade coal with the least concentration of carbon. Lignite has a low heating value and a high moisture content and is mainly used in electricity generation.

The coal in the Richmond Basin is considered between fair and good in quality although it was referred to as soft coal. It does not burn as efficiently as Anthracite coal with less heat and more smoke produced than with Anthracite. There was a time in the 1840's and 1850's when Richmond was covered by a smog-like haze due to the extensive household use of the Bituminous coal.

(Source: **The History of Henrico County, Louis** Manarin and Charles Peple, 2011, published by the County of Henrico)

There are two other detailed explanations of the geology of the Richmond Basin. The first was done in 1897 by Jay Backus Woodworth entitled **The Atlantic Coast Triassic Coal Field.** The author of this Compilation was provided a copy of the section on the Richmond coal basin which provided similar information found in Mr. Wilkes' book. Another source was done in 1899 by Nathaniel Shaler and Jay Woodworth entitled **"Geology of the Richmond Basin, Virginia"**. It was reprinted in 2010 and is available from several online retailers. It is an often quoted source of other authors.

Geological Surveys of the Richmond Coal Basin

During the middle 1800's to the early 1900's there were numerous geological surveys conducted at the behest of the coal mining companies and other institution. Each of these studies were conducted by credential geologists using the state of the art knowledge that existed in their day. The difficulty with the surveys was a reliance on the outcroppings of coal in the Richmond Basin, the mining

activity that had been conducted, and assumptions about the geological strata. As L. S. Evans observed "Factual knowledge of this field in limited to outcrop margins where faulty conditions are common. Engineers and geologists who have visited the field have yielded to the temptation to theorize. As d'Invilliers has remarked "factor is interwoven with theory and record with memory." The presence of seams, their depth, number, thickness and quality throughout the broad interior of the field are as much a mystery today as when, in 1609, the English settled at Jamestown." In addition to these surveys, there was numbers samplings of the coal conducted at different mines to measure the quality of the coal in regards to Carbon, Volatile Matter and Carbon Content.

(Source: The Richmond Coal Basin – A Compilation in Three Parts, Ira F. Davis and L S Evans, 1938. Part One)

Some of the surveys included in **The Richmond Coal Basin – A Compilation in Three Parts** include the 1866 reports from Dr. I. P. Kimball; the undated report of John Bladen on the Coal Lands in the Tuckahoe Valley, the 1904 report from E. V. d'Invilliers focused on the Coalbrook Slope operated by the Old Dominion Development Company, and the 1916 report from Merriweather Jones for Virginia Electric & Power on viability of using Henrico Coal after the mines had closed, the 1928 report form H. A. Tredwell. Other authorities were J. B. Woodworth in the 1880's. Some of th aforementioned surveys and others will be discussed later in this **Compilation.**

The early history of coal mining in Central Virginia

"Coal was first discovered in Colonial Virginia on the banks of the James River near Manakin. Colonel William Byrd, in a letter to the Colonial Council of Virginia dated May 10, 1701, refers to French Huguenot settlers using coal for domestic needs. Colonel Byrd took out a patent on 344 acres of coal land in 1701 and by 1709 he reported "...that the coaler found the coal mine very good and sufficient to furnish several generations" (Brock, 1886). It is probable that the Huguenot settlers knew of the coal prior to 1701. The previous references document the occurrence and use of coal but not its actual commercial production. The first commercial production of coal in the United States was from the Richmond mines. In 1758, nine tons of Richmond's coal was transported by ship from Hampton to New York. Later in that same century, street lamps in New York, Philadelphia, and Boston were fueled by coal gas derived from the flourishing Virginia coal industry near Richmond."

"The first commercial production of coal in the United States was in 1748 from the Richmond coalfield located in the Richmond Triassic basin of Virginia. Over the next 200 years, hundreds of drill holes, shafts, slopes, and open pit mines were developed, of which 7l mines and 38 drill holes have been located in the field. Coal quality information is represented by coal and coke analyses

from mining operations. Directly related to the development of the coalfield were transportation improvements, such as the Midlothian Turnpike, two canals, and four railroad companies with several miles of main and spur lines. Mining engineering practices were also improved by the Richmond coal industry. Initially, mining was haphazard and accidents and lost coal were common; explosions of methane or coal dust alone claimed at least 31 lives. Modern mining methods such as ventilation and dust control, roof support, and mechanized mining machinery were in use when the last major operation closed in 1927 due to competition from other coalfields. Attempts to mine coal continued sporadically through the 1950s but recent interest in the coalfield is related to the potential for in-situdegasification of the coal beds."

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

How Coal was Excavated in Henrico County

"The Tuckahoe Coal Basin in Henrico was discovered by Benjamin DuVal's workers employed in mining clay along the north bank of the James River. The clay was used in pottery manufacturing, a thriving business in colonial Virginia. DuVal's workers encountered an outcropping of coal beneath the clay they were excavating. The first coal mine in Henrico County was operated by Samuel DuVal of Mount Comfort around 1760. The coal was excavated and shipped by wagons to Richmond for use in homes and industry. As an example, DuVal supplied coal to the Westham Foundry from 1777 to 1780. The near surface level coal was not difficult to extract and could be done profitably. DuVal sold the land on November 6,1780 marking the beginning of many mining-related real estate transactions over the next 130 years. Other pits were soon opened and operated by landowners William Cottrell, John Wickham and John Ellis. The mine operated by Col Thomas Randolph was closed in 1812."

The Deep Run Coal Basin was mined in 1789 on land owned by Francis Hyland and soon followed by others who shipped their coal to Richmond on heavy wagons that would render the few available roads impassable due to deep ruts and erosion. That would lead to construction the Deep Run Turnpike that will be discussed later in this **Compilation**.

(Source: **The History of Henrico County, Louis** Manarin and Charles Peple, 2011, published by the County of Henrico)

"Domestic coal used by the early settlers was probably dug from small pits on the coal outcrop. This "outcrop coal" was undoubtedly very poor in quality because of its exposure to weather, but it was suitable for domestic fuel. These early miners followed the outcrop of the coal, digging trenches or shallow pits. Because of the coal's steep dip, the overburden soon became too thick to

remove (about 25 to 30 feet) and underground mines were advanced in the coal. As the demand for coal increased, large slopes or incline mines followed the coal one or two hundred feet down dip. Levels were constructed from the slope in the direction of the strike of the coal. When the mine became more established, the main levels were sometimes known as gangways. The pattern of mining and the placement of slopes and levels were influenced by local rolls or faulting of the coal. At a roll or fault, mining either ceased in that direction or a horizontal tunnel was driven through the structure seeking to relocate the coal."

"By the mid- 1700s, shaft mining was the dominant method used to extract coal. This type of mining was used primarily to keep away from the older slope workings. Breaking through to these old mines could flood the active mine with water or dangerous gases. The Richmond [Coal Basin] shaft mines were constructed by hand, by digging a vertical shaft until coal was encountered. The walls of the shafts were most commonly supported by timbers, but some of the established mines were brick-lined. Slopes originating at the surface were sometimes connected to the base of shaft mines and were used for ventilation, haulage, and escapeways.

Most of the mines in the Richmond coalfield accumulated water that had to be removed from the workings. This was accomplished in the early mines by a windlass-driven bucket hoisting water from a sump. Power for this was initially provided by mules but, later, steam engines were used. By the late 1800s water pumps were employed to more efficiently remove the water.

When mining commenced underground, the need to supply fresh air to the working face became apparent. In addition, some of the coals were gassy and mine explosions caused by the ignition of methane or coal dust were common and costly. An early method for ventilating underground workings was in use at the Black Heath Pit by 1818. Part of the workings had been on fire for several years and to separate the active and abandoned workings, a stopping with a mandoor was built. When the door was opened, fresh air was drawn from the outside, through the mine and into the damped fire. Care had to be exercised in using this method because flammable concentrations of methane, being emitted from the coal, could also be drawn into the fire. In 1839, this did happen and the violent explosion that resulted killed 53 men and outlined on the ground's surface the underground workings because of the collapse of the mine's sections."

"Several methods were used to control the buildup of explosive gases in the mines. In using a "firing line", a candle was attached to a cord and drawn into the gaseous area by using a pulley fixed to the working face. The miners could stand back in relative safety while the gas was ignited by the candle flame. Another method was accomplished by the "cannoneer" of the mine. This man would wrap himself in a wet, heavy cloak and lie flat on the floor upon reaching the gassy area. He would then hold a torch over his head to ignite the gas. In the mid-1800s two shafts were dug for each mine. The downcast shaft brought in fresh air from the outside and the

upcast shaft removed the mine air. By controlling the direction of airflow in the underground workings, a circulation of fresh air could ventilate the mine. Wooden walls, called brattice, were constructed in the passageways to control direction of ventilation. In some shaft mines, boilers were placed at the base of the upcast shaft and the heat generated caused an updraft, thus freeing the workings of gas and dust. Care had to be taken in this method because high volumes of methane passing the boilers to the upcast shaft could ignite causing severe explosions. By the late 1800s, most major mines were using fans to draw air and employed both wooden and stone brattice for controlling ventilation. This is basically the method used by the coal industry today."

"The actual mining of coal was by pick and shovel. Later in the field's mining history, steam- driven chainsaw-like machines were used to undercut the coal and holes were drilled in the coal face, filled with black powder and a clay "dummy". A fuse was placed in the powder, lit by open flame and the "shot was pulled". The loose coal could then be shoveled into carts and hauled by mules out of the slope or to the base of the shaft. At some mines, the mules worked and were stabled underground, never seeing daylight. They appeared very healthy due to the stable environment of the mine.

Later, the mules were replaced by wire cables attached to a steam-driven engine. In some shaft mines, a steam boiler at the base of the shaft was used to wind the cables. This boiler also made an excellent place to locate the smith's shop. A hoist was used to lift coal from the base of the shaft to the surface where various degrees of cleaning (removing rock and other debris) were done before loading the coal into wagons or railroad cars. Washing or other preparation was not normally used."

"Man-made coke was produced from the coal at some mine sites. The Creek Company operated two ovens in 1842, an oven was in operation at Winterpock during 1865 to 1870, and the Richmond Coal Mining and Manufacturing Company had ovens at the Gayton Shaft in the late 1800s. Generally, the brick ovens were constructed about eight feet square with an exhaust hole in the top and a hinged steel door at the front. Coal was loaded in the oven, fired and allowed to bake slowly. This process, known as carbonization, drove off much of the volatile matter, thus forming a product high in carbon and hydrogen with minor amounts of nitrogen, oxygen, and sulfur. After a given amount of time the coke was raked out of the oven and quenched with water. Richmond iron foundries, such as the Tredegar Iron Works, used all the coke that was produced."

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

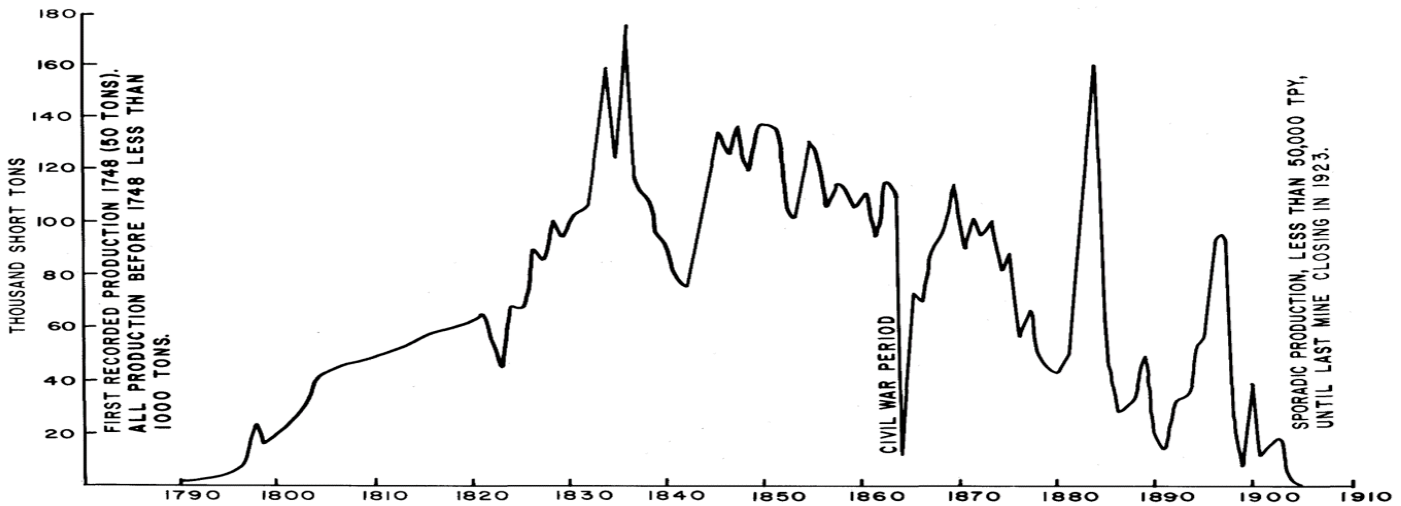


Figure 8. Coal production from the Richmond coalfield.

PUBLICATION 85

7

Coal production volume in the Richmond Coal Basis from 1790 to 1900. By 1910, the production to almost nothing.

Table 1: (Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

THE RICHMOND COAL BASIN

Five mining districts in the Richmond Coal Basin are recognized:

1. Carbon Hill (Henrico and Goochland Counties),
2. Deep Run (Henrico County),
3. Midlothian (which includes the Black Heath, Union, and Stonehenge basins in Chesterfield),
4. Clover Hill (Chesterfield), and
5. Manakin/ Huguenot Springs (Goochland and Chesterfield Counties).

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

Brief Description of Mines of Chesterfield

There are three coal mining districts within the boundaries of Chesterfield and Powhatan counties. These two counties were part of Henrico during their first century of existence.

The Mining Districts are Midlothian, Clover Hill, and Huguenot Springs.

The Midlothian District

"This district is on the east-central margin of the main basin beginning at the James River and continuing south to the end of the coal measures, to about State Road 604 in Chesterfield County (Plate l).Included in this district are the Stonehenge, Union, Cunliffe, and Black Heath basins.

The Stonehenge and Union basins are separated from the main basin by erosion. They represent areas of severe deformation of the Triassic strata. Several rolls and minor faults in the strata caused mining problems, but most were rectified by methods used at the

time of mining. The Black Heath and Cunliffe basins are a part of the main basin. They are structurally the same as the Stonehenge and Union basins but have not been eroded to the same extent."

"Four coals are found in this district. The uppermost coal averages 5 feet in thickness with L5 feet of shale partings. The second coal is 1 foot thick and is located in the 47-foot sandstone and shale interval between the first and third coals. The third coal averages l2 feet in thickness, including 0.2 to 2.0 feet of shale partings. An unnamed l4-foot coal is separated from the third coal by l0+ feet of sandstone and shale."

Gerald Wilkes listed over thirty known mines in the Midlothian District. Many of them were worked beginning in the late 1700's by different individuals and companies. Over the space of 150 years there were many mining companies operating in succession of each other like the Midlothian Coal Mining and Manufacturing Company, the Heath Mining , Willis Brown & Company, John J Werth and Company, and the Murphy Coal Company. The mines names such as Black Heath, Grove Shaft, Stonehenge Pits, Midlothian Pit, Maidenhead Pits, and Wo0ldridge Pits. Mining was its heights in Chesterfield from the 1820's to the 1850's and then again to a lesser degree from 1870's to early 1890. After that time, there was attempts re-open mines but none of these ventures yielded positive results.

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

The Midlothian mines and early railways in Chesterfield County are well-documented by many sources. Early transport of coal was by wagon. The earliest railways in the 1830's were gravity-powered incline railways that ran from the mines down to the dock in Manchester. The Chesterfield and Manchester Railroad was designed by Claudius Crozet who left his mark in many Virginia construction projects. It began operation in 1831. The cars would roll downhill and mule teams would pull the empty carts back to the mines.

The Midlothian mines are also the only remnants of mining in the Richmond Coal Basin that are still viewable by the public. There are ruins of the Mid-Lothian mining operations at Mid-Lothian Mines Park in Chesterfield County. The Foundation operating this park has constructed a replica of a 34-foot-tall wooden headstock structure which was directly over the 625-foot-deep mine shaft and contained a system of pulleys and ropes to raise and lower elevators filled with workers and mules, and to retrieve coal. Its largest remaining structure is the ventilation building that housed steam-powered fans to pull out toxic fumes and provide fresh air for

workers and mules. These types of structures would have been used at the mines in Henrico, although they may have been wooden instead of stone.

(source: https://www.midlomines.org.)

The following illustration and three photographs of the operation at the Mid-Lothian Mines Park provide some visual perspective on how a mine was operated.

Above is a drawing of the headstock structure, boiler plant, and other structures at a Mid-Lothian Coal Mining Company site. The steam boilers were probably housed in the building to the left from which drive belts were connected to a series of pulleys and belts

that powered the main pulleys at the top of the headstock structure. These pulleys were used to power the lifts that brought coal and miners to the surface.

Photo 1. (source: https://www.midlomines.org) The ventilation building at Grove Shaft was used to pull air out of the mines to disperse the buildup of coal dust and methane gas to prevent explosions and provide the miners with free air. The fans were belt driven from a series of pulleys connected together by belts from steam engines.

Photo 2. (source: https://www.midlomines.org) Another view of the ruins of the Grove Shaft at the Mid-Lothian Mines Park at 13301 N. Woolridge Rd., Midlothian, Va. 23114 USA in Chesterfield County.

Photo 3. (source: https://npr.org) Grove Shaft boiler house circa 1928.

The Clover Hill District

"This district is on the southeast margin of the Richmond basin, beginning near the junction of State Roads 664 and 655 and continuing south across the Appomattox River to an area west of Whites Store .

Three coals are present in this district. The top coal is 3 to 5 feet thick and is separated from the main coal (which is 7 to 20 feet thick) by l0 to 30 feet of sandstone and mudstone. A 40 to 50 foot interval of sandstone and mudstone separates the main coal from the bottom coal, which is 4 to 6 feet thick.

Early mining was by the slope method but was complicated by a squeeze in the strata, which pinched out the coals for a surface distance of I 00 feet. This so- called "Garrett Trouble" is located approximately 1300 feet along the surface west of the coal outcrop. Mining was terminated downdip when this structure was encountered. When the "Garrett Trouble" was delineated, shafts were located to the west of the roll and mining was able to continue.

The Clover Hill district was the last mining area to be developed in the Richmond coalfield, beginning in the early 1800s."

Names of the mining companies associated with this District were Clover Hill Mining Company and Brighthope. The mine names included Brighthope, Cox Pits, Clover Hill Pits, and Raccoon Slope.

"By 1845 the Clover Hill Railroad was completed from the Clover Hill mines to the Appomattox River, replacing the wagon road." "Because of the success of this rail line, the Clover Hill Mining and Manufacturing Company began building an l8-mile railroad to the Richmond and Petersburg Railroad at Chester Station. This spur, completed on October l, 1847, was a branch line of the Richmond and Petersburg Railroad. From 1847 to I 848 this line hauled 78,107 tons of coal from the Clover Hill area, of which 56,880 tons were shipped to other east-coast ports. The remainder was consumed in Richmond and Petersburg.

By 1866, the Clover Hill Railroad built its own landing at Osborn's, on the James River. However, the Dutch Gap Canal, built during the Civil War, diverted the river and caused a sandbar to develop in front of the Clover Hill Railroad's wharf making the landing useless. In April, 1867, a mine explosion at the Clover Hill Pits temporarily closed the mines. A cholera epidemic that year further depressed mining activity. The Clover Hill Coal Mining and Manufacturing Company's mines and railroad were sold in foreclosure to the Brighthope Mining Company in 1877. The Brighthope Railway Company continued haulage from this and other mines in the district until the late l800s."

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

The Huguenot Springs / Manakin District

"This district is on the west side of the Richmond basin between U.S. Highway 60 and State Highway 6.

At least two coals were mined: the upper coal was 7 to l2 feet thick and was separated from the lower 8-to l5-foot coal by a shale parting ranging from 5 to 12 feet thick. Several other coals have been noted in this area; DeBow (1860) mentions three coals and Brown (1937) measured a section containing seven coals. This district is plagued by structural problems which made conventional mining difficult. Dip measurements in the mines ranged from 20o to 70o in both the west and east directions. Russell (1892) attributed this structure to graben-type faulting and noted the mines were centered in fault blocks to obtain maximum coal thickness. When mining neared the edge of the block the coal typically would pinch and roll, and then thicken again in the next block."

South of the James River, this district included the Norwood Mine, Powhatan Pits, Chesterfield Coal Company Pits, and Old Dominion Pits.

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

Overview of Mining Operations in Henrico and Goochland Counties

In Goochland, there was one major mining area to the west of Tuckahoe Creek extending from just north of Route 6 to the James River in the Manakin area. The mines were collectively referred to as the Dover mines including a concentration of mines adjacent to Lower Tuckahoe and off Hockett Road near River Road west of the Richmond Country Club golf course.

In Henrico, there were two dominant mining areas. The first area is called Carbon Hill running north to south along Tuckahoe Creek on the border with Goochland County from present-day Patterson Avenue to somewhere north of the present day intersection of Lauderdale and Gayton Roads. The mining area extended from present-day Poplar Forest Road on the eastern side and Tuckahoe Creek on the western side into Goochland County. The second area mining is Deep Run running north to south along Deep Run Creek from present day Three Chopt Road on the south to the Springfield School area on the north paralleling Pemberton and Springfield Runs.

The Henrico western mines' transportation needs were first served by primitive dirt roads that were supplemented in the early 1800's by the Tuckahoe Creek Canal which connected to the James River for barge transport. The Canal would succumb to the incline-operated Tuckahoe and James River Railroad from the 1830's to the 1860's that connected with the James River and Kanawha Canal. After the Civil War, the incline railroad would be converted to steam engines on standard gauge track in the 1880's under the same name connecting with the Richmond & Alleghany Railroad at Lorraine. This Tuckahoe and James River Railroad would cease to operate by 1915.

The Goochland mines used the roads to the James River and the James River and Kanawha Canal to move coal to Richmond. There was also a nail manufacturing foundry on site in Goochland that used the coal to forge its products. There is at least one map that depicts a rail line connecting the Goochland mines in the 1850's but there is no other mention of a rail line operating in this area at that time so the author is unable to verify the accuracy of this map.

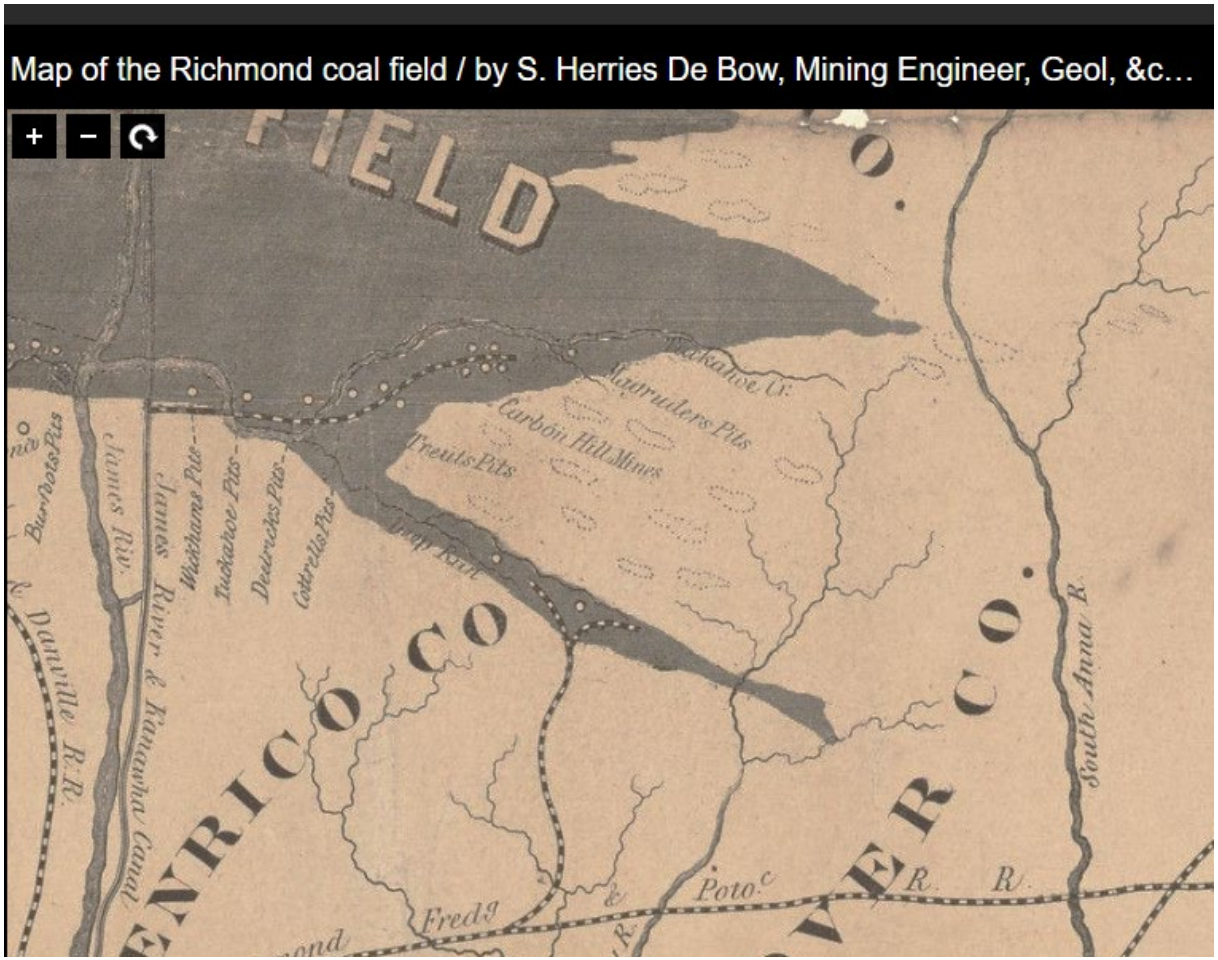
A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

1858 DeBow Map of the Richmond Coal Basin

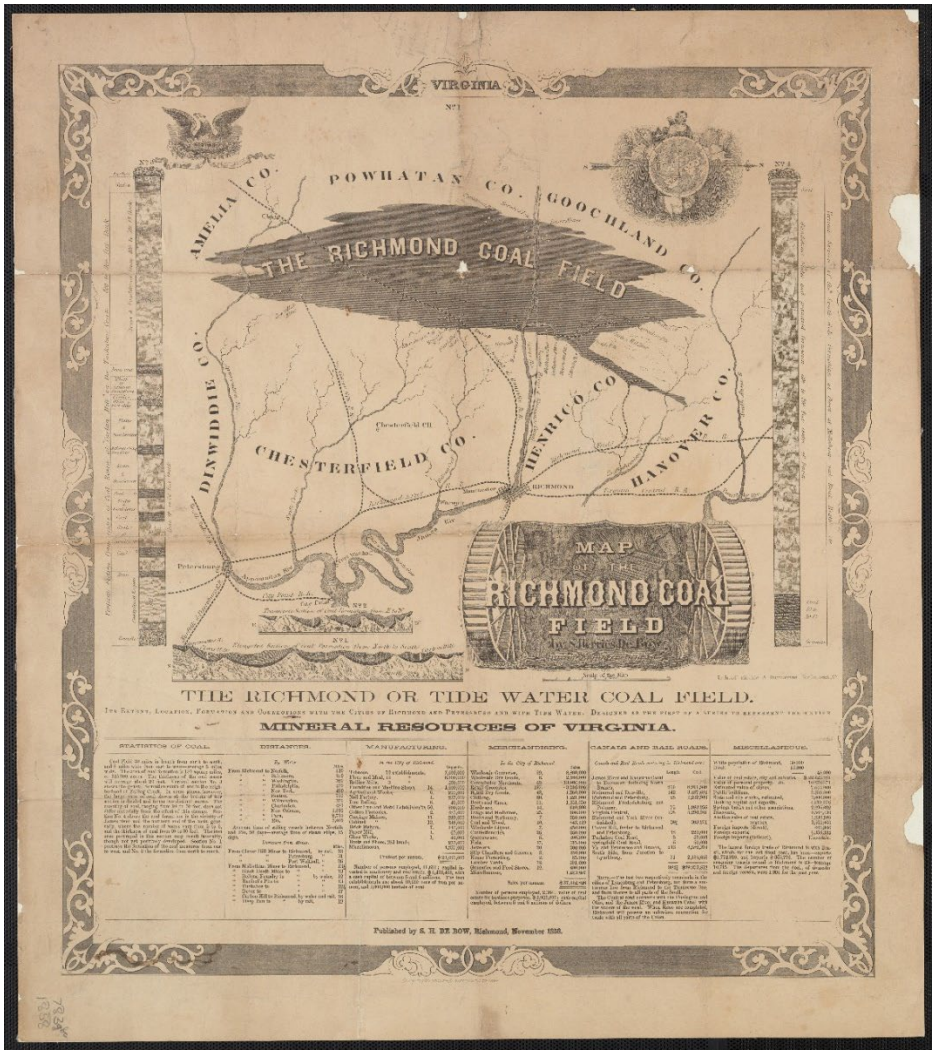
In 1858, S. Herries DeBow, Mining Engineer and Geologies created a map of the Richmond coal field which was lithographed by Ritchie & Dunnavant, Richmond, Va. showing the potential extent of the mining opportunities in Powhatan, Chesterfield, Henrico, and Goochland counties. The map orientation is confusing to a modern reader accustomed to a north to south presentation. The upper quadrant of the map is west, the right quadrant is north, the lower quadrant is east, and the left quadrant is south. The original map measured 36 x 42 cm. on sheet 57 x 51 cm. using a scale of ca. 1:227,500. Mr. DeBow would be involved in the New York and Richmond Coal Company that mining at the Deep Run and Springfield mines in the late 1850's. A copy of the map has been reprinted after this section.

For purposes of this discussion, in the next image is an enlargement of the section of the map that pertains to Henrico County. Following that image is the full image of the DeBow map.

The names of the mines in operation around 1858 are written on the DeBow map along with the delineation of the railroads serving the mines. In western Henrico, the named mines running south to north were the Wickham Pits, Tuckahoe Pits, Deelricks Pits, Cottrell Pits, Truets Pits, Carbon Hills Mines, and Magruders Mine that all were aligned along Tuckahoe Creek and served first by the Tuckahoe Creek Canal then by the James River and Tuckahoe Railroad which connected to James River and Kanawha Canal at Lorraine. This section would be commonly referred to as Carbon Hills and sometimes a reader will encounter the name Gayton applied to this area, In northwestern Henrico, there were two unnamed pits identified by DeBow aligned along Deep Run creek that were served by a rail spur off the RF&P connection at Hungary Watering Station (Laurel). The more southern mine would have been the Deep Run mine and the more northern mine would have been one of the Springfield mines. Based on other authors' commentaries, one of the mines may have been DuVal's Pit (one of the earliest mines) while the other could have been operated by John Barr. This basin would be commonly referred to as the Deep Run mines although there was some distance between the cluster that made up Springfield and the cluster that made up Deep Run as you will see in other maps. This is the Henrico portion of map.



Map 1A. (source: the collection at Yale University https://collections.library.yale.edu/catalog/15811282)



Map 1B. (source: the collection at Yale University https://collections.library.yale.edu/catalog/15811282). This map can be viewed and enlarged for better clarity using the online site provided at Yale University.

A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

Coal Mining in Goochland County

While agriculture remained the backbone of Goochland's economy for many years, mining also played a significant role. Coal, discovered by an early Huguenot settler, was mined in Manakin as early as the mid-1700s. The mines were located in the eastern part of the county at Dover and Tuckahoe. The Dover mines were visited by French nobleman the Duc de La Rochefoucauld in 1796. Villages often grew up around the mines, but then disappeared when the mining operation shut down. The community around Dover mines once hosted a post office, coach maker, 4 general merchants, a saw mill, a doctor, and possibly a hotel.

(source: https://www.exploregoochland.com)

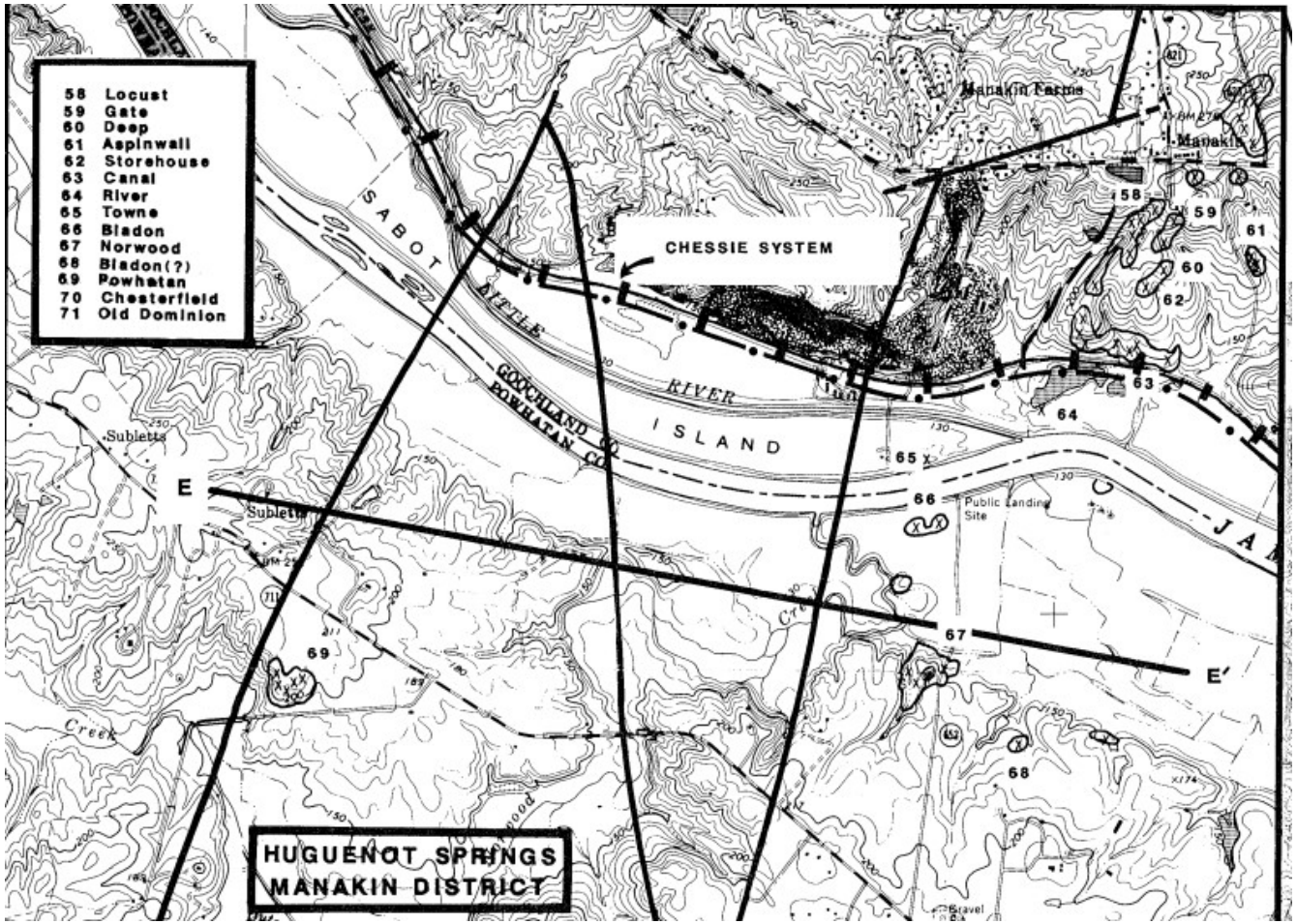
Frank Wadleigh observed that there were at least eight mines opened between 1848 and 1880.

(Source: Library of Virginia Richmond Coal Basin Project, **Story of the Richmond Coal Fields** by F R Wadleigh, circa 1935)

The following mines have been identified for the Manakin area by the Virginia Department of Energy in a map included in **Mining History of the Richmond Coalfield of Virginia** by Gerald P. Wilkes. The mines have been marked by number that corresponds to the following:

- 58 – Locust Shaft – northernmost mine in this District
- 59 - Gate – located south of the village of Mankin
- 60 - Deep – southwest of Aspinwell
- 61 - Aspinwell – southeast of the Gate
- 62 – Storehouse – southwest of Deep
- 63 – Canal – south of Storehouse on the James River & Kanawha Canal
- 64 – River – southwest of Canal on the James River
- 65 – Towne – on Sabot Island

This is topographical map which generally does not show any roads to use as a reference point.



Map 2. Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

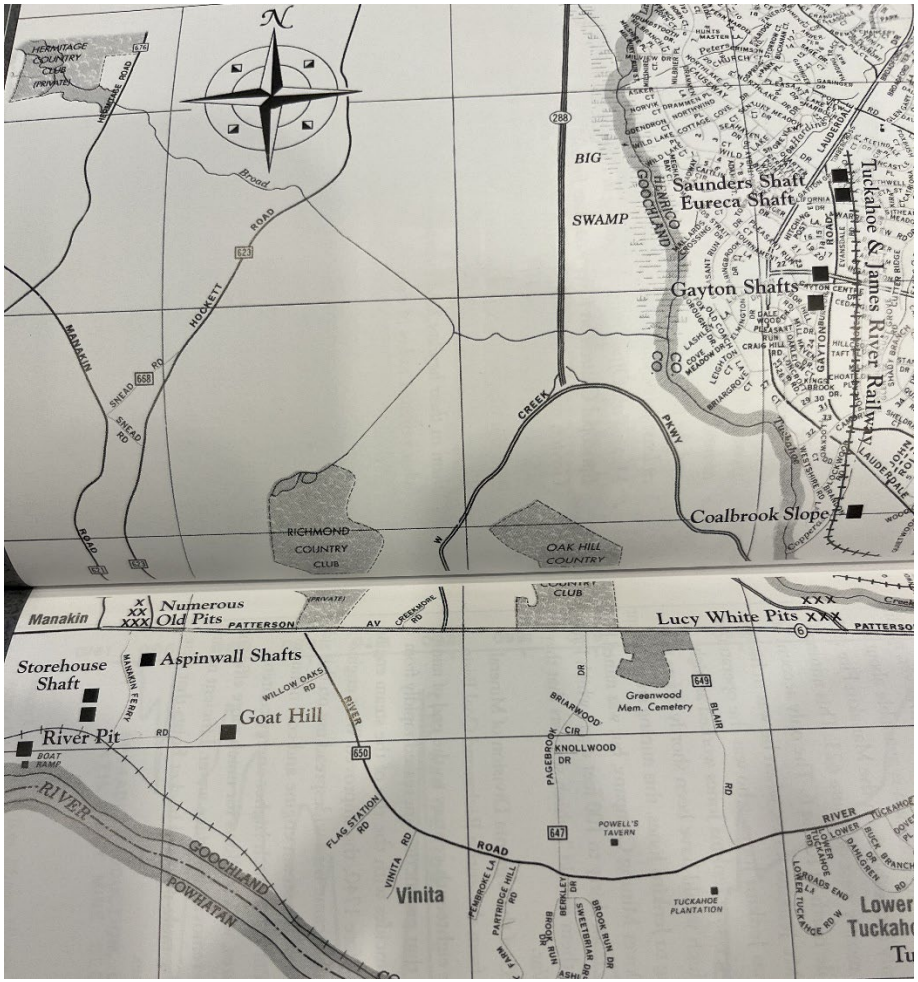
The eastern Goochland mining activity was located in the Manakin area stretching from the Henrico County border on the east to west of Manakin Road and from the James River on the south to an area north of Patteson Avenue. The Manakin area was the site of the earliest coal mining north of the James River.

" Collectively or individually, depending on when a mine was active, all the pits north of the James River were known as the Dover or Manakin Mines. The first report of coal in the wilderness west of Richmond was in this area in 1701. Later several small slope mines were operated on the outcrop in the 1700s and 1800s by Graham, Barr, Deaton, Cottrell, and others. The total surface area disturbed by these pits was approximately 50 acres. The mining was primitive and proceeded haphazardly. Coal was pulled out of the mine by mule-drawn boxes or "coaves" and no attempt was made to separate shale and other impurities from the coal. The Dover Coal Mining Company was operating several shafts near Manakin in the mid- 1800s but the company failed in 1860 due to a large financial burden.

Two coals are present in the area of the Dover Mines. The upper is generally 7 to 12 feet thick. The lower coal averages over 8 feet thick and is locally 15 feet thick. These coals are separated by 5 to 12 feet of shale. A third coal has been suggested, based on a correlation with the coals at Carbon Hill (Jones, l9l6)."

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

The following map created for the Goochland County Historical Society's Doug Price shows the location of the coal shafts and pits in eastern Goochland County in relationship to the Goochland road system in addition to several of the mines in western Henrico County that bordered Tuckahoe Creek.



Map 3. (source: Goochland County Historical Society Magazine, Vol 37 & 38, 2005, Soft Coal and Hard Times, map by Doug Price)

Dover Pits and Mines

"One of the earliest mines in the Richmond basin, the Dover Pits (Goochland County), depended primarily on slave labor. During the Due de La Rouchefoucault Liancourt's visit to the Dover mines in 1796, he noted about 500 black slaves laboring around and in the pits (Due de La Rouchefoucault Liancourt 1799:122-125). This labor situation was standard for the Richmond basin mines, and blacks continued working in the mines long after their emancipation."

Source: Jacqueline Louise Hernigle, An Archipelago of Coal Pits: Predicting Archeological Features in the Richmond, Virginia Coalfield, 1991, College of William and Mary, a Master's Thesis available online from the College of William & Mary)

Locust Shaft

This mine was operated in the early 1800's to the west of the Gate Shaft. The shaft was less than 150 feet deep. It is located south of Route 6.

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

Gate Shaft

The Gate shaft was a twelve foot coal seam that was worked prior to 1860. Reference was made in 1860 to this shaft by in a report by mining engineer S Herries DeBow. This shaft is not named in the DeBow 1862 map.

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

Deep Shaft

The Deep Shaft is located between the Gate Shaft and Storehouse Shaft. The Deep Shaft was dug in the early 1800's to a depth of 360 feet penetrating into two coal seams. The miners also dug an additional sump of 40 feet for collection of water which would be hoisted out of the mine on an ongoing basis.

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

Aspinwell Shaft

The Aspinwell Shaft was the property of the Dover Coal Mining Company which opened the shaft in the mid 1800's under the supervision of General Charles P. Stone. The Aspinwell Shaft consisted of circular brick-lined shafts about 50 feet apart. Both shafts were 10 feet in diameter. During construction, methane issued freely from the shaft which required ventilation.

(Source: Jacqueline Louise Hernigle, An Archipelago of Coal Pits: Predicting Archeological Features in the Richmond, Virginia Coalfield, 1991, College of William and Mary, a Master's Thesis available online from the College of William & Mary)

The Aspinwell Shaft site is located approximately 0.2 miles southeast of the Commissary Shaft site. It is also located on private property and was sealed by the Virginia Department of Mining, Minerals and Energy in 1990. There were two water filled shafts on the site approximately 50 feet apart. The shafts were circular, ten-feet in diameter, brick-lined and covered with timbers and wire mesh like the Commissary Shaft. The northernmost shaft was reportedly a ventilation shaft for the shaft to the south. Records indicated that the shafts were excavated in the mid-1860's. The survey test showed the main shaft to have a depth of more than 600 feet (recorded indicate 930 feet) and the ventilation shaft surveyed at a depth of 260 feet. The deeper shaft was sealed by the DMME using a concrete-filled, steel-fabricated plug covered with earth fill. The ventilation shaft was filled with coarse aggregate covered with a filter fabric and earth fill.

(Source: **Engineering Report for Richmond Shaft Project, Chesterfield, Goochland and Henrico County, Virginia**, prepared for the Commonwealth of Virginia, Department of Mines, Minerals and Energy, Division of Mined Land Reclamation, Abandoned Mine Land Group by Fuller, Mossberger, Scott and May Civil Engineers Inc., Lexington, KY, January 1989)

In a May 1901 report, an engineering firm engaged to evaluate the defunct Richmond Coal Mining and Manufacturing Company properties surveyed related mines in Goochland near Manakin. None of the mines were operating at that time of the inspection. The firm observed that some of the operations could be restarted economically. The engineer cited the Aspenwall Shaft with brick lining at a depth of 935 feet with a diameter of 10 feet. Nearby is the Storehouse Shaft that is 6 feet x 14 feet in good condition. He commented that there were several valuable brick buildings in this part of the field that were in good condition.

(source: Library of Virginia Richmond Coal Basin archives, Inspection of the Richmond Coal Field by unknown author issued to L Lancaster Williams and Everett Waddy, May 22, 1901)

Storehouse Shaft

One of the oldest mines in the area, coal was found near this site in 1701. A shaft measuring 6 ' x 14' with a depth of 325 feet had been dug on this site by 1750. The mine was originally worked by Anderson and Moody and later by the Dover Coal Mining Company. A tunnel at the 200 foot level was driven from the base shaft to dig out a 7' coal seam which was locally known as Cottrell's Coal.

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

From the Goochland County Historical Society magazine article Soft Coal and Hard Times written by Temple Bayliss, the following information has been provided about the Storehouse Shaft:

"Not long after the first commercial-scale mining got going, around 1748 on this side of the river, shaft mines were dug. A six-foot by fourteen-foot shaft, called the *Storehouse Shaft*, was dug before 1750 to a depth of 325 feet, also on the Goat Hill Farm property.[11] At 325 feet, the mine turned level and burrowed into the coal in several directions. The shaft would have been lined with wooden timbers, and it would have had an elevator and related gear to lower the miners and bring out the coal. There would have been some sort of structure like that shown in the photograph on the facing page, which was actually taken in 1890 at the Gayton Mines in Henrico County. A sluice for carrying away the water pumped out of the mine can also be seen in the photograph.

(source: Goochland County Historical Society Magazine, Vol 37 & 38, 2005, Soft Coal and Hard Times, Temple Bayliss, 2005)

Please see photograph #5 below for the Gayton Mine structure.

Canal Shaft

The Canal Shaft lies south of the Storehouse Shaft. It is situated near the banks of the James River & Kanawha Canal whose towpath would later transition into the roadbed of the Richmond & Alleghany Railroad. The Canal Shaft was 275 feet deep with a 500 foot slope that followed the coal seam. Ventilation for the mine was accomplished by dividing the 6' x 8' shaft in half with wooden

brattice. The mine originally was operated by Tredegar Iron Manufacturing Company and later taken over by the Dover Coal Mining Company. The mine would close upon the death of its owner, Mr. Deaton in the later 1800's.

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

River Pits

Located on the northern edge of the James River just northeast of the tip of Sabot Island, the River Pits were operated in the 1700's by Willis Brown and Company. The ownership of the River Pits would transfer to the Dover Coal Mining Company who worked the site until no later than 1860. The site workings were slope mines in a 20 foot thick seam of coal that extended 396 feet below the James River. As expected, dewatering was an issue for this mine and all dewatering operations were done by a bucket hoist.

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

From the Goochland County Historical Society magazine article Soft Coal and Hard Times written by Temple Bayliss, the following description of the River Pits is provided:

"The Dover Mines changed dramatically over their 180 years of existence. The first mining was very probably what is designated on maps as *The River Pits* or from something very like it. This mine began at a surface outcropping of coal so that someone just looking down at his feet would see it. The outcropping was just east and a few hundred yards north of the tip of Sabot Island. This surface coal was of poor quality because it had weathered, but digging down a few feet gave better quality coal. It was natural to dig deeper and deeper into the earth following the coal seam as it sloped downward. The result was a slope mine. The coal at *The River Pit* was mined in this way. The miners were following a seam of coal about twenty feet thick – unusually thick for this area. The seam descended under the river on a fairly steep grade, perhaps 30 degrees. In the end, the pit extended to a depth of 386 feet under the James River.[9] Water was removed by from the pit by a bucket hoist. At first, the hoist was almost certainly mule-powered . Mules were also used to pull carts loaded with coal up the slope and out of the mine. Mining was done with a pick and shovel and maybe a bit of blasting with black powder to loosen the coal at the face of the seam. This mine was abandoned around 1860 after about 110 years of use."

Remains of the River Pit Mine *Photograph by Louisa Preston*

Photograph 5. Remains of the River Pit Mine.

(source: **Goochland County Historical Society Magazine**, Vol 37 & 38, 2005, Soft Coal and Hard Times, Temple Bayliss, 2005)

Towne Pit (or Towne and Powell Pit)

Located on the east end of Sabot Island in the James River, this pit was operated in the early to mid-1800's by Dr. Towne.

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

The Commissary Shaft

The Commissary Shaft site is located approximately 0.2 miles southeast of the community of Goochland County, approximately 500 feet southeast of the intersection of State Route 6 and Manakin-Ferry Road. It is located on private property and was sealed by the Virginia Department of Mining, Minerals and Energy in 1990. The shaft was water filled, rectangular in shape, the opening was 12 feet by 15.5 feet in dimension while the throat of the mine was 7.5 feet by 12.5 feet and covered with timbers and wire mesh prior to being sealed. The shaft was surveyed at an approximate depth of 320 feet. The mine was sealed by the DMME using a concrete-filled, steel-fabricated plug covered with earth fill.

(Source: **Engineering Report for Richmond Shaft Project, Chesterfield, Goochland and Henrico County, Virginia**, prepared for the Commonwealth of Virginia, Department of Mines, Minerals and Energy, Division of Mined Land Reclamation, Abandoned Mine Land Group by Fuller, Mossberger, Scott and May Civil Engineers Inc., Lexington, KY, January 1989)

Lucy White Tract Pits and Woodward Pits

Maps place the Lucy White Pits adjacent to Route 6 (Patterson Avenue) in Goochland near the entrance to West Creek business park. The area has been developed with residential units and businesses.

"The Woodward Pits and Lucy White Track Pits operated between circa 1762- 1911. John Woodward had acquired the 350 acre tract by 1762 (Goochland County DB6:237; DB8:101; DB8:279). Between 1762 and 1825, coal had been mined from shallow pits for domestic consumption, possibly just for the Woodward family.

In 1825, Lancelot Woodward, John Woodward's grandson, assumed control of the mines. At the time of his father Samuel Woodward's death in 1827, Lancelot was indebted to him for an undisclosed amount. Lancelot was forced to relinquish his shares in the coal pits to his mother Elizabeth and his five brothers and sisters. Included in this transfer were "coal pits and slaves employed to work them...6 mules, 1 horse and saddle, 3 wagons, 2 carts and gear, 2 coal machines with ropes, buckets and covers, 25 picks, 8 shovel, 4 mauls, 2 boats with tent cloths and furniture and a parcel of blacksmithing tools and carpenter tools" (Goochland County DB28:195). Lancelot's brother Charles eventually bought the share outright and sold them to Edwin and Virginia Powell (Goochland County DB28:195; DB29:3; DB30:327).

In 1835, Lucy M. Woodward followed her father Samuels interest in the coal pits when she bought the rights the 350 acre tract from her brothers, sister, and the Powells (Goochland County DB30:327;351). In 1835, Lucy Woodward sold one-third of the mineral rights to William Scott (Goochland County DB31:213). Intensive coal mining took place under Lucy Woodward and Scott. In 1840 the assessed value of the land rose sharply from $15 to $72.71 per acre. There were $200 worth of improvements to the property and the tax books list it as "coal land." During this time, they had begun using more mechanized mining methods, equipment, and probably additional wooden frame shelters for the equipment. This is reflected in the increased land values. However, by 1841 the Woodward Pits were listed as lying "unwrought" (Wooldridge 1841:1-14).

In 1845, Lucy sold the 350 acres back to Lancelot Woodward (Goochland County DB34:260). Upon his death in 1847, "Woodward's coal pits" (as depicted on two 1825(?) maps of Tuckahoe Creek area: Virginia State Library) were turned over to his executor William A. Deitrick for payment of debts (Goochland County DB34:606). Deitrick maintained the parcel and willed it to Lucy White in 1879 (Goochland County DB44:223). In 1911, at Lucy White's death, the tract returned to Deitrick's heirs (Goochland County DB65:241).

(Source: Jacqueline Louise Hernigle, An Archipelago of Coal Pits: Predicting Archeological Features in the Richmond, Virginia Coalfield, 1991, College of William and Mary, done as a Master's Thesis available online from the College of William & Mary)

"The Lucy White pits were located in the area around the eastern entrance to West Creek business park off of Patterson Avenue. The Lucy White pits were open-pit mines that were worked by individuals and small groups. The produced low quality coal that was used primarily for home hearing before the Civil War."

(source: **Goochland County Historical Society Magazine**, Vol 37 & 38, 2005, Soft Coal and Hard Times, Temple Bayliss, 2005)

In regards to the Lucy White Tract Pits:

"Several shallow pits were worked in a 22- to 24-inch coal seam on this property. Most production was for home use, but some coal was loaded into wagons and transferred to the Tuckahoe and James River Railroad for sale in Richmond or elsewhere. There are not any detailed records about this Pit that the author could find."

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

Unnamed Pits

From the Goochland County Historical Society magazine article Soft Coal and Hard Times written by Temple Bayliss, there is mention of other mining areas:

"Another area of old pits, one that is easily accessible from the Manakin Fire and Rescue Co. 1, is east of the fire station and mostly west of Route 623. This mining region extends for at least a quarter of a mile north of Route 6. The only account of this mining is from a 1946 interview with Mr. Jenkins Jones, when he was in his seventies.[6] Jenkins Jones was the same of Thomas Jenkins Jones, who was the operator of the Dover Mining Company, At age 17, the young Jenkins Jones worked as night supervisor of the mines under this father, which would have been shortly before the company closed for good in 1889. According to Jenkins Jones, this mining area adjacent to the fire station was not worked by the Dover Minin Company, but was mined by individuals and small groups. The pits were from thirty to 100 feet deep, which Jones described as "shallow". Jones described them as "old," which suggests that they were abandoned by the time of the Civil War."

Photograph 6. Remains of a mine shaft in eastern Goochland County. Photo by Louisa Preston. Source: (**Goochland Historical Society Magazine**, Vol 37 & 38, 2005, Soft Coal and Hard Times, Temple Bayliss, 2005)

Photograph 7. Remains of a coal pit in eastern Goochland County. Photo by Louisa Preston. (source: **Goochland Historical Society Magazine**, Vol 37 & 38, 2005, Soft Coal and Hard Times, Temple Bayliss, 2005)

Further History on the Dover mines and the related Nail Foundry at Dover

"The Dover coal pits were the part of the northern extension of a large and important coal field that lay mostly south of the James River. The coal there had been exploited for many years, when the Dover Coal Company was organized in 1837 by an act of the Virginia General Assembly with shareholders including J. Davenport, R. M. Saunders, B. H. Green, and others with a maximum capital of $200,000. They purchased the former Graham Coal Pits [I859 Land Book]. Two years later they petitioned the Assembly for an expansion of the company to include the manufacturing of iron and a total capital of $500,000 [General Assembly Petitions, Box 91, folder 18]. The Dover Mining Co. owned property valued at the remarkably high assessment of $116,000 with improvements valued at $2,000 in 1840 [1840 Land Book]. The site of the Dover Pits was surveyed as the Dover Coal Mining Company (037-0058). It is comprised today of vacant land with roughly graded wooded topography concealing valuable subsurface resources and a single, standing brick chimney.

Richmond Industrialist Stephen DuVal purchased the 981 -acre tract containing the Dover Coal Pits in 1842 for about $16,000 and was assessed at the remarkable value improvements valued at $2,000. DuVal bought it from the shareholders and petitioned the General Assembly in 1844 to require the county to reduce the assessment to a figure more appropriate to the real value of the tract, which, he said, had been neglected for three years. He argued that the cod had been fully exploited. By 1849, however, when the Industrial Census of 1850 was taken, the Dover Coal Pits, then operated by Benton, DuVal, and Cottrell, were anything but inactive. It was the most extensive of the four coal mines in the county, with a capitalization of $15,000, and powered by steam. It produced 135,000 bushels of coal (there are approximately 70 to 80 pounds per bushel) in that year. The other mines consisted of those operated by the firms of Cottrell and James, Cottrell and Powell, and Jesse Snead and Company, all in the southeast Goochland area. These produced, respectively, 40,000, 40,000, and 122,000 bushels that year [1850 Industrial Census].

The Manakin Iron and Nail Works was built in 1844 on the side of the James River and Kanawha Canal by Stephen DuVal, Benjamin DuVal, William Edwards, and Benjamin Churchill of Massachusetts [Bullard 1994: 54]. This Benjamin DuVal was most likely Samuel's brother Benjamin, owner of a prosperous sawmill in western Henrico County. Adjacent to the coal mines, the nail factory was undoubtedly designed to make use of the abundant coal as fuel and the canal for both transportation and power. The water-powered nail factory (the ruins are identified as 037-0111) was capitalized at $21,000, employed 100 persons, and produced valuable nails and bar iron [1850 Industrial Census]. In the 1853 Land Book, the Stephen DuVal heirs were owners of 33 acres with $4,000 in improvements and of the Manakin Nail Works, with $2,000 in improvements on 230 acres. A note in the margin indicates that in that year the nail works burned down [Land Book 1853]. The community of Dover Pits or Dover Mines that grew up around the mines

may have centered along the canal as much as the top of the hill. It is there that a row of worker houses were located and that, in 1853, members of the black community founded the Dover Mines Baptist Church (see First Baptist Church - Manakin 037-5138) in a disused mining support building. By 1860, the DuVals were no longer involved in ownership of Dover Pits and the village of Manakin had begun growth into a company town at the top of the coal tract on the main road west from Richmond. The Dover Mining Company and the Manakin Iron Foundry (probably the nail factory) was acquired just before the Civil War by Robert H. Maury of Richmond."

Source: (A Survey of Historic Architecture in Goochland County, Virginia, Conducted for Virginia Department of Historic Resources, Richmond, Virginia, Goochland County, and the Goochland County Historical Society Goochland, Virginia, conducted by Gibson Worsham, Architect, 2003)

Manakin Iron Works was located in the town of Manakin in Goochland County, Virginia. The iron works began operation in 1844 and was originally owned by Benjamin J. DuVal and Company. The iron works was purchased in 1846 by Stephen O. DuVal after Benjamin J. DuVal and Company went out of business. It produced nails and boiler plate bar iron and conducted business in Richmond, Virginia. In September 1846, the iron works had 24 nail machines capable of producing 150 kegs of nails per day. It ceased operation in 1855.

Information is provided at the Library of Virginia's collection of Manakin Iron Works Ledgers, Daybooks, and Account Book, 1847-1851, including two daybooks, two ledgers, and an account book.

Source: (https://ead.lib.virginia.edu/vivaxtf/view?docId=lva/vi00818.xml , Manakin Iron Works Ledgers, Daybooks, and Account Book, 1845-1851, 5 Volumes at the Library of Virginia)

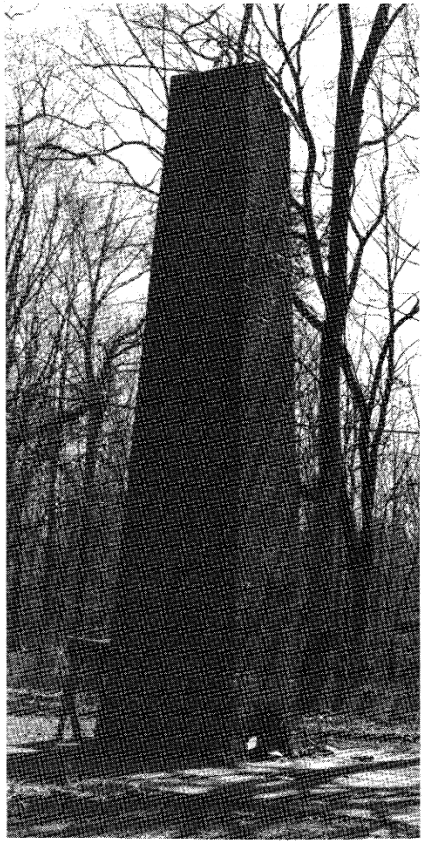


Figure 17. Nail factory chimney near Manakin (1979).

Photograph 8. The Manakin Iron and Nail Works chimney (1979) The Goochland County Historical Society has more current photographs of the ruins of this chimney which is no longer standing. Source: (the Virginia Department of Energy's Publication 85, Mining History of the Richmond Coalfield of Virginia, Gerald Wilkes, 1988.)

We have some insight into these mines and their customers from a letter than John Smith of Goochland County wrote to the editor of the Richmond Whig on July 20, 1848. Mr. Smith was opposing a tariff bill before the U. S. Congress that would have adverse effects

of the fledgling iron industry in Virginia and its suppliers like the Richmond Coal Basin. In this letter, Mr. Smith discussed a visit to the Manakin Iron Works which was "four miles above the pits on the Canal, and sixteen miles from Richmond." Mr. Smith observed:

"These works were only put in operation last January by Messrs. DuVal, Churchill & Co. The water used to propel the machinery comes from the Canal, and the coal used in their furnaces is taken from the Dover Pits, immediately to the north of them, on the hill. The nail factory part makes three-penny to seven-inch spikes. The Rolling Mill department possesses great power – capable of making any species of iron as well as nail and boiler plate. It is the design of the present owners (B. J. DuVal) to enlarge their operations and expand their works. I have no hesitancy in saying that they would be justified in so doing. This iron of Virginia makes the best and toughest nail of any iron in the Union and perhaps the world, and of course, must always have a market. The tariff, if it was repealed, could but slightly injure this branch of industry – competition could not among them – the suppression of enterprise alone could cripple them."

(Source: Virginiachronicle.com, Library of Virginia)

From the Goochland County Historical Society magazine article Soft Coal and Hard Times written by Temple Bayliss, the following information has been provided about the Storehouse Shaft:

"The surviving mines around Manakin had been consolidated into the Dover Mining Company by 1860. In 1862, Joseph Reid Anderson, the famous Managing Director of the Tredegar Iron Works, felt that he needed to operate both the Dover Mines and the Gayton Mines in order to insure a more reliable supply of coal for the ware-time production of iron. He obtained a loan of $200,000 Confederate dollars from the Confederate government, with which he purchased the Dover Mines and leased the Gayton Mines.[12] In spite of this changes of management, production fell because of an acute shortage of manpower. Aderson's records are full of this attempt to obtain more men, both slave (rented from landowners) and free, to work the mines.[13] He also implored the Confederate government to lend him drafts of soldiers who had previously worked in mines and in ironworks. The government turned him down. The production chart for the Richmond Coal Basin (*Figure 2*) shows how the war wrecked coal product even at a time of great need because of the shortage of manpower."

"At the close of the war, Joseph R. Anderson was desperate for capital to rebuild his ironworks. To generate some of the capital, he sold off four-fifths of his stock in the Dover Mines to a consortium of Northern capitalists lead by William H. Aspinwall.[14] The sale was made in 1866. The consortium hired General Charles P. Stone, a former Yankee general, to run the operation. Stone expanded and modernized the mines, building a company that continued to dominate the Manakin area. He built a substantial Victorian house (photo page 28) almost exactly where the post-

War World II brick house, *Longview,* is today, just south of Manakin off the Manakin Ferry Rd, and visible from Route 6. The General's house remained unoccupied form many decades after the mines closed, and residents of Manakin remember playing in it.[15]"

(source: **Goochland County Historical Society Magazine**, Vol 37 & 38, 2005, Soft Coal and Hard Times, Temple Bayliss, 2005)

The Dover mine closed May 30, 1889. The Goochland County Historical Society has a hand written letter from J. T. Jones contributed by Mary Katherine Sheppard in 1998. Jones was Sheppard's great uncle. The letter said:

"Dover Mines, VA.

The actual work in-sofar as blasting of rock, tunnel work, or coal digging was discontinued May 30th 1889. Inventory of equipment and final measurement of all work such as sinking the shaft and all inside or underground tunneling in rock, and opening of incline, upset and downset intended for cross-cuts for workings paralleling this tunnel completed the first week in June 1889 between June 3rd and Saturday June 8th the ropes were (?) on the drum and no person has been down that shaft since.

On Jan 1st 1890 my records shows that my father Mr. Thos. J. Jones sold 50 bushels of coal gotten from a small shaft known as Billie Snead's pit, receiving 10 cents per bushel a total of $5.00.

This coal was taken from the croppings or upper vein. No coal has been mined on the Dover property since the above date.

J. T. Jones"

(Source: Goochland County Historical Society)

There is a collection of business documents of the Dover Coal and Iron Company in the Special Collections Department at University of Virginia Library in Charlottesville. These papers were given to the University of Virginia Library by the Baker Library, Harvard University, Boston, Massachusetts, on January 8, 1940, and February 13, 1941.

"This collection consists of the official records and correspondence of the Dover Coal and Iron Company , Richmond, Virginia , and New York, miners and manufacturers of coal and iron in Virginia, ca. 225 items (1 Hollinger box), ca. 1865-1874, including one

letterbook with an index, 1869. The Dover Coal and Iron Company was incorporated in 1866 with the following members, Joseph Reid Anderson (1813-1892), head of Tredegar Iron Works and former general in the Confederate army; merchant and railroad promoter, William Henry Aspinwall (1807-1875), partner of Howland and Aspinwall, New York City; Samuel Latham Mitchell Barlow (1826-1889), New York City corporate lawyer; Charles Pomeroy Stone (1824-1887) Engineer and Superintendent, 1865-1869; and Judge Joel Parker (1795-1875), a lawyer of Cambridge, Massachusetts, and president of the company after 1869.

The Dover Company letterbook details the daily coal mining business of the company, as well as the foundry and furnace operations, including estimates of the amount of coal taken from various named shafts (pages 7-17), a report on the canal boats (pages 18-19), lists of office employees (page 20), employees at Richmond & Westham Furnace (pages 21 & 22), and employees at the Goochland County mines (pages 23-24) .

Includes much information about its business relations with Tredegar Iron Works , Richmond, especially Charles P. Stone's suspicions of their motives in some of their actions (see pages 31-32, 41, 44-45. 58-59, 72, and 77-79, suspicions on page 144; for many other references see the index of the letterbook), Lynchburg Mining and Manufacturing Company (see pages 33, 72, and the index for other references), Old Dominion Iron & Nail Works , Westham Iron Company , and various mines in the ore banks of Amherst, Augusta, Chesterfield, Goochland, Henrico, and Rockbridge counties of Virginia.

Other documents include a very detailed description of the property of the Dover Coal and Iron Company in Goochland County, Virginia, which was situated in the Richmond coal fields, with the James River and Kanawha Canal passing through it. The description was written by Thomas Petherick and Charles P. Stone on December 13, 1865.

The correspondence files, 1866-1874, and undated, include letters, memoranda, notices of stockholders' meetings, reports, receipts, notice of the intent of the directors to consolidate the Dover Company and the Westham Iron Company, formerly headed by its president, Frederick H. Wolcott (1868 Feb 26, Mar 10 & 30), minutes of the meetings of the Board of Directors, reports concerning the progress of the mines, furnace, foundry, and other aspects of the company, an analysis of the iron made by the Dover Company by Dr. Werth of Pittsburg (n.d.), financial summaries, and accounts. Also present is correspondence between Judge Joel Parker and Wellington Goddin , a Richmond real estate auctioneer and land agent, ca. 1871-1874.

Source: (https://ead.lib.virginia.edu Cataloged under Accession number 727 and 1059)

There are several photographs of the remnants of the coal mining operation taken by Louise Preston in 2005 included in the article Soft Coal and Hard Times published in Volumes 37 & 38 of the Goochland County Historical Society Magazine.

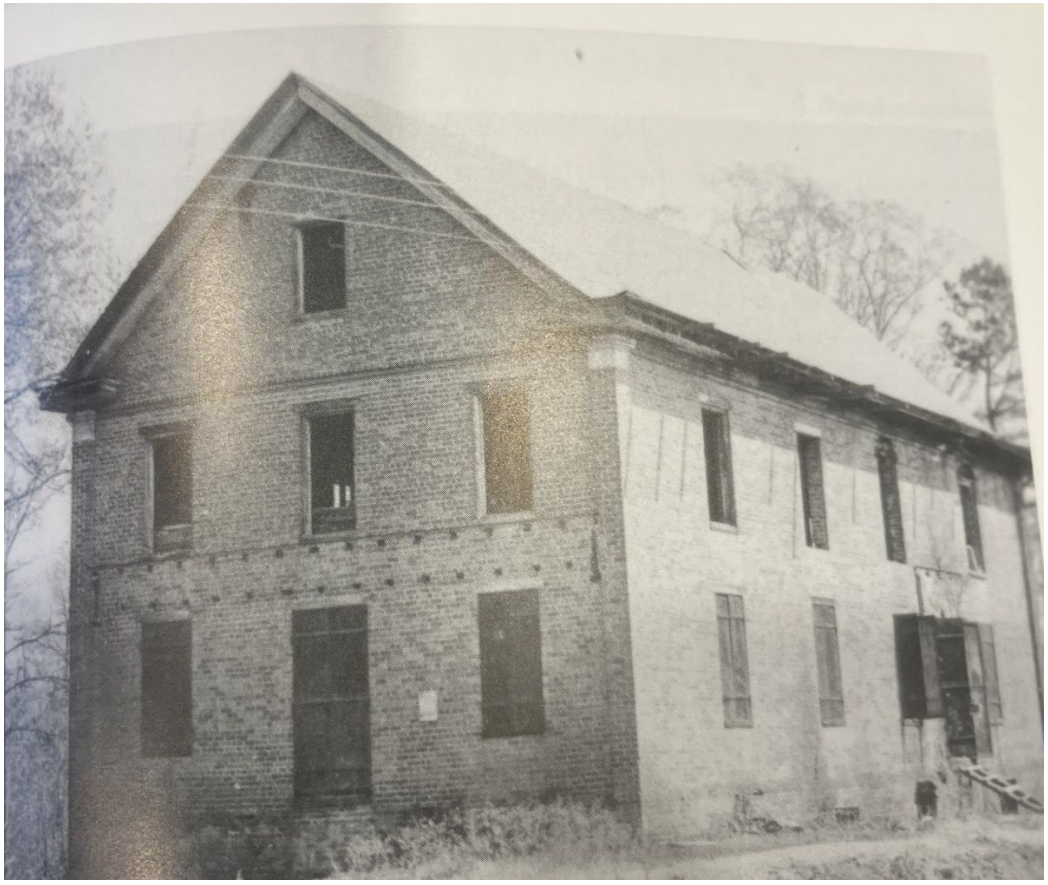


Photo 9. Dover Mining Company's Commissary or company store. source: Goochland County Historical Society Magazine, Vol 37 & 38, 2005, Soft Coal and Hard Times, Temple Bayliss)

Coal Mining in Henrico County

Maps of the Carbon Hills Mines

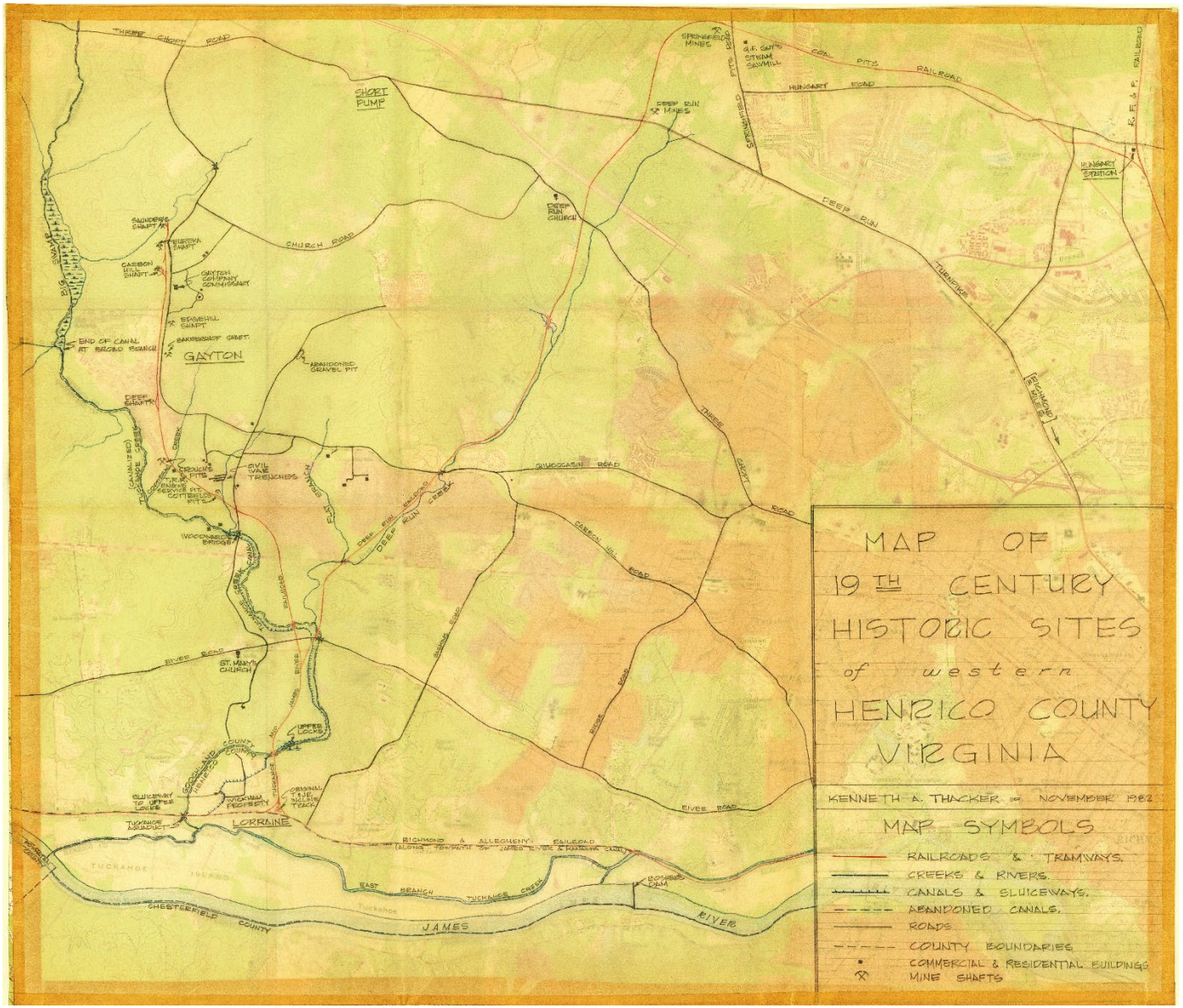
Map 3 below was created in 1982 by Kenneth Thacker for a first year English course college term paper he was writing. Mr. Thacker had access to the 1862 Gilmer Map and other maps of that time which showed the location of the mines, railroads, roads and landmarks such as St. Mary's Episcopal Church in Goochland and the Gayton (Richmond Coal Mining & Manufacturing Company) Company Commissary.

He enlisted the assistance of William Trout, a renowned historian and expert of the canal systems that served the western Henrico County coal mines. Since Mr. Thacker grew up in the Tuckahoe Village subdivision in the early 1970's, he had the opportunity to explore the undeveloped areas from present-day John Rolfe Parkway to Broad Street where the ruins of the mining operations were still evident.

In the Fall Quarter of 1982, he interviewed Bill Trout and tromped through the woods in the undeveloped area with him. While Mr. Trout's interest was largely in canals and pre-railroad navigation, he knew plenty of the larger story was assisted in identifying many of the ruins. Mr. Trout's work will be cited later in this **Compilation** when the Tuckahoe Creek Canal is discussed.

Based on all of this information, Mr. Thacker drew up a readable map from all of the resources and information at this disposal. The map conforms to other maps of this era as well as later periods when more detailed information was included in the maps.

Due to size limitations in posting this map, some of the writing on the map is not legible. the reader is encouraged to use the zoom feature on their web browser or PDF reader to be able to read the details on this map and other maps in this **Compilation** .


MAP OF
19 TH CENTURY
HISTORIC SITES
of western
HENRICO COUNTY
VIRGINIA
KENNETH A. THACKER – NOVEMBER 1982
MAP SYMBOLS
RAILROADS & TRAMWAYS.
CREEKS & RIVERS.
CANALS & SLUICEWAYS.
ABANDONED CANALS.
ROADS
COUNTY BOUNDARIES
COMMERCIAL & RESIDENTIAL BUILDINGS
MINE SHAFTS
SHORT PUMP
GAYTON
DEEP RUN
LORRAINE
JAMES
RIVER
CHURCH ROAD
RIVER ROAD
TURNPIKE
RICHMOND & ALLEGHENY RAILROAD

Map 4. (source: Kenneth Thacker)

In the next three images comprising Map 4, this author has reprinted a **Henrico County Planning Department Map** dating from the late 1950's to the early 1960's provided by Jack Bruce who obtained this map in researching his book. The exact date is unknown. Due to the length of this map, it was broken up into three parts to make the names legible. This map is a topographical map that does include the street names and neighborhoods that had been developed at that time, primarily in the second and third panels (as an indication of the era of the map). Use the Zoom feature in your browser to see greater details of the map.

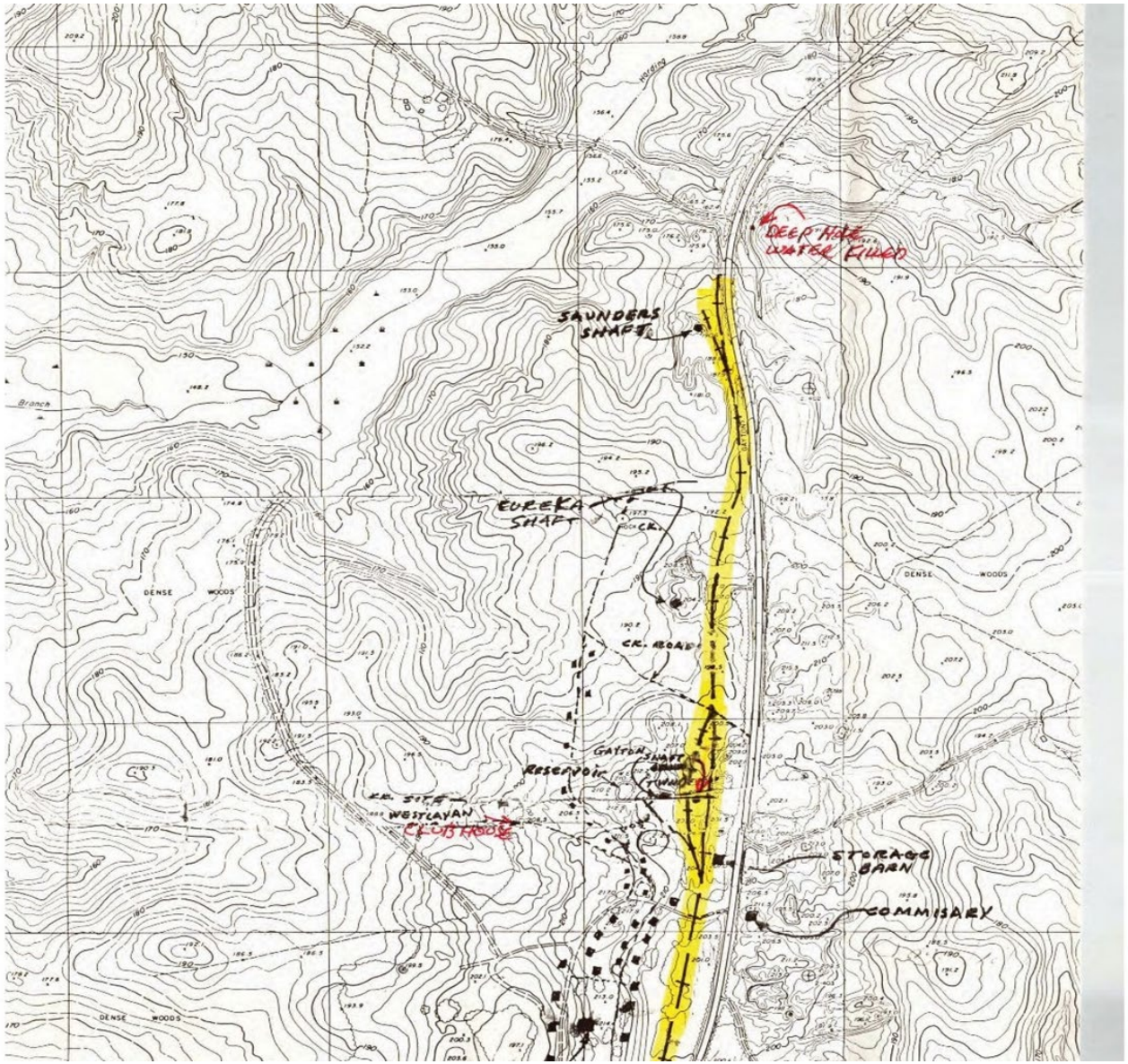
The three sections shown begin with the northern most sector starting at the Saunders Shaft and extending to Gayton Shaft; then a middle sector from the Gayton Shaft to Deep Shaft; and then a southern sector from Deep Shaft to the Willis Shaft. The mines shown on these maps were not all of the mines along Tuckahoe Creek. There were other mines located south of the boundaries of map area extending from Patterson Avenue down to the James River. The highlighted yellow line marks the Tuckahoe & James River Railroad road bed, arrows point to the named mines, some buildings are named like the Commissary, but most are denoted with a black block.

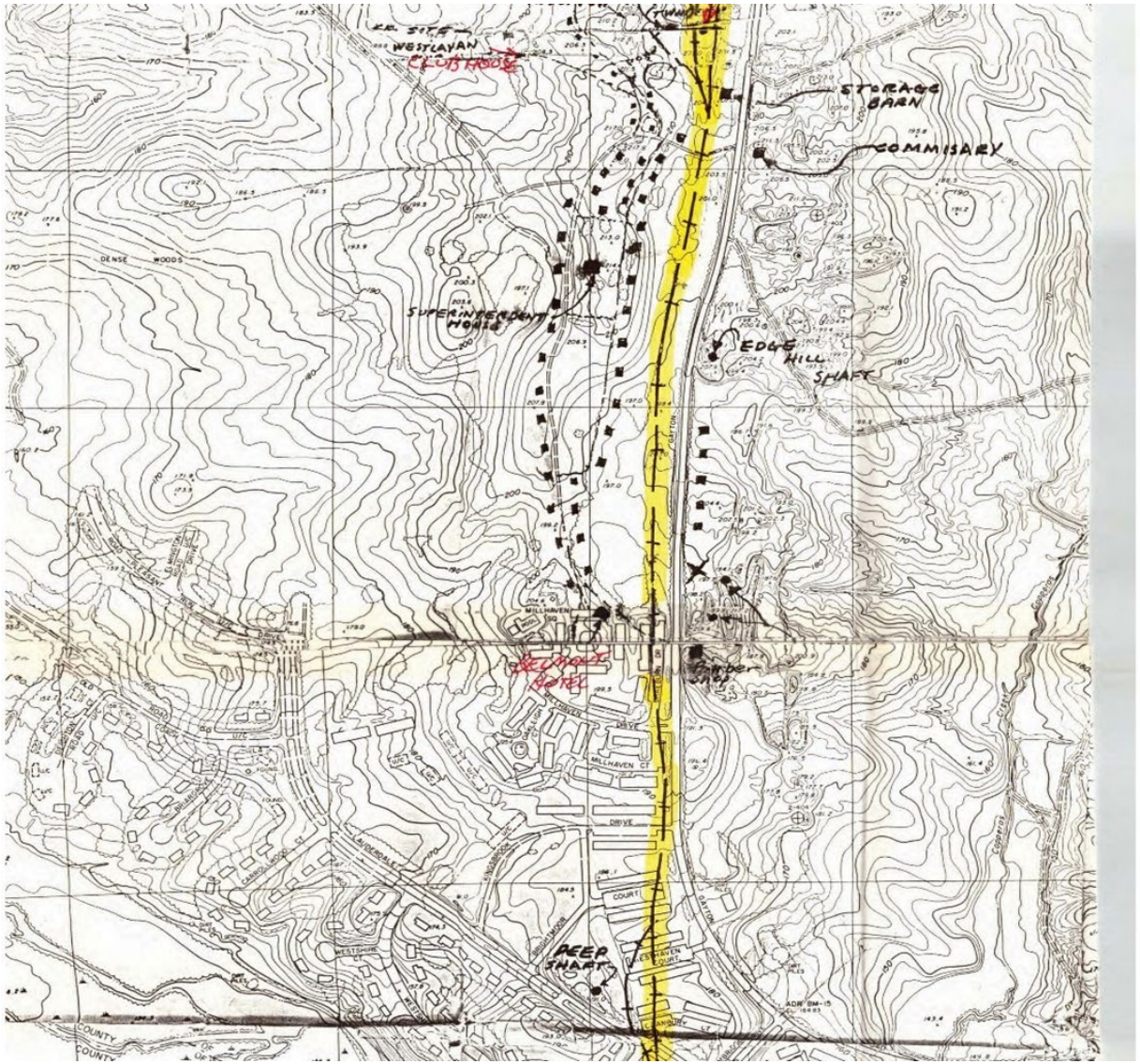
Note: At the time this map was made, Pump Road did not connect between Gayton Road and Patterson Avenue; Lauderdale Drive stopped at Pleasant Run Drive; the apartment along Gayton up to the area near the NOVA swim club had been built, the houses along Westshire were completed and there were plans for route 288 (later moved west to Goochland) that would cut across the undeveloped areas of Henrico.

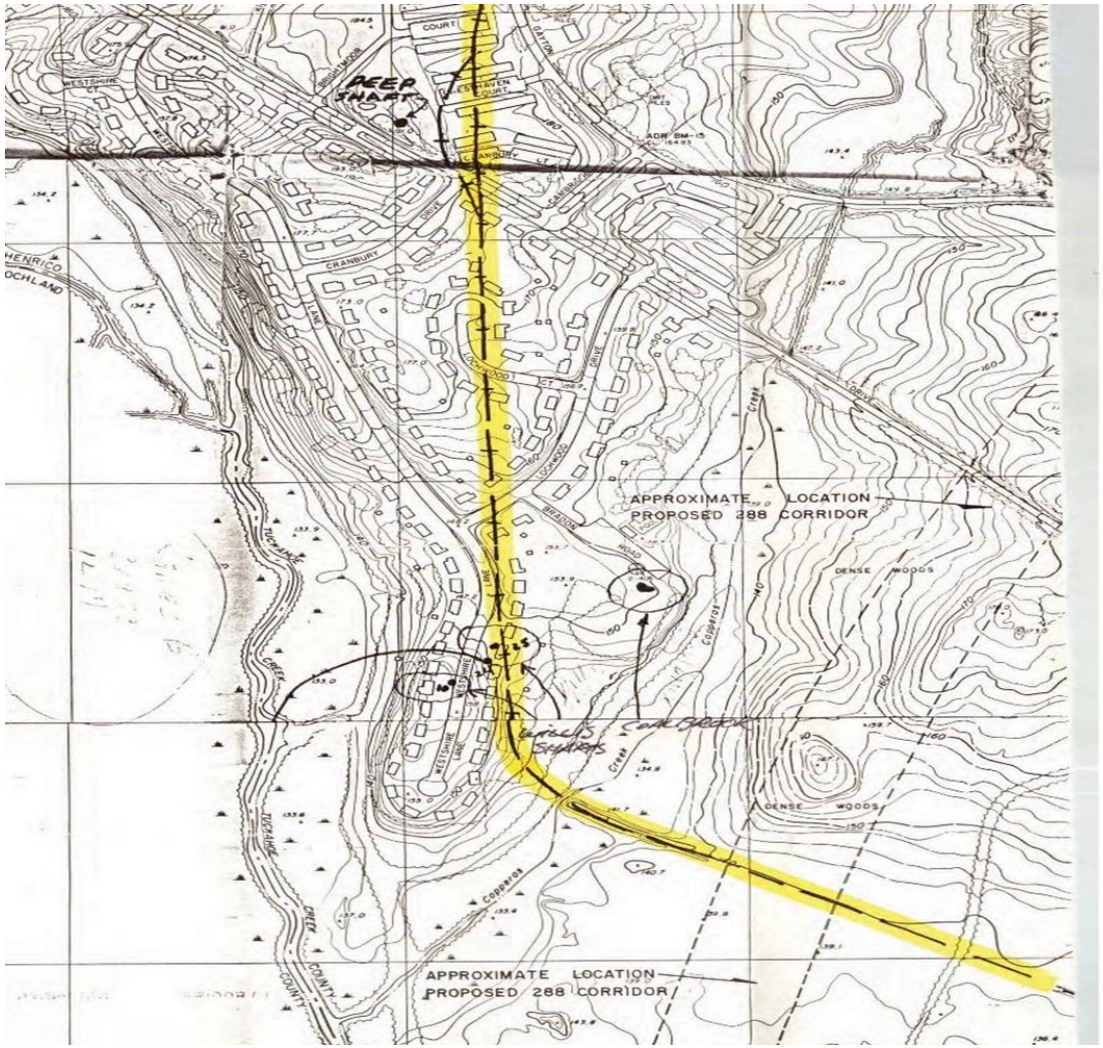
It is interesting to note that when the NOVA swim club was built, they encountered problems in construction due to the underlying coal tunnels. There was also a hotel in the late 1890's and early 1900's called the Belmont Hotel which is located on the site of an apartment complex today.

The map was provided by author Jack Bruce for inclusion in this **Compilation.**

Photographs of the Club House, Commissary, and miner houses (marked as black boxes) are included later in this **Compilation.**


DEEP HOLE
WATER FILLED
SAUNDERS SHAFT
EUREKA SHAFT
DENSE WOODS
CR. ROAD
GAYTON RESERVOIR
WESTLAVAN CLUB HOUSE
STORAGE BARN
COMMISARY


WESTLAVAN
CLUBHOUSE
STORAGE BARN
COMMISSARY
SUPERINTENDENT HOUSE
EDGE HILL SHAFT
MILLHAVEN
DRIVE
COURT
DEEP SHAFT
WESTSHIRE
DENSE WOODS



Map 5. (source: County of Henrico)

A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

The Henrico Mines

Mining History of the Richmond Coalfield of Virginia provided the following information .

TABLE 6.07 Coal Mining History: 1761 to 1924

Name	Origin	Date Closed	Depth (in feet)	General Location
Carbon Hill District				
Saunders Shaft	Early 1800s	1902	220	Near intersection of Lauderdale Dr. and Causeway Dr.
Eureka Shaft	1853	Unknown	230	Near intersection of Lauderdale Dr. and Francis Drake Dr.
Turpius Colliery, Magruder Pit, Maggi Pit	Pre-Civil War	Unknown	Unknown	West of Poplar Forest Dr.
Gayton Shaft, Coke Shaft, Orchard Shaft, Twin Shaft, Double Shaft, Breaker Shaft	Pre-1819	1901	325	SW of intersection of Gayton Rd. and Ridgefield Pkwy.
Edge Hill Shaft	Around 1842	Unknown	264	Near intersection of Poplar Forest Dr. and Taft Pl.
Barbershop Shaft, Railroad Shaft	Unknown	Unknown	Unknown	Near intersection of Gayton Rd. and Milhaven Dr.
Deep Shaft, Air or Shelter Air Shaft, Snead's Shaft, Crouch and Snead's Shaft, Crouche's Pits, Brooks Shaft	Around 1851	1875	200	SE of intersection of Lauderdale Dr. and Westshire Ln.
Coalbrook Slope, Trent Slope, Jos. R. Anderson and Company Mine, Carbon Hill Mine, Old Dominion Development Co. No. 1 Mine, Mule Shaft, Engine Shaft	Around 1848	1903	over 300	SW of intersection of Lauderdale Dr. and John Rolfe Pkwy.
Cottrell's Pits	Around 1835	1841	Unknown	South of Coalbrook Slope
Deep Run District				
Deep Run Pits, Springfield Pits, Duvall's Pits, Burton's Pits, Roxx and Curry Pits, Barr's Pits	Pre-1761	1924	Unknown	NW of intersection of W. Broad St. and Gaskins Rd.

Table 2. (Source: https://henrico.us/history/recent-history/400th-anniversary/historical-databook/.)

A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

Information regarding the history of the individual pit or mines has been obtained from the following sources and will be attributed to those sources by the author or source:

Mining History of the Richmond Coalfield of Virginia written by Gerald Wilkes, 1988 and published through the Virginia Department of Mining, Mineral and Resources.

The History of Henrico County; In the hands of reasonable and practical men: the lure of the Henrico Coalfield written by Jack Bruce 2018. Self-published. Available at the Henrico County Tuckahoe Library.

The History of Henrico County written by Louis Manarin and Charles Peple, 2011 published by Henrico County and **The History of Henrico County** written by Louis Manarin and Clifford Dowdey, 1984 published by the University Press of Virginia.

Papers from the Library of Virginia, Henrico County Historical Society magazines, and reports from the Virginia Chronicles' files of Richmond and other regional newspaper articles are also cited.

Carbon Hill District

"The area included in this district is on the northeast margin of the main Richmond basin and has a north-south trend between Big Swamp and the James River (Plate l). Included in this district is the Flat Branch (Edge Hill) basin, which is an erosional remnant of the main basin.

Compared to the other mining districts, the Carbon Hill area appears to have the most favorable mining conditions. Minor rolls and small faults were indicated from past mining but were not severe enough to complicate early mining practices. The average dip of the strata in this district is 25 degrees to the west and the strike is N 32 degrees."

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

Early Years of Mining Activity in the Carbon Hill District

There were numerous mining operations on the north bank of the James River in present-day eastern Goochland and western Henrico Counties in the area along Tuckahoe Creek from the late 1700's into the early 1800's. Most of the operations were small in comparison to the Chesterfield operations and consisted of pit mines from which the miners harvested near-surface outcropping of coal. In those days, coal was generally sold by the bushel and had to be hauled from the mines to customers on wagons over rugged roads into Richmond. This mode of transportation would change with the construction of the James River and Kanawha Canal and the Tuckahoe [Creek] Canal that would link the miners along Tuckahoe Creek with the James River and Kanawha Canal in the 1820's. The history of the Tuckahoe [Creek] Canal will be discussed in more detail later in this narrative.

In the early 1800's, the Randolph family (one of the aristocratic families of colonial Virginia who owned Tuckahoe Plantation where Thomas Jefferson spent part of his youth) became involved in the coal mining efforts on the north side of the James River. Their venture began as a clay mining operation for production of pottery in Richmond until the workers found coal outcroppings that led to the Randolphs expanding their real estate holding and engaging in early mining.

The coal mining activity in the Carbon Hill district from the 1830's to the 1850's was dominated by several families. The major colliers were Edward Anderson, John Barr, Richard Crouch, Joseph Mosby, Jesse Sneed, and William Detrick. In the late 1830's the miners started to pool their resources in a collective effort to mine larger tracts. In 1837, J. Crouch, Sneed, Cottrell, R. Crouch, and T Reed created the Runnymeade Coal Mining Company to hold and operate five hundred acres of mining. At the same time, Thomas Mann Randolph and John Brockenbaugh incorporated the Tuckahoe Creek Coal Mining company to work two hundred acres. In this era, authorization had to be obtained from the General Assembly to create stock companies. In addition to the aforementioned Colliers, there was also Messrs. Wickham, DuVal, Magruder, and Trout who were operating their individual pits and shafts during this time.

In regard to Thomas Randolph, he led the development of the Tuckahoe [Creek] Canal to move coal from the mines along Tuckahoe Creek down to the James River and Kanawha Canal. This allowed miners to avoid the arduous task of moving coal on wagons over dirt paths to Richmond. made a nice profit charging other miners to ship their coal down. According to historians, this venture was profitable for Randolph and his investors for a few years. The profit they made spurred discontent among their mining customers who felt they were paying too much for a canal system that deteriorated over time and was only accessible during certain times of the year. The discontent would lead to the other miners getting a charter from the General Assembly for the formation of a new venture known as the Tuckahoe and James River Railroad to compete with the canal. We will discuss this venture in more detail later

in the narrative. Sufficient to know is that the Tuckahoe [Creek] Canal fell into disuse within a few years. In 1843, the Randolphs and the Tuckahoe Coal Mining Company exited the coal business by selling the Tuckahoe Coal Pits to Major Jesse Sneed.

Most of mines under the control of these individuals and companies were actively worked either just prior to or through the Civil War. One of the major customers was the Tredegar Iron Works whose iron and foundry works consumed a massive amount of coal and coke. In 1863, Tredegar leased 250 acres of land in the Carbon Hill coal basin under a five-year lease to expand its supply of coal and coke. Tredegar would employ 250 hands to mine. Most of these miners were slaves.

(Source: **The History of Henrico County, Louis** Manarin and Charles Peple, 2011, published by the County of Henrico)

The below map is an 1862 Map of Hanover and Henrico counties that is part of the Gilmer Map collection at the University of North Caroline – Chapel Hill. This map provides some of the best information on who owned property in the western part of the county. It is best viewed on the University of North Carolina website.

Looking at the lower left-hand corner of the map, this is the far southwestern corner of Henrico County bordered by Tuckahoe Creek on the west and the James River on the south. The coal pits of J. Wickham are in this corner of the county to the west of the rail line. Approximately ½ mile to the east of J. Wickham across the rail line on a dirt path are the coal pits and residences on the Cottrell property. Approximately ¼ mile to the southeast of Cottrell are the pits on the Detrick property while ¼ mile to the north of Cotrell are L. Wickman's pits off a dirt trail coming off the Cottrell property. Detrick was not connected directly to either of these pits. On the map, homes of various members of the Ellis, Snead, Werth, DuVals and other coal mining related families can be located. These people were associated with coal mining during the early 1800's and the founding of the Tuckahoe & James River Railroad.

From the James River Canal, The Coals Pits Railroad travels in a northerly direction crossing Tuckahoe Creek into Goochland than emerging a ½ miles back across Tuckahoe Creek into Henrico. The line then continues northerly for several miles until it bends to the northwest as it follows Tuckahoe Creek to the northern mines. On this map, the reader can see a view of the named roads such as River Road intersects Tuckahoe Creek after winding westward from the old Westham Plan Road; Deep Run Turnpike (W Broad Street Road today), Three Chopt Road (from the western edge of the city to Deep Run Turnpike at Short Pump), and Quioccasin Road (extending from Ridge Baptist Church to Tuckahoe Creek). A few establishments were also identified. In an area approximately ½ south of Deep Run Baptist Church was a Cooper Shop adjacent to Chris Cottrell's land on a path that may be current-day Church Road. Maxwell's Tavern on the Deep Run Turnpike appears to be in the vicinity of the present-day Innsbrook Office Park. There is a

Sinclair Chapel approximately a mile east of the terminus of the Coals Pits Railroad. Shady Grove Church is shown to the north of Short Pump. Further to the northwestern corner of the county is the dormant Springfield and Deep Run mines along with the abandoned New York and Richmond Railroad is shown.

This map shows the road system in red, location and names of creeks, and provides the names of the landowners for both Henrico and Hanover counties. Most of Henrico County's western section is wooded and the map indicates the elevated area as surveyed by Gilmer in 1862.

The online map is in a JPEG format that allows the reader to zoom into various parts of the County to see the names and location of residents using the Zoom feature of their web browser. The map can be accessed by opening this hyperlink below to be able to zoom in and read its contents: https://dcr.lib.unc.edu/record/63f39df9-9c12-4519-aa37-5dd45f443378

Map 6. (source: University of North Carolina, 1862 Gilmer Map, https://dcr.lib.unc.edu/record/63f39df9-9c12-4519-aa37-5dd45f443378 University of North Carolina Libraries, Digital Collections Repository - Part of Jeremy Francis Gilmer Papers)

One of the other important maps used in the research for this project was the – **Gayton VA – 15 miles from Richmond**. This detailed map was produced in June 1896. It shows the mines along the northern end of the Tuckahoe and James River Railroad. The map includes buildings on mine sites, residences and other buildings that served community, and tunnel network for the Saunders, Gayton and Coalbrook shafts that were still operating in 1896. The map is available online from the Library of Virginia. The map Comes in two sections with the first section of the northern most area of the Sauders and Gayton Shafts and the second section of the Coalbrook Shaft to the south. This map was done on blueprint paper, and it does take time to load on a web browser, but is very detailed. Website address is:

https://lva.primo.exlibrisgroup.com/discovery/fulldisplay?context=L&vid=01LVA_INST:01LVA&search_scope=MyInstitution_noAER&tab=LibraryCatalog&docid=alma990015819420205756

Saunders Shaft

The Saunders Shaft has a long history of ownership and may date to the early 1800s. It was located west of Gayton Road near the intersection with present-day Lauderdale Drive. In the early days, that section of Gayton Road was labeled Quioccasin Road on the county maps. Quioccasin turned north at the present-day intersection with Lauderdale and intersected with Church Road along the same route as present day Lauderdale.

Saunders was one of three mines to be operated in this district after 1873 but was closed in 1902. The shaft was two hundred twenty feet deep; the depth to the "Coke seam" was two hundred feet and the last twenty feet of the shaft was used as a sump. At least four levels were developed on a slope that was driven downdip in the "Coke seam." The levels driven north were the easiest to mine and most productive. The "Coke seam" averaged ten to twelve feet thick in this mine but pinched to an unmineable thickness near rolls in the strata.

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

Another source, J. B. Woodworth, examined the Saunders slope in 1897. He noted that the lower bed here and at the Gayton shaft were coke. He noted that at the depth of 650 feet from the surface, the coke bed was about 9 feet thick, the lower 2 feet being relatively unaltered coal.

(Source: **The Atlantic Coast Triassic Coal Field,** Jay Backus Woodworth, 1897)

On the following page is a diagram of the tunnel system of the Saunders Shaft shown on the map referred to as the "Gayton VA – 15 miles from Richmond" map which is currently stored at the Library of Virginia. The map was produced in June 1896 and showed the three major mines still in operation: Saunders, Gayton, and Coalbrook.

The map provides a schematic of the Saunder Shaft mining network of tunnels including the incline tunnel that led to six levels of tunnels that were dug to excavate the descending coal seams. Coal seams were usually three to six feet thick and separated by many feet of rock and sediment from each other. The miners had to dig down to find the seam then follow it until it ran out or became too costly to remove. The tunnels were long. There were connections between the Saunders Shaft to the Gayton Shaft in the south (right hand side of the map) which can be viewed on the map in its entirety. The map denotes several unnamed shafts which may be ventilation shafts for Saunders and some adjacent abandoned shafts from an early time. The orientation of this map has north on the left side and east on the top side. The main entrance is to the east of the map along with the few structures that were on site.

Map 7. (source: Library of Virginia, Special Collections)

The Saunders Shaft ownership history included:

Gayton Coal & Land Corp	1936 – 1922
Herman J Cook	1922 – 1914
Old Dominion Development	1904 – 1914 (only operated the Coalbrook mine)
Virginia Coal & Coke	1902 – 1893
Richmond Coal Mining & Mfg. Co	1893 – 1887

(Source: In the hands of reasonable and practical men: the lure of the Henrico Coalfields by Jack N. Bruce, Jr., 2018)

The following is a chronology of the ownership of the Saunders Shaft prior to 1888:

Virginia Coal Company	1887 – 1867
(leased to Thomas Oram from 1871 who assigned lease to Julius Pratt in 1872 who then assigned lease to James River Coal Co in 1873 who retained lease until property was sold to Richmond Coal Mining & Mfg. Company in 1887)	
John T Daley	1867
Carbon Hill Coal Co	1867 – 1866
James Dunlop& Thomas McCance	1866 to latter date below
Thomas & Richard Crouch	1852 (12/15 interest in 131.5 and 50 acres)
H R Coleman	1863 (1/15 interest in131.5 and 50 acres)
Geo N Savage Jr	1834 (1/15 interest in131.5 and 50 acres)
Thomas T Giles	1855 (1/15 interest in131.5 and 50 acres)
Martha Ellis	1853 (40 acres)
Thomas Perkins and J S Woods	1854 (49 acres)
G C Brown & C G Ellett	1854 (63 acres)
Richard Dabney, Trustee	1854 (7.5 acres)

(Source: Library of Virginia, John Swartwout papers)

The "Gayton VA – 15 miles from Richmond" map shows the buildings comprising the Saunders Shaft operation. The structures included a large steam engine house to power the equipment, a "shifting" house and an adjacent dwelling on the premises. The author has not found any definition of a "shifting house" but that may have been a facility to grade and separate the coal from the mining debris. The Tuckahoe and James River Railroad terminated at the Saunders Shaft as shown in the upper right-hand corner of the map just east of "Shifting House." There is was Wye to the southeast to turn the engine around when it reached the end of the line.

Map 8. (source: Library of Virginia, Special Collections)

The photograph below may have been the engine house referred to in the above Map 8 of the Saunders Shaft. This building would contain the steam engines used to power equipment at the mine.

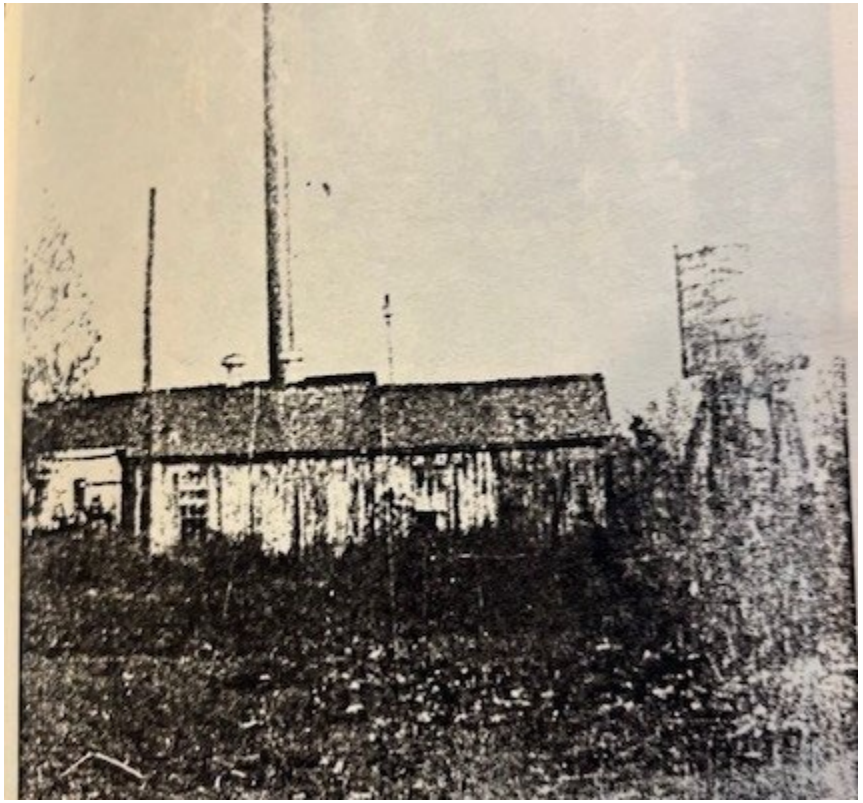


Photo 19. (source: Henrico County Historical Society Magazine, Volume 14, 1990)

Photograph 19 was found in an early 1990's edition of the Henrico County Historical Society magazine and later in the Short Pump Express. The contributor, Ms. Lugar, lived in the Pine Run neighborhood near the intersection of Gayton Road and Lauderdale Drive. She believed this building was on her property which she identified as part of the Gayton Mine.

Rich Castanet, a recent reader of this Compilation, contacted the author with evidence that Ms. Lugar was correct. Rich lives adjacent to the subject site. In the backyard of the site are remnants of what appears to be an industrial chimney as well as a pile of slate. Rich wrote that when he first visited the site where his house was to be built in Pine Run in the 1980's, the property was littered with slate. Slate was the material used to roof most of the buildings in this coal mining area as noted on Map 9. Rich also noted that "Over the years an occasional small hole has opened up in my yard requiring some fill. I always attributed it to construction or destruction debris covered over with dirt. One of my sidewalk slabs is sinking so I believe there is subsidence there. Might need to get that section lifted and underfilled one of these days."

Photo 19A and 19B. (source: Rich Castanet)

The blocked above are cut limestone. The blocks are large and heavy and pre-dated the construction of the home. The diameter of the circle is around twenty-feet and the trees have grown up inside of the circle that was filled with dirt. The author suspects the builder had no interest in trying to remove these blocks so decided to incorporate them into the backyard's ambiance.

As stated in the first Edition of the **Compilation**, this author believes the Saunders Shaft may have been on or adjacent to the property of Discovery United Methodist Church located at the intersection of Gayton Road and Lauderdale Drive, just east of the Causeway. The site of the Photograph 19A and 19B are less than 1000 feet in a straight line to the site of Discovery United Methodist Church. The location of the Saunders Shaft has been identified in the vicinity of the Causeway over Wilde Lake to the Colonies and Lauderdale Drive by several sources so we can be assured the site is within this area.

This author has been a member of Discovery United Methodist since the 1990's and recently had an interview with Reverand Doctor Jim Lavender, the founding pastor of Discovery United Church prior to his recent passing (July 2024) regarding the Church property.

The Methodist Church Conference purchased the Discovery property in the 1970's with the intention of starting a new church to service the burgeoning neighborhoods growing from Pump Road out to the wilds of Lauderdale Road. Dr. Jim told this author that when the Methodist Church bought this property, he participated in the inspection of the property for planning where to erect the initial worship facility (a tent). Dr. Jim remembers a ten-foot-wide mine shaft on the northeastern corner of the church lot (which coincides with a designation on the VA Dept of Mining survey of an abandoned mine shaft on California Drive – probably a ventilation shaft for the Saunders mine) and another shaft on the south side facing Lauderdale (which was not marked on the survey – probably also a ventilation shaft). Both had to be filled with dirt, debris, gravel and capped with concrete before the land could be used. There was also a large coal slag pile (this author remembers the pile) on the eastern side of the property in the woods behind the church where townhouses are now being built. The coal slag pile was removed when the rear parking lot was installed in the late 1990's. Dr. Jim remembers they found a large metal piece of equipment in the front yard at the intersection of Gayton and Lauderdale that was too large and expensive to cut up and remove from the property. They decided to keep it buried on the property although at least part of the equipment is near the surface. Another source confirmed to this author that a local engineering firm did core drilling on the property and encountered a large metal object. A third source confirmed seeing the object but could not describe its function. The metal object could have been some type of coal crusher or conveyor system from the mine to a coal tipple. There is mention in the maps of a Shifting House which would have been used to separate coal from other rocks and dirt. The Saunders Shaft was the

northern terminus of the T&JR RR. Dr. Jim remembers some railroad tracks being found on the property there were covered up. One of the early members of the Church who is a train enthusiast confirmed that he found a train car wheel and some scrap rail equipment on the site which he took home as a souvenir. These factors lead this author to conclude that this property was associated with the Saunders Shaft.

The Virginia Department of Energy (formerly Mining, Minerals and Energy) abandoned mine map does specifically name the Saunders Shaft's location but does show a shaft at the intersection of Lauderdale and the Causeway at Wilde Lake. This may also have been a vertical ventilation shaft for the Saunders Shaft based on the schematic.

(The above statement is the opinion of this author and subject to debate)

Eureka Shaft

This mine was located near Lauderdale Drive and Sir Francis Drive, southeast of the Saunders Shaft. In 1853, this shaft was dug two hundred thirty feet to the "Coke seam." Initial production was from a single level on this bed, which was later connected by tunnel to the C and B coals. The mine was dewatered by buckets hoisted by a 50-HP winding engine.

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

The Eureka Shaft was owned by the Carbon Hill Coal Company in 1866 then the Virginia Coal Company in 1871. There is little information regarding if there was any mining activity as of 1866 or thereafter as the depth had remained at approximately 230 feet. It is possible that the coal reserve had been depleted or additional excavations were going to be too difficult to justify continued work. In all probability, the mine shaft was abandoned for more lucrative shafts.

(Source: Library of Virginia paper)

In his 1866 survey, Dr. I. P. Kimball reported that the Eureka was the northernmost mine at that time. Its 288 feet shaft was located on the northern boundary of the property and about 230 years inside the outcrop of coke seam. "It strikes the coke, the gangway in which is connected by means of a tunnel to the two lower levels. This shaft is unwatered by capacious buckets and the hoisting effected by a winding engine of 50 horsepower."

(Source: The Richmond Coal Basin – A Compilation in Three Parts, Ira F. Davis and L S Evans, 1938. Part One)

On the "Gayton VA – 15 miles from Richmond" map of 1896, there is an unnamed "Old" shaft to the southeast of the Saunders Shaft very close to the Gayton Shaft. This may have been the Eureka Mine. On the 1862 Gilmer Map, this shaft is not specifically named but second shaft south of the northern terminus of the railroad is most likely the Eureka Shaft. This area is now a residential neighborhood just northwest of the intersection of Ridgefield Parkway and Gayton Road.

Turpius Colliery, Magruder Pit, Maggi Pit

These pits were located in an area west of present-day Poplar Drive, probably in the area that parallels Gayton Road between Ridgefield Parkway and Cambridge Drive. This area is now residential along Poplar Drive and commercial along Lauderdale Drive.

These mines was opened before the Civil War. The "Coke seam" was three feet thick with no partings and was mined by shallow shafts and some outcrop pits. All production from this pit was for home use. These pits were also known as the Maggi Pits in 1882.

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

The Carbon Hill Coal Company owned the Turpius Pit by 1866. The Pit was adjoining to the Carbon Mill Mine.

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

Dr. I. P. Kimball reported in 1866 that these pits were "north of Carbon Hill and to south of Tuckahoe Creek.

(Source: **The Richmond Coal Basin – A Compilation in Three Parts**, Ira F. Davis and L S Evans, 1938. Part One)

The records do not indicate if this Pit continued to be mined in the post-Civil War era. However, it is possible that when the Gayton shaft or other adjacent shafts were dug, they may have intersected with these shafts and pits.

Gayton Shaft, Coke Shaft, Orchard Shaft, Twin Shaft, Double Shaft, Breaker Shaft

These shafts were located southwest of the intersection of Gayton Road and Ridgefield Parkway.

"The Gayton property represents a long history of ownership and development as reflected in the number of names given to the workings. The first pits were shallow and were probably worked before 1819. The Breaker or Orchard shaft was sunk 180 feet to diabase by Messrs. Crouch and Snead about 1850 and were collectively known as the Gayton Shafts (Figure I l). A slope was dug in the "Coke seam" near the base of the shaft. Here, the "Coke seam" was eight to ten feet thick with two shale partings.

A 325-foot shaft through the "Coke seam" was dug forty feet south of the original shaft by the Richmond Coal Mining and Manufacturing Co. about 1887. A slope was put in that followed the "Coke seam" one thousand feet at a 30-degree west dip. From the slope, levels were turned every sixty feet, the longest level being 3,000 feet from north to south. Most production was from levels 6 and 8. The last production was in 1901, and the property was sold at auction in 1902. After abandonment, the upper workings caught fire by spontaneous combustion. Pumping ceased and the mine was allowed to fill with water."

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

The Gayton Shaft ownership history included:

Gayton Coal & Land Corp	1936 – 1922
Herman J Cook	1922 – 1914
Old Dominion Development	1904 – 1914 (only operated the Coalbrook mine)
Virginia Coal & Coke	1902 – 1893
Richmond Coal Mining & Mfg. Co	1893 – 1887

(Source: **In the hands of reasonable and practical men: the lure of the Henrico Coalfields** by Jack N. Bruce, Jr., 2018)

The following is a chronology of the ownership of the Saunders and Gayton mines prior to 1888:

Virginia Coal Company	1887 – 1867

(leased to Thomas Oram from 1871 who assigned lease to Julius Pratt in 1872 who then assigned lease to James River Coal Co in 1873 who retained lease until property was sold to Richmond Coal Mining & Mfg Company in 1887)

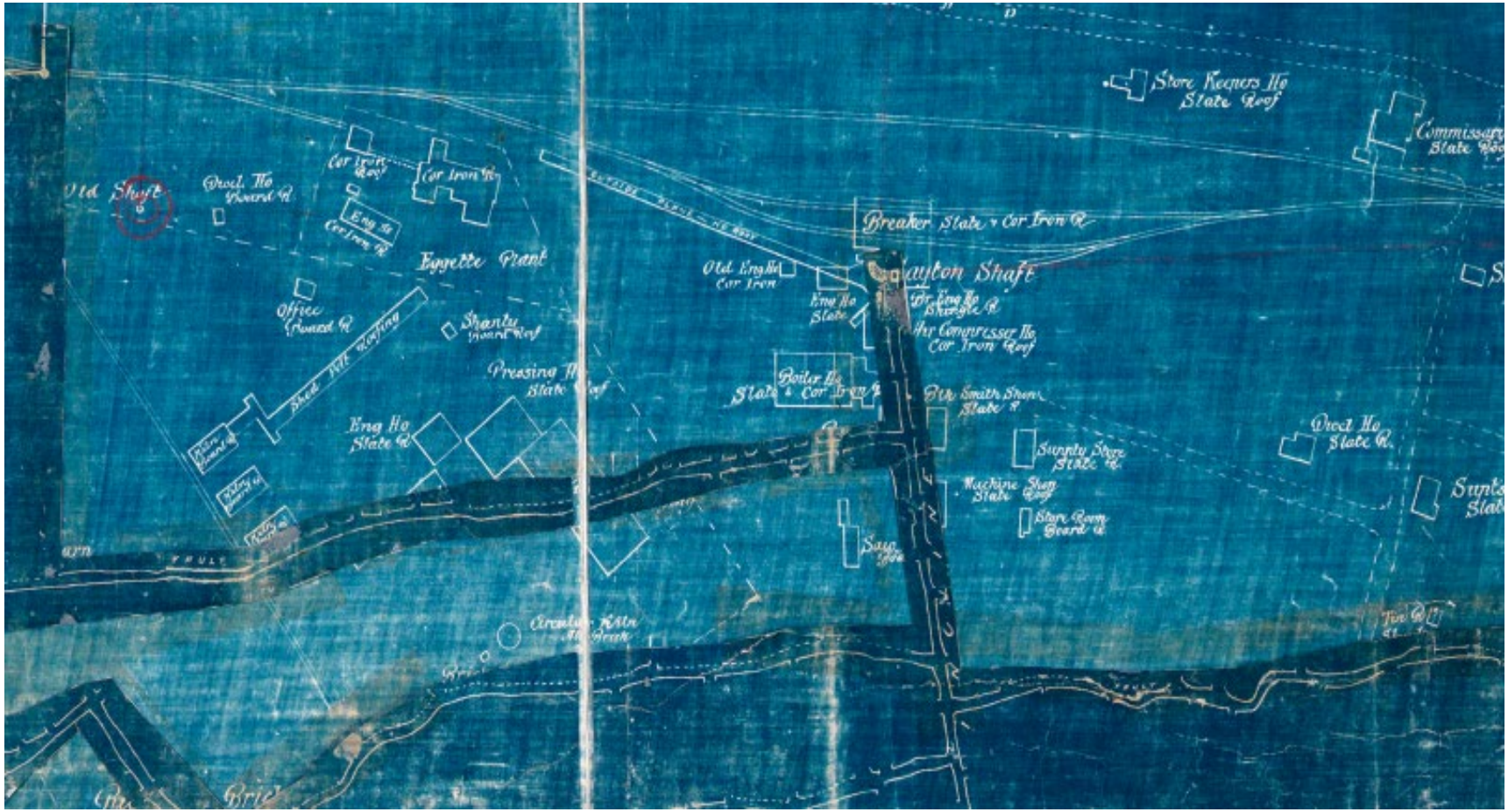
John T Daley	1867
Carbon Hill Coal Co	1867 – 1866
James Dunlop& Thomas McCance	1866 to latter date below
Thomas & Richard Crouch	1852 (12/15 interest in 131.5 and 50 acres)
H R Coleman	1863 (1/15 interest in131.5 and 50 acres)
Geo N Savage Jr	1834 (1/15 interest in131.5 and 50 acres)
Thomas T Giles	1855 (1/15 interest in131.5 and 50 acres)
Martha Ellis	1853 (40 acres)
Thomas Perkins and J S Woods	1854 (49 acres)
G C Brown & C G Ellett	1854 (63 acres)
Richard Dabney, Trustee	1854 (7.5 acres)

(Source: Library of Virginia, John Swartwout papers)

The "Gayton VA – 15 miles from Richmond" map includes the Gayton Shaft which was a more robust site than the Saunders Shaft. The Gayton Shaft site had a Coal Breaker with a long outside "plane," an air compressor building, boiler house, a wooden engine house, a brick engine house, blacksmith shop, store keepers (parts) building, machine shop, supply store room buildings, and a saw mill (for timbers). The railroad tracks included two rail sidings including one that appears to go under the Coal Breaker and a separate siding for the Eggette Plant.

Just to the north of the Gayton Shaft was the site of the Eggette Plant. Gayton Ware, President of the Richmond Coal Mining and Manufacturing Company tried to create a briquette type of product to use for home heating using the byproducts of the coal mines. The manufacturing operation was adjacent to the Gayton Shaft. The operations included several kilns, sheds, a pressing plant, engine houses, shanties and other buildings on an area that appears to be several acres. The Eggette Plant was a failed business but is shown on this 1896 map.

Within a hundred feet of the Gayton Shaft site to the southeast was the company Commissary next to the store keeper II building. Just west of the Commissary was another Store House, then a residential dwelling and the Superintendent's House. Below is a diagram of the Gayton Shaft from the "Gayton VA – 15 miles from Richmond" map.



Map 9. (Source: Library of Virginia, Special Collections)

The Tuckahoe and James River Railroad (T&JR RR) ran to the east of the mining area. Just south of the Commissary there was a turnout with a Locomotive Shed near the Gayton Shaft (to the right-hand side). The State railroad commission records for this era list only one engine running on the T&JR RR.

The coal veins and tunnels for the Gayton shaft ran north and south adjoining the tunnels of the Saunders Shaft to the north. There were several tunnels off of the main incline that ran to the north and the main southern tunnel extends beyond the edge of the map. There were numerous small excavation areas shown but there is no indication on the map regarding the number of levels that had been dug for the Gayton Shaft as there had been for the Saunders Shaft.

(Source: Library of Virginia, Special Collections)

According to Manarin and Peple's **The History of Henrico County**, between 1900 and 1910, improvements were made to the Gayton Mine with new mine ventilation system, three 120 and two 250 horsepower boilers, three story breaker building, boiler and engine building, and machine shops. Numerous workers housing were built at a cost of $20,000. A commissary (Company Store) and stables were built.

(Source: **The History of Henrico County, Louis** Manarin and Charles Peple, 2011, published by the County of Henrico)

Based on this author's research and the details on the "Gayton VA – 15 miles from Richmond" map, it is possible that the dates should have been 1886 to 1890 when the RCM&MC was actively investing in this site. This author believes that most of the improvements between 1900 and 1910 were done at the Coalbrook Slope.

(Author's opinion subject to debate)

There is one photo of the Gayton Shaft that has been found depicting the structure at the mouth of the mine used to move men and materials from the mine as well as dewater the mine. Below is a picture of John William Eagles standing in front of Gayton Shaft, Henrico Co., Virginia coal mine. Eagles was a train engineer and worked at other mines such as Winterpock and Grove Shaft in

Chesterfield Co, Virginia. He would haul the coal downhill to the James River for transport. He had hurt his leg in a mining accident year earlier and finally left to get a job closer to Richmond.

Similar to the photographs of the Midlothian mines, the wooden structure would be the Headstock structure on which the pulleys were mounted to operate the lifts. The steam boilers are not shown in this view, but the size of the structure is several stories high using the workers as a reference point. Another set of equipment not seen in the photograph are the water pumps that had to be used to de-water the shafts and tunnels. The depth of the mines often penetrated water tables at different depths that could flood the mines without the dewatering process.

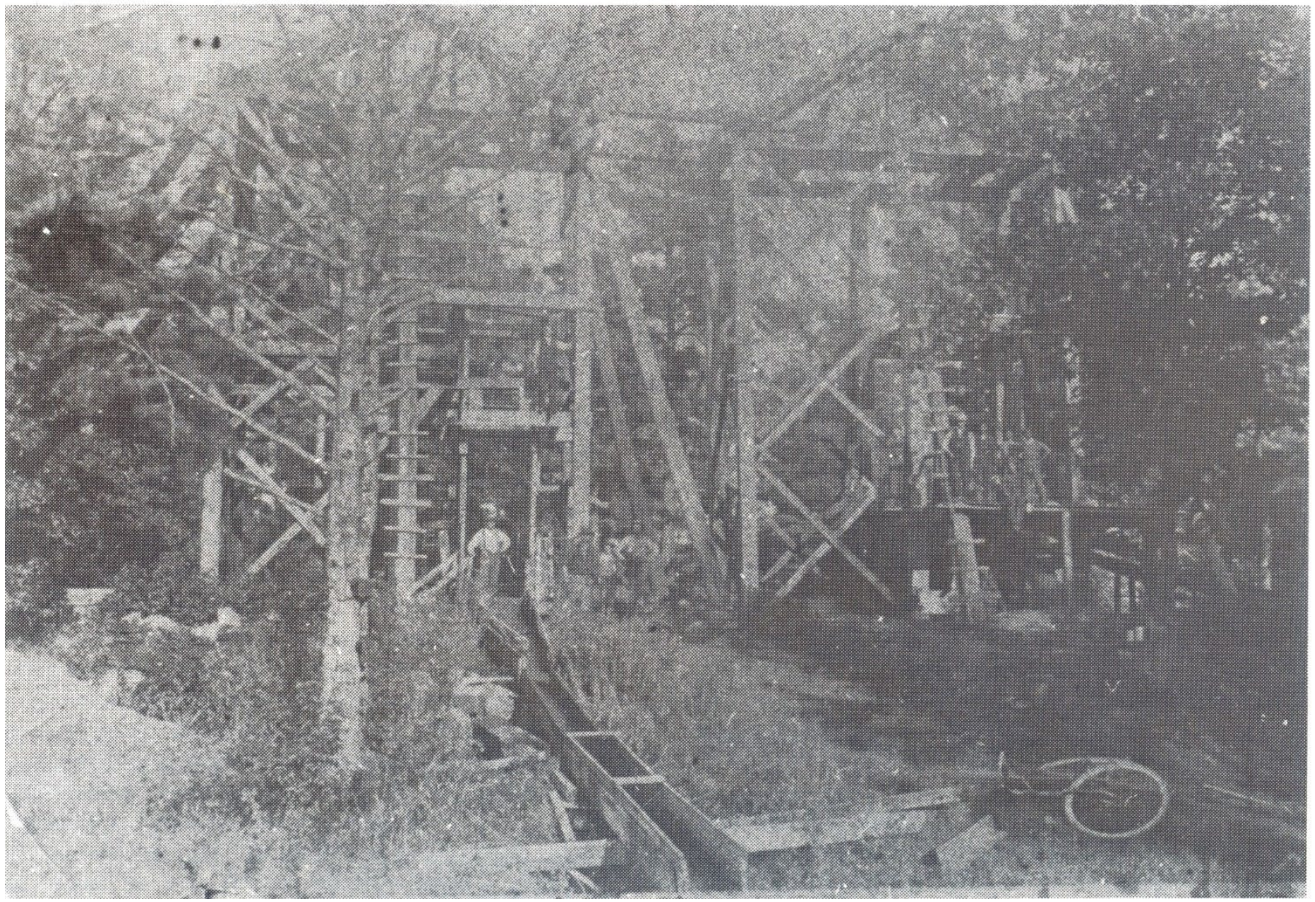


Photo 10. (Source: Mining History of the Richmond Coalfield of Virginia, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

Edge Hill Shaft

This shaft was near the intersection of Poplar Forest Drive and Taft Place, a residential area. Like most of the mines in this area, it was east of Lauderdale Drive and west of Gayton Road adjacent to the Eureka Mine on the west.

The Edge Hill Shaft was worked by Grabs and Company who produced 3,472 tons in 1842. Coal was transported to Richmond on the Richmond, Fredericksburg, and Potomac Railroad. The mine site was located 165 yards west of the "Coke seam" outcrop. The shaft intersected the B coal at 264 feet and the "Coke seam" at 180 feet. Slopes were driven both down and up dip on each bed. A 35-HP engine was used for pumping and hoisting."

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

"Edge Hill Mine was operated by J. C. Deaton was over 0.5 miles northeast of Crouch's mine. It was mining coal and coke. There were thirty hands raising 150,000 bushels in 1843."

(Source: **The History of Henrico County, Louis** Manarin and Charles Peple, 2011, published by the County of Henrico)

John Smith of Goochland County wrote a letter to the editor of the Richmond Whig published in July 20, 1848. His letter was opposing a tariff bill before the U. S. Congress. The bill would have adverse effects on the fledgling iron industry in Virginia and its suppliers like the Richmond Coal Basin. In this letter, Mr. Smith said he had decided to visit all of the coal mines by buggy with Major Snead, a key mine operator. Smith described his visit to the Edge Hill Hime operated by J. C. Deaton & Co. "The Edge Hill mine was a pit producing both coal and coke. The coke is in the upper strata, the coal lies sixty feet below it. Mr. S. Richardson was the first to discover and work the coke for the market – stoves and grates principally. It is said to create a stronger heat for the amount used, than any other kind of fuel. The mine uses about thirty hands raising 150,000 bushels in 1848. The coal is used principally for smith and furnace purposes. This pit was formerly managed badly, and the character of the coal in some degree suffered from it. It is now in a fair way being reinstated."

(Source: Virginia Chronicle.com)

In 1866, Dr. I. P. Kimball wrote "Depth 264 fee to the third coal seam, cutting coke seam (180 feet) and second. Located 165 years inside west of coke seam. Gangways on each seam. Present workings now in the coke, in which two lines of gangway connected by Planes or Winzes, have been wrought. In October, the shaft had not been cleared to the Sump. A stationary 35 horse engine performs pumping and winding."

(Source: **The Richmond Coal Basin – A Compilation in Three Parts,** Ira F. Davis and L S Evans, 1938. Part **One)**

The Edge Hill Shaft would be the site of a deadly boiler explosion in 1876. At this point in time, the land has been leased from the Virginia Coal and Coke Company to Mr. J. J. Tonkin.

The Richmond Dispatch edition of October 18, 1876 had a front page article regarding two men were killed and a third injured by a boiler explosion at Edge Hill shaft, Carbon Hill mines, Henrico County. The headlines read:

"A NEST OF FOUR BOILERS EXPLODED AT THE CARBON-HILL MINES-A LARGE BUILDING WRECKED.FEARFUL DEATH OF TWO MINERS WHILE DRYING THEIR CLOTHES-CARELESSNESS THE CAUSE OF THE CALAMITY-SOME ACCOUNT OF THE MEN WHO WERE KILLED AND WOUNDED."

"About 8 o'clock yesterday morning a nest of boilers at the Edge Hill shaft, Carbon Hill mines, exploded, killing George Smoot and Isaac Howell, and fatally injuring Ben Ford, all employes of the mining company. The mines are thirteen or fourteen miles from Richmond and are situated between the river road and the canal. The coal raised is conveyed to the canal by cars, and thence boated to this city. When the accident occurred, there were about twenty-live persons in the pit and live above ground around the boilers. A reporter of this paper who visited the scene yesterday afternoon found all the signs of a terrific explosion. The shed, which was over the boilers, a substantial structure about forty by eighty feet, was blown to pieces, and the fragments scattered around for a great distance. So violent was the explosive force it was scarcely possible to find two shingles joined together. There had been under this shed thirteen large boilers of a capacity of three hundred horsepower. They were used in affording steam to pump the water out of the pit and hauling cars out of the pit up an inclined plane. Eleven of these boilers were in use, and four or five of them were utterly wrecked. They were hurled about as easily as the wind would toss a feather. Some of them were found piled upon others, and one or two were torn to pieces.

The violence of the explosion threw a section of one of the boilers weighing about 1,500 pounds to a distance of one hundred and twenty-five yards, and other portions shorter distances. Pieces of steampipe were hurled around in all directions. The smokestack and brick work upon which the stack rested were thrown down, and the piles of coal and the roadways and vacant spaces in the vicinity were covered with cinders, ashes, and dust. If there had been no boiler-iron poking out from under piles of bricks and masses of timber the uninformed traveler by that road might well have supposed that "there had been some volcanic eruption, so unnatural did the face of the earth thereabouts appear. The engine and pumps were just outside of the boiler-shed, and were but little injured.

The two colored firemen on duty at the time. William Brown and Spencer Lockett escaped unhurt, though the sad accident was undoubtedly occasioned by their carelessness or sleepy headedness. Ben Ford, the night-foreman, who was superintending the hands at work in the pit, finding that there was not steam enough furnished to run the pumps, walked out of the pit up the incline to the boilers. When he got there the water was found to be low in one nest of four boilers, and immediately on turning it on they exploded. Brown and Spencer were at the pumps and not under the shed, and so saved their lives, though Brown was thrown twenty feet by the shock. The two miners who were killed (George Smoot, white, and Isaac Howell, colored) were drying their clothes at the boilers after finishing some work in the mines. Smoot was only about twenty-one years old. He was unmarried and lived in the neighborhood. His body was found about one hundred yards from the boilers, with his skull and neck broken. Death must have been instantaneous. His friends and relatives took possession of the corpse. Howell lived at Dover Mills, was thirty years of age, and left a wife. He was found in the debris of the boiler-house and was terribly scalded. He lived several hours after being taken out. Ford is a colored man of forty-five. His injuries are of such a nature as to leave no hope of his recovery. He is very badly burnt about the breast and legs and is also severely cut on the Head.

The boilers blown up were in good condition and had indeed but recently undergone thorough overhauling and repairing. An experienced boilermaker is kept on the ground. From examination made yesterday it is believed that when the boilers exploded the iron must have been red-hot. There was about forty pounds of steam on, though it is said they could have easily carried one hundred. The pumps were ranged to run at a very low pressure. The explosion was heard five miles away. There were three boilers near the mouth of the shaft and about fifty yards from the other boilers. They were not hurt at all and will afford enough power to keep down the water in the pits until better arrangements can be made.

Mr. Tonkin, the lessee of the mines, who is himself an experienced machinist, states that he believes the explosion was wholly the result of carelessness of the firemen in not keeping them supplied with water. Mr. Tonkin expects to be shipping coke to market again within a week."

(source: VirginiaChronicles.com, The Richmond Dispatch, October 18, 1876)

The January 10, 1877, Richmond Dispatch edition reported that William Brown, engineer at Edge Hill shaft, was tried for the murder of George Smoot and Isaac Howell by carelessly neglecting his engine and allowing the boiler to explode.

(source: VirginiaChronicles.com, The Richmond Dispatch, January 10, 1877).

Locust Hill Mine

Locust Hill Mine to the east of Edge Hill worked by R W Jordan. The mine was opened in 1843. There were thirty hands raising 90,000 bushels of coke in 1843.

(Source: **The History of Henrico County, Louis** Manarin and Charles Peple, 2011, published by the County of Henrico)

John Smith in his July 20, 1848 letter to the editor of the Richmond Whig described his visit to R. W. Jordan and the Locust Hill Mine after visiting the Edge Hill mine. The Locust Hill mine was a pit producing coke instead of coal. Smith explained that coke does not have bitumen as found in coal. He confirmed that production with thirty "operatives" was 90,000 bushels being shipped to Richmond, Petersburg, Lynchburg, Norfolk and other Virginia communities. Coke is preferred for household use.

After Locust Hill, the next stop was to an unidentified mine operated by Messrs. Town and Powell with thirty hands and raising 500 to 600 bushels of coal per day. This pit was entirely coke. This pit is at the head terminus of the railroad. The lump coke is sold. The fine coke is left at the site of the mine as there is no market for it.

(Source: Virginia Chronicle.com)

Barbershop Shaft, Railroad Shaft

This shaft, of undetermined depth, worked the C coal (the third seam of coal). Workings from the Deep Shaft connected with this mine.

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

One map obtained in researching for this **Compilation** used a US Geological topographic map with Henrico streets shown (dating from the late 1950's or early 1960's) (the "1958 Map"). The "1958 Map" locates the Barbershop Shaft just east of Gayton Road across from Millhaven Square with two unnamed shafts located to the northeast along Gayton Road. This same map indicates there was a hotel located on the northeastern corner of the current Fox Chase Apartment Complex which may be supported by the Gayton VA – 15 miles from Richmond" map.

Deep Shaft, Air or Shelter Air Shaft, Snead's Shaft, Crouch and Snead's Shaft, Crouch's Pits, Brooks Shaft

These shafts and pits were located in the area west of Lauderdale Drive and south of Westshire Drive near Lakewood Manor. These were some of the earliest coal pits and shafts dug in this area and were in close proximity to each other. At this site, Copperas Creek flows into Tuckahoe Creek forming a marshy area which was explored by Geologist Gerald Wilkes in the **From the Mines of Henrico: The Beginning of Our Nation's Coal Industry** video produced by Henrico County Public Relations.

"There were four interconnected shafts on this property: Deep, Brooks, Air (or Shelter Air) and an unnamed shaft. Work began about 1851 by Mr. Snead on the Crouch property. Mining ceased near the end of the Civil War and the property remained idle until 1873. At this time the James River Coal Company cleaned out the old workings and resumed production of the natural coke, marketing it as Carbonite. The mine was last worked in 1875.

The Deep Shaft was approximately two hundred feet deep, cutting the "Coke seam" and C coal, and bottoming in the B coal. Levels were turned off each bed and worked along strike. The south levels went only a short distance before encountering a dike two hundred feet wide that separates this operation from the Coalbrook Slope's northern workings. The Deep Shaft's north levels followed the C and B coals and ultimately connected with the Edge Hill Shaft workings near the old Belmont Hotel. A short slope that dipped 30 degrees to the west at the bottom of the shaft was often filled with water and was used as a sump."

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

Author's Note: The Belmont Hotel is marked as such on the 1958 Map and there is also a hotel marked on the "Gayton VA – 15 miles from Richmond" map.

In 1841, Major Snead and Mr. Crouch had employed over one hundred fifty hands and were producing 400,000 bushels of coal. At this time, Woodward's and Cottrell's pits were unwrought (undeveloped) and the Edge Hill mines were employing only 30 hands and raising 80,000 bushels of coal. The historians noted that due to the lesser quality of the coal coming from this mine, there were substantial discounts to customers to induce sales.

Thomas and Robert Crouch's mine to the north of Cottrell had eighty hands raising 800 to 900 bushels per day in 1843.

(Source: **The History of Henrico County, Louis** Manarin and Charles Peple, 2011, published by the County of Henrico)

John Smith in his July 20, 1848 letter to the editor of the Richmond Whig said the Crouch Pits were operated by T & R Crouch. Crouch Pits were only one hundred yards north of the Cottrell Pit. The Crouch Pits employed eighty to ninety hands and raised up to several hundred bushels per day. Smith commented that Crouch was sinking a new shaft at the time of the visit.

Smith's next stop was a pit operated by Perry, Ferris & Co. The owners were in a quarrel and the mine had filled with 300 feet of water despite having what Smith described as finest engines of any mine around. In Smith's words "There is some loose screw here, and it ought to be tightened without delay."

(Source: Virginia Chronicle.com)

Dr.. I. P. Kimball described:

- "Shelter Air Shaft Slope. No. 1 in second coal seam (third of above section) cutting the first (second of section) total length 360 feet."
- The Old Slope was abandoned.

- "Sneads or Deep Shaft (350 feet) located 412 years inside (west) of coke seam down to third seam, cutting coke and second. Gangway turned and wrought in each seam. The winding and pumping are done by a 50 horse engine.'
- "Air Slope 250 feet in depth 160 feet inside coke seam. No measurement of the gangway on the several seams having yet been made by the present owners, it is practicable at this time merely to state, with regards to its bearing on the past removal of coal, that existence of the gangways under the circumstances, of the meager breasts, is an advantage much in access disadvantages, proceeding form past consumption. The dip of the several seams averages about 30 degrees and is pretty regular and this angel is accordingly the incline of the slope". He discusses needed improvements to the mine to make the mine viable."

(Source: **The Richmond Coal Basin – A Compilation in Three Parts,** Ira F. Davis and L S Evans, 1938. Part One)

"Coalbrook Slope, Trent Slope, Jos. R. Anderson and Company Mine, Carbon Hill Mine, Old Dominion Development Co. No. I Mine, Mule Shaft, Engine Shaft

These mines were near the intersection of John Rolfe Parkway and Lauderdale Drive.

About 1848, Thomas and Richard Crouch drove a slope 1,658 feet in the A seam of coal. The slope was later extended to 2,400 feet with a dip of 16 degrees to 35 degrees to the west. The Mule Shaft intersected the main slope at 125 feet. This shaft passed through the C and B seams of coal, intersected the main slope at the A coal, and was used for ventilation and raising water from the mine. Levels turned off the main slope at irregular intervals. The main level was located 1,360 feet downslope and was turned north and south to follow the strike of the coal. The south main level was 1,400 feet long. A 30-foot roll was encountered 1,000 feet along this level, otherwise the bed was consistent. The north 1,360-foot level went 700 feet before encountering a dike. This dike separates Coalbrook from the south levels of the Deep Shaft.

Before 1860, tunnels were turned near the base of the main slope and connected with the B and C coals. Another slope (Little Incline or No. 3 Slope) followed the C coal downdip with levels working off of it. Some B coal was mined from this slope. The Engine (or "Indian') Shaft was sunk 185 feet to intersect the No. 3 Slope (Figures 12, 13, and l4)."

"During the Civil War, Joseph R. Anderson and Co. used the Engine Shaft for the main portal and worked the rise on the C and B coals. The coal mined during this period was used by the Tredegar Iron Works for the Confederate war effort."

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

In the May 15, 1858 edition of the Richmond Enquirer, the following commentary about mining north of the James River was made:

"The deepest mine on the north side of the James is a slope, on the property of Dr. Trent, whose angle of about 25 degrees is about 1.800 feet deep and between 700 and 800 feet perpendicular. This is lowest vein that has been discovered there; which ranges from 5 to 7 feet thick, and is more extensive and gaseous below 500 feet perpendicular than above. It appears to be good gas coal at that depth and burns when free from impurities.

J. J. Werth did a drilling cross section and reported the layer of sediment to be:

- Igneous sandstone
- Coke cinder
- "Whin" fire clay and black sandstone
- Blue slates, fire clay and c., fossiliferous
- Pure natural coke
- Fire clay
- Slates and sandstones
- Upper coal seam – 5 to 7 feet thick
- Slate and sandstone
- Second coal seam – 4 to 6 feet thick
- Sandstone
- Lower vein discovered – 5 to 10 feet thick
- Probably depth to basin 757 feet
- Unexplored region, coal measures, slates, sandstones & c.
- Problematic vein of coal from ten to fifty fee thick
- Total depth of coal measures from 800 to 900 feet below Tuckahoe Creek at Coalslope dale."

(Source: virginiachroncile.com)

The name of "Jos R Anderson & Co." associated with this set of mines is the name of a manufacturer of locomotives and steam vessels at the Tredegar Iron Works in Richmond. An August 23, 1860 article in the Daily Dispatch spoke of a recently delivered steam locomotive to the New York and Richmond Railroad that had been produced at the Joseph R Anderson & Co. shops. The Tredegar Iron Works bought coal from the Richmond Coal Basin colliers and also maintained their own coal mining operations.

(Source: Virginia Chronical. Com)

The Coalbrook Shaft ownership history included:

Gayton Coal & Land Corp	1936 – 1922	
Herman J Cook	1922 – 1914	
Old Dominion Development	1904 – 1914	(only operated the Coalbrook mine)
Virginia Coal & Coke	1902 – 1893	
Richmond Coal Mining & Mfg. Co	1893 – 1887	
O H Russell	1887 - 1881	
C Spaulding	1881 – 1873	
Wm R Trent	1873 – 1852	
Thomas & Richard Crouch	1852 – 1836	
Crouch	1839 – 1819	Had driven incline to 1658 feet
Ellis	1819 to (?)	

(Source: In the hands of reasonable and practical men: the lure of the Henrico Coalfields by Jack N. Bruce, Jr., 2018)

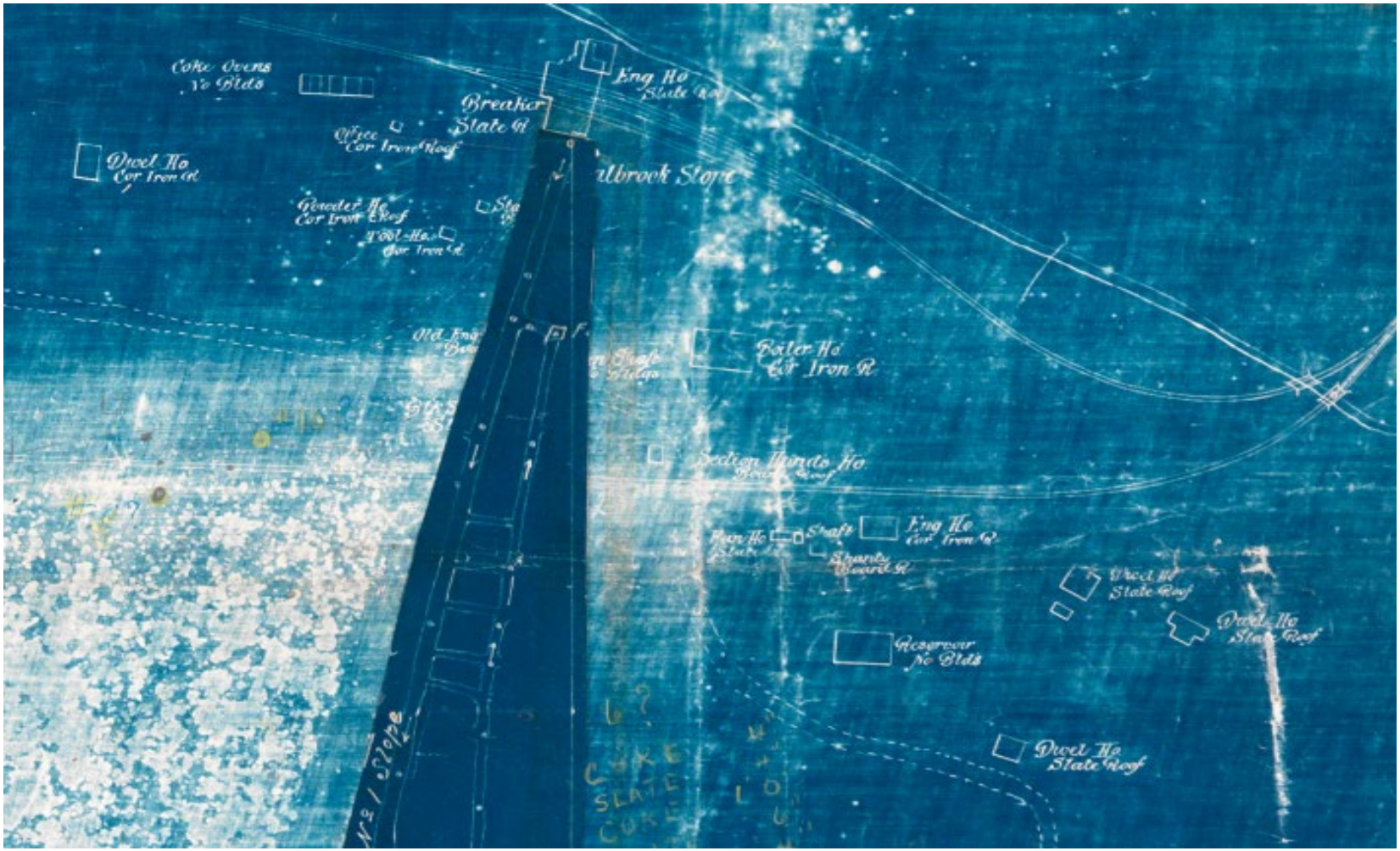
The "Gayton VA – 15 miles from Richmond" map includes details of the Coalbrook Shaft. Along the T&JR RR tracks and Quioccasin Road (now called Gayton Road) between the Gayton Shaft and Coalbrook Shaft were approximately 20 or more residential dwellings with slate roofs. Sources have described these dwellings as 6 to 8 room miners' cottages with some sources reporting that these dwellings were duplexes. There was also an unnamed "hotel" at the intersection of Quioccasin and a county road that ran west across Tuckahoe Creek. As previously stated, the hotel was probably the Belmont.

The Coalbrook Shaft site had a coke oven, Coal Breaker, a Powder house for explosives, tool house, several Engine houses, blacksmith shop, fan building over a ventilation shaft, shanties and other buildings. The railroad tracks passed through the Coalbrook Shaft property turning southeast after the property with turnout that led a single track back to the Coal Breaker where there was a three-track siding.

A detailed description of the geology of the Coalbrook Slope, the depth and width of the seams, the chemical analysis the coal from each of the three seams, the development potential of the mine, and the cost to create another shaft with supporting infrastructure (estimated at $106,000) was prepared in 1904 by E. V. D'Invelliers for the Old Dominion Development Company. D'Invelliers estimated it would take 14 to 16 months to sink such a shaft. He also assessed the condition and usefulness of existing equipment that were on side at the adjacent Gayton mine. In summary, D'Invelliers recommended the development of the mine based on his economic evaluation.

(source: **The Richmond Coal Basin – A Compilation in Three Parts,** Ira F. Davis and L S Evans, 1938. Part One)

Below is a section of the "Gayton VA – 15 miles from Richmond" map showing infrastructure.



Map 10. (Source: Library of Virginia, Special Collections)

The diagram below shows the two incline tunnels and multiple levels of tunnel used to mine the different seams of coal. Note that the main tunnel went under Tuckahoe Creek and the honeycomb of tunnels were in Goochland County.

Map 11. (Source: Library of Virginia, Special Collections)

The diagrams on the next two pages are additional drawings of the tunnel system of Old Dominion Development Mine No. 1 at Coalbrook Slope. Note that often a mine could be renamed by a new operator but that was the continued excavation of an existing mine. This can make for confusion for some readers.

The diagrams are reprinted from Gerald Wilkes' book **Mining History of the Richmond Coalfield of Virginia**. The first diagram shows how extensive the entrances and tunnels for a mine were in reaching the various levels of coal seams. A mine of this size would be worked for several decades and reach depths of several hundred feet to over one thousand feet. The second diagram shows the plans for the extension of the old working at this site that needed to be reinforced allowing access to the coke and coal underneath. Based on test drilling holes, the plan showed how the miners would access the coke vein as well as the C and B veins of coal at the Coalbrook Slope. The coke vein which is closer to the surface was seven feet to nine feet thick while the C vein was five feet thick, and the B vein varied from three feet to six feet think. There were interconnecting tunnels between the veins at a distance of 1,150 feet and 1,360 feet from the entrance. In looking at the diagram, notice that to the right of the page is the main shaft in Henrico County that slopes at a 20-degree angle going under Tuckahoe Creek into Goochland County reaching the property boundary line of the Crump Estate at an undisclosed depth.

As Mr. Wilkes noted in an interview in the 2005 Henrico County Public Relations' department video of "Henrico Coal", the tunnels were only big enough to get the coal in the seam. If the seam was only three feet high, the miners only dug a tunnel that height which made them crawl rather than walk to excavate the coal seam. The only light would have been a candle in their helmet which did not cast much light into the black hole in which they worked. The flame also could trigger an explosion if there was sufficient gas leaking into the tunnel from the surrounding carbon materials. Mr. Wilkes discussed his experiences in modern-day mining operations where he could go into a mine and actually hear the hissing of the gas as it was emitting from the coal seam. Another danger was water. When digging into the earth, the excavator encountered aquifers at different depths which would quickly fill a mine if dewatering processes was not maintained by the operator. This was a real problem in Henrico County mines that were both operating and had been abandoned. As Mr. Wilkes pointed out in the 2005 video presentation, there were a lot of abandoned shafts and coal pits in Henrico as operators moved to find new seams that were cheaper to extract. Often this meant digging a new shaft that was a few hundred feet away from a previously worked shaft. In many situations, those old shafts were filled with water. In the process of following a coal seam without good maps or sense of distance, a miner could break through the walls of a flooded seam resulting in a deluge of water into a tight space with a fatal outcome. These were the risks of coal mining in the 1800's and early 1900's.

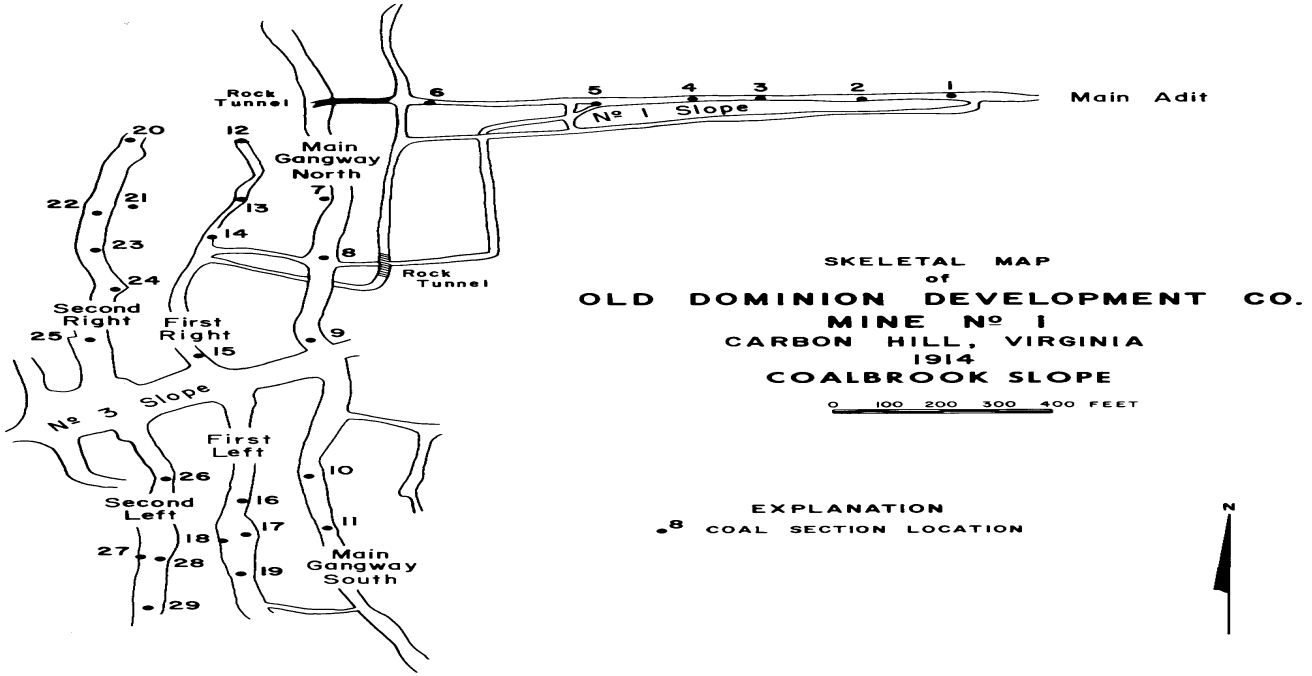


Figure 12. Skeletal map of the Coalbrook Slope.

Map 12. (source: Gerald Wilkes, **Mining History of the Richmond Coalfield of Virginia**)

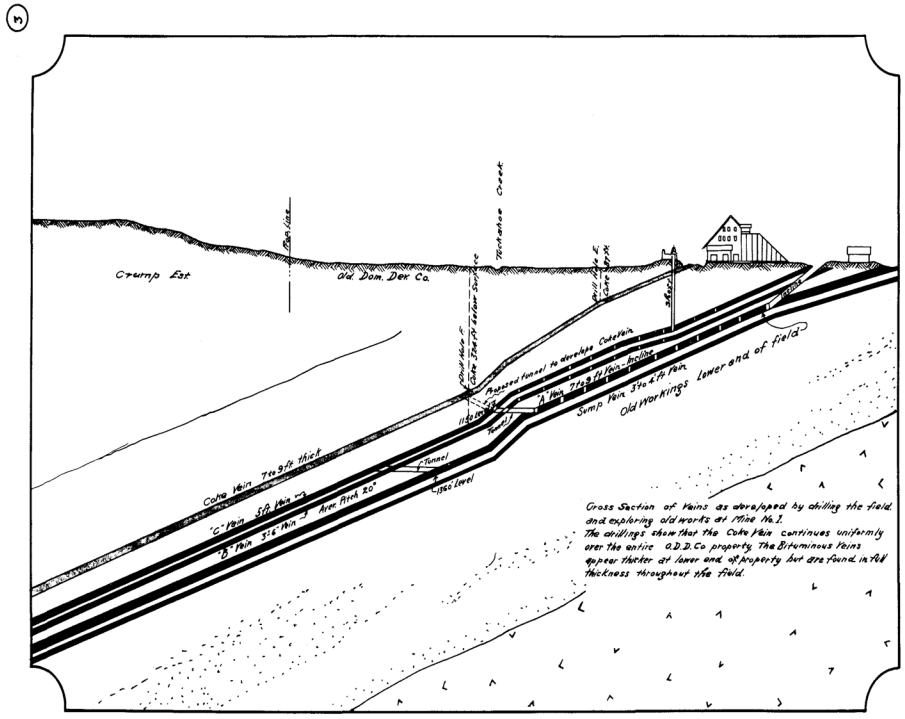


Figure 13. Cross section of the Coalbrook Slope.

PUBLICATION 85

15

Map 13. (source: Gerald Wilkes, **Mining History of the Richmond Coalfield of Virginia**)

The Coalbrook Shaft was probably located behind present-day Lakewood Manor off of Lauderdale Road. This area was explored in the **From the Mines of Henrico: The Beginning of Our Nation's Coal Industry** video produced by the Henrico County Public Relations and Media Services. https://www.youtube.com/watch?v=tU7E2WpfVrA Before Lakewood Manor was built, many people explored this portion of swampy land along Tuckahoe Creek to look at the ruins of the mines as they existed back then. They remember finding a brick lined pit alongside the railroad bed in the woods. As railroad enthusiasts, they were able to identify this as the locomotive inspection pit for the removal of ash from the steam locomotive which was required on a regular basis.

Below is a photograph they took of the Tuckahoe & James River Railroad roadbed through the swampy area near Lakewood Manor . This is private property and the reader should not trespass on this land on their own.

Photo 11. Roadbed of the Tuckahoe and James River Railroad

Cottrell Pits

Based on maps from this era, the Cottrell property was to the northeast of the Wickham property in the far southwest corner of Henrico County along Tuckahoe Creek. The Cottrell Pits were among the earliest of the coal mining operations in Henrico County and there were many generations of land owners named Cottrell found on various property maps of Henrico County from 1819 through the 1950's.

Wiliam Cottrell's pits were located 1.5 miles north of the Tuckahoe Pits. There thirty hands raining 400 to 500 bushels of coal per day in 1843.

(Source: **The History of Henrico County, Louis** Manarin and Charles Peple, 2011, published by the County of Henrico)

In John Smith's July 20, 1948 letter to the editor of the Richmond described his visit to the Cottrell Pit operated by William Cottrell Smith noting that Cottrell had thirty hands and raised up to 500 bushels per day.

(Source: Virginia Chronicle.com)

Woodward Pits

The Woodward Pits were adjacent to the Cottrell Pits.

(Source: **The History of Henrico County, Louis** Manarin and Clifford Dowdey, 1984, published by University Press of Virginia)

Tippecanoe Shaft

"This mine was worked in 1841 and probably was closed before the Civil War. A dike cut through the coal and locally altered it to natural coke. Only a small amount of coal was mined from this shaft."

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

"Tippecanoe Shaft was operated between circa 1841-circa 1860 by the Tippecanoe Coal Company. Only a small amount of coal was mined. This coal was among several samples from the Richmond Basin analyzed by Professor W.R. Johnson in 1843 for the U.S. Navy Department"

(Source: Jacqueline Louise Hernigle, An Archipelago of Coal Pits: Predicting Archeological Features in the Richmond, Virginia Coalfield, 1991, College of William and Mary, a Master's Thesis available online from the College of William & Mary)

Tuckahoe Shaft (on the border between Henrico and Goochland Counties)

The Tuckahoe Shaft was located south of River Road in the area near the Wickham Pits and Tippecanoe Pits near the James River & Kanawha Canal.

The Tuckahoe Shaft had originally been started by Thomas Randolph in the early 1800's. He would later incorporate the Tuckahoe Coal Company to work at this mine.

In 1843 Major Snead purchased the Tuckahoe Pits from the Randolphs. Mining had stopped at 412 feet at the time that Snead had made the purchase . By 1846, Snead was profitable with fifty hands (employees or slaves) raising (mining) 300,000 bushels per year.

(Source: **The History of Henrico County, Louis** Manarin and Charles Peple, 2011, published by the County of Henrico)

"The Tuckahoe Shaft was worked and abandoned before the Civil War by the Tuckahoe Coal Company. As many as five major beds and several minor coals were found in this mine."

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

"Tuckahoe Pits also known as Tuckahoe Shaft were opened during late 1780s and closed before the Civil War. The first mining at this site was under the supervision of Col. Thomas Randolph, destined to supply his blacksmith shops. Shallow pits in this area were mined periodically after this until the War of 1812. In 1837, Dr. W.T. Scott reopened the pits.

The Tuckahoe Coal Mining Company was then organized, and they purchased the entire tract for $30,000. After sinking the Tuckahoe Shaft 412 feet, presumably without encountering coal, they abandoned the shaft. In 1843, Maj. Snead began working the shaft successfully. Fifty hands were employed during 1846, and they raised 300,000 bushels of coal per year. The coal was considered excellent for iron manufacturing processes. Tredegar and Belle Isle Rolling Mills ordered shipments of the Tuckahoe coal."

(Source: Jacqueline Louise Hernigle, An Archipelago of Coal Pits: Predicting Archeological Features in the Richmond, Virginia Coalfield, 1991, College of William and Mary, done as a Master's Thesis available online from the College of William & Mary)

John Smith in his July 20, 1848 letter to the editor of the Richmond Whig made the following observations about his visit to the Tuckahoe shaft: "Early in the morning, we rose, washed, combed and ate a first-rate breakfast, and then went to the Tuckahoe, mined by Messrs. Snead and Dietrick. Coal was first discovered here sixty years ago by Colonel Thomas Randolph, the proprietor of the land. They supplied his smith shops. Since that time, they have been worked periodically, up to the war of 1812, when they were abandoned, and re-commenced in 1837 under the management of Dr. W. T. Scott. Subsequently, a company was formed named the Tuckahoe Coal Mining Company, which purchased the whole track at a cost of $30,000. They commenced the sinking of a shaft that went as far as 412 feet, and then pitched fat all into the fire by hauling all off in despair. In 18473, Major Sneed went to work at it, and succeeded. I may here remark that Major Sneed has been the pioneer in this business on the North side of the River and has sunk more shafts than any other man who has pursued this vocation in Eastern Virginia. The difficulties and expenses of sinking these shafts are sometimes immense. The coal on the outcrop of the surface is not always a guide to where it may be found imbedded many hundred feet under the earth.

The Tuckahoe Pits are on the Eastern end of the coal field, within twelve hundred yards of the Canal, and about twelve miles from Richmond. They employ fifty hands and raise some three hundred thousand bushels of coal per year. It is highly bituminous and excellent for manufacture of iron. The Tredegar and Belle Isle Rolling Mills are supplied with it. It must be good and right kind, or they would not use it. These pits are the only ones on this side that are troubled with gas – of course ventilation is necessary. There is not as much water in this Pit as I have found generally in many others, although they have extended their operations to a considerable distance underground. I have observed in examining the coal mine that, where they are sank by over four or five hundred feet, they are annoyed by gas, and where there is less depth they are troubled with water. It is evident therefore, that water, in the region of these coal fields, does not run through the earth to any extent, even five hundred feet deep, and the further you go below the ground the increase of gas."

(Source: Virginia Chronicle.com)

Wickham or Wigham Pits

"Based on maps from this era, the Wickham property was near the James River in the far southwest corner of Henrico County along Tuckahoe Creek. These pits were worked and abandoned before the Civil War."

(Source: **Mining History of the Richmond Coalfield of Virginia**, Gerald P. Wilkes, 1988, Virginia Dept. of Energy)

Other coal pits or shafts that have been mentioned in the historical records include HJ Cook Mine, Jones Pit, Sycamore Pit and Waterloo Pit.

(Source: Jacqueline Louise Hernigle, An Archipelago of Coal Pits: Predicting Archeological Features in the Richmond, Virginia Coalfield, 1991, College of William and Mary, a Master's Thesis available online from the College of William & Mary)

Photographs of the Carbon Hill Mine No. 1 Coal Breaker

The following five photographs were taken by Rob Timmins' grandfather on a Sunday ride around the western part of Henrico County sometime in the second or third decade of the 20th century. The Carbon Hill No. 1 mine had ceased operation in 1914. It is uncertain as to whether the mine had closed down by the time these photographs were taken. Rob's family provided these photos to Henrico County back in the 1990's for the Henrico video on coal mining. David LeTourneau, Assistant Director of Henrico County Public Relations made these photographs available for this **Compilation.**

The coal breaker was located near the intersection of John Rolfe Parkway and Lauderdale Drive. The Tuckahoe and James River Railroad line curves east at this point and there was a rail spur to the mine to service the mine.

The first photograph below is a side view of the coal breaker which was three stories tall. In the lower middle of the photograph is a white object. Based on other photographs from the Old Dominion Development Company photo album at the Virginia Museum of History and Culture, this white object would have been ventilation fan house for the mine shafts. The sheds in the foreground and to the right of the ventilation fan house were probably storage sheds or workshops.

The second photograph is of the same side of the Carbon Hill No. 1 coal breaker from a different angle. The coal breaker was used to separate impurities such as rock and other mining debris from the coal. The mined coal came in large chunks that were not wanted by customers. The coal had to be sorted and, in some cases, crushed to create marketable coal. Coal was brought to the tipple and loaded on a conveyor belt that took the coal to the upper level of the tipple.

The third photograph is a frontal view. Note the railroad tracks in the foreground which may have been the main line. Down the line there would have been a turnout to access the siding up to the coal breaker.

The fourth photograph appears to be from the rear of the breaker plant. The two gentlemen in the photograph were visitors to the site on a Sunday drive. Rob Timmins' grandfather is on the left.

The photograph appears to be showing the rear section of the steam locomotive with its wooden cab and sloped tender that hauled coal from mines to the R&A (later C&O) Railroad at Lorraine on the James. While the name on the tender is obscured other than Rail Company, this is likely the Tuckahoe & James River as listed with the State registry.

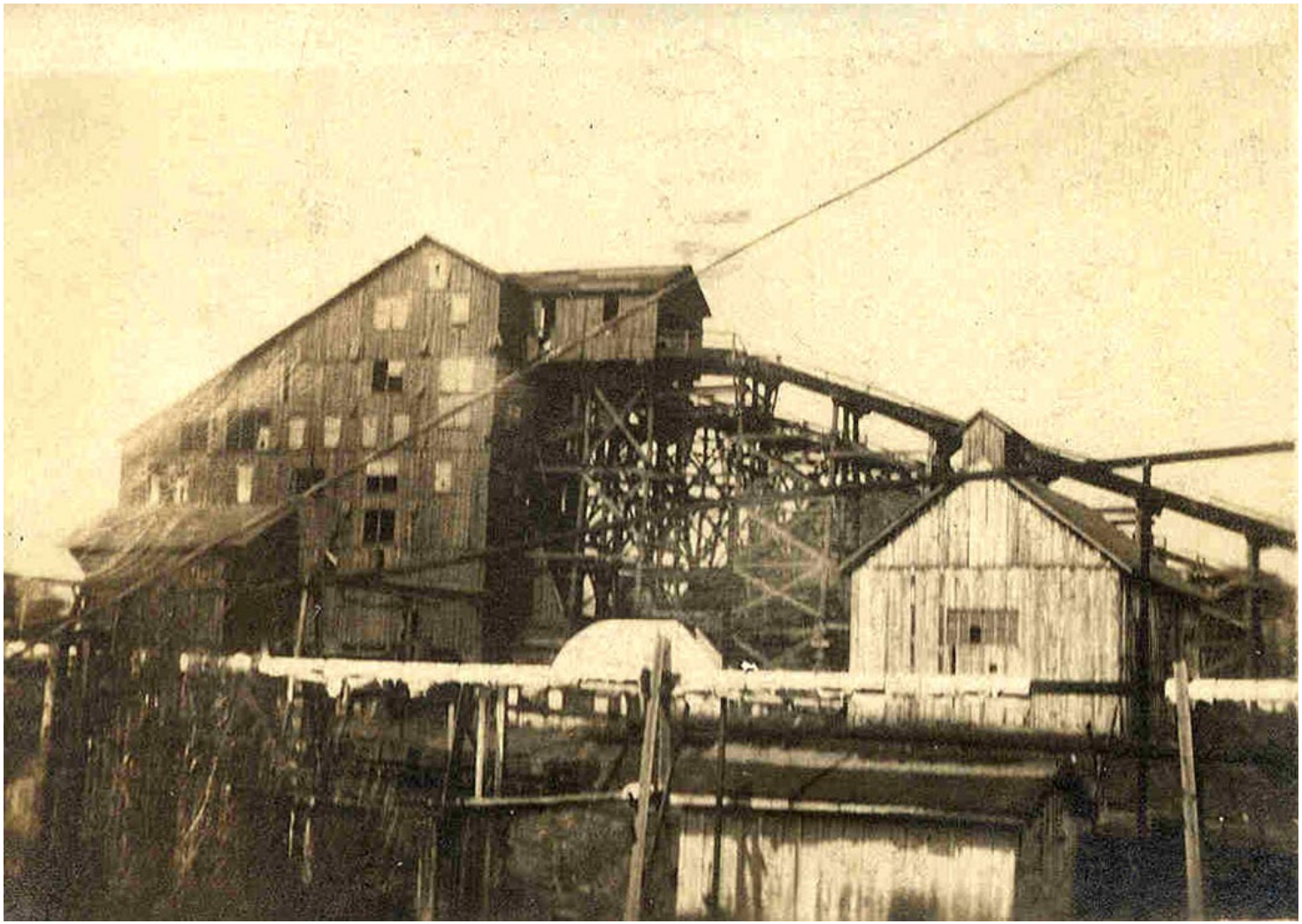


Photo 12. (source: Henrico County Department of Public Relations. Taken circa 1912 by Francis M. Timmins. Original sources is the R H Timmins family album)

Photo 13. (source: Henrico County Department of Public Relations. Taken circa 1912 by Francis M. Timmins. Original sources is the R H Timmins family album)

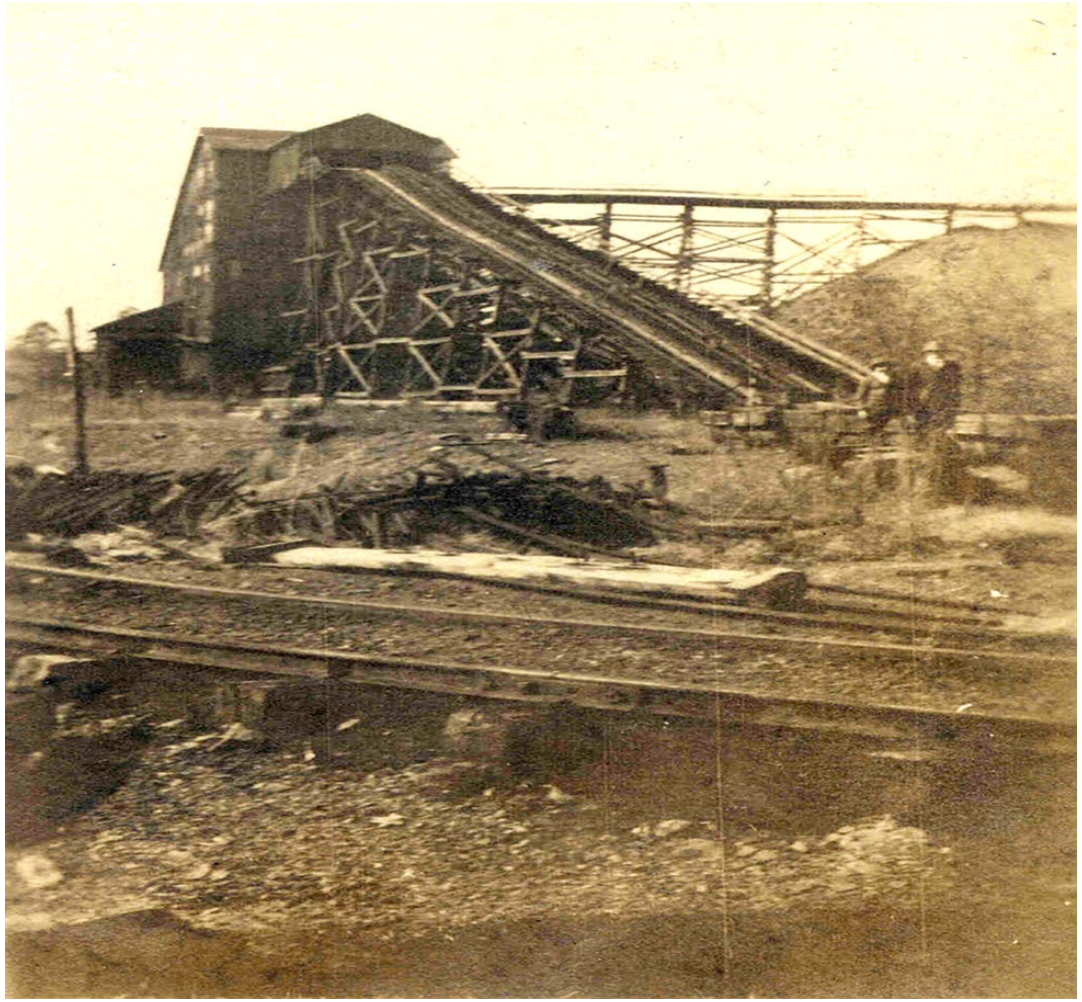


Photo 14. (source: Henrico County Department of Public Relations. Taken circa 1912 by Francis M. Timmins. Original sources is the R H Timmins family album)

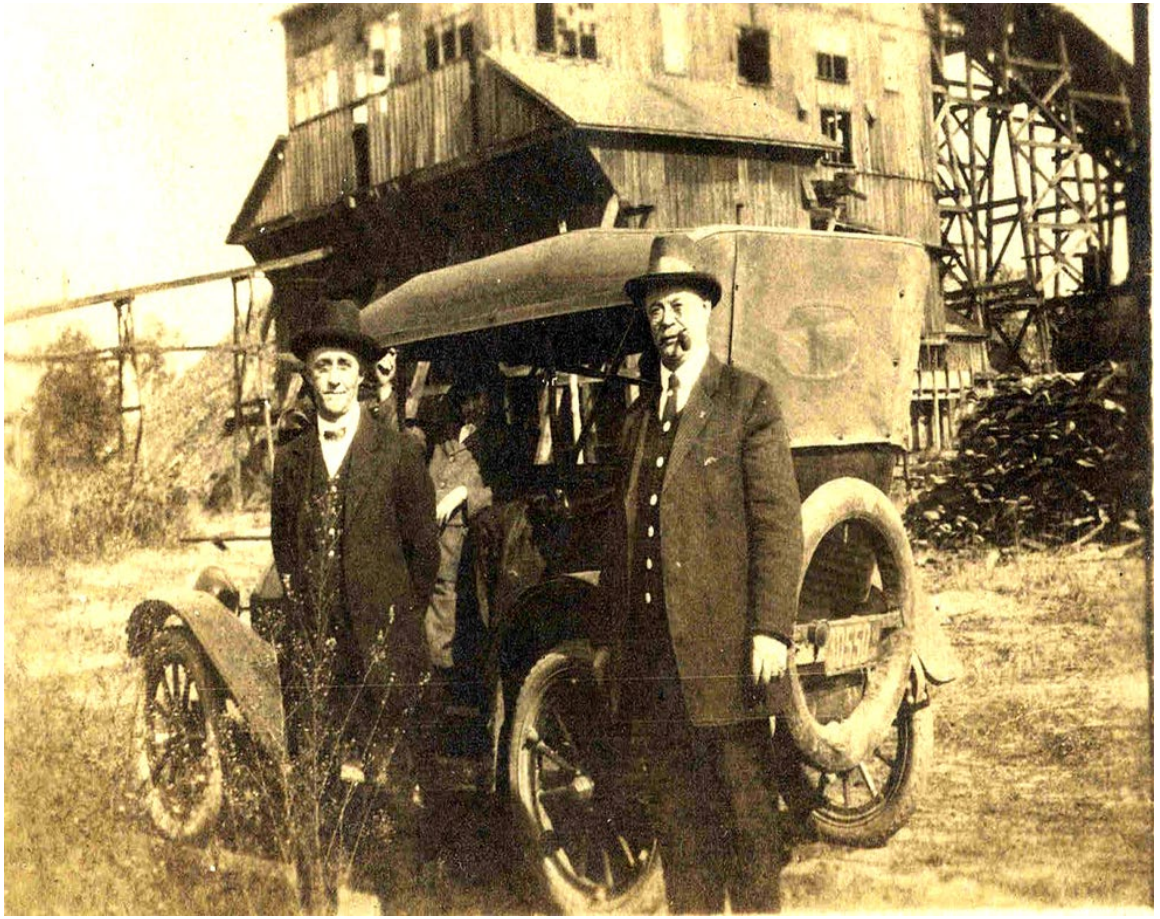


Photo 15. (source: Henrico County Department of Public Relations. Taken circa 1912 by Francis M. Timmins. Original sources is the R H Timmins family album)

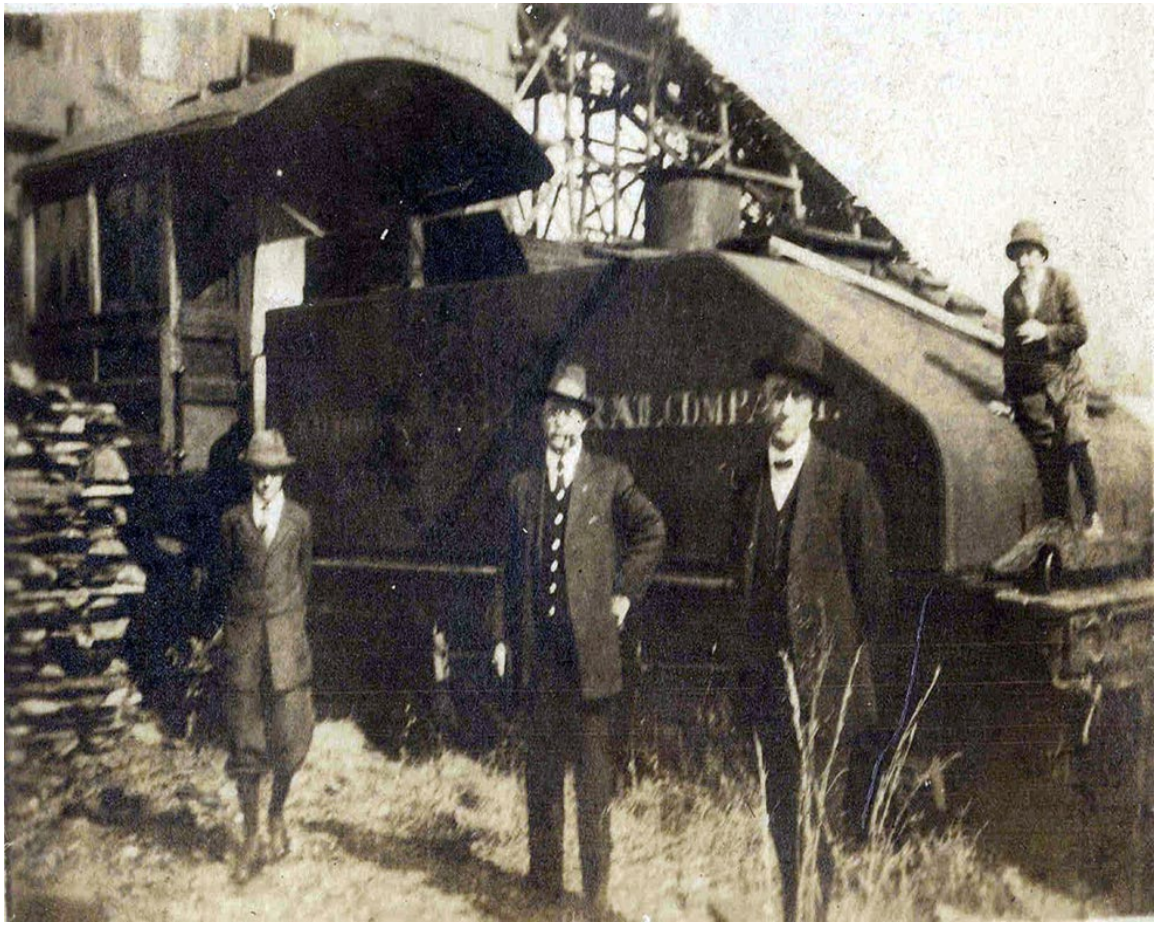


Photo 16. (source: Henrico County Department of Public Relations. Taken circa 1912 by Francis M. Timmins. Original sources is the R H Timmins family album)

A sixth photograph from the Timmins family collection provided by Chuck McIntyre of the Old Dominion Chapter of the National Railroad Historic Society is a view of the breaker plan with the mine carts on the elevation to the coal breaker plant. The seventh photograph is this series is an example of a mining cart from a museum.

Photo 17. (source: Taken circa 1912 by Francis M. Timmins. Original sources is the R H Timmins family album. Provided by Chuck McIntyre)

Photo 18. (source: Chuck McIntyre)

The photograph below is from the Henrico Historical Society Magazine, Volume 14, 1990. It appears to be from another angle of the Carbon Hill coal breaker. The date of the photograph and the name of the photographer is unknown. Unfortunately, I was not able to get a more refined version of this copy from trying to scan the magazine.

Photo 20. (source: Henrico County Historical Society Magazine, Volume 14, 1990)

Chronology of Post-Civil War Operators and Owners of the Carbon Hill District Mining Operations

During the Civil War, the Dover Mines in Goochland and 107-acre Trent's Pits in Henrico came under the control of JR Anderson & Co. All of the mines suffered from lack of skilled laborers due to enlistment of eligible white males into the Confederate army from 1860 to 1865. Additionally, by 1865 what was left of the mine work force, including slaves were being drafted into building up the defenses of Richmond against the encroaching Union armies. With the evacuation of Richmond by the Confederacy in April 1985, the mines were depleted on their enslaved labor who had been emancipated by the Union troops.

After the Civil War, in an effort to rebuild his businesses, Anderson sought to operate the Tredegar Iron Work, Trent's pits, and several blast furnaces under the name of Tredegar Company. Trent's Pits had a 1,656-foot incline, tunnel about nine feet wide with an average angle of 30 degrees. There were four seams of coal of which one seam was coke. To produce 10,000 bushels from Trent's Pits, Anderson estimated that he needed a team of 211 workers including 60 diggers, 40 top hands, 40 trailers and 16 canal boaters. Remember that in 1860's and 1870's, the James River and Kanawha Canal was still in operation. The coal was moved 3 miles to the canal on mule powered rail (the T & JR RR). Anderson ceased operation at Trent's Pits in 1867.

Another Civil War era mine operator was John Werth. During the Civil War, outside of Trent's Pits, his mine was the only productive mine in Henrico producing Coke for local iron works. His issue was manpower shortage. Staffed by slaves, there was a high fugitive rate among men leased to the mine operator along with a shortage of supervisory level white employees. Most of the white supervisors had been conscripted into the Confederate force. Werth tried to get discharges for his supervisors and later petitioned the governor to use convict labor. The primary customer for coal and coke was the Tredegar Iron Works, which manufactured a significant amount of weaponry for the Confederate army.

Carbon Hill Coal Company

In 1866, John Werth, James Dunlop and Thomas McCance obtained authorization for organization of the Carbon Hill Coal Company to hold lands in multiple counties in VA that included a substantial portion of the Richmond Coal Basin. A report on the properties was prepared by Dr. Kimball in 1866 to attract New York investors. Operations were anemic.

Carbon Hill mines in 1866 consisted of:

1. Eureka Shaft – 228 feet deep
2. Shelter Air Shaft
3. Edge Hill Shaft – 264 feet deep
4. Old Slope – closed
5. Sneed's or Deep Shaft – 350 feet deep
6. Air Slope – 250 feet deep but inactive
7. Turpius – adjoining Carbon hill had a three-foot seam of pure coke.

The venture was short lived. Carbon Hill Coal Company assets were sold at auction in 1867 to the Virginia Coal Company.

Virginia Coal Company

The Virginia Coal Company was organized as a New York corporation in 1867 by John T Daley, a distiller from California and brother William H Daly, a New York real estate investor. Virginia Coal Company leased their property to operators like Jeremiah Jones who operated from 1867 to 1871. Jones acquired railcars from Anderson when Trent's Pits were closed and used his timber rights to construct a railway to the T&JR RR. By 1873 the Virginia Coal Company held:

1. Eureka Shaft – 228 feet
2. Twin Shafts – 180 and 198 feet
3. Edge Hill Shaft – 276 feet
4. Snead's Shaft – 396 feet
5. Main Slope – 366 feet
6. Edge Hill Slope -426
7. Trent's Pits

The Virginia Coal Company leased 12,143 acres in 1871 to Thomas Oram of Dover NY who sold his rights to Julies H. Pratt of Montclair NJ in 187. Pratt's son-in-law was Henry F Fuller who was an engineer and real estate agent with Delaware and Hudson Coal Company. Messrs. Pratt and Fuller created the James River Coal Company with offices at 111 Broadway, New York, New York. The

James River Coal Company acquired Trent's Pits as well as other real estate. Pratt and Fuller marketed their coal as Carbonite in an attempt to create a brand name for a commodity product. The company reincorporated as a Virginia corporation in 1874. Oram, Pratt and Fuller were active in managing the James River Coal Company which focused on selling to northern markets as well as local markets. James River Coal Company activity mined the Edge Hill Slope and Shaft, Deep Shaft, Coal Slope and Trent's Pits. Limited mining activity was occurring at the Eureka and Sneed shafts. The company failed in 1875 with a trustee's auction of tracts of lands, the mineral and surface rights (from Virgina Coal Company) that expired in 1886, the T&JR RR and other business assets. J.J. Tonkin took the lease and resumed production at Edge Hill until 10/17/1876 when an explosion in the boiler house killed two miners drying their clothes. This brought a quick end to Tonkin's company.

(source: In the hands of reasonable and practical men: the lure of the Henrico Coalfields by Jack N. Bruce, Jr., 2018)

In 1877, another name appears. There was a notice in the Richmond Dispatch edition of June 6, 1877 from John Torrey stating "Notice-I have this day appointed H. F. Torrey, my agent, to mine COKE and COAL upon the properties in Henrico and Goochland Counties, known as Carbon Hill Mines, and to sell the product thereof, and to carry on a store at said mines, all purchase for said mines and store to be made in cash." Research on John Torrey indicates he was associated with the Gravity Railroad of the Delaware and Hudson Canal Company. He may have been an investor in the James River Coal Company.

(source: VirginiaChronicle.com)

Document 1. (source: image from internet search)

<u>Richmond Coal Mining and Manufacturing Co. (RCM&MC)</u>

The next operator on the scene was the Richmond Coal Mining and Manufacturing Co. (RCM&MC) led by Ware Gay who had prior experience with coal operations in various states.

"Born in Boston, Ware Gay became well established in the coal trade in Boston. He was active in coal distribution, a member of the Boston Coal Exchange and participated in several coal-mining enterprises. Besides his involvement in the Henrico coalfield, he served as manager of the Montana Coal and Coke Company's operations at Aldridge, Mont. employing 175 men. He was also the manager of the Electric Mines at Horr, Mont., another property owned by Montana Coal and Coke, which employed 30 men. Ware Gay was the quintessential promoter of his era, generating far more ideas than capital was available to properly exploit. In addition to coal, he was also tied to ventures associated with transportation, banking, real estate, utilities and lumber. Many of his schemes were interrelated. For instance, when a movement was evolving to "privatize" the municipally owned and operated coal gas plants in Richmond, Gay and some of his associates developed a plan to lease the works, probably to use locally mined coal. While one might properly describe the man as a visionary, a list of failed enterprises marred his record and certainly left him with a number of disappointed investors and probably not a few detractors in the conservative Richmond business community. Although he was not identified in either of the acts addressing the incorporation of Richmond Coal Mining and Manufacturing, the fact that the act empowered the company to maintain offices and transact business in the cities of Richmond, New York, and Boston" (italics added) indicates that he or his associates may have been involved from the onset. He was appointed president of RCM&MC and would become an advocate of coal mining, not only in Henrico, but the entire Richmond Basin"

The RCM&MC was incorporated in 1882, but did not begin operations until 1887. The RCM&MC had to rebuild the T&JR RR line from Carbon Hill to Lorraine at a significant cost and then arranged for the old T&JR RR was taken over by the R&A under an operating agreement for shipment of coal from the mines while RCM&MC had responsibility keeping the T&JR RR and Henrico RR lines serviceable. The RCM&MC was engaged in raising capital as well as starting up mining operations in 1877 with great difficulty. There were disputes with potential lenders, labor issues due to lack of housing and 7-day work weeks as well as marketing, cost control and other initiatives. In 1888, the company acquired land from the heirs of Jeremiah Jones and activated mines including the high-quality Red Ash seam. While production was limited and sales were slow, the company pushed forward to build a coal breaker facility using its timber and rock mining assets to fund operations through 1889. Gay in the meantime had tried to start a brick making venture and pursued acquiring more mining interests in Chesterfield Count. In 1890, Gay formed the Virginia Eggette Fuel Company to produce coal briquettes from the coal culm produced at the RCM&MC mines.

(source: In the hands of reasonable and practical men: the lure of the Henrico Coalfields by Jack N. Bruce, Jr., 2018)

The Library of Virginia possesses an extensive collection of letters written by William Wilcox, Secretary of the RCM&MC who was resident at the mines to Ware Gay, President of the RCM&MC who resided in Boston and to H. C. Skinner, Treasurer of the RCM&MC who resided in New York. All of the letters are handwritten. Most of Wilcox's letters in this collection date from 1887 to 1888. The letters contain daily reports on the progress of reopening of the mines, rebuilding the railroad to Lorraine Station, building of the coal breaker at the Gayton mine (March to July 1888), coal shipments, payroll payment requests, vendor invoices, and other affairs such as workplace injuries in the mine.

In two of his letters, Wilcox discussed the move of the local Post Office from Lorraine to Gayton in 1888 with Wilcox appointed as the Postmaster for the office. In the 1896 map, the post office is shown on the northern end of the Tuckahoe & James River Railroad in the area of the Gayton Mine.

(source: Library of Virginia, local call number for the microfiche is 29636 on miscellaneous reel 565)

A front-page article in the Richmond Dispatch edition of May 15, 1890, announced the formation of the Virginia Eggette Fuel Company to use coal from the Gayton Mines to produce egg shaped briquettes using a patented process that had been obtained by the principles of the company including Ware B. Gay of Boston and Edward Gay and Lee Lorraine of Richmond. Apparently, the venture did transform into a business operated under the name of Gay and Lorriane Companies offering cheap Gayton Coal for sale in the Richmond Dispatch edition of April 19, 1892. Gay and Lorraine Company was located at 10 South 9th Street in Richmond. The Eggette plant was shown on the "Gayton VA – 15 miles from Richmond" map. How this venture fared in the long term, the author does not know. Virginia Eggett Fuel Company appears to be one of many enterprises in a long list of business attempts at the Carbon Hill district to make profit on the black gold under the ground.

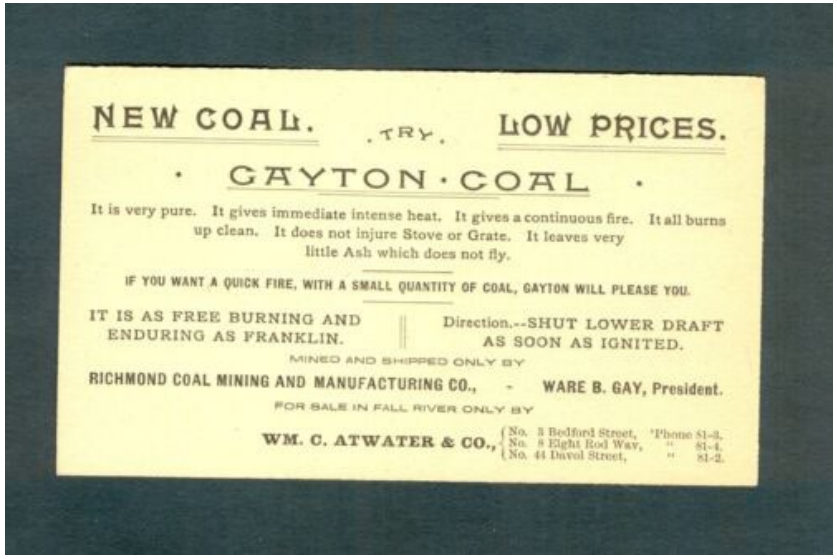
(source: VirginiaChronicles.com, Richmond Dispatch, May 15, 1890)

In 1892, Gay obtained a charter for the North Gayton Land Company to develop a town. The company acquired 350 acres along Three Chopt Road for this business purpose, but the town was never developed as envisioned and the land would be sold in 1907. The financial panic of 1893 brought financial ruin to many businesses including the RMC&MC.

Through a series of transactions, Gay arranged for the RCM&MC to lease its properties to the newly formed Gayton Coal Company in December 1893 which in turn leased the same to its secretary who leased the same to Virginia Coke and Coal Company in October 1894. Pennsylvania interests and Ware Gay were all participating in each enterprise.

RCM&MC entered receivership in 1900 and Emma Gay, wife of Ware Gay, initiated suit to collect on $141,000 which the RCM&MC owed to noteholders that included Emma Gay. Ware Gay was appointed receiver of the RCM&MC to wind down the affairs of his own company.

(source: In the hands of reasonable and practical men: the lure of the Henrico Coalfields by Jack N. Bruce, Jr., 2018)



Document 2. (source: image from internet search)

On May 22, 1901, an Inspection of the Richmond Coal Field by an unknown author was issued to L. Lancaster Williams and Everett Waddy regarding the Carbon Hill properties. At that time, the properties consisted of:

Grump	200 acres
Cottrell	43 acres
Dietrick	242 acres
Jones	483 acres
Dover	13,300 acres
McGruder	183 acres
Chaffin	707 acres
Richmond Coal MMC	2,185 acres
Torrey	700 acres
Nuckolls	150 acres

The report says there were four seams of valuable minerals, the top seam is vein of natural coke with thickness of 8 to 10 feet, the second is a vein of bituminous coal with thickness of 6 to 6.5 feet, the third is a vein of bituminous coal with thickness of 4 feet, and the fourth is a vein of bituminous coal with thickness of 7 to 8 feet. The coke vein contained an estimated 105 million tons of coal. The engineering firm report speculated that after 50 years of mining activity, less than 5% of the field had been depleted. A chemical analysis of the coal was conducted by Dr. Henry Froehling testing sample of each vein for moisture, volatile combustible matter, fixed caron, ash and Sulphur content.

The engineering report further noted “The Gayton Shaft is, in the judgment of the writer, a dangerous shaft, being driven under the crusher building, the burning of which building would imperil the shafts as well as the miners working before. The Saunders shaft is free from this objection.” “The Coalbrook Slope on the Eastern Outcrop was working the lower coal Vein to a depth of 1,656 feet. Short tunnels are cut through from this lower vein to intervene with veins Nos. 1 and 2 lying above.”

The engineer recommended building a 9-mile inexpensive railroad to Laurel on the RF&P at an estimated cost of $50,000. He noted that 5 miles of the route had already been graded.

Author's note: This proposed railroad to Laurel would be on roadbed of the abandoned Henrico Railroad that ceased operation in 1884 – 1886.

They noted that the Gayton Shaft had reached a depth of 325 feet.

The purpose of the report may have been related to the pending disposal of the RCM&MC by auction. Since the document does reference Dr. Froehling, it is possible that the report was done by the firm of Froehling and Robertson.

(source: Library of Virginia Richmond Coal Basin archives, Inspection of the Richmond Coal Field by unknown author issued to L Lancaster Williams and Everett Waddy, May 22, 1901)

While the RCM&MC was in receivership under Ware Gay's control, he announced on September 12, 1903 that the Gayton mines would be producing coal by November 1, 1903. The 1800 foot shaft of the mine were being dewatered after a long period of inactivity. The process started in February 1903 and would soon be finished with only 250 feet left to be dewatered. The production of bituminous and semi-anthracite coal was to begin within two months.

The newspaper article noted that between 500,00 and 600,000 tons of coal had been taken from 1,300 to 1,500 acres since mining had begun in the area. The article stated that there was still 2,285 acres still to be mined. The source of this information was not cited, but this author suspects Mr. Gay was trying to build up interest in the property prior to the sale with great estimation of the value that laid therein.

The article further reported that Mr. Gay had returned from the North where he had been meeting with potential investors in light of a forthcoming Commissioner's sale of the RCM&MC's assets.

(source: VirginiaChronicles.com, Richmond Dispatch, September 12, 1902)

Notice was made September 19, 1902 of a Commissioner's Sale of the coal property of the RCM&MC pursuant to two decrees from the US Circuit Court for the Eastern District of Virginia issued June 27, 1902. The Sale was scheduled for October 17, 1902. The notice in The Times (Richmond, VA) listed 12 parcels of land equal to approximately 2,000 acres of timber and coal properties in Henrico and Goochland Counties along Tuckahoe Creek with all improvements thereupon. In addition to the land, the sale also included six

steam engines and boilers; machinery; buildings; erections; fixtures; implements; tools; and mineral, materials and mining rights. The announcement said that three mines had been opened on this property. There was additional a sale of the 579 shares of capital stock of the Tuckahoe and James River Railroad, twelve railroad cars, and two wood cars. No steam locomotive is listed. The sale term was 1/3 down in cash and the balance paid over 2 years.

(source: VirginiaChronicles.com, Richmond Dispatch, September 19, 1902)

The Commissioner Sale of the RCM&MC resulted in proceeds of $105,000 from a group of Northern investors was represented by H Lee Lorraine and F. C. Christian for the land and $2,800 for the T&JR RR. This fell short of the $142,000 owed to the bondholders. The news article noted that 2,800 acres were purchased which was more than the amount of acreage listed for the 12 parcels in total. The article also listed six steam engines with the T&JR RR purchased which was probably incorrect as the state records show only 1 engine ever listed with the annual filings of the T&JR RR.

The article reported that the property is purported to be capable of 900-ton output of bituminous coal, but the actual output never exceeded 240 tons.

(source: VirginiaChronicles.com, Richmond Dispatch, October 18, 1902)

H Lee Lorraine was an associate of Ware Gay. For a while, there was speculation in the newspapers as to who the undisclosed parties was and their intentions. Some speculated that Ware Gay was behind the purchase in an attempt to continue to try to make money out of the original investment.

(author's note: there were a number of news article on this subject prior to the Joseph Woolfolk and his team being identified as the new operators of the mine).

The Coalbrook Shaft was finally pumped dry by November 8, 1903.

(source: VirginiaChronicles.com, The News Leader, November 9, 1902)

"By 1903, all mineable coal above the 1000-foot level had been taken out. Coalbrook was the mine name used at this time.

Several attempts were made to work this mine after 1903. The last attempt to reopen the mine failed in 1944.

The main slopes were eight to nine feet wide and the gangways seven feet wide. Initially, small carts were used to haul coal up the slope, but later, cars capable of 3350-pound loads were used. The coal was loaded onto rail cars at the mine and moved to loading facilities in Richmond (Figure l5).

A small amount of coke was extracted at three places in the mine. In all cases, the occurrence of coke was local and the coal incompletely coked."

(Source: Gerald Wilkes' "Mining History of the Richmond Coalfield of Virginia." Commonwealth of Virginia Department of Mines, Minerals and Energy Division of Mineral Resources. Charlottesville, VA 1988)

There were no reports of the Coalbrook Shaft being worked after it was pumped dry in November 1903 for about five years. The only activity in this period was a break-in of and theft from the RCM&MC storehouse (Commissary?) by James A. and Mattie Cottrell. The Cottrells' lived about ½ mile from the storehouse and had a six year old daughter. The news article reported that the night watchman was asleep when the Cottrells loaded up a wagon on July 30th with guns, watches, shoes, and clothes. Unfortunately for the Cottrells, there were witnesses who were all members of the Cottrells' family. The Cottrells were arrested in September and placed in the Henrico Jail. The little child was imprisoned with her mother until Ms. Cottrell made bail. Mr. Cottrell stayed behind bars. The newspaper article described the trial in October as one of the most pathetic trials that had taken place before that tribunal in years. The little child was at the trial which made the situation even more pitiful. The final outcome of the trial was not announced in these editions.

(source: VirginiaChronicles.com, The News Leader, October 11 and 12, 1904)

The Old Dominion Development Company

In 1905, local papers reported the Joseph Woolfolk, a civil engineer from New York, had purchased the assets of the RCM&MC. Woolfolk sought to connect the Carbon Hill mines with the RF&P rather than the C&O that carried competitors coal. The T&JR RR still had a connection at Lorraine.

The transfer of the property was announced in the February 10, 1905 edition of the News Leader newspaper.

It was determined that most of the area east of the T&JR RR near Tuckahoe Creek and Copperas Creek had been depleted.

The successor to the RCM&MC would be the Old Dominion Development Company. It would be organized in January 1909 with headquarters at 503-4 Mutual Building in Richmond. Joseph Woolfolk was President and Richard Woolfolk was Secretary being listed as residents of Richmond.

Woolfolk and his associates had raised $1.5 million through the issuance of bonds in 1910. The Old Dominion Development Company (ODCC)hired a consultant who estimated there was 75,000.000 tons of marketable coal on the property despite earlier reports that many of the mine areas were depleted.

(source: In the hands of reasonable and practical men: the lure of the Henrico Coalfields by Jack N. Bruce, Jr., 2018)

Woolfolk invested in the rehabilitation of the Coalbrook Slope mine that was named Carbon Hill No. 1 including a new ventilation fan building and boiler house which is included in the Virginia Museum of History and Culture's the Old Dominion Development Company photo album. Aside from the Timmins family photos of the coal breakers, the Virginia Museum of History and Culture and Henrico County Historical Society photographs used in this book are the only known mine-related photographs of the activities around the Old Dominion Development Company era of 1910 -1915. The Virginia Historical Society collection consists of approximately forty photographs which have been copied and used in various sections of this Compilation.

An Eastern Shore Virginia newspaper reported that Mr. Woolfolk is thought to be backed by Northern investors including Frank Jay Gould who will construct an electric road to the mines. Mr. Gould was the son of railroad financier Jay Gould who was very controversial in his days for his financial dealings. In 1909, Frank Jay Gould founded the "Virginia Railway and Power Company" in Richmond, Virginia. The company would be renamed "Virginia Electric and Power Company", and known widely by its acronym (VEPCO) in 1925. He would later move to France and owned casinos in that country where he died in 1956.

(source: VirginiaChronicles.com, Accomack News, February 18, 1905 and https://en.wikipedia.org/wiki/Frank_Jay_Gould)

In April 1906, Captain Woolfolk asked the Richmond Chamber of Commerce to appoint a Committee to investigate the character, value and extent of the coalfields near Richmond. Woolfolk stated that there was an abundance of coal and a committee should be appointed to investigate the development of the coal. The Chamber agreed and appointed a committee.

(source: VirginiaChronicles.com, Evening Journal, April 13, 1906)

On January 19, 1911, an explosion occurred at the Gayton (Carbon Hill) mine that killed 5 miners. The Richmond Evening Journal edition of January 20, 1911 provided front page coverage of the event. At the end of Richmond Evening Journal article on the explosion, the newspaper then focuses on the Old Dominion Development Company and its long-range plan for coal mining operations in the area. There will be a second mine explosion in less than a year later. Despite the loss of lives, the mines continued to operate for a while.

"Captain Joseph W. Woolfolk is president of the company. William G Woolfolk is resident manager and Wade Alien auditor.

The Old Dominion Development Company is organized with a capital stock of $3,000,000. It has offices on the fifth floor of the Mutual building in Richmond, and at 71 Broadway, New York. The managers and owners have lived on the Carbon Hill property for the past two years. The Company has for two years been a member of the Richmond Chamber of Commerce.

The directors are: Beverly Chew. George N. Hartman and Henry C. Guzman, of New York City; Captain Joseph W. Woolfolk and William G. Woolfolk. The two latter, while citizens of New York, live at the mines. The officers are: Captain Joseph W. Woolfolk. President; William G. Woolfolk, vice president: Henry C. Guzman, secretary: W. P. Sullivan, manager: Wade Allen, auditor.

The company began operations in November, 1908 with the rehabilitation and development of this property formerly known as the Gayton coal mines, lying north of the James, in the western part of Henrico County. These mines were in operation for many years, furnishing Richmond with a large part of its coal supply during the War Between the States. Probably the machinery and equipment speedily became antiquated, and the enterprise finally ceased to exist, the workings filling up with water.

For more than two years the new Interests which are now in control have been steadily developing the mines, cleaning them out, putting in modern machinery and gathering together a large plant. The company owns and controls an area exceeding 6,400 acres, a

part of which is very highly improved, with suitable buildings for miners, mechanics and laborers including coal tipples, commissary building, machine shops and other accessories incident to a large coal operation.

All of the output is taken by the Richmond, Fredericksburg and Potomac Railroad for use on their freight engines.

The rail haul is, at present, over what is known as the James River Railroad, which runs from the Carbon Hill mines to Lorraine on the James River Division of the Chesapeake and Ohio. This road has recently been rebuilt and equipped. The connecting line from the mines to Laurel in the opposite direction will be built within the next few months.

The haul by the Chesapeake and Ohio will be seventeen miles; that by the Richmond, Fredericksburg and Potomac Railroad will be eighteen miles. Both railroads connect with the Southern Railway, which are now laid in the wharf property owned by the Old Dominion Development Company which lies just below the wharves of the Old Dominion Steamship Company. The coal handling plant which the company proposes to erect will automatically load into barges and other vessels from elevated bins near the water's edge. These bins will discharge on one side the local for local users; on the other side will empty themselves directly into the hulls of the vessels without a second handling.

The Old Dominion Development Company expects to place, within the next eighteen months, not within less than 100,000 tons of coal in barges in the James at Richmond.

During the present year the company will construct a new mine of the most modern character on its property, electrically equipped in addition to its present workings.

W. P. Sullivan has come here from Birmingham, Ala., to become mine manager. Mr. Sullivan has been in charge of one of the largest mines in the Birmingham field and brings his assistant with him.

(source: VirginiaChronicles.com, The Richmond Evening Journal, January 20, 1911, page 1 and 2).

A headline in the January 2, 1912 edition of The News Leader reported that "Richmond Area doing well since reopening of the Gayton Mines". The article is mainly focused on mining in western Virginia but had this note: Gayton Mines Re-Opened. "During the last four years new life has been introduced into the Richmond basin areas by reopening of the old Gayton mines in Henrico and

Goochland counties. For many years after the opening up of the Southwest Virginia and southern West Virginia coals, the mines of the RICHMOND basin lay idle or were worked only for a restricted local market. A considerable tonnage was reported for each of the last two years." No further details were offered.

(source: VirginiaChronicles.com, The News Leader, July 18, 1912, page 1)

The photographs below comes for the archives of the Virginia Historical Society. It is contained in an album of photographs from the Old Dominion Coal Company. This image depicts a group of miners at the opening of the No. 1 Mine at Coalbrook Slope which was the primary mine being operated by ODDC in the period between 1905 and 1913. Many of these miners may have been either Hungarians or Poles who had migrated down from the Pennsylvania mines to Henrico County in the late 1890's to early 1900's in addition to the local white and black residents who had worked at the mines for years as evidenced in the photograph below.

Photo 21. (Source: Virginia Museum of History and Culture website)

The successive mining explosions at the Carbon Hill No. 1 mine from 1910 to 1912, the inability to extract sufficient volumes of coal to cover costs, the inefficient use of capital to support the business (e.g., building the Village of Gayton), and intense competition from the western coal fields of Virginia and West Virginia adversely impacted the economic viability of the Old Dominion Development Company. The Old Dominion Development company was put into receivership in November 1913 and all mining

activities ceased shortly thereafter. The company was never able to reach profitable levels of production and critiques said the Woolfolks did not follow their advisors' advice as they invested in building an organization capable of supporting a much larger company (e.g. too much overhead) and spent money on development ideas rather than focusing on the core business.

(source: In the hands of reasonable and practical men: the lure of the Henrico Coalfields by Jack N. Bruce, Jr., 2018)

By 1914, the Old Dominion Development Company ceased operation. A foreclosure notice was published in the January 20, 1914 edition of the Richmond Virginian newspaper. The three column notice that the Metropolitan Trust of New York as trustee was to sell the assets of the Company at public auction on February 14, 1914 in New York. The notice listed 16 tracts of land that were being sold in Henrico and Goochland counties along with all improvements, equipment, and the mines and minerals.

(source: VirginiaChronicles.com, Richmond Virginian, February 14, 1914)

Other Owners and Operator after 1915

Herman Cook

Herman Cook of NY bought 5,344 acres of mining property, including 2,694 acres with coal rights as well as buildings and equipment in 1914.

Gayton Coal and Land Corporation

Cook sold the land to the Gayton Coal and Land Corporation in 1922 headed by P T Murphy (a local coal dealer) and John B Swartwout, a local attorney and developer of Brookland Park.

(source: In the hands of reasonable and practical men: the lure of the Henrico Coalfields by Jack N. Bruce, Jr., 2018)

The Sunday, February 21, 1915 edition of the Richmond Times-Dispatch featured an article leasing of a gas plant from the City of Richmond by the Southern Gas and Electric Corporation to produce gas for the City of Richmond using coal from the Gayton Mines. It was pitched that there would be a significant cost savings in locally produced coal. Officials claim that a recent assay shows the mines to have an inexhaustible supply of coal, enough to supply Richmond for a hundred years. The plan was to convert the coal into gas

and pipe it into Richmond. No further articles were found on the subject. It appears that the mine may have ceased operation around this time.

(source: VirginiaChronicles.com, The Richmond Times-Dispatch, February 21, 1915, page 7)

In 1916, W. T. Wortham did a survey of the Gayton / Carbon Hill mining area. Wortham claims that there was 1.152 billion tons of coal in the Richmond Coal Basin waiting to be exploited. “Those operating the mines in the Richmond basin lacked necessary capital to compete, neither had they installed the most improved methods of operation and were mining coal as it had been mined nearly a hundred years before, there could be but one result – first – the mines were robbed, butchered, for dividends and then the operations stopped, not because there was any lack of coal, or because that from the Pocahontas was better, as will be seen later on, but because up-to-date business methods and capital won.”

(source, Library of Virginia, Richmond Coal Basin Project, Richmond Coal Basin, by T M Wortham March 10,1916)

In another independent study done in 1916, Meriweather Jones while focused on the Chesterfield mines, opined that there was a rich field of coal in the Richmond Coal Basis available but would require capital, technology and proper management in order to be profitable.

(source, Library of Virginia, Richmond Coal Basin Project, Coal Report on Richmond Coal Basin by Meriweather Jones 1916)

During World War I, there was a coal shortage. The Thursday, December 20, 1917 edition of the Richmond Times-Dispatch ran a front page article regarding the use of the Gayton Mine to relieve coal shortages in Richmond with 800 tons of coal per day. The plan was to reopen the mine with the next sixty to ninety days of the article under the ownership of S. Dixon and Associates of West Virginia. “Connected with Mr. Dixon and his associates are several practical operators with more than twenty-live years' experience in mining coal, and they are confident that the Gayton mines can be operated on a profitable basis. Arrangements for the necessary machinery have been practically completed. and will be installed as quickly as possible, it is not known definitely how many men will be employed in the mines, but that is believed to be dependent upon the success of the operation. since the demand for fuel is far in excess of the supply.

There are about 5,000 acres of land in the tract on which the mines are located, and which is controlled by Mr. Dixon. While the Gayton mines are among the oldest in this country, in recent years they have not been able to compete on the same rate basis with the West Virginia and New River fields.

When first opened, more than 100 years ago, fuel was supplied to Philadelphia and many Southern cities. In recent years, however, only one attempt has been made to operate the mines. This was made about five years ago by the late Colonel Woolfolk, but was unsuccessful. It was pointed out last night that, in an emergency, coal could be hauled from the mines to Richmond by motor trucks, and this city's supply would not be affected by railroad congestion, although officers of the Chesapeake and Ohio Railroad have stoutly maintained that all congestion on its lines was caused by the refusal of connecting lines to accept traffic."

(source: VirginiaChronicles.com, The Richmond Times-Dispatch, December 20, 1917, page 1)

The Richmond Times-Dispatch reports in its January 4, 1918 edition that a Mr. A. G. Lucas, state mine inspector, was to visit the Gayton Mine as a preliminary to the re-opening of the mines under orders from the federal fuel administrators. The article claimed the mines contain high grade coal, but operation had been found to be too expensive.

(source: VirginiaChronicles.com, The Richmond Times-Dispatch, January 4, 1918, page 1)

No further news about the Gayton Mine has been found until another article appears on July 2, 1919 in The News Leader announcing that an estimated 20 million tons of unused coal lies in the mines at Carbon Hill. The article is critical of the Old Dominion Development Company management's effort to operate the mine which appears to have closed in the Spring of 1914. The article also provides the reader with some insight into the structures that were on the property including miner housing.

"Inefficient management and poor mining method are laid to have been responsible for the unsuccessful operation of the Carbon Hill mine at Gayton, about fifteen miles from RICHMOND, during recent years. Estimates place at 20,000,000 tons the coal that lies under this property and the land in which the company owns the coal rights, and experts declare that the product, as well as the coke which also has been found, could be mined at a profit and sold for commercial purposes under the proper supervision. This property is at the end of the coal basin of which the Midlothian mines in Chesterfield country are a part, and was formerly owned, by the Old Dominion Development Company of Virginia, standing in the name of Herman J. Cocke. Since the '60's the property has been worked by four different parties, but not continuously, there having been long intervals when it lay idle.

The mining of coke was the main feature previous to the last operations and little coal extracted. Under the last administration, from 1908 to 1912, by bad and inefficient management, according to experts, the tunnage was so restricted that the overhead expenses ate up all of the profits this led to the closing down of the mine in the summer of 1914 and its gradual filling up with water. About one-third of the property lies in Henrico County and the remainder in Goochland.

Three Seams of Coal

The east crop of the coal is exposed on the property, and the west appears near Dover, some four miles to the west, grows less as it nears the center of the basin. The coal dips sharply to the west at an angle of about thirty degrees, but it is supposed that this pitch grows less as it nears the center of the basin. There are three seams of coal, the first not considered merchantable at this time, the second being four and one-half feet and the third being three and one-half feet. To properly prepare the coal for market the fine coal must be passed through screens and washed.

Having been operated until the spring of 1914, the mine is equipped with double hoisting engines, Air compressors, two 350-horsepower boilers, pumps, fans and washer plant, machine shop with tool equipment. The boiler house is of corrugated iron and other buildings of frame. There are forty double tenements of six and eight rooms each, two boarding houses, one church, president and vice-president's houses, one clubhouse, commissary, supply house, office and one large brick barn."

(source: VirginiaChronicles.com, The News Leader, July 2, 1919)

For reasons not explained, some folks in Richmond did not want to give up on reopening the mines. In the January 3. 1922 edition of the News Leader, Councilman James Dickerson of the Jefferson ward wanted to introduce a resolution at City Council to have the city investigate the possibility of the city undertaking coal mining operations in Henrico to supply the city's gas and electric plants. In the article A. G. Lucas, mining inspector, declared that the coal in this area was better than coal from other sections of the state.

(source: VirginiaChronicles.com, The News Leader, January 3, 1922)

By 1924, coal mining was inactive at Gayton, but other commercial activities were ongoing. The News Leader edition of March 4, 1924 reported the seizure of a 500 gallon capacity distillery operating illegally at the Gayton Mine property by Ernest Lane, proprietor of Hilltop Inn. The state prohibition inspector claimed to have seized between 18,000 and 20,000 gallons of mash found in

a dozen or more huge wooden vats, which, with the boiler and other apparatus eclosed in improvised quarters, and covered with a galvanized iron roof. This was Mr. Lane's second arrest.

(source: VirginiaChronicles.com, The News Leader, March 4, 1924)

Occasionally, someone would provide a contrarian view of the value of the coal beneath the terrain of western Henrico County.

H. A. Treadwell, another engineer, in July 1928 (fifteen months before the Great Depression began) concluded that from the information available to him, it does not appear practical to start coal mining operations in the Richmond Coal Basin. The coal was deemed objectionable in most boiler rooms because it made "clinkers" due to the low fusion point of the ash. This is not a problem with western coal. Part his work was based on previous work done by

He described the Gayton mine consisting of a 2,200 feet long slope reaching a depth of 900 feet with an average dip of 22 degrees. "The first 1,200 feet of the slope was driven in the bottom seam, the thickness of which varied from 36 inches at the top of slope to 70 inches at about 600 feet down, then narrowing to 57 inches at about 700 foot point. This seam was very dirty. At 1,200 feet down the slope, they drive a level rock tunnel through the B seam into the C seam, then they continued the slope in the C seam. The interval between the B & was 60 inches of rock. The B seam showed about 37 inches of coal split with about three bands of sulfur about ¼ inch wide. The C seam has about a 35 inch thickness of clean coal." He stated that he found no water except for mine shafts under creeks that had not been properly protected.

Treadwell noted that a lot of industrial firms like DuPont and s in the Richmond were looking at the coal resources for their operations at this time, but he would not recommend this source.

(Source: Library of Virginia Richmond Coal Basin Project, Preliminary Report on the Richmond Coal Basin by H A Treadwell, July 1928. Also found in The Richmond Coal Basin – A Compilation in Three Parts, Ira F. Davis and L S Evans, 1938. Part One)

For clarification, a clinker is described as "Clinker is a hard, black, or dark grey substance created when coal is burned. It's made of ash, soot, and minerals that fuse together at high temperatures. Clinkers can form on the fire grate, inside combustion chambers, or in flue pipes. These lumps can damage furnace components and reduce efficiency if not removed."

(Source: https://heatingsystemwiki.com/what-is-a-clinker-in-a-coal-furnace/, 2024)

In 1935, Frank R. Wadleigh, a mining engineer, studied Gayton, Carbon Hill, and Colebrook mines. He concluded that a large body of coal of fair to good quality remained in the ground. He asserted that mining operations had failed due to the operators' lack of knowledge and mining experience, misunderstanding of underground conditions, insufficient financial resources and a misdirection of available financial resources. He did note that the coal was of a lower quality and efficiency than the coal found in western Virginia and West Virginia.

(Source: **The History of Henrico County, Louis** Manarin and Charles Peple, 2011, published by the County of Henrico)

Mr. Wadleigh's 1935 report found in the Library of Virginia's Richmond Coal Basin project provided an extensive background in regards to the history of the Richmond Coal Basin. In 1911 and 1912, Carbon Hill was producing only 150 tons of coal per day using 90 men.

(Source: Library of Virginia Richmond Coal Basin Project, **Story of the Richmond Coal Fields** by F R Wadleigh, circa 1935 and **The Richmond Coal Basin - A Compilation in Three Parts**, Ira F. Davis and L S Evans, 1938. Part Two)

Around 1922, John B. Swartwout, a Richmond-based attorney who co-developed the Brookland Park neighborhood in Richmond had control over the Gayton / Carbon Hill properties through the Gayton Coal & Land Company. The information about Mr. Swartwout comes from the Library of Virginia where this author reviewed a folder of papers included in the Richmond Coal Basis project labeled as part of a statement that have been prepared by Mr. Swartwout in support of the economic feasibility of re-opening certain mining sites. The Statement was a very lengthy typewritten document that included prior engineering studies, including from T. M. Wortham 1916 report regarding the potential value of the Richmond Coal Basin; a more recent letter from W D Duke, assistant to the President of the RF&P on the quality of the coal from the Richmond Coal Basin.; and information from the Old Dominion Development Company regarding the potential for the profitable extraction of coal from the Gayton / Carbon Hill Properties. Mr. Swartout describes the coal area of the North Bank of the James River as eight miles wide starting with the Woodward Pits, Cottrell Pits, Coalbrook Slope, Deep Bottom Shaft, Edge Hill Shaft then the Gayton Shaft and the Saunders Shaft with comments that there are pits too numerous to mention. "The whole outcrop is honeycombed with small workings not over 300 feet deep and with slopes or workings not over 500 feet except Coal Brook, Gayton and Saunders, the only three mines to be operated since 1873."

In support of this position, Mr. Swartout names several people who can attest to the quantity and quality of the coal in the mines including John Tibbs who worked in the Coal Brook Mine until injured in an explosion forcing him to change occupations; J.J. Ellis who lived at Gayton and had worked at Gayton and Saunders Shafts; Mr. Eagles who was an engineer with Miller Manufacturing at the time but was the last man to work at the Coalbrook Mine before it was filled with water; H. Lee Lorraine who was a partner of Ware B Gay in the RCM&M; Lynwood Johson who lived on River Road at first house beyond Tuckahoe Creek and Wilmah Green who lived on the Shepard Property, both whom worked in the mines; and J. A. Denton living at Woods Store on corner of Lombardy and Winder Street who helped sink the 70' shaft to the coke vein at the Magruder tract.

Mr. Swartout provided some insights into the Old Dominion Development Company operations. From him, this author learned that there was a brick factory operated by the Old Dominion Development Company which produced 30,000 bricks per day. The mines were producing approximately 200 tons of coal per week. There is also contained a detailed description of the activities at the Sauders, Gayton and Coalbrook shafts.

(Source: Library of Virginia, Richmond Coal Basin Project, John B Swartout statement on the Richmond Coal Field, date not cited)

Columbia Coal Development Company

In August 1924, the Columbia Coal Development Company ("Columbia") (recently chartered in Virginia) announced its intention to mine coal in western Henrico at a site that could produce one to two million tons of coal that was first discovered in October 1922. The Columbia has been capitalized with $300,00. The officers of the corporation were Ridgway Moore, president: Samuel Michaelson, vice-president and treasurer: Benjamin Brenner, secretary; and J Leicester Watts, counsel.

"The mine will be formally opened for production by the latter part of November, it was stated. The corporation owns in fee, and has under lease, more than 260 acres of coal lands in Henrico County, a seam running under the entire property and ranging from ten to thirty feet in thickness. The average depth of the coal is 135 feet from the land surface. Various Inspectors of the Associated Insurance Companies and of the state have declared that there is no gas or black damp to impede the operation or to make conditions unsafe for operators. The coal is a pure, low- volatile; smokeless bituminous having a high heating value and ash fusing point, the latter at 2,010 degrees Fahrenheit. Analysis has shown that the run-of-the mine, unwashed, to contain 69.87 per cent: fixed carbon, while the lump, unwashed, shows 82.30 per cent. The cost of production is said to compare favorably with other coal fields, and the coal is of great value to Richmond industry and homes due to its close proximity to this city. Cost of production and

carriage to Richmond is estimated at $3 per ton, while contracts have been made at this date with wholesale consumers at $5.30 to $5.90 per ton. Retail pricing of coal of this quality here shows a cost of $7.25 per ton. Equipment will be installed as soon as practicable so as to permit a production of from 200 to 250 tons of uniform coal daily, It is said that the selling price on the Richmond market should be more than $1per ton less than the present selling price of like quality coal."

(Source: The News Leader, August 11, 2024, page 6 from VirginiaChronicles.com)

The actual location of this potential site is not known. After this one newspaper article, there is no further mention of this company in the local newspapers. A further search of the VirginiaChronicles.com website found Ridgway Moore associated with a real estate firm; Benjamin Brenner was President of Southern Wrecking Company in 1923; and J Leicaster Watts was an attorney and in 1924 served President of the Lord Reading Club that was building a new $50,000 clubhouse at 711 West Broad.

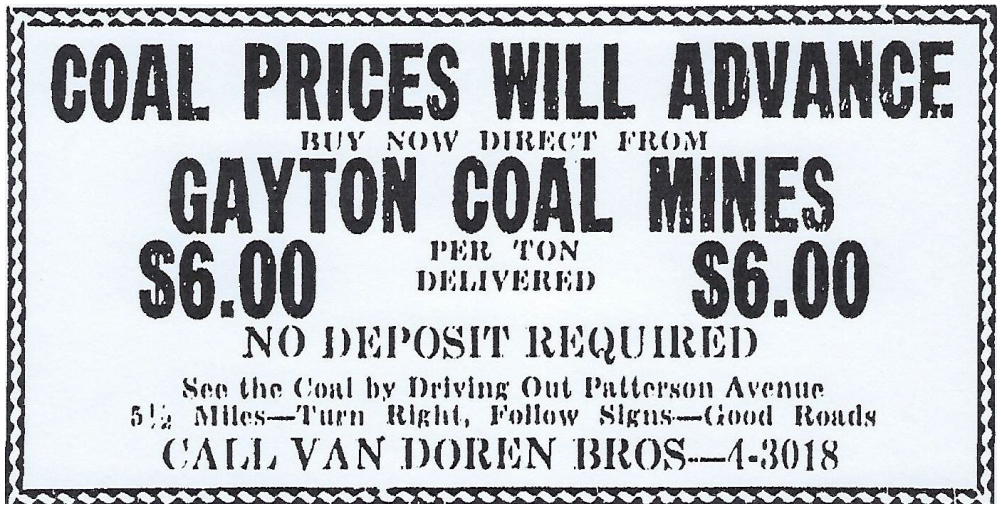
(Source: name searches on VirginiaChronicles.com)

Van Doren Brothers

In March 1940, M.B. and Jacob Van Doren began strip mining on the Gayton property. The Van Doren Brothers were a contracting company that had been in business for more than 25 years doing public works projects. The location of the operation was generally identified as off Gayton Road near Patterson Avenue. The strip mining was done with a huge drag line shovel to remove overburden and find coal at depths of 10 to 25 feet. A coal tipple was erected on site to screen the coal according to size. Approximately 1,500 tons of coal were mined over a short period of time. There are no known photographs of this operation or the coal tipple.

(source: In the hands of reasonable and practical men: the lure of the Henrico Coalfields by Jack N. Bruce, Jr., 2018)

An ad for the Van Doren Brothers' coal was placed in the July 28, 1940 edition of the Richmond Times-Dispatch below.



Document 3. (source: internet search for image)

In pursuit of the potential beneath the surface, Mr. Swartout began exploratory drilling in the Coalbrook Slope area with over twenty to thirty core drillings done between 1941 and 1942. A contractor named Edward Tierney (from another coal company) had been engaged to develop the site but Tierney withdrew in 1942 citing financial drain of his resources. Another contractor named John Lawton continued the explorations in an attempt to reopen No.1 Slope and No. 2 Slope, but nothing materialized

(source: In the hands of reasonable and practical men: the lure of the Henrico Coalfields by Jack N. Bruce, Jr., 2018)

In letters found in the Library of Virginia archives, Tierney wrote a report in September 11, 1944 (apparently to John Swartwout) in which he discussed the condition of No 1 and No 2 Slopes. No. 1 had been driven 100 feet where they encountered a fault. No. 2 is partially filled with "slate" but could be opened. The author felt that there was good opportunity to be able to mine in the soft shale environment and extract the coal without blasting.

(Source: Library of Virginia, Richmond Coal Basin Project, Inspection report dated 9/11/1944 from John Lawton)

No further correspondence has been found as to when Mr. Lawton ceased efforts.

E. Carlton Wilton

In 1946, the Gayton Coal and Land Company sold off a large portion of its holding to the Gayle Land Corporation who in turn sold 2,656.74 acres between Broad Street and Patterson to E. Carlton Wilton would build Tuckahoe Village in the early 1960's and later partner with Universal Corporation to build Tuckahoe West and other developments in the west end of Henrico.

There was controversy about residential development in the area surrounding the abandoned mines as detailed in Jack Bruce's narrative.

In October 1977, there was a hearing with the Board of Supervisors for the zoning of more properties in the west end of Henrico. One resident who spoke at the meeting said they had seen mine shafts along Copperas Creek. In November 1977, an ad hoc committee was formed to examine the topic and report, The commission included Supervisors, director of planning LeVecchia, chief of building inspection Bartell, and county engineer Rutledge. The committee reported on December 1st that they had found one shaft close to Merchants Square in the vicinity of Tuckahoe Village and two others off Gayton Road approximately ½ mile below Church Road that owner Wilton was instructed to fill in.

A draft of the report with a map was presented on December 14, 1977. The Barbershop Shaft was the only shaft still visible in a developed area. It was located south and slightly east of the Merchants Square shopping center on the east side of Gayton Road. The Willis, Coalbrook and Deep Shaft were also identified within areas then developed. One shaft had already been capped on Westshire Lane in the vicinity of the Willis shaft, the Coalbrook shaft was located at the end of Bradon Road and had been filled with dirt and debris but it was within the floodplain of Copperas Creek so no development would occur on the site. The Deep Shaft located on the northeast side of Lauderdale at the top of the hill approximately 300 feet east of Brightmoor Court had been filled. There was also a waste shale area to the east of Gayton near Cambridge Drive. The committee also found four shafts on undeveloped but rezoned land to include the Saunders, Eureka, and Gayton (all to the west of Gayton Road) and Edge Hill shaft (to the east of Gayton Road). Gayton Village was located to the south of the Gayton Shaft. Shafts in the Deep Run area were addressed as well. The committee report was used to help direct the development of the region as the mine reclamation was not a county responsibility. The authority for dealing with these issues was the Abandoned Mine Land Program administered by the Division of Mined Land Reclamation of the VA Dept of Mining, Minerals and Energy. One instance of the Division's activity in the Richmond area involved the Olde Springfield

neighborhood in 2002 when a resident found a 20-foot-deep gorge in their backyard. Over 25 coal pits had been identified by the developer and were supposed to be filled. The DMME was called in and found that coal pit of 42 feet in diameter and 26 feet in depth had not been remediated effectively. There had been a drought, and engineers believe this allowed for air pockets to form in former water tables that collapsed the concrete cap.

In the late 1970's there was some interest in the possibility of extracting natural gas. Interestingly, John B Swartout III was one of the parties who had expressed interest in the feasibility of developing this type of enterprise.

(Source: In the hands of reasonable and practical men: the lure of the Henrico Coalfields by Jack N. Bruce, Jr., 2018)

Deep Run District

This area is bordered on the south by Broad Street Road (formerly Deep Run Turnpike), Springfield Road on the east, just north of Nuckols Road on the north, and just west of Deep Run Creek on the western edge. There may have been some mining between Broad Street Road and Three Chopt Road in the early 1900's based on some newspaper articles.

"This area is one of four outlier basins in which the coal measures have been preserved (Plate l). The coals dip steeply (up to 74" to the east) on the western margin of the basin and more gently (20o to the west) on the eastern margin. The western margin of the basin is interpreted to be fault controlled (Shaler and Woodworth, 1899; Goodwin, 198 l). Coal mines were in operation in this district by 176 I . These early mines were outcrop pits and slopes but shafts were later used to extract the coal. At least three coals, with a cumulative thickness of l9 feet. were mined.

Deep Run Pits, Springfield Pils, Duvall's Pits, Burton's Pirs, Ross and Cuny Pits, Barr's Pits

Location: It is not possible to differentiate individual pits in this district. All of them are generally referred to as the Deep Run or Springfield pits.

Historical notes: The Deep Run Coal Pits were operated in 1761, and probably earlier, by Samuel Duval. Several people and companies intermittently worked in these pits until 1924. Among these are John Barr in 1835, Richardson in 1842, and J.C. Deaton in 1846. By the mid-1800s, coal was transported from the mines to the Tuckahoe Canal by cart where it was loaded into barges and pulled to the James River and Kanawha Canal at Lorraine and then to Richmond. Later, the coal was taken from the mines on the Tuckahoe and James River Railroad (a spur of the Fredericksburg, Richmond and Potomac Railroad) which delivered it either to the James River Canal (later to the Richmond and Alleghany Railroad) or the Fredericksburg, Richmond and Potomac Railroad main line near Glen Allen. Three coals were mined in the Deep Run Pits, but a fourth may exist.

References: Lyell (1847), Kimball (1866), Rogers (1884a), Wortham (1916), Loeber (1927), Roberts (1928), Swartout (1930), Wadleigh (1934)."

(Source: Gerald Wilkes' "Mining History of the Richmond Coalfield of Virginia." Commonwealth of Virginia Department of Mines, Minerals and Energy Division of Mineral Resources. Charlottesville, VA 1988)

"Samuel Duval opened a mine on the Deep Run Road to Richmond in 1760. After Duval's ownership, the mines changed hands several times. On January 1. 1804, Harry Heth and Andrew Nicholson became partners in the coal business, and purchased, among others, the "Deeprun Coalpits in Henrico." By 1804, the pits had flooded and had to be dewatered (Heth Family Papers: J. Nicholson to H. Heth, April 27,1804). It is unclear what occurred to the property after 1804, however, it probably was divided into shares upon the death of Heth.

On December 5, 1815, W.M. Hancock had come into possession of the site and offered the Deep Run Coal Pits for sale in the Richmond Enquirer. The 1,750 acre tract was advertised as containing "the largest body [of coal] in any one tract of Land in this state." Hancock described pits as being ready for work, with "mules, machinery, tools, etc., sufficient to commence immediate operations." There were subsequent owners such as John Barr in 1835, Richardson in 1842, and J.C. Deaton in 1846."

(Source: Jacqueline Louise Hernigle, An Archipelago of Coal Pits: Predicting Archeological Features in the Richmond, Virginia Coalfield, 1991, College of William and Mary, a Master's Thesis available online from the College of William & Mary)

John Barr was operating the Deep Run pits by 1841. He had forty hands who raised 250,000 bushels of coal per year. Nearby to Barr's operations was the Burton Pits mined by Grub and Co. with similar production output.

In addition to John Barr, other mining pits in the area were being operated by DuVal Burton & Company.

(Source: **The History of Henrico County, Louis** Manarin and Charles Peple, 2011, published by the County of Henrico)

Between 1837 and 1847, 180,000 tons of coal were removed and shipped from the Deep Run mines. 4,000 tons of coal were mined from 1848 to 1857 and 4,000 tons were mined from 1858 to 1859. In those days, the coal from the Deep Run mines were hauled to the RF&P at Hungary Water Station (present day Laurel).

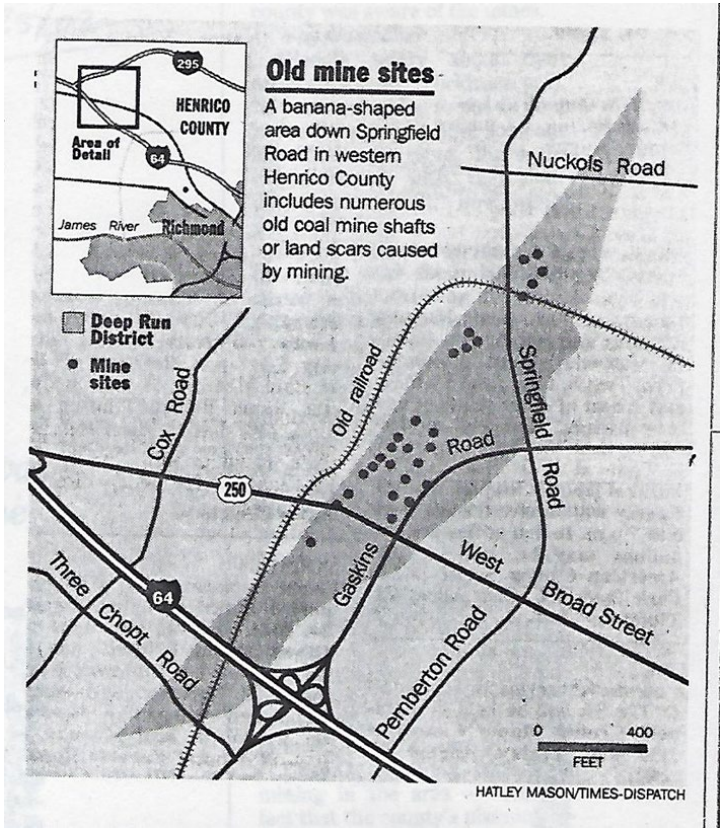
(Source: https://henrico.us/history/recent-history/400th-anniversary/historical-databook/)

F. R. Wadleigh's report found in the Library of Virginia's Richmond Coal Basin stated that the Deep Run mine produced 18,000 tons taken as an average until 1847 when the mines stopped working.

A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

(Source: Library of Virginia Richmond Coal Basin Project, Story of the Richmond Coal Fields by F R Wadleigh, circa 1935)

The map below represents locations of the mines that were part of the Deep Run and Springfield mines and pits. The map also shows the portion of the Henrico Railroad (Coal Pit Railroad) railroad line that reach east to Hungary Station on the RF&P mainline and the that reach south to the connection with the C&O at Lorraine. The eastern portion was first built in the 1850's and then abandoned by 1861. It was revitalized in the 1880's and the southern portion of the line was constructed around 1880 by the Henrico Coal Mining Company. Portion of the old roadbed are marked in Deep Run Park by the County of Henrico.



Map 14. (Source: Richmond Times- Dispatch, August 25, 2002, "Hole opens can of worms", Nicole Johnson and Chris Dovi)

This photograph below was taken by Kenneth Thacker in 1982. Ken was preparing a freshman year term paper entitled "An exercise in futility: Coal Mining in Henrico County" for a college English course. It is a hand painted sign posted to a tree along Springfield Road warns passersby of the dangerous abandoned mine shafts. This area has subsequently been developed into residential neighborhoods with remediation of the mine pits and shafts.

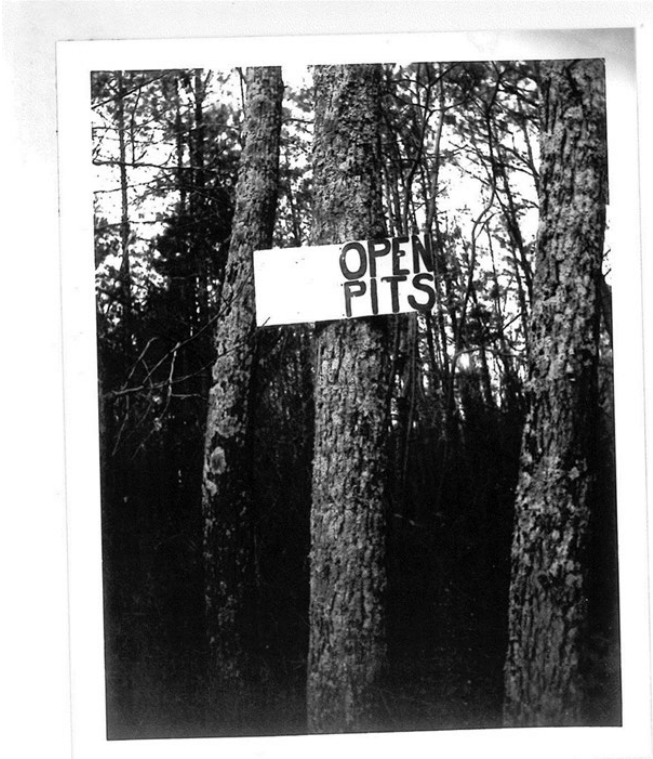


Photo 22. (source: Kenneth Thacker)

Photo 23. (source: Kenneth Thacker)

The photograph above was part of Kenneth Thacker's 1982 freshman year English term paper entitled "An exercise in futility: Coal Mining in Henrico County". Mr. Thacker wrote: "An open shaft of the Springfield mines appears to be a harmless pond, but underneath the mirror-like surface is a hole that could be as much as 300 feet deep.

Not enough emphasis can be placed on the serious danger of these abandoned shafts. Many rural areas in Henrico are still dotted with similar shafts that were not properly covered when companies hastily ceased operation of the mines. Great care must be taken when exploring these sites."

Most of the mines in this area were filled and sealed before this area was developed in the mid to late 1980's. There be some small undeveloped areas along Deep Run Creek where mining operations may not have been reclaimed at this point so caution must be exercised when exploring these areas."

New York and Richmond Coal Company

The Deep Run mines would be revived by the New York and Richmond Coal Company in the late 1850's.

From the Hagley Museum & Library of Wilmington, Delaware, the author obtained permission to use the 1857 Reports on the Properties of the New York and Richmond Coal Company ("NY&R Coal Co")("Report"), No. 18 William Street, New York, NY. Thomas Talmadge was President, Edward Quintard was Vice President and Robert Russell was Secretary and Treasurer.

The Report describes the purchase of 2,820 acres of the Springfield and Deep Run estate for coal mining at a cost of $655,532 of which $171,000 was financed at a 6% interest rate. Management stated the following in the Report:

"There has been expended and paid up to this time for the construction of nearly five miles of heavy (T.) Railroad, the building of dwellings, Store House, Chapel, Carpenter and Black- smiths Shops, in all some forty buildings, (including those on the premises when purchased,) for the construction of three steam engines and pumps, with Iron pipes, and Saw Mill, with bouses over the same, for Scale House, Depot House, with Platform Scales, and for Horses, Mules, Oxen, Wagons, Harnesses, Buggies lo hoist. Coal, Tools; together with some thirty Coal Cars, (of capacity sufficient to carry from 150 to 200 ton of Coal to market daily, the sum of sixty-six thousand two hundred and sixty-seven $50-100 in cash; the construction of the tramway for $60,000 and purchase of equipment and buildings for another $60,760."

The Report contained a geological survey conducted by William Rowson, geologist and mining engineer; a site analysis from Professor William F. Roberts; and a mining evaluation by S. H. DeBow on the composition of the coal field and its economic potential.

The Report also provides some forecasts of the development of the railroads in Central Virginia:

"The present facilities for conveying the coal to market, are by the Richmond, Fredericksburg and Potomac Rail Road, which runs within three miles of the property, and from which road, (connecting] at Hungary) a lateral has been laid by this company of about Five miles, with heavy T Rail to the center of the company's lands.

Under a charter granted by the State of Virginia, to the Central Rail Road Company, they expect soon to lay down an airline Road from Richmond; to connect with their present road at Charlottsville, which road must run directly through the property of this company. *(editorial note – this never happened)*

The Richmond and York River Rail Road Company are now constructing a road, which will be completed in one year, connecting the City of Richmond, with West Point on the York River, at which last place, the largest ships can load, and at which point, navigation is open at all seasons of the year.

A Road of Fifteen miles in length, is about to be constructed from Port Royal, on the Rappahannock River, at deep tide water navigation, which road will intersect the Richmond, Fredericksburg and Potomac road at Milford, thirty-five miles from these lands, thus affording four different avenues by Rail roads, and connecting with four of the principal Rivers of the State, all emptying into the Chesapeake Bay, whereby to get the Coal, Iron Orc and other productions of the Company to all of the home, and Eastern Atlantic Markets, to wit—to Richmond on the James River, 12 miles ; to West Point on the York River, 47 miles ; to Port. Royal 50 miles, and to the Potomac fiver 70 miles."

(Source: **1857 Reports on the Properties of the New York and Richmond Coal Company** ("NY&R Coal Co")("Report"), No. 18 William Street, New York, NY., courtesy of the Hagley Museum & Library of Wilmington, Delaware)

It was not uncommon in the 1800's for the Virginia legislature to charter a significant number of proposed railroads that would rely upon public subscription to fund surveys, land acquisitions, and site preparation. Unfortunately, many of these ventures never laid the first rail due to lack of capital, economic downturns, and higher than expected costs to complete the rail lines.

There appears to have been some legal squabbles between the NY&R Coal Company and local residents in the summer of 1860. A series of legal notices were posted in the Richmond Enquirer in August and September of 1860 reading:

"THE COMMONWEALTH OF VIRGINIA,

To the SHERIFF OF HENRICO COUNTY GREETING:

You are hereby commanded to Summon the New York and Richmond Coal Company to appear at the Clerk's Office of Our Circuit Court of the County of Henrico, at the Rules to be holden for said Court, on the first Monday in September next, to answer the action of Philip Kahm and Frank Cahl, partners under the style of Philip Rahm, of a plea of trespass on the case. Damage $1100. And have then there this Writ. Witness, Johnson Sands, Clerk of our said Court, at the State Court House in the city of Richmond, this 77th day of August, l860, and in the 95th year of the Commonwealth, JOHNSON SANDS."

A similar notice was posted in the same paper for Samuel Young with damages of $1000; Joseph Nuckols with damages of $300; James A Moore with damages of $240; William Smith with damages of $700; Philip Rahm, Frank Kuhl, and Edmund Ivens with damages of $700; and Archibald I Wilson and John L Woodson, merchants and partners, trading under the name of A. P. Woodson and J. L. Woodson damages of $350.

There was one further legal notice in the paper for an action by David M. Dewitt against the New York and Richmond Coal Company to pay its debts of $1140 and $360 in bonds that were in arrears.

(source: VirginiaChronicles.com, Richmond Enquirer, September 7, 1860)

The New York and Richmond Coal Company financials problem culminated in a Sherrif's sale of the assets of company has announced in the September 24, 1860 edition of the Daily Dispatch. The sale would occur September 28, 1860 at the mines consisting of 3 engines, water pumps, saw mill, 20 coal cars, 4 ½ miles of railroad track, mining and blacksmith tools, and other equipment. The action was taken in regard to the case of Issac Pomeroy versus the New York and Richmond Coal Company. The railroad track, 20 coal cars, mining equipment and blacksmith tools were purchased for $6600 by Pomery P. Dickinsen for $6,592. Benjamin Loder bought 2500 acres in a later sale in November 1860 for the Deep Run and Springfield tracts.

(source: VirginiaChronicles.com, Daily Dispatch, September 24, 1860 and In the hands of reasonable and practical men: the lure of the Henrico Coalfields by Jack N. Bruce, Jr., 2018)

Another auction notice of the same personal property appeared in the December 17, 1861 of the Richmond Semi-Weekly Examiner. The notice only references the property formerly occupied by The New York and Richmond Coal Company. Whether the notice was a continuation of the previous sale or other legal action, the author could not determine.

Springfield and Deep Coal Mining and Mineral Company

The Springfield and Deep Coal Mining and Mineral Company (SDRCM&MC) was authorized in February 1861 by the Virginia General Assembly and was organized by former bondholders of NY&RCC with plans to build a railroad line to the York River. At onset of Civil War, northern-based firms were declared to be "alien enemy" allowing the Commonwealth of Virginia to seize assets of SDRCM&MC.

The 1860's operations of the Springfield and Deep Run mines were curtailed by the Civil War. By the early 1860's the production of coal had virtually ceased at Springfield and Deep Run due to the disruptions along the RF&P caused by military battles between the Union and Confederate forces, the diminution of the labor forces caused by military conscription, and the isolation of the mines from the northern owners. The mines would remain idle until the late 1870's when new northern capital would be infused under new ownership with rebuilding and expansion of the railroad branch line from the RF&P and opening of new coal pits.

When opened again in 1867, the SDRCM&MC operated under the supervision under Dowling Lumley. The company failed in 1872 owing $100,000 in bonds. Edwin Litchfield, a Brooklyn NY attorney, bought the property and in 1875 incorporated as the Virginia Deep Run Mining Company with grand plans that never materialized. They sold their assets to Conrad N Jordan of New York in 1880. Jordan was treasurer of the New York Ontario & Western RR, a large northeastern railroad, and he was connected to a number of northern business interests.

(source: In the hands of reasonable and practical men: the lure of the Henrico Coalfields by Jack N. Bruce, Jr., 2018)

The Henrico Coal Company

The Henrico Coal Company was formed in 1881 by William H Barnum and Conrad N Jordan. Mr. Barnum was a Senator from Connecticut, Director of the Richmond and Alleghany Railroad, and industrialist who had mining interests in Illinois, a financier who financed the Ensign Manufacturing Company, a railroad freight car manufacturer with Collis P. Huntington (C&O railroad) In 1872. Ensign Manufacturing Company would later be merged into American Car and Foundry Company. Mr. Barnum died in 1898.

(Source: https://ancestors.familysearch.org/en/M22S-FQS/william-henry-barnum-1818-1889)

The Henrico Coal Company sought to ship to the R&A rather than across to the RF&P. The Plan was to build a line south of the Springfield and Deep Run mines to connect with the old T&JR RR ROW at Lorraine and the line would be known as the Henrico Railroad (or Coal Pit Railroad in some literature). The Henrico Coal Company acquired more land to the south along Deep Run creek to connect to the T&JR RR. Initially, they used the old roadbed to connect to the RF&P at Hungary from the Oakwood Shaft to move coal to the Richmond market. The roadbed to the south encountered hard rock beyond the village of Deep Run (to be renamed Henrico) that had to be blasted and required a lot of time and capital to complete. While well-capitalized and using modern technologies, revenues were dismal for the Prospect and Oakwood mines output. Experts were sent to the mines who came back with favorable reports about capacity and potential output. With the extension of the rail line to Carbon Hill, the Henrico Coal Company took interest in mining in Carbon Hill. Unfortunately, the company ceased operations in September 1884 and the R&A abandoned operations over the Henrico Railroad. The Henrico Coal Company assets were not auctioned until 1890. Those assets included 2,807 acres along Deep Run, 1,200 acres along the Henrico / Hanover border and another 126-acre tract. These were purchased by Philip Bartlett, New York attorney whose firm Simpson, Thatcher & Barnum included William M Barnum as a partner. Bartlett paid $5,000 for the land and company assets. He then conveyed the assets to William M Barnum. The 1901 map of Henrico County shows approximately six large parcels west of Springfield Road between the Springfield mines and Three Chopt Road on the south owned by Mr. W. M. Barnum. While his business venture failed, Mr. Barnum and his heirs retained the land.

(source: In the hands of reasonable and practical men: the lure of the Henrico Coalfields by Jack N. Bruce, Jr., 2018)

In 1887, William Clifford made a presentation to the Manchester [England] Geological Society regarding the Richmond Coal Basin. He noted that he traveled north to south starting along the Chickahominy River at the Henrico and Hanover County border and journeyed in a southwestern direction through the woodlands of western Henrico County. In his presentation, he described the terrain and the abundance of abandoned, water-filled pits and shafts that have been abandoned by the miners along this path. He found Deep Run mine was closed – fully worked out in his words. The Tuckahoe basin was dead and the railway to Carbon Hill had been pulled up. He stated “Their history of the coal field is a record of failure, disaster and death, hundreds of men have been killed by explosions of fire [damps], suffocated by fire-{struck] and drowned by holing into old workings during the last sixty years. He spoke of the high risks of the Henrico mining operations with dried timbers in the shafts, explosive coal dust and ignition sources. He was not impressed with what he saw.

(Source: Handwritten Manuscript in the Library of Virginia Richmond Coal Basin Project archives labeled Richmond Coal Field by William Clifford, 1887 (manuscript read before the Manchester Geological Society, December 6, 1887)

In 1922, the Henrico Coal Company was granted a charter to mine and deal in minerals of all kinds. The minimum capitalization was $5,000 and the maximum capitalization was $25,000. Frank Hagan was President and J. E. Norvell was Secretary. John Tibbs and George Lumsden were also named with the company.

(source: The News Leader, July 22, 1922 edition, page 4, found on VirginiaChronicles.com)

Author's note: The relationship of this iteration of the Henrico Coal Company to W. H. Barnum's Henrico Coal Company is not understood. The original Henrico Coal Company assets were auctioned off in 1890 and it is presumed that Mr. Barnum's stock company would have been dissolved shortly thereafter. Barnum was deceased by 1922.

In 1922, Frank Hagan and John Tibbs obtained mineral rights to C. B. Cottrell's' 370- acre farm on Deep Run Creek under a five year royalty lease. They Invested only $25,000 in the venture. They focused on a location off of Broad Street Road in the Springfield region. They attempted to reopen a previously worked shaft on the west side of Springfield road. Inspectors found safety protocols lax or ignored in early 1923. The company had to make improvements but failed so the mine closed by 1924.

(source: In the hands of reasonable and practical men: the lure of the Henrico Coalfields by Jack N. Bruce, Jr., 2018)

There is a mention in **The History of Henrico County** of a mine that opened around 1920 from which 50,000 tons of coal were extracted before closing in 1923. This would be consistent with the above description.

(Source: **The History of Henrico County, Louis** Manarin and Charles Peple, 2011, published by the County of Henrico)

In the August 1, 1922 edition of The News Leader on page 19, there was an advertisement by the Henrico Coal Company for delivered coal at the price of $5.50 per ton if deliver was taken prior to August 5th. The advertisement was made by Frank Hagan, President of the Henrico Coal Company with an address of 1 1W. 10th Street, Richmond, VA.

(source: The News Leader, August 1, 1922 edition, page 19, found on VirginiaChronicles.com)

A report from August 23, 1922 stated that work had begun on a virgin coal vein being just off Broad Street, two miles southeast of the junction of Broad and Three Chopt Roads. The output of the mine(s) in the vicinity of Richmond was stated to be 100 tons daily.

(source: The News Leader, August 23, 1922 edition, page 7, found on VirginiaChronicles.com)

The Henrico Coal Company was actively soliciting for investors by October 2022. There was an advertisement for 10 businessmen to buy one share of stock (par value $100) for which each purchaser would be given 10 tons of coal for "free". This ad was placed by J E Norvell, Secretary, who gave an address of 2601 Hull Street.

(source: The News Leader, October 24, 1922 edition, page 7, found on VirginiaChronicles.com)

In 1931 FW Kunker purchased 111 ¾ acres at intersection on east side of Nuckols Road and Springfield Road. Three test holes were drilled finding an 8 ½ feet seam at 104 feet, an outcrop at 30 feet, and two 4-foot seams separated by two feet of rock at 160 feet and a 5 ½ thick seam at 172 feet. In 1934, Virginia Power studied the potential of the field using its own engineering resources and consultants from other coal companies. Concerned was expressed for the condition of the abandoned mines on the property and the adequacy of the reserves given the previous century of mining activities. While the consultants were optimistic, management within Virginia Power did not share the optimism. While this study and report was being prepared, FW Kunker acquired additional land and mineral rights adjacent to his property including 424 acres from the heirs of William M Barnum as well as mineral rights on 100 acres of land owned by George Carrier at the southwest quadrant to Springfield and Nuckols road. FW Kunker found a buyer willing to develop his holdings in October 1938 – R L Page and Inez Smith who gave Kunker a $55,000 secured note. They created the Virginia Land and Minerals Company. Within a brief time, the Company announced plans to reopen mining on the former New York and Richmond Coal Company and Henrico Coal Company properties. More drilling was done, and more seams were found. The challenge was to raise capital, acquire the necessary equipment, pump water out of the old shafts, remove shale and rock from the old shafts, and boost production to 100 tons a day. By March of 1939 there was some success with hiring of miners, ordering new equipment and employing experienced mining engineers. Orders for coal were being taken and promises of deliveries being made. Customers, including industrial concerns, were taking advantage of seasonal discounts and made deposits for fall deliveries. Those deliveries were never achieved as the removal of water and debris caused lengthy delays and limited coal production. As with all of the predecessors, Virginia Land and Minerals Company ran out of money by October 1939 and shut down the mines. The property went to auction and was purchased by the First Colony Coal in 1941 who then defaulted on its real estate note in 1942. The assets were sold off in June 1942.

In March 1938, local coal merchant George Magill and E. P. Vaiden announced plans to resume mining on the property owned by C B Cottrell adjacent to Three Chopt Road. This property was bordered on the north by lands formerly owned by William Barnum. Magill and Vaiden had also been drilling to find seams and boasted that the coal found was of a smokeless class and a grade better than coal in the western part of the state. They incorporated the Deep Run Mining Company in August 1938. There is no further information on their venture.

(source: In the hands of reasonable and practical men: the lure of the Henrico Coalfields by Jack N. Bruce, Jr., 2018)

The 1901 Map of Henrico County locates C. B. Cottrell's land south of Three Chopt Road where a current day medical park at the junction with Gaskins Road has been built and extends further south and west to include Deep Run Park.

Reclamation of the Deep Run Mine

In 1990, the Virginia Department of Mining, Minerals and Energy, Division of Mined Land Reclamation, Abandoned Mine Land Group sealed the Deep Run Shaft. The Deep Run Shaft was located north of US 250 (West Broad Street Road) in Henrico County, approximately 1.2 miles from the intersection of I-64 and US 250. The site was located within 100 yards of heavily populated residential property and an adjacent office complex. The shaft is on private property. The site contained one rectangular, 30.5 feet by 29 feet at the surface with a throat dimension of 10.5 feet by 5.5 feet. The shaft was a water filled shaft with a substantial amount of floating debris. The shaft was sealed with coarse aggregate, capping the aggregate with a reinforced concrete mat covered with earth fill.

(Source: Engineering Report for Richmond Shaft Project, Chesterfield, Goochland and Henrico County, Virginia, prepared for the Commonwealth of Virginia, Department of Mines, Minerals and Energy, Division of Mined Land Reclamation, Abandoned Mine Land Group by Fuller, Mossberger, Scott and May Civil Engineers Inc., Lexington, KY, January 1989)

2012 Virginia Department of Mining, Minerals and Energy Survey of Abandoned Mines in Richmond Coal Basin

The Virginia Department of Mining, Minerals and Energy (renamed Virginia Department of Energy) conducted a statewide survey of abandoned coal pits, shafts and mines in order to remediate the sites around 2008 to 2012. The Virginia Department of Energy manages an abandoned mine program on a statewide basis to address remediation of risks to the public of abandoned mines. At the end of this article, there is more information about this program. The results of the survey have been published as an interactive map available at the following website:

https://vadmme.maps.arcgis.com/home/webmap/viewer.html?webmap=d8ea5313fd0b4feea8ddd8a768c58b17

The map is a very powerful tool which allows the user to drill down to the street level to identify where mining operations may have existed. Another value tool is the ability to click on a symbol to obtain what survey information is available about the particular site. In the following section, four screenshots of the survey for selected of Henrico are shown.

The author used the map to identify seven clusters of mining operations in the western areas of Henrico and eastern area of Goochland. Those clusters consisted of:

1. North of Hungary Road and West of Springfield Road around Springfield Park and Springfield Elementary School;
2. North of Meredith Woods Road, South of Timber Pass and East of Springfield Road;
3. North of Broad Street, West of Gaskins Road and Coal Springs Lane, and East of Lexington Farms Drive along Deep Run creek basin. There are three clusters on the map. A number of sites are in the ravine just to the northwest of the former Bed, Bath & Beyond store;
4. Open pits and shafts near Cedarfield on Three Chopt Road west of Gaskins Road along Deep Run;
5. South of Lauderdale Road and North of Patterson Avenue along Tuckahoe Creek / Swamp including areas behind Lakewood Manor;
6. Entrance area of West Creek Parkway off Patterson Avenue; and
7. Southeast of Lower Tuckahoe neighborhood and north of the James River.

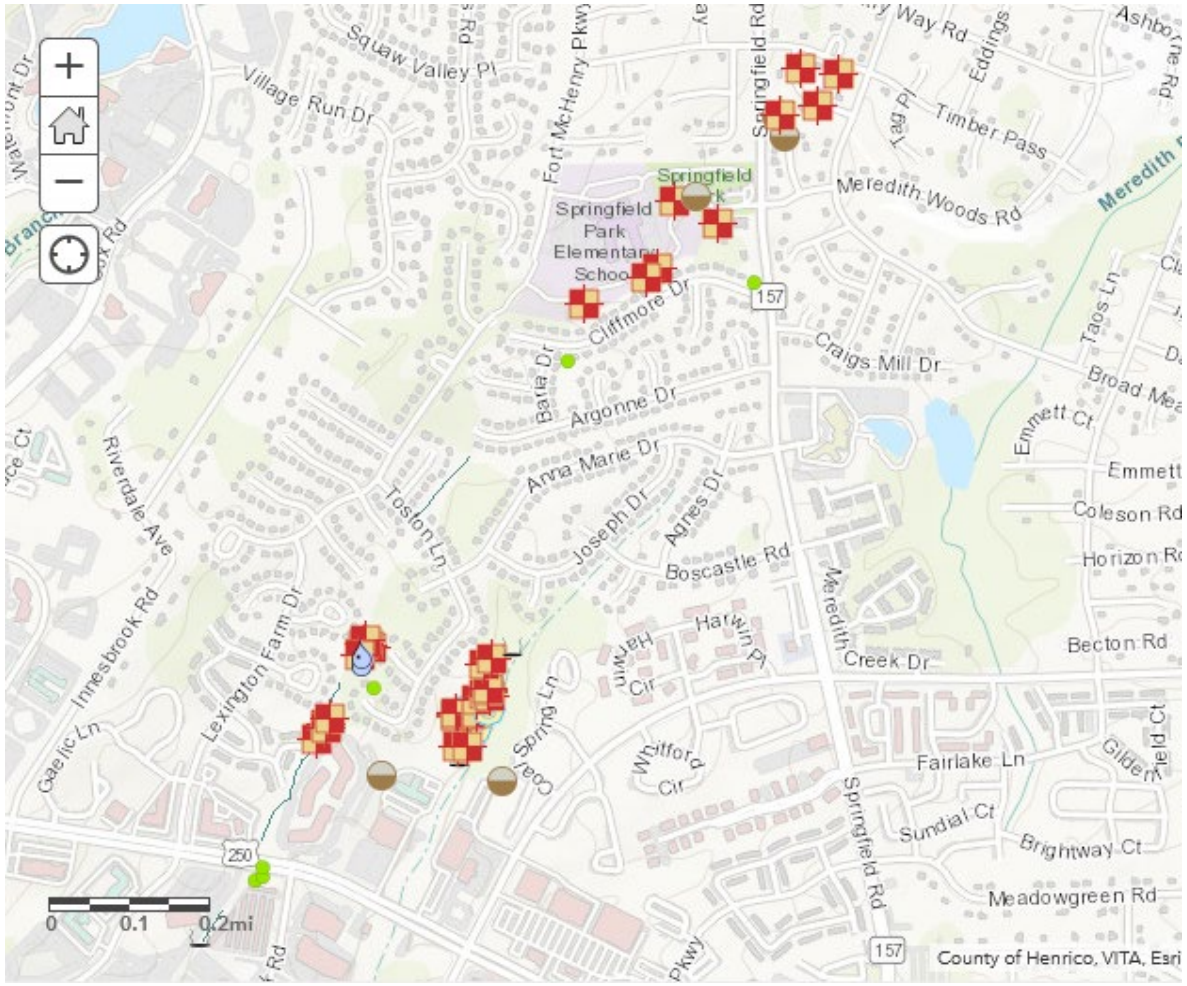
There were also scattered sites in other areas in the areas around Lauderdale Drive and Gayton Road that include coal slag piles.

The survey was the most comprehensive undertaking to identify the location of the many operating mines and pits as well as the numerous air shafts and exploratory pits that had been abandoned over the years. It should be noted that historical records indicate that there were other pits, shafts and mine operations that were not found in the survey. This omission was due to the reclamation efforts that had gone on years before where certain mining operations had been remediated by developers or had not been recorded on any plats or other land records. As a result there may no physical evidence left of these shafts, pits or mining sites for the Department of Energy to find.

Prior to the 20th Century, there was no mining commission or other regulatory agencies to track mining operations. The mine operators would dig a pit or shaft to look for a coal seam in hopes of finding a coal seam. If they were lucky, they hit a seam and followed the seam. If they were not lucky, the abandoned the hole and moved over to start a new hole. The abandoned holes may have had a fence or some type of barrier to mark the danger zone, but nothing permanent. These holes were fill with debris and water over time. Some would collapse leaving a depression.

Maps 14 through 17 that follow this section show specific areas of Henrico and Goochland Counties where the survey of the abandoned coal mines has identified the location of mine openings  , spoil (mining debris) banks  , coal slag or waste piles  , Vertical openings , and open pits or strip pits .

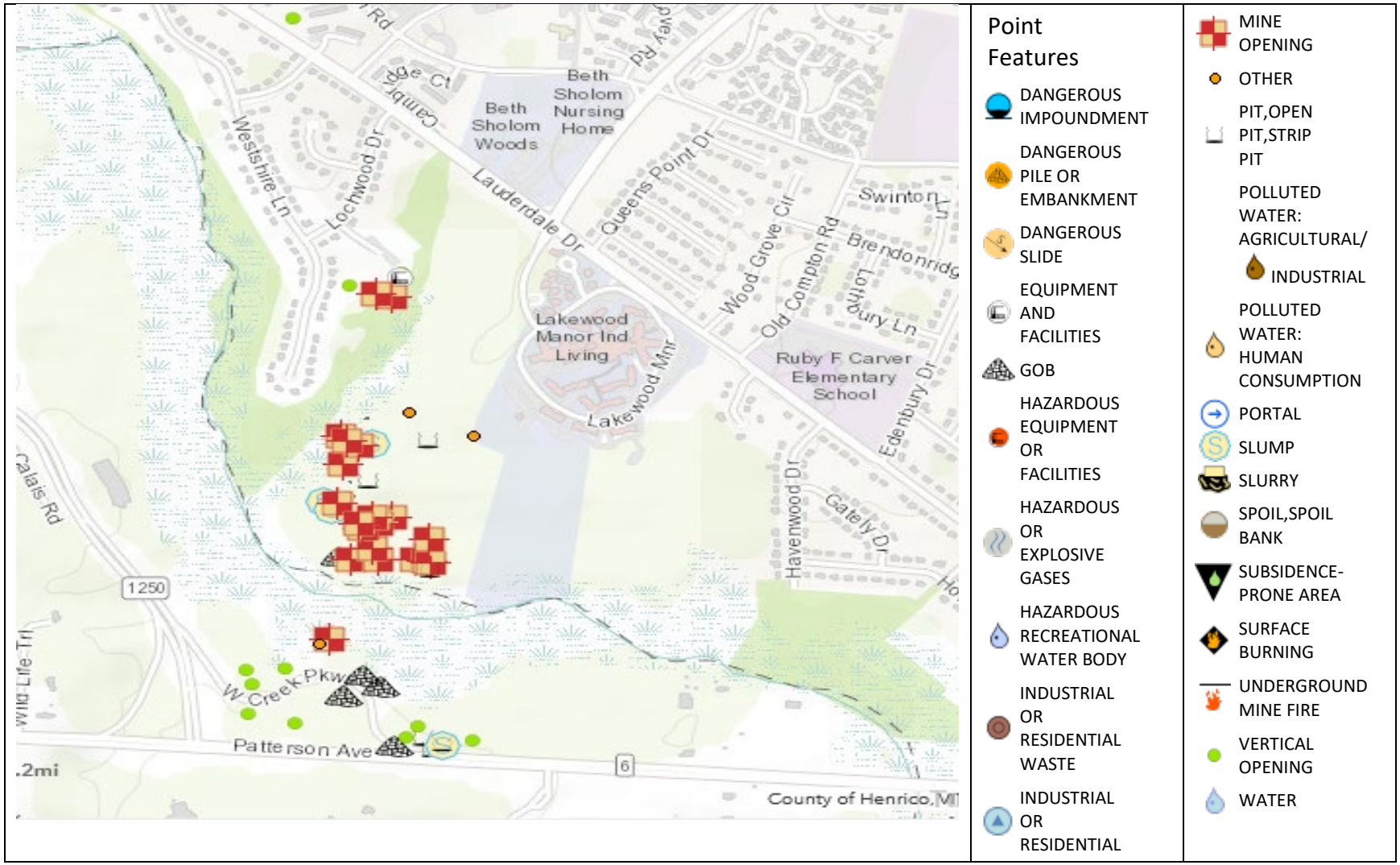
Map 15. The screenshot below covers the area of the Springfield and Deep Run mines.



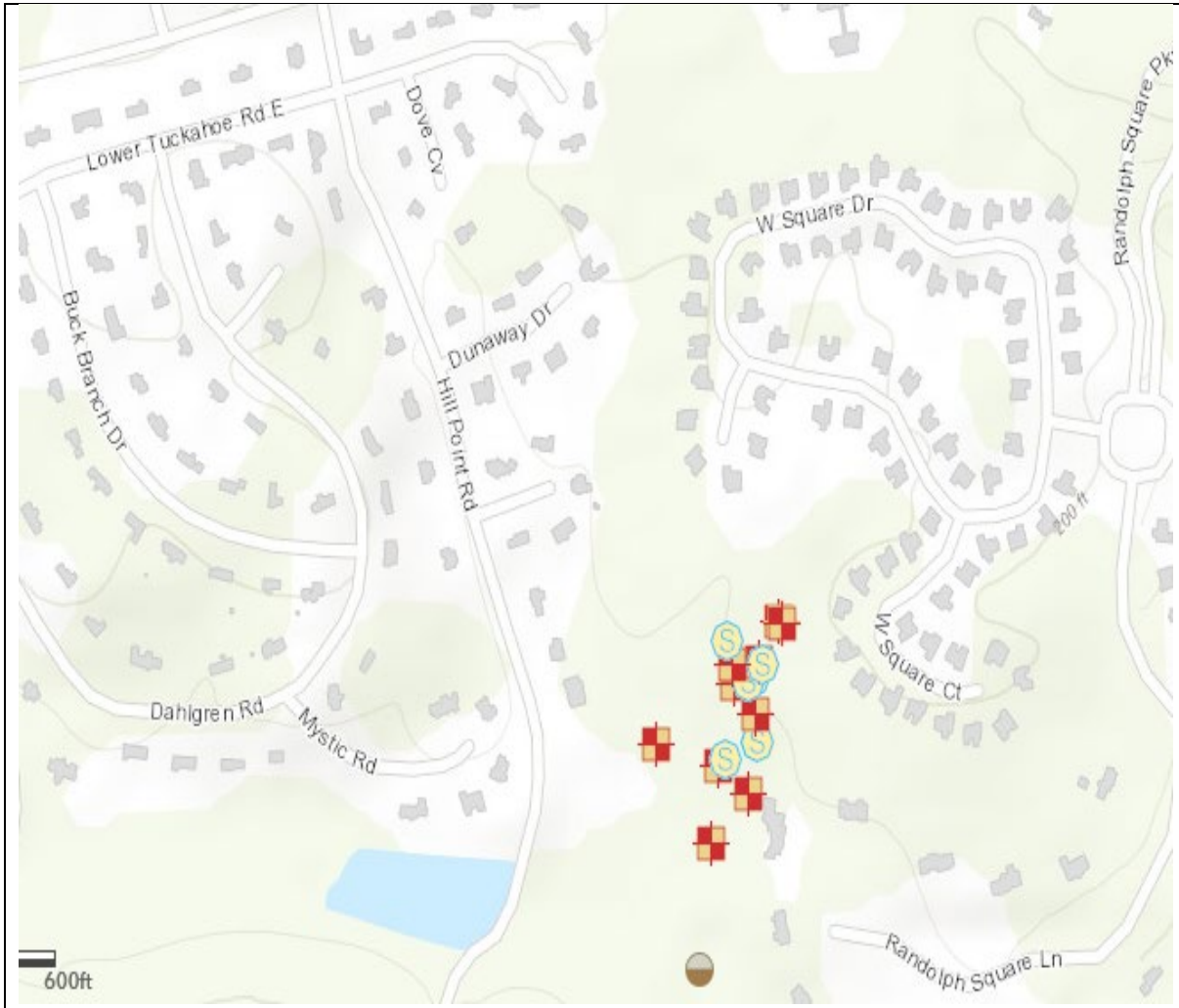
Point Features

- DANGEROUS IMPOUNDMENT
- DANGEROUS PILE OR EMBANKMENT
- DANGEROUS SLIDE
- EQUIPMENT AND FACILITIES
- GOB
- HAZARDOUS EQUIPMENT OR FACILITIES
- HAZARDOUS OR EXPLOSIVE GASES
- HAZARDOUS RECREATIONAL WATER BODY
- INDUSTRIAL OR RESIDENTIAL WASTE
- INDUSTRIAL OR RESIDENTIAL
- MINE OPENING
- OTHER
- PIT,OPEN PIT,STRIP PIT
- POLLUTED WATER: AGRICULTURAL/ INDUSTRIAL
- POLLUTED WATER: HUMAN CONSUMPTION
- PORTAL
- SLUMP
- SLURRY
- SPOIL,SPOIL BANK
- SUBSIDENCE-PRONE AREA
- SURFACE BURNING
- UNDERGROUND MINE FIRE
- VERTICAL OPENING
- WATER

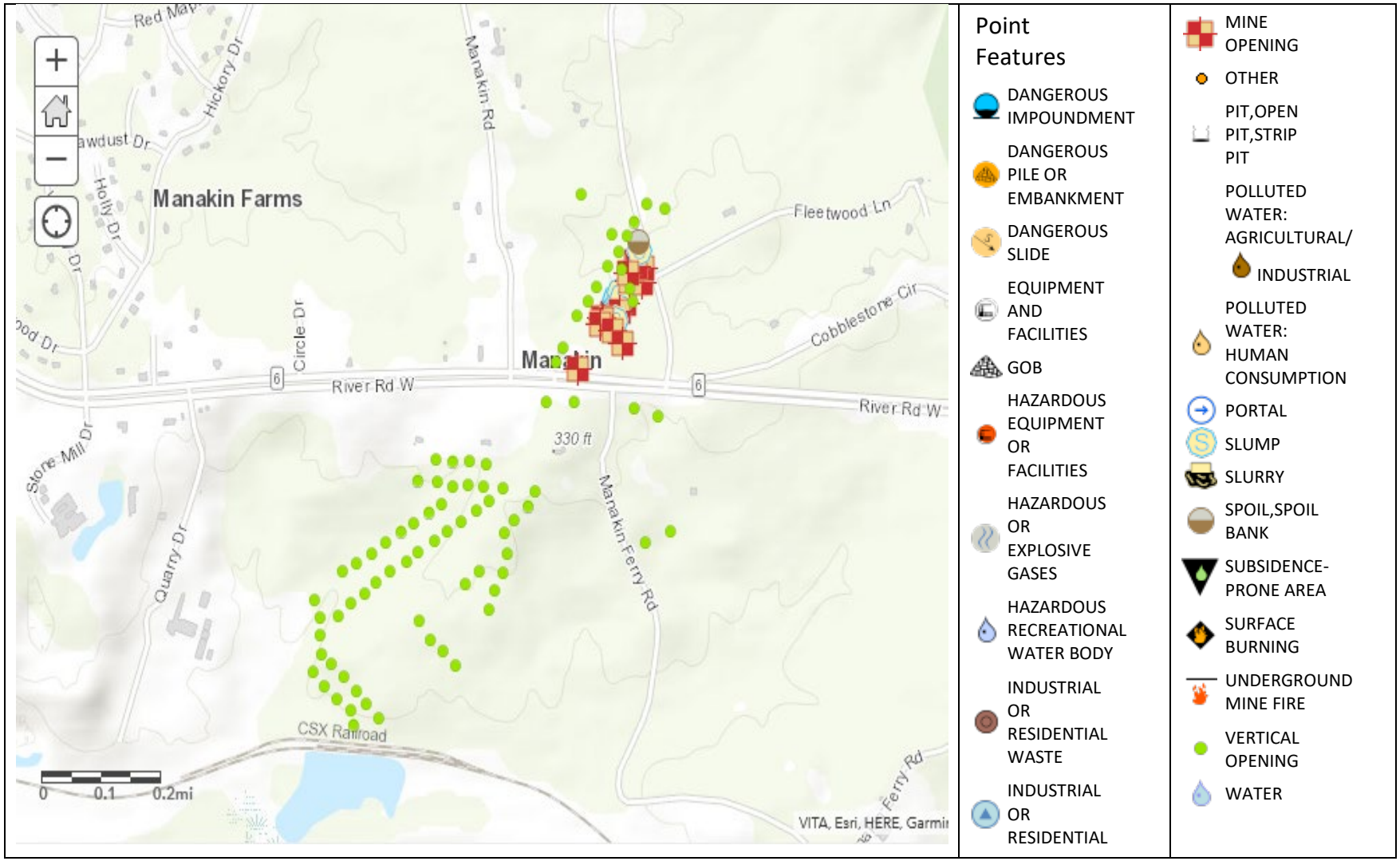
Map 16. This screenshot is the area south of Lauderdale and north of Patterson Avenue.



Map 17. This screenshot is the area southeast of Lower Tuckahoe



Map 18. This screenshot is the southeastern corner of Goochland County off Hockett Road.



Roads, Railroads, Canals and Transportation of the Coal in Henrico County

The initial coal mining operations in the early 1700's relied on mule or horse drawn wagons to transport their product on dirt roads (or paths) from relatively rural Henrico to Richmond for local customers and transportation down the James River to other localities. The roads were limited in number and the amount of coal that could be moved was limited by the wagon size and road conditions.

Canal System

From the early days of the British colonies to the founding of the nation, the river system was often the safest and quickest way to move goods. Road systems were neither dependable nor safe for the movement of freight during part of the year, especially during periods of inclement weather.

While the rivers were a natural resource for navigation, there was a problem with the use of the river system in reaching the western settlements. The problem was the geological fall line in Virginia that extended from the Potomac River to the James River which made the river system difficult, if not impossible, to safely navigate past certain places.

"The fall line marks the geologic boundary of hard metamorphosed terrain—the product of the Taconic orogeny—and the sandy, relatively flat alluvial plain of the upper continental shelf, formed of unconsolidated Cretaceous and Cenozoic sediments. Examples of Fall Zone features include the Potomac River's Little Falls and the rapids in Richmond, Virginia, where the James River falls across a series of rapids down to its own tidal estuary.

Before navigation improvements such as locks, the fall line was generally the head of navigation on rivers due to their rapids or waterfalls, and the necessary portage around them. Numerous cities initially formed along the fall line because of the easy river transportation to seaports, as well as the availability of waterpower to operate mills and factories, thus bringing together river traffic and industrial labor. U.S. Route 1 and I-95 link many of the fall-line cities."

(source: https://en.wikipedia.org/wiki/Atlantic_Seaboard_Fall_Line)

Some goods were shipped through the James River rapids on smaller boats, but it was a perilous journey that did not always result in delivery of the goods.

The best way to bypass the rapids and rocks of the fall line was to build canals. This was done on both the Potomac River and on the James River. To build a canal, companies had to be chartered by the state and money raised from investors with occasional support from the state. George Washington, Edmund Randolph, and John Marshall (prominent Virginians in their day) promoted the development of a James River canal system linking the Ohio River to the Chesapeake Bay. In 1790, the James River Company was chartered to construct a canal parallel to the James River to bypass the rapids of the James River and money was raised by subscription for the taking of land, buying equipment and materials, and hiring of labor, both freeman and slaves. By the early 1800's, the first section of the canal from east of Richmond to Westham in western Henrico was completed.

"Beginning around 1748, Richmond coal was shipped to the major coastal cities of Colonial America. The market was primarily for smithing and home heating since steam engine development for industry and transportation was still in its infancy and charcoal was the preferred fuel for iron making. The increasing scarcity of wood, however, soon created a bourgeoning market for coal. The early coal mines, or pits, were just north and south of the James River, but the fall line to the east posed a dangerous impediment to shipment of the mined coal to the Tidewater and schooners just east of the city.

Shipment by wagon on unimproved rough roads was less than ideal due to the damage to the soft bituminous coal caused by interminable jostling and the risk of becoming mired in mud with heavy loads. Coal was shipped on the upper James via bateaux that depended on sluices blasted through the rock ridges and enhanced with small wing dams to form manageable channels and mitigate the risks of capsizing. The James River Company was chartered in 1785 (with George Washington as the honorary President) to address this situation and provide a safer water route through the fall lines. In 1789, the two hundred yard long Upper Canal around the falls at Westham and the three mile long Lower Canal terminating in downtown Richmond officially opened and became the first operating canal system with locks in America.

At the beginning of the 19th century, Richmond Basin coal production had become a lucrative industry, and the mine owners increasingly turned to engineers to maximize their productivity and marketability. Notably on the north side of the James, the Tuckahoe [Creek] Canal was built to access the Tuckahoe and Gayton pits and link to the James River Canal. This link was further improved by the construction of the Tuckahoe and James River Railroad in 1835. For the decades after 1820, the east-west canal,

which became the James River & Kanawha Canal, was improved, and ultimately extended east and west along the north side of the James River for 196 miles."

(source: https://www.hmdb.org/m.asp?m=238290)

Transportation on the James River and the James River Canal was done with flat bottom boats known as a bateau which could float in shallow waters. In the 21st century, there are still bateaux races each July from Lynchburg to Goochland to commemorate these 1800's river vessel. Packets (another shallow water boat) were pulled by mules and horses on the canal towpaths to reach Richmond. This form of transportation would flourish until the 1870's with the advent of the railroad which would render the Canal System economically unsustainable. The James River and Kanawha canal would eventually extend westward to Buchanan, Virginia in Botetourt County just to the east of present-day I-81. Remnants of the canal system can still be found today,

(Source: https://en.wikipedia.org/wiki/James_River_and_Kanawha_Canal)

William Trout prepared the twenty-one-page document entitled **Tuckahoe Creek Navigation: Coal to Richmond** in 1964 which also provided an in-depth study of the history of Tuckahoe Creek canal citing multiple sources for his work. This author obtained a copy of Trout's work from the Virginia Department of Historical Resources along with permission to reprint parts of the work. Trout noted that George Washington was given the honorary title of President for his promotion of the James River Company (later named James River and Kanawha Canal). According to Trout's work, the first section of the James River Canal was completed by 1795 with a canal that bypassed the falls at Westham, five miles to the west of Richmond, and another canal at the present-day stie of the Byrd Park Pumphouse that extended to a large canal basin at the foot of Capitol Hill. By the early 1800's the James River Company (operators of the canal) had plans to expand westward from Tuckahoe Creek to a dam at Maiden's Adventure which was 15 miles to the west. The goal of this expansion was to facilitate the shipment of coal that was expected to pay for the expansion work. Trout provides a lengthy discussion of the engineering of the James River and Kanawha canal and its support structures including Bosher's Dam and the Tuckahoe Aqueduct.

(Source: **Tuckahoe Creek Navigation: Coal to Richmond**, William Trout, 1964).

With coal mining active along Tuckahoe Creek, the colliers sought a more economical means to reach the James River Canal than hauling their coal to the James River to be loaded onto barges. The Tuckahoe Creek Canal was charted by the General Assembly in

1813 for the purpose of opening Tuckahoe Creek from the James River to the furthest north point on the Creek as possible. At the time of the charter, Thomas Randolph (from one of the influential First Families of Virginia) had built a mill dam and mill pond for the operation of mill. No action on constructing the Canal occurred until a second Tuckahoe Creek Canal was authorized by the General Assembly in 1820. The new charter specified that the Canal was to be built on Randolph land or another Canal route was to be used. The Canal company would raise the capital for construction and engage Claudius Crozet as principal engineer. Twenty years later, Crozet would direct the construction of the Blue Ridge Tunnel for the Virginia Central Railway through Afton Gap.

The Tuckahoe Creek Canal measured 6.5 miles long, 22 feet wide, and 3 feet deep. The Canal system consisted of 3 locks, a dam, two bridges, guard, and flood gates, and two aqueducts of 320 feet and 150 feet in length. All the materials were made of wood at a total construction cost of $14,023. The tolls assessed to the colliers for the shipping of their coal allowed the Canal to pay for itself in two years. Unfortunately, due to the use of wood, the canal was in bad shape by 1835 and the colliers were in revolt over the high tolls and poor service. The president of the Tuckahoe Canal Company was Stephen DuVal.

The canal boats were 60 feet to 77 feet long, 5 to 6 feet wide and carried 200 to 300 bushels of coal.

By the late 1830's, there was only one collier (Thomas M Randolph and John Brockenbrough as partners in the Tuckahoe Coal Mining Company) using the Canal. Randolph had been an investor in the Canal. When Randolph decided shortly thereafter to divest himself of the coal mining business, the Canal went into disuse and was allowed to deteriorate beyond recognition.

(Source: **The History of Henrico County, Louis** Manarin and Charles Peple, 2011, published by the County of Henrico)

Further information about the Tuckahoe Canal Company comes from Dr. William E. Trout, a former Richmond resident and an authority on canals and vice president of the American Canal Society. The Tuckahoe Creek Canal (or Navigation) Company was incorporated in 1827 and was considered at the time to be the most valuable canal stock at the time by Joseph Martin's Gazetteer of Virginia. The canal boats were limited in size by the canal locks that were only 30' x 12' with a depth of 2 ½ feet when not obstructed by sediment and gravel deposit, low water during droughts, and ice flowing down Tuckahoe Creek. Trout's sources indicate there were several landings along the canal including Crouch's Pit. The navigation system did not consist of a continuous canal but a combination of canal, slack water and a sluice.

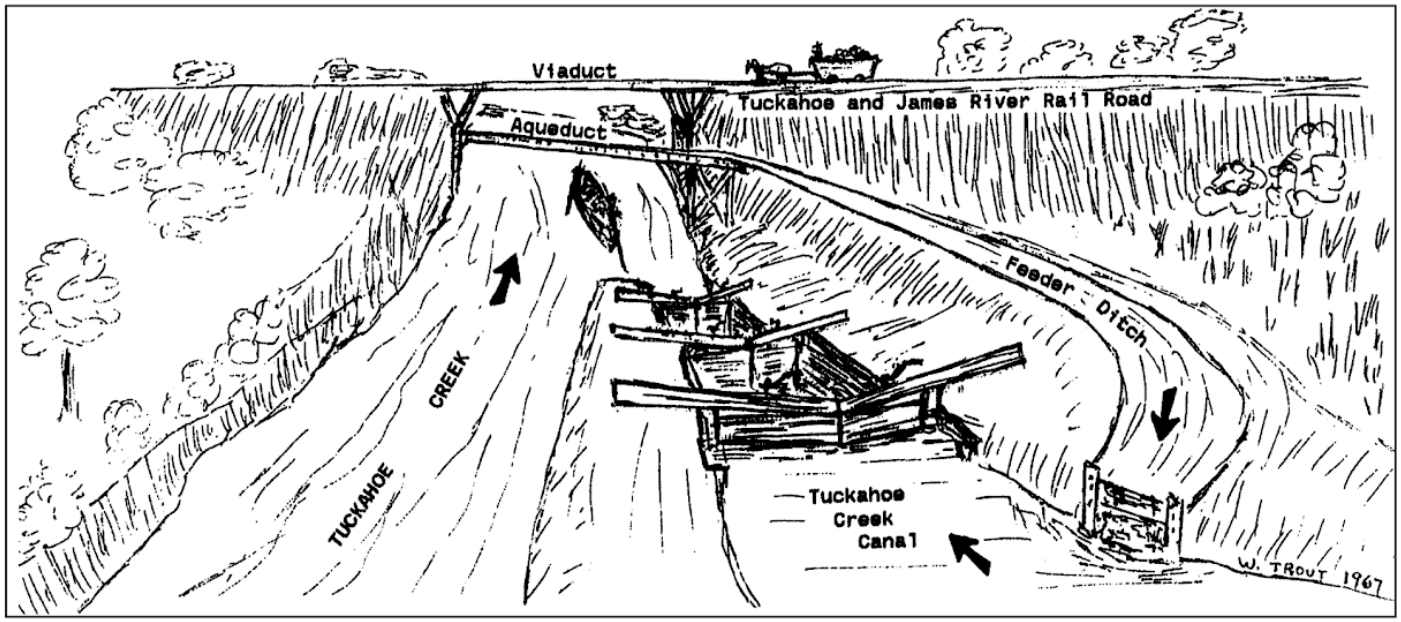
According to reporter David Ryan of the Richmond Times-Dispatch whose article on the Tuckahoe Creek Canal in the February 3, 1975 edition, "the system began at Broad Branch, a feeder creek that empties into Tuckahoe Creek north of Patterson Avenue, as a dredged or sluiced creek bed cutting through the swampy valley for about three miles. Just above River Road were a dam and guard gate at the head of the man-made Tuckahoe Canal which continued one and three quarters miles downstream. The canal reconnected with the creek through a system of two locks known as the upper locks. Canal Boats would continue downstream by slack water for another mile and a half where there was another dam known as the lower dam. From this point, the canal boat continued three miles down Lower Tuckahoe Creek to a point near Bosher's dam where the creek connected to the James River and Kanawha Canal." "One device used to maintain the water supply was a non-navigable ditch more than a mile long constructed from the James River and Kanawha Canal north to the creek canal at the upper locks. At the upper and lower ends of the ditch were wooden aqueducts, the lower one (320 feet long) to carry water over low ground and the upper one (150 feet long) to carry water across the creek to the canal on the western bank." "The upper portion of the Tuckahoe Canal, that portion north of Pattern Avenue, have faded into urbanization, and much of the Gayton Mines site has become a housing development.

(Source: **Richmond Times- Dispatch, February 3, 1975, page B-4,** David D. Ryan citing work of William Trout)

Mr. Trout's work discusses much of the design, engineering and dynamics of the Tuckahoe Canal that are too extensive to cover here. hat Mr. Trout does state and others concur, the coming of the railroad would begin the decline and demise of the canal systems.

(Source: **Tuckahoe Creek Navigation: Coal to Richmond**, William Trout, 1964).

COAL BOAT LOCKS ON TUCKAHOE CREEK.

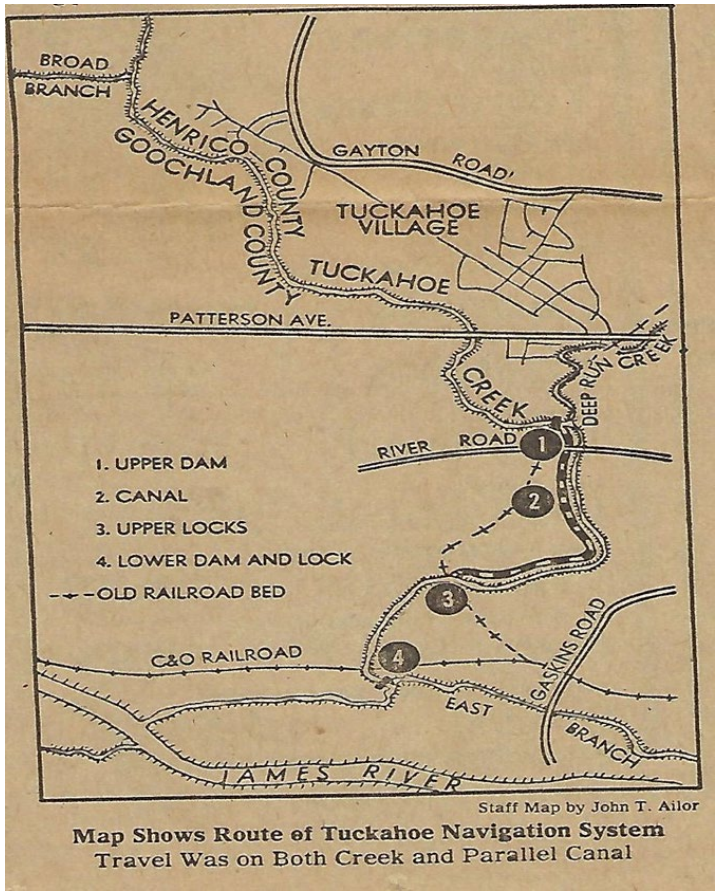


Above: A conjectural sketch of the Upper Locks on the Tuckahoe Creek Navigation, looking downstream, based on remaining traces. The navigation improvements were 6 ½ miles long, from the Tuckahoe coal fields west of Richmond, down Tuckahoe Creek to the James River, along the Goochland/Henrico county line. Completed in 1830, for ten years it was one of the best investments in the state. The Tuckahoe and James River Railroad, a mule-drawn tramway, supplanted it in 1840. See *The Falls of the James Atlas*, pp.56-65.

Document 4. (source: https://www.tuckahoecreektrail.org/history)

Tuckahoe Creek Canal, with water standing in old canal bed. Photo taken March 1966 by William E. Trout, III.

Photograph 24. Source: (Goochland Historical Society Magazine, Volume 6, Number 2)



Map 19. (Source: Richmond Times- Dispatch, February 3, 1975, page B-4, David D. Ryan citing work of William Trout)

Above map of the Tuckahoe Creek Canal built in 1830. The old railroad bed depicted on the map would be the Tuckahoe & James River Railroad connecting to the C&O Railroad (formerly Richmond & Alleghany Railroad) at Lorraine Station.

Another interesting source of information on the Tuckahoe Canal (and the Tuckahoe and James River Railroad) was a 1988 study undertaken for the expansion of Route 288 through Goochland and Henrico counties. The study titled Phase II and Supplemental Phase I Cultural Resource Survey for the Northern Portion of Proposed Route 288, Richmond, Virginia by Robert F Hoffman, Jerome D Traver, Jacqueline Hernigle, Stephen Hinks, Harding Polk, Esther White, MaryAnna Ralph, et. al. was obtained from the Virginia Department of Historical Resources and reprinted with their permission. The study collaborates much of which has already been cited in the preceding paragraphs.

"The desire to find an economical and efficient method of coal transportation led to the construction of several canal systems in the late eighteenth and early nineteenth centuries. At this time, Thomas Randolph had made a portion of the Tuckahoe Creek navigable by erecting a milldam below Deep Creek. However, it was not until 1813 that the Tuckahoe Creek Company was chartered to open navigation of the creek to the highest practical point. Apparently, this venture was not very successful, for a second Tuckahoe Creek Company was established in 1820, again to provide a route from the coal mines to the James River and Kanawha Canal. Finally, the Tuckahoe Canal Company was incorporated in 1827 to provide water transportation from Crouch's coal pits (approximately 5 miles up Tuckahoe Creek) to the James River and Kanawha Canal. In 1829, the canal was finally opened up as far as Cotrell's coal pits, slightly downstream from Crouch's mines (Manarin and Dowdey 1984:195-196). Although very successful at first, lack of maintenance led to deteriorating conditions of the Tuckahoe Creek canal, its locks and bridges. Additionally, the vagaries of flooding, siltation and other natural impediments resulted in dissatisfaction with the Tuckahoe Canal Company in its ability to transport coal from the mines to the James River and Kanawha Canal. Consequently, different petitions were put forth by both a group of mine owners and the Tuckahoe Canal Company to construct a railroad to replace the canal."

(source: **Phase II and Supplemental Phase I Cultural Resource Survey for the Northern Portion of Proposed Route 288, Richmond, Virginia** by Robert F Hoffman, Jerome D Traver, Jacqueline Hernigle, Stephen Hinks, Harding Polk, Esther White, MaryAnna Ralph, et. al. published in 1988 by the Virginia Department of Historical Resources.)

From a 1983 article written by the late Julian Tarrant, historian of the Old Dominion Railroad Historical Society, the following commentary was provided:

"This arrangement of canals worked successfully for a while. There were locks and sluiceways and at the coal pits were loading docks and, in some cases, short tramways from the landings to the mines. But the canals were usable only for part of the year because of high or low water or ice. A railroad was demanded, and one was built. The Tuckahoe and James River Railroad, completed in 1840,

was only a tramway operated with mule power. It ran from Lorraine (on the James River Canal) up to Carbon Hill, about 4 miles, was laid with 19-pound rail and was narrow gauge."

(source: Once Upon a Time – Railfacts of the Past, Julian Tarrant, 1983 based on information provided by Kenneth A. Thacker, Sargeant Reynolds Community College, and other sources)

While there is little to see of the Tuckahoe Creek Canal that was abandoned over 180 years ago, part of the Canal's path has been preserved. A trail known as the Tuckahoe Creek Trail traverses this area providing folks the opportunity to walk where the mining activities were happening. The Tuckahoe Creek Trail is an approximately 6-mile long multi use trail stretching from W Broad St to Patterson Ave along the Goochland and Henrico County line.

(Source: https://www.tuckahoecreektrail.org/home for the trail map and more details on what to see)

The photograph below by John S. Salmon was taken of a railroad bridge abutment on the James River & Kanawha Canal. The photograph is on page 207 of **The History of Henrico County** by Louis H. Manarin & Clifford Dowdey published in 1984 by the University Press of Virginia. This edition of **The History of Henrico County** was found at the Library of Virginia in the authors' section. There are additional photographs of the canal and more extensive information in Manarin's & Dowdey's book.

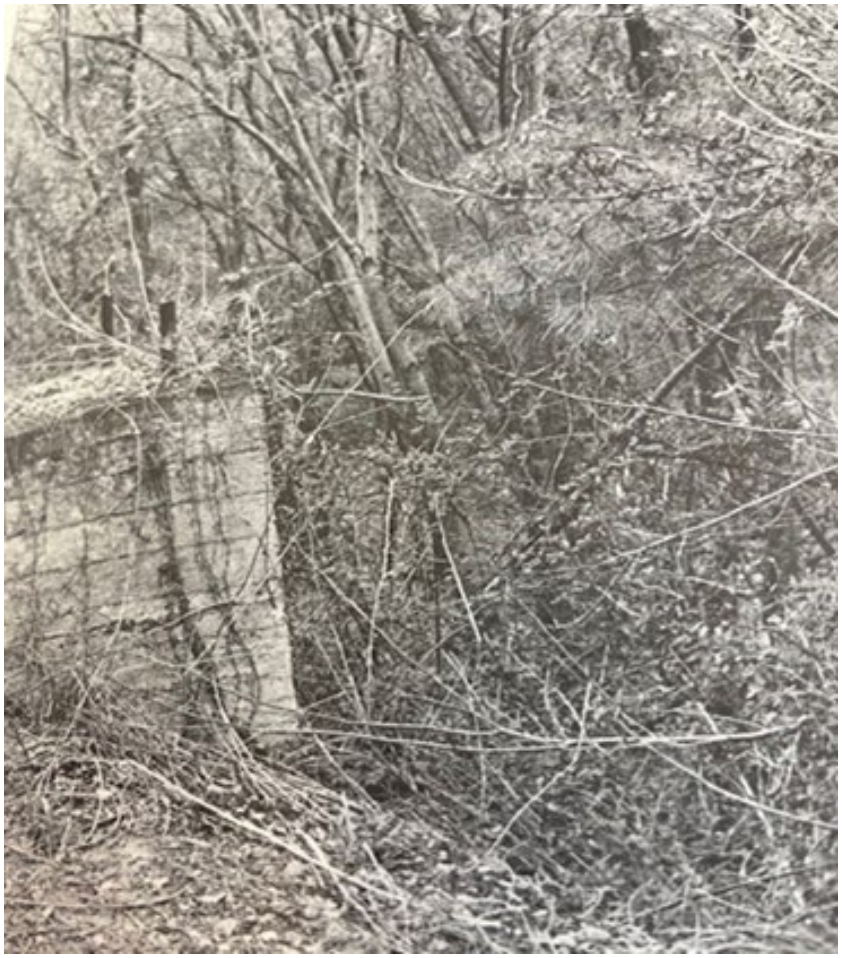


Photo 25. (source: The History of Henrico County by Louis H. Manarin & Clifford Dowdey)

Photo 26. (source: Kenneth Thacker)

Above is a photograph taken by Kenneth Thacker in 1982 for his English freshman year college term paper entitled “An exercise in futility: Coal Mining in Henrico County”. Mr. Thacker was assisted by canal historian and expert William Trout in his field research on the canal systems. Mr. Thacker wrote: “About 100 feet above the railroad bridge are the remains of locks on the Tuckahoe Creek Canal. Situated between a gas pipeline

and a sewage line, the site has been undisturbed for more than a century. Water is standing in the canal bed. The sluiceway is visible on the left as a slight indentation running parallel to the canal."

Road Systems

Henrico County was one of the original shires of the Virginia colony founded in 1611. The early inhabitants lived to the east of present-day Richmond along the James River. The soil to the east of the Fall Line was more suitable to large scale agricultural activity than the land to the west of the Fall Line. For the first 200 years of its existence, the population was concentrated in the eastern portion of Henrico which included present-day Chesterfield that would be carved out of Henrico in the 1700's. The James River was the main thoroughfare for those two hundred years. The early road systems often followed paths created by natural forces or the native Americans who lived in the area and traversed many miles across their respective nations. Roads were primarily dirt paths which could be impassable during inclement weather, especially if used extensively by heavy wagons.

In the early 1800's, the General Assembly found it necessary to implement an improved road system to facilitate travel within the Old Dominion in areas that could not be served by navigable waters. The General Assembly authorized a series of Turnpike Authorities to construct road of gravel and rock with proper drainage to accommodate public transportation. These Turnpike Authorities had to raise capital by subscription to fund the road and were allowed to charge tolls to pay for the construction and maintenance of the Turnpike. One of the early Turnpikes was the Deep Run Turnpike authorized in 1802 to build a ten-mile road from the Deep Run mining area to Richmond with connection to Three Chopt Road. The Deep Run Turnpike was essential to the transportation of coal from Deep Run coal basin whose heavy wagons had destroyed the integrity of the primal road system then in use. The new Deep Run Turnpike was to be 40 feet wide with a toll house at each end of the road. Over the years the colliers and the Deep Run Turnpike Authority would do battle in front of the General Assembly over the toll rates. The colliers felt that we were being charged to much while the Turnpike Authority claimed the heavy wagons were necessitating frequent repairs and resurfacing of the road whose cost was being exceeded by the toll revenue.

The Deep Run Turnpike is now Broad Street Road. Another toll road was the Westham Plank Road built from Richmond to the west end of Richmond to connect with River Road. There would be toll roads like Osbourne Turnpike in the east end and others connecting the major population centers in Virginia. As a side note, around this time it would take 16 hours for a stage coach to travel from Alexandria to Richmond under ideal conditions. Such were the challenges of traveling two hundred years ago.

(Source: **The History of Henrico County, Louis** Manarin and Charles Peple, 2011, published by the County of Henrico)

The hand-drawn map below was obtained on the Library of Congress portal. The information that accompanied the map indicated the map showed the main road systems in Henrico prior to 1860. The main thoroughfares are in red.

The Deep Run Turnpike in the upper quadrants of the map is today's Broad Street Road. In the middle right area of the Map was the Westham Plank Road begins at the edge of the city and then transitions into River Road as one travels west. 3 (Three) Chopt Road begins at Westham Plank Road in the area of the Country Club on Virginia and meanders in a northwesterly direction to intersect with Quioccasin Road in the area near today's Ridge Elementary School and Ridge Baptist Church and then continues in a meandering northwest direction to intersect Deep Run Turnpike near Short Pump. Three Chopt Road would continue on to Charlottesville as one of the colonial period's main roads to the west.

Note that Quioccasin Road follows the path of today's Gayton Road over Deep Run Creek with a termination at Tuckahoe Creek. Railways and canals were not on this map.

Map 20. Source:(https://tile.loc.gov/image-services/iiif/service:gmd:gmd388:g3883:g3883h:cwh00041/full/pct:12.5/0/default.jpg)

The map below was produced in the 1850's. It covers the western part Henrico, eastern portion of Goochland, and northern portion of Chesterfield. The map shows the primary roads in existence at the time as well as the railroad lines including the mining lines from the Dover mines in Goochland and the Carbon Hill mines on Tuckahoe Creek in Henrico to the James River. There was the Deep Run Turnpike (Broad Street Road), Three Chopt Road (the original frontier path to Charlottesville), Quioccasin Road extending all the way to Woodward's Bridge over Tuckahoe Creek, River Road along the James which extended into Goochland County over the Tuckahoe Bridge. The map also depicts unnamed connector roads or paths.

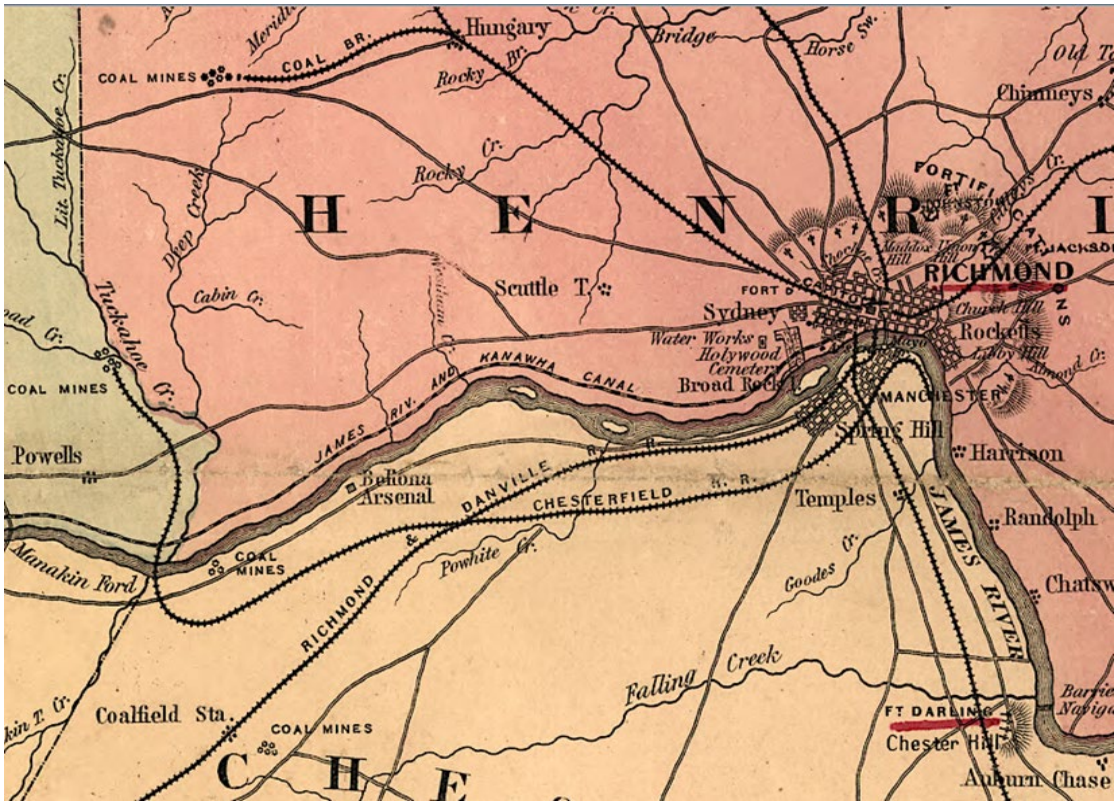
Notable landmarks include the Ridge Church at the intersection of Three Chopt Road and Quioccasin Road where there was a small settlement of several buildings, the rail lines to the Dover Mines in Goochland and the Tuckahoe & James River Railroad following Tuckahoe Creek.

This map also illustrates the railroad and road systems that had developed in northern Chesterfield County to support the more extensive mining operations. On the map, one rail station is identified as Pawhite Station which may have been a precursor to current date term Powhite. On the Chesterfield side of the opposite of the terminus of the Tuckahoe & James River Railroad is an area marked as U.S. Arsenal west of an unnamed dam on the James.

The rail lines to the Dover Mine are depicted in each of Maps 21, 22 and 23 which were drawn in the 1850's and 1860's. While there is no mention of this rail line in any of the documentation that has been reviewed , it is probable that a gravity tramway from the Dover Mines to the James River and Kanawha Canal would have served the nail factory adjacent to the mines as well as move coal to the barges. The fact that three cartographers have included this line in their work would support the existence of a line that has long since disappeared.

Map 21. (Source: Virginiaplaces.org)

The map below was produced in 1862 by J. Knowles Hare and obtained from the Library of Congress portal. While not labeled as such, 3 (Three) Chopt Road intersects with River Road south of a location labeled Scuttle T. Quioccasin and other roads are missing from this map. The abandoned New York & Richmond Railroad is called the "Coal Br." while the Tuckahoe & James River Railroad is not shown. The rail line in Goochland connecting to Chesterfield over the James River was probably an error. The US Arsenal in Chesterfield is labeled as the Beliona Arsenal as probably taken over by the Confederacy Army by 1862.



Map 22. (Source: https://www.loc.gov › item › 99439119)

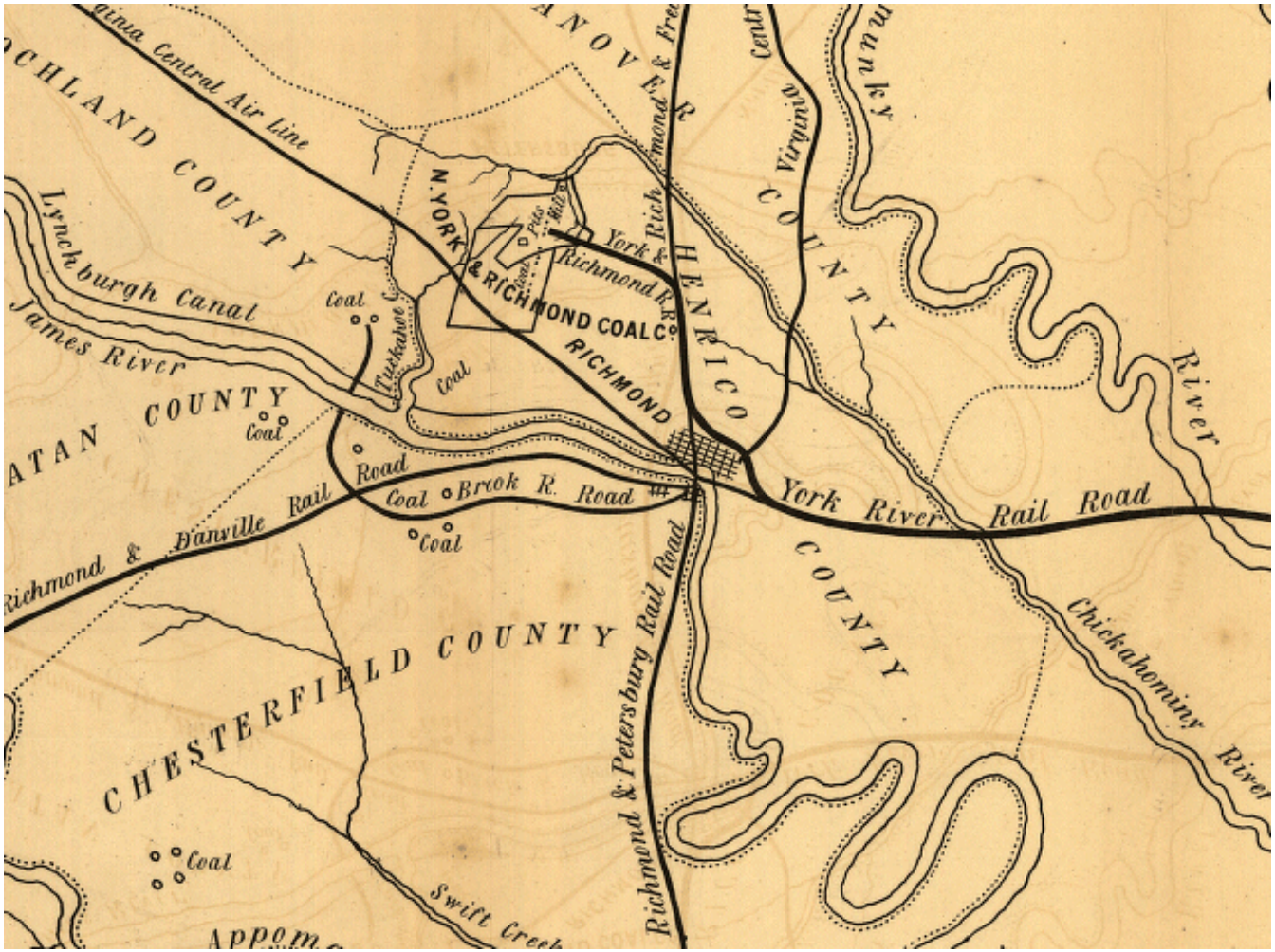
Railroads and Tramways

The advent of the steam powered railroads in the 1830's would have a major change on America in its westward movement and industrialization as travel time was reduced and large quantities of materials and goods could be transported effectively and cost efficiently.

The early mining operation in Midlothian area and later in the Tuckahoe Creek areas relied on gravity and mule powered tramways that moved the coal in carts from the mines down to the James River for loading onto barges. Most of these tramways were constructed of light steel straps attached to wooden rails laid across wooden ties. The full carts would be rolled downhill to be emptied then pulled back up the hill by mules.

In Henrico County, there would be two coal mine lines initially. The Tuckahoe and James River Railroad would follow Tuckahoe Creek bordering Henrico and Goochland counties down to the James River and Kanawha Canal while the New York and Richmond railroad connected the Springfield mines to the Richmond Fredericksburg and Potomac Railroad at Hungary Watering Station (now called Laurel) about eight miles north of the terminus in Richmond.

Below is another map from 1858 depicting the railroad lines. Interestingly, the rail line from the Dover Mine in Goochland to the James River is shown, but the James River and Tuckahoe Railroad that followed the Tuckahoe Canal is not marked. The New York and Richmond Railroad connecting the Deep Run and Springfield mines is shown connecting to the RF&P at Hungary Station (Laurel) although the line was on the verge of abandonment as the mines were closing. The Virginia Central Airlines railroad show as coming westward from Goochland through the heart of western Henrico had been proposed, may have been surveyed by this time, but was never built. Note in Chesterfield that the forerunner of the Southern Railway (Richmond and Danville Rail Road and the York River Rail Road) were operating at this time. There was also a small mining line named the Coal Brook Rail Road in Chesterfield that was originally a tramway operate using gravity and slope grades to move coal cars from the mines down to the river. The Virginia Central line along the Pamunkey River would later become part of the Chesapeake & Ohio Railroad.



Map 23. (source: Library of Congress, https://www.loc.gov/item/98688566)

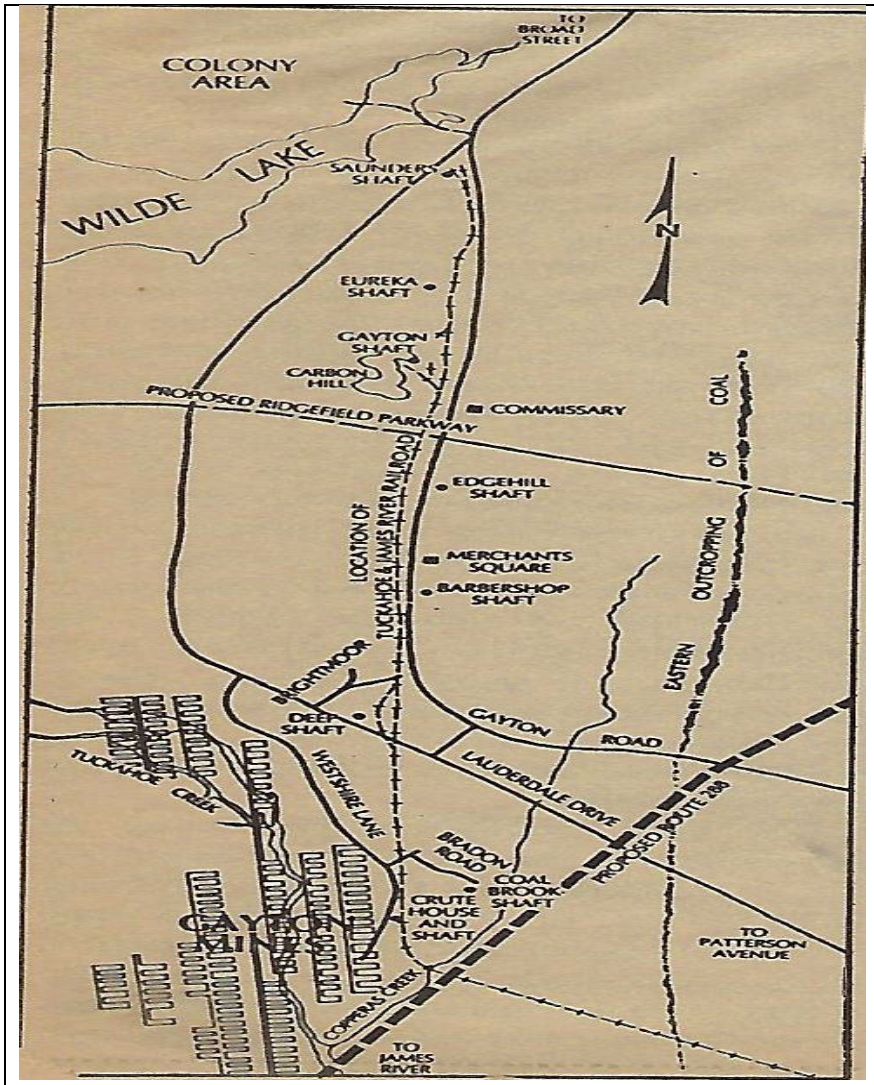
The Tuckahoe and James River Railroad

In 1837, the colliers along Tuckahoe Creek petitioned the General Assembly to authorize a railroad along Tuckahoe Creek due to the poor condition of the Tuckahoe Creek Canal and the high tolls being assessed. The General Assembly was slow to take action on the petition. Further complaints and requests for action were made the following year to the General Assembly with petitions from John, Thomas, and Richard Crouch, John Barr and Jesse Snead. The petitioners sought authority to build a rail line from William Detrick's mine south to the James River. The next year, the General Assembly authorized the railroad to be built by the Tuckahoe Canal Company, which was given 60 days to open their books, seek capital through subscriptions and start construction. Nothing happened. Seizing on the failure of the Tuckahoe Canal Company, the petitioners obtained the authority to form the Tuckahoe and James River Railroad (T&JR RR). The promoters of this venture raised $68,000 of capital in two offerings. The T&JR RR was led by Edward Anderson, John Barr, Richard Crouch, Joseph Mosby, Jesse Snead and William Detrick, all colliers.

The T&JR RR was 4 5/8 miles long, made of wooded white oak ties and Iron plates two inches thick fastened to the oak rails with one spike per foot on a gauge that was 4'8 1/2" wide, on which coal cars would be pulled from the mine siding down the line to the James River Canal for loading on barges. The railroad may a tramway that used gravity to move the coal car to the Canal and then used mules to pull the cars back up hill to the mines. The cost of construction was $55,539.85. From March 19, 1839 until June 30, 1842, 1,567,713 bushels of coal would be moved from the mines to the James River generating toll of $21, 026.31.

This railroad line would operate for many years as a mule powered line until steam would arrive decades later concurrently with the building of the Richmond and Alleghany Railroad on the towpaths of the old James River and Kanawha Canal in the 1880's.

(Source: **The History of Henrico County, Louis** Manarin and Charles Peple, 2011, published by the County of Henrico)



Map of the route of the Tuckahoe and James River Railroad and the mines served in western Henrico County.

The northern most mine served was the Saunders Shaft at the end of the line. It is worth noting that this map shows the railroad running east of Lauderdale Drive and just west of Gayton Road from the intersection of Gayton and Lauderdale, traveling south for at least a mile, crossing over Lauderdale Drive then turning east at Copperas Creek. The line would then turn south, cross Patterson Avenue and follow Tuckahoe Creek towards the Lorraine Station on the C&O tracks. The location of the mines are shown on this map which provides the reader with additional information on the location of the former mines as provided earlier in this Compilation.

For readers it is important to remember that some of today's roadways have been relocated over the last few decades so the designation of those roads on older maps may not be the current routes of today's roadway. This is particularly true of Quioccasin Road, which is shown in the 1900s and earlier maps on the current route of Gayton Road.

Map 24. (source: Short Pump Express, April 1987 edition)

The Tuckahoe Canal Company fought the T & JR RR from becoming operational. From a search of court records, there were efforts by the Tuckahoe Canal Company to impede the T&JR RR building a bridge for its tramway across the canal. The Tuckahoe Canal Company sought an injunction against the T&JR RR which was trying to cross the canal with a bridge to connect directly to the James River and Kanawha Canal bypassing the Tuckahoe Canal. The T&JR RR was trying to use the legal concept of Eminent Domain to condemn and take a right of way from the Tuckahoe Canal Company. Eminent Domain is a long-standing legal concept that one entity can take another's' private property for public uses if such public use is deemed to be in the best interest of the general public. The case was ultimately heard by the Supreme Court of Virginia who ruled in favor of the T&JR RR in 1840. The opinion is available online at the cited source.

(source: https://www.courtlistener.com/opinion/6910039/tuckahoe-canal-co-v-tuckahoe-james-river-rail-road/)

"So, ten years after the building of the Tuckahoe Canal, the railroads came - and probably supplanted it, although the records do not say. A short distance of the Tuckahoe and James River Railroad line was opened in March 1839, and the whole from the Kanawha Canal bank below Tuckahoe Aqueduct to Carbon Hill, 4 ½ miles with 1/3 mile of side branches, was completed in July 1840. The line cost $55,539.35 (1840 dollars); over six times the cost of the Tuckahoe Navigation. Although one might expect the rail mileage to increase over the years, it was the same 30 years later so other suspected traces discovered amid the undergrowth are new or have other explanations. The tramway was exclusively for the transport of coal. In 1872, 18 cars used the line; each carried two tons and supplied by mules at 4 miles per hour. In recent years, modern railway lines were built along the original tramway route, and a spur to the Deep Run mines, up a branch of the creek, but there are gone now, leaving a number of trees to puzzle out and hike along"

(Source: Virginia Canal Essay, M. Trout, 1967)

The southern terminus of the T&JR RR was Lorraine. Lorraine was located at the end of South Gaskins Road. Lorraine also served as a passenger station on the Chesapeake and Ohio Railroad (formerly the Richmond and Alleghany Railroad). There are no remains of the station today to be seen but in the following section are photographs of the station.

(source: Inventory of Early Architecture and Historic and Archeological Site, County of Henrico, VA)

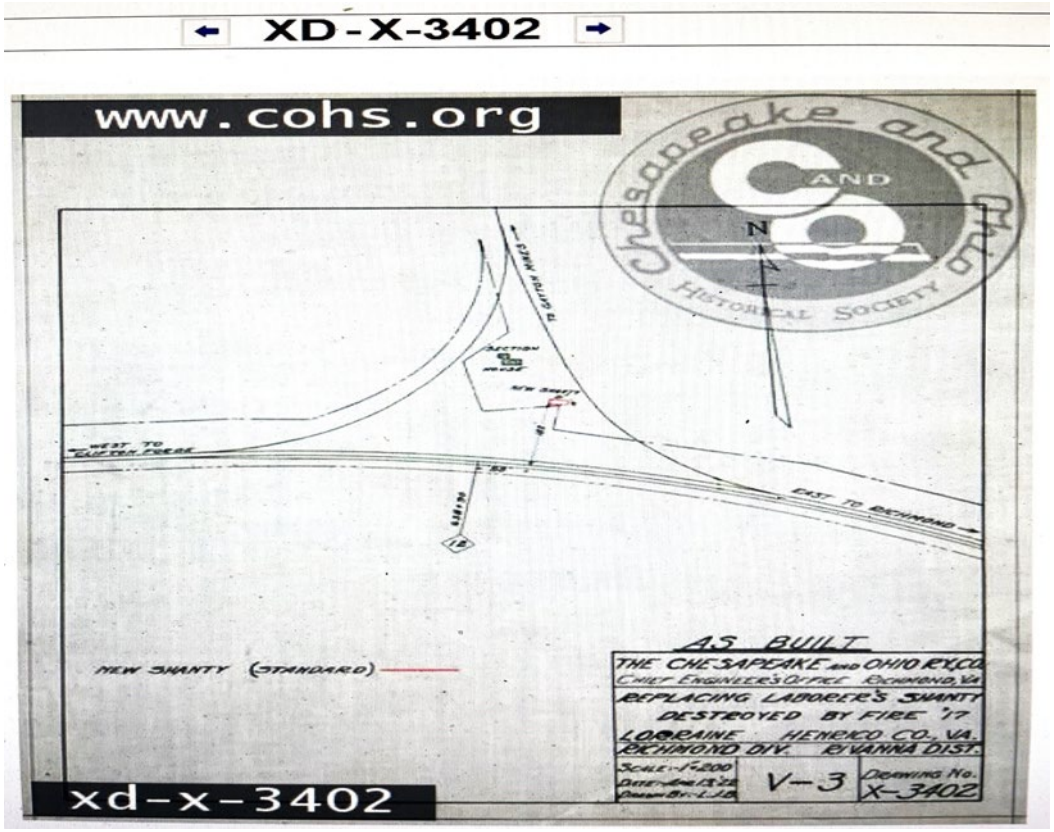
The photograph below is the iron switch stand on display at the old Southern Railway Hull Street Station museum in Richmond VA operated by the Old Dominion Chapter of the National Railroad Historical Society. This iron switch stand was used at the Wye of the

intersection of the Chesapeake and Ohio Railroad and the Tuckahoe and James River Railroad to shift the rails that allowed trains to move from on track to another track.

Photo 27. (source: Chuck McIntyre at the Richmond NRHS museum in Manchester, VA)

At Lorraine Station, there was a Wye at the intersection of the Wye intersection of the Chesapeake and Ohio Railroad and the Tuckahoe and James River Railroad. Traditionally, a Wye is used to turn an engine around at the engine of the line when there is not a turntable. The drawing below is the Wye on the C&O at Lorraine Station that was removed many years ago. The western portion of

the Wye was abandoned in 1921 and dismantled in January 1922. The eastern section of the Wye does not show in 1928 drawings from the Chief Engineer's office.



Document 5. (source: Chesapeake and Ohio Railroad Historical Society website)

Photographs of the Lorraine Station on the Chesapeake and Ohio Railroad in southern Henrico County are shown below. The dates of the photograph on the left is unknown. The photo on the right is described in the C&O Historical Society Website as "this odd

structure at Lorraine, VA on the Rivanna Subdivision about 1910, was obviously a non-standard depot design that appears to be a miniaturized version of the standard Richmond & Alleghany (R&A) stations.

Photo 28 and 29 (Source: Brandy Martin sourced from the archives of the Chesapeake & Ohio Railroad Historical Society)

Brandy Martin reported that both of the above photos appear in Donald Traser's **Virginia Railway Depots** (1998), page 50, with credit to his collection. Years taken were not noted. Donald Traser says the name of the Station taken from Edouard Lorraine who was chief engineer of the James River & Kanawha Canal. Lorraine was still listed in the Official Guide of June 1918. Stop for trains 9, 10, 11, and 32. Still listed in February 1946 as stop for trains 9, 10, 11 and 12.

Phase II and Supplemental Phase I Cultural Resource Survey for the Northern Portion of Proposed Route 288, noted that:

"Previous archeological research at 44HE665 was conducted during the Phase I portion of the survey for the Route 288 right-of-way and resulted in the location of a railroad track bed and a brick-lined pit, at the time believed to be a maintenance facility. No artifacts were recovered from the site at that time.

On March 27, 1837, the Tuckahoe and James River Railroad Company was organized by the directors of the Tuckahoe Canal Company under an Act of the General Assembly. An initial capitalization investment of $68,600.00 was used to construct the railroad, depots, and workshops as well as to buy the equipment to operate the railroad. This railroad was a tram-type railroad where small cars were hauled by harnessed mules. The rails upon which the cars ran were probably wooden and laid with strap iron to protect the working surface. By March of 1839, a short distance of the road had been opened and used; and the entire line was completed by July 2, 1840 (Manarin and Dowdey 1984:227-228). As recorded to the Board of Public Works in 1842, the railroad had constructed "in the usual manner" 4 5/8 miles of track from the James River and Kanawha Canal, and was presently in good repair (Board of Public Works 1843:632).

The railroad served the Crouch, Cottrell, Ellis, Redd and Snead coal pits in the Carbon Hill area, at the upper navigable reaches of Tuckahoe Creek, thereby providing a dependable year-round route from which to ship coal from these mines to the James River and Kanawha Canal at Lorraine and thence to Richmond. During the early 1840s, 400- 500 bushels of coal were raised from William Cottrell' s mine which employed 30 hands, while the other mines served by this railroad generally had a higher production rate (Manarin and Dowdey 1984:232). From March of 1839 until June 30, 1842, the Tuckahoe and James River Railroad transported 1,567,713 bushels of coal; 550,165 bushels were from July 1, 1841 to July 1, 1842. The Tuckahoe and James River Railroad was able to extinguish its debts by 1841 and pay dividends to its investors in 1842, when a net profit of $5,944.16 was realized solely from the transportation of coal (Board of Public Works1843:633-634).

In the decades during and after the Civil War, coal production was negligible in the Carbon Hill district. Unfortunately, no records for the Tuckahoe and James River Railroad exist for the period between 1842 and 1871 due to a fire which destroyed records. The Tuckahoe and James River Railroad was not a 'particularly good investment' in the years 1872 and 1873. In the annual report for 1872, President William Clopton reported gross earnings of only $360.00 from freight and a net loss of $2982.50 (Board of Public Works 1872:105) and no income for 1873, while incurring expenses of $3610.00 (Board of Public Works 1874:96). Finally, the report

notes that the railroad had been leased to Thomas Oram for fifteen years, who receives all earnings, pays all expenses and keeps the railroad in repair (Board of Public Works 1872:105, 1873:96).

The 1872 and 1873 annual reports are more detailed in their description of the assets and operations of the railroad. At this time, the railroad had diversified somewhat; for instance, it transported both coal and wood to the Lorraine station and returned with merchandise, etc. His report indicates that of the 4 5/8 miles of track, 1/8 mile was a branch line, although its location is not noted. The weight of the rails is 19 lbs. to the yard, indicating that it is still of lightweight tram-style construction. The railroad owns 18 cars of two-ton capacity, which move at four miles per hour and is drawn by mules (Board of Public Works 1872:101-106, 1873:91-97)"

By 1897, the Tuckahoe and James River Railroad was owned by the Richmond Coal Mining and Manufacturing Company and was leased to and operated by the Virginia Coke and Coal Company. Although it is unclear when the acquisition of the railroad was made, $50,000 in bonds were sold in 1894, probably to upgrade the railroad by installing standard gauge track and acquiring a locomotive and cars. This conversion finally tied the Tuckahoe and James River Railroad into the main line of the old Richmond and Allegheny Railroad, since assumed by the Chesapeake and Ohio Railroad at Lorraine.

The annual reports of 1897, 1898 and 1901 indicate that the Tuckahoe and James River Railroad continued operating at a deficit. During this period, the rolling stock consisted of one freight locomotive and one coal car. A caboose was acquired in 1900. The trackage remained the same (Board of Public Works 1897:565-571, 1898: 561-567, 1901:317-325).

As documented above, the extant railbed at 44HE665 is a small remnant of the Tuckahoe and James River Railroad which operated from 1837 through, though not continuously, 1914. Its function was to provide rail access from the coal pits and mines of the Carbon Hill district of Henrico County to the James River and Kanawha Canal, later to become the Richmond and Allegheny Railroad and finally the Chesapeake and Ohio Railroad. Unfortunately, the later conversion of the railroad to standard gauge track destroyed any vestige of the original tramway.

As a result of difficulties in keeping the canals open and competition from the railroads, the James River and Kanawha Canal was sold to the Richmond and Allegheny Railroad in 1880, which utilized the old tow path for the bed of the new railroad. This development probably increased activity on the Tuckahoe and James River Railroad. In 1882, the coal mines in this area were reorganized under the Richmond Coal Mining and Manufacturing Company. Under its president, Ware B. Gay, improved machinery, methods and conditions came to the mines; and Gayton, a small community named after him, grew up nearby."

A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

(source: titled Phase II and Supplemental Phase I Cultural Resource Survey for the Northern Portion of Proposed Route 288, Richmond, Virginia by Robert F Hoffman, Jerome D Traver, Jacqueline Hernigle, Stephen Hinks, Harding Polk, Esther White, MaryAnna Ralph, et. al. obtained from the Virginia Department of Historical Resources)

There are two photographs of the steam locomotive in the Old Dominion Development Company photo album at the Virginia Museum of History and Culture. The photographs are faded and the details of the engine and tender are not sufficient to be able to read the name of the railroad on the tender or see enough details of the engine to determine the manufacturer of the engine. At this time, those photographs are not available for this edition.

It is believed that the engine in the photographs was used by the Tuckahoe and James River Railroad in the 1880's through 1900 then by the Old Dominion Development Company from 1910 to 1914. Train enthusiasts who are familiar with the photograph believe this is a 0-6-0 (the Whyte notation designation for steam locomotives wheel configuration) possibly built by the Baldwin Locomotive Works prior to the 1860's. The experts believe this steam engine had no leading axels but does have power and coupled driving wheels on three axles, and no trailing axles. This type of locomotive design was made in the early days of steam and quickly faded out of favor as the weight and length of trains increased beyond the capacity of this type of locomotive by the 1860's. It is estimated that around 300 0-6-0's were built between 1840 and 1865. Due to their design, they could not handle long haul freight and were relegated to switching duties. No builder plate can be seen from the photograph so the manufacturer is unknown.

The 0-6-0 locomotive was used primarily for switching operations, which would have been suitable for the 5 miles of the T&JR RR from the mines to the C&O junction at Lorraine. There is no record of the original owner of the locomotive prior to coming into the service of the Richmond Coal Mining and Manufacturing Company in the 1880's and then the Old Dominion Development Company after 1900. In all probability, given the economic conditions of the mining company, this was a second or third hand locomotive purchased to run on short mileage track of the T&JR RR. The records show that the locomotive was sold with the rest of the mine assets in 1914 but its fate is unknown after that date.

The picture below is a restored Baldwin 0-6-0 locomotive at a railroad museum, courtesy of Chuck McIntyre:

Photo 30. (source: Chuck McIntyre)

The Tuckahoe and James River Railroad did enjoy a brief renaissance after 1900 when the Old Dominion Development Company rehabilitated the old Coalbrook Slope Mine as Mine No, 1 with investments in new equipment at the mines and repairs to the rail line from the mine to Lorraine as evidenced in the below photographs.

The Virginia Museum of History and Culture's Old Dominion Development Company photo album contains approximately forty photographs. In regards to the railroad, there are views of the (1) T&JR RR rail line on what may be a bridge or an elevation above a swampy area based on the vegetation adjacent to the rail line (2) crews working on the rails, (3) a section of the line going through a field, (4) the loading ramps for the coal breaker, and (5) winter scenes of the coal mine in operation from the tracks. Due to cost constraints, the author was not able to obtain the rights to scan and print all of these photographs. They can be seen by appointment of the Virginia Museum of History and Culture.

The Country Club on Virginia has shared information on their website regarding their Tuckahoe Course:

"At one time the Old Gayton Coal Mine Railroad (e.g., the Tuckahoe & James River RR) crossed the 2nd and 17th holes, delivered coal to barges waiting in the Kanawha Canal. Remnants of the old canal and railroad can still be found. "

(source: https://www.theccv.org/web/pages/course-tour)

Ken Thacker recalls that "The former T&JR / Henrico RR grade followed a substantial fill southward below River Road as it approached its final crossing of Tuckahoe Creek. Bill Trout took me here and showed me the TC canal works in the vicinity — those traces were harder to find but he knew every detail! This area would have been deeply inundated by Agnes in 1972, in fact Tuckahoe Creek and Flat Branch / Deep Run Creek rose over Patterson Avenue for a few days." Such flooding would have damaged the former Canal works, bridges and other structures associated with the old railroad and canal.

(source: Ken Thacker correspondences with this author)

The Tuckahoe Creek trail may also show some historical evidence of the mining and railroad operations.

(source: https://www.tuckahoecreektrail.org/history).

Below is another photograph from Kenneth Thacker's 1982 freshman year college term paper "An Exercise in Futility: Coal Mining in Henrico County" He wrote of this photograph: "A good view of the Tuckahoe and James River Road's grade near their bridge over the Tuckahoe Creek, just north of the James River Course. The railroad was on a gradual incline until it reached sufficient height to cross the creek. At one point, the grade is twenty feet higher than the surrounding forest floor. The fill material for the grade is mine waste."

Photo 31. (source: Kenneth Thacker)

Below is another photograph of Kenneth Thacker's term paper photographs He wrote "The remains of a bridge over Tuckahoe Creek on the old River Road. This section was relocated in the late 1930's. The photographer is standing on a major junction of two nineteenth century avenues of commerce: The Tuckahoe and James River Railroad crossed the River Road here at grade. The bridge has obviously seen better days."

Photo 32. (source: Kenneth Thacker)

Below is a third photograph from Kenneth. He commented that ""Well-constructed stone abutments are the only remaining evidence of the railroad bridge over Tuckahoe Creek. It can only be assumed that the bridge was a wooden truss arrangement. It is not known if the bridge was dismantled after the abandonment in 1912, or if it was washed away in the flood of 1972. Notice the proximity of the sewage line at right -- signified by the large rocks"

Photo 33. (source: Kenneth Thacker)

The video **From the Mines of Henrico: The Beginning of Our Nation's Coal Industry** produced by the Henrico County Public Relations and Media Services featured Gerald Wilkes of the Virginia Department of Energy touring the remnants of the Tuckahoe & James River Railroad. The following photographs are screen shots from that video. First screenshot is a coal pit that has billed in with water.

Screenshot 1.

The second screenshot is the road bed of the T&JR RR.

Screenshot 2.

The third screenshot is a trough on the rail line. Local rail historians believe this was an inspection pit used in the maintenance of the engine including emptying the firebox. Several of the persons who lived in this area in the seventies remember encountering this inspection pit in their adventures along the line back in the late 1960's and early 1970's.

Screenshot 3.

Springfield and Deep Run Mine railroad line (aka the New York & Richmond RR, Henrico Railroad and the "Coal Pit" Railroad)

In 1837, the stockholders of the Richmond, Fredericksburg and Potomac Railroad (RF&P) voted to construct a line from the Hungary Water Station (present day Laurel) westward to the Springfield and Deep Run mines. In order to build the line, the colliers (John Barr and DuVal Burton & Co) had to advance $27,000 to pay for the line. The colliers would then be repaid out of the tolls placed on the

transportation of the coal. The advance would bear a 6% interest rate. The toll would be $.045 per 5 peck bushel of coal and the colliers would receive credits against the debt owed. The agreement had a 5-year term. At the end of 5 years, the branch line would be owned by RF&P.

The line opened for service on August 28, 1838, at a total cost of $32,612.72. The RF&P had 60 coal cars in 1841. The volume of coal production from the Springfield and Deep Run mines was sufficient to allow the credits to pay off the debt in less than 3 years. The period of 1838 to 1847 were peak years for the railroad. The mines would close in the 1850's and RF&P would dismantle the rails by 1856. After the rails were removed, coal had to be hauled by wagon on the old roadbed to Hungary Station or further on down the road to Richmond.

This would not be the end of mines or the railroad for Springfield or Deep Run.

"After the war the Henrico coal mines were reduced to little or no production. The James River and Kanawha Canal had ceased to operate (due to take-over by the new Richmond and Alleghany Railroad, now the C&O), thus eliminating the transfer of coal from tramway to canal boat. The new R&A now tapped the West Virginia coal mines which produced better coal, and the Henrico mines themselves had been rather badly ravaged by war. Therefore, by the mid 1870's, the T&JR Railroad (tramway) was abandoned.

As previously mentioned in this **Compilation**, in the mid to late 1880's, the Springfield and Deep Run mines were bought by Henrico Coal Mining Company. The primary investor in this venture was Senator William Barnum from Connecticut who owned several large tracts of land along Deep Run stretching south from the current location of Springfield Elementary School to Three Chopt Road according to the 1901 map of Henrico County.

Barnum also served director of the Richmond & Alleghany Railroad (R&A), which may have influenced his decision to connect the Henrico Coal Mining Company mines to the R&A at Lorraine near the point where the Tuckahoe & James River Railroad joined the R&A. This was done to provide an alternative to the RF&P for shipping coal.

He built a standard gauge steam railroad, called the Henrico Railroad, on the old roadbed of the New York and Richmond Railroad to connect to the RF&P at Hungary Station. Then the new roadbed turned south beginning at Deep Run mine running down to meet the R&A at Lorraine. This new roadbed required an extension amount of grading and encountered several obstacles that had to be

blasted. When completed, this line formed a continuous route from Hungary Station to Lorraine. The line was leased to the R&A to form a convenient belt line by-passing Richmond for through freight.

(source: Once Upon a Time – Rail facts of the Past, Julian Tarrant, 1983 based on information provided by Kenneth A. Thacker, Sargeant Reynolds Community College, and other sources and The Short Pump Express, April 1987 edition based on information provided by Kenneth Thacker, Martin Wilson and Joseph Slay

"In 1882, the Henrico Railroad Company was chartered with authority to construct a line from the RF&P at Hungary Station through the Counties of Henrico and Goochland to any point at or near the James River.

In 1893 the Gayton Co. invested new money and rebuilt the Tuckahoe and James River to standard gauge, including a wye junction with the R&A at Lorraine. Several maps identify this line simply as the Tuckahoe Railroad."

(source: Once Upon a Time – Rail facts of the Past, Julian Tarrant, 1983 based on information provided by Kenneth A. Thacker, Sargeant Reynolds Community College, and other sources and The Short Pump Express, April 1987 edition based on information provided by Kenneth Thacker, Martin Wilson and Joseph Slay)

The roadbed for this line was very evident into the 1970's on the stretch from Springfield to Laurel. The line could be found behind the homes on the south side of Steamboat Drive, Broad Meadow Road and Kellywood in the Broad Meadows areas. Development in the 1980's eradicated most evidence of the old New York & Richmond Railroad roadbed Using aerial views from the Henrico County website, certain portions of the southern path of the Henrico Railroad line can still be discerned today in the Raintree neighborhood where the line ran along one side of Gregory's Pond and then south of Patterson.

The **Phase II and Supplemental Phase I Cultural Resource Survey for the Northern Portion of Proposed Route 288** provided this commentary:

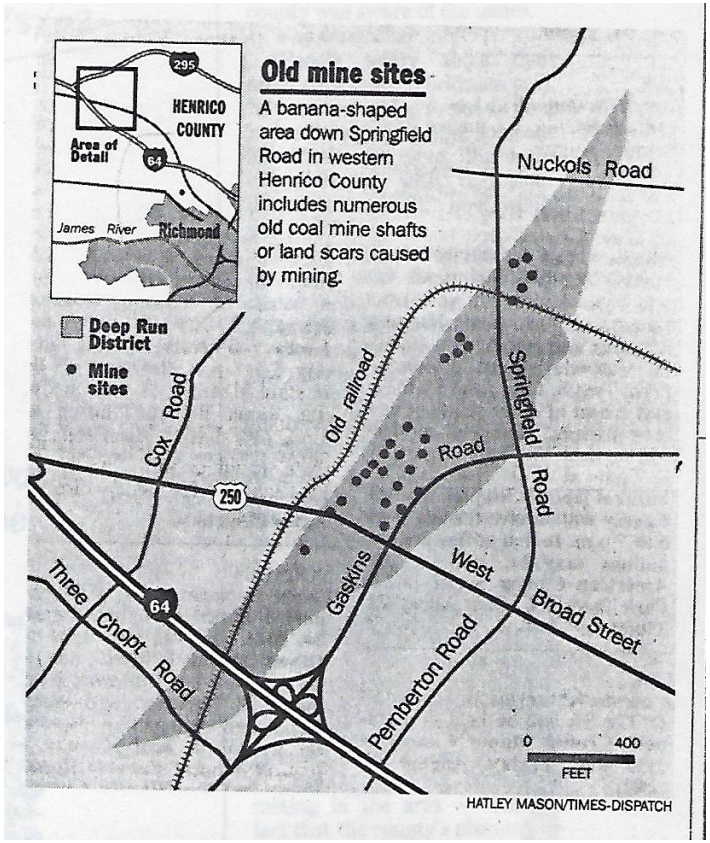
"At approximately the same time [1880's], Senator W.H. Barnum of Connecticut procured charters for the Henrico Coal Mining Company and the Henrico Railroad Company to reopen the mines in the Deep Run area east of Carbon Hill. In the process of setting up this operation though, the Henrico Railroad Company had been established and provided a link between the Richmond and Allegheny at Lorraine to the Hungary station of the Richmond, Fredericksburg, and Petersburg Railroad. Apparently, the southern two

miles of the eleven-mile line overlapped and utilized the Tuckahoe and James River Railroad railbed. Despite optimistic forecasts of extensive coal deposits, they were soon exhausted, and the entire venture became a total failure. The Henrico Coal Mining Company and the Henrico Railroad went into receivership and was sold, and the tracks were taken up and sold (James River Project Committee 1950:744- 745) ."

(source: titled Phase II and Supplemental Phase I Cultural Resource Survey for the Northern Portion of Proposed Route 288, Richmond, Virginia by Robert F Hoffman, Jerome D Traver, Jacqueline Hernigle, Stephen Hinks, Harding Polk, Esther White, MaryAnna Ralph, et. al. obtained from the Virginia Department of Historical Resources)

Photograph 34. An abutment for the New York and Richmond Railroad from Hungary Station to Springfield Mine. Courtesy of Rob Timmins.

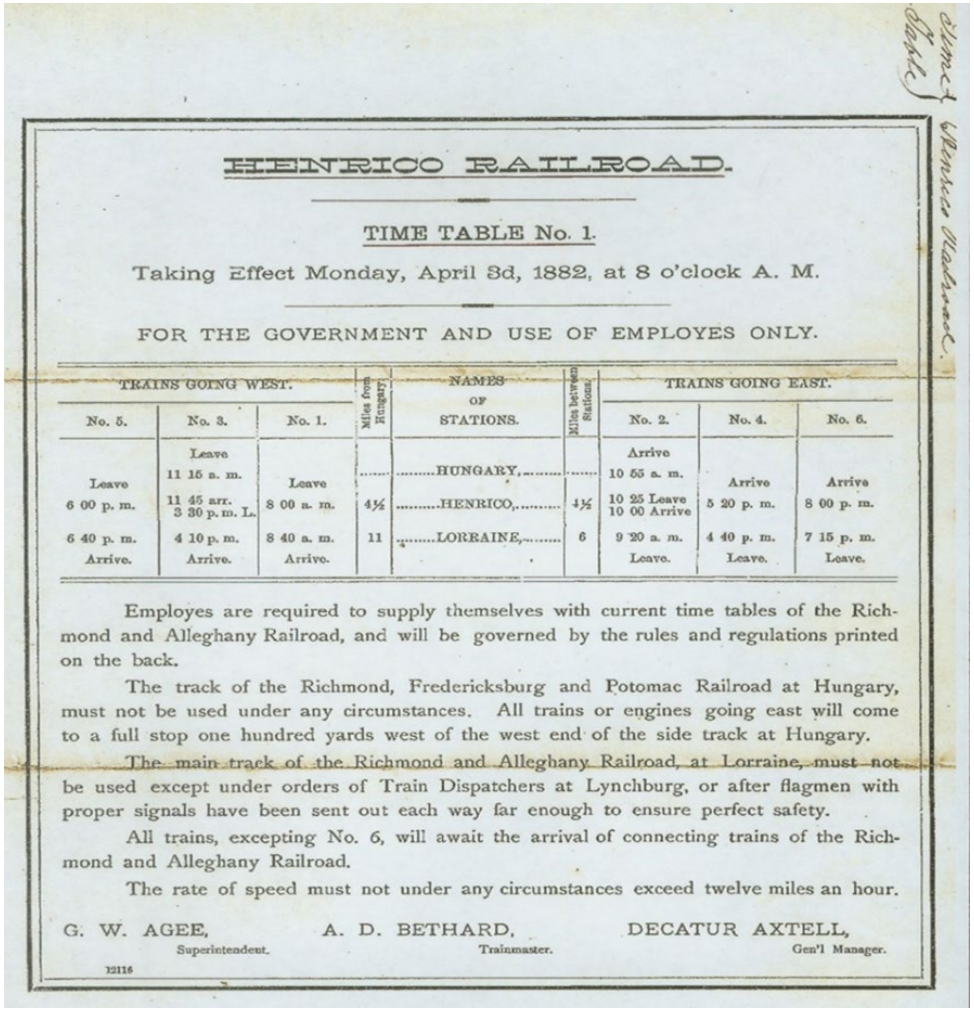
The following map was found in the August 25, 2002, edition of the Richmond Times-Dispatch in an article reporting on a sinkhole in a subdivision built over the Springfield mines. The purpose of this map is to show its route as it traveled southward from the Springfield Mines to the present-day Deep Run Park.



Map 25. (source: Richmond Times Dispatch, August 25, 2002)

On the following page is a timetable that was published for the Henrico Railroad that connected from the RF&P line at Hungary Water Station (Laurel) to the C&O line at Lorraine on the James River. The operating life of this railroad was only a few years with most northern operations ceased by 1886. The Henrico Railroad timetable to the left shows the schedule for the movement of trains between the Richmond Fredericksburg and Potomac connection at Hungary Station and the Richmond & Alleghany (later the Chesapeake & Ohio) Railroad connection at Lorraine. As Julian Tarrant described in his article, the Henrico Railroad had been built on the remains of the New York and Richmond Railroad / Old Coal Pits Road to service the Deep Run and Springfield mines as well as connect with the Gayton and Tuckahoe Creek mines. The journey took about 1 ½ hours on No. 2 that went from Lorraine to Hungary Station. This full route was only traveled once a day on a non-stop basis. The timetable was provided to the author by Brandy Martin, a member of the Virginia Train Collectors Association.

There is no indication that the Henrico Railroad had an engine or any rolling stock. The engine used was probably the Tuckahoe & James River's 0-6-0 engine and the rolling stock used to transport the coal were either C&O or RF&P coal cars. While there is a photograph of the Tuckahoe & James River's 0-6-0 engine with a passenger car in one of the Virginia Museum of History and Culture's Old Dominion Development Company photo album, there is no record of the railroad having possessed any passenger cars. It is likely the car may have been loaned to the T&JR RR for an excursion by the C&O which would have picked up the passenger car and taken it into Richmond. The passenger station at Lorraine had regularly scheduled service to Richmond which would have allowed the miners and their families more opportunities to travel into town.



HENRICO RAILROAD.

TIME TABLE No. 1.

Taking Effect Monday, April 3d, 1882, at 8 o'clock A. M.

FOR THE GOVERNMENT AND USE OF EMPLOYES ONLY.

TRAINS GOING WEST.			Miles from Hungary	NAMES OF STATIONS.	Miles between Stations	TRAINS GOING EAST.		
No. 5.	No. 3.	No. 1.				No. 2.	No. 4.	No. 6.
	Leave					Arrive		
	11 15 a. m.			.....HUNGARY,.....		10 55 a. m.		
Leave		Leave					Arrive	Arrive
6 00 p. m.	11 45 arr. 3 30 p. m. L.	8 00 a. m.	4½	.....HENRICO,.....	4½	10 25 Leave 10 00 Arrive	5 20 p. m.	8 00 p. m.
6 40 p. m.	4 10 p. m.	8 40 a. m.	11	.....LORRAINE,.....	6	9 20 a. m.	4 40 p. m.	7 15 p. m.
Arrive.	Arrive.	Arrive.				Leave.	Leave.	Leave.

Employes are required to supply themselves with current time tables of the Richmond and Alleghany Railroad, and will be governed by the rules and regulations printed on the back.

The track of the Richmond, Fredericksburg and Potomac Railroad at Hungary, must not be used under any circumstances. All trains or engines going east will come to a full stop one hundred yards west of the west end of the side track at Hungary.

The main track of the Richmond and Alleghany Railroad, at Lorraine, must not be used except under orders of Train Dispatchers at Lynchburg, or after flagmen with proper signals have been sent out each way far enough to ensure perfect safety.

All trains, excepting No. 6, will await the arrival of connecting trains of the Richmond and Alleghany Railroad.

The rate of speed must not under any circumstances exceed twelve miles an hour.

G. W. AGEE, Superintendent. A. D. BETHARD, Trainmaster. DECATUR AXTELL, Gen'l Manager.

12116

Table 3: (timetable for the Henrico Railroad, internet search)

Photo 35. (source: Kenneth Thacker)

Above is another Kenneth Thacker photograph. Mr. Thacker wrote: “The author literally stumbled across this remnant of the Henrico Railroad a spike protrudes from an oak railroad tie — the remains of the railroad that was torn up after only one year of operation. A lump of coal, presumed to be from the Deep Run mines, is visible at the far right of the photograph. These artifacts were uncovered recently by excavation for a new sewage line near the Deep Run Business Center.”

In the years after 1890, the Springfield and Deep Run mines would operate intermittently. Traces of the railroad roadbed were visible in some areas in the 1950's through late 1970's before the area between the RF&P tracks and Springfield Road was subject to large scale residential development. The only trace of the railroad is the indentation in the ground that was once the roadbed running through Deep Run Park at the intersection of Gaskins Road and Ridgefield Parkway.

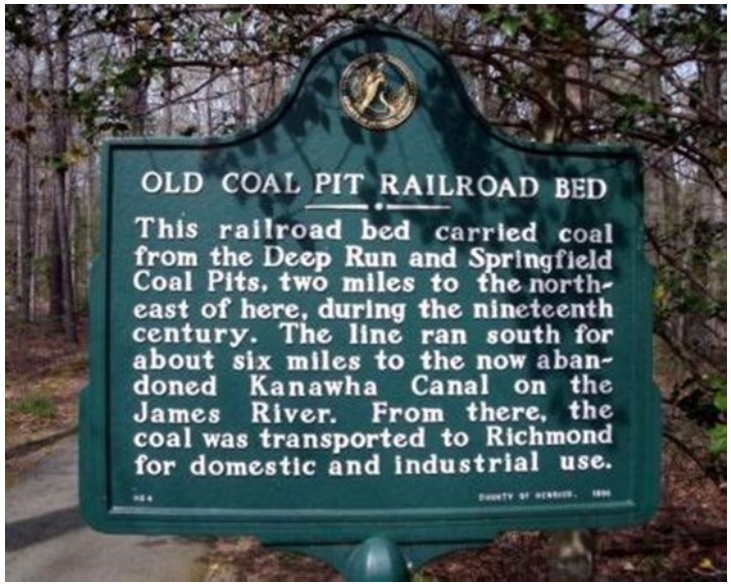


Photo 36. (source: Henrico County website)

This abandoned railroad line remained on real estate surveys long after the rails and ties were removed. As late as 1984, the railroad line was shown on the plat of this author's home on the east side of what would become Gaskins Road. In 1984, neither Gaskins Road nor Ridgefield Parkway were built and Deep Run Park was not open.

Historical Maps of Henrico County

The Library of Congress has several maps of Henrico County that date prior to the 1930's which may interest the reader of this **Compilation**. Some of the maps are topographical in nature while other maps focus on land ownership and landmarks.

The first map to share is the Redd, J. T. & A. Hoen & Co. (1887) Map of the upper District of Henrico County ; Map of the Lower District of Henrico County. [Richmond: Lith. by A. Hoen & Co] [Map] available online from the Library of Congress. This 1887 map is a topographical map with streams , rail lines, roads, and land owners identified by name. The location of many of the coal pits and mines are marked although some of the individual mine names are omitted.

Among the roads shown is Carbon Hill Road which would be renamed Gayton Road at a later date. Carbon Hill Road connected Quioccasin Road to Ridge Road which further intersected River Road and Westham Road near the University of Richmond. Parham Road was a connector between Three Chopt Road and Deep Run Road (Broad Street Road) east of Springfield Road and west of Hungary Spring Road. Roads that mostly follow their current paths include Hungary Road, Bethlehem Road, Church Road, Horsepen Road, and Brook Road.

View more details at: https://www.loc.gov/item/2011586685/

Map 26. (source: Library of Congress, https://www.loc.gov/item/2011586685/)

The second map to share is **T. Crawford Redd & Brother & A. Hoen & Co. (1901) Map of Henrico County, Virginia. Richmond, VA**: retrieved from the Library of Congress. This map provides the names and locations of parcels in the County at that time which is interesting to compare to 1862 Gilmer map previously mentioned in this Compilation.

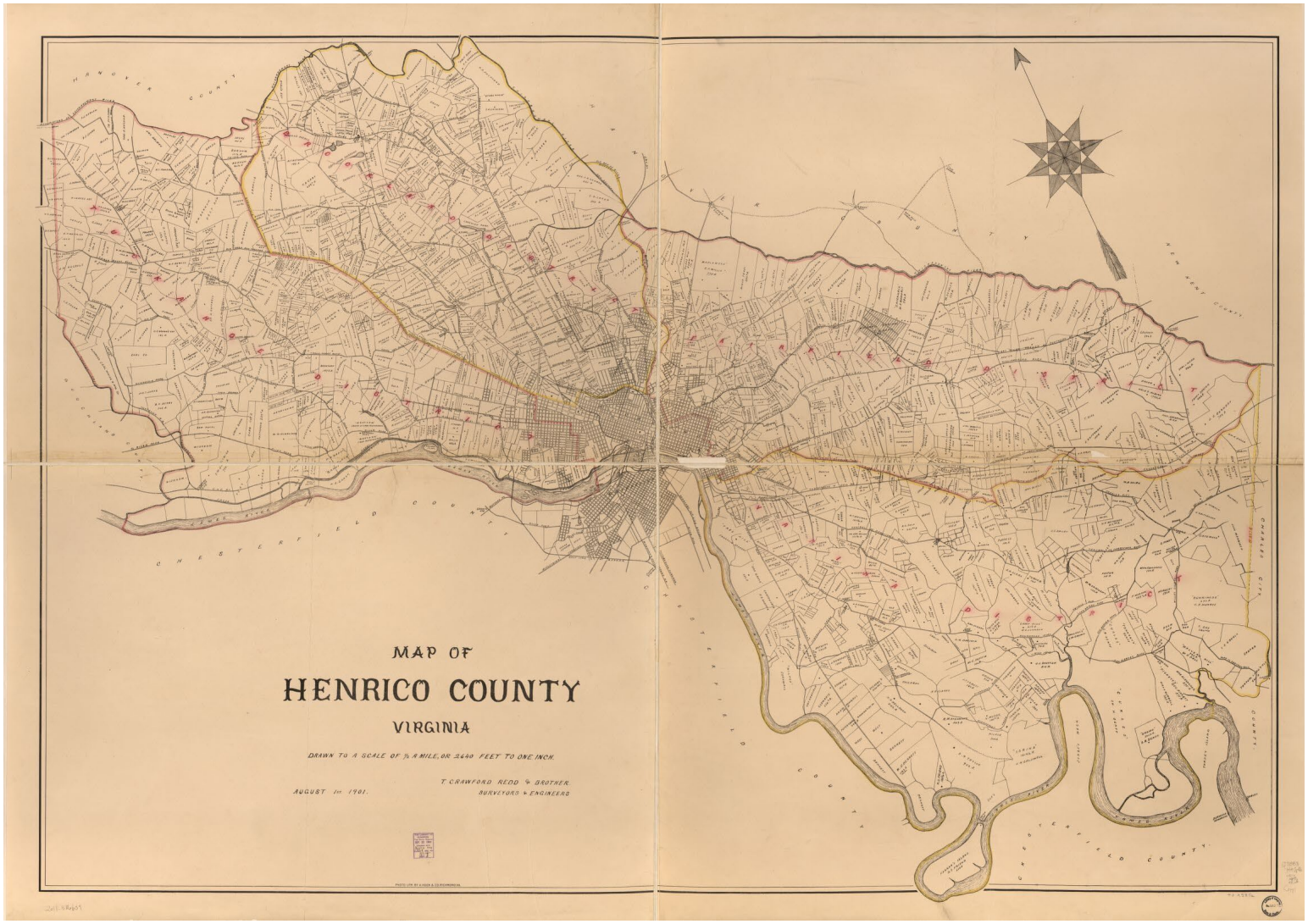
The second map is reproduced below. The map shows the 1901 road system, railroads network, Westham Park Electric Railway street car lines, names of land owners and approximate location of residences on their parcel in Henrico County at that time.

For the reader interested in the coal railroad lines, it is very interesting to trace the roadbed of the Old Coal Pits Railroad (Henrico Railroad) from the RF&P Railroad at Hungary to the C&O Railroad at Lorraine on the James River. That rail line is joined by the James River and Tuckahoe coming down along Tuckahoe Creek.

The current major roads of Henrico today are present on this map so there is an opportunity for today's Henrico resident to determine who owned the parcel of land upon which your residence may be built today. It is also interesting to see names of land owners that are now associated with roads and developments.

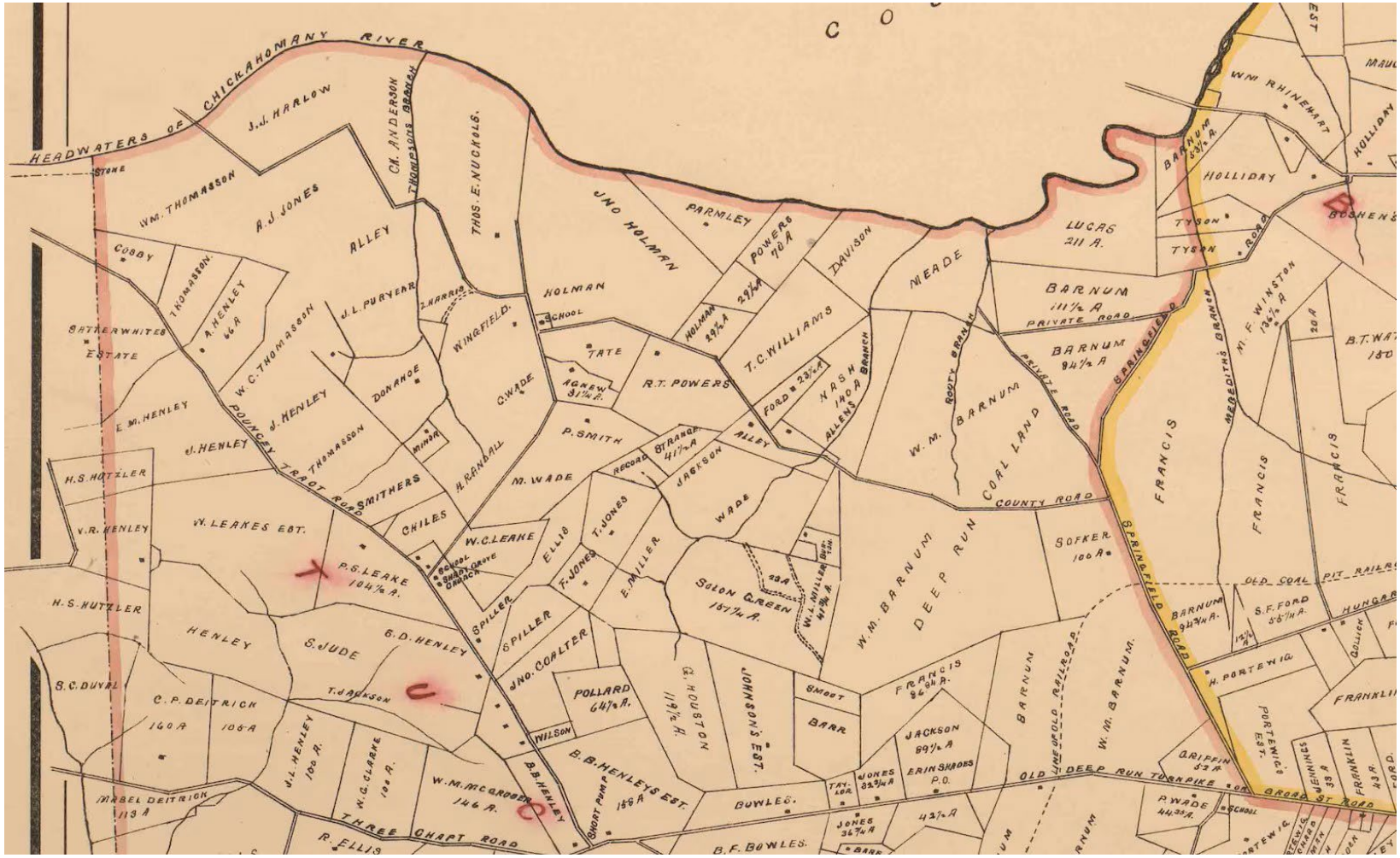
As an example, Henrico's Deep Run Park area was owned by Ch. D. Cottrell in 1901. The area west along present day Lauderdale Road was owned by the Richmond Coal Mining and Manufacturing Company. Quioccasin Road was still the name of the road that extended all the way from Three Chopt Road to the Tuckahoe Creek mines bordering Goochland County.

The map can be viewed in better detail at https://www.loc.gov/resource/g3883h.la002082/?r=-0.189,0.08,1.385,0.544,0



Map 27. (source: Library of Congress, https://www.loc.gov/resource/g3883h.la002082/?r=-0.189,0.08,1.385,0.544,0)

Below is a more detailed look at the Deep Run and Springfield mine area from the above 1901 Redd map.



Map 28. (source: Library of Congress, https://www.loc.gov/resource/g3883h.la002082/?r=-0.189,0.08,1.385,0.544,0)

Here is a detailed look at the Carbon Hill mine area on the 1901 Redd map. It is interesting that a lot of the names of landowners on the 1862 map have disappeared.

Map 29. (source: Library of Congress, https://www.loc.gov/resource/g3883h.la002082/?r=-0.189,0.08,1.385,0.544,0)

A third map from the Library of Congress is dated 1916 from T. Crawford Redd & Brother. **(1916) *Map of Henrico County, Virginia*. Richmond, VA: T. Crawford Redd & Bro. Map** is available online from the Library of Congress. This map show the beginning of development in the west end of Henrico with Pemberton Road, Forest Avenue and Gayton Road added, Quioccasin Road divided between Old and New, and the name of Broad Street Road being used in lieu of the Deep Run Turnpike.

On this map it is easier to trace the old Henrico Railroad path from Springfield and Deep Run mines as it runs south through current day Deep Run Park, turns west to run along Quioccasin (now Gayton Road) before crossing what is now Pump Run (not on the map at that time) and then turns southwest across the Tinsley Estate (Kingsley neighborhood) where the Village of Gayton once stood. The rail line then turns south at Deep Run creek and intersects the Tuckahoe and James River Railroad on the Wickham property that is labeled "Lower Tuckahoe."

It is also noteworthy that certain parcels like the Wickam and Dietrick properties along the James appear to have remained in the same families' hands for one hundred years or more.

To view this map in greater detail, access online at **https://www.loc.gov/item/2011586687/**

Map 30. (source: Library of Congress, https://www.loc.gov/item/2011586687/)

Finally, the Rand McNally road map of 1911. Note a location called Coal Hill and the village of Erin Shades on this map.

Map 31. (source: image from internet search)

Who were the Miners and Where did the Miners live?

Screenshot 4. (source: From the Mines of Henrico: The Beginning of Our Nation's Coal Industry produced by the Henrico County Public Relations and Media Services)

There is not much physical evidence left today to indicate that mining ever occurred in Henrico or Goochland Counties. There is some evidence of the T&JR RR and the Coal Pits (Henrico) RR rail bed, some water-filled shafts and ground depression where a coal mine tunnel has collapsed, and some foundation in undeveloped areas of the counties. You will not find any coal breakers that once towered over mine shafts, rails and ties for the coal trains, shanties for the workers, water towers, mechanical shops, industrial mine buildings or the company store (commissary). The westward growth of the Richmond metropolitan area in the 1960's and 1970's caused the mines to be filled in, railroad beds to be graded and all dilapidated structures demolished to make way for the multitude

of neighborhoods that would grow along Lauderdale Road, Gayton Road, Springfield Road and in-between. Residents who lived in the early-developed neighborhoods like Canterbury and Tuckahoe Village West in the late 1960's and early 1970's recall adventuring westward on their bikes and on foot to explore the undeveloped areas where the mines once operated. The residents to whom the author spoke remember fishing along Tuckahoe Creek at Maggi's Hole, riding on the remnants of the railroad beds, and finding foundations and fallen structures that were once the homes of the miners, and gazing at pools of water that were the opening of mine shafts.

What we have is information from the historical research, maps, surveys, and photographs that are scattered around the internet, museums and libraries.

Who were the miners

The bulk of the mining workforce from the late 1700's to mid- 1800's were slave labor. The local plantation owners and farmers who had slaves would lease their slaves to the mine owners who were to provide housing, food and clothing to their workforce. There was also some immigrant labors such as the Irish who came to work in the coal fields in the mid-1800's during the immigration wave from Europe in the 1840's and 1850's. A search of the newspapers from this period, especially in the years leading up to and including the Civil War (1861 – 1865) show many Help-Wanted advertisements for the coal mines. Several researchers have commented that the coal operators preferred to use the enslave and freed black workers in the mine as conditions were harsh and many white miners sought work elsewhere including industries and services in Richmond.

J. B. Woodworth confirmed in 1897 that "In the earlier days colored labor was largely employed under the supervision of English and Welsh miners. At present Hungarian and colored labor, under the direction of local and Pennsylvanian mining engineers, is employed. No accurate statistics exist as to the number of men or the wages paid;"

(Source: **The Atlantic Coast Triassic Coal Field,** Jay Backus Woodworth, 1897)

A detailed discussion of the life of the slave or bondsman (freed black) miners in the Chesterfield and Goochland County mines can be found in Volume 87, No. 2, April 1979 edition of The Virginia Magazine of History and Biography published by the Virginia Historical Society. The article by Ronald L. Lewis is entitled "The Darkest Abode of Man": Black Miners in the First Southern Coal Field, 1780-1865 (pp. 190-202).

After the Civil War, the coal mining operators were almost non-existent. When mining operations started up again in the late 1870's, a new wave of immigrants began to come to Henrico. There were Hungarian and Polish miners who had migrated down from the anthracite mines of Pennsylvania.

How the miners lived

"The eighteenth-century pits, trenches, slopes, drifts, and shafts were excavated primarily by male slaves, with white overseers. Buildings for shelter were provided for the slaves, as well as food and clothing, during their periods of mining. One or one-and- one-half story log or frame houses would be built for small families, as well as barracks- type buildings for single or less-permanent slaves. Cooks were also employed to feed the colliers, and, therefore, a kitchen building would have been constructed. The overseers employed by the company were also housed near the mine operations. The company size and available capital played a large role in determining the number of slaves and overseers, and, therefore, the number of houses and other mining-related structures that would be constructed at the mine site. The economic status of the mine owner and the availability of capital are strong variables in calculating the types and numbers of structures and equipment at each mine site during the end of this period, and especially during the succeeding periods."

"The late eighteenth-century domestic dwellings occupied by the miners were probably all of frame or log construction, with brick or stone chimneys and sometimes foundations. These houses were generally only one or one-and-one-half stories high, after their English counterparts (O'Dell 1983:xv). The lifespan of the structures was predictably brief in the humid, insect-laden climate. Thomas Jefferson (1787) felt it was "...impossible to devise things...more perishable. [The] duration of a frame or log structure is highly estimated at 50 years." Therefore, it is not surprising that there are no known remaining eighteenth-century dwellings directly attributable to mining in the Richmond basin. However, these eighteenth-century mining communities expanded as the industry did, leaving behind indelible marks on the nineteenth-century landscape."

(Source: Jacqueline Louise Hernigle, An Archipelago of Coal Pits: Predicting Archeological Features in the Richmond, Virginia Coalfield, 1991, College of William and Mary, done as a Master's Thesis available online from the College of William & Mary)

There were approximately forty miner duplex cabins located along present-day Gayton Road near either the Gayton or Coalbrook Slope mines based on the "Gayton, Virginia – 15 miles from Richmond" map. The forty house figure is mentioned in the auction notice for the ODDC property and also by a former resident. She noted that these company owned houses were painted red and sat adjacent to the train tracks. Another source says the houses contained six rooms and shared the chimney. Photographs of those houses are found at the Virginia Museum of History and Culture's Old Dominion Development Company photo album. The author was not able to afford the cost for the rights to reproduce and publish the approximate 40 photographs in this collection for this **Compilation**.

In the years after the Civil War, Polish and Hungarian miners from the anthracite mines of Pennsylvania migrated to Henrico to engage in mining. These miners brought their experience and knowledge of mining to the increasingly complex mining operations in the Carbon Hills coal basin. Their nationality is mentioned in the mine explosion records and newspaper reports from the period of 1910 to 1914. It appears from newspaper accounts there were a number of arrests among the folk who lived in the Gayton mine area for domestic violence, moonshining, and thefts. Many of the foreign miners could not speak English according to newspaper reports. We also know there were African American and other white miners and laborers among the workforce at the mines during this period.

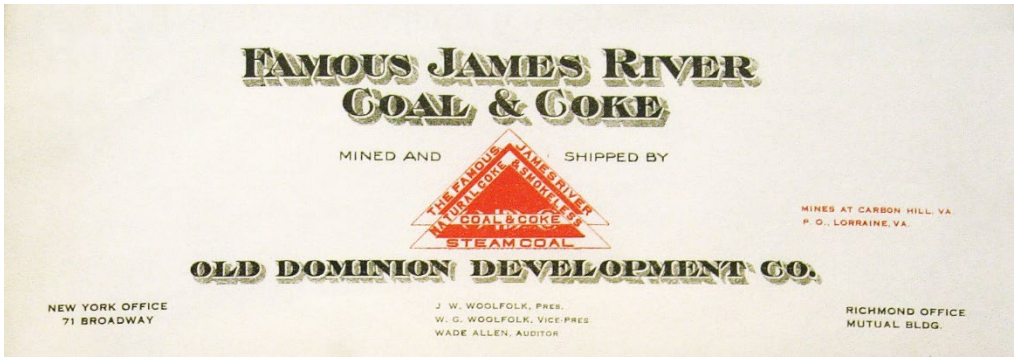
The origin of term "Gayton"

Jack Bruce has provided us with insight in to the name "Gayton" which has been used to refer to a large area in western Henrico County. The corridor between present-day Gayton Road and Lauderdale Drive has been referred to as "Carbon Hill" and "Gayton" in different publications and articles. More than one map used a designation of "Coal Hill."

The use of the name "Gayton" did not come about until 1888 when a post office was established by that name on the property of the Richmond Coal Mining & Manufacturing Company ("RCM&MC"). This was third time in a century that the post office in this part of the county had been moved. It was previously at Lorraine and another location. Prior to 1888, at least during much of the mid-to-late 1800s, the general area now known as Gayton was referred to as "Carbon Hill." The RCM&MC under the leadership of Ware Billings Gay, used the name Carbon Hill early in its existence and switched to Gayton upon the creation of the post office at the mine. Virginia Coal and Coke Company, successor operator of the RCM&MC properties, continued the use of the Gayton name. Interestingly, the Old Dominion Development Company ("ODDC") which acquired the RCM&MC property in 1905, reverted to the use of the name Carbon Hill.

(source: Jack Bruce correspondences, 2024)

Below is a copy of an ODDC letterhead (circa 1911) referred to "Mines at Carbon Hill, Va." using a Lorraine, Va. post office address as well as business addresses in Richmond and New York.



Document 6. (source: Virginia Museum of History and Culture website)

There were at least two geographical areas in proximity to each other named "Gayton" where the coal miners and their families lived. The Virginia Department of Historical Resources designated an area off of present-day Gayton Road west of Pump Run in the current Kingsley neighborhood as the "Village of Gayton." There is photographic evidence of the existence of the Village of Gayton from two sources. Jack Bruce's research indicates that this Village was built by the Old Dominion Development Company in the early 1900's. He compared contemporary photographs from around 1910 sourced from the Virginia Museum of History and Culture's files on the Old Dominion Development Company to those taken by Edward F. Heite in 1968 at the site of the current Kingsley neighborhood.

Jack observed "We can only surmise the reason why the two areas developed as they did. We do know that the area along the Tuckahoe & James River was densely developed, would have certainly contained many older structures (possibly in various states of disrepair), and had numerous mine shafts within sight. Perhaps the ODDC sought to create a "suburb" … a place with homes removed from mining activity, yet still within a reasonable distance from the scene of mining activity at Old Dominion No. 1 at

Coalbrook. Contemporaneous photographic evidence in the VHS ODDC Photo Album shows that these structures were well-built homes, particularly the president's home. Even the miner's cottages were nice. One of these was also recorded by Heite in 1968.

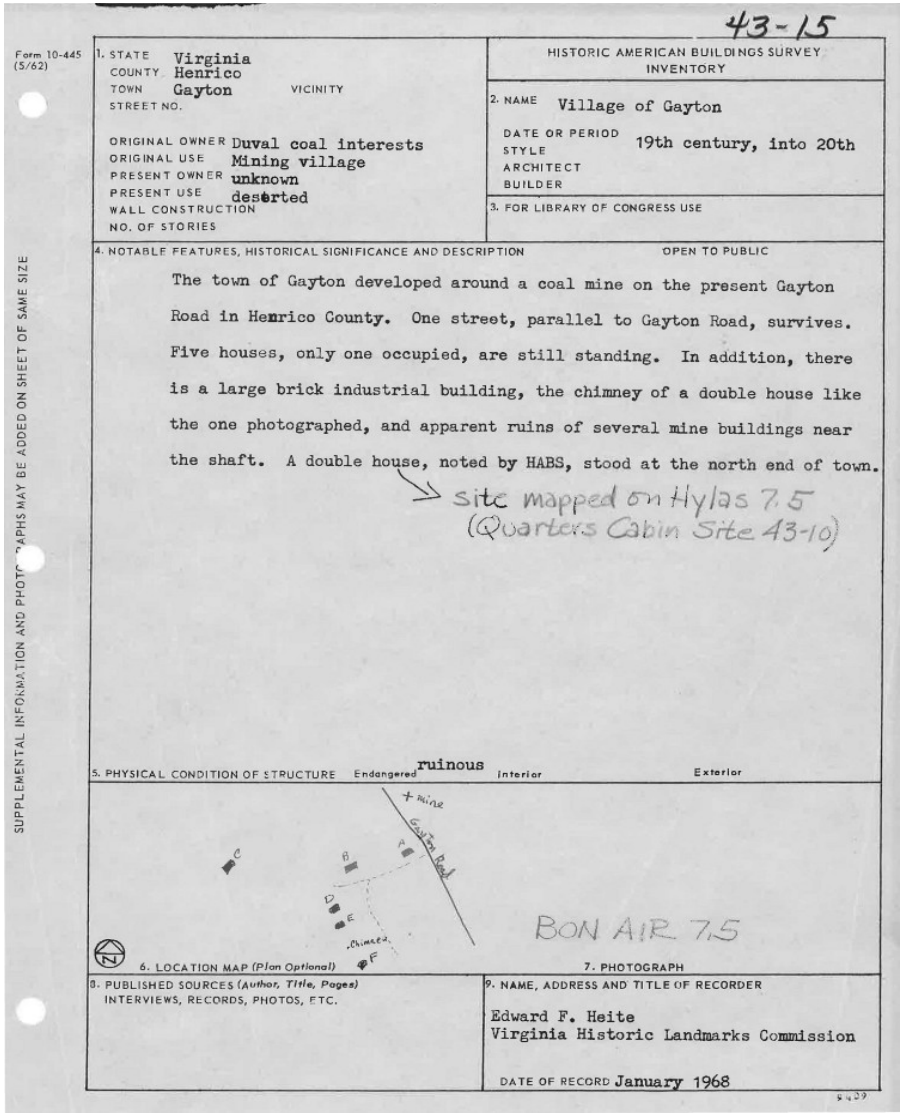
Restoration of the Carbon Hill name was as short lived as the ODDC. We can only guess as to why the use of the Gayton name was discontinued by them. With the Woolfolks being from Columbus GA, and having activity in Alabama, perhaps they were familiar with the Carbon Hill mines in Alabama. Despite the ODDC's attempt to rename the area Carbon Hill, the name Gayton stuck in the popular mind. This may have been the result of Ware Gay, an ongoing promoter of the coal mines there, who moved to the Richmond area and did not die until 1934."

For reference, there is a hamlet of Gayton in Northamptonshire, England.

Edward F. Heite wrote **Inventory of Early Architectural and Historic Sites** which was published by the County of Henrico in 1976. In this preface, he wrote "DEDICATED TO THE PEOPLE OF HENRICO COUNTY AND TO THE PERPETUATION OF THOSE HISTORIC SITES, NATURAL RESOURCES, AND HUMAN VALUES THAT HAVE ENRICHED THE COUNTY IN THE PAST, AND WHICH THROUGH CAREFUL PLANNING MIGHT BE PRESERVED FOR FUTURE GENERATIONS." This 322 page book contained detailed information and photographs of many early structures in Henrico County, some of which stood in 1976 and others which had vanished with time. In this book, he discussed the architectural styles that were used with various buildings and provided illustrations to highlight those styles. Of interest to this **Compilation**, Mr. Heite documented what had remained of the Gayton of Village, the Wickham Cabin, and other western Henrico landmarks. In 1995, Susan Smead and Marc Wagner wrote **An Update Of The Inventory Of Early Architecture and Historical and Archeological Sites, County of Henrico, Virginia** which was published by Henrico County. Other of these books can be found via an internet search.

The Village of Gayton (built by the Old Dominion Development Company around 1907 – 1910)

In January 1968, Edward F. Heite of the Virginia Historical Landmark Commission (later named the Virginia Department of Historical Resources) surveyed and mapped an area along present-day Gayton Road that had been identified as the Village of Gayton. Below is his report:



43-15

Form 10-445 (5/62)

1. STATE Virginia
COUNTY Henrico
TOWN Gayton VICINITY
STREET NO.

ORIGINAL OWNER Duval coal interests
ORIGINAL USE Mining village
PRESENT OWNER unknown
PRESENT USE deserted
WALL CONSTRUCTION
NO. OF STORIES

HISTORIC AMERICAN BUILDINGS SURVEY
INVENTORY

2. NAME Village of Gayton
DATE OR PERIOD 19th century, into 20th
STYLE
ARCHITECT
BUILDER

3. FOR LIBRARY OF CONGRESS USE

4. NOTABLE FEATURES, HISTORICAL SIGNIFICANCE AND DESCRIPTION OPEN TO PUBLIC

The town of Gayton developed around a coal mine on the present Gayton Road in Henrico County. One street, parallel to Gayton Road, survives. Five houses, only one occupied, are still standing. In addition, there is a large brick industrial building, the chimney of a double house like the one photographed, and apparent ruins of several mine buildings near the shaft. A double house, noted by HABS, stood at the north end of town.

site mapped on Hylas 7.5
(Quarters Cabin Site 43-10)

5. PHYSICAL CONDITION OF STRUCTURE Endangered ruinous Interior Exterior

mine
Gayton Road
A
B
C
D
E
Chimney
F

BON AIR 7.5

6. LOCATION MAP (Plan Optional)

7. PHOTOGRAPH

8. PUBLISHED SOURCES (Author, Title, Pages)
INTERVIEWS, RECORDS, PHOTOS, ETC.

9. NAME, ADDRESS AND TITLE OF RECORDER
Edward F. Heite
Virginia Historic Landmarks Commission

DATE OF RECORD January 1968

SUPPLEMENTAL INFORMATION AND PHOTOGRAPHS MAY BE ADDED ON SHEET OF SAME SIZE

Document 7. (source: Virginia Department of Historical Resources)

The Heite report appears to identify the location of the Village of Gayton as near a mine on present-day Gayton Road but does not provide the name of the mine. There are a total of 6 structures marked on the map. The report also provides a reference to a double house site mapped on Hylas 7.5 (Quarters Cabin site 43-10) which Mr. Odell's described as " this framed servants quarters near Gayton was photographed by the Historic American Buildings Survey in 1940, and has since disappeared. Probably built in the mid-19th century, it appears to have had a two-room plan with twin front doors and an upstairs loft. The rear ell was probably added in this century. The house is said to have accommodate two families as recently as the early part of this century."

Photo 37. (source: PDF document from Virginia Department of Historical Resources cited with permission of the VDHR).

An Historic American Building Survey done sometime after 1933 did capture three images of what was captioned as Quarters Cabins, Gayton Road Vicinity, Glen Allen, VA found in the Library of Congress. The photograph above comes from this collection. The photographs below appears to be a duplex cabin based on the two front doors, two chimneys and two front windows. There were probably bedrooms in the loft / attic. The Bradford subdivision in Wyndam now covers this site.

Photo 38. (source: Library of Congress, https://www.loc.gov/item/va0507/)

In the Library of Congress website, this and the following photographs were identified as part of the "Quarters Cabin, Gayton Road vicinity, Glen Allen, Henrico County, VA Photos from Survey HABS VA-222". HABS stands for Historic American Buildings Survey. The Historic American Buildings Survey (HABS) began during the Great Depression in December 1933, when Charles E. Peterson of the National Park Service submitted a proposal for one thousand out-of-work architects to spend ten weeks documenting "America's antique buildings." Having operated under various administrative authorities for its first two years, HABS became a permanent program of the National Park Service in July 1934 and was formally authorized by Congress as part of the Historic Sites Act of 1935. The Historic American Engineering Record (HAER) was founded in 1969 to parallel HABS, providing for documentation of engineering works and industrial sites. In October 2000, the Historic American Landscapes Survey (HALS) was permanently established to document historic landscapes. The HABS/HAER/HALS collections at the Library of Congress have grown to constitute a unique, valuable, and extensive repository of knowledge about American buildings, industries, engineering works, and landscapes. Today's documentation is produced primarily by students pursuing degrees in architecture and in history, and the HABS, HAER and HALS

programs have proven to be an important training ground for several generations of architects, engineers and historians. (See HABS, HAER, and HALS at the National Park Service Web site for additional history of the programs.)

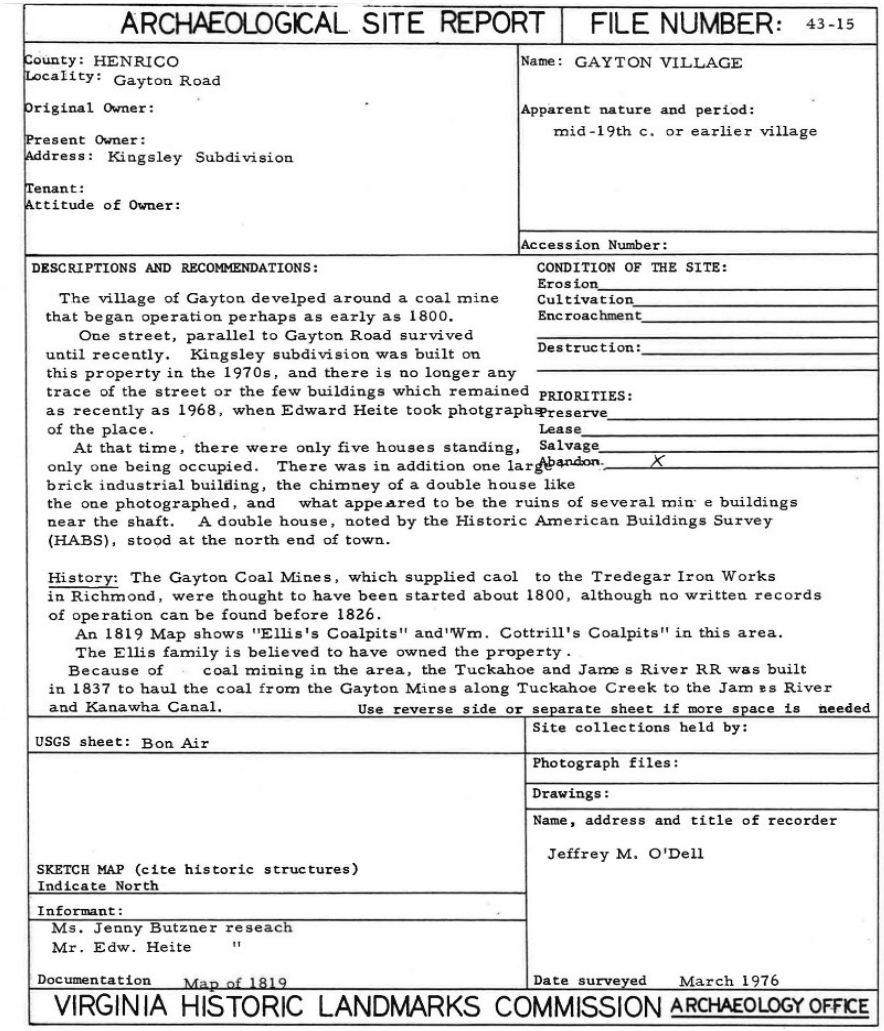
The following screenshot came from **From the Mines of Henrico: The Beginning of Our Nation's Coal Industry** produced by the Henrico County Public Relations and Media Services. It is a typical 1 ½ story cottage that was built in this area according to the survey of Jeffrey O'Dell. It is similar to photograph 61 taken by Mr. Heite in 1968 in an area described as the Village of Gayton.

Screenshot 5.

The following photograph from the same Library of Congress collection. This building was labeled as a double house in Tuckahoe VA. The exact location was not included in the available documentation so it is uncertain as to its proximity to the coal field or connection to the coal mining community.

Photo 39. (source: https://www.loc.gov/resource/hhh.va1449.photos)

In 1976, the Archeology Department of the Virginia Historical Landmark Commission (renamed to the Virginia Department of Historical Resources) made another report dated March 1976, authored by Jeffrey M O'Dell. Mr. O'Dell located the Village of Gayton on the present-day site of the Kingsley residential development, which is just west of Pump Road and south of Gayton Road. The following is Mr. O'Dell's report and associated papers:



ARCHAEOLOGICAL SITE REPORT | FILE NUMBER: 43-15

County: HENRICO
Locality: Gayton Road

Original Owner:

Present Owner:
Address: Kingsley Subdivision

Tenant:
Attitude of Owner:

Name: GAYTON VILLAGE

Apparent nature and period:
mid-19th c. or earlier village

Accession Number:

DESCRIPTIONS AND RECOMMENDATIONS:

The village of Gayton develped around a coal mine that began operation perhaps as early as 1800.

One street, parallel to Gayton Road survived until recently. Kingsley subdivision was built on this property in the 1970s, and there is no longer any trace of the street or the few buildings which remained as recently as 1968, when Edward Heite took photgraphs of the place.

At that time, there were only five houses standing, only one being occupied. There was in addition one large brick industrial building, the chimney of a double house like the one photographed, and what appeared to be the ruins of several min e buildings near the shaft. A double house, noted by the Historic American Buildings Survey (HABS), stood at the north end of town.

History: The Gayton Coal Mines, which supplied caol to the Tredegar Iron Works in Richmond, were thought to have been started about 1800, although no written records of operation can be found before 1826.

An 1819 Map shows "Ellis's Coalpits" and "Wm. Cottrill's Coalpits" in this area.

The Ellis family is believed to have owned the property.

Because of coal mining in the area, the Tuckahoe and Jame s River RR was built in 1837 to haul the coal from the Gayton Mines along Tuckahoe Creek to the Jam es River and Kanawha Canal.

Use reverse side or separate sheet if more space is needed

CONDITION OF THE SITE:
Erosion
Cultivation
Encroachment
Destruction:

PRIORITIES:
Preserve
Lease
Salvage
Abandon X

USGS sheet: Bon Air

Site collections held by:

Photograph files:

Drawings:

Name, address and title of recorder

Jeffrey M. O'Dell

SKETCH MAP (cite historic structures)
Indicate North

Informant:
Ms. Jenny Butzner reseach
Mr. Edw. Heite "

Documentation Map of 1819

Date surveyed March 1976

VIRGINIA HISTORIC LANDMARKS COMMISSION ARCHAEOLOGY OFFICE

Document 8. (source: Virginia Department of Historical Resources)

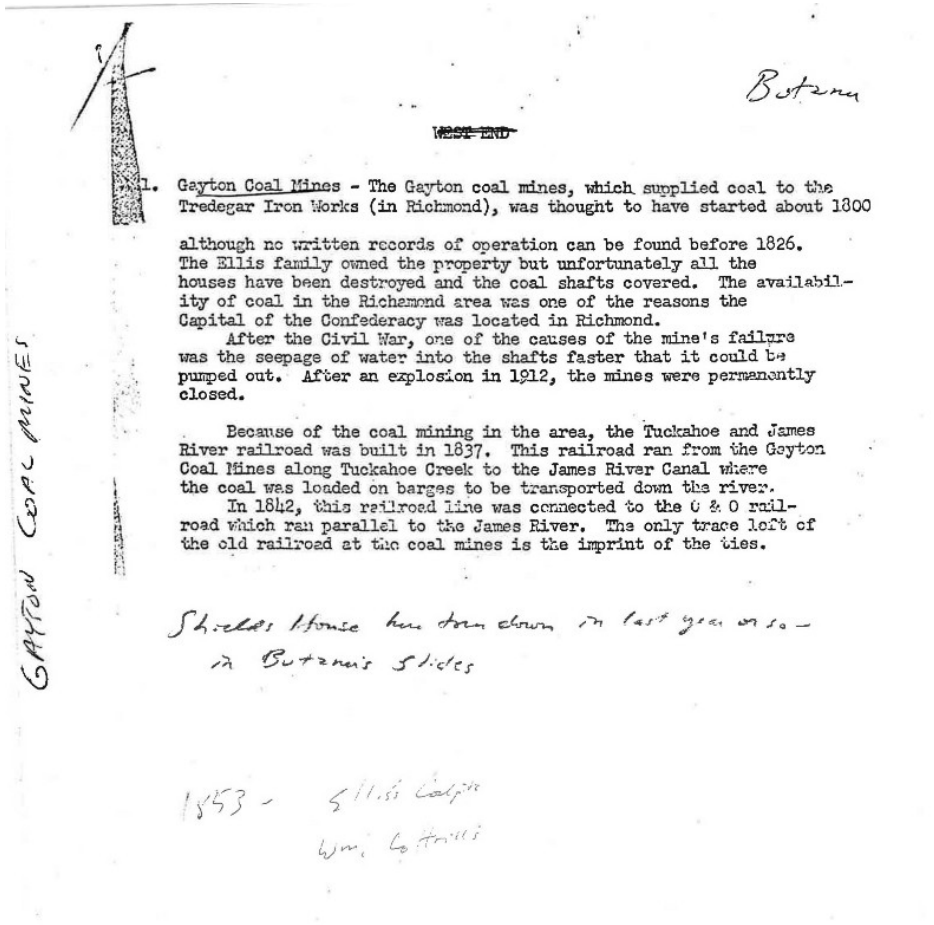
GAYTON VILLAGE AND ~~GAO~~ COAL PITS 43-15 (Bon Air) Quad)

The village of Gayton developed around a coal mine that began operation perhaps as early as 1800. As recently as 1968, a street and several buildings remained, but all traces of the town were eradicated with the development of Kingsley Subdivision in the 1970s.

Written records of the Gayton Mines do prior to 1826 have not been found; the property ~~is believed to have~~ belonged to the Ellis family in the early 19th century. Because of coal mining in the area, the Tuckahoe and James River RR was built in 1837 to haul the coal along Tuckahoe Creek to the James River and Kanawha Canal. One of the prime considerations in choosing Richmond as the Capital of the Confederacy was its burgeoning iron industry and the proximity of coal deposits. Activity at the mines declined after the Civil War, ~~and after an explosion~~ because of water seepage and other factors, and after an explosion in 1912 the Gayton mines were closed ~~xxxxxxx~~ permanently.

A few photos taken in 1968 by ~~the~~ a VHLC staff member show various mid-19th c. structures, including a most unusual dwelling with wraparound veranda characteristic of ~~the deep South.~~ architecture in the deep South.

Document 9. Included with document 8 for background information. (source: Virginia Department of Historical Resources)



Botanu

~~WEST END~~

1. Gayton Coal Mines - The Gayton coal mines, which supplied coal to the Tredegar Iron Works (in Richmond), was thought to have started about 1800 although no written records of operation can be found before 1826. The Ellis family owned the property but unfortunately all the houses have been destroyed and the coal shafts covered. The availability of coal in the Richemond area was one of the reasons the Capital of the Confederacy was located in Richmond.

After the Civil War, one of the causes of the mine's failure was the seepage of water into the shafts faster that it could be pumped out. After an explosion in 1912, the mines were permanently closed.

Because of the coal mining in the area, the Tuckahoe and James River railroad was built in 1837. This railroad ran from the Gayton Coal Mines along Tuckahoe Creek to the James River Canal where the coal was loaded on barges to be transported down the river.

In 1842, this railroad line was connected to the C & O railroad which ran parallel to the James River. The only trace left of the old railroad at the coal mines is the imprint of the ties.

GAYTON COAL MINES

Shields House has been down in last year or so — in Botanis Slides

1853 - Ellis Coal Co
Wm. Ellis

Document 10. Included with document 8 for background information. (source: Virginia Department of Historical Resources)

here the . coal was loaded on barges to be transported down the river.
In 1842, this railroad line was connected to the C&O RR which ran parallel to the James River. The only trace left of the old RR at the coal mines is the imprint of the ties.
One of the primary reasons Richmond was chosen as the Capital of the Confederacy was its iron industry and the proximity of coal deposits.
After the Civil War, one of the causes of the mine's failure was the seepage of water into the shafts faster than it could be pumped out. After an explosion in 1912, the mines were permanently closed.

Document 11. Included with document 8 for background information. (source: Virginia Department of Historical Resources)

The location of the Village of Gayton has been mapped by the Virginia Department of Historical Resources on the Virginia Cultural Resource Information System. The site is west of Pump Road and south of Gayton Road.

The following are the photographs of the Village of Gayton taken in 1968 by Edward F. Heite as part of the Virginia Historical Landmark Commission survey and photographs from the archives of the Virginia Museum of History and Culture's records on the Old Dominion Development Company taken in the early 1900's. The first row of photographs are believed to be the home of Captain Joseph Woolfolk, President of the ODDC with the photo on the left taken in 1968 by Mr. Heite and the photo on the right was taken in the first or second decade of 1900. The gentleman on the porch may be Captain Woolfolk. Note the absence of the water tower and porch in 1968.

Photos 40 and 41. (Source: Right: Virginia Department of Historical Resources. Left: Virginia Museum of History and Culture website)

The next photographs are buildings located on the site where the Kingsley neighborhood near the intersection of Gayton Road and Pump Road were located. The purpose of the some of the buildings were to provide residences for the coal miners and supervisors while some of the other buildings may have been storehouses, shops or some other type of industrial building.

Photo 42. (Source: Virginia Department of Historical Resources)

Photos 43 and 44. (Source: Virginia Department of Historical Resources)

Photo 45. (Source: "The Inventory of Early Architecture and Historic and Archeological Sites, County of Henrico" 1976 compiled by Jeff O'Dell", courtesy of Henrico County Department of Parks and Recreation)

The 1901, 1911 and 1916 T Redd maps show the area where Kingsley is located off Gayton Road today to have been part of either the R. Tinsley Estate or property owned by Ms. Powell. There is no indication of multiple dwellings on these properties on any of these maps but sometimes details were overlooked. In later maps, it appears that the R Tinsley Estate had been subdivided into multiple lots.

Virginia Coal Company / Richmond Coal Mining and Manufacturing Company Property ("Gayton Town" or "Gayton Village") built by the Richmond Coal Mining and Manufacturing Company in the 1880's.

There was a substantial community aligned along the tracks of the Tuckahoe and James River Railroad from the Saunders Shaft (the author believes to be located at the current intersection of Gayton Road and Lauderdale Drive) to the Coalbrook Shaft (which was located east of present-day Lakewood Manor between Gayton Road and Lauderdale Drive) as evidenced by a map labeled "Gayton VA – 15 miles west of Richmond" presented in three parts in a previous section of this Compilation.

This "Gayton VA – 15 miles west of Richmond" map is dated June 14, 1896. The map was created on blueprint paper and can be seen online at the Library of Virginia website. It is in two parts. The map can be viewed in greater detail on line at: https://lva.primo.exlibrisgroup.com/discovery/fulldisplay?context=L&vid=01LVA_INST:01LVA&search_scope=MyInstitution_noAER&tab=LibraryCatalog&docid=alma990015819420205756

The "Gayton VA– 15 miles west of Richmond" map provides a detailed scale drawing of the Saunders, Gayton and Coalbrook shafts that were operating at the time along with locations of creeks (Tuckahoe and Copperas), roads (Quioccasin Road and other paths between the mines), railroad lines and yards, mine offices, mining building including coal breakers, railroad engine houses, and residential dwellings, hotels, commissary, and town hall (including roof material composition). The map also showed property lines and property ownership. The map includes the location of the incline and multiple layers of tunnels for each shaft that were dug for each coal seam. This map is consistent with a description of the property belonging to the Old Dominion Development Company (successor to RCM&MC) provided in July 2, 1919 article in The News Leader focused on the Coalbrook shaft that was the last operating mine.

An interesting feature of this map is the Eggette Plant (factory) which Mr. Gayton had started as one of his many ventures that ultimately failed. The Eggette Plant was located adjacent to the Gayton Shaft, consisting of three to six buildings looking at the drawing.

The July 2, 1919 article in The News Leader described the property of the Old Dominion Development Company recently purchased by a Mr. Cooke (after the auction of the Old Dominion Development assets). The size of the holding was described as "5,344 acres in the property (2,694 in fee simple, covering surface and coal; 705 acres is of coal only, and 1,945 acres in partial interest in coal only. The whole tract is low level bottom land, running up into gently rolling upland with no high hills or rough country. About 100 acres are cleared and available for crops, the remainder being covered with second growth timber in addition to 500,000 feet of merchantable product." *(Author note: there are 640 acres in a square mile. This tract of land of 5,344 acres would equal almost 9 square miles of western Henrico and eastern Goochland).*

The article described the buildings on the property as "Having been operated until the spring of 1914, the mine is equipped with double hoisting engines, six compressors, two 350-horsepower boilers, pumps, fans and washer plant, machine shop with tool equipment. The boiler house is [made] of corrugated iron and other buildings of frame. There are forty double tenements of six and eight rooms each, two boarding houses, one church, president and vice-president's houses, one clubhouse, commissary, supply house, office and one large brick barn." The hotel and town hall shown on the "Gayton VA – 15 miles west of Richmond" were not listed in this article. Another map identifies the hotel as the Belmont. The town hall may have been a social hall as some accounts mention a gathering place where dances were held.

(Source: Virginiachronicles.com, The News Leader, July 2, 1919)

The Commissary (or company store) located in Gayton Town. This was most likely built by the Richmond Coal Mining and Manufacturing Company in the 1880's and was part of the assets sold at auction to the Old Dominion Development Company. There was also a social hall labeled the "The Clubhouse," maybe it served community center or was the "dance hall" as described by the late Ms. Andrew Fore, a Gayton Town resident, in an article from the Henrico County Historical Society. A photograph of the Commissary and Clubhouse are found in the Virginia Museum of History and Culture's Old Dominion Development Company photo album.

Photo 46 (source: Ken Thacker)

The photograph above was taken by Kenneth Thacker in 1982 for his English freshman year college term paper entitled “An exercise in futility: Coal Mining in Henrico County”. Mr. Thacker lived in this area of the counties in the 1970’s and was familiar with the many trails and dirt roads, ruins, and pits. He wrote:

“A view down one of the old roads that radiated from the loosely defined boundaries of the town of Gayton. The arrival of sub-divisions, along with drastic road improvements, left this stretch little more than a dirt hiking trail. This un-named road (that was probably trod upon by Civil War soldiers) is rapidly being reclaimed by nature.”

There are several written accounts from former residents of the area about life in the coal mining community.

In the May 1987 edition of the weekly newspaper Short Pump Express, Ms. Andrew Fore was cited for the following information:

"Mrs. Andrew Fore has given us photographs, dated 1919 of several buildings at the mines. Her father, she says, worked in the machine shop and helped to maintain tram cars that were used in the mines. She remembers that there was a doctor's office, a dance hall, a commissary, and a hotel in Gayton Town. There were several rows of hours along the tracks, all painted barn-red. When the mines were closed, her father bought one of these houses for $50.

According to Ms. Fore, the railroad engineer's name was Hall and he lived in the first house on the old line. When Mrs. Hall died, her husband took the funeral party on the flatcar down to Lorraine Station, and they walked up the hill to St. Mary's Episcopal Church for the service.

From Ken Thacker's {1982] college paper of the coal mines, we learn that there was a flatcar fitted with benches, probably used on a regular basis by those attending St. Mary's Episcopal Church in Goochland.

(Source: The Short Pump Express, May 1987, page 1.)

St. Mary's Episcopal Church in Goochland served the mining community. From the church's website: "The building was consecrated on April 20, 1878 by Bishop Francis Whittle. Throughout its earliest years, St. Mary's hosted visiting clergy and other lay leaders for services once per month, and focused its energy on serving the impoverished local coal mining and farming communities. The bell from the steam engine that hauled coal from the nearby mines rings for worship in Little St. Mary's even today."

(Source: History – St. Mary's Episcopal Church; www.stmarysgoochland.org)

Tuckahoe & James River Railroad engineer Thomas Hall and his wife are buried at St. Mary's Episcopal Church in Goochland. While the T&JR RR ceased operations after 1914, Mr. Hall went on to serve as a train engineer for the Chesapeake and Ohio Railroad for many years according to his death certificate. Mr. Hall died at the age of 87, quite an accomplishment given the harsh and grimy conditions under which a train engineer had to work in those days. The photograph below is their headstone at the cemetery. She died in 1915.

Photo 47. (source: author's visit to St. Mary's Episcopal Church cemetery)

There is a "history display" room at St. Mary's Episcopal Church which traces the formation and growth of the church. It is interesting that both the Ellis and Wickham families (possible descendants of early colliers) were among the founding families of the church. One of the displays discusses John Henry Smoot who worked as a miner at the Gayton Mines. Mr. Smoot married his wife Rosa Lee Seay Smoot in 1877. They had eleven children, some of them are buried at St. Mary's. Mr. Smoot died sometime after his wife had their eleventh child. Coincidentally, a George Smoot was killed in an explosion at the Edge Hill Shaft in 1876. George's relation to John Henry Smoot is unknown, but they were probably related as mining was a generational occupation.

Another display at St. Mary's mentions that Adolphus Denton (grave #1) worked at the Gayton mine after the Civil War. He was married to Charlotte Temple Utley (grave #2) and the two had seven children, 2 of whom, infants, are buried at St. Mary's. Families

were large in those days as the census records would reveal and infant mortality was common in rural areas where healthcare was limited in the 1800's.

In Volume 14 of the Henrico County Historical Society Magazine, there was an article about "Gayton Village". The author of the Historical Society magazine article, wrote that as a member of a tour group, the author traveled to St. Mary's Episcopal Church near Lorraine as described above and saw the graveyard of the miners on that property along with a bell that came from the steam train that ran on the Tuckahoe and James River Railroad. The article contained several photographs of St. Mary's. In this article, there was information that came from a Ms. Bagby who had grown up in Gayton Village until her father was injured in a mine explosion. After the explosion, Ms. Bagby's family moved into Richmond but returned to Gayton Village for visits. She recalled that there was a long row of barn-red story houses and a windmill, but did not mention the train tracks. In her recollection, there were about 40 houses in Gayton Village, a barbershop, company store and a tavern. She remembered that many of the coal miner families were poor and had to be transient as they moved from mine to mine as work was available. One of the most interesting comments from the article was her memory of an area near the village being fenced off because of fires that burned for years. While this author did not find any other information to indicate that there were issues with underground fires in the Gayton / Carbon Hill mines like those in Centralia, PA, it is possible that such problems were not documented.

(Source: The Henrico County Historical Society Magazine, Volume 14, 1990, edited by Dr. Henry Lee Nelson, Jr. Found in the archives at the Library of Virginia)

The photographs for Gayton Town or Gayton Village support the recollections of these two persons.

Erin Shades

Erin Shades was located at West Broad Street Road near Gaskins Road with a tavern house and home of Solomon Lovenstein in 1850. By 1881, there were three general merchants, two blacksmiths and wheelwrights, a carpenter, a miller, two sawmills, a physician and a photographer. Nearby was the DuVal and Coates farms. The tracks of the Henrico Railroad crossed in the vicinity of Erin Shades. There was also an Erin Shades Farm belonging to the Nuckols family which is the location of present-day Innsbrook about one mile west of this site.

(source: In the hands of reasonable and practical men : the lure of the Henrico Coalfields by Jack N. Bruce, Jr., 2018)

The Brock House is featured in a Henrico County Historical Society article on Short Pump. The house is described as located between Pemberton and Cox Roads on West Broad Street which places it in the area of Erin Shades. “It is not known how old the house was, but these pictures are believed to have been taken sometime in the late 1930's or early 1940's. The house had two very large rooms across a center hall that ran from back door to front. The Marshalls lived in the room on the western end of the house, which had a small kitchen attached. Mrs. Brock lived in the other room on the eastern end of the house, which had a staircase leading down to an English basement. It was said there was once a tavern keep in the basement. The house also had attic bedrooms that were unused and unusable toward the last years of the house.”

Photo 48 and 49. (source: http://henricohistoricalsociety.org/lostarchitecture.shortpump.html)

Newspaper articles dating back to the early 1870’s list Erin Shades as a voting place for Tuckahoe Township with approximately 500 votes. There are also several notes from the social pages of the local newspapers around the 1900’s of people (the Bowles family) from Erin Shades visiting relatives and friends from out of town. No news articles about Erin Shade were found after 1906.

Erin Shades is listed in the 1883 edition of Rand McNally Map as part of Coal Hill; the 1887 edition of Gray's New Topographical Map of Virginia and West Virgini, and also marked on the 1911 edition of the Rand McNally Map but not in the 1916 T Redd map shown earlier in this **Compilation**.

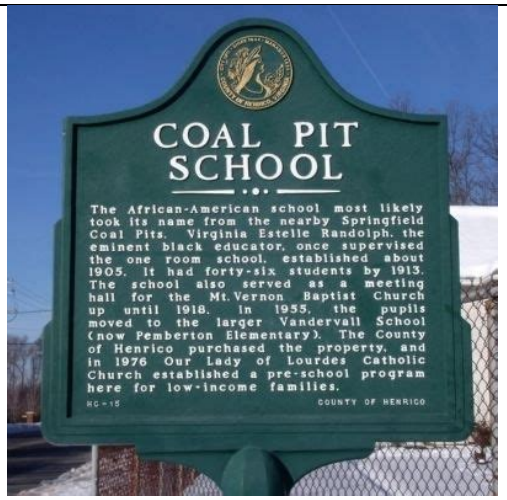
(sources: https://www.loc.gov/books/?q="erin+shades")

North Central Henrico County

The miners of Deep Run and Springfield mines probably lived in the area along Springfield Road north of Broad Street and to the east of Springfield Road toward Francistown Road. There are no records of any company owned housing or stores servicing the miners who worked these mines. There were no photographs available of the housing that prevailed at this time, the railroad line or roads that serviced the mines, or the miners. The one landmark that does not exist is the Coal Pits School that began at the end of the mining period.

“The Coal Pits School (located on Francistown Road just east of Springfield Road) was found in 1905 to educate African American children during this era of segregation. The Coal Pit School was named after the nearby Springfield Coal Mine. In those days, schools were segregated, and this was an African American school. Virginia Randolph, a famous African American educator, ran the two-room schoolhouse for years. In 1932 the students moved to a wooden school about 5 miles south named Quioccasin School, but that school burned down in 1953. A new brick school was built across the street at the intersection of Pemberton and Quioccasin Roads. It was called the Vandervall School in honor of William Leroy Vandervall, a community leader. Upon desegregation in 1971, the school was renamed Pemberton Elementary. The building is still there today... and it all started with the Coal Pit School. Today the original Coal Pit School building is a preschool and has been remodeled.”

(Source: https://virginiatrekkers.com/Henrico/CoalPitSchool/CoalPitSchool.html)



Photos 50, 51 & 52. (Source: https://henrico.us/locations/coal-pit-school-plaque/)

Springfield Farm and Hotel

Identified as (Site) 43-193 (Glen Allen Quad) in **Inventory of Early Architecture Historic Sites** written by Jeffrey O'Dell in 1976. The Inventory did not determine the exact location of this site. The probable spot is between Snow Goose Lane and Rollingwood Lane. The development of The Forest at Innsbrook subdivision has impacted the area of the site since 1987 .

Springfield, located in northwestern Henrico, was not ed in the 19th century for its mineral and sulphur springs. Prior to 1840 an entrepreneur named Burton built a resort here consisting of a large hotel surrounded by a covey of individual cottages. Richmonders who did not care to make the long journey to such mountain resorts as White Sulphur Springs made Springfield a thriving social center during the summer months.

About half a mile south of the hotel lay the Springfield Coal Pits, which had been owned and operated by the Burton family since at least the second decade of the 19th century.

Quioccasin Road

"Quioccasin Road derives its name from Indian usage. The name could evolve from the Indian name, Quiasosough, meaning a lesser deity of the Indians. Another possibility is that the name comes from the Indian word translating into a temple or meeting place, a gathering spot. A paragraph from a work dated 1705, concerning the Virginia Indians and their life style says " … The Indians have posts fix'd around their Quioccasin which have men's faces carved upon them and are painted. They are likewise set up round some of their other celebrated places and make a circle for them to dance about on certain solemn occasions."

(source: https://henrico.us/history/names-places-in-henrico/#QUIOCCASIN%20ROAD)

The maps through 1900 show Quioccasin Road beginning at Ridge Church near Three Chopt Road and running in a westward direction along its current path continuing on to Tuckahoe Creek where there was a bridge into Goochland County. At one time, Church Road and Quioccasin Road intersected according to at least one map. A large portion of the road was renamed to Gayton Road in the 20th century. The original Gayton Road began at Patterson Avenue and intersected with Quioccasin Road near the present-day Gayton Square Shopping Center.

Post Office Location

There were different three post offices for Carbon Hill area between 1873 and 1903. Those post offices were called Carbon Hill (1873-1875); Lorraine (1882-1886) and Gayton (1888-1903). The letters on William Wilcox, secretary of the RCM&MC in the Library of Virginia collection address issues of delivery of mail from Lorraine and the relocation of the post office near the Gayton mines. The 1901 map of Henrico County shows the Gayton Post Office located at the end of the Tuckahoe and James River Railroad on the land of the Richmond Coal Mining Manufacturing Company near the intersection of present-day Gayton Road and Lauderdale Drive.

(Source: **The History of Henrico County, Louis** Manarin and Charles Peple, 2011, published by the County of Henrico)

Wickman Cabin (South Gaskins Road)

Another potential example of the type of housing used by the early miners is the Wickham Cabin that has been documented by the Henrico Historical Society. It is located at the end of South Gaskins Road which was the site of the Wickman Pits.

Photo 53. (source: Henrico County Historical Society website)

Located on Gaskins Road, this "saddlebag" log structure, circa 19th century, is unique in Henrico, being of a form rarely encountered in eastern Virginia. The building consists of two separate units joined by a commonly shared chimney of crudely made bricks laid up in random American bond. Inside is wide pine flooring roughly hewn square and saddle-notched at the corners. The interstices were originally chinked with mud, but this has been replaced with brown tinted cement. Any original glass in the windows has been

removed. The land upon which the log cabin sits belonged to the prominent Wickham family through the 1800s who may have been the original owners. The property is Privately owned.

(Source: http://www.henricohistoricalsociety.org/tuckahoe.allsites.html)

The Dangers of Coal Mining

Coal and natural gas (e.g. methane) are carbon products found in mining operations. The presence of explosive coal dust mixed with natural gases (e.g., methane) created frequent explosions deep within the vertical mine shafts and horizontal tunnels that followed the coal seams. Attempts were made to expel the combustible mixture to the surface using powered ventilation shafts, but pockets of gas still accumulated. As a result, mining safety supervisors had developed techniques to detect the presence of the lethal mix before the miners were allowed to go too far into the mines, but lax procedures led to catastrophic results.

Another problem was water infiltration into the mines. As geologists point out, there are numerous layers of sentiment of shale, granite, gravel, limestone, and other rock materials that had to be excavated to get to the coal seams. In this digging process, miners often encountered aquifers and underground streams whose endless flow would flood a mine or weaken the supports to hold up the mine. Dewatering of mines was a continuous operation.

Another risk arose from digging mines in close proximity to each other. Abandoned shafts and tunnels filled with water over time. If a miner from a nearby working shaft dug far enough towards an abandoned and penetration the wall of the old shaft or tunnel, they risked being inundated with murky water with no means to escape. When underground in the dark conditions, it was hard to judge distances and the miners dug a seam of coal until there was no more to take.

A final issue was the machinery used in the mines. Early mining operations relied on pick and shovel to remove chunks of coal from a seam. Mine equipment in the late 1800's was operated by steam generated power through a series of belts, gears and cogs which drove conveyors, power drills, haul carriages and lifts, and ventilation fans. Steam vessels must be carefully monitored and managed due to high levels of pressure that can build up in the metal vessel containing the super-heated water and steam. Too much pressure in a vessel will cause an explosion of scalding hot water and steam capable on third degree burns as well as shrapnel from the vessel itself. The end-result of a boiler explosion was usually death or permanent disfigurement.

J. B. Woodworth, in his book **The Atlantic Coast Triassic Coal Field** reported the first explosion that occurred in 1817. In 1839, an explosion occurred at one of the Heath's pits in which 53 of the 56 miners present at the site were killed in the disaster. Woodworth noticed that were also explosions at the Maidenhead prior to 1839, the Wills pit in 1841, Blackheath basin in 1844, and then 1954 when 19 men were killed. Another 54 died that same year at the Chesterfield Coal Company shaft. There were fires as early as 1935 in the Blackheath mines and the Bell workings had been on fire for twenty-five years when Woodworth published his work in 1897.

A detailed discussion of the lives lost in the Chesterfield mines can be found in Volume 87, No. 2, April 1979 edition of The Virginia Magazine of History and Biography published by the Virginia Historical Society. The article by Ronald L. Lewis is entitled "The Darkest Abode of Man": Black Miners in the First Southern Coal Field, 1780-1865 (pp. 190-202). The article describes the life of the enslaved and bondsman (free) coal miners employed at the Black Heath mines.

The earliest recorded mine explosion causing death in Chesterfield County as the Cox Pit incident which killed 7 miners. There has been an earlier explosion at the Black Health Pits in 1817, but no deaths were recorded. The most fatal mine explosions were at Bright Hope (04/05/1867) resulting in 69 deaths, at Midlothian (03/29/1855) with 55 deaths and at Black Heath (03/18/1839) resulting in 40 deaths. There were at least 3 explosions between 1855 and 1882 while Bright Hope had two explosions. The 1839 explosion at Black Heath was the earliest reported. According to the available records, the total number of dead was 268 due to explosions. What is not recorded are deaths out of the mines but on the mining sites due to boiler explosion, construction accidents, coal car loading mishaps and other industrial accidents involving pulleys, conveyors, and coal crushers.

(source: https://www.wikitree.com/wiki/Space:Virginia_Mining_Disasters)

The Henrico mines had no reported deaths due to mine explosion until 1919. There were four separate explosions between 1909 and 1912 at the Carbon Hill mines killing 26 miners. January 10, 1909 : 6 deaths; January 21, 1911: 7 deaths; January 16, 1912: 9 deaths; and July 16, 1912: 8 deaths.

January 19, 1911 explosion occurred at the Carbon Hill Coal Company's Carbon Hill No. 1 Mine at Carbon Hill, Henrico County, Virginia. The government investigation report stated:

"Initial statement following the explosion: Five men killed and 4 fatally injured and 7 others injured as a result of the explosion of dynamite or gas in the Gayton mine, about 15 miles west of Richmond, early today All of the dead are Poles who came to Virginia from Pennsylvania. The 6 men who were injured are still in the mine about 1,200 to 2,000 feet from the entrance. The exact cause of the explosion is not certain."

(Source: https://usminedisasters.miningquiz.com/saxsewell/gayton.htm)

The Richmond Evening Journal of January 20, 1911 published a front page and second page article on this disaster. It will be interesting to the reader that this article discusses the mine disaster then goes on to talk about the future grand plans of the Old Dominion Development Company which owned the mine. The following is the article taken verbatim from a copy of the paper in the VirginiaChronicle.com archives:

"**5 KILLED 10 INJURED BY EXPLOSION - DEAD BODIES ENTOMBED IN LOWER LEVEL**

Blast due to Gas at Depth of Thirteen Hundred Feet - MEN MOSTLY POLES

Foreman had cautioned the men not to go further than certain point and Paid the Penalty with Their Disobedience.

Five men were instantly killed and ten were Injured, (several perhaps fatal!). In a gas explosion in Carbon Hill shaft at the Old Dominion Development Company mines at Gayton, Henrico County, this morning at 7 o'clock. The explosion occurred thirteen hundred feet below the surface of the earth, and those who escaped death or serious injury were badly shocked and made a hurried retreat for the mouth of the shaft.

Day Mine Foreman Louie Wilson had arrived at the mine but a half-hour before and gone down the shaft laying off the work and distributing the men.

"I knew that section was dangerous" said Mine Foreman Wilson to a Journal reporter, the first newspaper man on the scene. "and I had taken the precaution to mark if off with chalk in order that none of the men would venture out of the main shaft. They did not heed the mark and death was the result."

Foreman Wilson was close by when the explosion took place, and the first report that came up out of the earth was that he was among those killed. He, however, proved himself to be very much alive by organizing what few of the men he could secure and formed a rescue party, taking out the injured. No foot, however, had been set in the pocket where the five miners met death until the arrival of Acting Coroner Dr. J. Fulmer Bright. Upon the coroner's arrival at 1:30 o'clock this afternoon he quickly empaneled a jury and ordered the bodies brought up.

Women at Shaft.

When the news of the explosion was sent through the little mining camp hundreds of people gathered about the little mine and many women, mothers and wives of the dead and injured, became hysterical.

One woman actually assisted in carrying her injured husband to the office of the company, a hundred yards away, where company physician Dr. T. D. Dunn, rendered him assistance, along with the others Injured. Dr. Hugh Taylor, of Richmond, also helped to dress the wounds of the unfortunate coal diggers.

Used Naked Lamps

Foreman Wilson is the only one of the fifty miners who entered the shaft this morning who used a protected lamp. The others, the men who were killed and injured, wore upon their caps what is known as "naked" lamps. These, of course, ignited the gas and the explosion followed. Had the men worn protected lamps the explosion would not have occurred. It was learned from one of the miners, Charles Deiter, who was in the mine at the time and whose father and brother wero among the seriously injured.

“I have been in four explosions in my life," aid young Deiter, "but never again. I never expect to enter a mine again.”

The five men killed were all Hungarians and Poles. They are known by numbers only to the company and therefore It was impossible to get all their names. The names of Frank Herger and Louis Lavlnka, however, were secured from a miner who knew them both and who also narrowly escaped death. Although The Journal reporter attempted to learn the names of the dead and injured from men and women about the shaft here was unsuccessful due to the fact that they could absolutely not speak English.

Among the injured were Jeff Deiter and his son Ralph, both badly burned; Tony Oraldo cut above the eye and seriously burned over body. Seven others were badly hurt, although their names could not be learned.

After being taken from the shaft, the elder Deiter, it was learned, had been overcome with after-damp or black damp, the fumes from the gas.

Near Main Shaft

The explosion, fortunately, occurred below where the greater number of men were working . If they had been caught with fire and fumes above them, probably every man would have met death.

Had Premonitions

Lee Seay, a miner who had been ill for some days, said that he had expected to return to work this morning, but that a premonition that an explosion was to occur prevented him. "People say there Is nothing in pre-monitions, yet the one I had last night saved my life," declared Seay.

'We had an explosion here four months ago. Eight men were Injured, some being badly burned," said Mr. Seay "The day before the accident one of the men said he had a premonition that something was going to happen. He remained away the next day. Sure enough, there was an explosion, and that, too, right in the pocket he had been working."

Officials Differ

Vice President W. Q. Woolfolk, the Old Dominion Development Company, said that the explosion was caused by the premature discharge of a stick of carbon, an explosive known as 'safety powder." Foreman Wilson, however, declared to a Journal "reporter that the accident was due to one of the miners crossing the line into a pocket of gas. The foreman, however, and all others about the mine declined to say anything after a conference with officials at the company's office.

Gayton is on the Tuckahoe and James River Railroad, which connects with the Chesapeake and Road at Lorraine, five miles from this plant. It Is fourteen miles from Richmond.

Usually there are about 200 people in the shaft, although there were but fifty on the day shift today. The coroner's jury, which will investigate the explosion, is composed of the following men: R.G. Ellis, Wilbur Pierce. Lynn Conway, L. A. Snead, J. W. Henley, F. J. Browning.

An explosion occurred at the same mine four month ago when eight men were burned.

Dr. Taylor Summoned

Dr. Hugh Taylor, who was dispatched to the mine in response to a request for additional medical assistance, made an examination of the injured immediately upon reaching the scene, several of whom he ordered hurried to the Virginia Hospital, this city. Their condition was regarded as such that the very best of attention was required.

Several others who were Injured he deemed not sufficiently hurt to necessitate their removal to this city, and. after treating them, he left them at their homes.

Most of the Injured had been conveyed to their homes, or boarding houses, upon the arrival of Dr. Taylor. Dr. Taylor did not explore the mine, nor the dead. "I had my hands full with the living" he explained adding “and, then again, I would have been of no assistance to those who had expired."

Asked if more fatalities would result, Dr, Taylor said “Several of the men were seriously Injured and may not survive their wounds,"

The Injuries Include burns, bruises, fractures, and dislocations. One man had both shoulders dislocated. Dr. Taylor stated it was his opinion that the explosion was caused by the carelessness or negligence of one of the men, who exploded a dynamite cartridge within the danger line. An explosion of fire damp occurred in Dr. Taylor's belief, sufficient to maim and wound the men within the mine, but not sufficient of force as to wreck the mine. According to Dr. Taylor, operations were not interrupted at the least.

“The explosion was entirely local,” he explained, ”and probably remote parts of the mine were not aware of the accident. Certainly the outward appearance of the mine gave no indication of an accident. Sections of shafting within that part of the mine where the explosion occurred did not cease their running."

The men killed and injured were apparently grouped in one part of the mine.”

(source: VirginiaChronicles.com, The Richmond Evening Journal, January 20, 1911, page 1 and 2).

Less than a year later, another disaster occurs as reported at https://usminedisasters.miningquiz.com/saxsewell/gayton.htm.

On July 16, 1912, at the Old Dominion Development Company there was a Carbon Hill Mine Explosion in Gayton, Henrico County, Virginia resulting in eight dead.

"(From Bureau of Mines Report, by H. I. Smith)

The shot firer went to the face of 2d left gangway and found an accumulation of gas, then went back and told some men that he going to take a change in firing shots in the face with fuse instead of using a battery. He lit his pipe and went back to the face and charged the holes. He lit one fuse with his pipe but failing to light the second fuse from the first one, he struck a match, which ignited the gas, resulting in an explosion with killed eight men and injured another. The explosion was confined to six rooms along the gangway. Two rescue parties put/up a canvas brattice line and recovered the bodies. Some of the rescue men were overcome but revived by use of compressed air. The mine was gassy, ventilation was weak, and open lights were used on the slope and main gangway; safety lamps were supposed to be used in all other parts of the mine. The coal dust present did not propagate the explosion. From January 1909 to June 1912, 6 explosions in this mine resulted in the death of 28 men and injury to 32 others."

(Source: https://usminedisasters.miningquiz.com/saxsewell/gayton.htm)

In the July 18, 1912, edition of The News Leader, the headline states that a coroner's jury found that human life was not properly safeguarded there (Gayton Mines) and urges prompt state investigation. The coroner's jury found Donnelly, the shotfirer, to be responsible for the explosion. The News Leader noted that "That the state law, passed by the last general assembly, authorizing the employment of a state inspector of mines has not been carried out since passage of the law. That since passage of the law, an inspection of Gayton mines has not been carried out."

(source: VirginiaChronicles.com, The News Leader, July 18, 1912, page 1).

While researching graveyards for the miners, one source mentions that eight miners who died in an 1800's explosion are buried with unmarked stones at the private Cauthorn-Brown cemetery on Pump Road.

A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

VIRGINIA DEPARTMENT OF ENERGY BROCURE EXTRACTS

Abandoned Mine Land Program

"The Abandoned Mine Land (AML) Program, which is administered by the federal Office of Surface Mining Reclamation and Enforcement (OSMRE), was established in 1977 with the passage of Title IV of the Surface Mining Control and Reclamation Act (SMCRA). The purpose of the AML program is to eliminate human health and safety hazards caused by coal mining practices that were in place before August 3, 1977, as well as to reclaim and restore land and water resources that have been adversely impacted by coal mining operations. Prior to SMCRA, there was no federal law requiring mining companies to secure dangerous mines or clean-up the environmental problems created by a mining operation, and laws at the state level were relatively ineffective, so many coal mine sites were simply abandoned, left deteriorating and polluting the surrounding landscape. In the case of the Richmond Coalfield, many mines were left open, creating falling and entrapment hazards throughout the coalfield."

Abandoned Mines - Greater Richmond Area

"In accord with the provisions set forth in SMCRA, fees are charged to active coal mining companies on every ton of coal that is produced, and these fees are deposited in the AML Program fund to be distributed to states and Native American tribes that need the money to reclaim abandoned mine sites. Each year, the states and tribes with historic coal production, and subsequent AML problems, are given a certain amount of the AML fund for reclamation. Virginia obtained primacy from the OSMRE to regulate its coal industry in 1981. The Department of Energy's Mined Land Repurposing ("MLR") Program administers the state's coal surface mining reclamation program, which regulates current coal mining activities and administers the AML program. The agency oversees the reclamation of abandoned coal mine features located throughout the state, including Richmond.

As part of the AML program in Richmond, AML specialists conduct field work throughout the historic coal mining districts of the Richmond area in order to locate and document any type of coal mining related features. Using a global positioning system (GPS) device, the coordinates of the features are obtained and any special characteristics of the feature are noted. The data is then uploaded into a database that keeps track of all AML inventory features throughout the state, which is available to the public through an online mapping tool. In the Richmond area, some of the abandoned coal mining features include vertical openings (also called shafts), pits, spoil piles, relict structures, and remnants of coal rail lines. Each feature is given a priority ranking, and the AML features that pose the greatest threat to public health and safety, typically the vertical openings, are given the highest priority for reclamation.

So far, over 85 hazardous abandoned coal mine features have been reclaimed in the Richmond Coalfield as a result of AML inventory and AML funding."

The following photographs were obtained from the Richmond Coalfield Abandoned Mine Land Program Flyer.

Photos 54 and 55. (Source: Virginia Department of Mining)

Below are photographs of "an emergency was called in by a citizen for a subsidence feature that opened up in her backyard. MLR responded by quickly reclaiming the feature and restoring the yard to its original conditions, eliminating this serious AML hazard."

Photos 56, 57 and 58 (Source: Virginia Department of Mining)

Below is “a vertical opening was discovered by MLR during the inventory process. The property owners were contacted and informed of the AML feature on their property and agreed to have it reclaimed. The vertical opening was filled and capped, and typical marker posts were installed to indicate its location.”



Photos 59, 60 and 61 (Source: Virginia Department of Mining)

Contact Information

Please do not hesitate to contact MLR if you are concerned that you may have an AML feature on your property, or have general concerns about AML features that you may know of around your area! Also, if you have any questions about the AML program or the Richmond Coalfield, please feel free to call or email using the contact information below.

Contact: Lorrie Skiffington, Project Manager AML
Phone: (276) 639-2045
Email: lorrie.skiffington@energy.virginia.gov

Contact: Melissa Rosendale, Project Inspector
Email: melissa.rosendale@energy.virginia.gov

"Virginia Energy is presenting these maps in response to Chapter 706 of the Virginia Acts of Assembly (2006). The legislation requires that the seller of any new dwelling in Planning District 15 disclose in writing to the purchaser whether they have knowledge of previous mining on the property, or the presence of abandoned mines, shafts, or pits. These maps depict locations of abandoned mines contained in the publications, databases, and archives of Virginia Energy. The mines are shown as symbols plotted on U.S. Geological Survey 7.5-minute quadrangle topographic base maps at a scale of 1:24,000, presented as Portable Document Format (.pdf) files. At this scale, one inch is equal to 2,000 feet. The larger map below is an index to abandoned mine location maps. Red boxes indicate maps that are currently available. Clicking on a red box will open a link to a .pdf file containing the map associated with that area." For the interactive map, go to https://www.energy.virginia.gov/coal/mined-land-repurposing/AMLGreaterRichmond.shtml

(Source: https://www.energy.virginia.gov/coal/mined-land-repurposing/Abandoned-Mine-Land.shtml)

Another source of information on the reclamation program came from a presentation made at the 2013 ITGAUM/CEGAS Annual Technical Forum at James Madison University by Steve Pond of Schnabel Engineering. In this presentation, Mr. Pond summarized the history of the Richmond Coal basin noting there were hundreds of drill holes, exploratory pits, slopes, shafts and mine pits scattered in a four county area upon which suburban development encroached starting in the late 1950's. Many of these mining operations were never documented in the 1800's as miners would move from one site to the next site as the coal was exhausted and there were no mining regulations or governing agencies to oversee what was going on at the mines. As a result, when developers started to build neighborhoods in Chesterfield and Henrico, many were not aware of the mines that lay beneath the residential neighborhoods they were constructing as well as some commercial buildings. When the ground began to collapse behind houses and businesses, firms like Schnabel Engineering were engaged by the Virginia Department of Mining to remediate the site.

One of the Schnabel projects was the Mini Storage facility on West Broad Street west of Gaskins Road. This area lies just south of the Deep Run mines and may also have been a site of mining activity in the 1920's when Frank Hagan and John Tibbs obtained mineral rights to C. B. Cottrell's' 370- acre farm on Deep Run Creek under a five year royalty lease. At this site, the ground under part of the storage facility caved in causing damage to the foundation and walls which had to corrected as shown in the following photographs.






Photos 62 through 67 (Source: Steve Pond, Schnabel Engineering)

There have been no further issues after the remediation process was completed.

A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

Recommended Reading and Videos on the topic of Henrico Coal

If this **Compilation** inspires you to learn more, the author recommends the following books, articles and videos:

The authoritative narrative **In the hands of reasonable and practical men : the lure of the Henrico Coalfields** written by Jack N. Bruce, Jr. in 2018. This history of coaling mining in Henrico County is a very thorough chronology of the evolution of the industry from the 1700's until its final demise in the 1940's. Mr. Bruce has researched and documented the affairs of many companies that came and went from surviving company records, newspaper reports and court records. His narrative covers the activities of those employed in the mining region and the transformation of rural western Henrico into the suburban sprawl which consumed the former Gayton / Carbon Hill and Deep Run / Springfield properties. Mr. Bruce's work is found in the reference section of the Tuckahoe and Varina branches of the Henrico County public libraries.

Publication 085 from the **Virginia Division of Mineral Resources** published in 1988 entitled **Mining History of the Richmond Coalfield of Virginia** written by Gerald P. Wilkes. The Publication can be found and downloaded online. This is a fact filled 58-page booklet with maps and illustrations, some used in this **Compilation.** Mr. Wilkes served as a Virginia state geologist whose work provides an excellent source of information about the unique geology of Central Virginia, a historical overview of mining in the area, and detailed information on the operations and location of the Henrico mines. Search online at https://www.energy.virginia.gov/commerce/ProductDetails.aspx?productID=1453.

From the Mines of Henrico: The Beginning of Our Nation's Coal Industry. A twenty-minute video that can be found on YouTube that was produced by the Henrico County Public Relations and Media Services. To view this video, please use your favorite web browser and search for https://www.youtube.com/watch?v=tU7E2WpfVrA.

This video includes interviews with Henrico County employees Karen Sicola and Lisa Denton who are responsible for the history program within the Henrico Parks and Recreation Department. These presenters are very well informed about Henrico County's past. The video shows a substantial number of photographs, some of which this author has been able to obtain and reproduce for this **Compilation** and features Gerald Wilkes. Mr. Wilkes takes the viewer on an adventure to the remnants of coal mining operations between Lauderdale Road and Patterson Avenue as well as providing a brief overview of what was occurring in the coal mines of Henrico. The video was produced by Dave Letourneau of Henrico County Public Relations.

A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

The History of Henrico County written by Louis Manarin and Charles Peple, 2011, published by the County of Henrico. The Book is found in the reference section of the Henrico County Public Library and at the Library of Virginia in downtown Richmond. This is also a 1984 edition of this same title by Louis Manarin and Clifford Dowdey at the Library of Virginia.

Henrico County Historical Society Magazine published by the Henrico County Historical Society edited by Dr. Henry Lee Wilson, Jr. Bound volumes are found in the reference room at the Library of Virginia. Volume 14 (1990) recounts the history as documented by Louis Manarin and Gerald Wilkes. Volume 15 (1991) tells the story of the Hungary Station on the RF&P including to the probable location of the station identified by local preservationist Dr. Robert Bluford.

The Tuckahoe Creek Navigation – Coal to Richmond by William Trout published in 1964. This typewritten manuscript was obtained from the Virginia Department of Historical Resources.

On a historical note, many Henrico County records that could have provided more insight about the early days of the mining operations were destroyed when the British occupied Richmond from 1780 to 1781 and again by the Confederates in 1865 during the Great Evacuation fire at the end of the Civil War. We are fortunate to have the records that survived.

An Archipelago of Coal Pits: Predicting Archeological Features in the Richmond, Virginia Coalfield by Jacqueline Louise Hernigle, 1991, published at the College of William and Mary. This was her Master's Thesis available online from the College of William & Mary).

The Richmond coal basin: a compilation in three parts by Ira F. Davis and L. S. Evans, 1938 found in the closed stacks at the Library of Virginia. Contained reports from geologists in the Part One, Frank Wadleigh's 1935 report in the Part Two, and

Inventory of Early Architectural and Historic Site, Jeffrey M. O'Dell, December 1976, published County of Henrico, Virginia. Found on internet using the book title as search name.

An Update of Inventory of Early Architectural and Historical and Archeological Sites, Susan Smeed and Marc Wagner, 1995, published County of Henrico, Virginia. Found on internet using the book title as search name.

Story of the Richmond Coal Fields by F R Wadleigh, circa 1935 found in the closed stacks at the Library of Virginia

A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

The Maps Used In This Compilation

Access to maps of the western part of Henrico County was very important in understanding where the railroads and mines were located and to identifying land ownership and landmarks that may still exist. Maps were found from internet searches, the archivists at the Library of Virginia, and recommendations from individuals who were collaborators on this **Compilation**.

1853 – **Smith's Henrico County Map from Library of Virginia** ("1853 Smith Map") in JPG format. The reader can zoom in to see road names, creeks, location of residences with owners' names, bridges, and location of coal shafts and pits including those pits north of the terminus of the Tuckahoe and James River Railroad that are not included in other maps.

1856 – **Map of the New York and Richmond Coal Company** operations in the area of Springfield Road serviced by the New York & Richmond Railroad connection with the RF&P at Hungary (present day Laurel). The map shows all of the major rail lines in Hanover, Goochland, Henrico, and Chesterfield along with the location of some mines. This map can be viewed online from the Library of Congress.

https://www.loc.gov/item/98688566

1858 – **Map of the Richmond Coal Fields.** S. Herries DeBow, Mining Engineer and Geologies created a map of the Richmond coal which was lithographed by Ritchie & Dunnavant, Richmond, Va. showing the major coal fields in Powhatan, Chesterfield, Henrico, and Goochland counties. The map orientation is confusing to a modern reader accustomed to a north to south presentation. The upper quadrant of the map is west, the right quadrant is north, the lower quadrant is east, and the left quadrant is south. The original map measured 36 x 42 cm. on sheet 57 x 51 cm. using a scale of ca. 1:227,500. Mr. DeBow would be involved in the New York and Richmond Coal Company mining at the Deep Run and Springfield mines in the late 1850's. Available online from Yale University through https://collections.library.yale.edu/catalog/15811282

1862 – **Map of parts of Hanover and Henrico County from the Gilmer Map No. 522** from Collection at UNC Chapel Hill - Jeremy Francis Gilmer Papers collection. This map contains paths and roads, landmarks, creek names, location of residences with owners' name, and path of the railroad and coal pits it served. Online access through: https://dcr.lib.unc.edu/record/63f39df9-9c12-4519-aa37-5dd45f443378

A Compilation of the History of
Coal Mining in Goochland and Henrico Counties, VA
Second Edition – March 2025

1862 – **J. Knowles Hare map of railroad system** in central Virginia. Found online at the Library of Congress. https://www.loc.gov/item/98688566

1870's – Post Civil War Map of the Railroads and Main Roads in Central Virgina.

1887 - **Map of the upper District of Henrico County; Map of the Lower District of Henrico County** by T Crawford Redd & Brother County available online from the US Library of Congress in JPG format. The reader can zoom in to see major roads, names of creeks and rivers, location of the railroad lines and coal pits, and location of residences with owners' names. Online access through: https://www.loc.gov/item/2011586685/

1896 (June) – **Gayton VA – 15 miles from Richmond**. Detailed map of the mines along the northern end of the Tuckahoe and James River Railroad. Includes buildings on mine sites, residences and other buildings that served community, and tunnel network for the Saunders, Gayton and Coalbrook shafts that were still operating in 1896. Available online from the Library of Virginia. Comes in two sections with the first section of the northern most area of the Sauders and Gayton Shafts and the second section of the Coalbrook Shaft to the south. Done on blueprint paper and takes time to load, but it is very detailed. Website address is: https://lva.primo.exlibrisgroup.com/discovery/fulldisplay?context=L&vid=01LVA_INST:01LVA&search_scope=MyInstitution_noAER&tab=LibraryCatalog&docid=alma990015819420205756

1901 – T Crawford Redd & Brother **Map of Henrico County** available online from the US Library of Congress in JPG format. The reader can zoom in to see major roads, land parcels with names, and location of the railroad lines. Online access through: https://www.loc.gov/resource/g3883h.la002082/?r=-0.189,0.08,1.385,0.544,0

1911 – T Crawford Redd & Brother **Map of Henrico County, Virginia**: shows portions of Chesterfield County also City of Richmond available online from the US Library of Congress in JPG format. The reader can zoom in to see major roads and land parcels with names. Online access through: https://www.loc.gov/resource/g3883h.la002030/?r=0.122,0.137,0.167,0.065,0

1916 - A third map from T. Crawford Redd & Brother **(1916) *Map of Henrico County, Virginia***. from the Library of Congress. Map is available online from the Library of Congress. This map shows the beginning of development in the west end of Henrico with Pemberton Road, Forest Avenue and Gayton Road added, Quioccasin Road divided between Old and New, and Broad Street Road being used in lieu of the Deep Run Turnpike. Online access through: https://www.loc.gov/item/2011586687/

Early 1960's – **Henrico County Planning Department Map** with Tuckahoe & James River Railroad, coal shafts and pits, and certain building overlaid. Note the street names of the neighborhoods that had been developed as an indication of the date of the map. At this point, Pump Road did not connect between Gayton Road and Patterson Avenue but there were plans for route 288 (later moved west to Goochland). Due to the length of this map, it was broken up into three parts to make the names legible. Author is unknown. The map was provided by Jack Bruce for this Compilation.

1958 – **Henrico County Road Map.** Map of existing roads in 1958 with legend indicating the route number for each road and its name. This map is interesting as it shows the extent of development in the west end as of that time and the absence of many roads that are main throughfares today. Can be accessed from the Henrico Historical Society website: http://www.henricohistoricalsociety.org/henricomaps/henrico_map_1958.pdf

1958 – **Henrico County Tax Map**. This map consists of 20 sections of the county tax map assembled by author Jack Bruce. The map has been converted into PDF format. The Eastern Edge of the map is the Richmond, Fredericksburg & Potomac railroad tracks. The path of the rail lines of the Henrico Railroad and Tuckahoe & James River Railroads and the Tuckahoe Creek Canal are shown on this map. The location of the coal pits and shafts were excluded from this map. It is worthy to note that just west of Pump Road on Gayton Road these are more than a dozen parcels aligned along an unnamed road to the south of Gayton just to the north of the crossing of the Henrico (Coal Pit) rail line. This author believes this may have been the Village of Gayton.

1970's – Map of the path of the Tuckahoe and James River Railroad overlaid on modern roads along Gayton Road and Lauderdale Drive. Certain mine sites have also been marked. Published in the Short Pump Express, April 1987 edition. Not available online.

1975 – Map of the route of the Tuckahoe Creek Canal. Published in the **Richmond Times- Dispatch, February 3, 1975, page B-4,** David D. Ryan citing work of William Trout. Not available on line.

1975 – Map of the Springfield and Deep Run mine locations published in **Richmond Times- Dispatch, August 25, 2002**, "Hole opens can of worms", reported by Nicole Johnson and Chris Dovi.