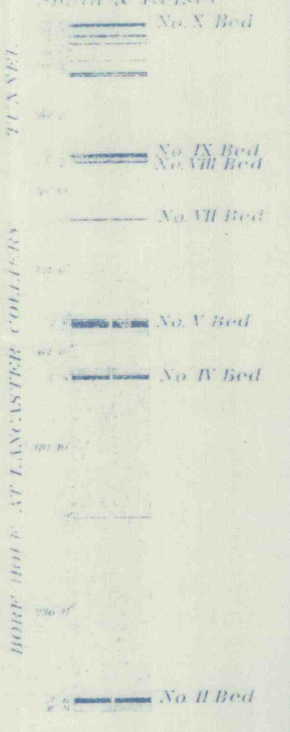


GEOLOGICAL SURVEY OF PENNSYLVANIA. J.P. LESLEY, STATE GEOLOGIST
ANTHRACITE DISTRICT FRANK A. HILL, GEOLOGIST IN CHARGE

WESTERN MIDDLE COAL FIELD MINE SHEET NO. 12

BLACK DIAMOND BASIN, COLUMBIA COUNTY

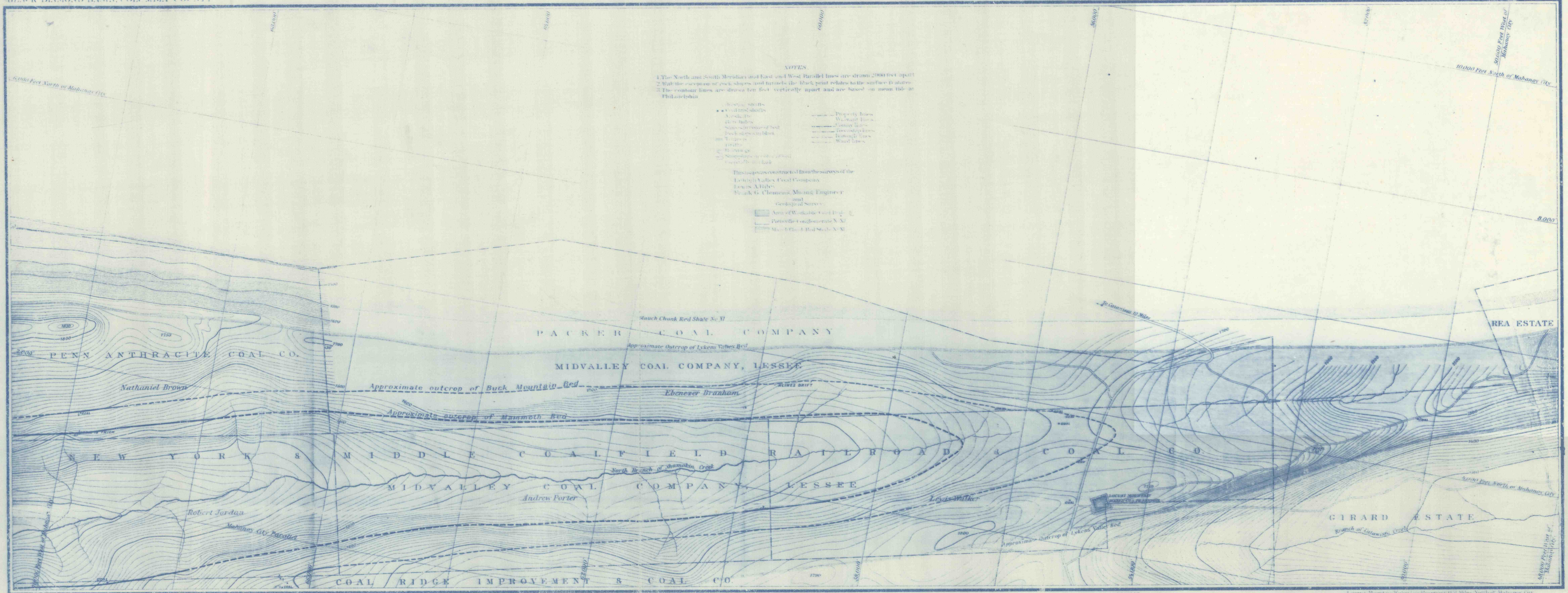
SECTION OF COAL MEASURES
BIG MOUNTAIN SHEET
HICKORY SWAMP COLLIERY
Union Coal Co.
LANCASTER COLLIERY
South A. Foster



NOTES:
1. The North and South Meridian and East and West Parallel lines are drawn 2000 feet apart.
2. All the names of rock strata and towns in the Black Diamond Basin are based on the Philadelphia.
3. The contour lines are drawn ten feet vertically apart and are based on mean tide at Philadelphia.

Legend:
--- Property lines
--- Railroad lines
--- Contour lines
--- Township lines
--- Borough lines
--- Ward lines
--- Township lines
--- Borough lines
--- Ward lines

This map was compiled from the surveys of the
Lancaster Valley Coal Company
Lewis & Hill
Frank G. Clements, Mining Engineer
and
Geological Survey
New York, 1889.
Philadelphia, 1889.
New York, 1889.
Philadelphia, 1889.



540

Lowest Meridian, Robert Jordan, 1889, 1890, 1891, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1929, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 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