



**New Jersey Geological Survey  
Geological Survey Report GSR 25**



**INVENTORY OF ACTIVE AND ABANDONED  
SAND AND GRAVEL MINING OPERATIONS IN NEW JERSEY**



**STATE OF NEW JERSEY**

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**Department of Environmental Protection**

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**Cover illustration:** Sand mining in the Cohansey Formation, Brick Township, Ocean County. This clean, planar-bedded sand was laid down on an ocean beach approximately 10 million years ago during the Miocene Epoch. Sands and gravels now being mined elsewhere in New Jersey were deposited offshore, on deltas, by rivers, and by glacial meltwater streams.

Photo by Peter Sugarman.

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by

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Geological Survey  
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# INVENTORY OF ACTIVE AND ABANDONED SAND AND GRAVEL MINING OPERATIONS IN NEW JERSEY

## INTRODUCTION

With annual production of up to 20 million tons (tables 1, 2), valued at up to \$100 million, sand and gravel mining is a significant industry in New Jersey. Of the 786 mining operations listed in this report, roughly 100 are currently active. Inactive and abandoned operations are included because of their importance in environmental investigations, planning, zoning, and resource evaluation.

Sand and gravel are broadly grouped as construction grade (used primarily for concrete, asphalt, road base material, water filtration, and road sand) and industrial grade (used for glass and ceramics, foundry molds and cores, sand blasting, and other specialized industrial applications). Glauconite sand, mined as a soil conditioner at numerous pits during the 19th century and mined today as a water and soil conditioner by the Inversand Company of Sewell, Gloucester County, is not included in this inventory.

### Construction-grade sand and gravel

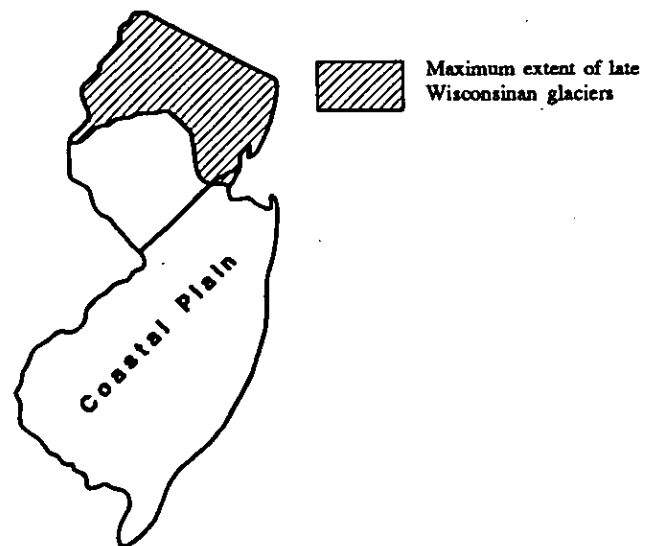
Construction sand and gravel is, after crushed stone, the leading mineral commodity produced in the State, accounting in 1988 for 31 percent of the value of New Jersey mineral products. In that year 73 pits, in 15 of the State's 21 counties, were in operation (U.S. Bureau of Mines, 1988). Roughly 100 other pits were dormant or past production, but retained N.J. Bureau of Mine Safety certification.

**Table 1.** Construction sand and gravel sold or used in 1988, by major use category.\*

Use	Quantity (short tons)	Value (\$)	Value (\$ per ton)
<b>CONSTRUCTION</b>			
Concrete aggregates (including concrete sand)	3,719,000	18,301,000	4.92
Plaster and gunite sands	160,000	828,000	5.18
Concrete products (blocks, brick, pipe, etc.)	73,000	383,000	5.25
Asphalt concrete aggregates and other bituminous mixtures	485,000	2,468,000	5.09
Road base and coverings	1,281,000	3,941,000	3.08
Fill	902,000	3,389,000	3.76
Snow and ice control	134,000	502,000	3.75
Other	33,000	245,000	7.42
Actual	8,906,000	33,293,000	3.74
Estimated	2,626,000	10,834,000	4.13
<b>Total or average</b>	<b>18,318,000</b>	<b>74,183,000</b>	<b>4.05</b>
<b>INDUSTRIAL</b>	<b>1,900,000</b>	<b>25,400,000</b>	<b>13.37</b>

\* modified from U.S. Bureau of Mines, annual

Production is primarily from outwash sands and gravels within and adjacent to glaciated portions of northern New Jersey (figure 1) and from Tertiary alluvial deposits of the Bridgeton, Pensauken, and Beacon Hill Formations within the coastal plain. Smaller quantities are mined from the Kirkwood, Cohansey, Cape May, and other Coastal Plain formations (Hayes, 1945; Martens, 1956) and in post-glacial alluvium.



**Figure 1.** Extents of late Wisconsin glaciation and coastal plain.

Demand closely follows construction activity (figure 2, table 2). In response to recession, production fell from 18 million tons in 1988 to 13 million tons in 1990.

While sand and gravel deposits are fairly widespread, restrictive zoning, increasing land values, environmental regulations, and building have limited resource development in urban areas. In response to the shortage of accessible, land-based deposits, aggregate producers have turned to materials dredged from the New York Harbor entrance. In 1987, the majority of concrete sand sold in the Greater New York Metropolitan Area was from this source (U.S. Bureau of Mines, 1987).

### Industrial sand

Commercial glass making was begun in New Jersey in Salem County in 1739 (McKearin and McKearin, 1941). In 1868, approximately thirty thousand tons of sand were mined for glass manufacturing. Other uses then included molding sand, furnace sand and artificial stone (Cook, 1868).

Year	Quantity (Short tons)		
	Construction	Industrial	Total
1925	3,988,000	898,000	4,887,000
1930	5,148,000	757,000	5,969,000
1935	na*	na*	na*
1940	3,638,000	1,280,000	4,918,000
1945	3,432,000	2,075,000	4,506,000
1950	6,049,000	1,572,000	7,620,000
1955	8,549,000	2,605,000	11,152,000
1960	8,916,000	2,678,000	11,594,000
1965	13,555,000	3,932,000	17,389,000
1970	11,366,000	5,366,000	16,732,000
1975	10,282,000	2,730,000	13,012,000
1980	5,829,000	2,766,000	8,596,000
1981	9,756,000	2,305,000	12,061,000
1982	7,940,000	2,140,000	10,080,000
1983	10,800,000	2,386,000	13,186,000
1984	9,545,000	2,712,000	12,257,000
1985	10,600,000	2,820,000	13,420,000
1986	13,999,000	2,341,000	16,340,000
1987	16,600,000	2,525,000	19,125,000
1988	18,318,000	1,860,000	20,178,000
1989	17,970,000	1,797,000	19,767,000
1990	13,000,000	1,925,000	14,925,000

Table 2. Sand and gravel production in New Jersey, 1925-1990 (modified from U.S. Bureau of Mines, annual).

As of 1987, industrial sand was mined from 17 pits in 7 counties. With production of 21 million tons, valued at \$27.9 million, New Jersey ranked fourth in the nation in industrial sand production.

All of New Jersey's industrial sand production is from coastal plain formations, most from areas of high-silica, low-iron sand within the Cohansey Formation. In 1986, 88 percent of the production was from the Milville area of Cumberland County (U.S. Bureau of Mines, 1988).

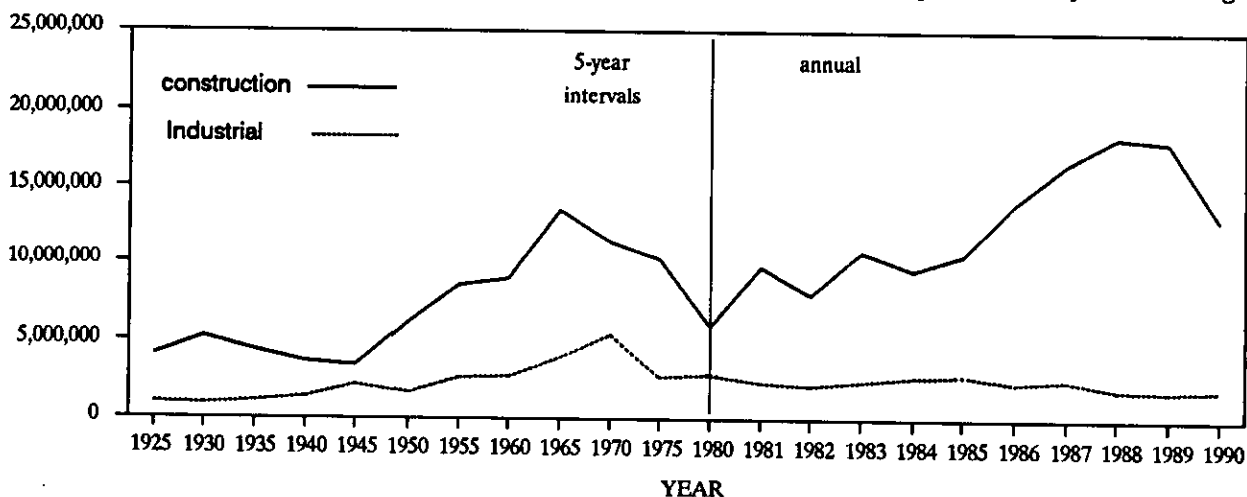


Figure 2. Sand and gravel production in New Jersey, 1925-1990 (modified from U.S. Bureau of Mines, annual).

## Compilation of the inventory

Data for this inventory were obtained primarily from state and federal government sources. These include the U.S. Bureau of Mines "The Mineral Industry of New Jersey" (annual) and "Mineral Industry Location System." State sources include the list of operations certified by the Department of Labor and Industry, Bureau of Mine Safety, and the list of registered suppliers maintained by the Department of Transportation, Bureau of Materials. Most of the older operations were from Annual Reports of the State Geologist, New Jersey Geological Survey Bulletins, and the Final Report of the State Geologist series (1888-1916). In addition, sand and gravel pits described on unpublished field maps in the files of the New Jersey Geological Survey were included. Hundreds of sand pits are shown on U.S. Geological Survey quadrangle maps. As no information other than their existence was available for these pits, they were not added to the inventory. Aerial photograph interpretation to identify additional sites and field investigations to verify site names, location, geology, commodities produced and status of activity were used in limited areas.

In many instances, particularly for small, abandoned pits, there is no known owner or name. These were numbered sequentially within U.S. Geological Survey 7.5-minute quadrangle areas (figure 3). For example, pit no. 2 on the map showing sand and gravel mining operations in Atlantic county (p. 6) is the first pit on the Oceanville quadrangle for which the N.J. Geological Survey has no owner or name and is listed (p. 7) as Oceanville quad, no. 1.

## Acknowledgments

We thank the sand and gravel producers and personnel of the Departments of Transportation and Labor and Industry for their assistance.

The county maps were prepared with the N.J. Department of Environmental Protection Geographic Information System. The tables and Geographic Information System output were formatted for publication by Doreen Hogan.



- |                   |                    |                      |
|-------------------|--------------------|----------------------|
| 1 Milford         | 61 Plainfield      | 121 Brookville       |
| 2 Port Jervis S   | 62 Perth Amboy     | 122 Forked River     |
| 3 Unionville      | 63 Arthur Kill     | 123 Barnegat Light   |
| 4 Pine Island     | 64 The Narrows     | 124 Wilmington S     |
| 5 Uk Maskozha     | 65 Coney Island    | 125 Penns Grove      |
| 6 Culvers Gap     | 66 Lumberville     | 126 Woodstown        |
| 7 Branchville     | 67 Stockton        | 127 Pitman West      |
| 8 Hamburg         | 68 Hopewell        | 128 Pitman East      |
| 9 Wawayanda       | 69 Rocky Hill      | 129 Williamstown     |
| 10 Greenwood Lake | 70 Monmouth Jct    | 130 Hammonton        |
| 11 Stoatsburg     | 71 New Brunswick   | 131 Atsion           |
| 12 Bushkill       | 72 South Amboy     | 132 Jenkins          |
| 13 Flatbrookville | 73 Keyport         | 133 Oswego Lake      |
| 14 Newton West    | 74 Sandy Hook      | 134 West Creek       |
| 15 Newton East    | 75 Buckingham      | 135 Ship Bottom      |
| 16 Franklin       | 76 Lambertville    | 136 Long Beach NE    |
| 17 Newfoundland   | 77 Pennington      | 137 Delaware City    |
| 18 Wanaque        | 78 Princeton       | 138 Salem            |
| 19 Ramsey         | 79 Hightstown      | 139 Alloway          |
| 20 Park Ridge     | 80 Jamesburg       | 140 Elmer            |
| 21 Nyack          | 81 Freehold        | 141 Newfield         |
| 22 Stroudsburg    | 82 Marlboro        | 142 Buena            |
| 23 Portland       | 83 Long Branch     | 143 Newtonville      |
| 24 Blairstown     | 84 Hatboro         | 144 Egg Harbor City  |
| 25 Tranquility    | 85 Langhorne       | 145 Green Bank       |
| 26 Stanhope       | 86 Trenton West    | 146 New Gretna       |
| 27 Dover          | 87 Trenton East    | 147 Tuckerton        |
| 28 Boonton        | 88 Allentown       | 148 Beach Haven      |
| 29 Pompton Plains | 89 Roosevelt       | 149 Taylors Bridge   |
| 30 Paterson       | 90 Adelphia        | 150 Canton           |
| 31 Hackensack     | 91 Farmingdale     | 151 Shiloh           |
| 32 Yonkers        | 92 Asbury Park     | 152 Bridgeton        |
| 33 Bangor         | 93 Frankford       | 153 Millville        |
| 34 Belvidere      | 94 Beverly         | 154 Five Points      |
| 35 Washington     | 95 Bristol         | 155 Dorothy          |
| 36 Hackettstown   | 96 Columbus        | 156 Mays Landing     |
| 37 Chester        | 97 New Egypt       | 157 Pleasantville    |
| 38 Mendham        | 98 Cassville       | 158 Oceanville       |
| 39 Morristown     | 99 Lakehurst       | 159 Brigantine Inlet |
| 40 Caldwell       | 100 Lakewood       | 160 Bombay Hook      |
| 41 Orange         | 101 Point Pleasant | 161 Ben Davis Point  |
| 42 Weehawken      | 102 Philadelphia   | 162 Cedarville       |
| 43 Central Park   | 103 Camden         | 163 Dividing Creek   |
| 44 Easton         | 104 Moorestown     | 164 Port Elizabeth   |
| 45 Bloomsbury     | 105 Mount Holly    | 165 Tuckahoe         |
| 46 High Bridge    | 106 Pemberton      | 166 Marmora          |
| 47 Calton         | 107 Browns Mills   | 167 Ocean City       |
| 48 Gladstone      | 108 Whiting        | 168 Atlantic City    |
| 49 Bernardsville  | 109 Keswick Grove  | 169 Fortescue        |
| 50 Chatham        | 110 Toms River     | 170 Port Norris      |
| 51 Roselle        | 111 Seaside Park   | 171 Hesterville      |
| 52 Elizabeth      | 112 Marcus Hook    | 172 Woodbine         |
| 53 Jersey City    | 113 Bridgeport     | 173 Sea Isle City    |
| 54 Brooklyn       | 114 Woodbury       | 174 Rio Grande       |
| 55 Riegelsville   | 115 Runnemede      | 175 Stone Harbor     |
| 56 Frenchtown     | 116 Clementon      | 176 Avalon           |
| 57 Pittstown      | 117 Medford Lakes  | 177 Cape May         |
| 58 Flemington     | 118 Indian Mills   | 178 Wildwood         |
| 59 Raritan        | 119 Chatsworth     | 179 Cape Henlopen    |
| 60 Bound Brook    | 120 Woodmansie     |                      |

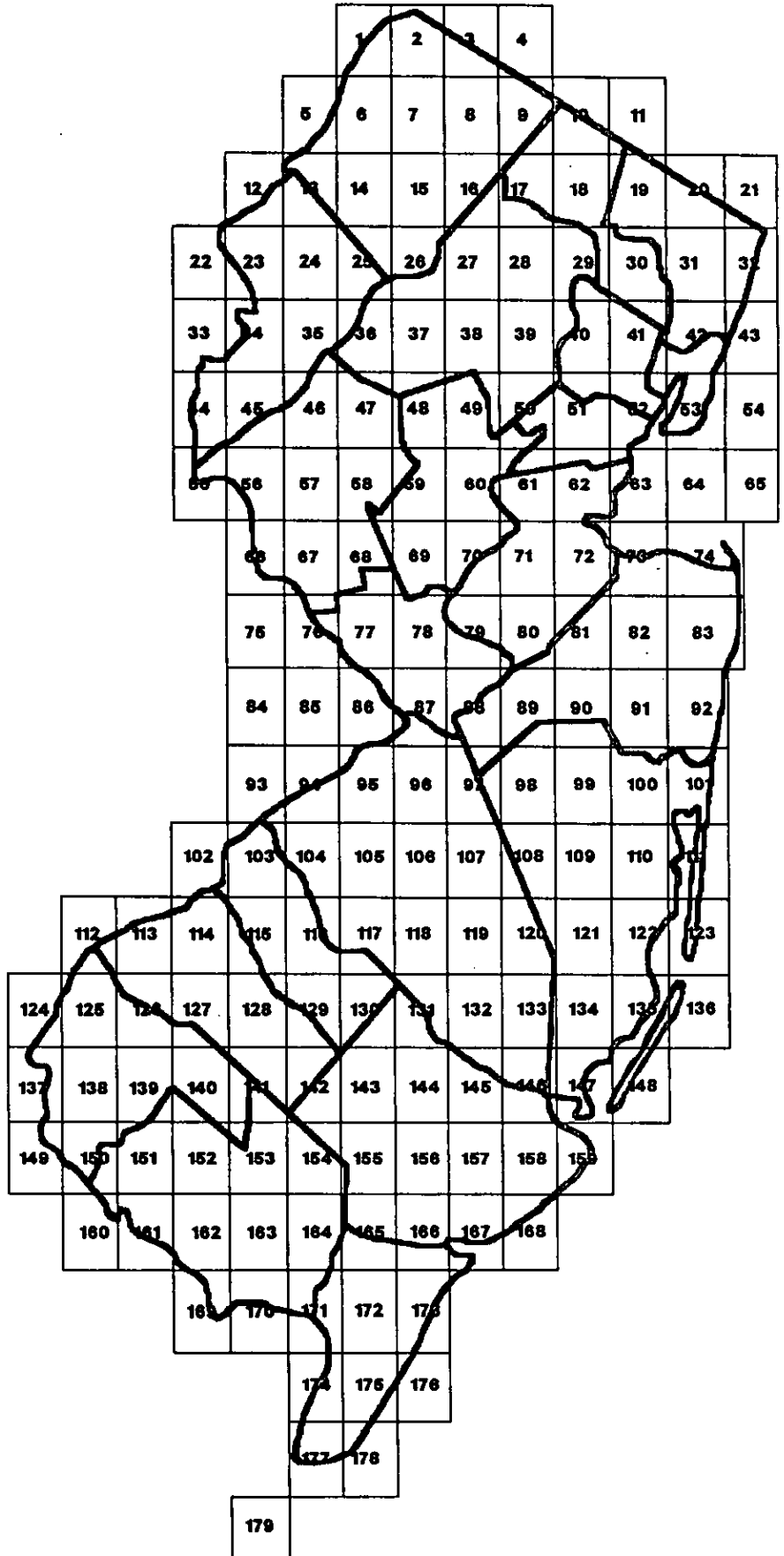


Figure 3. Quadrangle index map.

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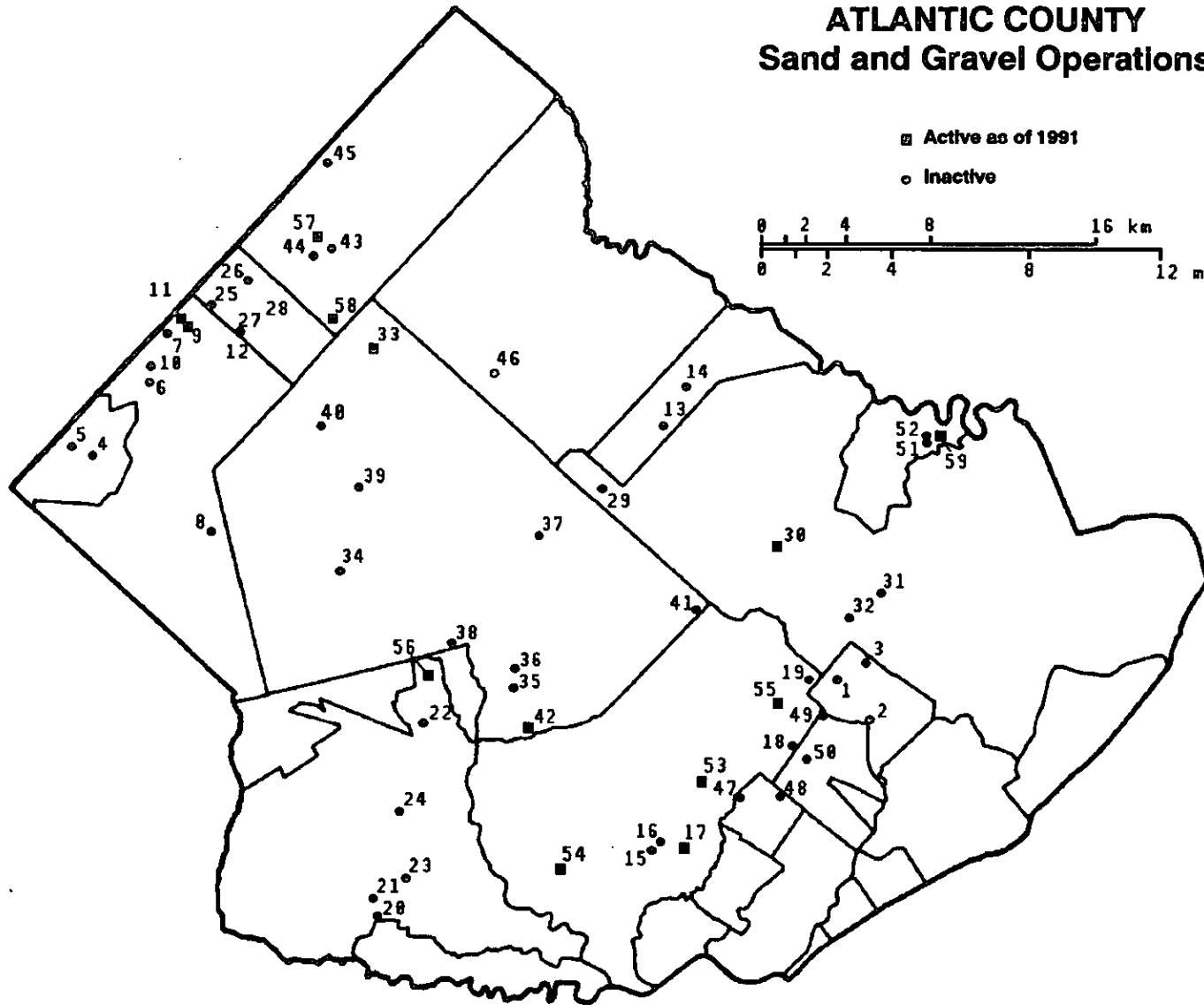
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# ATLANTIC COUNTY Sand and Gravel Operations

■ Active as of 1991

○ Inactive



# ATLANTIC COUNTY

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Absecon City</b>						
1	Absecon Island Sand	1947(?) - 1956(?)	392603 N 743054 W	Cape May	10 ft. of coarse, yellow and white sand, some gravel above water level. Dredged to 12 ft. below water table. Gravel 66% quartz, 34% chert. Coarse sand almost all quartz. Sand finer than 50 mesh has high feldspar content. One pebble of chlorite schist (Chickies Quartzite) found.	Washed concrete sand, plaster sand, grits and gravel. Coarse sand could be used for sand blast and filter sand. N.J. Geological Survey (1899-1937), Martens (1956)
2	Oceanville quad, no. 1	Abandoned before 1911	392456 N 742946 W	Cape May	Alternating beds of gravel 3-12 in. thick with thicker beds of sand, usually cross-bedded. Sand is white and unstained.	N.J. Geological Survey (1899-1937)
3	Pleasantville quad, no. 7	1938(?) - 1952(?)	392626 N 743007 W	Cape May	Sand and gravel	U.S. Army Corps of Engineers (1942d), U.S. Coast and Geodetic Survey (1952)
<b>Buena Boro</b>						
4	Buena Vista Town Pit	1946-1956	393149 N 745629 W	Bridgeton	12 ft. of clayey, reddish brown sand and gravel. Mostly quartz, some kaolinized white chert.	Road gravel. Martens (1956), N.J. Geological Survey (1899-1937)
5	Downstown Pit	Opened before 1942	393202 N 745710 W	Bridgeton	Gravel	Army Map Service (1948a), U.S. Geological Survey (1970)
<b>Buena Vista Twp.</b>						
6	Brimfield Bros.	Active in 1956	393353 N 745424 W	Bridgeton	0-6 ft., reddish-brown, coarse, strongly bonded molding sand. 6-9 ft., light-brown and yellow sand, less strongly bonded. 9-10.5 ft., yellow, very fine sand. 10.5-11.5 ft. light-brown, slightly clayey, coarse sand. Upper 9 ft. is 98% quartz. after washing.	Molding sand. Martens (1956)
7	Cedar Lake Pit & Mill	? - ?	393503 N 745358 W	...		U.S. Bureau of Mines (1976)
8	Dorothy quad, no. 1	Abandoned before 1956	392951 N 745214 W	Bridgeton	Coarse sand.	Martens (1956)
9	Mays Landing Sand and Gravel	? - Present	393523 N 745308 W	...		Construction grade sand and gravel. U.S. Bureau of Mines (1976), N.J. Department of Transportation (1982), N.J. Bureau of Mine Safety (1991)
10	J. Morie & Son Inc.	1956(?) - 1979(?)	393539 N 745331 W	Cohansey	0-0.5 ft., gray to white fine sand. 0.5-2 ft., yellow, fine sand, a few pebbles from. 2-6 ft., brown, fine to medium sand. 6-8 ft., yellow and white fine sand.	Molding sand.
11	J. Morie & Son Inc.	? - Present	393413 N 745425 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)
12	Newtonville quad, no. 2	Opened before 1956	393418 N 745208 W	Bridgeton	8 ft. of coarse brown molding sand with 2% pebbles. Quality of material variable.	Martens (1956), U.S. Bureau of Mines (1976), Johnson (1979), Martens (1956)
<b>Egg Harbor City</b>						
13	Green Bank quad, no. 1	Operating in 1956	393244 N 743700 W	Bridgeton, Cohansey	0-1 ft., grayish-yellow, pebbly sand. 1-13 ft., brown, coarse sand. Base of Bridgeton at 13 ft. marked by coarse pebble layer. 13-17 ft., yellow to white sand, a little clay 17-20 ft., nearly white, medium to fine-grained sand.	County road material. Martens (1956)

**ATLANTIC COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
14	Green Bank quad, no. 2	? - ?	393345 N 743627 W	...	0-8 ft., coarse, yellow sand. 3-11 ft., gravel and brown sand.	N.J. Geological Survey (1899-1937)
<b>Egg Harbor Twp.</b>						
15	Canale, Tony	Operating in 1979	392131 N 743709 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
16	Lee's Gravel Pit	Operating in 1979	392137 N 743650 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
17	Puggi, Anthony J.	? - Present	392137 N 743617 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)
18	Pleasantville quad, no. 4	Opened before 1956	392412 N 743226 W	Bridgeton	Gravel	Knapp (1897)
19	Pleasantville quad, no. 8	1938(?)-1952(?)	392559 N 743153 W	Cape May	Sand and gravel	U.S. Army Corps of Engineers (1942d), U.S. Coast and Geodetic Survey (1952)
53	Puggi, Anthony J.	? - Present	392300 N 743600 W	...		N.J. Bureau of Mine Safety (1991)
54	Bob's Gravel Pit	? - Present	392200 N 743830 W	...		N.J. Bureau of Mine Safety (1991)
55	Ole Hansen & Sons	? - Present	392500 N 743230 W	...		N.J. Bureau of Mine Safety (1991)
<b>Estell Manor City</b>						
20	Buck Hill	? - ?	391934 N 744625 W	Cohansey	6-12 ft. of arkosic gravel with scattered pebbles.	Several pits. N.J. Geological Survey (1899-1937)
21	Moores	Operating in 1931	392008 N 744641 W	Bridgeton	10 ft. of deep pinkish-yellow gravel, strong clay binder. Most of pebbles are quartz, a number of decomposed chert pebbles.	Molding sand after gravel was removed. N.J. Geological Survey (1899-1937)
22	Mays Landing quad, no. 3	? - ?	392447 N 744454 W	...	White glass sand over yellow sand	N.J. Geological Survey (1878)
23	Tuckerton quad, no. 2	? - ?	392042 N 744537 W	Bridgeton	Gravel	N.J. Geological Survey (1899-1937)
24	Tuckerton quad, no. 4	Opened before 1935	392227 N 744547 W	Bridgeton	Rusty brown, somewhat clayey sand and gravel. Some is cemented into thin bedded ferruginous sandstone and conglomerate. Fossil concretions.	N.J. Geological Survey (1899-1937)
56	William Mayville	? - Present	392530 N 744500 W	...		N.J. Bureau of Mine Safety (1991)
59	Ole Hanson & Sons	? - Present	393215 N 742745 W	...		N.J. Bureau of Mine Safety (1991)
<b>Folson Boro.</b>						
25	Brimfield Co.	? - ?	393555 N 745229 W	...		U.S. Bureau of Mines (1976)

## ATLANTIC COUNTY (cont.)

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
26	Dun-Rite Sand & Stone	? - ?	393624 N 745118 W	Cohansey	Light colored quartz sand.	Construction grade sand and gravel. Formerly Morie and Sons and maybe George F. Pettinos, Inc. (pre-1956). N.J. Department of Transportation (1982), Martens (1956)
27	Newtonville quad, no. 1	Opened before 1956	393517 N 745140 W	Cape May	0-2 ft., grey, white, yellow to brown, medium-grained sand. 2-8 ft., light yellow, medium-grained sand.	Could be used for concrete aggregate, filter sand, sandblast sand and the coarser grades for washed foundry sand. Deposit covers hundreds of acres. Martens (1956)
28	Road Material Pit	Opened before 1956	393606 N 745046 W	Bridgeton	16 ft. brown gravel and coarse sand (Bridgeton), basal conglomerate at contact with Cohansey. A boring 17.5 ft. into Cohansey showed light-brown to white, medium-grained sand, 99% quartz, 15% clay.	Could be used as foundry sand. Martens (1956)
Galloway Twp.						
29	Egg Harbor Pits	1938(?) - 1956(?)	393102 N 743856 W	Cohansey		Several pits. U.S. Army Corps of Engineers (1942a), U.S. Geological Survey (1956)
30	Monfredo, J. Inc.	? - Present	392934 N 743257 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)
31	Oceanville quad, no. 2	Opened before 1897	392821 N 742937 W	Bridgeton	Gravel with yellow sand over 10 ft. thick.	Knapp (1897h)
32	Pleasantville quad, no. 6	1942(?) - 1952(?)	392747 N 743037 W	Bridgeton	Gravel	U.S. Army Corps of Engineers (1942d), U.S. Coast and Geodetic Survey (1972)
Hamilton Twp.						
33	Aztec Sand and Gravel	? - Present	393442 N 744655 W	...		N.J. Department of Transportation (1982), N.J. Bureau of Mine Safety (unpub.), formerly Arawak Paving, N.J. Bureau of Mine Safety (1991)
34	Dorothy quad, no. 2	Abandoned before 1946	392856 N 744805 W	Cape May	0-3 ft., light yellow sand. 3-5 ft., yellow, gray, reddish, cream-colored, slightly clayey, fine to medium-grained sand, scattered pebbles. 5-13 ft., lightly clayey yellow sand and gravel.	N.J. Geological Survey (1899-1937)
35	Mizpah Sand and Gravel	1947- ?	392537 N 744157 W	Cape May	Light gray sand.	N.J. Geological Survey (1899-1937)
36	Mays Landing quad, no. 1	? - ?	392608 N 744158 W	Bridgeton	0-0.5 ft., light-gray, pebbly sand. 0.5-2 ft., grayish-yellow pebbly sand. 2-9 ft., reddish-brown, cross-bedded sand, some pebbly streaks. 9-10 ft. coarse gravel, over 6.5 ft. of brown cross-bedded sand with considerable clay, over 0.5 ft. gravel with sand matrix with high heavy mineral content. At a depth of 17 ft. is Bridgeton-Cohansey contact.	Presently the site of the Hamilton Twp.. Municipal Landfill. Martens thought material from 17-32 ft. could be used as foundry sand as it is 99% quartz. Farnsworth (Pers. comm. 1985), Martens (1956)
37	Mays Landing quad, no. 1	Abandoned before 1956	392950 N 744112 W	Bridgeton	10 ft. of coarse, well bonded sand	Martens (1956)
38	Mays Landing quad, no. 2	? - ?	392649 N 744405 W	...	Clean white glass sand on yellow sand.	N.J. Geological Survey (1878)
39	Newtonville quad, no. 3	? - ?	393102 N 744719 W	Cape May		N.J. Geological Survey (1899-1937), Salisbury and Knapp (1917)

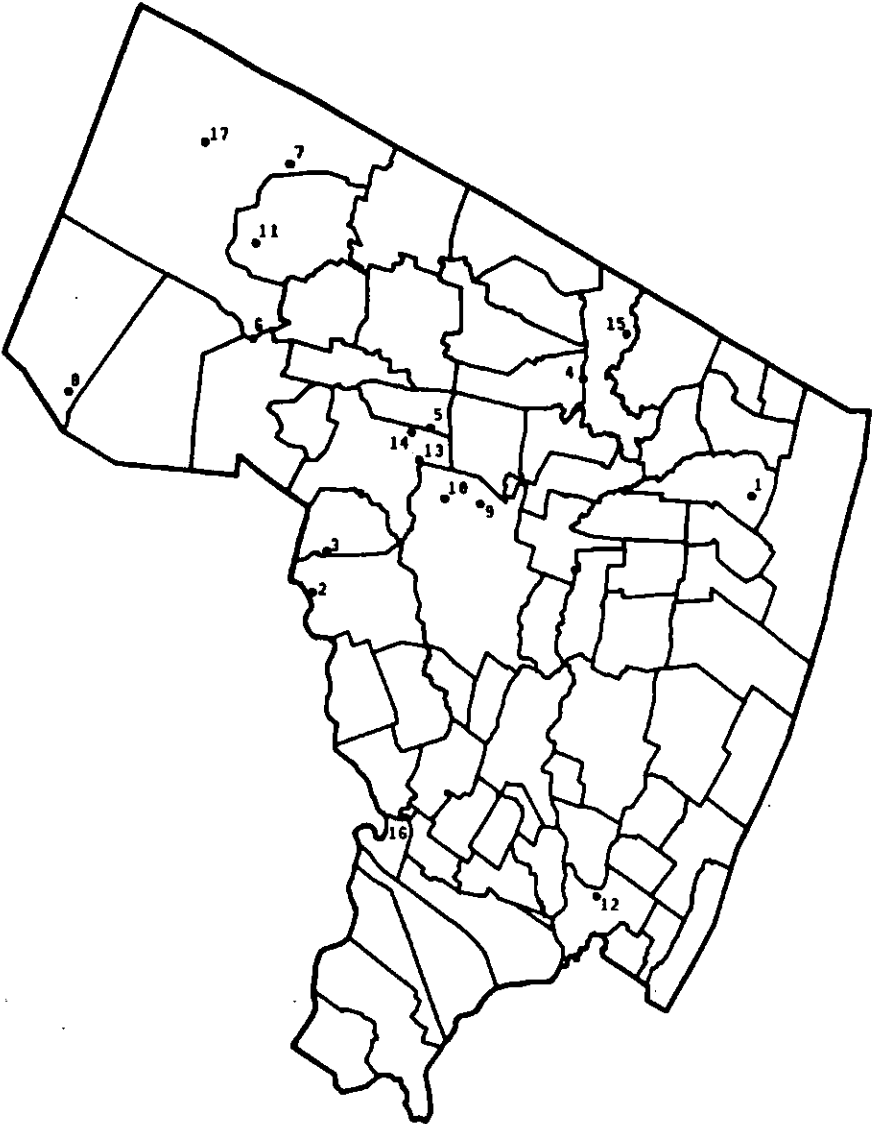
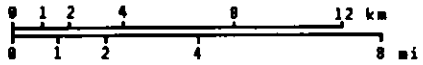
**ATLANTIC COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
40	Newtonville quad, no. 5	Opened before 1942	393241 N 744845 W	Bridgeton	Gravel	Army Map Service (1948a), U.S. Geological Survey (1972b)
41	Pleasantville quad, no. 5	1942(?) - 1952(?)	392748 N 743535 W	Bridgeton		U.S. Army Corps of Engineers (1942d), U.S. Coast and Geodetic Survey (1972)
42	Santora, Frank	? - Present	392436 N 744120 W	Bridgeton, Cohansey	Both Bridgeton and Cohansey were mined for sand. Clay presently major commodity.	Presently clay is the major product for use in landfill covers. N.J. Bureau of Mine Safety (1991).
<b>Hammonton Town</b>						
43	Delco Construction Co.	? - ?	393720 N 744819 W	...		U.S. Bureau of Mines (1976)
44	Newtonville quad, no. 4	Opened before 1928	393709 N 744852 W	...	Gravel	Opened between 1922 and 1928. Plummer (1925)
45	Oak Grove	Opened before 1928	393933 N 744840 W	...	Gravel	Opened between 1922 and 1928. Plummer (1929b)
57	Frank DiBona	? - Present	393700 N 744830 W	...		N.J. Bureau of Mine Safety (1991)
58	Giacoppo Enterprises	? - Present	393530 N 744800 W	...		N.J. Bureau of Mine Safety (1991)
<b>Mollica Twp.</b>						
46	Elwood Pits	1938(?) - 1956(?)	393405 N 744254 W	...		U.S. Army Corps of Engineers (1940a), U.S. Geological Survey (1956)
<b>Northfield City</b>						
47	Birch Grove Pits	1942(?) - 1952(?)	392246 N 743401 W	Cape May		Army Map Service (1948b)
48	Pleasantville quad, no. 2	Opened before 1883	392254 N 743250 W	Cape May	Gravel	N.J. Geological Survey (1899-1937), Geological Survey of NJ (1902c)
<b>Pleasantville City</b>						
49	Pleasantville quad, no. 1	Opened before 1956	392454 N 743125 W	Cape May	15 ft. of pebbly sand of light color with little clay	Location approximate. Material suitable for washed concrete sand. Martens (1956)
50	Pleasantville quad, no. 3	Opened before 1956	392350 N 743155 W	Bridgeton	Gravel	N.J. Geological Survey (1899-1937), Geological Survey of NJ (1902c)
<b>Port Republic City</b>						
51	Absecon Island Sand Co.	? - 1949	393226 N 742759 W	Cape May	More than 98% quartz sand. Material processed in 1949 had gravel removed by screening. Shallow pond dredge.	Martens (1956)
52	Mizpah Sand and Gravel	Operating in 1956	393233 N 742759 W	Cape May	50% gravel, little clay. 3/4 in. gravel is 96% quartz, 4% chert. Pea gravel, 98% quartz, sand, 99% quartz.	Gravel, pea gravel, plaster and concrete sand. Sand could be used for sandblast and filter sand. Worked by suction dredge to 18 ft. water depth. Martens (1956)



# BERGEN COUNTY Sand and Gravel Operations

- Active as of 1991
- Inactive



# BERGEN COUNTY

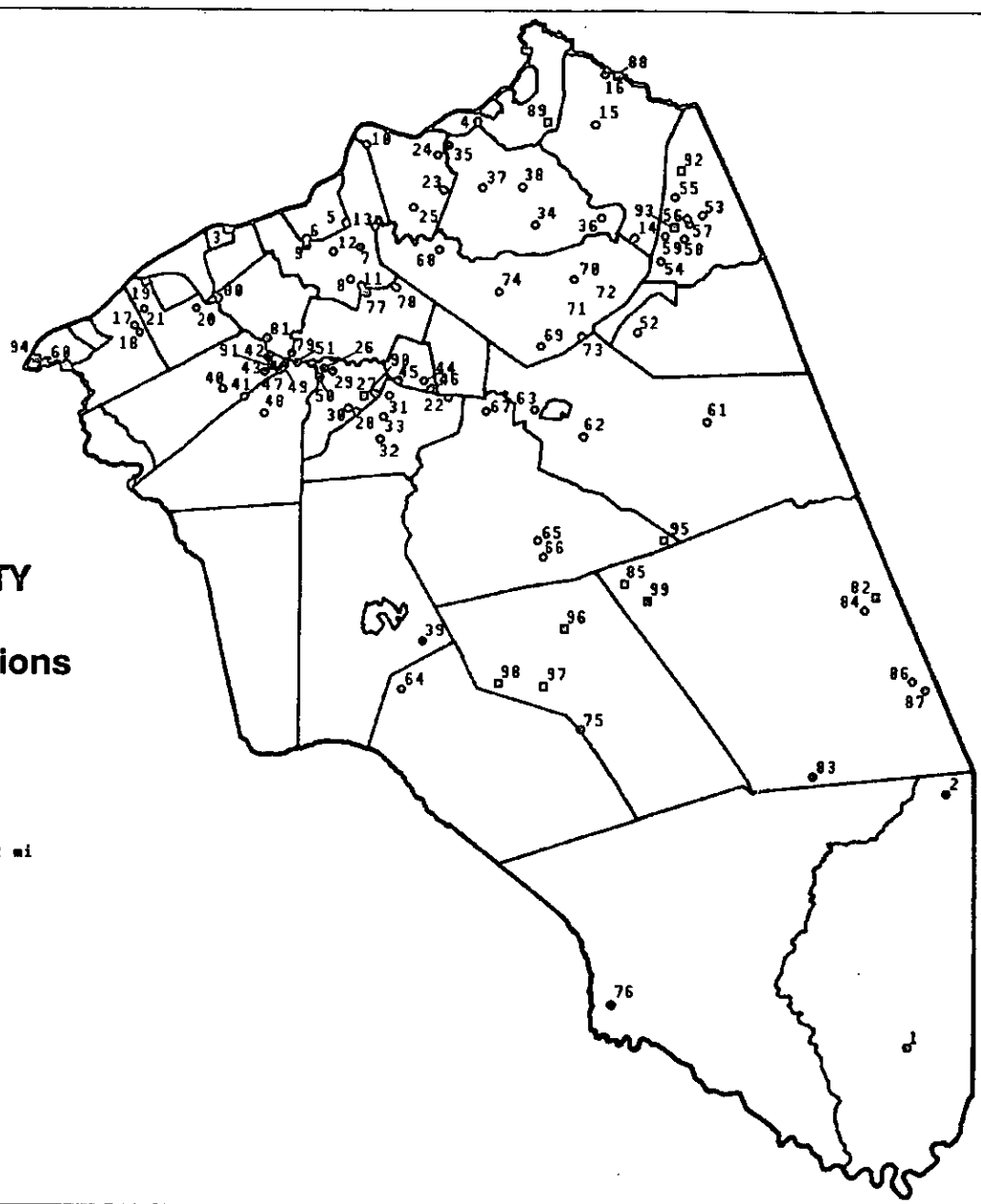
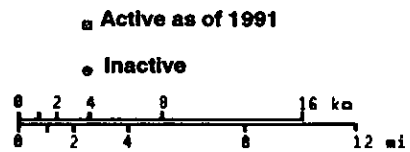
MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Closter Boro</b>						
1	Yonkers quad, no. 1	? - ?	405814 N 735653 W	...	0-7 ft., clayey sand, very large boulders. 7-32 ft., pink sand and gravel. Gravel is 15% of material; 50% of gravel from Newark Basin.	N.J. Geological Survey (1899-1937)
<b>Fair Lawn Boro</b>						
2	Fairlawn Sand and Gravel	Active in 1929	405614 N 740824 W	...	0-6 ft., well stratified, yellow sand. 6-30 ft., reddish, clayey gravel underlain by coarse, stratified sand.	N.J. Geological Survey (1899-1937)
<b>Glen Rock Boro</b>						
3	Glen Rock Sand Co.	Active in 1929	405703 N 740805 W	...	Rather clean, medium grained sand.	In 1929 shipped 50-100 tons of sand per day in summer months. N.J. Geological Survey (1899-1937)
<b>Hillsdale Boro</b>						
4	Oliva, A.	Active in 1931	410030 N 740118 W	Stratified drift	0-3 ft., sandy loam. Below 3 ft., well stratified, rather coarse, very clean sand. Pebbles are 50% Newark Basin sandstone and 50% granite gneiss.	Site of Pascack Swimming Pool. N.J. Geological Survey (1899-1937)
<b>Hohokus Boro</b>						
5	McKee's, A.D.	? - ?	405936 N 740521 W	Stratified drift	0-10 ft., stratified sand and gravel. 10-14 ft., light brown clay and boulders. 14-34 ft., medium to coarse-grained, pink sand. Pebbles are limestone, gneiss and shale	N.J. Geological Survey (1899-1937)
<b>Mahwah Twp.</b>						
6	Braen's Sand and Gravel	1931(?) - ?	410123 N 740949 W	...	Stratified, gravelly sand. At most 5% of material is gravel, the rest is a clean, medium-grained sand. Dips strongly east.	N.J. Geological Survey (1899-1937)
7	McKee Bros Sand & Gravel	? - ?	410451 N 740857 W	Glacial-undifferentiated		N.J. Bureau of Mine Safety (1991), U.S. Bureau of Mines (1976). As of 1991, pit inactive. Processing plant still used.
17	Ramsey quad, no. 1	? - ?	410500 N 741015 W			Several pits along river north of Darlington.
<b>Oakland Boro</b>						
8	Oakland Industrial Park	Active in 1979	410018 N 741447 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976), Johnson (1979)
<b>Paramus Boro</b>						
9	De Willegen and Joy's	Active in 1931	405804 N 740401 W	Stratified drift	0-10 ft., cobbles and boulders. 10-13 ft., cross-bedded sand. 13-22 ft., cobbles and boulders. 22-24 ft., sand. Gravel contains trap and sandstone	N.J. Geological Survey (1899-1937)
10	Hackensack quad, no. 1	Opened before 1924	405812 N 740458 W	...	Sand	Opened between 1903-1024. Plummer (1924)

**BERGEN COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Ramsey Boro</b>						
11	Ramsy quad, no. 1	Opened before 1924	410317 N 740950 W	...	Sand	Opened between 1902-1924. Plummer (1924)
<b>Ridgefield Boro</b>						
12	Weehawken quad, no. 1	1900(?)-1934(?)	405008 N 740101 W	...	Sand	N.J. Geological Survey (1899a), N.J. Geological Survey (1914), N.J. Geol. Survey (1934)
<b>Ridgewood Village</b>						
13	Bross Henry	? - ?	405855 N 740535 W	Stratified drift	15 ft. of stratified glacial drift above water level. Newark Basin sandstone pieces are decomposed.	N.J. Geological Survey (1899-1937)
14	Knyfd, Nicholas	Active in 1931	405927 N 740548 W	Stratified drift	20 ft. stratified sand and gravel	N.J. Geological Survey (1899-1937)
<b>River Vale Twp.</b>						
15	Park Ridge quad, no. 1	? - ?	410127 N 740005 W	Stratified drift	Gravel, small boulders and sand with little clay. Pebbles mostly granite-gneiss and red sandstone.	Several pits. N.J. Geological Survey (1899-1937)
<b>Wallington Boro</b>						
16	Weehawken quad, no. 2	Opened before 1933	405144 N 740601 W	Stratified drift		Several pits on both sides of railroad tracks. N.J. Geological Survey (1934)

# BURLINGTON COUNTY

## Sand and Gravel Operations



# BURLINGTON COUNTY

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Bass River Twp.</b>						
1	New Gretna quad, no. 1	? - ?	393724 N 742622 W	Cohansey	0-1 ft., sand, gravel and humus. 1-3 ft., slightly clayey, yellow sand and gravel. 3-8 ft., clean, fine-grained sand, occasional pebble. Pebbles almost all quartzite.	N.J. Geological Survey (1899-1937)
2	Woodmansie quad, no. 3	? - ?	394543 N 742438 W	Bridgeton	7-8 ft. of compact gravel, some pudding stone, overlying coarse-grained Cohansey sand.	N.J. Geological Survey (1899-1937)
<b>Beverly City</b>						
3	Eastern Sand	Active in 1956	400405 N 745454 W	Stratified drift	Dredge operation at Beverly, near Delaware River.	Concrete sand and gravel. Operation had a washing and screening plant on the same barge. Martens (1956)
<b>Bordentown Twp.</b>						
4	Delaware River Sand Dredging Co.	Active in 1934	400740 N 744418 W	...		N.J. Geological Survey (1908-1953)
88	Herman Leidtka	? - Present	400900 N 743915 W	...		N.J. Bureau of Mine Safety (1991)
<b>Burlington City</b>						
5	Burlington Clay & Engineering Co.	? - ?	400422 N 744957 W	Cape May	Cape May exposed in overburden of clay pit. It is fine, brown molding sand 3-4 ft. thick. Sand is 86% quartz, 4% feldspar, 9% fine aggregate and 1% heavy minerals. Some glauconite and shale, some clay may be from weathering of feldspar.	Martens (1956)
6	Cugliotta, Joseph	Active in 1929	400350 N 745136 W	Magothy/Raritan	0-10 ft., gravel 10-15 ft., clay 15-25 ft., clean, white, fine to medium-grained sand. Most of the production was for a local foundry.	
<b>Burlington Twp.</b>						
7	Bowen Pit	Opened before 1905	400333 N 744929 W	Pensauken	Gravel	Knapp (1894)
8	Bristol quad, no. 1	Active in 1956	400238 N 744945 W	Pensauken	0-1 ft., gravelly loam. 1-3 ft., brown clayey and pebbly coarse sand. 3-6 ft. brown, coarse clayey sand with amount of bonding decreasing with depth. 6-18 ft., coarse, brown sand, too little bond for molding sand. Washed sand is 69% quartz, 18% feldspar, 12% limonitic aggregates and 1% heavy minerals.	Fill and road material. Could be used as coarse molding sand. Working face was 1200 ft. long in 1956. Martens (1956)
9	Bristol quad, no. 4	? - ?	400342 N 745135 W	Cape May	0-2 ft., Cape May sand and gravel. 2-4 ft., weathered Merchantville sand.	N.J. Geological Survey (1899-1937)
10	Bristol quad, no. 5	Opened before 1917	400655 N 744913 W	Cape May	6 ft. of sand and gravel with many cobblestones. Depth of gravel varied from 3 to 30 ft.	Salisbury and Knapp (1917)
11	Haines, George	? - ?	400215 N 744921 W	Pensauken	Clayey loam and coarse sand. Quartz grains angular.	Several shallow pits. Used at Burlington Foundry for cores. N.J. Geological Survey (1899-1937), Knapp (1894)

**BURLINGTON COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
12	Riggs, E.D.	? - ?	400325 N 745033 W	Pensauken	0-20 in., heavy clay loam. 2-6 ft., gravelly sand.	N.J. Geological Survey (1899-1937), Knapp (1894)
13	Sherman, H.R.	Active in 1956	400413 N 744857 W	Cape May	0-5 ft. of clayey overburden. Below 5 ft., medium to coarse sand, some limonite and glauconite.	Bank run for concrete. Martens (1956)
<b>Chesterfield Twp.</b>						
14	Tilghmans Pits	Opened before 1948	400401 N 743800 W	Kirkwood	Sand and gravel	Army Map Service (1949b), Army Map Service (1970b)
15	Trenton East, quad, no. 3	Opened before 1894	400747 N 743943 W	Pensauken		Salisbury (1895)
16	Trenton East quad, no. 4	Opened before 1894	400918 N 743923 W	Pensauken	Gravelly loam.	Road bed materials. Salisbury (1895)
89	Herman Leidtka	? - Present	400700 N 744215 W	...		N.J. Bureau of Mine Safety (1991)
<b>Cinnaminson Twp.</b>						
17	Lockhart, Inc. quad, no. 1	Active in 1956	400059 N 745905 W	Cape May	0-1 ft., overburden. 1-3 ft., grayish-yellow fine sand. 3-5 ft., brown, moderately clayey, fine sand. 5-12 ft., yellow to gray, fine sand over gravel, cobbles and boulders, many are ventifacts. Sand is 80-85% quartz, rest feldspar, glauconite and shale.	Asphalt sand. Martens (1956)
18	Lockhart, Inc. quad, no. 2	Active in 1956	400045 N 745855 W	Pensauken	0-10 ft., clayey brown sand and gravel. Below 10 ft., yellow, less clayey sand.	Upper sand used as fill and road gravel. Lower sand used as bank run mason's sand. Martens (1956)
<b>Delran Twp.</b>						
19	Amico Sand & Gravel	? - 1991	400219 N 745833 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991), reported closed (1991).
20	Beverly quad, no. 1	1935 - ?	400131 N 745617 W	Pensauken	4-8 ft. of gravel, upper 3 ft. is chiefly sand. Gravel is fairly coarse. Pebbles are quartz, quartzite, chert and occasional red shale. Pit bottoms in 1 ft. of clay-marl.	N.J. Geological Survey (1899-1937)
21	Delaware River Sand Dredging Co.	Active in 1956	400135 N 745831 W	Stratified drift	1-3 ft. of clayey sand overburden. Deposit is largely 2 in. or larger gravel of mainly grey and red sandstone. Sand is 80% quartz, 20% mineral and rock fragments.	Mined by bucket dredge to a depth of 30 ft. Produced concrete aggregate, plaster sand and 3 grades of gravel. Much of the gravel was crushed. Martens (1956)
<b>Eastampton Twp.</b>						
22	Pettinos, G.F. Inc.	Active in 1956	395849 N 744551 W	Cape May	0-1 ft., gray sandy loam. 3-4 ft., brown molding sand, uniform grain size, free of pebbles and concretions. Washed sand is 93% quartz, 3% glauconite, 2% each feldspar and heavy minerals. Weathered Cape May.	Produced molding sand. Martens (1956)
<b>Florence Twp.</b>						
23	Bowens, Geo., Pit	Active in 1904	400526 N 744602 W	Pensauken	8 ft. deep in 1904. The upper half was coarse sand, lower half is finer.	Material was screened and used at Florence and Burlington Foundries. N.J. Geological Survey (1899-1937)

**BURLINGTON COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
24	Bristol quad, no. 3	? - ?	400638 N 744613 W	Cape May	0-0.5 ft., topsoil. 0.05-2 ft., reddish-brown, strongly bonded fine sand. 2-4 ft., brown, fine molding sand. 4-18 ft., gray, yellow and brown, fine to medium sand, irregularly stratified, clay lenses, gravel streaks.	Several small pits in this area Martens (1956)
25	Warren Pit	Opened before 1894	400456 N 744709 W	Pensauken	Gravel pit	Salisbury (1895), Knapp (1905)
<b>Halesport Twp.</b>						
26	Grant Berry	Opened before 1956	395851 N 744842 W	...	0-2 ft., overburden. 2-3 ft., molding sand. Washed sand is 91% quartz, 4% glauconite 3% feldspar and 2% heavy minerals.	Produced molding sand. Martens (1956)
27	Modern Mechanical Systems	Active in 1979	395816 N 744933 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
28	Pettinos Bros. quad, no. 2	Active in 1904	395931 N 745033 W	Cape May		Molding sand. N.J. Geological Survey (1899-1937)
29	Wheeler, Harold	Active in 1956	395823 N 744951 W	...	0-3 ft., overburden. 3-8 ft., brown, medium-grained molding sand, no stratification, lower section less strongly bonded. Below 5 ft., greenish-yellow, medium-fine sand with little bond. Molding sand is 84% quartz, 10% glauconite, 4% feldspar and 2% heavies.	About 30 acres of molding sand. Martens (1956)
90	A. Campo	? - Present	395800 N 744945 W	...		N.J. Bureau of Mine Safety (1991)
<b>Lumberton Twp.</b>						
30	Eagle, Jos. Pit	Active in 1904	395840 N 744813 W	...		Molding sand. N.J. Geological Survey (1899-1937)
31	Mount Holly quad, no. 1	Abandoned Opened before 1928	395716 N 744833 W	Mt. Laurel/ Wenonah	20 ft. of interstratified fine and coarse-grained glauconitic sand. Finest sand is light gray, yellow sand above and below.	N.J. Geological Survey (1899-1937)
32	Parson, J.W.	Active in 1904	395808 N 744818 W	...		Molding sand. N.J. Geological Survey (1899-1937)
<b>Mansfield Twp.</b>						
33	Aaranson	Opened before 1905	400425 N 744219 W	Englishtown	White and yellow sand with clay.	Knapp (1905)
34	Bristol quad, no. 2	? - ?	400659 N 744546 W	Magothy	0-3 ft., clayey sand with pebbles and boulders. 3-11 ft., fine, white and brown, cross-bedded sand, almost pure quartz, white when washed.	Sand would be suitable for high-silica foundry sand and possibly glass sand. Presence of overburden and land use may make it unsuitable for mining. Martens (1956)
35	Hutchinson Pit	Opened before 1894	400433 N 743922 W	Pensauken		Operated as Hutchinsons in 1905. Salisbury and Knapp (1897), Knapp (1905)
36	Sharps Pit	? - 1934(?)	400539 N 744426 W	Pensauken	0-6 ft., clayey sand and gravel. 6-12 ft., clean gravel.	Product used in concrete. N.J. Geological Survey (1899-1937)

**BURLINGTON COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
37	Wilcon Pit	Opened before 1905	400542 N 744250 W	Pensauken	0-5 ft., rusty brown clayey sand. 5-15 ft., arkosic, rusty-brown, fine to medium-grained, cross-bedded sand (Pensauken). 15-25 ft., fine-grained, yellow sand (Englishtown).	N.J. Geological Survey (1899-1937), Knapp (1905)
<b>Medford Twp.</b>						
38	Medford Lakes quad, no. 2	Opened before 1899	395046 N 744641 W	...	Sand	N.J. Geological Survey (1900b)
<b>Moorestown Twp.</b>						
39	Moorestown quad, no. 2	Opened before 1902	395904 N 745459 W	Pensauken	Gravel	Knapp (1902p)
40	Moorestown quad, no. 3	Opened before 1902	395847 N 745411 W	Pensauken	Gravel	Knapp (1902p)
41	Moorestown quad, no. 4	Opened before 1902	395956 N 745322 W	Cape May		
42	Smith Construction	Active in 1979	395930 N 745327 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (unpub.)
91	County Sand and Stone	? - Present	395945 N 745315 W	...		N.J. Bureau of Mine Safety (1991)
<b>Mount Holly Twp.</b>						
43	Caven, Jas. & Sons		395932 N 745054 W	Cape May		
44	Mount Holly quad, no. 2	Opened before 1899	395909 N 744644 W	Cape May	Sand	N.J. Geological Survey (1900c)
45	Mount Holly quad, no. 3	Opened before 1924	395915 N 744753 W	...	Sand	Opened between 1899-1924 Knapp (1902p)
46	Pettinos, G.F.	Active in 1956	395903 N 744631 W	...	0-0.5 ft., gray loam. 0.5-5 ft., grayish-yellow, medium to fine sand. 5-11 ft., gray, grayish-yellow and greenish, medium-grained sand with fairly regular stratification. Sand is 88% quartz, 8% glauconite, 2% each feldspar and heavy minerals.	Asphalt sand, overlying molding sand was removed. Martens (1956)
<b>Mount Laurel Twp.</b>						
47	Horner's, Chas. H. Pits	Active in 1904	395931 N 745246 W	...	3 ft. of gravel and yellowish sand.	Numerous pits. Molding sand. N.J. Geological Survey (1899-1937)
48	Moorestown quad, no. 1	Opened before 1899	395818 N 745336 W	Pensauken		N.J. Geological Survey (1900c)
49	Paxson - Taggart Co.	Active in 1929	395944 N 745240 W	Cape May	Gravel, largely iron-stained quartz pebbles. Sand Coarse to fine, yellow sand, some layers with considerable glauconite.	Road material. N.J. Geological Survey (1899-1937)
50	Pettinos Bros.	Active in 1904	395923 N 745116 W	Cape May		N.J. Geological Survey (1899-1937)



**BURLINGTON COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
51	Pettinos, G.F.	Opened before 1956	395940 N 745206 W	Cape May	Yellow, slightly glauconitic sand.	Asphalt and concrete sand Martens (1956)
<b>New Hanover Twp.</b>						
52	Columbus quad, no. 2	? - ?	400050 N 743801 W	Bridgeton	0-3 ft., compact, loamy sand. 3-6 ft., stratified sand and gravel. 6-8 ft., coarse sand. 8-9 ft., gravel.	Opened to supply Fort Dix. Material used for road metal. N.J. Geological Survey (1899-1937)
<b>North Hanover Twp.</b>						
53	Ehily Pit	Opened before 1905	400442 N 743513 W	Bridgeton	Gravel	Operated by Ehily (1905) Knapp (1905)
54	Holmes, Earl	1894(?) - ?	400317 N 743646 W	Kirkwood	Very gravelly, yellow sand.	In 1902 operated as Holmes Knapp (1902b)
55	New Egypt quad, no. 1	? - ?	400517 N 743617 W	Pensauken	10 ft. roughly stratified, irregularly-bedded, coarse Pensauken sand and gravel. Mostly yellow-brown with some gravel, rusty-brown, and some sand, greenish-yellow. Weathered Navesink at base.	N.J. Geological Survey (1899-1937)
56	New Egypt quad, no. 2	? - ?	400425 N 743550 W	Bridgeton	6 ft. of yellow quartz sand and gravel, somewhat compacted.	N.J. Geological Survey (1899-1937)
57	New Egypt quad, no. 3	? - ?	400410 N 743542 W	Kirkwood	12 ft. of interbedded coarse and fine white sand. Pebbles mostly quartz with some weathered white chert.	N.J. Geological Survey (1899-1937)
58	New Egypt quad, no. 4	? - ?	400358 N 743602 W	Bridgeton	0-18 ft., yellow-brown, glauconitic medium-grained sand (Bridgeton). 18-31 ft., yellow sand and gravel (Bridgeton). 31-32 ft., white, gravelly sand (Bridgeton). 32-33 ft., sand (Kirkwood).	N.J. Geological Survey (1899-1937)
59	Poinsett, H.C.	? - ?	400400 N 743636 W	Bridgeton	10 ft. of fine gravel and coarse sand. Gravel predominates in upper section.	Cost at the turn of the century was 10 cents per load N.J. Geological Survey (1899-1937)
92	Herman Leidtka	? - Present	400515 N 743600 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain.
93	Smyties Trucking	? - Preent	400415 N 743530 W	...		N.J. Bureau of Mine Safety (1991)
<b>Palmyra Boro</b>						
60	Erato, P.	1904 (?) - ?	395946 N 750245 W	...	10-35 ft. of sand and gravel underlain by clay.	The white sand was used for fire sand, the yellow sand was processed for molding sand. Ries and Kummel (1904)
94	A. Campo (Fill it Corp.)	? - 1990(?)	395945 N 750245 W	...		N.J. Bureau of Mine Safety (1991)
<b>Pemberton Twp.</b>						
61	Browns Mills quad, no. 1	Opened before 1929	395758 N 743453 W	Cape May	0-20 ft., sand and gravel. 20-30 ft., fine to coarse sand. Surface sand (to 1 ft. thick) is white, below that sand is yellow to salmon.	N.J. Geological Survey (1899-1937)

**BURLINGTON COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
62	Norcross Bros. S&G	Active in 1956	395729 N 744008 W	...	0-1 ft., overburden. 1-3.5 ft., light brown, medium to coarse grained sand 3.5-10 ft., light yellow to nearly white sand, medium to coarse, some fine layers.	Washed sand is white, almost all clean quartz. Produced concrete and plaster sand. Sand was dredged and then water classified. Martens (1956)
63	Norcross Bros. S&G	Active in 1956	395822 N 744212 W	Cape May	0-1 ft., topsoil. 1-3 ft., yellow, medium grained sand with slight bond. 3-7 ft., light yellow and brown sand. 7-14 ft., light grey and brown, medium-grained sand, horizontally stratified. Contains glauconite.	Asphalt sand. Martens (1956)
<b>Shamong Twp.</b>						
64	Hansens, Ole & Son	Active in 1979	394909 N 744732 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
<b>Southampton Twp.</b>						
65	Continental Sand and Gravel	Active in 1979	395356 N 744150 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
66	Trap Rock Industries	? - ?	395333 N 744144 W	...		Formerly Continental Sand and Gravel. N.J. Department of Transportation (1982)
67	Whitehead Brothers	Active in 1931	395815 N 744403 W	Cape May	Clayey, rusty brown, glauconitic sand.	Molding sand. N.J. Geological Survey (1899-1937)
95	Burlington Asphalt Co.	? - Present	395400 N 743800 W	...		N.J. Bureau of Mine Safety (1991). Location is uncertain.
<b>Springfield Twp.</b>						
68	Bristol quad, no. 6	Opened before 1894	400330 N 744607 W	Pensauken		Salisbury (1895)
69	Columbus quad, no. 1	? - 1918(?)	400031 N 744155 W	Cohansey	Ironstone conglomerate of rice and pea gravel. Coarse sand on slopes is yellow to reddish brown.	Several pits in this area. N.J. Geological Survey (1899-1937)
70	Columbus quad, no. 3	Opened before 1894	400236 N 744025 W	Pensauken		Salisbury (1895)
71	Columbus quad, no. 4	Opened before 1905	400117 N 744057 W	Pensauken	Gravel	Knapp (1894)
72	Columbus quad, no. 5	Opened before 1957	400151 N 743839 W	Cohansey	Sand and gravel	Opened between 1949-1957. Army Map Service (1949b), Army Map Service (1970b)
73	Ellis, Samuel	Active in 1918	400038 N 744007 W	Cohansey	0-5 ft., reddish-brown ironstone. 5-15 ft., white to yellowish sand, occasional thin layers of extremely fine sand or clay. Highly glauconitic sand, (Pleistocene?), overlies Cohansey in west side of pit.	N.J. Geological Survey (1899-1937)
74	Hancock Pits	Opened before 1905	400216 N 744341 W	...	Fine, greenish-brown sand, no pebbles.	Several pits. Knapp (1905), N.J. Geological Survey (1899-1937)

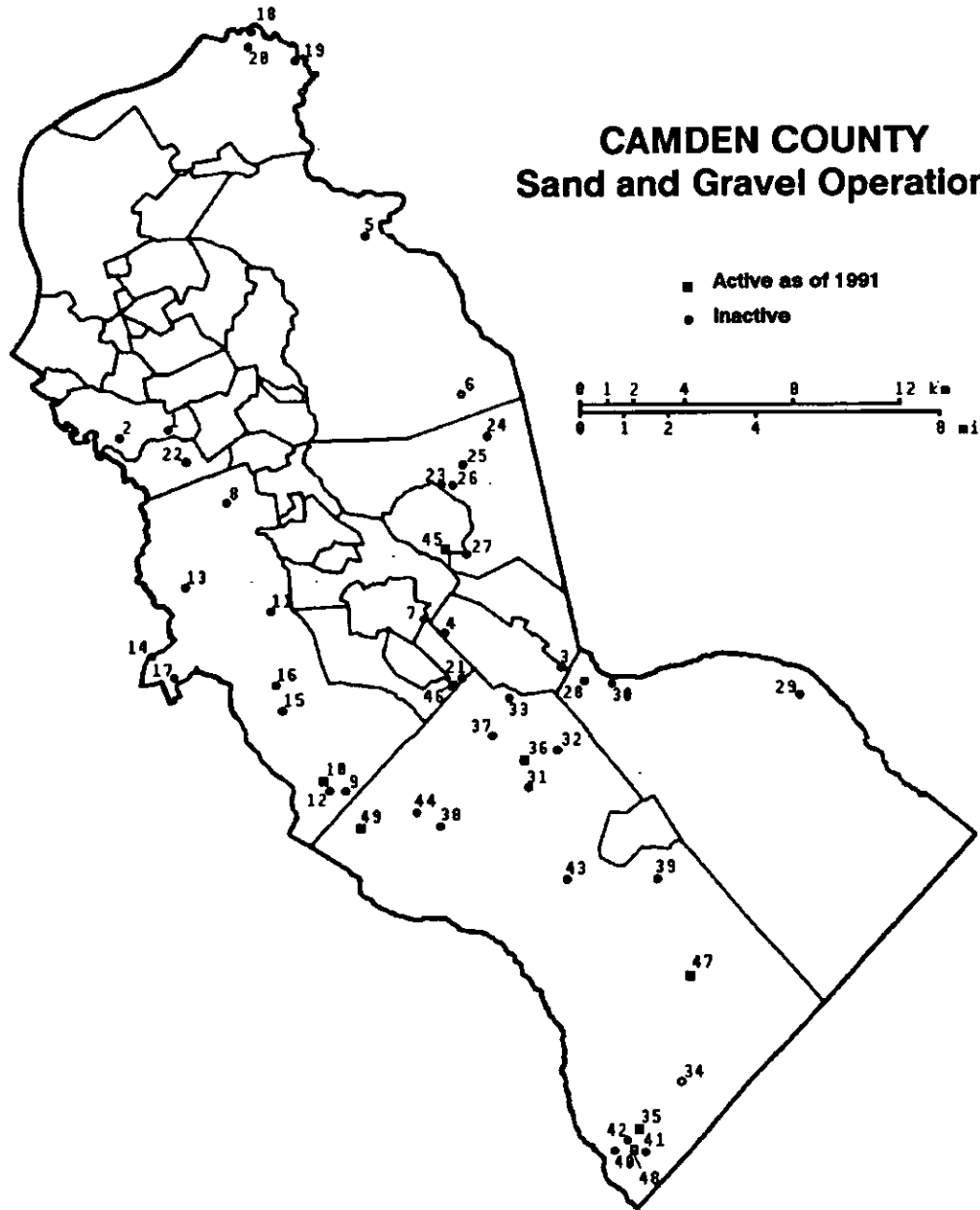
**BURLINGTON COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Tabernacle Twp.</b>						
75	Indian Mills quad, no. 1	Opened before 1956	394747 N 744004 W	Cohansey	0-0.5 ft., light grey, fine sand. 0.5-2 ft., grayish-yellow, fine sand with pebbles. 2-4 ft., brown, fine, clayey sand. 4-21.5 ft., yellow, fine sand, little clay, no pebbles, nearly all quartz, only slight stain after washing.	Small borrow pit suitable for washed foundry sand or add clay for molding sand. Martens (1956)
96	A.C. Allen	? - Present	395000 N 744100 W	...		N.J. Bureau of Mine Safety (1991)
97	Hass Sand and Gravel	? - Present	394900 N 744200 W	...		N.J. Bureau of Mine Safety (1991)
98	Hobart R. Gardner	? - Present	394915 N 744300 W	...		N.J. Bureau of Mine Safety (1991)
<b>Washington Twp.</b>						
76	Atsion quad, no. 1	? - ?	393854 N 743848 W	...	5 ft. gravel bed. Gravel mainly 1/4 to 1/2 inch with some 1 in. quartz pebbles.	N.J. Geological Survey (1899-1937)
<b>Westampton Twp.</b>						
77	Bristol quad, no. 7	? - ?	400202 N 744915 W	Pensauken	Mostly gravel (ironstone, quartz and chert).	N.J. Geological Survey (1899-1937), Salisbury and Knapp (1917)
78	Cavendish Pit	? - ?	400210 N 744759 W	Pensauken	90 ft. of quartz gravel, floor of pit shows masses of Cretaceous ironstone.	N.J. Geological Survey (1899-1937)
<b>Willingboro Twp.</b>						
79	Austin Pit	Opened before 1905	400003 N 745220 W	Pensauken	Gravel up to 20 ft. thick.	N.J. Geological Survey (1899-1937), Knapp (1902n)
80	Hainesport Mining & Trans.	Active in 1923	400155 N 745524 W	Cape May	0-3 ft., fluvialite, unconsolidated, light yellow, fine sand with a few glauconite grains. 15-18 ft., white or gray, high silica sand.	Molding sand. Twitchell and Dane (1923)
81	Stokes, J.C.	? - ?	400035 N 745317 W	...		N.J. Geological Survey (1899-1937)
<b>Woodland Twp.</b>						
82	Clayton Sand	? - Present	395209 N 742740 W	...		Construction grade sand and gravel. Formerly Hollander Dredge and Plant. U.S. Bureau of Mines (1976), N.J. Department of Transportation (1982), N.J. Bureau of Mine Safety (1991).
83	Chatsworth quad, no. 1	? - ?	394615 N 743013 W	...	0-3 ft., clayey, yellowish-brown sand, gravel (Pensauken). 5-8 ft., yellowish-brown sand (Cohansey). 8-10 ft., fine to medium grained, yellow sand (Cohansey). Pebbles mainly quartz.	N.J. Geological Survey (1899-1937)
84	Hess	? - ?	395142 N 742809 W	...		Formerly Burlington Asphalt, Clayton Sand Co. N.J. Department of Transportation (1982)

**BURLINGTON COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
85	Wards Sand & Materials	? - Present	395241 N 743819 W	...		Gypsum processing plant at same site. Formerly Lockhart Sand Co. U.S. Bureau of Mine (1976), N.J. Bureau of Mine Safety (unpub.), N.J. Bureau of Mines Safety (1991).
99	Southern Materials	? - Present	395200 N 743800 W	...		N.J. Bureau of Mine Safety (1991). Location is uncertain.
86	Woodmansie quad, no. 1	Opened before 1932	394921 N 742555 W	...	0-8 ft., gravel, many weathered, fossiliferous chert pebbles (Beacon Hill). 8-10 ft., pinkish-yellow, cross-bedded sand (Cohansey). Fossils include <i>Favosites</i> , <i>Streptelasma</i> , <i>spirifers</i> , <i>Tentaculites</i> , and a bryzoan.	N.J. Geological Survey (1899-1937)
87	Woodmansie quad, no. 4	Opened before 1928	394906 N 742525 W	Beacon Hill	Gravel	Opened between 1922-1928. Plummer (1929b)

# CAMDEN COUNTY Sand and Gravel Operations



# CAMDEN COUNTY

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Bellmawr Boro</b>						
1	Buzby Bros.	Opened before 1956	395149 N 750437 W	Englishtown	15 ft. of yellow to white, medium to coarse quartzose sand.	Martens (1956)
2	Runnemedede quad, no. 2	? - ?	395142 N 750546 W	Pensauken	1-2 ft. of clayey arkosic sand and gravel, from 2-4.5 ft. clayey fine to coarse arkosic sand, from 4.5-9.5 ft. yellowish brown fine to coarse sand with pebbles from 9.5-13.5 ft. of ironstone.	N.J. Geological Survey (1899-1937)
<b>Berlin Boro</b>						
3	Atlas White Brick Co.	Active in 1930	394710 N 745450 W	Cohansey	About 10 ft. of Bridgeton gravel overlying 60 ft. of white sand.	Sand-lime brick. N.J. Geological Survey (1899-1937)
4	Pine Valley Sandwash No. quad, no. 1	Active in 1956	394751 N 745742 W	Bridgeton	8-10 ft. of gravel and coarse sand (Bridgeton) over 20 ft. of white, yellow and gray sands (Cohansey). Some thin layers almost all heavy minerals, mostly ilmenite and leucoxene.	Concrete and plaster sand and little gravel. Martens (1956)
<b>Cherry Hill Twp.</b>						
5	Cole, Sam T.	Opened before 1901	395536 N 745937 W	Pensauken	Contains mainly locally-derived, angular and partially rounded ironstone and a small amount of crystalline rock and shale gravel.	Operated by Cole in 1901. N.J. Geological Survey (1899-1937)
6	Hutton Hill	? - ?	395228 N 745714 W	Bridgeton	15 ft. of Bridgeton gravel, chiefly quartz. Total thickness of 30-33 ft. Seams of sand.	N.J. Geological Survey (1899-1937)
<b>Clementon Boro</b>						
7	Clementon quad, no. 2	Opened before 1899	394805 N 745807 W	...	Gravel	N.J. Geological Survey (1900b)
<b>Gibbsboro Borough</b>						
45	J.D.M. Materials (Triborough Sand & Gravel)	? - Present	394900 N 745715W	...		N.J. Bureau of Mines Safety (1991).
<b>Gloucester Twp.</b>						
8	Chews Land-ing Sand & Stone	Active in 1956	395024 N 750306 W	Cape May	Much glauconite and limonite so is not of interest for industrial sand.	Washed sand and gravel for building. Martens (1956)
9	Continental Sand and Gravel	1976(?)-1979(?)	394440 N 750003 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
10	Dun-Rite Sand & Stone	? - Present	394455 N 750037 W	....		Construction grade sand and gravel. N.J. Department of Transportation (1982), N.J. Bureau of Mine Safety (1991).
11	Iona Brick	Active in 1956	394816 N 750202 W	Bridgeton/ Kirkwood	Up to 7 ft. of Bridgeton Fm. over 26 ft. of yellow, white and lt. brown, very fine grained sand with lowest 2 ft. red and yellow, very fine sand with few coarse grains at bottom (Kirkwood). Mineralogy in 91% quartz, 6% feldspar, 1% muscovite and kaolin and 2% heavy minerals.	Sand lime brick. Martens (1956)

**CAMDEN COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
12	Piersons Gravel Pit	Active in 1979	394445 N 750026 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (unpub.)
13	Runnemede quad, no. 4	? - ?	394843 N 750411 W	Kirkwood	Fine, white to pinkish sand. Overburden is Pensauken.	Molding sand. N.J. Geological Survey (1899-1937)
14	Runnemede quad, no. 7	Opened before 1908	394720 N 750457 W	Bridgeton		Bascom and others (1909)
15	Runnemede quad, no. 9	Opened before 1899	394618 N 750144 W	...	Sand and gravel	N.J. Geological Survey (1900a)
16	Seeger, Peter	Active in 1979	394647 N 750155 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
17	Wilson Thorn no. 107	Active in 1956	394655 N 750425 W	Kirkwood	8 ft. of fine, reddish molding sand under 4 ft. of overburden. Composition of washed and sieved sand is 89% quartz, 7% feldspar, 1% kaolinite and muscovite and 3% heavies.	Molding sand. Martens (1956)
<b>Pensauken Twp.</b>						
18	Lockhart, Inc.	Active in 1956	395934 N 750221 W	Pensauken	16 ft. of brown to yellow sand with gravel streaks (Pensauken) over 15 ft. of white, cross-bedded, medium to coarse sand (Raritan). Another pit on the property has lt. yellow clayey sand (Raritan).	Molding sand. Martens (1956)
19	Ward, R. W. Inc. Plant, no. 13	1948-1956(?)	395901 N 750112 W	Pensauken	Partly in Pensauken and partly in Raritan. Worked to depth of 40 ft. Sands in the Raritan are nearly all quartz while those in the Pensauken are 80% quartz and 20% feldspar.	Pea gravel and three grades of sand. Martens (1956), N.J. Geological Survey (1899-1937)
20	Wards Sand & Materials Co.	? - ?	395921 N 750224 W	Pensauken	Yellow to brown, cross-bedded sand of the Pensauken overlain by finer sand.	Construction grade sand and gravel. Formerly Russel W. Ward, Inc. U.S. Bureau of Mines, Martens (1956)
<b>Pine Hill Boro</b>						
21	Pine Valley Sandwash no. 2	Active in 1956	394654 N 745719 W	Bridgeton		Washed gravel, concrete and plaster sand. Also suitable for sand blast and filter sand due to high grade content. Martens (1956)
46	Hass Sand & Gravel	? - Present	394700 N 745710 W	...		N.J. Bureau of Mines Safety (1991).
<b>Runnemede Boro</b>						
22	Runnemede quad, no. 3	? - ?	395114 N 750402 W	Bridgeton	Medium grained, light grayish-yellow sand on 14 ft. of cross-bedded sand and gravel which is iron stained. Bottom of pit is 6 ft. of fossiliferous marl.	N.J. Geological Survey (1899-1937)
<b>Voorhees Twp.</b>						
23	Buzby Bros. Materials Corp.	Active in 1979	395042 N 745739 W	Cohansey	Mostly quartz sand. 1 ft. lt. grey topsoil, 1 ft. yellow to brown, very coarse pebbly sand, 4 ft. lt. yellow, medium to fine sand, 6 ft. yellow and red, medium to fine sand, 5 ft. yellow, cross-bedded sand and 11 ft. yellow, medium to coarse, cross-bedded sand with clay layer.	Washed building sand, concrete and plaster sand, pointing sand. U.S. Bureau of Mines (1976), Johnson (1979), Martens (1956)
24	Lafferty and Son	1949(?) - ?	395140 N 745642 W	...	1-2 ft. of pea gravel (Bridgeton) over 20 ft. of yellow and pink, fine to coarse sand with thin clayey streaks.	N.J. Department of Transportation (1982), N.J. Geological Survey (1899-1937)

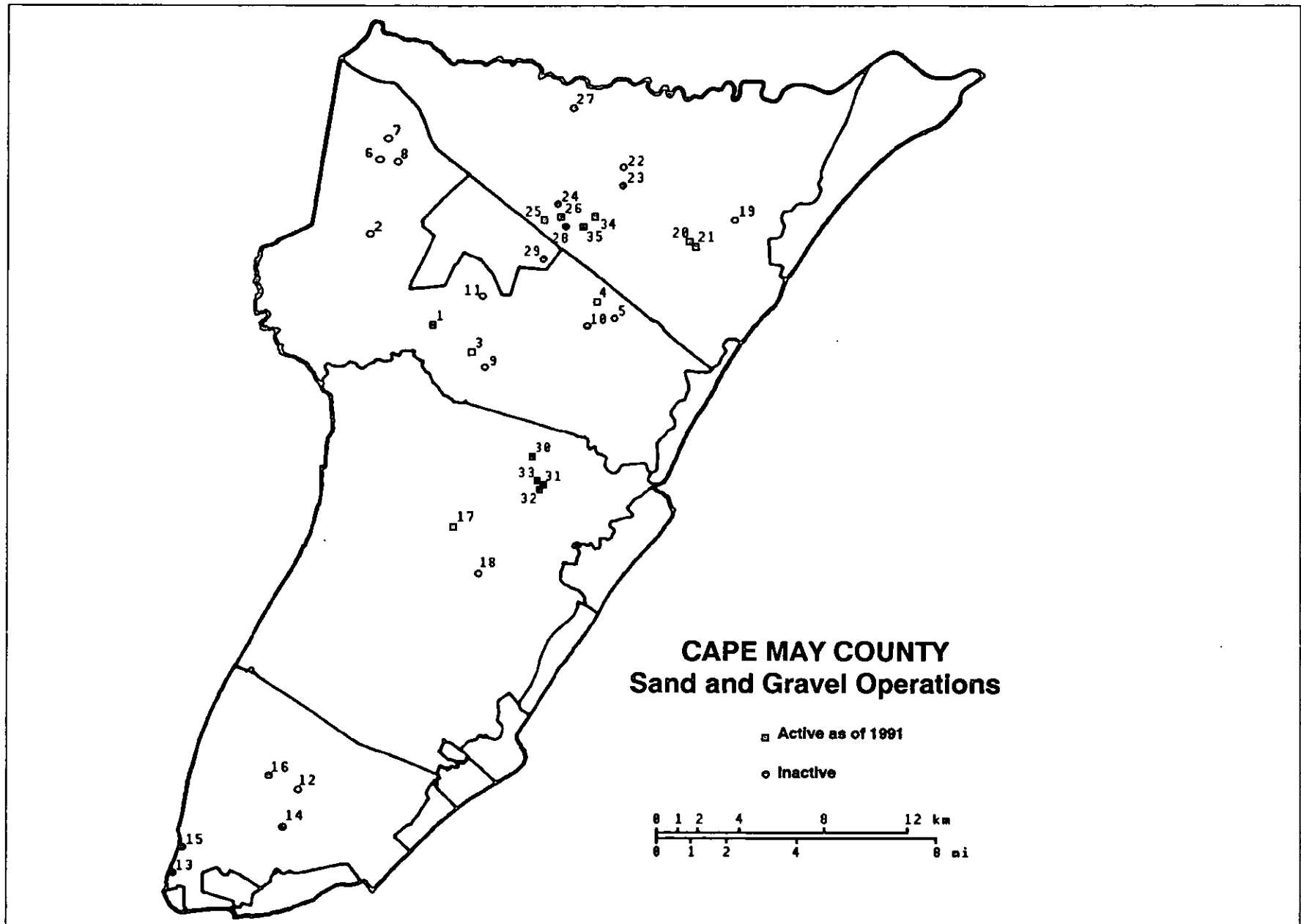
**CAMDEN COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
25	Lafferty and Son	1949(?) - ?	395104 N 745712 W	...	1-2 ft. of pea gravel (Bridgeton) over 20 ft. of yellow and pink, fine to coarse sand with thin clayey streaks.	N.J. Department of Transportation (1982), N.J. Geological Survey (1899-1937)
26	Lafferty and Son	1949(?) - ?	395048 N 745725 W	...	1-2 ft. of pea gravel (Bridgeton) over 20 ft. of yellow and pink, fine to coarse sand with thin clayey streaks.	N.J. Department of Transportation (1982), N.J. Geological Survey (1899-1937)
27	Tri-Borough Sand & Stone	1917(?) - ?	394919 N 745706 W	Bridgeton	10 ft. of coarse arkose sand with very little gravel.	Owned by JDM Materials Co., Inc. U.S. Bureau of Mines (1976), N.J. Dept. of Labor (Ann), N.J. Geological Survey (1899-1937)
<b>Waterford Twp.</b>						
28	Clementon quad, no. 1	Opened before 1899	394650 N 745406 W	Bridgeton	Gravel	N.J. Geological Survey (1900b)
29	Medford Lakes quad, no. 1	? - ?	394634 N 744842 W	Cape May	9.5 ft. of lt. yellow, medium-grained sand. It is nearly all quartz with large percent rounded and frosted. Less than 1% clay, silt and fineness # of 44.	Bank run or washed core sand. Martens (1956)
30	Richards, Thomas	Opened before 1878	394646 N 745325 W	Cohansey	5-8 ft. of yellow, gravelly loam and irregular, alternating layers of white sand on 5 ft. of glass sand. In sand bed are layers of reddish-yellow, sandy earth 0.5-6 in. thick which is removed.	The white, fine-grained sand used as glass sand at Richard Words, Jackson, for window glass. N.J. Geological Survey (1878)
<b>Winslow Twp.</b>						
31	Associated Sand and Gravel Co.	1929 - ?	394446 N 745535 W	Cohansey	Cross-bedded, pinkish-yellow and white sand. Some gravel in the upper 10 ft., over 15 ft. of fine to coarse sand with a little yellow clay.	Concrete and plasterers sand. N.J. Geological Survey (1899-1937)
32	Clementon quad, no. 1	Opened before 1956	394534 N 745448 W	Bridgeton	5 ft. of reddish gravel and sand (Bridgeton) over 23 ft. of medium to coarse, yellow and brown sand (Cohansey).	Silica sand for industrial purposes. Martens (1956)
33	Clementon quad, no. 3	Opened before 1899	394629 N 745605 W	...	Gravel	N.J. Geological Survey (1900b)
34	Hay, A.K.	Active in 1878	393857 N 745138 W	...	2-5 ft. sandy loam with coarse gravel over 6-7 ft. of yellowish, fine-grained sand.	Used at their glass works in Winslow for common holloware. N.J. Geological Survey (1899-1937)
35	Morie, J & Son Inc.	Active in 1979	393804 N 745242 W	Bridgeton	Irregularly bedded brown, coarse sand and sandy gravel with strong bond up to 18 ft. thick with 1 ft. of overburden. Washed sand is 93% quartz, 2% chert, 1% feldspar, 3% clay aggregate and 0.5% heavies.	Oversize was sold for road construction. May be site of Brimfield pit which produced molding sand. U.S. Bureau of Mines (1976), Johnson (1979), Martens (1956)
36	Pettinos, G.	1947(?) - Present	394520 N 745535 W	Cohansey		Construction grade and washed sand and gravel. In 1956 produced white sand for industrial uses. U.S. Bureau of Mines (1976), N.J. Dept. of Labor (Ann), Martens (1956), N.J. Bureau of Mine Safety (1991).
37	Reading Sand	1900-1956(?)	394551 N 745626 W	Cohansey	Cohansey sand which is mostly quartz, 3-4 ft. of overburden.	Sand is dredged to 25-36 ft. Product used by foundries. Previously produced glass sand. Martens (1956)
38	Sicklerville Pit and Mill	? - ?	394402 N 745748 W	...		Formerly Dun-Rite Sand and Gravel. U.S. Bureau of Mines (1976)
39	Winston Townshill	Active in 1897	394259 N 745219 W	...		Knapp (1897g)



CAMDEN COUNTY (cont.)

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
40	Williams-town quad, no. 1	Opened before 1956	393736 N 745316 W	Cape May	Deposit is only 1-2 ft. thick in leached topsoil zone of Cape May Fm.	Glass sand. Martens (1956)
41	Williams-town quad, no. 2	Active in 1956	393739 N 745237 W	Cohansey	7 ft. of brown, white and light-gray fine sand used as molding sand. Washed sand is 99% quartz and 1% limonitic aggregates and heavy minerals. Adjacent pit had brown, fine molding sand with rather strong bond.	Molding sand when mixed with more strongly bonded material. Martens (1956)
42	Williams-town quad, no. 3	Active in 1956	393754 N 745254 W	Cohansey	2 ft. of overburden over 7 ft. of brown and light red, fine and coarse sand used as molding sand. Washed sand is over 99% quartz, angular in finer sizes, subangular and polished in coarser sizes. Below bank is 13.5 ft. of fine to coarse sand which is 99% quartz.	Molding sand. Martens (1956)
43	Williams-town quad, no. 5	? - ?	394257 N 745437 W	Bridgeton	2-4 ft. of gravel with coarse sand on 4-5 ft. of yellow sand which lays on 4 ft. of sand plus clay.	Some sand of good glass sand quality in lower level of pit (Cohansey). N.J. Geological Survey (1899-1937)
44	Williams-town quad, no. 7	1942(?) - 1966	394418 N 745827 W	Cohansey	Sand and gravel	Army Map Service (1948a), U.S. Geological Survey (1966b)
47	J.D. Excavating	? - Present	394100 N 745030 W	...		N.J. Bureau of Mine Safety (1991).
48	DunRite	? - Present	393740 N 745245 W	...		N.J. Bureau of Mine Safety (1991).
49	Woodpeak	? - Present	394415 N 745930 W	...		N.J. Bureau of Mine Safety (1991).



# CAPE MAY COUNTY

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Dennis Twp.</b>						
1	Albrecht & Heun Inc.	? - Present	391128 N 745010 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991).
2	Belleplain State Forest S&G	Active in 1979	391339 N 745151 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
3	Cape Concrete Co.	? - Present	391043 N 744855 W	...		N.J. Department of Transportation (1982), N.J. Bureau of Mine Safety (1991).
4	Earthwork Associates	? - Present	391205 N 744454 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991).
5	Earthwork Associates	Active in 1979	391135 N 744417 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
6	Pettinos, Charles F.	Active in 1923	391548 N 745138 W	Bridgeton	Unconsolidated sand and gravel, 2-3 ft. light yellow sand overburden on red, fine-grained, strongly bonded sand.	Molding sand for use by Hiller and Jones in making very large iron castings weighing approx. 110,000 lbs. Pit has working face 1000 ft. long and 6 ft. high. Twitchell and Dane (1923)
7	Tuckahoe, quad no. 1	? - ?	391620 N 745130 W	Bridgeton	Gravel	N.J. Geological Survey (1899-1937)
8	Whitehead Bros.	Active in 1930	391545 N 745117 W	Bridgeton	Rusty, yellow, clayey sand, 6.5-7 ft. thick, some fine gravel over yellow, medium-grained sand (Cohansey).	Molding sand. N.J. Geological Survey (1899-1937)
9	Woodbine, quad no. 1	Abandoned Active in 1931	391015 N 744828 W	Cape May	0-2.5 ft., clayey sand and gravel. 2.5- 4.5 ft., coarse sand and gravel. 4.5 to over 14 ft., coarse-grained sand. Contains white, chalky pebbles of decomposed chert.	Road gravel. N.J. Geological Survey (1899-1937)
10	Woodbine, quad no. 2	Abandoned ? - ?	391122 N 744514 W	...	Thin layer of Cape May gravel over cross-bedded, white sand (Cohansey).	N.J. Geological Survey (1899-1937)
11	Young Sand & Gravel Co.	Active in 1930	391209 N 744836 W	Cape May	Sand and gravel, about 7 ft. thick. Gravel contains occasional pebbles of flint, granite-gneiss, or pegmatite. Sand averages 99.1% quartz.	Washed sand and gravel. Sand is so clean the only preparation needed is drying. Gravel was used in concrete work where a light-colored aggregate is desired. N.J. Geological Survey (1899-1937)
<b>Lower Twp.</b>						
12	Bennet Station	1897(?) - ?	385909 N 745419 W	Cape May	2 ft. of brown loam over fine Cape May gravel	N.J. Geological Survey (1897-1937)
13	Cape May S&G Co.	Opened before 1954	385657 N 745807 W	Beach Sand	3 ft. of coarse pebbly beach sand. 20% of deposit is gravel. Gravel is 94% quartz, 6% chert. Coarsest sand is 97-98% quartz, 2-3% chert. Finer sands are 98% quartz, 1% chert, feldspar and various heavies. Sands are very light yellow to nearly white.	Filtration sand, sand for cleaning coal, sand blast and filter sand. Martens (1956)
14	Cape May, quad no. 1	Abandoned ? - ?	385813 N 745443 W	Cape May	0-5.5 ft., yellowish-brown, clayey sand, small pebbles 5.5-6 ft., fine grained, light yellow fluffy sand. Pebbles chiefly quartz, some fossiliferous chert.	N.J. Geological Survey (1899-1937)
15	Cape May, quad no. 2	? -1956	385737 N 745745 W	Beach sand	Sand, 98% quartz, minor feldspar and heavy minerals	Small intermittent operation. Martens (1956)

CAPE MAY COUNTY (cont.)

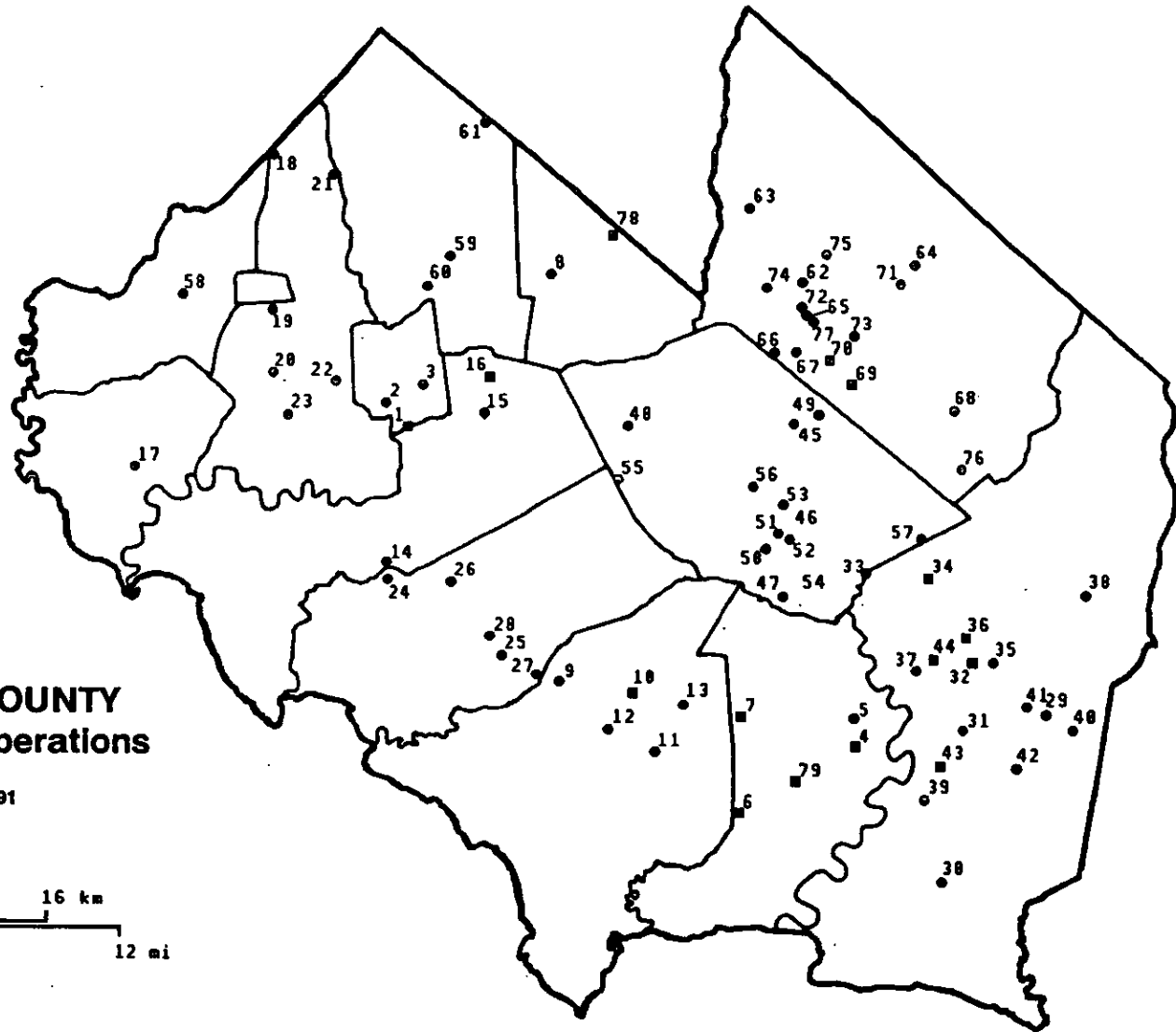
MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
16	Cape May, quad no. 3	? - ?	385930 N 745507 W	Cape May	Gravel	N.J. Geological Survey (1899-1937)
<b>Middle Twp.</b>						
17	Albrecht & Heun Inc.	? - Present	390607 N 744930 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991).
18	Woolson, T.	Opened before 1956	390455 N 744847 W	Cape May	Coarse sand, mostly quartz.	Washed sand and fine gravel. Martens (1956)
30	Albrecht and Heun	? - Present	390800 N 744650 W	...		N.J. Bureau of Mine Safety (1991).
31	Albrecht and Heun	? - Present	390700 N 744800 W	...		N.J. Bureau of Mine Safety (1991).
32	Albrecht and Heun	? - Present	390650 N 740705 W	...		N.J. Bureau of Mine Safety (1991).
33	Earthwork Associates	? - Present	390700 N 744815 W	...		N.J. Bureau of Mine Safety (1991).
<b>Upper Twp.</b>						
19	Champion Sand & Gravel Co.	Active in 1929	391412 N 744028 W	...		N.J. Geological Survey (1908-1953)
20	Earthwork Associates	? - Present	391340 N 744152 W	...		N.J. Department of Transportation (1982), N.J. Bureau of Mines Safety (1991).
21	Action Supply	1956(?)- Present	391333 N 744145 W	Cape May	Quartz pebbles and sand.	Washed sand and gavel for construction uses. Formerly Seaville Sand and Gravel Co., Lentine Sand and Gravel. Mined with dredge to a depth of 30 ft. N.J. Department of Transportation (1982), Martens (1956), N.J. Bureau of Mine Safety (1991).
22	Marmora, quad no. 1	? - ?	391533 N 744400 W	...	Gravel	N.J. Geological Survey (1899-1937)
23	Thomsons Trenching	? - ?	391506 N 744401 W	...		U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (unpub.)
24	Tuckahoe Sand and Gravel	1956(?)- Present	391437 N 744607 W	Cape May	0-8 ft., brown, silty sand with small pebbles. 8-20 ft., white to gray, medium-coarse sand, cross-bedded, fine gravel. 20-25 ft. gravel with pebbles up to 2 in., some sand. Sand and gravel is mostly quartz.	Construction grade sand and gravel. Formerly Menantico-Tuckahoe Sand and Gravel Co., Lentine Sand and Gravel which produced washed and construction grade sand and gravel. N.J. Department of Transportation (1982), U.S. Bureau of Mines (1976), Martens (1956), N.J. Bureau of Mine Safety (1991).
25	Tuckahoe Sand and Gravel	? - Present	391411 N 744635 W	Cape May		Construction grade sand and gravel. N.J. Department of Transportation (1982), U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (1991).
26	The Morie Company	? - Present	391450 N 744512 W	Cape May		Construction grade sand and gravel. N.J. Department of Transportation (1982), U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (1991). Formerly Tuckahoe Sand and Gravel.

**CAPE MAY COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
27	Tuckahoe, quad no. 3	? - ?	391714 N 744540 W	Bridgeton	Gravel	N.J. Geological Survey (1899-1937)
28	Upper Township Sand & Gravel	? - ?	391402 N 744551 W	...		T/A Thomson Mining Corp., N.J. Department of Transportation (1982)
34	Daleys Pit	? - Present	391445 N 744515 W	...		N.J. Bureau of Mine Safety (1991).
35	Earthwork Associates	? - Present	341430 N 744520 W	...		N.J. Bureau of Mine Safety (1991).
<b>Woodbine Boro</b>						
29	Barrett Sand and Gravel	? -1980(?)	391312 N 744632 W	...		W. Cummings, N.J. Department of Transportation (pers. commun. 1982)

# CUMBERLAND COUNTY Sand and Gravel Operations

- Active as of 1991
- Inactive



# CUMBERLAND COUNTY

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Bridgeton City</b>						
1	Bonham Sand and Stone	1929(?)- Present	392425 N 751324 W	Cape May		Building sand and some fine gravel. A few thousand tons of partially washed sand in piles which were accumulated when the gravel was screened. Martens (1956), N.J. Geological Survey (1908-1953), N.J. Bureau of Mines Safety (1991).
2	Bridgeton quad, no. 2	? - 1956(?)	392500 N 751408 W	Bridgeton/ Cohansey	3 ft. gravel (Bridgeton) overlying fine, brown, yellow and white sand (Cohansey).	Glass sand. Part of the deposit appears pure enough to be used for second-quality glass sand. Martens (1956)
3	Lupton, A.H.	Active in 1931	392525 N 751304 W	Bridgeton	0-7 ft., clayey gravel with pebbles up to 6 in. 7-25 ft., cross-bedded, white and yellow, coarse sand and fine gravel, pebbles of decayed chert.	N.J. Geological Survey (1899-1937)
<b>Commercial Twp.</b>						
4	Morie, J. & Son Inc.	? - Present	391704 N 750031 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991).
5	Morie, J. & Son Inc.	Active in 1979	391740 N 750031 W	...		U.S. Bureau of Mines (1976)
6	Ricci Brothers Sand Co., Inc.	? - Present	391533 N 750349 W	...		Construction grade sand and gravel. U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (1991).
7	Unimin Corporation	? - Present	391747 N 750348 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991).
<b>Deerfield Twp.</b>						
8	Tri State Sand Co.	1949 - ?	392758 N 750921 W	Bridgeton	1-2 ft. of grayish-yellow pebbly sand over 8-10 ft. of coarse, irregularly-bedded brown sand with streaks of pebbles.	Working face 1400 ft. long. Formerly product was used as road material. Martens (1956)
78	Diliberta, Maurice	? - Present	392845 N 750745 W	...		N.J. Bureau of Mine Safety (1991).
<b>Downe Twp.</b>						
9	Newport Station Pit	Opened before 1897	391833 N 750858 W	...	4 to 6 ft. of gravel on more than 7 ft. of fine glass sand.	Knapp (1897d)
10	U.S. Silica	1930(?) - Present	391825 N 750655 W	Cohansey		Glass sand and construction grade sand and gravel. Operated as Pennsylvania Pulverizing Co. in 1930. U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (unpub.) N.J. Geological Survey (1899-1937), N.J. Bureau of Mine Safety (1991). Formerly Pennsylvania Glass Sand.
11	Pennsylvania Glass Sand	Active in 1979	391658 N 750616 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
12	South Jersey Sand Co.	Active in 1956	391730 N 750731 W	Cape May	Sand, cross-bedded, 20 ft. thick (Cape May) beneath swamp deposits.	Much of the deposit is under Bear Swamp. Product used for glass sand and pulverized silica. Martens (1956)
13	Whitehead Brothers	? - ?	391807 N 750441 W	Cohansey	Washed sand nearly white, about 99% quartz, a few limonitic aggregates and chert.	Industrial grade sand and gravel. U.S. Bureau of Mines (1976), Martens (1956)

**CUMBERLAND COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Fairfield Twp.</b>						
14	Fairton Sand and Gravel	? - ?	392115 N 751403 W	...		U.S. Bureau of Mines (1976)
15	South State Inc.	? - ?	392446 N 751120 W	...		U.S. Bureau of Mines (1976)
16	South State Inc.	? - Present	392541 N 751107 W	...		Also known as Reeves Dredge. U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (1991).
<b>Greenwich Twp.</b>						
17	Shiloh quad, no. 1	? - ?	392329 N 752141 W	...	2 ft. of loam over 3 ft. of gravel. Some sand, pebbles up to 3/4 in., all quartz.	Road construction gravel. N.J. Geological Survey (1899-1937)
<b>Hopewell Twp.</b>						
18	Alloway quad, no. 1	Abandoned Opened before 1939	393039 N 751736 W	Bridgeton	0-10 ft., yellowish or rusty-brown, clayey coarse sand and gravel (Bridgeton). 10-14 ft., fine grained yellowish-brown clayey sand (Cohansey).	N.J. Geological Survey (1899-1937)
19	Bridgeton Washed Gravel Corp.	Opened before 1930	392705 N 751738 W	Bridgeton	0-17 ft., gravel (Bridgeton), 17-18 ft., red sand (Cohansey)	Material was dredged and screened. Vibrating screens separated gravel and sand. Sand was cleaned. N.J. Geological Survey (1899-1937)
20	Fithians	Opened before 1902	392540 N 751736 W	Bridgeton	Over 10 ft. of gravel with minor amount of sand.	Knapp (1902i)
21	Paxson, J.W.	Active in 1923	393012 N 751545 W	Cape May	Fluviatile, unconsolidated fine, brownish-yellow, bonded sand with numerous glauconite grains.	Deposit 2-3 ft. thick. Produced Lumberton fine molding sand. In 1923 shipped 2-4 rail cars per day. Twitchell and Dane (1923)
22	Shiloh quad, no. 2	? - ?	392532 N 751534 W	Bridgeton	Gravel	N.J. Geological Survey (1899-1937)
23	Shiloh quad, no. 3	Opened before 1900	392444 N 751705 W	Bridgeton	Gravel	N.J. Geological Survey (1899-1937), Salisbury and Knapp (1917)
<b>Lawrence Twp.</b>						
24	Cedarville Block S&G	? - 1955(?)	392056 N 751359 W	Cape May	Sand, more than 95% quartz but too much iron oxide stain for glass. Maximum of 8 ft. of brown to nearly white, coarse pebbly sand with 6 in. of gray soil overburden.	Sand and gravel for concrete. Martens (1956)
25	Cedarville quad, no. 1	Opened before 1955	391918 N 751046 W	Cohansey	At least 25 ft. of yellow, white and brown sand, 4 ft. overburden. Most sand is limonite stained.	Glass sand, foundry sand and pulverized silica. Martens (1956)
26	Cedarville quad, no. 2	Opened before 1897	392052 N 751210 W	Pensauken	0-10 ft., gravel. 10-16 ft., yellow sand.	Several pits in this area. Knapp (1897d)
27	Cedarville quad, no. 3	Opened before 1938	391847 N 750940 W	Cape May	Sand	U.S. Army Corps of Engineers (1942), U.S. Geological Survey (1972c)
28	Pettinos, G.F.	Active in 1930	391936 N 751102 W	Bridgeton/ Cohansey	0-4 ft., sand, clay and gravel (Bridgeton). 4-24 ft., light, salmon-colored sand (Cohansey).	N.J. Geological Survey (1899-1937)
<b>Maurice River Twp.</b>						
29	Harris, John J.	Active in 1930	391754 N 745500 W	Bridgeton	Approx. 8-9 ft. of clayey, rusty-yellow sand and gravel. Few pebbles quartz, some sandstone, quartzite and conglomerate.	Molding sand. N.J. Geological Survey (1899-1937)



CUMBERLAND COUNTY (cont.)

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
30	Heislerville quad, no. 1	? - ?	391401 N 745759 W	Cape May		N.J. Geological Survey (1899-1937)
31	Mays Landing Sand and Gravel	Active in 1979	391724 N 745716 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
32	Mays Landing Sand and Gravel	? - Present	391903 N 745703 W	...		Construction grade sand and gravel. U.S. Bureau of Mines (1976), N.J. Department of Transportation (1982), N.J. Bureau of Mine Safety (1991).
33	Menantico-Tuckahoe Sand	Opened before 1947	392059 N 750012 W	Cape May	Light yellow sand, 98-99% quartz.	Suitable for sandblast, filter and engine sand. Martens (1956)
34	NJ Silica Sand	(?)1956-Present	392102 N 745820 W	Cohansey		Up to 84 ft. thick. Wide variety of industrial sands. U.S. Bureau of Mines (1976), Johnson (1979), Martens (1956), N.J. Bureau of Mine Safety (1991).
35	Owens-Illinois	Active in 1979	391904 N 745630 W	Cape May		Formerly Millville Washed Silica Sand and Gravel Co.(1956). Used mainly as foundry sand. U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (unpub.), Martens (1956)
36	The Morie Co.	1947(?)-Present	391936 N 745715 W	Cape May	Gray to light yellow sand, 98-99% quartz, 0-0.5% feldspar, 0.5-1% heavy minerals, trace of chert and limonitic aggregates.	Mined by dredge. U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (unpub.), Martens (1956), N.J. Bureau of Mine Safety (1991), formerly Pettinos.
37	Port Silica Sand Co.	? - ?	391854 N 745836 W	...		U.S. Bureau of Mines (1976)
38	Port Elizabeth quad, no. 1	Opened before 1955	392038 N 745348 W	Bridgeton	0-1 ft., loose, pebbly sand. 1-6 ft., brown clayey and pebbly coarse sand. 6-10 ft., brown coarse sand. 10-11 ft. of yellow coarse sand. Sand is quartz, 2-3% clay.	Foundry sand. Martens (1956)
39	Whibco	Active in 1956	391626 N 745742 W	Cohansey	Sand, 97-99% quartz, 3% or less limonitic aggregates, chert, heavy minerals, kaolinite and feldspar.	Molding sand. Martens (1956)
40	Whibco	Active in 1930	391733 N 745412 W	Bridgeton	0-1 ft., topsoil 1-10 ft., sand and gravel. Gravel is mostly quartz, some sandstone, quartzite and conglomerate pebbles. More pebbles than usual for Bridgeton.	Molding sand. N.J. Geological Survey (1899-1937)
41	Whibco (Harris Pit)	Active in 1956	391801 N 745533 W	Cohansey	Deposit is at least 17 ft. deep above the water table. Sand is white to yellow.	Molding sand of good quality. Martens (1956)
42	Whibco	Active in 1956	391639 N 745549 W	Bridgeton	0-5 ft., pebbly sand overburden. 5-13 ft., red and brown, strongly bonded sand. Washed sand is 97% quartz, 1% chert and 2% feldspar, kaolinite and heavy minerals.	Molding sand. Martens (1956)
43	Whibco	? - Present	391909 N 745817 W	Bridgeton	0-1.5 ft., overburden. 7-9 ft., coarse, reddish-brown, strongly bonded sand, streaks of pebbles. Sand is about 98% quartz.	Molding sand or gravel. U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)

CUMBERLAND COUNTY (cont.)

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
44	Whibco	? - Present	391641 N 745802 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)
79	Albrecht and Heun	? - Present	391615 N 755540 W	...		N.J. Bureau of Mine Safety (1991).
<b>Millville City</b>						
45	Ada Silica Co.	Active in 1935	392433 N 750210 W	Cohansey	0-6 ft., medium to coarse grained yellow sand. 6-14 ft., white stratified sand. Below 14 ft., at least 10 ft. of sand. Water level at 14 ft.	Mined by dredge. Sand was used in making concrete blocks and as sized material. N.J. Geological Survey (1899-1937)
46	Dividing Creek quad, no. 1	Abandoned Opened before 1906	392207 N 750224 W	...	Bank 40 ft. high, 5 different layers of sand separated by thin seams of clay, coarsens downward.	Foundry sand. N.J. Geological Survey (1899-1937)
47	Hilliards, Samuel	1842 - ?	392038 N 750243 W	...	Several pits 12-16 ft. of glass sand overlain by 3 ft. of loam, 4-5 ft. of greyish-white clay and 1 ft. of yellow sand.	Opened 1842 by Anthony Sharp. In 1878 produced 10- 12,000 tons a year for glass works in New England, New York, Jersey City, Philadelphia and elsewhere. N.J. Geological Survey (1899-1937)
48	Millville quad, no. 3	? - ?	392428 N 750706 W	...	Gravel	N.J. Geological Survey (1899-1937)
49	Millville quad, no. 4	? - ?	392450 N 750135 W	Bridgeton	Gravel	N.J. Geological Survey (1899-1937)
50	Pettinos quad, no. 4	Active in 1956	392143 N 750301 W	Bridgeton	0-1.5 ft., gray and grayish-yellow gravelly sand. 1.5-8 ft., red and brown, coarse sand, some pebbles, sand is 98% quartz.	Molding sand. Martens (1956)
51	Pettinos quad, no. 3	Active in 1956	392204 N 750245 W	Bridgeton	0-1.5 ft., gray and grayish-yellow, pebbly sand overburden. 1.5-9.5 ft., brown to reddish, coarse sand, few small pebbles. Sand, about 95% quartz, small amounts of chert, kaolinite and weathered feldspar.	Molding sand. Martens (1956)
52	Pettinos quad, no. 2	Active in 1956	392153 N 750222 W	Cohansey	0-2 ft., pebbly sand 10-12 ft., fine, brown, yellow and white sand (Cohansey).	Molding sand. Martens (1956)
53	Pettinos, G.F. Inc.	1930(?) - 1956(?)	392238 N 750237 W	Bridgeton	0-6 ft., brown gravel and pebbly sand (Bridgeton). 6-26 ft., white to brown, coarse to very coarse, cross-bedded sand, small to moderate amount of clay (Cohansey). Sand is 99% quartz and 1% feldspar.	Sand and clay for foundries. Martens (1956), N.J. Geological Survey (1899-1937)
54	Pettinos, G.F. Inc. #125 Pit	Active in 1956	392110 N 750206 W	Bridgeton	0-6 ft., gravel and pebbly sand (Bridgeton). 6-8 ft., brown, very fine clayey sand (Cohansey). 8-14 ft., very fine, clayey sand of variegated color. 14-21 ft., yellow and gray, very fine, clayey sand. 22-26 ft., brown and white slightly clayey sand. Sand is 99% quartz.	Cupola daub material. Martens (1956)
55	Pettinos, G.F. no. 2	Active in 1923	392315 N 750232 W	Cape May	Thin overburden of Cape May on Cohansey. Working face was 6 ft. high and 800 ft. long. Fine yellow sand with strong clay bond. Overburden is about 4 ft., chiefly loose, gray sand with gravel.	Molding sand. Twitchell and Dane (1923)

CUMBERLAND COUNTY (cont.)

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
56	Samano Brothers	Active in 1979	392306 N 750331 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (unpub.)
57	Unisil Corp.	? - ?	392149 N 745838 W	...		U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (unpub.)
<b>Stow Creek Twp.</b>						
58	Shiloh quad, no. 4	Active in 1902	392727 N 752020 W	Bridgeton	Gravel on yellow/brown sand. Deposit over 9 ft. thick	Knapp (1902i)
<b>Upper Deerfield Twp.</b>						
59	Bridgeton quad, no. 1	Abandoned ? - ?	392822 N 751216 W	Bridgeton	20 ft. of Bridgeton gravel and sand overlying Cohansey sand.	N.J. Geological Survey (1899-1937)
60	Bridgeton quad, no. 5	Opened before 1938	392744 N 751301 W	Bridgeton	Gravel	U.S. Army Corps of Engineers (1942b), U.S. Geological Survey (1972a)
61	Paxson, J. W.	Active in 1904	393124 N 751118 W	...		Several pits in this area. Extracted a 3 ft. layer of molding sand from beneath thin cover of soil. Layer extended over most of the hill. Sand was sent to foundries at Burlington and Florence. Kummel (1905)
<b>Vineland City</b>						
62	Armstrong Cork Company	Active in 1956	392748 N 750206 W	Bridgeton	Upper 5-10 ft. brown gravel, coarse sand (Bridgeton). 8 ft. of fine sand (Cohansey) above water level. Sand is white, streaks of brown and yellow sand to 2 ft. thick.	Used for glass sand. Iron oxide was removed almost completely by washing. Used at the Millville glass factory owned by Armstrong. Martens (1956)
63	Bidwell	Active in 1897	392930 N 750338 W	...	0-3 ft., fine sand. 3-11 ft., coarse, white sand.	Knapp (1897b)
64	Brunetti Brothers	Active in 1956	392814 N 745854 W	Bridgeton		Concrete and plaster sand and washed gravel. Mined by suction dredge. Washed concrete sand is 93% quartz and 7% chert, clay aggregates and feldspar. U.S. Bureau of Mines (1976), Martens (1956)
65	Drinker, J.B.	Active in 1930	392654 N 750157 W	Cohansey		Pure silica sand. N.J. Geological Survey (1899-1937)
66	Golder Pit	Active in 1923	392609 N 750248 W	Bridgeton	0-2 ft., loose sandy loam. 8-10 ft., yellow to reddish brown sand.	Several pits in unconsolidated sand and gravel, largest with face 400 ft. long. Molding sand which was too variable in quality to be economical on a large scale. Twitchell and Dane (1923)
67	Golder Pit no. 2	Active in 1923	392610 N 750215 W	Bridgeton	Gravel, yellow to reddish brown, mostly coarse grained.	Molding sand for iron foundries. Formerly Whitehead Bros. Twitchell and Dane (1923)
68	Morie, J. & Son Inc.	Active in 1979	392453 N 745742 W	Cohansey	Sand, approx. 99% quartz, 0.5-1% heavy minerals, traces of limonite, little mica and feldspar.	Formerly Daniel Goff Co. Produced bank-run core, molding, furnace bottom and foundry daub sand. U.S. Bureau of Mines (1976), Johnson (1979), Martens (1956)
69	Morie, J. & Son Inc.	? - ?	392601 N 750124 W	...		Construction grade sand and gravel and glass sand. U.S. Bureau of Mines (1976)
70	Morie, J. & Son Inc.	1979 - Present	392525 N 750040 W	Cohansey	Clay, 20-30 ft. thick, gravel cap up to 5 ft. thick.	Farnsworth (Pers. comm. 1986), U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)

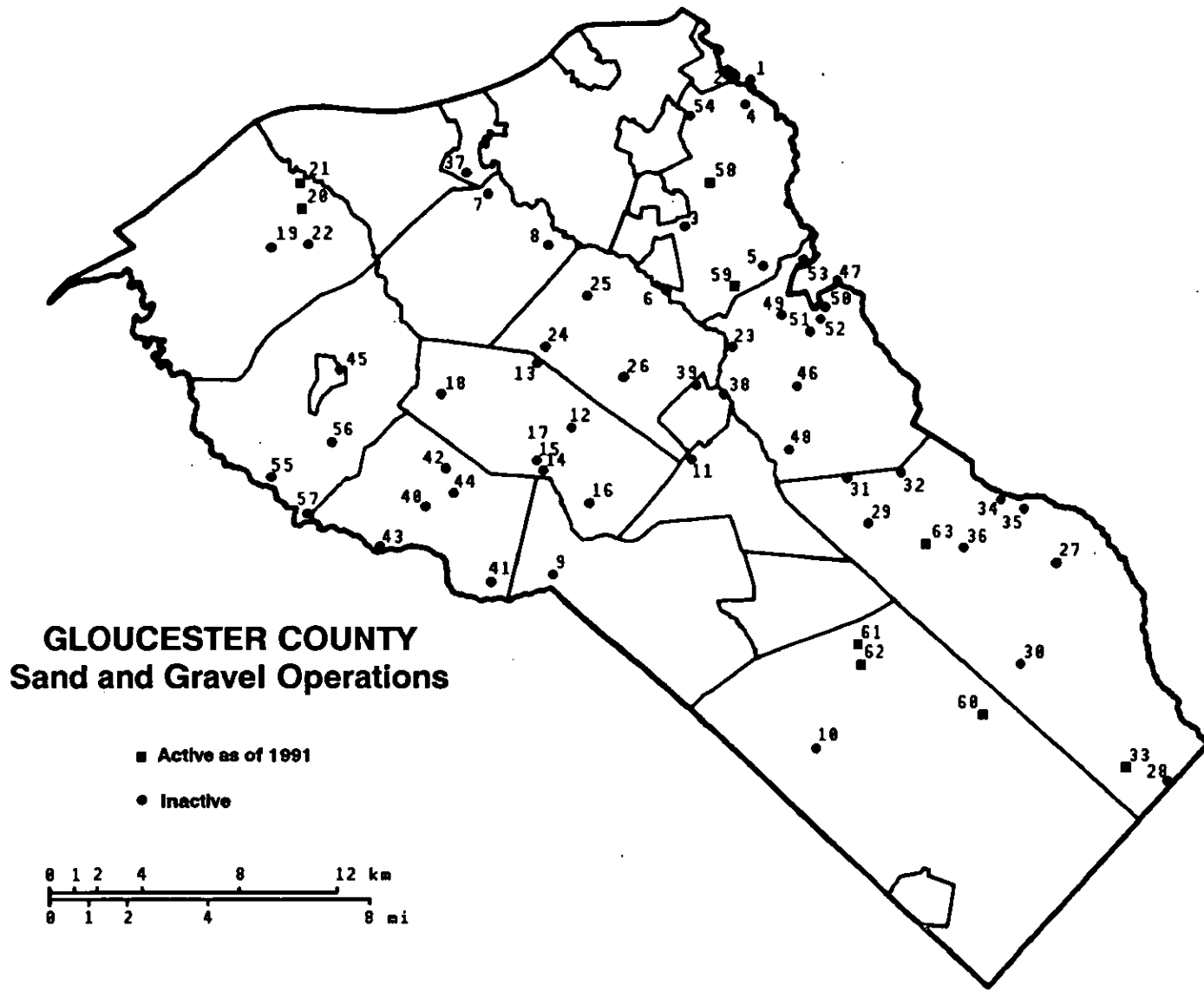
**CUMBERLAND COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
71	Morie, J. & Son Inc.	Active in 1930	392747 N 745915 W	...		
72	Millville quad, no. 1	Abandoned Opened before 1956	392717 N 750210 W	...		Numerous abandoned glass sand pits. Martens (1956)
73	Millville quad, no. 2	? - ?	392636 N 750051 W	...		Glass sand. N.J. Geological Survey (1899-1937)
74	Pasquale, J.D. Lumber Co.	Active in 1956	392743 N 750312 W	Cape May	0-1 ft., gray sand. 1-4 ft., light brown, medium-grained, unstratified sand. 4-8 ft., light-yellow to white, medium to coarse sand, horizontally stratified.	Concrete and plaster sand. Martens (1956)
75	Pasquale, James	Active in 1930	392826 N 750126 W	Bridgeton	Gravel, quartzite up to 2 in. diameter. Deposit up to 30 ft. thick, underlain by fine sand.	Mined by small dredge. N.J. Geological Survey (1899-1937)
76	Piermattei, Carlo	Active in 1956	392329 N 745727 W	Bridgeton	0-2 ft., gray to grayish sand, pebbles. 2-6.5 ft., reddish-brown sand (Bridgeton). 6.5-8.5 ft., reddish-brown sand (top of Cohansey). 8.5-11.5 ft., brown to yellow fine sand. 11.5-14.5 ft., white and yellow fine sand. 14.5-18.5 ft., yellow sand. 18.5-20.5 ft. clayey sand.	Foundry sand. Martens (1956)
77	Whitetail Tatem Co.	Active in 1910	392651 N 750149 W	Bridgeton/ Cohansey	0-7 ft., sand and gravel (Bridgeton) 7-15 ft., white sand (Cohansey). Below 15 ft., clay.	Glass sand. N.J. Geological Survey (1899-1937)



# ESSEX COUNTY

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Bloomfield Town</b>						
1	Orange quad, no. 3	1898(?) - 1920(?)	404720 N 741223 W	...		N.J. Geological Survey (1899-1937)
<b>Cedar Grove Twp.</b>						
2	Cedar Grove S & G Co.	Active in 1929	405209 N 741337 W	...		Large operation in 1931. N.J. Geological Survey (1899-1937)
3	Little Falls S & G Co.	Active in 1931	405155 N 741342 W	...		Large operation in 1931. N.J. Geological Survey (1899-1937)
4	Million, A.C.	Active in 1931	405157 N 741322 W	...		N.J. Geological Survey (1899-1937)
<b>East Orange City</b>						
5	Orange quad, no. 1	1898(?) - 1920(?)	404710 N 741255 W	...		N.J. Geological Survey (1899-1937)
6	Orange quad, no. 2	1898(?) - 1920(?)	404706 N 741259 W	...		N.J. Geological Survey (1899-1937)
<b>Glen Ridge Boro</b>						
7	Finan, John	1898(?) - 1930(?)	404720 N 741255 W	...		N.J. Geological Survey (1899-1937)
8	Shaloo, Patrick	1898(?) - 1930(?)	404717 N 741245 W	...		
<b>Livingston Twp.</b>						
9	Livingston S & G Co.	? - 1932(?)	404751 N 741832 W	...	Fine, brownish sand with boulders to 2-3 ft.	Several pits over an area of 46 acres. N.J. Geological Survey (1899-1937)
10	Mitschle and Baer Inc.	Active in 1933	404807 N 741916 W	Stratified drift	Roughly stratified glacial drift, about 75% sand and 25% gravel. Sand is medium-grained.	
<b>West Orange Town</b>						
11	Caldwell, quad, no. 1	? - ?	404703 N 741637 W	Glacial-undifferentiated	Irregular stratification, sharp contrast between coarse gravel and fine sand. Sand is reddish-gray.	Large pit. N.J. Geological Survey (1899-1937)



# GLOUCESTER COUNTY

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCED, COMMENTS
<b>Deptford Twp.</b>						
1	Buzby Bros.	Active in 1934	395130 N 750624 W	Cape May	90% sand, 10% gravel (quartz, quartzite, flint, ironstone conglomerate). Pleistocene shell fossils at contact between sand and gravel and clay.	N.J. Geological Survey (1899-1937)
2	Davidson, E. Pit	Active in 1902	395132 N 750702 W	Pensauken	4-6 ft. of almost solid gravel. South pit, over 2 ft. of yellow sand under 2-4 ft. of gravel.	N.J. Geological Survey (1899-1937)
3	Jericho Pit	? - ?	394819 N 750824 W	Kirkwood	5 ft. of gravel over several feet of fine sand (Kirkwood).	N.J. Geological Survey (1899-1937)
4	Runnemede quad, no. 1	Active in 1936	395110 N 750637 W	Cape May	2-5 ft. of clayey, yellowish-brown sand and gravel over 10 ft. of fine grained sand, mostly yellow.	N.J. Geological Survey (1899-1937)
5	Runnemede quad, no. 6	Opened before 1908	394727 N 750554 W	Bridgeton		Bascom and others (1909)
6	Wenonah Cement Products Co.	Active in 1931	394652 N 750850 W	Cape May	Northwest end of pit: 3 ft. of loam and gravel, predominately quartz (Cape May) on 13 ft. of medium to coarse grained sand, much glauconite (Mt. Laurel-Wenonah).	N.J. Geological Survey (1899-1937)
58	Marlco, Inc.	? - Present	394845 N 750745 W	...		N.J. Bureau of Mine Safety (1991).
59	Marlco, Inc.	? - Present	394630 N 750615 W	...		N.J. Bureau of Mine Safety (1991).
<b>East Greenwich Twp.</b>						
7	Wenonah S&G Co.	Active in 1956	394905 N 751350 W	Cape May	0-3 ft., gray and yellow fine sand. 3-4 ft., brown sand and sandy gravel. 4-14 ft. yellow, medium to coarse sand, irregularly cross-bedded. Water level at 14 ft.	Mined by suction dredge. Produced plaster and concrete sand, grit, pea gravel and 3/4 in. gravel. Martens (1956)
8	Woodbury quad, no. 1	Abandoned ? - ?	394756 N 751206 W	Pensauken	8 ft. of yellowish-brown sand and gravel overlying 1+ ft. fine to medium grained, glauconitic, micaceous sand. Gravel mostly quartz with chert, pegmatitic quartz and muscovite pebbles.	N.J. Geological Survey (1899-1937)
<b>Elk Twp.</b>						
9	Pitman West, quad, no. 7	1938(?)-1967(?)	394020 N 751201 W	Pensauken		U.S. Army Corps of Engineers (1942c)
<b>Franklin</b>						
10	Grays Ferry Brick Co.	1956(?)-1979(?)	393624 N 750424 W	Cape May	Terrace deposit of Little Ease Run. Pit worked to 20 ft. Sand is very light yellow.	Sand is mixed 2 parts to 1 part of finer sand for sandlime bricks. U.S. Bureau of Mines (1976), Martens (1956)
60	Sahara Franklin	? - Present	393645 N 745930 W	...		N.J. Bureau of Mine Safety (1991).
61	Grochowski Excavating	? - Present	393800 N 750315 W	...		N.J. Bureau of Mine Safety (1991).
62	Grochowski Excavating	? - Present	393745 N 750325 W	...		N.J. Bureau of Mine Safety (1991).



**GLOUCESTER COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Glassboro Boro</b>						
11	Brida, A.M.	Active in 1979	394301 N 750805 W	...		U.S. Bureau of Mines (1976)
<b>Harrison Twp.</b>						
12	Borden, Samuel	Opened before 1902	394344 N 751138 W	...	Gravel	Knapp (1902o)
13	Brooks, Chas.	Active in 1979	394512 N 751232 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
14	Continental Sand and Gravel	Active in 1979	394243 N 751220 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
15	Harris, Henry L.	Active in 1979	394253 N 751229 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
16	Larrimore, R.R.	Active in 1979	394202 N 751058 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
17	Pitman West quad, no. 1	Abandoned ? - ?	394318 N 751254 W	---	3-4 in., gray sand and gravel. 3-4 in. to 12 in., light yellow sand and gravel. 12 in. to 2.5 ft., reddish-brown, clayey gravel. 2.5-7 ft., yellowish-brown sand and gravel, thin horizontal clayey bands.	N.J. Geological Survey (1899-1937)
18	Woodstown quad, no. 3	Abandoned ? - ?	394428 N 751520 W	Cape May	12 ft. cross-bedded, light-brown sand and gravel. Pebbles chiefly quartz. Quartzite and chert pebbles constitute 10-15% of total.	N.J. Geological Survey (1899-1937)
<b>Logan Twp.</b>						
19	Curtis, L.R. & Son	1956(?) - 1979(?)	394753 N 752022 W	Cape May	0-1 ft., gray, loamy sand. 1-2 ft., grayish yellow, medium sand with small pebbles. 2-4 ft., yellow pebbly sand, coarse pebbles at bottom mark unconformity at base of Cape May Fm. 4-10 ft., brown to white sand (Raritan). 10-16 ft., white sand.	Pit dredged up to 30 ft. below water level. Produces mason's sand, concrete sand and white sand. U.S. Bureau of Mines (1976), Johnson (1979), Martens (1956)
20	Logan Sand & Gravel	? - ?	394848 N 751928 W	...		Construction grade sand and gravel. Formerly Wenonah Sand and Gravel Co. U.S. Bureau of Mines (1976), N.J. Department of Transportation (1982), N.J. Bureau of Mine Safety (1991).
21	Richard Pierson	? - Present	394915 N 751933 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991), formerly Logan Sand and Gravel.
22	Union Paving	? - 1982(?)	394755 N 751919 W	Cape May	Yellowish-brown sand on at least 35 ft. of yellowish sand and gravel.	Formerly LR Curtis and Sons. Called Penn-Jersey Sand and Gravel Co. in 1944. U.S. Bureau of Mines (1976), N.J. Geological Survey (1899-1937)
<b>Mantua Twp.</b>						
23	Runnemedede quad, no. 5	? - ?	394536 N 750700 W	...	Gravel, more or less cemented, contains shaly material. Red shale suggests this is Bridgeton but the deposit is at a lower elevation than usual for Bridgeton.	Pits had maximum depth of 20 ft. N.J. Geological Survey (1899-1937)

**GLOUCESTER COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
24	Woodbury quad, no. 2	Abandoned ? - ?	394535 N 751219 W	Bridgeton	36-46 ft. of Bridgeton.	N.J. Geological Survey (1899-1937)
25	Woodbury quad, no. 3	? - ?	394644 N 751104 W	Pensauken, Navesink/ Hornerstown	4 ft. of Pensauken gravel on marl (Navesink/ Hornerstown).	
26	Zeco, Inc.	Active in 1979	394451 N 751003 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
<b>Monroe Twp.</b>						
27	Action Services	Active in 1979	394043 N 745717 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N. J. Bureau of Mine Safety (unpub.)
28	Brimfield Bros., no. 2	Active in 1956	393542 N 745345 W	Cohansey	0-1 ft., gray to yellow, sandy gravel. 1-3 ft., brown, clayey, fine sand, thin streaks of white and pink clay. 3-9 ft., white and yellow fine sand.	About 4 acres in size. Cupola daub. Washed sand consists of quartz 96%, limonitic aggregates 3%, heavy minerals 1%. Martens (1956)
29	Downer Silica	1875-1956(?)	394135 N 750252 W	Bridgeton	0-7 ft., brown, clayey gravel (Bridgeton). 7-9 ft., light brown fine sand (Cohansey). 9-14 ft., yellow and light brown, fine sand, small amount of clay. 14-18 ft. light-yellow to white sand. Water table at 18 ft.	Gravel and coarse sand used for fill and road material. Finer sand used as furnace bottom sand. U.S. Bureau of Mines (1976), Martens (1956)
30	Irish, James	Active in 1979	393821 N 745817 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
31	Pitman East quad, no. 1	? - ?	394236 N 750324 W	Bridgeton	10-11 ft., reddish-brown, fairly well stratified sand, gravel 11-13 ft., gravel, 15-20% chert. 13-15 ft., yellow to white, fine-grained sand, a little clay.	N.J. Geological Survey (1899-1937)
32	Pitman East quad, no. 2	Abandoned ? - ?	394242 N 750149 W	Bridgeton	0-8 ft., sand and gravel, sand coarse grained, clay seams. 8-17 ft., fine, white glass sand.	N.J. Geological Survey (1899-1937)
33	Sahara Sand	? - Present	393600 N 745510 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991). Formerly Sharpe Brothers.
34	Sicklers, J.A.	1878(?) - 1956(?)	394206 N 745857 W	Bridgeton	0-4 ft., brown sand and gravel (Bridgeton Fm.). 4-5.5 ft., brown coarse sand (top of Cohansey). 5.5-10.5 ft., cross-bedded, white and brown sand. 10.5-15.5 ft., yellow to white, medium to coarse sand. Water level at 15.5 ft.	Glass sand. Martens (1956), N.J. Geological Survey (1878)
35	White, Frank Pits	Active in 1915	394154 N 745818 W	Bridgeton	4-8 ft. of gravel (Bridgeton) on 8-10 ft. of yellowish, clayey sand (Cohansey) on 5 ft. of white sand (Cohansey).	Molding sand. N.J. Geological Survey (1899-1937)
36	Williamstown quad, no. 6	Opened before 1902	394100 N 745958 W	...	10 ft. of gravel on brownish-yellow sand.	Knapp (1902d)
63	Gloucester Recycling	? - Present	394115 N 750005 W	...		N.J. Bureau of Mine Safety (1991).
<b>Paulsboro Boro</b>						
37	Strathman S & G	Active in 1931	394934 N 751439 W	Cape May	12 ft. of yellow sand and gravel above water. Dredge operated to 15 ft. below water.	In 1950's operated by Paulsboro Transportation Company. Martens (1956), N.J. Geological Survey (1899-1937)

**GLOUCESTER COUNTY (cont.)**

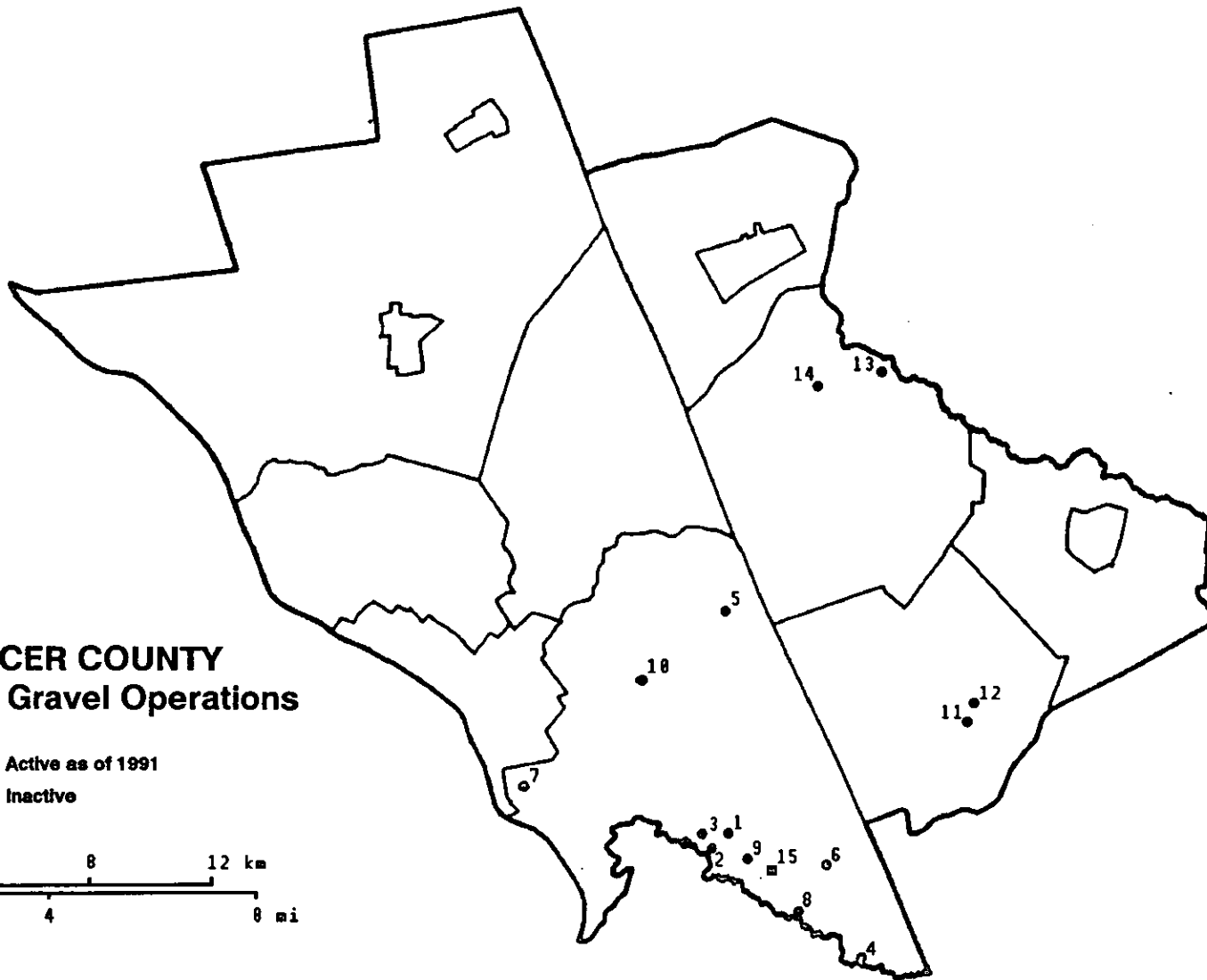
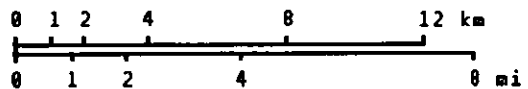
MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Pitman Boro</b>						
38	Kindle, Geo. C.	Active in 1931	394428 N 750707 W	Pensauken	8 ft. of yellow-brown sand and gravel. Pebbles mostly quartz, chert common, quartzite occasional. Below sand and gravel is fine-grained sand (Kirkwood).	N.J. Geological Survey (1899-1937)
39	Pitman West quad, no. 4	Opened before 1895	394442 N 750754 W	Bridgeton	25 ft. of cross-stratified sand with a little gravel. Deeper holes show Miocene sand.	N.J. Geological Survey (1899-1937)
<b>South Harrison Twp.</b>						
40	Hurffis', Lervis Pit	? - ?	394152 N 751547 W	Bridgeton	12 ft. of hard, compact sand and gravel.	N.J. Geological Survey (1899-1937)
41	Pitman West quad, no. 6	Opened before 1896	394011 N 751355 W	Pensauken	Gravel, mostly quartz pebbles with some ironstone.	Road material. Salisbury and Knapp (1897)
42	Woodstown quad, no. 4	Abandoned ? - ?	394243 N 751510 W	Bridgeton	0-6 in., gray, gravelly sand. 6-18 in., light-yellow, leached sand and gravel. 18 in.-9 ft., rusty-brown, compact clayey sand, gravel. Deposit is 30% gravel. Gravel is 90% quartz.	N.J. Geological Survey (1899-1937)
43	Woodstown quad, no. 6	Abandoned ? - ?	394052 N 751709 W	Vincentown	Vincentown limesand.	N.J. Geological Survey (1899-1937)
44	Woodstown quad, no. 9	? - ?	394212 N 751502 W	Bridgeton	Gravelly sand and gravel.	N.J. Geological Survey (1899-1937)
<b>Swedesboro Boro</b>						
45	Woodstown quad, no. 2	Abandoned ? - ?	394453 N 751820 W	Cape May	8 ft. of sand and gravel. Pebbles are mostly quartz, some chert, ironstone, flint, pegmatitic quartz, muscovite. Sand is yellow, medium-grained.	N.J. Geological Survey (1899-1937)
<b>Washington Twp.</b>						
46	Bunker Hill Pit	Active in 1902	394446 N 750505 W	Bridgeton	0-2 ft., loam and gravel. 2-4 ft., coarse and fine sand. 4-8 ft., white sand.	Knapp (1895, 1897)
47	Pettinos, G.F.	Active in 1941	394701 N 750353 W	Cape May	0-1.5 ft., coarse sand with a few pebbles (Cape May) 1.5-20 ft., fine-grained, white to pink sand (Kirkwood).	
48	Pitman East quad, no. 3	Abandoned 1938(?) - 1966(?)	394318 N 750516 W	Bridgeton	Gravel	U.S. Army Corps of Engineers (1942c), U.S. Geological Survey (1966a)
49	Runnemedé, quad, no. 8	Opened before 1899	394622 N 750519 W	...	Gravel	N.J. Geological Survey (1900a)
50	Wilson Thorn no. 107	Active in 1956	394632 N 750407 W	Kirkwood	0-4.5 ft., overburden. 4.5-18 ft., yellow, white and reddish, very fine sand. Deposit continues at least 4 ft. below the bank.	Molding sand. Martens (1956)
51	Wilson Thorn no. 111	Active in 1956	394606 N 750430 W	Kirkwood	0-1 ft., overburden. 1-7 ft., light, yellowish grey, very fine sand with basal limonitic conglomerate and quartz pebbles. Below 7 ft., yellow, very fine sand (Kirkwood). 91% quartz, 7% feldspar, 1% muscovite and kaolinite, 1% heavies.	Bank run material was used for core sand. Martens (1956)

**GLOUCESTER COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
52	Wilson Thom no. 112	Active in 1956	394618 N 750414 W	Kirkwood	0-2 ft., overburden. 2-35 ft., brown, yellow, pink and red, very fine-grained sand, medium to strongly bonded; 1.5 ft. interbeds with little bond. 35-47 ft., fine to very fine, light brown, yellow and grayish-yellow sand, 93.5% quartz, 4% feldspar, 0.5% kaolinite, muscovite, 2% heavy minerals.	Molding sand. Martens (1956)
53	Wilson Thom no. 48	Active in 1956	394734 N 750442 W	Kirkwood	Horizontally stratified sand, brown to nearly white. Washed sand is 88% quartz, 7% feldspar, 1% each muscovite and kaolinite and 3% heavies. Pit has 3 ft. of Pensauken overburden.	Molding sand. Martens (1956)
<b>Woodbury City</b>						
54	Woodbury Park Pit	? - ?	395053 N 750815 W	Pensauken	Fine, arkosic sand.	N.J. Geological Survey (1899-1937)
<b>Woolwich Twp.</b>						
55	Woodstown quad, no. 1	Abandoned ? - ?	394230 N 752025 W	Pleistocene/ Homerstown	Yellow sand and gravel, pockety quartzite boulders up to 12 in. diameter (Pleistocene) over rusty-brown clayey sand with small pieces of ironstone (Homerstown).	N.J. Geological Survey (1899-1937)
56	Woodstown quad, no. 10	Opened before 1948	394323 N 751840 W	...	Gravel	Army Map Service (1948c), U.S. Geological Survey (1967b)
57	Woodstown quad, no. 7	? - ?	394137 N 751907 W	...		N.J. Geological Survey (1899-1937)

# MERCER COUNTY Sand and Gravel Operations

- Active as of 1991
- Inactive



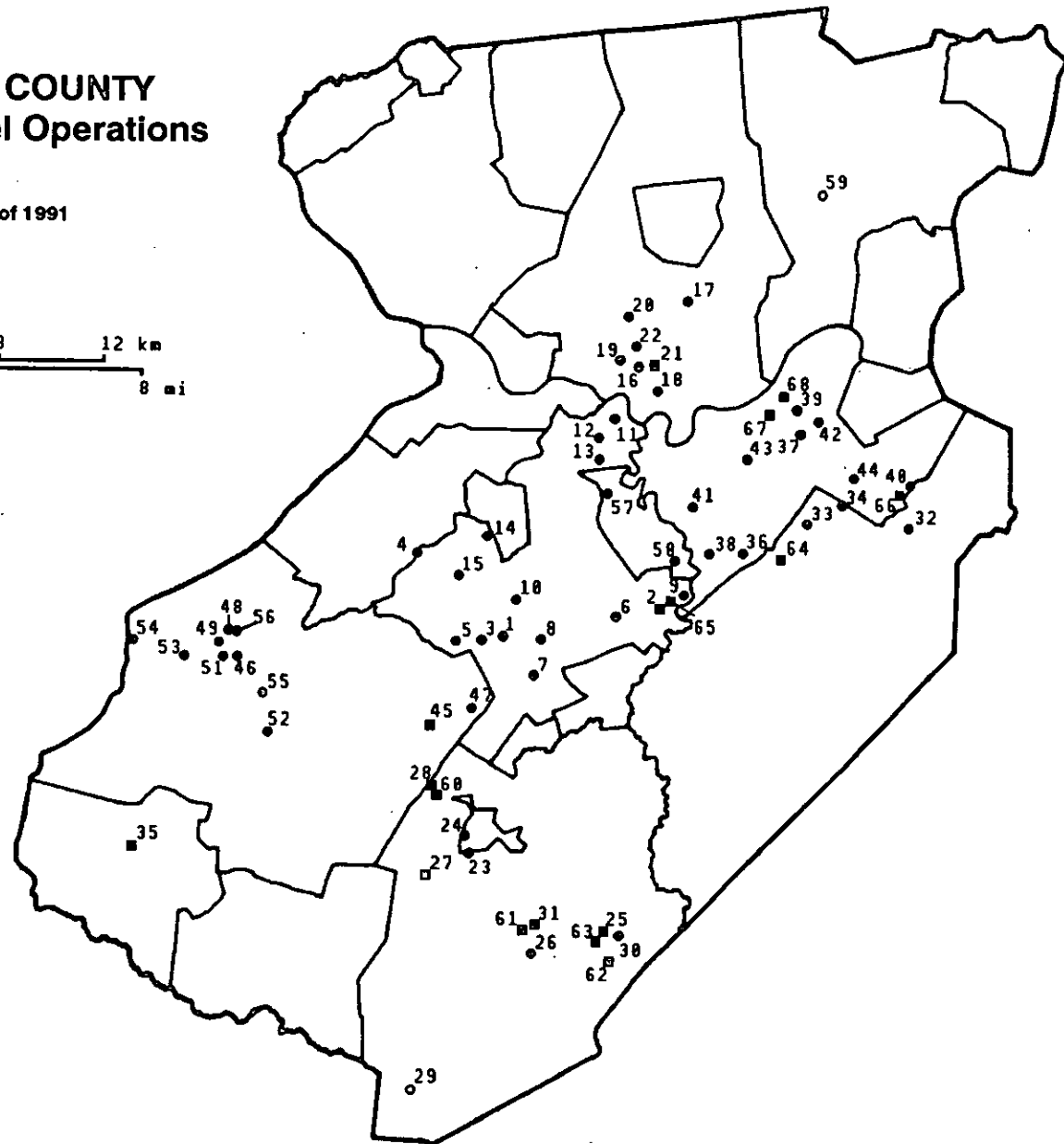
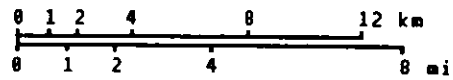
**MERCER COUNTY**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Hamilton Twp.</b>						
1	Crosswicks S & G Co.	Active in 1956	401045 N 744005 W	Cape May	0-10 ft., brown clayey sand, some glauconite (overburden) 10-22 ft., yellow and brown cross-bedded sand, pebbles. 22 ft., black clay.	Concrete and plaster sand, pea gravel, small amount of coarse gravel. Martens (1956).
2	Falsey J.J.	Active in 1930	401030 N 744027 W	...		N.J. Geological Survey (1908 - 1953).
3	Martin Bros.	Active in 1956	401044 N 744038 W	Cape May	0-3 ft., brown and yellow, clayey, unstratified sand. 3-6 ft., irregularly stratified, cross-bedded, brown sand, fine gravel. 6-18 ft., light brown, medium to coarse sand, fine gravel with much limonite, some glauconite.	Concrete blocks and concrete aggregate. Martens (1956).
4	Mosier George Pit	Active in 1946	400833 N 743655 W	Pensauken	0-6 in., topsoil. 6 in. - 9 ft., gravel. Below 9 ft., iron-stained sand, gravel partially limonite cemented.	Road material. N.J. Geological Survey (1899 - 1937).
5	Trenton East quad, no. 1	? - ?	401445 N 744010 W	Cape May	3-4 ft. of thick, very fine grained, light brown sand (Cape May) on 4 ft. of very fine gray to white sand (Raritan).	N.J. Geological Survey (1899 - 1931).
6	Trenton East quad, no. 2	? - ?	401013 N 743746 W	Pensauken	Pensauken gravel over Woodbury clay.	N.J. Geological Survey (1899 - 1937).
7	Trenton East quad, no. 5	Opened before 1901	401136 N 744446 W	...		Several sand and gravel pits in this area. N.J. Geological Survey (1902a).
8	Trenton East quad, no. 6	Opened before 1901	400925 N 743825 W	Cape May		Several gravel pits in this area. N.J. Geological Survey (1902c).
9	Trenton East quad, no. 7	Opened before 1901	401018 N 743937 W	Cape May	Sand	N.J. Geological Survey (1902a).
10	Trenton East quad, no. 8	? - ?	401333 N 744209 W	Pensauken	Gravel, chiefly quartz and sandstone.	N.J. Geological Survey (1899 - 1931), Salisbury (1917).
15	Margaret C. Lyons Estate	? - Present	400945 N 743800 W	...		N.J. Bureau of Mine Safety (1991)
<b>Washington Twp.</b>						
11	Allentown quad, no. 1	? - ?	401249 N 743430 W	Pensauken	10 ft. of rusty-brown, cross-bedded sand and gravel. Reddish clay binder at 3-5 ft. 82% quartz, 10% chert, 6-8% limonite or ferruginous sandstone.	N.J. Geological Survey (1899 - 1931).
12	Allentown, quad, no. 4	Opened before 1901	401307 N 743422 W	Pensauken	Sand	N.J. Geological Survey (1902a).
<b>West Windsor Twp.</b>						
13	Hightstown quad, no. 1	? - ?	401904 N 743630 W	Pensauken	6 ft. of yellowish-brown, medium-grained, slightly micaceous sand, a few well-rounded pebbles (quartz, quartzite conglomerate, flat pieces of gray baked shale).	N.J. Geological Survey (1899 - 1937).
14	Princeton quad, no. 1	Active in 1932	401849 N 743754 W	Pensauken	0-3 ft., yellow sand, gravel, large blocks of quartzite and siliceous conglomerate. 3-7 ft., light gray conglomerate. Attitude N80°E 15°NW.	N.J. Geological Survey (1899 - 1937)

# MIDDLESEX COUNTY Sand and Gravel Operations

■ Active as of 1991

● Inactive



MIDDLESEX COUNTY

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>East Brunswick Twp.</b>						
1	Dallenbach Sand Co.	Opened before 1956	402442 N 742605 W	Pensauken		Mined for 20 years with a suction dredge. Martens (1956)
2	Herbert Sand	? - Present	402517 N 742210 W	...		Also known as Herbert Materials Inc. U.S. Bureau of Mine (1976), N.J. Bureau of Mine Safety (1991)
3	Herbert Sand	Active in 1956	402438 N 742631 W	Pensauken	Light yellow, mostly quartz, free of impurities.	Concrete aggregate. Martens (1956)
4	New Brunswick quad, no. 1	? - ?	402616 N 742801 W	Pensauken	15 ft. of yellow sand, boulders of quartzite, diabase, red shale and baked shale. Outcrop 3 ft. above lake level may be Raritan fire clay.	N.J. Geological Survey (1899-1937)
5	New Brunswick quad, no. 2	1948 - ?	402436 N 742706 W	Pensauken	6 ft. of sand and gravel exposed in 1948. Pebbles mostly under 4 in. diameter. Pebbles are quartz, quartzite, Baked shale fragments in sand.	N.J. Geological Survey (1899 - 1937)
6	New Brunswick quad, no. 3	? - ?	402504 N 742316 W	Pensauken	12 ft. of ferruginous gravel.	N.J. Geological Survey (1899-1937)
7	New Brunswick quad, no. 4	? - ?	402357 N 742518 W	Pensauken	Rust colored sand in irregularly stratified beds. Majority of pebbles are quartz, some ironstone, sandstone, chert, 9 ft. of clay.	N.J. Geological Survey (1899 - 1937)
8	New Brunswick quad, no. 6	? - ?	402438 N 742505 W	Pensauken		Salisbury (1895)
9	South River Sand Co.	? - ?	402532 N 742140 W	Pensauken	0-6 ft., brown, pebbly sand (Pensauken). 50-56 ft., fine sand and dark clay. 56-64 ft., white, cross-bedded sand (Raritan).	Martens (1956), U.S. Bureau of Mine (1976), N.J. Dept. of Labor (Ann)
10	Standard S & G Co.	1925 - ?	402525 N 742543 W	Pensauken	Very fine sand and gravel, mostly quartz, many decomposed Triassic cobbles. Fossil tree found beneath 30 ft. of Pensauken gravel in 1920.	N.J. Geological Survey (1899 - 1937)
11	Whitehead Bros. #1	Active in 1905	402848 N 742319 W	...	4 pits with different types of sand including white and yellow, irregularly bedded, coarse sand and very sticky, clayey sand.	N.J. Geological Survey (1899 - 1937)
12	Whitehead Bros. #2	Active in 1931	402828 N 742347 W	Magothy/ Raritan	Sand and gravel over 15 ft. of medium to coarse-grained fire sand, nearly white at base, on 2 ft. of clay, on coarse-grained, white arkosic sand.	N.J. Geological Survey (1899-1937)
13	Whitehead Bros. #3	? - 1931(?)	402802 N 742343 W	Magothy/ Raritan	2-5 ft. of clayey, fine-grained sand on 14 ft. of Raritan sand and gravel.	N.J. Geological Survey (1899-1937)
14	Wright, Marcus S., Inc.	Active in 1936	402552 N 742709 W	Pensauken	1-6 ft. of clayey Pensauken gravel, chiefly quartz or quartzite over 2-10 ft. of light gray, white and red Woodbridge clay on 15 ft. of fine-grained, white sand.	N.J. Geological Survey (1899-1937)
15	Wright, Marcus S., Inc.	Active in 1956	402634 N 742624 W	Magothy/ Raritan	Farrington Member of the Raritan Fm. over clay. Maximum 30 ft. of brown to light-gray, coarse sand.	Martens (1956)
65	RMA Sand	? - Present	402545 N 742145 W	...		N.J. Bureau of Mine Safety (1991)



**MIDDLESEX COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Edison Twp.</b>						
16	Campbells	Active in 1905	402945 N 742247 W	...	5-15 ft. of yellow building sand on 2-5 ft. of fine sand. Beds are very irregular.	Several pits in this area. Martens (1956)
17	Edgar, C.S.	Active in 1905	403103 N 742136 W	Pensauken	10-15 ft. of white and yellow, clean, cross-bedded sand, small numbers of clay pellets.	Concrete sand. N.J. Geological Survey (1899-1937)
18	Lehigh Gravel Co.	? - ?	402922 N 742221 W	Cape May	8-10 ft. of reddish sand and gravel. Clay occurs at water level.	Company owned by Dallenbach Sand Co. of Milltown, NJ. Gravel was dug with drag line and bucket. N.J. Geological Survey (1899-1937)
19	New Brunswick quad, no. 5	? - ?	402952 N 742321 W	Pensauken	9 ft. of yellowish-brown, pebbly sand.	N.J. Geological Survey (1899-1937)
20	Plainfield quad, no. 1	? - ?	403045 N 742303 W	Pensauken	10 ft. of clayey, reddish-brown sand and gravel.	N.J. Geological Survey (1899-1937)
21	Raritan River Sand Co.	Pre 1956 - Present	402952 N 742221 W	Magothy/Raritan	Light yellow sand composed of angular quartz grains.	Fire, sandblast and filter sand. Martens (1956), N.J. Bureau of Mine Safety (1991)
22	Treat-Right Concrete Block	Active in 1928	403012 N 742253 W	Pensauken	15 ft. of sand and gravel, pebbles of red shale, quartz.	Small pit. N.J. Geological Survey (1899-1937)
<b>Jamesburg Boro</b>						
23	Glenn Rock Concrete Prod. Inc	Active in 1956	402035 N 742650 W	Pensauken	0-2 ft., brown and gray silt. 2-8 ft., brown clayey gravel and coarse sand. 8-18 ft., brown sand and gravel. 18-38 ft., light brown sand. 38-53 ft., some gravel.	Martens (1956)
24	Hause Washed Sand & Gravel Co	Active in 1931	402056 N 742657 W	...		N.J. Geological Survey (1908-1953)
<b>Monroe Twp.</b>						
25	Buck Mining and Material	? - Present	401910 N 742335 W	...		Formerly Monroe Materials Corp. U.S. Bureau of Mine (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)
26	Hause Washed Sand & Gravel Co	? - ?	401843 N 742518 W	Pensauken	20 ft. of gravel on white sand. Gravel is mostly quartz with partly disintegrated quartzite and chert.	N.J. Geological Survey (1899-1937)
27	Herbert Materials Co.	? - Present	402012 N 742753 W	...		Also known as Herbert Sand Co. U.S. Bureau of Mine (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)
28	J.I.S.	? - Present	402158 N 742753 W	Pensauken	In 1952 the pit showed beds of sand and gravel cut by N-S channel 15 ft. across and 10 ft. deep. Gravel is high in chert.	N.J. Geological Survey (1899-1937), N.J. Bureau of Mine Safety (1991), formerly Jones Industrial Service.
29	Jamesburg quad, no. 1	? - ?	401612 N 742812 W	Pensauken	11 ft. of non-arkosic gravel (Pensauken) on fine, yellow, micaceous sand (Englishtown).	N.J. Geological Survey (1899-1937)
30	P & L Trucking Co.	Active in 1979	401900 N 742310 W	...		U.S. Bureau of Mine (1976), Johnson (1979), N.J. Bureau of Mine Safety (unpub.)
31	Toto Brothers Inc.	? - Present	401915 N 742514 W	...		U.S. Bureau of Mine (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)

MIDDLESEX COUNTY (cont.)

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
60	Manzo Construction Co.	? - Present	402130 N 742745 W	...		N.J. Bureau of Mine Safety (1991)
61	B & J Warren Co.	? - Present	401850 N 742530 W	...		N.J. Bureau of Mine Safety (1991)
62	Cardell, Inc.	? - Present	401845 N 742245 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain.
63	Manzo Construction Co.	? - Present	401900 N 742300 W	...		N.J. Bureau of Mine Safety (1991)
<b>Old Bridge Twp.</b>						
32	Gordon's	? - 1905(?)	402645 N 741601 W	Magothy		Pit face was 25 ft. long. Much sand removed by 1905. N.J. Geological Survey (1899-1937)
33	Whitehead Bros. #3	Active in 1956	402649 N 741838 W	Pensauken	Gravelcaps on hill. 0-1/2 ft., grayish-yellow sandy soil. 1/2 to 8.5 ft., yellow to light brown fine sand. Below 8.5 ft., brown gravel, coarse sand.	N.J. Geological Survey (1899-1937)
34	Whitehead Bros. #4	1903(?)-1956(?)	402710 N 741748 W	Pensauken	0-1 ft., gray sand. 1-4 ft., brown, very clayey molding sand. 4-11 ft. reddish sand, coarse gravel.	Numerous pits in this area. Martens (1956), N.J. Geological Survey (1899-1937)
64	Manzo Construction Co.	? - Present	402645 N 741910 W	...		N.J. Bureau of Mine Safety (1991)
<b>Plainsboro Twp.</b>						
35	McCormick, W.J. Sand Div.	? - Present	402043 N 743502 W	...		U.S. Bureau of Mine (1976), N.J. Bureau of Mine Safety (1991)
<b>Sayreville Boro</b>						
36	Central Jersey Sandfill	Active in 1979	402617 N 742014 W	...		U.S. Bureau of Mine (1976), Johnson (1979)
37	Crossman Co.	Active in 1979	402833 N 741846 W	Pensauken	36 ft. of brown, medium to coarse grained, clayey, feldspathic sand (Pensauken) over 50 ft. of white and light gray, quartzose sand (Raritan).	U.S. Bureau of Mine (1976), Martens (1956)
38	Paragon Products Inc.	1931(?)-1956(?)	402615 N 742058 W	Pensauken	0-2 ft., brown gravel (Pensauken) 2-8 ft., brown sand (Raritan). 8-24 ft., white, brown and yellow sand (Raritan). Sand is 99% quartz, 1% mica and heavy minerals.	Martens (1956), N.J. Geological Survey (1899-1937)
39	Rustic Materials	Active in 1979	402900 N 741854 W	...		U.S. Bureau of Mine (1976), Johnson (1979), N.J. Bureau of Mine Safety (unpub.)
40	Smith, F.H.	1903 - ?	402733 N 741610 W	Magothy/ Raritan	Fine, micaceous sand, 12-15 ft. thick, overlying black clay.	N.J. Geological Survey (1899-1937)
41	South Amboy quad, no. 1	Opened before 1905	402710 N 742132 W	...	0-10 ft. of yellow gravel on 0-5 ft. of yellow loam sand on 10 ft. of yellow and white sand.	Several pits. N.J. Geological Survey (1899-1937)
42	United Excavating	Active in 1979	402845 N 741824 W	...		U.S. Bureau of Mine (1976), Johnson (1979)
43	Whitehead Bros. Co.	1949(?)-1956(?)	402802 N 742008 W	Magothy/ Raritan	0-5 ft., yellow to brown sand (Pensauken). 5-20 ft., sand, with clay lenses (Raritan). 20-32 ft., sand, white and light-gray (Raritan).	Old pit reopened in 1949. Martens (1956)

MIDDLESEX COUNTY (cont.)

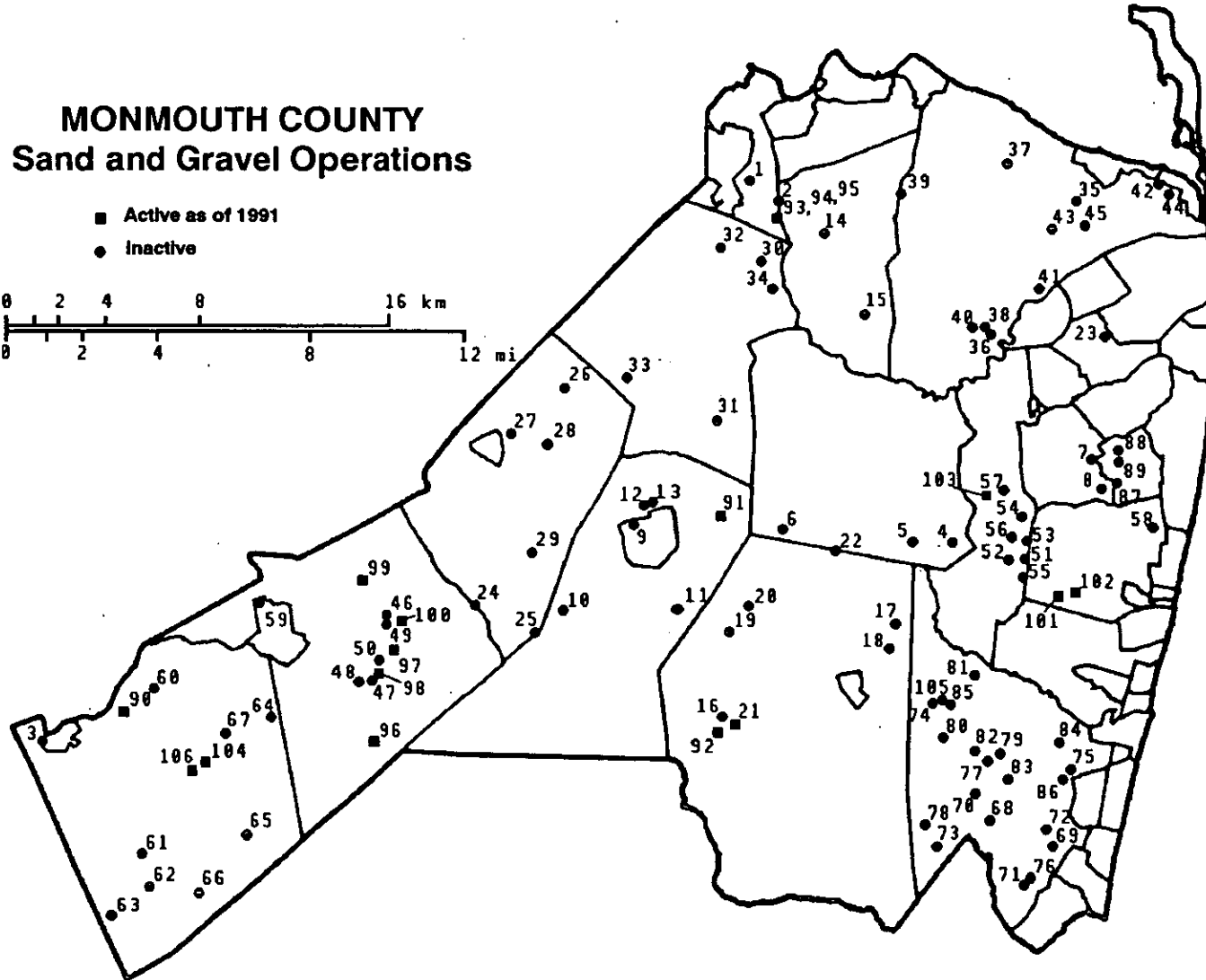
MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
44	Whitehead Bros. #2	Active in 1956	402739 N 741730 W	...	0-1 ft., grayish yellow, loamy sand 1-4 ft., yellow, medium sand. 4-10 ft. yellow to light-brown, medium sand.	Martens (1956)
66	Jaybill Equip-ment Co.	? - Present	402730 N 741630 W	...		N.J. Bureau of Mine Safety (1991)
67	Linden Sandfill Co.	? - Present	402845 N 741900 W	...		N.J. Bureau of Mine Safety (1991)
68	Linden Sandfill Co.	? - Present	402815 N 741900 W	...		N.J. Bureau of Mine Safety (1991)
<b>South Brunswick Twp.</b>						
45	Dallenbach Sand Co.	1948 - Present	402304 N 742752 W	Pensauken	Bank 8-15 ft. high. Top half is clayey gravel and yellow to green sand (Pensauken), bottom half is white and yellow, medium to coarse sand.	U.S. Bureau of Mine (1976), Martens (1956), N.J. Bureau of Mine Safety (1991)
46	G. & J. Spilatore	? - 1975	402417 N 743235 W	Magothy/ Raritan		Field check 1983
47	Gordon Sand and Gravel	Active in 1979	402324 N 742655 W	...		U.S. Bureau of Mine (1976), Johnson (1979)
48	Monmouth Junction quad, no. 1	Abandoned ? - 1960(?)	402443 N 743241 W	Magothy/ Raritan		Field check (1983)
49	Monmouth Junction quad, no. 2	Abandoned ? - 1980(?)	402440 N 743254 W	Magothy/ Raritan		Field check (1983)
50	Monmouth Junction quad, no. 3	Abandoned ? - 1983	402430 N 743237 W	Magothy/ Raritan		Field check (1983)
51	Monmouth Junction quad, no. 4	Abandoned ? - ?	402419 N 743252 W	Magothy/ Raritan		Site of the No. Brunswick water tower. Field check (1983)
52	Monmouth Junction quad, no. 5	Abandoned ? - ?	402254 N 743148 W	Pensauken		Field check 1983
53	Monmouth Junction quad, no. 6	Abandoned Pre 1960	402417 N 743352 W	Magothy/ Raritan	The Pensauken Fm. was probably recovered in addition to the Magothy/Raritan Fm.	Land is now part of a Green Acres Park Facility. Field check 1983
54	Monmouth Junction quad, no. 8	Abandoned ? - ?	402438 N 743501 W			Field check 1983
55	Monmouth Junction quad no. 10	Abandoned ? - ?	402337 N 743149 W	Pensauken	Borrow pit with 9 ft. of typical Pensauken exposed.	N.J. Geological Survey (1899-1937)
56	Monmouth Junction quad, no. 11	Temporarily Inactive 1983- Present	402443 N 743234 W	Magothy/ Raritan		Area to be used as a building site. Field check 1983

MIDDLESEX COUNTY (cont.)

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>South River Boro</b>						
57	Daly's, John Pit	Active in 1905	402723 N 742329 W	...	15 ft. gravelly, arkose sand of Pleistocene over gravel streaks on 2 ft. of very coars white gravel.	N.J. Geological Survey (1899-1937)
58	Wright, Marcus S., Inc.	Active in 1929	402609 N 742153 W	Magothy/Raritan	0-10 ft., gravel (Pleistocene). 10-40 ft., cross-bedded, white and yellow sand. 40-65 ft., clean, white sand. Water level is at 65 ft.	White and yellow sand used in asphalt paving, clean white sand used in elastic stucco, bird sand, glass-making and foundry sand. N.J. Geological Survey (1899-1937)
<b>Woodbridge Twp.</b>						
59	Valentine M.D. & Bros.	1904(?) - 1956(?)	403305 N 741820 W	Magothy/Raritan	Pensauken sand, bluish clay with very little grit.	Sand used as fill for highway construction. Samples of clay tested for fire shrinkage varied from 5.5% to 13%, adsorption from 7.76% to 24.25% and the clay burned white to a light buff. Ries and Kummel (1904), Martens (1956)

# MONMOUTH COUNTY Sand and Gravel Operations

- Active as of 1991
- Inactive



# MONMOUTH COUNTY

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Aberdeen Twp.</b>						
1	Arrow Smith Pit	Opened before 1902	402420 N 741327 W	Englishtown	Light-colored, Englishtown sand.	N.J. Geological Survey (1899-1937), Knapp (1903d)
2	Keyport quad, no. 2	? - ?	402355 N 741240 W	Englishtown	0-10 ft., fine-grained, buff, slightly micaceous sand. 10-18 ft., laminated, dark-gray, lignitic clay, sand streaks. 18-21 ft., fine-grained, white to yellow sand. Muscovite, pyrite, amber, and epsomite noted.	N.J. Geological Survey (1899-1937)
<b>Allentown Boro</b>						
3	Allentown quad, no. 3	Opened before 1901	401035 N 743554 W	Cape May	Gravel	N.J. Geological Survey (1902a)
<b>Colts Neck Twp.</b>						
4	Long Branch quad no. 6	1940 - ?	401526 N 740656 W	Kirkwood	0-4 ft., buff sand. 4-11 ft., white, fine-grained sand with pebble bands. 11-17 ft., yellow to white sand. 17- 31 ft., white sand with 2 ft. bed of pebbles. Slight dip to SE.	N.J. Geological Survey (1899-1937)
5	Peerless Sand Co.	1935 - ?	401531 N 740801 W	Kirkwood	8-10 in., light-gray sand. 10-40 in., yellow, clayey sand and small pebbles. 40 in.-9 ft., cross-bedded, light, straw-yellow sand. Borings showed highly siliceous sand to 23 ft.	Plant to prepare silica sand was built 1935. N.J. Geological Survey (1899-1937)
6	Taylor's Pit	Opened before 1902	401545 N 741230 W	Bridgeton	Sand and gravel	Knapp (1902)
<b>Eatontown Boro</b>						
7	Johnson's, Joe Pit	? - ?	401723 N 740227 W	Pensauken	2-4 ft., poorly stratified gravel, yellow, coarse sand matrix. Gravel mostly quartz, some ironstone. 4-6 ft., greenish-brown sand with a little glauconite.	N.J. Geological Survey (1899-1937)
8	Long Branch quad, no. 3	? - ?	401647 N 740211 W	...	0 ft. to 6 to 8 ft., sand and gravel, mostly quartz pebbles, some ironstone. 6 to 8 ft. to 8 to 12 ft., thick conglomerate. Interbedded sand and gravel at base.	N.J. Geological Survey (1899-1937)
<b>Freehold Boro</b>						
9	Freehold quad, no. 1	Active in 1905	401553 N 741700 W	...	0 -12 ft., red sand, even-grained, some iron crust at top and bottom.	Road material. N.J. Geological Survey (1899-1937)
<b>Freehold Twp.</b>						
10	Adelphia, quad, no. 1	? - ?	401347 N 741923 W	Vincentown	0-1 ft., clay loam and coarse gravel. 1ft. to 2 to 4 ft., ironstone, chiefly, pea-gravel. 2 to 4 ft. to 7 to 10 ft., yellowish, coarse, loose sand. Sand on Hornerstown Fm.	N.J. Geological Survey (1899-1937)
11	Adelphia quad, no. 2	Opened before 1903	401349 N 741539 W	Vincentown	Base of Vincentown Fm. 4-5 ft. of fine gravel and sand on 3-6 ft. of coarse sand, mostly quartz.	N.J. Geological Survey (1899-1937)
12	Freehold quad, no. 1	Abandoned ? - ?	401621 N 741646 W	...	4-8 ft. sand and gravel. Top, wind-blown sand and dunes.	Several pits. N.J. Geological Survey (1899-1937)

**MONMOUTH COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
13	Freehold quad, no. 2	Abandoned ? - ?	401627 N 741631 W	...	Terrace deposit. 4-5 ft. of yellow, fine-grained sand, traces of gravel.	Molding sand. N.J. Geological Survey (1899-1937)
91	Fred McDowell	? - Present	401130 N 743330 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain.
<b>Holmdel Twp.</b>						
14	Keyport quad, no. 3	? - ?	402306 N 741115 W	Cape May	0-3 ft., yellow, clayey gravel. 3- 10 ft., yellow gravel, some sand, large amount of ironstone.	N.J. Geological Survey (1899-1937)
15	Marlboro quad, no. 2	1948(?) - 1954(?)	402111 N 740955 W	...	Sand and gravel, some glauconite in the sand.	Soil Conservation Service (1948)
<b>Howell Twp.</b>						
16	Chevalier, V. & Son, Inc.	Active in 1979	401110 N 741423 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
17	Farmingdale quad, no. 1	? - ?	401332 N 740847 W	Kirkwood	0-2 ft., yellow clay. 2-9 ft., fine, white sand. Several thin layers of white quartz pebbles.	N.J. Geological Survey (1899-1937)
18	Farmingdale quad, no. 2	Active in 1905	401249 N 740904 W	Pensauken	5-6 ft. of gravel with very little intermixed sand.	May have been used for roofing gravel. N.J. Geological Survey (1899-1937)
19	Farmingdale quad, no. 4	Opened before 1896	401318 N 741410 W	Pensauken	Several pits in gravel. Largely quartz pebbles, a bit of ironstone.	Road material. Salisbury and Knapp (1897)
20	Farmingdale quad, no. 5	Opened before 1896	401353 N 741330 W	Pensauken	Gravel, mostly quartz pebbles, some ironstone.	Road material. Salisbury and Knapp (1897)
21	Herbert Sand	? - Present	401105 N 741404 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)
22	Marlboro quad, no. 1	Active in 1905	401516 N 741046 W	Cohansey	1-2 ft. of fine white sand overlying yellow sand.	White sand was used for mortar, concrete, etc. N.J. Geological Survey (1899-1937)
92	Howell Sand and Gravel	? - Present	401115 N 741400 W	...		N.J. Bureau of Mine Safety (1991)
<b>Little Silver Boro</b>						
23	Cooney, Dan Pit	Active in 1903	402029 N 740204 W	Cape May	10 to 12 ft. of gravel, sand and loam. Sand is reddish-brown and contains glauconite. Sand and gravel is well sorted, but strata are discontinuous and ill defined.	N.J. Geological Survey (1899-1937)
<b>Manalapan Twp.</b>						
24	Adelphia quad, no. 3	Active in 1933	401359 N 742215 W	Vincentown	6-10 ft. of medium-grained, white and brown sand with a little fine-grained glauconite.	Used locally for concrete. N.J. Geological Survey (1899-1937)
25	Adelphia quad, no. 4	? - ?	401322 N 742006 W	Pensauken	0-2 ft. clay loam. 2-5 ft., ironstone conglomerate. 5-15 ft., yellowish and white Vincentown sand.	N.J. Geological Survey (1899-1937)
26	Babcock's Pit	? - ?	401919 N 741918 W	Pensauken	6-7 ft. of compact, stratified sand and gravel. Pebbles mostly quartz. Sand is 5-10% glauconite. Base, at the Marshalltown-Wenonah transition, is pink, ashy sand with mica.	Large shallow pit. N.J. Geological Survey (1899-1937)

**MONMOUTH COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
27	Clayton, B. Pit	Opened before 1903	401814 N 742102 W	Pensauken	Pensauken gravel on basal portion of the Marshalltown (marly, greenish sand). Englishtown beneath this is a loose, white quartz sand.	N.J. Geological Survey (1899-1937), Knapp (1903)
28	Ervins, Michael Pits	? - ?	401757 N 741949 W	Pensauken	Several pits. 4-8 ft. of loose sand and gravel with pebbles of quartz and ironstone. Underlying sand is fine to medium grained, yellow, brown and white, with fine glauconite in places.	N.J. Geological Survey (1899-1937)
29	Freehold quad, no. 2	1938 - ?	401517 N 742021 W	Pensauken	0-7 ft., cross bedded, rusty-brown sand and gravel (gravel is 87.5% quartz) 7-19 ft., Red Bank Fm. (40 mesh, micaceous sand, brown, grading down into yellow).	N.J. Geological Survey (1899-1937)
<b>Marlboro Twp.</b>						
30	Beacon Hill	? - ?	402225 N 741316 W	Beacon Hill	Ironstone in Beacon Hill gravel and underlying Kirkwood sand.	Road metal and fill. Most of the gravel had been stripped by 1948. N.J. Geological Survey (1899-1937)
31	Dennis Pit	? - ?	401832 N 741440 W	Bridgeton	8 ft. of gravel (quartz, chert and ironstone) over Vincentown sand. Gravel has been mixed downward into the Vincentown.	N.J. Geological Survey (1899-1937)
32	Keyport quad, no. 1	Opened before 1935	402247 N 741433 W	Englishtown	Micaceous, slightly lignitic, fine-grained, yellow sand.	N.J. Geological Survey (1899-1937)
33	Okerson Pit	Opened before 1903	401933 N 741722 W	Pensauken	Non-arkosic sand and gravel.	Knapp (1902), N.J. Geological Survey (1899-1937)
34	Pleasant Valley Pit	1948(?) - 1954(?)	402147 N 741245 W	Beacon Hill	Sand and gravel. Sand contains some glauconite.	Soil Conservation Service (1948)
<b>Matawan</b>						
93	Manco Inc.	? - Present	402330 N 741330 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain
94	Manzo, Joseph	? - Present	402330 N 741330 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain.
95	Manzo, Michael	? - Present	402330 N 741330 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain.
<b>Middletown Twp.</b>						
35	Andrews Pit	? - ?	402352 N 740304 W	Bridgeton	18 ft. of gravel. Quartz, minor chert, all well rounded.	N.J. Geological Survey (1899-1937)
36	Grant's, Henry Pit	? - ?	402036 N 740551 W	Pensauken	10-15 ft. of well stratified and fairly well sorted sand and gravel. Top of Red Bank.	N.J. Geological Survey (1899-1937)
37	Hopping Station	? - ?	402449 N 740519 W	...	15-18 ft. of yellow gravel and sand, loose and cross-bedded with worn ironstone. Gravel surface extends at least 50 ft. with base at 35-40 ft. May be intermediate between the Cape May and Pensauken in age.	N.J. Geological Survey (1899-1937)
38	Hubbards Pit	? - ?	402042 N 740555 W	Pensauken	20 ft. of gravel above Red Bank sand.	N.J. Geological Survey (1899-1937)
39	Keyport quad, no. 4	Opened before 1902	402406 N 740834 W	...	15 ft. well sorted sand and gravel in alternating beds 3 ft. thick.	Knapp (1895-1896)



MONMOUTH COUNTY (cont.)

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
40	Long Branch quad, no. 1	? - ?	402044 N 740616 W	...	10 ft. of gravel. Quartz and some ironstone.	N.J. Geological Survey (1899-1937)
41	Long Branch quad, no. 2	? - ?	402142 N 740420 W	Cape May	10 ft. of stratified, yellow and brown, glauconitic sand with basal layer of gravel, quartz or ironstone. Beneath this is micaceous sand and clay.	N.J. Geological Survey (1899-1937)
42	Mt. Mitchell Pit	? - ?	402422 N 740025 W	Bridgeton	0-20 ft. gravelly sand (Bridgeton) with ironstone. 20-30 ft. glauconite-quartz.	Large pit. N.J. Geological Survey (1899-1937)
43	Sandy Hook quad, no. 1	Abandoned Opened before 1903	402312 N 740351 W	Mount Laurel	6-10 ft. of medium to fine black sand and muddy sand. Ironstone over 4 ft. thick.	N.J. Geological Survey (1899-1937)
44	Sandy Hook quad, no. 2	Opened before 1963	402403 N 740010 W	Cohansey	Sand	Minard (1969)
45	Webb Swann Pit	? - ?	402316 N 740250 W	Bridgeton	Quartz gravel with some chert. Floor of pit is red, yellow and brown indurated marl. Gravel is cemented to conglomerate. Wood in the conglomerate is replaced by iron.	N.J. Geological Survey (1899-1937)
<b>Millstone Twp.</b>						
46	Benjamin Warnick Pit	Active in 1948	401344 N 742457 W	Bridgeton	0-24 ft., yellowish-brown sand and gravel, ironstone. 24-36 ft., yellow sand and gravel. 36-39 ft., gravel.	N.J. Geological Survey (1899-1937)
47	Carste Pit	1958(?) - ?	401207 N 742529 W	...	0-1.5 ft., clayey, brown gravelly sand. 1.5-5 ft., slightly clayey, yellow-brown coarse sand. 5 - over 13 ft., firm, coarse sand.	N.J. Department of Transportation (1982), N.J. Geological Survey (1899-1937)
48	Preston, Raymond Inc.	? - Present	401203 N 742550 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)
49	Roosevelt quad, no. 2	? - ?	401329 N 742457 W	Beacon Hill	Very fine gravel, mostly under 1 in. diameter, yellowish-brown, loam matrix, very compact.	N.J. Geological Survey (1899-1937)
50	Stavola Construction Materials	? - ?	401236 N 742514 W	...		Construction grade sand and gravel.
96	Buck Mining and Materials	? - Present	401010 N 742545 W	...		N.J. Bureau of Mine Safety (1991)
97	C.H. Stephen	? - Present	401240 N 742530 W	...		N.J. Bureau of Mine Safety (1991)
98	Howell Sand and Gravel	? - Present	401215 N 742550 W	...		N.J. Bureau of Mine Safety (1991)
99	A. Campo Contracting	? - Present	401330 N 742450 W	...		N.J. Bureau of Mine Safety (1991)
100	Sahara Sand of Millstone	? - ?	401300 N 742445 W	...		N.J. Bureau of Mine Safety (1991).

**MONMOUTH COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Ocean Twp.</b>						
58	Jeffrey's, John R.	Active in 1903	401547 N 740022 W	Cape May	6 to 10 ft. of quartz gravel, sand and loam overlying 1-2 ft. of yel- low clay with coarse sand seams.	N.J. Geological Survey (1899-1937)
101	Seaview Coporate Park	? - Present	401345 N 740330 W	...		N.J. Bureau of Mine Safety (1991).
102	Stavola Con- struction Co.	? - Present	401350 N 740325 W	...		N.J. Bureau of Mine Safety (1991).
<b>Roosevelt Boro</b>						
59	Roosevelt quad, no. 4	Opened before 1948	401354 N 742852 W	Beacon Hill	Gravel	Soil Conservation Service (1948)
<b>Tinton Falls Boro</b>						
51	Asbury Park quad, no. 2	Opened before 1948	401456 N 740438 W	Pensauken	Gravel	Soil Conservation Service (1948)
52	Fary Pit	Active in 1953	401503 N 740508 W	Pensauken	0-10 ft., brown sand and gravel. Pebbles 98% quartz, 2% chert and quartzite. 10-11 ft., white to yellow, fine-grained sand.	N.J. Geological Survey (1899-1937)
53	Hause Gravel	Active in 1928	401525 N 740444 W	...	0-1 ft., light-gray sandy soil. 1-5 ft., brown gravel, coarse sand, moderately clayey. Below 5 ft., gravel.	Several pits. Martens (1956), N.J. Geological Survey (1899-1937)
54	McDowell, F.	? - 1956(?)	401605 N 740443 W	Bridgeton		Washed aggregate materials. Martens (1956)
55	NJ Sand and Gravel Co.	Active in 1931	401431 N 740443 W	Pensauken	0-20 ft., gravel, chiefly quartz . Below 20 ft., sand, sometimes capped by 6 in. of clay.	N.J. Geological Survey (1899-1937)
56	Scarano, J. Sand and Gravel	Pre 1956 - Present	401533 N 740457 W	Bridgeton	0-0.5 ft., gray, pebbly sand. 0.5-6.5 ft., brown, clayey, sandy gravel. 6.5-8, brown, fine sand 8-12 ft., brown, yellow, white gravel.	U.S. Bureau of Mines (1976), Martens (1956), N.J. Bureau of Mine Safety (1991)
57	Steffe Construction Co.	Active in 1930	401642 N 740518 W	Kirkwood	Coarse sand with quartz pebbles.	Road gravel, washed sand and gravel. N.J. Geological Survey (1899-1937)
103	Stavola Con- struction Co.	? - Present	401600 N 740510 W	...		N.J. Bureau of Mine Safety (1991).
<b>Upper Freehold Twp.</b>						
60	Allentown quad, no. 2	Opened before 1894	401153 N 743220 W	Pensauken		Salisbury (1895)
61	Holmes Pit	Opened before 1905	400748 N 743245 W	Pensauken	Gravel	Knapp (1905)
62	Miers, T.	Opened before 1905	400659 N 743230 W	Red Bank/ Tinton	4-9 ft. of fine-grained, glauconitic sand overlying 2-3 ft. of gravel.	Knapp (1905), N.J. Geological Survey (1899-1937)
63	Reed Pit	Opened before 1901	400617 N 743342 W	Cohansey	Sand and gravel, upper 5 ft. ironstone and fine conglomerate. At base is fine sand, possibly Miocene.	Knapp (1905), N.J. Geological Survey (1899-1937)

**MONMOUTH COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
64	Roosevelt quad, no. 1	? - ?	401109 N 742840 W	Beacon Hill	4-5 ft. of gravel, mainly quartz, over coarse, arkosic, sticky, yellow to reddish-brown sand.	N.J. Geological Survey (1899-1937)
65	Roosevelt quad, no. 3	? - ?	400819 N 742924 W	Kirkwood	0-3 ft., brown loam. 3-6 ft., yellow to red sand. 5-11 ft., clean, white coarse sand and gravel.	N.J. Geological Survey (1899-1937)
66	Wickoff Pits	Opened before 1905	400656 N 743054 W	Pensauken	Gravel	Knapp (1905)
67	Wrightsville Pit	Opened before 1948	401048 N 743006 W	...	Sand and gravel.	Soil Conservation Service (1948)
90	E.M.E., Inc.	? - Present	401115 N 323345 W	...		N.J. Bureau of Mine Safety (1991)
<b>Upper Millstone</b>						
104	Moslowski Brothers	? - Present	401115 N 743010 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain.
106	E.M.E., Inc.	? - Present	401100 N 743020 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain.
<b>Wall Twp.</b>						
68	Allenwood Sand and Gravel	1948(?) - 1954(?)	400842 N 740556 W	Pensauken	Brown sand and gravel.	Soil Conservation Service (1948)
69	Asbury Park quad, no. 1	Opened before 1901	400803 N 740350 W	...	Gravel	N.J. Geological Survey (1903)
70	Asbury Park quad, no. 3	1948(?) - 1954(?)	400916 N 740617 W	Pensauken	Brown sand and gravel.	Soil Conservation Service (1948)
71	Bennett Sand and Gravel	1929(?) - ?	400704 N 740440 W	Bridgeton	0-1 ft., gray, sandy topsoil 2-7 ft., brown, sandy, clayey gravel. 7ft. to 13 to 21ft., sandy gravel. Below 13 to 21ft., sand.	U.S. Bureau of Mines (1976), Martens (1956), Field check, (1982, active)
72	Brookhurst S & G Co.	Active in 1928	400823 N 740357 W	Pensauken	10-15 ft. of gravel underlain by 10 ft. of white, coarse-grained sand and gravel (Miocene). Gravel is mostly quartz, some gneiss, ironstone, quartzite and schist.	N.J. Geological Survey (1899-1937)
73	Coastal S&G Co.	Active in 1953	400802 N 740740 W	Pensauken	0-6 ft., sand and gravel about 50% gravel. 6-11 ft., sand, about 5% gravel, ferruginous lenses. 11-13 ft., interbedded sand and gravel.	N.J. Geological Survey (1899-1937)
74	Farmingdale quad, no. 3	1923(?) - ?	401135 N 740745 W	Kirkwood	Sand	Plummer (1931)
75	Harris Brothers	1926(?) - Present	400953 N 740317 W	Pensauken	In 1936, 0-12 ft., yellowish-brown gravel. 12-22 ft., fine to coarse, white sand. 22-27 ft., clayey, brown gravel.	U.S. Bureau of Mines (1976), N.J. Geological Survey (1899-1937), N.J. Bureau of Mine Safety (1991)
76	Harris Brothers	? - Present	400712 N 740434 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)

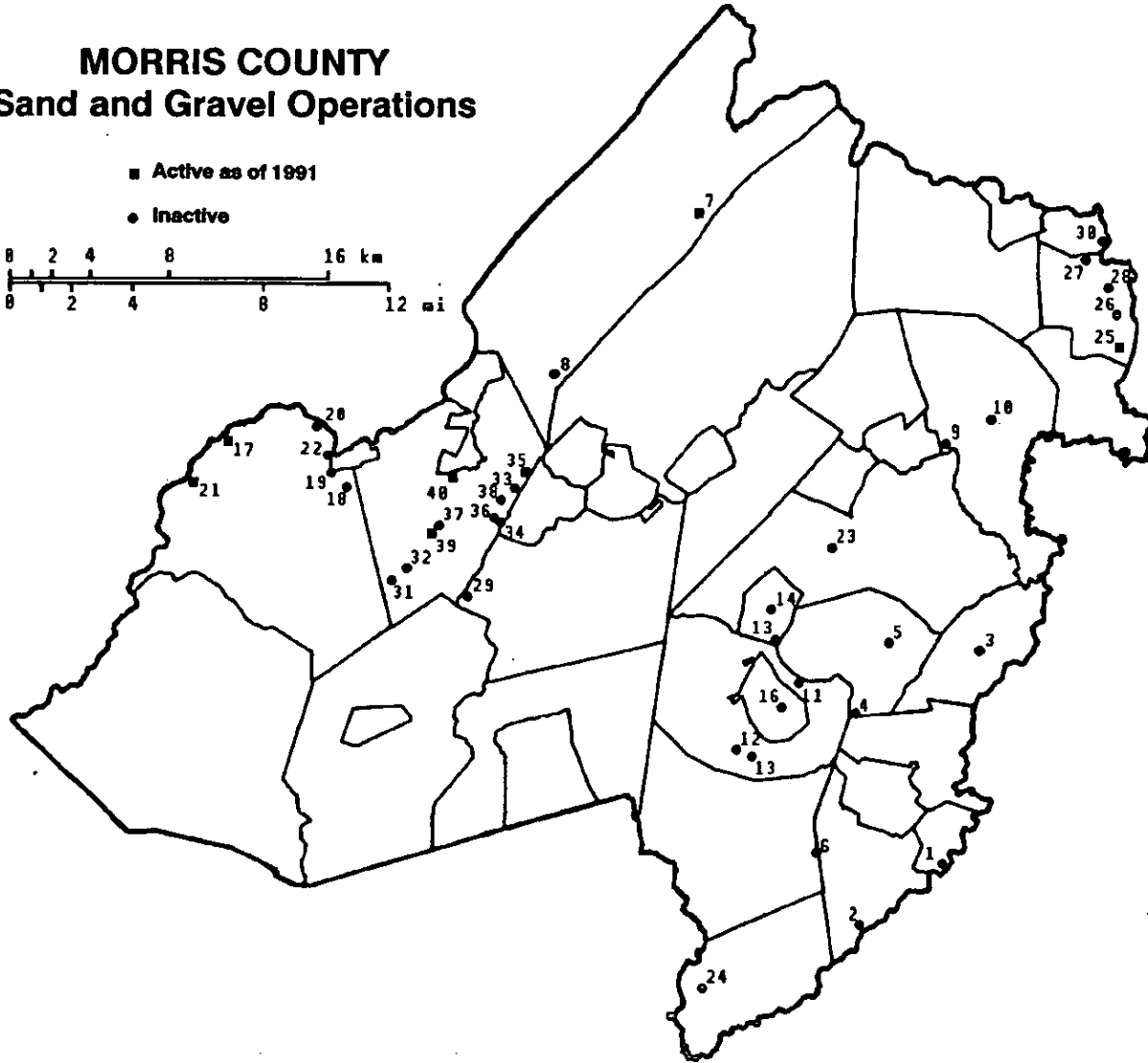
**MONMOUTH COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
77	Harris Brothers	Active in 1979	401001 N 740556 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
78	Hause Gravel	? - ?	400829 N 740757 W	Bridgeton	Gravel and coarse sand.	Martens (1956)
79	Hess Brothers Inc.	? - Present	401020 N 740536 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)
80	McDowell, F.	1931(?) - ?	401040 N 740721 W	Pensauken	2.5 ft. of fine-grained, yellow sand overlying 6.5 ft. of clayey, brown, hard-packed sand and gravel.	U.S. Bureau of Mines (1976), N.J. Geological Survey (1899-1937)
81	McDowell, F.	Active in 1979	401209 N 740625 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
82	McDowell, F.	1931(?) - 1979(?)	401022 N 740622 W	Bridgeton	0-2 ft., gray, gravelly sand. 2-9 ft. brown, clayey and sandy gravel 9-18 ft., yellow to light-brown gravel.	U.S. Bureau of Mines (1976), Johnson (1979), Martens (1956), N.J. Geological Survey (1899-1937)
83	Mutual Contracting Co.	Active in 1956	400941 N 740518 W	Pensauken	6 ft. of gravelly, brown, clayey sand overlying 6 ft. of lighter-colored, less clayey sand.	Several pits. Martens (1956).
84	New Bedford Sand and Gravel	1948(?) - 1954(?)	401035 N 740343 W	Pensauken	Sand and gravel	Soil Conservation Service (1948)
85	New Jersey Gravel Co.	Active in 1956	401138 N 740709 W	Bridgeton	Sand and gravel, mostly light yellow quartz.	U.S. Bureau of Mines (1976), Martens (1956)
86	Wall Washed S & G Co.	Active in 1956	400938 N 740341 W	Cape May	6-8 ft. of yellow and gray, medium to coarse sand.	Deposit worked to maximum depth of 20 ft. below water. Martens (1956)
105	Rustic Materials, Inc.	? - Present	401130 N 740715 W	...		N.J. Bureau of Mine Safety (1991)
<b>West Long Branch Boro</b>						
87	Chamberlins, W.J.	Active in 1903	401651 N 740143 W	Vincentown	Poorly sorted, stratified gravel. Bed is 3-8 ft. thick and runs downslope to the north.	N.J. Geological Survey (1899-1937)
88	Long Branch quad, no. 4	? - 1903(?)	401745 N 740133 W	Vincentown	Cobbles and slabs of ironstone full of fossils overlying 10 ft. of pink, green and yellow, glauconitic sand which can be molded by hand.	N.J. Geological Survey (1899-1937)
89	Long Branch quad, no. 5	Opened before 1905	401734 N 740133 W	Vincentown	Greenish-gray sand from 0-3 ft. overlying 3 to 6 ft. of hard, red, iron-cemented sand.	N.J. Geological Survey (1899-1937)

# MORRIS COUNTY Sand and Gravel Operations

■ Active as of 1991

● Inactive



# MORRIS COUNTY

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Chatham Boro</b>						
1	Chatham quad, no. 3	Opened before 1893	404344 N 742305 W	...	Wave-built terrace of glacial Lake Passaic. Sand and gravel	Salisbury (1894)
<b>Chatham Twp.</b>						
2	Chatham quad, no. 1	1893(?) - ?	404214 N 742540 W	...	Wave cut terrace of glacial Lake Passaic. Fine sand to pebbles 6 in. in diameter.	Now a recreation field. Opened by Samuel Durie about 1893. Product used for road material. Field check 1985, Salisbury (1894), N.J. Geological Survey (1902b)
<b>East Hanover Twp.</b>						
3	Hanover Sand & Gravel Co.	Active in 1929	404905 N 742150 W	...		N.J. Geological Survey (1908-1953)
<b>Hanover Twp.</b>						
4	Morristown quad, no. 3	? - ?	404730 N 742553 W	Stratified drift	Inner face of moraine. Distinct beds of sand and gravel. 2 to 3 ft. of till covers deposit.	Building sand. N.J. Geological Survey (1899-1937)
5	Morristown quad, no. 5	Opened before 1903	404920 N 742447 W	Glacial-unstratified		Darton and others (1908)
6	Chatham quad, no. 2	Opened before 1908	404359 N 742717 W	Terminal Moraine		Darton and others (1908)
<b>Jefferson Twp.</b>						
7	Berkshire Sand & Stone	1955 - Present	405959 N 743103 W	Glacial-undifferentiated		There are two pits at this location. U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (1991)
8	Dover quad, no. 1	? - ?	405557 N 743532 W	...	Stratified sand and gravel, strong easterly dip. Material is fairly clean, 5-50% gravel. 30 ft. of material exposed in 1948.	N.J. Geological Survey (1899-1937)
<b>Montville Twp.</b>						
9	Conklin, Frank	Active in 1979	405416 N 742254 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976), Johnson (1979)
10	Montville Pits	Opened before 1892	405451 N 742134 W	Stratified drift	Several pits in kame, much of the gravel is well rounded.	In 1985 the site of condominiums. Salisbury (1893), Field check (1985)
<b>Morris Twp.</b>						
11	Morristown quad, no. 2	1951(?) -	404814 N 742748 W	Stratified drift	50 ft. of stratified sand and gravel.	Top 5 to 10 ft. dip gently SE while underlying beds dip strongly eastward. The glacial deposit is 172 ft. thick.
12	Morristown quad, no. 4	Opened before 1900	404638 N 742952 W	...	Gravel	N.J. Geological Survey (1902b), N.J. Geological Survey (1939)
13	Spring Brook	Opened before 1893	404626 N 742920 W	...	Coarse, stratified trap gravel. Gravel is mostly derived from the hill to the east.	Used in 1893 as a source of road gravel. Salisbury (1894)
<b>Morris Plains Boro</b>						
14	Landi, T. and Sons	Active in 1953	405008 N 742842 W	Stratified drift	Pit face 20-40 ft. high. Slightly clayey, somewhat heterogeneous mixture of brown sand and gravel. Material poorly sized and looks like a torrential stream deposit.	N.J. Geological Survey (1899-1937)

**MORRIS COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
15	Morris Plains Crushed St.	Active in 1927	404922 N 742832 W	Stratified drift	Sand and gravel. Gravel is mostly gneiss, some Newark Super-group shale and sandstone.	N.J. Geological Survey (1899-1937)
<b>Morristown Town</b>						
16	Houdaille Construction Mater	? - ?	404745 N 742826 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976)
<b>Mount Olive Twp.</b>						
17	R.A. Hamilton Corp.	? - Present	405424 N 744612 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (1991). Formerly Certified Aggregates, Little Ferry Asphalt.
18	Planders Const. Materials	? - Present	405311 N 744220 W	Glacial-undifferentiated	Crushed stone produced at same location.	U.S. Bureau of Mines (1976), Johnson (1979)
19	Gallo Bros.	Active in 1929	405332 N 744254 W	...		N.J. Geological Survey (1908-1953)
20	Hodgson Sand & Gravel Co.	1900(?) - 1931(?)	405441 N 744321 W	Stratified drift	0-30 ft., chiefly stratified sand. 30-40 ft., at least 50% gravel. 40-50 ft., mostly boulders. Little clay.	Several pits. Sand and gravel was washed and sized at the site. N.J. Geological Survey (1899-1937)
21	Saxton Falls Sand and Gravel	? - Present	405324 N 744715 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (1991)
22	Stanhope, quad, no. 1	Opened before 1881	405359 N 744307 W	...	Sand	N.J. Geological Survey (1905)
<b>Parsippany Troy Hills</b>						
23	Morristown quad, no. 1	? - 1918(?)	405141 N 742644 W	...	Stratified sand and gravel.	N.J. Geological Survey (1899-1937)
<b>Passaic Twp.</b>						
24	O'Rourke & Thompson	Opened before 1893	404042 N 743059 W	...	Trap gravel, poorly rounded but water worn.	Salisbury (1894)
<b>Pequannock Twp.</b>						
25	P-10 Management	? - Present	405637 N 741726 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)
26	Pompton Sand & Gravel Co.	Active in 1929	405733 N 741718 W	...	Numerous pits operated by different companies over the years.	N.J. Geological Survey (1908-1953)
27	Pompton Plains quad, no. 1	? - ?	405851 N 741824 W	Stratified drift	0-45 ft., 90% varicolored, angular sand, 10% gravel. 45-47 ft., 20% gravel. 47-57 ft., fine to medium-grained, angular sand.	N.J. Geological Survey (1899-1937)
28	Pompton Plains quad, no. 3	1955(?) - 1970(?)	405816 N 741742 W	Stratified drift	Sand and gravel	Army Map Service (1955), Army Map Service (1970a)

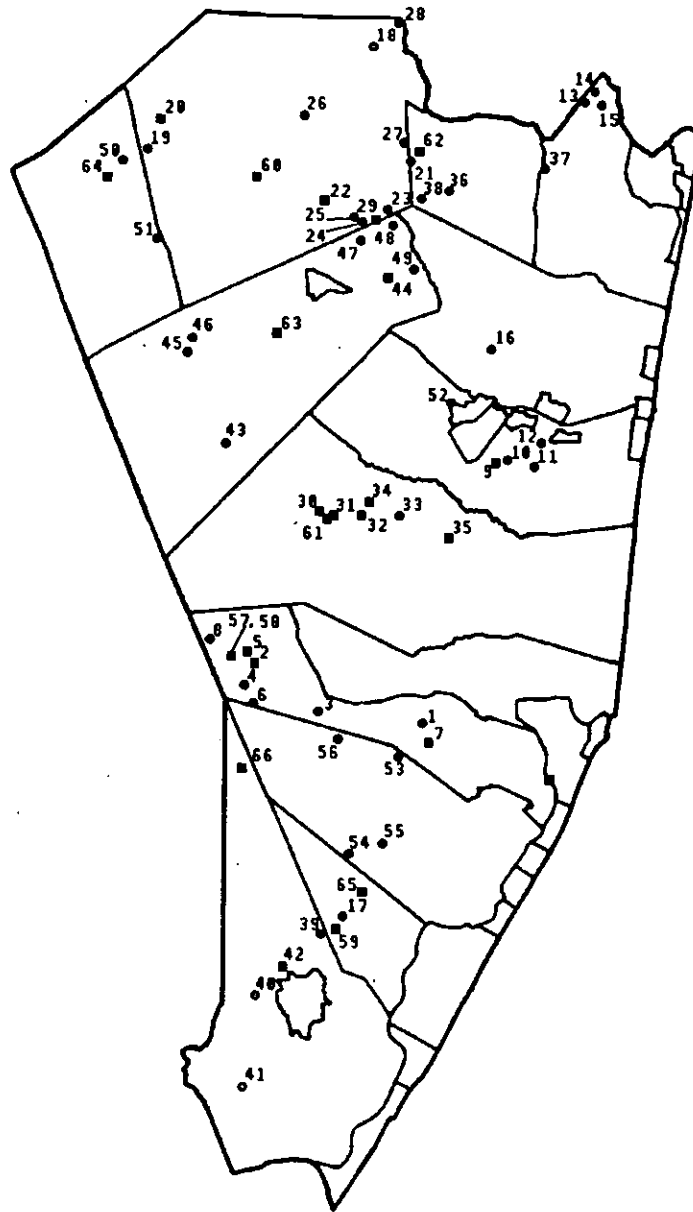
**MORRIS COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Randolph Twp.</b>						
29	Chester quad, no. 1	1905(?) - ?	405035 N 743821 W	...	Sand	N.J. Geological Survey (1916)
<b>Riverdale Boro</b>						
30	Houdaille Construction Materials	1933(?) - 1979(?)	405918 N 741757 W	Glacial-undifferentiated		Operated by Consolidated Sand and Stone Co. in 1933. U.S. Bureau of Mines (1976), Johnson (1979), N.J. Geological Survey (1899-1937)
<b>Roxbury Twp.</b>						
31	Acme Silica	1918(?) - 1929(?)	405052 N 744053 W	Green Pond	Crushed white sandstone, 98% silica. Attitude of bedding N30°E, 54°SE.	Steel molding sand. N.J. Geological Survey (1899-1937)
32	Acme Silica Co. #2	1929-1947(?)	405110 N 744028 W	Green Pond	Crushed white sandstone. Attitude of bedding N50°E, 38-47°SE.	Sand for furnace bottoms, coarser material for cupola patch and lining of ladles. N.J. Geological Survey (1899-1937)
33	Barnard Construction Co.	? - ?	405307 N 743652 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976)
34	Barnard Construction Co.	? - 1979(?)	405222 N 743723 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976), Johnson (1979)
35	County Concrete Corp.	? - Present	405334 N 743626 W	Glacial-undifferentiated		Formerly Houdaille Construction Materials, Inc. U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)
36	Chester quad, no. 2	1905(?) - ?	405224 N 743735 W	...	Sand	N.J. Geological Survey (1916)
37	Read, M.W.	Active in 1933	405212 N 743924 W	Stratified drift	0-2 ft., clayey sand and gravel. 2-14 ft., average 49% gravel, mostly under 3 in.	Top material used for roads and fill. N.J. Geological Survey (1899-1937)
38	Ridner Bros.	Active in 1956	405256 N 743717	...		N.J. Geological Survey (1908-1953)
39	ESC Equipment Co.	? - Present	405245 N 744030 W	...		N.J. Bureau of Mine Safety (1991)
40	McNear Excavating	? - Present	405345 N 743900 W	...		N.J. Bureau of Mine Safety (1991)



# OCEAN COUNTY Sand and Gravel Operations

- Active as of 1991
- Inactive



# OCEAN COUNTY

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Barnegat Twp.</b>						
1	Forked River quad, no. 1	Abandoned ? - ?	394531 N 741433 W	Bridgeton	Pit is in coarse brown, compact arkosic sand over a compact gravel bed.	N.J. Geological Survey (1899-1937)
2	Johnson Sand and Gravel	? - Present	394742 N 742204 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)
3	Johnson Sand and Gravel	? - ?	394554 N 741907 W	...		Formerly Francis Moon and So. Brunswick Asphalt. N.J. Department of Transportation (1982)
4	Lentine Materials	? - ?	394652 N 742237 W	...		Washed sand and gravel. Formerly Hunterdon Concrete Co. and Mt. Laurel Concrete Co
5	Moon, F. M. Inc.	? - Present	394800 N 742222 W	...		Construction grade sand and gravel. N.J. Bureau of Mine Safety (1991)
6	Pinelands Materials	Active in 1979	394610 N 742210 W	...		Formerly Mount Holly Concrete
7	Tanner Trucking	? - Present	394454 N 741416 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (unpub.), N.J. Bureau of Mine Safety (1991)
8	Woodmansic quad, no. 2	Opened before 1932	394825 N 742408 W	Beacon Hill	0-2 ft., Beacon Hill gravel. 2-6 ft., pinkish-yellow, clayey Cohanse sand.	N.J. Geological Survey (1899-1937)
57	Alpha Omega Equities	? - Present	394750 N 742230 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain.
58	Bay Construction and Supply	? - Present	394740 N 742200 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain.
<b>Berkeley Twp.</b>						
9	Fisher Brothers Sand & Gravel	? - Present	395438 N 741108 W	...		U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (1991)
10	NJ Pulverizing Co.	Active in 1956	395439 N 741047 W	Cape May	Yellow, light brown and white sand and fine gravel.	U.S. Bureau of Mines (1976), Martens (1956)
11	Toms River quad, no. 1	Active in 1956	395435 N 740935 W	Cape May	5-15 ft. of light, yellow sand and sandy gravel.	Martens (1956)
12	Toms River quad, no. 2	Opened before 1941	395527 N 740919 W	Cape May		Army Map Service (1948d), U.S. Coast and Geodetic Survey (1970)
<b>Brick Twp.</b>						
13	Arlauckas, P	1967(?) - ?	400715 N 740708 W	...	Sand is used as fill.	Also known as Arlauckas Gravel. Field check 1982, N.J. Bureau of Mine Safety (unpub.)
14	Brown & Brudge Pit	? - 1965	400727 N 740655 W	...		Part of the pit is now the township landfill Field check (1982)
15	James, J.H. Inc.	? - ?	400710 N 740630 W	...		Presently the site of a landfill. Field check (1982)

OCEAN COUNTY (cont.)

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Dover Twp.</b>						
16	Ocean Co. Washed S & G Co.	Active in 1952	395843 N 741133 W	Pensauken	Well sorted gravel with lenses of white sand and brown, clayey sand.	N.J. Geological Survey (1899-1937)
<b>Eagleswood Twp.</b>						
17	West Creek quad, no. 1	Abandoned Opened before 1956	393852 N 741808 W	Cape May	Several small pits with coarse, pebbly sand.	Martens (1956)
59	Bob Kalsch	? - Present	393915 N 741810 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain.
65	Cox and Cox	? - Present	394045 N 741800 W	...		N.J. Bureau of Mine Safety (1991)
<b>Jackson Twp.</b>						
18	Archers Corner	1928(?) - ?	400533 N 742709 W	...	Gravel	Plummer (1929a)
19	Adelphia quad, no. 5	Opened before 1896	400911 N 741701 W	...	Hard gravel with coarse, light-yellow sand.	Knapp (1897a)
20	Clayton Block	? - Present	400510 N 741519 W	...		Construction grade sand and gravel. U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (1991)
21	Clayton Brothers	1980(?) - ?	400346 N 741906 W	...		Construction grade sand and gravel.
22	Clayton, Ralph & Sons	? - Present	400329 N 741624 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)
23	Cassville quad, no. 3	1948(?) - 1957(?)	400638 N 742627 W	...	Gravel	Army Map Service (1949a), U.S. Geological Survey (1971)
24	Earle, W. Corp.	? - ?	400257 N 741724 W	....		N.J. Department of Transportation (1982)
25	Harris Brothers	? - ?	400308 N 741745 W	...		N.J. Department of Transportation (1982)
26	Lakehurst quad, no. 2	Opened before 1896	400649 N 742012 W	...	Pea gravel and sand	Knapp (1897a)
27	Lakehurst quad, no. 3	1923 - ?	400552 N 741538 W	Cape May	Gravel	Opened about 1923. Plummer (1931)
28	Randolph Oakerson Pit	Opened before 1896	400950 N 741557 W	...	6 ft. of gravel on extra fine sand.	Knapp (1897a)
29	Stavola S & G	? - Present	400316 N 741647 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (unpub.), N.J. Bureau of Mine Safety (1991)
60	Nord Ilmenite	? - Present	400330 N 742000 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain.

OCEAN COUNTY (cont.)

HAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Lacey Twp.</b>						
30	Atlantic Sand and Gravel	? - Present	395254 N 741916 W	...		Formerly Gravatts Sand and Gravel. U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (1991)
31	Brick Wall Corp.	? - Present	395252 N 741846 W	...		Formerly Parker Construction Co. U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (1991)
32	French Contracting Co.	? - Present	395255 N 741716 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)
33	Harris Brothers	Active in 1979	395254 N 741545 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
34	Parker Construction Co.	? - Present	395321 N 741706 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)
35	Parker Construction Co.	? - Present	395203 N 741330 W	...		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)
61	Lacey Sand and Gravel	? - Present	395253 N 741900 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain.
<b>Lakewood Twp.</b>						
36	Lakewood quad, no. 1	Opened before 1900	400409 N 741346 W	Bridgeton	Gravel	N.J. Geological Survey (1899-1937)
37	Manzo Construction Co.	? - ?	400456 N 740911 W	...		N.J. Department of Transportation (1982)
38	North Jersey Quarry Co.	Active in 1956	400350 N 741454 W	...	8 ft. of Bridgeton overburden over Kirkwood or lower Cohansey.	Martens (1956)
62	Clayton Sand and Gravel	? - Present	400510 N 741510 W	...		N.J. Bureau of Mine Safety (1991)
<b>Little Egg Harbor Twp.</b>						
39	Bay Construction Co., Inc.	Active in 1979	393818 N 741905 W	...		U.S. Bureau of Mines (1976), Johnson (1979)
40	Giffordtown Pits	Opened before 1897	393606 N 742211 W	Cape May	0-4 ft., loam with few pebbles 4-10 ft., gravel and coarse sand. Pieces of sandstone, some quite large.	Knapp (1897c)
41	Oswego Lake quad, no. 2	Opened before 1934	393301 N 742236 W	Cape May	Slightly clayey sand and pea gravel.	N.J. Geological Survey (1899-1937)
42	Tuckerton Sand & Gravel	1931(?) - Present	393708 N 742054 W	Cape May	5 ft. of light-yellow to nearly white, sandy gravel. Little clay present.	Martens (1956), N.J. Geological Survey (1899-1937), N.J. Bureau of Mine Safety (1991)
66	Mt. Holly Concrete	? - Present	394400 N 742230 W	...		N.J. Bureau of Mine Safety (1991)
<b>Manchester Twp.</b>						
43	Brennan Sand	Opened before 1956	395525 N 742337 W	Beacon Hill	Composition of the washed sand is 98% quartz, 1% chert, 1% clay aggregates, trace heavy minerals.	Martens (1956)

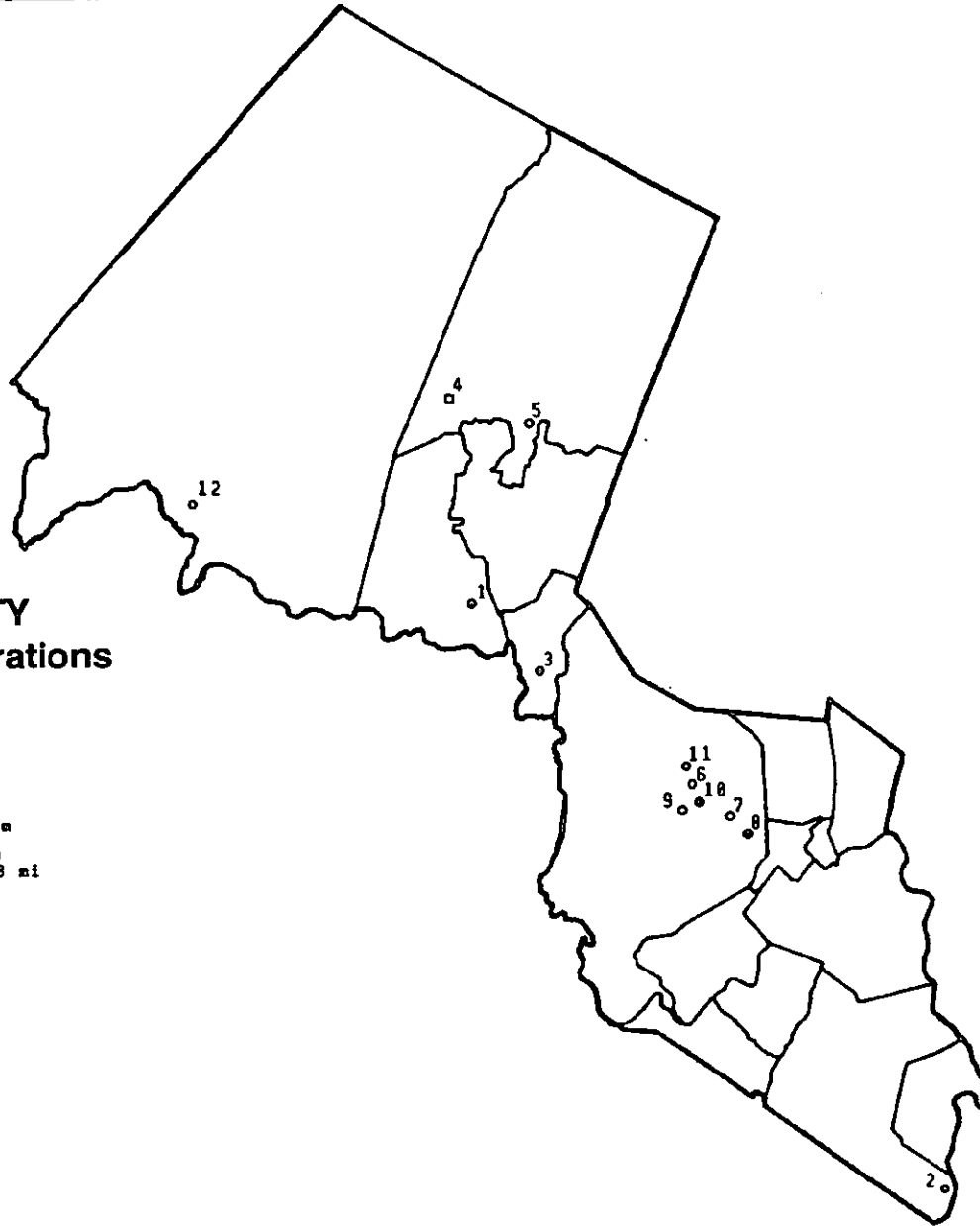
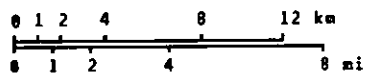
OCEAN COUNTY (cont.)

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
44	Brick Wall	? - Present	400106 N 741603 W	...		U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (1991)
45	Fort Dix Pit	Active in 1942	395905 N 742509 W	Cohansey	4-7 ft. of well-bonded gravel (Bridgeton?) over 1 ft. of fine to coarse-grained, yellow sand.	N.J. Geological Survey (1899-1937)
46	Fort Dix quad, no. 2	Active in 1942	395837 N 742513 W	...	3-4 ft. of gravel (Bridgeton?) over yellow Cohansey sand.	N.J. Geological Survey (1899-1937)
47	Stavola Construction Material	? - ?	400252 N 741604 W	...		Construction grade sand and gravel. Formerly Cohansey sand. Houdaille Const. Materials.
48	Lakehurst quad, no. 1	? - ?	400220 N 741748 W	Pensauken	6 ft. of gravel with some sand over 2 ft. of yellow sand over a few inches of reddish-brown sand over loose, yellow sand (Cohansey).	N.J. Geological Survey (1899-1937)
49	Union Processed Sand & Gravel	? - ?	400126 N 741515 W	...		Formerly Brick Wall Corp. N.J. Department of Transportation (1982), N.J. Bureau of Mine Safety (unpub.)
63	Heritage Minerals	? - Present	395900 N 742100 W	...		N.J. Bureau of Mine Safety (1991)
<b>Plumsted Twp.</b>						
50	Cassville quad, no. 1	? - ?	400505 N 742825 W	Bridgeton	2-3 ft. of brown, clayey sand with scattered pebbles, 95% of which are quartz (Bridgeton)	N.J. Geological Survey (1899-1937)
51	Hopkins Pit	Active in 1942	400225 N 742642 W	Bridgeton	At the south end of the pit is 3-9 ft. of sandy to well-bonded gravel over 2 ft. of fine to coarse grained, cross-bedded, yellow to white Cohansey sand. Quartz comprises 97% of pebbles.	N.J. Geological Survey (1899-1937)
64	E.M.E., Inc.	? - Present	400400 N 742930 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain.
<b>South Toms River Boro</b>						
52	Smith, W.C. Mineral Prod.	1929 - ?	395642 N 741318 W	Cohansey	Up to 12 ft. of white and light yellow, cross-bedded sand above water table. 19 ft. of white sand below water table.	N.J. Geological Survey (1899-1937)
<b>Stafford Twp.</b>						
53	Clayton, Ralph & Sons	Active in 1979	394426 N 741543 W	...		Johnson (1979)
54	Kalsch, R. Construction	1934(?)-1979(?)	394104 N 741800 W	...	Several acres were stripped in 1934 to obtain 3-4 ft. of Bridgeton gravel over Cohansey sand. Sand is coarse-grained, clayey, and highly colored.	N.J. Geological Survey (1899-1937), U.S. Bureau of Mines (1976), Johnson (1976)
55	Kalsch, R.E. Sand and Gravel	? - ?	394127 N 741627 W	...		U.S. Bureau of Mines (1976)
56	Moon, F. M.	? - ?	394459 N 741830 W	...		U.S. Bureau of Mines (1976)

# PASSAIC COUNTY Sand and Gravel Operations

□ Active as of 1991

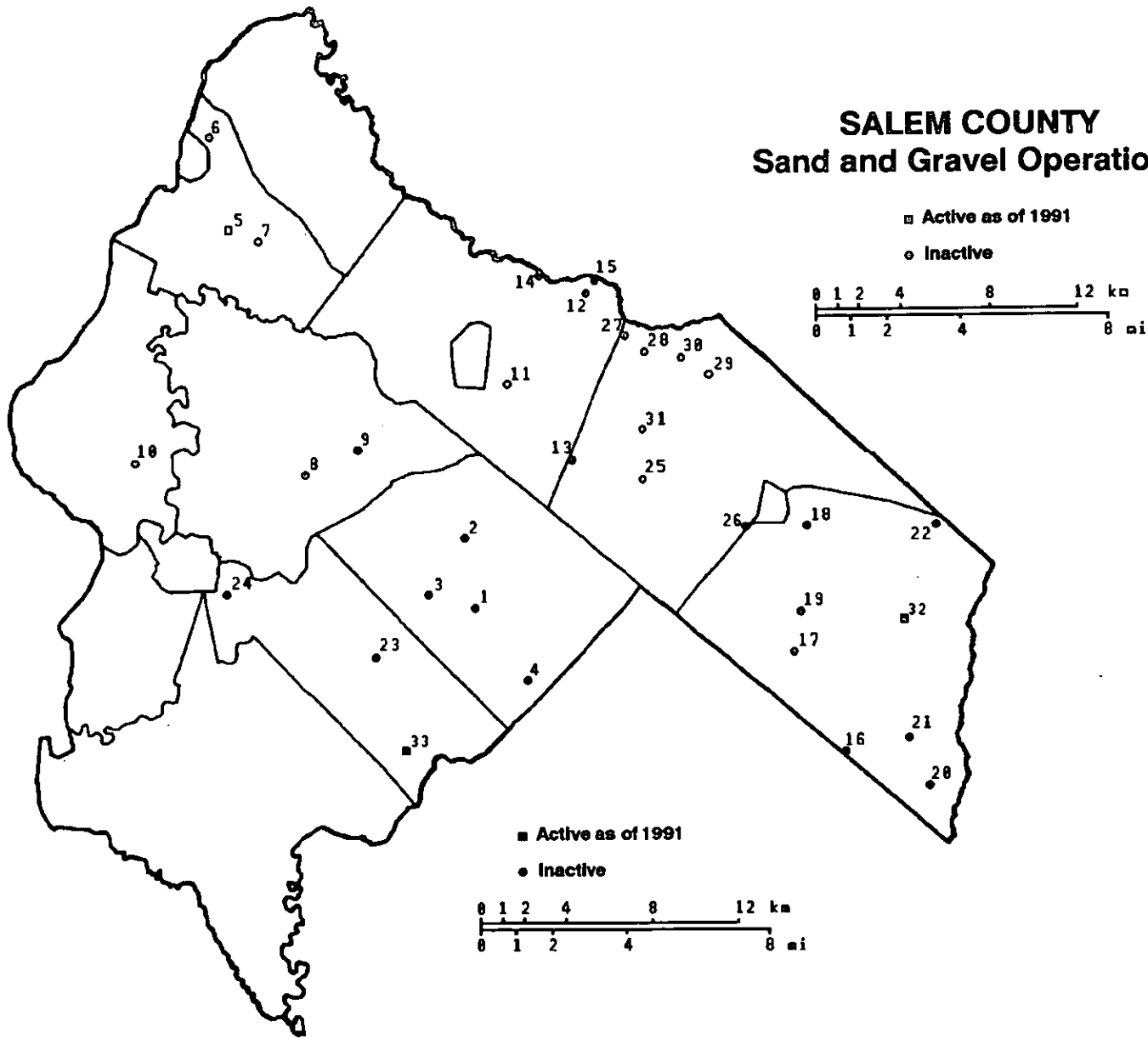
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# PASSAIC COUNTY

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Bloomington Boro</b>						
1	Rome, George K.	1929(?)-1931(?)	410056 N 741856 W	...		N.J. Geological Survey (1908-1953)
<b>Clifton City</b>						
2	D and V Sand and Gravel	Active in 1929	404950 N 740733 W	...		Small operation in 1929. N.J. Geological Survey (1908-1953)
<b>Pompton Lakes Boro</b>						
3	Pompton Plains quad, no. 2	? - ?	405938 N 741718 W	...	8 ft. of stratified sand and gravel exposed in 1935. Upper 4 ft. is poorly sorted, fine to coarse sand with some gravel over a very fine-grained, yellow sand.	N.J. Geological Survey (1899-1937)
<b>Ringwood Boro</b>						
4	Van Orden, E. Sand and Gravel	? - Present	410447 N 741925 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991)
5	Van Orden, E. Sand and Gravel	? - ?	410417 N 741730 W	Glacial-undifferentiated		Formerly Van Orden Ringwood Pit and Mill, U.S. Bureau of Mines (1976)
<b>Wayne Twp.</b>						
6	Brooks-Wright S & G	Active in 1939	405726 N 741336 W	Stratified drift.		Beds dip south. Worked to depth of 30 ft. N.J. Geological Survey (1899-1937)
7	Hinchman, H.J. & Son	? - ?	405652 N 741244 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976)
8	Hinchman, H.J. & Son	Active in 1979	405632 N 741217 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976), Johnson (1979)
9	Van Decker Brothers	Active in 1979	405702 N 741345 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (unpub.)
10	Van Orden Pit & Mill	? - ?	405711 N 741326 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976)
11	Van Orden Pit & Mill	Active in 1979	405749 N 741347 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (unpub.)
<b>West Milford Twp.</b>						
12	New-foundland quad, no. 1	Opened before 1947	410254 N 742546 W	Stratified drift	Gravel	Blanchard (1947), N.J. Geological Survey (1960)

# SALEM COUNTY Sand and Gravel Operations





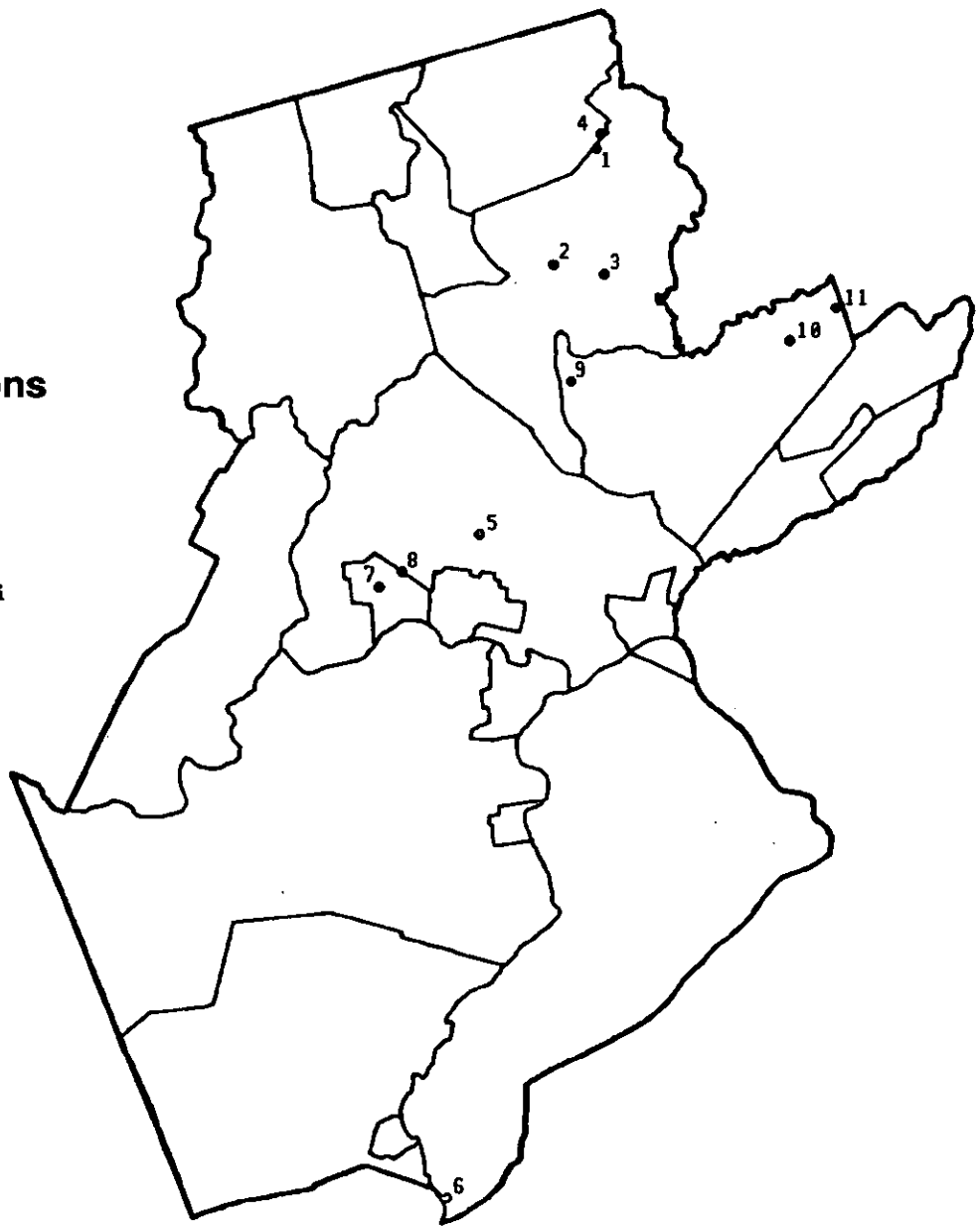
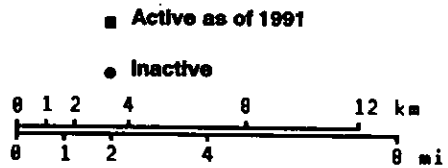
# SALEM COUNTY

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Alloway Twp.</b>						
1	Alloway quad, no. 3	Opened before 1902	393302 N 751927 W	Bridgeton	0-3 ft., gravel. 3-5 ft., yellow-brown, medium to fine sand.	Knapp (1902f)
2	Alloway quad, no. 4	Opened before 1902	393442 N 751947 W	...	4-5 ft. of well sorted, brown to yellow, sand and gravel.	Knapp (1902f)
3	Dunham, John	Opened before 1895	393317 N 752049 W	...	1-3 ft. of sand and gravel on over 10 ft. of medium to fine, yellow to white sand.	Knapp (1902f)
4	New Boston Pit	Active in 1902	393120 N 751709 W	...	4 to 5 ft. of gravel on 4 to 5 ft. of yellow to white sand.	Knapp (1902i)
<b>Carneys Point Twp.</b>						
5	Clemente A.	? - Present	394157 N 752658 W	...		Washed sand. Formerly owned by Dupont. N.J. Department of Transportation (1982), N.J. Bureau of Mine Safety (1991)
6	Penns Grove quad, no. 1	Opened before 1956	394410 N 752741 W	Cape May		Aggregate materials. Martens (1956)
7	Penns Grove quad, no. 2	Opened before 1934	394144 N 752609 W	Cape May	10 ft. exposure, chiefly sand with some fresh flint pebbles. Black Marshalltown clay-marl is exposed in the northern edge of pit.	N.J. Geological Survey (1899-1937)
<b>Mannington Twp.</b>						
8	Salem quad, no. 1	? - ?	393610 N 752437 W	Pensauken	0-2 ft., sandy quartz gravel (Pensauken). 2-10 ft., yellow Kirkwood sand. 10-12 ft., white Kirkwood sand.	N.J. Geological Survey (1899-1937)
9	Salem quad, no. 2	Opened before 1902	393647 N 752259 W	Vincentown	2 ft. of yellow to brown clay, over 10 ft. of limesand, over gray to greenish-gray, coarse quartzose sand.	N.J. Geological Survey (1899-1937)
<b>Pennsville Twp.</b>						
10	Hancock's Pit	Opened before 1897	393626 N 752950 W	Pensauken	Coarse gravel and cobbly beds interstratified with sand. Unusually coarse sand for this area in the State.	N.J. Geological Survey (1897-1937)
11	Richman Pit	Active in 1956	393823 N 751830 W	Bridgeton	Top 8-12 ft. is reddish, sandy gravel; next 25 ft. is white, yellow and brown, coarse sand with streaks of gravel. Washed samples are 92% quartz, 6% feldspar and 2% other minerals.	Top 8-12 ft. used for road material. Remaining material used for fill and for covering roads. Martens (1956)
<b>Pilesgrove Twp.</b>						
12	Amos Peterson	1901(?) - ?	394032 N 751612 W	Bridgeton	Bridgeton gravel over Kirkwood clay.	N.J. Geological Survey (1899-1937)
13	Robins, W.	Active in 1902	393636 N 751712 W	Bridgeton	Clean gravel over loose sand.	Knapp (1902)
14	Woodstown quad, no. 5	? - ?	394102 N 751743 W	Cape May	0-8 ft., light-yellow sand and gravel. 8-11ft., very fine-grained, white Kirkwood sand. 11-14 ft., yellow, glauconitic Vincentown sand.	N.J. Geological Survey (1899-1937)
15	Woodstown quad, no. 8	? - ?	394052 N 751557 W	Bridgeton	6-8 ft. of gravel over 2 ft. of micaceous clay.	N.J. Geological Survey (1899-1937)
<b>Pittsgrove Twp.</b>						
16	Bridgetown quad, no. 4	1938(?) - 1953(?)	392943 N 750815 W	Bridgeton		U.S. Army Corps of Engineers (1942b), U.S. Geological Survey (1972a)

SALEM COUNTY (cont.)

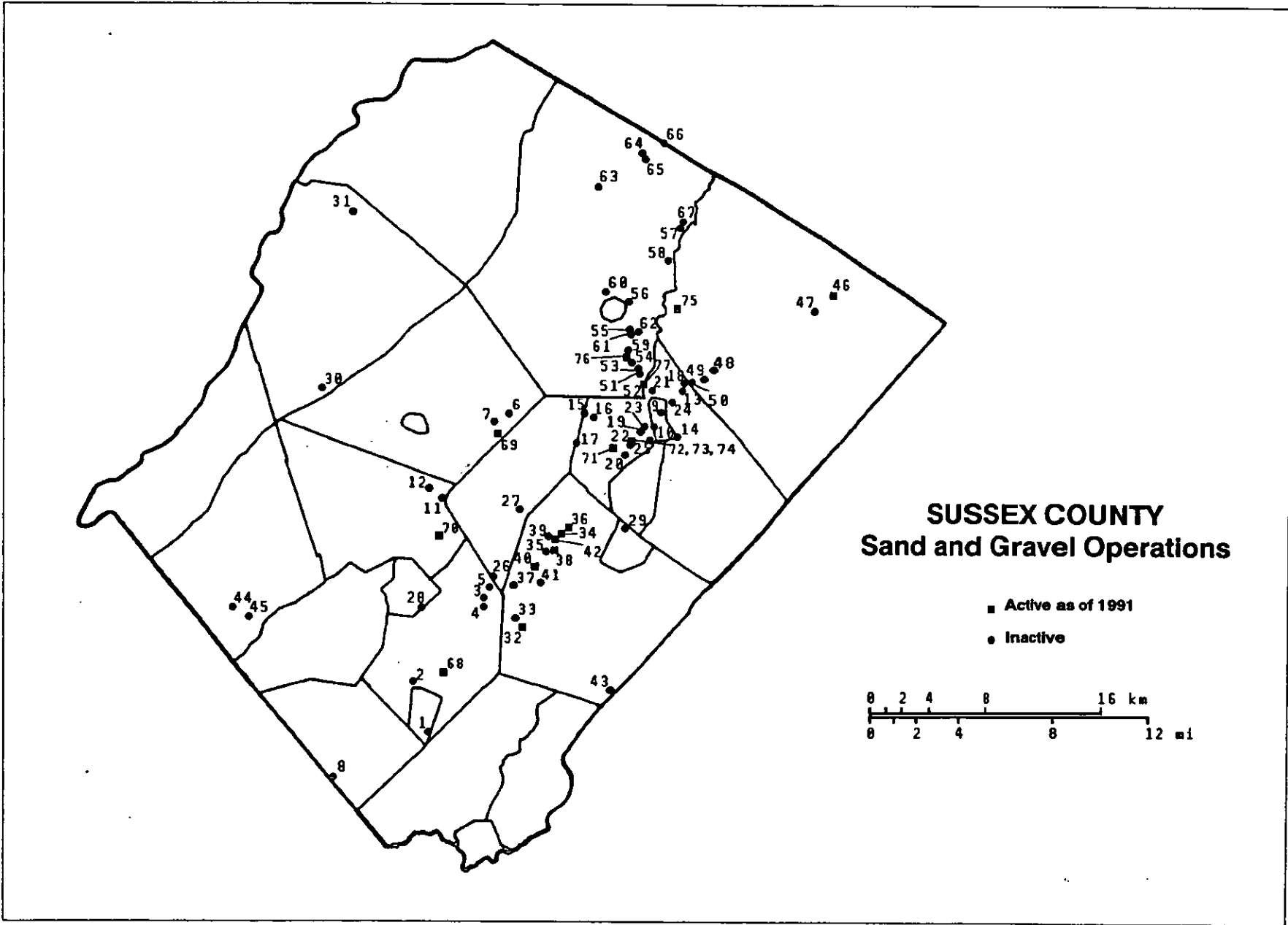
MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
17	Elmer quad, no. 2	? - ?	393206 N 750942 W	Bridgeton	6-10 ft. of yellow to rusty brown, slightly clayey sand and gravel (Bridgeton) on 8 ft. of white to buff, fine to coarse, cross-bedded sand (Cohansey).	N.J. Geological Survey (1899-1937)
18	Elmer quad no. 4	Opened before 1928	393505 N 750923 W	Cohansey	Gravel	Opened between 1922 and 1928. Plummer (1929b)
19	Elmer quad, no. 5	Opened before 1897	393302 N 750935 W	Bridgeton	1-2 ft. of loam and gravel on Bridgeton gravel and coarse sand. Cobbles are abundant.	Knapp (1902h)
20	Meckel & Son	? - ?	392855 N 750541 W	...		N.J. Department of Transportation (1982)
21	Newfield quad, no. 1	Opened before 1937	393006 N 750616 W	Bridgeton	8 ft. of clayey, rusty brown, sand and gravel. Pebbles are mostly quartz.	N.J. Geological Survey (1899-1937)
22	Newfield quad, no. 2	Opened before 1928	393508 N 750529 W	...	Gravel	Opened between 1922-1928. Plummer (1929b)
32	South State	? - Present	393130 N 750600 W	...		N.J. Bureau of Mine Safety (1991)
<b>Quinton Twp.</b>						
23	Alloway quad, no. 2	Opened before 1894	393152 N 752227 W	Pensauken		Road material. Salisbury (1895)
24	Davis, A.W. Lumber Co.	1931(?) - 1946(?)	393319 N 752656 W	Cape May	Medium grained, micaceous, light yellow sand overlain by 3-6 ft. of chocolate-colored, clayey sand with small proportion of gravel.	Dredged 12-15 ft. below the water table. Produced washed sand. N.J. Geological Survey (1899-1937)
33	S.V. Farming	? - Present	392900 N 752145 W	...		N.J. Bureau of Mine Safety (1991)
<b>Upper Pittsgrove Twp.</b>						
25	Elmer quad, no. 1	? - ?	393609 N 751424 W	Bridgeton	11 ft. of cross-bedded, yellowish-brown sand and gravel. Pebbles are mostly quartz and quartzite.	N.J. Geological Survey (1899-1937)
26	Jones Pit	1897(?) - 1902(?)	393457 N 751113 W	Cohansey	Poorly stratified yellow sand and gravel.	Operating until at least 1902. Knapp (1902h)
27	Pitman West quad, no. 2	? - ?	393937 N 751442 W	--	Fine gravel	N.J. Geological Survey (1899-1937)
28	Pitman West quad, no. 3	? - ?	393912 N 751405 W	Bridgeton	6-7 ft. of compact gravel with minor sand between pebbles.	N.J. Geological Survey (1899-1937)
29	Pitman West quad, no. 5	Opened before 1895	393839 N 751215 W	--	8 ft. of fine and coarse sand, well stratified and cross-bedded.	Knapp (1902g)
30	Pitman West quad, no. 8	1938(?) - 1967(?)	393903 N 751310 W	Bridgeton	Gravel	U.S. Army Corps of Engineers (1942c), U.S. Geological Survey (1967a)
31	Shades, H.	? - ?	393718 N 751420 W	Bridgeton	Gravel with occasional boulders. Gravel compact and in distinctly stratified beds. Beneath it is a fine-grained, glass sand (Cohansey).	N.J. Geological Survey (1899-1930)

# SOMERSET COUNTY Sand and Gravel Operations



# SOMERSET COUNTY

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Bernards Twp.</b>						
1	Boytes Pit	Opened before 1927	404253 N 743330 W	...	45-50 ft. of sand and gravel (gneiss till on fine to coarse, clayey sand on sand and gravel and boulders). Gneiss boulders greatly weathered.	N.J. Geological Survey (1899-1937)
2	Bernardsville quad, no. 2	Active in 1893	404040 N 743436 W	Stratified drift	8 ft. of stratified trap gravel. No matrix in gravel.	Pit was owned by Bernards Twp., in 1893. Product was used on roads. N.J. Geological Survey (1899-1937), Salisbury (1894)
3	Zieglow & Bros.	Opened before 1893	404029 N 743320 W	...	Trap gravel in a narrow channel between two islands of glacial Lake Passaic. Gravel bed is over 18 ft. thick. Pebbles average less than 2 in.	In 1893 pit owned by Lawyer Zieglow and Dominic Bowers. Salisbury (1894)
<b>Bernardsville Boro</b>						
4	Bernardsville quad no. 1	1918 - ?	404312 N 743327 W	Stratified drift	0-2 ft., gravel (predominantly trap). 2 ft. to 8 to 10 ft., stratified sand and gravel. Pebble lithologies of all kinds. Bottom 2 ft., clean sand.	N.J. Geological Survey (1899-1937)
<b>Bridgewater Twp.</b>						
5	Bound Brook quad, no. 1	? - ?	403534 N 743618 W	Pensauken	Reddish brown, clayey gravel, mainly quartz, on pinkish-yellow sand and gravel.	N.J. Geological Survey (1899-1937)
<b>Franklin Twp.</b>						
6	Monmouth Junction	? - ?	402257 N 743704 W	Early Drift		Field check 1983
<b>Raritan Boro</b>						
7	Lindsley's Pit	? - ?	403434 N 743845 W	Pensauken	0-1 ft., clayey sand. 1 ft. to 1 to 2.5 ft., reddish-brown, clayey sand 1 to 2.5 ft. to 10 ft., cross-bedded, yellow and brown sand with quartz pebble beds.	N.J. Geological Survey (1899-1937)
8	Raritan quad, no. 1	1916(?) - 1927(?)	403445 N 743817 W	Pensauken	6 ft. of clayey till over yellow sand and gravel. Maximum thickness 18 ft.	N.J. Geological Survey (1899-1937)
<b>Warren Twp.</b>						
9	Dougherty, John	Opened before 1893	403828 N 743411 W	...	Coarse trap gravel, water worn, loosely stratified with a little interstitial sand. Glacial lake deposit.	Salisbury (1894)
10	Old Home Life Ins.	Opened before 1893	403913 N 742838 W	...	Lake Passaic shore gravel. Trap gravel 3 to 4 ft., deep ranging from pea to cobble size. Gravel is water worn but not well rounded.	In 1893 owned by Old Home Life Ins. Co. Produced gravel for road material. N.J. Geological Survey (1899-1937), Salisbury (1894)
11	Schwab, John F.	Opened before 1893	403947 N 742730 W	...	Lake Passaic shore gravel. Trap pebbles 2-3 in. in diameter, poorly rounded but water-worn. Deposit is 4-5 ft. thick.	Road gravel. Salisbury (1894)



# SUSSEX COUNTY

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Andover Boro</b>						
1	Andover Industries	? - ?	405832 N 744419 W	Glacial-undifferentiated		Field check 1981, active
2	Andover Industries	? - ?	410007 N 744502 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976)
3	Jarrell Industries	1960(?) - ?	410302 N 744149 W	Stratified drift		
4	Newton East quad, no. 1	? - ?	410247 N 744151 W	...		N.J. Geological Survey (1899-1937)
5	Sussex Road Material	? - ?	410324 N 744144 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (unpub.)
68	Good Earth	? - Present	410010 N 744330 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain.
<b>Frankford Twp.</b>						
6	Branchville, quad, no. 2	Opened before 1947	410905 N 744104 W	Stratified drift	Gravel	Blanchard (1947), N.J. Geological Survey (1960)
7	Branchville quad no. 3	Opened before 1947	410851 N 744131 W	Stratified drift	Gravel	Blanchard (1947), N.J. Geological Survey (1960)
69	Gallo Asphalt	? - Present	410845 N 744115 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain.
<b>Green Twp.</b>						
8	Tranquility quad, no. 3	Opened before 1900	405705 N 744823 W	...	Sand and gravel. Gravel is mostly limestone with some gneiss.	Kummel (1890-1894d)
<b>Hamburg Boro</b>						
9	United Sand	1950(?) - ?	410916 N 743425 W	Glacial-undifferentiated		Screen gravel, bank run. Formerly used in concrete blocks. Formerly Harvey Kitchell, Franklin Block, Samuel Braen, Union Building, and Diem-a-mac. Field check 1982, active. U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (unpub.)
10	Wantague Sand and Gravel	1976(?) - 1982	410836 N 743445 W	Glacial-undifferentiated		Also known as Passaic Crushed Stone. Field check 1982. N.J. Department of Transportation (1982)
<b>Hampton Twp.</b>						
11	Castmore, Erney	1984 - ?	410617 N 744345 W	Stratified drift		
12	Couse, J. Martin	1935(?) - ?	410635 N 744427 W	Stratified drift		N.J. Bureau of Mine Safety (1991).
70	Snooks Excavating	? - Present	410500 N 744400 W	...		N.J. Bureau of Mine Safety (1991).

SUSSEX COUNTY (cont.)

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Hardyston Twp.</b>						
13	Admix Sand & Gravel	? - ?	410955 N 743320 W	Glacial-undifferentiated		Produces 3/4 to 3/8 inch gravel. Formerly Gianello. Field check 1982, active. N.J. Bureau of Mine Safety (unpub.)
14	Baum, John J.	1960-1981	410821 N 743334 W	Glacial-undifferentiated		Field check 1982. N.J. Bureau of Mine Safety (unpub.)
15	Beaver Run Farm Aggregates	1971- Present	410914 N 743730 W	Glacial-undifferentiated		Crushed dolomite and washed sand and gravel. Formerly Div. of Shotmeyer Bros. Inc. Field check 1982, active. U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (unpub.)
16	Cappello, John	1980-1981	410905 N 743720 W	Glacial-undifferentiated		Field check (1982)
17	Classified Pit & Mill	? - ?	410808 N 743801 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976)
18	Drew, Leon	1982 - ?	411006 N 743325 W	Glacial-undifferentiated		Planned to begin operation in 1982. Field check (1982), active
19	Hessler, Ted	1970(?) - 1981	410832 N 743510 W	Glacial-undifferentiated		Inactive in 1981 and at time of visit. Field check (1982)
20	North Church Gravel Co.	1940(?) - ?	410747 N 743603 W	Glacial-undifferentiated		Bank run sand and gravel. Formerly Leslie Day Contracting. Field check 1982, active. U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (unpub.)
21	Raia Industries	? - ?	410955 N 743454 W	Glacial-undifferentiated		Also known as Hambrug Quarry; In 1952-1953 Sussex Quarries Inc. Also sells crushed gneiss. Field check 1982, active.
22	Ramm Associates	? - 1981(?)	410816 N 743542 W	Glacial-undifferentiated		Formerly Ridgefield Pit and Mill. U.S. Bureau of Mines (1977), Field check 1982.
23	Township Pit	? - ?	410830 N 743507 W	Glacial-undifferentiated		Few years old in 1982. Field check 1982
24	Van Decker Brothers	1981 - ?	410936 N 743352 W	Glacial-undifferentiated		Field check 1982. N.J. Bureau of Mine Safety (unpub.)
25	Wallkill Valley Aggregates	? - ?	410818 N 743455 W	Glacial-undifferentiated		Formerly Passaic Crushed Stone Co. Owned by Tri- County Asphalt. Field check 1982. U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (unpub.)
71	VanDecker Brothers	? - Present	410950 N 743400 W	...		N.J. Bureau of Mine Safety (1991)
72	A. Ferraiulo, Jr., & Sons	? - Present	410815 N 743515 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain.
73	TransMix Aggregates	? - Present	410845 N 743545 W	...		N.J. Bureau of Mine Safety (1991)
74	Wallkill Valley Aggregates	? - Present	410815 N 743515 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain.

**SUSSEX COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Lafayette Twp.</b>						
26	Andover Industries	? - 1982(?)	410345 N 744134 W	...		U.S. Bureau of Mines (1976)
27	Newton East quad, no. 2	? - ?	410555 N 744025 W	...		N.J. Geological Survey (1899-1937)
<b>Newton Town</b>						
28	Newton East quad, no. 6	? - ?	410238 N 744441 W	Stratified drift		
<b>Ogdensburg Boro</b>						
29	Searche's Gravel Pit	? - ?	410516 N 743559 W	Glacial-undifferentiated		R. Metzger, N.J. Zinc Co. (pers. commun. 1982)
<b>Sandyston Twp.</b>						
30	Culvers Gap, quad, no. 1	? - ?	410956 N 744900 W	Glacial-undifferentiated		Glacial deposit on the High Falls Fm. which has been scoured smooth by glacial action. N.J. Geological Survey (1899-1937)
31	Milford quad, no. 1	Opened before 1946	411548 N 744745 W	Stratified drift	Gravel	Blanchard (1946)
<b>Sparta Twp.</b>						
32	Bennett F.W. & Son	1930(?) - Present	410219 N 744037 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976), Johnson (1979), N.J. Bureau of Mine Safety (1991.)
33	Bennett, F.W. & Son	? - 1984	410205 N 744026 W	Stratified drift		
34	Grinnell Enterprises	1969 - Present	410506 N 743846 W	Stratified drift		N.J. Bureau of Mine Safety (1991)
35	Grinnell Sand and Gravel Pit	? - ?	410434 N 743925 W	Glacial-undifferentiated		
36	Kozdeba Brothers	1960(?) - Present	410523 N 743820 W	Stratified drift		N.J. Bureau of Mine Safety (1991)
37	Limestone Products	Active in 1979	410327 N 744044 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976), Johnson (1979)
38	Michelotte & Sons	? - Present	410437 N 743901 W	Glacial-undifferentiated		N.J. Bureau of Mine Safety (1991)
39	Michelotte Brothers	? - 1975(?)	410500 N 743919 W	...		
40	Baldwin Enterprises	1957 - Present	410411 N 743955 W	...		Formerly known as Sparta Sand and Gravel, N.J. Bureau of Mine Safety (1991)
41	Sparta Township Landfill	1959 - 1969	410332 N 743941 W	...		

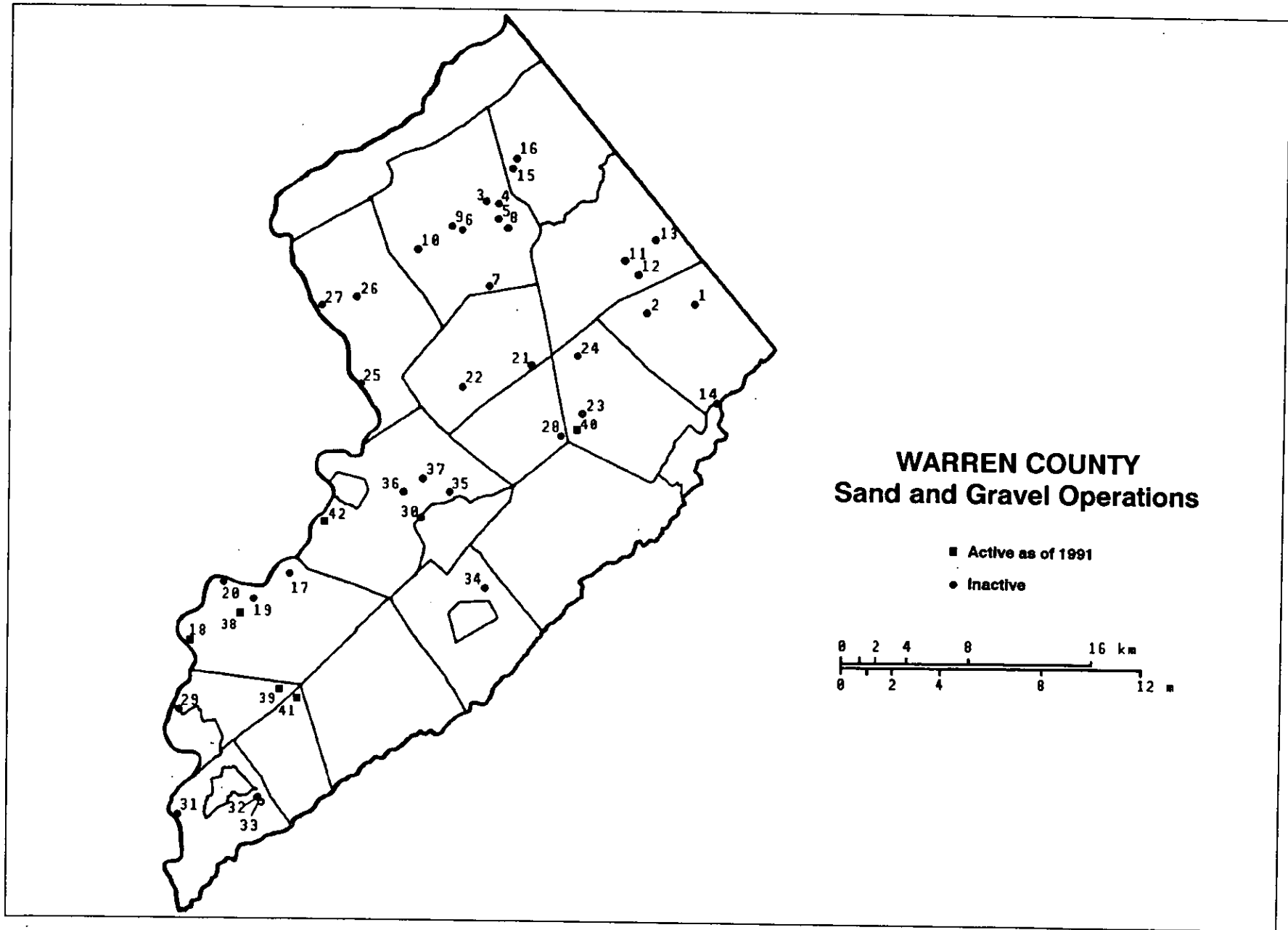


SUSSEX COUNTY (cont.)

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
42	Tanis, Joel & Sons, Inc.	1980 - Present	410458 N 743903 W	Stratified drift		N.J. Bureau of Mine Safety (1991)
43	Tri County Asphalt	? - ?	405956 N 743637 W	Glacial-undifferentiated		Field check 1982
<b>Stillwater Twp.</b>						
44	Flatbrookville quad, no. 1	Opened before 1946	410239 N 745253 W	Stratified drift	Gravel	Blanchard (1946)
45	Skuba Sand and Gravel	? - ?	410227 N 745215 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976), Johnson (1979)
<b>Vernon Twp.</b>						
46	Baldwin	1982 - Present	411310 N 742714 W	Glacial-undifferentiated		Field check 1982. N.J. Bureau of Mine Safety (1991)
47	Braen, Samuel Co.	? - ?	411237 N 742753 W	Glacial-undifferentiated		Location is approximate. It has been closed for some time. U.S. Bureau of Mines (1976), Field check 1982
48	McAfee Pit & Mill	? - 1982(?)	411034 N 743221 W	Glacial-undifferentiated		Field check (1982). U.S. Bureau of Mines (1976)
49	Raia Industries	? - ?	411010 N 743303 W	Glacial-undifferentiated		Field check 1982
50	Raia Industries	? - ?	411019 N 743235 W	...		Formerly Hardyston Sand and Gravel. U.S. Bureau of Mines (1976), N.J. Bureau of Mine Safety (unpub.)
75	Franklin Associates	? - Present	411230 N 743415 W	...		N.J. Bureau of Mine Safety (1991)
<b>Wantage Twp.</b>						
51	Becker, Rodney	? - 1982(?)	411034 N 743525 W	Glacial-undifferentiated		Field check 1982
52	Bicsak, Paul	? - ?	411003 N 743515 W	Glacial-undifferentiated		Pit has been in operation for many years. Field check (1982), active
53	Covello, L.	1981(?) - ?	411037 N 743525 W	Glacial-undifferentiated		Field check (1982), active
54	Garden State Sand and Gravel	? - 1976	411052 N 743539 W	Glacial-undifferentiated		This pit has been operated for many years, but Garden State has removed the most material.
55	Holbert, T.	? - 1982(?)	411153 N 743545 W	Glacial-undifferentiated	Clean sand and gravel.	Former operators were Houdaille and Leach. Houdaille had a portable cement plant for local operations. Field check (1982). W. Cummings, N.J. Department of Transportation (person. commun.)
56	Ideal Farms Realty	1947(?) - ?	411252 N 743555 W	Glacial-undifferentiated		Field check (1982), active
57	Operator unknown	? - ?	411526 N 743344 W	Stratified drift		

SUSSEX COUNTY (cont.)

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
58	Parrott, N. & Son	1960 - ?	411415 N 743412 W	Glacial-undifferentiated		Used for their construction firm. Field check 1982, active
59	Richards & Gaston	? - 1925(?)	411114 N 743551 W	Glacial-undifferentiated		N.J. Department of Transportation (1982), Field check 1982
60	Shotmeyer Bros.	1960(?) - ?	411312 N 743648 W	Glacial-undifferentiated		Material is taken out of this pit by a number of operators. Field check 1982, active
61	Sussex Redi-Mix Concrete	? - 1982(?)	411148 N 743542 W	Glacial-undifferentiated		Presently just a processing plant, they get sand and gravel from Tri-County Asphalt in Hardyston and Delaware Valley Sand and Gravel in Port Jervis, NY. Formerly a bank run operation. Formerly Decker and Simmons. Field check 1982
62	Todd, J&M	1955 - 1964	411152 N 743530 W	Glacial-undifferentiated		Bank run, some screened material. Field check 1982
63	Unionville quad, no. 1	? - 1960(?)	411642 N 743714 W	...		
64	Unionville quad, no. 2	? - 1960(?)	411748 N 743519 W	...		
65	Unionville quad, no. 3	? - 1970(?)	411738 N 743512 W	Stratified drift		
66	Unionville quad, no. 4	? - 1960(?)	411804 N 743425 W	...		
67	Unionville quad, no. 5	? - ?	411528 N 743338 W	Stratified drift		
76	Berkshire Sand and Stone	? - Present	411100 N 743515 W	...		N.J. Bureau of Mine Safety (1991)
77	United Sand and Aggregates	? - Present	410950 N 743530 W	...		N.J. Bureau of Mine Safety (1991)



# WARREN COUNTY

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Allamuchy Twp.</b>						
1	Eastern States S&G	Active in 1923	405252 N 744837 W	Stratified drift	Within terminal moraine. 0-6 in. topsoil. 6 in - 2 ft., yellow, very gravelly, subsoil. 2-4 ft., quartz sand and gravel, some feldspar.	Twitchell and Dane (1923)
2	Tranquility quad, no. 2	Opened before 1900	405613 N 744938 W	Stratified drift	Coarse sand and gravel	Kummel (1890-1894d)
3	Tranquility quad, no. 5	1950(?)-1954(?)	405554 N 745142 W	Stratified drift	Sand and gravel	Soil Conservation Service (1950)
<b>Blairstown Twp.</b>						
4	Blairstown quad, no. 1	Abandoned ? - 1984(?)	405926 N 745836 W	Stratified drift	Stratified clay to cobbles, some boulders.	Pit less than two acres. Field check (1984)
5	Blairstown quad, no. 2	Abandoned ? - 1964(?)	405920 N 745810 W	Glacial-undifferentiated		On Blair Academy Golf Course. Based on vegetative growth pit has been abandoned at least 20 years. Field check (1984)
6	Blairstown, quad, no. 3	Abandoned ? - 1980(?)	405853 N 745806 W	...		Field check (1984)
7	Blairstown quad, no. 4	Abandoned ? - 1984(?)	405834 N 745945 W	Glacial-undifferentiated	Upper 4 ft. sandy, more cobbly lower section. Few boulders.	Field check (1984)
8	Blairstown quad, no. 7	Abandoned ? - 1984(?)	405638 N 745830 W	...		Small borrow pit. Field check (1984)
9	Blairstown quad, no. 14	Opened before 1900	405844 N 745750 W	Glacial-undifferentiated	Gravel	Kummel (1890-1894a)
10	Portland quad no. 2	Opened before 1950	405836 N 750009 W	Stratified drift	Gravel	Soil Conservation Service (1950)
11	Vail pits	Opened before 1950	405753 N 750138 W	Stratified drift	Gravel	Soil Conservation Service (1950)
<b>Frelinghuysen Twp.</b>						
12	Blairstown quad, no. 6	Abandoned ? - 1980(?)	405735 N 745241 W	...		Location is approximate as pit is no longer visible. Houses have been built. Field check (1984)
13	Tranquility quad, no. 1	Opened before 1900	405711 N 745208 W	Stratified drift	Sand and gravel	Kummel (1890-1894c)
14	Tranquility quad no. 4	Opened before 1950	405817 N 745118 W	Stratified drift	Gravel	Soil Conservation Service (1950)
<b>Greenwich</b>						
41	Schafers Pit	? - Present	404230 N 740715 W	...		N.J. Bureau of Mine Safety (1991)
<b>Hardwick Twp.</b>						
15	Flatbrookville quad, no. 2	1950(?)-1954(?)	410043 N 745733 W	Stratified drift	Gravel	Soil Conservation Service (1950)

**WARREN COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
16	Flatbrookville quad, no. 3	1950(?)-1954(?)	410059 N 745728 W	Stratified drift	Gravel	Soil Conservation Service (1950)
<b>Harmony Twp.</b>						
17	Harmony Sand and Gravel	? - ?	404645 N 750657 W	Glacial-undifferentiated		The old pit is the site of the mill and processing plant. U.S. Bureau of Mines (1976), N.J. Department of Transportation (1982)
18	Steckel Concrete Co.	Pre 1950 - Present	404437 N 751126 W	...	Stratified glacial drift. Pit face 40-45 ft. high, about 2/3 sand and 1/3 gravel. Limestone pebbles at top are yellow, leached and soft, while those at bottom are sound and gray.	N.J. Geological Survey (1899-1937), N.J. Bureau of Mine Safety (1991)
19	Steckel Concrete Co.	Active in 1979	404558 N 750828 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976), Johnson (1979)
20	Trans-Mix Inc.	1949(?)- ?	404630 N 750955 W	Stratified drift	5ft. of brown, clayey, glacial drift over 6 ft. of reddish-brown, compact, clayey sand and gravel.	U.S. Bureau of Mines (1976), N.J. Geological Survey (1899-1937)
38	Agorganic	? - Present	454545 N 750900 W	...		N.J. Bureau of Mine Safety (1991). Location uncertain.
<b>Hope Twp.</b>						
21	Blairstown quad, no. 8	? - 1983(?)	405401 N 745640 W	...		Small grass-covered borrow pit. Field check (1984)
22	K.P.& B. Sand and Gravel	1979(?)- ?	405319 N 745936 W	Glacial-undifferentiated	Reported to have 80-100 ft. of material. Depth to bedrock is variable.	Sand and roofing gravel, about 1.5 in. Sand is used for concrete. Operated as a pit without dredge but pumping pit dry was a problem. Dredge started about 1979. Pond is 55 ft. long and 35 ft. deep at western end. N.J. Department of Transportation (1982), Field check (1984, active)
<b>Independence Twp.</b>						
23	Goble, H.L.	Active in 1929	405226 N 745419 W	...		Operated to meet demand. N.J. Geological Survey (1908-1953)
24	Kelsey Sand and Gravel	? - ?	405422 N 745435 W	Stratified drift	Stratified drift, possibly a kame. Alternating layers of sandy material and cobbles.	Field check (1984)
40	Pio Costa	? - Present	405100 N 745500 W	...		N.J. Bureau of Mine Safety (1991)
<b>Knowlton Twp.</b>						
25	Delaware Sand Co.	Active in 1923	405318 N 750401 W	...	Fluviatile deposit with molding sand over sand and gravel.	Molding sand for large, medium and small iron, brass and aluminum castings. One of the chief users was the Singer Manufacturing Co. N.J. Geological Survey (1899-1937)
26	Portland quad, no. 1	Opened before 1900	405612 N 750412 W	Glacial-unstratified	Sand and gravel	Kummel (1890-1894c)
27	Portland, quad, no. 3	Opened before 1950	405552 N 750546 W	Stratified drift	Gravel	Soil Conservation Service (1950)
<b>Liberty Twp.</b>						
28	Washington quad, no. 1	? - 1937(?)	405145 N 745517 W	...	50% of the cobbles and boulders are limestone.	Large roadside pit. N.J. Geological Survey (1899-1937)

**WARREN COUNTY (cont.)**

MAP NUMBER	OWNER OR NAME	DATES OF OPERATION	LATITUDE/ LONGITUDE	GEOLOGIC FORMATION	DESCRIPTION OF MATERIALS	PRODUCTS, REFERENCES, COMMENTS
<b>Lopatcong Twp.</b>						
29	Steckel Concrete Co.	? - ?	404213 N 751143 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976)
39	Agorganic	? - Present	404240 N 750735 W	...		N.J. Bureau of Mine Safety (1991)
<b>Oxford Twp.</b>						
30	Ferrante A & Sons	? - ?	404849 N 750115 W	...		U.S. Bureau of Mines (1976)
<b>Pohatcong Twp.</b>						
31	Carpentersville Sand & Gravel	? - ?	403845 N 751139 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976), N.J. Department of Transportation (1982)
32	Slack, Fred	Active in 1930	403918 N 750758 W	...	20 ft. of stratified sand and gravel. Mixture is approximately 2/3 sand and 1/3 gravel. Pebbles are quartz, limestone, sandstone, quartzite, granite-gneiss and conglomerate.	N.J. Geological Survey (1899-1937)
33	Slack, Fred	Active in 1930	403917 N 750758 W	Stratified drift	20 ft. of stratified sand and gravel coated with yellow clay. Pebbles are rounded and mostly quartz, limestone and sandstone.	N.J. Geological Survey (1899-1937)
<b>Washington Twp.</b>						
34	Hoffman, C. Sand	? - ?	404633 N 745831 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976)
<b>White Twp.</b>						
35	Belvidere quad, no. 1	? - ?	404943 N 750005 W	Stratified drift	Scattered limestone boulders and pebbles with a sandy matrix. Calcite coating on some pebbles shows partial leaching of overlying material with subsequent deposition.	N.J. Geological Survey (1899-1937)
36	Belvidere quad, no. 2	1950(?) - 1985(?)	404942 N 750206 W	Stratified drift	Sand and gravel	Soil Conservation Service (1950)
37	Hoffman, C Sand Pit	Active in 1979	405010 N 750112 W	Glacial-undifferentiated		U.S. Bureau of Mines (1976), Johnson (1979)
42	Harmony Sand & Gravel	? - Present	404830 N 750600 W	...		N.J. Bureau of Mine Safety (1991)

# NOTES

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