STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
DIVISION OF AIR AND WASTE MANAGEMENT
391 LUKENS DRIVE
NEW CASTLE, DELAWARE 19720-2774

WASTE MANAGEMENT SECTION
SITE INVESTIGATION &
RESTORATION BRANCH

TELEPHONE: (302) 395-2600
FAX: (302) 395-2601

October 20, 2010

Mr. James Hargett (3H512)
US EPA Region III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029

RE: Preliminary Assessment Report for the Procino Plating site (DE-0344)

Dear Mr. Hargett:

Enclosed please find a copy of the Preliminary Assessment report for the Procino Plating site (DE-0344) located in Blades, Delaware.

If you have any questions concerning this document, please contact either myself or Qazi Salahuddin at (302) 395-2600.

Sincerely,

Krystal A. Stanley
Project Manager

KAS:tlw
KAS10010.doc
DE 0344 II A 2

Enclosure

pc: Qazi Salahuddin, Program Manager I
John G. Cargill, Project Officer

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STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
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WASTE MANAGEMENT SECTION
SITE INVESTIGATION &
RESTORATION BRANCH

TELEPHONE: (302) 395-2600
FAX: (302) 395-2601

October 20, 2010

Patrick and Rita Procino
901 Market Street
Blades, DE. 19973

RE: Preliminary Assessment Report for the Procino Plating site (DE-0344)

Dear Mr. and Mrs. Procino:

Enclosed please find a copy of the Preliminary Assessment report for the Procino Plating site (DE-0344) located in Blades, Delaware.

If you have any questions concerning this document, please contact either myself or Qazi Salahuddin at (302) 395-2600.

Sincerely,

Krystal A. Stanley
Project Manager

KAS:tlw
KAS10011.doc
DE 0344 II A 2

Enclosure

pc: Qazi Salahuddin, Program Manager I
John G. Cargill, Project Officer

PRELIMINARY ASSESSMENT
OF
PROCINO PLATING

DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DE-0344
October 2010

Prepared by:
John G. Cargill and Krystal A. Stanley
Site Investigation and Restoration Branch
Department of Natural Resources and
Environmental Control
391 Lukens Drive
New Castle, DE 19720

Reviewed and Approved by:
Qazi Salahuddin
Environmental Program Manager I
Site Investigation and Restoration Branch
Department of Natural Resources and
Environmental Control
391 Lukens Drive
New Castle, DE 19720

EXECUTIVE SUMMARY

The Delaware Department of Natural Resources, Site Investigation and Restoration Branch (DNREC-SIRB), in cooperation with the United States Environmental Protection Agency (EPA) conducted a Preliminary Assessment (PA) of the Procino Plating (Site).

The PA is intended to provide a general overview of the operational history and observed environmental conditions present at the Site. This assessment does not provide an in-depth evaluation of surface or subsurface conditions at the project site.

Based on the conclusions drawn in the PA report, the EPA and state officials will decide whether the Site should undergo further investigation or obtain a "No Further Action" (NFA) designation under the Federal Superfund and/or State Site Investigation & Restoration Branch Programs.

Procino Plating is located at 901 Market Street, Blades, Delaware. The site is approximately forty-two (42) acres in size and is comprised of two tax parcel (132-1.15-187.00 and 132-1.15-188.00) located at the intersection of Market Street and 9th Street. The land use surrounding the Site is primarily residential properties. The parcels for the residences are adjacent to the Site. There are approximately 4,698 people residing within the four (4) mile air target pathway.

The central coordinate for the Site is latitude 38° 37'48" by longitude 75° 36'34" (38.630139,-75.609546). The elevation of the Site is an average of 10-20 feet above sea level with flat topography. The Site is an electroplating facility that has been in operation since the 1980s. Aerial photographs taken prior to 1938 indicate that the land was undeveloped.

The Site is located entirely within the Atlantic Coastal Plain Province. The surficial geology for the Site is made up of Nanticoke deposits and overlies the Pliocene Age Beaverdam Formation, which contains the Pleistocene aquifer. The nearest domestic well is approximately 391 feet to the north. There are 1,566 domestic wells, 48 public wells, and 18 well head protection areas within the four (4) mile groundwater target pathway. The Site is located within a well head protection area.

The Site is located outside the 500 year floodplains. There are no surface water bodies on the Site. The nearest named water body is Morgan's Branch located 0.2 miles south of the Site. The Nanticoke River is also located 0.4 miles to the west. The soil at the site is mostly classified as Evesboro loamy sand (EvB).

RECOMMENDATIONS

The Site has been an electroplating facility from approximately the 1980s to the present. In addition, the Site soil has a sandy texture, and the depth to groundwater is anticipated to be less than 10 feet. Based on the review of all available historical data, site visits and interviews, DNREC-SIRB believes that the Site has the potential to impact soil, surface water and groundwater in the area. Therefore, DNREC-SIRB recommends that an additional investigation in the form of a Site Inspection (SI), which includes environmental sampling of soil, surface water, and groundwater, be conducted. The SI is performed to determine the presence or absence of contaminants that could potentially endanger the health and welfare of people and wildlife.

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1.0 INTRODUCTION

The Delaware Department of Natural Resources and Environmental Control, Site Investigation and Restoration Branch (DNREC-SIRB), in cooperation with the United States Environmental Protection Agency (EPA), has developed this Preliminary Assessment (PA) report for Procino Plating (Site), located in Blades, Sussex County, Delaware (Figure 1).

The purpose of the PA is to provide a general overview of the historical environmental conditions present at the Site and to investigate the possible existence of released hazardous substances, through the collection and analysis of historical data and interviews with the present property owner/tenants. DNREC-SIRB will submit the PA report to the U.S. EPA. Based on the conclusions drawn in the PA report, the EPA and state officials will decide whether the Site should undergo further investigation or obtain a "No Further Action" designation under the Federal Superfund and/or DNREC-SIRB.

This PA report is intended to provide a general characterization of the environmental conditions present at the Site, and does not provide a surface or subsurface assessment of the Site. The assessments expressed within are based solely on information collected from property owner interviews, recent site visits, and historical documentation.

2.0 SITE DESCRIPTION, OPERATIONAL HISTORY, AND WASTE CHARACTERISTICS

2.1 SITE LOCATION AND DESCRIPTION

Procino Plating is located at 901 South Market Street, Blades, Sussex County, Delaware (Figure 2). The site is approximately 42 acres in size and is comprised of two tax parcels (132-1.15-187.00 and 132-1.15-188.00), and is located on the corner of South Market Street and West 9th Street. The center coordinate for the Site is latitude 38° 37'48" by longitude 75° 36'34". The elevation of the Site is an average of 10-20 feet above sea level with flat topography (Figure 3). Water service and sewage is supplied by the Town of Blades. The Site is an active electroplating facility.

There are six private residences located to the north of the Site along with the parking are for the facility. Private residences are also located to the east of the site. There are private homes located on the south side of the site with one home in very close proximity to the Procino building on Market Street. Rail-road tracks are located on the west side of the site with more residential homes on the opposite side of the rail-road tracks.

According to the National Weather Service Data, the average yearly temperature in this area is 56 degrees Fahrenheit. In general, the month with the lowest average temperature is January with average temperatures in the mid 30's. July has the highest average temperature, with averages in the mid 70's. The average annual precipitation is approximately 47 inches. (Appendix A)

2.2 HISTORICAL SITE USES AND LAYOUT

No Sanborn Fire Insurance Maps were available for review of the Site area. DNREC-SIRB reviewed aerial photographs for the years 1937, 1954, 1961, 1968, 1992, 1997, 2002, and 2007 (Figures 4 – 11).

The following is a chronological summary based on the review of the aerial photographs.

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1937 The aerial photograph is poor quality. The Site appears to be an undeveloped agriculture field. The surrounding parcels appear to be agricultural fields (Figure 4).

1954 The aerial photograph is slightly clearer in quality compared to the 1937 photograph. The Site seems to have one building on the eastern portion of the property (Figure 5). It appears that the surrounding properties have not incurred any development but the properties do look like they have been cleared and sited for development. The Town of Blades appears to be developing and expanding in the aerial photo.

1961 The aerial photo is of poor quality. The Site seems to be unchanged with one building in the eastern portion of the property. The surrounding properties appear to have private homes (Figure 6).

1968 The aerial photograph is of poor quality. The Site seems to be unchanged with one structure in the eastern portion of the Site. It appears that the surrounding properties have not changed, but the town has expanded (Figure 7).

1992 The aerial photograph shows considerable change to the Town of Blades but the Site appears to be the same as in the 1968 aerial photo (Figure 8).

1997 The surrounding properties appear unchanged from the 1992 aerial photograph. The Site has, what looks like, two additional buildings on the western portion of the Site (Figure 9).

2002 The Site appears to remain unchanged with the exception of a shed like structure on the south side of the western buildings (Figure 10).

2007 The aerial photograph is concentrated on the Site. The surrounding properties appear to be unchanged from the 2002 aerial photograph. No changes were made to the Site (Figure 11).

A chronological search of ownership for the property was conducted by the DNREC-SIRB paralegal and project manager. The results of the searches have been included in Appendix B.

2.3 ADDITIONAL DNREC INFORMATION

In addition to SIRB's files, documents from the DNREC Solid and Hazardous Waste Management Branch (SHWMB), Tank Management Branch (TMB), and Surface Water Division (SWD) were reviewed. They are included in Appendix C. A summary of the information is provided in the paragraphs below.

SHWMB – According to SHWMB, the Site is a hazardous waste generator and is not required to have a hazardous waste permit.

TMB – There are no documented above ground storage tanks (ASTs) or underground storage tanks (USTs) on the Site. There are three UST sites within a quarter miles of the site: Wyoming Concrete Industries, Bo-Win (Peninsula Plating), and Blades Elementary (Figure 12).

Other SIRB sites – There is one SIRB site located within a quarter mile of the Site, Peninsula Plating (DE-0287) located north of the Site (Figure 12).

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3.0 DNREC – SITE VISIT

Interviews and a site visit were conducted by DNREC-SIRB personnel in conjunction with representatives of the Solid and Hazardous Waste Management Branch in September of this year. Appendix D contains photographs of the property.

DNREC conducted a site interview with Patrick Procino, the current property owner. Mr. and Mrs. Procino purchased the property in 1996 from HMS Blades Limited. The HMS Blades Limited company obtained the property in 1988. Prior to the site being developed in the 1960s, there was no activity at the site.

Procino Plating currently cuts and electroplates griddles with chrome for restaurant use. The electroplating activities occur in the main building. Most of the flooring in the main building is concrete or covered with wooden planks over concrete. According to Mr. Procino, there were only floor drains in areas where electroplating occurred in the past or areas where electroplating is currently in use. Much of the paint on the metal walls in the main building was rusted and peeling off the walls due to the fumes from the acid bathes used in the process. In one room where all electroplating was discontinued, the walls were badly rusted and the steel beams over head were rusted also. Dismantled piping and drums lined the walls of this room. DNREC representatives observed a powdery white and yellow substance on the floor around the drums and in the metal grates in the floor. The basement of the main building is currently used for storage of dismantled piping, and solutions tubs from discontinued electroplating activities. A water pretreatment system is also located in the basement, but is no longer operational.

The second building on the Site is used for the pretreatment, cutting, grinding and shaping of the metal slabs to be used as griddles. The floor in the second building was concrete and had no drains. The walls and ceiling were in fair condition. In a back area of the second building, a large machine sanded the surface on the griddles. The sanding waste was collected and stored in large bins close to the machine. Drums of electroplating solutions were stored along the walls in the second building. It should be noted that the property owner indicated that the labels on the drums should not be used to determine its contents. Therefore the nature of the substances or material stored onsite could not be verified.

The outdoor cross space between the two buildings was used for storage of mostly empty drums and containers of metal shavings from the cutting process.

Plating Operations:

Electroplating is primarily used for metal plating and polishing of metal products by dipping the metal product into an acid or caustic solution. The layer of material from the solution can give the metal product a desired property such as abrasion and wear resistance, corrosion protection, lubricity, and aesthetic qualities that the metal product otherwise lacks.

4.0 GROUNDWATER PATHWAY

4.1 HYDROGEOLOGIC SETTING

Information on the hydrogeologic setting was obtained from the Delaware Geological Survey, and well permits from the Water Resources division of DNREC. According to these reports, the Site is located

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entirely within the Atlantic Coastal Plain Province. The sedimentary beds gently dip southeast toward the Atlantic Ocean. The maximum total thickness of sediments is 4,200 feet in the northern portion of the Atlantic Coastal Plain and 5,200 feet thick in the southeastern portion. The general elevation of the Site is 10-20 feet above sea level.

Procino Plating site is located on Nanticoke deposits of the area. Nanticoke deposits consist of brown to light gray, fine to medium grain sand. The deposits are finely laminated to structure-less gray to brown clayey sandy silt, silty clayey sand and rare beds of gravelly coarse to medium sand. Some areas consist of shelly sandy silt, and sandy clayey silt with woody fragments. The Nanticoke deposits unconformably overlie the Beaverdam Formation.

The Beaverdam Formation consists of light gray to white coarse to very coarse sand with beds of fine to medium grain sand. There is often white silt to a clayey silt matrix in the area which can appear white when brought to the surface. Beds of sandy silt, clayey sandy silt, and clayey silt are common. The thickness of this formation can be up to 75 to 100 feet. The Beaverdam Formation is within the unconfined Pleistocene aquifer. This aquifer has a poor to excellent yield and minor confining beds.

The Manokin Formation underlies the Beaverdam Formation. This formation is subdivided into subunits A and B. Subunit B is made up of light to medium gray, or yellow-orange to red-orange, medium to fine and course quartz sand with common beds of gravelly sand, and less common beds of clayey to silty sand. Subunit A consist of gray, blue-gray, and brown-gray silty clayey sand and silty sand with scattered lignite. The thickness of the Manokin formation can vary from a feather edge to 50 feet thick. The St. Mary's formation conformably underlies Subunit A and is gradational into subunit B.

The St. Mary's Formation is made up of blue-gray, green-gray, or gray silty sandy clay, clayey sandy silt, and silty clay, with beds of fine to medium quartz sand, and fines to medium gravel I a mud matrix. This formation can be up to 110 feet thick (Figure 13).

4.2 GROUNDWATER TARGETS

The project officer conducted a search for drinking water wells within four (4) miles of 901 Market Street, Blades, Delaware. The following is a list of the number of wells and distance from the Site:

	Public Wells	Domestic Wells
Within ¼ mile of the Site	2	7
¼ to ½ mile of the Site	2	20
½ to 1 mile of the Site	0	69
1 to 4 miles of the Site	44	1,470
Total	**48**	**1,566**

Assuming an average of three persons per household for private wells, 4,698 individuals could be using the groundwater within four miles of the Site. This number may be higher due to wells constructed prior to 1970, when the well permitting program was initiated. There are 18 well head protection areas within four miles of the Site. The Site is located within a well head protection area.

The Site is connected to the Blades public water supply. The nearest domestic well off site is 392 feet from the north border of the Site. The nearest public well is approximately 0.20 miles north of the Site.

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5.0 SURFACE WATER AND SEDIMENT PATHWAY

5.1 HYDROLOGIC SETTING

The direction of surface water flow based on topography and the site visit is westerly toward the Nanticoke River and the Chesapeake Bay. Groundwater is anticipated to follow surface contours and flow to the north.

The Nanticoke River is approximately 1,300 feet from the western border of the site. The Nanticoke River winds through Delaware and Maryland until it reaches Chesapeake Bay.
According to Federal Emergency Management (FEMA) information, the Site lies outside 500 year flood zones (Figure 14).

5.2 SURFACE WATER AND SEDIMENT TARGETS

A review of the Delaware Natural Heritage and Endangered Species Program (NHESP) database was conducted to identify any possible state or federally listed threatened or endangered plants, animals or natural communities within the four (4) mile air pathway and 15 mile surface water pathway from the Site. According to NHESP, there are currently no rare state or federally listed plants, animals or natural communities at the Site. However, there are numerous state and federally threatened /endangered species listed approximately 3-5 miles downstream and upstream from the site. There are additional species located within the 15 mile downstream and seven (7) mile upstream extent of the surface water pathway for tidal water bodies (Figure 15).

According to the Surface Water Branch, there are no surface water intakes for potable water in Sussex County.

6.0 SOIL AND AIR PATHWAY EXPOSURE

6.1 PHYSICAL SETTING/SOIL MORPHOLOGY

According to the U.S. Department of Agriculture (USDA), Soil Conservation Service (SCS) soil mapping report for Sussex County, the Site consist of one type of soil; Evesboro loamy sand (EvB). The Evesboro loamy sand, loamy substratum has a slope of 2-5%. This soil is found on ridges or on the sides of ridges within or adjacent to areas of Evesboro loamy sand, loamy substratum (EvA) with a 0-2% slope. Small areas of this substratum can have sand to the depth of 6 feet below ground surface. The substratum is finer textured and has the ability to hold moisture making it better suited for crop cultivation. Woodland stands mainly consist of second-growth hardwoods, but loblolly pine dominates in areas that once were cultivated. Many communities, including parts of several large towns, have been developed on this soil because of its sturdiness (Figure 16).

At this time, there are no known operations onsite that would create a release of hazardous or harmful substances to the air.

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6.2 SOIL AND AIR TARGETS

There are no daycare facilities or schools within the 200 feet soil exposure pathway. The closest daycare is one mile east of the Site and the closest school is 0.17 miles east. There are 6 daycares and 11 schools within a 4 miles air target pathway. See Appendix E for the names and addresses of these schools and daycares.

According to 2000 census data, there are approximately 454 people residing within a quarter mile of the Site, approximately 3,020 people within one mile of the Site, and approximately 19,380 people within the four (4) mile air exposure pathway of the Site (Appendix F). These numbers do not include schools, daycares, or businesses.

Given the current Site land use, contact with potentially contaminated soils would include targets such as visitors, business operators, customers, trespassers, and migratory animals.

7.0 SUMMARY AND RECOMMENDATIONS

7.1 SUMMARY

DNREC-SIRB, in cooperation with the U.S.EPA, conducted a Preliminary Assessment at the Procino Plating Site (Site) located in Blades, Delaware. The Site is comprised of two parcels of land totaling approximately 42 acres.

The Site is an electroplating facility which uses acidic or caustic solutions to metal plate and finish metal products. Electroplating operations started in the 1980's and continue to this day. Prior to 1930s, the Site was reported to be undeveloped land.

There are 43 private wells and two public water supply wells within one (1) mile of the Site. These wells serve approximately 1000 individuals. There are approximately 454 people residing within a quarter mile of the Site and approximately 3,020 people within one mile of the Site. Water service and sewage is supplied by the Town of Blades.

The purpose of the PA is to investigate the possible existence of released hazardous substances due to past and/or present industrial/commercial activities. To assist in this effort, historical aerial photographs were reviewed, and site visits and property owner interviews were conducted.

After the completion of the PA, DNREC-SIRB will submit the PA report to the EPA. Based on the conclusions drawn in the PA report, the EPA and State officials will decide whether the Site should undergo further investigation or obtain a "No Further Action" (NFA) designation under the Federal Superfund and/or State Site Investigation & Restoration Branch Programs.

The PA is intended to provide a general characterization of the environmental conditions present at the Site and does not provide a complete surface and subsurface assessment of the project area or individual properties. The assessments contained within this report are based solely on conditions at the time of the site visits and the specific locations evaluated. This report is not intended to constitute an environmental or structural assessment of the building on site.

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7.2 RECOMMENDATIONS

The Site has been conducting electroplating operations since the 1980's. The operations involved the use of highly toxic bathes of acids to place a metal coating on unfinished metal items.

Based on the review of all available historical information, site visits and interviews, DNREC-SIRB believes that the Site has the potential to impact soil, surface water and groundwater. Therefore, DNREC-SIRB recommends that an additional investigation in the form of a Site Inspection (SI), which includes environmental sampling of soil, surface water, and groundwater to determine the presence or absence or contaminants that could endanger the health and welfare of people and wildlife, be conducted at the Site.

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REFERENCES

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12. Underground Storage Tanks and SIRB sites with ¼ mile
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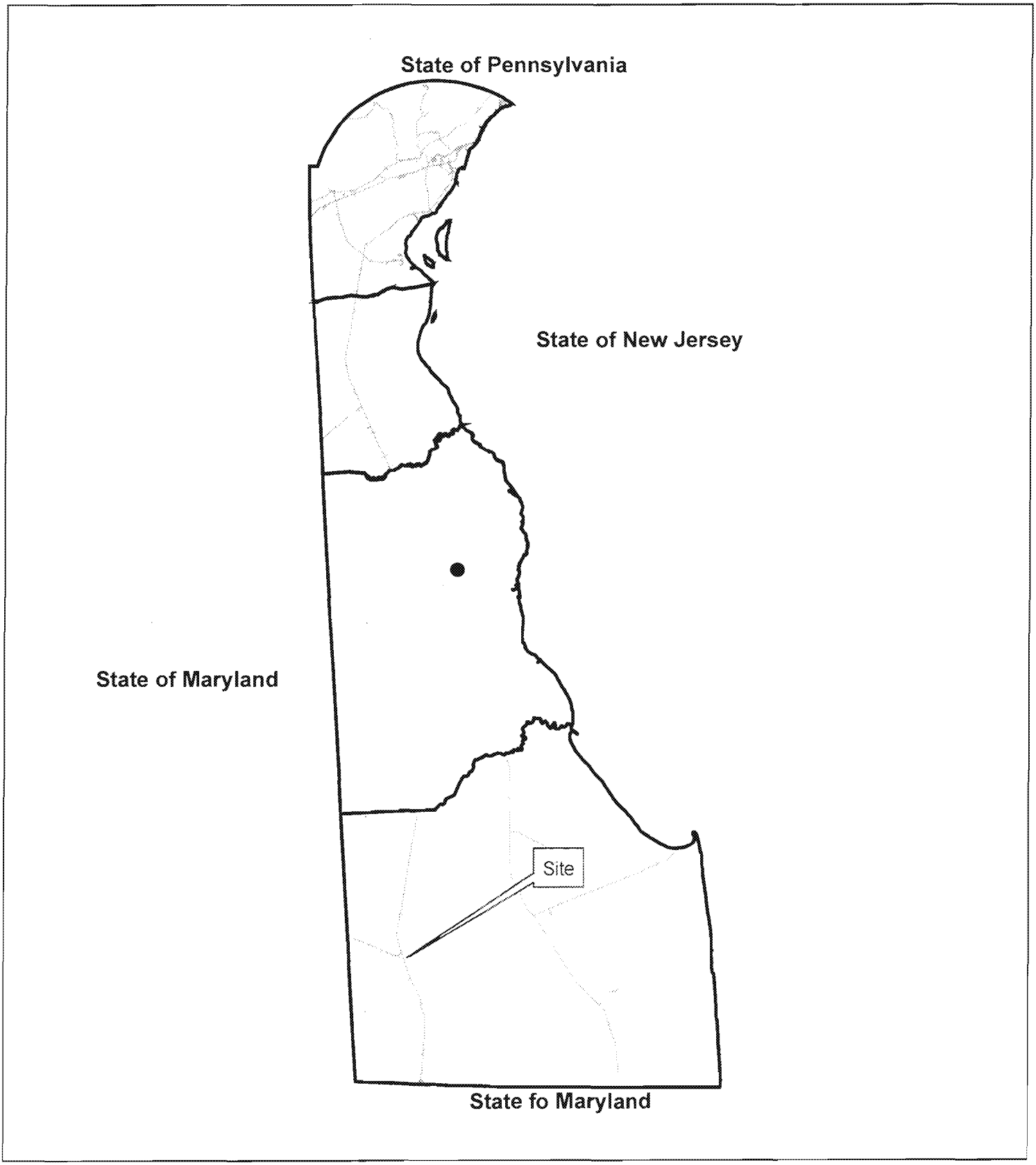
14. Sussex County FEMA Data
15. Locations of Wetlands within ½ mile of Procino Plating
16. Site Soil Classifications



Location in the State of Delaware

1 inch = 66,666.67 feet

N

DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

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391 Lukens Dr.,
New Castle, DE 19720
302.395.2600

Figure 1
Procino Plating
DE-0344

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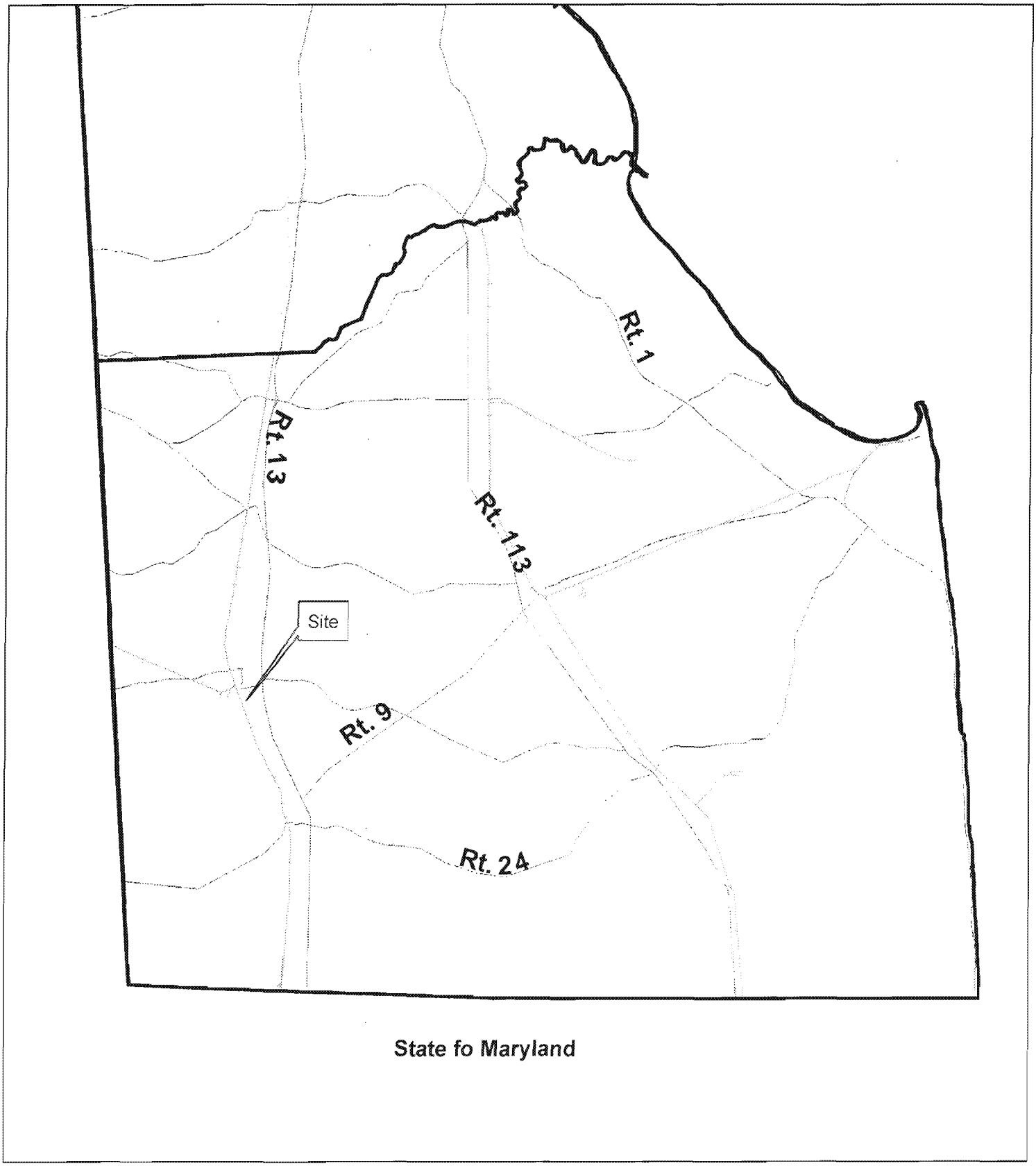

Location in Sussex County

1 inch = 28,653.18 feet

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Figure 2
Procino Plating
DE-0344

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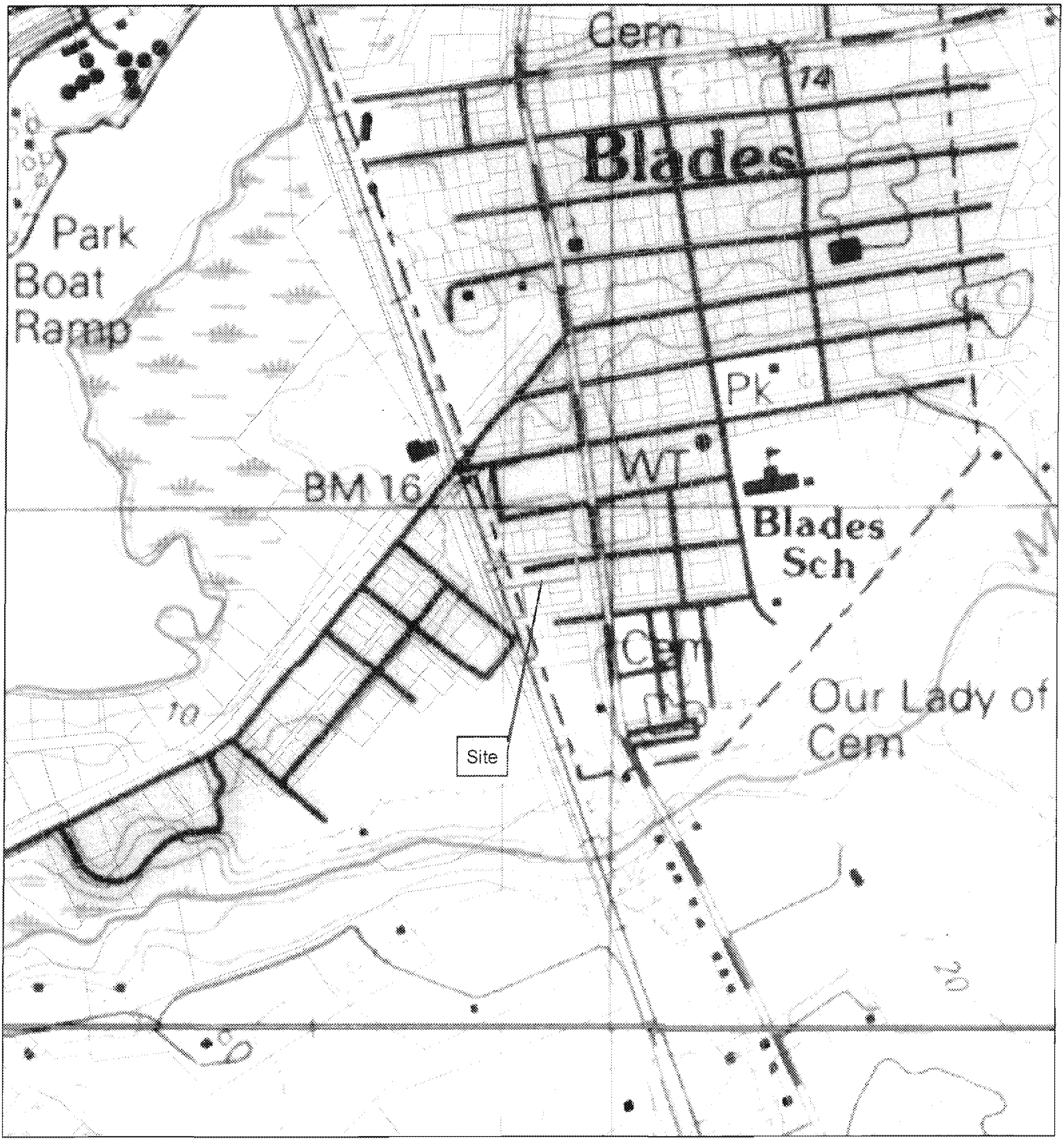

7.5 Minute USGS Topgrahical Map

1 inch = 555.06 feet

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Figure 3
Procino Plating
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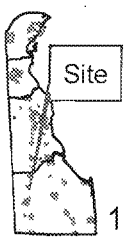

1937 Aerial Photograph

1 inch = 430.72 feet

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Figure 4
Procino Plating
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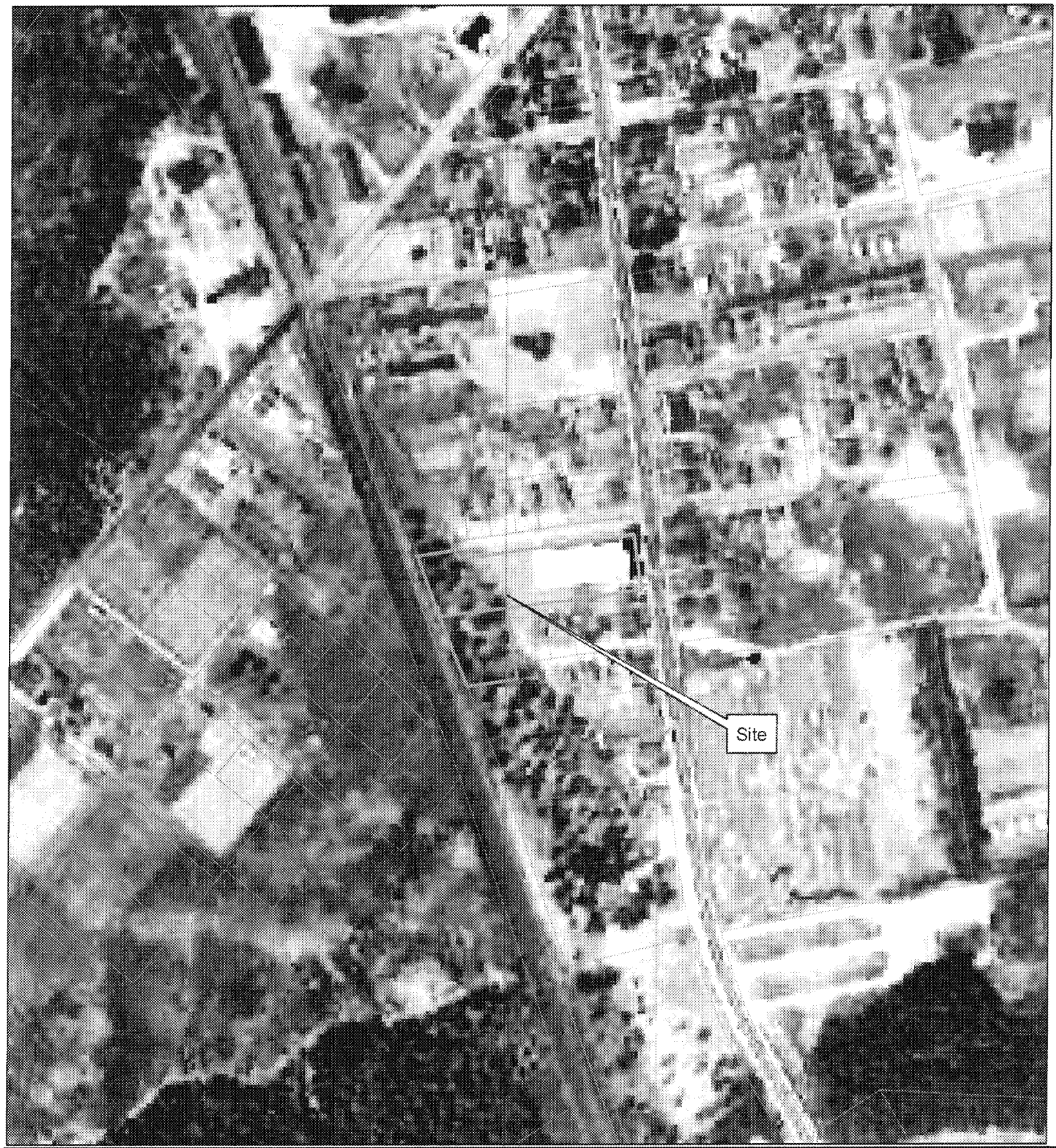

1954 Aerial Photograph

1 inch = 235.15 feet

N

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Figure 5
Procino Plating
DE-0344

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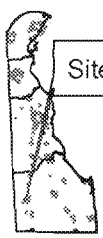

1961 Aerial Photograph

1 inch = 313.53 feet

N

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Figure 6
Procino Plating
DE-0344

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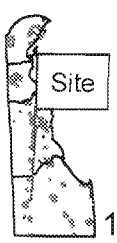

1968 Aerial Photograph

1 inch = 313.53 feet

N

DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
DAWM
Site Invesigation & Restoration Branch
391 Lukens Dr.,
New Castle, DE 19720
302.395.2600

Figure 7
Procino Plating
DE-0344

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1992 Aerial Photograph

1 inch = 235.15 feet

N

DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DAWM
Site Invesigation & Restoration Branch
391 Lukens Dr.,
New Castle, DE 19720
302.395.2600

Figure 8
Procino Plating
DE-0344

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1997 Aerial Photograph

1 inch = 235.15 feet

N

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DAWM
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391 Lukens Dr.,
New Castle, DE 19720
302.395.2600

Figure 9
Procino Plating
DE-0344

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2007 Aerial Photograph

1 inch = 132.27 feet

N

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DAWM
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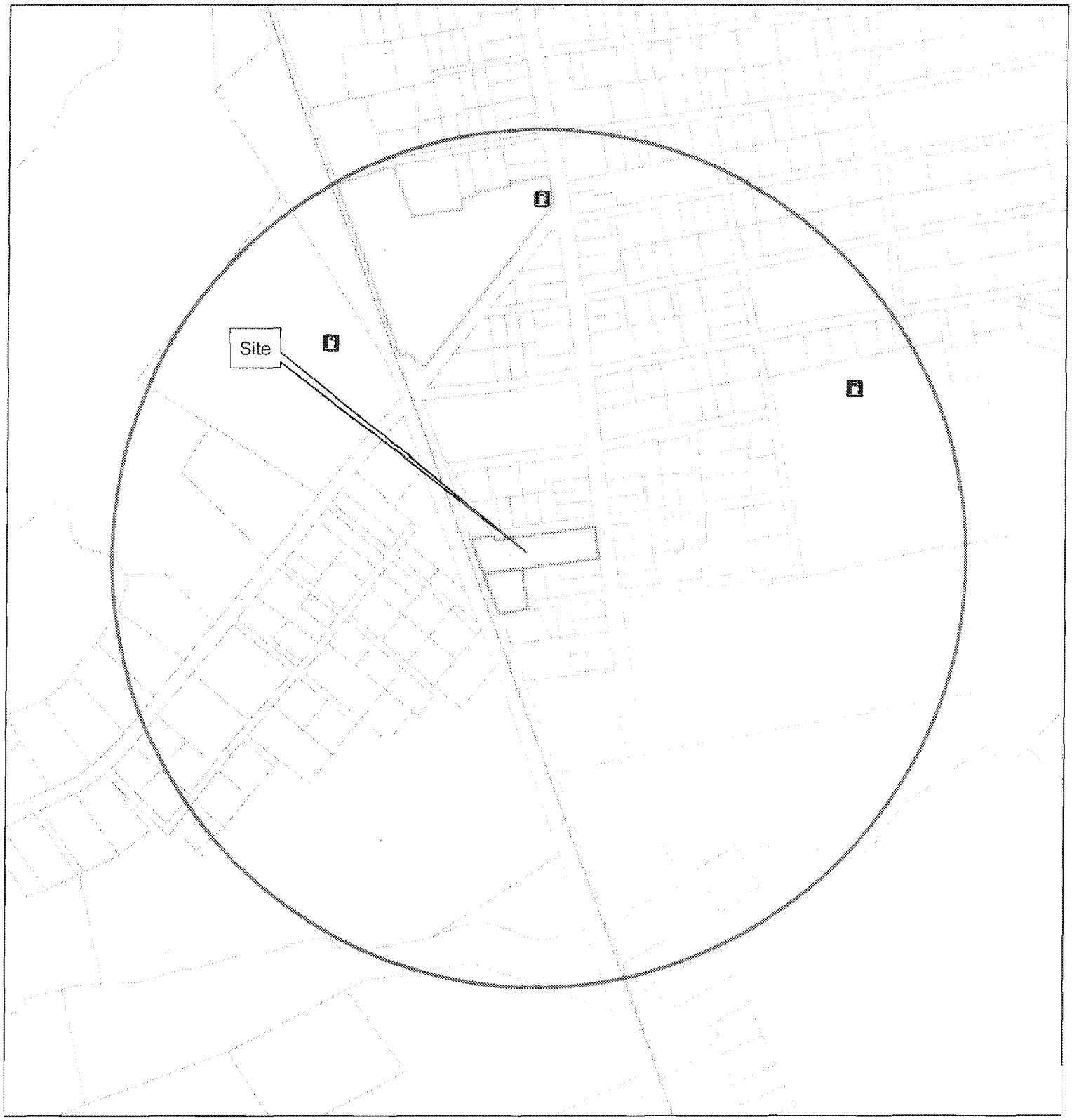
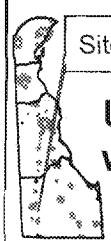
391 Lukens Dr.,
New Castle, DE 19720
302.395.2600

Figure 11
Procino Plating
DE-0344

This map is provided by the DNREC-SIRB solely for display and reference purposes and is subject to change without notice. DNREC-SIRB will not be held responsible for the assumed accuracy contained in the map or for use other than its intended purposes. February 2008





N

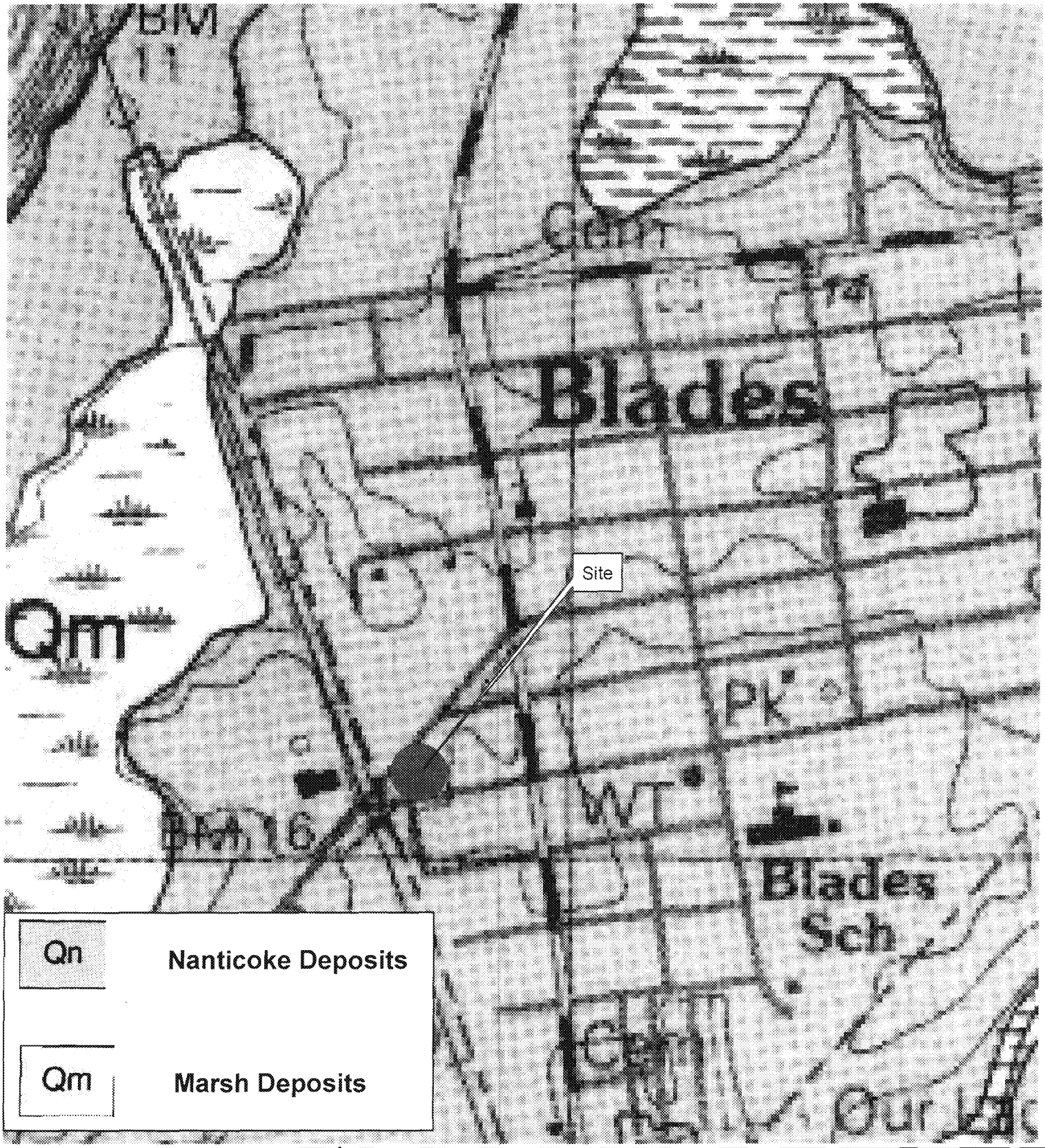
UST and SIRB sites within 1/4 mile radius

1 inch = 418.05 feet

DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
DAWM
Site Invesigation & Restoration Branch
391 Lukens Dr.,
New Castle, DE 19720
302.395.2600

Figure 12
Procino Plating
DE-0344

This map is provided by the DNREC-SIRB solely for display and reference purposes and is subject to change without notice. DNREC-SIRB will not be held responsible for the assumed accuracy contained in the map or for use other than its intended purposes. February 2008



Geological Map

1 inch = 577.57 feet

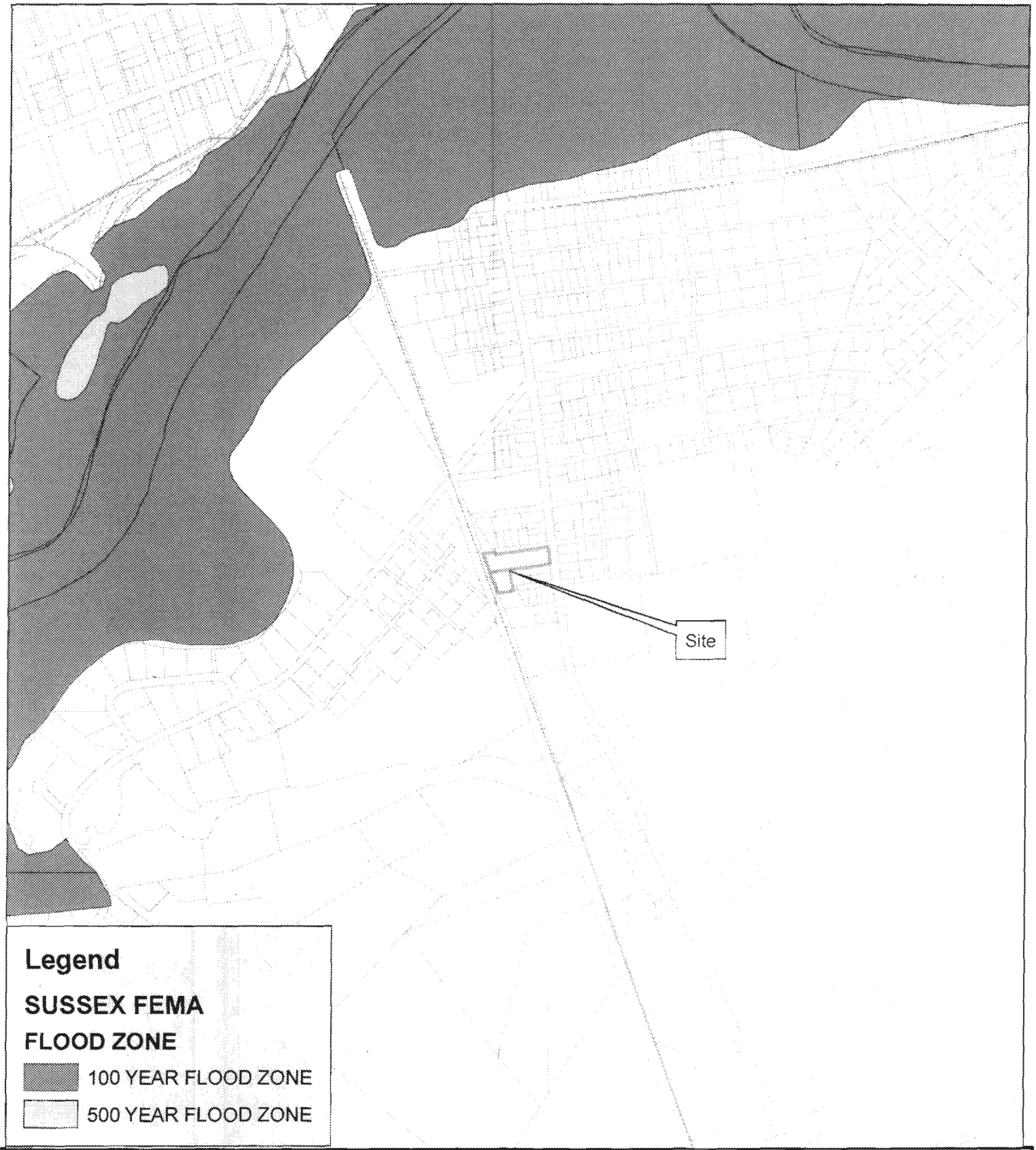
N

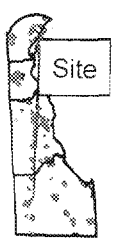
DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DAWM
Site Invesigation & Restoration Branch
391 Lukens Dr.,
New Castle, DE 19720
302.395.2600

Figure 13
Procino Plating
DE-0344

This map is provided by the DNREC-SIRB solely for display and reference purposes and is subject to change without notice. DNREC-SIRB will not be held responsible for the assumed accuracy contained in the map or for use other than its intended purposes. February 2008





FEMA Map

1 inch = 770.09 feet

N

DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DAWM
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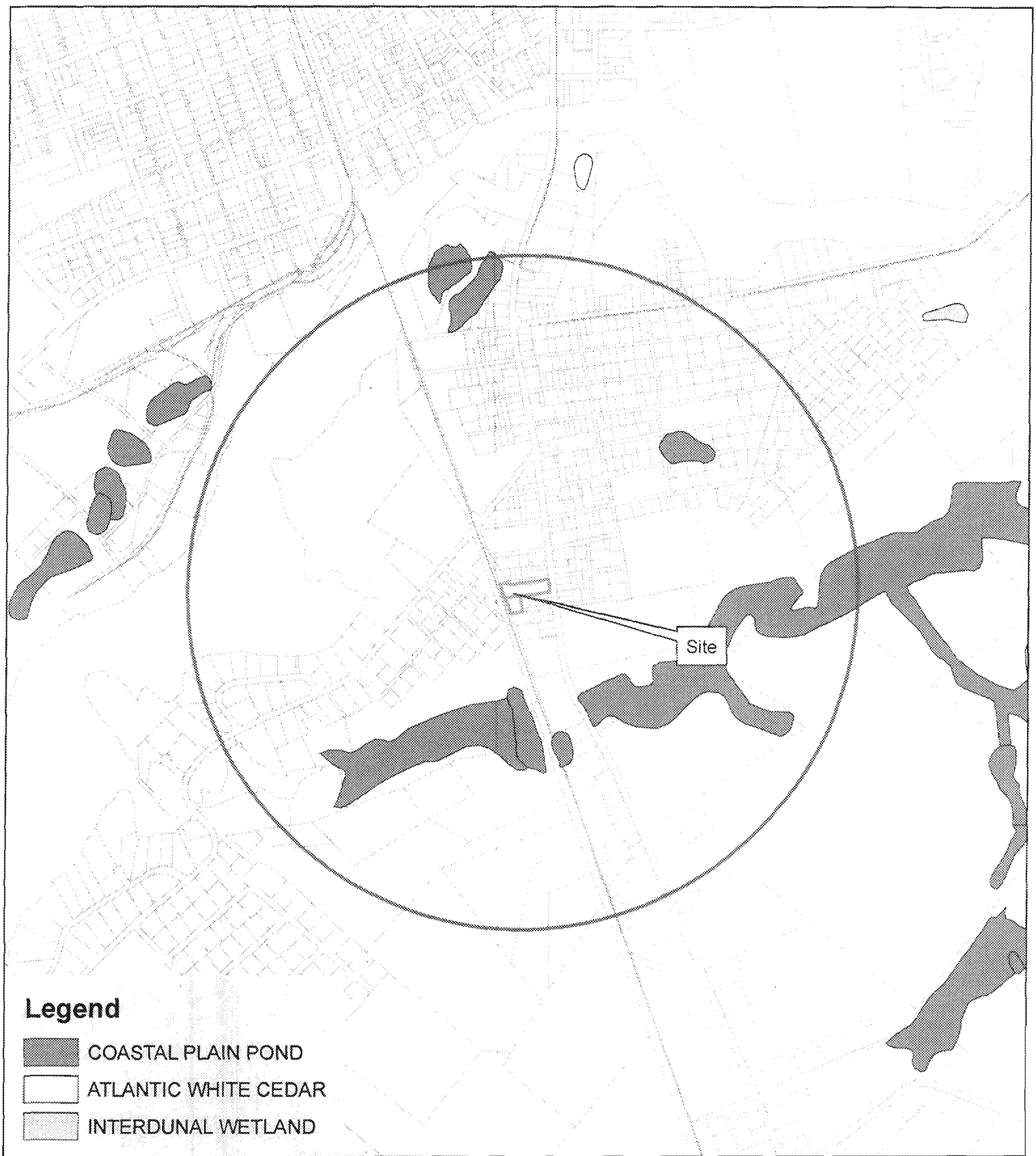
391 Lukens Dr.,
New Castle, DE 19720
302.395.2600

Figure 14
Procino Plating
DE-0344

This map is provided by the DNREC-SIRB solely for display and reference purposes and is subject to change without notice. DNREC-SIRB will not be held responsible for the assumed accuracy contained in the map or for use other than its intended purposes. February 2008



Wetland within 1/2 mile radius

1 inch = 1,026.79 feet

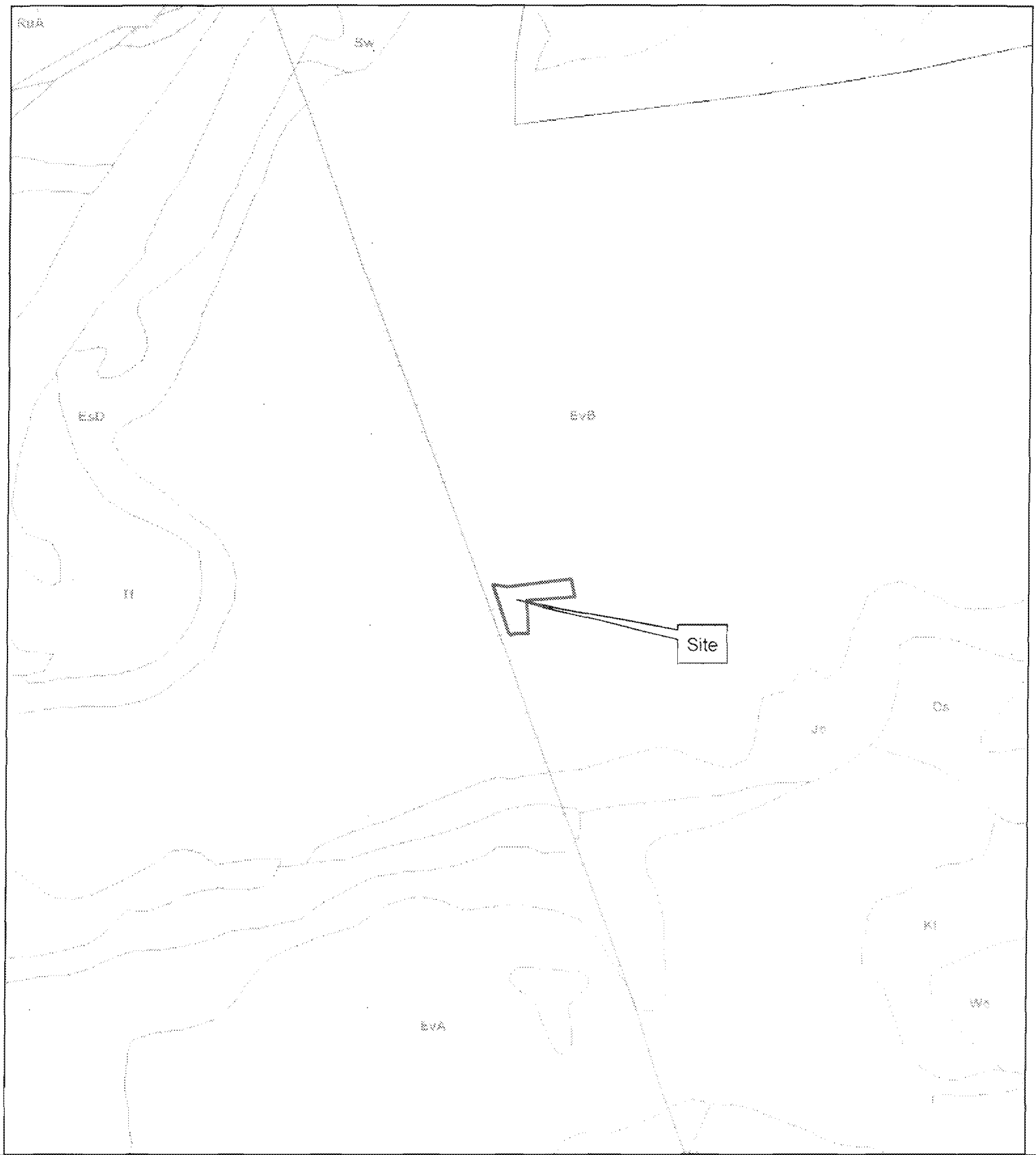
N

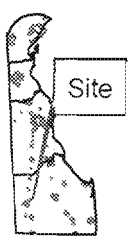
DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DAWM
Site Invesigation & Restoration Branch
391 Lukens Dr.,
New Castle, DE 19720
302.395.2600

Figure 15
Procino Plating
DE-0344

This map is provided by the DNREC-SIRB solely for display and reference purposes and is subject to change without notice. DNREC-SIRB will not be held responsible for the assumed accuracy contained in the map or for use other than its intended purposes. February 2008





Site Soil Classification

1 inch = 577.57 feet

N

DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

DAWM
Site Invesigation & Restoration Branch
391 Lukens Dr.,
New Castle, DE 19720
302.395.2600

Figure 16
Procino Plating
DE-0344

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APPENDICES

A. National Weather Service Data

B. Parcel Title Search

C. Additional DNREC Information

D. Site Photographs

E. Daycare Facility and School Information

F. 2000 Census Data

APPENDIX A
NATIONAL WEATHER SERVICE DATA
Procino Plating DE-0344

NOAA Satellite and Information Service
National Environmental Satellite, Data, and Information Service (NESDIS)

National Climatic Data Center
U.S. Department of Commerce

DOC > NOAA > NESDIS > NCDC Search Field: Search NCDC

NCDC / Climate At A Glance / Climate Monitoring / Search / Help

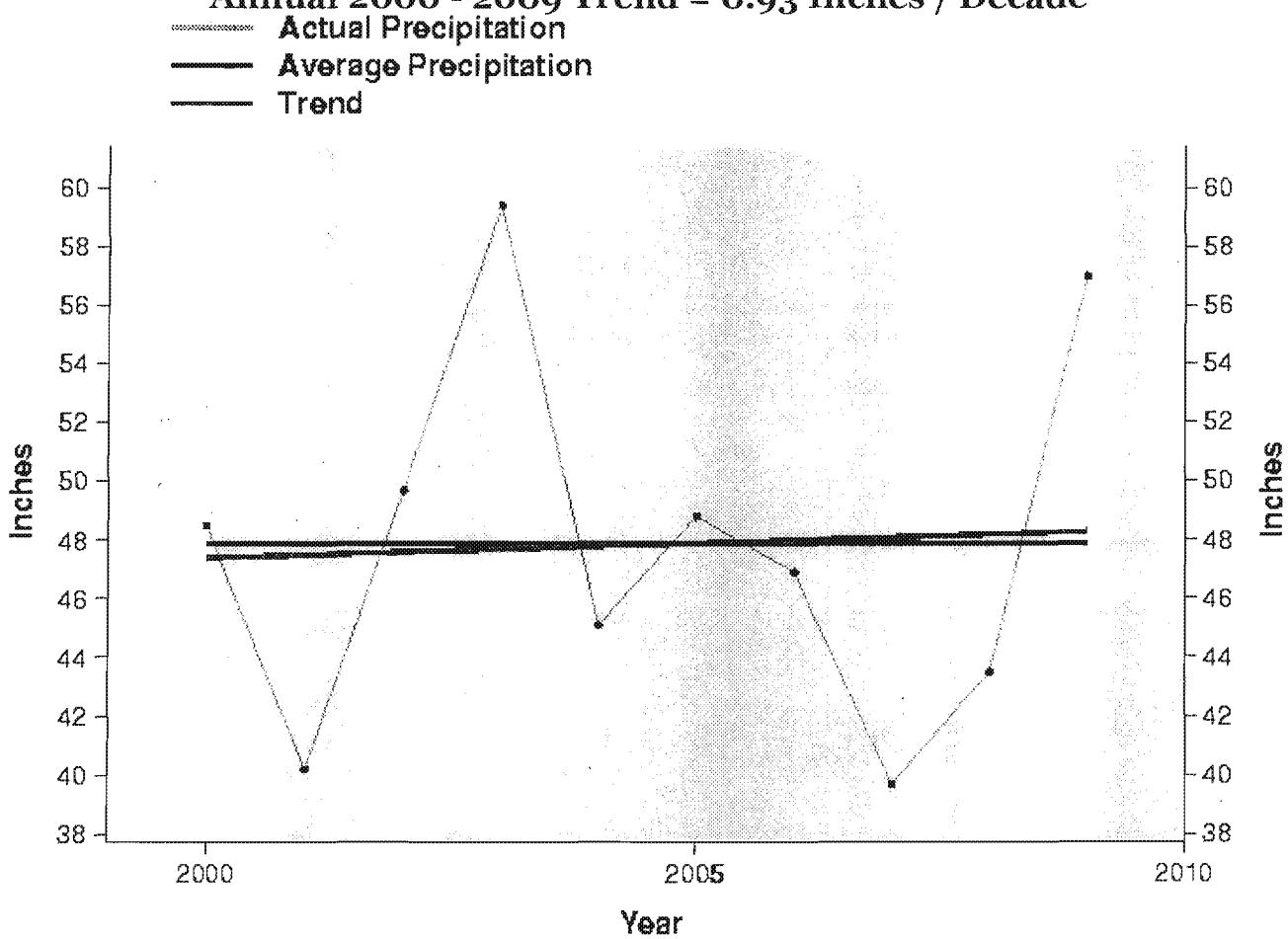
Climate At A Glance
Annual Precipitation
Delaware

Some of the following data are preliminary and have not been quality controlled.
For official data, please contact the NCDC Climate Services and Monitoring Division at ncdc.orders@noaa.gov.

Annual 2000 - 2009 Data Values:

Annual 2009: 56.97 Inches Rank: 9

Annual 2000 - 2009 Average = 47.88 Inches
Annual 2000 - 2009 Trend = 0.93 Inches / Decade



NOAA Satellite and Information Service
National Environmental Satellite, Data, and Information Service (NESDIS)

National Climatic Data Center
U.S. Department of Commerce

Climate At A Glance
Winter (Dec-Feb) Temperature
Delaware

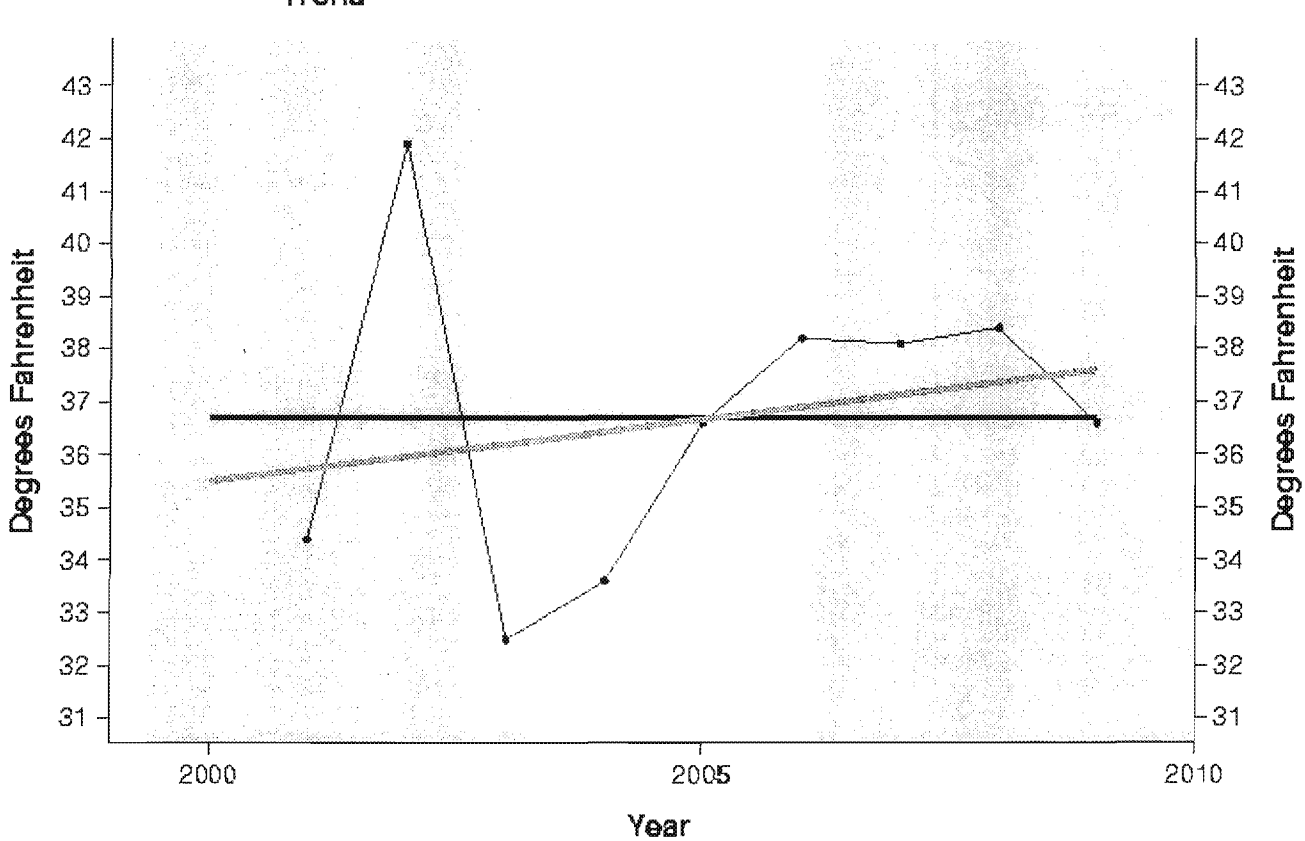
Some of the following data are preliminary and have not been quality controlled.
For official data, please contact the NCDC Climate Services and Monitoring Division at ncdc.orders@noaa.gov.

Winter (Dec-Feb) 2000 - 2009 Data

Values:

Winter (Dec-Feb) 2009: 36.6 degF Rank: 4

Winter (Dec-Feb) 2000 - 2009 Average = 36.70 degF
Winter (Dec-Feb) 2000 - 2009 Trend = 2.37 degF / Decade



NOAA Satellite and Information Service
National Environmental Satellite, Data, and Information Service (NESDIS)

National Climatic Data Center
U.S. Department of Commerce

DOC > NOAA > NESDIS > NCDC Search Field: Search NCDC

NCDC / Climate At A Glance / Climate Monitoring / Search / Help

Climate At A Glance

Summer (Jun-Aug) Temperature
Delaware

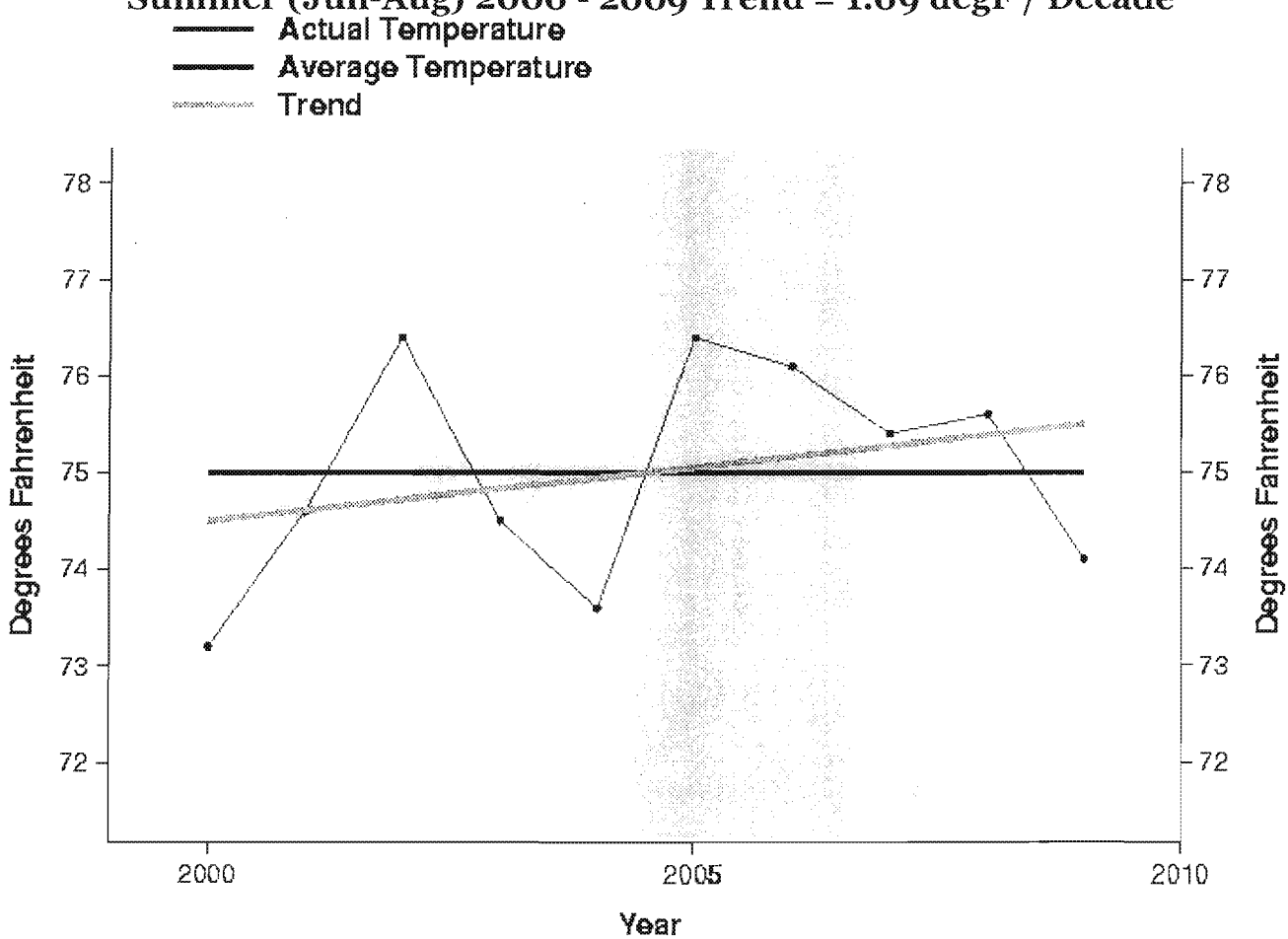
Some of the following data are preliminary and have not been quality controlled.
For official data, please contact the NCDC Climate Services and Monitoring Division at ncdc.orders@noaa.gov.

Summer (Jun-Aug) 2000 - 2009 Data

Values:

Summer (Jun-Aug) 2009: 74.1 degF Rank: 3

Summer (Jun-Aug) 2000 - 2009 Average = 74.98 degF
Summer (Jun-Aug) 2000 - 2009 Trend = 1.09 degF / Decade



APPENDIX B
PARCEL TITLE SEARCH
Procino Plating DE-0344

Tax Parcel Number:
132-1.15-187.00 and 132-1.15-188.00

Bought Date	Sold Date	Owners
5/3/96	-	Patrick and Rita Procino
6/23/88	5/3/96	HMS Blades, Limited
-	6/23/88	John and Eileen Reynolds
7/16/96	-	Patrick and Rita Procino (parcel two)
-	7/16/96	Gordon A Ramsey (parcel two)

APPENDIX C
ADDITIONAL DNREC INFORMATION
Procino Plating DE-0344

SHWMB – According to SHWMB, the Site is a hazardous waste generator and is not required to have a hazardous waste permit.

TMB – There are no documented above ground storage tanks (ASTs) or underground storage tanks (USTs) on the Site. There are three UST sites within a quarter miles of the site: Wyoming Concrete Industries, Bo-Win (Peninsula Plating), and Blades Elementary (Figure 12).

Other SIRB sites – There is one SIRB site located within a quarter mile of the Site, Peninsula Plating (DE-0287) located north of the Site (Figure 12).

APPENDIX D
SITE PHOTOGRAPHS
Procino Plating DE-0344

DNREC-SIRB
391 Lukens Drive,
New Castle, DE 19720

PHOTOGRAPHIC LOG

Client Name: Procino Plating	**Site Location:** Blades, DE	**Project No:** DE-0344

Photo No.	**Date:**
1	9/14/10

Direction Photo Taken:

South-west

Description:

Building front of Procino Plating facing Market St.

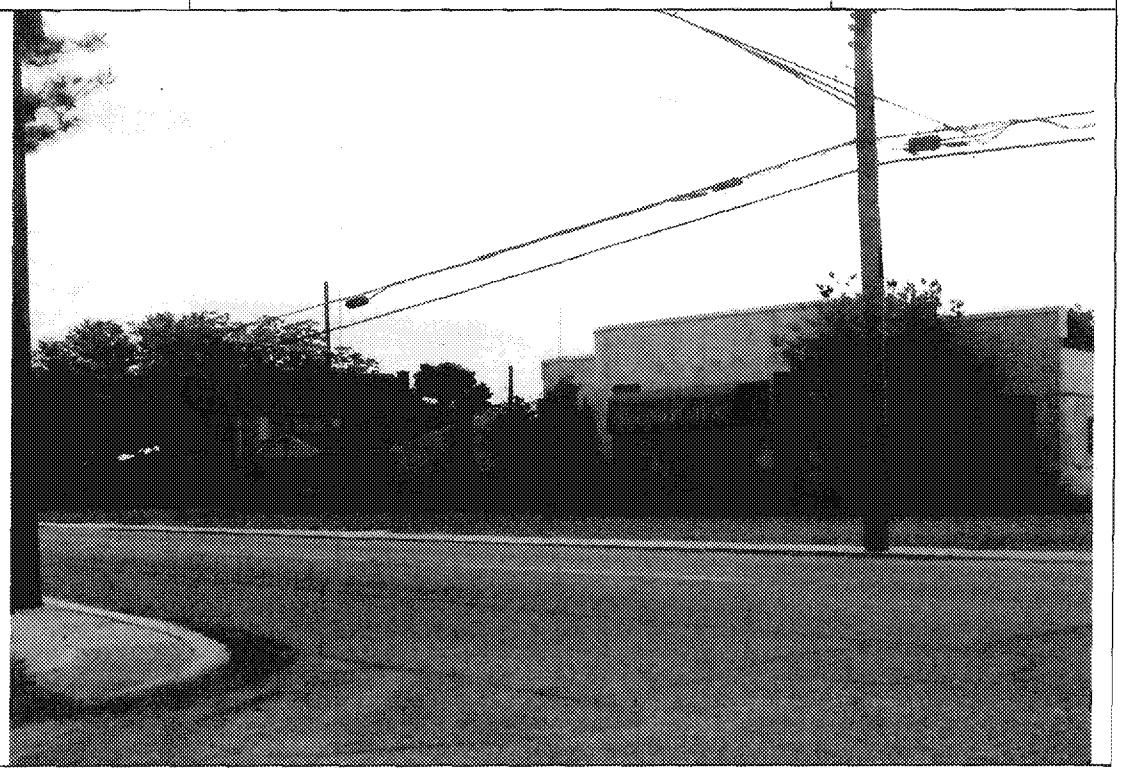


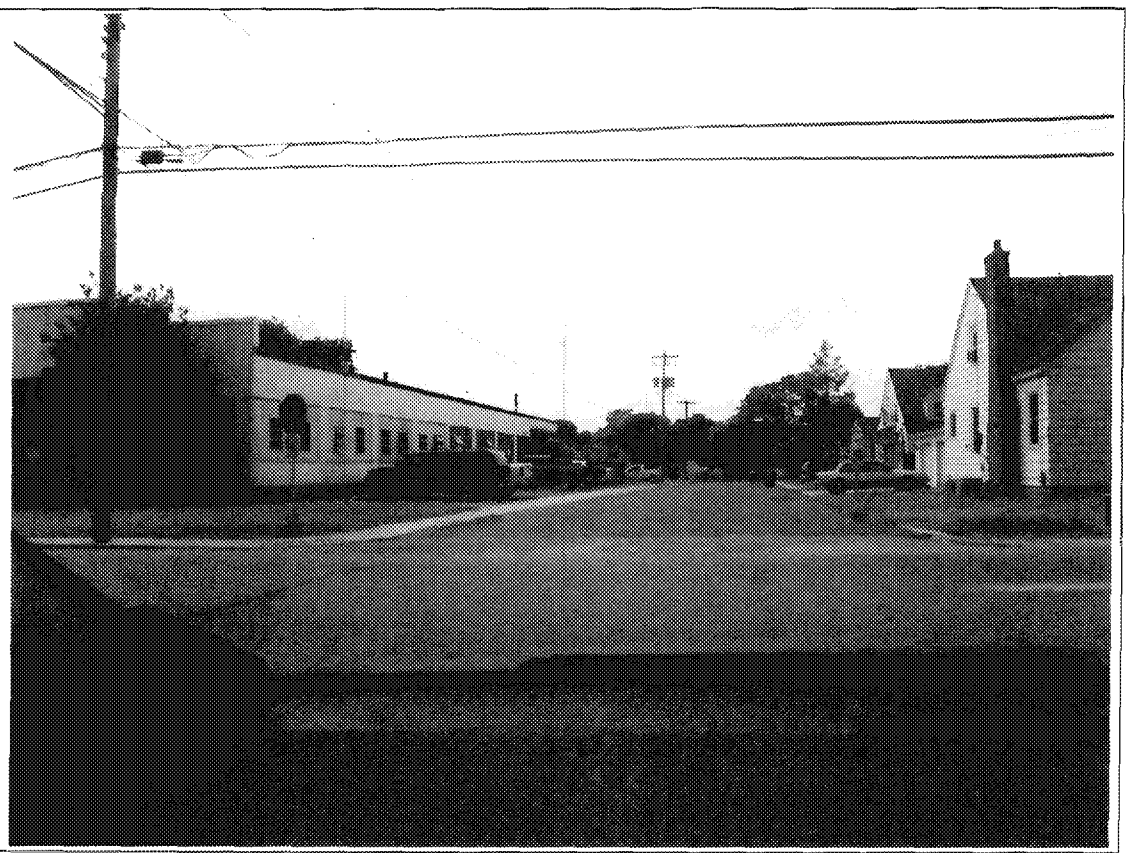
Photo No.	**Date:**
2	9/14/10

Direction Photo Taken:

West

Description:

The side of the Procino Plating building and parking lot along 9th Street.



DNREC-SIRB
391 Lukens Drive,
New Castle, DE 19720

PHOTOGRAPHIC LOG

Client Name: Procino Plating	**Site Location:** Blades, DE	**Project No:** DE-0344

Photo No.	**Date:**
3	9/14/10

Direction Photo Taken:

South

Description:

An operating electroplating bath.

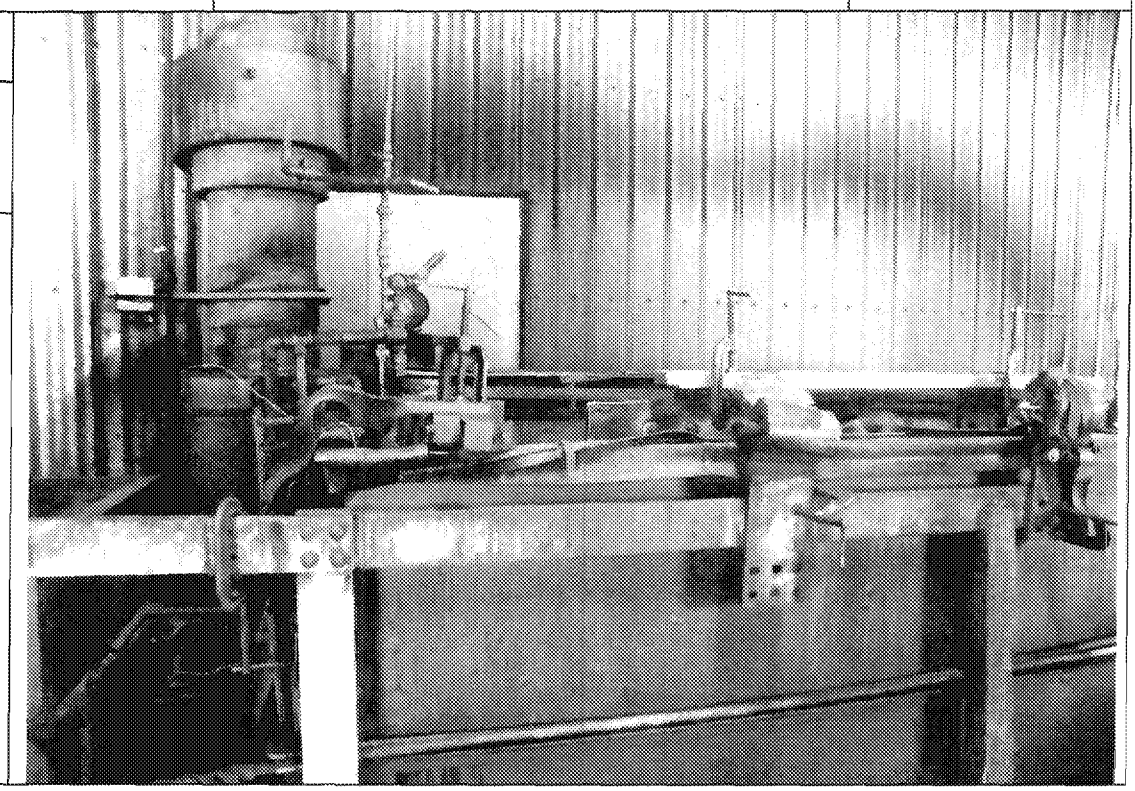


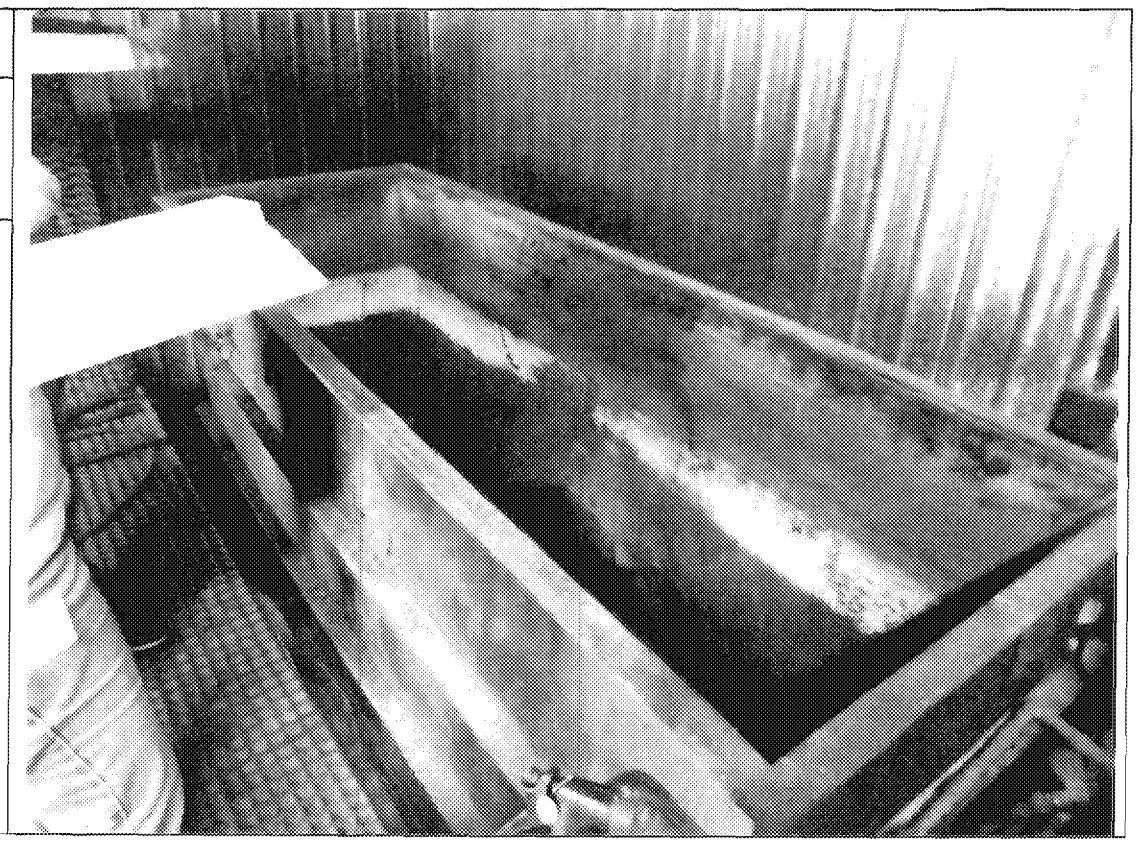
Photo No.	**Date:**
4	9/14/10

Direction Photo Taken:

East

Description:

An empty electroplating bath ready for operation. Both baths are on a platform.



DNREC-SIRB
391 Lukens Drive,
New Castle, DE 19720

PHOTOGRAPHIC LOG

Client Name: Procino Plating	**Site Location:** Blades, DE	**Project No:** DE-0344

Photo No.	**Date:**
5	9/14/10

Direction Photo Taken:

South

Description:

Orange foam that formed on top of the acid bath while a metal slab is heated and soaked in the bath.

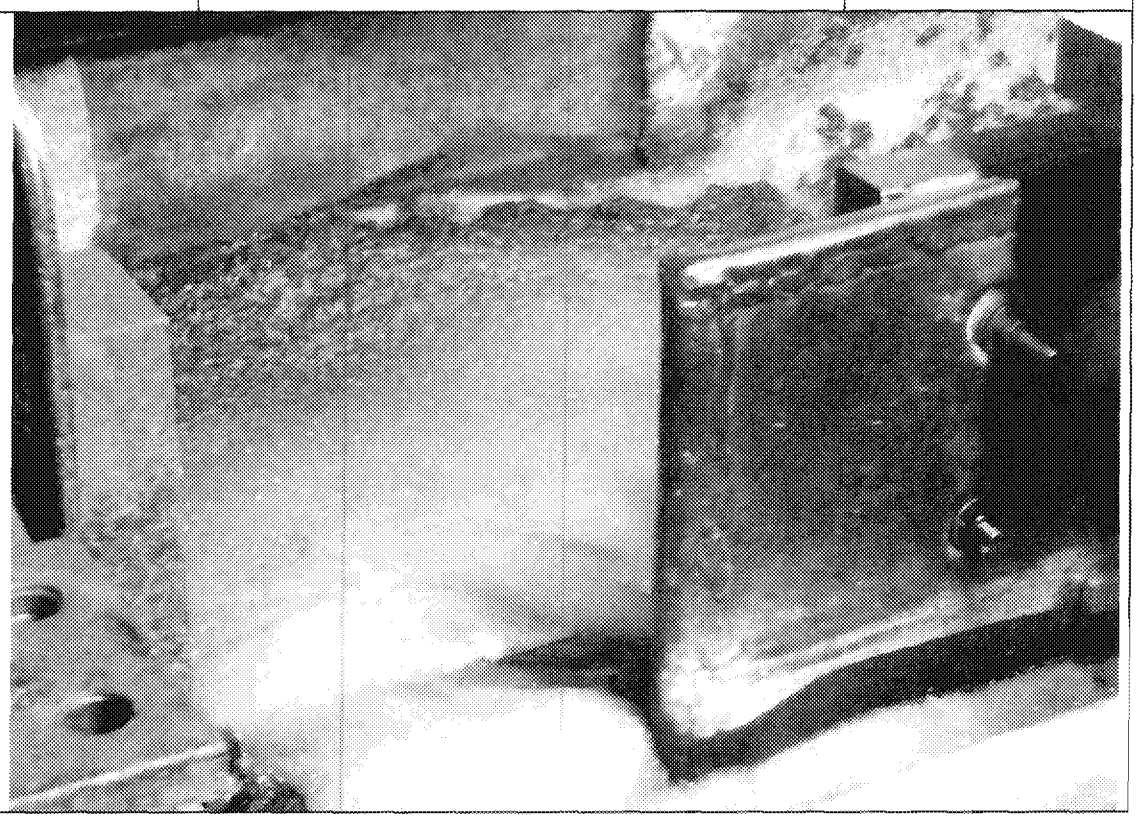


Photo No.	**Date:**
6	9/14/10

Direction Photo Taken:

North

Description:

Containers of an additive used in the acid baths during the electroplating process.

DNREC-SIRB
391 Lukens Drive,
New Castle, DE 19720

PHOTOGRAPHIC LOG

Client Name: Procino Plating	**Site Location:** Blades, DE	**Project No:** DE-0344

Photo No.	**Date:**
7	9/14/10

Direction Photo Taken:

South

Description:

A substance observed leaking from the acid bath.

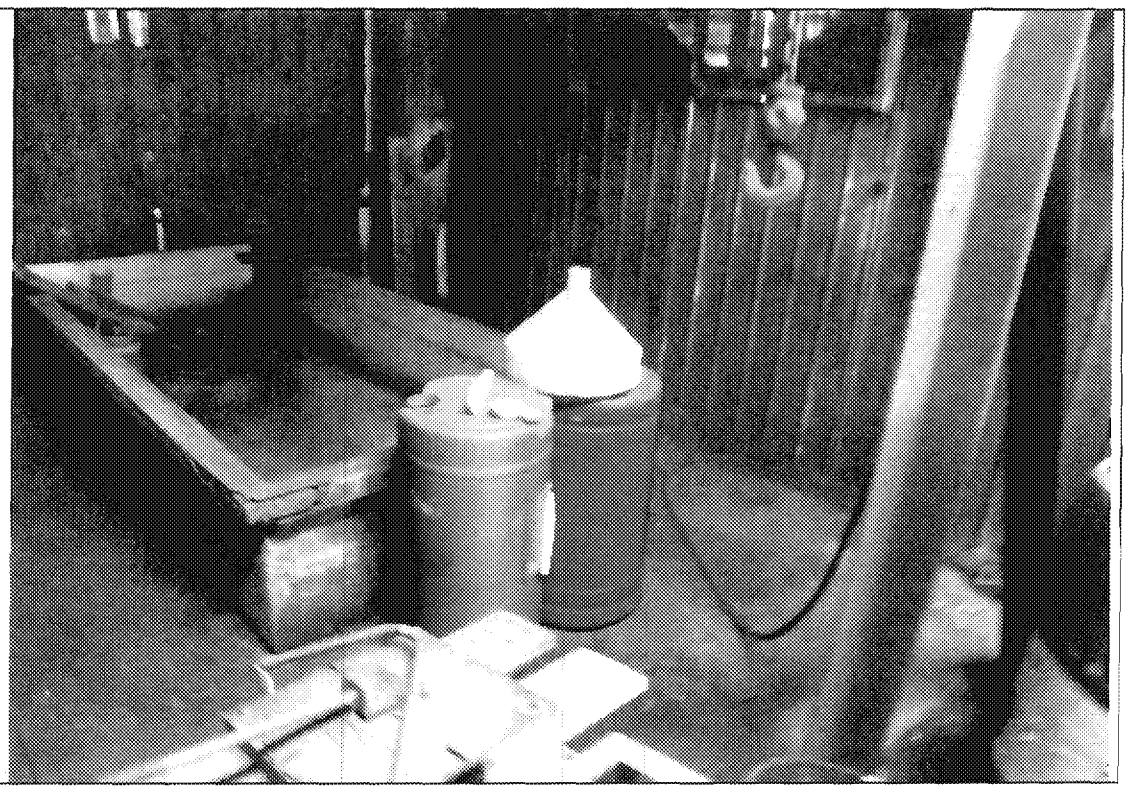
Photo No.	**Date:**
8	9/14/10

Direction Photo Taken:

South

Description:

A tub and solutions used in the electroplating process.



DNREC-SIRB
391 Lukens Drive,
New Castle, DE 19720

PHOTOGRAPHIC LOG

Client Name: Procino Plating	**Site Location:** Blades, DE	**Project No:** DE-0344

Photo No.	**Date:**
9	9/14/10

Direction Photo Taken:

South

Description:

Drums of solutions

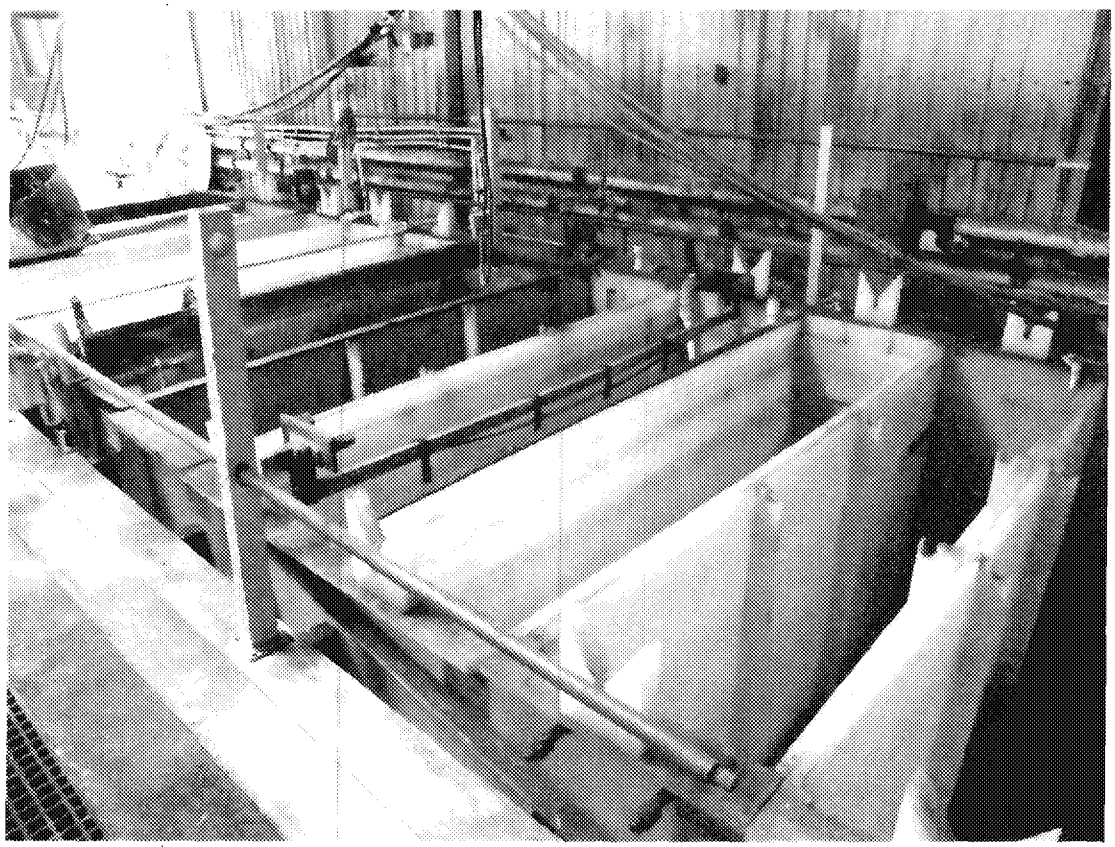
Photo No.	**Date:**
10	9/14/10

Direction Photo Taken:

South-east

Description:

Empty and decommissioned acid baths.



DNREC-SIRB
391 Lukens Drive,
New Castle, DE 19720

PHOTOGRAPHIC LOG

Client Name: Procino Plating | **Site Location:** Blades, DE | **Project No:** DE-0344

Photo No.	Date:
11	9/14/10

Direction Photo Taken:

South

Description:

Piping for the decommissioned acid baths mounted to the walls.

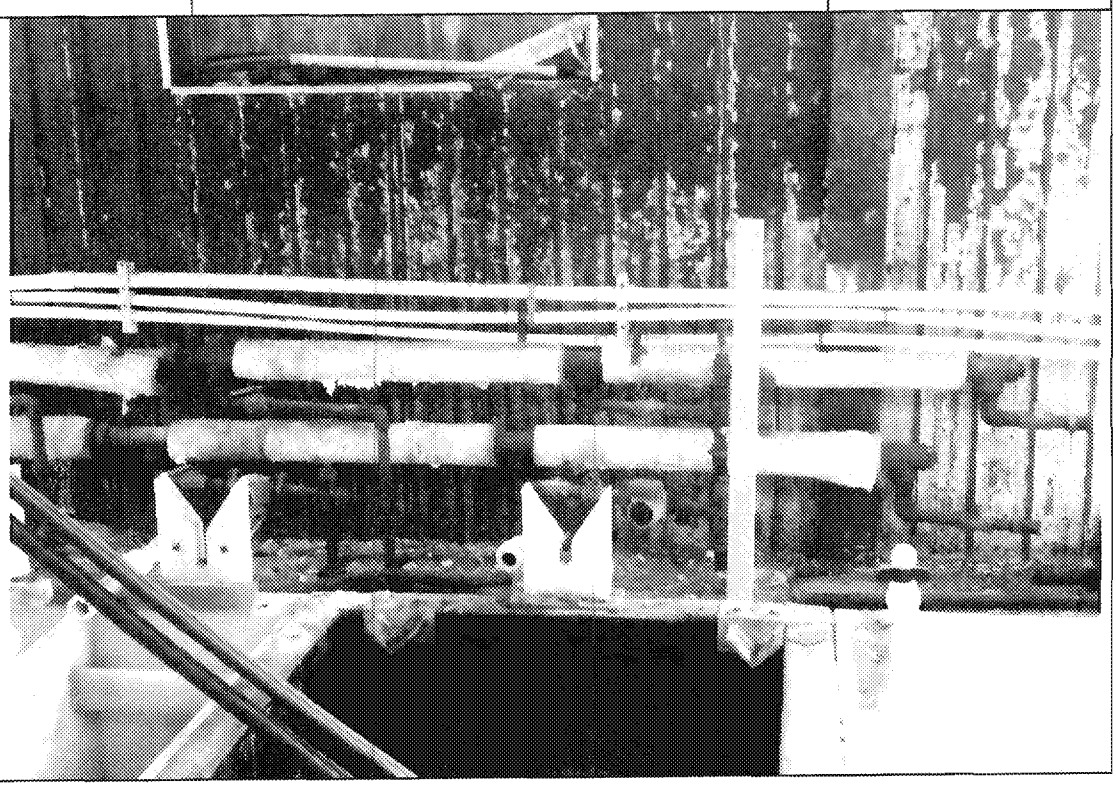


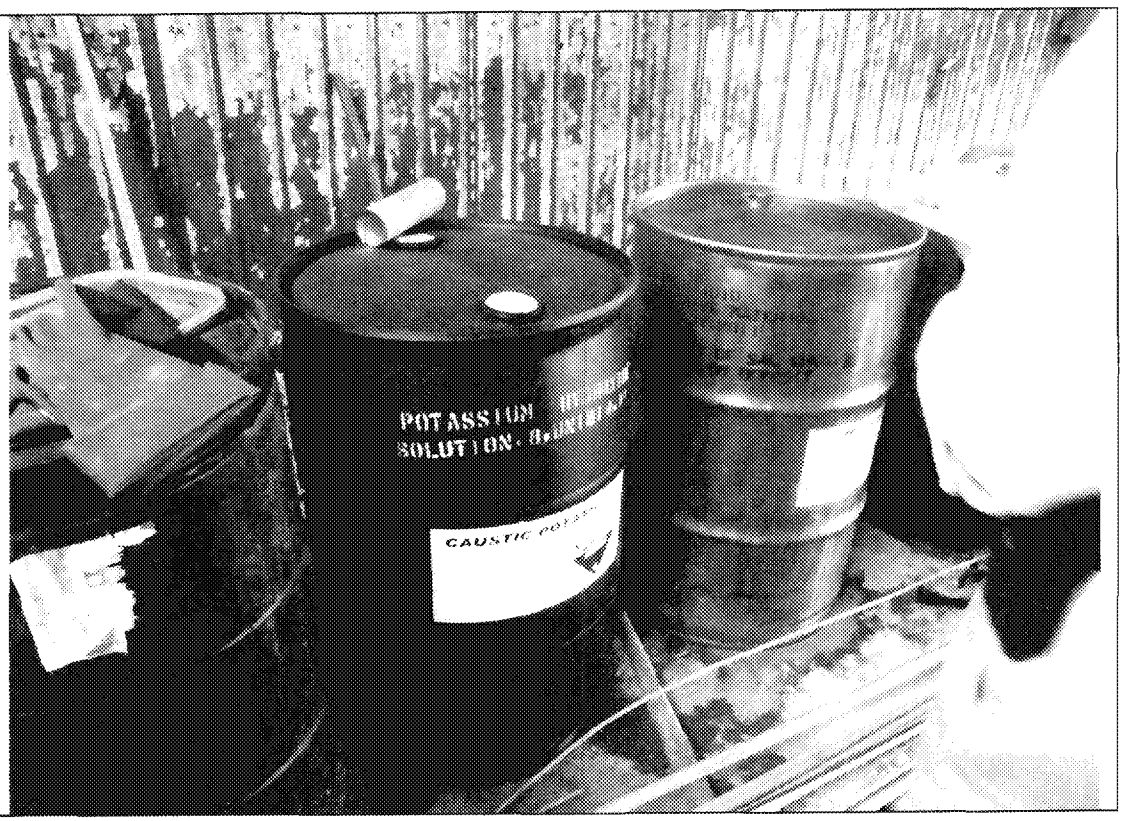
Photo No.	Date:
12	9/14/10

Direction Photo Taken:

North

Description:

Drums of caustic solutions.



DNREC-SIRB
391 Lukens Drive,
New Castle, DE 19720

PHOTOGRAPHIC LOG

Client Name: Procino Plating	**Site Location:** Blades, DE	**Project No:** DE-0344

Photo No.	**Date:**
13	9/14/10

Direction Photo Taken:

North

Description:

Drum of Nitric acid

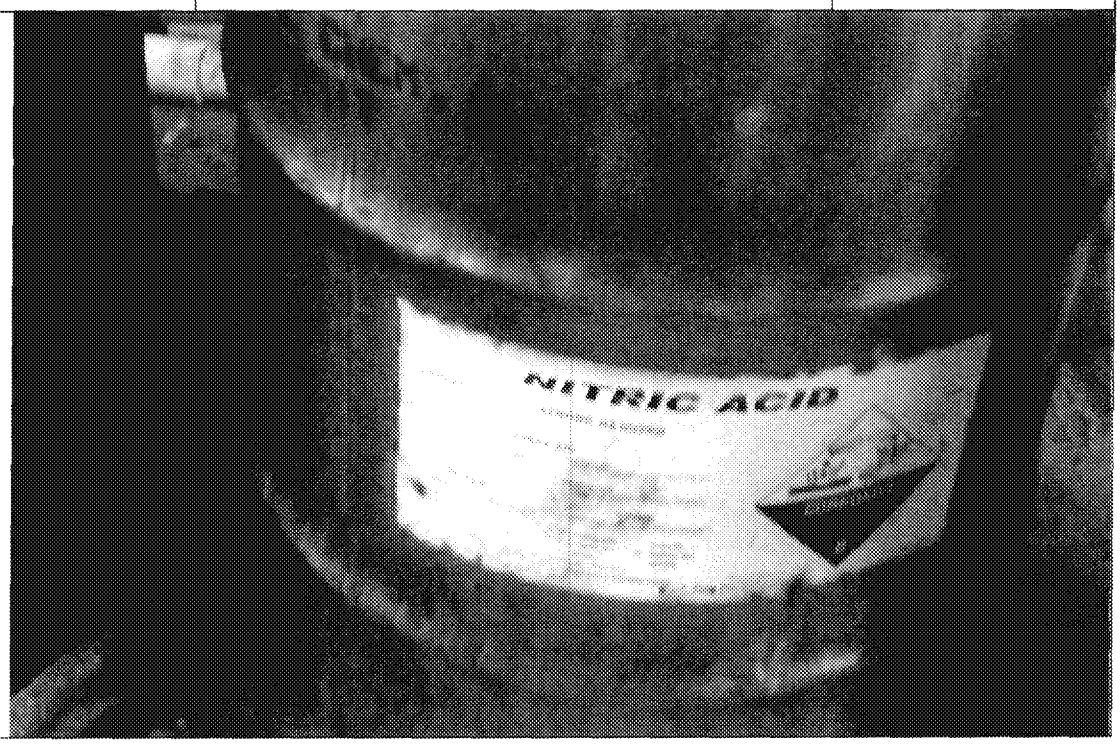


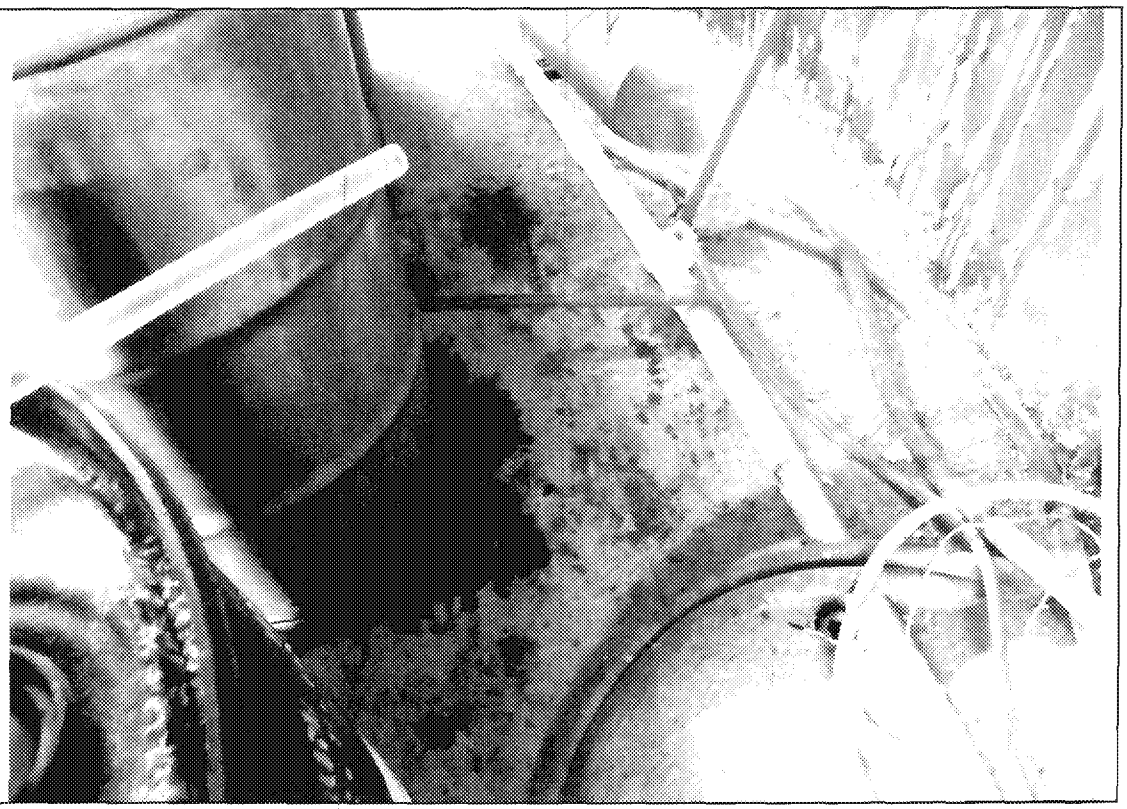
Photo No.	**Date:**
14	9/14/10

Direction Photo Taken:

East

Description:

Staining under the drum of Nitric Acid.



DNREC-SIRB
391 Lukens Drive,
New Castle, DE 19720

PHOTOGRAPHIC LOG

Client Name: Procino Plating	**Site Location:** Blades, DE	**Project No:** DE-0344

Photo No.	**Date:**
15	9/14/10

Direction Photo Taken:

North

Description:

Yellow and white powdery substance on the floor around drums.

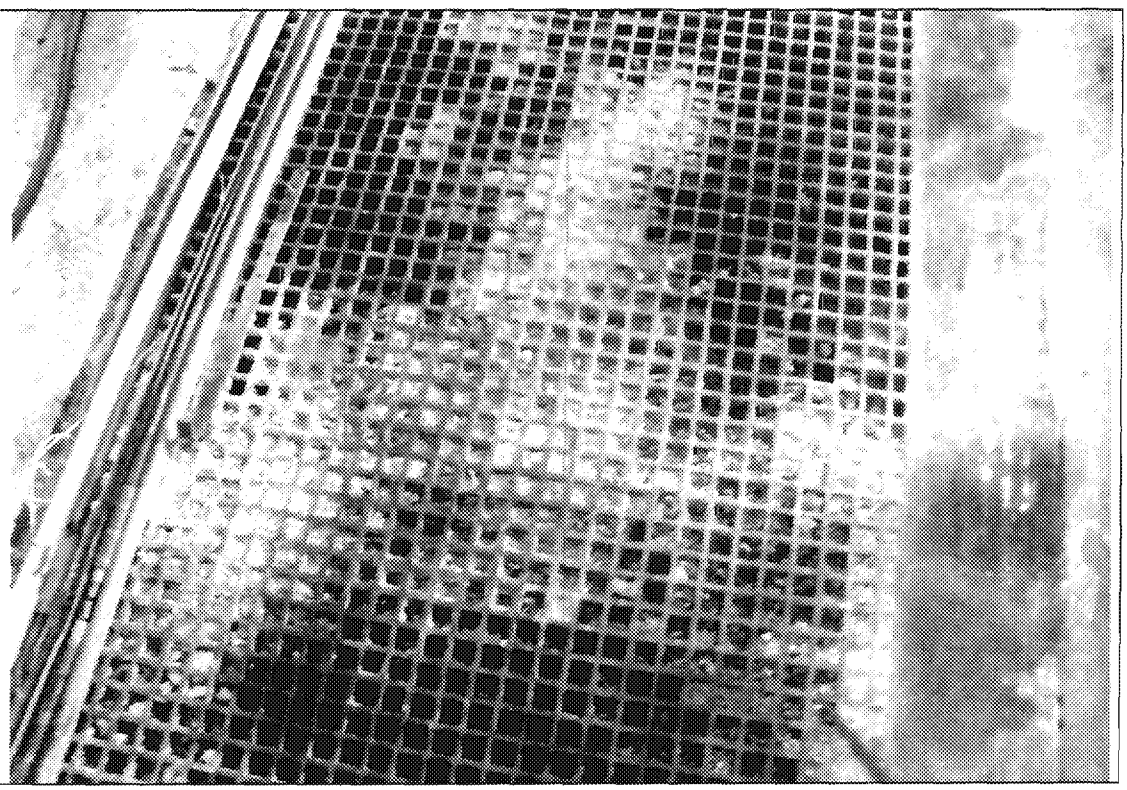
Photo No.	**Date:**
16	9/14/10

Direction Photo Taken:

East

Description:

Yellow and white powdery substance in a metal grate walkway.



DNREC-SIRB
391 Lukens Drive,
New Castle, DE 19720

PHOTOGRAPHIC LOG

Client Name: Procino Plating	**Site Location:** Blades, DE	**Project No:** DE-0344

Photo No.	**Date:**
17	9/14/10

Direction Photo Taken:

East

Description:

Water cooling tanks for the current electroplating operations.

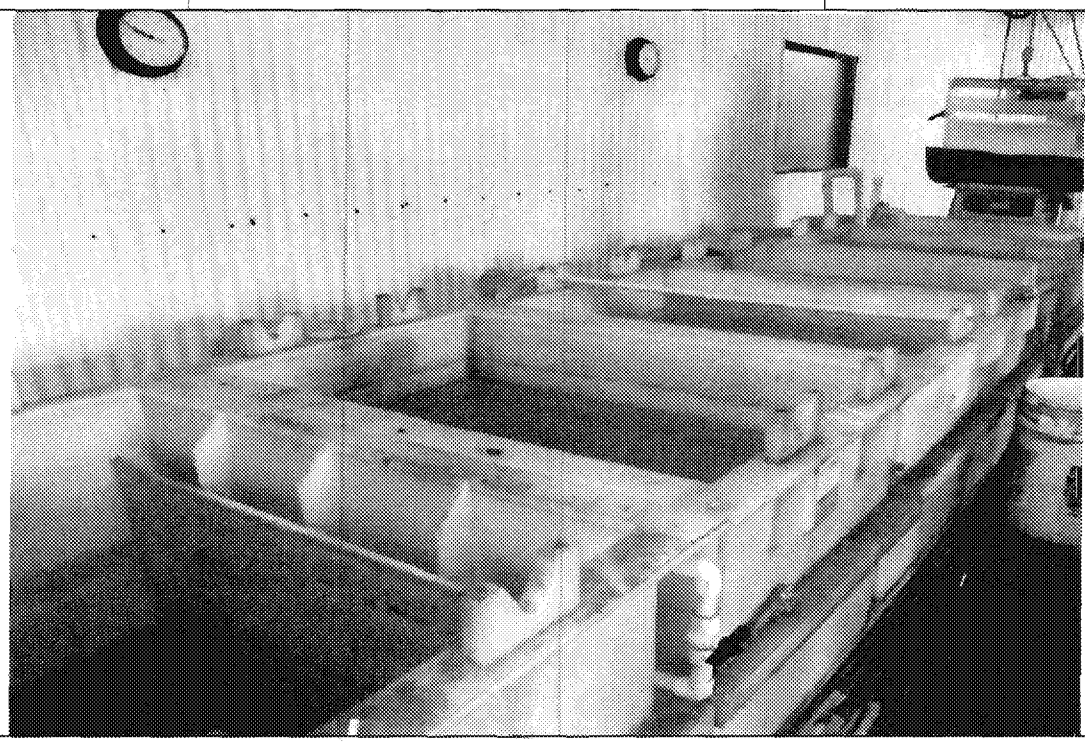


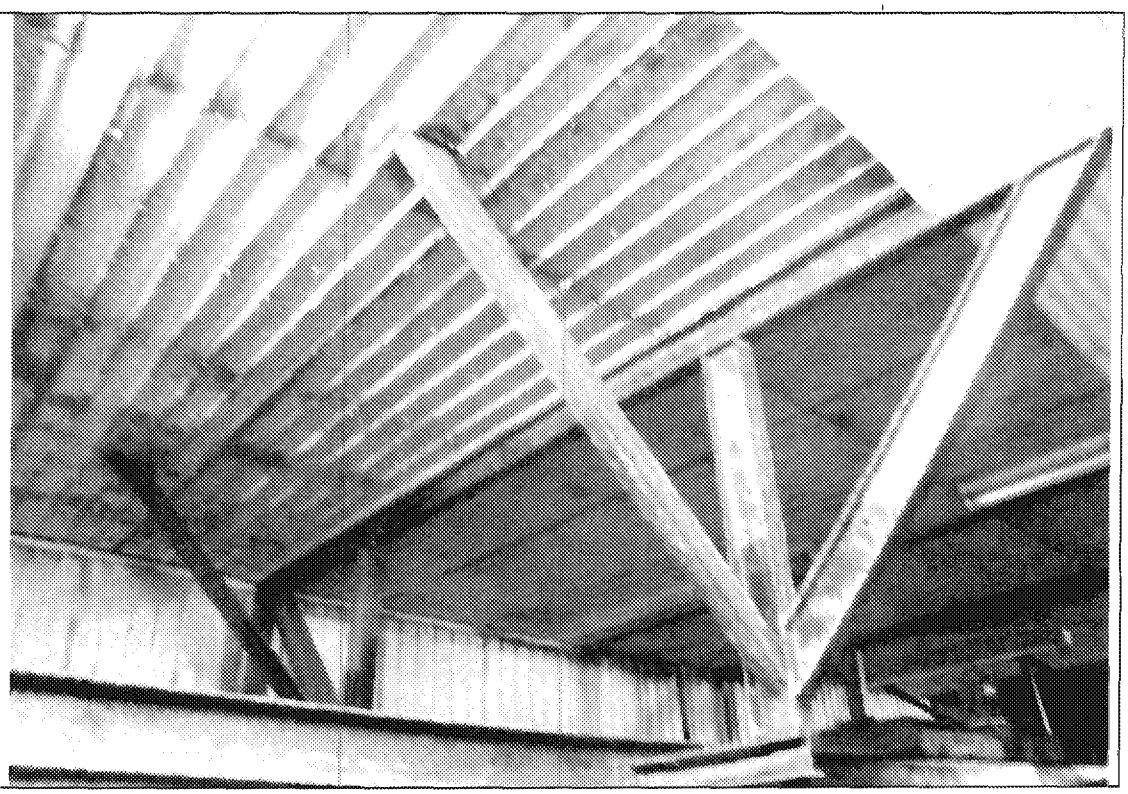
Photo No.	**Date:**
18	9/14/10

Direction Photo Taken:

South

Description:

Rusted steel beams above the former acid baths.



DNREC-SIRB
391 Lukens Drive,
New Castle, DE 19720

PHOTOGRAPHIC LOG

Client Name: Procino Plating	**Site Location:** Blades, DE	**Project No:** DE-0344

Photo No.	**Date:**
19	9/14/10

Direction Photo Taken:

South

Description:

Basement of the main building on Site.

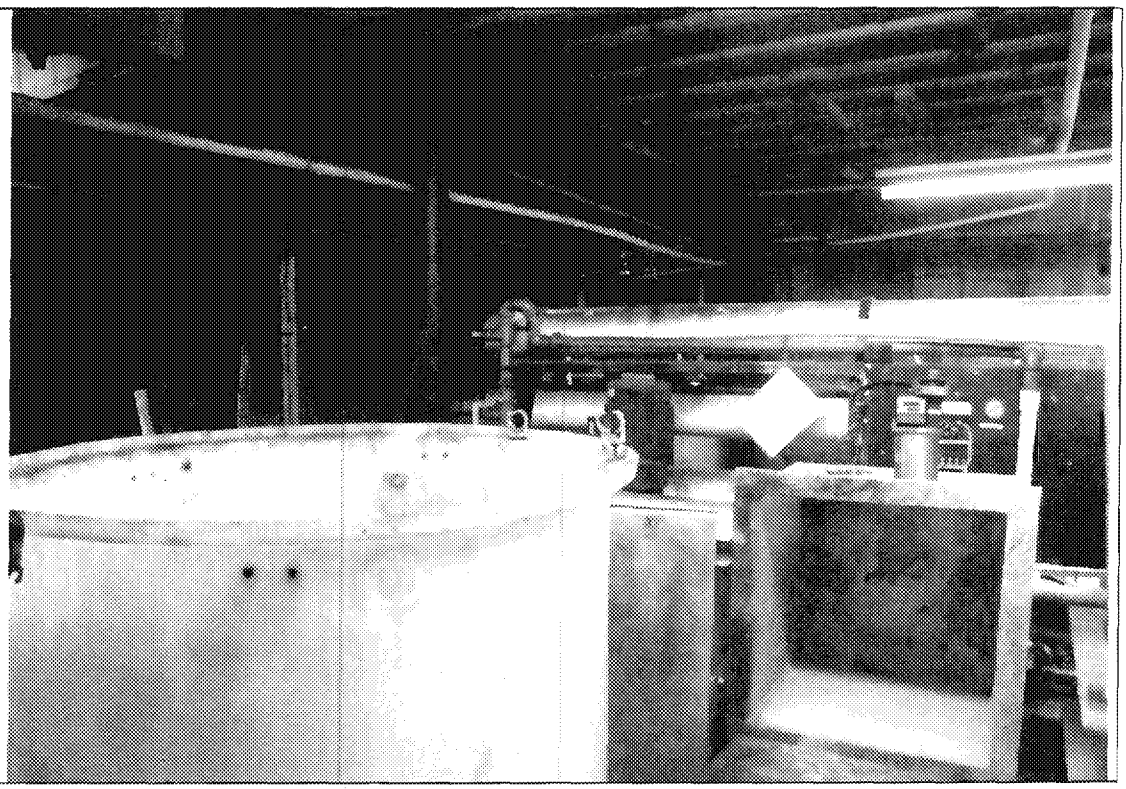
Photo No.	**Date:**
20	9/14/10

Direction Photo Taken:

East

Description:

Dismantled electroplating equipment placed in the basement for storage.



DNREC-SIRB
391 Lukens Drive,
New Castle, DE 19720

PHOTOGRAPHIC LOG

Client Name: Procino Plating	**Site Location:** Blades, DE	**Project No:** DE-0344

Photo No.	**Date:**
21	9/14/10

Direction Photo Taken:

South-west

Description:

Pretreatment water system

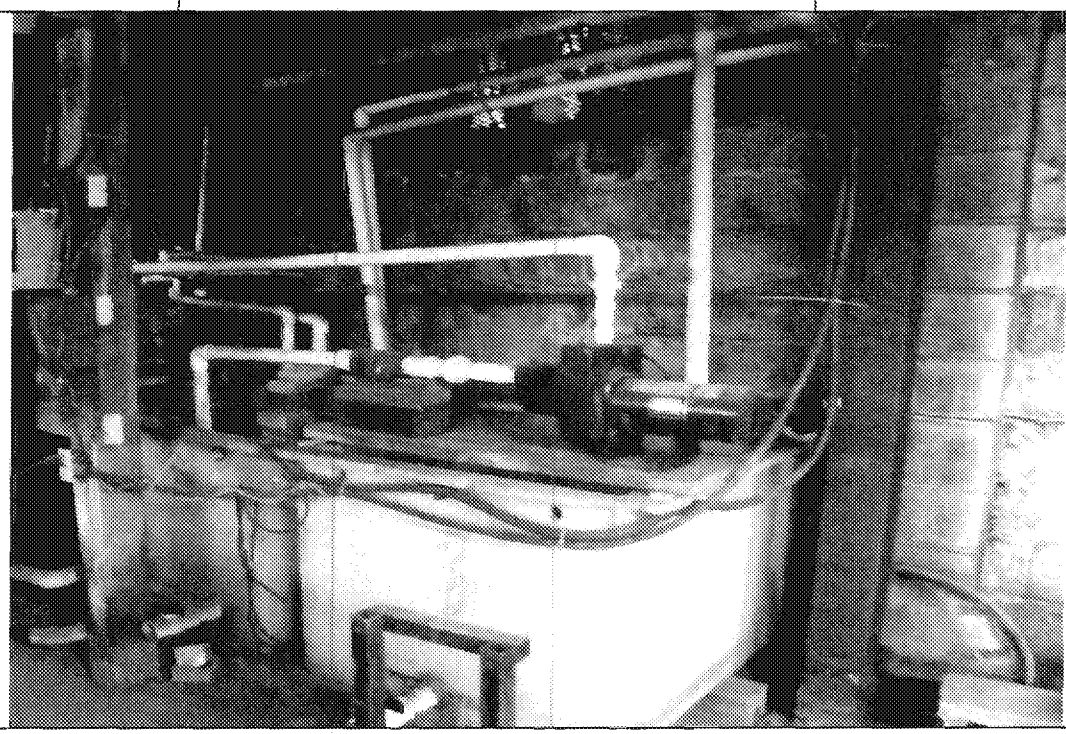


Photo No.	**Date:**
22	9/14/10

Direction Photo Taken:

South-west

Description:

A suspected sump or well located in the basement.

DNREC-SIRB
391 Lukens Drive,
New Castle, DE 19720

PHOTOGRAPHIC LOG

Client Name: Procino Plating	**Site Location:** Blades, DE	**Project No:** DE-0344

Photo No.	**Date:**
23	9/14/10

Direction Photo Taken:

South-west

Description:

The pretreatment piping

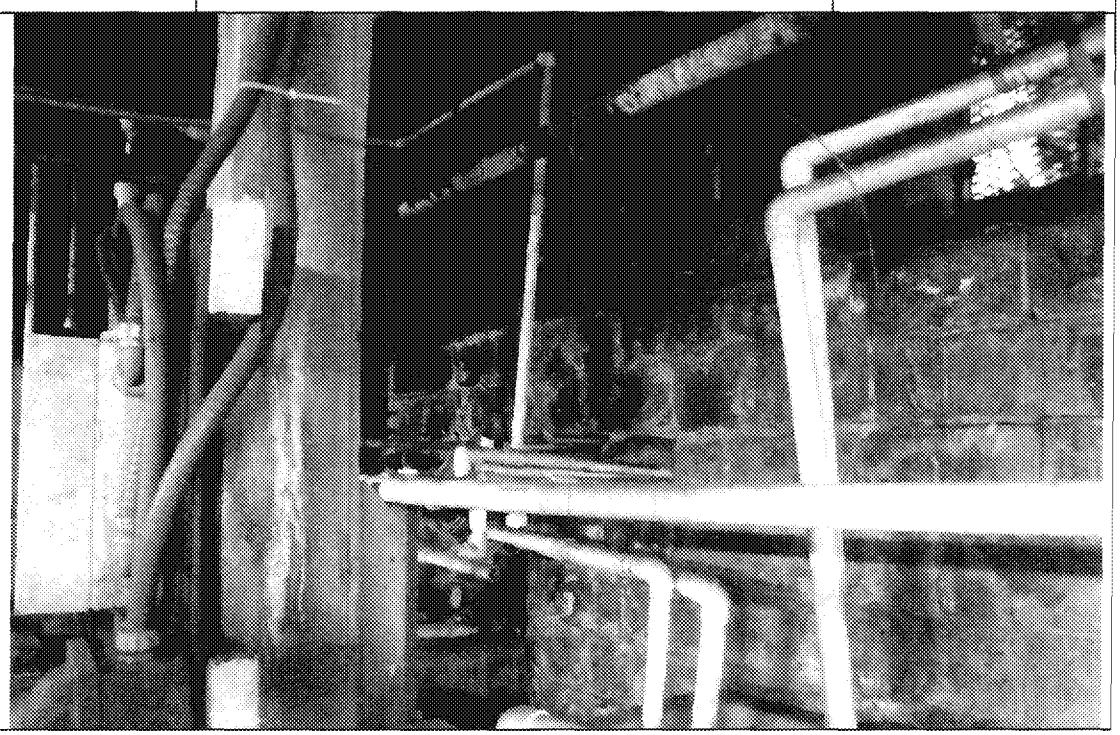


Photo No.	**Date:**
24	9/14/10

Direction Photo Taken:

South-east

Description:

A reverse osmosis system used in the pretreatment of solutions before going through the onsite water treatment.

DNREC-SIRB
391 Lukens Drive,
New Castle, DE 19720

PHOTOGRAPHIC LOG

Client Name: Procino Plating	**Site Location:** Blades, DE	**Project No:** DE-0344

Photo No.	**Date:**
25	9/14/10

Direction Photo Taken:

North-west

Description:

Large uncovered metal bins with metal shavings.

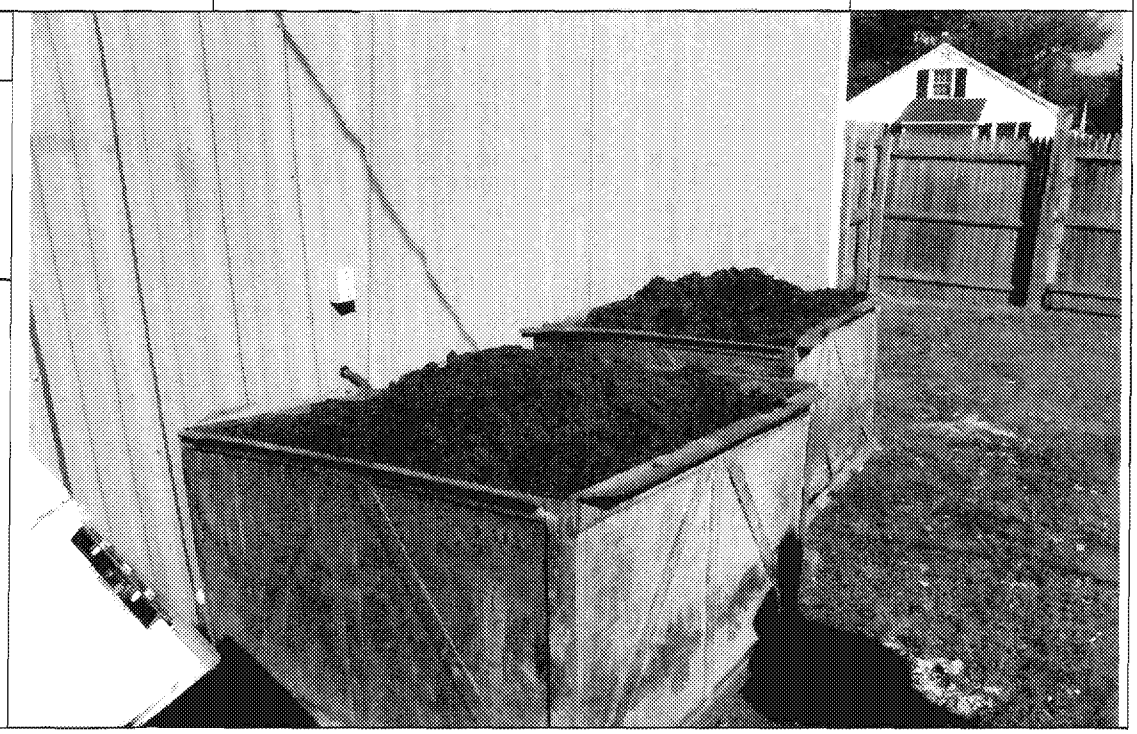


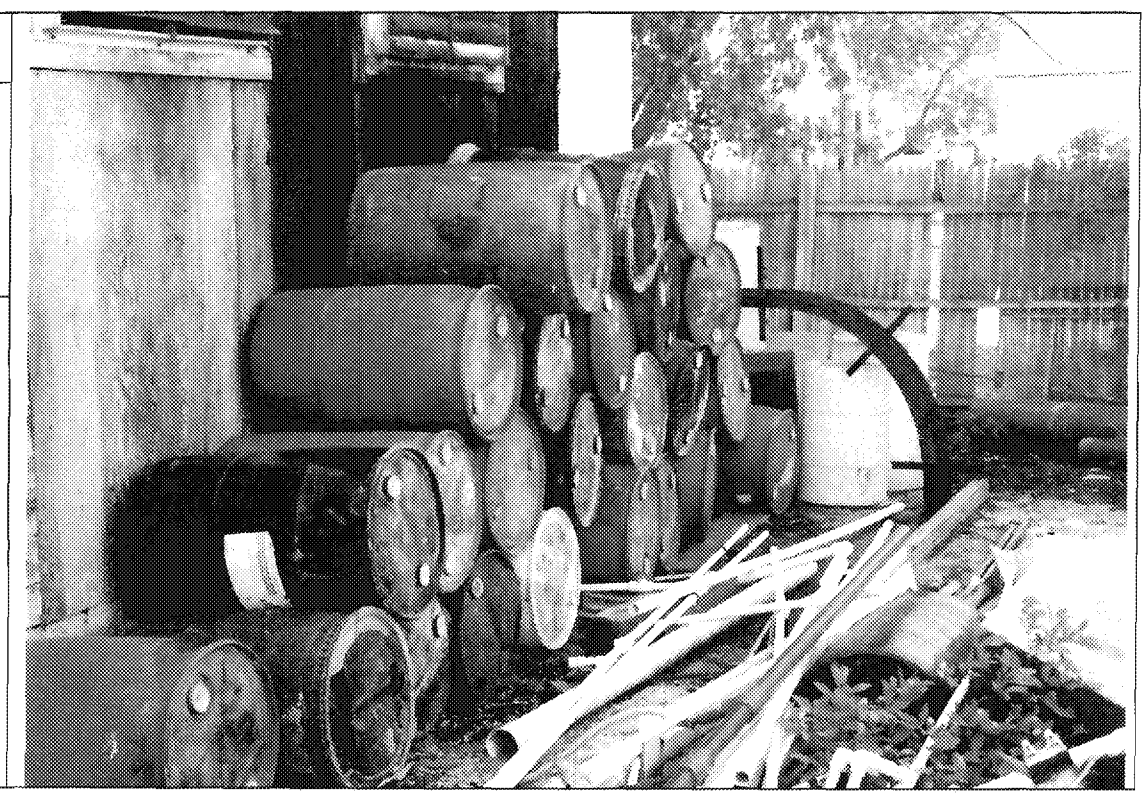
Photo No.	**Date:**
26	9/14/10

Direction Photo Taken:

South

Description:

Empty drums stored in the cross space area between the two buildings onsite.



DNREC-SIRB
391 Lukens Drive,
New Castle, DE 19720

PHOTOGRAPHIC LOG

Client Name: Procino Plating	**Site Location:** Blades, DE	**Project No:** DE-0344

Photo No.	**Date:**
27	9/14/10

Direction Photo Taken:

West

Description:

Drums in the cross space area.

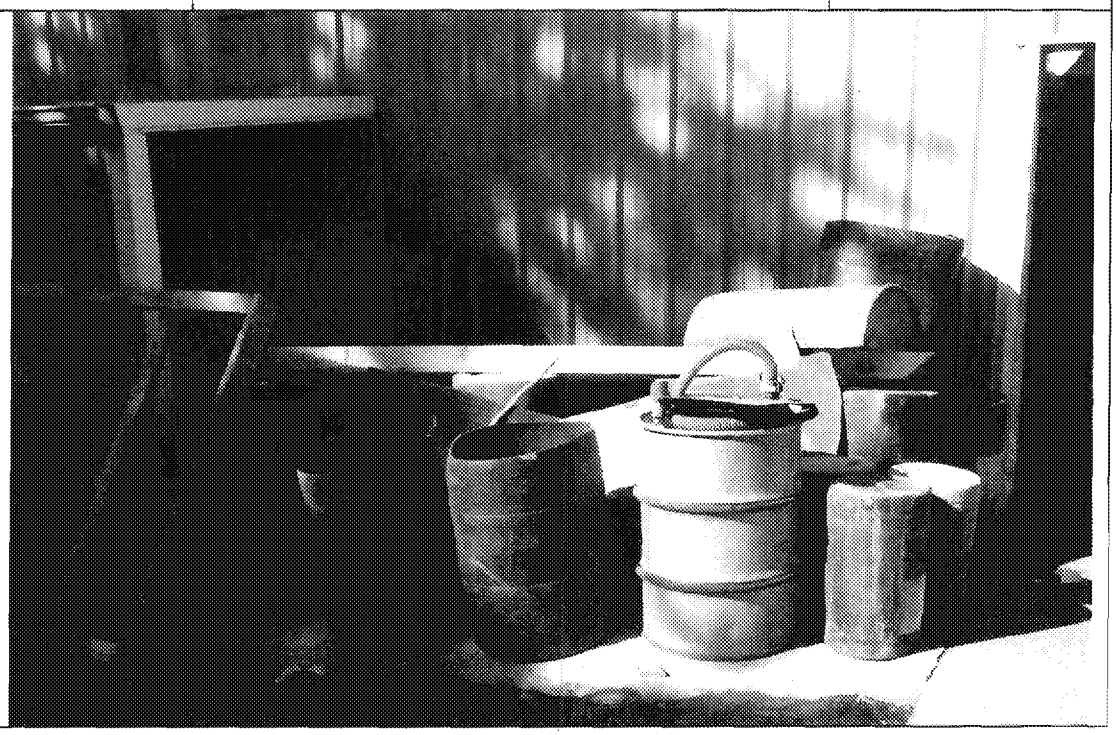


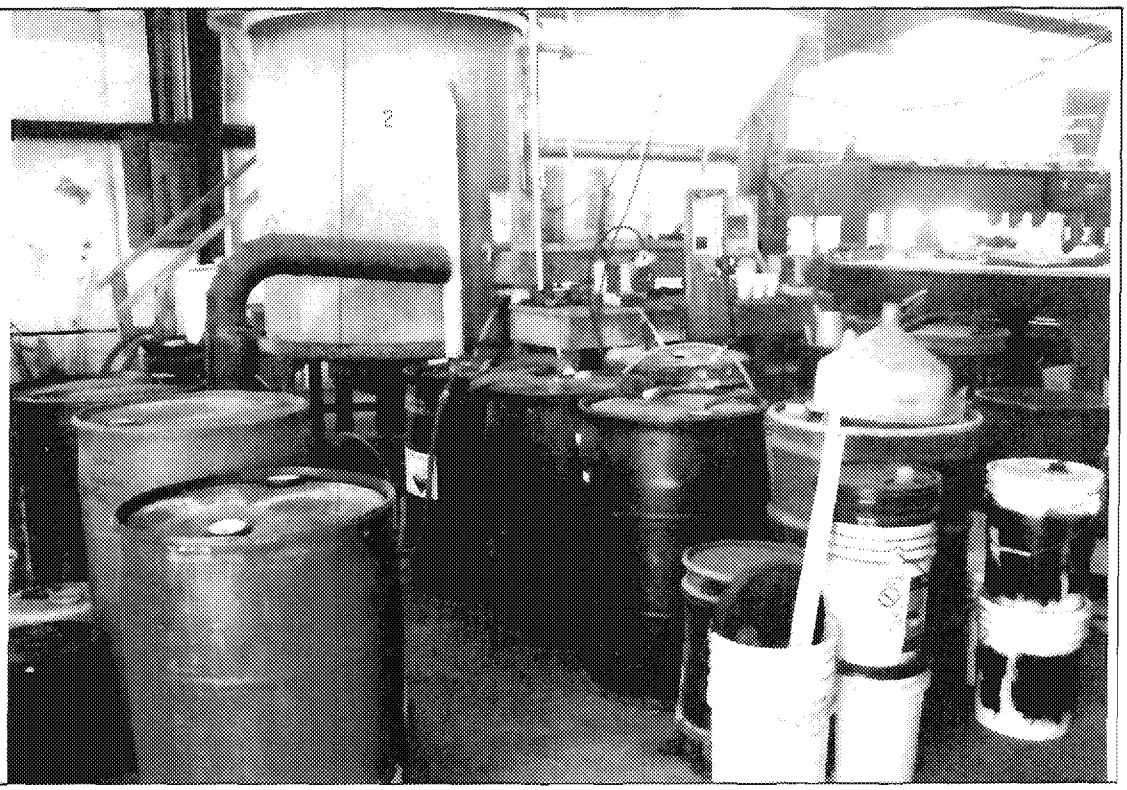
Photo No.	**Date:**
28	9/14/10

Direction Photo Taken:

South

Description:

Drums of chemicals used in the pretreatment of the metal slabs.



DNREC-SIRB
391 Lukens Drive,
New Castle, DE 19720

PHOTOGRAPHIC LOG

Client Name: Procino Plating	**Site Location:** Blades, DE	**Project No:** DE-0344

Photo No.	**Date:**
29	9/14/10

Direction Photo Taken:

South

Description:

A drum with a white substance on top and around it and piping connected to a larger mixing tank.

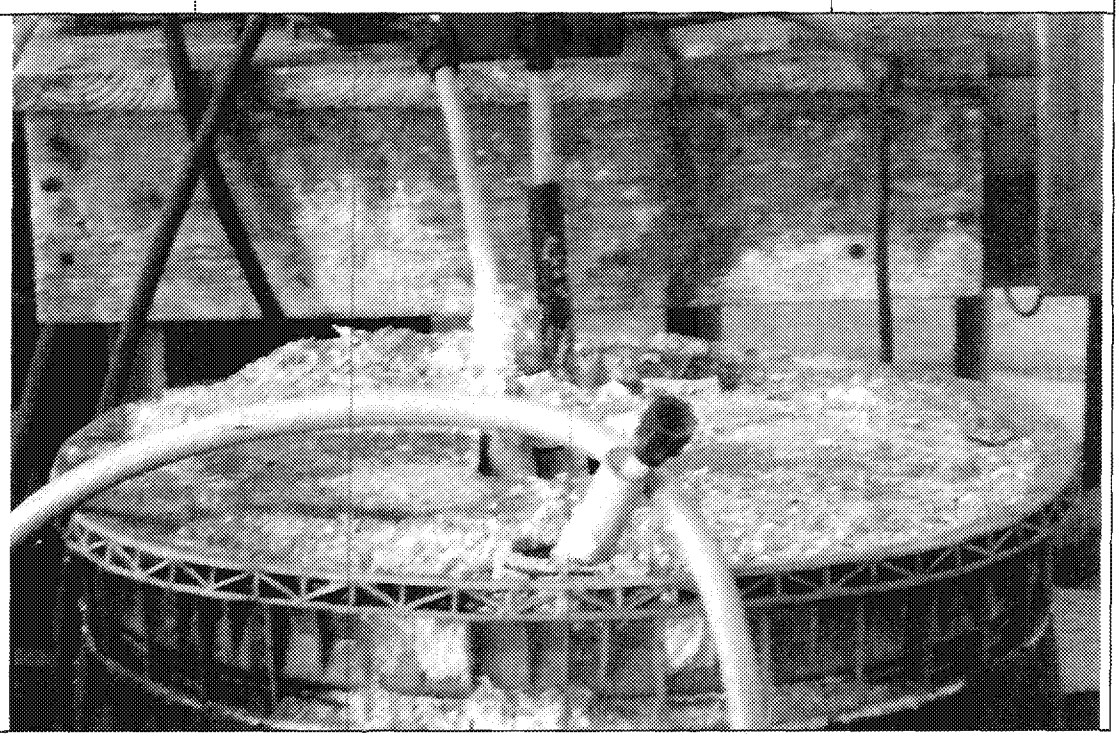


Photo No.	**Date:**
30	9/14/10

Direction Photo Taken:

North

Description:

Unlabeled or incorrectly labeled drums stored in the second building.

DNREC-SIRB
391 Lukens Drive,
New Castle, DE 19720

PHOTOGRAPHIC LOG

Client Name: Procino Plating	**Site Location:** Blades, DE	**Project No:** DE-0344

Photo No.	**Date:**
31	9/14/10

Direction Photo Taken:

North-east

Description:

Unlabeled or incorrectly labeled drums and other equipment in the storage area in the second building.

Photo No.	**Date:**
32	9/14/10

Direction Photo Taken:

West

Description:

Equipment used to cut and shape the metal slabs.

DNREC-SIRB
391 Lukens Drive,
New Castle, DE 19720

PHOTOGRAPHIC LOG

Client Name: Procino Plating	**Site Location:** Blades, DE	**Project No:** DE-0344

Photo No.	**Date:**
33	9/14/10

Direction Photo Taken:

South

Description:

A leaking drum labeled hazardous waste.

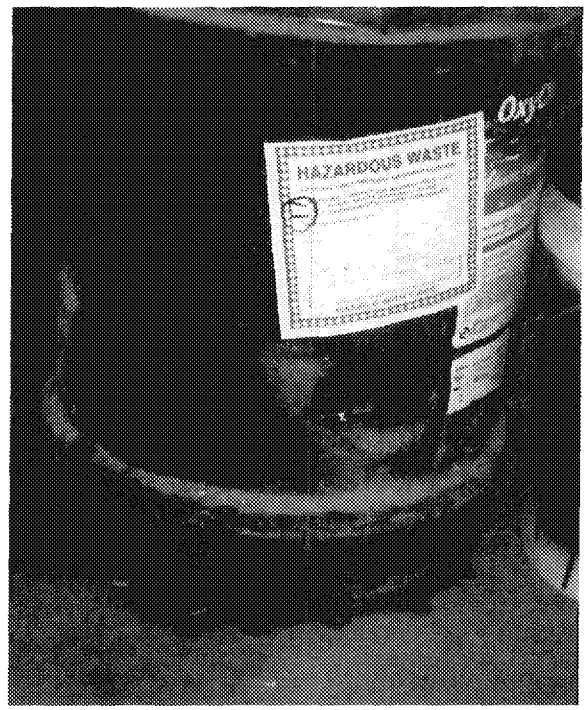


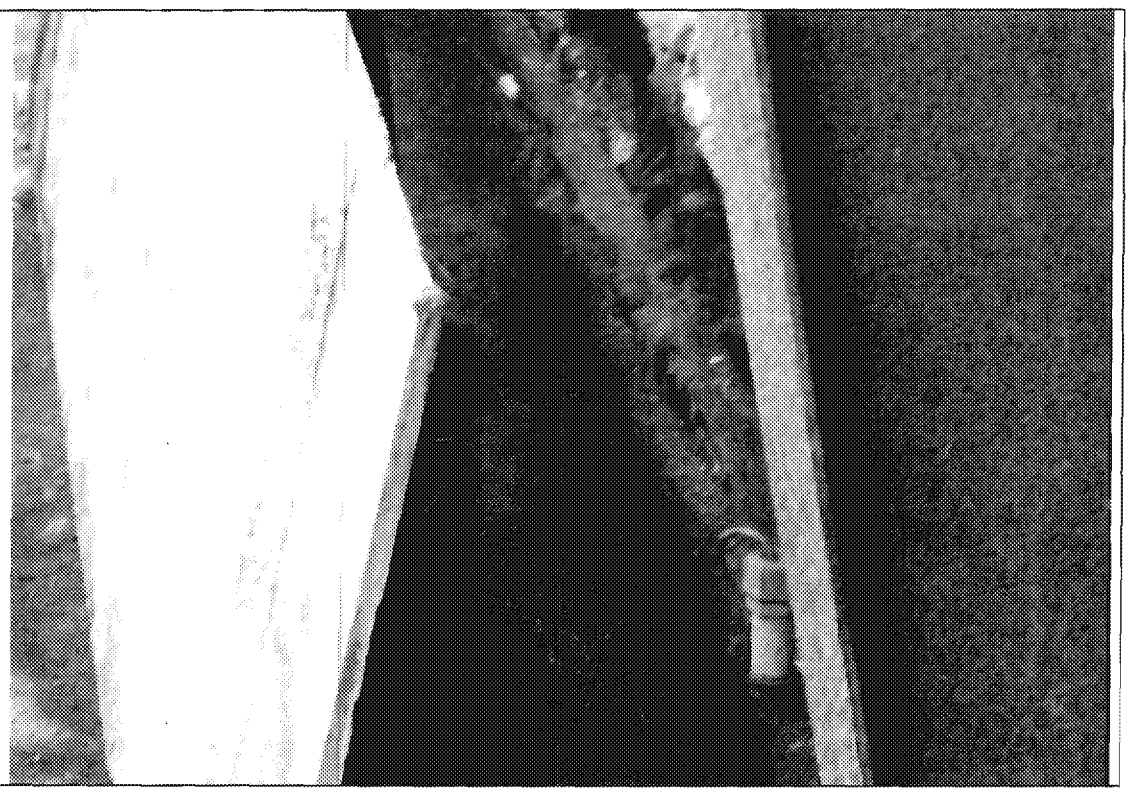
Photo No.	**Date:**
34	9/14/10

Direction Photo Taken:

East

Description:

A liquid substance found on the floor by the drum holding area in the second building.



DNREC-SIRB
391 Lukens Drive,
New Castle, DE 19720

PHOTOGRAPHIC LOG

Client Name: Procino Plating	**Site Location:** Blades, DE	**Project No:** DE-0344

Photo No.	**Date:**
35	9/14/10

Direction Photo Taken:

West

Description:

Well cover outside the second building on the Site.

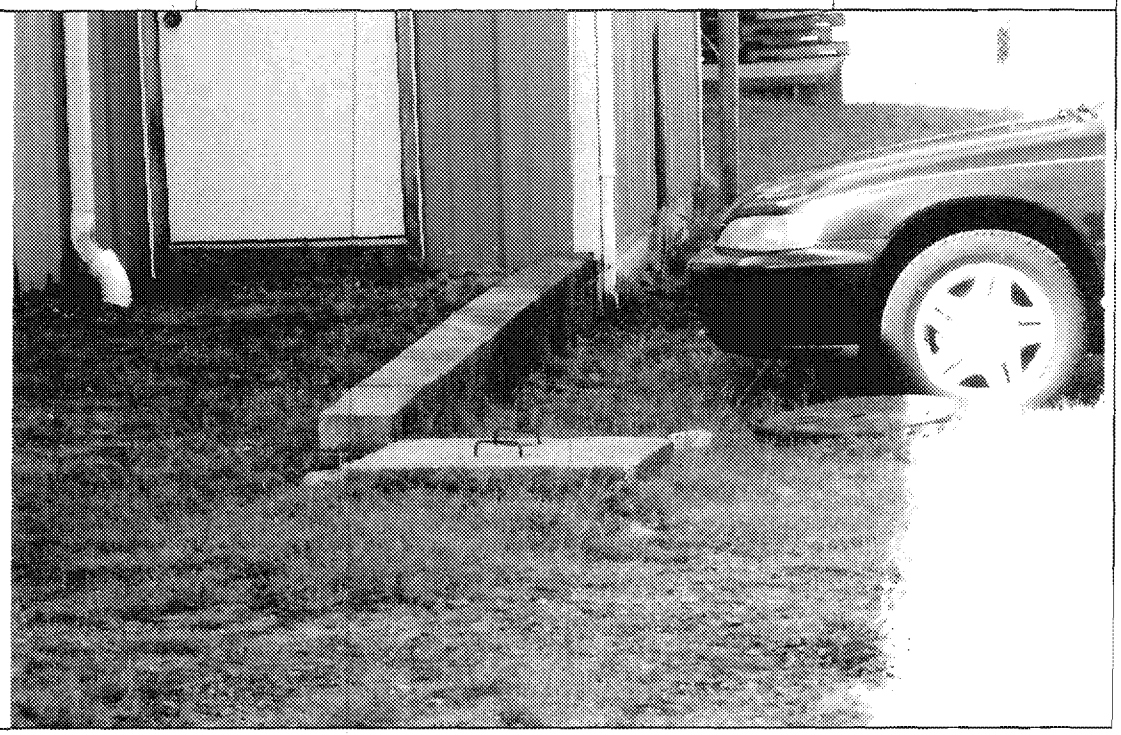


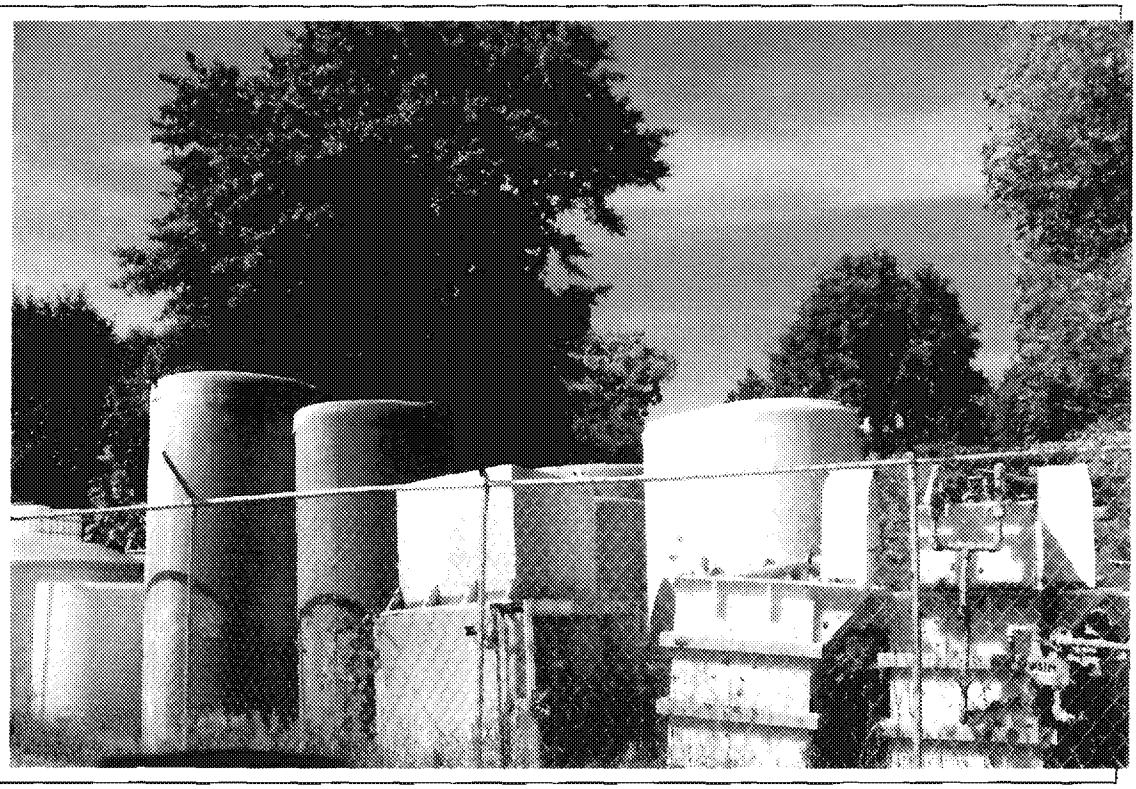
Photo No.	**Date:**
36	9/14/10

Direction Photo Taken:

South

Description:

General outdoors storage area onsite.



APPENDIX E
DAYCARE FACILITY AND SCHOOL INFORMATION
Procino Plating DE-0344

Daycares

- June Family Daycare
  113 North Bradford St., Seaford
- Heaven Cent Child Care
  506 North Pine St., Seaford
- Shonda's Daycare
  25353 Haven Dr., Seaford
- Care for Kids Daycare
  1020 Brickyard Rd., Seaford
- Dukes Family Daycare
  9356 Mount Zion Rd., Laurel
- Child Craft Co.
  26396 Seaford Rd., Seaford

Schools

- Blades Elementary School
  900 South Arch St., Blades
- Seaford Christian Academy
  110 Holly St., Seaford
- St. John Pre-school
  East Poplar Rd. & Poplar St., Seaford
- Frederick Douglass Elementary
  1 Swain Rd., Seaford
- West Seaford Elementary
  511 Sussex Ave., Seaford
- Seaford Middle School
  500 E. Stein Hwy., Seaford
- Seaford Central Elementary
  399 N. Market St., Seaford
- Destiny Christian School
  627 Nylon Blvd., Seaford
- Seaford High School
- David G. Fleagle Elementary School
  10030 Old Furnace Rd., Seaford

APPENDIX F
2000 CENSUS DATA
Procino Plating DE-0344

LandView Census 2000 Population Estimator

Instructions for using this estimator | Home

Enter Location and Radius

	Latitude	Longitude	Radius (miles)
Decimal degrees	38.630139	75.609546	0.25
— or —			
deg-min-sec	38 37 48	75 36 34	Calculate Population
hemisphere	◉ North ○ South	◉ West ○ East	

Clear all fields | Refresh Lat/Long from MARPLOT | Print this screen | Show this radius on map

Results (based on Census Blockpoints located within or touching the circle defined by the radius)

Total population:	454	Block count:	16
Housing Units:	183	Area within radius:	0.2 sq. mi.

White alone:	333
Black or African American alone:	95
American Indian and Alaska Native alone:	1
Asian alone:	2
Native Hawaiian and Other Pacific Islander alone:	1
Some other race alone:	8
Two or more races:	14
Hispanic or Latino:	19

LandView Census 2000 Population Estimator

Instructions for using this estimator | Home

Enter Location and Radius

	Latitude	Longitude	Radius (miles)
Decimal degrees	38.630139	75.609546	0.50
or			
deg-min-sec	38 37 48	75 36 34	Calculate Population
hemisphere	◉ North ○ South	◉ West ○ East	

Clear all fields | Refresh Lat/Long from MARPLOT | Print this screen | Show this radius on map

Results (based on Census Block points located within or touching the circle defined by the radius)

Total population:	879	Block count:	28
Housing Units:	358	Area within radius:	0.8 sq. mi.

White alone:	649
Black or African American alone:	168
American Indian and Alaska Native alone:	5
Asian alone:	10
Native Hawaiian and Other Pacific Islander alone:	1
Some other race alone:	22
Two or more races:	24
Hispanic or Latino:	39

LandView Census 2000 Population Estimator

Instructions for using this estimator | Home

Enter Location and Radius

	Latitude	Longitude	Radius (miles)
Decimal degrees	38.630139	75.609546	1
— or —			
deg-min-sec	38 37 48	75 36 34	Calculate Population
hemisphere	◉ North ○ South	◉ West ○ East	

Clear all fields | Refresh Lat/Long from MARPLOT | Print this screen | Show this radius on map

Results (based on Census Block points located within or touching the circle defined by the radius)

Total population:	3,020	Block count:	112
Housing Units:	1,218	Area within radius:	3.1 sq. mi.

White alone:	2331
Black or African American alone:	519
American Indian and Alaska Native alone:	15
Asian alone:	41
Native Hawaiian and Other Pacific Islander alone:	2
Some other race alone:	49
Two or more races:	63
Hispanic or Latino:	180

LandView Census 2000 Population Estimator

Instructions for using this estimator | Home

Enter Location and Radius

	Latitude	Longitude	Radius (miles)
Decimal degrees	38.630139	75.609546	2
— or —			
deg-min-sec	38 37 48	75 36 34	Calculate Population
hemisphere	◉ North ○ South	◉ West ○ East	

Clear all fields | Refresh Lat/Long from MARPLOT | Print this screen | Show this radius on map

Results (based on Census Blockpoints located within or touching the circle defined by the radius)

Total population:	11,322	Block count:	298
Housing Units:	4,686	Area within radius:	12.6 sq. mi.

White alone:	7645
Black or African American alone:	3013
American Indian and Alaska Native alone:	36
Asian alone:	150
Native Hawaiian and Other Pacific Islander alone:	15
Some other race alone:	217
Two or more races:	246
Hispanic or Latino:	538

LandView Census 2000 Population Estimator

Instructions for using this estimator | Home

Enter Location and Radius

	Latitude	Longitude	Radius (miles)
Decimal degrees	38.630139	75.609546	3
— or —			
deg-min-sec	38 37 48	75 36 34	Calculate Population
hemisphere	◉ North ○ South	◉ West ○ East	

Clear all fields | Refresh Lat/Long from MARPLOT | Print this screen | Show this radius on map

Results (based on Census Blockpoints located within or touching the circle defined by the radius)

Total population:	14,914	Block count:	390
Housing Units:	6,140	Area within radius:	28.3 sq. mi.

White alone:	10594
Black or African American alone:	3487
American Indian and Alaska Native alone:	54
Asian alone:	196
Native Hawaiian and Other Pacific Islander alone:	18
Some other race alone:	257
Two or more races:	308
Hispanic or Latino:	630

LandView Census 2000 Population Estimator

Instructions for using this estimator | Home

Enter Location and Radius

	Latitude	Longitude	Radius (miles)
Decimal degrees	38.630139	75.609546	4
or			
deg-min-sec	38 37 48	75 36 34	Calculate Population
hemisphere	◉ North ○ South	◉ West ○ East	

Clear all fields | Refresh Lat/Long from MARPLOT | Print this screen | Show this radius on map

Results (based on Census Block points located within or touching the circle defined by the radius)

Total population:	19,380	Block count:	486
Housing Units:	8,055	Area within radius:	50.3 sq. mi.

White alone:	14310
Black or African American alone:	4092
American Indian and Alaska Native alone:	66
Asian alone:	226
Native Hawaiian and Other Pacific Islander alone:	19
Some other race alone:	301
Two or more races:	366
Hispanic or Latino:	735