

**HISTORY OF OPERATIONS
AT
BUFFALO TERMINAL**

**Buffalo Terminal
Buffalo, New York**

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1.0 INTRODUCTION

This History of Operations for the Buffalo Terminal was prepared to provide background information regarding activities that have occurred at the Exxon Mobil Corporation (Exxon Mobil) Buffalo Terminal (Site), located at 625 Elk Street, Buffalo, New York (Figure 1). This report provides a brief history of the Site in order to identify areas of potential environmental impact, which will be used in scoping future investigations at the Site.

The Site has been subdivided into nine geographic areas, which are shown on Figure 2 and Plates 1 through 6. The geographic areas were designated according to the primary operations that occurred in that portion of the Site, and are the following:

- Northeast Process and Storage Area (NPSA);
- Northern Tank Yard Area (NTYA);
- Former Refinery Area (FRA);
- Central Rail and Process Area (CRPA);
- Southern Tank Yard Area (STYA);
- Eastern Tank Yard Area (Former Disposal Area [ETYA]);
- Babcock Street Properties Area (BSPA);
- Administrative Offices and Operations Area (AOOA); and
- Elk Street Properties Area (ESPA).

The following sections provide a detailed description of each of these areas including the operations performed and the structures located within each area. Section 2.0 discusses the sources of information used to prepare this document. Section 3.0 provides a comprehensive history of the Site as a whole from 1880 through present day and details milestones that have occurred at the Site and provides a summary of properties located adjacent to the site from 1889 through 1986. Section 4.0 provides a detailed description of each of the geographic areas. This section has been divided into nine subsections, one for each geographic area. Within each subsection, a description of the location of the geographic area within the Site is provided, as well as a summary of operations performed in that geographic area, former and current

structures, waste handling areas (WHAs) located within that geographic area, and product spills or releases that have occurred within the geographic area. Section 5.0 describes site drainage and water management facilities. Section 6.0 describes the environmental history of the site, including environmental remediation activities and previous environmental investigations.

2.0 SOURCES OF INFORMATION

The historical information used to prepare this document was derived from various sources. References used to prepare the sections of this report consisted of Exxon Mobil documents, historical engineering drawings, aerial photographs, Sanborn Fire Insurance Maps, newspaper articles, historical publications, and information provided verbally by former and/or current Exxon Mobil employees. The historical drawings and photos listed below were used to prepare a set of six plates (Plate 1 through Plate 6) that present the structures, tanks and layout of the Site in a particular year or range of years. The six plates were required to clearly show changes the Site underwent over the course of its history. A plate was prepared for 1917 (Plate 1), 1924 (Plate 2), 1939 (Plate 3), 1951 (Plate 4), 1977 through 1987 (Plate 5) and existing conditions (Plate 6). The drawings used as the primary references to prepare the six plates and compile the historical information in this report are:

- “Atlas of the City of Buffalo New York” dated 1884 (Appendix A)
- “Atlas City of Buffalo New York” dated 1894 (Appendix A)
- “The New Century Atlas of Greater Buffalo” dated 1915 (Appendix A)
- “Standard Oil of New York Atlas Works Map” dated 1917 (1917 map, Plate 1)
- “Map of Property Standard Oil of New York Atlas Works Map” dated 1924 (1924 map, Plate 2)
- “Map of Yard SOCONY Vacuum Oil Co. Inc. Atlas Works” dated 1939 (1939 map, Plate 3)
- “Map of Atlas Works Properties” (dated 1951, 1951 Real Estate Map) (Appendix B)
- “Map of Yard, Buffalo Refinery” dated 1951 (1951 map, Plate 4)
- “Below-Ground Piping and Storm Sewer Location Map” dated 1955
- “Map of Yard, Buffalo Refinery” dated 1977 (1977 map, Plate 5)
- “Photogrammetric Base Mapping for Mobil Refinery, Elk Street, Buffalo, New York,” dated 1987 (1987 Map, Plate 6 and basemap for all plates)
- “Buffalo Terminal Plot Plan” dated 1989 (1989 map)
- “Boundary Survey for Mobil Oil Corporation” dated 1995 (1995 map)
- Sanborn Fire Insurance Maps (1889, 1917, 1940, 1950, and 1986)

- Aerial photographs (1927, 1938, 1951, 1958, 1966, 1972, 1974, 1976, 1978, 1981, and 1990)

Additional maps and drawings of the site were reviewed during the preparation of this document and are listed in Appendix G. The structures shown on the six plates are labeled with a number and name corresponding to the first known usage of the structure described in Section 4. For structures that had multiple uses throughout the years, Section 4 presents a summary of the various uses and names associated with a particular structure. The existing conditions shown on Plate 6 were compiled from information from the 1987 and 1995 maps, with additional information verified through field visits. The 1987 photogrammetric base map (1987 map) served as the surveyed base map for Plates 1 through 6. Many structures and tanks that existed on the 1987 map were present as far back as 1924. The locations of these structures and tanks for all years that they were present were based on the 1987 map. Additional structures were added from the other map sources with locations referenced to the 1987 structures.

An aerial photograph analysis was performed to aid in determining changes in the physical layout of the Site and is summarized in Appendix C. The results of this analysis were incorporated into Section 4 where appropriate. Additionally, Sanborn Fire Insurance Maps and aerial photographs were utilized to note changes to the properties adjacent to the Site that occurred through the years. Information from the Sanborn maps was also incorporated into Section 4, where appropriate. The Sanborn maps and aerial photographs are provided in Appendices D and E, respectively. The adjacent property history is provided in Section 3.2.

Information concerning the releases of product was derived from Mobil documents and information received from the NYSDEC Department of Spills. The Erie County Department of Health, the New York State Department of Health and the City of Buffalo Fire Department were also contacted for information regarding spills (Roux Associates, 2000a, b, and c). These agencies verbally indicated that they did not have any information beyond that provided by NYSDEC. Documents obtained from the NYSDEC and Mobil regarding significant product spills and releases are provided in Appendix F. A comprehensive list of the references used to develop the report is provided in Appendix G.

3.0 COMPREHENSIVE SITE HISTORY

The following sections provide a general history of the Site and adjacent properties.

3.1 General Site History

The petroleum refining operations at the Site began during 1880. During the early period of refining, several petroleum companies occupied portions of the Site including Buffalo Pipeline Company, Solar Oil Company, Tidewater Pipe Line Company, Buffalo Lubricating Oil Company, and Atlas Refining Company (Wayland Hill, 1923). The information regarding historical ownership of portions of the Site was obtained from the 1951 Real Estate Map presented in Appendix B.

The Solar Oil Company was developed in 1880 in the western portion of the Site (Appendix B). In 1883, Solar Oil Works was passed to Tidewater Pipe Line Company, which in turn passed to the Atlas Refining Company. The property occupied by Solar Oil Works was sold on June 10, 1885 to the Atlas Refining Company (Wayland Hill, 1923).

In 1881, the Buffalo Lubricating Oil Company was developed by Charles B. Matthews and located adjacent to Solar Oil Works in the western portion of the Site (Appendix B). The Buffalo Lubricating Oil Company continued operations until 1887 when the company was transferred to other refineries in Cleveland, Oil City and Corry. The Buffalo Lubricating Oil Company continued to operate under the new ownership. In 1888, Buffalo Lubricating Oil Company ceased operations and sold their property to Atlas Refining Company (Wayland Hill, 1923).

The Atlas Refining Company originated in 1880 by the Kalbfleisch Sons of the Buffalo Chemical Works. In 1881, the Atlas Refining Company became an interest of the Standard Oil Company. In 1892, the property occupied by the Atlas Refining Company was purchased by the Standard Oil Company and the name Atlas Refining Company was changed to the Standard Oil Company-Atlas Works. In 1911, property was transferred to the ownership of the Standard Oil Company of New York, or SOCONY, one of thirty-four companies formed as a result of the breakup of the Standard Oil Company.

Formerly, the Buffalo River transected the southern portion of the Site. Based on historical atlas drawings from 1884 through 1894, a tributary of the Buffalo River transected the Site from the southwest corner to the northeast corner (Appendix A). By 1915, this tributary no longer existed. Between 1914 and 1917, the river was rerouted to the south to form a relatively straight channel (Plate 1). The rerouting of the Buffalo River was intended to facilitate the navigation of ships and in turn, benefit industries along the river. The rerouted river line became the Site's southern boundary. To the east of the D.L.&W.R.R tracks, the Buffalo River was filled in, relocated farther to the east, and rerouted to run generally in an west-southwesterly direction to the railroad bridge where the straightened navigable channel began. The parcel between the east side of the D.L. & W.R.R rail tracks and the new river channel is included in the ETYA.

Originally, until around 1917, the Site was utilized for the refining of crude petroleum for illuminating oil. The heavy residuum obtained from the distillation process was converted into paraffin oil and wax, which was refined on site. In the paraffin and wax refinery area, located within the NPSA (Plate 1), the oil was extracted from the wax and refined into lubricating oil. The wax was utilized on site for the manufacture of products such as candles. Additionally, the Site had extensive railcar shops where Union Tank Line railcars were manufactured and repaired. The car shops were capable of manufacturing six rail tank cars each day. The Site also had a cooper shop that manufactured approximately 1,600 storage barrels each day. The Site contained an acid treatment department in which sulfuric acid used in the refinery processes was treated and recycled (Buffalo Illustrated, 1890). Additional departments included naphtha works and a compounding plant (The Buffalo Courier, 1901).

Between 1917 and 1924, the Site underwent a transformation in operations and structural layout. During this period, the emergence of motor vehicles began, thus leading to additional uses for refined petroleum. The Site terminated its tank car construction and repair operations and barrel manufacturing. The majority of the Site was cleared and reconstructed with new storage tanks and refining structures (Plate 2). The original structures remaining after the transformation were the paraffin and wax refining department and a few warehouses and boiler rooms. In 1931, SOCONY merged with Vacuum Oil Company, a lubricating oil company. The name SOCONY was subsequently changed to SOCONY-Vacuum Oil Company.

Between 1939 (Plate 3) and 1951 (Plate 4), the Site continued to evolve through the addition of modernized refining units including the Houdry Unit, Thermoform Catalytic Cracking Unit (TCC Unit), and the Deflorez Cracking Unit. Between 1951 and 1955, the Site continued to be modernized and underwent another transformation including the addition of an Alkylation Unit, a Sovaformer Unit, a Treating, Blending, and Shipping Area, and Asphalt Refining and Distribution Units (Plate 5). These processes and structures remained at the Site until the refinery structures were demolished between 1988 and 1991, as discussed below. The primary products manufactured at the Site included gasoline, kerosene, home heating fuels, industrial fuels, diesel fuel, and asphalt (Mobil, 1987).

In 1951, the ETYA, the parcel of land between the Erie Lackawanna Railroad and the Buffalo River, was purchased from the City of Buffalo, who had utilized the property from 1921 through 1951 for the disposal of municipal waste (Section 4.6). This parcel originated from the filling of the original Buffalo River during the rerouting of the river, as discussed above. In 1953, the ETYA was developed with two 70,000-barrel storage tanks, four propane tanks, and a propane loading rack (Mobil, 1987).

In September 1959, the paraffin and wax refining operations were terminated. Associated structures and 50 storage tanks with capacities ranging from 2,000 and 10,000 barrels were removed (Buffalo News, 1959). In 1963, the terminal began receiving shipments of crude oil through a Canadian pipeline in addition to the crude oil delivered through the Buckeye Pipeline from Texas (Buffalo Courier Express, 1963) and occasionally by barge via the Buffalo River. Also occurring at this time, the SOCONY-Vacuum Oil Company began using the name Mobil Oil Corporation.

In May 1981, the Site terminated all refinery operations (Buffalo News, 1988). The Site continued only as a distribution terminal, receiving product via a pipeline and barge. The terminal distributed No. 1 Fuel Oil, No. 2 Fuel Oil (diesel), leaded gasoline, two types of unleaded gasoline, and Jet A commercial fuel (Mobil, 1987). Leaded gasoline storage was discontinued in 1989.

Demolition of the refinery occurred from 1988 through 1991. The demolition included the removal of buildings, structures, above ground tanks and piping. Upon completion of the demolition activities, the thirteen storage tanks remaining in the STYA and Tanks 175 and 176 in the ETYA were realigned. Subsequently, Tanks 96 and 198 were removed. A listing of the materials disposed during the demolition from 1988 through 1989 is provided in Appendix H. In 1991, the current tank truck loading rack (Section 4, Item 112) was constructed to replace the tank truck loading rack in the BSPA (Section 4, Item 141).

Currently, the Site operates as a distribution terminal within the limits of the property boundary shown on Plate 6. Throughout the Site's history, the areal extent of property owned by Mobil changed as portions of property were acquired or sold for various reasons. For example, the entire BSPA was sold to One Babcock Street, Inc. in 1994. In 1976, several properties to the north of Elk Street were purchased as a result of a product release that occurred in March 1976, as described in Section 4.9. The northwestern portion of the FRA is currently leased to Custom Topsoil for the storage and distribution of construction materials. The former Main Office (Section 4, Item 21) on the northern Site boundary located in the NPSA has been leased to the City of Buffalo Police Department since 1991.

The Buffalo River is maintained as a federal navigation channel along the length of the Site's bulkhead to a location approximately 300 feet west of the former Erie Lackawanna Railroad Bridge. This federally maintained channel begins approximately 30 feet south of Mobil's bulkhead and extends to within approximately 30 feet of the bulkhead on the southern bank of the river. Mobil maintains the 30-ft portion of the Buffalo River between the bulkhead and the federal navigation channel for barge access. The federal navigation channel has been dredged by the United States Army Corps of Engineers (USACOE) every 2 to 5 years to remove sediment and maintain an adequate water depth for navigation. During the 1992 and 1997 dredging events, Mobil participated by dredging the 30-ft portion of the river at the bulkhead to maintain barge access to the Site (Mobil, 1999).

3.2 Adjacent Property History

A review of Sanborn Fire Insurance Maps was completed in order to describe the historical uses of properties surrounding the Site outside of the boundaries of the nine geographical areas described in Section 1. The Sanborn Map coverage for the Site includes the years 1889, 1900, 1917, 1940, 1950, and 1986. The following sections provide a summary of the surrounding property usage as indicated on the Sanborn Maps. A figure summarizing the information presented in the Sanborn Maps is also included in this appendix for each year. The aerial photographs presented in Appendix E also provide information on the history of adjacent properties. The results of the aerial photograph review are presented in Appendix C.

1889

To the west of the Site was Genesee Oil Works, which occupied a portion of the BSPA (Section 4.7) and additional property to the west. Genesee Oil Works extended from Babcock Street to Walter Street and was bounded on the south by Prenatt Street. Sanborn Map coverage for the property to the west of the Site, south of Prenatt Street was not available. The northern boundary of the Genesee Oil Works property was approximately mid-way between Prenatt Street and Babcock Street. To the northwest between the BSPA border and Orlando Street and further west to Maurice Street were residential structures and vacant land.

1900

Located to the west of the Site in the former location of the Genesee Oil Works was G. Elias & Bros. Lumber Yard. The property was used primarily for the storage of lumber. Beyond G. Elias & Bros. Lumber Yard to the west, on the corner of Maurice Street and Prenatt Street, was W.H. Foot & Company Oil Works. This property housed an office, an engine room, a furnace, oil storage sheds, and five outdoor, aboveground oil storage tanks of varying capacities. To the north of G. Elias & Bros. Lumber Yard were residential structures. Located to the north of the Site were residential and commercial structures. The property to the east of the NSPA between the area boundary and the D.L. & W. R. R. rail tracks, from Elk Street to Prenatt Street, was owned by Sidney McDougal. Within this property was Buffalo Oil and Paint, McDougal Varnish Company, McDougal White Lead Company, and Spencer Kellogg & Company Varnish Oils. The property housed several linseed oil storage tanks with varying capacities. Sanborn Map coverage for the property which is currently the ETYA was not available. Located to the

south was the Buffalo River. Sanborn Map coverage was not available for south of the Site or the Buffalo River. Plate 1 represents the configuration of the Buffalo River as it existed at this time.

1917

The surrounding property usage in 1917 remained primarily the same as the property usage in 1900. Located to the west on a portion of the BPSA and further west to Maurice Street was G. Elias & Bros. Lumber Yard. The remainder of the properties to the west of the BSPA were residential.

The properties on the north side of Elk Street, between Babcock Street and Bradford Street, were occupied by residential and commercial structures (i.e., storefront structures, repair shops). The properties on the north side of Elk Street, between Bradford Street and Duncan Street, were primarily vacant and undeveloped.

Located to the east of the NPSA from Elk Street to Prenatt Street and between the Site boundary and the D.L. & W. R. R. rail tracks were McDougal Varnish Company and McDougal Paint Company. At this time, the property housed approximately six linseed oil storage tanks of varying capacities. Also located east of the Site and south of the Prenatt Street rail tracks was Spencer Kellogg & Sons, Inc. Linseed Oil Refining and Foundry Oil Manufacturing. This property was an extension of the property occupied by Spencer Kellogg & Sons in 1900. Four bulk storage linseed oil tanks were located on the Spencer Kellogg & Sons property.

To the south of the Site was the Buffalo River. The Sanborn Map coverage indicates that the rerouting and straightening of the Buffalo River was partially completed and represents a segment of the river yet to be rerouted.

1940

The property to the west of the Site, south of Prenatt Street, is represented on the Sanborn Maps as undeveloped. Documentation available from real estate records indicates that this property was purchased by Allied Chemical Corporation between 1940 and 1950. Tidewater Oil

Company occupied the parcel to the south of Prenatt Street and west of the Allied Chemical Corporation Parcel at this time. The property north of Prenatt Street, adjacent to the west side of the Site was no longer occupied by G. Elias & Son Lumber Yard and was represented as vacant.

The properties to the north remained primarily residential and commercial structures. South Buffalo Auto Wrecking Company occupied the property located to the north of Elk Street, between Duncan Street and Kellogg Street. Adjacent to the east of the South Buffalo Auto Wrecking Company was Angert Auto Parts Company's automobile junkyard.

The property located to the east of the NPSA, between the NPSA boundary and the D.L. & W. R. R. tracks, were R.H. Thompson Paper Company, Nukem Products Corporation (manufacturers of chemical cement), and Buffalo Extract & Supply Company (manufacturers of leather dressings). The property on the east side of the D.L. & W. R. R. tracks and south of Elk Street was occupied by Angert Auto Parts Company's automobile junk yard. The parcel located south of the Angert Auto Parts Company, between the D.L. & W. R. R. rail tracks and the Buffalo River (ETYA) was primarily undeveloped land, with the exception of a Buffalo Sewer Authority Pumping Station. The Sanborn Maps did not indicate any activity at the current ETYA or ownership by the City of Buffalo.

To the south of the Site was the Buffalo River. Sanborn Map coverage for the property on the south side of the Buffalo River was not available.

1950

Some residential structures remained along Elk Street on the northern border of the BSPA. Residential structures and vacant land also existed to the west of Orlando Street. Sanborn Map coverage for the property south of Prenatt Street and west of Babcock Street was not available. However, based upon other Exxon Mobil documentation regarding real estate transactions, Allied Chemical Corporation owned the property to the west of the BSPA boundary at this time.

Located on the corner of Elk Street and Keim Street was Hulbert Forwarding Company, whose property was used for truck storage. On the corner of Dole Street and Elk Street was a Niagara

Mohawk Power Corporation Substation. The other properties located along the north side of Elk Street remained residential and commercial structures. South Buffalo Auto Wrecking Company and Angert Auto Parts Company, Inc. automobile junkyards were still present in 1950.

R.H. Thompson Paper Company was still located to the east of the NPSA boundary in 1950. The Buffalo Extract and Supply Company was moved to the corner of Prenatt Street and the eastern boundary of the Site. The former Buffalo Extract and Supply Company structure was replaced by Kleen-Quik Chemical Corporation, Liquid Chemical Blending. The Angert Auto Parts Company's automobile junkyard and the Buffalo Sewer Authority Pumping Station were still present. The property which is currently the ETYA is represented as undeveloped with no indication of ownership by the City of Buffalo.

To the south of the Site was the Buffalo River. Sanborn Map coverage of the properties south of the Buffalo River was not available.

1986

The surrounding property usage in 1986 remained similar to the property usage in 1950. The property to the west and north of the BSPA remained partially residential. Sanborn Map coverage for the property south of Prenatt Street and west of Babcock Street was not available, however, available real estate documentation indicates that Allied Chemical Corporation owned this property.

The properties to the north of Elk Street were primarily commercial. Angert Auto Parts Company was replaced by the expansion of the South Buffalo Auto Wrecking Company's automobile junkyard.

The property formerly occupied by Angert Auto Parts Company on the south side of Elk Street and to the east of the NPSA boundary was developed with additional structures associated with the automobile junkyard. The property formerly occupied by R.H. Thompson Paper Company was replaced by structures whose function could not be determined from the Sanborn Map. The

northeast corner of the NPSA, formerly occupied by SOCONY storage tanks, was occupied by Krantz Asphalt Company.

The south of the Site was bounded by the Buffalo River. Sanborn Map coverage was not available for the properties south of the Buffalo River.

4.0 GEOGRAPHIC AREAS

The majority of the Site was purchased by Standard Oil Company of New York (SOCONY), Mobil's predecessor, in 1892. Previously, multiple owners including Atlas Refining Company, National Transit Co., and other private entities owned portions of the Site. In order to facilitate better management and reporting of assessments and remedial activities, the Site has been divided into nine geographic areas (Figure 2). These areas were designated according to the primary operations that occurred in that portion of the Site.

The nine geographic areas total approximately 91 acres. Historically, the major site operations occurred south of Elk Street in an area of approximately 89 acres. The area within the current Exxon Mobil property boundary is 78.3 acres. The following sections summarize the historical development of the nine geographic areas of the Site. Details concerning changes in the physical layout of the Site, property ownership, and changes of operations over time are presented according to the geographic area in which they occurred. Within each of the following sections, each geographic area's historical and current structures have been listed and are itemized chronologically according to construction date. Additionally, each structure has been numbered for reference purposes and appears on Plates 1 through 6. Each plate represents a different time period in which changes occurred at the site and represents the structures as they appeared at that time. Waste Handling Areas (WHAs) and spills or product releases that have occurred in the geographic areas are discussed in the respective geographic area section.

4.1 Northeast Process and Storage Area

The NPSA encompasses approximately 10.7 acres in the northeast section of the Site (Plate 1). The northwest portion of the NPSA, along the northern border of the Site, was purchased by Atlas Refining Company from Peter Schermerhorn on December 22, 1882. Atlas Refining Company purchased the eastern portion of the NPSA from National Transit Company on July 31, 1890. Two years later on June 16, 1892, SOCONY purchased both of these parcels from the Atlas Refining Company. The northeast portion of the NPSA, also along the northern border of the Site, was purchased by SOCONY from Mr. Edward Tanner in 1910.

4.1.1 Former and Current Structures

Based on the 1917 map, the NPSA originally consisted primarily of structures and storage tanks associated with paraffin and wax refining/treatment and railcar construction and repair shops (Plate 1). The construction and repair of railcars terminated between 1917 and 1924. Through 1939, additional paraffin and wax refining structures and tanks replaced the railcar construction and repair shops (Plate 3). By 1951, roads were developed in the NPSA to provide access to the various portions of the area. A macadam roadway was constructed parallel to Elk Street, along the southern boundary of the NPSA (Plate 4). This roadway enabled better access to the paraffin and wax refining buildings in the northwest portion of the NPSA. A concrete roadway was constructed between the Wax Refinery (Item 6) and the Iroquois Gas Company Buildings (Item 7; Plate 4). This roadway ran in a north to south direction and intersected with the macadam roadway. In 1959, many of the paraffin and wax refining structures and tanks were removed and replaced with larger storage tanks and the Main Office building (Item 21; Plate 5). From the 1960s through the 1980s, the northeast portion of the NPSA was used for the storage of debris. In 1989, this area was cleared of all debris piles and the Biotreatment Cell was constructed (Item 22; Plate 6). In 1990, a gated entrance was installed on the above-mentioned concrete road, adjacent to the Main Office, providing additional security to the Site (Plate 6). Currently, the Police Community Services building (Former Main Office), the Biotreatment Cell, and the gated entrance exist in the NPSA.

Table 1 provides information on the storage tanks located within this area including their construction dates, capacities, demolition dates, and types of product stored. The following structures were located in the NPSA and are summarized in chronological order according to construction date.

1. **Paraffin Boiler House.** This structure, first appearing on the 1917 map (Plate 1), was located along the northern border of the Site, adjacent to Elk Street. The Paraffin Boiler House was approximately 100 ft by 70 ft. Attached to the Paraffin Boiler House were a Fan House (approximately 35 ft by 40 ft) and a Wash Room (approximately 40 ft by 45 ft). The Fan House and Wash Room were demolished between 1917 and 1924. During the period of 1924 through 1939, the use of the Paraffin Boiler House was changed to serve as a garage, locker room, and lunchroom for personnel and was later demolished in 1989. According to the 1924 map (Plate 2), adjacent to the east of the Paraffin Boiler House was Transformer No. 98. This transformer was removed between 1955 and 1977.

2. **Paraffin Office.** Located adjacent to the east of the Paraffin Boiler House, the Paraffin Office was approximately 17 ft by 32 ft. This structure first appeared on the 1917 map (Plate 1) and was used to house office support to the paraffin and wax refinery. The Paraffin Office was demolished between 1917 and 1924.
3. **Engine House and Press Rooms.** The primary paraffin refining processes were conducted in the Engine House and Press Rooms structure. The structure was constructed prior to 1917 and was located adjacent to the east of the Paraffin Office. The Engine House measured approximately 80 ft by 65 ft. Attached to the Engine House were a Pump House (approximately 60 ft by 30 ft), a Chilling Room (approximately 22 ft by 36 ft) and five Press Rooms (each 62 ft by 15 ft) to support the paraffin refining processes. A Conveyor Room, approximately 78-ft by 15-ft in size, adjoined the Press Rooms on the eastern side of the building. The Engine House and Press Rooms structure was demolished between 1917 and 1924.
4. **Sweater Structures.** The Sweater structures, constructed prior to 1917, consisted of four adjoining structures along the northern boundary of the Site (each approximately 20 ft by 60 ft) and one single Sweater structure adjacent to the south (approximately 22-ft by 59-ft; Plate 1). Within the four adjoining Sweater structures was a pump house measuring approximately 11 ft by 60 ft. The Sweater structures were used for steam heating the wax to extract the oil from the wax. The wax was then used for the manufacture of products including candles. Three of the four adjoining Sweater structures were demolished between 1917 and 1924. The remaining Sweater structure and the single Sweater to the south were demolished between 1939 and 1955. Adjacent to the east were ten wax storage tanks with varying capacities. These tanks were constructed prior to 1917 and were dismantled between 1939 and 1951.
5. **Pan House.** The Pan House (also named Building 30) was used to house pans in which the wax for the paraffin and wax refining process was stored (Plate 1). The structure was constructed prior to 1917 and was approximately 42 ft by 32 ft. The Pan House was demolished some time between the years 1951 and 1955. According to the 1939 map (Plate 3), attached to the Pan House was a Switch House. The Switch House measured approximately 8 ft by 15 ft.
6. **Wax House.** The Wax House structure (also named Building 37) consisted of three adjoining structures, each 25-ft by 60-ft in size and was located adjacent to the east of the Pan House (Plate 1). The Wax House was an integral structure in the paraffin and wax refining processes. A 10-ft by 76-ft platform ran along the eastern side of the Wax House, used for loading and unloading of wax products from the adjacent railroad track. The Wax House was constructed prior to 1917 and demolished in between the years 1951 and 1955.
7. **Iroquois Gas Company Buildings.** The Iroquois Gas Company maintained 6 buildings in the NPSA (Plate 1). These buildings were constructed prior to 1917 and the exact uses are unknown. Two of the six Iroquois Gas Company structures were demolished between 1917 and 1924. Some time between 1917 and 1924, NY Transit began occupying one of the four remaining buildings (Plate 2). The three Iroquois Gas

Company structures were demolished between 1924 and 1939. The NY Transit building was demolished between 1951 and 1955.

8. **Hose House No. 87.** Hose House No. 87 was located adjacent to the south of the Iroquois Gas Company Buildings (Plate 1). The hose house was constructed prior to 1917. The structure was 18 ft by 10 ft in size and was demolished between 1951 and 1955.
9. **Car Shop.** The Car Shop was used to construct and house railcars (Plate 1). The Car Shop was constructed prior to 1917 and was approximately 260 ft by 101 ft in size. Railroad tracks that ran in a general east to west direction along Prenatt Street branched to the northeast into the NPSA. The tracks branched again and one branch ran towards the wax and paraffin refining structures while the other ran towards the Car Shop and Car Repair Shop (Item 10), where the tracks terminated (Plate 1). The 1939 map (Plate 3) indicates that the Car Shop was modified into a wax and paraffin refining structure, including two rooms of presses. The size and construction of the structure remained the same. The wax and refining structure was later demolished between 1951 and 1955.
10. **Car Repair Shop.** The Car Repair Shop was constructed prior to 1917 and was 30 ft by 260 ft in size (Plate 1). This structure served as a repair shop for the railcars used on the Site. The Car Repair Shop and the tracks leading to the shop were removed between 1917 and 1924 and replaced with additional paraffin refining and treatment structures and tanks.
11. **Scrap Shed.** The Scrap Shed was constructed prior to 1917 and was located to the south of the Car Repair Shop (Plate 1). The shed was approximately 130 ft by 15 ft in size. The scrap stored in the Scrap Shed was associated with the surrounding railcar construction structures. The Scrap Shed was removed between 1917 and 1924.
12. **Pump House and Sweater Structure.** According to the 1924 map (Plate 2), additional pump house and sweater structures were constructed between 1917 and 1924 south of the Wax House (Item 6). The Pump House (also named Building No. 14) was an 18-ft by 44-ft brick structure. The Sweater Structure (also named Building No. 13) was also constructed of brick and measured approximately 23 ft by 44 ft in size. These two structures were used in association with the wax refining processes. The Pump House and Sweater Structure were demolished between the years 1951 and 1955.
13. **Pump House No. 26.** Pump House No. 26 was constructed between 1917 and 1924 in the former location of Car Repair Shop (Plate 2). The pump house was a brick structure and 70 ft by 30 ft in size. Pump House No. 26 was demolished between the years 1951 and 1955.
14. **In-ground Oil/Water Separator (Yard Trap).** An In-ground oil/water separator, approximately 10-ft by 30-ft, was located adjacent to Pump House No. 26 and was constructed between 1917 and 1924 in the former location of the Car Repair Shop (Plate 2). The trap was used for separation of petroleum from aqueous waste streams

and storm water. The exact origin of the waste streams collected in the trap could not be determined from the available information. The trap does not appear on the 1955 map.

15. **Engine House No. 40.** Engine House No. 40 was constructed between 1917 and 1924 (Plate 2) and was located adjacent to the Machine Shop in the AOOA (refer to Section 4.8). The Engine House, 14 ft by 20 ft in size, was demolished between the years 1951 and 1955.
16. **Pressed Distillate Unit.** Consisting of five structures, the Pressed Distillate Unit (P.D. Unit) first appears on the 1924 map (Plate 2). These structures were located along the eastern border of the Site. The P.D. Unit received the wax oil extracted from the Sweater units and distilled the oil, which was then sent to the lube plant. The P.D. Unit included a receiving house, condensers and a cooler. Also associated with the P.D. Unit was Stack No. 8, a brick stack measuring 5 ft in diameter and 100 ft in height. The P.D. Unit structures were demolished between the years 1958 and 1966 (aerial photographs) during which time, the wax refining operations were ceased.
17. **Sweater Structure No. 7.** This Sweater structure was constructed between the years 1924 and 1939. This structure, approximately 30 ft by 45 ft in size, was constructed in the location of the former Iroquois Gas Company buildings and adjacent to the former Car Shop (Plate 3). Similar to the Sweater structures discussed in Item 4, this structure was associated with the paraffin and wax refining and treatment process to extract the oil from the wax product. The Sweater structure was demolished between the years 1951 and 1955.
18. **Building No. 38.** This structure was constructed adjacent to Sweater Structure No. 7 between the years 1924 and 1939 (Plate 3). The use of this structure could not be determined from the available information. This structure was removed between the years 1951 and 1955.
19. **Locomotive House No. 19.** The Locomotive House, approximately 8-ft by 15-ft, was located at the end of the tracks that ran toward the former Car Shop and Car Repair Shop (Items 9 and 10). The structure first appears on the 1939 map (Plate 3), indicating that it was constructed between the years 1924 and 1939. Before the construction of the Locomotive House, the rail tracks continued towards the east and beyond the Site boundary. Therefore, at the time of construction, the tracks were removed and terminated at the location of the Locomotive House. The exact usage of the Locomotive House could not be determined from the available information. The Locomotive House was demolished between the years 1958 and 1966 (aerial photographs).
20. **Rail Loading Racks.** According to the 1939 map (Plate 3), a 93-ft by 5-ft loading rack was constructed in the former location of the Car Repair Shop (Item 10), adjacent to the rail track that ran towards the northeast and terminated at the Locomotive House (Item 19). Two additional loading racks were constructed south of the former Car Shop (Item 9) between 1939 and 1951. These two loading racks measured approximately 28 ft by 8 ft and 15 ft by 8 ft. The specific function of these loading racks could not be determined from the available information.

- 21. Main Office.** The Main Office was constructed between the years 1951 and 1955 (Plate 5). This office structure served as the main office structure for administrative operations at the terminal. The Main Office is a one-story building encompassing approximately 9,000 sf. The structure that currently exists at the Site has been leased to the City of Buffalo Police Community Services since 1991.
- 22. Biotreatment Cell.** The Biotreatment Cell was constructed in 1989, is trapezoidal in shape, and measures approximately 570 feet from north to south and from east to west measures between 140 and 390 feet (Plate 6). The treatment cell has been used to biologically treat impacted soil from the terminal and other off-site Mobil facilities. The Biotreatment Cell is lined with an impermeable plastic liner, is surrounded by a berm, and is capable of treating 6,000 cubic yards of soil. The Biotreatment Cell currently exists at the Site and contains approximately 4,800 cubic yards of soil awaiting treatment.
- 23. Gated Entrance.** The gated entrance was constructed adjacent to the west of the Main Office (Item 21), at the northern border of the Site. Associated with the construction of the new Truck Loading Rack in the CRPA (see Section 4.4, Item 112), the gated entrance permitted entrance to authorized vehicles, thus adding additional security to the Site.

4.1.2 Waste Handling Areas

Two WHAs were identified in the company records as being located in the NPSA (Mobil, 1987). These two units include a steel storage tank used to store leaded tank bottom material and a debris disposal/storage area. Each of the units and their functions are described below.

Steel Storage Tank

The WHA was a 450-gallon steel storage tank located in the southern portion of the NPSA. The storage tank, designated WHA-1 (Plate 5), was three feet in diameter and 8.5 feet in length. The tank was utilized from 1970 through 1981 for the storage of leaded tank bottoms, at an estimated rate of 10 pounds per year. The residence time of the hazardous waste was unknown (Mobil, 1987).

Demolition Debris Storage Area

This demolition debris storage area was located in the northeast portion of the Site, in the current location of the Biotreatment Cell (Item 22). This area, designated WHA-9 (Plate 5) was used for the disposal of on-site construction and demolition debris including old pumps, wood, paper, scrap metal, insulation, transformer carcasses that may have contained PCBs during operation,

and empty process tanks. A contractor retained by Mobil periodically removed the debris. The area was cleared and contaminated soil was removed prior to the construction of the Biotreatment Cell (Mobil, 1987).

4.1.3 Spills/Releases

No spills or releases were documented in this area.

4.2 Northern Tank Yard Area

The Atlas Refining Company had purchased the NTYA from Peter Schermerhorn on December 22, 1882. The NTYA was acquired by the SOCONY from the Atlas Refining Company on June 16, 1892. The NTYA encompasses approximately 9.2 acres in the northern section of the Site (Plate 1). The following sections discuss the former and current structures, and WHAs located in the NYTA, and spills or product releases that have occurred in this area.

4.2.1 Former and Current Structures

According to the 1917 map (Plate 1), the structures within this area were either associated with the paraffin and wax refinery operations in the NPSA or with the refining processes in the Former Refinery Area. From 1917 to 1995, this area was primarily maintained as a tank yard, consisting of various sizes of storage tanks. Table 1 provides information on the storage tanks located within this area including their construction dates, capacities, demolition dates, and types of product stored. The following structures were located in the NTYA and are itemized in chronological order according to its construction date.

- 24. Hose House.** The Hose House first appears on the 1917 map (Plate 1) and was located near the northern border of the Site, adjacent to Elk Street. The structure was approximately 18 ft by 10 ft in size and was removed between the years 1924 and 1939.
- 25. Condensers/Receiving House.** This 47-ft by 18-ft structure, constructed prior to 1917, consisted of condensers and a Receiving House (Plate 1). The condenser structure measured approximately 30 ft by 18 ft. The Receiving House measured approximately 17 ft by 18 ft. Both the condensers and Receiving House were associated with the refining processes performed in the NTYA and Former Refinery Area. This structure was demolished between 1917 and 1924.
- 26. Cooler.** This cooler was constructed prior to 1917 and located south of the Condenser/Receiving House (Plate 1). The cooler measured approximately 21 ft by 10 ft in size and acted as a heat exchanger to lower the temperature of the hot petroleum

product refined in this area and the Former Refinery Area. The cooler was removed between the years 1917 and 1924.

27. **Blanket Room/Pipe Shop/Electrical Shop.** This structure, constructed prior to 1917 in the central portion of the NTYA, consisted of five adjoining structures including the Blanket Room, the Pipe Shop, the Electrical Shop, the Laboratory, and a cooler (Plate 1). The Blanket Room was "L-shaped" with major dimensions of 50 ft by 30 ft. The Pipe Shop was located south of the Blanket Room and Electrical Shop and measured approximately 42 ft by 36 ft. The Electrical Shop, located west of the Blanket Room, was approximately 26 ft by 14 ft. The Laboratory, in the northwest corner of the structure, measured approximately 15 ft by 14 ft. The cooler measured 20 ft by 10 ft in size. The structure was removed between the years 1917 and 1924. Approximately 5 ft to the west was a 22-ft by 12-ft hose house. This hose house was also removed between 1917 and 1924.
28. **Bleachers Structure.** The Bleachers structure, measuring approximately 63 ft by 45 ft, housed two bleaching tanks (Tanks 76 and 77; Table 1). This structure first appears on the 1917 map (Plate 1). The structure and the tanks were removed between the years 1917 and 1924.
29. **In-ground Oil/Water Separator (Yard Trap).** This collection trap was located in the eastern portion of the NTYA and measured approximately 40 ft by 22 ft (Plate 1). The trap was constructed prior to 1917 and was used for the separation of petroleum from aqueous waste streams and storm water. Between 1924 and 1939, Tank Nos. 21 and 22 were constructed on either side of the trap. According to the 1955 map, the pipelines leading to the collection trap are storm sewers indicating that the collection trap was used for the collection of storm water from the neighboring tank yards. The trap does not appear on the 1990 map.
30. **Pulp Oil Building.** The Pulp Oil Building was constructed prior to 1917 (Plate 1). This structure measured approximately 118 ft by 78 ft and was located in the eastern portion of the NTYA. The Pulp Oil Building had two platforms, one along the northern wall (130 ft by 12 ft) and one along the eastern wall of the building (90 ft by 12 ft). The specific use of the Pulp Oil Building could not be determined from the available information. The Pulp Oil Building was demolished between the years 1917 and 1924.
31. **Cripple Shed.** The Cripple Shed was an ironclad structure measuring approximately 125 ft by 30 ft in size (Plate 1). The structure was constructed prior to 1917 and was located in the eastern portion of the NTYA, south of the Pulp Oil Building (Item 30). Rail tracks, that ran generally from east to west along Prenatt Street, branched northeast into the NPSA and into the Cripple Shed. The Cripple Shed was removed between the years 1917 and 1924.
32. **Union Tank Line Storehouse and Bull Room.** The Union Tank Line (U.T.L) Storehouse and Bull Room was constructed prior to 1917 and measured approximately 115 ft by 45 ft (Plate 1). The structure was located in the eastern portion of the NTYA and south of the Pulp Oil Building. This structure was associated with the railcar

construction and repair operations. The structure was demolished between the years 1917 and 1924.

- 33. Pump House No. 47.** Pump House No. 47 was constructed between 1924 and 1939 and located adjacent to Tank 184 on the southern boundary of the NTYA (Plate 3). The structure measured 17 ft by 15 ft in size and was removed between 1951 and 1958.
- 34. Paint Shed.** The Paint Shed was located adjacent and to the east of Tank 19 in the NTYA (Plate 4). The Paint Shed measured 21 ft by 15 ft and was constructed between 1939 and 1951. The structure was utilized for storing paint and was associated with the Wheel Shop/Blacksmith Shop/Machine Shop (Item 143). The Paint Shed was removed between 1951 and 1955.
- 35. Sub-Station "C."** This structure was "T-shaped" with major dimensions of 45 ft by 25 ft. Sub-Station "C" replaced the Watchman House (Item 55) between the years 1951 and 1955. Sub-Station "C" currently exists at the Site.

4.2.2 Waste Handling Areas

According to company records, any tank that was used to store leaded gasoline was cleaned out by spreading the tank bottoms in the tank yard. Consequently, the tank yards surrounding Tanks 21 and 187 were classified as WHAs and have been designated as WHA-4 (Plate 5). Similar to the tank yards located in the STYA that formerly stored leaded gasoline, the tank yards were surrounded by dikes and drained to the Main In-ground Oil/Water Separator (Item 69, WHA-2). The storage of leaded gasoline at the site occurred between 1952 and 1989 (Heffner, 1994).

4.2.3 Spills/Releases

One significant spill was documented to have occurred in this area (Table 2). The documentation for this spill is in the form of information provided by current and/or former Exxon Mobil employees, photographs taken at the time and a NYSDEC Spill Report Form for Spill No. 9314016 dated February 1, 1994.

- The NYSDEC Spill Report Form was filed after the incident occurred and refers to the incident as the "Old Spill at Elk Street." The release occurred when the roof of Tank 60 ruptured when hot cracking stock for the TCC Unit entered the tank from the crude unit. The hot product contacted ice in the bottom of the tank, causing it to expand and damage the roof. The cracking stock spilled onto Elk Street and Parcels No. 4 and No. 5, at that time occupied by Trico Products Corporation and residential structures. Mobil cleaned up the cracking stock by vacuuming off excess product and then mixing the remaining material with sand, excavating the material and disposing it off site. Subsequently, Mobil purchased Parcels No. 4 and No. 5 and demolished the residential structures (See Section 4.9). The NYSDEC Spill Report Form for this release is included in Appendix F.

4.3 Former Refinery Area

The Former Refinery Area was owned by various entities in the late 1800's. The northern portion of the Former Refinery Area was sold to Atlas Refining Company in 1888 by Buffalo Lubricating Oil Company, Ltd. The parcel of land to the east was sold to Atlas Refinery Company from Solar Oil Company in 1885. These parcels were purchased on June 16, 1892 by SOCONY from the Atlas Refining Company. The southern portion of the Former Refinery Area, south of Prenatt Street, was purchased by SOCONY from Buffalo Hardwood Lumber Company, the City of Buffalo, and other unnamed entities on July 23, 1915. Prior to 1915, the Buffalo River transected the southern portion of the Former Refinery Area (Plate 1). At that time, the Buffalo River was rerouted to the south to form a relatively straight channel, which then became the SOCONY (and later Mobil Refinery) southern property boundary. The Former Refinery Area currently encompasses 15.3 acres.

4.3.1 Former and Current Structures

Information regarding the storage tanks located within this area is provided on Table 1. Within the Former Refinery Area was a brick roadway that ran in a north to south direction and bridged Elk Street and Prenatt Street. Additionally, three major railroad tracks originating from Prenatt Street branched towards the north. These tracks were utilized to deliver supplies to the structures within the Former Refinery Area for refinery operations. Based on the available information, prior to 1917 and through 1981, the Former Refinery Area had been the primary location for the petroleum refining processes at the Site. Between 1917 and 1924, many of the refinery associated structures on the east side of the brick roadway were removed and replaced with an electrical substation and storage tanks. The operations at the remaining portions of the Former Refinery Area generally remained the same with some additions and modifications as refinery processes changed and evolved through the years. The refinery structures north of Prenatt Street were demolished between 1988 and 1991. The following former structures are summarized in chronological order according to their construction date in the Former Refinery Area.

- 36. The Star Oil Barns and Office.** The Star Oil structure was constructed prior to 1917 on the corner of Elk Street and Babcock Street (Plate 1). This structure measured approximately 110 ft by 60 ft and was used as a barn for the horse drawn bulk oil delivery wagons and an office for administrative purposes. The Star Oil structure was removed between the years 1924 and 1939.

- 37. Warehouses No. 1-3.** According to the 1917 map (Plate 1), three warehouses existed south of the Star Oil Barns and Office. Warehouse No. 1 was a four-story structure and approximately 205 ft by 60 ft in size. A rail platform, approximately 215 ft by 10 ft ran along the eastern wall of Warehouse No. 1. Rail tracks ran in a north to south direction adjacent to Warehouse No. 1 and terminated at the northeast corner of the warehouse. According to the 1939 map (Plate 3), Warehouse No. 1 was occupied by Star Oil Company and according to the 1955 map, the Lakes Division occupied Warehouse No. 1. Warehouse No. 1 was demolished in 1989. Warehouse No. 2 was adjoined to the south wall of Warehouse No. 1. This warehouse was approximately 102 ft by 42 ft in size. Warehouse No. 3, adjoined to the south wall of Warehouse No. 2, was approximately 95 ft by 42 ft. Associated with Warehouse No. 3 was a 70-ft by 8-ft rail platform, which was removed between 1917 and 1924. Within the warehouses, asphalt was packaged into two-pound containers. Warehouse Nos. 2 and 3 were removed between the years 1924 and 1939 and replaced with Tanks 81 and 82.
- 38. Watchman's House.** This structure was constructed prior to 1917 and was used as a security watchman's station. The Watchman's House was approximately 10 ft by 5 ft in size and located along the northern border of the Site on Elk Street between the Star Oil Barns and Office and the Main Office of the Atlas Works (Plate 1). The structure was removed between the years 1917 and 1924.
- 39. Main Office of Atlas Works.** The Main Office of Atlas Works was constructed prior to 1917 and was approximately 78 ft by 45 ft in size (Plate 1). The structure was located on Elk Street, along the northern border of the Site and was used for administrative operations for the Atlas Works Refinery. The Main Office was removed between the years 1958 and 1966.
- 40. Garages.** According to the 1917 map (Plate 1), adjacent to the east side of the Main Office of Atlas Works was a structure consisting of two garages. The garages each measured approximately 19 ft by 17 ft in size and were removed between the years 1958 and 1966.
- 41. Barns.** The barns were constructed prior to 1917 and were located south of the garages (Item 40) in the northern portion of the Former Refinery Area (Plate 1). The barns were used to house the horse drawn bulk oil delivery wagons. The structure was approximately 42 ft by 42 ft and removed between the years 1917 and 1924.
- 42. Fan Houses.** Three fan houses were located adjacent to the Tower Stills and Coal Sheds (Item 47). The Fan House located in the northeast corner of the Former Refinery Area was constructed prior to 1917 and measured approximately 20 ft by 20 ft (Plate 1). According to the 1939 map (Plate 3), the structure was used as a fire truck garage/hose house. The 1951 map (Plate 4) indicates that the structure was used as a medical department. The fan house was demolished in between 1955 and 1966 (aerial photograph). Two additional fan houses, each measuring 25 ft by 20 ft, were located adjacent to the west of the Tower Stills and Coal Sheds. These fan houses were built prior to 1917 and demolished between 1924 and 1939.

- 43. Watchman's House at Gate No. 5.** A watchman's house was constructed prior to 1917 on the northeast corner of the Former Refinery Area at Gate No. 5 (Plate 1). The structure measured approximately 10 ft by 5 ft and was used as a security station for the brick roadway that connected Elk Street to Prenatt Street. The Watchman's House was demolished between 1917 and 1924.
- 44. Sheds.** According to the 1917 map (Plate 1), three sheds existed in the Former Refinery Area. Shed No. 1 was located in the central portion of the Former Refinery Area, adjacent to Tank No. 29. This shed measured approximately 50 ft by 20 ft in size. Shed No. 1 was removed between 1917 and 1924. Shed No. 2 was located between the Star Oil Barns and Office structure (Item 36) and the Main Office of the Atlas Works Refinery Company (Item 39) and measured approximately 63 ft by 22 ft. Shed No. 2 was demolished between 1924 and 1939 and replaced by loading racks (Item 85). Shed No. 3, located approximately 50 ft south of Shed No. 2, measured approximately 57 ft by 48 ft and was removed between the years 1917 and 1924.
- 45. Pressure Stills/Coal Shed.** Adjacent on the west side of the brick roadway within the Former Refinery Area were 15 pressure stills (Plate 1). The pressure stills were constructed prior to 1917 on brick structures. They were aligned directly adjacent to each other and in total measured approximately 185 ft by 42 ft. Adjoined to the east side of the pressure stills was a 185 ft by 12 ft coal shed used to supply coal to the pressure stills. By 1924, nine of the fifteen pressure stills were removed. The six remaining pressure stills were removed between 1924 and 1939.
- 46. Condensers.** The 1917 map (Plate 1) indicates that approximately 15 condensers were located adjacent to the west of the Pressure Stills and Coal Shed (Item 10). The condensers were utilized for the refining operations in the Former Refinery Area as heat transfer units to condense vapor by removing heat from hot liquid product by utilizing a cooler medium. Two of these condensers were removed between 1917 and 1924. The remaining 13 condensers were removed between 1924 and 1939.
- 47. Tower Stills and Coal Sheds.** South of the Pressure Stills and Coal Shed (Item 46), a structure consisting of seven coal sheds and twelve tower stills was constructed prior to 1917 (Plate 1). This structure measured approximately 380 ft by 50 ft. Each coal shed had a rail spur connecting it to the rail track that ran in a north to south direction adjacent to the brick roadway. The coal sheds stored coal to support the tower stills operations. Ten tower stills and all seven coal sheds were removed between the years 1924 and 1939 and were replaced by the Houdry Unit (Item 77). The two remaining tower stills were removed between 1939 and 1951.
- 48. Receiving Houses.** Based on the 1917 map (Plate 1), two receiving houses were located in the northern portion of the Former Refinery Area, between the condensers (Item 46) and storage tanks. One of the receiving houses was located adjacent to the Star Oil Company filling tanks and measured approximately 80 ft by 12 ft. The second receiving house was located adjacent to the east of the Storage Tanks 173 and 175 and measured 63 ft by 20 ft. Both receiving houses were removed between 1924 and 1939.

49. **Tar Cooler.** The tar cooler was constructed prior to 1917 and was located between the storage tanks and receiving house in the northern portion of the Former Refinery Area (Plate 1). The cooler measured 27 ft by 22 ft and was used as a heat exchanger through which hot liquid product was passed to lower its temperature. Between 1924 and 1939, the tar cooler was removed.
50. **Watchman's House at Gate No. 7.** Gate No. 7 was on Babcock Street, south of the former location of Warehouse No. 3 (Item 37). The Watchman's House, constructed prior to 1917, was approximately 14 ft by 12 ft in size and served as the security watchman's station (Plate 1). The Watchman's House was removed between 1917 and 1924.
51. **Hose House.** The Hose House was constructed prior to 1917 and was located approximately 110 ft north of Prenatt Street and adjacent to Tank No. 79 (Plate 1). The Hose House was 22 ft by 8 ft in size and demolished between 1924 and 1939.
52. **WC Structure.** This structure, constructed prior to 1917, was located adjacent to the east of the Hose House (Item 51). The WC Building was approximately 25 ft by 10 ft (Plate 1). The specific use of this building could not be determined from the available information. The WC Structure was removed between 1917 and 1924.
53. **Pipe Shop/Experimental Stills.** The Pipe Shop was located on the north side of Prenatt Street (Plate 1). The Pipe Shop was approximately 75 ft by 30 ft. Attached to the Pipe Shop were experimental stills, which were approximately 20 ft by 30 ft in size. According to the 1939 map (Plate 3), this structure was used as a wash room. The 1951 map (Plate 4) indicates that the structure was used as a laboratory. The structure was later removed between 1958 and 1966 (aerial photographs). Adjacent to the east of the structure was Transformer No. 99. Located to the south of the Pipe Shop was a truck scale. The truck scale was constructed between 1939 and 1951 and was removed between 1977 and 1987.
54. **Laboratory.** Constructed prior to 1917, the laboratory was situated on the northwest corner of the brick roadway and Prenatt Street (Plate 1917). The structure measured 40 ft by 32 ft. The laboratory was demolished between the years 1958 and 1966.
55. **Watchman/Clock House.** This 18-ft by 12-ft structure was constructed prior to 1917 and was located on the northeast corner of the Former Refinery Area along Elk Street and a brick roadway connecting Elk Street to Prenatt Street (Plate 1). According to the 1924, 1939, and 1951 maps (Plates 2 through 4), this structure was used as a watchman or clock house. However, according to the 1940 Sanborn map, this structure was used as a hose house. The structure was replaced between 1940 and 1955 by Sub-Station "C" (Item 35). A 335-ft by 75-ft parking lot was constructed adjacent to the structure between 1924 and 1939.
56. **Coal Shed and Reducing Stills.** The Coal Shed was constructed prior to 1917 and was approximately 45 ft by 15 ft in size (Plate 1). The Coal Shed stored coal used to power the refining processes occurring in the Former Refinery Area. Affixed to the Coal Shed

were two Reducing Stills, each measuring 34 ft by 18 ft. The Coal Shed and Reducing Stills structure were removed between the years 1917 and 1924.

- 57. Coal Sheds and Tar Stills.** A structure consisting of six tar stills and four coal sheds was located on the eastern side of the brick roadway (Plate 1). The structure was constructed prior to 1917. The structure was comprised of three sets of coal sheds adjoined by two tar stills. Each of the tar stills measured approximately 22 ft by 17 ft. The coal sheds varied in size and were used to store coal utilized to power the tar stills and other refinery operations. The coal sheds and tar stills were removed between 1917 and 1924.
- 58. Condensers/Receiving House.** The Condensers/Receiving House structure was constructed prior to 1917 on the eastern side of the brick roadway in the Former Refinery Area (Plate 1). The Receiving House was situated between the two condensers. The total structure measured 70 ft by 20 ft in size. Between 1917 and 1924, the Condensers/Receiving House structure was removed. Approximately 30 feet south of this structure was an additional condenser. This condenser measured approximately 30 ft by 20 ft and was constructed prior to 1917. The condenser was removed between 1917 and 1924.
- 59. Cooler.** A cooler was formerly located adjacent to the east side of the Condensers/Receiving House (Item 58). The cooler, approximately 22 ft by 8 ft, was situated at this location prior to 1917 and was later removed between the years 1917 and 1924.
- 60. Pump House.** The Pump House was constructed prior to 1917 and located adjacent to the Condensers/Receiving House (Item 58) and storage tanks (Plate 1). The Pump House was removed between 1917 and 1924.
- 61. Coal Shed/Crude Oil Sheds/Condenser Structure.** This structure, constructed prior to 1917, was comprised of multiple units including coal sheds, crude oil compartments, condensers, a fan house, W.C. house, coolers, receiving houses, an economizer, an engine house, and five stacks (Plate 1). The primary coal shed unit, measuring approximately 180 ft by 40 ft, was adjoined by nine crude oil compartments (each approximately 32 ft by 22 ft), a fan house (25 ft by 22 ft), a W.C. house (approximately 22 ft by 17 ft), a 600 ft stack, and a 60 ft stack. To the south was a 185-ft by 25-ft structure utilized for housing condensers. Adjoined to this condenser structure were two 40-ft stacks, an additional condenser (approximately 22 ft by 8 ft), and a structure (15 ft by 15 ft) whose use could not be determined from the available documentation. Adjacent to the east of the condenser unit was a cooler (25 ft by 10 ft) and a receiving house (approximately 46-ft by 22 ft). South of the condenser unit were 4 crude oil compartments (approximately 25 ft by 16 ft each) adjoined by a coal shed (64 ft by 26 ft). Adjacent to the east of this coal shed and crude oil compartments were an economizer (approximately 60 ft by 12 ft) and a water purifier (approximately 35 ft by 26 ft). South of the economizer was an engine house, measuring approximately 30 ft by 15 ft in size, and a 200-ft stack. The majority of these units were removed between 1917 and 1924. According to the 1924 map (Plate 2), the economizer, the 200-ft stack,

and the 22-ft by 8-ft condenser were the only remaining units. These units were subsequently removed between 1924 and 1939.

- 62. Steam Still Condensers/Receiving House.** Constructed prior to 1917, this structure was located on the north side of Prenatt Street in the central portion of the Former Refinery Area (Plate 1). The Steam Still Condensers/Receiving House structure measured 185 ft by 25 ft and consisted of a receiving house centered between two steam still condenser units. Adjacent to the west were five steam stills, varying in size. One steam still condenser and the Receiving House were removed between 1917 and 1924. The remaining steam still condenser and five adjacent steam stills were removed between 1924 and 1939.
- 63. Refinery Office.** The Refinery Office served as the main administrative office for the Former Refinery Area. The office was located on the northeast corner of the brick roadway and Prenatt Street (Plate 1). The structure measured 34 ft by 30 ft and was adjoined by a 17-ft by 14-ft auxiliary structure. The office was constructed prior to 1917 and was demolished prior to 1924. The Refinery Office was replaced by Hose House No. 85 (Item 79).
- 64. Locomotive House.** The Locomotive House was located in the center of Prenatt Street and was constructed some time prior to 1917 (Plate 1). The Locomotive House was approximately 37 ft by 20 ft in size. The structure was removed between 1917 and 1924.
- 65. Refinery Boiler House/Pump House.** The Refinery Boiler House/Pump House was constructed prior to 1917 on the south side of Prenatt Street (Plate 1). The Refinery Boiler House measured 144 ft by 67 ft. Adjoined to the east was the Pump House, which measured 59 ft by 53 ft. Both of these structures were associated with the refinery operations that occurred at the time in the southern portion of the Former Refinery Area. Adjacent to the south was a 150-ft stack, also associated with the refinery operations. The Pump House structure was removed between the years 1924 and 1939. At that time, the Refinery Boiler House was changed to a storage house and the Pump House was relocated within this storage house. The former Refinery Boiler House was removed between 1958 and 1966 (aerial photographs) and replaced with the Asphalt Loading Area (Item 93).
- 66. Icehouse.** The Icehouse was constructed prior to 1917 on the south side of Prenatt Street (Plate 1). The Icehouse was an "L-shaped" structure with dimensions of 60 ft by 20 ft and 30 ft by 20 ft and was removed between 1917 and 1924.
- 67. Acid Shed.** This structure measured approximately 27 ft by 16 ft and was constructed prior to 1917 near the southeast corner of the Refinery Boiler House/Pump House (Plate 1). The Acid Shed was removed between 1917 and 1924.
- 68. In-ground Oil/Water Separator (Yard Trap).** An In-ground oil/water separator was located to the south of the Refinery Boiler House/Pump House (Item 65). The separator was constructed prior to 1917 and measured approximately 100 ft by 20 ft (Plate 1). The origin of the waste streams collected in the separator could not be determined from

the available information. The orientation of the separator relative to the former Buffalo River channel indicates that this separator likely discharged to the Buffalo River prior to its realignment which occurred between 1914 and 1917. It is not clear where the separator discharged to after the realignment. The separator does not appear on the 1924 map.

- 69. Main In-ground Oil/Water Separator.** The Main In-ground Oil/Water Separator (also referred to as the Main Trap) was constructed between 1917 and 1924 in the southern portion of the Former Refinery Area (Plate 2) and is designated as WHA-2. The separator was used for the separation of petroleum from aqueous waste streams and storm water. The Main In-ground Oil/Water Separator measured approximately 260 ft by 103 ft in size, was 16 feet deep and consisted of eight chambers with varying measurements. The trap collected waste streams from process areas, the Site's Well Point System and storm sewers across the entire Site. The Main In-ground Oil/Water Separator currently exists at the Site. However, the five southernmost chambers were abandoned in 1993. The Main In-Ground Oil/Water Separator is currently used only for temporary storage of storm water in excess of the capacity of the existing water treatment system. Section 5.0 further discusses the Main In-ground Oil/Water Separator.
- 70. Building No. 85.** This 18-ft by 10-ft brick structure was constructed between 1917 and 1924 and was located north of the Pipe Shop/Experimental Stills structure (Plate 2). The structure was demolished between 1924 and 1939. The use of this structure could not be determined from the available information.
- 71. Building No. 28.** This corrugated iron structure was constructed between 1917 and 1924 and measured approximately 29 ft by 20 ft. The structure was located adjacent to the southwest corner of the Refinery Boiler House/Pump House (Plate 2). The specific function of this structure could not be determined from the available documentation. Between the years 1924 and 1939, the structure was removed.
- 72. Pump House No. 27.** Pump House No. 27 was constructed between 1917 and 1924. This 15-ft by 13-ft brick structure was located approximately 95 ft south of the Refinery Boiler House/Pump House, adjacent to Tanks 291 and 292 (Plate 2). The Pump House was removed in 1989.
- 73. Pump House No. 25. (Fire House/Current Remediation Building).** This brick structure, constructed between 1917 and 1924, was located along the eastern boundary of the Former Refinery Area and adjacent to the east of Pump House No. 27 (Plate 2). Pump House No. 25 measured 40 ft by 68 and was demolished between 1951 and 1955. Between 1951 and 1955, the pump house was modified into a fire house. Also occurring at that time, the routing of the adjacent road was changed. The Fire House was constructed alongside this new macadam road. The Fire House structure currently exists at the Site, and was modified into the Remediation Building, which houses the Site's water treatment system.

- 74. Hose House No. 84.** Hose House No. 84 was constructed between 1917 and 1924 just north of the settling tanks (Plate 2). The structure measured 18 ft by 10 feet and was demolished between 1951 and 1955.
- 75. Pipe Still/Condenser Unit.** The Pipe Still/Condenser Unit replaced the Pressure Stills and Coal Shed (Item 10) between the years 1924 and 1939 (Plate 3). This unit consisted of two pipe still units, two condensers and three stacks. Stack No. 5, a 150-ft stack, was constructed between 1917 and 1924. Between 1939 and 1951, a pump house was constructed adjacent to the Pipe Still/Condenser Unit. The pump house measured 23 ft by 23 ft and was demolished between 1951 and 1955. The Pipe Still/Condenser Unit was also demolished between 1951 and 1955.
- 76. Building No. 35.** This structure, approximately 150 ft by 18 ft, was constructed between 1924 and 1939 (Plate 3). The structure was located in the eastern portion of the Former Refinery Area and adjacent to the south of the Watchman/Clock House (Item 55). The specific use of this structure could not be determined from the available information. Building No. 35 was removed between 1951 and 1955.
- 77. Houdry Unit.** The Houdry Unit was constructed in 1939 at the former location of the Tower Stills and the Coal Sheds (Item 47; Plate 3). This unit consisted of two steel framed structures that housed suspended tanks, towers and exchangers, an evaporator heater, a tar cooler box, a pump house, a control house, a heater control house, and two furnaces. Catalytic cracking processes were performed in the Houdry Unit in which heavy hydrocarbon stock (crude oil) is converted into lighter products. This process not only increased the quantity of gasoline but also increased the quality and octane rating of the gasoline. By 1950, an additional furnace was installed and the tar cooler box was removed from the Houdry Unit. The remainder of the Houdry Unit was removed between 1990 and 1995.
- 78. Salt Heater/Electric Substation "B"/Vacuum Still.** These three units replaced the Coal Shed/Crude Oil Sheds/Condenser Structure and steam stills (Item 61) between 1924 and 1939 (Plate 3). The salt heater (approximately 151 ft by 7 ft), the Electric Substation "B" (approximately 53 ft by 13 ft), and the vacuum still (approximately 34 ft by 19 ft), were each associated with the refining processes performed in this area. The salt heater was removed in 1951. Substation "B" and the vacuum still were removed between 1951 and 1955.
- 79. Hose House No. 85.** The Hose House was constructed between 1924 and 1939 at the former location of the Refinery Office (Plate 3). The Hose House measured approximately 19 ft by 15 ft in size and was removed in between 1951 and 1955.
- 80. Lab Sample Storage Structure.** This structure, approximately 15 ft by 11 ft, was located north of Hose House No. 85 and adjacent to the east of the Laboratory (Plate 3). The Lab Sample Storage Structure was constructed between 1924 and 1939 and removed between 1977 and 1986.
- 81. Thermofor Catalytic Cracking (TCC) Area.** The TCC Area was constructed between 1939 and 1951 in the former location of the Pressure Stills and Coal Shed (Item 10),

between the Pipe Still/Condenser Unit and the Houdry Unit (Plate 4). This area was used for conversion of heavier petroleum hydrocarbons into lighter products such as kerosene, gasoline, liquefied petroleum gasoline (LPG), and heating oil. Typical units that comprise a TCC Unit include a catalytic reactor bed, a fractionating tower, and a carbon-monoxide boiler. The TCC Area measured approximately 105 ft by 50 ft. According to the 1955 map, a TCC heater and a W.H. boiler had been installed to the north of the TCC Unit. The TCC Unit and associated structures were removed between 1989 and 1995.

- 82. Catalytic Polymerization Area.** The Catalytic Polymerization Area was added to the Former Refinery Area between 1939 and 1951 (Plate 4). This area was located to the west of the Houdry Unit (Item 77) and housed processes in which light olefin gases were converted into higher-octane products to be used for gasoline blending. Typical units that comprise the polymerization process are a polymerization reactor, a stabilizer/fractionator system, and feed drums. The Catalytic Polymerization Area was removed between 1990 and 1995.
- 83. Compressor House.** A compressor house was constructed adjacent to the west of the Houdry Unit and north of the Catalytic Polymerization Area between the years 1939 and 1951 (Plate 4). This structure measured approximately 105 ft by 30 ft and was removed in 1990 and 1995.
- 84. Cooling Tower.** A cooling tower was added to the Former Refinery Area at the former location of the Coal Shed/Crude Oil Sheds/Condenser Structure (Item 24) between 1939 and 1951 (Plate 4). The cooling tower was removed between 1951 and 1955.
- 85. Rail Loading Racks.** Three loading racks were constructed between 1924 and 1939 at the former location of Shed No. 3 (Item 44). An additional loading rack was constructed at that time to the southeast of the three loading racks. Three 15 ft by 5 ft loading racks were located south of the tracks that led into the former Refinery Boiler House/Pump House (Item 65). The three loading racks were removed between 1951 and 1977. Two loading racks (one measuring 15 ft by 5 ft and the other measuring 15 ft by 8 ft) were located on the north and south sides of a railroad track that ran in a southeast direction from Prenatt Street into the Former Refinery Area and terminated north of the Main In-ground Oil/Water Separator. These two loading racks were removed between 1951 and 1977. A rail loading rack was constructed between 1939 and 1951 on the eastern side of the brick roadway in the Former Refinery Area (Plate 4). The loading rack was located along rail tracks that branched from Prenatt Street towards the north and parallel to the brick roadway. The loading rack measured approximately 12 ft by 8 ft and was removed between 1951 and 1977. Two additional rail loading racks were constructed between 1939 and 1951 adjacent to Building No. 35 (Item 76). Each loading rack measured approximately 12 ft by 8 ft and was removed between 1951 and 1977.
- 86. Control House.** A control house was constructed to the northwest of the TCC Unit (Plate 5). The structure, approximately 60 ft by 45 ft, was constructed between 1951 and 1955. The control house was demolished between 1990 and 1995.

- 87. Gas Compressor/Exchanger Structure.** This structure was located adjacent to the west side of the TCC unit (Plate 5). The structure measured approximately 70 ft by 45 ft and was constructed between the years 1951 and 1955. The exact use of the compressors and exchangers stored in this structure could not be determined. The structure was removed between 1977 and 1986.
- 88. Electric Substation "E".** This electric substation replaced Electric Substation "B" when the Sovaformer Area was constructed in 1956 (Plate 5). The substation measured approximately 84 ft by 24 ft and was used to supply the Former Refinery Area and neighboring areas with electricity to support refinery operations. Electric Substation "E" was removed between 1977 and 1986.
- 89. Tar Box.** A tar box, constructed between 1951 and 1955, was located north of Substation "E" and measured approximately 24 ft by 24 ft (Plate 5). The tar box was utilized to cool the rundown from the crude unit prior to storage in Tank 60. The structure was removed between 1977 and 1986.
- 90. Sovaformer Area.** This area was located in the former location of the Steam Stills Condensers/Receiving House (Item 62). The Sovaformer unit became operational in 1956 and consisted of a control building (45 ft by 30 ft), a heater building (58 ft by 55 ft), four towers (approximately 110 ft in height) and storage tanks. The Sovaformer unit utilized three reactors containing platinum catalysts to convert low-octane paraffin hydrocarbons into high-octane aromatic hydrocarbons. This process allowed for the production of 100-octane gasoline. The Sovaformer unit was removed between 1990 and 1995.
- 91. Asphalt Control House.** The Asphalt Control House was constructed between 1951 and 1955. The structure measured approximately 65 ft by 20 ft and was located north of Tank No. 495 (Plate 5). The structure was demolished in 1989.
- 92. Dissolved Air Flotation Unit.** The dissolved air flotation unit was located north of the Main In-ground Oil/Water Separator (Item 31). The unit was installed in 1972 and operational by 1973. The dissolved air flotation unit was used in addition to the Main Separator for separation of waste streams and was removed between 1977 and 1986. The dissolved air flotation unit is further discussed in Section 5.0.
- 93. Asphalt Loading Area/Heater.** The Asphalt Loading Area replaced the former Refinery Boiler House/Pump House structure (Item 65) between 1958 and 1966 (aerial photographs). The loading area was associated with the neighboring asphalt storage tanks, Asphalt Control House (Item 86), Asphalt Heater, and Asphalt Pump House (Item 138) and was equipped with a truck loading rack (Plate 5). The Asphalt Loading Area was removed between 1982 and 1986. The asphalt heater was located to the southeast of the loading rack area. The heater was installed between 1951 and 1955 and was associated with the asphalt refining processes. The heater was removed between 1977 and 1986.

94. Fire Pump Houses. Two fire pump houses were constructed along the southern boundary of the Site, adjacent to the Buffalo River bulkhead (Plate 5). The pump houses were constructed between the years 1966 and 1974 (aerial photographs) and were used for fire suppression and protection purposes. These structures each measured 20 ft by 15 ft and were removed between 1977 and 1986.

4.3.2. Waste Handling Areas

Two WHAs located in the Former Refinery Area were identified in company records. These WHAs are the Main In-ground Oil/Water Separator and the Dissolved Air Flotation Unit (Mobil, 1987).

Main In-ground Oil/Water Separator

The Main In-ground Oil/Water Separator was classified as a WHA (WHA-2; Plate 5). As stated in Section 4.3.1 (Item 69), the separator measured approximately 260 ft by 100 ft. by 16 ft. in size and consisted of eight chambers. The operational history of the separator is discussed in Section 5.0.

Dissolved Air Flotation Unit

The Dissolved Air Flotation Unit (Item 91) was also a WHA (WHA-3; Plate 5). This unit was located to the north of the Main In-ground Oil/Water Separator and was utilized as part of the wastewater treatment system. The unit measured approximately 16 ft by 64 ft and began operating in 1973. The operational history at this unit is discussed in Section 5.0

4.3.3. Spills/Releases

A list of spills/releases that occurred in the FRA are presented in Table 2. The significant spills are described below. Historical evidence supporting the occurrence of the significant releases in this area exists in two forms, those supported by documentation and those based on the knowledge of current and/or former Exxon Mobil employees. The following release has supporting documentation in the form of Mobil records and a NYSDEC Spill Report Form for Spill No. 9104672.

- On July 31, 1991, a release of 2,500 gallons of quench oil occurred. The release was believed to occur in the FRA based upon the description of events and the ongoing demolition of the former refinery. The release occurred when a 3,000 gallon aboveground storage tank was being emptied. The valve on the tank became stuck. In

addition to the NYSDEC, the BSA was notified of the release. The product spilled onto a concrete pad and entered the Site's sewer system. The concrete pad was cleaned and a vacuum truck was used to remove product from the sewer. The recovered product was disposed off site.

The following spill description is based on knowledge of current and/or former Exxon Mobil employees.

- Several releases of asphalt products occurred at the former asphalt loading rack (Item 93). The quantities of product released and the timeframe during which these incidents occurred are not known.
- The seals on the pumps located south of Tank 82 would reportedly leak due to handling the heavy heated products. When the seals would leak, the heavy product would drain to the ground surface. The quantities of product released and the timeframe during which these incidents occurred are not known.

4.4 Central Rail and Process Area

The CRPA is located in the central portion of the Site and is transected by two roadways, Prenatt Street and an unpaved roadway, both running in a west to east direction. The CRPA encompasses approximately 8 acres.

The western portion of the CRPA was purchased by the Atlas Refining Company from Peter Schermerhorn on December 22, 1882. Atlas Refining Company purchased the eastern portion of the CRPA from the National Transit Company on July 31, 1890. These two parcels were purchased by SOCONY on June 16, 1915 from Buffalo Hardwood Lumber Company, the City of Buffalo and other unnamed entities.

4.4.1 Former and Current Structures

In 1917, the CRPA consisted primarily of railroad tracks on Prenatt Street and structures associated with the construction of barrels. Between 1924 and 1990, this area was generally used for housing refinery process related structures. Table 1 provides information regarding storage tanks that were previously located in this area. The following structures were previously located within the CRPA and are summarized in chronological order according to their construction date.

95. **Hose House.** This hose house was constructed prior to 1917 on the north side of Prenatt Street (Plate 1). The structure measured approximately 18 ft by 11 ft and was removed between 1917 and 1924.
96. **Coal Shed.** A coal shed was located adjacent to the Hose House (Item 95) on the north side of the railroad tracks that ran from east to west along Prenatt Street (Plate 1). The Coal Shed was constructed prior to 1917 and measured approximately 27 ft by 11 ft in size. The coal shed was demolished between 1917 and 1924.
97. **Old Store House/Rivet Storage Room.** This structure was comprised of 4 adjoining units, the Old Storage House (approximately 110 ft by 80 ft), the Rivet Storage Room (approximately 80 ft by 36 ft), the Carpenter Shed (60 ft by 25 ft), and the Lumber Shed (approximately 37 ft by 17 ft). This structure was constructed prior to 1917 and was located on the south side of Prenatt Street (Plate 1). Each of these units was associated with the construction of barrels. The structure was demolished between 1917 and 1924.
98. **Stave Shed and Cooper Shop.** These two structures were located to the southwest of the Old Store House/Rivet Storage Room (Item 97) and similarly were associated with the construction of barrels (Plate 1). The Stave Shed measured approximately 40 ft by 35 ft and was used to store the staves used in making barrels. The Cooper Shop, located south of the Stave Shed, measured approximately 42 ft by 20 ft and was where the assembly of barrels was performed. The two structures were removed between 1917 and 1924.
99. **Paint Shed.** The Paint Shed was constructed prior to 1917. The structure measured approximately 40 ft by 20 ft and was located north of the Old Storage House/Rivet Storage Room structure (Plate 1). The Paint Shed was demolished between 1917 and 1924.
100. **Acid Oil Box.** The Acid Oil Box, measuring approximately 20 ft by 8 ft, was located to the east of the Old Storage House/Rivet Storage Room structure (Plate 1). This structure was constructed prior to 1917 and was used for storage purposes. The Acid Oil Box was removed some time before 1924.
101. **Pump House No. 95/Tool House No. 93 Structures.** These structures were constructed between 1917 and 1924 and replaced the Old Storage House/Rivet Storage Room structure (Item 97). Pump House No. 95 measured 43 ft by 15 ft. Tool House No. 93 measured approximately 15 ft by 10 ft. Associated structures located adjacent to these structures included a coal bunker, an ash hopper, a 150-ft stack, and a structure measuring approximately 225 ft by 67 ft containing twelve 25 ft by 15 ft compartments (Plate 2). The specific use or refinery process performed at these structures could not be determined from the available information. These structures, with the exception of the pump house and tool house, were removed between 1924 and 1939. The pump house and the tool house were removed between 1951 and 1955.

- 102. Rail Filling Racks.** A rail filling rack was constructed in the central portion of the CRPA between two rail tracks (Plate 1) for the transport of propane and No. 2 fuel oil. The filling rack was constructed prior to 1917 and measured approximately 300 ft by 5 ft. An additional filling rack was constructed prior to 1917 and was located adjacent to the west of the Barrel House (Item 114). These filling racks were removed between 1924 and 1939. A filling rack was constructed between 1924 and 1939 in the same portion of the CRPA as the two former filling racks. The filling racks measured approximately 280 ft by 5 ft and was removed between 1951 and 1977 when the Treating, Blending, and Shipping Area (Item 109) was constructed. Between 1951 and 1955, a rail filling rack was constructed in the northeast and measured approximately 225 ft by 5 ft. The filling rack was removed between 1985 and 1990. Adjacent to the southeast was Transformer No. 97. This transformer was placed at this located between 1917 and 1924 and was removed between 1939 and 1951.
- 103. Tar Loading Rack.** The tar loading rack was located on the north side of Prenatt Street (Plate 3). The loading rack was constructed between 1924 and 1939 and measured approximately 180 ft by 6 ft. The loading rack was removed between 1951 and 1955.
- 104. Ethyl Plant No. 16.** The Ethyl Plant was constructed between 1924 and 1939 and was located south of Prenatt Street, adjacent to the west of the railroad tracks (Plate 3). Within the Ethyl Plant, lead was injected into the gasoline. The Ethyl Plant structure was removed between 1990 and 1995. Between 1939 and 1951, Tank No. 49 was constructed adjacent and to the west of the Ethyl Plant. The Safety Building (Item 111) was constructed on the west side of Tank No. 49.
- 105. Dehydrator/Pipeline Pump House No. 38.** A dehydrator and Pipeline Pump House No. 38 were constructed between 1924 and 1939 to the southeast of the Ethyl Plant (Plate 3). The dehydrator measured approximately 38 ft by 5 ft. The pump house measured approximately 53 ft by 30 ft. The dehydrator was removed between 1951 and 1955. The pump house structure was removed between 1977 and 1985.
- 106. Deflorez Cracking Unit/Cross-Cracking Unit.** The Deflorez Cracking Unit was constructed in the former location of the Old Storage House/Rivet Storage Room (Plate 3). This unit was constructed between 1924 and 1939 and consisted of pump houses, a Deflorez furnace, a tar cooler, and towers. The Deflorez Unit converted stock and crude bottoms into No. 6 fuel oil and cracked naphtha, used for gasoline production. Adjacent to the west of the Deflorez Cracking Unit, were a control house and a Cross-Cracking Unit. The Cross-Cracking Unit was removed between 1939 and 1951. The Deflorez Cracking Unit was removed between 1951 and 1955.
- 107. Instrument Shop/Water Separator.** The Instrument Shop and a water separator were constructed between the years 1939 and 1951 in the former location of the Cross-Cracking Unit (Plate 4). The Instrument Shop measured approximately 85 ft by 25 ft and was used for storage purposes. The water separator measured approximately 63 ft by 20 ft. Both structures were removed between 1951 and 1955.

- 108. Pipeline Storage House.** The Pipeline Storage House was constructed adjacent to the west of the Pipeline Pump House No. 38 (Item 10) between 1951 and 1955 (Plate 5). The storage house measured approximately 24 ft by 24 ft and was removed between 1985 and 1990.
- 109. Treating, Blending, and Shipping Area.** This area was located between Prenatt Street and the unpaved roadway, after the removal of railroad tracks previously located in this area (Plate 5). The Treating, Blending, and Shipping Area was constructed between 1951 and 1955 and included a control house, a caustic storage area, stacks, and process tanks of various sizes. This area was used to remove non-hydrocarbons, impurities and other constituents that adversely affect the properties of finished products or intermediate hydrocarbon streams. The area was cleared between 1985 and 1990.
- 110. Alkylation Unit Area.** The Alkylation Unit Area was located in the former location of the Deflorez Cracking Unit (Item 106). The area was constructed between 1951 and 1955 (Plate 5). Within the Alkylation Unit Area was a control house measuring approximately 36 ft by 24 ft. Additional roadways were constructed surrounding this area. Based on published descriptions of refinery processes, alkylation was used to produce high-octane aviation fuel and petrochemical feedstock for explosives and synthetic rubber. The Alkylation Area was demolished between 1990 and 1995.
- 111. Safety Building.** The Safety Building was constructed between 1955 and 1977 and measured approximately 42 ft by 18 ft. The Safety Building was removed between 1990 and 1995.
- 112. Tank Truck Loading Rack.** The Tank Truck Loading Rack was constructed in 1990 (Plate 6). This construction included the additional removal of railroad tracks on Prenatt Street, the paving of roadways, and construction of truck parking facilities. The Truck Loading Rack has three loading bays and measured approximately 70 ft by 65 ft. The Truck Loading Rack currently exists at the Site.

4.4.2 Waste Handling Areas

Two WHAs were identified in the CRPA from company records (Mobil, 1987). These WHAs include the Buried Acid Sludge Trench and three Hazardous Waste Dumpsters and are described below.

Buried Acid Sludge Trench

The Buried Acid Sludge Trench extended from the south side of the Alkylation Unit to the north side of the tank yard of Tank 99. The trench is designated as WHA-10 and is represented on Plate 5. The acid sludge originated from an acid treating process used in lube oil production and was disposed in a 60 ft by 40 ft by 8 ft clay lined construction pit. In October 1985, the material began to rise to the surface of the soil. Soil borings were performed to delineate the extent of the

acid sludge. Subsequently, a total of 1,185 tons of material was excavated and disposed off site at CECOS in Niagara Falls (Mobil, 1987).

Hazardous Waste Dumpsters

Three hazardous waste dumpsters were located north of the Alkylation Unit (Item 110) in the CRPA. The dumpsters were designated WHA-12 and are represented on Plate 5. The type of waste or duration of use could not be determined from the available information. In 1991, during the demolition of the refinery, the dumpsters were used to store and ship pipe that was scrapped (Mobil, 1987).

4.4.3 Spill/Releases

A list of spills/releases that occurred in the CRPA are presented in Table 2. The most significant spill that documented in this area is described below. The following release has supporting documentation in the form of Mobil records and a NYSDEC Spill Report Form, presented in Appendix F.

- On October 25, 1988, approximately 34,062 gallons of No. 2 fuel oil was released in the CRPA. This release was reported to the NYSDEC and assigned Spill No. 8806247. The release was also reported to the BSA. The incident occurred while emptying Tank 22 in the NTYA for demolition. Product was pumped through a former diesel fuel line to Tank 221 in the BSPA. The former diesel line ruptured at a location between the Treatment, Blending and Shipping Pit Area (Item 109) and a location near the northwest corner of the containment berm for Tank 25. Product spilled into the contained concrete Treatment, Blending and Shipping Pit Area. The drains within the contained pit area connected to the Main In-ground Oil/Water Separator located in the FRA. Approximately 33,984 gallons of the spilled product were recovered by vacuum trucks and pumped back to Tank 22 for storage. The remaining product released reportedly drained into the Site sewer system and to the Main In-ground Oil/Water Separator.

4.5 Southern Tank Yard

The STYA encompasses approximately 15.5 acres and is located in the southern portion of the Site between Prenatt Street and the Buffalo River. Similar to the CRPA, the western portion of the STYA was purchased by the Atlas Refining Company from Peter Schermerhorn on December 22, 1882. Atlas Refining Company purchased the eastern portion of the STYA from the National Transit Company on July 31, 1890. The two parcels were purchased by SOCONY from Buffalo Hardwood Lumber Co., the City of Buffalo and other unnamed entities on July 23,

1915. As discussed previously, prior to 1915 the Buffalo River transected the southern portion of the Site through both the STYA and the Former Refinery Area. The Buffalo River was rerouted to the south to form a relatively straight channel. Due to the restructuring of the Buffalo River, SOCONY relinquished a parcel of property to the City of Buffalo in 1915 to allow for the altered course of the Buffalo River.

4.5.1 Former and Current Structures

Prior to 1917, the STYA housed refining related structures including treating process structures, structures associated with the barrel construction processes discussed in Section 4.3, and storage tanks. Between 1917 to present, the STYA has primarily been maintained as a tank yard, housing storage tanks of various sizes. Table 1 provides information regarding the storage tanks located within this area. The following structures were located in the STYA and are listed chronologically by their construction date.

- 113. Acid Treating/Clay Contacting Area.** This area was comprised of multiple units associated with acid treating and clay contacting of petroleum products. The structures were constructed prior to 1917 in the western portion of the STYA (Plate 1) and included acid sheds, clay plants, a blow house, pump houses, alkali tanks, and lye storage tanks. The Acid Treating/Clay Contacting Area was removed between 1917 and 1924.
- 114. Barrel House.** The Barrel House, approximately 200 ft by 75 ft, was constructed prior to 1917 (Plate 1). This structure was associated with the barrel construction process structures described in Section 4.4. The Barrel House was bounded on the northwest and southeast sides of the structure by rail tracks. Along the northeast, northwest, and southwest walls was a platform for staging of barrels. The Barrel House was removed between 1917 and 1924.
- 115. Hose House.** A hose house was located to the south of the southeast corner of the Barrel House (Item 114, Plate 1). The hose house measured approximately 18 ft by 12 ft in size and was constructed prior to 1917. The structure was removed between 1917 and 1924.
- 116. Pan House/Boiler House Area.** The Pan House and the Boiler House were two adjoining units constructed prior to 1917 in the southeast portion of the STYA (Plate 1). The Pan House measured approximately 45 ft by 40 ft. The Boiler House, located to the south of the Pan House measured approximately 35 ft by 40 ft. Adjoined to the Boiler House was an 18-ft by 10-ft shed. Adjacent to the north of the structure was a steam box unit measuring approximately 36 ft by 20 ft. To the east of the structure was a 50-ft stack and water tank. Adjacent to the southeast was a 14-ft by 5-ft hose house and a 60-ft stack. To the west of the structure was a rail track with a loading rack and several units whose specific purpose could not be determined from the available

information. The Pan House/Boiler House Area was demolished between 1917 and 1924.

- 117. Bottle Houses and Pan House/Steam Boxes.** Located to the south of the Pan House/Boiler House Area (Item 116) were two Bottle Houses and a Pan House/ Steam Box structure (Plate 1). Each of these structures was constructed prior to 1917. Located between the two Bottle Houses were two condensers, two 60-ft stacks, and storage tanks. It could not be determined what refining process was performed in these structures. The structures were removed between 1917 and 1924.
- 118. Atlas Works Office.** The Atlas Works Office was constructed prior to 1917 adjacent to the Pan House and Steam Boxes Structure (Plate 1). The structure, measuring approximately 18 ft by 18 ft, served as the administrative office for the refining processes performed in this portion of the Site. The office structure was demolished between 1917 and 1924.
- 119. Hose House No. 88.** Hose House No. 88 was constructed between 1917 and 1924 in the northern portion of the STYA (Plate 2). The structure was constructed of brick and measured 9 ft by 12 ft. Between 1951 and 1955, Hose House No. 88 was removed.
- 120. Pump Houses No. 44 and No. 24.** These two pump houses, constructed between 1917 and 1924, were located on the southern boundary of the Site, adjacent to the bulkhead of the Buffalo River (Plate 2). Pump House No. 44 was constructed of brick and measured 21 ft by 32 ft. Attached to Pump House No. 44 was Structure 107, measuring 24-ft by 17-ft in size. Pump House No. 24 was located approximately 175 ft to the west of Pump House No. 44. This pump house was constructed of brick and concrete and measured 27 ft by 18 ft. Adjoined to Pump House No. 24 was Structure No. 106, which measured 17 ft by 20 ft in size. The two pump houses were removed between 1951 and 1955.
- 121. Building No. 79.** This structure was located in the southeast corner of the STYA and constructed between 1917 and 1924 (Plate 2). The structure measured 67 ft by 57 ft. Adjacent to the north and west were several storage tanks of varying capacities. Located to the south were two towers and a furnace. The specific refining process that was performed at this structure could not be determined. The structure and the associated storage tanks were removed prior to 1939.
- 122. Hose House No. 89.** This hose house, measuring 9 ft by 12 ft, was located in the eastern portion of the STYA (Plate 2). The structure was constructed between 1917 and 1924 and was demolished between 1939 and 1951 and replaced by Tank No. 90.
- 123. Car Shop.** This car shop was constructed between 1917 and 1924 and was used for the construction, maintenance and housing of railcars (Plate 2). The structure measured 220 ft by 30 ft, was located in the eastern portion of the STYA, and was removed between 1924 and 1939.
- 124. Stabilization Unit No. 35.** This structure was associated with the Pump House No. 95/Tool House No. 93 structures (Item 101). The stabilization unit measured 35 ft

by 60 ft and was constructed between 1924 and 1939 (Plate 3). The specific purpose of this structure could not be determined. The structure was demolished between 1951 and 1955.

- 125. Wash Room (Fire Truck House No. 31).** According to the 1939 map, this structure served as a wash room. The structure was constructed some time between 1924 and 1939 in the eastern portion of the STYA and measured approximately 68 ft by 10 ft (Plate 3). According to the 1955 map, this structure served as a fire truck house. The structure was removed between 1951 and 1955 when the Alkylation Unit (Item 110) was constructed.
- 126. Storage Shed No. 54.** This structure was constructed between 1924 and 1939 and located adjacent to Gate No. 23 on the eastern boundary of the Site (Plate 3). The storage shed measured approximately 55 ft by 30 ft and was removed between 1958 and 1977.
- 127. Hose House No. 131.** Hose House No. 131 was constructed between 1939 and 1951 adjacent to Tank No. 90 (Plate 4). The structure measured approximately 15 ft by 9 ft and was removed between 1951 and 1955 and replaced by Tank No. 75.
- 128. Shelter House No. 121.** The Shelter House was located on the southern boundary of the Site and along the bulkhead of the Buffalo River (Plate 4). The structure was constructed between 1939 and 1951 and measured approximately 12 ft by 6 ft. Between 1951 and 1955, the Shelter House was removed.
- 129. Pump Pad.** A pump pad was constructed between 1951 and 1955 at the former location of Tank No. 46, adjacent and to the west of Tank No. 40 (Plate 5). The pump pad measured approximately 57 ft by 15 ft in size. Between 1977 and 1986, the pump pad was removed.
- 130. Crude Scale House.** The Crude Scale House was located in the eastern portion of the STYA and constructed some time between 1951 and 1955. It was in this area of the Site that the crude oil supply pipeline entered the Site (Plate 5). The structure measured approximately 20 ft by 15 ft and was removed 1986 and 1990.
- 131. Cooling Tower.** A cooling tower was constructed adjacent and to the west of Tank No. 90 between the years 1951 and 1955 (Plate 5). The cooling tower was associated with the adjacent Alkylation Unit. The cooling tower structure measured approximately 56 ft by 36 ft and was removed between 1977 and 1986.
- 132. Pipe Rack.** An aboveground pipe rack was installed with the construction of the truck loading rack in the CRPA in 1990. The pipe rack originates at a pump pad located north of Tank No. 38 and No. 97 and runs north to the truck loading rack (Plate 6). The pipe rack currently exists at the Site.
- 133. Vapor Recovery System.** The Vapor Recovery System is located at the former location of the cooling tower (Item 131), adjacent to Tank No. 90 (Plate 6). The Vapor Recovery System recovers vapors at the truck loading rack and passes the vapors

through carbon units. The Vapor Recovery Unit was constructed at the same time as the truck loading rack construction (Item 112) and currently exists at the Site.

4.5.2 Waste Handling Areas

Four WHAs were located in the STYA based on company records. These WHAs include the tank yards surrounding the former leaded gasoline storage tanks, wastewater treatment/storage tanks, slop oil tanks, and a hazardous waste storage area. Each of the WHAs and their functions are described below.

Tank Yards

The tank yard surrounding Tank 18 has been characterized as a WHA. Formerly, Tank 18 was used to store leaded gasoline. At that time, the tank yard was used as a disposal location, in which the leaded tank bottoms from Tank 18 were spread and allowed to weather. According to company records, any tank that was used to store leaded gasoline would have been cleaned out by spreading the tank bottoms in the tank yards. Therefore, tank yards surrounding Tanks 20, 21, 23, 25, 26, 38, 42, 75, 86, 96, 97, 98, 99, 100, 160, 171, 187, 197, and 198 would have been utilized similarly (Mobil, 1987). Collectively, the tank yards have been designated as WHA-4 and are represented on Plate 5.

Drainage and containment was controlled by dikes surrounding the tank yards with drains that carried the material to the Main In-ground Oil/Water Separator. The storage of leaded gasoline at the site occurred between 1952 and 1989.

Wastewater Storage/Treatment Tanks

Two storage tanks located within the containment wall of the hazardous drum storage area were WHAs (WHA-5; Plate 5). Both tanks were constructed of steel and had fixed roofs and utilized in association with the Dissolved Air Flotation Unit after its installation in 1972 and operation in 1973 (Item 92).

One of the tanks was identified as Tank 77. The other tank designation could not be determined from the available information. The location of these tanks could not be verified by the available information. Both tanks were used from 1940 to 1981. From 1973 through 1981 the tanks

received a combined flow of oil and foam from the Dissolved Air Flotation Unit. The use of these tanks prior to 1973 could not be determined from available information. The tanks were surrounded by a concrete dike and drained to the Main In-ground Oil/Water Separator.

Formerly, heat exchangers were used in conjunction with wastewater treatment. These exchangers contained chromium. During the closure of the refinery, the tanks were cleaned and removed and all material within the tanks was disposed (Mobil, 1987).

Slop Oil Tanks

According to company records, Tanks 40 and 2 were utilized for storing slop and were characterized as WHAs (Mobil, 1987). The tanks are designated as WHA-6 on Plate 5. The capacity of Tank 40 was approximately 840,000-gallons and was located in the northern portion of the STYA, north of Tank 18. The tank stored slop oil from the Main In-ground Oil/Water Separator between 1940 and 1981. The tank was equipped with an automatic gauge and a high level alarm to notify personnel to stop inflow. From 1973 through 1981, when the dissolved air flotation unit was operating, the slop oil was received from the Dissolved Air Flotation Storage Tank 77 (WHA-5), separated, and was later reprocessed. The undesired separated material was disposed off site. Tank 40 was cleaned and removed between 1990 and 1994. Tank 2 was located north of the Alkylation Unit (Item 110) and stored caustic soda for the caustic treating area in the CRPA (Heffner, 1994). Information regarding the dismantling of Tank 2 was not available.

Hazardous Drum Storage Area

According to company records, a hazardous drum storage area was located in the eastern portion of the STYA and north of Tanks 23 and 100. This storage area was identified as WHA-7 and is represented on Plate 5. The storage area measured approximately 200 ft by 140 ft and stored a maximum of 298,000 gallons of contained waste. Within the storage area, approximately 10 tons of corrosive solid waste was stored annually. Additionally, 1 ton of hazardous leaded tank bottom material was stored in this area annually. The area was surrounded by a 3-ft concrete wall and contained no means for drainage. The storage of waste in this area was discontinued in 1984. There were no reported releases in this storage area. A 35-ft by 35-ft area within this

storage area was identified in the company records as storing material received from the Main In-ground Oil/Water Separator beginning in 1980 (Mobil, 1987). Storage of waste was also discontinued in 1984.

4.5.3 Spills/Releases

A list of spills/releases that occurred in the CRPA are presented in Table 2. The significant spills that occurred in this area are described below. The following releases had supporting documentation in the form of Mobil documentation and/or a NYSDEC Spill Report Form, presented in Appendix F.

- On March 12, 1987 approximately 4,260 gallons of gasoline were released. This release was reported to the NYSDEC and assigned Spill No. 8607552. The BSA was also notified of the incident, which occurred when a flexible connector ruptured during a product transfer from Tank 18 to Tank 99. The location of the rupture is not mentioned in the report. NYSDEC spill report indicates that the spill was contained and cleaned up satisfactorily. A Mobil document for this spill, reference in the NYSDEC spill report form, was not located during the research for this history document.
- On August, 1993, approximately 42,600 gallons of super unleaded gasoline were released. This release was reported to the NYSDEC and assigned Spill No. 930522. The incident occurred when a contractor left a valve at Tank 20 open while removing a common suction line (believed to be idled) from Tanks 20 and 96. When the valve on the active Tank 99 was opened to receive a delivery, product flowed by gravity through the open valve on the common suction line and to the ground on the west side of the Tank 20 containment. Approximately 500 gallons of product were removed from the ground surface using a vacuum truck. The remainder of the gasoline moved from the west side of the containment where the spill occurred, to the east side of the containment, where it entered the Site's sewer system through 3 catch basins on the east side of the Tank 20 containment berm. From there it went to the Main In-ground Oil/Water Separator. The pipeline and approximately 20 yards of impacted soil were removed and placed in the Biotreatment Cell. Reportedly 9,500 gallons of product were recovered from the 3 catch basins and stored in tank trailers. Another 12,500 gallons were recovered from the Main In-ground Oil/Water Separator. The remaining unrecovered product was not accounted for.

The following spill description is based on knowledge of current and/or former Exxon Mobil employees.

- Several releases of crude oil occurred from the crude oil pumps located north of Tank 38. Reportedly, when the pumps malfunctioned, the crude oil would drain to the ground surface. The quantities of product released and the timeframe during which these incidents occurred are not known.

4.6 Eastern Tank Yard Area (Former Disposal Area)

The ETYA is located between the eastern side of the Erie Lackawanna Railroad Company (formerly D.L.&W.R.R.) rail tracks and the bank of the Buffalo River. Prior to the straightening of the Buffalo River between 1914 and 1917, the river's course ran in a generally north to south direction through the ETYA, parallel to the D.L.&W.R.R. tracks. The river was filled in, relocated to the east, and rerouted to continue in an west-southwesterly direction. A small parcel of land that existed prior to the rerouting between the D.L.&W.R.R. tracks and the original river was owned by SOCONY. This parcel of land was relinquished by SOCONY to the City of Buffalo on July 8, 1915. The ETYA currently encompasses 15.3 acres.

4.6.1 Former and Current Structures

The City of Buffalo reportedly utilized the land between the D.L.&W.R.R. tracks and the rerouted river channel for disposal of municipal waste between the years 1921 and 1951. Mobil repurchased the parcel of land in 1951. In 1953, two aboveground storage tanks (Tanks 175 and 176), each with 70,000-barrel capacities, were constructed in the ETYA (Plate 5). The details concerning these storage tanks are provided in Table 1. To the south of the storage tanks, four propane tanks and a propane loading rack (Item 134) were constructed between 1958 and 1966. According to discussions with former and/or current Exxon Mobil employees, the propane loading rack was never utilized. The propane tanks and loading rack were removed in 1988.

4.6.2 Waste Handling Areas

Mobil also used this area for disposal purposes. According to company records, the waste disposed in the ETYA included storage tank bottom material, spent cracking and reforming catalysts, oil/water separator material, slop oil solids, demolition debris, and asphalt containing soil. Mobil reportedly used this area for disposal between the years 1952 and 1974 (Mobil, 1987). Plate 5 shows disposal locations of wastes, designated as WHA-8, disposed in the ETYA as reported by the company records. Following several subsurface investigations, the disposal area within the ETYA was re-classified in 1988 by the NYSDEC from a New York State Registry of Inactive Hazardous Waste Disposal Sites Class 2a site (indicating that additional information is needed to accurately categorize the site) to a Class 3 site. This Class 3 classification indicates that the area does not pose a significant threat to the public or environment.

4.6.3 Spills/Releases

One significant spill was documented to have occurred in this area (Table 2). The following release has supporting documentation in the form of Mobil records and a NYSDEC Spill Report Form, presented in Appendix F.

- On August 28, 1989, approximately 6,500 gallons of unleaded gasoline were released. This incident was reported to NYSDEC and assigned Spill No. 8905279. It was also reported to the City of Buffalo Fire Department. The incident occurred when Tank 176 was overfilled due to incorrect safe fill and high alarm settings being used. The area was barricaded and approximately 2,800 gallons of product were removed with a vacuum truck. In addition, the safe fill and high level alarm settings were corrected. Subsequently, monitoring wells were installed and monitored for the presence of product. The containment berm for this tank and Tank 175 were lined during the storage tank realignment project completed in 1991.

4.7 Babcock Street Properties Area

The entire BPSA and associated structures were sold to One Babcock Street, Inc. in 1994. Prior to the sale, a portion of the property including the Barrel House (Item 135) was leased to Pinto Construction. The duration of the lease is not known. The parcel in the northern portion of the BSPA is bounded by Elk Street to the north, Babcock Street to the east, Prenatt Street to the south, and Orlando Street to the west. The southern portion of the BSPA is bounded by Prenatt Street to the north, the adjacent property currently owned by PVS Chemical (formerly owned by Allied Chemical/National Aniline) to the west, the FRA to the east, and the Buffalo River to the south. In total, the BSPA encompasses approximately 11.1 acres.

The original route of the Buffalo River formerly bisected the southern portion of the BSPA. As discussed in Section 3.0, the Buffalo River was filled and rerouted to form a straight channel. The parcel of land located on the east side of Babcock Street and between Prenatt Street and the original Buffalo River, was purchased by Atlas Refining Company from Chas Norton, Receiver for Buffalo Lubricating Oil Company on July 6, 1888. On June 16, 1892, the Standard Oil Company purchased the property from Atlas Refining Company.

Prior to 1917, a 300-ft by 125-ft section of the northern portion of the BSPA was owned by private entities and maintained as residential properties. Between 1917 and 1919, SOCONY purchased these properties from the private entities. The 333-ft by 125-ft section to the south of

this section bordered by Prenatt and Babcock Streets, was purchased by SOCONY Vacuum Oil Company from the Superintendent of Insurance of the State of New York in 1939. The Sanborn Map from 1889 (Appendix D) indicates that Genesee Oil Works occupied the portion of the property north of Prenatt Street to approximately midway between Elk and Prenatt Streets. The Genesee Oil Works property extended beyond the BSPA border at Orlando Street to Maurice Street. The Sanborn Maps from 1900 and 1917 indicate that this portion of the BSPA was occupied by G. Elias & Bros. Lumber Yard for the storage of lumber. The section to the west was purchased by SOCONY Vacuum Oil Company from private residential entities between 1942 and 1944.

The portion of the BSPA located on the west side of Babcock Street and between Prenatt Street and the Buffalo River was leased by Mobil from Allied Chemical from 1956 through 1974, at which time Mobil purchased the property. This portion of the BSPA was primarily used for employee parking. Following the purchase of this property, Mobil installed several catch basins and below grade piping for drainage of the parking area. These parking lot drains discharged to the Buffalo River through a single pipe located along the river bank, west of the BSPA (Exxon Mobil, 2000).

4.7.1 Former and Current Structures

Following the purchases of various sections of the BSPA by SOCONY, the northern portion remained primarily vacant. The residential structures were removed and two storage tanks, Tanks Nos. 83 and 84, and two pipeline tunnels to the Former Refinery Area were constructed between 1939 and 1951. The south portion of the BSPA, on the east side of Babcock Street, was utilized to house refinery associated structures and storage tanks. Later these areas were occupied by the Lakes Division, the marketing division of SOCONY, and used specifically for the distribution of petroleum products.

Table 1 provides information regarding the storage tanks that were formerly located in the BSPA. The following list of structures is arranged in chronological order by their construction date in the BSPA.

- 135. Barrel House (Lube Oil Building).** This 200-ft by 125-ft structure was constructed between 1917 and 1924 in the southeast portion of the BSPA (Plate 2). The first floor

was utilized for storage. This structure was primarily used for the manufacture and containerization of lubricating oil. It contained up to 40 storage tanks with capacities ranging from 1,600 to 12,000 gallons on the second and third floors. Piping ran between the third and second floors and out through the east wall of the building. After exiting the building, the piping continued below grade. This piping connected the tanks within the building to the storage tanks located at the eastern border of the BSPA. Two railroad tracks spurred southward between the Barrel House and the tanks to the east from the tracks that ran westward along Prenatt Street. The former Barrel House currently exists and is occupied by several tenants of One Babcock Street, Inc. A gasoline shed was identified on the 1939 and 1951 maps at the south end of the Barrel House. The purpose of the gasoline shed could not be determined from the available information.

- 136. Loading Platforms.** Between 1924 and 1939, four loading platforms were constructed north of the Barrel House (Plate 3). An 88-ft by 5-ft platform was located approximately 25 ft north of the Barrel House. Three 15-ft by 5-ft platforms were located in the area between the Barrel House and the railroad tracks in Prenatt Street near where the tracks spurred southward to the Barrel House. These loading platforms were removed between 1951 and 1955 when the Truck Loading Rack (Item 141) was constructed.
- 137. Unloading Trench.** The Unloading Trench was located on the east side of the Barrel House between the two tracks that spurred from the Prenatt Street tracks (Plate 3). The trench was approximately 220 ft by 8 ft in size and contained piping from the tanks to the east, the tanks within the Barrel House (Item 135), and pumps to load and unload lube oil products from the railcars. The Unloading Trench was decommissioned between 1977 and 1986.
- 138. Pump Houses.** Two pump houses were constructed between 1924 and 1939 in the southeast portion of the BSPA (Plate 3). One pump house, measuring approximately 68 ft by 20 ft in size, was located south of Tank Nos. 393 and 394 and was changed to the Asphalt Pump House between 1951 and 1955. The Asphalt Pump House was used in conjunction with the asphalt distributing operations that were started during that time frame. The Asphalt Pump House was demolished in 1989. The other pump house, measuring approximately 20 ft by 15 ft, was located between the rail spur that led to the Former Refinery Area and the spur that led to the Barrel House. This pump house was removed between 1951 and 1955 when several of the storage tanks and the rail spur were removed and the area was renovated for asphalt distributing operations.
- 139. Ethyl Plant.** The Ethyl Plant was constructed between 1924 and 1939 and located in the southeastern corner of the BSPA (Plate 3). The Ethyl Plant measured approximately 53 ft by 23 ft and was used for the injection of lead into the petroleum products. The structure was removed in 1951.
- 140. Lakes Division Garage.** The Lakes Division Garage was constructed on the northwest corner of Prenatt Street and Babcock Street between 1939 and 1951 (Plate 4). The structure measured approximately 245 ft by 100 ft. The structure

currently exists and is owned and occupied by One Babcock Street, Inc. and their tenants.

141. Tank Truck Loading Rack. The Tank Truck Loading Rack was constructed between 1951 and 1955. The rack measured approximately 180 ft by 55 ft and had 10 islands with four pumps per island. The structure currently exists and was been modified by One Babcock Street, Inc. into a storage structure/garage facility after 1994. This tank truck loading rack was replaced during 1990 and 1991 by the current tank truck loading rack in the CRPA (Item 112).

141a. The Truck Wash Building. The Truck Wash Building was located just south of Prenatt Street and west of Babcock Street in the portion of the BSPA purchased from Allied Chemical Corp. for employee parking in 1974. The Truck Wash Building was approximately 80 ft by 25 ft in size and was detailed on a 1974 partial plan of the Site. Associated with the Truck Wash Building were three drains and below grade piping to collect the runoff from the truck washing activities. The engineering drawing of the Truck Wash Building indicates that the drain piping was connected to a below grade oil/water separator with a 1,000 gallon oil collection tank, both located to the north of the building. The drawing indicates that the water from the separator discharged to the BSA municipal sewer system on Prenatt Street. The Truck Wash Building was removed between 1990 and 1995.

4.7.2 Waste Handling Areas

No WHAs were identified in the BSPA.

4.7.3 Spills/Releases

Historical evidence supporting the occurrence of the following releases in this area is based on the knowledge of current and/or former Exxon Mobil employees (Table 2).

- Repeated releases of mixed petroleum products have been documented at several of the catch basins located in the BSPA during heavy precipitation events. These events have been documented by Mobil employees, as well as by the current occupants of the former Barrel House. During these events, two catch basins to the north and two catch basins to the east of the former Barrel House (Item 135) overflow, causing a mixture of petroleum product and water to pool on paved and unpaved surfaces. The timeframe during which these incidents have occurred is not known.

In addition to these releases, there have been several incidents where a sheen was observed on the Buffalo River in the area behind the Barrel House, at the outfall location of the BSA Babcock Street Sewer and to the west of the BSPA along the bank of the River. These spills are listed on Table 2 and the supporting documentation, in the form of Mobil records and/or NYSDEC Spill

Report Forms, is provided in Appendix F. The releases that are included in this category are the following:

- On August 29, 1988, a sheen was identified on the Buffalo River coming from the BSA outfall location. NYSDEC was notified and Spill No. 8804710 was assigned. The BSA was also notified. The follow-up action for this incident is not known.
- On October 19, 1989, a sheen was identified on the Buffalo River coming from the BSA outfall location. NYSDEC was notified and Spill No. 8907130 was assigned. The follow-up action for this incident is not known.
- On July 6, 1990, a sheen was identified on the Buffalo River coming from the BSA outfall location. NYSDEC was notified and Spill No. 9003889 was assigned. The BSA and United States Coast Guard (USCG) were also notified. The follow-up action for this incident is not known.
- On December 9, 1991, an oily substance was identified on the Buffalo River coming from the BSA outfall location. NYSDEC was notified and Spill No. 9109562 was assigned. The BSA, USCG and City of Buffalo Fire Department was also notified. Mobil deployed a containment boom and absorbents around the area of sheen.
- On April 11, 1992, a sheen was identified on the Buffalo River. The location of the sheen is not identified in the spill report. NYSDEC was notified and Spill No. 9200434 was assigned. The follow-up action for this incident is not known.
- On April 1, 1995, Mobil received a call from the adjacent property owner to the west (PVS Chemical), notifying them of a sheen on the Buffalo River coming from the Mobil dock area. An oily sheen was observed originating from the Mobil bulkhead behind the former Barrel House. NYSDEC was notified and Spill No. 9500007 was assigned. Mobil installed absorbent pads and vacuumed out free oil on the water. Two days later, the area was still leaching product. Mobil continued to change absorbent pads and inspected the WPS for efficiency.
- On April 5, 1995, petroleum product was observed entering the Buffalo River from the same source as 4/1/95 release. NYSDEC was notified and Spill No. 9500223 was assigned. The cause was believed to be a malfunction of the Well Point System. Mobil continued to maintain the containment booms and absorbents still in place from 4/1/95. The WPS was checked for malfunctions and repairs were made.
- On October 19, 1995, sheen was observed on the Buffalo River near the BSA Outfall at the base of Mobil's dock. NYSDEC was notified and Spill No. 9508906 was assigned. The BSA, City of Buffalo and Erie County were also notified. Mobil deployed a containment boom and absorbents to the sheen.

- On February 20, 1998, a 5' x 30' sheen along the Mobil dock was observed, sheen was also identified at PVS property and behind Pinto building approximately 82' upstream of the BSA outfall. NYSDEC was notified and Spill No. 9712937 was assigned. Mobil used a vacuum truck to cleanup sheen.
- On October 4, 1999, a sheen was observed on the Buffalo River near the BSA Outfall and approximately 100 ft to the west of Babcock Street. NYSDEC was notified and Spill No. 9908124 was assigned. The United States Coast Guard (USCG) were also notified. Mobil installed a slickbar containment boom and sorbent boom around the sheen. Mobil has maintained the booms since October 1999 and inspects the area daily.

4.8 Administrative Offices and Operations Area

The AOOA is centered between the NPSA, the NTYA, the CRPA, and the STYA. This area encompasses approximately 3.7 acres.

Similar to the NPSA, the western portion of the AOOA was purchased by Atlas Refining Company from Peter Schermerhorn on December 22, 1882. Atlas Refining Company purchased the eastern portion of the AOOA from the National Transit Company on July 31, 1890. Subsequently, SOCONY purchased these two parcels from Atlas Refining Company on June 16, 1892.

4.8.1 Former and Current Structures

Historically, the AOOA has housed structures related to railcar construction and repair, mechanical shops, and a laboratory. Prior to 1917, the structures located in the AOOA consisted primarily of railcar construction and repair shops and storage houses. After 1951, these structures were converted for usage as mechanical shops, storage houses, and boiler rooms. These structures were replaced with a mechanical shop, a storage house and a laboratory between 1951 and 1955. These structures currently exist at the Site. Additionally, roadways were paved through the area. The following list of structures describes in further detail the types of structures located within the AOOA. The structures are listed in chronological order according to its construction date. Table 1 provides information regarding storage tanks that were located within the AOOA.

- 142. Coal Shed.** The Coal Shed was located adjacent to the southwest of the Car Repair Shop (Item 10; Plate 1). The 43-ft by 15-ft shed was constructed prior to 1917 and stored coal used to power various operations. The Coal Shed was demolished between 1917 and 1924.

- 143. Wheel Shop/Blacksmith Shop/Machine Shop.** This structure was constructed prior to 1917 in the northern portion of the AOOA (Plate 1). The Wheel Shop measured approximately 48 ft by 55 ft. The Blacksmith Shop, adjoined to the east wall of the Wheel Shop, measured approximately 95 ft by 55 ft. The Machine Shop was adjoined to the east wall of the Blacksmith Shop and measured approximately 80 ft by 55 ft. Each of these units was associated with the railcar construction and repair processes that were performed in this area and the NPSA. After the railcar construction operations ceased at the Site between 1924 and 1939, the Wheel Shop became the Electrical Shop. This structure was removed between 1951 and 1955.
- 144. Iron Rack.** An iron rack was located north of the Wheel Shop/Blacksmith Shop/Machine Shop structure (Plate 1). The rack, constructed prior to 1917, measured approximately 25 ft by 18 ft and was associated with the car construction and repair operations. The iron rack was removed between 1917 and 1924.
- 145. Car Shop.** The Car Shop, constructed prior to 1917, was a brick 203 ft by 102 ft building located to the south of the Wheel Shop/Blacksmith Shop/Machine Shop structure (Plate 1). The Car Shop was the prime location of railcar construction operations. Following the termination of railcar construction at the Site, this structure became the Boiler/Mechanical Shop. This structure was removed between 1951 and 1955.
- 146. Furnace Room.** The Furnace Room, constructed prior to 1917, was located adjacent to the west side of the Car Shop (Plate 1). This structure was a brick structure and measured 32 ft by 24 ft. During the period of time that the AOOA housed railcar construction and repair structures, the Furnace Room was used in conjunction with these processes. The structure was later changed to Electrical Sub-Station "A". This structure currently exists at the Site.
- 147. Car Repair Shop/Steel Shed.** The Car Repair Shop was constructed prior to 1917 and located in the southwest corner of the AOOA (Plate 1). A railroad track that ran along Prenatt Street terminated at the structure. Located on the northeast corner of the Car Repair Shed was the Steel Shed. This structure measured approximately 40 ft by 52 ft in size and was used for storage. These two structures were removed between 1917 and 1924.
- 148. Car Shop Storehouse and Offices.** This structure was comprised of the Car Shop Storehouse (105 ft by 42 ft), an Engine Room and Boiler House (64 ft by 55 ft), and offices (approximately 42 ft by 42 ft). The structure was constructed prior to 1917 (Plate 1) and was located south of the Car Shop (Item 3). Adjacent and to the east of the Engine Room and Boiler House were a water heater and a 50-ft stack. Between 1917 and 1924, the Engine and Boiler Room, water heater and stack were removed from the structure and the remainder of the structure was utilized as a storehouse. The Car Shop Storehouse was demolished between 1951 and 1955.
- 149. Boiler House/Fire Foam House.** The Boiler House/Fire Foam House structure was constructed between 1917 and 1924 at the former location of the Car Repair Shop/Steel Shed (Plate 2). The Boiler House was approximately 200 ft by 52 ft in size with an

adjoining 20-ft by 26-ft brick structure on the western wall. The Fire Foam House was a 63-ft by 33-ft structure adjoined to the northern wall of the Boiler House. Adjacent to the north wall of the Boiler House were three storage tanks (Tanks 9, 352, and 353) and a 250-ft stack. The structure was demolished between 1951 and 1955.

- 150. Laboratory Building.** The Laboratory building was constructed between 1951 and 1955 in the northern portion of the AOOA (Plate 5). The structure measures approximately 50 ft by 60 ft. The Laboratory building currently exists at the Site and is used for storage of records related to the Terminal operations.
- 151. Boiler House.** This Boiler House was constructed between 1951 and 1955 at the former location of the Boiler House/Fire Foam House (Item 149; Plate 5). The structure was approximately 120 ft by 60 ft in size and was demolished between 1986 and 1990.
- 152. Mechanical Shop.** This structure was constructed between 1951 and 1955 at the former location of the Car Shop (Item 145) and the Wheel Shop/Blacksmith Shop/Machine Shop (Item 143). The Mechanical Shop measured approximately 180 ft by 100 ft and contained a garage for repairs and offices (Plate 5). The Mechanical Shop currently exists at the Site and is used as the Main Office.
- 153. Store House.** The Store House was constructed between 1951 and 1955 adjacent and to the east of the Mechanical Shop (Plate 5). The structure measures approximately 100 ft by 120 ft. The Store House currently exists at the Site and is used as a warehouse for storing miscellaneous equipment (i.e., snow plows). Located to the north were two storage sheds, one measuring approximately 30 ft by 65 ft, the other measuring approximately 35 ft by 40 ft. These storage sheds were removed between 1977 and 1986.

4.8.2 Waste Handling Areas

One storage tank was identified in the AOOA as a WHA from company records (Mobil, 1987). The storage tank was designated as WHA-11 and is represented on Plate 5. This storage tank measured approximately 6 ft by 4 ft by 2 ft and was located adjacent to the Mechanical Shop (Item 152). The tank was utilized to store waste oils and solvents generated from the maintenance and repair operations in the Mechanical Shop. A contractor was retained, as needed, for off-site reclamation of the waste. According to company records dated 1994, the tank was moved to a wash bay.

4.8.3 Spills/Releases

No significant spills have been documented to occur in this area. One spill, of less than 5 gallons, is described in Table 2.

4.9 Elk Street Properties Area

There are several parcels associated with the ESPA, all located on the north side of Elk Street. The total area of the ESPA is 2.8 acres. The following is a list of the parcels that comprise the ESPA, which describes the locations of the parcels and the previous and current structures located on these parcels.

- **Parcel No. 1.** This parcel is a 110-ft by 100-ft parcel (0.25 acres) on the northeast corner of Elk Street and Babcock Street (Plate 1 and 1917 Sanborn Map). Prior to 1912, this property was undeveloped. In 1912, a private garage was constructed by the SOCONY to house wagons and a repair shop.
- **Parcel No. 2.** In 1921, the 0.23 acre property adjacent to the private garage on Parcel No. 1, located on the northwest corner of Elk Street and Gorham Street, was purchased by SOCONY (Plate 2). Formerly occupied by residential structures, the property was developed with an additional private garage and a watchman's station.
- **Parcel No. 3.** In 1925, the garage on Parcel No. 2 was extended by 0.40 acres and in total, the garage measured approximately 260 ft by 100 ft (Plate 3). Between 1940 and 1950, Parcels No. 1, 2 and 3 housing both garages was sold to Trico Products Corporation. Trico Products Corporation currently occupies these properties.
- **Parcel No. 4 and No. 5.** Parcel No. 4 is a 0.3 acre parcel located on the northwest corner of Elk Street and Winona Street (Plate 5). Parcel No. 5 is a 1.5 acre parcel on located on the north side of Elk Street and between Winona Street and Bradford Street (Plate 5). These properties were purchased by Mobil following a product release from Tank 60, which occurred on March 12, 1976. The release occurred when the roof of Tank 60 ruptured when hot cracking stock for the TCC Unit entered the tank from the crude unit. The hot product contacted ice in the bottom of the tank, causing it to expand and damage the roof. The cracking stock spilled onto Elk Street and Parcels No. 4 and No. 5 properties, at that time occupied by Trico Products Corporation and residential structures. Mobil cleaned up the cracking stock by vacuuming off excess product and then mixing the remaining material with sand, excavating the material and disposing of it off site. Subsequently, Mobil purchased the two Elk Street properties and demolished the residential structures. Currently, Trico Products Corporation occupies the property on the corner of Elk Street and Winona Street (Parcel No. 4). The property between Winona Street and Bradford Street (Parcel No. 5) is still owned by Mobil and is currently undeveloped.

4.9.1 Spills/Releases

The only significant spill that occurred in this area was the March 12, 1976 incident involving Tank 60. This spill is described in Section 4.2.3.

5.0 SITE DRAINAGE AND WATER MANAGEMENT FACILITIES

The following is a summary of the Site storm water drainage system and the historical and current practices and facilities employed for the management of storm water and process water at the Site.

Historically, all storm water at the Site was collected by a network of catch basins and below grade piping. This storm water collection network has been in existence throughout the history of the Site, expanded and modified as necessary, to account for changes to the Site processes and layout over the years. In addition, process water and cooling water were also historically collected via underground piping, manholes and catch basins. In many areas of the Site, it is difficult to distinguish process sewer lines from storm water sewer lines based upon available documentation. However, available documentation indicates many of the sewer lines located within the northern portion of the FRA were associated with the refining processes and were abandoned in place with concrete slurry by 1993 (Mobil 1993). The water collected by the drainage network has been handled by several different treatment systems throughout the years, as described below. The current Site Storm Water and Groundwater Treatment System (Water Treatment System) is described in Section 6.1.

The 1917 map (Plate 1) shows an in-ground oil/water separator (yard trap) in the southern portion of the FRA (Section 4.3, Item 68). The origin of the waste streams collected in the separator could not be determined from existing documentation. The orientation of the separator relative to the former Buffalo River channel indicates that this separator likely discharged to the Buffalo River prior to its realignment, which occurred between 1914 and 1917. It is not clear where the separator discharged to after the realignment.

From prior to 1924 through 1993, all storm water, cooling water and process water were handled by the Main In-ground Oil/Water Separator (Section 4.3, Item 69). This separator was installed prior to 1924 and was located in the southern portion of the FRA. The separator consisted of eight compartments and was designated as WHA-2 as discussed in Section 4.3 and shown on Plate 5. Process water, as well as groundwater extracted by the Well Point System (WPS) between 1971 and 1993 (discussed in Section 6.1), was handled in the separator compartment located furthest to the north (compartment 1). The remaining seven compartments handled all

storm water and cooling water, as well as overflow from the first compartment. Between 1977 and 1984, the effluent from the Main In-ground Oil/Water Separator was discharged to the Buffalo River under SPDES Permit No. NY-0000264, as discussed further below.

Historically, until the refinery demolition occurred between 1988 and 1991, the oil that accumulated on the water in the first compartment (and other compartments, if any), was removed using a vacuum truck and pumped to tank 40 for storage (see Section 4.5). Approximately five to ten gallons of slop oil were removed from the separator each day and later resold (Mobil, 1987). As part of the formal closure of the refinery, the eight separator compartments were cleaned in 1981, following Resource Conservation and Recovery Act (RCRA) guidelines and at the direction of the NYSDEC and EPA. The waste generated during the 1981 cleaning was disposed off site. After the cleaning, compartment 1 continued to treat process water, cooling water and groundwater from the WPS. Compartments 2 and 3 continued to accept storm water and overflow of water from compartment 1. The five remaining chambers were not used. Chamber 1 was cleaned in 1992 and the waste generated was disposed off site. The five southernmost compartments were decommissioned in September 1993 by backfilling the compartments with soil from the Biotreatment Cell (Item 22). The sediment on the compartment floors was mixed with the soil from the Biotreatment Cell (Heffner, 1994).

Between 1973 and 1987/88, the effluent from the first compartment of the Main In-Ground Oil/Water Separator was treated by a Dissolved Air Flotation Unit (Section 4.3, Item 92). The Dissolved Air Flotation Unit was installed in 1972 (1972 aerial photograph), and operational by 1973 (Mobil, 1987). The unit was no longer used by 1987/88, but was not removed from the Site until 1990, when it was cleaned and dismantled in accordance with RCRA guidelines (Heffner 1994). This unit was designed WHA-3, as described in Section 4.2 and shown on Plate 5. The oil and foam from the unit were removed and sent to the Dissolved Air Flotation Float Storage Tank 77 (see Section 4.5). The foam was transported off site and the oil was stored in tanks 40 and 2 (see Section 4.5) and is shown in Plate 5.

Prior to the completion of upgrades to the Site's storm water and groundwater (Water Treatment System) discussed in Section 6.0, there were times under conditions of high storm water flow

that the capacity of the treatment system was exceeded. During these periods, which were generally short durations, a portion of the storm water flow from the Site was diverted to the Main In-ground Oil/Water Separator for temporary storage. Diverting storm water to the In-ground separators was manually initiated by opening a normally closed valve. Once the high storm water flow subsided, water was pumped back to the lift station from the Main In-ground Oil/Water Separator and through the Water Treatment System.

Historical Site drawings (Plates 1, 2, 3 and 4) indicate that several small in-ground oil/water separators were located within the collection system to treat flow streams from localized areas of the Site (see Section 4.1, Item 14 and Section 4.2, Item 29). The flow from small in-ground separators then discharged into the Site's collection system and ultimately to the Main In-ground Oil/Water Separator.

Documentation regarding spills at the Site (Table 2, NYSDEC Spill Nos. 9010202 and 9012582) indicate that the drains located within the bermed area of the former truck loading rack in the BSPA, discharged to a 6,000 gallon below grade spill collection tank. The spill tank was located off the southeast corner of the former loading rack. The reports indicate that the material collected in the tank was periodically pumped out with a vacuum truck and discharged to the Main In-ground Oil/Water Separator for treatment. This tank was no longer needed once the current truck loading rack was installed in the CRPA in 1991.

In 1977, Mobil was issued a State Pollution Discharge Elimination System (SPDES) permit (No. NY-0000264) by the NYSDEC for discharge of the treated water to the Buffalo River (NYSDEC 1995). In November 1979, the Site began discharging process water treated through the Main In-ground Oil/Water Separator and the Dissolved Air Flotation Unit to the Buffalo Sewer Authority (BSA) municipal sewer system. Storm water continued to be discharged from the Main In-ground Oil/Water Separator to the Buffalo River. In October 1984, the Site's SPDES permit was deleted since all flows, including storm water, were directed to the BSA sewer system. The treated water was originally discharged to the BSA sewer system under a Buffalo Water Authority Permit No. 85-06-045. Subsequently, the permit for discharge to the BSA sewer system was modified to a BSA Buffalo Pollution Discharge Elimination System

(BPDES) permit and renewed several times over the years. The Site's Water Treatment System is currently discharging to the BSA under BPDES Permit No. 97-05-BU045, which is due to be renewed in July 2000.

Since 1991, when the current truck loading rack in was installed in the CRPA, storm water/product from the truck loading rack containment area has been collected by a network of catch basins and below grade piping and discharged to a 12,000 gallon below grade tank. The material in the tank was periodically evacuated with a vacuum truck and discharged to the Main In-ground Oil/Water Separator until 1993 when the Site's Water Treatment System was installed and operational (Section 3.3). Between 1993 and February 2000, the water from the below grade tank was discharged to the storm water lift station associated with the Water Treatment System. After February 2000, the water/product was taken off site for disposal.

Following the purchase of the southwestern portion of the BSPA in 1974, Mobil installed several catch basins and below grade piping to drain their parking lot area. The parking lot drains discharged to the Buffalo River through a single pipe located along the river bank west of the BSPA (Exxon Mobil, 2000).

As part of the product storage tank realignment project, completed between 1988 and 1992, the tank berms for the active storage tanks were lined and a dedicated storm water drainage system for the berm areas was installed. Storm water from these areas is currently collected by a network of catch basins and below grade piping and directed to a lift station. Water is pumped from the lift station to an above ground oil/water (Plate 6) prior to discharge to the Buffalo River under SPDES permit No. NY-0204480, first issued in April 1992.

Since 1993, all storm water from sewers not associated with the current truck loading rack or the lined tank farm sewer system, is discharged to a storm water lift station (Plate 6) located to the north of the Main In-ground Oil/Water Separator. From the lift station, the storm water is pumped to the Water Treatment System, which treats storm water and groundwater extracted by the Site's remediation systems, as discussed in Section 6.1

6.0 SITE ENVIRONMENTAL HISTORY

The following is a summary of the Site's environmental history.

6.1 Site Environmental Remediation History

To date the environmental remediation activities at the Site have focused on control of groundwater flow beneath the Site and recovery of separate phase product. Two groundwater extraction systems are currently operating at the Site, the WPS and the Dual-Phase Recovery System. The groundwater recovered by these systems is treated by the Site's Water Treatment System, installed in the Remediation Building in the FRA (Section 4.3, Item 73) and operational since 1993. Treated water is discharged to the BSA municipal sewer system as discussed in Section 5.0. The following is a description of these systems and their history.

6.1.1 Well Point System

The WPS was installed and operational in 1971. It consists of approximately 123 well points located parallel to the Buffalo River and is configured in two legs, eastern and western. The western leg consists of 23 well points and the eastern leg consists of over 100 well points. The eastern leg has run continuously since its installation, however, the western leg had not operated from 1992 through August 1999.

Each leg has an independent header collection pipe and discharge pipe to the Water Treatment System, as well as a totalizing flow meter. Each well point is approximately 25 feet deep and 2.5 inches in diameter with a drop tube assembly within the well. Most points have been modified with a riser to the surface so that the well can be accessed. Each well has a valve connecting it to the 6-inch collection header pipe.

The well points are connected in series to the header pipe that leads to a dual-phase liquid ring pump vacuum system for each leg of the WPS. Each leg has an independent pump. The eastern leg has one operating pump and one standby pump. The western leg has one operating pump. The pumps provide a vacuum that extracts fluid from all of the well points tied into each header. Total fluids pulled from the WPS are pumped directly into the piping system and transmitted to the Site's Water Treatment System (prior to the existence of the Water Treatment System in

1993, the groundwater from the WPS was treated through the Main In-ground Oil/Water Separator described in Section 5.0).

The western leg of the WPS was rehabilitated between August 1998 and April 1999. The rehabilitation included accessing and inspecting each well point drop tube, isolation valve and connection piping to the collection header. The collection header was observed to be in poor condition and was replaced with new pipe and connections to the well points. In addition, each well point was pressure cleaned. The rehabilitation also included the purchase and installation of a new liquid ring vacuum pump. The western leg of the WPS was reactivated on August 23, 1999 and has been operated continuously since then.

6.1.2 Dual-Phase Recovery System

A dual-phase recovery system was installed at the Terminal between 1991 and 1993 to recover product. The dual-phase recovery system was activated in September 1993. The five recovery wells currently operating (RW-1 through RW-5) are located in the STYA within the separate phase product plume. A sixth recovery well had been installed in RW-6 in the STYA, but is no longer in use due to insufficient product recovery. The pumping equipment from this well was relocated to a manhole (MH-4) that showed the presence of product, located to the northwest of the Main In-ground Oil/Water Separator in the FRA. To date, the equipment has not been activated.

Associated with each recovery well are product and water recovery pumps, liquid level probes, a product storage tank, product and water transfer piping and a control panel. A groundwater pump is located near the bottom of the well and the product pump is located above it. By pumping water out of the recovery well, the water level is lowered in the surrounding area, creating a “cone of depression,” which is used to capture floating product and maximize its recovery. Recovered water is pumped to the Water Treatment System and recovered product is pumped to an above ground storage tank for later disposal off site.

6.1.3 Water Treatment System

The Site’s Water Treatment System was installed and operational by 1993. The Water Treatment System is located in the Remediation Building (Item 73) in the FRA. The treatment

system handles all extracted groundwater, as well as storm water not associated with the lined tank farm drainage system or the current loading rack drainage system (see Section 5.0). From 1993 until March 2000, the Site's Water Treatment System consisted of one 300 gallon per minute (gpm) coalescing oil/water separator to remove separate phase product, followed by three air sparging tanks (each rated for a maximum flow of 200 gpm) arranged in series to remove dissolved phase constituents.

In March 2000, upgrades to the treatment system, which included the addition of three oil/water separators, were completed to increase the capacity of the system and improve the removal of separate phase product. The upgraded system is arranged so that the flow from all groundwater sources described above, as well as dry weather flow from the storm water lift station (described in Section 5.0), are directed through one treatment train (Train 1). This treatment train consists of a new 500 gpm oil/water separator followed by the existing 300 gpm oil/water separator and air sparging tanks. Treated water is discharged to the existing BSA discharge location (a manhole located in the FRA to the west of the Main In-ground Oil/Water Separator).

Storm water flow generated under wet weather conditions is collected in the lift station, which serves as the primary removal point for separate phase product and suspended solids. Storm water is then pumped to the second treatment train (Train 2) which consists of a new 1,500 gpm oil/water separator followed by the new 500 gpm oil/water separator. The system is arranged so that flow in excess of the capacity of the 500 gpm separator bypasses this separator. Following oil water separation, the water is combined with the effluent from Train 1 and discharged to the BSA through the existing discharge location.

Several maintenance loops have been included in the system piping so that individual components can be isolated for maintenance and inspection, while allowing treatment to continue using the remaining components.

Recovered separate phase product is pumped from the oil/water separators to an 8,000 gallon above ground storage tank and periodically disposed off site.

6.2 Previous Environmental Investigations

The following is a listing of previous environmental investigations that have been conducted at the Site:

- Phase I Investigation at the ETYA (former Disposal Area), conducted by Recra Research, Inc. in 1983 (URS, 1986);
- Phase II investigation at the ETYA (former Disposal Area), conducted by URS Company, Inc. in 1986 (URS, 1986) and follow-up sampling for the Phase II investigation in the ETYA conducted in the fall of 1986, spring of 1987 and March 1988;
- Installation of five monitoring wells (ESI-1 through ESI-5) in the STYA, and performance of water-level and product thickness measurements in these new wells, by Empire Soils Investigations, Inc. in March and April 1989 (ESI, 1989a);
- Installation of five monitoring wells (B-1MW, B-2MW and B-4MW through B-6MW) in various areas of the Site and performance of water-level and product thickness measurements in these new wells, by Empire Soils Investigations, Inc. in July 1989 (ESI, 1989b);
- Installation of monitoring well B-3MW in the BSPA and performance of water-level and product thickness measurements in the new well, by Empire Soils Investigations, Inc. in October 1989 (ESI, 1989c);
- Installation of two monitoring wells (W-1 and W-2) in the ETYA and performance of water-level and product thickness measurements in these new wells, by Empire Soils Investigations, Inc. in October 1989 (ESI, 1989d);
- Installation of 17 monitoring wells (MW-1 through MW-17) in various areas of the Site and performance of water-level and product thickness measurements in these new wells, by Empire Soils Investigations, Inc. in October and November 1989 (ESI, 1990a);
- Installation of 25 monitoring piezometers (P-1 through P-25) in the ETYA and performance of water-level and product thickness measurements in these new piezometers, by Empire Soils Investigations, Inc. in April 1990 (ESI, 1990b);
- Abandonment and replacement of well B-5MW with B-5MWR in the CRPA by Empire Soils Investigations, Inc. in May 1990 (ESI, 1990c);
- Abandonment and replacement of well B-5MWR with B-5MWRR in the CRPA by Empire Soils Investigations, Inc. in July 1990 (ESI, 1990d);
- Environmental site assessment for parcels north of Elk Street, conducted by Groundwater Technology, Inc. in October 1993 (GTI 1994a);

- Environmental site assessment for the Barrel House (Lube Building) and surrounding area in the BSPA, conducted by Groundwater Technology, Inc. in October 1993 (GTI, 1994b);
- Environmental site assessment for the Barrel House (Lube Building) in the BSPA, conducted by Groundwater Technology, Inc. in March 1994 (GTI, 1994c);
- Environmental site assessment for the Babcock Street garage in the BSPA, conducted by Groundwater Technology, Inc. in April 1994 (GTI, 1994d);
- Site Facility Investigation, conducted by Groundwater & Environmental Services, Inc. from June through August 1998 (Roux Associates, Inc., 1998);
- Site Facility Investigation completion, conducted by Groundwater & Environmental Services, Inc. and Roux Associates from July through October 1999 (Roux Associates, Inc., 1999); and
- Investigation of an area of seepage along the Buffalo River west of Babcock Street and the BSPA, conducted by Groundwater & Environmental Services, Inc. and Roux Associates in January 2000 (Roux Associates, Inc., 2000d).

Respectfully submitted,

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Table 1. Tank Inventory for the Buffalo Terminal, Exxon Mobil Corporation, Buffalo Terminal, Buffalo, New York.

| Tank No | Size | | | | Capacity (BBL) | | Year Built | Removed | Duplicate Tank Designation | Notes | Location | Product Stored | Roof Type | Shell |
|---------|--------|-------|-----------------|---------------|----------------|-----------|------------|----------|----------------------------|-------|-----------------------------|------------------------|-----------|--------|
| | Length | Width | Diameter (Feet) | Height (Feet) | Gross | Available | | | | | | | | |
| 334 | | | 36 | 28 | 5,076 | | 1924 map | 1951 map | | | BSPA | | | |
| 342 | | | 25 | 16 | 1,399 | | 1924 map | 1977 map | | | BSPA | | | |
| 343 | | | 36 | 28 | 5,076 | | 1924 map | 1977 map | | | BSPA | | | |
| 383 | | | 12 | | | | 1939 map | 1977 map | | | BSPA | Stock Oil | | |
| 384 | | | 12 | | | | 1939 map | 1977 map | | | BSPA | Stock Oil | | |
| 385 | | | 12 | | | | 1939 map | 1977 map | | | BSPA | Stock Oil | | |
| 386 | | | 12 | | | | 1939 map | 1987 map | | | BSPA | Stock Oil | | |
| 387 | | | 12 | | | | 1939 map | 1987 map | | | BSPA | Stock Oil | | |
| 393 | | | 25 | 35 | 2,966 | 2,924 | 1941 | 1995 map | | | BSPA | Asphalt | Cone | Welded |
| 394 | | | 25 | 35 | 2,966 | 2,924 | 1941 | 1995 map | | | BSPA | Asphalt | Cone | Welded |
| 395 | | | 25 | 35 | 2,966 | 2,924 | 1941 | 1995 map | | | BSPA | Asphalt | Cone | Welded |
| 396 | | | 25 | 30 | 2,966 | 2,924 | 1941 | 1995 map | | | BSPA | Asphalt | Cone | Welded |
| 397 | | | 30 | 40 | 4,886 | 4,825 | 1941 | 1995 map | | | BSPA | Asphalt | Cone | Welded |
| 398 | | | 30 | 40 | 4,886 | 4,825 | 1941 | 1995 map | | | BSPA | Asphalt | Cone | Welded |
| 420 | | | 25 | 33 | 2,885 | | 1924 map | 1995 map | | | BSPA | Diesel | | |
| 421 | | | 25 | 33 | 2,885 | | 1924 map | 1995 map | | | BSPA | No. 2 Fuel Oil | | |
| 422 | | | 25 | 33 | 2,885 | | 1924 map | 1995 map | | | BSPA | No. 2 Fuel Oil | | |
| 423 | | | 25 | 33 | 2,885 | | 1924 map | 1995 map | | | BSPA | Kerosene | | |
| 424 | | | 25 | 33 | 2,885 | | 1924 map | 1995 map | | | BSPA | Stock Oil 102 | | |
| 425 | | | 25 | 33 | 2,885 | | 1924 map | 1995 map | | | BSPA | Stock Oil 494 | | |
| 491 | | | 30 | 40 | 4,886 | 4,825 | 1942 | 1995 map | | | BSPA | Out of Service/Asphalt | Cone | Welded |
| 492 | | | 30 | 40 | 4,886 | 4,825 | 1942 | 1995 map | | | BSPA | Out of Service/Asphalt | Cone | Welded |
| 493 | | | 25 | 35 | 2,966 | 2,924 | 1942 | 1995 map | | | BSPA | Asphalt | Cone | Welded |
| 494 | | | | | | | 1939 map | 1977 map | | | BSPA | | | |
| 495 | | | 25 | 35 | 2,966 | 2,924 | 1942 | 1995 map | | | BSPA | Asphalt | Cone | Welded |
| 800 | | | 30 | | | | 1951 map | 1990 map | | | BSPA | Stock Oil 492 | | |
| 801 | | | 30 | | | | 1951 map | 1990 map | | | BSPA | | | |
| 802 | | | 12 | | | | 1951 map | 1987 map | | | BSPA | Stock Oil | | |
| 803 | | | 12 | | | | 1951 map | 1987 map | | | BSPA | Stock Oil | | |
| 804 | | | 12 | | | | 1951 map | 1977 map | | | BSPA | Stock Oil | | |
| 805 | | | 12 | | | | 1951 map | 1977 map | | | BSPA | Stock Oil | | |
| 806 | | | 12 | | | | 1951 map | 1977 map | | | BSPA | Stock Oil | | |
| 807 | | | 12 | | | | 1951 map | 1977 map | | | BSPA | Stock Oil | | |
| 808 | | | 12 | | | | 1951 map | 1977 map | | | BSPA | Stock Oil | | |
| 809 | | | 12 | | | | 1951 map | 1977 map | | | BSPA | Stock Oil | | |
| 91 | | | 7 | 5 | 34 | | 1924 map | | | | BSPA (inside Lube Building) | Lube Products | | |
| 92 | | | 7 | 5 | 34 | | 1924 map | | | | BSPA (inside Lube Building) | Lube Products | | |
| 205 | | | 10 | 10 | 140 | | 1924 map | | | | BSPA (inside Lube Building) | Lube Products | | |
| 206 | | | 10 | 10 | 140 | | 1924 map | | | | BSPA (inside Lube Building) | Lube Products | | |
| 207 | | | 10 | 10 | 140 | | 1924 map | | | | BSPA (inside Lube Building) | Lube Products | | |
| 208 | | | 10 | 10 | 140 | | 1924 map | | | | BSPA (inside Lube Building) | Lube Products | | |
| 209 | | | 10 | 10 | 140 | | 1924 map | | | | BSPA (inside Lube Building) | Lube Products | | |
| 210 | | | 10 | 10 | 140 | | 1924 map | | | | BSPA (inside Lube Building) | Lube Products | | |

Table 1. Tank Inventory for the Buffalo Terminal, Exxon Mobil Corporation, Buffalo Terminal, Buffalo, New York.

| Tank No | Size | | | | Capacity (BBL) | | Year Built | Removed | Duplicate Tank Designation | Notes | Location | Product Stored | Roof Type | Shell |
|---|--------|-------|-----------------|---------------|----------------|-----------|------------|------------|----------------------------|-------|----------------------------|---------------------------------|-----------|---------|
| | Length | Width | Diameter (Feet) | Height (Feet) | Gross | Available | | | | | | | | |
| Administrative Offices and Operations Area | | | | | | | | | | | | | | |
| 9 | | | 35 | 24 | 4,113 | | 1924 map | | | | AOOA | | | |
| 222 | | | 75 | | | | 1948 | 1955 map | | | AOOA | | | |
| 348 | | | | | | | 1939 map | 1951 map | | | AOOA | | | |
| 349 | | | | | | | 1924 map | 1977 map | | | AOOA | | | |
| 351 | | | | | | | 1924 map | 1977 map | | | AOOA | | | |
| 352 | | | 10 | 20 | 280 | | 1924 map | 1977 map | | | AOOA | | | |
| 353 | | | 10 | 20 | 280 | | 1924 map | 1977 map | | | AOOA | | | |
| 412 | | | 12.67 | 10 | 224 | | 1924 map | 1939 map | | | AOOA (Inside Boiler House) | | | |
| 413 | | | 12.67 | 10 | 224 | | 1924 map | 1939 map | | | AOOA (Inside Boiler House) | | | |
| 414 | | | 10.5 | 8 | 123 | | 1924 map | 1939 map | | | AOOA (Inside Boiler House) | | | |
| 415 | | | 10.5 | 8 | 123 | | 1924 map | 1939 map | | | AOOA (Inside Boiler House) | | | |
| 416 | | | | | | 180,600 | 1924 map | 1939 map | | | AOOA (Inside Boiler House) | | | |
| 417 | | | | | | 35,700 | 1924 map | 1939 map | | | AOOA (Inside Boiler House) | | | |
| Babcock Street Properties Area | | | | | | | | | | | | | | |
| 76 | | | 15 | 16 | 504 | | 1924 map | 1977 map | | | BSPA | Mobil Gas | | |
| 77 | | | 15 | 16 | 504 | | 1924 map | 1977 map | | | BSPA | V.M.P | | |
| 83 | | | 67 | 40 | 23,865 | 22,609 | 1939 | 1990 photo | | | BSPA | No. 6 Fuel Oil | Cone | Welded |
| 84 | | | 67 | 40 | 23,865 | 22,609 | 1939 | 1990 photo | | | BSPA | No. 6 Fuel Oil | Cone | Welded |
| 85 | | | 100 | 40 | 54,630 | 51,828 | 1944 | 1990 photo | Duplicate name in FRA | | | No. 6 Fuel Oil and Cutter Stock | Cone | Riveted |
| 151 | | | 15 | 16.167 | 509 | | 1924 map | 1977 map | | | BSPA | No. 3 Fuel Oil | | |
| 152 | | | 15 | 16.104 | 507 | | 1924 map | 1977 map | | | BSPA | | | |
| 153 | | | 15 | 16.25 | 511 | | 1924 map | 1977 map | | | BSPA | No. 80 Octane | | |
| 154 | | | 14 | 15.135 | 415 | | 1924 map | 1977 map | | | BSPA | No. 5 Savo. (Lube Oil) | | |
| 159 | | | 15 | 16 | 504 | | 1924 map | 1977 map | | | BSPA | No. 5 Savo. (Lube Oil) | | |
| 162 | | | 16 | 15 | 537 | | 1924 map | 1939 map | | | BSPA | | | |
| 162 | | | 16 | | | | 1939 map | 1977 map | Different Location | | BSPA | | | |
| 164 | | | 15 | | | | 1939 map | 1977 map | | | BSPA | | | |
| 166 | | | 21 | | | | 1939 map | 1977 map | | | BSPA | | | |
| 167 | | | 15 | 20.208 | 636 | | 1924 map | 1977 map | | | BSPA | | | |
| 170 | | | 15 | 15.125 | 476 | | 1924 map | 1977 map | | | BSPA | No. 3 Fuel Oil | | |
| 188 | | | 25 | 16 | 1,399 | | 1924 map | 1977 map | | | BSPA | | | |
| 190 | | | 15 | 16 | 504 | | 1924 map | 1977 map | | | BSPA | | | |
| 193 | | | 15 | 16.25 | 511 | | 1924 map | 1977 map | | | BSPA | No. 1 Savo. | | |
| 214 | | | 24.25 | 17.5 | 1,440 | | 1924 map | 1951 map | | | BSPA | | | |
| 221 | | | 85 | 50 | 49,441 | 45,394 | 1944 | 1988 | | | BSPA | No. 2 Fuel Oil | Cone | Riveted |
| 333 | | | 36 | 28 | 5,076 | | 1924 map | 1951 map | | | BSPA | | | |

Table 1. Tank Inventory for the Buffalo Terminal, Exxon Mobil Corporation, Buffalo Terminal, Buffalo, New York.

| Tank No | Size | | | | Capacity (BBL) | | Year Built | Removed | Duplicate Tank Designation Notes | Location | Product Stored | Roof Type | Shell |
|---------|--------|-------|-----------------|---------------|----------------|-----------|------------|---------|----------------------------------|-----------------------------|----------------|-----------|-------|
| | Length | Width | Diameter (Feet) | Height (Feet) | Gross | Available | | | | | | | |
| 211 | | | 4 | 5 | 11 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 212 | | | 5 | 4 | 14 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 231 | | | 14.25 | 11 | 312 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 232 | | | 12.17 | 11 | 228 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 294 | | | | | 119 | | 1943 map | | | BSPA (inside Lube Building) | Delvac 920 | | |
| 295 | | | | | 119 | | 1943 map | | | BSPA (inside Lube Building) | Mobil Oil 88 | | |
| 296 | | | | | 119 | | 1943 map | | | BSPA (inside Lube Building) | Rubbex 900 | | |
| 297 | | | | | 119 | | 1943 map | | | BSPA (inside Lube Building) | | | |
| 298 | | | | | 119 | | 1943 map | | | BSPA (inside Lube Building) | Stock 232 | | |
| 299 | | | | | 119 | | 1943 map | | | BSPA (inside Lube Building) | Mobil Oil AF | | |
| 300 | | | | | 119 | | 1943 map | | | BSPA (inside Lube Building) | Flowrex 500 | | |
| 303 | | | 5 | 4.5 | 16 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 304 | | | 5 | 4.5 | 16 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 305 | | | 5 | 4.5 | 16 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 307 | | | 5.875 | 11.208 | 54 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 310 | | | 7 | 11 | 75 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 311 | | | 7 | 11 | 75 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 312 | | | 7 | 11 | 75 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 315 | | | 7 | 8 | 55 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 316 | | | 7 | 8 | 55 | | 1924 map | | | BSPA (inside Lube Building) | Cylrex | | |
| 317 | | | 7 | 8 | 55 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 319 | | | 12.5 | 11 | 240 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 320 | | | 12.5 | 11 | 240 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 321 | | | 12.5 | 12 | 262 | | 1924 map | | | BSPA (inside Lube Building) | Stock No. 172 | | |
| 322 | | | 12.5 | 12 | 262 | | 1924 map | | | BSPA (inside Lube Building) | Stock No. 378 | | |

Table 1. Tank Inventory for the Buffalo Terminal, Exxon Mobil Corporation, Buffalo Terminal, Buffalo, New York.

| Tank No | Size | | | | Capacity (BBL) | | Year Built | Removed | Duplicate Tank Designation Notes | Location | Product Stored | Roof Type | Shell |
|---------|--------|-------|-----------------|---------------|----------------|-----------|------------|---------|----------------------------------|-----------------------------|------------------|-----------|-------|
| | Length | Width | Diameter (Feet) | Height (Feet) | Gross | Available | | | | | | | |
| 323 | | | 12.5 | 12 | 262 | | 1924 map | | | BSPA (inside Lube Building) | Stock No. 180 | | |
| 428 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Stock No. 826 | | |
| 429 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Turex 90 | | |
| 430 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Stock No. 102 | | |
| 431 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Stock No. 92 | | |
| 432 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Stock No. 572 | | |
| 433 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Cylinder Oil | | |
| 434 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | DTE Oil light | | |
| 435 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Stock No, 270 | | |
| 436 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Stock No. 671 | | |
| 437 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Stock No. 113 | | |
| 438 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Stock No. 492 | | |
| 439 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Stock No, 494 | | |
| 440 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Turex 125 | | |
| 441 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Delvac 930 | | |
| 442 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Mobil Oil Arctic | | |
| 443 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 444 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Stock No. 142 | | |
| 445 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Stock No. 615 | | |
| 446 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Stock No. 352 | | |
| 447 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Stock No. 141 | | |
| 448 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Stock No. 621 | | |
| 449 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Mobil Oil Spec. | | |
| 450 | | | 13 | 12 | 284 | | 1924 map | | | BSPA (inside Lube Building) | Mobil Oil | | |

Table 1. Tank Inventory for the Buffalo Terminal, Exxon Mobil Corporation, Buffalo Terminal, Buffalo, New York.

| Tank No | Size | | | | Capacity (BBL) | | Year Built | Removed | Duplicate Tank Designation Notes | Location | Product Stored | Roof Type | Shell |
|--------------------------------------|--------|-------|-----------------|---------------|----------------|-----------|------------|----------|--|-----------------------------|--|-----------|--------|
| | Length | Width | Diameter (Feet) | Height (Feet) | Gross | Available | | | | | | | |
| 451 | | | 12.75 | 12 | 273 | | 1924 map | | | BSPA (inside Lube Building) | DTE Oil Heavy | | |
| 452 | | | 14 | 11 | 302 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 453 | | | 14 | 11 | 302 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 454 | | | 8 | 4 | 36 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 455 | | | 5 | 10.75 | 38 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 456 | | | 6 | 8 | 40 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 457 | | | 6 | 8 | 40 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 458 | | | 6 | 8 | 40 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 459 | | | 6 | 8 | 40 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 460 | | | 5 | 5 | 17 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 461 | | | 11 | 8.5 | 144 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| 462 | | | 11 | 5.83 | 99 | | 1924 map | | | BSPA (inside Lube Building) | Lube Products | | |
| Central Rail and Process Area | | | | | | | | | | | | | |
| 50 | | | | | | | 1939 map | 1951 map | | CRPA | | | |
| 265 | | | 20 | 111.92 | 6,262 | | 1924 map | 1939 map | | CRPA | | | |
| 354 | | | 25 | 17 | 1,486 | | 1924 map | 1939 map | | CRPA | | | |
| 355 | | | 25 | 17 | 1,486 | | 1924 map | 1939 map | | CRPA | | | |
| 356 | | | 25 | 17 | 1,486 | | 1924 map | 1939 map | | CRPA | | | |
| 357 | | | 25 | 17 | 1,486 | | 1924 map | 1939 map | | CRPA | | | |
| Eastern Tank Yard Area | | | | | | | | | | | | | |
| 175 | | | 130 | 32 | 68,548 | 63,366 | 1953 | Existing | | ETYA (Former Disposal Area) | TCC Charge/ No. 6 Fuel Oil and Cutter, No.2 Fuel Oil | Cone | Welded |
| 176 | | | 130 | 30 | 68,548 | 63,366 | 1953 | Existing | | ETYA (Former Disposal Area) | TCC Charge/ No. 6 Fuel Oil and Cutter, Unleaded Gasoline | Cone | Welded |
| F213 | 46 | 10 | | | | | 1977 map | 1987 map | | ETYA (Former Disposal Area) | Liquified Petroleum Gas | | |
| F214 | 46 | 10 | | | | | 1977 map | 1987 map | | ETYA (Former Disposal Area) | Liquified Petroleum Gas | | |
| F215 | 46 | 10 | | | | | 1977 map | 1987 map | | ETYA (Former Disposal Area) | Liquified Petroleum Gas | | |
| F216 | 46 | 10 | | | | | 1977 map | 1987 map | | ETYA (Former Disposal Area) | Liquified Petroleum Gas | | |
| Former Refinery Area | | | | | | | | | | | | | |
| 4 | | | | | | | 1917 | 1939 | Also called 29 and Duplicate tank name in NTYA | FRA | | | |

Table 1. Tank Inventory for the Buffalo Terminal, Exxon Mobil Corporation, Buffalo Terminal, Buffalo, New York.

| Tank No | Size | | | | Capacity (BBL) | | Year Built | Removed | Duplicate Tank Designation Notes | Location | Product Stored | Roof Type | Shell | |
|---------|--------|-------|-----------------|---------------|----------------|-----------|------------|------------|----------------------------------|----------|---------------------------------|-----------|---------|--|
| | Length | Width | Diameter (Feet) | Height (Feet) | Gross | Available | | | | | | | | |
| 29 | | | 54 | 30.167 | 12,305 | | 1924 map | 1990 photo | Same as Tank 4 | FRA | | | | |
| 36 | | | 15 | 20 | 629 | | 1924 map | 1977 map | | FRA | | | | |
| 37 | | | 15 | 20 | 629 | | 1924 map | 1977 map | | FRA | | | | |
| 45 | | | 30 | 20 | 2,518 | | 1917 map | 1939 map | Not labeled until 1924 map | FRA | Hot Water Tank | | | |
| 45 | | | 16 | | | | 1917 map | 1924 map | | FRA | | | | |
| 47 | | | 30 | 25 | 3,147 | | 1924 map | 1977 map | | FRA | | | | |
| 48 | | | 24 | | | | 1939 map | 1977 map | | FRA | | | | |
| 51 | | | 15 | | | | 1939 map | | | FRA | | | | |
| 81 | | | 48 | 40 | 1,210 | 11,941 | 1939 | 1989 | | FRA | Unblended No. 2/TCC Charge | Cone | Welded | |
| 82 | | | 48 | 40 | 12,100 | 10,826 | 1940 | 1988 | | FRA | Mobil Diesel #2 Fuel Oil (1986) | Cone | Riveted | |
| 85 | | | 10 | 10 | 140 | | 1924 map | 1939 map | Duplicate name in BSPA | FRA | | | | |
| 117 | | | 25 | 20 | 1,749 | | 1924 map | 1977 map | | FRA | Diesel | | | |
| 120 | | | 30 | 16.33 | 2,056 | | 1924 map | 1939 map | | FRA | | | | |
| 157 | | | 23 | 14.33 | 1,060 | | 1924 map | 1977 map | | FRA | | | | |
| 161 | 36 | 12 | | | | | 1951 map | 1977 map | | FRA | | | | |
| 165 | 36 | 12 | | | | | 1951 map | 1977 map | | FRA | | | | |
| 169 | | | 70 | 30 | 19,757 | 16,934 | 1924 map | | Replaced | FRA | | | | |
| 169 | | | 70 | 30 | 19,757 | 16,934 | 1940 | 1988 | | FRA | Kerosene/Jet A #1 Fuel Oil | Cone | Riveted | |
| 173 | | | 30 | 12 | 1,511 | | 1917 map | 1939 map | | FRA | | | | |
| 174 | | | 30 | 12 | 1,511 | | 1917 map | 1939 map | | FRA | | | | |
| 175 | | | 30 | 12 | 1,511 | | 1917 map | 1939 map | | FRA | | | | |
| 176 | | | 30 | 12 | 1,511 | | 1917 map | 1939 map | | FRA | | | | |
| 177 | | | 30 | 12 | 1,511 | | 1917 map | 1939 map | | FRA | Lube Oil | | | |
| 178 | | | 30 | 12 | 1,511 | | 1917 map | 1951 map | | FRA | | | | |
| 179 | | | 40 | 12 | 2,686 | | 1917 map | 1939 map | | FRA | | | | |
| 180 | | | 40 | 12 | 2,686 | | 1924 map | 1977 map | | FRA | | | | |
| 181 | | | 40 | 12 | 2,686 | | 1917 map | 1977 map | | FRA | | | | |
| 185 | | | 30 | 40 | 4,645 | 4,277 | 1939 | 1995 map | | FRA | No. 6 Fuel Oil | Cone | Welded | |
| 186 | | | 12 | 10 | 201 | | 1924 map | 1939 map | | FRA | | | | |
| 186 | | | 30 | | | | 1939 map | 1995 map | | FRA | | | | |
| 191 | | | 40 | 12 | 2,686 | | 1924 map | 1977 map | | FRA | | | | |
| 192 | | | 40 | 12 | 2,686 | | 1924 map | 1977 map | | FRA | | | | |
| 194 | | | 40 | 12 | 2,686 | | 1924 map | 1977 map | | FRA | | | | |
| 195 | | | 40 | 12 | 2,686 | | 1924 map | 1977 map | | FRA | | | | |
| 219 | | | 24 | | | | 1951 map | 1977 map | | FRA | | | | |
| 220 | | | 36 | | | | 1951 map | 1977 map | | FRA | | | | |
| 291 | | | 18 | 14 | 635 | | 1924 map | 1951 map | | FRA | | | | |
| 292 | | | 18 | 14 | 635 | | 1924 map | 1951 map | | FRA | | | | |
| 301 | | | 15 | 10 | 315 | | 1924 map | 1977 map | | FRA | | | | |
| 364 | | | 45 | 16 | 4,532 | 17,810 | 1917 map | 1977 map | | FRA | Gas Holder | | | |
| 390 | 36 | 12 | | | | | 1951 map | 1977 map | | FRA | | | | |
| 392 | 36 | 12 | | | | | 1951 map | 1977 map | | FRA | | | | |
| 490 | | | 30 | 40 | 4,886 | 4,825 | 1942 | 1995 map | | FRA | Asphalt | Cone | Welded | |
| 496 | | | | | | | 1939 map | 1995 map | | FRA | | | | |
| 497 | | | | | | | 1939 map | 1995 map | | FRA | | | | |

Table 1. Tank Inventory for the Buffalo Terminal, Exxon Mobil Corporation, Buffalo Terminal, Buffalo, New York.

| Tank No | Size | | | | Capacity (BBL) | | Year Built | Removed | Duplicate Tank Designation Notes | Location | Product Stored | Roof Type | Shell |
|---|--------|-------|-----------------|---------------|----------------|-----------|------------|----------|----------------------------------|----------------------|--|-----------|---------|
| | Length | Width | Diameter (Feet) | Height (Feet) | Gross | Available | | | | | | | |
| 498 | | | 25 | 35 | 2,966 | 2,924 | 1942 | 1995 map | | FRA | Asphalt | Cone | Welded |
| 499 | | | 25 | 35 | 2,966 | 2,924 | 1942 | 1995 map | | FRA | Asphalt Cutter (Kerosene Distillate)/Asphalt | Cone | Welded |
| 525 | 36 | 12 | | | | | 1951 map | 1977 map | | FRA | | | |
| 531 | | | 15 | | | | 1951 map | 1977 map | | FRA | | | |
| 534 | | | 30 | | | | 1951 map | 1977 map | | FRA | | | |
| Northeast Process and Storage Area | | | | | | | | | | | | | |
| 3 | | | 40 | 12 | 2,686 | | 1924 map | 1977 map | | NPSA | | | |
| 6 | | | 10 | 16 | 224 | | 1924 map | 1977 map | | NPSA | | | |
| 7 | | | 10 | 16 | 224 | | 1924 map | 1977 map | | NPSA | | | |
| 11 | | | 10 | 16 | 224 | | 1924 map | 1977 map | | NPSA | | | |
| 15 | | | 30 | 12 | 1,511 | | 1924 map | 1977 map | | NPSA | Lube Oil | | |
| 17 | | | 10 | 16 | 224 | | 1924 map | 1977 map | | NPSA | | | |
| 30 | | | 40 | 11.875 | 2,658 | | 1924 map | 1977 map | | NPSA | Lube Oil #2 Fuel Oil (1986) | | |
| 32 | | | 70 | 30 | 19,878 | 19,538 | 1923 | 1980 | | NPSA | Unleaded Gasoline | Cone | Riveted |
| 34 | | | 30 | 10 | 1,259 | | 1924 map | 1977 map | | NPSA | | | |
| 38 | 48 | 18 | | NA | | | 1939 map | 1955 map | | NPSA | | | |
| 39 | | | 30 | 24 | 3,022 | | 1924 map | 1977 map | | NPSA | | | |
| 41 | | | 30 | 24 | 3,022 | | 1924 map | 1977 map | | NPSA | | | |
| 61 | | | 21.92 | 11.33 | 762 | | 1924 map | 1951 map | | NPSA | | | |
| 62 | | | 12 | 5.5 | 111 | | 1924 map | 1939 map | | NPSA | | | |
| 63 | | | 14 | 15 | 411 | | 1924 map | 1951 map | | NPSA | | | |
| 63 | | | 14 | | | | 1951 map | 1977 map | Different Location | NPSA | | | |
| 64 | | | 14 | 15 | 411 | | 1924 map | 1951 map | | NPSA | | | |
| 64 | | | 14 | | | | 1951 map | 1977 map | Different Location | NPSA | | | |
| 71 | | | 21 | | | | 1939 map | 1977 map | | NPSA | | | |
| 72 | | | 21 | | | | 1939 map | 1977 map | | NPSA | | | |
| 73 | | | 40 | 11.77 | 2,634 | | 1924 map | 1977 map | | NPSA | Lube Oil | | |
| 74 | | | 24 | | | | 1939 map | 1977 map | | NPSA | | | |
| 108 | | | 16 | 18 | 645 | | 1924 map | 1977 map | | NPSA | | | |
| 114 | | | 20 | 15 | 839 | | 1924 map | 1977 map | | NPSA | | | |
| 124 | | | 2.92 | 12.25 | 15 | | 1924 map | 1939 map | | NPSA (Pump House) | | | |
| 135 | | | 18 | 20 | 906 | | 1924 map | 1977 map | | NPSA | | | |
| 135½ | | | 14 | 18.167 | 498 | | 1924 map | 1977 map | | NPSA | | | |
| 136 | | | 18 | 20 | 906 | | 1924 map | 1977 map | | NPSA | | | |
| 136½ | | | 14 | 18.167 | 498 | | 1924 map | 1977 map | | NPSA | | | |
| 141 | | | 14 | | | | 1939 map | 1977 map | | NPSA | | | |
| 142 | | | 14 | | | | 1939 map | 1977 map | | NPSA | | | |
| 143 | | | 14 | | | | 1939 map | 1977 map | | NPSA | | | |
| 144 | | | 14 | | | | 1939 map | 1977 map | | NPSA | | | |
| 155 | | | 35 | 6 | 1,028 | | 1924 map | 1977 map | | NPSA | | | |
| 156 | | | 35 | 6 | 1,028 | | 1924 map | 1977 map | | NPSA | Lube Oil | | |
| 177 | | | 21 | | | | 1939 map | 1977 map | | NPSA | | | |
| 178 | | | 18 | | | | 1939 map | 1977 map | | NPSA | | | |
| 183 | | | 30 | 12 | 1,511 | | 1924 map | 1977 map | | NPSA | Lube Oil | | |
| 201 | 18 | 8 | | 4 | 103 | | 1924 map | 1939 map | | NPSA | Water box | | |
| 215 | 40 | 21 | | 9 | 1,346 | | 1924 map | 1977 map | | NPSA | | | |
| 216 | | | 12.75 | 5.33 | 121 | | 1924 map | 1977 map | | NPSA | | | |

Table 1. Tank Inventory for the Buffalo Terminal, Exxon Mobil Corporation, Buffalo Terminal, Buffalo, New York.

| Tank No | Size | | | | Capacity (BBL) | | Year Built | Removed | Duplicate Tank Designation Notes | Location | Product Stored | Roof Type | Shell |
|---------|--------|--------|-----------------|---------------|----------------|-----------|------------|----------|----------------------------------|----------------------|---------------------------------------|-----------|---------|
| | Length | Width | Diameter (Feet) | Height (Feet) | Gross | Available | | | | | | | |
| 218 | | | 70 | 30 | 19,878 | 19,500 | 1923 | 1990 | | NPSA | TCC Charge/ No. 6 Fuel Oil and Cutter | Cone | Riveted |
| 223 | | | 15 | 18 | 567 | | 1924 map | 1951 map | | NPSA | | | |
| 223 | | | 18 | | | | 1951 map | 1977 map | Different Tank and Location | NPSA | | | |
| 224 | 26 | 16 | | 8 | 593 | | 1917 map | 1977 map | | NPSA | | | |
| 227 | | | 15 | 14.83 | 467 | | 1924 map | 1951 map | | NPSA | | | |
| 228 | | | | | 21 | | 1939 map | 1977 map | | NPSA | | | |
| 229 | | | | | 24 | | 1939 map | 1977 map | | NPSA | | | |
| 241 | 18.5 | 5.083 | | 4.5 | 75 | | 1924 map | 1939 map | | NPSA | Paraffin/Wax | | |
| 241½ | 18.5 | 5.167 | | 4.417 | 75 | | 1924 map | 1939 map | | NPSA | Paraffin/Wax | | |
| 242 | 18.458 | 4.67 | | 4.333 | 67 | | 1924 map | 1939 map | | NPSA | Paraffin/Wax | | |
| 242½ | 18.33 | 5.33 | | 4.333 | 75 | | 1924 map | 1939 map | | NPSA | Paraffin/Wax | | |
| 243 | 19.08 | 12 | | 4.167 | 170 | | 1924 map | 1939 map | | NPSA | Paraffin/Wax | | |
| 244 | 19.25 | 11.167 | | 4.833 | 185 | | 1924 map | 1939 map | | NPSA | Paraffin/Wax | | |
| 245 | | | 14 | 11.5 | 315 | | 1924 map | 1977 map | | NPSA | | | |
| 246 | | | 14 | 11.5 | 315 | | 1924 map | 1977 map | | NPSA | | | |
| 247 | | | 14 | 11.5 | 315 | | 1924 map | 1977 map | | NPSA | | | |
| 248 | | | 14 | 11.5 | 315 | | 1924 map | 1977 map | | NPSA | | | |
| 250 | | | 30 | 25.167 | 3,168 | | 1924 map | 1977 map | | NPSA | Lube Oil | | |
| 251 | | | 50 | 30 | 9,828 | 9,650 | 1923 | 1990 | | NPSA | TCC Charge/ No. 6 Fuel Oil and Cutter | Cone | Riveted |
| 252 | | | 50 | 30 | 9,791 | 9,616 | 1923 | 1990 | | NPSA | Unblended No. 2/TCC Charge | Cone | Riveted |
| 254 | | | 25 | 18.833 | 1,647 | | 1924 map | 1977 map | | NPSA | | | |
| 255 | 21 | 14.75 | | 5.667 | 313 | | 1924 map | 1939 map | | NPSA | Paraffin/Wax | | |
| 256 | 21 | 14 | | 5.417 | 284 | | 1924 map | 1939 map | | NPSA | Paraffin/Wax | | |
| 257 | 21 | 14 | | 5.417 | 284 | | 1924 map | 1939 map | | NPSA | Paraffin/Wax | | |
| 258 | 21 | 14 | | 5.333 | 279 | | 1924 map | 1939 map | | NPSA | Paraffin/Wax | | |
| 259 | 12.083 | 6.167 | | 5.83 | 77 | | 1924 map | 1977 map | | NPSA | | | |
| 260 | 12.083 | 6.167 | | 5.83 | 77 | | 1924 map | 1977 map | | NPSA | | | |
| 264 | | | 12 | 5 | 101 | | 1924 map | 1951 map | | NPSA | | | |
| 266 | | | 20 | 24 | 1,343 | | 1924 map | 1977 map | | NPSA | | | |
| 267 | | | 20 | 24 | 1,343 | | 1924 map | 1977 map | | NPSA | | | |
| 274 | 18 | 12 | | 5.5 | 212 | | 1924 map | 1939 map | | NPSA (Pump House) | | | |
| 279 | | | 27 | | | | 1939 map | 1977 map | | NPSA | | | |
| 280 | | | 27 | | | | 1939 map | 1977 map | | NPSA | | | |
| 281 | | | 24 | 25 | 2,014 | | 1924 map | 1977 map | | NPSA | Lube Oil | | |
| 282 | 27 | 12 | | | | | 1939 map | 1977 map | | NPSA | | | |
| 283 | | | 16 | 16 | 573 | | 1924 map | 1977 map | | NPSA | | | |
| 325 | 20 | 10 | | 3 | 107 | | 1924 map | | | NPSA | | | |
| 326 | 5 | 10 | | | | | 1924 map | | | NPSA | | | |
| 327 | 14 | 8 | | 4 | 80 | | 1924 map | | | NPSA | | | |
| 330 | | | 12 | 4.5 | 97 | | 1924 map | | | NPSA | | | |
| 331 | | | 12.417 | 4.5 | 97 | | 1924 map | | | NPSA | | | |
| 335 | | | 40 | 26 | 5,819 | | 1924 map | | | NPSA | | | |
| 336 | | | 40 | 26 | 5,819 | | 1924 map | | | NPSA | | | |
| 337 | | | 40 | 26 | 5,819 | | 1924 map | | | NPSA | | | |
| 338 | | | 40 | 26 | 5,819 | | 1924 map | | | NPSA | | | |
| 339 | | | 40 | 26 | 5,819 | | 1924 map | | | NPSA | | | |

Table 1. Tank Inventory for the Buffalo Terminal, Exxon Mobil Corporation, Buffalo Terminal, Buffalo, New York.

| Tank No | Size | | | | Capacity (BBL) | | Year Built | Removed | Duplicate Tank Designation Notes | Location | Product Stored | Roof Type | Shell |
|--------------------------------|--------|--------|-----------------|---------------|----------------|-----------|------------|------------|----------------------------------|--------------------------|-----------------------------------|-----------|---------|
| | Length | Width | Diameter (Feet) | Height (Feet) | Gross | Available | | | | | | | |
| 340 | | | 40 | 26 | 5,819 | | 1924 map | | | NPSA | | | |
| 341 | | | 40 | 26 | 5,819 | | 1924 map | | | NPSA | | | |
| 358 | | | 20 | 23.25 | 1,301 | | 1924 map | | | NPSA | | | |
| 359 | | | 20 | 23.08 | 1,291 | | 1924 map | 1939 map | | NPSA | | | |
| 360 | | | 20 | 23.08 | 1,291 | | 1924 map | 1939 map | | NPSA | | | |
| 361 | | | 20 | 23.375 | 1,308 | | 1924 map | 1939 map | | NPSA | | | |
| 373 | | | 45 | 30 | 8,498 | | 1924 map | 1939 map | | NPSA | | | |
| 379 | | | 45 | 30 | 8,498 | | 1924 map | 1939 map | | NPSA | | | |
| 249 | 8 | 6 | | 5 | 43 | | 1924 map | 1939 map | | NPSA (Pan House) | | | |
| 249A | 24 | 5 | | 5 | 107 | | 1924 map | 1939 map | | NPSA (Pan House) | | | |
| 249B | 24 | 5 | | 5 | 107 | | 1924 map | 1939 map | | NPSA (Pan House) | | | |
| 295 | | | | | | | 1917 map | 1977 map | | NPSA | | | |
| 296 | | | | | | | 1917 map | 1977 map | | NPSA | | | |
| 298 | | | | | | | 1917 map | 1977 map | | NPSA | | | |
| 319 | | | | | | | 1917 map | 1977 map | | NPSA | | | |
| 328 | 4.67 | 12.083 | | 5.0625 | 51 | | 1924 map | 1939 map | | NPSA (Wax Refinery) | | | |
| 329 | 4.583 | 12.083 | | 5.083 | 50 | | 1924 map | 1939 map | | NPSA (Wax Refinery) | | | |
| 332 | | | 4 | 29.083 | 0 | | 1924 map | 1939 map | | NPSA (Wax Refinery) | | | |
| 418 | 42.25 | 12 | | 3.5 | 316 | | 1924 map | 1939 map | | NPSA (Former Car Shop) | | | |
| 419 | 42.25 | 12 | | 3.5 | 316 | | 1924 map | 1939 map | | NPSA (Former Car Shop) | | | |
| 225 | 29.5 | 8.5 | | 5.417 | 242 | | 1924 map | 1939 map | | NPSA (Sweater Structure) | | | |
| 261 | 23.667 | 8.5 | | 5.667 | 203 | | 1924 map | 1939 map | | NPSA (Sweater Structure) | | | |
| 268 | | | 4.5 | 6 | 17 | | 1924 map | 1939 map | | NPSA (Sweater Structure) | | | |
| 269 | | | 4.5 | 6 | 17 | | 1924 map | 1939 map | | NPSA (Sweater Structure) | | | |
| 270 | | | 4.5 | 6 | 17 | | 1924 map | 1939 map | | NPSA (Sweater Structure) | | | |
| Northern Tank Yard Area | | | | | | | | | | | | | |
| 1 | | | 70 | 30 | 19,194 | 17,479 | 1924 | 1989 | | NTYA | Jet A/Kerosene | Cone | Riveted |
| 2 | | | 40 | 12 | 2,686 | | 1924 map | 1990 photo | | NTYA | | | |
| 4 | | | 48 | 40 | 12,892 | | 1971 | 1990 photo | | NTYA | Sour Water | | |
| 4 | | | 40 | 12 | 2,686 | | 1924 map | 1990 photo | | NTYA | | | |
| 10 | | | 40 | 12 | 2,686 | | 1924 map | 1990 photo | | NTYA | | | |
| 19 | | | 93 | 35 | 39,946 | 36,314 | 1927 | 1990 photo | | NTYA | No.6 Fuel and Cutter Stock | Cone | Riveted |
| 21 | | | 93 | 38 | 38,901 | 33,679 | 1940 | 1990 photo | | NTYA | PTR Charge/Regular | Floater | Riveted |
| 22 | | | 93 | 35 | 41,117 | 40,512 | 1931 | 1989 | | NTYA | TCC Charge/ No. 6 Fuel Oil Cutter | Cone | Riveted |
| 24 | | | 45 | 30 | 8,498 | | 1924 map | Existing | | NTYA | | | |

Table 1. Tank Inventory for the Buffalo Terminal, Exxon Mobil Corporation, Buffalo Terminal, Buffalo, New York.

| Tank No | Size | | | | Capacity (BBL) | | Year Built | Removed | Duplicate Tank Designation Notes | Location | Product Stored | Roof Type | Shell |
|--------------------------------|--------|-------|-----------------|---------------|----------------|-----------|------------|------------|----------------------------------|----------|--|-----------|---------|
| | Length | Width | Diameter (Feet) | Height (Feet) | Gross | Available | | | | | | | |
| 27 | | | 60 | 30 | | 14,661 | 1920 | 1989 | | NTYA | PTR Special Pretreated Naphtha for Startup, Jet A (1986) | Cone | Riveted |
| 28 | | | 35 | 20 | 3,263 | 3,202 | 1919 | 1995 map | | NTYA | PTR Special Pretreated Naphtha for Startup | Cone | Riveted |
| 31 | | | 70 | 30 | 19,573 | 17,513 | 1915 | 1990 photo | | NTYA | No. 6 Fuel Oil | Cone | Riveted |
| 33 | | | 60 | 30.08 | 15,148 | | 1924 map | 1990 photo | | NTYA | | | |
| 52 | 21 | | | | | | 1939 map | 1977 map | | NTYA | | | |
| 54 | 93 | | | | | | 1939 map | 1990 photo | | NTYA | | | |
| 55 | 93 | | | | | | 1939 map | 1990 photo | | NTYA | | | |
| 60 | | | 117 | 42 | 78,433 | 76,573 | 1945 | 1989 | | NTYA | TCC Charge, #2 Fuel Oil (1986) | Cone | Riveted |
| 80 | | | 70 | 30 | 20,563 | | 1924 map | | Replaced | NTYA | | | |
| 80 | | | 70 | 30 | 22,000 | 19,944 | 1934 | 1990 photo | | NTYA | Out of Service/No. 6 Fuel Oil | Cone | Riveted |
| 89 | | | 93 | 35 | 41,715 | 38,089 | 1920 | 1990 photo | | NTYA | No. 6 Fuel Oil and Cutter Stock | Cone | Riveted |
| 93 | | | 40 | 35 | 7,638 | 7,526 | 1944 | 1990 photo | | NTYA | Kerosene Distillate | Cone | Riveted |
| 94 | | | 40 | 30 | 6,714 | | 1924 map | 1990 photo | | NTYA | | | |
| 95 | | | 40 | 30 | 6,270 | 6,178 | 1924 | 1995 map | | NTYA | Kerosene Distillate | Cone | Riveted |
| 101 | | | 40 | 11.79 | 2,639 | | 1924 map | 1990 photo | | NTYA | | | |
| 102 | | | 70 | 30 | 19,573 | 17,775 | 1924 | 1989 | | NTYA | Unblended No. 2/TCC Charge/ Jet A | Cone | Welded |
| 141 | | | 15 | 19 | 598 | | 1924 map | 1939 map | | NTYA | | | |
| 142 | | | 15 | 19 | 598 | | 1924 map | 1939 map | | NTYA | | | |
| 143 | | | 15 | 19 | 598 | | 1924 map | 1939 map | | NTYA | | | |
| 144 | | | 15 | 19 | 598 | | 1924 map | 1939 map | | NTYA | | | |
| 184 | | | 23 | 14 | 1,036 | | 1924 map | 1939 map | | NTYA | | | |
| 187 | | | 93 | 34 | 41,135 | | 1924 map | 1989 | | NTYA | No. 2 Fuel Oil | | |
| 187 | | | 93 | 38 | 43,204 | 38,550 | 1940 | 1990 photo | | NTYA | PTR Charge | Floater | Welded |
| 189 | | | 70 | 30 | 19,573 | 19,230 | 1915 | 1989 | | NTYA | Jet A Unblended No. 2/TCC Charge | Cone | Welded |
| 230 | | | | | | | 1939 map | 1939 map | | NTYA | | | |
| 279 | | | 24 | 25 | 2,014 | | 1924 map | 1939 map | | NTYA | | | |
| 280 | | | 24 | 25 | 2,014 | | 1924 map | 1939 map | | NTYA | | | |
| 293 | | | 25 | 32 | 2,798 | | 1924 map | 1990 photo | | NTYA | | | |
| 350 | | | 40 | 12 | 2,686 | | 1924 map | 1990 photo | | NTYA | | | |
| 351 | | | 40 | 12 | 2,686 | | 1924 map | 1990 photo | | NTYA | | | |
| Southern Tank Yard Area | | | | | | | | | | | | | |
| 1 | | | 30 | 20 | 2,518 | | 1924 map | 1939 map | | STYA | | | |
| 2 | | | 25 | 25 | 2,186 | | 1924 map | 1977 map | | STYA | | | |
| 3 | | | 25 | 20 | 1,749 | | 1924 map | 1977 map | | STYA | Lube Oil | | |
| 5 | | | 30 | 25 | 3,147 | | 1924 map | 1977 map | | STYA | | | |
| 12 | | | 50 | 10 | 3,497 | | 1924 map | 1977 map | | STYA | | | |
| 13 | | | 50 | 10 | 3,497 | | 1924 map | 1977 map | | STYA | | | |
| 14 | | | 50 | 10 | 3,497 | | 1924 map | 1977 map | | STYA | | | |
| 16 | | | 50 | 10 | 3,497 | | 1924 map | 1977 map | | STYA | | | |
| 18 | | | 93 | 37.25 | 40,636 | 35,575 | 1940 | 1989 | | STYA | Regular/Premium | Floater | Riveted |

Table 1. Tank Inventory for the Buffalo Terminal, Exxon Mobil Corporation, Buffalo Terminal, Buffalo, New York.

| Tank No | Size | | | Capacity (BBL) | | Year Built | Removed | Duplicate Tank Designation | Notes | Location | Product Stored | Roof Type | Shell |
|---------|--------|-------|-----------------|----------------|--------|------------|----------|----------------------------|----------|----------|---|---------------|---------|
| | Length | Width | Diameter (Feet) | Height (Feet) | Gross | | | | | | | | |
| 20 | | | 93 | 35 | 42,345 | | 1924 map | | Replaced | STYA | | | |
| 20 | | | 93 | 37.25 | 40,382 | 37,082 | 1940 | 1992 | | STYA | Unleaded Gasoline | Floater | Riveted |
| 23 | | | 45 | 36 | 9,634 | 9,210 | 1920 | 1990 photo | | STYA | Out of Service/Gasoline/Used for Phenolic Water Storage | Floater | Riveted |
| 25 | | | | | | | 1939 map | Dec-1960 | Replaced | STYA | | | |
| 25 | | | 60 | 40 | 18,369 | 16,367 | 1960 | Existing | | STYA | Regular Gasoline | Floater | Welded |
| 26 | | | | | | | 1939 map | Dec-1960 | Replaced | STYA | | | |
| 26 | | | 60 | 40 | 18,372 | 16,370 | 1960 | Existing | | STYA | Regular Gasoline | Floater | Welded |
| 38 | | | 93 | 35 | 38,925 | 34,196 | 1990 | Existing | | STYA | Unleaded Gasoline | Floater | Riveted |
| 40 | | | 60 | 40 | | 19,735 | 1949 | 1989 | | STYA | Slop Oil | Cone | Riveted |
| 42 | | | 93 | 37.25 | 41,266 | 36,136 | 1939 | 1990 photo | | STYA | Regular/Premium | Floater | Riveted |
| 43 | | | 8 | 6 | 54 | | 1924 map | 1939 map | | STYA | | | |
| 44 | | | 10 | 6.08 | 85 | | 1924 map | 1939 map | | STYA | | | |
| 46 | | | 30 | 25 | 3,147 | | 1924 map | 1977 map | | STYA | Slop Oil | | |
| 49 | | | 25 | 30 | 2,600 | 2,480 | 1945 | 1990 | | STYA | Out of Service | Cone | Riveted |
| 75 | | | 90 | 40 | 40,791 | 38,431 | 1956 | Existing | | STYA | Unleaded Gasoline | Internal Deck | Welded |
| 86 | | | 87 | 40 | 39,794 | 35,446 | 1940 | 1988 | | STYA | #2 Fuel Oil (1986) | Floater | Welded |
| 87 | | | 70 | 30 | 19,184 | 16,614 | 1940 | Existing | | STYA | Jet A No. 2 Fuel Oil/Kerosene | Cone | Riveted |
| 88 | | | 102 | 40 | 52,340 | 49,311 | 1940 | 1990 | | STYA | Unleaded Gasoline | Internal Deck | Welded |
| 90 | | | 65 | 35 | 20,689 | 18,917 | 1944 | Replaced | | STYA | No. 2 Fuel Oil | Cone | Riveted |
| 90 | | | 80 | 33.5 | 29,991 | | 1988 | Existing | | STYA | No. 2 Fuel Oil | Cone | Riveted |
| 96 | | | 93 | 35 | 42,345 | | 1924 map | 1940 | | STYA | Unknown | | |
| 96 | | | 93 | 38 | 40,938 | 35,972 | 1940 | 1995 map | | STYA | TCC, Gasoline/Regular Unleaded Gas | Floater | Riveted |
| 97 | | | 93 | 35 | 42,345 | | 1924 map | | Replaced | STYA | | | |
| 97 | | | 93 | 38 | 39,477 | 34,441 | 1940 | | Replaced | STYA | Out of Service/Crude Oil | Floater | Riveted |
| 97 | | | 93 | 48 | 58,074 | | 1990 | Existing | | STYA | Unleaded Gasoline | | |
| 98 | | | 93 | 38 | 39,465 | 34,335 | 1940 | 1989 | | STYA | Premium/Regular | Floater | Riveted |
| 99 | | | 70 | 30 | 18,671 | 18,325 | 1913 | 1989 | | STYA | PTR Reformate/PTR | Floater | Riveted |
| 99 | | | 93 | 48 | 58,074 | | 1990 | Existing | | STYA | Unleaded Gasoline | | |
| 100 | | | 70 | 30 | 18,557 | 15,765 | 1917 | 1924 | | STYA | Unleaded Gasoline | Floater | Riveted |
| 103 | | | 80 | 40 | 32,211 | 31,785 | 1936 | 1988 | | STYA | PTR Charge/TCC Charge/No. 2 Fuel Oil | Cone | Riveted |
| 104 | | | 75 | 40 | 30,665 | 27,910 | 1936 | Existing | | STYA | Jet A No. 2 Fuel Oil/Kerosene | Cone | Riveted |
| 105 | | | 60 | 40 | 19,142 | 16,618 | 1936 | Existing | | STYA | Jet A/Kerosene | Cone | Riveted |
| 125 | | | 8 | 30 | 269 | | 1924 map | | | STYA | | | |
| 126 | | | 8 | 30 | 269 | | 1924 map | | | STYA | | | |
| 127 | | | 8 | 30 | 269 | | 1924 map | | | STYA | | | |
| 128 | | | 8 | 30 | 269 | | 1924 map | | | STYA | | | |
| 129 | | | 8 | 30 | 269 | | 1924 map | | | STYA | | | |
| 130 | | | 8 | 30 | 269 | | 1924 map | | | STYA | | | |
| 131 | | | 8 | 30 | 269 | | 1924 map | | | STYA | | | |
| 132 | | | 8 | 30 | 269 | | 1924 map | | | STYA | | | |
| 133 | | | 8 | 30 | 269 | | 1924 map | | | STYA | | | |
| 134 | | | 8 | 30 | 269 | | 1924 map | | | STYA | | | |
| 140 | | | 10 | 5.083 | 71 | | 1924 map | 1939 map | | STYA | | | |
| 160 | | | 70 | 30 | 20,563 | | 1924 map | | | STYA | | | |
| 160 | | | 70 | 30 | 17,970 | 15,138 | 1939 | 1990 photo | | STYA | PTR Reformate/PTR | Floater | Riveted |

Table 1. Tank Inventory for the Buffalo Terminal, Exxon Mobil Corporation, Buffalo Terminal, Buffalo, New York.

| Tank No | Size | | | | Capacity (BBL) | | Year Built | Removed | Duplicate Tank Designation Notes | Location | Product Stored | Roof Type | Shell |
|----------------------------------|--------|-------|-----------------|---------------|----------------|-----------|------------|------------|----------------------------------|----------------|--|---------------|---------|
| | Length | Width | Diameter (Feet) | Height (Feet) | Gross | Available | | | | | | | |
| 171 | | | 90 | 30 | 40,633 | 36,039 | 1975 | Existing | | STYA | Unleaded Crude Oil | Internal Deck | Welded |
| 197 | | | 93 | 35 | 42,345 | | 1924 map | | | STYA | Crude Oil | | |
| 197 | | | 93 | 38 | 38,822 | 34,043 | 1939 | 1990 photo | | STYA | Crude Oil | Floater | Riveted |
| 198 | | | 93 | 35 | 42,345 | | 1924 map | 1990 | | STYA | | | |
| 198 | | | 93 | 38 | 39,431 | 34,368 | 1939 | 1995 map | | STYA | Regular/Premium | Floater | Riveted |
| 199 | | | 5.5 | 20 | 85 | | 1924 map | | | STYA | | | |
| 299 | | | 32 | | | 3,056 | 1957 | | | STYA | BB Mix | Spheroid | Welded |
| 300 | | | 32 | | | 3,056 | 1957 | | | STYA | TCC Olefins | Spheroid | Welded |
| 375 | | | 50 | 30 | 9,743 | 8,151 | 1924 | 1989 | | STYA | Jet A, Kerosene | Cone | Riveted |
| 376 | | | 50 | 30 | 9,743 | 8,871 | 1924 | 1989 | | STYA | No. 1 Fuel Oil, Mobil Diesel, Kerosene | Cone | Riveted |
| 377 | | | 45 | 30 | 7,483 | 6,349 | 1924 | 1989 | | STYA | Used for Phenolic Water Storage | Floater | Riveted |
| 378 | | | 45 | 30 | 8,498 | | 1923 | 1990 | | STYA | | | |
| 381 | | | 12 | | | | 1939 map | 1977 map | | STYA | | | |
| 382 | | | 12 | | | | 1939 map | 1977 map | | STYA | | | |
| 389 | | | 18.4 | 17.08 | 809 | | 1924 map | 1939 map | | STYA | | | |
| 390 | | | 18.4 | 17.08 | 809 | | 1924 map | 1939 map | | STYA | | | |
| 391 | | | 18.4 | 17.08 | 809 | | 1924 map | 1939 map | | STYA | | | |
| 391 | | | 20 | 20 | 1,059 | 1,032 | 1960 | | Different Tank and Location | STYA | Asphalt | Cone | Welded |
| 392 | | | 18.4 | 17.08 | 809 | | 1924 map | 1939 map | | STYA | | | |
| 392 | | | 20 | 20 | 1,059 | 1,032 | 1960 | | Different Tank and Location | STYA | Asphalt | Cone | Welded |
| 393 | | | 18.4 | 17.08 | 809 | | 1924 map | 1939 map | | STYA | | | |
| 394 | | | 18.4 | 17.08 | 809 | | 1924 map | 1939 map | | STYA | | | |
| 395 | | | 14.625 | 14.833 | 444 | | 1924 map | 1939 map | | STYA | | | |
| 396 | | | 10 | 20 | 280 | | 1924 map | 1939 map | | STYA | | | |
| 397 | | | 10 | 20 | 280 | | 1924 map | 1939 map | | STYA | | | |
| 398 | | | 10 | 20 | 280 | | 1924 map | 1939 map | | STYA | | | |
| 399 | | | 10 | 20 | 280 | | 1924 map | 1939 map | | STYA | | | |
| 400 | | | 15 | 8.83 | 278 | | 1924 map | 1939 map | | STYA | | | |
| 401 | | | 15 | 8.83 | 278 | | 1924 map | 1939 map | | STYA | | | |
| 402 | | | 15 | 8.83 | 278 | | 1924 map | 1939 map | | STYA | | | |
| 403 | 5.125 | 9 | | 2.5 | 21 | | 1924 map | 1939 map | | STYA | | | |
| 405 | | | 15 | 12.25 | 386 | | 1924 map | | | STYA | | | |
| 381 | 12 | 8 | | 3 | | | 1924 map | 1939 map | | STYA (Bldg 79) | | | |
| 382 | 12 | 8 | | 3 | | | 1924 map | 1939 map | | STYA (Bldg 79) | | | |
| 383 | 12 | 8 | | 3 | | | 1924 map | 1939 map | | STYA (Bldg 79) | | | |
| 384 | 12 | 8 | | 3 | | | 1924 map | 1939 map | | STYA (Bldg 79) | | | |
| 385 | 12 | 8 | | 3 | | | 1924 map | 1939 map | | STYA (Bldg 79) | | | |
| 386 | 12 | 8 | | 3 | | | 1924 map | 1939 map | | STYA (Bldg 79) | | | |
| 387 | 9 | 8 | | 4 | | | 1924 map | 1939 map | | STYA (Bldg 79) | | | |
| 388 | 9 | 8 | | 4 | | | 1924 map | 1939 map | | STYA (Bldg 79) | | | |
| Underground Storage Tanks | | | | | | | | | | | | | |
| U-1 | | | Unknown | | 2,000 | | 1997 | | | UST | Unleaded UST | | FRP |
| U-2 | | | Unknown | | 2,000 | | 1986 | | | UST | Fuel Oil | | FRP |
| U-3 | | | Unknown | | 4,000 | | 1986 | | | UST | Unleaded UST | | FRP |
| U-4 | | | Unknown | | 12,000 | | 1992 | | | CRPA | Stormwater Spills | | FRP |
| | | | | | 0 | 0 | | | | | | | |

Table 1. Tank Inventory for the Buffalo Terminal, Exxon Mobil Corporation, Buffalo Terminal, Buffalo, New York.

| Tank No | Size | | | | Capacity (BBL) | | Year Built | Removed | Duplicate Tank Designation Notes | Location | Product Stored | Roof Type | Shell |
|--------------------------|--------|-------|-----------------|---------------|----------------|-----------|------------|---------|----------------------------------|----------|-------------------|-----------|-------|
| | Length | Width | Diameter (Feet) | Height (Feet) | Gross | Available | | | | | | | |
| A-1 | | | Unknown | | 12,000 | | 1992 | | | CRPA | Gasoline Additive | | |
| A-2 | | | Unknown | | 8,000 | | 88 | | | CRPA | Unknown | | |
| Unknown Locations | | | | | | | | | | | | | |
| 225 | | | | | | | 1957 | | | | | | |
| 226 | | | | | | | 1957 | | | | | | |
| 227 | | | | | | | 1957 | | | | | | |

- Notes:
1. Where blanks entries exist, information from the existing documentation was not available.
 2. For Construction dates, an entry referencing a map or aerial photo indicates the map/aerial photo that the tank first appeared.
 3. For Removal Dates, an entry referencing a map or aerial photo indicates the first map/aerial photo that the tank does not appear on.
 4. Not all 1917 tanks are listed.

Table 2. Summary of Spills/Releases at the Buffalo Terminal, Mobil Oil Corporation, Buffalo, New York

| Date of Incident | Quantity | Product | Cause/Source of Spill | Geographic Area | Media Affected | Agency Notified | Action Taken/Comments | Source | Date Spill Closed by NYSDEC |
|---|----------------|-------------------|--|---|-------------------------|--|---|--|-----------------------------|
| FORMER REFINERY AREA (FRA) | | | | | | | | | |
| Various Dates | Unknown | Asphalt Products | Several releases of asphalt products occurred at the asphalt loading racks in the former refinery area throughout its years of operation. | FRA | Soil | None | Unknown | Current and/or Former ExxonMobil Employees | NA |
| 3/15/1990 | 1 gallon | #6 Fuel Oil/Water | Abandoned overhead line in the former refinery area leaked after the pipeline was washed and drained. Oily water accumulated and leaked from a failed flange gasket. Stain was approximately 2 feet in diameter. | FRA | Soil/Stone | NYSDEC - #8911921 | Gasket was replaced and area cleaned with absorbent pads; contaminated soil/stone was disposed. | Mobil Files/ NYSDEC Spills | 3/16/1990 |
| 6/1/1991 | 100 gallons | Oil/Water | Contractor cut an abandoned pipe in overhead pipe rack during demolition and 100 gallons of light oil and water drained onto soil. | FRA | Soil | NYSDEC - #9102475 | Free product picked up and put into container for disposal. Excavated impacted soil and placed on plastic prior to placement in biotreatment cell. | Mobil Files/ NYSDEC Spills | 6/19/1991 |
| 8/27/1991 | 10-15 gallons | Hydraulic Oil | During demolition of the asphalt heater in the refinery, oil was left in the coils and leaked. | FRA | Soil | NYSDEC - #9105735 NRC - #85672 | Absorbent pads used to clean free product. Soil was removed and placed in the biotreatment cell. | Mobil Files/ NYSDEC Spills | 11/22/1991 |
| 7/31/1991 | 2500 gallons | Quench Oil | Aboveground tank holding approximately 3000 gallons was being emptied. The valve became stuck, product spilled onto a concrete pad and into the Terminal's sewer system. | FRA (assumed based on the description of the event) | Soil/concrete pad/sewer | NYSDEC - #9104672 NRC - #81721 Buffalo Sewer Authority | Cleaned pad and used vacuum truck to clean out sewer. No further action required on NYSDEC Spill Report Form. Recovered product was disposed offsite. | Mobil Files/ NYSDEC Spills | 8/21/1991 |
| CENTRAL RAIL AND PROCESS AREA (CRPA) | | | | | | | | | |
| 10/25/1988 | 34,062 gallons | #2 Fuel Oil | While emptying Tank #22 for demolition, product was pumped through a former diesel pipeline to Tank #221. The former diesel line ruptured at a location between the treatment, blending and shipping (TBS) pit area and a location near the northwest corner of the containment for Tank 25. Product spilled into a contained concrete pit area (TBS pit area). The drains within the TBS pit area connect to the Main in-ground Oil/Water Separator located in the FRA. | CRPA | None | NYSDEC - #8806247 Albany & Buffalo Sewer Authority | 33,894 gallons recaptured by vacuum trucks and pumped to storage in Tank # 22. Remaining 168 gallons reportedly drained into the Site sewer system to the Main in-ground Oil/Water Separator. | Mobil Files/ NYSDEC Spills | 1/20/1989 |
| 4/1/1991 | Unknown | PCB Oil | Exact date unknown. While removing the alkylation control room during the demolition project, an electrical cable was pulled from a transformer, releasing PCB oil to the concrete pad. | CRPA | Concrete pad | None | Remaining oil removed from the transformer and concrete pad cleaned. One week later during heavy rain, a sheen was observed in the vault that lead to the transformers. The sheen was cleaned up. | Mobil Files | NA |
| 7/14/1995 | 75 gallons | Diesel Fuel | Goetz Trucking overfilled compartment during fueling at the loading rack | CRPA | Concrete | NYSDEC - #9504583 | Spill was contained by concrete berms at the loading rack; product was squeegeed to catch basins which are connected to the loading rack's below grade product recovery tank. | NYSDEC Spills | 7/14/1995 |
| 3/3/1998 | 40 gallons | Gasoline | Seal failed on product pump located at pump pad north of Tanks 38 and 97, product spilled into concrete dike area. | CRPA | Concrete | NYSDEC - #9713449 | Product removed with vacuum truck and placed in Tank 75; drain valve was opened to allow the remaining product to drain to the Main in-ground Oil/Water Separator in the FRA, no further action required. | NYSDEC Spills | 3/5/1998 |

Table 2. Summary of Spills/Releases at the Buffalo Terminal, Mobil Oil Corporation, Buffalo, New York

| Date of Incident | Quantity | Product | Cause/Source of Spill | Geographic Area | Media Affected | Agency Notified | Action Taken/Comments | Source | Date Spill Closed by NYSDEC |
|---------------------------------------|---------------|---------------------------|---|-----------------|---------------------------|--|---|--|-----------------------------|
| 6/19/1998 | 35 gallons | Gasoline | As driver was loading at the loading rack, a coupling handle was partially open, resulting in the release. | CRPA | Concrete | NYSDEC - #9804137 | Spill was contained by concrete berms at the loading rack and was cleaned up. | Mobil Files/ NYSDEC Spills | 7/24/1998 |
| 7/17/1998 | 71 gallons | Gasoline | Truck overfilled at the loading rack. | CRPA | Concrete | NYSDEC - #9804823 | Spill was contained by concrete berms at the loading rack and was cleaned up. | Mobil Files/ NYSDEC Spills | 7/24/1998 |
| 7/28/1998 | 170 gallons | HS #2 Fuel Oil | Truck overfilled at the loading rack. | CRPA | Concrete | NYSDEC - #9805267 | Spill was contained by concrete berms at the loading rack and was cleaned up. | Mobil Files/ NYSDEC Spills | 7/28/1998 |
| 7/31/1998 | 170 gallons | Gasoline | Truck overfilled at the loading rack. | CRPA | Concrete | NYSDEC - #9805432 | Spill was contained by concrete berms at the loading rack and was cleaned up. | Mobil Files/ NYSDEC Spills | 8/3/1998 |
| 1/12/1999 | 30 gallons | HS #2 Fuel Oil | Truck overfilled at the loading rack. | CRPA | Concrete | NYSDEC - #9812613 | Spill was contained by concrete berms at the loading rack and was cleaned up. | Mobil Files/ NYSDEC Spills | 1/13/1999 |
| 7/2/1999 | 20 gallons | #2 LSD | Truck overfilled at the loading rack. | CRPA | Concrete | NYSDEC - #9903796 | Spill was contained by concrete berms at the loading rack and was cleaned up; debris drummed for disposal. | Mobil Files/ NYSDEC Spills | 7/2/1999 |
| 8/4/1999 | 20 gallons | Super Unleaded Gasoline | Truck overfilled at the loading rack. | CRPA | Concrete | NYSDEC - #9905387 | Spill was contained by concrete berms at the loading rack and was cleaned up. | Mobil Files/ NYSDEC Spills | 8/4/1999 |
| 10/13/1999 | 25 gallons | HS #2 Fuel Oil | Truck overfilled at the loading rack. | CRPA | Concrete | NYSDEC - #9908513 | Spill was contained by concrete berms at the loading rack and was cleaned up. | Mobil Files/ NYSDEC Spills | 12/30/1999 |
| 1/17/2000 | 3-4 gallons | HS #2 Fuel Oil | Meter overflow onto top of truck as driver pulled out of rack, overfilled product spilled on ground | CRPA | Concrete | NYSDEC - #9911984 | Spill was contained by concrete berms at the loading rack and was cleaned up. | Mobil Files/ NYSDEC Spills | 1/18/2000 |
| 4/17/2000 | Unknown | Unknown Petroleum Product | During repair catch basin invert found to be leaking at the tank truck loading rack. Grout concrete at pipe connection to catch basin had deteriorated. | CRPA | Soil | NYSDEC - #0075028 | Repaired catch basin pipe connection, backfill excavation with clean soil, free product recovered with vacuum truck. | Mobil Files/ NYSDEC Spills | |
| Various Dates | Unknown | Crude Oil | Crude oil reportedly drained from the pumps located near tank 86 if they were malfunctioning. | CRPA | Soil | None | Unknown | Current and/or Former ExxonMobil Employees | NA |
| SOUTHERN TANK YARD AREA (STYA) | | | | | | | | | |
| 3/12/1987 | 4,620 gallons | Gasoline | Ruptured flexible connector during transfer from Tank 18 to Tank 99 | STYA | Soil | NYSDEC - #8607552 Buffalo Sewer Authority | Release was contained, some went to Main in-ground Oil/Water Separator. No further action required by NYSDEC. | NYSDEC Spills | 3/20/1987 |
| 1988 | Unknown | Distillate Storage | No specific spill mentioned, however, tank inspection indicated that there was a seam leak at the shell to floor joint in the northeast tank quadrant | STYA | Unknown | None | Repairs made | Mobil Tank Records | NA |
| 12/10/1988 | 10-15 gallons | Jet A Fuel | Tank was out of service for rehabilitation, was tested and being refilled. While filling Tank 87, leak occurred at gate valve. | STYA | Soil (in a diked area) | NYSDEC - #8807485 Albany & Buffalo | Product cleaned from frozen ground; soil removed from area of spill. Approximately 185 lb. of contaminated debris disposed according to NYSDEC Spill Report Form. | Mobil Files/ NYSDEC Spills | 2/1/1989 |
| 2/17/1989 | Unknown | Naptha | Oil found in soil coring for new tank | STYA | Soil | NYSDEC - #8808982 | Other spills number were later incorporated in to this one. | NYSDEC Spills | Spill not closed |

Table 2. Summary of Spills/Releases at the Buffalo Terminal, Mobil Oil Corporation, Buffalo, New York

| Date of Incident | Quantity | Product | Cause/Source of Spill | Geographic Area | Media Affected | Agency Notified | Action Taken/Comments | Source | Date Spill Closed by NYSDEC |
|-------------------------|-----------------|-------------------------|---|--|--------------------------|---|---|-------------------------------|------------------------------------|
| 12/8/1989 | 25-30 gallons | Diesel Fuel | The tank bottom valve to the fill hose on a contractors 300 gallon diesel tank used to fill diesel equipment was left open, the hose fell to the ground, diesel fuel spilled into Tank 97 yard. | STYA | Soil | NYSDEC - #8908893 | Fill hose was secured so it could not vibrate from the diesel tank. Contractor cleaned up spill. | Mobil Files/ NYSDEC Spills | 2/28/1990 |
| 12/26/1989 | < 1 gallon | Recovered product | Overfill protection system on the recovery tank for the product recovery system was defective and did not shut off when capacity reached, causing oily water to spurt from top of tank. | STYA assumed due to location of product plume | Tank Shell, Concrete Pad | NYSDEC - Buffalo notified on 1/2/90 - no spill number | Pump setting was rechecked; other tanks checked also. Product on concrete pad and tank shell cleaned. | Mobil Files | NA |
| 1990 | Unknown | Regular Gasoline | No specific spill indicated, however, tank maintenance records indicate coating deterioration and an exterior tank shell and floor joint. | STYA | Unknown | None | Repairs made, epoxy coating applied to tank floor and double bottom installed. | Mobil Tank Records | NA |
| 4/12/1991 | 10-15 gallons | Crude Oil | While shearing an old crude pipe at the former crude scales area, crude oil leaked out onto a stoned area. | STYA | Soil/Stone | NYSDEC - #9100500 Albany & Buffalo | Pipe put in small dumpster; stone excavated and disposed. | Mobil Files/ NYSDEC Spills | 4/16/1991 |
| 6/9/1991 | Unknown | Jet A Fuel | Leaking air eliminator. | STYA (assumed as Jet A tanks are located in this area) | Soil/Stone | NYSDEC - #9102759 Spill Emergency - #74936 | Eliminator adjusted and repaired; NYSDEC Spill Report form noted the debris was cleaned up and placed in the biotreatment cell. | Mobil Files/ NYSDEC Spills | 6/13/1991 |
| 1991 | Unknown | Super Unleaded Gasoline | No specific spill mentioned, however, tank inspection records indicated that the tank should be retired due to unacceptable condition of vertical riveted shell seams caused by extreme corrosion activity on the interior. | STYA | Unknown | None | Tank was removed. | Mobil Tank Records | NA |
| 1991 | Unknown | Jet A Fuel | No specific spill mentioned, however, tank inspection records indicated that the tank was leaking around the bottom of tank shell. | STYA | Unknown | None | Unknown | Mobil Tank Records | NA |
| 3/29/1993 | 20 gallons | Gasoline | Product spill adjacent to Tank 75 occurred while transferring from the fix tank to a contractor's tanker truck. | STYA | Asphalt/Soil | NYSDEC - #9214525 | Speedy-dri applied; all soil and debris collected and placed in the biotreatment cell. | NYSDEC Spills | 5/28/1993 |

Table 2. Summary of Spills/Releases at the Buffalo Terminal, Mobil Oil Corporation, Buffalo, New York

| Date of Incident | Quantity | Product | Cause/Source of Spill | Geographic Area | Media Affected | Agency Notified | Action Taken/Comments | Source | Date Spill Closed by NYSDEC |
|------------------|----------------|---------------------------|--|-----------------|----------------|-------------------|---|-------------------------------|--|
| 8/4/1993 | 42,600 gallons | Super Unleaded Gasoline | A contractor left a valve at Tank 20 open while removing a common suction line, believed to be idled, from Tanks 20 and 96. This line was connected to active tank 99. When the valve on Tank 99 was opened to receive a delivery, product flowed by gravity through the open valve on the common suction line and to the ground on the west side the Tank 20 containment. | STYA | Soil | NYSDEC - #9305522 | Approximately 500 gallons of product were removed from the ground surface using a vacuum truck. The remainder of the gasoline moved from the west side of the containment where the spill occurred, to the east side of the containment, where it entered the Site's sewer system through 3 catch basins on the east side of the Tank 20 containment. From there it went to the Main in-ground Oil/Water Separator. The pipeline and approximately 20 yards of impacted soil were removed and placed in the biotreatment cell. Reportedly 9,500 gallons of product were recovered from the 3 catch basins and stored in tank trailers. Another 12,500 gallons were recovered from the main in-ground oil/water separator. Approximately 19,000 gallons of product were recycled. The remaining product was not accounted for. | Mobil Files/ NYSDEC Spills | 02/03/1994 (note, the NYSDEC spill report says 2/03/1993) |
| 12/11/1998 | Unknown | Unknown Petroleum Product | Product observed in monitoring well during MOSF monitoring | STYA | Groundwater | NYSDEC - #9811466 | Unknown | NYSDEC Spills | 12/17/1998 |

Table 2. Summary of Spills/Releases at the Buffalo Terminal, Mobil Oil Corporation, Buffalo, New York

| Date of Incident | Quantity | Product | Cause/Source of Spill | Geographic Area | Media Affected | Agency Notified | Action Taken/Comments | Source | Date Spill Closed by NYSDEC |
|---|--------------|---------------------------|---|-----------------|----------------|--|---|---|-----------------------------|
| EASTERN TANK YARD AREA (ETYA - Former Disposal Area) | | | | | | | | | |
| 8/28/1989 | 6500 gallons | Unleaded gasoline | Overfill from Mobil pipeline at Tank 176 due to incorrect safe fill and high alarm heights used. | ETYA | Soil | NYSDEC - #8905279 Albany & Buffalo Buffalo Fire Department | Area was barricaded; approximately 2800 gallons of product was removed with a vacuum truck; safe fill and alarm heights on tank were revised, monitoring wells installed. The containment berm for this tank and Tank 175 were lined during the storage tank realignment project completed in 1991. | Mobil Files/ NYSDEC Spills | 6/11/1991 |
| BABCOCK STREET PROPERTIES AREA (BSPA) | | | | | | | | | |
| Various Dates | Unknown | Heavy Products | The seals on the pumps located southeast of Tank 84 would reportedly leak due to handling the heavy heated products. Product would drain to the ground in the pump area. | BSPA | Soil | None | Unknown | Current and/or Former ExxonMobil Employees | NA |
| 3/24/1984 | 82 gallons | Gasoline | Spill during delivery at the loading rack | BSPA | Unknown | NYS DOT | Squeegeed spill to drains at the loading rack. DOT requested a rewash. | Mobil Files | NA |
| 7/23/1989 | 150 gallons | Super Unleaded Gasoline | Leaking gasket on 6-inch gasoline line, 10 feet north of the loading rack pumps. Product leaked through a blind flange gasket and trickled down onto the ground. | BSPA | Soil | NYSDEC - #8904003 | Area was barricaded; container used to capture product and prevent additional product from reaching the ground; product removed with a vacuum truck. Gasket was replaced; line eliminated as part of loading rack relocation (1990). Impacted soil was disposed (8/31/89). | Mobil Files/ NYSDEC Spills | 2/28/1990 |
| 12/19/1990 | Unknown | Jet A Fuel | Underground storage tank (6,000 gallon), located off the southeast corner of the former tank truck loading rack used to receive jet fuel from trucks when flushed after gasoline load and prior to the jet fuel load failed integrity test. | BSPA | Unknown | NYSDEC - #9010202 | Vacuum truck used to pump out. Tank subsequently removed (3/21/91 per NYSDEC Spill Form). No contamination identified; no further action required. | Mobil Files/ NYSDEC Spills | 4/10/1991 |
| 3/7/1991 | 20 gallons | #2 Fuel Oil | While the vacuum truck was transferring #2 Fuel Oil from jet flush tank located off the southeast corner of the former tank truck loading rack to #2 Fuel Oil storage tank, the cap on discharge valve fell off, the valve vibrated open and product spilled on road. | BSPA | Road | NRC - #62618 NYSDEC - #9012582 | Valve on the vacuum truck was checked; hold down installed to ensure valve remains closed; wire lugs used on cap when truck is loaded. | Mobil Files/ NYSDEC Spills | 3/8/1991 |
| 2/1/1994 | Unknown | Unknown Petroleum Product | Contamination found during Site Assessment | BSPA | Unknown | NYSDEC - #9314015 | NYSDEC Spill Report Form noted that this spill would be incorporated into spill #8808982. Spill closed by NYSDEC on 1/3/96 as site addressed under consent order. | NYSDEC Spills | 1/3/1996 |
| Various Dates | Unknown | Unknown Petroleum Product | During heavy precipitation several of the catch basins (two to the north and two to the east) of the former Barrel House overflowed causing a mixture of product and water to pool on paved and unpaved areas. | BSPA | Soil/Pavement | NA | The product/water mixture was recovered using a vacuum truck and either treated through the Site's Water Treatment System or disposed offsite. | Current and/or Former ExxonMobil Employees | NA |

Table 2. Summary of Spills/Releases at the Buffalo Terminal, Mobil Oil Corporation, Buffalo, New York

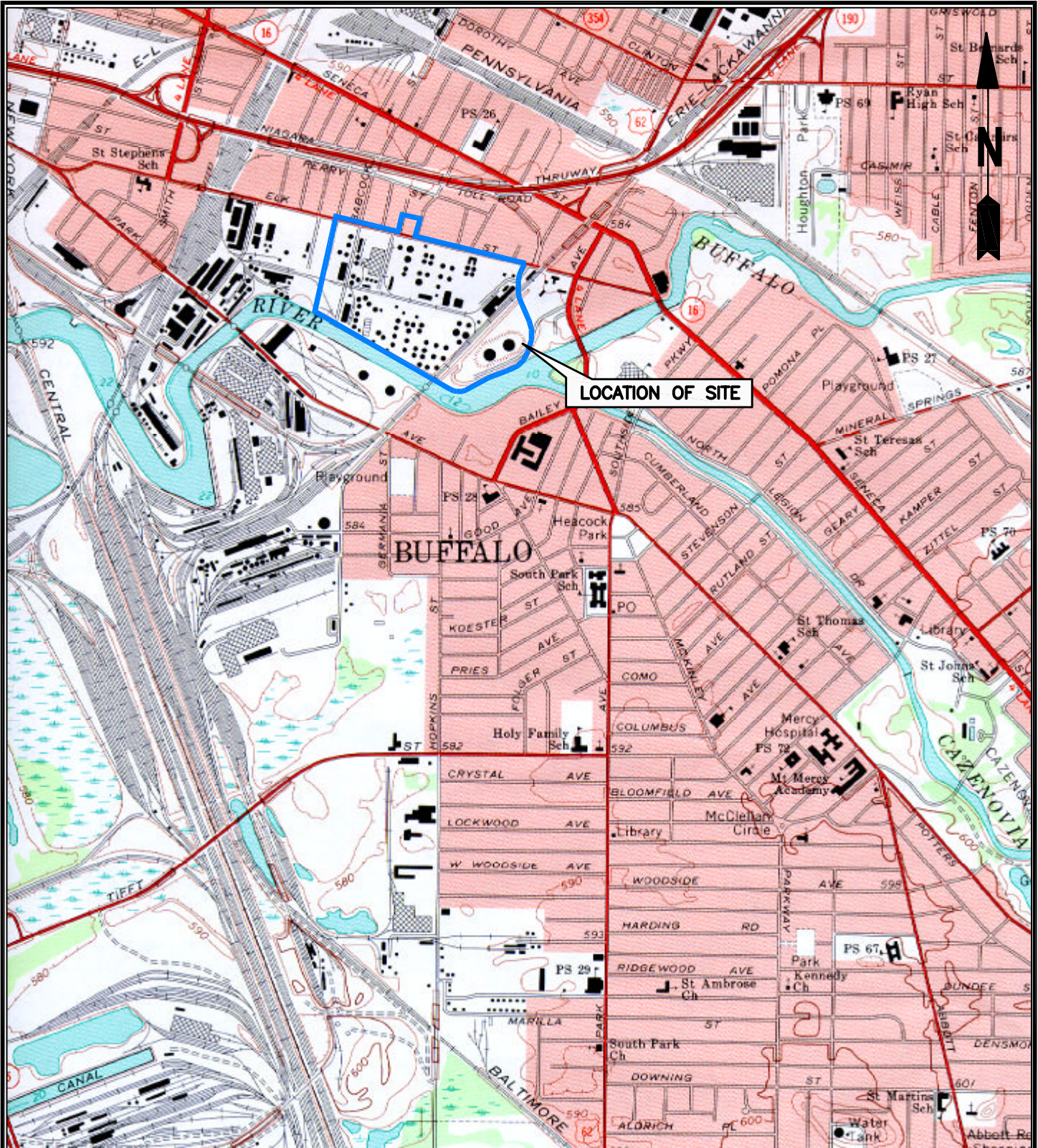
| Date of Incident | Quantity | Product | Cause/Source of Spill | Geographic Area | Media Affected | Agency Notified | Action Taken/Comments | Source | Date Spill Closed by NYSDEC |
|--|------------|---------------------------|---|--|------------------|---|--|-------------------------------|-----------------------------|
| BUFFALO RIVER/BSPA | | | | | | | | | |
| 8/29/1988 | Sheen | Unknown Petroleum Product | Sheen identified on the Buffalo River coming from the BSA Outfall. | BSPA/RIVER | Buffalo River | NYSDEC - #8804710 Buffalo Sewer Authority | Unknown | NYSDEC Spills | 9/12/1988 |
| 10/19/1989 | Sheen | Unknown Petroleum Product | Sheen identified on the Buffalo River coming from the BSA Outfall. | BSPA/RIVER | Buffalo River | NYSDEC - #8907130 | Unknown | NYSDEC Spills | 11/2/1989 |
| 7/6/1990 | Sheen | Unknown Petroleum Product | Sheen identified on the Buffalo River coming from the BSA Outfall. | BSPA/RIVER | Buffalo River | NYSDEC - #9003889 USCG, Buffalo Sewer Authority | NYSDEC Spill Report Form noted it was a one time incident and no further action was necessary. | NYSDEC Spills | 7/9/1990 |
| 12/9/1991 | Sheen | Unknown Petroleum Product | Oil substance discovered coming from BSA Outfall. | BSPA/RIVER | Buffalo River | NYSDEC - #9109562, Buffalo Sewer Authority, NRC - #98855, Buffalo Fire Department, USCG | Boom and absorbents deployed 12/9/91 and removed 12/11/91. | Mobil Files/ NYSDEC Spills | 12/31/1991 |
| 4/11/1992 | Sheen | Unknown Petroleum Product | Sheen identified on the Buffalo River. | BSPA/RIVER | Buffalo River | NYSDEC - #9200434 | Unknown | NYSDEC Spills | 4/13/1992 |
| 4/1/1995 | Sheen | Unknown Petroleum Product | Received call from PVS Chemical notifying of sheen on Buffalo River coming from Mobil dock area. An oily sheen observed originating from Mobil bulkhead behind the former Barrel House. | BSPA/RIVER | Buffalo River | NRC - #285244 NYSDEC - #9500007 | Installed absorbent pads and vacuum out free oil on the water. Two days later, still leaching product. Mobil continued to change absorbent pads. Well point system inspected for efficiency. | Mobil Files/ NYSDEC Spills | 5/15/1995 |
| 4/5/1995 | Sheen | Unknown Petroleum Product | Petroleum product was observed entering the Buffalo River from the same source as 4/1/95 release. The cause was believed to be a malfunction of the Well Point System. | BSPA/RIVER | Buffalo River | NYSDEC - #950223 | Containment booms and absorbents still in place from 4/1/95, Well Point System checked for malfunctions and repairs made. | Mobil Files/ NYSDEC Spills | 5/15/1995 |
| 10/19/1995 | Sheen | Unknown Petroleum Product | Sheen observed on the Buffalo River near the BSA Outfall at the base of Mobil's dock | BSPA/RIVER | Buffalo River | NYSDEC - #9508906 Buffalo Sewer Authority, City of Buffalo, and Erie County | Boom and absorbents deployed. | NYSDEC Spills | 11/28/1995 |
| 2/20/1998 | Sheen | Unknown Petroleum Product | Sheen 5' x 30' along Mobil dock observed, sheen also identified at PVS property and behind Pinto building approximately 82' upstream of the BSA outfall. | BSPA/RIVER | Buffalo River | NRC - #425263 NYSDEC - #9712937 | Mobil used vacuum truck to cleanup sheen and installed sorbent boom. | Mobil Files/ NYSDEC Spills | Spill not closed |
| 10/4/1999 | Sheen | Unknown Petroleum Product | Sheen observed on the Buffalo River near the BSA Outfall and to the west of Babcock Street approximately 100 ft. | BSPA/RIVER | Buffalo River | NRC - Unknown NYSDEC - #9908124 | Installed slick bar boom and sorbent boom. Mobil has maintained boom since October 1999 and inspects the area daily. | Mobil Files/ NYSDEC Spills | Spill not closed |
| ADMINISTRATIVE OFFICES AND OPERATIONS AREA (AOOA) | | | | | | | | | |
| 4/24/1991 | <5 gallons | #6 Fuel Oil | An exchanger from the boiler area was laid down and leaked oil onto a small puddle from heavy rain. | AOOA (assumed since this is area contained boiler house) | Soil/storm water | NYSDEC - #9100966 | Absorbents and vacuum truck used to clean area; ends removed from exchanger; exchanger drained. | Mobil Files/ NYSDEC Spills | 4/29/1991 |

Table 2. Summary of Spills/Releases at the Buffalo Terminal, Mobil Oil Corporation, Buffalo, New York

| Date of Incident | Quantity | Product | Cause/Source of Spill | Geographic Area | Media Affected | Agency Notified | Action Taken/Comments | Source | Date Spill Closed by NYSDEC |
|---|---------------|---------------------------|--|-----------------|----------------|-------------------|---|---------------------------------------|-----------------------------|
| ELK STREET PROPERTIES AREA (ESPA) | | | | | | | | | |
| 3/12/1976 | Unknown | Cracking Stock | The top of Tank 60 was damaged when hot product from the crude unit contacted ice on the bottom of the tank causing it to expand. Cracking stock for the TCC unit was released to Elk Street and several properties north of Elk Street. | ESPA/NTYA | Soil | Unknown | Mobil cleaned up the cracking stock by vacuuming off excess product and then mixing the remaining material with sand, excavating the material and disposing it off-site. Residences that were impacted were purchased by Mobil and demolished. | Current and/or Former Mobil Employees | NA |
| 2/1/1994 | Unknown | Cracking Stock | NYSDEC documentation refers to the "old spill at Elk Street". The incident referred to was the rupture of Tank 60 (cracking stock) in 1976. | ESPA/NTYA | Soil | NYSDEC - #9314016 | NYSDEC Spill Report Form noted that additional investigation and possible remediation would be requested and that this spill would be incorporated into spill #8808982. Spill closed by NYSDEC on 1/3/96 as site addressed under consent order. | NYSDEC Spills | 1/3/1996 |
| SPILLS FOR WHICH THE AREA OF OCCURRENCE COULD NOT BE DETERMINED FROM AVAILABLE INFORMATION (UNKNOWN) | | | | | | | | | |
| 7/17/1987 | 1 gallon | Gasoline | Gasoline found in trench excavation. (No other information) | Unknown | Unknown | NYSDEC - #8703102 | Recovered one gallon. | NYSDEC Spills | 8/4/1987 |
| 9/7/1989 | Unknown | #2 Fuel Oil | Underground tanks failed tightness test. | Unknown | Unknown | NYSDEC - #8905567 | Unknown | NYSDEC Spills | 11/20/1989 |
| 2/2/1990 | <1 gallon | Gasoline | Product pipeline test failure | Unknown | Unknown | NYSDEC - #8910543 | Product was removed from the pipeline; location of the leak was to be located. Follow-up action by NYSDEC to be made under spill # 8808982. | NYSDEC Spills | 12/7/1990 |
| 5/18/1991 | 15-20 gallons | Caustic | Contractor cut 3-inch pipe in pipe rack with a shear with (believed to be) caustic remaining in the pipeline | Unknown | Unknown | NYSDEC - #9101954 | Drained the pipe and cleaned area; NYSDEC Spill Report Form noted no further action required. | Mobil Files/ NYSDEC Spills | 5/20/1991 |
| 7/12/1990 | 50 gallons | Diesel Fuel | Equipment failure in the diked area (No additional information) | Unknown | Soil | NYSDEC - #9004061 | NYSDEC Spill Report Form indicates spill was cleaned up by Mobil. | NYSDEC Spills | 7/12/1990 |
| 3/24/1992 | 25 gallons | #6 Fuel Oil | Pipeline severed during construction | Unknown | Soil | NYSDEC - #9113037 | Impacted soil removed and placed in the biotreatment cell, no further action required. | NYSDEC Spills | 4/3/1992 |
| 3/27/1992 | 50 gallons | Unknown Petroleum Product | Contractor cutting up old piping released residual oil trapped in piping | Unknown | Soil | NYSDEC - #9113176 | Spill cleaned up and debris placed in biotreatment cell. | NYSDEC Spills | 3/31/1992 |
| 7/31/1992 | 15 gallons | Mixed Product | Oil/water separator overflowed due to rain | Unknown | Soil | NYSDEC - #9205006 | Impacted soil removed and placed in the biotreatment cell. | NYSDEC Spills | 8/3/1992 |
| 9/20/1992 | 10 gallons | Gasoline | Pressure valve malfunction | Unknown | Soil | NYSDEC - #9207108 | Spill cleaned up, no further action required. | NYSDEC Spills | 9/21/1992 |
| 10/22/1992 | 5 gallons | Jet Fuel | During demolition, jet fuel leaked from an out of service line | Unknown | Soil | NYSDEC - #9208484 | Pipe was blanked; absorbent pads placed; impacted soil removed and placed in the biotreatment cell. No further action required. | NYSDEC Spills | 10/23/1992 |
| 3/1/1993 | Unknown | Petroleum Product | 4,000 cubic yards of contaminated soil (Source not specified) | Unknown | Soil | NYSDEC - #9314328 | NYSDEC Spill Report Form noted no further action required. | NYSDEC Spills | 3/8/1994 |
| 6/23/1993 | 20 gallons | Unknown Petroleum Product | Unknown | Unknown | Soil/Stone | NYSDEC - #9303750 | Soil and stone were excavated and placed in biotreatment cell, no further action required. | NYSDEC Spills | 7/23/1993 |
| 7/5/1993 | 40 gallons | Gasoline | Equipment failure | Unknown | Soil/Stone | NYSDEC - #9304257 | Impacted soil removed and replaced with new stone; repairs were made, no further action required. | NYSDEC Spills | 7/23/1993 |

Table 2. Summary of Spills/Releases at the Buffalo Terminal, Mobil Oil Corporation, Buffalo, New York

| Date of Incident | Quantity | Product | Cause/Source of Spill | Geographic Area | Media Affected | Agency Notified | Action Taken/Comments | Source | Date Spill Closed by NYSDEC |
|-------------------------|-----------------|-------------------|--|------------------------|-----------------------|------------------------|---|-------------------------------|------------------------------------|
| 1/17/1995 | 10 gallons | Petroleum Product | Sewer backup due to storm water and runoff | Unknown | Sewer | NYSDEC - #9413823 | One cubic yard of soil removed and placed in biotreatment cell; auto dialer installed in the event of high alarm at storm sewer lift station. | Mobil Files/ NYSDEC Spills | 5/15/1995 |
| 5/18/1999 | 30 | Diesel Fuel | Product Spill from a tractor trailer onto the road and in the parking lot. | Unknown | Sewer | NYSDEC - #9901860 | Speedy-dri applied; contractor cleaned up debris; disposal records provided to NYSDEC; no further action required. | Mobil Files/ NYSDEC Spills | 6/7/1999 |



LOCATION OF SITE

N:\PROJECTS\MC172\MCS2Y\122\MCS212202.DWG

SOURCE:

USGS; 1965. BUFFALO SE, NEW YORK
7.5 MINUTE TOPOGRAPHIC QUADRANGLE

NEW YORK



QUADRANGLE
LOCATION


Title:

SITE LOCATION MAP

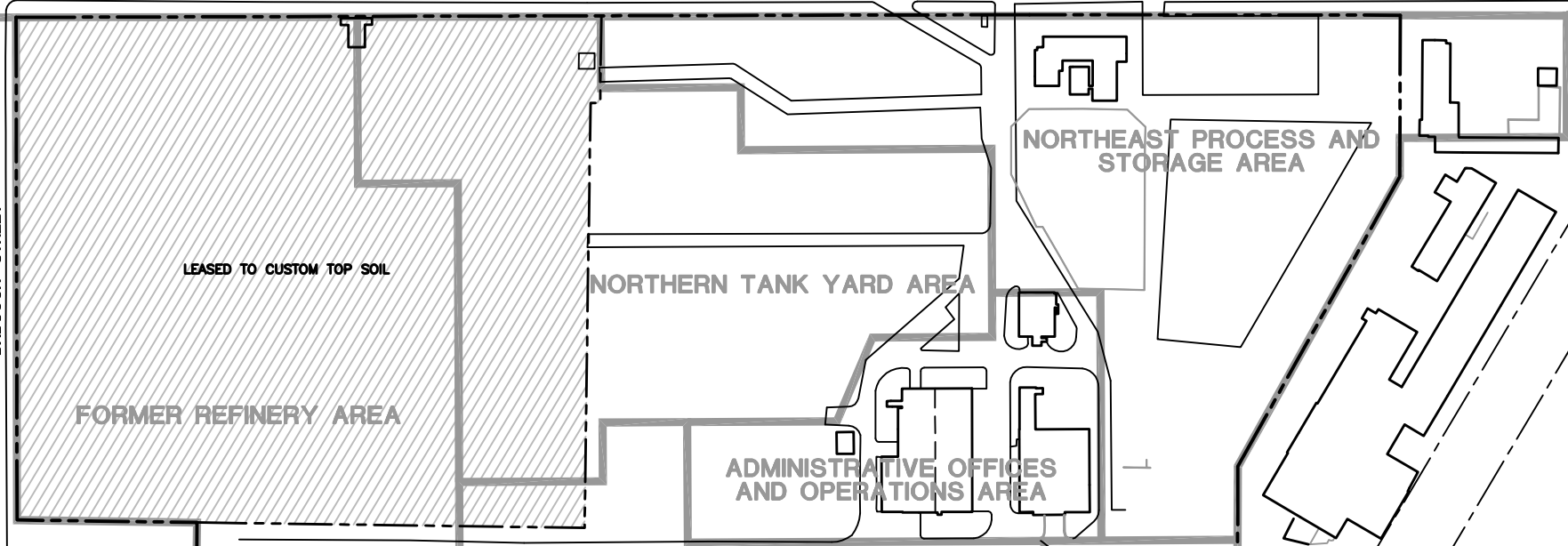
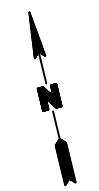
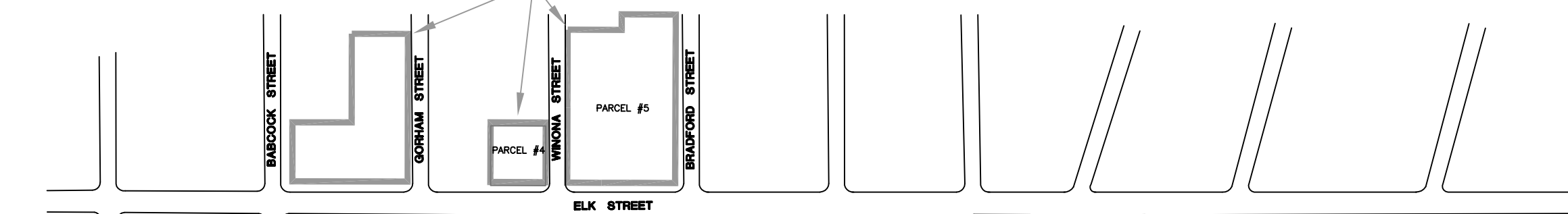
BUFFALO TERMINAL, BUFFALO, NEW YORK

Prepared For:

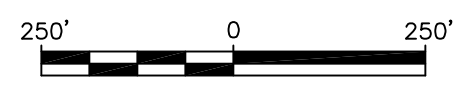
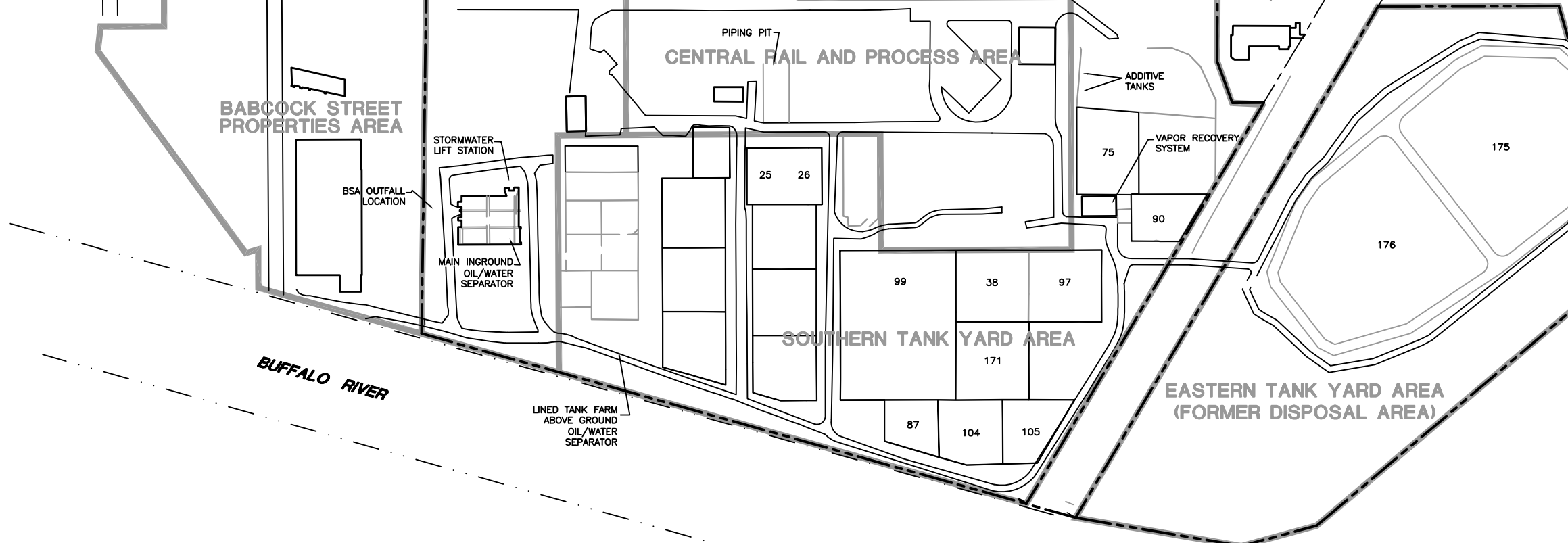
EXXON MOBIL CORPORATION

| | | | |
|--|-------------------|-------------------|--------------------|
|  ROUX ASSOCIATES, INC. <i>Environmental Consulting & Management</i> | Compiled by: M.S. | Date: 4/00 | FIGURE 1 |
| | Prepared by: R.K. | Scale: 1"=2,000' | |
| | Project Mgr: M.S. | Office: NY | |
| | File No: M5212208 | Project: 17252Y02 | |

ELK STREET PROPERTIES AREA



- LEGEND**
- ◉ EXISTING TANK
 - EXISTING STRUCTURE
 - - - - - CURRENT PROPERTY LINE (BASED ON DENLUCK-O'NEILL ENGINEERING AND SURVEYING, DEC. 15, 1988; AND NUSSBAUMER & CLARKE, INC. FEBRUARY 6, 1995)
 - — — — — GEOGRAPHIC AREA BOUNDARY AND/OR FORMER PROPERTY LINES



| | | | |
|--|--------------------|-------------------|--------------------|
| Title: GEOGRAPHIC AREAS OF THE BUFFALO TERMINAL | | | |
| BUFFALO TERMINAL, BUFFALO, NEW YORK | | | |
| Prepared For: EXXON MOBIL CORPORATION | | | |
| | Compiled by: N.C. | Date: 4/00 | FIGURE 2 |
| | Prepared by: G.M. | Scale: AS SHOWN | |
| | Project Mgr: N.C. | Office: NY | |
| | File No: MC5212207 | Project: 17252Y03 | |

APPENDIX A

Historical Atlas Maps of Site Area and Buffalo River Channel
1884 through 1915

Figure A-1: Site Area in 1884

Reference: Atlas of the City of Buffalo New York, G. M. Hopkins, C.E., Philadelphia, 1884, Plate 31

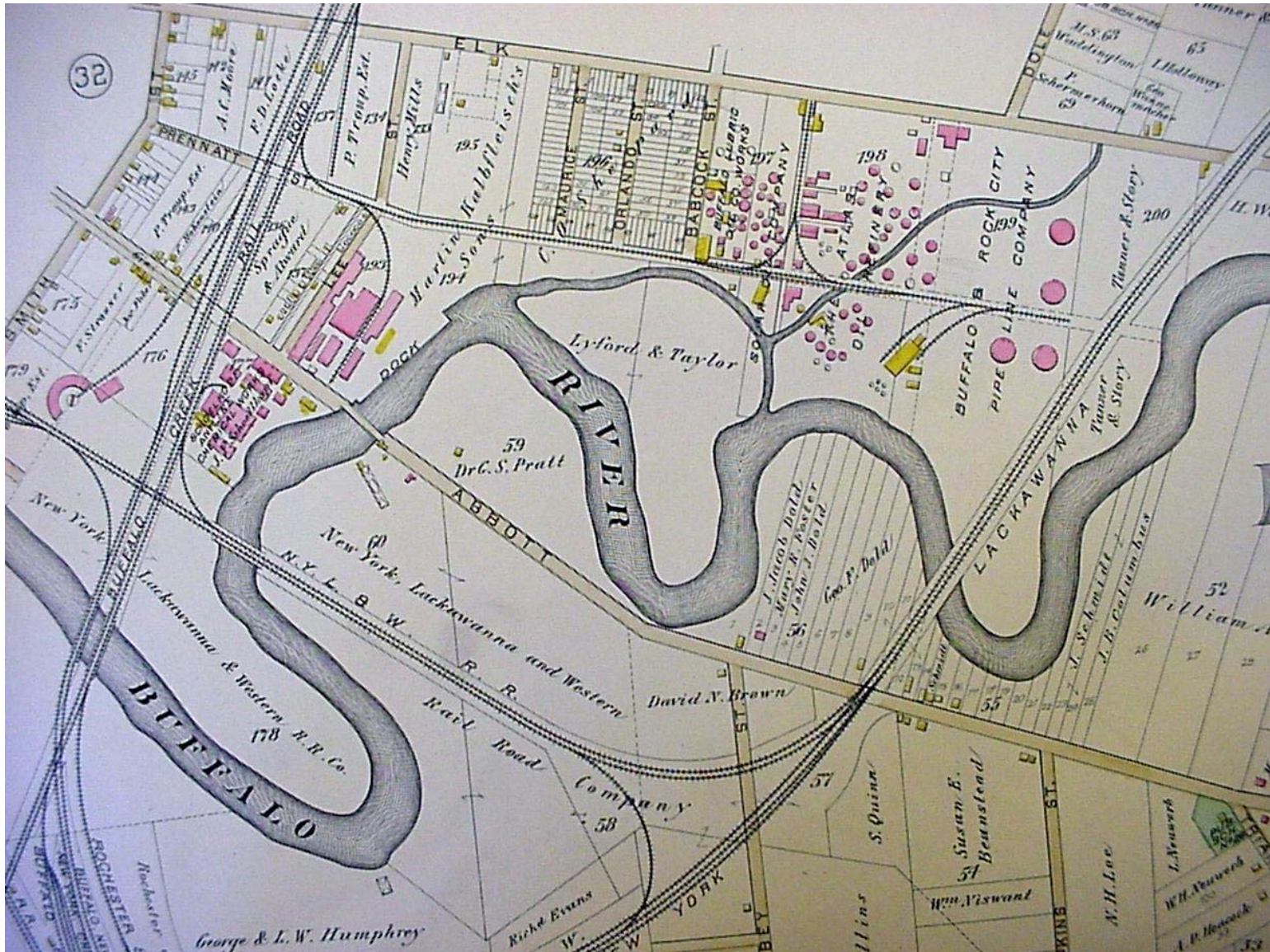


Figure A-2: Site Area in 1894

Reference: Atlas City of Buffalo New York, American Atlas Company, New York City,

1894, vol. 3, Plate 55

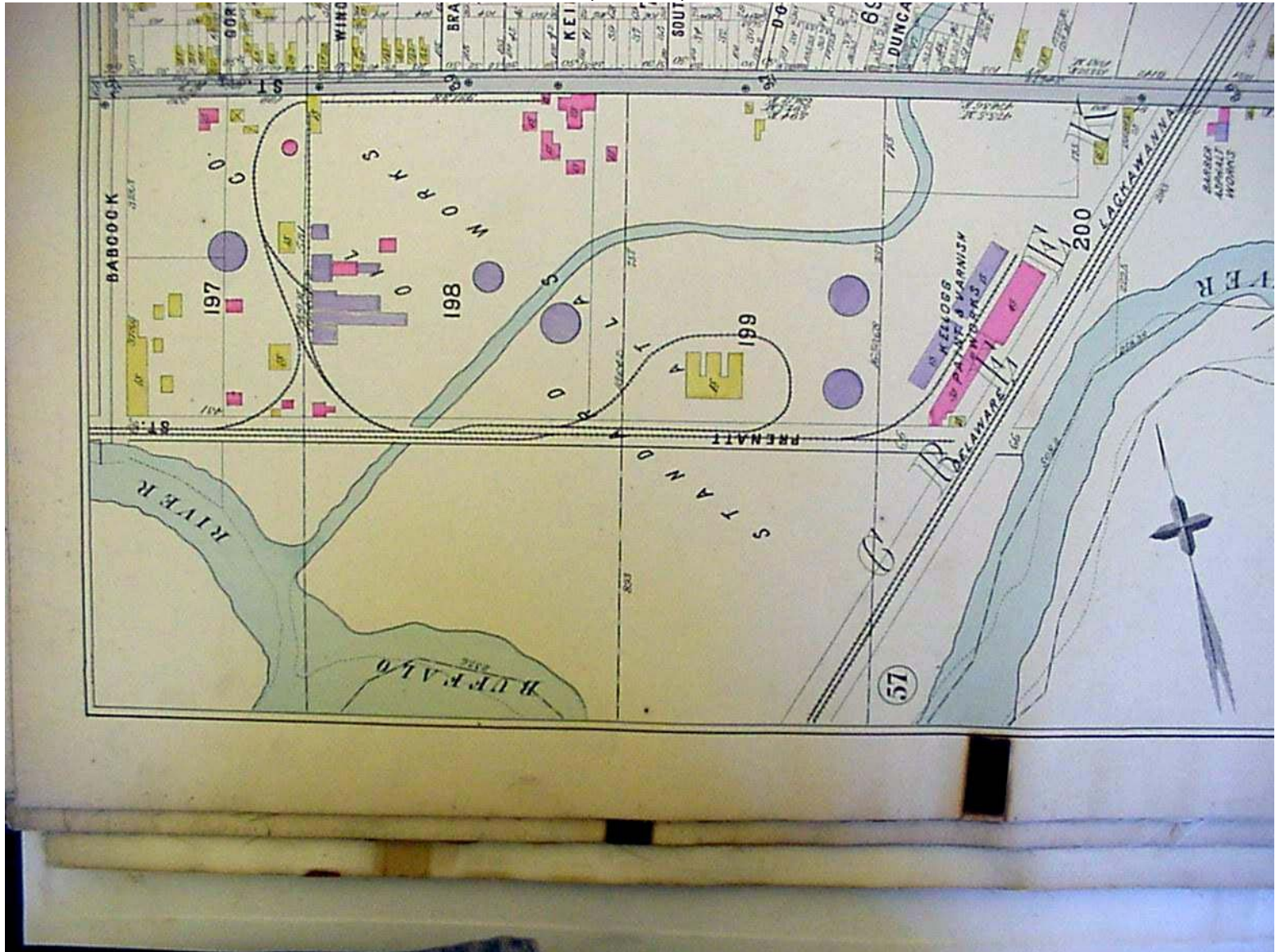


Figure A-3: Site Area in 1894

Reference: Atlas City of Buffalo New York, American Atlas Company, New York City, 1894, vol. 3, Plate 57

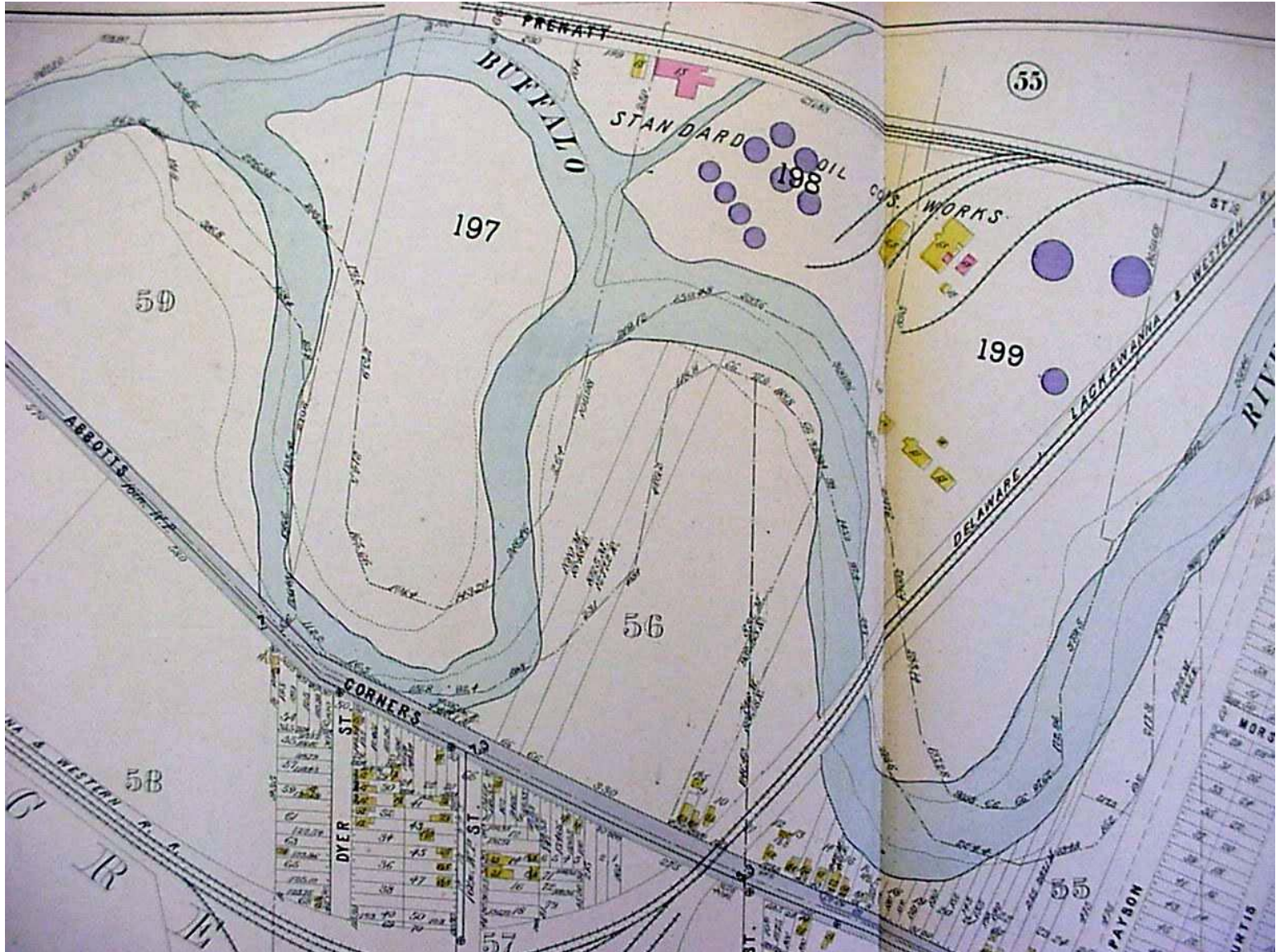


Figure A-4: Site Area in 1915

Reference: The New Century Atlas of Greater Buffalo, Century Atlas Company, Philadelphia, 1915, vol. 2, Plates 47

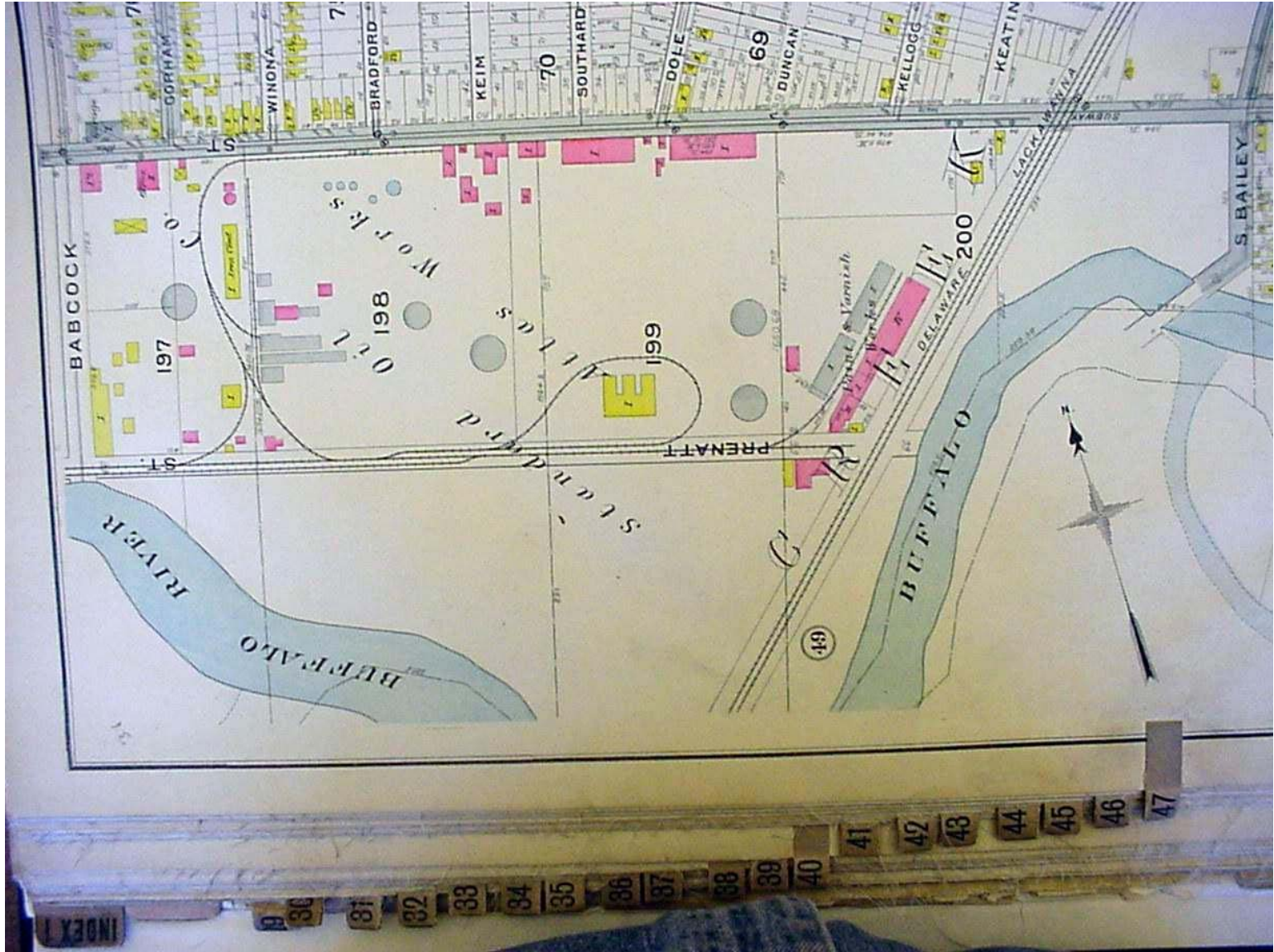


Figure A-5: Site Area in 1915

Reference: The New Century Atlas of Greater Buffalo, Century Atlas Company, Philadelphia, 1915, vol. 2, Plates 48

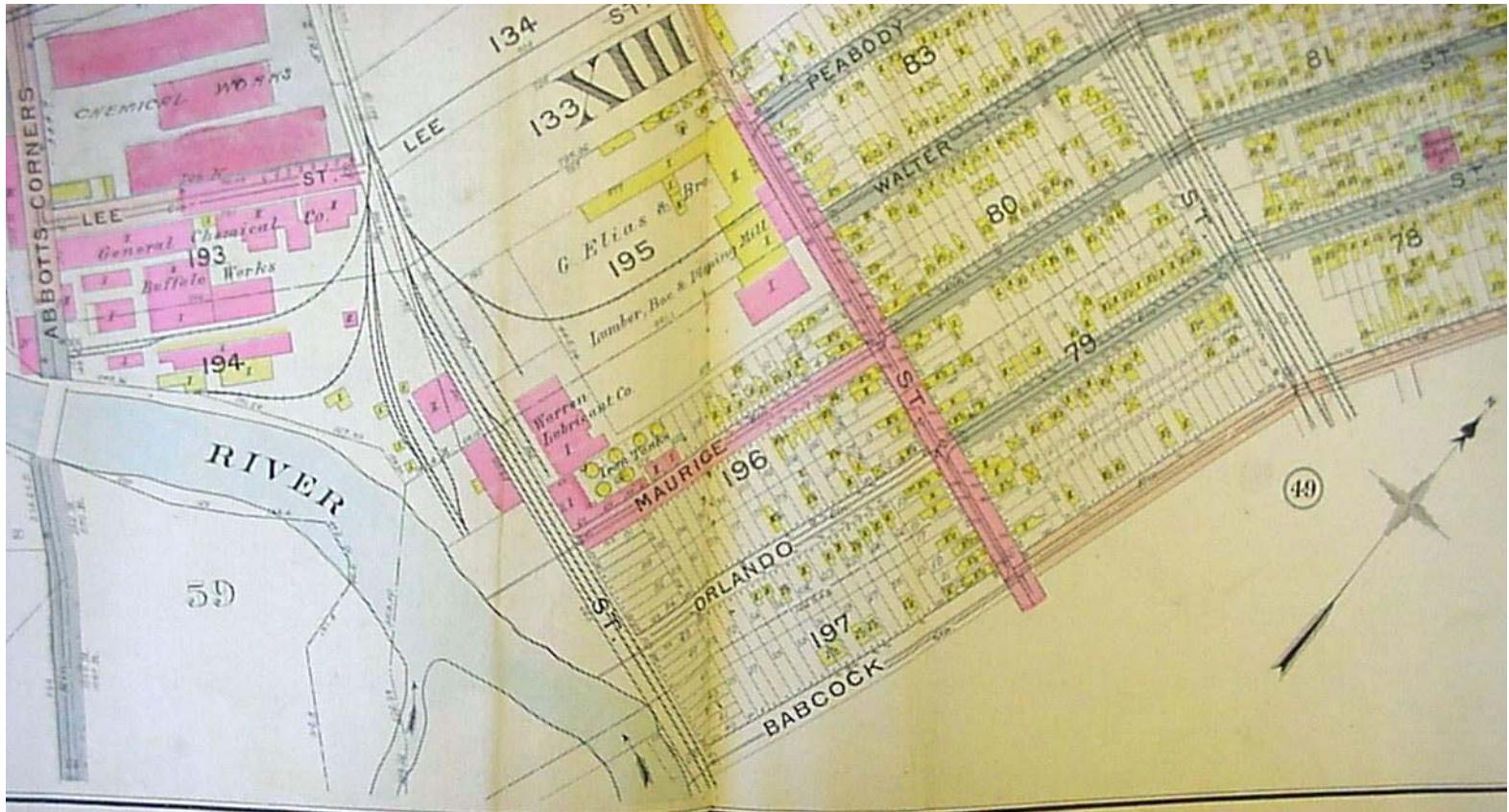
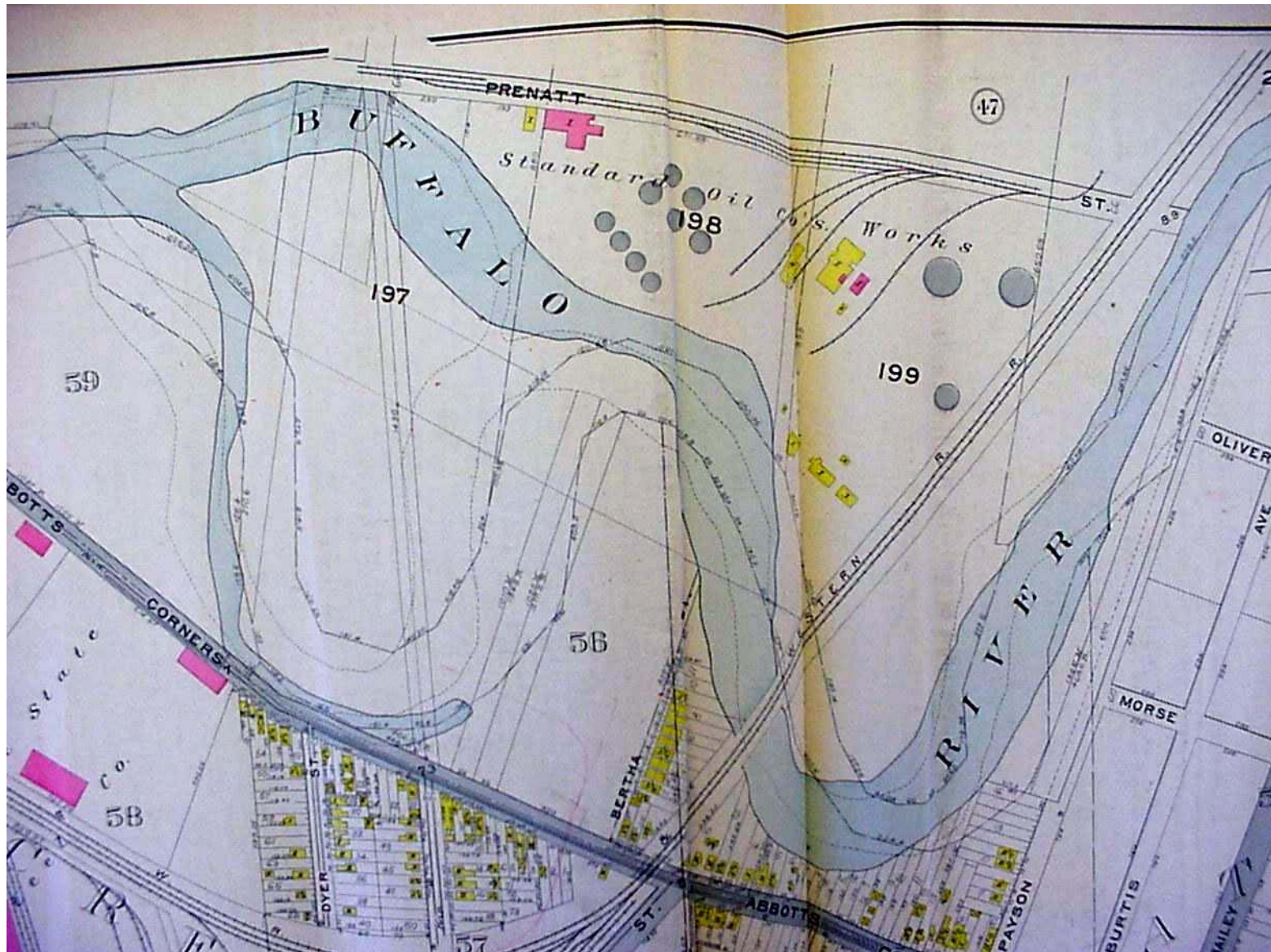
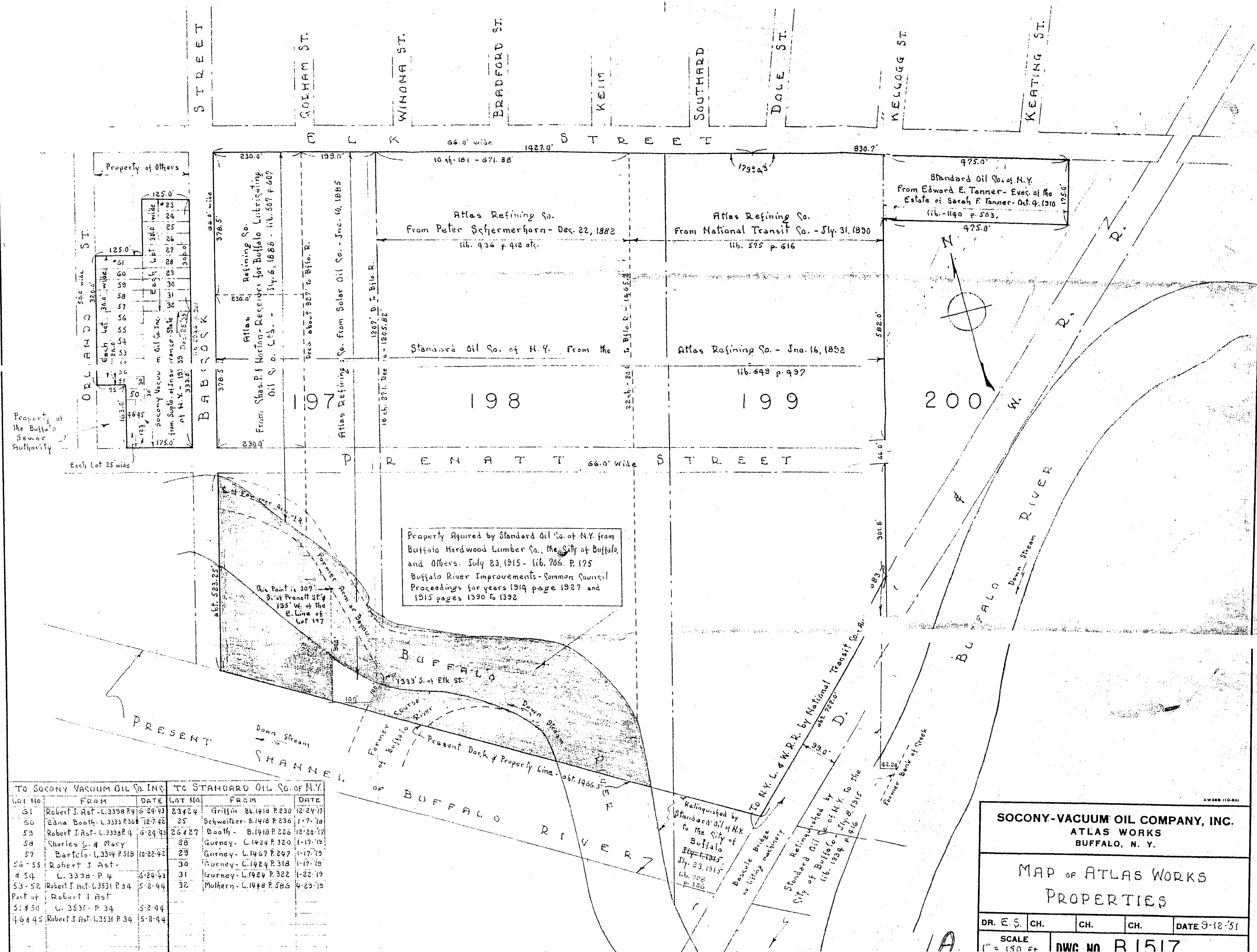


Figure A-6: Figure Site Area in 1915
Reference: The New Century Atlas of Greater Buffalo, Century Atlas Company,
Philadelphia, 1915, vol. 2, Plate 49



APPENDIX B

Map of Atlas Works Properties



| TO SOCONY VACUUM OIL CO. INC. | | | TO STANDARD OIL CO. OF N.Y. | | |
|-------------------------------|-------------------------------|----------|-----------------------------|-----------------------------|----------|
| LOT NO. | FROM | DATE | LOT NO. | FROM | DATE |
| 51 | Robert J. Ast - L. 3398 P. 4 | 6-24-43 | 24 | Griffin Bk. 1418 P. 230 | 12-24-17 |
| 50 | Eina Booth - L. 3333 P. 36 | 12-7-42 | 25 | Schweitzer - B. 1418 P. 236 | 1-7-18 |
| 59 | Robert J. Ast - L. 3398 P. 4 | 6-24-43 | 26 | Booth - B. 1418 P. 226 | 12-20-17 |
| 58 | Charles C. & Mary | | 28 | Gurney - L. 1424 P. 320 | 1-17-19 |
| 57 | Barfelo - L. 3314 P. 518 | 10-22-42 | 29 | Gurney - L. 1467 P. 247 | 1-17-19 |
| 56-55 | Robert J. Ast - | | 30 | Gurney - L. 1424 P. 318 | 1-17-19 |
| 4 54 | L. 3398 - P. 4 | 6-24-43 | 31 | Gurney - L. 1424 P. 322 | 1-22-19 |
| 53-52 | Robert J. Ast - L. 3531 P. 34 | 5-2-44 | 32 | Mulhern - L. 1448 P. 586 | 4-29-19 |
| Part of | Robert J. Ast | | | | |
| 51 & 50 | L. 3531 - P. 34 | 5-2-44 | | | |
| 7 6 & 45 | Robert J. Ast - L. 3531 P. 34 | 5-2-44 | | | |

AW 288 (110-50)

SOCONY-VACUUM OIL COMPANY, INC.
ATLAS WORKS
BUFFALO, N. Y.

MAP OF ATLAS WORKS
PROPERTIES

| | | | | |
|----------------------|-----|-----|-----|-----------------|
| DR. E. S. | CH. | CH. | CH. | DATE 9-12-51 |
| SCALE 1" = 150 Ft | | | | DWG. NO. R 1517 |

APPENDIX C

Aerial Photograph Review Summary

AERIAL PHOTOGRAPH REVIEW

Roux Associates performed a review of historical aerial photographs covering the Site and the surrounding properties. The review was performed to assist in determining historical uses at the Site and the surrounding properties.

Nine stereographic pairs of aerial photographs and two standard aerial photographs dating from 1927 to 1990 were reviewed to achieve the above-stated objective. All of the stereographic pairs were nine by nine prints of various scales, each were black and white. Information regarding the specific aerial photographs is provided in the table below. Interpretation of the stereographic pairs was achieved by utilizing the 3X and 8X magnification lenses of a Sokkisha Model MS-27 stereoscope. The standard prints were reviewed using a hand-held magnifying glass.

| Flight Date | Negative Scale | Photo Source | Comments |
|--------------------|-----------------------|---------------------|------------------------------------|
| 1927 | 1"=2000' | SUNY Buffalo | |
| 8/3/1938 | 1"=1667' | 228F | B/W Stereo Pair, Poor clarity |
| 10/14/1951 | 1"=1667' | 228F | B/W Stereo Pair, Good clarity |
| 10/6/1958 | 1"=1667' | 313F | B/W Stereo Pair, Average clarity |
| 6/12/1966 | 1"=1667' | 313F | B/W Stereo Pair, Good clarity |
| 10/10/1972 | 1"=2000' | 205P | B/W, standard aerial photograph |
| 4/17/1974 | 1"=2000' | 121P | B/W Stereo Pair, Excellent clarity |
| 1976 | 1"=2000' | 182P | |
| 10/31/1978 | 1"=3100' | 313F | B/W Stereo Pair, Average clarity |
| 8/20/1981 | 1"=2000' | 205P | B/W, |
| 7/2/1982 | | Skyview | |
| 1990 | 1"=2000' | 122F | |

1927

Babcock Street Properties Area

- Layout and structures are essentially as shown on 1924 drawing.
- All lots immediately west of Babcock Street were vacant or being used for storage of containers. No evidence of refinery or petroleum storage operations.
- The lot, which eventually contains Tank 221, is occupied by residential housing.
- There is a long loading dock or loading rack associated with the rail spurs leading towards the Main Separator.

Off-Site North and West of Babcock Street Properties Area

- Residential or light commercial use immediately adjacent Elk Street
- To the west most of the property appears to be a large storage yard organized in rows of rectangular objects.
- No evidence of refinery or petroleum storage operations.

Former Refinery Area

- Layout is as shown on the 1924 drawing (Plate 2).
- A large area of dark ground discoloration is located east of the Main Inground Oil/Water Separator.

Central Rail and Process Area

- Layout essentially as shown on the 1924 drawing

Elk Street Properties

- Parcels #1, 2, and 3 appear residential or light commercial.
- Parcels #4 and 5 appear mostly residential or light commercial; however, a northeastern portion appears to be vacant or being used for storage.

Northern Tank Yard

- Essentially as shown on the 1924 drawing (Plate 2)

Southern Tank Yard

- Essentially as shown on the 1924 drawing (Plate 2)

Northeast Process and Storage Area

- Essentially as shown on the 1924 drawing (Plate 2)

Administrative Office and Operations Area

- Essentially as shown on the 1924 drawing (Plate 2).

Eastern Tank Yard Area (Former Disposal Area)

- Majority of property appears to be open dirt or sand covered area, possibly part of landfilling operation.

1938

Babcock Street Properties Area

- Tanks 83 and 84 west of Babcock Street had not been built.

- No evidence of activity west of the Lube Building
- Facility layout immediately east and north of the Lube Building essentially as shown on 1939 drawing (Plate 3)
- Layout northeast of Lube Building layout is more like 1924 drawing (Plate 2).

Off-Site North and West of Babcock Street Properties Area

- Vacant with the exception of what appears to be residential or light commercial use immediately adjacent Elk Street

Former Refinery Area

- Layout was much more similar to 1924 drawing (Plate 2) than the 1939 drawing (Plate 3) in all parts of the Former Refinery Area.
- Pipe still area (north of Houdry Unit) was possibly under construction
- Houdry Unit was not yet built.

Central Rail and Process Area

- Layout much more similar to 1939 drawing (Plate 3) than 1924 drawing (Plate 2).
- Deflorez Cracking Unit and Stabilization Unit are in place.
- Ethyl Plant, Dehydrator and Pipeline Pump House do not appear to be in place.

Elk Street Properties

- Parcels #1, 2, and 3 appear residential or light commercial.
- Parcels #4 and 5 appear mostly residential or light commercial; however, a northeastern portion appears to be vacant or being used for storage.

Northern Tank Yard

- Essentially as shown on 1939 drawing (Plate 3).

Southern Tank Yard

- Essentially as shown on 1939 drawing (Plate 3).

Northeast Process and Storage Area

- Essentially as shown on 1939 drawing (Plate 3).

Administrative Office and Operations Area

- Essentially as shown on 1939 drawing (Plate 3).

Eastern Tank Yard Area (Former Disposal Area)

- Majority of property appears to be an area of filling or disposal operation.

1951

Babcock Street Properties

- All lots immediately west of Babcock Street were active.
- Tanks 83 through 85 and the Lakes Division Garage west of Babcock Street were in place.
- Structures are visible at the loading racks adjacent to Tanks 83 and 84 on the 1951 drawing.
- Directly south of the Lakes Division Garage, across Prenatt Street, a large amount of dark looking material is piled (approximately 200 ft by 100 ft)
- The former Lube Building and the layout around the building are as depicted on the 1951 drawing (Plate 4).

Off-Site North and West of Babcock Street Properties Area

- A rail siding has been extended from the Site to the west of where the Babcock Street meets the Buffalo River.
- The large lot west of Orlando Street (west of Tank 221) appears graded with dark soil
- Immediately adjacent to Elk Street was similar to 1938.

Former Refinery Area

- Essentially as depicted on 1951 drawing (Plate 4).
- Elongated feature adjacent to east side of Main Inground Oil/Water Separator, appears to contain dark material surrounded by berm.

Central Rail and Process Area

- Essentially as depicted on 1951 drawing (Plate 4).

Elk Street Properties

- Parcels #1, 2, and 3 appear residential or light commercial.
- Parcels #4 and 5 appear mostly residential or light commercial; however, the northeastern portion appears to be vacant with disturbed ground.

Northern Tank Yard

- Essentially as depicted on 1951 drawing (Plate 4).

Southern Tank Yard

- Essentially as depicted on 1951 drawing (Plate 4).

Northeast Process and Storage Area

- Essentially as depicted on 1951 drawing (Plate 4). Very little change from 1938.

Administrative Office and Operations Area

- Essentially as shown on 1951 drawing. Very little change from 1938.

Eastern Tank Yard Area (Former Disposal Area)

- Area of disturbed ground is more concentrated with center of area.
- Tanks shown on 1951 drawing (Plate 4) are not present yet.

1958

Babcock Street Properties

- The structures to the west of Babcock Street appear identical to the 1951 photo.
- The mound south of the Lakes Division Garage, across Prenatt Street, has been leveled and is sparsely occupied by vehicles.
- There is a large discolored or disturbed area associated with the rail siding immediately to the west of where the Babcock Street meets the Buffalo River.
- The large lot to the west of Orlando Street (west of Tank 221) appears to be a possible disposal location due to uneven terrain, areas of discoloration, and the presence of trucks or containers.
- The former Lube Building and to the east and northeast of the building are similar to those observed in 1951. The truck loading rack has been installed to the north of the building.

Off-Site West of Babcock Street Properties Area

- There is a large discolored or disturbed area associated with the rail siding immediately to the west of where the Babcock Street meets the Buffalo River.
- The large lot west of Orlando Street (west of Tank 221) appears to be a possible disposal location due to uneven terrain, areas of discoloration, and the presence of trucks or containers.

Former Refinery Area

- Essentially as depicted on the 1951 drawing (Plate 4) except the Sovaformer Area has been added.
- Elongated feature adjacent to east side of Main Inground Oil/Water Separator which was visible in the 1951 photograph is no longer visible.

Central Rail and Process Area

- Essentially as depicted on the 1955 (Final revision 1982) drawing.
- Treating, Blending and Shipping area was constructed where rail car loading rack was in 1951.
- Alkylation Unit (Plate 5) and associated tanks have been added where Deflorez Cracking Unit and other structures were located in 1951.
- New rail car loading rack is present.
- Caustic Storage Area tanks on the 1956 (Final revision 1982) drawing have not been installed yet.
- Settling Tanks in southwest portion of area (shown on 1951 drawing and photo) have been removed.

Elk Street Properties

- Parcel #4 appears residential or light commercial.
- Western half of Parcels #5 appears residential. Southeastern half appears to be used for parking. Northeastern portion appears to be used for miscellaneous storage or debris.

Northern Tank Yard

- Similar to 1951 drawing (Plate 4).
- Tanks 2, 4, 10, 101, 350 and 351 are gone.

Southern Tank Yard

- Very similar 1951 photo and drawing (Plate 4).
- Tanks 75, 299 and 300 constructed since 1951.
- Cooling Tower constructed
- Tanks 46, 381 and 382 taken down since 1951.

Northeast Process and Storage Area

- Essentially as shown on 1951 photo and drawing (Plate 4).

Administrative Office and Operations Area

- New buildings since 1951 include the Mechanical shop, Laboratory, and Storehouse.
- Buildings demolished since 1951 include the Old Mechanical Shop, Old Storehouse and Old Blacksmith and Machine Shop.
- Tank 222 demolished (replaced by new lab building)
- Old Boiler House, Fire Foam House is still present.

Eastern Tank Yard Area (Former Disposal Area)

- Tanks 175 and 176 are present.
- Area to the southwest of tanks appears to be possible landfill/disposal location.
- Offsite junkyard operation has begun to expand from north into the area northeast of Eastern Tank Yard Area.

1966

Babcock Street Properties

- The structures to the west Babcock Street appear identical to the 1951 photo.
- The area south of the Lakes Division Garage, across Prenatt Street, is occupied by trucks. There is a large area of discolored ground that appears to be associated with the former Truck Loading Rack.
- The disturbed area associated with the rail siding immediately to the west of where the Babcock Street meets the Buffalo River appears similar to the 1958 photo.
- The large lot west of Orlando Street (west of Tank 221) is vacant.
- The area to the east and north of the Lube Building appears similar to 1958.
- Since 1958, some of the tanks and structures have been removed from the area to the northeast of the Lube Building.

Off-Site West of Babcock Street Properties Area

- The disturbed area associated with the rail siding immediately to the west of where the Babcock Street meets the Buffalo River appears similar to the 1958 photo.
- The large lot west of Orlando Street (west of Tank 221) is vacant.

Former Refinery Area

- The structures on the north side of the area (office, garage, old loading racks, medical dept.) have been demolished since 1958.
- The only visible tanks left are 47, 48, 496 – 499, 169 and 185 and 186.
- The process units on the east side of the area appear the same as 1958.
- The control house west of the pipe still area has been built.

Central Rail and Process Area

- Essentially as depicted on the 1956 (Final revision 1982) drawing.
- Caustic Storage Area Tanks 2, 106, 107 and 168 have been added since 1958 photograph.
- Bullet tanks 1 through 4 added since 1958.

Elk Street Properties

- Parcel #4 lot appears residential or light commercial.
- Western half of Parcel #5 appears residential or light commercial. Southeastern half appears to be used for parking. Northeastern portion appears to be vacant.

Northern Tank Yard

- Essentially unchanged since 1958.

Southern Tank Yard

- Tanks 3, 5, 199/43, 12, 13, 14, 16 removed since 1958
- Crude scale house added since 1958.

Northeast Process and Storage Area

- Major demolition activities since 1958
- The only tanks left are 32, 218, 251, 252 and 379 (approx.)
- None of the prior buildings or structures remain
- The new office building has been constructed
- Scattered areas of debris or small storage items, and areas of discoloration are present within the area south of Tank 376 and between Tank 376 and Tank 251.
- A building has been constructed on the approximate area where Tanks 336 and 337 had been located.

Administrative Office and Operations Area

- The new boiler house and surrounding structures, as shown on the 1956 (final revision 1982) and 1977 drawings, have replaced the old boiler house/fire foam house.

Eastern Tank Yard Area (Former Disposal Area)

- Tanks 175 and 176 are present.
- Southwest portion of area still appears to be active filling/disposal location
- Major expansion of offsite junkyard activity up to property line.

1972

Babcock Street Properties

- The structures to the west Babcock Street appear identical to the 1966 photo.
- The area south of the Lakes Division Garage, across Prenatt Street, is occupied by trucks. There are large areas of discolored ground that appears associated with the trucks and the former truck loading rack.
- The area around the Lube Building appears similar to 1966.

Off-Site West of Babcock Street Properties Area

- The disturbed area associated with the rail siding immediately to the west of where the Babcock Street meets the Buffalo River continues to be in use. Two rail cars are on the siding near the terminus at the River.
- The large lot west of Orlando Street (west of Tank 221) is occupied by two long lagoons.

Former Refinery Area

- Appears similar to 1966 photograph.
- The Dissolved Air Floatation unit has been constructed north of the separator.

Central Rail and Process Area

- Appears similar to 1966 photograph.

Elk Street Properties

- Western half of current Elk Street lot appears residential. Southeastern half appears to be used for parking. Northeastern portion appears to be vacant.

Northern Tank Yard

- Essentially unchanged since 1966.

Southern Tank Yard

- Essentially unchanged since 1966.

Northeast Process and Storage Area

- Scattered debris and areas of discoloration.

Administrative Office and Operations Area

- Essentially unchanged since 1966.

Eastern Tank Yard Area (Former Disposal Area)

- Tanks 175 and 176 are present.
- Southwest portion of area still appears to be active filling/disposal location.

1974

Babcock Street Properties

- The structures on west side of Babcock Street appear almost identical to prior years with the exception that some of residences along Elk Street have been replaced by parking areas.

- The area south of the Lakes Division Garage, across Prenatt Street, is occupied by trucks. The large area of discolored ground associated with the former truck loading rack is still visible.
- Extensive black discoloration is within the yard for Tank 221.
- The area around the Lube Building appears similar to 1966.

Off-Site West of Babcock Street Properties Area

- Two elongated lagoons have been constructed on the lot west of Orlando Street.
- The disturbed area associated with the rail siding immediately to the west of where the Babcock Street meets the Buffalo River appears similar to the 1958 photo. The siding is occupied by a train of 8 rail cars near the terminus at Babcock Street.
- A square lagoon or retention pond is active along the rail siding, near the western end of the train of rail cars, approximately 300 feet west of Babcock Street and 300 feet from the Buffalo River.

Former Refinery Area

- The truck loading rack shown on the 1977 drawing (Plate 5) in the Asphalt Loading Area north of Tank 490 is visible.
- The firewall east of the Main Separator has been constructed. Between the firewall and the three northern most chambers on the east side of the separator is an elongated feature, possibly similar to a trench. A similar feature exists on the west side of the separator. These features are shown, but not labeled, on the 1977 drawing.
- The main process areas in the northern half of the Former Refinery Area appear similar to the 1966 photo.

Central Rail and Process Area

- No significant structural changes noted since 1972.
- Elongated discoloration, possible trench, between Alkylation Unit and Tanks 99, 38 and 97.

Elk Street Properties

- Western half of Parcel #5 appears residential or light commercial.
- Southeastern half of Parcel #5 appears to be used for parking. Northeastern portion appears to have been paved since 1972 and is being used for parking.
- Parcel #4 appears residential or light commercial
- Other land uses north of Elk Street remain similar to 1958.

Northern Tank Yard

- Tank 55 demolished since 1972.
- Other tanks appear unchanged since 1972.
- Dark discoloration apparent with most bermed areas surrounding tanks.

Southern Tank Yard

- Appears unchanged since 1972.

Northeast Process and Storage Area

- With the exception the office building, the northern portion of this area (along Elk Street) is being primarily used for parking. Some additional buildings have been added in the northeast portion of the area.
- Scattered areas of debris or small storage items, and areas of discoloration are present throughout the majority of area southeast of the office building and Tanks 32, 218, 251 and 252.

Administrative Office and Operations Area

- No significant changes since 1972.

Eastern Tank Yard Area (Former Disposal Area)

- Tanks 175 and 176 are present.
- Southwest portion of area still appears to be active filling/disposal location.

1976

Babcock Street Properties

- The structures on west side of Babcock Street appear almost identical to 1974.
- The area south of the Lakes Division Garage, across Prenatt Street, is occupied by trucks. An area of dark ground discoloration is present immediately south of Prenatt Street in vicinity of the truck washing station.
- The area around the Lube Building appears similar to 1966.
- There is a large area of dark ground discoloration in the northeast portion of the area in the vicinity of the asphalt pump house.

Off-Site West of Babcock Street Properties Area

- Two elongated lagoons have been constructed on the lot west of Orlando Street.
- The disturbed area associated with the rail siding immediately to the west of where the Babcock Street meets the Buffalo River appears similar to the 1958 photo. The siding is occupied by a train of 20+ railcars near the terminus at Babcock Street.

- The square lagoon or retention pond, observed in the 1974 photograph, is still present. It is located approximately 300 feet west of Babcock Street and 300 feet from the Buffalo River.

Former Refinery Area

- The truck loading rack shown on the 1977 drawing in the Asphalt Loading Area north of Tank 490 is visible. There is a large area of dark ground discoloration within this area extending to the west and into the northeast portion of the Babcock Street Properties Area.
- On the east side of the Main Separator is an elongated feature, possibly similar to a trench. A similar feature exists on the west side of the separator. These features are shown, but not labeled, on the 1977 drawing.
- The Dissolved Air Flotation Unit has not yet been constructed north of the separator.
- The main process areas in the northern half of the Former Refinery Area appear similar to the 1977 drawing (Plate 5).

Central Rail and Process Area

- No significant structural changes noted since 1966.
- Possible expansion of Treating Blending and Shipping Area since 1966.
- Elongated discoloration, possible trench, between Alkylolation Unit and Tanks 99, 38 and 97.
- Extensive discoloration along rail sidings in vicinity of Loading Rack and north of Treating and Blending Area

Elk Street Properties

- Western half of Parcel #5 has been leveled and is vacant.
- Eastern half of Parcel #5 appears to be used for parking.
- Parcel #4 has been leveled and cleared of all buildings.

Northern Tank Yard

- Tanks 2, 4, 10, 101, 351, 350, 33 taken down.
- Other tanks appear unchanged since 1966
- Dark discoloration apparent within most bermed areas surrounding tanks.

Southern Tank Yard

- No significant changes in Tanks since 1974.
- Dark discoloration apparent within most bermed areas.

Northeast Process and Storage Area

- With the exception of the office building, the northern portion of this area (along Elk Street) is being primarily used for parking. Some additional buildings have been added in the northeast portion of the area.
- Scattered areas of debris or small storage items, and areas of dark ground discoloration are present throughout the majority of area southeast and east of the office building and Tanks 32, 218, 251 and 252.

Administrative Office and Operations Area

- No significant changes since 1974.

Eastern Tank Yard Area (Former Disposal Area)

- Tanks 175 and 176 are present.
- Within the bermed area south of Tank 176 is an area of dark ground discoloration that appears to originate from the south side of Tank 176.
- Northwest of Tank 176 is an area of dark ground discoloration.
- Southwest portion of area no longer appears to be active filling/disposal location.

1978 (Difficult to interpret detail due to scale and clarity)

Babcock Street Properties

- The structures on west side of Babcock Street appear the same as 1974
- The area south of the Lakes Division Garage, across Prenatt Street, occupied by trucks.
- Of the larger tanks east of the Lube Building, only Tanks 800 and 801 remain.

Off-Site West of Babcock Street Properties Area

- Two elongated lagoons have been constructed on the lot west of Orlando Street.
- The disturbed area associated with the rail siding immediately to the west of where the Babcock Street meets the Buffalo River appears similar to the 1958 photo. The siding is occupied by a train of 8 railcars near the terminus at Babcock Street.
- The square lagoon or retention pond formerly present approximately 300 feet west of Babcock Street and 300 feet from the Buffalo River, has been backfilled.

Former Refinery Area

- Similar to 1974 photograph.

Central Rail and Process Area

- Similar to 1974 photograph

Elk Street Properties

- Both Parcels #4 and 5 are being used for parking. Buildings have been demolished.

Northern Tank Yard

- Tank 94, 33 and 54 demolished since 1974
- Other tanks appear unchanged since 1974

Southern Tank Yard

- Appears unchanged since 1974

Northeast Process and Storage Area

- Appears unchanged since 1974

Administrative Office and Operations Area

- Appears unchanged since 1974

Eastern Tank Yard Area (Former Disposal Area)

- Tanks 175 and 176 are present.
- Filling/disposal in southwest of area is not readily apparent. Vegetative growth is occurring in extreme southwest portion of area, indicating that this area is not being utilized.

1981

Babcock Street Properties

- The structures on west side of Babcock Street appear the same as 1974

Former Refinery Area

- Very similar to 1974 and 1978 photographs.

Central Rail and Process Area

- Similar to 1974 and 1978 photographs

Elk Street Properties

- Both Parcels #4 and 5 are being used for parking.
- Other land uses north of Elk Street remain similar to 1974 and 1978.

Northern Tank Yard

- Tanks appear unchanged since 1978

Southern Tank Yard

- Appears unchanged since 1978

Northeast Process and Storage Area

- Appears unchanged since 1978

Administrative Office and Operations Area

- Appears unchanged since 1978

Eastern Tank Yard Area (Former Disposal Area)

- Tanks 175 and 176 are present.
- In the southwest portion of the area there is a triangular area of discoloration possibly indicative of filling or disposal activity, or low growth vegetation

1982 Photos

Babcock Street Properties

- The structures on west side of Babcock Street appear the same as 1981

Offsite West of Babcock Street Properties Area

- Railcars and surficial staining are indicative of releases or disposal activities at the terminus of the rail siding near the Buffalo River.
- Two more square lagoons are visible directly south of the two elongated lagoons. These lagoons were backfilled by the time the second set of photos was taken.

Former Refinery Area

- Very similar to 1981.

Central Rail and Process Area

- Similar to 1981

Elk Street Properties

- Both Parcels #4 and 5 are being used for parking.
- Other land uses north of Elk Street remain similar to 1974 and 1978.

Northern Tank Yard

- Tanks appear unchanged since 1981

Southern Tank Yard

- Appears unchanged since 1981

Northeast Process and Storage Area

- Appears unchanged since 1981

Administrative Office and Operations Area

- Appears unchanged since 1981

Eastern Tank Yard Area (Former Disposal Area)

- Tanks 175 and 176 are present.
- In the southwest portion of the area there is a triangular area of discoloration seen in the 1981 photograph that appears to be associated with low growth vegetation.

1990

Babcock Street Properties

- The only structures remaining are the Lakes Division Garage, the Lube Building and the Loading Rack.
- All offsite lagoons previously observed have been backfilled.

Former Refinery Area

- All main structures and tanks between the Main Inground Oil/Water Separator and the main process area have been demolished.
- The dissolved air floatation unit is still present
- Lakes Division Warehouse has been demolished.
- The main process area appears similar to 1978.

Central Rail and Process Area

- Still appears similar to 1978.
- Alkylation Unit and Treatment and Blending Areas still standing.

Elk Street Properties

- Both Parcels #4 and 5 appear vacant.

Northern Tank Yard

- All tanks have been demolished.
- Dark discoloration is evident within all former tank berm areas, with the exception of former tank berms 19, 22, 23, 31 and 89, which have been graded and show no evidence of tanks having been present.

- The small oil/water separator between former Tanks 22 and 23 is still visible as a dark rectangular area.

Southern Tank Yard

- Tanks Demolished: 23, 100, 26, 20, 96, 198, 160, 376, 375, 99, 197, 86, 103

Northeast Process and Storage Area

- Appears unchanged since 1978

Administrative Office and Operations Area

- Boiler house and some the associated structures have been demolished since 1978.

Eastern Tank Yard Area (Former Disposal Area)

- Tanks 175 and 176 are present.
- Filling/disposal in southwest of area is not apparent. Vegetative growth continues.
- Four rectangular container structures are located

APPENDIX D

Sanborn Fire Insurance Maps

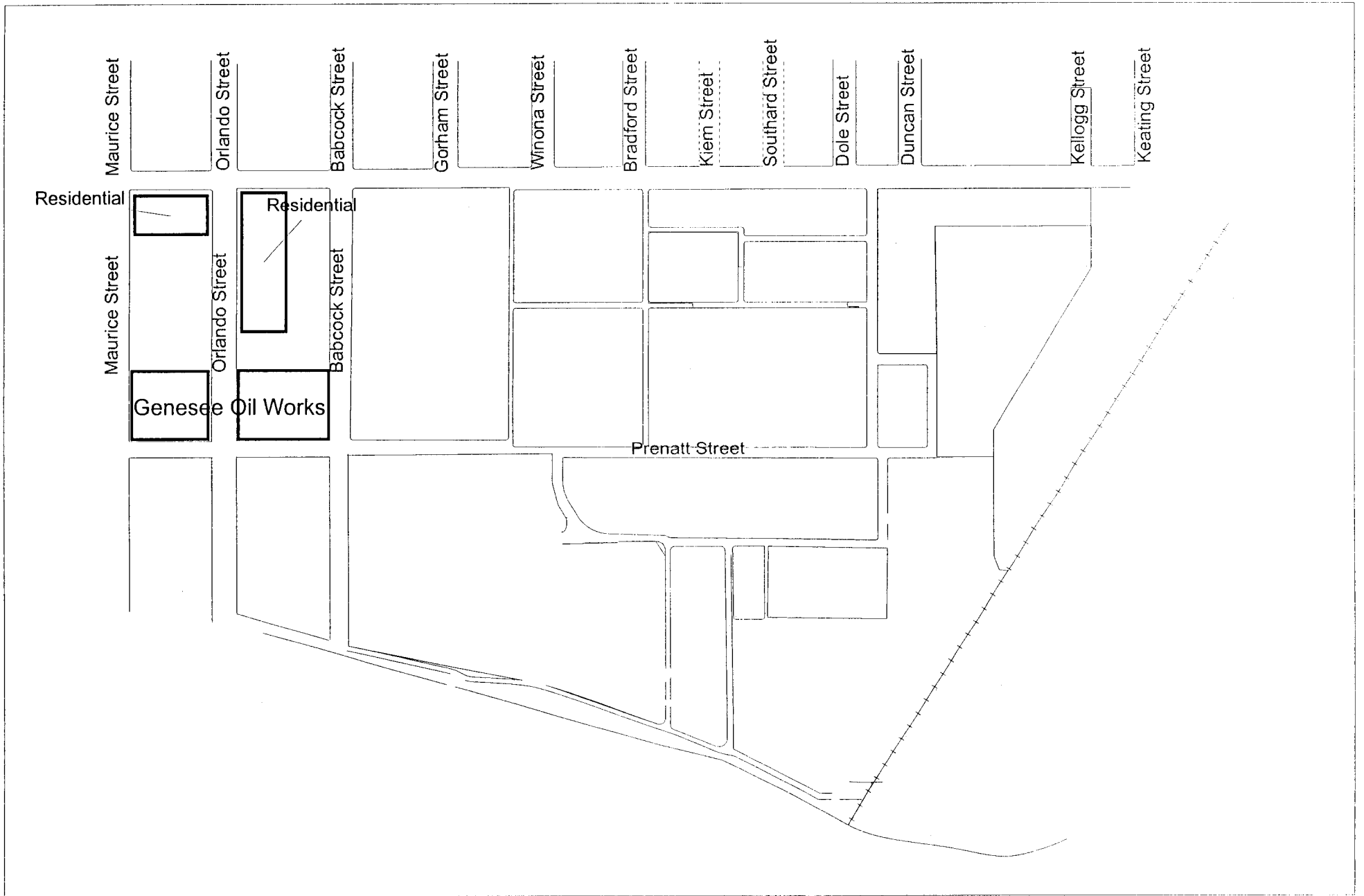


Figure D-1. Adjacent Property Summary for 1889

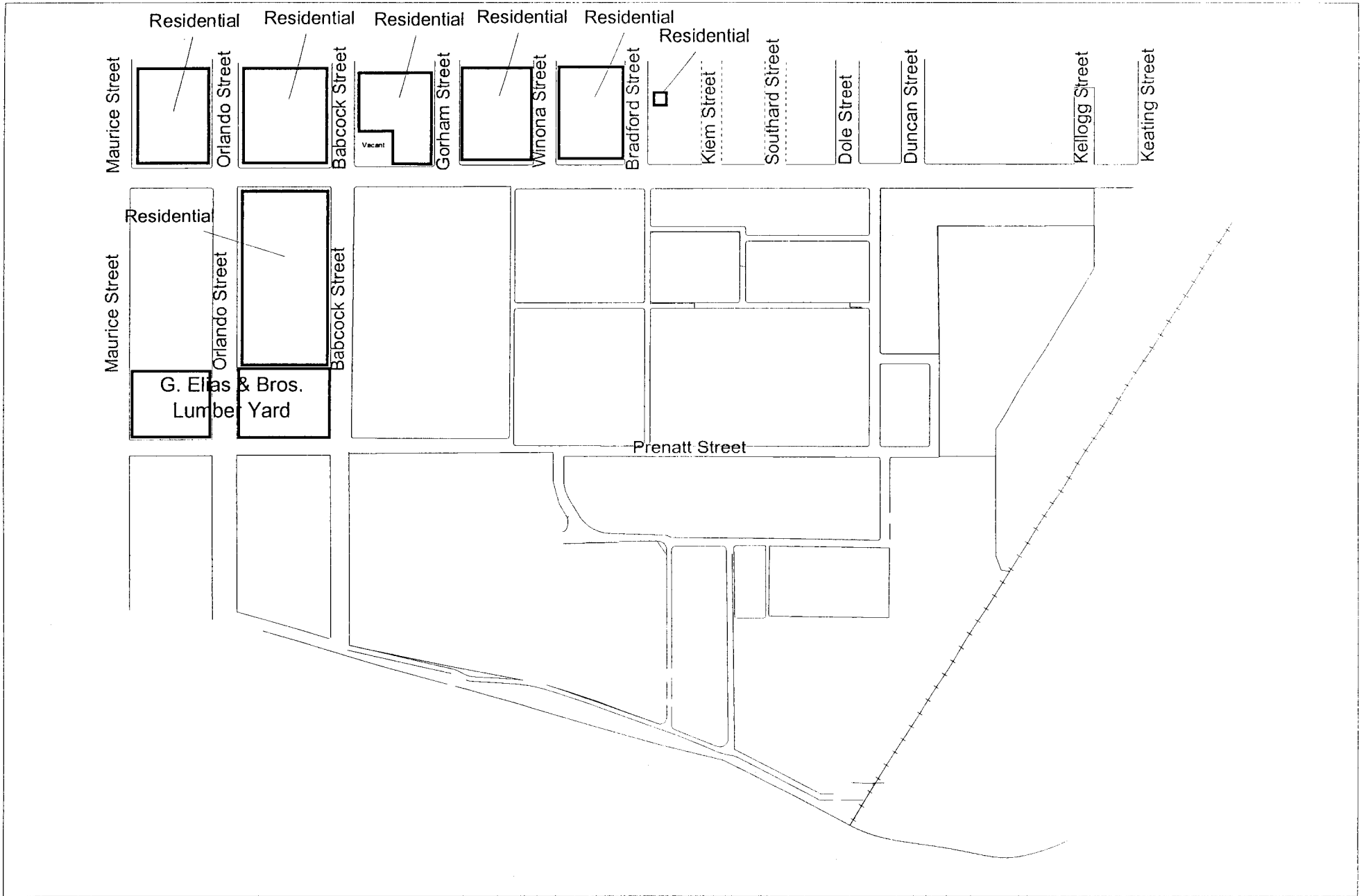


Figure D-2. Adjacent Property Summary for 1900

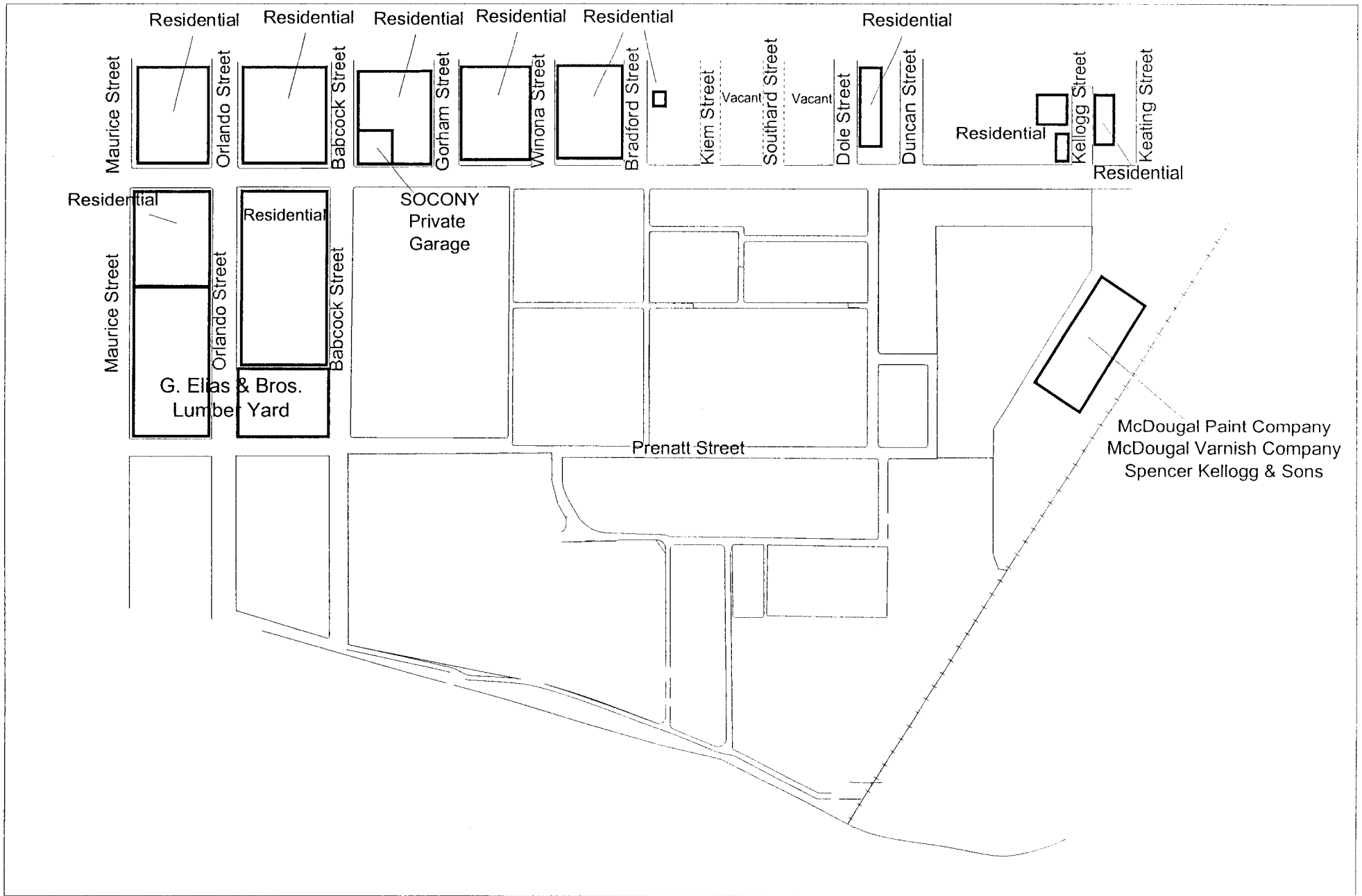


Figure D-3. Adjacent Property Summary for 1917

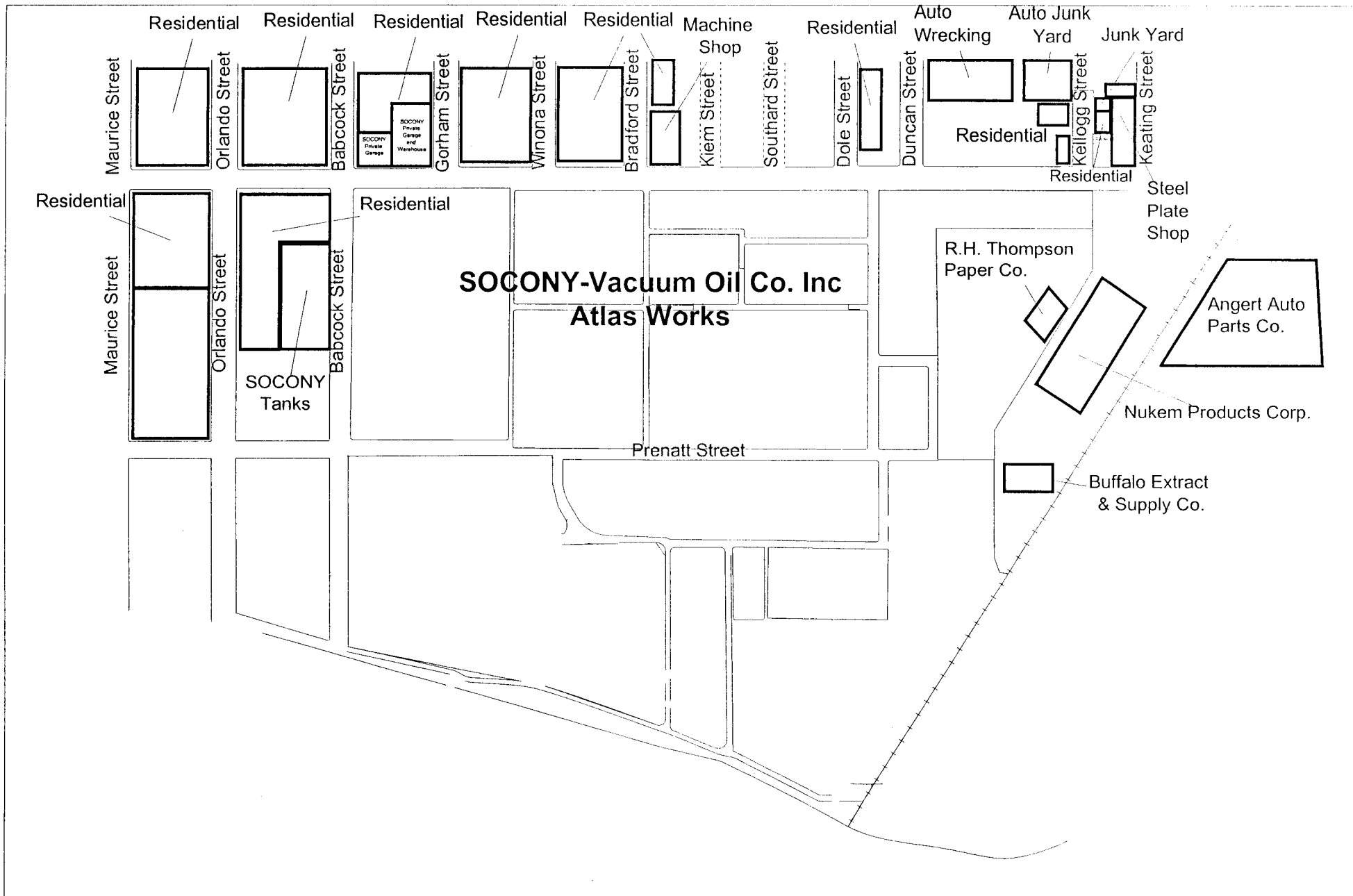


Figure D-4. Adjacent Property Summary for 1940

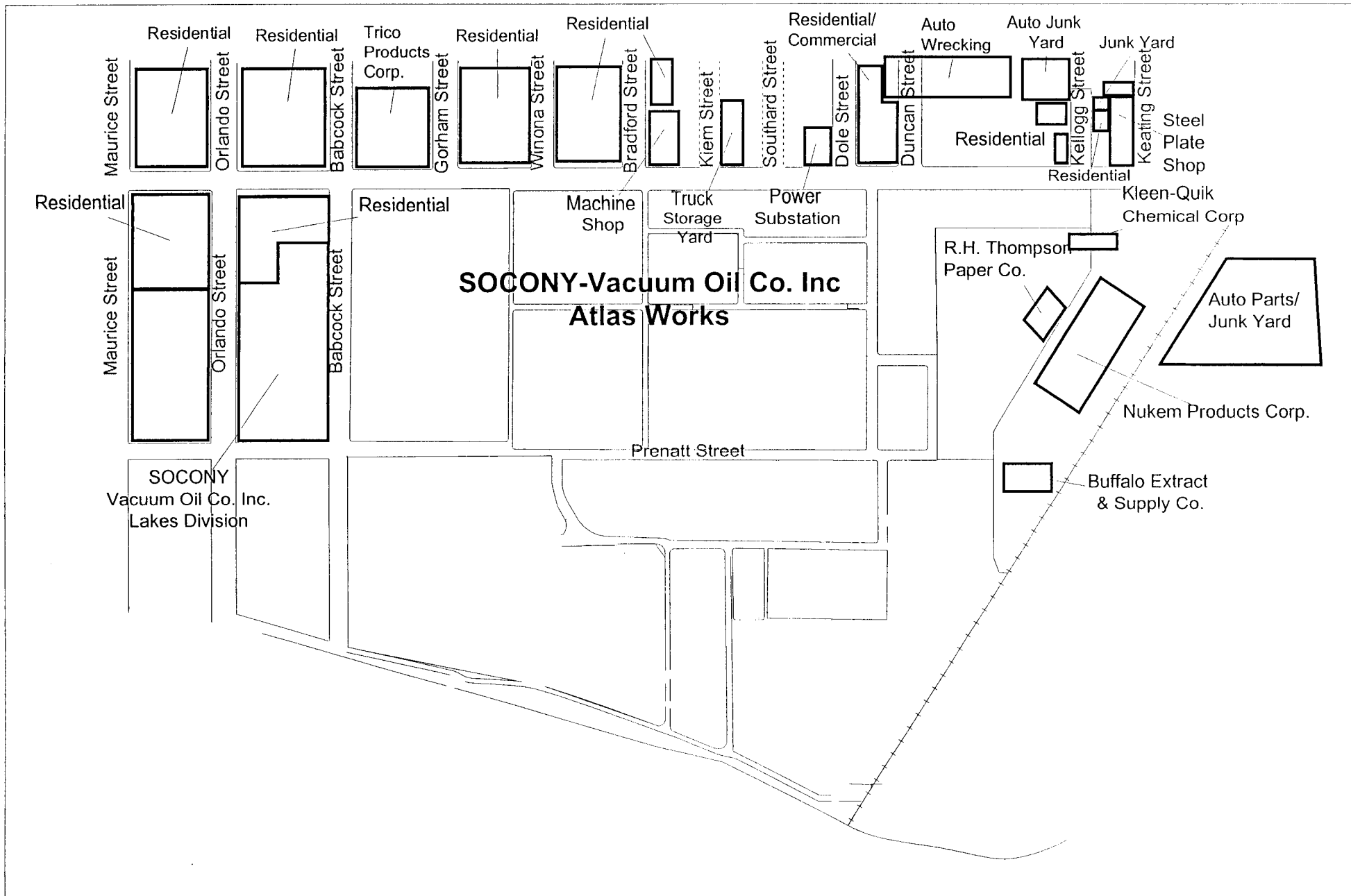


Figure D-5. Adjacent Property Summary for 1950

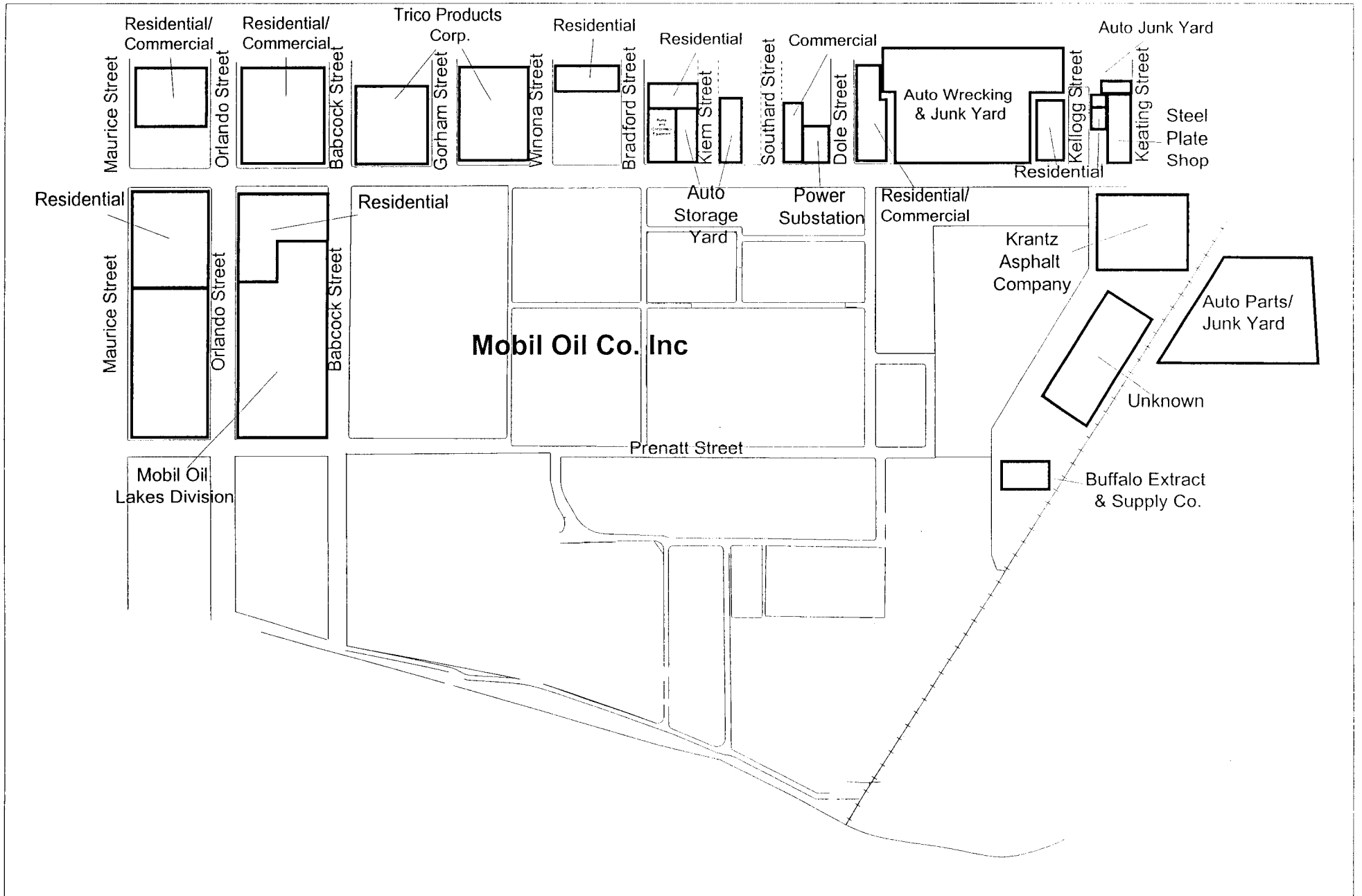
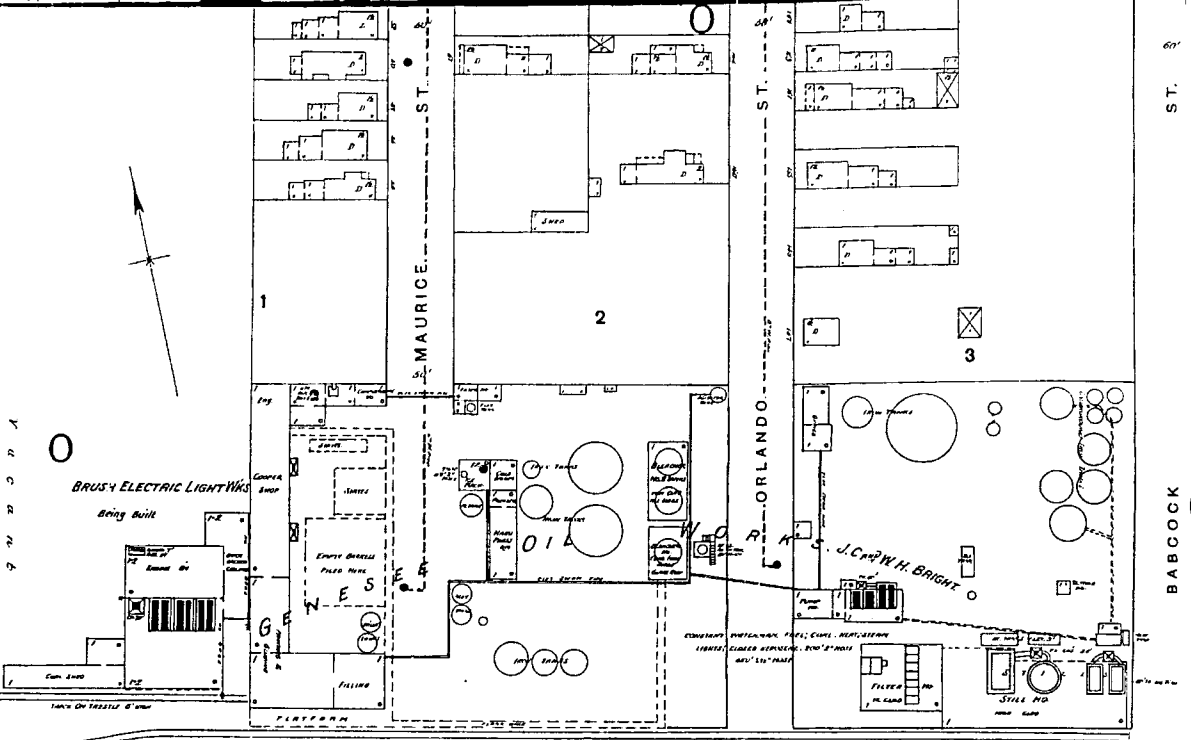
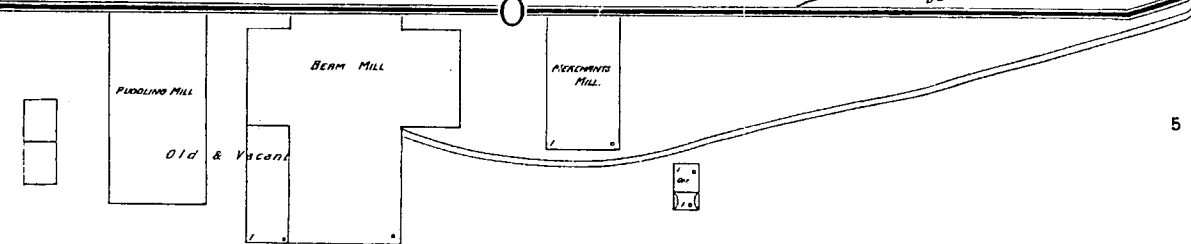


Figure D6. Adjacent Property Summary for 1986

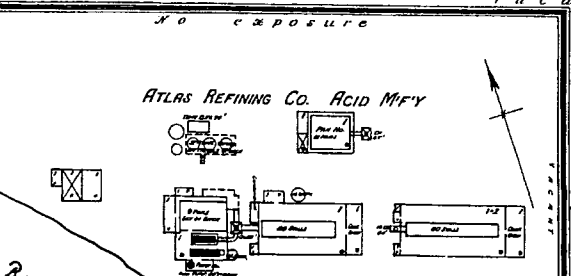
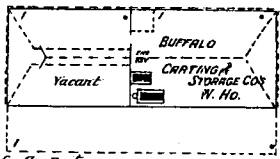
Sanborn Fire Insurance Maps
1889 Maps



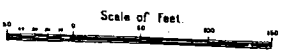
PRENATT STREET (not opened)



KATHARINE



THIS MAP IS HEREBY ON RECORD FOR THE PURPOSES OF THE CITY OF BUFFALO, AND THE CITY ENGINEER HAS REVIEWED THE SAME AND FOUND THAT THE SAME CONFORMS TO THE CITY MAP ACT, AND THAT THE SAME SHOULD BE RECORDED.



Buffalo River

Buffalo River

73

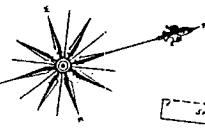
Buffalo River

SOUTH ST.

HAMBURG ST.

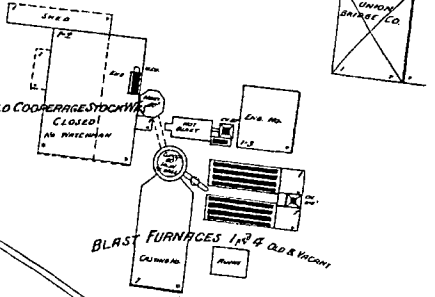
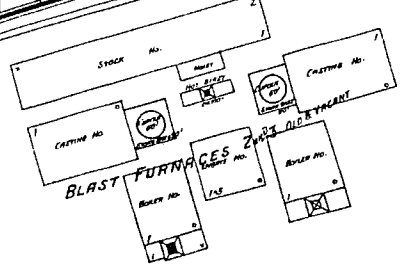
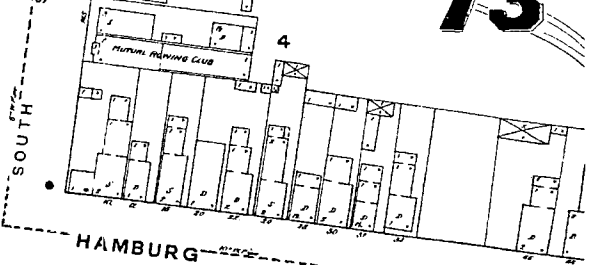
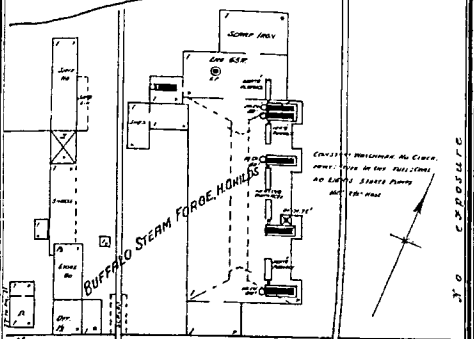
CHILDS ST.

ST.



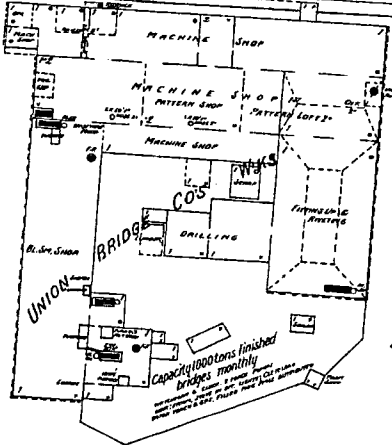
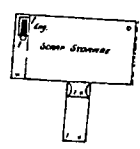
BUFFALO COOPERAGE STOCKING
CLOSED
NO RECEIVING

BLAST FURNACES 1, 2 & 3
OLD & YOUNG



STREET

ROAD TRAVELING BARRAGE



Rolling up & Reeling

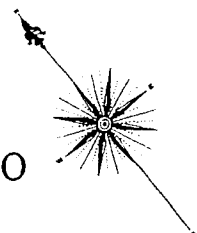
6

THE ONE FURNACE

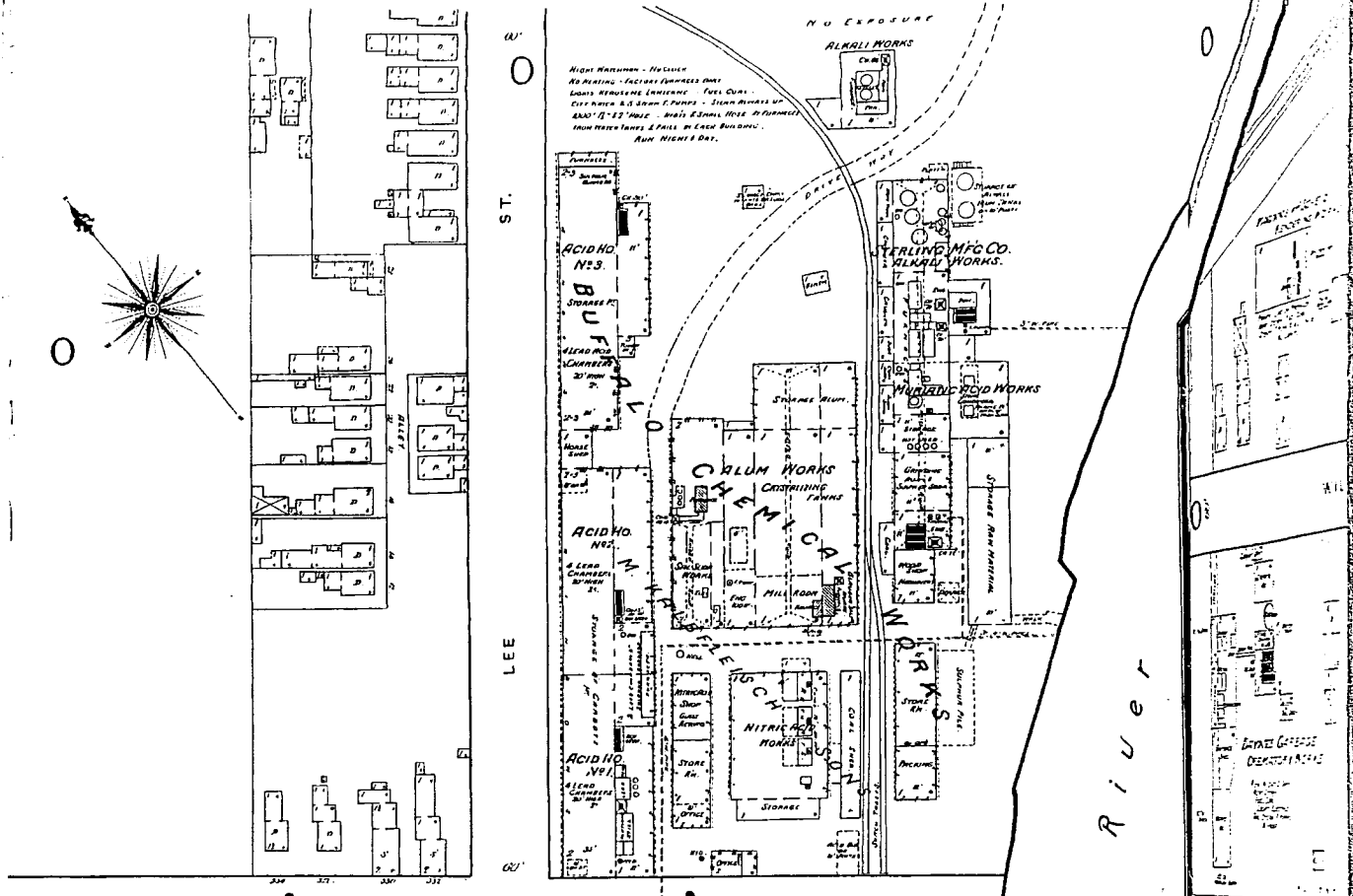
EXCELSIOR ST.

10 River

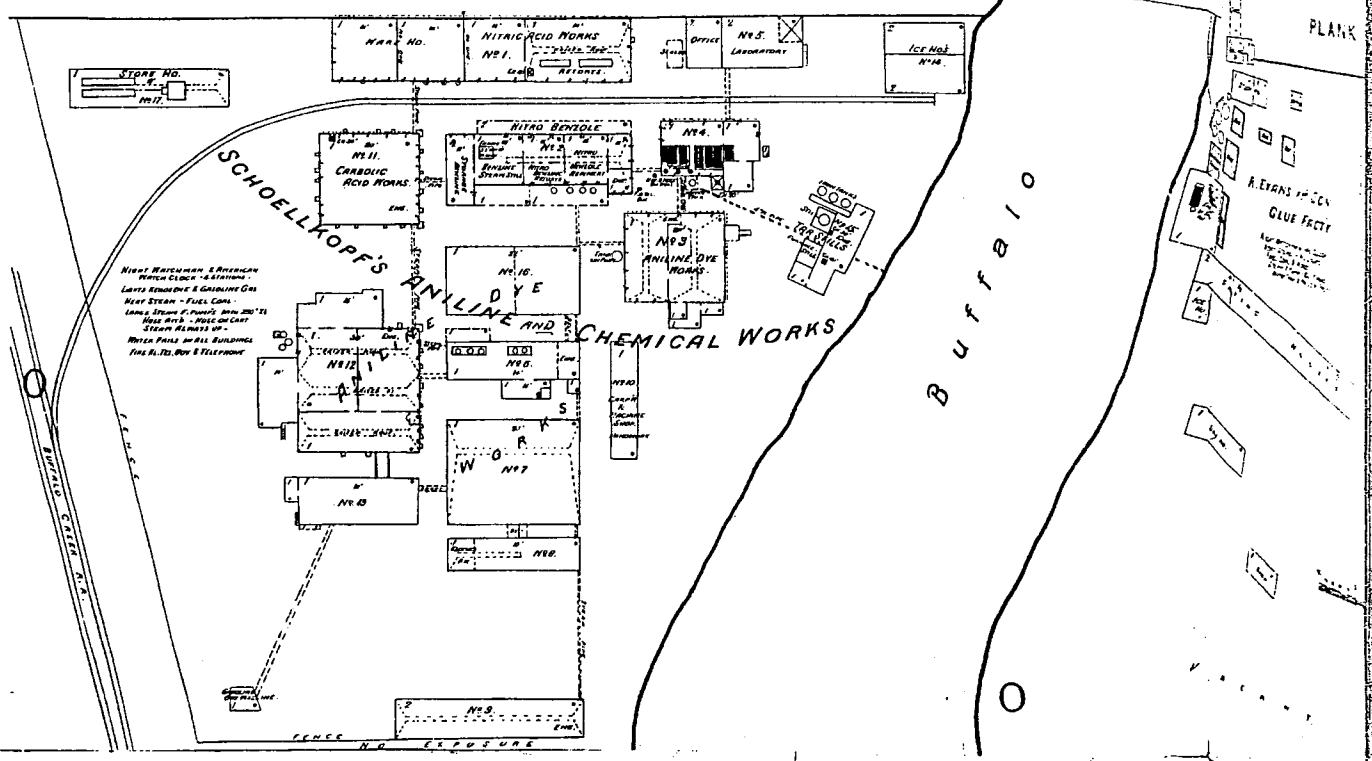
Capacity 100 tons finished
bridges monthly



High Watermark - No Leaks
 No Parking - Facilities Sprinklers Only
 Loads Removable Entrance - Feet Cans
 100' Runway & 5' Sidewalk - Paved - Stone - 10' Runway
 600' 11" 23" Wide - 100' 5" Small Hole - 10' Runway
 from Water Tanks & Falls of Each Building
 Run - Night & Day

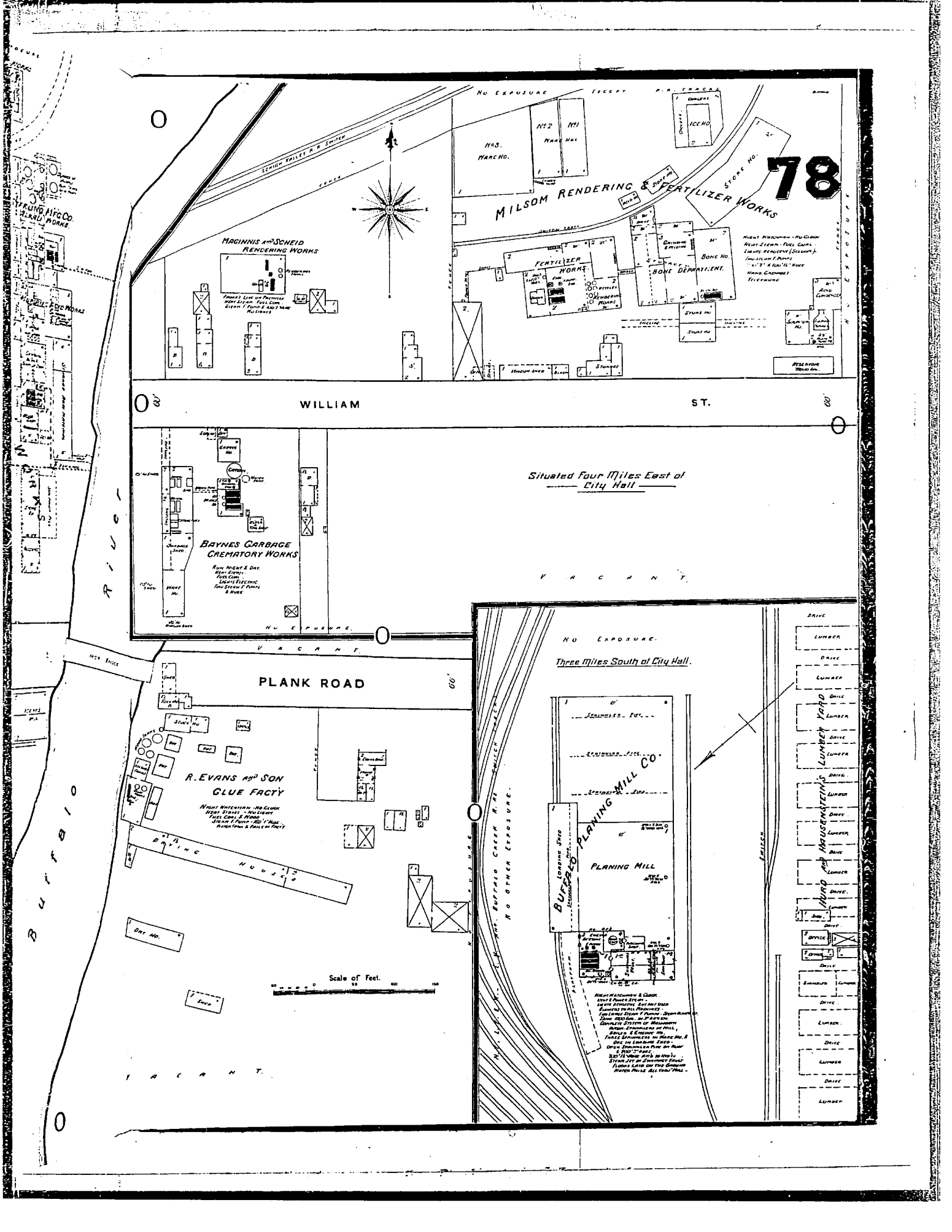


ABBOTT'S CORNERS



High Watermark - 5' 8" Runway
 Water Clock - 6 Stations
 Heavy Steam - Fuel Cans
 100' Runway & 5' Sidewalk - Paved - Stone - 10' Runway
 600' 11" 23" Wide - 100' 5" Small Hole - 10' Runway
 from Water Tanks & Falls of Each Building
 Run - Night & Day

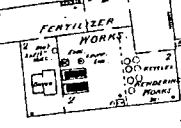
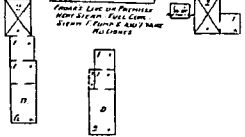
LEE ST. H.P. EXPOSURE



78

MILSON RENDERING & FERTILIZER WORKS

MAGINNIS and SCHEID RENDERING WORKS



BONE DEPARTMENT

WILLIAM ST.

ST.

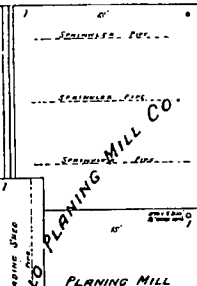
Situated Four Miles East of City Hall

VACANT

BAYNES GARBAGE CREMATORY WORKS

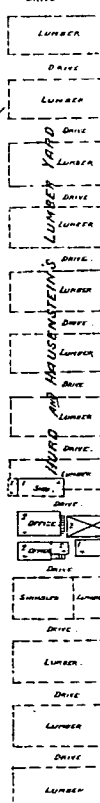
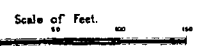
PLANK ROAD

R. EVANS and SON GLUE FACTY



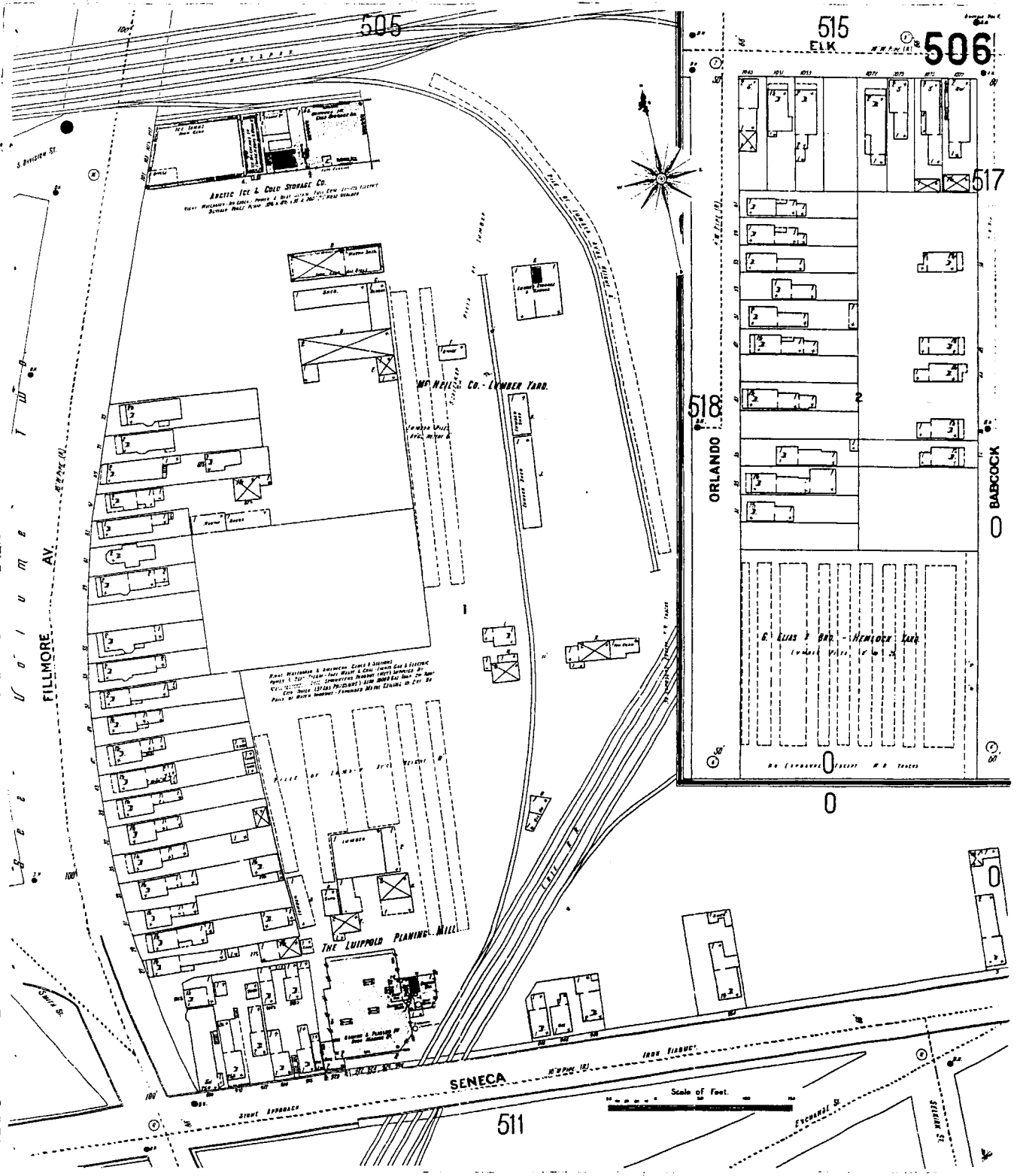
BUFFALO PLATING MILL CO.

PLATING MILL



Notes and specifications regarding machinery, materials, and site conditions for the Buffalo Plating Mill.

Sanborn Fire Insurance Maps
1900 Maps



530

510

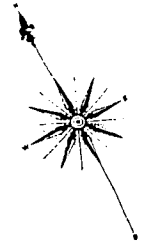
2

HARRISON

1

LESTER

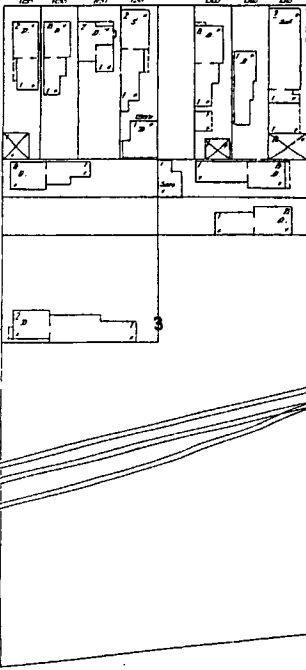
7



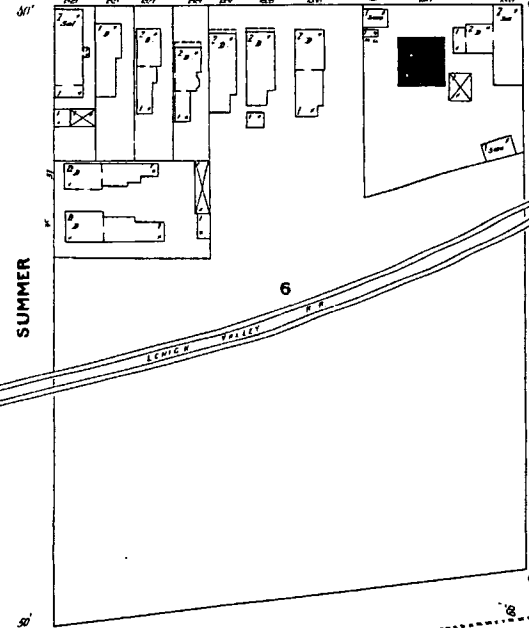
SENECA

509

MILTON



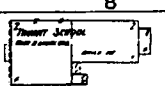
SUMMER



LEWIS VALLEY

DOLE

0



PRIVATE DRIVEWAY

PERRY

517

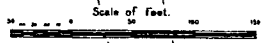
KEIM

4

SOUTHARD

5

0



513

512

SELKIRK

512

520

BUFFALO HARDWOOD LUMBER CO.

ESTIMATED AMOUNT 500000 FEET

LUMBER PILES 0' TO 16'

LUMBER PILES 0' TO 16'

Lee St.

ELK

PERRY

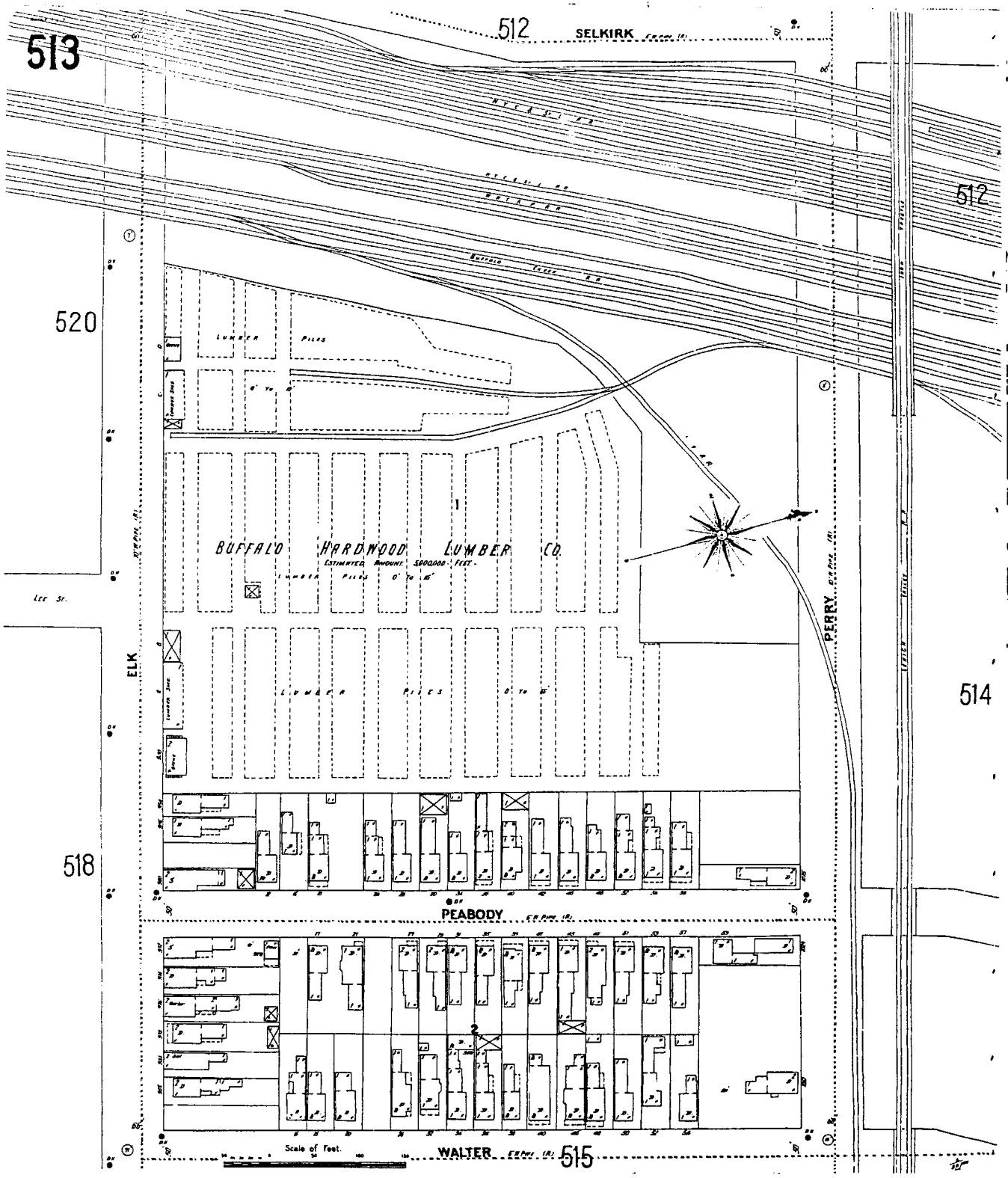
514

518

PEABODY

Scale of Feet

WALTER 515



515

513

WALTER

MAURICE

ORLANDO

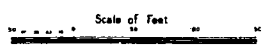
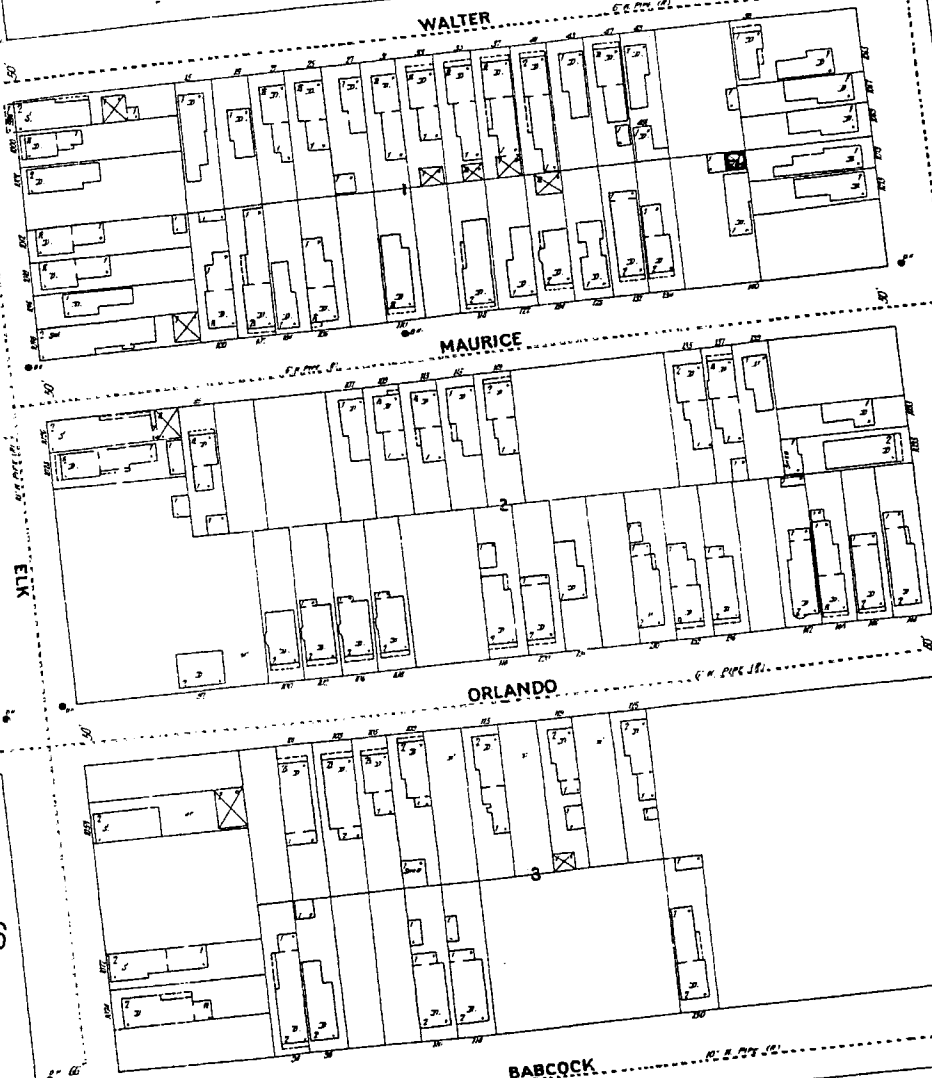
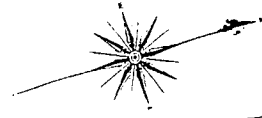
BABCOCK

517

518

506

516



517

515

BABCOCK

GORHAM

WINONA

BRADFORD

KEIM

510

510

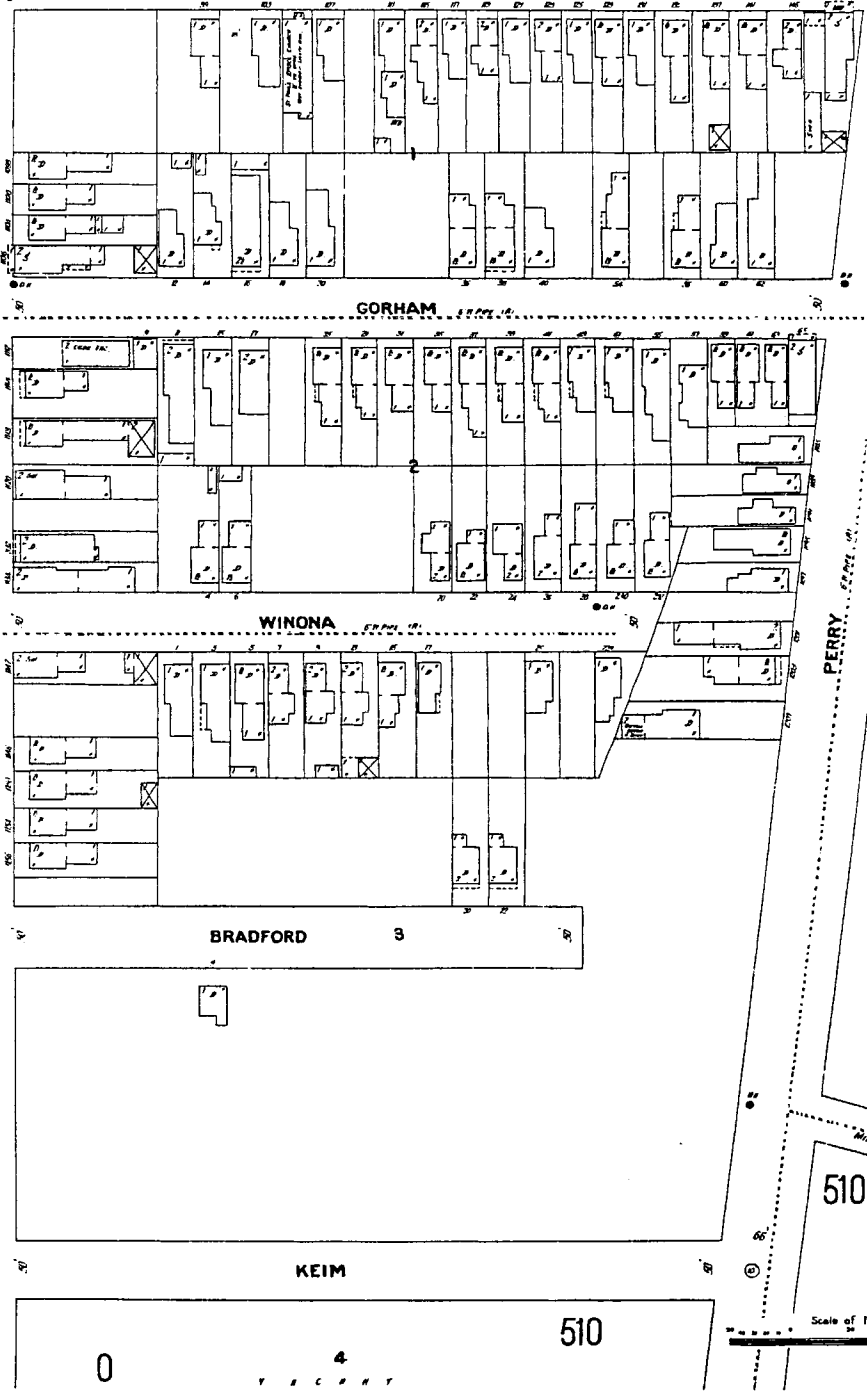
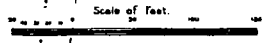
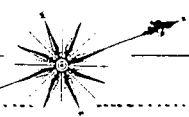
509

STANDARD OIL CO'S GROUNDS
REVISION REVISED

ELK

PERRY

UNION



522

520
LEE

518

TAYLOR & CRATE LUMBER YARD

LARGE LUMBER

GENERAL CHEMICAL CO.

513

LUMBER SHED

PRENATI
BUFFALO ELECTRIC & LIGHT
CO. ENGINEERS

BUFFALO GENERAL ELECTRIC LIGHT

G. ELLIAS & BRO. LUMBER YARD

PAPER MILL

PIL SPARKING ENGINE

W. H. FODY & CO. OIL WORKS

MAURICE

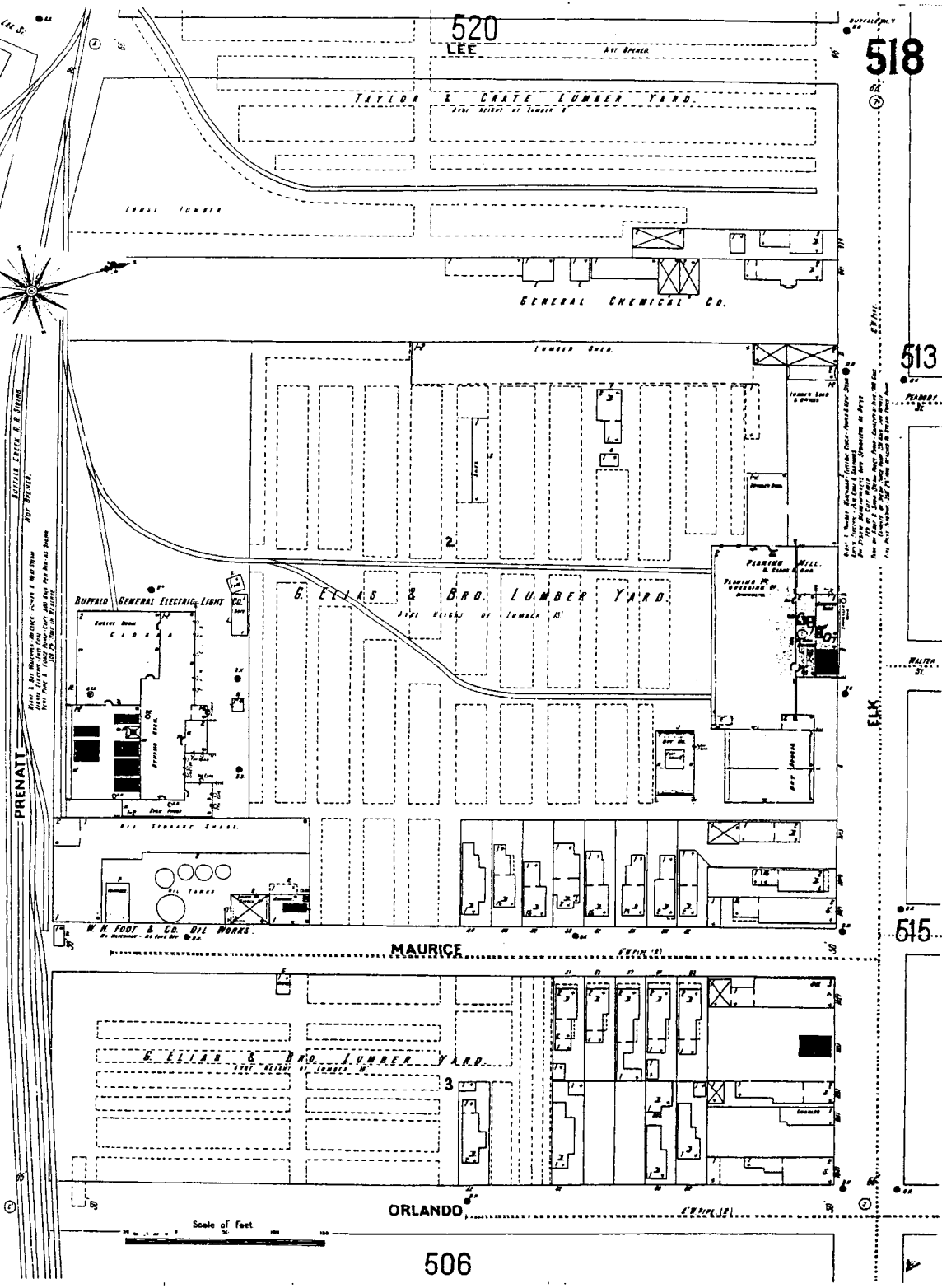
515

G. ELLIAS & BRO. LUMBER YARD

ORLANDO

506

Scale of feet



519

SEE VOLUME TWO

SMITH

521

OWAHN PL.

520

522

ABBOTT ROAD

PRENATT

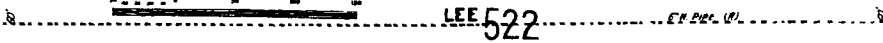
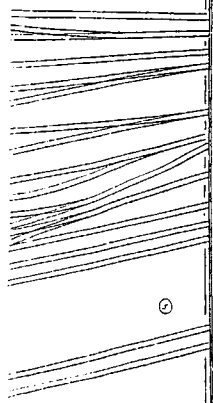
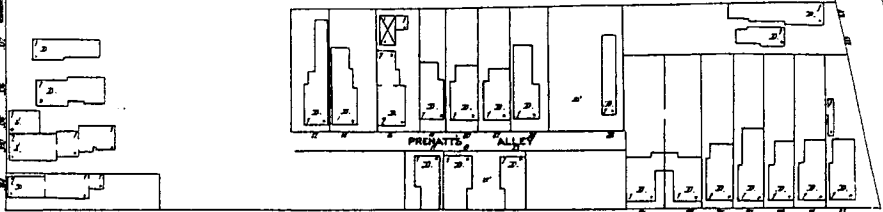
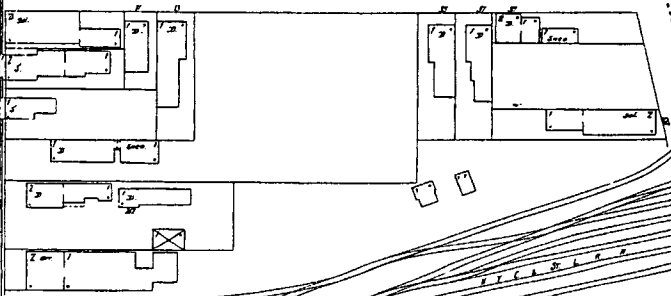
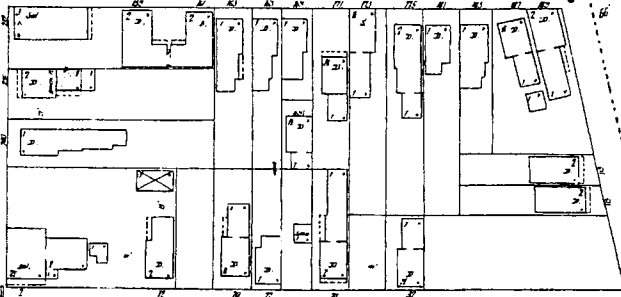
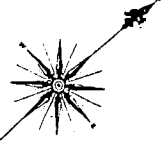
NO OPENING

2

PRENATT ALLEY

LEE 522

Scale of Feet.



SEE VOLUME TWO SMITH

520

512

519

PRENATI

ELK ST.

SELKON ST.

ELK

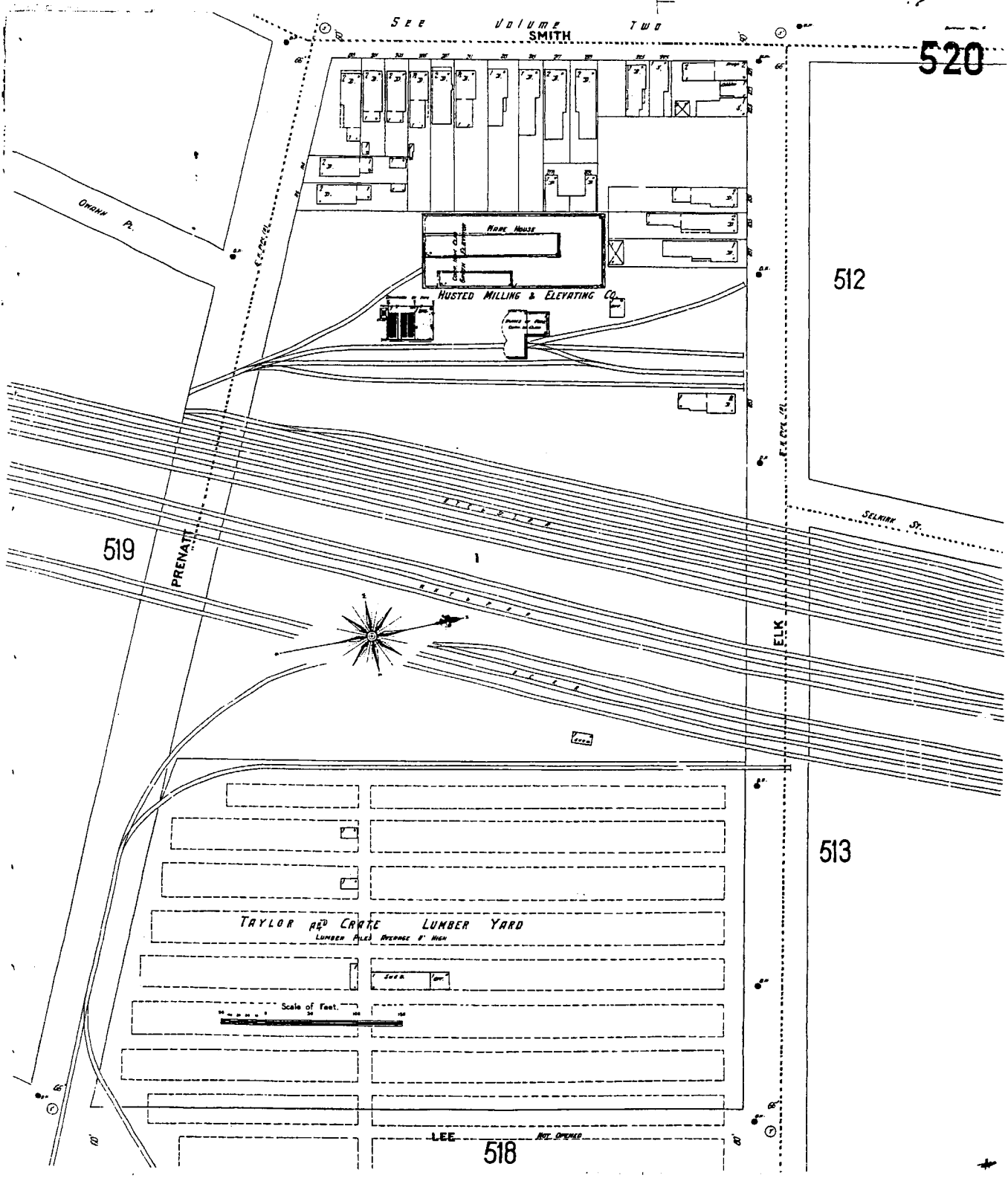
513

TAYLOR and CARTE LUMBER YARD
LUMBER PILES BEHIND P. HIGH

Scale of Feet.

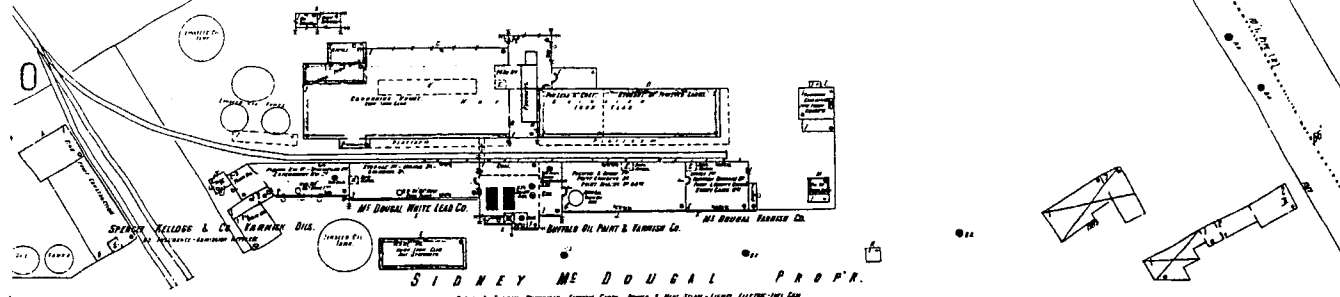
LEE NOT OPENED

518



524

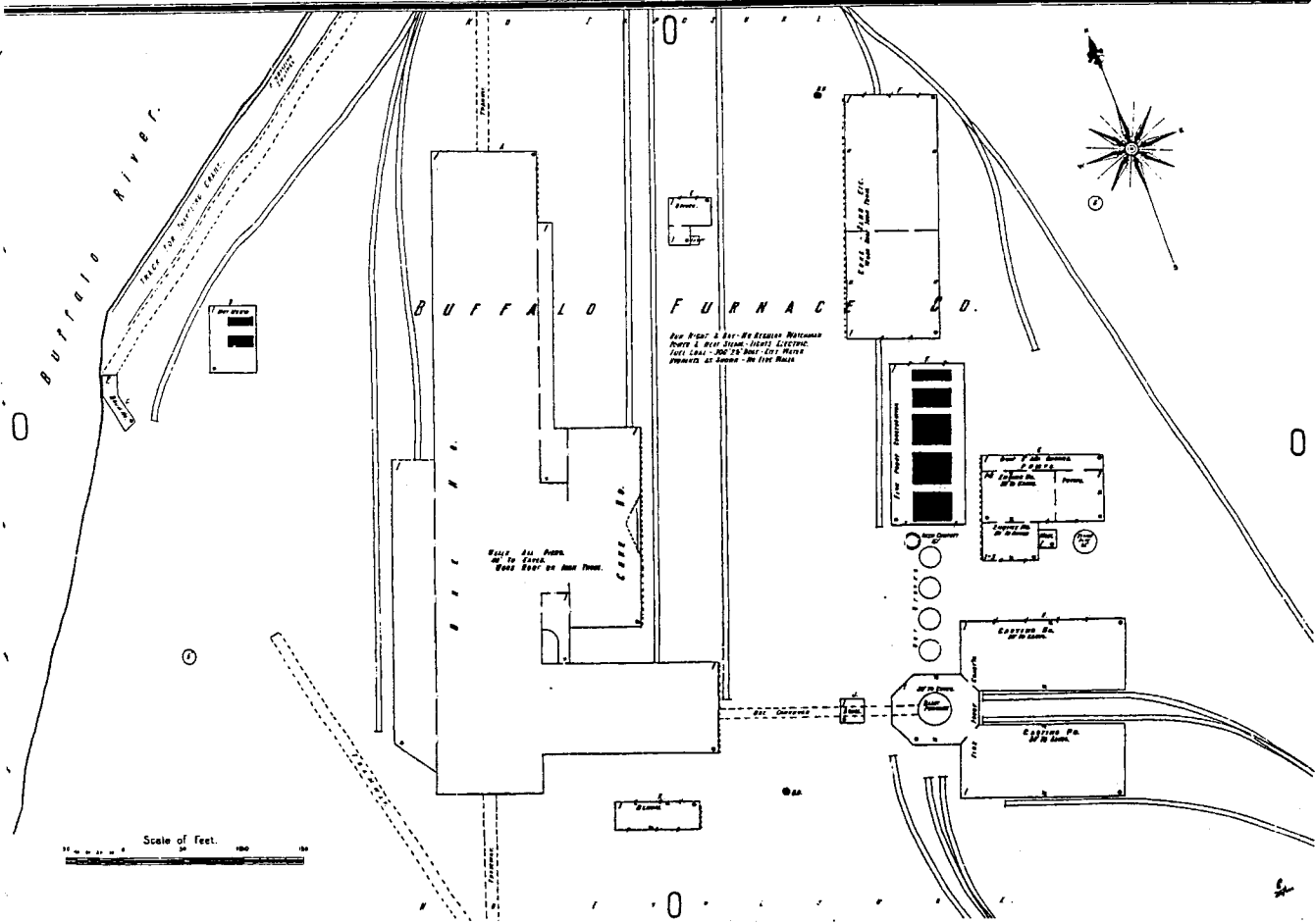
STANDARD OIL COS GROUNDS - ATLAS WORKS.



SIDNEY Mc DOUGAL PROP.

BLDG. & SHEDS: WRECKMAN - CEMENT - COKE - POWER & HEAT - STEAM - LIGHTS - ELECTRIC - HOT - COLD
 WATER - AND UNWATERED - CEMENT - STEEL - (MILL - STEELWORK) FOR BY - SINK - PUMP - AND - SINK
 SINK - MILL - LEAD - IN - FURNACE - BLDG. - CITY - WATER - PIPE - & - CEMENT - PAUL - HANCOCK

497



BUFFALO FURNACE CO.

See Plan & Say - Mc DOUGAL WRECKMAN
 WATER & HEAT - STEAM - LIGHTS - ELECTRIC
 CITY - WATER - PIPE - & - CEMENT - PAUL - HANCOCK
 SINK - MILL - LEAD - IN - FURNACE - BLDG.

WATER PUMP
 10' IN DIAMETER
 75' IN LENGTH

Scale of Feet.
 0 50 100

Sanborn Fire Insurance Maps
1917 Maps

673

WILLIAM

CRANDALL HORSE CO. SALES STABLES

675

HOWARD

674

Scale of Feet

THOMAS

METCALFE

WALTER

MAURICE

ORLANDO

672

674

698

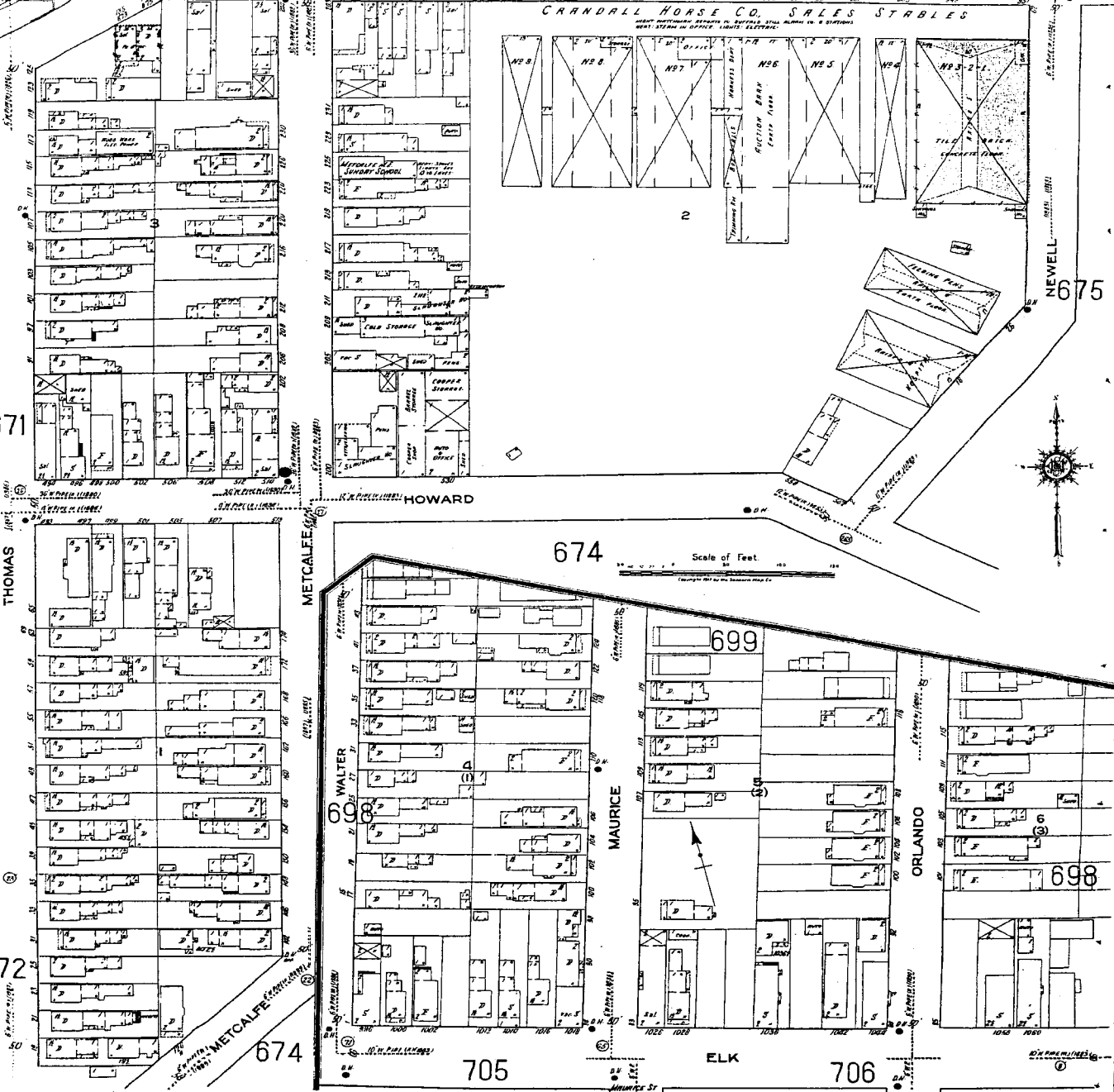
699

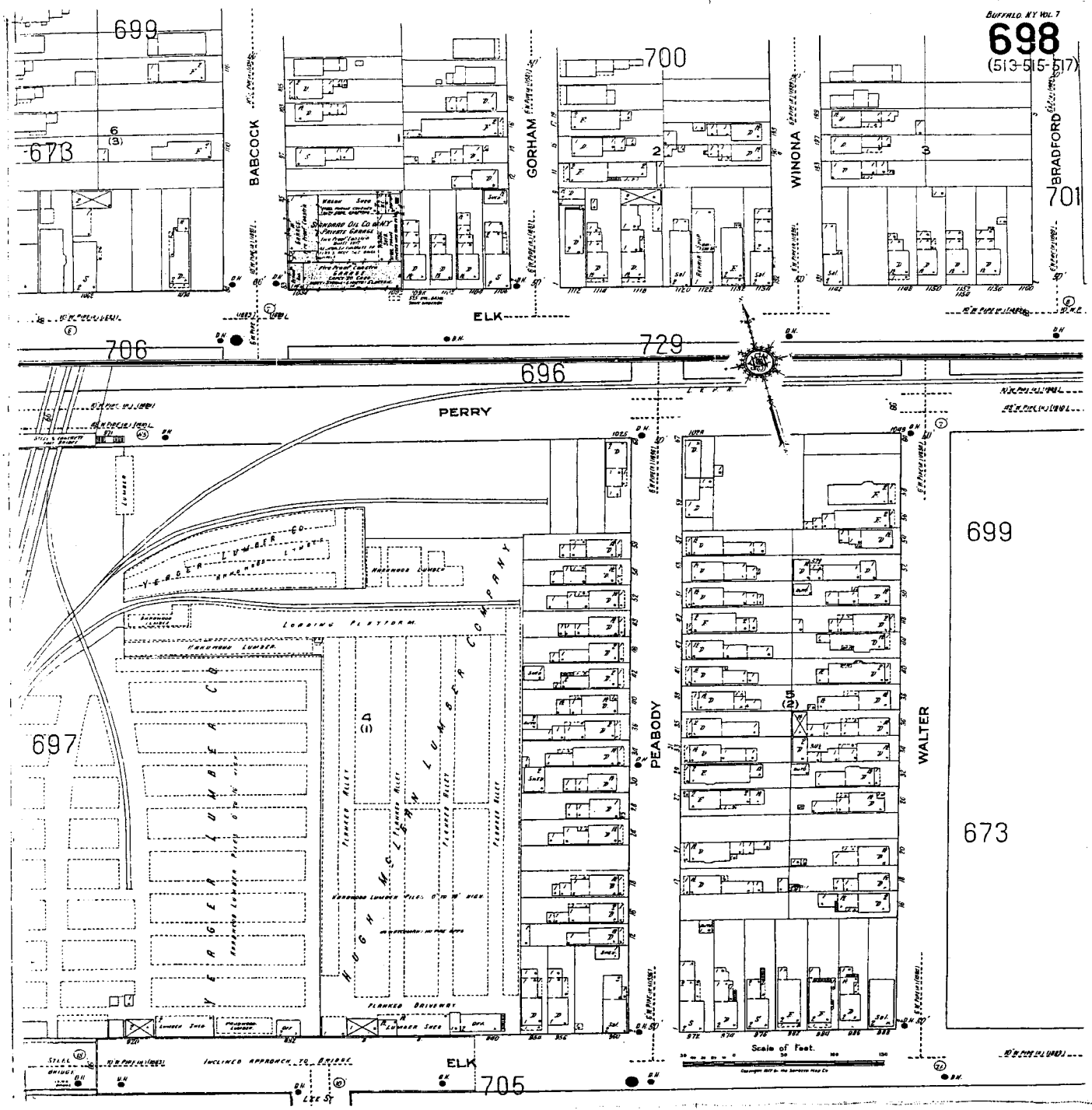
698

705

ELK

706





699

700

698
(513-515-517)

673

BABCOCK

GORHAM

WINONA

BRADFORD
701

706

729

696

PERRY

697

699

673

PEABODY

WALTER

ELK
705

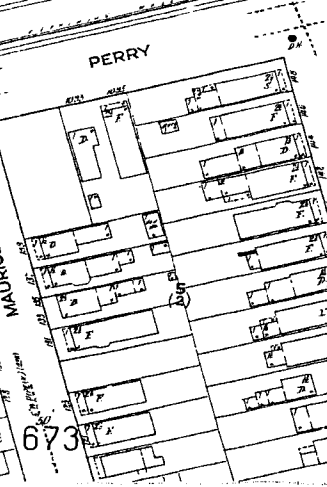
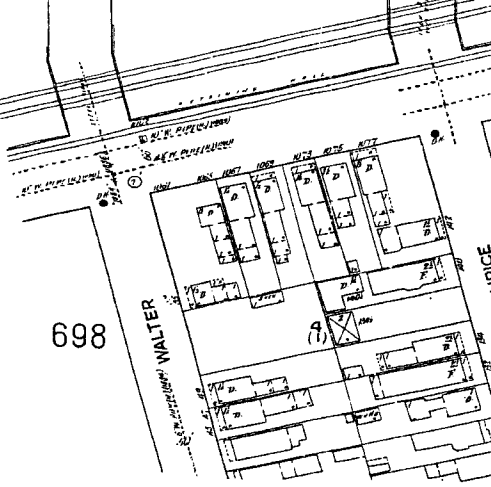
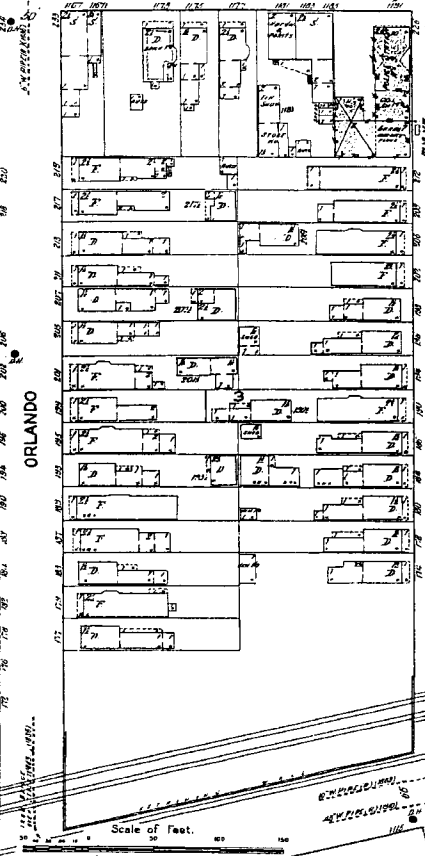
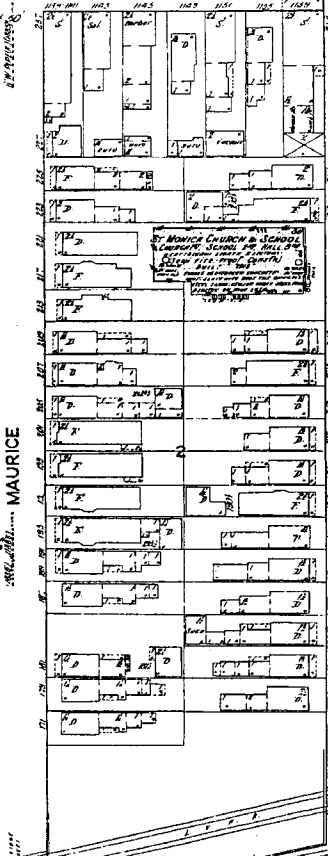
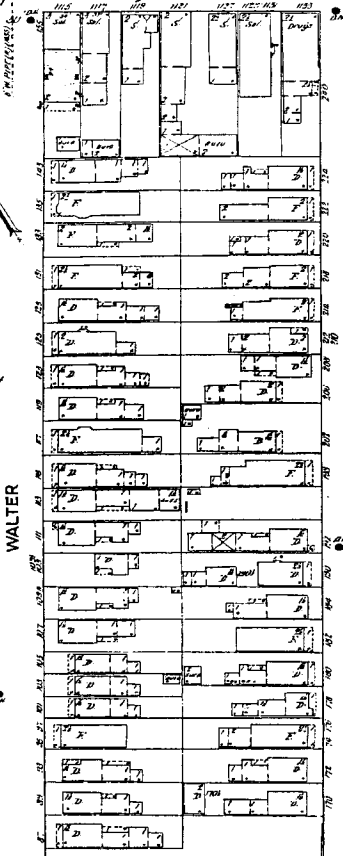
Scale of Feet.
0 50 100 150

Scale of Feet.
0 50 100 150

699
(515-518)

691
SENECA

696



PERRY

ORLANDO

BABCOCK

700

BABCOCK

698

673

698

Scale of feet.



St. Maurice Church & School
 Located on the corner of Seneca St. and Maurice St.
 The building is a two-story structure with a prominent steeple.
 The school is located on the corner of Seneca St. and Maurice St.
 The building is a two-story structure with a prominent steeple.

692
SENECA

700
(509-517)

BABCOCK

IMSON

OAKDALE PL.

MILTON

IMSON

701

699

PERRY

BABCOCK

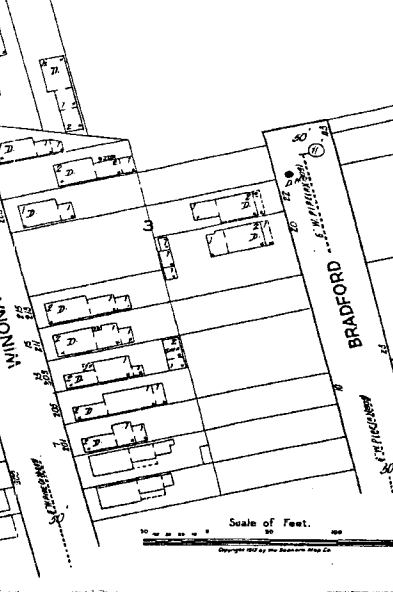
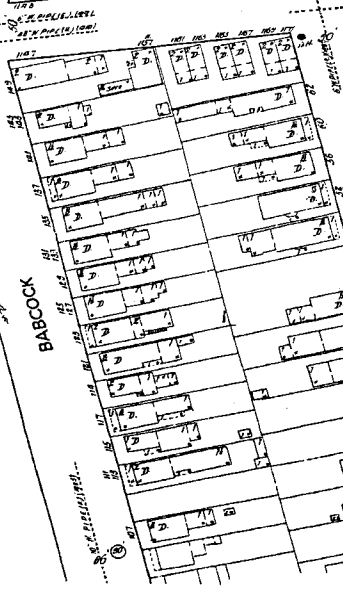
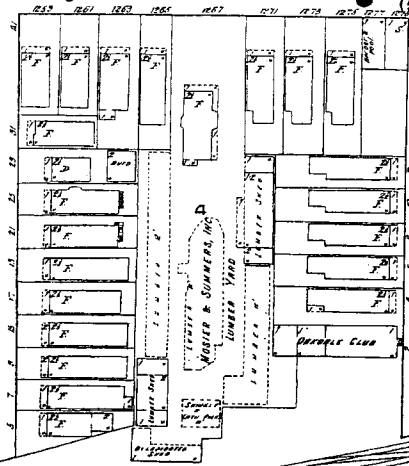
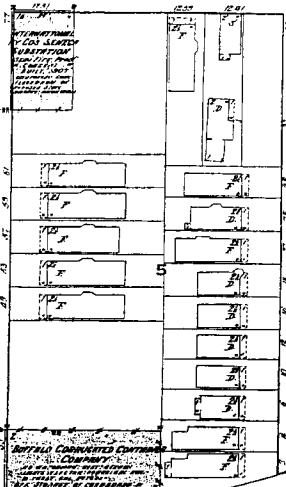
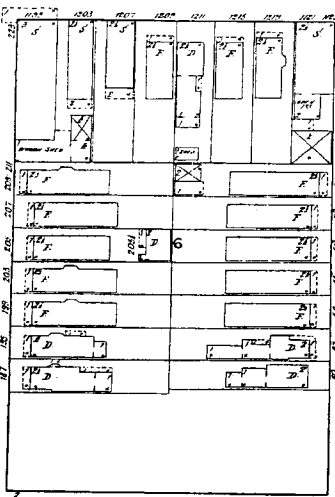
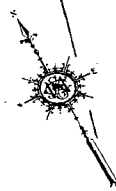
GORHAM

WINONA

BRADFORD

698

Scale of Feet.



677

SENECA

693

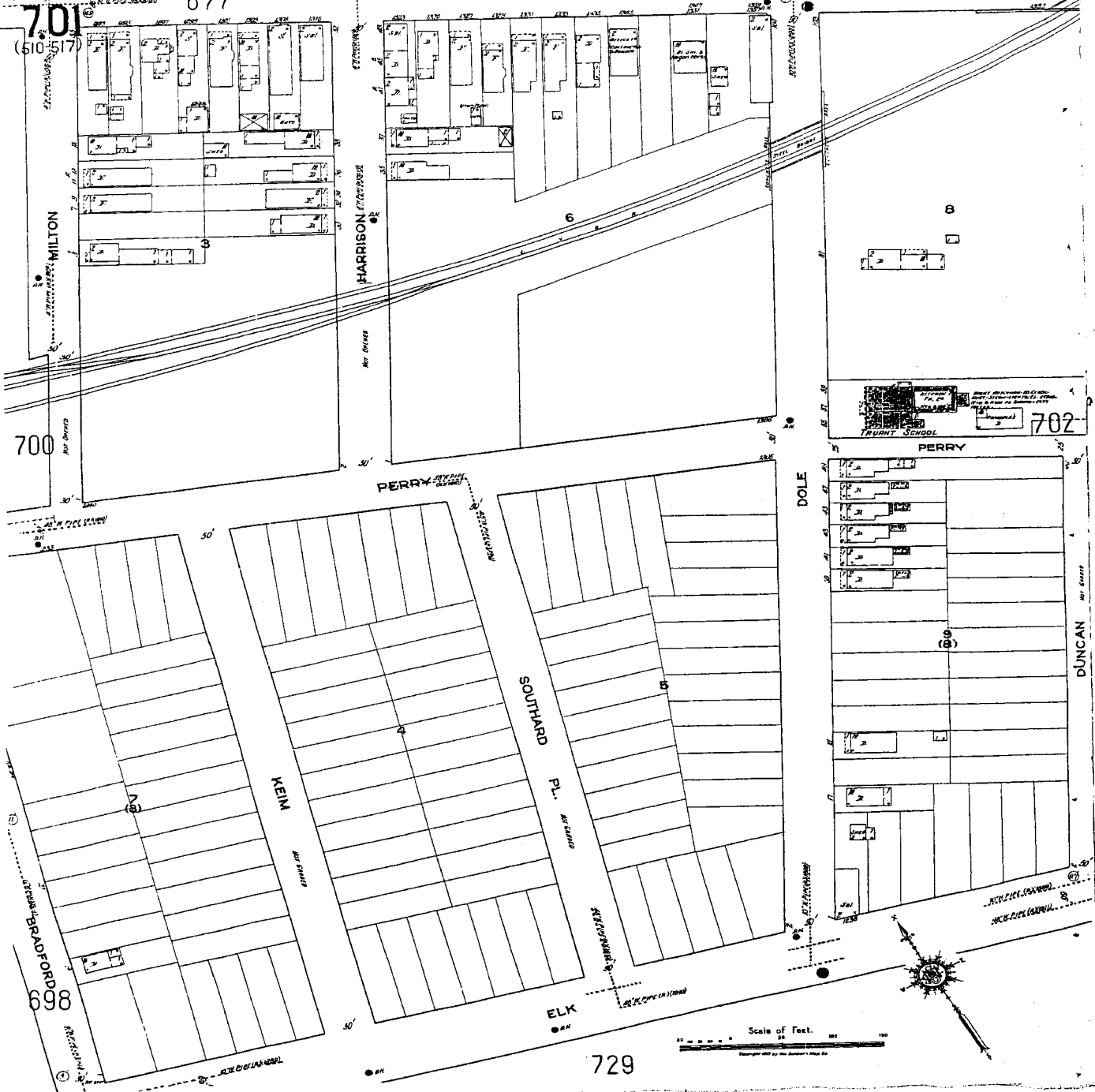
701
(510-517)

700

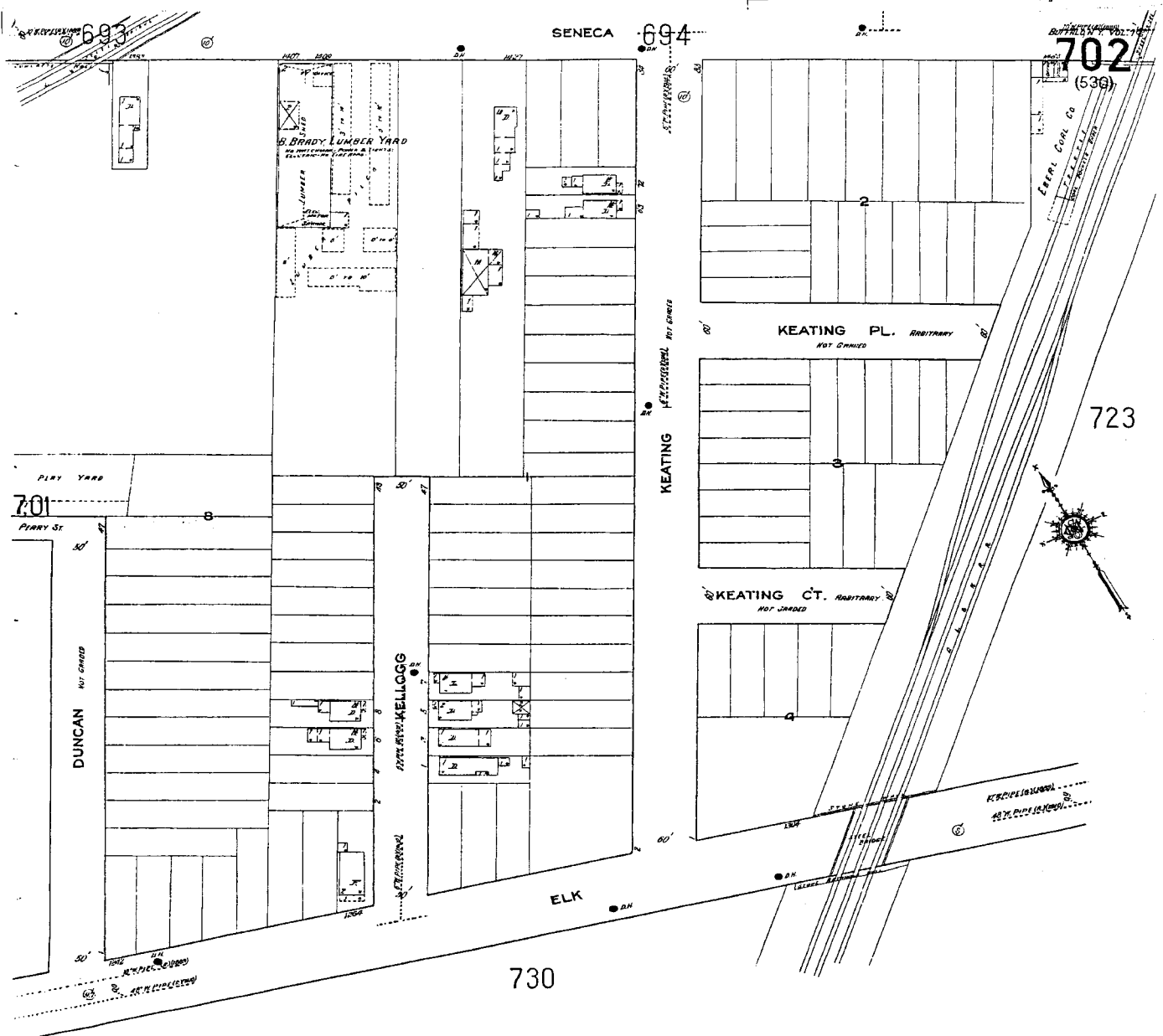
702

698

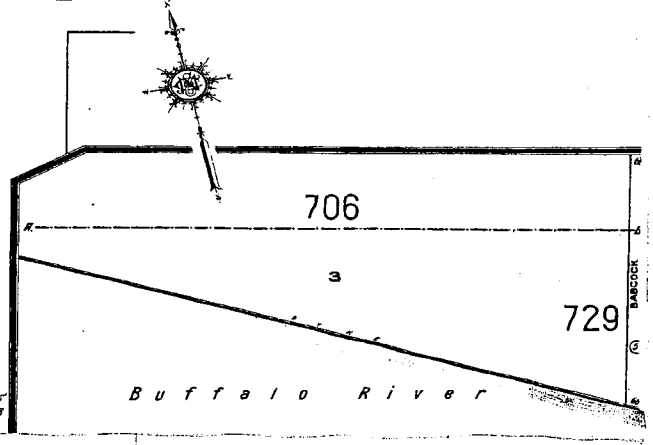
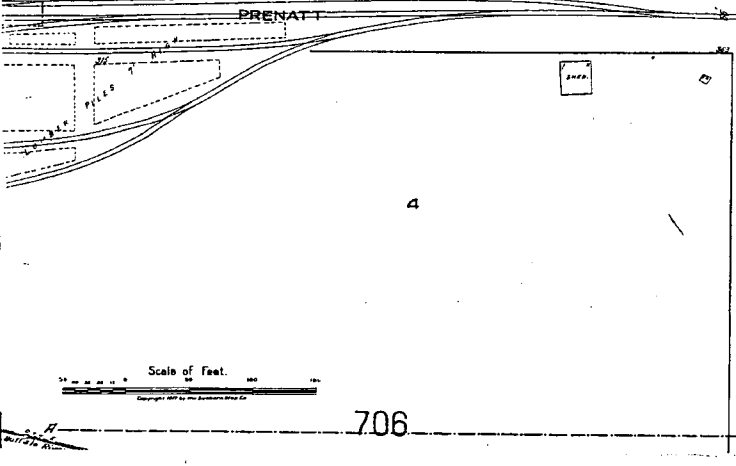
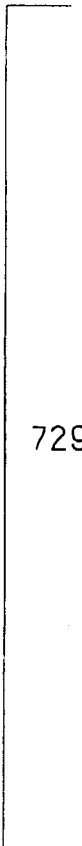
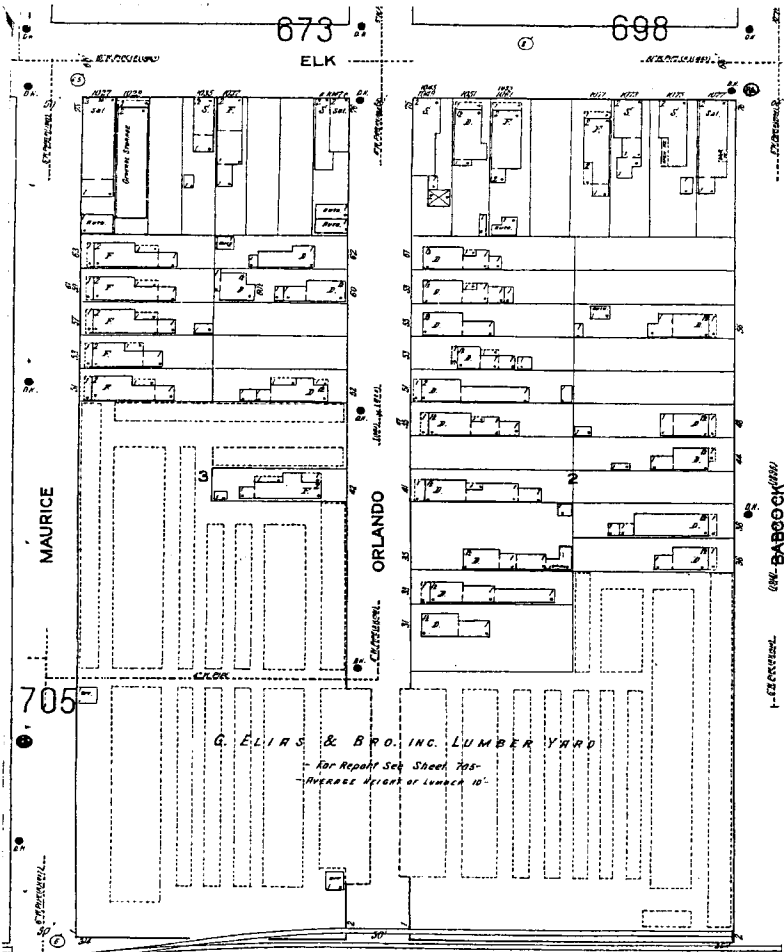
729



Scale of Feet.
0 20 40 60 80 100
Copyright 1911 by the Buffalo City Co.



Buffalo KY Vol. 7
706
(506-518)



729 SCALE 100 FT TO AN INCH

698

701

702

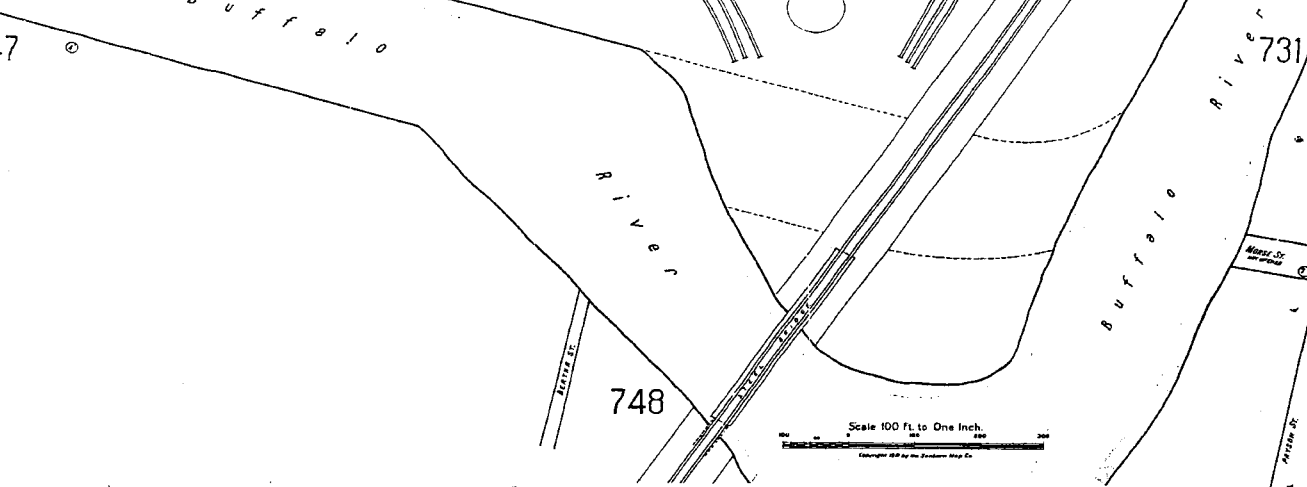
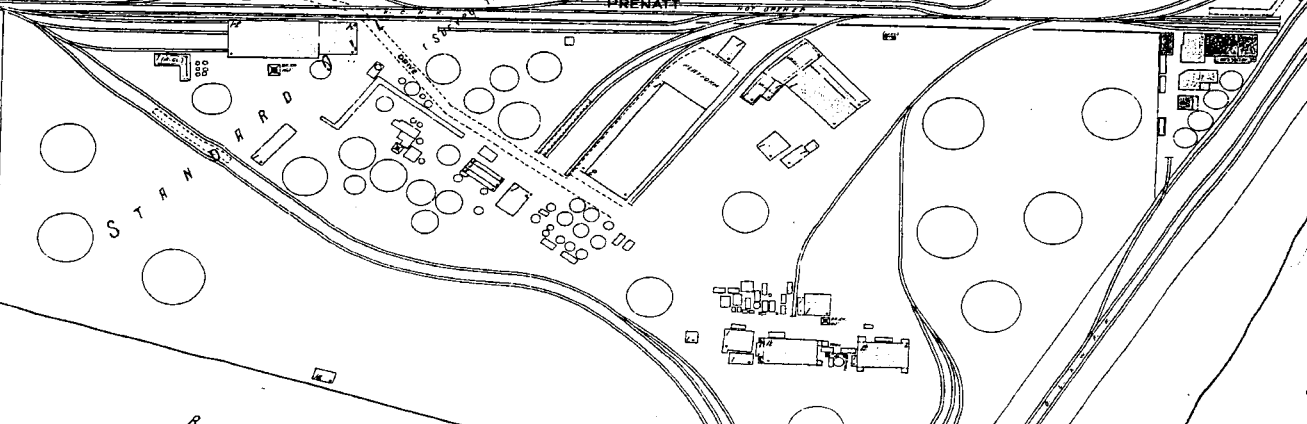
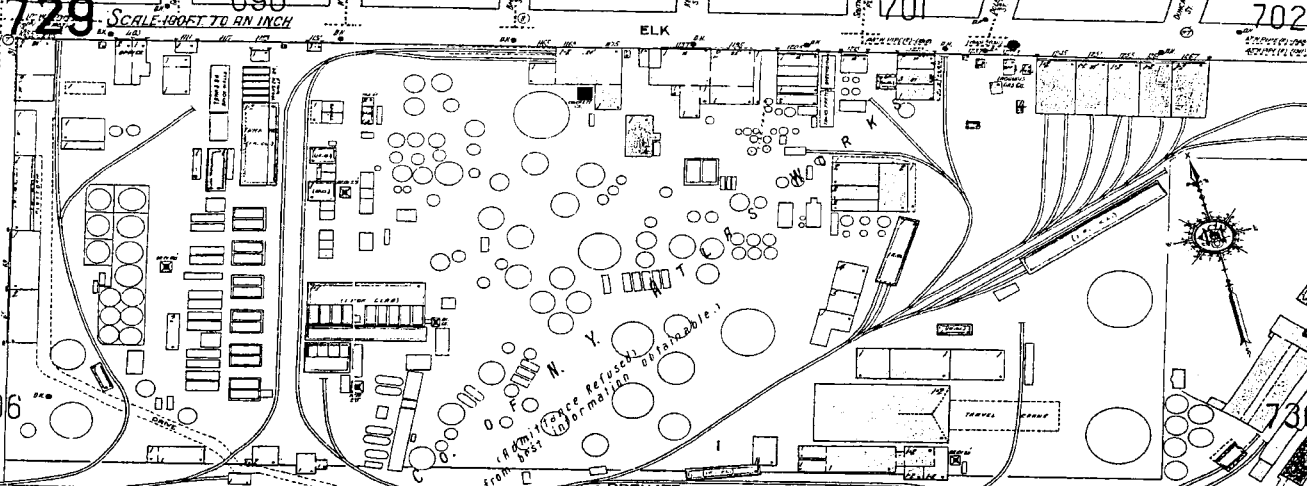
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730

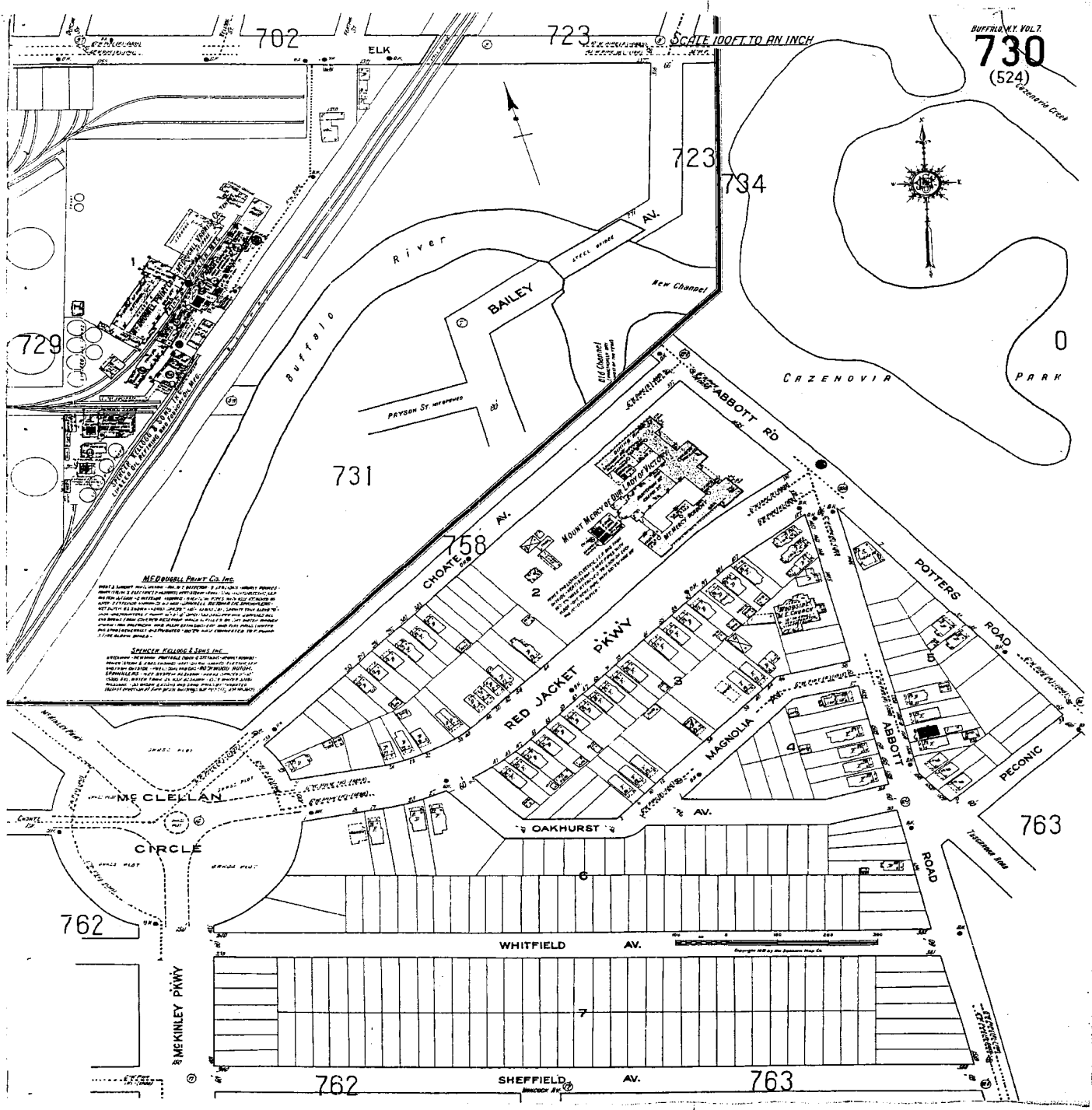
747

748

731



Scale 100 Ft. to One Inch
Copyright 1948 by the Ordnance Map Co.



McDUGGELL PRINT CO. INC.
This is a reprint of a map of Buffalo, N.Y., showing the Buffalo River, Crzenovir Park, and various streets including McKinley Pkwy, Chouteau Av., Red Jacket Pkwy, Oakhurst Av., Whitfield Av., Sheffield Av., and Potters Road. The map is bounded by lot numbers 702, 723, 731, 734, 758, 762, and 763. A scale of 100 feet to an inch is provided at the top. A north arrow is also present.

SPENCER, COLLINS & LOWE, INC.
This is a reprint of a map of Buffalo, N.Y., showing the Buffalo River, Crzenovir Park, and various streets including McKinley Pkwy, Chouteau Av., Red Jacket Pkwy, Oakhurst Av., Whitfield Av., Sheffield Av., and Potters Road. The map is bounded by lot numbers 702, 723, 731, 734, 758, 762, and 763. A scale of 100 feet to an inch is provided at the top. A north arrow is also present.

100

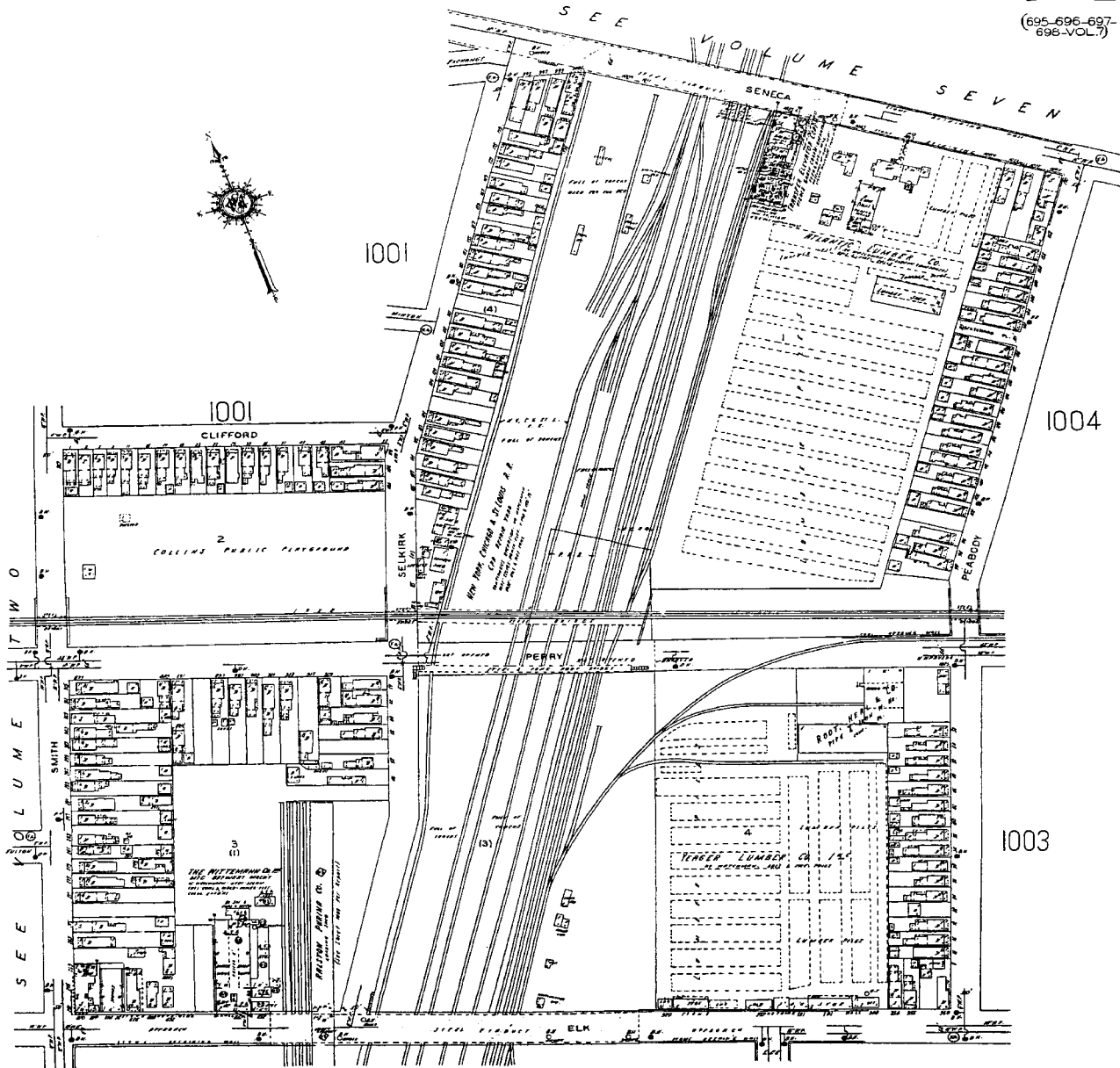
763

762

762

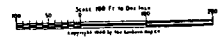
763

Sanborn Fire Insurance Maps
1940 Maps

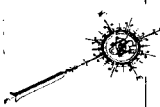


SEE
VOLUME
SEVEN

1008



BUFFALO, N. Y. VOL. 10
1003
(673-698-699-
VOL. 7)



1002

PEABODY

WALTER

MAURICE

ORLANDO

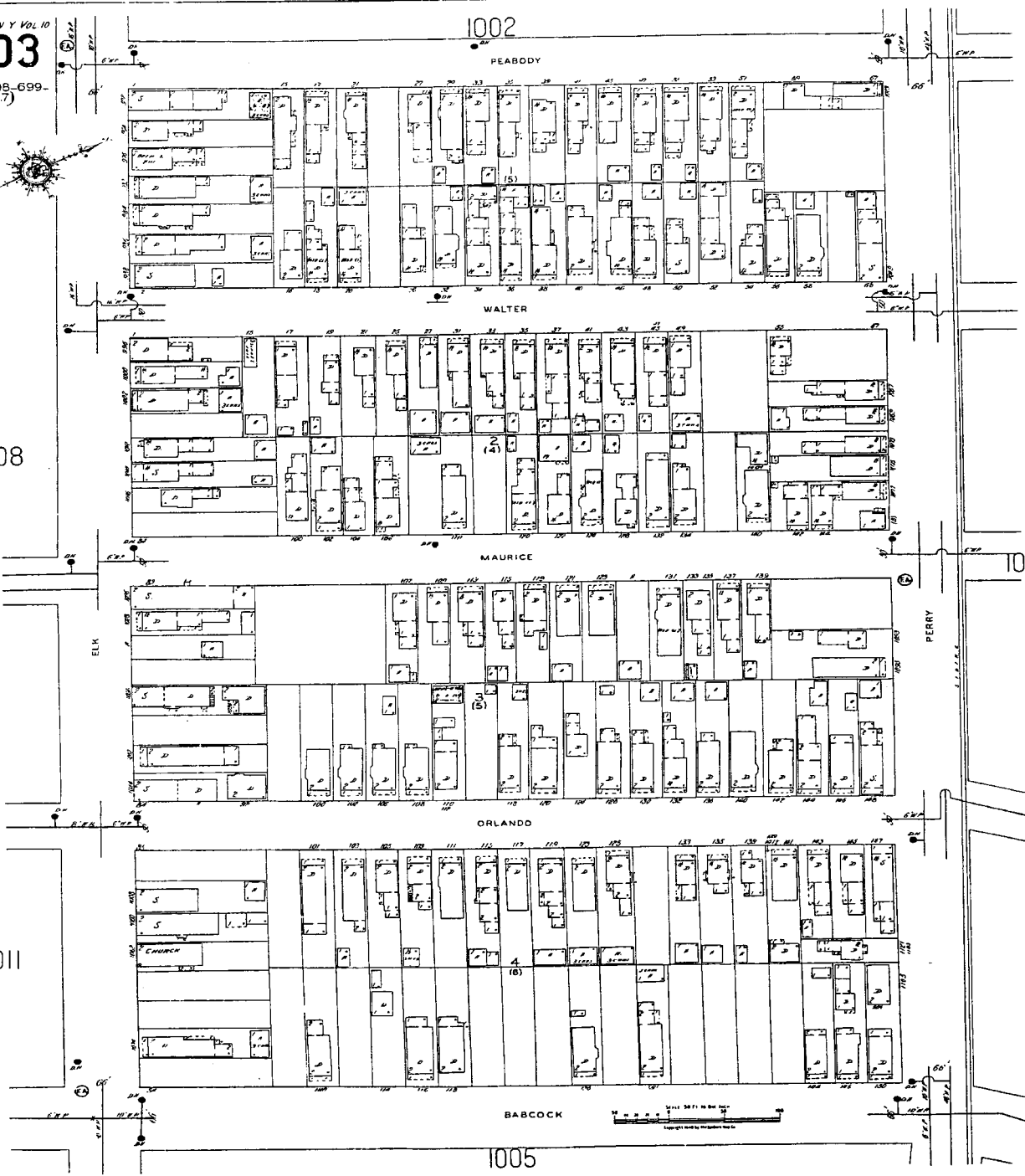
BABCOCK

1005

1008

1011

1004



1002

BUFFALO, N.Y. 14250

1004

(696-699 VOL 7)

PEABODY

WALTER

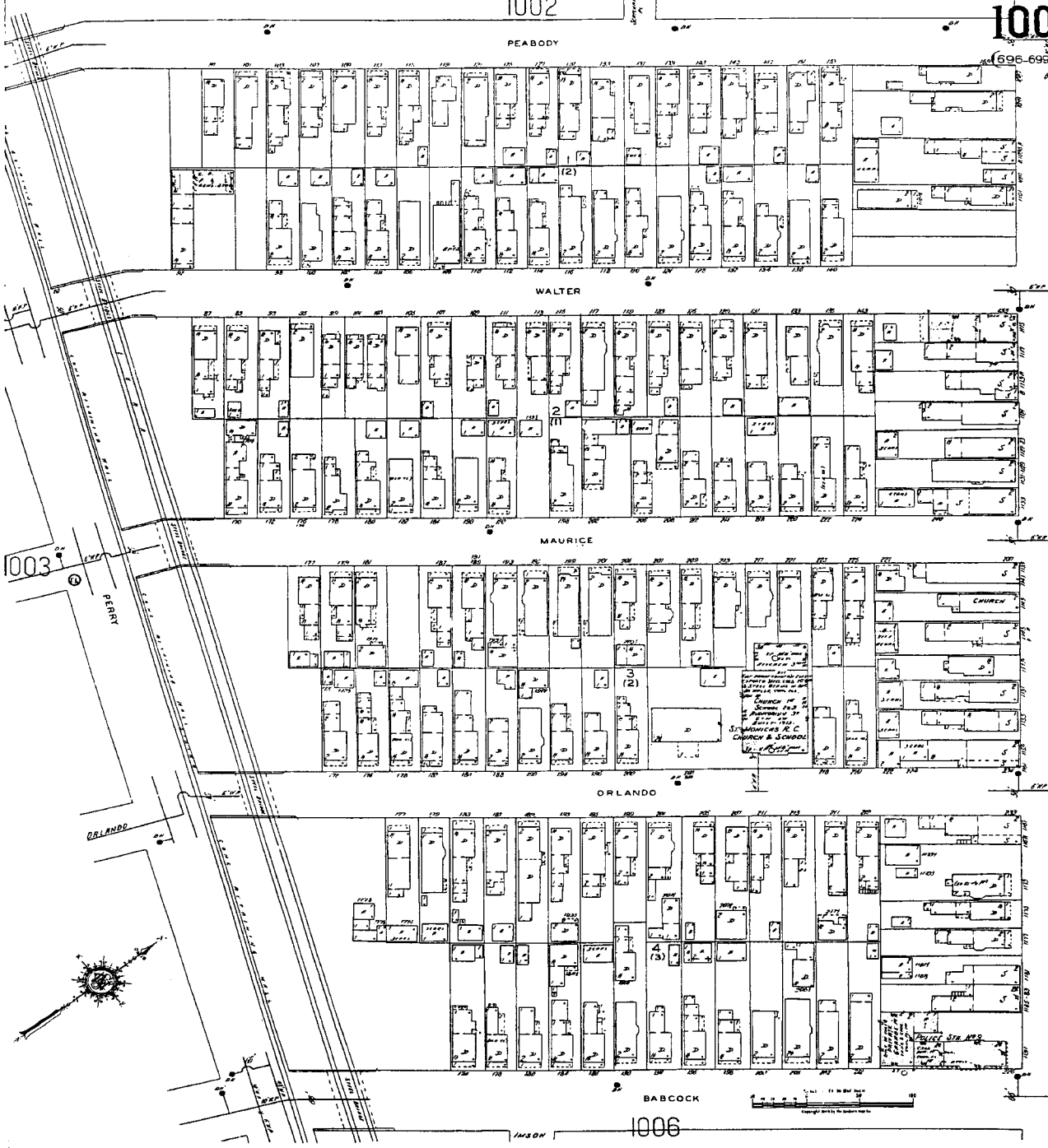
MAURICE

ORLANDO

BABCOCK

1006

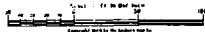
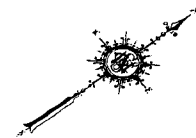
SENECA
VOLUME
S E V E N



1003

ORLANDO

ORLANDO



SUFFALO, N. Y. VOL. A
1005
(69B-700-701-
VOL. 7)

1003

BABCOCK

GORHAM

WINONA

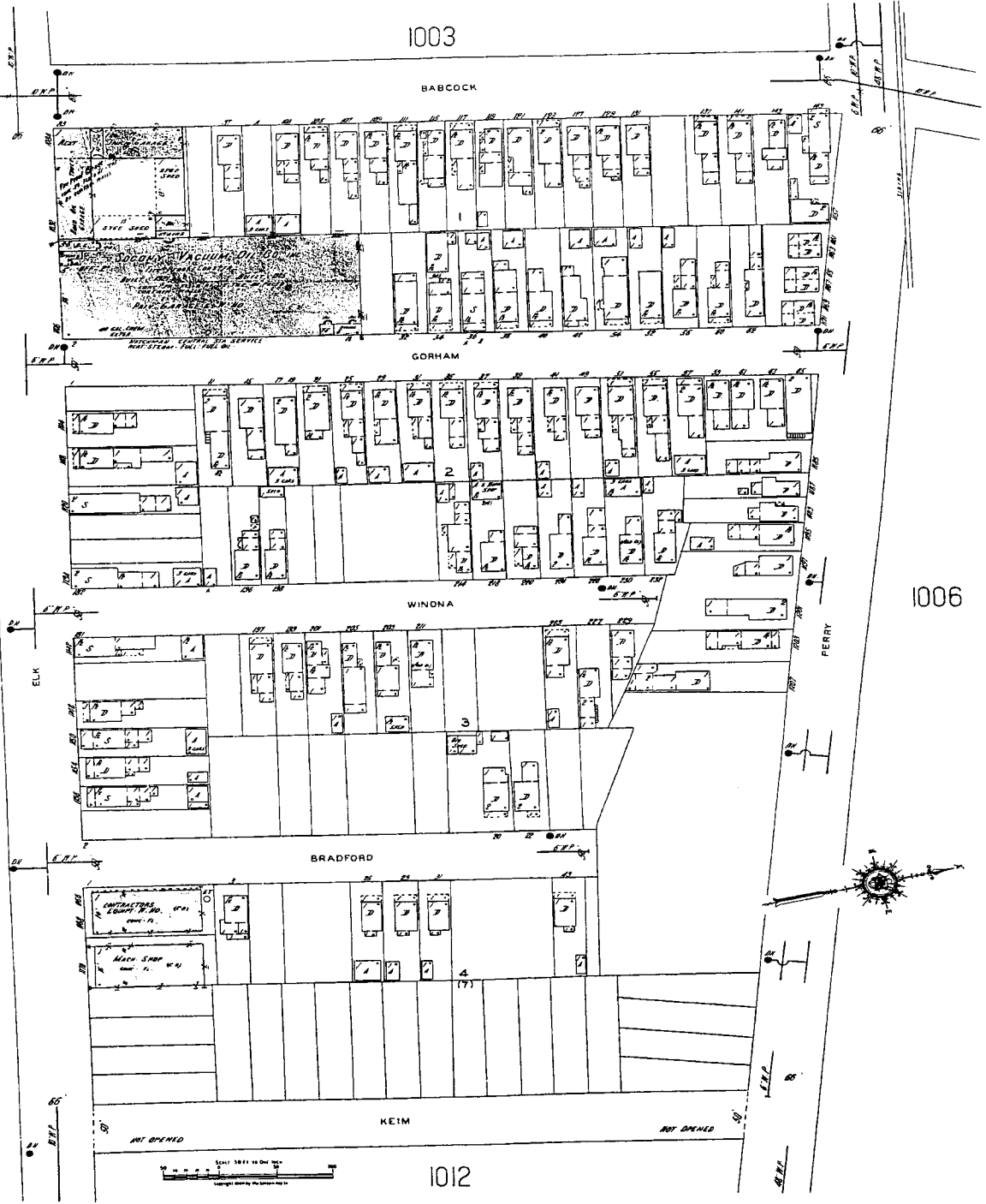
BRADFORD

KEIM

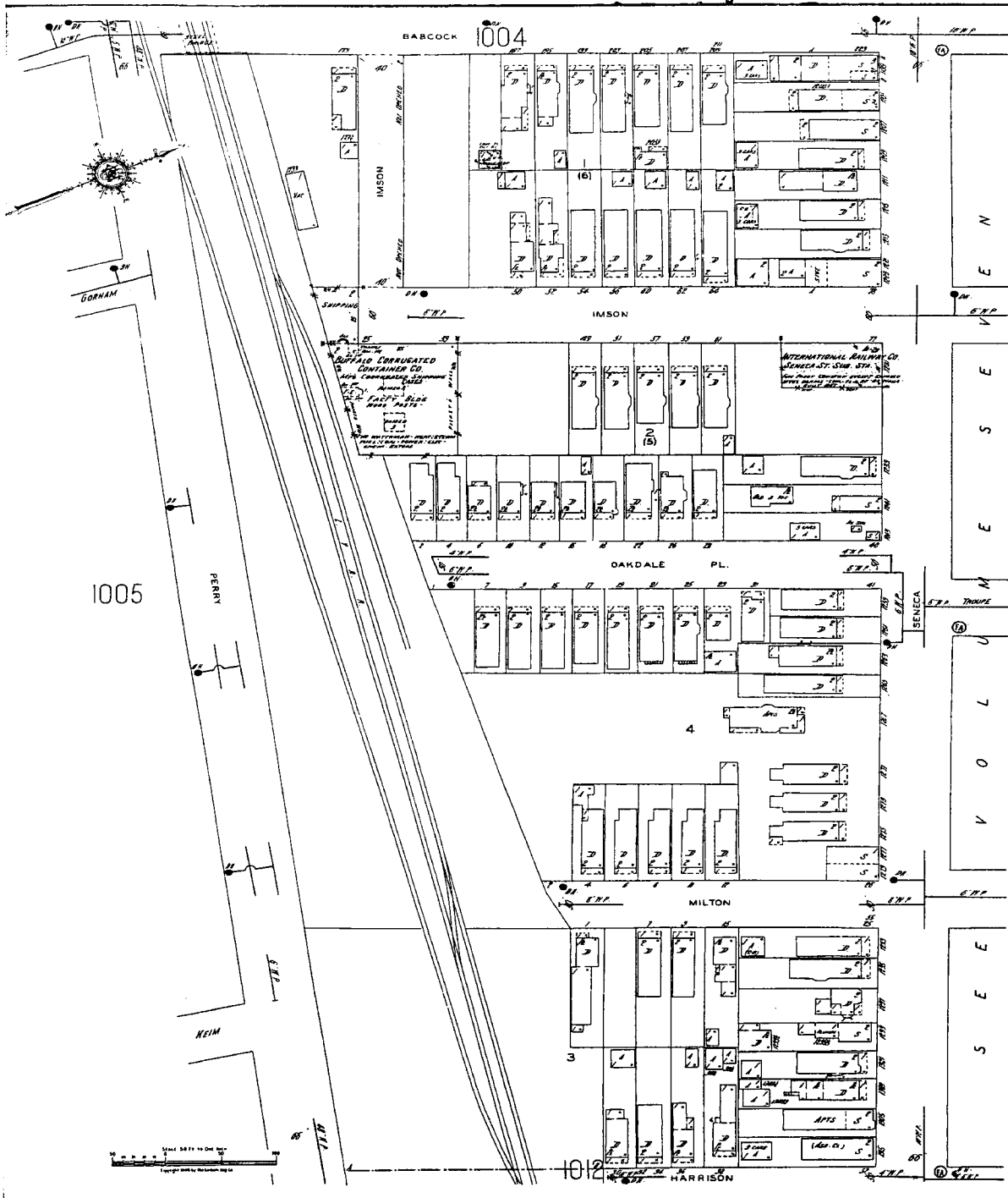
1012

1011

1006



BUFFALO, N. Y. VOL. 10
1006
(700-701-VOL. 7)



1005

1004

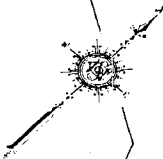
1012

S E N
V O L
S E E

SCALE 80 FT. TO ONE INCH
Copyright 1911 by the McGraw-Hill Co.

1007

(707-708-709-738 VOL.7)



S E A V O L U M E T W O

1083

1083

Buffalo River

NEW YORK, CHICAGO & ST. LOUIS R.R.

1008

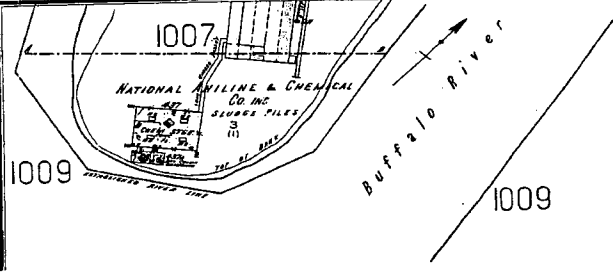
NATIONAL ANILINE & CHEMICAL CO. INC.

Buffalo River

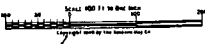
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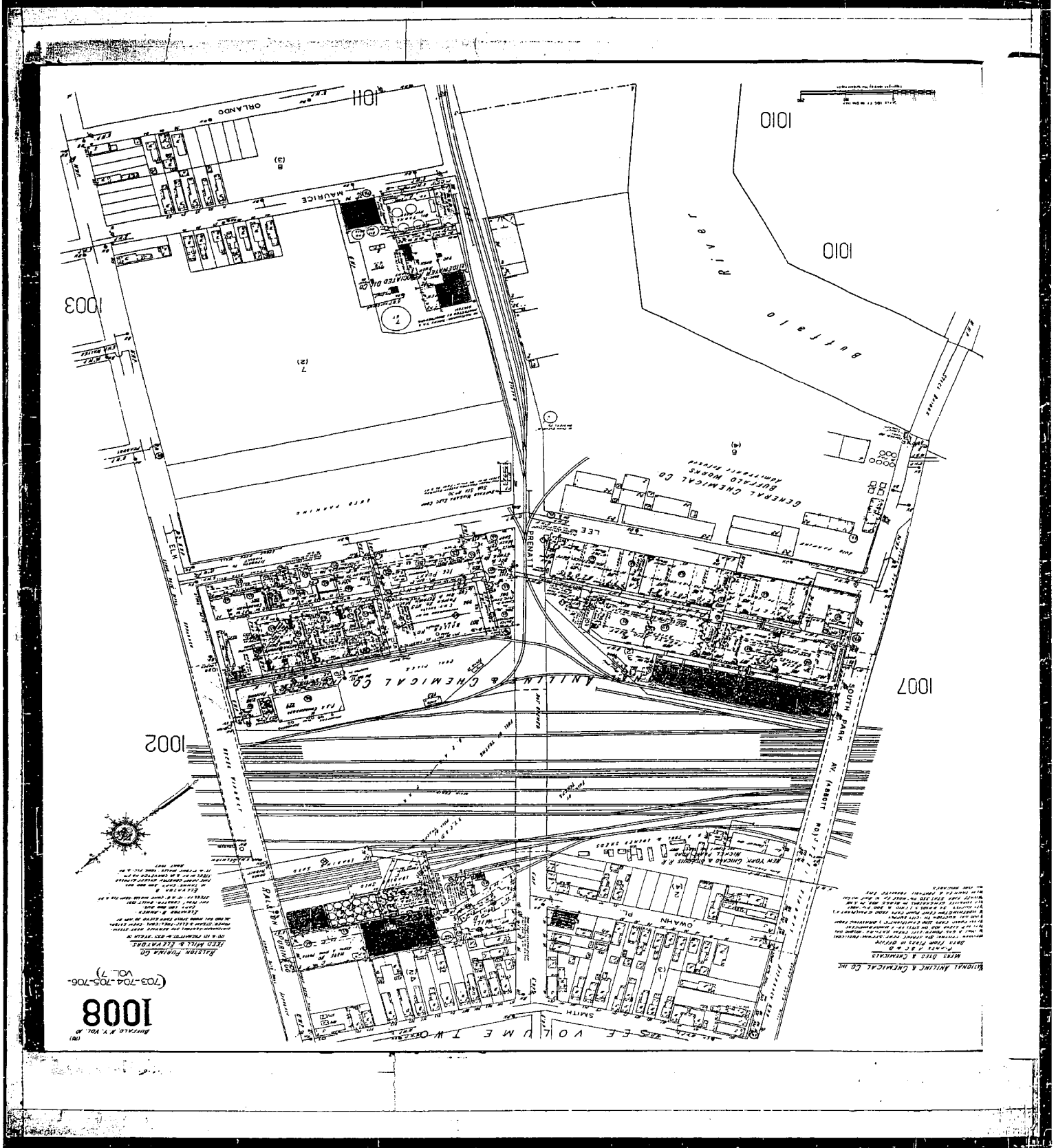
1010

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1009





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1003

1002

1007

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VOL. 7)

1008

BUFFALO, N. Y. VOL. 100

NATIONAL ANILINE & CHEMICAL CO. INC.

DRUGS, DYES & CHEMICALS

200 WEST 10TH STREET

PHILADELPHIA, PA.

NEW YORK OFFICE: 100 WEST 40TH STREET

NEW YORK, N. Y.

CHICAGO OFFICE: 100 WEST MADISON STREET

CHICAGO, ILL.

ST. LOUIS OFFICE: 100 WEST MARKET STREET

ST. LOUIS, MO.

MEMPHIS OFFICE: 100 WEST BROADWAY

MEMPHIS, TENN.

INDIANAPOLIS OFFICE: 100 WEST MARKET STREET

INDIANAPOLIS, IND.

CINCINNATI OFFICE: 100 WEST BROADWAY

CINCINNATI, OHIO

CLEVELAND OFFICE: 100 WEST BROADWAY

CLEVELAND, OHIO

PHILADELPHIA OFFICE: 100 WEST 10TH STREET

PHILADELPHIA, PA.

NEW YORK OFFICE: 100 WEST 40TH STREET

NEW YORK, N. Y.

CHICAGO OFFICE: 100 WEST MADISON STREET

CHICAGO, ILL.

ST. LOUIS OFFICE: 100 WEST MARKET STREET

ST. LOUIS, MO.

MEMPHIS OFFICE: 100 WEST BROADWAY

MEMPHIS, TENN.

INDIANAPOLIS OFFICE: 100 WEST MARKET STREET

INDIANAPOLIS, IND.

CINCINNATI OFFICE: 100 WEST BROADWAY

CINCINNATI, OHIO

CLEVELAND OFFICE: 100 WEST BROADWAY

CLEVELAND, OHIO

PHILADELPHIA OFFICE: 100 WEST 10TH STREET

PHILADELPHIA, PA.

NEW YORK OFFICE: 100 WEST 40TH STREET

NEW YORK, N. Y.

CHICAGO OFFICE: 100 WEST MADISON STREET

CHICAGO, ILL.

ST. LOUIS OFFICE: 100 WEST MARKET STREET

ST. LOUIS, MO.

MEMPHIS OFFICE: 100 WEST BROADWAY

MEMPHIS, TENN.

INDIANAPOLIS OFFICE: 100 WEST MARKET STREET

INDIANAPOLIS, IND.

CINCINNATI OFFICE: 100 WEST BROADWAY

CINCINNATI, OHIO

CLEVELAND OFFICE: 100 WEST BROADWAY

CLEVELAND, OHIO

PHILADELPHIA OFFICE: 100 WEST 10TH STREET

PHILADELPHIA, PA.

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NEW YORK, N. Y.

CHICAGO OFFICE: 100 WEST MADISON STREET

CHICAGO, ILL.

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ST. LOUIS, MO.

MEMPHIS OFFICE: 100 WEST BROADWAY

MEMPHIS, TENN.

INDIANAPOLIS OFFICE: 100 WEST MARKET STREET

INDIANAPOLIS, IND.

CINCINNATI OFFICE: 100 WEST BROADWAY

CINCINNATI, OHIO

CLEVELAND OFFICE: 100 WEST BROADWAY

CLEVELAND, OHIO

PHILADELPHIA OFFICE: 100 WEST 10TH STREET

PHILADELPHIA, PA.

NEW YORK OFFICE: 100 WEST 40TH STREET

NEW YORK, N. Y.

CHICAGO OFFICE: 100 WEST MADISON STREET

CHICAGO, ILL.

ST. LOUIS OFFICE: 100 WEST MARKET STREET

ST. LOUIS, MO.

MEMPHIS OFFICE: 100 WEST BROADWAY

MEMPHIS, TENN.

INDIANAPOLIS OFFICE: 100 WEST MARKET STREET

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CINCINNATI OFFICE: 100 WEST BROADWAY

CINCINNATI, OHIO

CLEVELAND OFFICE: 100 WEST BROADWAY

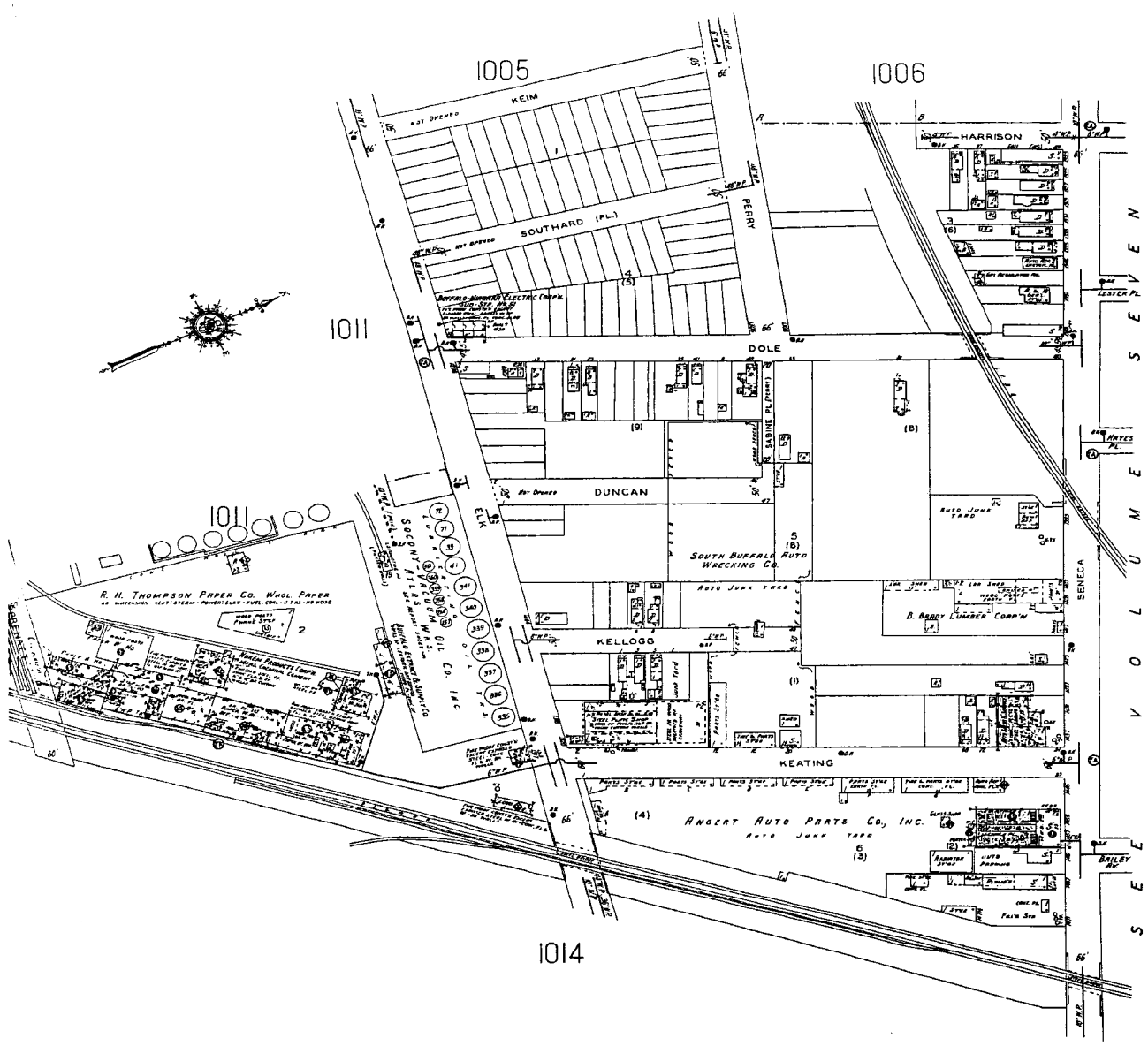
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PHILADELPHIA OFFICE: 100 WEST 10TH STREET

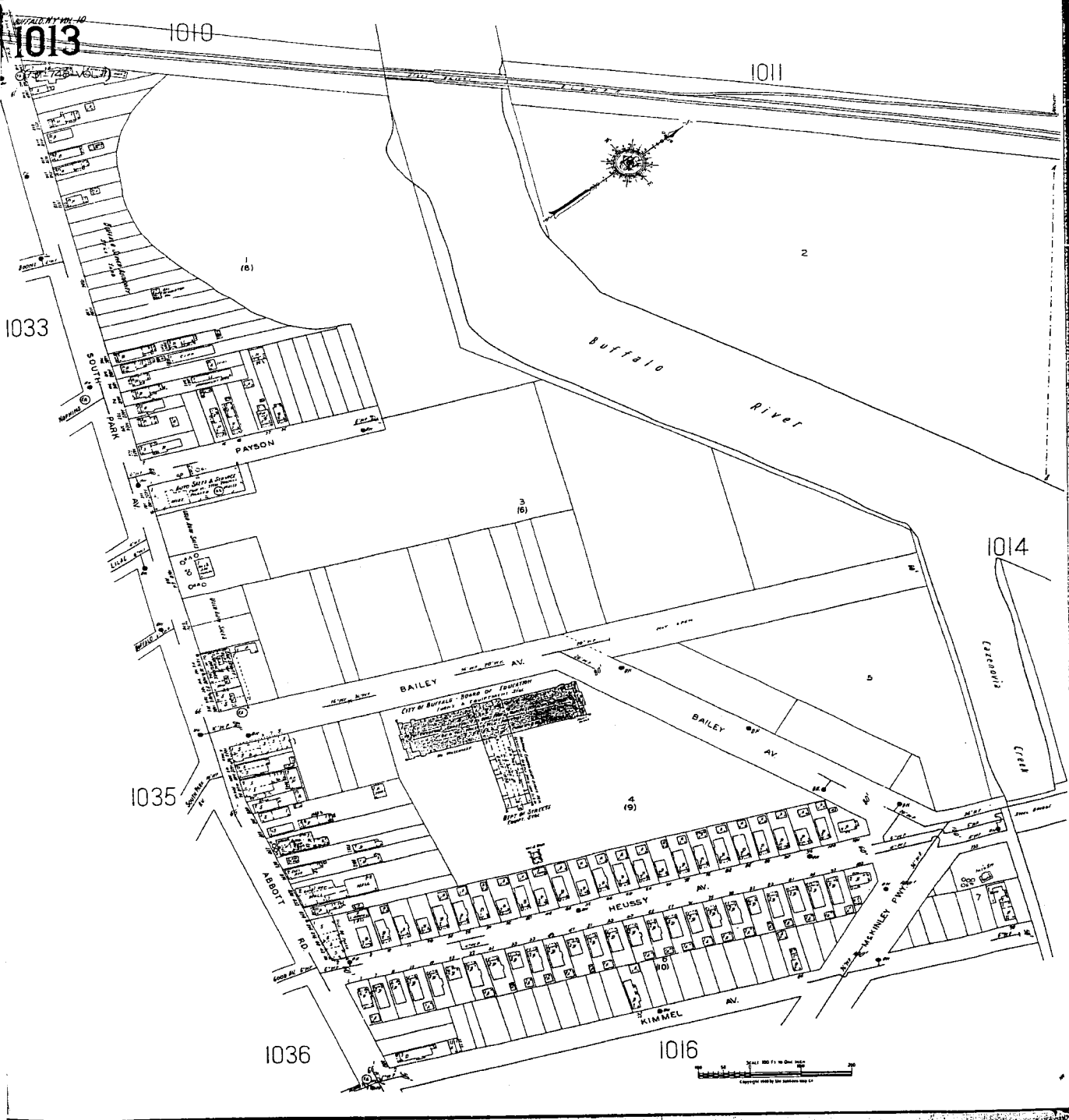
PHILADELPHIA, PA.

NEW YORK OFFICE: 100 WEST 40TH STREET

NEW YORK, N. Y.



Scale: 1" = 100' (1" = 30.48m)
Copyright 1971 by the Buffalo Map Co.



1013

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1016

Buffalo River

BAILEY AV.

BAILEY AV.

HELUSSY AV.

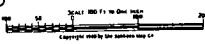
KIMMEL AV.

SOUTH PARK

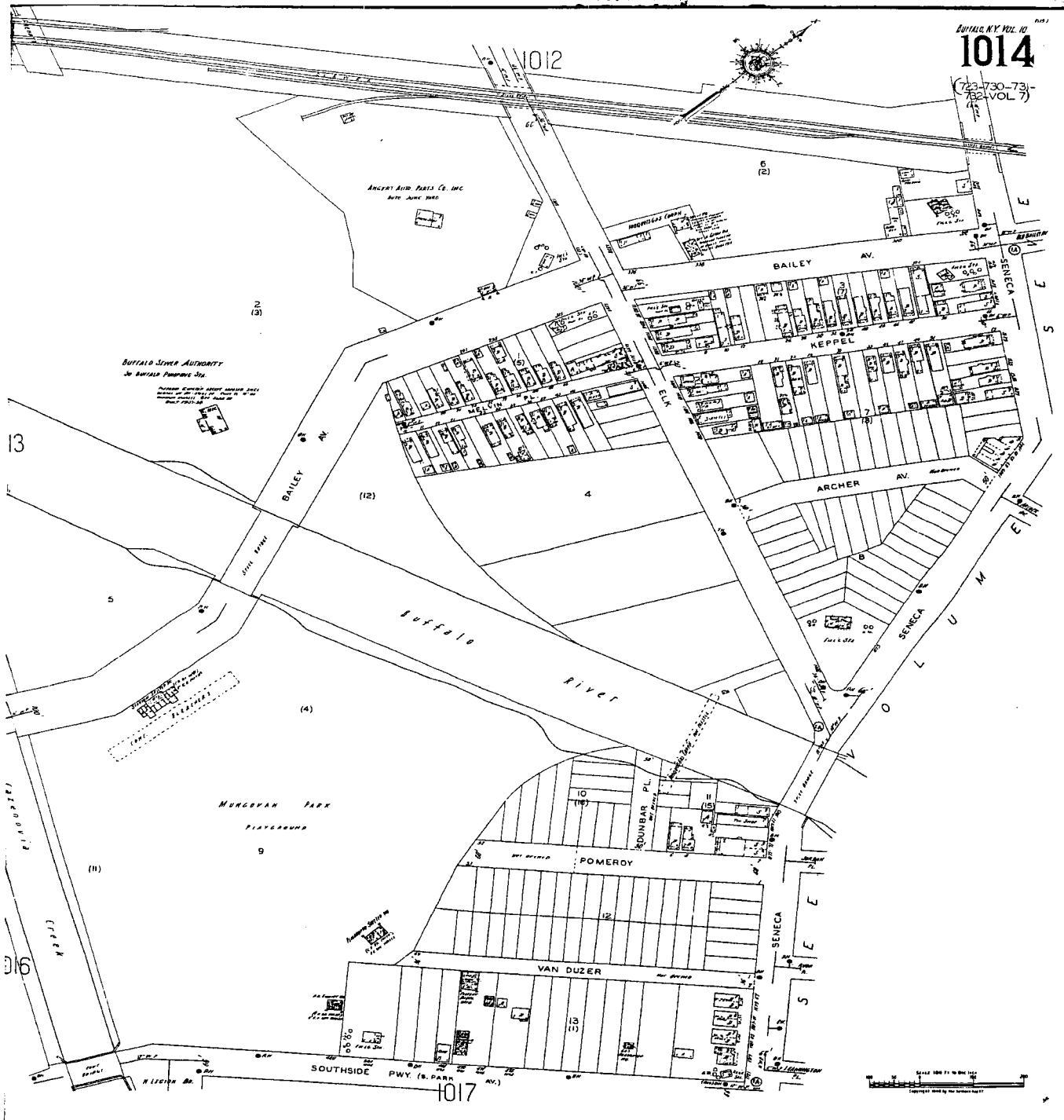
PAYSON

ABBOTT

CITY OF BUFFALO - BOARD OF EDUCATION



Scale 1" = 100' - 0" (not to scale)
Copyright 1967 by the publisher map 12

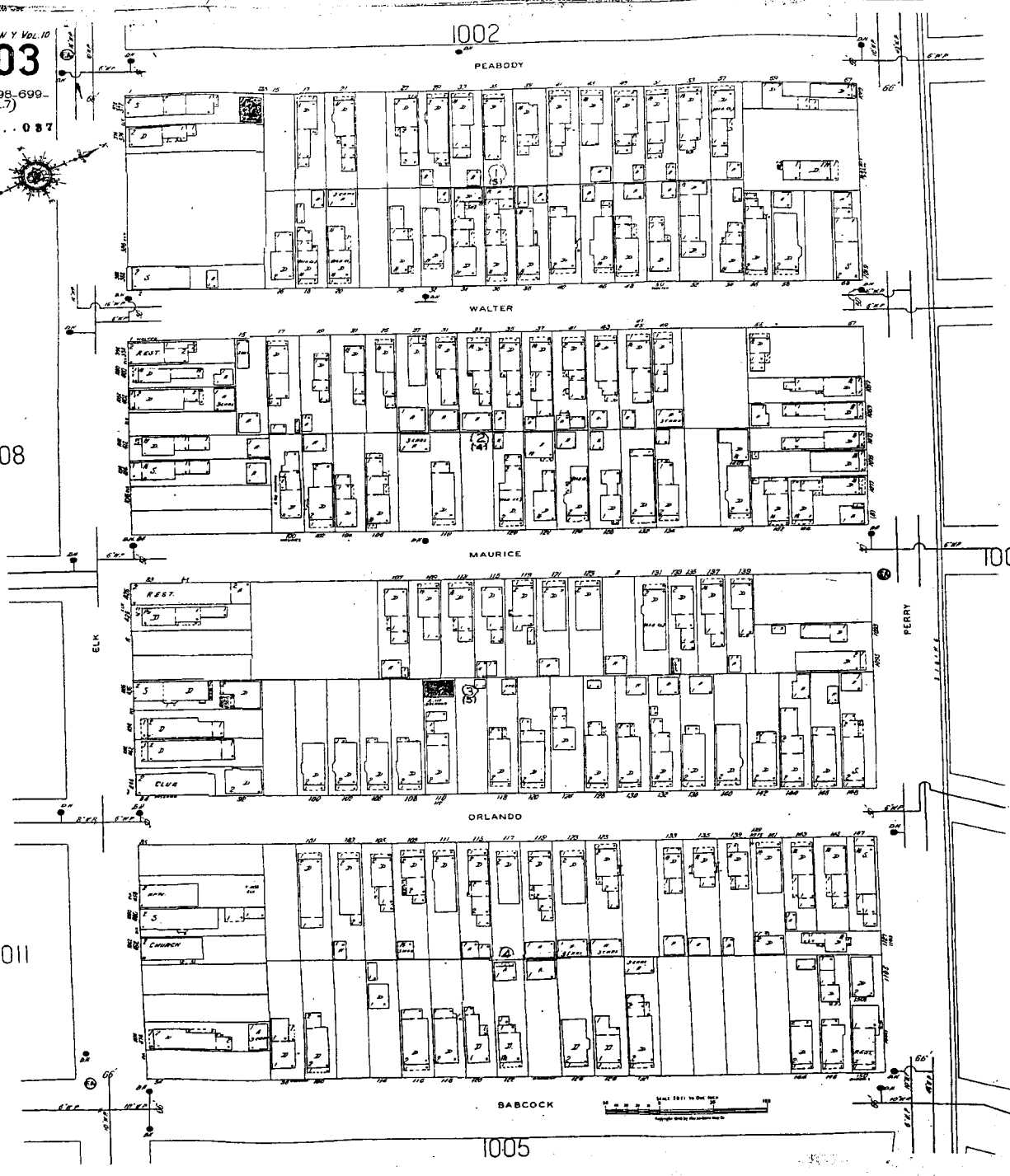


Sanborn Fire Insurance Maps
1950 Maps

1003

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VOL. 7)

N. Y. . . . 087



1002

PEABODY

WALTER

MAURICE

ORLANDO

BABCOCK

1008

1004

1011

1005



1002

1004

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PEABODY

WALTER

MAURICE

ORLANDO

BABCOCK

INSON

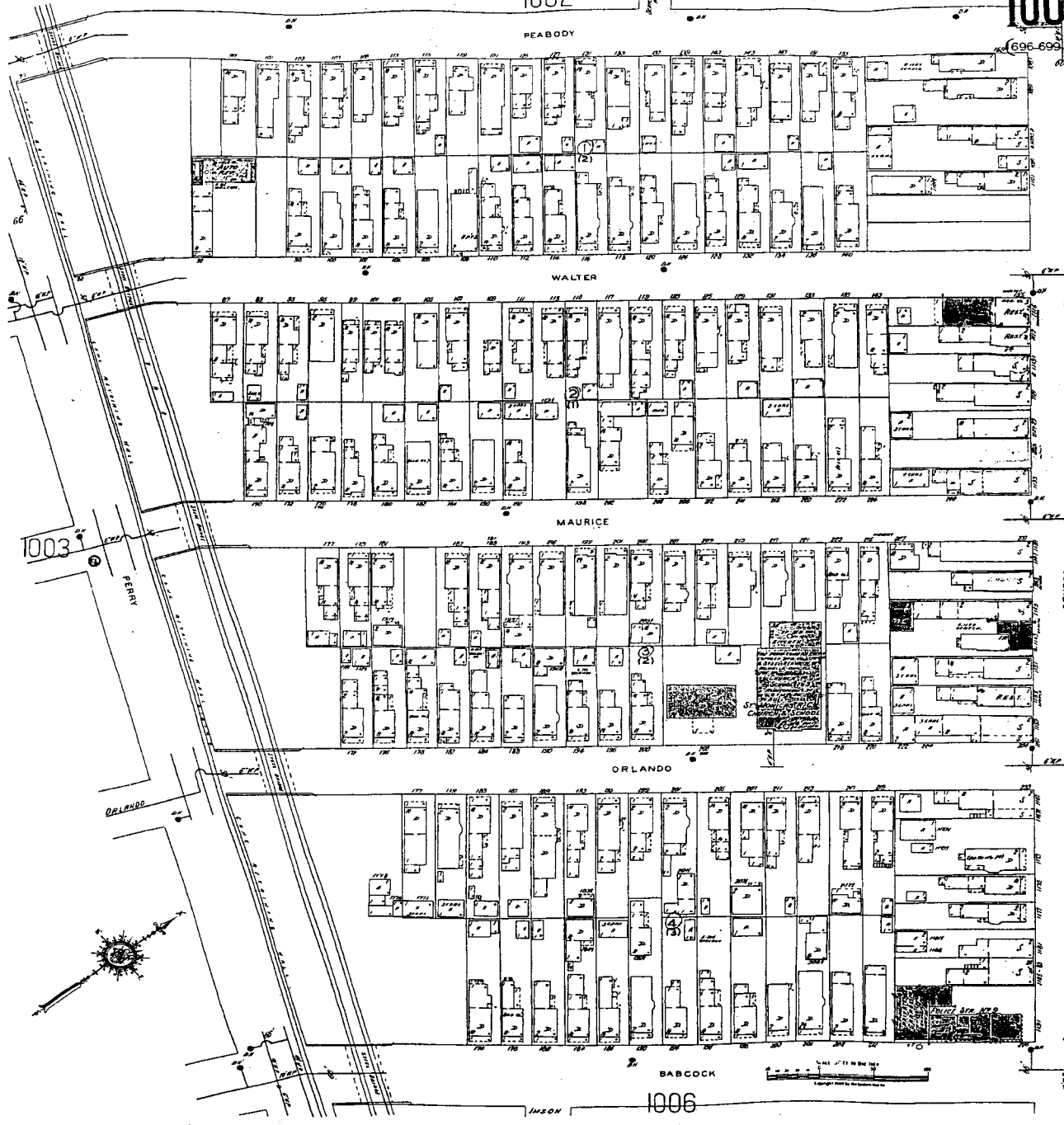
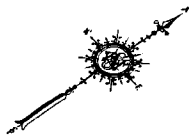
1006

SENECA
V O L U M E
S E E N

1003

FERRY

ORLANDO



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1005
(698-700-701-
VOL. 7)
W. T. . . 087

1003

BABCOCK

GORHAM

WINONA

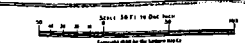
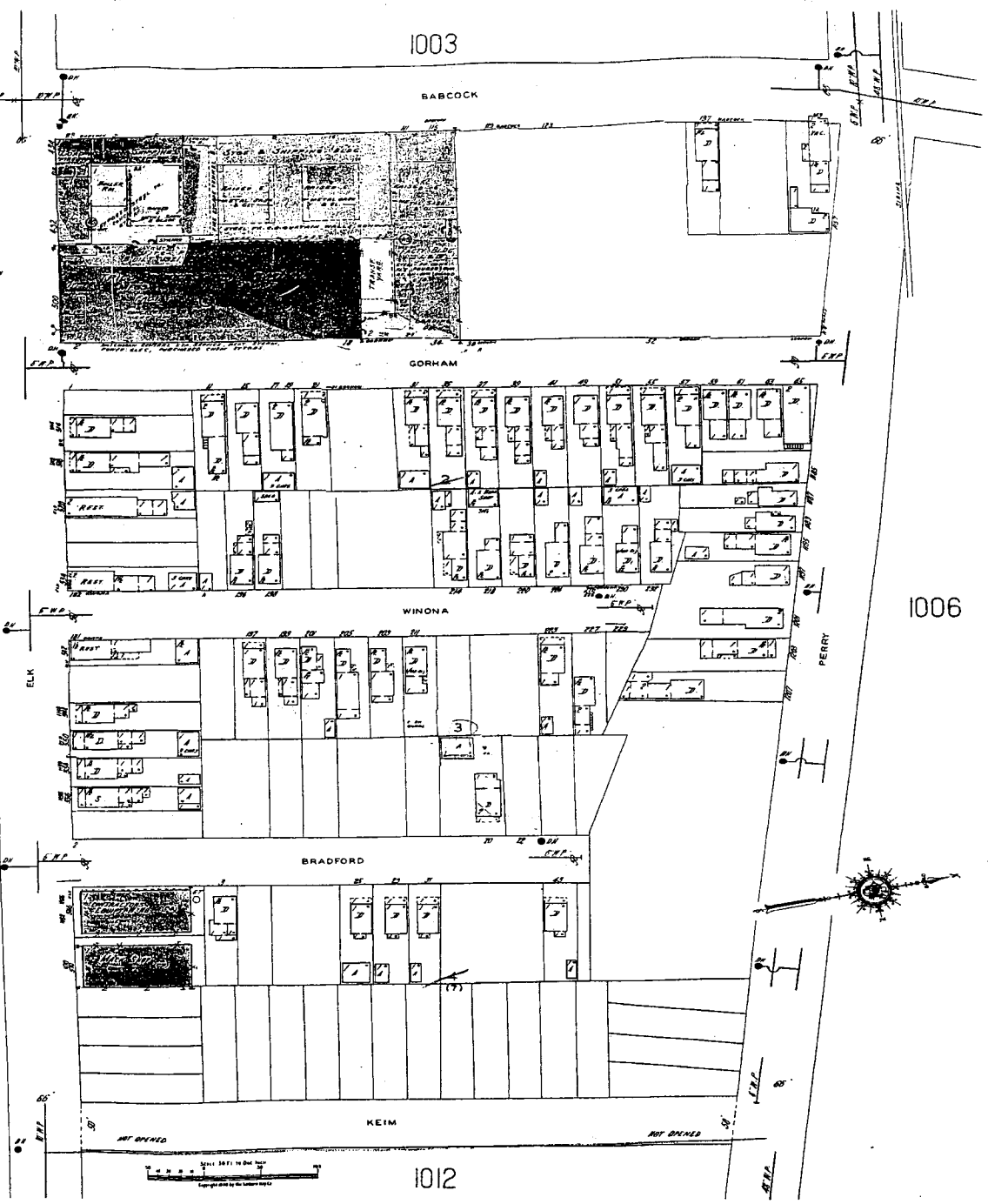
BRADFORD

KEIM

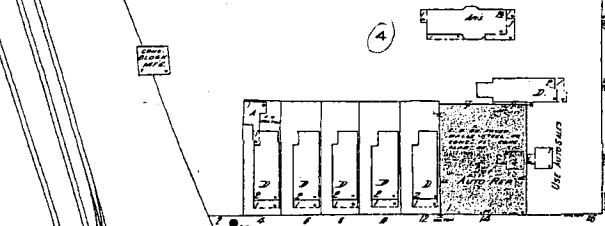
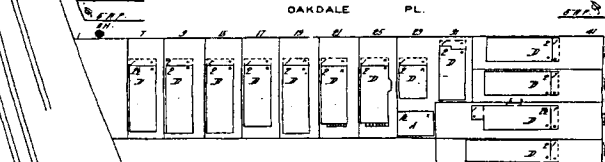
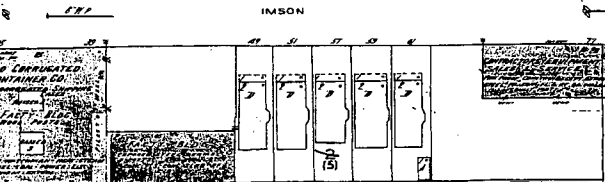
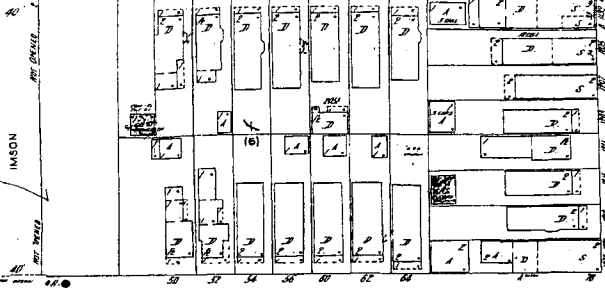
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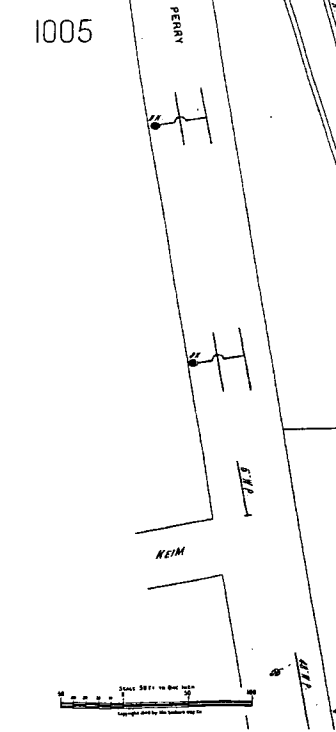
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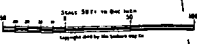
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1005



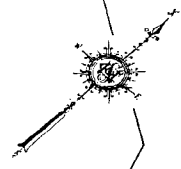
SENeca
V O L U N T E E R S



1007

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E. I. ... 087



SEVENTH AVENUE

SMITH

1083

1083

Buffalo River

YORK CHICAGO BRIGHT YARD
R.R. DEPOT
R.R. DEPOT

1008

CHEMICAL & DYE NATIONAL ANILINE DIV.
1007

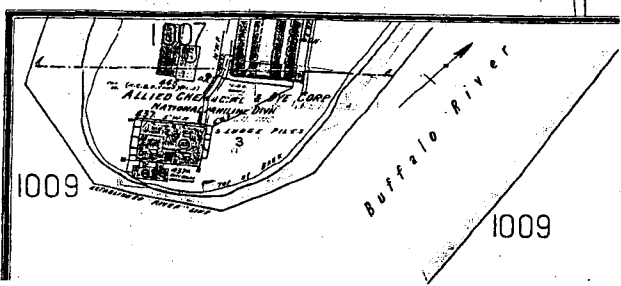
CORP.

Buffalo River

1082

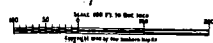
1010

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ALLIED CHEMICAL & DYE CORP.
NATIONAL ANILINE DIV.
MILL DYES & CHEMICALS
 PLANTS 1, 2, 3 & 4
 800' FROM FERRY ON OFFICE

REISTON PURINA CO.
SEED MILL & ELEVATORS
 200' N. OF FERRY ON 200' W. OF 1ST ST.
 100' W. OF 1ST ST. ON 200' W. OF 1ST ST.
 100' W. OF 1ST ST. ON 200' W. OF 1ST ST.
 100' W. OF 1ST ST. ON 200' W. OF 1ST ST.



1007

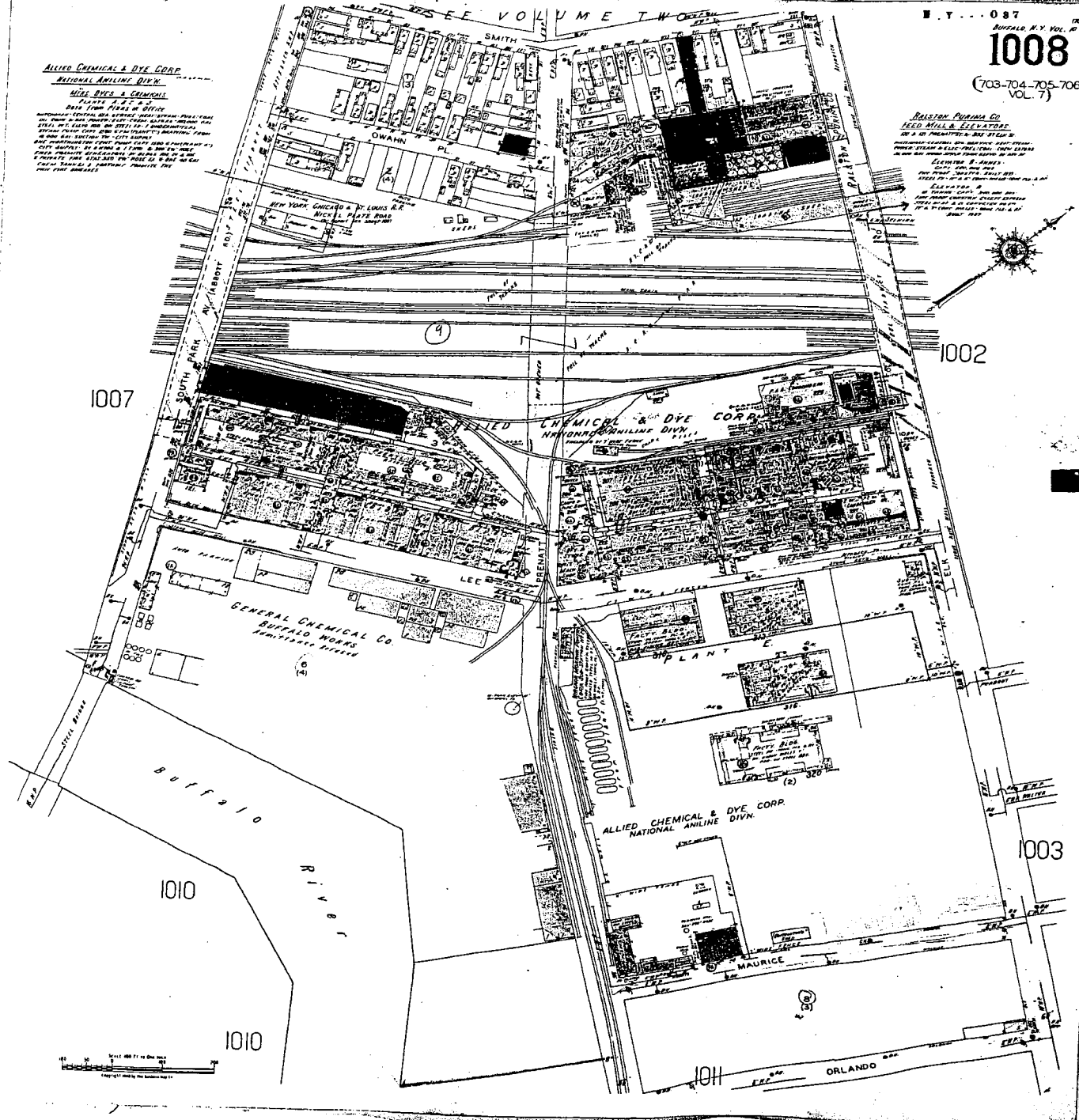
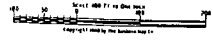
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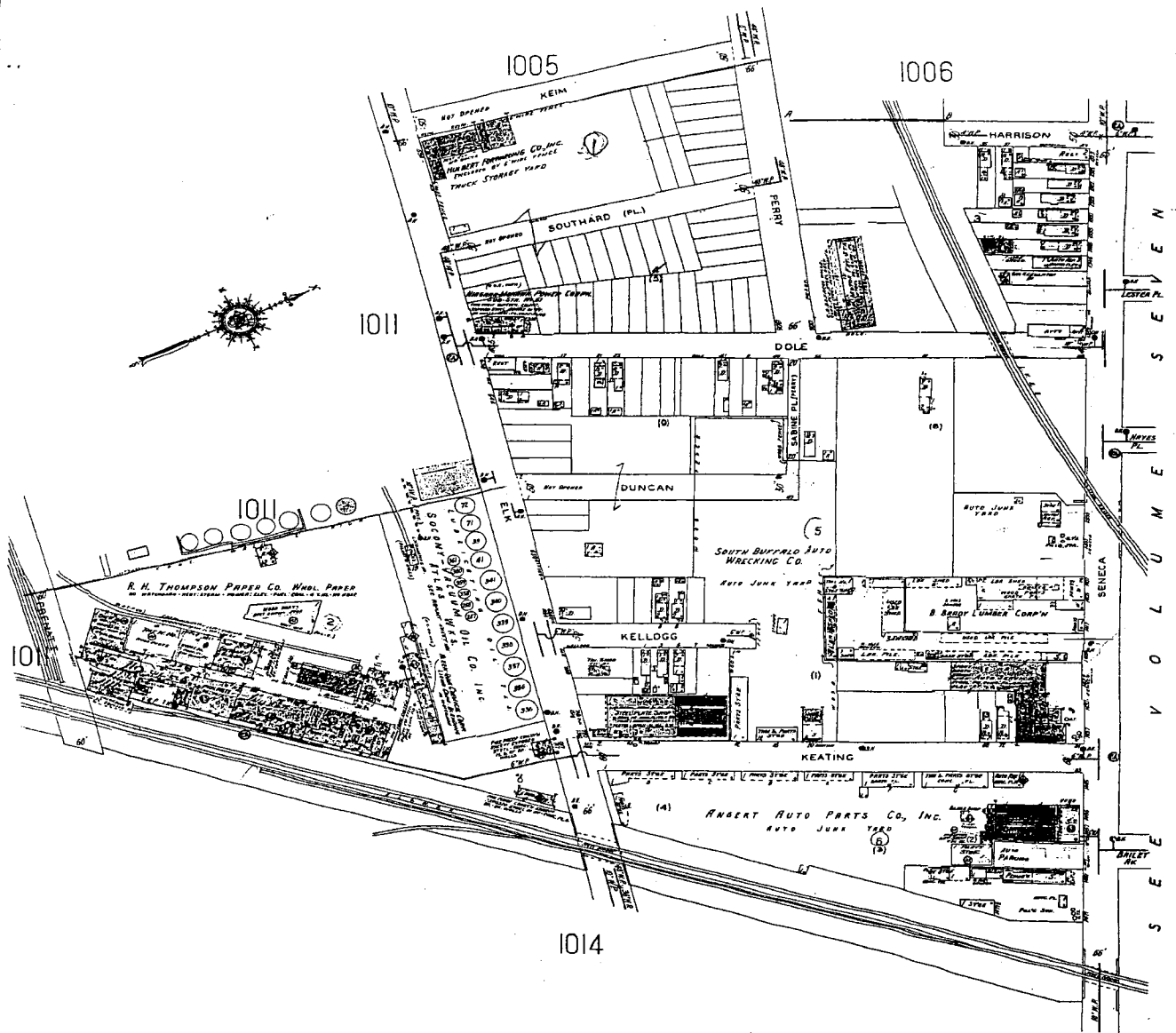
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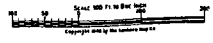
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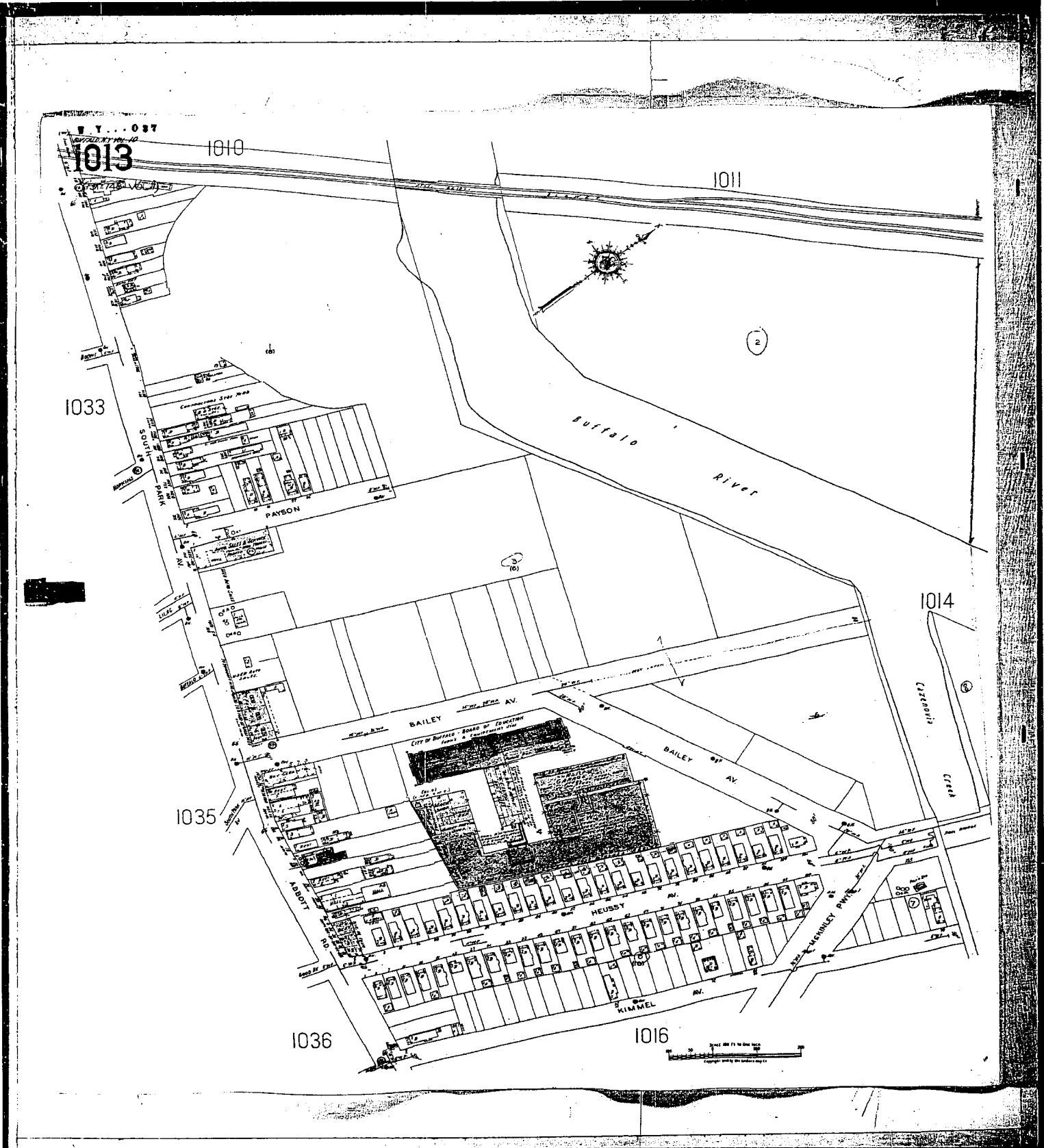
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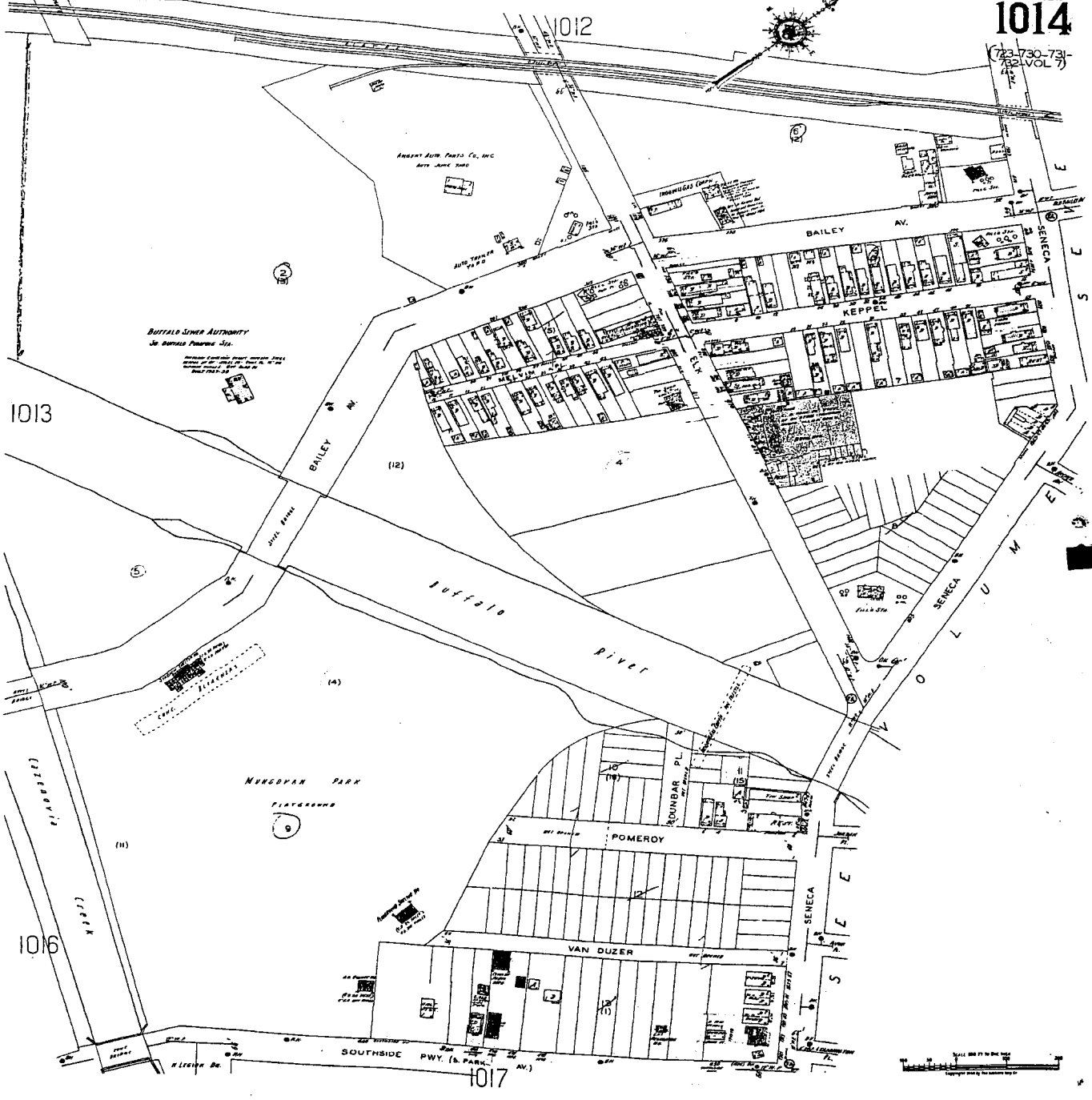


1014





N.Y. 087
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1014
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1013

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1016

Sanborn Fire Insurance Maps
1986 Maps

1003

1002

PEABODY



1008

WALTER

MAURICE

1004

PLAYGROUND

ELK

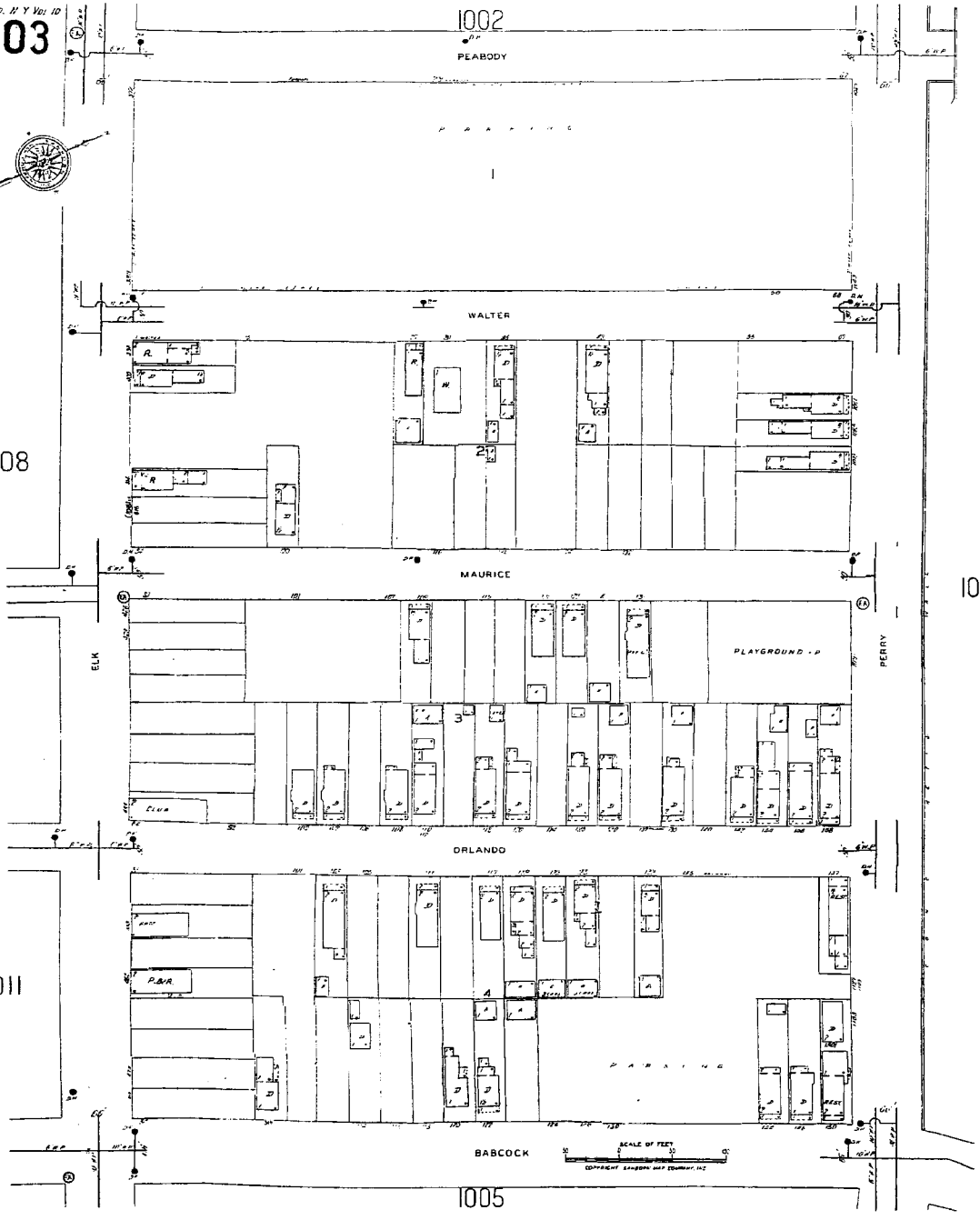
PERRY

ORLANDO

1011

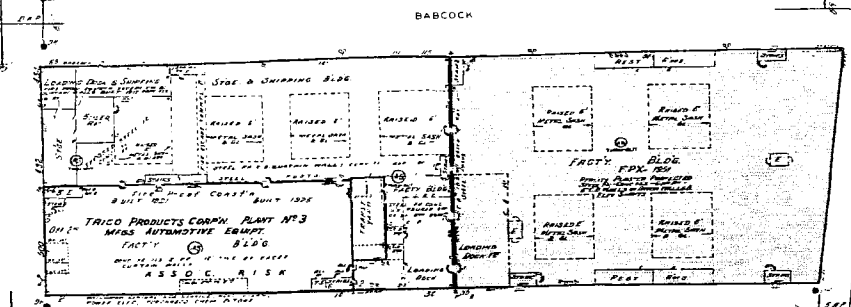
BABCOCK

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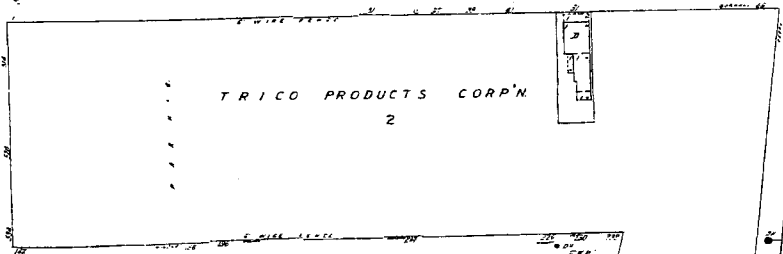
BUFFALO, N. Y. 1005

1003



BABCOCK

GORHAM

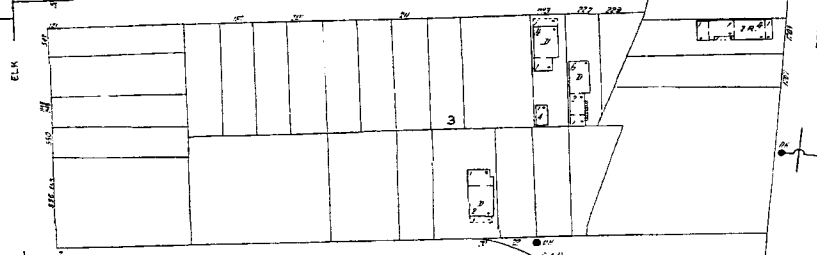


TRICO PRODUCTS CORP. 2

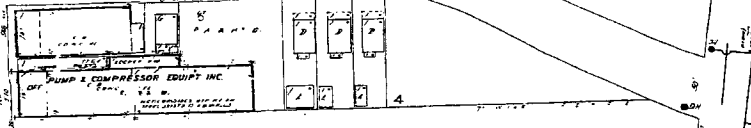
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WINONA

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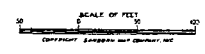
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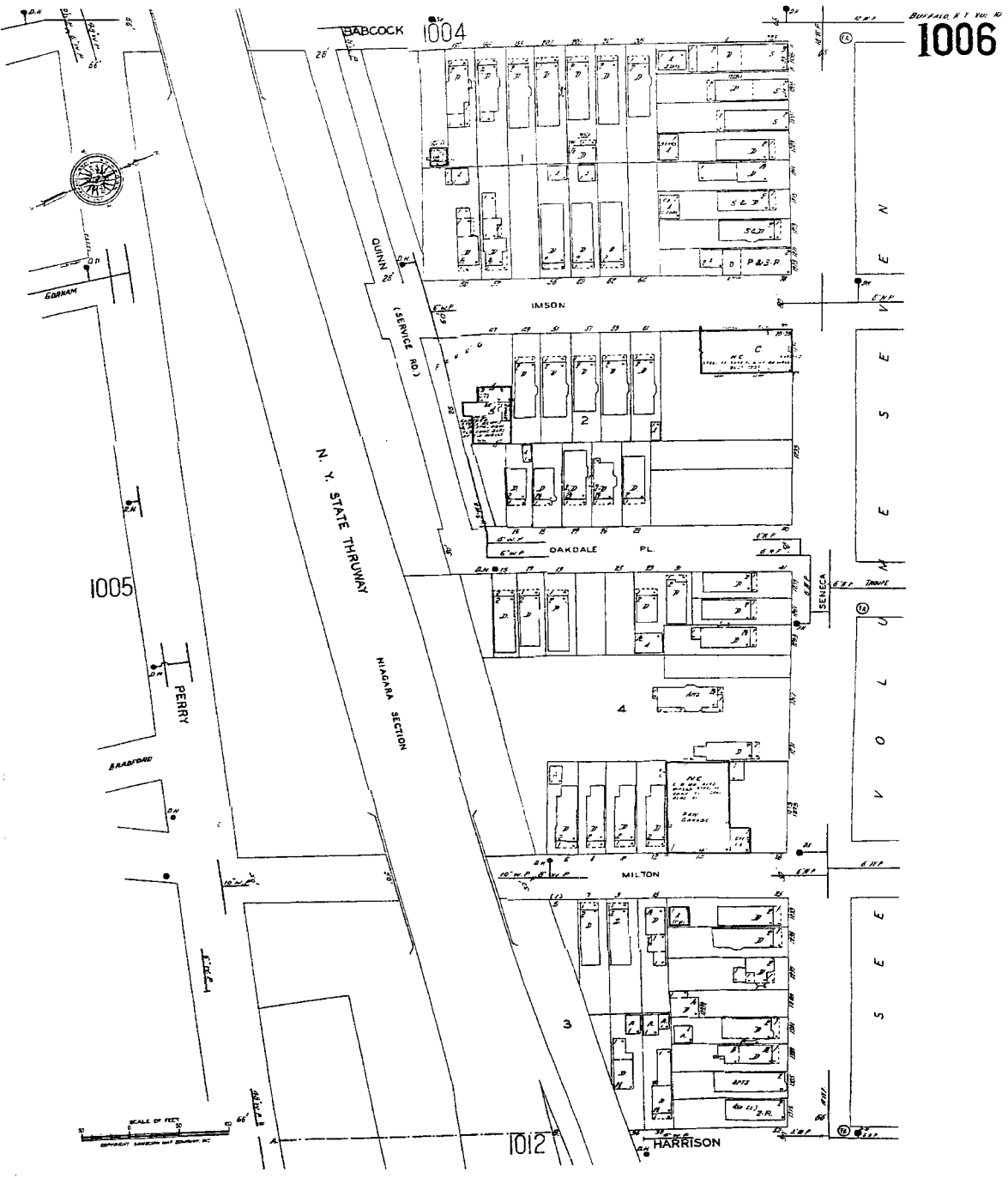


OFF. PUMP & COMPRESSOR EQUIP. INC.

AUTO CONTROL STEEL YARD

1012





SCALE OF FEET
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DISTRICT ENGINEER W.T. BURNETT, N.C.



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1006

N. Y. STATE THRUWAY

NIAGARA SECTION

BABCOCK

QUINN

(SERVICE ROAD)

IMSON

OAKDALE PL.

MILTON

HARRISON

SENeca

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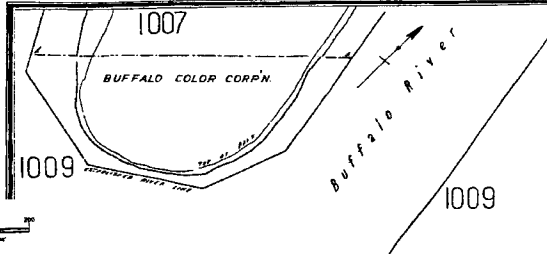
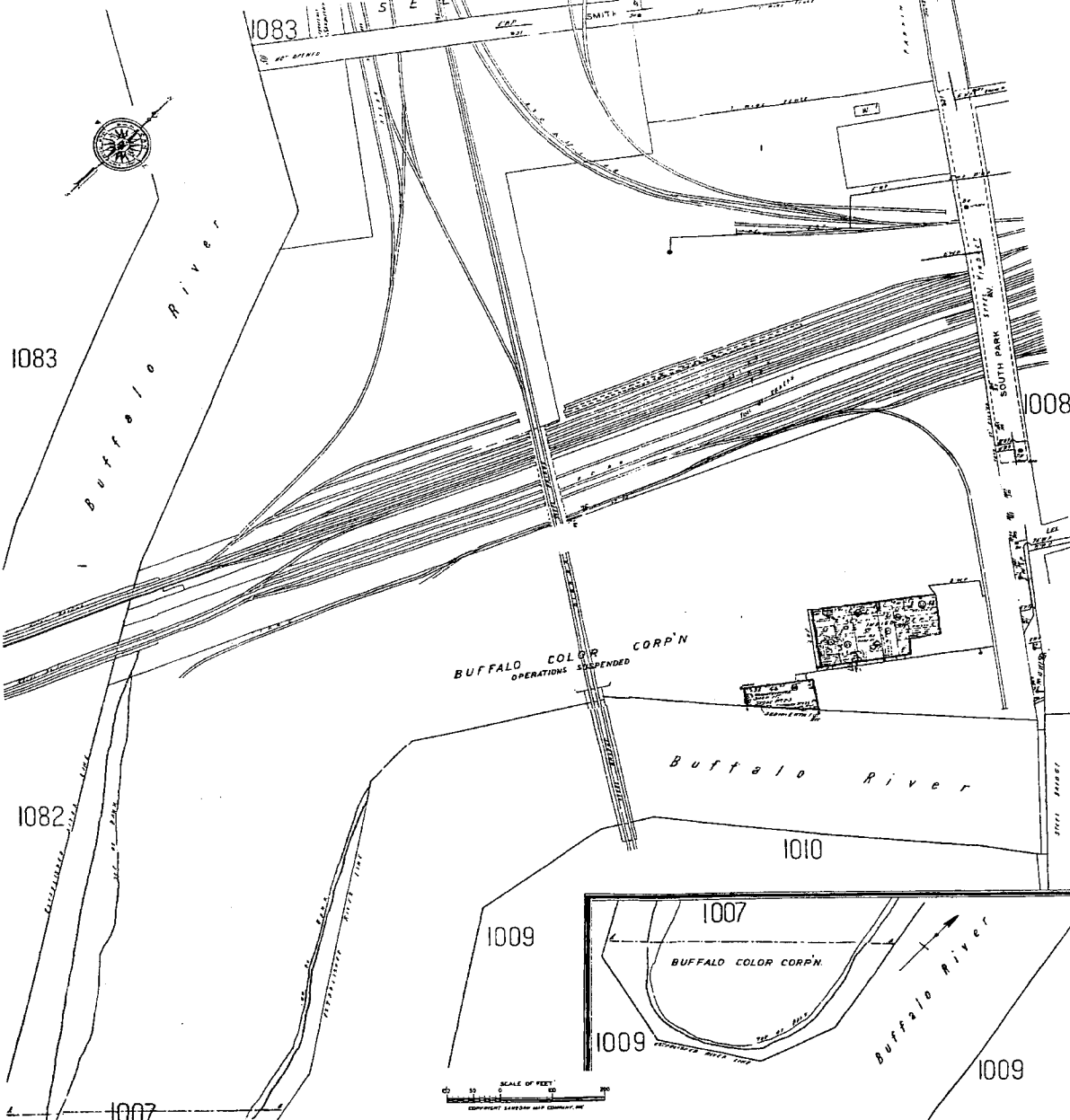
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BUFFALO # 1 304 B
1007

S E E V O L U M E T W O



SCALE OF FEET
0 20 40 60
COPYRIGHT 1958 BY THE COMPANY, INC.



1010

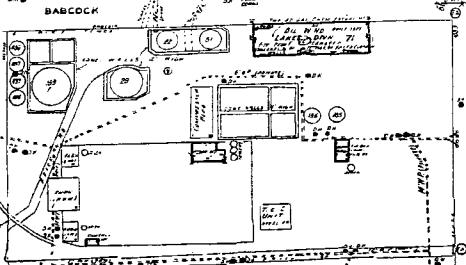
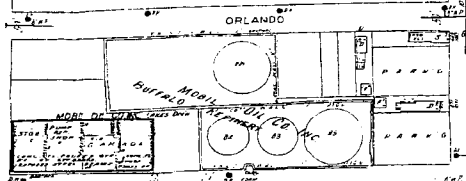
Buffalo River

1013

1008

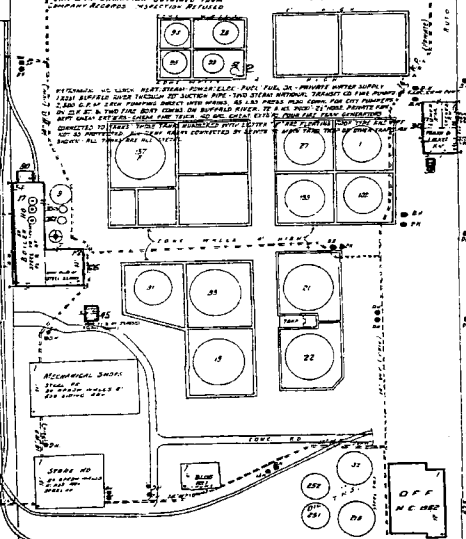
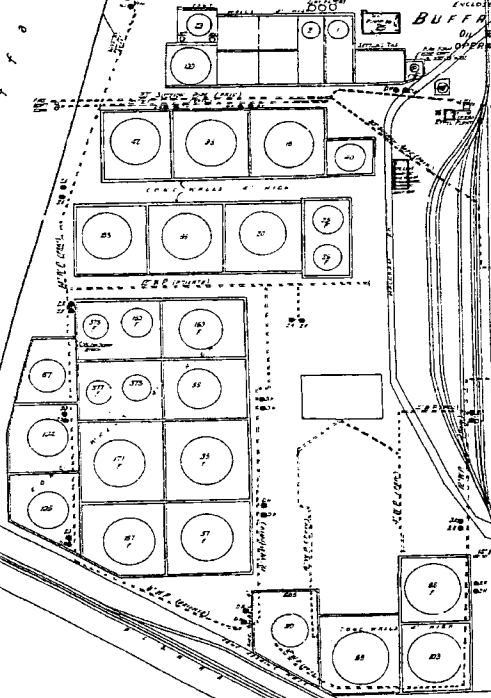
ORLANDO

1003



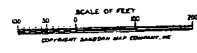
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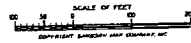
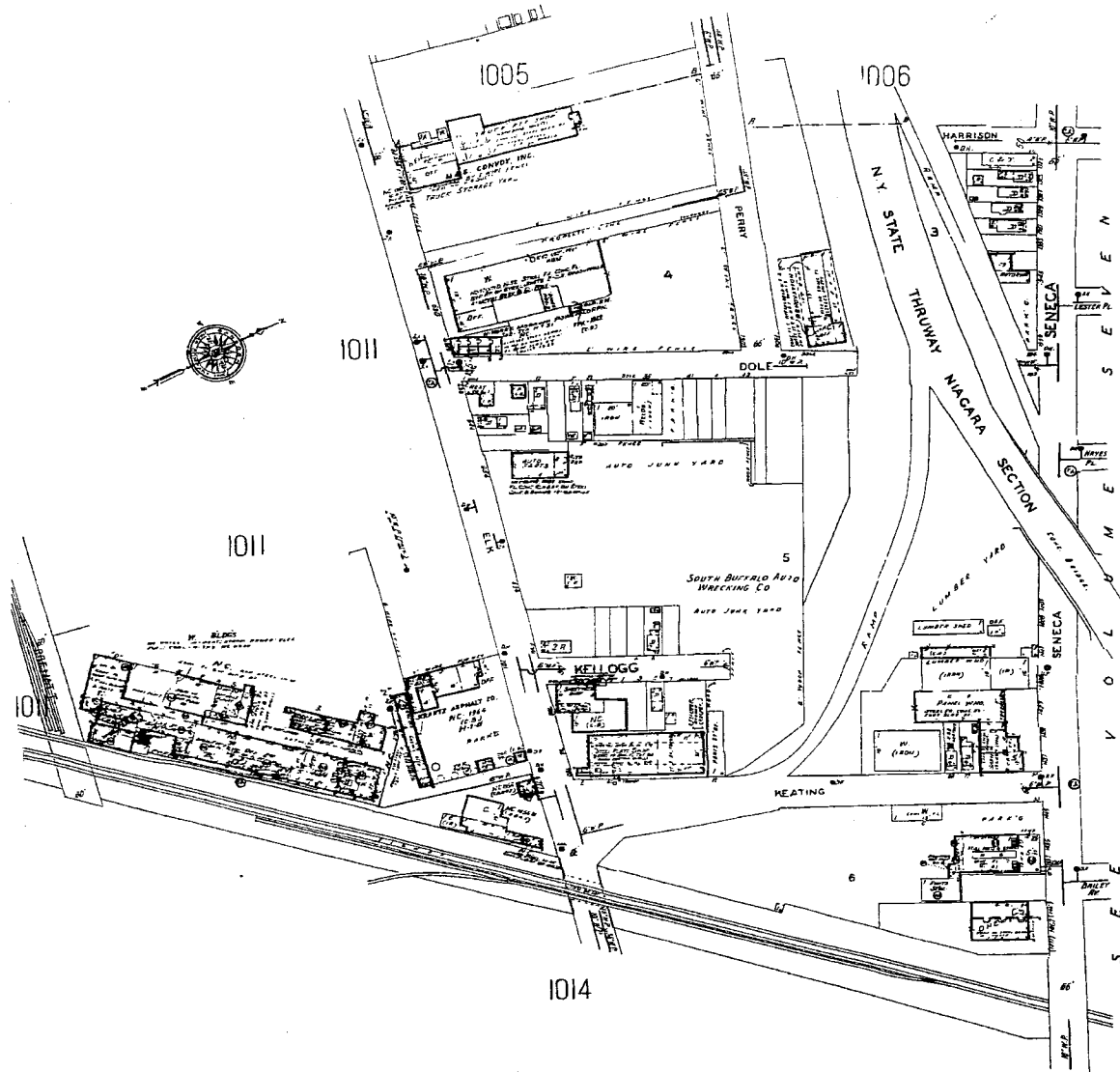
MOBILE OIL CO. INC.
BUFFALO REFINERY

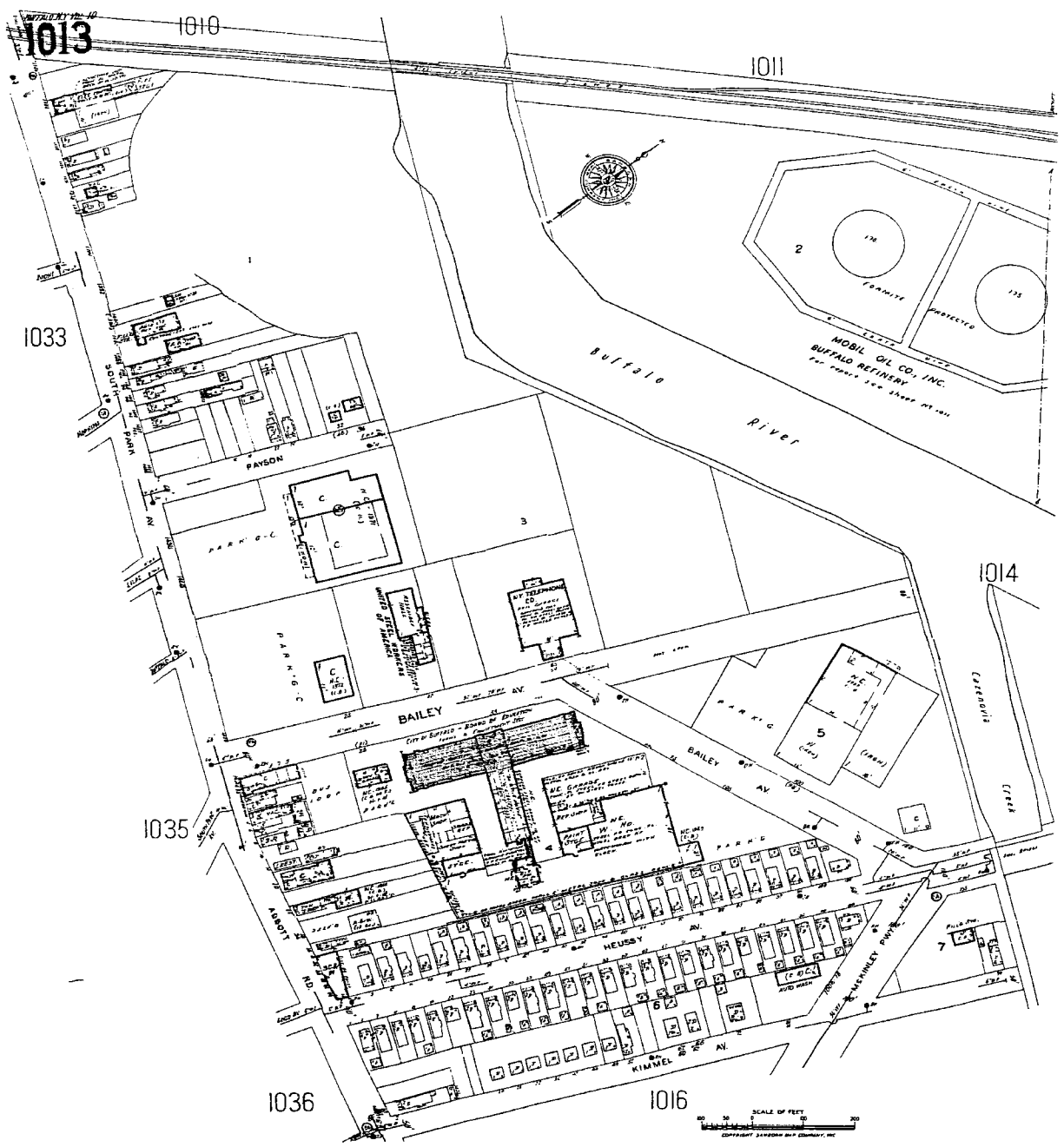


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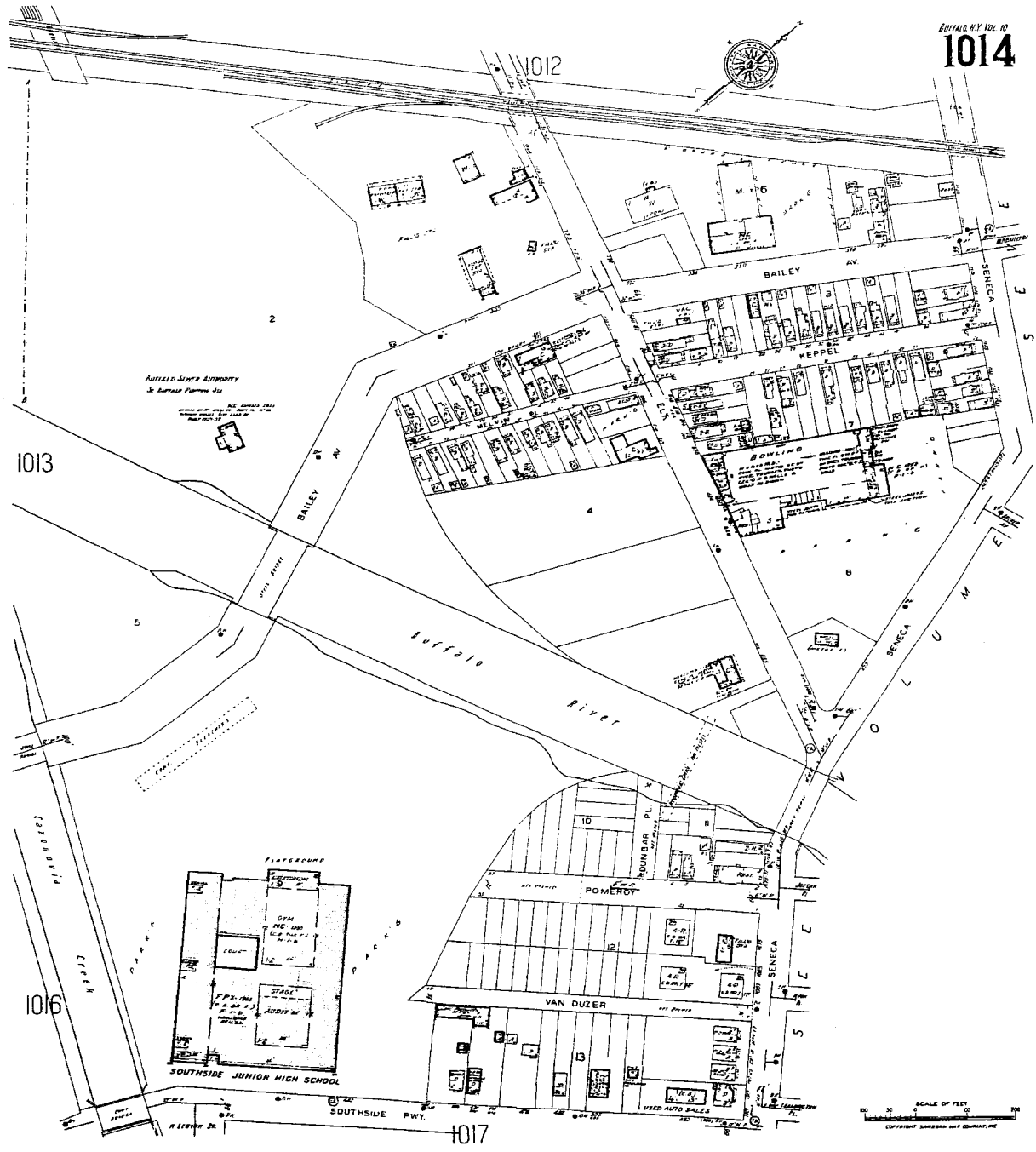
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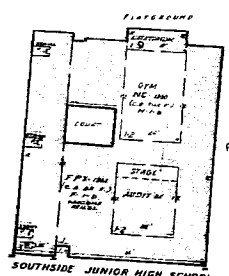




EDMUNDTY CO. D.
1014



BUFFALO SENEC A AUTHORITY
30 BUFFALO PLAZA 310



SOUTHSIDE JUNIOR HIGH SCHOOL

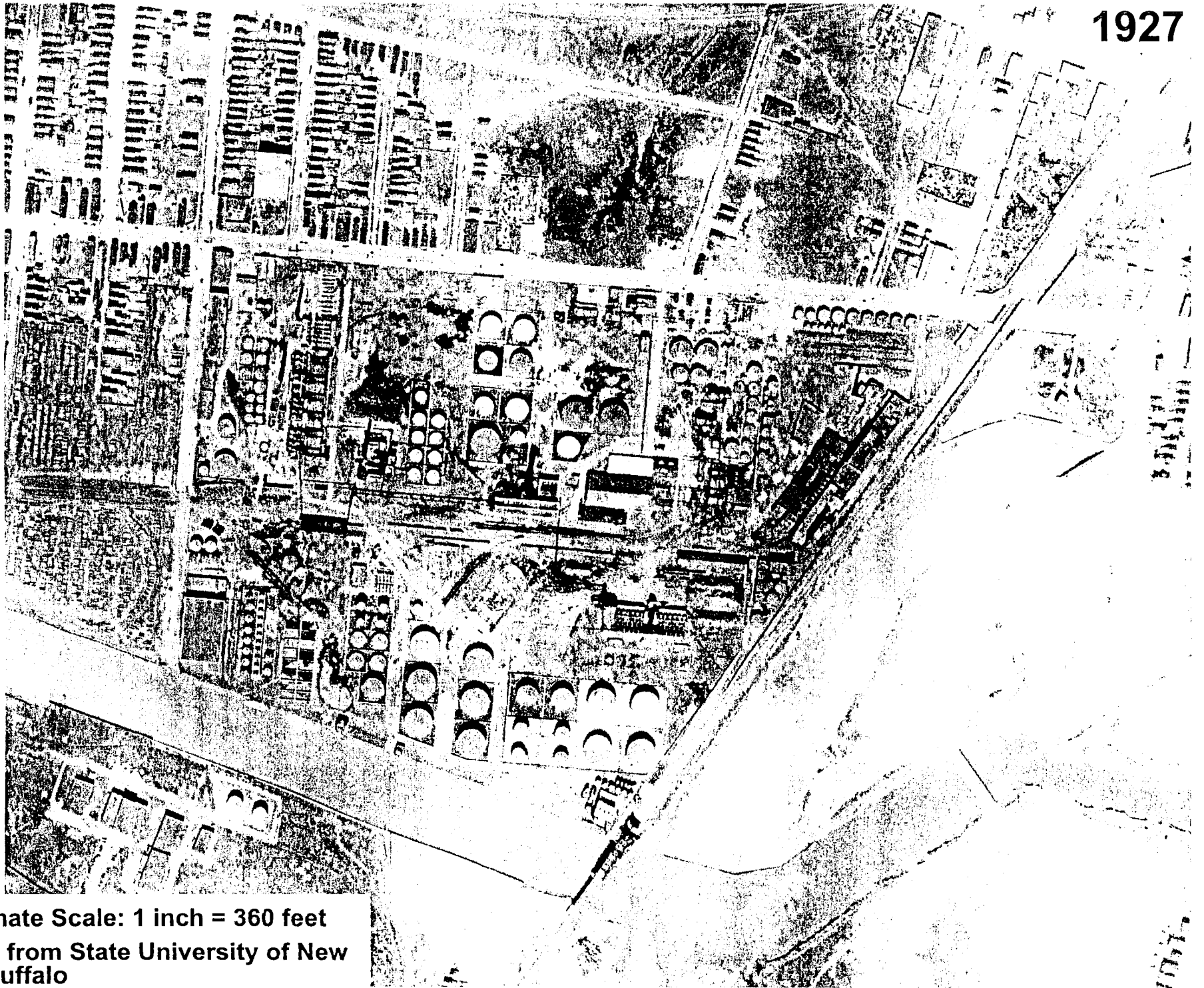


SCALE OF FEET
COPYRIGHT 1955 BY EDMUNDTY CO.

APPENDIX E

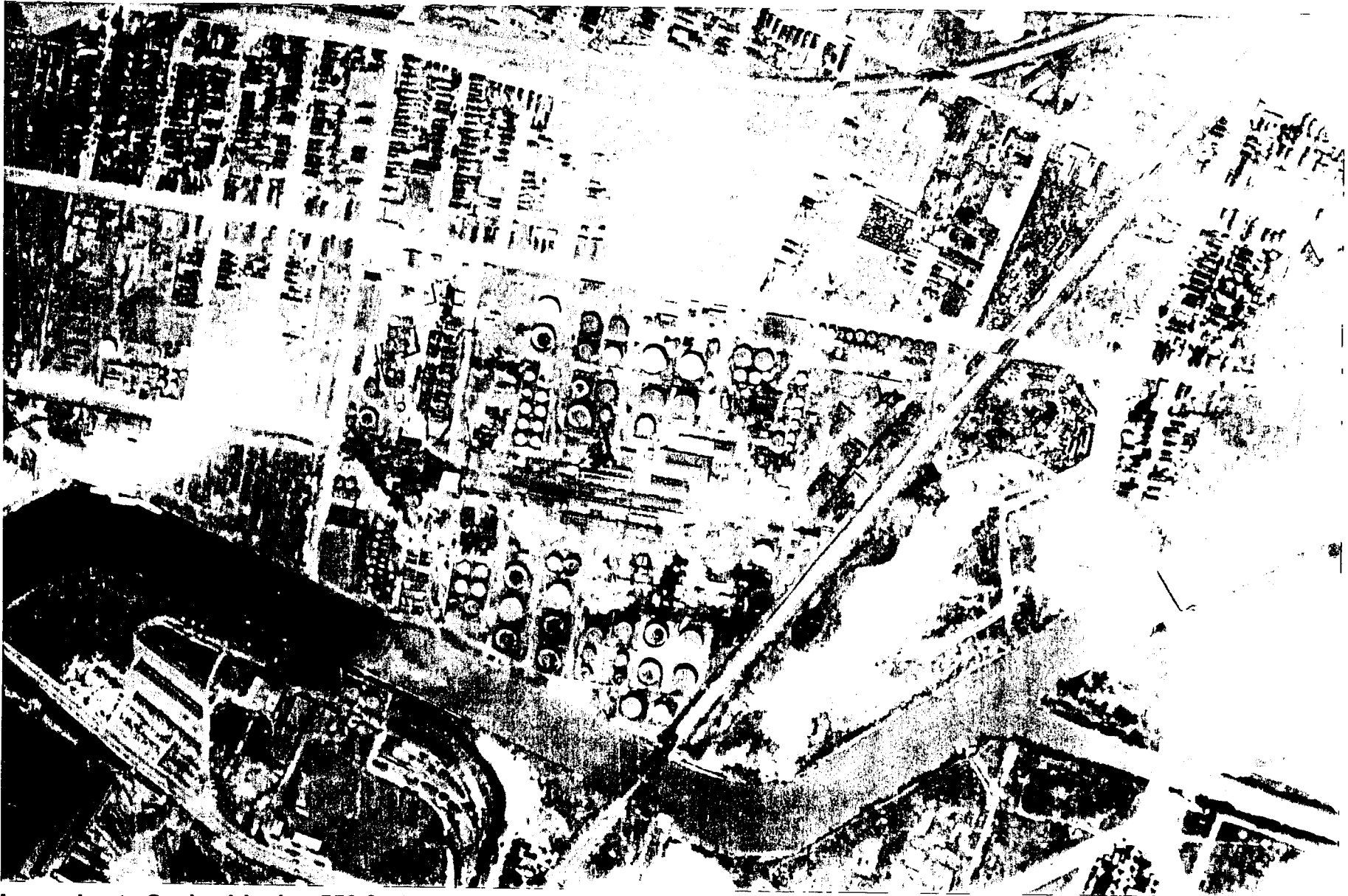
Aerial Photographs

1927



Approximate Scale: 1 inch = 360 feet
Obtained from State University of New
York at Buffalo

August 3, 1938



Approximate Scale: 1 inch = 550 feet

Obtained from National Aerial Resources

NAR SN# 228F 00-0077

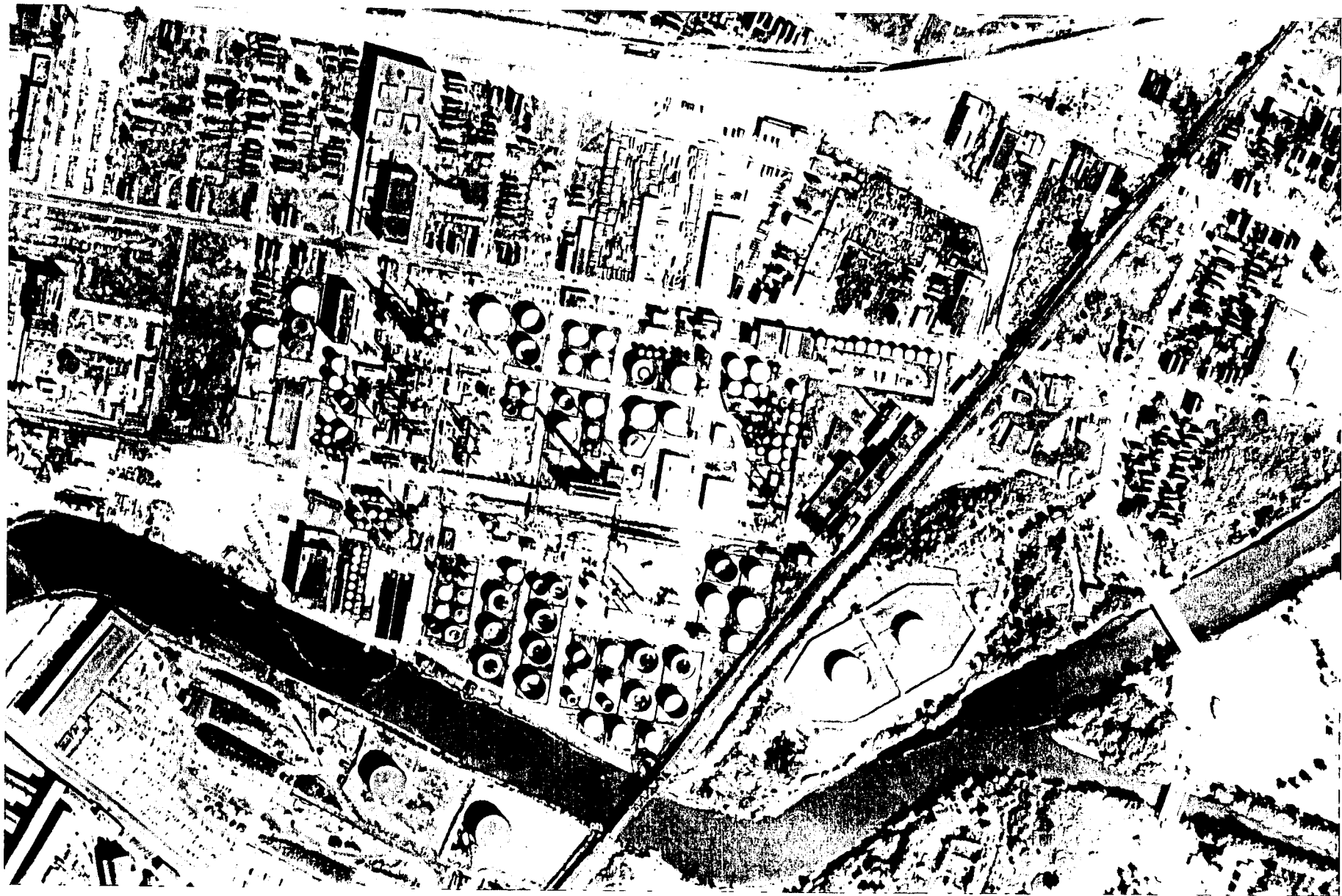
October 14, 1951



Approximate Scale: 1 inch = 510 feet
Obtained from National Aerial Resources

NAR SN# 228F 00-0077

October 6, 1958



Approximate Scale: 1 inch = 530 feet

Obtained from National Aerial Resources

NAD CN# 2425 00 0077D

June 12, 1966



Approximate Scale: 1 inch = 530 feet

Obtained from National Aerial Resources

NAR SN# 313F 00-0077R

October 10, 1972



Approximate Scale: 1 inch = 510 feet

Obtained from National Aerial Resources

NAR SN# 205P 00-0077

April 17, 1974



Approximate Scale: 1 inch = 510 feet

Obtained from National Aerial Resources

NAR SN# 122F 00-0077A

October 11, 1976

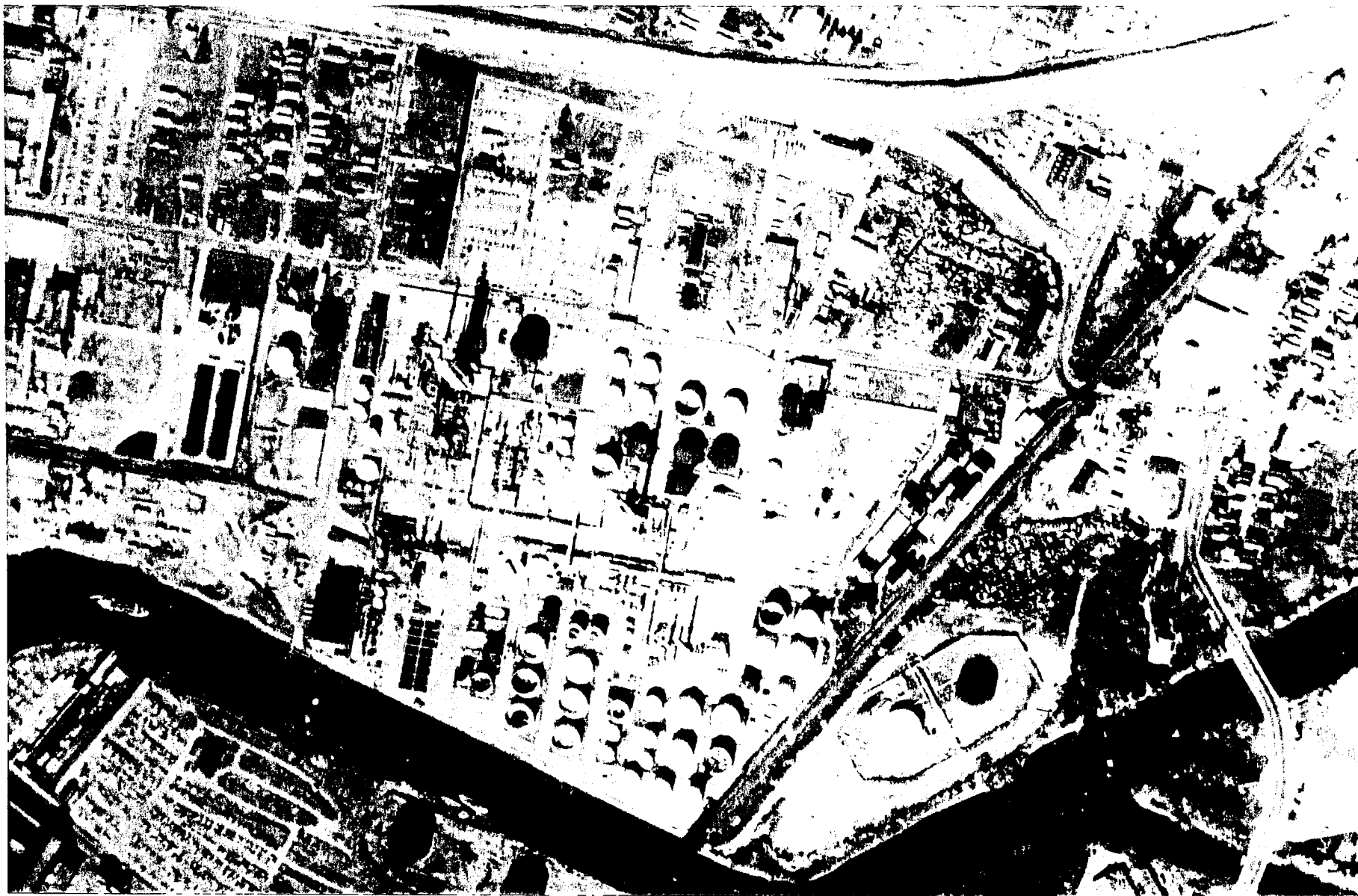


Approximate Scale: 1 inch = 510 feet

Obtained from National Aerial Resources

NAR SN# 182P 00-0077C

October 31, 1978

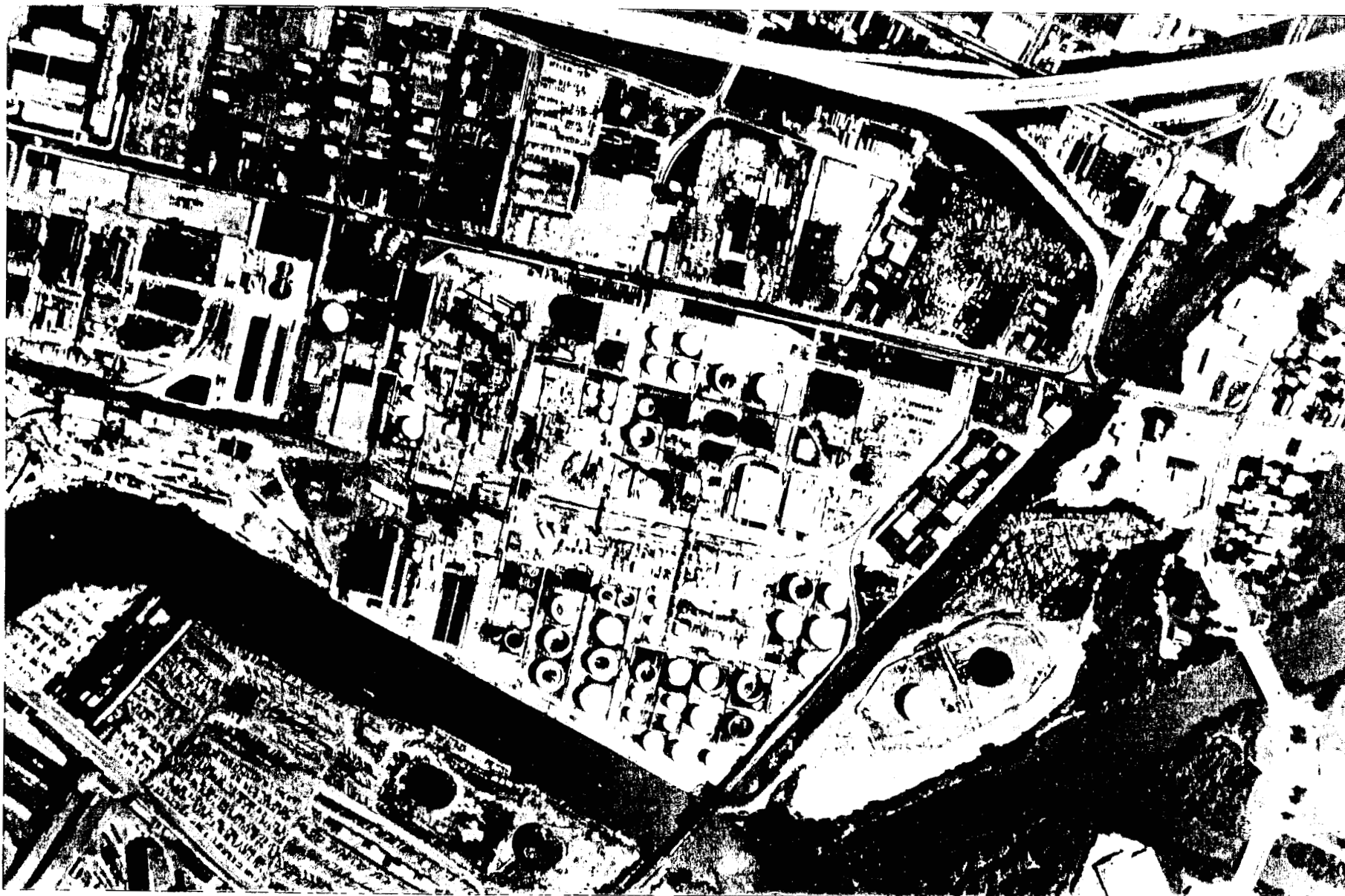


Approximate Scale: 1 inch = 490 feet

Obtained from National Aerial Resources

NAR SN# 313F 00-0077B

August 20, 1981

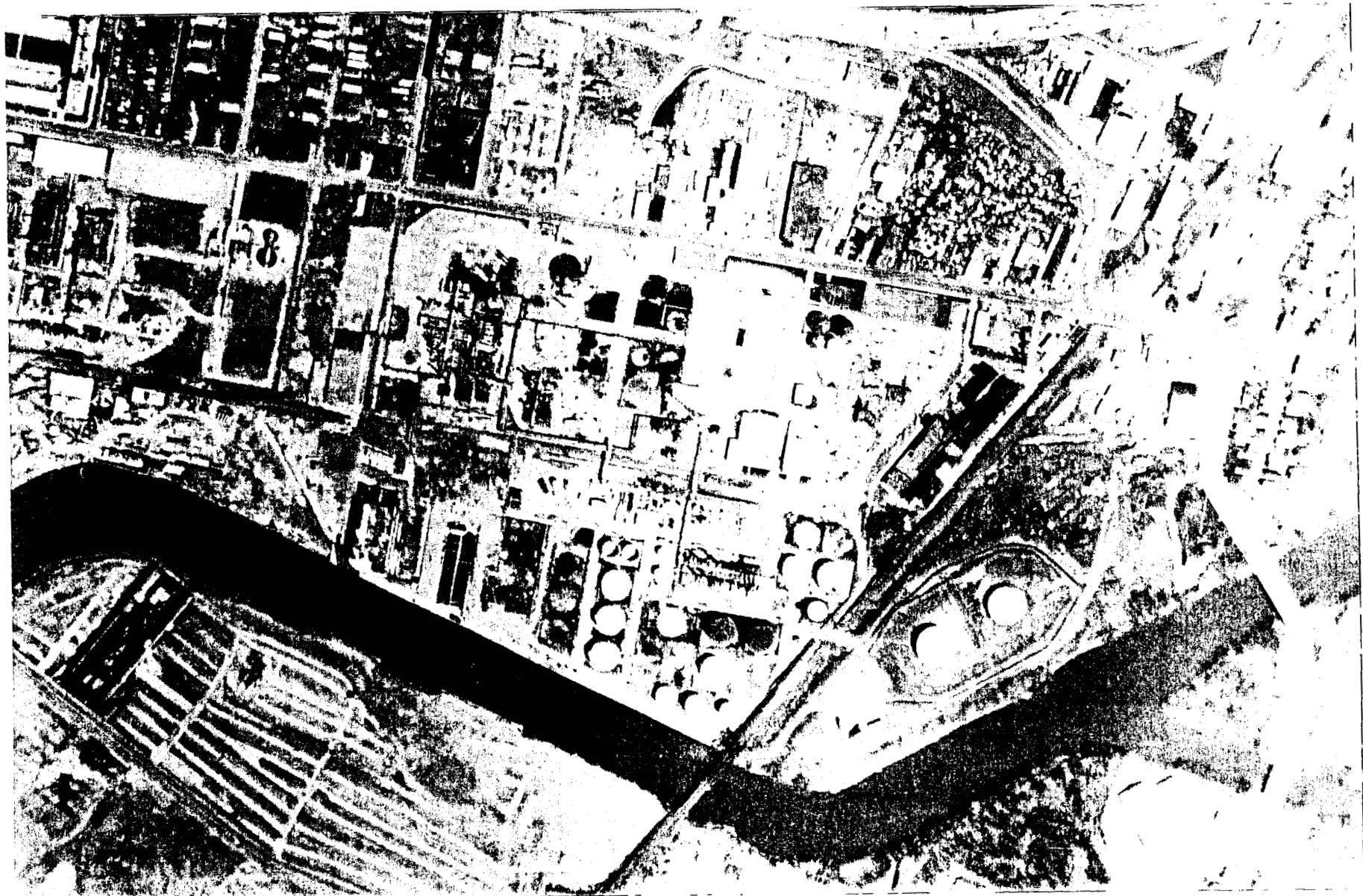


Approximate Scale: 1 inch = 510 feet

Obtained from National Aerial Resources

NAR SN# 205P 00-0077

April 19, 1990



Approximate Scale: 1 inch = 510 feet
Obtained from National Aerial Resources

NAR SN# 122F 00-0077C

APPENDIX F

Product Spills/Releases Documentation

Significant Spills/Releases
in the NTYA/ESPA

NYSDEC SPILL REPORT FORM



DEC REGION# 9 (Buffalo) SPILL NUMBER 9314016
 SPILL NAME: MOBIL - OLD SPILL ELK ST. DEC LEAD: TED
 CALLER'S NAME: G.B. HEFFNER NOTIFIER'S NAME: _____
 CALLER'S AGENCY: MOBIL OIL NOTIFIER'S AGENCY: _____
 CALLER'S PHONE: _____ EXT. _____ NOTIFIER'S PHONE: _____ EXT. _____

SPILL DATE: 02/01/94 TIME: 12:00
 CALL RECEIVED DATE: 02/25/94 TIME: 12:00 RECEIVED BY CID #: _____

| Material Spilled | Mat. Class | Am't Spilled | Units | Am't Rec |
|---------------------|--|----------------|---------------------------------|----------------|
| 1) <u>WASTE OIL</u> | <input type="radio"/> Pet-Haz-Other-Unk. | <u>Unknown</u> | <input type="radio"/> Gal - Lbs | <u>Unknown</u> |
| 2) _____ | <input type="radio"/> Pet-Haz-Other-Unk. | _____ | <input type="radio"/> Gal - Lbs | _____ |
| 3) _____ | <input type="radio"/> Pet-Haz-Other-Unk. | _____ | <input type="radio"/> Gal - Lbs | _____ |
| 4) _____ | <input type="radio"/> Pet-Haz-Other-Unk. | _____ | <input type="radio"/> Gal - Lbs | _____ |

SPILL LOCATION

PLACE: MOBIL - OLD SPILL ELK ST.
 STREET: ELK STREET
 T/C/V: BUFFALO CO: ERIE
 CONTACT: _____
 PHONE: _____ EXT. _____

POTENTIAL SPILLER

NAME: MOBIL OIL
 STREET: 1 BABCOCK STREET
 CITY: BUFFALO
 STATE: NY ZIP: 14210-2250
 CONTACT: _____
 PHONE: _____ EXT. _____

SPILL CAUSE

Human Error Tank Test Failure Tank Failure
 Traffic Accident Housekeeping Tank Overfill
 Equipment Failure Deliberate Other
 Vandalism Abandoned Drums Unknown

SPILL SOURCE

Gas Station Private Dwelling Non-Maj F
 Passenger Vehicle Vessel Comm/Ind
 Comm. Vehicle Railroad Car Non-Comm
 Tank Truck Major Facility Unknown

RESOURCE AFFECTED

On Land Groundwater Air
 In Sewer Surface Water

SPILL REPORTED BY

Responsible Party Tank Tester Local Age
 Affected Persons DEC Federal Go
 Police Department Citizen Other
 Fire Department Health Dept.

** WATERBODY: _____

CALLER REMARKS: RECEIVED PHASE I SITE ASSESSMENT.

| * PBS Number | Tank Number | Tank Size | Test Method | Leak |
|--------------|-------------|-----------|-------------|-------|
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |

PRIMARY CONTACT CALLED DATE: _____ TIME: _____ hrs. REACHED DATE: _____ TIMEs. _____
 SECONDARY CONT. CALLED DATE: _____ TIME: _____ hrs. FAXED BY CID#: _____

| | | | |
|------------------------|--|---|-----------------------------|
| PIN # | T & A | Cost Center | ISR to Central Office |
| Cleanup Ceased | Meets St'ds | NO | Last Inspection |
| RP-CUI | ENF-INIT | INVS-COM | CAP |
| UST Trust Eligible YES | Site <input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E | Resp. Party <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 | Reg Close Date <u>03/96</u> |

Spill Number: 9314016 **Spill Name:** MOBIL - OLD SPILL ELK ST. **Printed on:** 01/07/00

DEC REMARKS

02/17/95: WILL REQUEST ADDITIONAL WORK AND POSSIBLE REMEDIATION.

01/03/96: SPILL CLOSED 1/3/96. SITR BEING ADDRESSED UNDER CNSENT ORDER WITH MOBIL OIL. SEE SPILL NUMBER 880892 FOR FOLLOW UP.

Significant Spills/Releases in the FRA

SPILL REPORT

FACILITY: BUFFALO TERMINAL

LOCATION OF SPILL BUFFALO TERMINAL

DATE/TIME DISCOVERED 7/31/91 0930

TIME REPORTED _____

PERSON DISCOVERING P. A. HAZLETT

TYPE OF PRODUCT QUENCH OIL AMOUNT INITIAL 500
FINAL 3,000

SUPERVISOR NOTIFIED G. B. HEFFNER

N.Y.D.E.C. 1-800-457-7362 - NORMAL WORKING HOURS

518/457-7362 AFTER HOURS

NAME: BRETT PUTNAM TIME 1110

SPILL # 9104672

COMMENTS: _____

LOCAL D.E.C. - MON - FRI - 8:00 A.M. - 5:00 P.M.

716/847-4590

NAME: MIKE HINTON TIME 1110

COMMENTS: MIKE VISITED SITE. HE REQUESTED THAT WE NOTIFY
THE BUFFALO SEWER AUTHORITY AND WE GIVE HIM A COPY OF THE
ANALYSIS OF THE OIL. HE RETURNED 8/2/91 AND REVIEWED THE CLEAN
UP OPERATION. HE ASKED FOR A COPY OF THE DISPOSAL PAPERWORK.
NATIONAL RESPONSE CENTER - 1-800-424-8802

NAME: UNKNOWN TIME 1130

SPILL # 81721

COMMENTS: ASKED IF IT WOULD REACH THE RIVER.
WE SAID NO

SPILL REPORT

-2-

STATE POLICE: 716/941-9300

NAME: _____ TIME: _____

COMMENTS: _____

LOCAL FIRE & POLICE "911" - 716/856-1870

NAME: _____ TIME: _____

COMMENTS: _____

BUFFALO SEWER AUTHORITY - IF THE SPILL HAS THE POTENTIAL OF REACHING THE SEWER STATION

TELEPHONE # 716/883-1820

NAME: BARBRA TIME: 1315

COMMENTS: BILL SCHMIT VISITED SITE AT 1500 HOURS AND SAID ALL WAS OK

SOURCE OF SPILL AND DESCRIPTION: AN ABOVE GROUND TANK HOLDING APPRO. 3000 GALLONS WAS BEING EMPTIED WHEN THE VALVE BECAME STUCK OPEN. THE PRODUCT SPILED ON TO A CONCRETE PAN AND INTO THE TERMINAL'S SEWER.

ACTION TAKEN: CLEANED PAN AND USED VAC TRUCK 7/31/91 & 8/1/91 TO CLEAN OUT SEWER



Research Oil Company
 2777 Broadway Ave.
 Cleveland, Ohio 44115
 216-623-8383
 FAX-216-623-8393

WASTE PROFILE SHEET

Prelim. #: 8'2'
 Salesperson _____
 Approval Fee RUSH 350
 Date 9-19-00

1. GENERAL INFORMATION

Generator's Name Mobil Oil Corp.
 Facility Street Address 1 Babcock St.
 City, County, State, Zip Rochester, NY 14210 Phone # (716) 827-5118
 Generator Contact Mark McEllan Fax # ()
 EPA I.D.# _____
 Mail Invoice To: Same as above Generator Billing Address Broker Other
 (If different than above, please provide address below)
 Company Name Clean Harbors of Syracuse
 Street Address _____
 City, State, Zip _____ Phone # (315) 463-1349
 Contact Linda Kemp Fax # ()

2. WASTE STREAM DESCRIPTION

Generator Common Name for Waste QUENCH OIL
 Process Description OIL REFINERY
 Projected Volume Gals Per Month _____ Quarter _____ Year _____
 Quantity on hand 10,100 gal - ONE TIME
 Storage Bulk _____ Drums _____ Other _____
 Date Sampled _____ Type Container _____ Size _____
 Type of Sampling Method _____
 Were Container and Sampling Device Clean? Yes No

3. HAZARDOUS PROPERTIES (complete if known)

USEPA Hazardous Waste? Yes No USEPA Hazardous Code(s) _____
 State Hazardous Waste Yes No State Hazardous Code(s) _____

Hazardous Characteristics

- None Ignitable Radioactive Etiological EP Toxic
- Pesticide Manufacturing Waste Reactive PCBs Corrosive

Is this product a hazardous material as defined by the United States Department of Transportation pursuant to the hazardous material transportation act? Yes No

*(See CFR 40PAR 172.101 for hazardous materials list and characteristics)

If yes, please specify the following:

Proper D.O.T. Shipping Name _____ D.O.T. Hazard Class _____
 D.O.T. Identification Number(s) _____ D.O.T. Shipping Container(s) _____

4. WASTE COMPOSITION

Identify all components present in Waste Stream (must total 100%)

| COMPONENT | CONCENTRATION (Units) |
|-----------|-----------------------|
| 1. _____ | _____ |
| 2. _____ | _____ |
| 3. _____ | _____ |
| 4. _____ | _____ |
| 5. _____ | _____ |
| 6. _____ | _____ |
| 7. _____ | _____ |
| 8. _____ | _____ |
| 9. _____ | _____ |
| 10. _____ | _____ |



11111-000-0000
Cleveland, Ohio 44115
216-623-8383
FAX-216-623-8393

This section is for research use only.

Acceptance # 812
Generator Mobile Oil Corp.

Date logged in 091990 Date completed 9/21/90 Box # 259

% oil 99%
% water 1%
% solids _____
Pounds/Gal 7.80
pH 6 s.u.
COD _____ ppm
Viscosity 45
% Total Chlorination 0.003
% Volatile Chlorination ND
Flash Point 200 °F
Phenol _____ ppm
Kit _____ ppm
Aminoantipyrine _____ ppm
Layered NONE

Appearance Brownish / red

Odor Mild

Lab Comments P.O. 59578

Treatment Method(s) _____

Quote at following prices
% Oil Price Per Gallon

Additional Surcharges _____

Solids Per Gallon _____
Price Per Drum _____

Aqueous Metals - All units reported in ppm
Ag _____ Cr _____ Ni _____
As _____ Cu _____ Pb _____
Ba _____ Fe _____ Se _____
Cd _____ Hg _____ Zn _____

Organic Metals - All units reported in ppm
Cd ND Cr 4.4 Pb 13.2

Other _____
Solvent Analysis Yes No (reported in %)
Methanol _____ Methylene chloride _____
Ethanol _____ MEK _____
Acetone _____ sec-butanol _____
2-Propanol _____ n-butanol _____
Toluene _____ Ethyl Acetate _____
Iso-butanol _____ 1,1,1, Trichloroethane _____
Xylene _____ MIBK _____
Others _____
Acid Test N/A

Caustic Test N/A

Ammonia _____
BTU Value _____

D.O.T. DESCRIPTION
Shipping Name Waste Oil N.O.S.
Hazard Class Combustible liquids
ID Number NA 1270

EPA Codes NONE

Subject to Land Ban Yes No
Consent to Service Yes No

Lab Fees _____
Transportation, labor and pumping _____ per load
Demurrage (1 1/2 hours free pumping) _____
Misc. _____

Rejections, Why? _____

Approval Lab Manager OK 9/21/90 DDW



WASTE MATERIAL PROFILE SHEET

R 78728

Profile Number

A. GENERAL INFORMATION

GENERATOR: Mobile Oil Corp. (As will appear on manifest) BILL TO: CHI Syracuse (Customer)

FACILITY ADDRESS: One Babcock St. CUSTOMER CONTACT: Linda Kemp

Buffalo NY 14210 CUSTOMER PHONE: 315-463-1349

TECHNICAL CONTACT: Mark McLellan TITLE: Proj. Mgr GENERATOR U.S. EPA ID #: NY1002107419 PHONE: (716) 827-5718

GENERATORS COMMON NAME FOR WASTE: QUENCH OIL

PROCESS GENERATING WASTE: OIL REFINERY

B. PHYSICAL CHARACTERISTICS OF WASTE

| | | | |
|---------|----------|-------------------|-------------|
| BTU/LB. | PH RANGE | % ORGANIC HALOGEN | ODOR |
| | | | <u>oily</u> |

PHYSICAL STATE @ 70°F (CHECK SEVERAL BOXES IF APPLICABLE)

THICK VISCOUS LIQUID LIQUID WITH NO SETTLED SOLIDS LIQUID/SOLID MIXTURE SOLID WITHOUT FREE LIQUIDS POWDER

FLASH POINT (°F)

< 100 100-140 141-200 > 200 NO FLASH

C. COMPOSITION (INCLUDE INERT COMPONENTS, DEBRIS, ETC.)

OIL/WATER 100 %

POH SOLUBA %

RUST APPROVAL %

% LIQUID: 100% % SOLID: _____

H. METALS TOTAL (PPM) EPA EXTRACTION PROCEDURE (mg/L)

| | | | |
|-------------------|-----------|---------------|-----------|
| ARSENIC (As) | <u>NO</u> | SELENIUM (Se) | <u>NO</u> |
| BARIUM (Ba) | <u>NO</u> | SILVER (Ag) | <u>NO</u> |
| CADMIUM (Cd) | <u>NO</u> | COPPER (Cu) | <u>NO</u> |
| CHROMIUM (Cr) | <u>NO</u> | NICKEL (Ni) | <u>NO</u> |
| CHROMIUM HEX Cr-6 | <u>NO</u> | ZINC (Zn) | <u>NO</u> |
| LEAD (Pb) | <u>NO</u> | TIN (Sn) | <u>NO</u> |
| MERCURY (Hg) | <u>NO</u> | OTHER | <u>NO</u> |

D. DEPT. OF TRANSPORTATION SHIPPING INFORMATION

D.O.T. HAZARDOUS MATERIAL YES NO **PLEASE ADVISE**

D.O.T. SHIPPING NAME: _____

D.O.T. HAZARD CLASS: _____

UNNA # _____ REPORTABLE QUANTITY VALUE: _____

I. OTHER COMPONENTS -- TOTAL (PPM)

| | | | |
|----------|-----------|--------------------------|-----------|
| CYANIDES | <u>NO</u> | PCB'S P001-P008 SOLVENTS | <u>NO</u> |
| SULFIDES | <u>NO</u> | | |

PESTICIDES YES NO SPECIFY: _____

WATER REACTIVE YES NO DIOXINS YES NO

E. SHIPMENT METHOD

BULK LIQUID BULK SOLID DRUM (SIZE) _____

OTHER (SPECIFY): _____

J. SAMPLE STATUS

REPRESENTATIVE SAMPLE HAS BEEN SUPPLIED

CLEAN HARBORS HAS WAIVED THE SAMPLE REQUIREMENT FOR THE FOLLOWING REASON

WASTE IS AN UNUSED (VIRGIN) PRODUCT (ATTACH MSDS)

WASTE HAS BEEN PREVIOUSLY RECEIVED BY CLEAN HARBORS

WASTE CAN NOT BE SAMPLED

WASTE IS NON HAZARDOUS

WASTE WAS GENERATED FROM A SPILL

F. ANTICIPATED VOLUME

10,000 (QUANTITY) PER _____

GALS. DRUMS CUBIC YDS.

ONE TIME QUARTER YEAR

G. WASTE DISPOSAL STATUS

U.S. EPA HAZARDOUS WASTE YES NO

U.S. EPA HAZARDOUS WASTE NUMBER(S): _____

STATE HAZARDOUS WASTE YES NO

STATE HAZARDOUS WASTE NUMBER(S): _____

IS THIS WASTE BANNED FROM LAND DISPOSAL UNDER FEDERAL REGULATIONS?

YES NO

SPECIFIC GENERATOR REQUESTS FOR DISPOSAL: _____

K. OTHER COMMENTS (FOR CUSTOMER'S USE)

L. FOR CLEAN HARBORS USE

GENERATOR'S CERTIFICATION

I hereby certify that all information submitted in this and attached documents is correct to the best of my knowledge. I certify that the waste is not radioactive, pyrophoric, explosive or shock sensitive. I also certify that any samples submitted are representative of the actual waste.

Agent for Linda Kemp

CHI 102 AUTHORIZED SIGNATURE

LINDA KEMP

9/17/90

This Memorandum is an acknowledgment that a Bill of Lading has been issued and is not the Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

Shipper's No.

Carrier GRIFFIN IND. SVC Carrier's No. 7A-283

RECEIVED, subject to the classifications and tariffs in effect on the date of the receipt by the carrier of the property described in the Original Bill of Lading

at JULY 31 1991 from MOBIL, BARBARK ST, BUFFALO N.Y.

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classification in effect on the date hereof, if this is a rail or a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back thereof, set forth in the classification or tariff which governs the transportation of this shipment and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.


Consigned to INDUSTRIAL OIL TANK SERVICE (Mail or street address of consignee—For purposes of notification only.)

Destination RT 91 & CONRAIL VERONA State N.Y. Zip Code _____ County _____

Delivery Address _____ (★To be filled in only when shipper desires and governing tariffs provide for delivery thereof.)

Route _____

Delivering Carrier _____ Car or Vehicle Initials HU 5857 No. _____

| No. Packages | Kind of Package, Description of Articles, Special Marks, and Exceptions | *Weight (Sub. to Car.) | Class or Rate | Check Column | Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges. |
|--------------|--|------------------------|---------------|--------------|---|
| 1 | 3200 GAL QUENCHER OIL NON-HAZARDOUS NON-DOT REGULATED (UN 1993) | | | |  (Signature of Consignor) If charges are to be prepaid, write or stamp here, "To Be Prepaid." |
| | | | | | |
| | | | | | Received \$ _____ To apply in prepayment of the charges on the property described herein. |
| | | | | | Agent or Cashier |

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight."

NOTE—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____

† If boxes used for this shipment conform to the specifications set forth in the box maker's certificate thereon, and all requirements of Uniform Freight Classification.
 ‡ Stamp's imprint in lieu of stamp; not a part of bill of lading approved by the Interstate Commerce Commission.

Per _____ (The signature here acknowledges only the amount prepaid.)

Charges Advanced: \$ _____

Paul H. Platt Shipper, Per _____ Agent, Per _____ **3**

This Memorandum is an acknowledgment that a Bill of Lading has been issued and is not the Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

Shipper's No.

Carrier GRIFFIN INDUSTRIAL Carrier's No. 7A-283

RECEIVED, subject to the classifications and tariffs in effect on the date of the receipt by the carrier of the property described in the Original Bill of Lading

at 8/2 19 91 from _____
 the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party of any time interested in all or any of said property, that every service to be performed hereunder shall be subject in all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classification in effect on the date hereof, if this is a rail or a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back thereof, set forth in the classification or tariff which governs the transportation of this shipment and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Consigned to INDUSTRIAL OIL SERVICE INC (Mail or street address of consignee—for purposes of notification only.)

Destination RT 319 CANRAIL State NY Zip Code _____ County VERONA

Delivery Address ★ _____
 (★ To be filled in only when shipper desires and governing tariffs provide for delivery thereat.)

Route _____

Delivering Carrier _____ Car or Vehicle Initials VAL TRUCK No. HU 5357

| No. Packages | Kind of Package, Description of Articles, Special Marks, and Exceptions | Weight (Sub. to Car.) | Class or Rate | Check Column | Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges. |
|--------------|---|-----------------------|---------------|--------------|---|
| 1 | <u>5 GAL QUENCHER OIL</u> <u>NON-HAZARDOUS</u> <u>NON-DOT REGULATED</u> <u>(UN 1993)</u> | | | | <u>Rick Lambert</u> (Signature of Consignor) If charges are to be prepaid, write or stamp here, "To Be Prepaid." |
| | | | | | Received \$ _____ To apply in payment of the charges on the property described hereon. |

If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight."

NOTE—Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.

he agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____

When boxes used for this shipment conform to the specifications set forth in the box maker's certificate thereon, and the requirements of Uniform Freight Classification, the shipper's imprint in lieu of stamp; not a part of bill of lading approved by the Interstate Commerce Commission.

Agent or Cashier _____
 Per _____
 (The signature here acknowledges only the amount prepaid.)
 Charges Advanced: \$ _____

Paul [Signature] Shipper, Per _____ Agent, Per _____

NYSDEC SPILL REPORT FORM



DEC REGION# 9 (Buffalo) SPILL NUMBER 9104672
 SPILL NAME: MOBIL OIL - TERMINAL DEC LEAD: MJH
 CALLER'S NAME: GLEN HEFNER NOTIFIER'S NAME: _____
 CALLER'S AGENCY: MOBIL OIL NOTIFIER'S AGENCY: _____
 CALLER'S PHONE: (716) 827-5127 EXT. _____ NOTIFIER'S PHONE: _____ EXT. _____

SPILL DATE: 07/31/91 TIME: 09:30
 CALL RECEIVED DATE: 07/31/91 TIME: 11:21 RECEIVED BY CID #: _____

| Material Spilled | Mat. Class | Am't Spilled | Units | Am't Rec |
|-----------------------------|--|--------------|---------------------------------|--------------|
| 1) <u>UNKNOWN PETROLEUM</u> | <input type="radio"/> Pet-Haz-Other-Unk. | <u>3,200</u> | <input type="radio"/> Gal - Lbs | <u>3,100</u> |
| 2) _____ | Pet-Haz-Other-Unk. | _____ | Gal - Lbs | _____ |
| 3) _____ | Pet-Haz-Other-Unk. | _____ | Gal - Lbs | _____ |
| 4) _____ | Pet-Haz-Other-Unk. | _____ | Gal - Lbs | _____ |

SPILL LOCATION
 PLACE: MOBIL OIL - TERMINAL
 STREET: 1 BABCOCK STREET
 T/C/V: BUFFALO CO: ERIE
 CONTACT: _____
 PHONE: _____ EXT. _____

POTENTIAL SPILLER
 NAME: MOBIL OIL
 STREET: 1 BABCOCK STREET
 CITY: BUFFALO
 STATE: NY ZIP: 14210
 CONTACT: _____
 PHONE: _____ EXT. _____

SPILL CAUSE

| | | |
|--|--------------------|---------------|
| Human Error | Tank Test Failure* | Tank Failure |
| Traffic Accident | Housekeeping | Tank Overfill |
| <input checked="" type="radio"/> Equipment Failure | Deliberate | Other |
| Vandalism | Abandoned Drums | Unknown |

SPILL SOURCE

| | | |
|-------------------|---|-----------|
| Gas Station | Private Dwelling | Non-Maj F |
| Passenger Vehicle | Vessel | Comm/Ind |
| Comm. Vehicle | Railroad Car | Non-Comm |
| Tank Truck | <input checked="" type="radio"/> Major Facility | Unknown |

RESOURCE AFFECTED

| | | |
|--|-----------------|-----|
| <input checked="" type="radio"/> On Land | Groundwater | Air |
| In Sewer | Surface Water** | |

SPILL REPORTED BY

| | | |
|--|--------------|------------|
| <input checked="" type="radio"/> Responsible Party | Tank Tester | Local Age |
| Affected Persons | DEC | Federal Go |
| Police Department | Citizen | Other |
| Fire Department | Health Dept. | |

CALLER REMARKS: FAULTY VALVE ON ABANDONED EQUIPMENT BEING PREPARED FOR DEMOLISHION RELEASED QUENCH TO GROUND

| * PBS Number | Tank Number | Tank Size | Test Method | Leak |
|--------------|-------------|-----------|-------------|-------|
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |

PRIMARY CONTACT CALLED DATE: _____ TIME: _____ hrs. REACHED DATE: _____ TIME: _____
 SECONDARY CONT. CALLED DATE: _____ TIME: _____ hrs. FAXED BY CID#: _____

| | | | |
|--------------------|-----------------|---|--|
| PIN # | T & A | Cost Center | ISR to Central Office |
| Cleanup Ceased | <u>08/21/91</u> | Meets St'ds <input checked="" type="checkbox"/> YES | Last Inspection <u>08/05/91</u> NO Penalty |
| RP-CUI | ENF-INIT | INVES-COM | CAP |
| UST Trust Eligible | NO | Site: A B C D E | Resp. Party 1 2 3 4 5 6 Reg Close Date <u>08/21/91</u> |

Created on 08/05/91 Last Updated on 04/21/92 Is Updated? NO EDO DATA INPUT
 Date Printed: 01/07/00 PrintFor 1/9/98 AAA

Spill Number: 9104672 Spill Name: MOBIL OIL - TERMINAL

Printed on: 01/07/00

DEC REMARKS

08/05/91: MOBIL OIL CREWS CLEANING UP SPILL, BSA NOTIFIED.

08/14/91: SPILL SATISFACTORLY CLEANED UP MOBIL TO SEND REPORT ON INCIDENT.

08/21/91: MOBIL PROVIDED INCIDENT REPORT NO FURHTER ACTION NECESSARY.

INTEROFFICE CORRESPONDENCE

August 1, 1991

To: J. F. Sullivan

cc: M. Cribbs
P. A. Hazlett

BUFFALO DEMOLITION
PROJECT
STATUS REPORT

Below is the status of the demolition of the Buffalo Refinery.

Accountability

SCRAP From July 1, to July 31, 1991

Number of loads 191
Number of long tons(2240per/ton) 2,000-84

SALVAGE From July 1, to July 31, 1991

Pipe total tons(2000/ton) 22.3
Valves total lbs 89,740
stainless 3,940
Other
Misc. shop parts
Air compressor
250 kva transformer
Switch gear
2 25 hp motors
Compressors and blowers

NOBLE METALS From July 1, to July 31, 1991

Aluminum total pounds 2,000
Brass total pounds 75,020
Copper total pounds 8,460
Stainless total pounds 5,920
Lead total pounds 47,040
Insulated copper total pounds 24,880
Stainless 400 total pounds 57,600

SAFETY

Attached are the minutes from the weekly meetings for July 18, & 26.

INCIDENTS From July 1, to July 31, 1991

Injuries

There no injuries for the month of July.

Spills

There was one spill reported in the month of July. That was the 3000 gallons of quench oil. As of 8/1 we had shipped 3,200 gallons to Industrial Oil Tank Service and have another 800 gallons approx. on the vac truck. The vac truck is again scheduled in here on 8/2

Fires

There no fires in the month of July.

General status

The TCC tower is scheduled to come down on Saturday 8/3/91 at approx. 0800 hours. Meetings are to be held on 8/1/91 with Pinto Equipment and Mobil and another meeting on Friday 8/2/91 with all other involved in the blast parties.



G. B. Heffner
Terminal Superintendent
Buffalo Terminal

Significant Spills/Releases in the CRPA

Mobil Oil Corporation

1 BABCOCK STREET
BUFFALO, NEW YORK 14210-2250

November 16, 1988

New York State Department
of Environmental Conservation
600 Delaware Avenue
Buffalo, New York - 14202

Attn.: Michael J. Hinton, P.E.

Dear Mr. Hinton:

Per your request, following is a report on the pollution incident of October 25, 1988 at the Buffalo Terminal.

While emptying Tank #22 for demolition and pumping product through a pipe to Tank #221, the line ruptured. Approximately 34,000 gallons of No. 2 Fuel Oil flowed into a contained concrete pit area which has both concrete walls and a concrete floor. After the pump was shut off and valves closed at both ends of the ruptured pipe, the contained product was picked up with two vacuum trucks and pumped back into a storage tank. There was no threat to the Buffalo River.

The recovery operation was completed at approximately 9:00 PM that same day. A total of 33,894 gallons were recaptured and pumped back to storage. This remaining gallonage was then captured by our API separator. In addition, the ruptured line has been replaced and hydrostatically tested with water to ensure safe future operations.

If we can be of further assistance, please call me at (716) 827-5125.

Sincerely,

MOBIL OIL CORPORATION



K. M. PARENT
Complex Manager
Western New York Complex

BFLOSP/csn

WESTERN NEW YORK COMPLEX
October 27, 1988

J. A. WYATT
Schaumburg

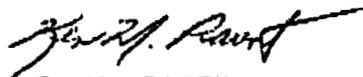
R. S. Kraus - Fairfax (5S508)
R. B. Maynard - Fairfax (4N505)
D. H. McNerney - Buffalo

BUFFALO TERMINAL
NO. 2 FUEL OIL SPILL

Attached is the Incident Report for the spill which occurred at the Buffalo Terminal on October 25, 1988. In addition, attached is a detailed summary which outlines the sequence of events and proper actions which should be taken in the future to prevent similar occurrences. This summary also contains inventory records, diagrams and photographs.

It should be noted that all but 168 gallons were recovered from the total spill of 34,062 gallons. All of this lost gallonage was captured in our API separator.

If there are any further questions, please advise.



K. M. PARENT
Complex Manager

Attachment
BT32F/csn

TO: Region Environmental

CC: Region Operations Manager
Region Claims Manager
Region Safety Manager
Region Public Relations Manager
Engineering Center Manager

Leak/Pollution Incident Report - Wholesale Plant

General Information

- . Facility Buffalo Terminal
- . Location 1 Babcock Street, Buffalo, New York - 14210
- . Date/Time Reported: 10/25/88 - 12:45 P.M.
- . Reported By: D. H. McNerney

Description of Reported Leak or Hazard

Approximately 34M gallons of No. 2 Fuel Oil leaked into a contained concrete area. We were attempting to empty Tank #22 for demolition and flush the new sales line with the product going to Tank #221. The new sales line was actually a revised line which utilized existing piping from the refinery.

Investigation Results

- . Loss indicated by inventory records 34M gallons.
- . Source of Leakage or Cause of Spill: While pumping No. 2 Fuel Oil through a revised Diesel line, the line ruptured releasing the oil into our TBT concrete pit area.
- . Hazardous situation confirmed (Describe situation): No. 2 Fuel Oil released in our treating, blending and transfer pit area.

Issued
New

4200j/15

Page 1

Corrective Action

Action taken to make safe: 1. Pump shut off and valves closed at both ends of the ruptured pipe. 2. Area was barricaded. 3. Product was picked up with two vacuum trucks and pumped back to a storage tank (Tank #22).

Date Made Safe: 10/25/88 - 9:00 P.M.

Local Agencies Notified:

| Agency or Title | Persons | Date and Time |
|--------------------------------|-----------------------|------------------------------|
| <u>NYS DEC - Albany</u> | <u>Cindy Cantwell</u> | <u>10/25/88 - 12:45 P.M.</u> |
| <u>Buffalo Sewer Authority</u> | <u>Frank Cefalu</u> | <u>10/25/88 - 12:50 P.M.</u> |
| <u>NYS DEC - Buffalo</u> | <u>Mike Hinton</u> | <u>10/25/88 - 12:55 P.M.</u> |

Repair action taken or planned: Sales line alternatives being evaluated. It is going to be difficult to replace the ruptured pipe due to the confined pipe tunnel area. Currently using Tank #221 (No. 2 Fuel Oil) for sales.

Product Recovery Required: Yes No

By (Agency) Environmental Oil and Mobil Oil Corporation

Report prepared by: _____

Approved: _____
Manager of Plant Operations

Issued
New
4200j/16

Page 2
Final

**BUFFALO TERMINAL
NO. 2 FUEL OIL SPILL
OCTOBER 25, 1988**

DETAILED SUMMARY

- We were attempting to empty Tank #22 for demolition and flush the "new" sales line. The product transfer began at approximately 10:55 A.M. Please refer to Diagram #1. The "new" sales line was actually a revised line which utilized existing (idle) piping from the refinery. The "new" sales line consists of a twelve inch line running from Tank #90 to the TBT pit area and a six inch line running from the TBT pit area to the loading rack. It was our intent that the "new" sales line transfer product from the "new" No. 2 Fuel Oil Tanks (Tks. #90 and #175) to the loading rack. Therefore, our product flow path in emptying Tank #22 was as follows:
 - 1) Tank #22 to the TBT (transfer) pit area (10" line)
 - 2) TBT pit area to Tank #90 (6" line)
 - 3) Tank #90 to the TBT pit area (12" line)
 - 4) TBT pit area to Tank #221 (6" line)

- The Chief Bulkplantman handling the transfer was Vern King. His assistant was Joe Serio (Bulkplantman). A problem was detected based on the computer inventory gauges. The inventory level in Tank #221 was not rising significantly. At approximately 11:25 A.M., the pump was shut down. The rupture was found at 11:40 A.M. in an open pipe trench in a six inch pipe located in the TBT concrete pit area (see Diagram #2). The valves were then closed at both ends of the rupture (one in the pit area, one close to the load rack). Although approximately thirty minutes had passed before the pump had been shut down, it must be remembered that a significant amount of time was required to fill the enormous length of pipe involved in the transfer. No negligence or error was found as a result of either operators' actions. They were merely following supervisory instructions to use this particular line.

- Since both ends of the ruptured pipe were blocked off, the remaining product trapped in that line leaked into the TBT pit area. The TBT pit area has concrete walls and a concrete floor. Therefore, the 34,062 gallons spilled were contained in this area (see attached inventory summary). There was no threat to the Buffalo River.

- Both the local and state D.E.C. offices were contacted. Times and persons contacted are listed on the Incident Report. The Buffalo Sewer Authority (B.S.A.) was also notified. Discharge samples into the B.S.A. were taken for a 24 hour period as a precautionary measure. Sample results have not yet been received but we feel certain that no oil beyond the allowable limits was discharged from our API separator.
- Mobil Management notified at this time included J. A. Wyatt, (MPO) and R. B. Maynard (Environmental).
- The product recovery operation began at approximately 12:30 P.M. and ended at 9:00 P.M. Two vacuum trucks were involved (one from Mobil, one from Environmental Oil) and the product was pumped back to Tank #22. All but 168 gallons were recaptured. Since the TBT pit area drains to the API separator via a sewer line, it is assumed that this unrecovered product had weeped through the plugged sewer line and was captured on the API separator.
- During the clean-up operation, the D.E.C. and Coast Guard visited the facility. The Coast Guard examined the Buffalo River and found no evidence of oil. The Terminal did not notify the Coast Guard.

Subsequent visits were made by both the D.E.C. and Coast Guard the following day. The D.E.C. was satisfied with the recovery/clean-up and once again the Coast Guard found no evidence of oil in the Buffalo River. Please note that Government Agency Visit Questionnaires are also attached.

The U. S. Environmental Protection Agency did call the Buffalo Terminal on October 26, 1988 to receive general information regarding the spill.
- We attempted to reach Mark Cohen of Public Relations both at work and home between 4:45 P.M. and 8:30 P.M. on October 25, 1988. Carol Edwards was contacted at approximately 9:30 A.M. the following day. She prepared a press statement to be released only if queried. There still have been no press inquiries to date.
- To prevent similar occurrences in the future, the Buffalo Terminal will ensure that old idle lines will be hydrostatically tested with water prior to use. All supervisory personnel and the blue collar workers have been made aware of this fact.

It was our original intent to hydrostatically test this line when it was full of product. However, old product lines which have been idle for several years must be pressure tested with water first to determine their condition.

The section of ruptured line has been removed (see photographs). It is in the process of being replaced. The entire section of "new" sales line from Tank #90 to the loading rack will then be hydrostatically tested with water.

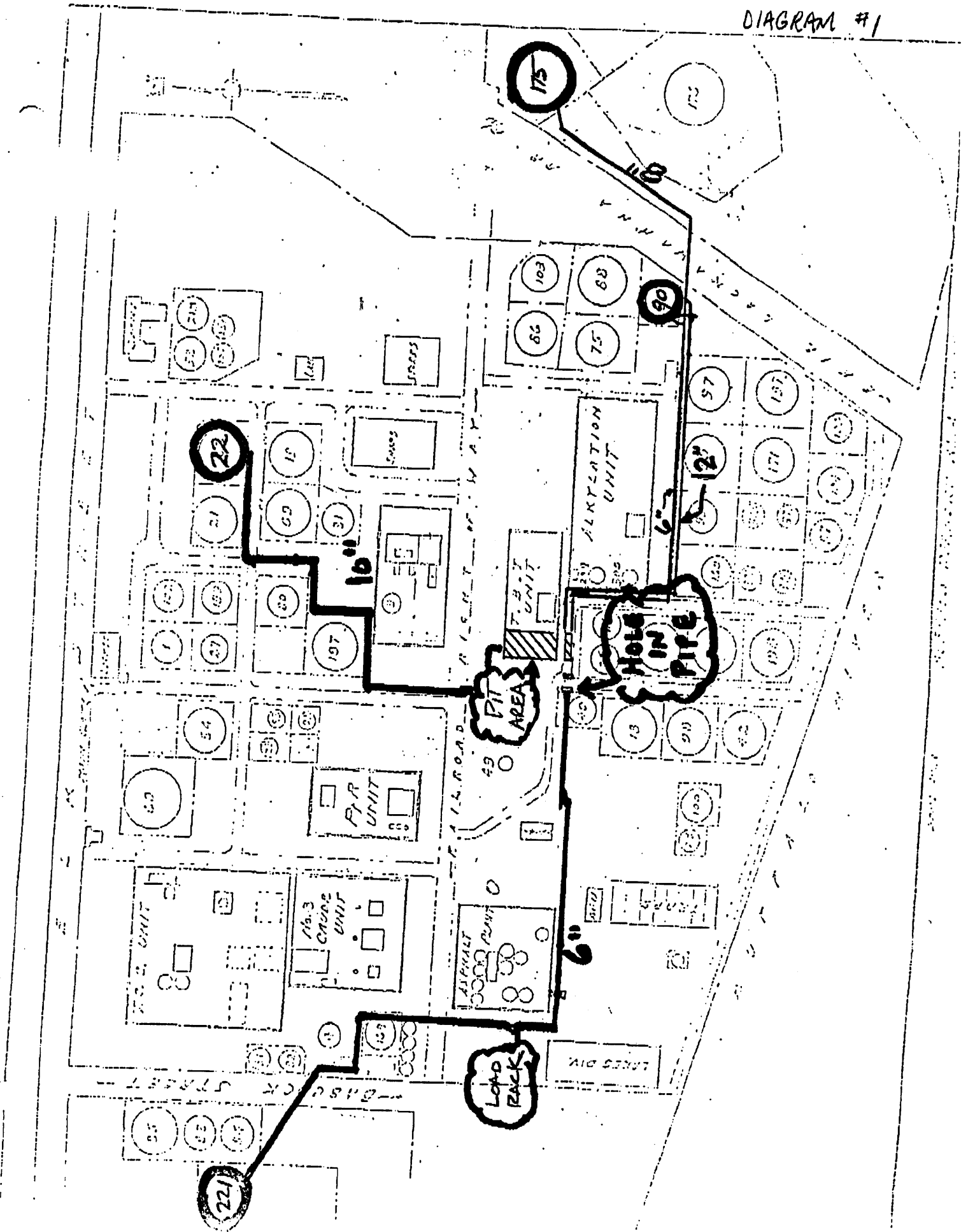
- MEMO; 1) Installation of the "new" sales line was part of A.F.E. 448247 (Capital - \$16,260 and Expense - \$69,510).
- 2) The weather conditions on October 25, 1988 consisted of rain the entire day and occasional thundershowers. The temperature high for the day was 40 degrees fahrenheit.

bt2fo/csn

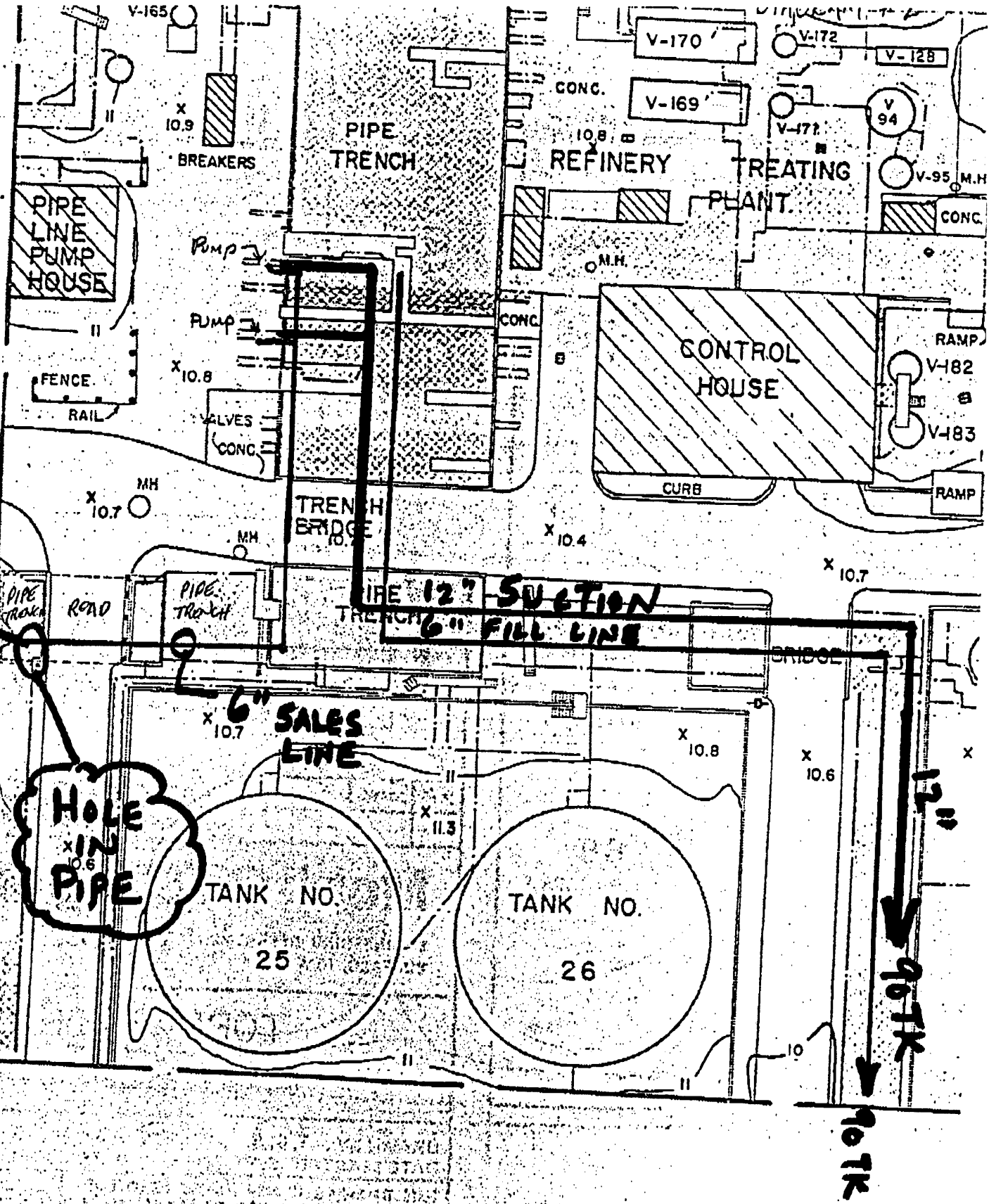
INVENTORY RECORDS

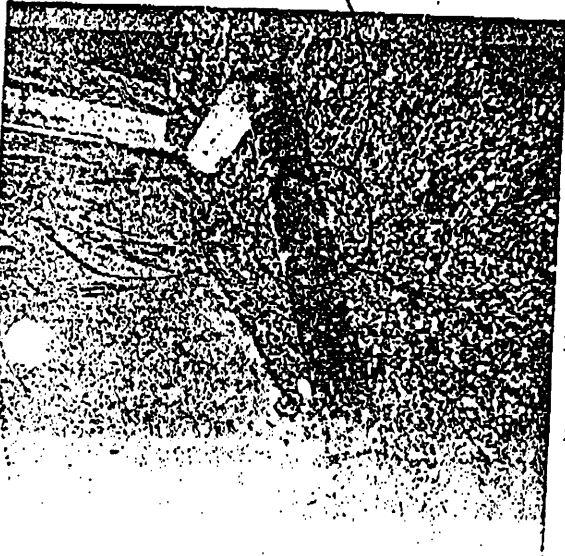
| | <u>QUANTITY (BBS.)</u> | <u>GAUGE</u> |
|--|------------------------|---------------|
| 1) Tank #22 (No. 2 Fuel Oil) before pumping | 22,777 | 18' 9 5/8" |
| Tank #22 after pump shut down | <u>21,913</u> | 18' 1" |
| TOTAL DISCHARGED FROM TANK #22 | 864 | |
| 2) Tank #221 (No. 2 Fuel Oil) before pumping | 10,405 | 10' 3 3/4" |
| Tank #221 after pump shut down | <u>10,458</u> | 10' 4 3/8" |
| TOTAL PUMPED TO TANK #221 | 53 | |
| 3) Total spilled (#1 - #2) | 811 | |
| 4) Tank #22 after Product pump back | 22,721 | 18' 8 7/8" |
| Tank #22 after pump shut down | <u>21,913</u> | 18' 1" |
| TOTAL (PRODUCT & WATER) PUMPED BACK | 808 | |
| 5) Water bottom (TK. 22) after pump back | 302 | 3" |
| Water bottom (TK. 22) before pump back | <u>76</u> | 3/4" |
| TOTAL WATER PUMPED BACK | 226 | |
| 6) Total product recovered (#4 - 5#) | 582 | |
| 7) Product line inventory | | |
| a) Tank #175 to Tank #90 (8" pipe, 1025 ft.) | 65 | |
| b) TBT pit to Tank #90 (12" pipe, 900 ft.) | 128 | |
| c) TBT pit to Tank #90 (6" pipe, 900 ft.) | <u>32</u> | |
| TOTAL INVENTORY IN PRODUCT LINES | 225 | |
| 8) TOTAL PRODUCT LOST INTO API SEPARATOR | | |
| (#3 - #6 - #7) | 4 | (168 Gallons) |

INVREC/csn



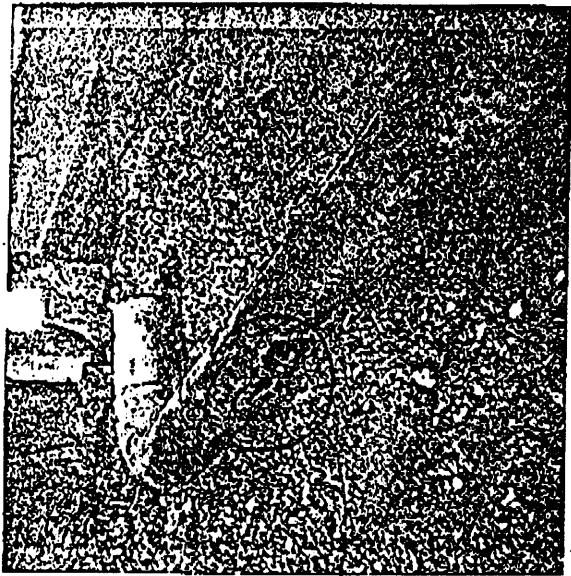
MATCH LINE FOR



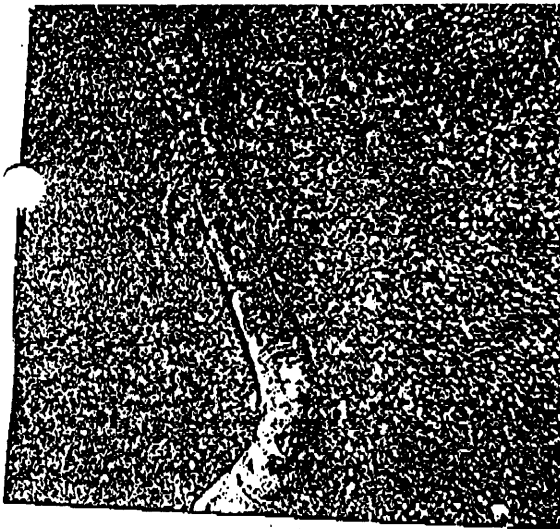


PIPE FROM F.F.O. LINE THAT
CAME UNDER ROAD BY 40 TX,
10-25-88

↑
SURFACE



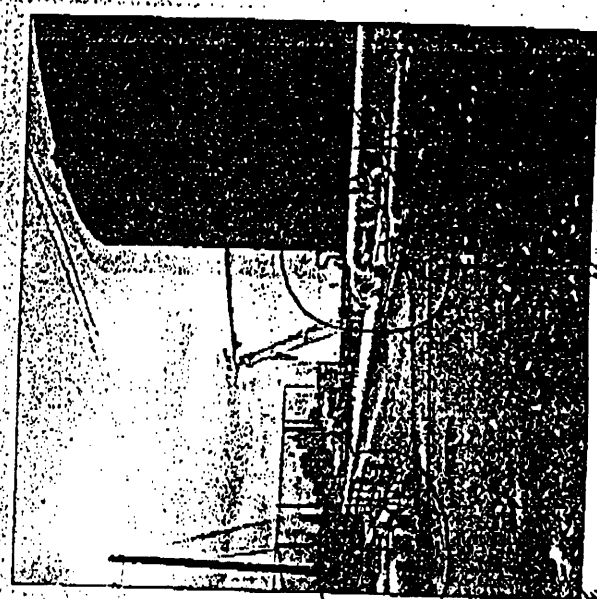
1" PIPE FROM F.F.O. LINE
THAT LEAK UNDER ROAD BY 91 TX
10-25-88



PIPE FROM F.F.O. LINE
THAT LEAKS UNDER ROAD BY 40
10-25-88



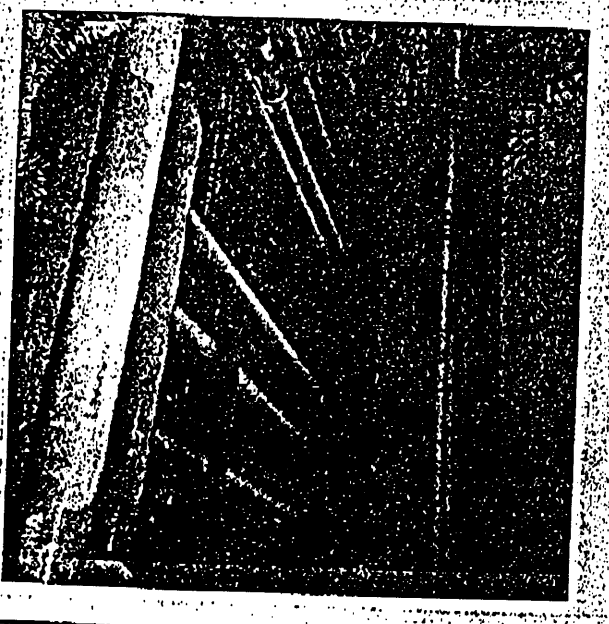
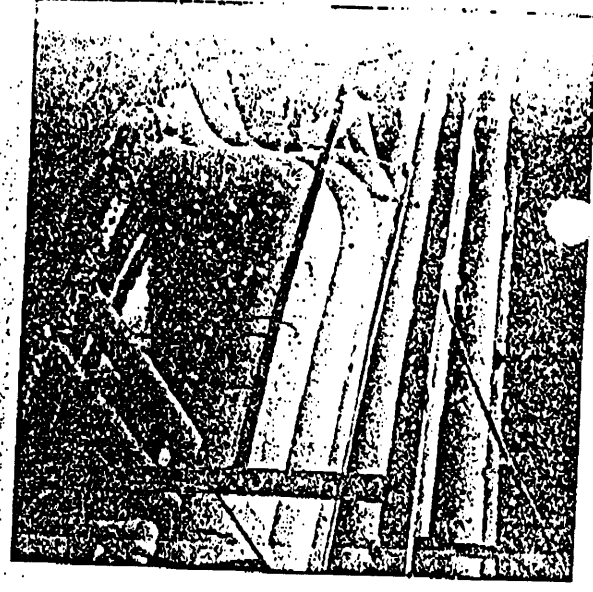
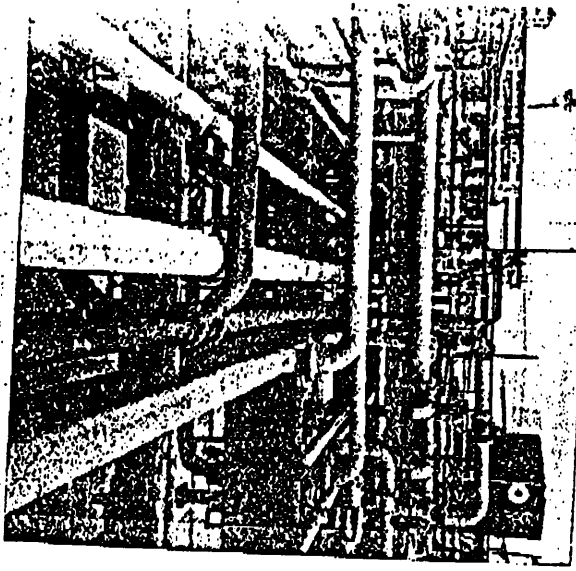
THIS AREA
LEADS TO
THE LARGER
TUNNEL WHICH
FIT AREA



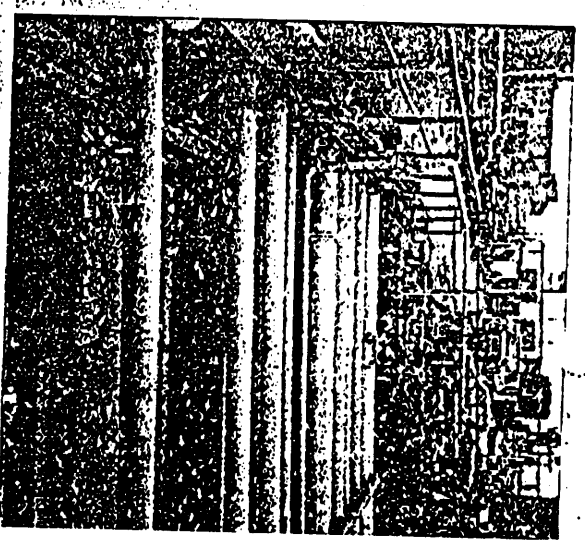
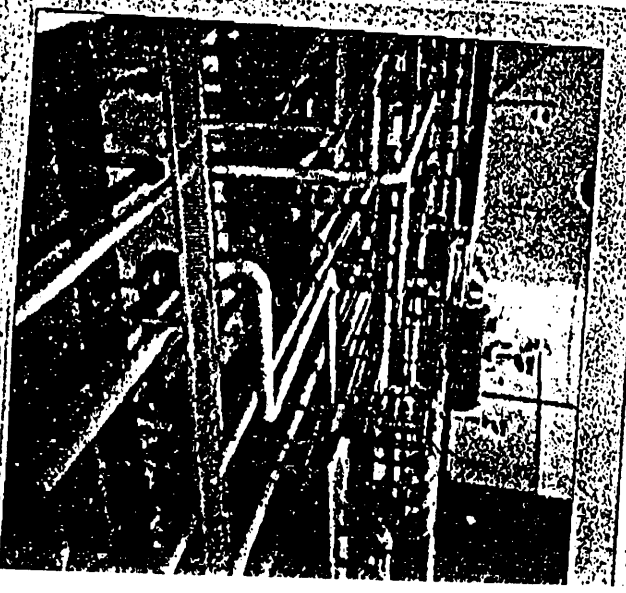
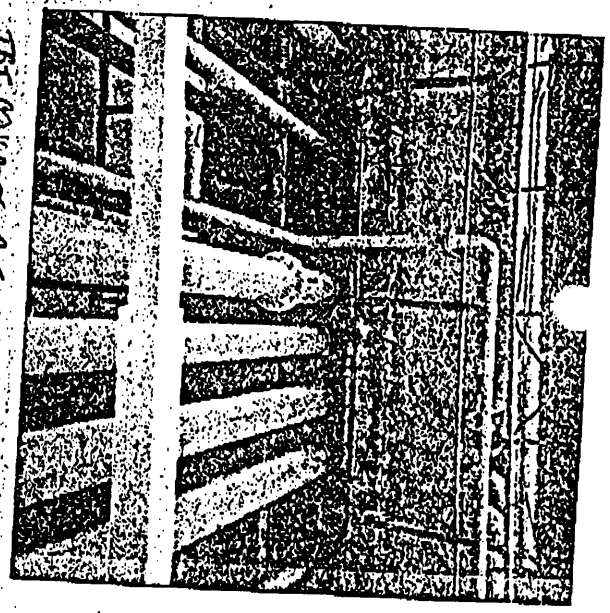
GOOD AREA OF RUMBLE
- OPEN PIPE TUNNEL UNDER ROAD



PIPE UNDER RUMBLE
- RUMBLE ON UNDER SITE



TBI CONCRETE PIT AREA
- PROTECT REINFORCEMENT IN THIS AREA



draft 1
BUFFALO STANDBY STATEMENT
(FOR USE ONLY IF QUERIED)
10/26/88

Mobil Oil Corporation confirmed that about 34,000 gallons of No. 2 fuel oil leaked from a pipeline yesterday morning (Oct. 25) at the company's Buffalo Terminal.

The product spilled into a concrete pit. No product migrated off the terminal property, and there is no threat to the Buffalo River. About 25,000 gallons has already been recovered.

The company said the spill occurred when a line ruptured at about the time the fuel oil was being transferred from one storage tank to another.

No one was injured, and there was never any danger of fire or explosion.

###

PUMPING LOG AND TRANSFER SHEET

WHOLESALE PLANT OR WORKS

FOREMAN'S NAME

DEPT.

DATE 25 Oct 88

SHEET NO.

| GRADE OF PRODUCT | TANK NO. BARGE STEAMER | TIME OPEN CLOSE | LINE FULL OR EMPTY | FROM | | | | BARRELS OR GALLONS | | | GAUGE OR PUMPER | GRADE OF PRODUCT | TANK NO. BARGE STEAMER | TEMP. | FEET | INCHES (IRONES) | WATER (INCHES) | TO | | | REMARK RECEIVING DIFFERENC | | | |
|------------------|------------------------|---------------------------------|--------------------------------|-------|------|-------------------------------|------------|--------------------|--------------------|-----------------|-----------------|------------------|------------------------|-------|------|--------------------------------|----------------|------------|-----------|-------|--------------------------------|---|--|--|
| | | | | TEMP. | FEET | INCHES | TANK TEMP. | 60° TEMP. | BARRELS OR GALLONS | GAUGE OR PUMPER | | | | | | | | TANK TEMP. | 60° TEMP. | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| SUP | 20 | 4 ³⁰ / _A | | 50 | 16 | 3 ¹ / ₂ | | 19577 | | C | | | | | | | | | | | | | | |
| | | | | 51 | 13 | 7 ³ / ₄ | | 16574 | | T | | | | | | | | | | | | | | |
| REG | 96 | 4 ⁵⁰ / _A | | 64 | 14 | 4 | | 16722 | | C | | | | | | | | | | | | | | |
| | | | | 48 | 13 | 0 ¹ / ₂ | | 15268 | | T | | | | | | | | | | | | | | |
| UNL | 75 | 4 ⁴⁰ / _A | | 51 | 13 | 6 ³ / ₄ | | 15153 | | C | | | | | | | | | | | | | | |
| | | | | 49 | 7 | 6 ¹ / ₂ | | 8275 | | C | | | | | | | | | | | | | | |
| JET | 105 | 4 ³⁰ / _A | | 50 | 19 | 1 ¹ / ₂ | | 9625 | | C | | | | | | | | | | | | | | |
| | | | | 46 | 18 | 7 ³ / ₄ | | 9450 | | C | | | | | | | | | | | | | | |
| #1 | 169 | 4 ³⁰ / _A | | 66 | 24 | 9 ¹ / ₂ | | 16980 | | C | | | | | | | | | | | | | | |
| | | | | 66 | 24 | 9 ¹ / ₄ | | 16744 | | C | | | | | | | | | | | | | | |
| #2 | 221 | 4 ³⁰ / _A | | 48 | 10 | 6 | | 10587 | | C | | | | | | | | | | | | | | |
| | | | | 46 | 10 | 4 ¹ / ₄ | | 10448 | | C | | | | | | | | | | | | | | |
| UNL | PL | 2 ⁰⁰ / _A | | | | | | | | | | | 88 | 50 | 9 | 0 ¹ / ₂ | | | | 12645 | | C | | |
| | | | | | | | | | | | | | | | | | | | 47 | 9 | 11 ³ / ₄ | | | |
| JET | A | 9 ⁰⁰ / _A | | 59 | 18 | 6 ¹ / ₂ | | 12678 | | C | | | 315 | 47 | 3 | 2 ¹ / ₂ | | | | 1214 | | C | | |
| | | | | 59 | 20 | 6 ³ / ₄ | | 14084 | | C | | | | | | | 8756 | | C | | | | | |
| SUP | 18 | 4 ⁵⁰ / _A | | 42 | 2 | 1 ¹ / ₂ | | 2563 | | C | | | 171 | 47 | 24 | 10 ¹ / ₄ | | | | 7632 | | C | | |
| | | | | 40 | 2 | 1 | | 2553 | | C | | | | | | | 5938 | | C | | | | | |
| * #2 | 10 F.O. | 15 ⁵⁵ / _A | | 49 | 18 | 9 ⁵ / ₈ | | 22777 | | C | | | 221 | 47 | 5 | 4 ¹ / ₂ | | | | 5977 | | C | | |
| | | | | 48 | 18 | 1 | | 21913 | | C | | | | | | | 89 | | | 10405 | | C | | |
| #2 | 11 F.O. | Vacuum Trucks | 3 ³⁵ / _P | | | | | | | | | | 22 | 46 | 10 | 4 ³ / ₈ | | | | 16458 | | C | | |
| | | | | | | | | | | | | | | | | | | 53 | | | 21913 | | | |
| JET | PL | 4 ³⁰ / _A | 2 ⁰⁰ / _A | | | | | | | | | | 102 | 49 | 18 | 1 | | | | 22778 | | C | | |
| | | | | | | | | | | | | | | | | | | 808 | | | 11533 | | | |
| | | | | | | | | | | | | | | 59 | 16 | 11 ¹ / ₂ | | | | 15041 | | C | | |
| | | | | | | | | | | | | | | 59 | 20 | 11 ¹ / ₂ | | | | 3448 | | C | | |

Fill in each space across the sheet.

Check X those not needed.

When figures are for "Inventory" write Inventory in Remarks column.

For "Inventory" records use two spaces or back of sheet.

ID: FEB 04 '92 10:00 NO. 002 P. 18

PUMPING LOG AND TRANSFER SHEET

2000

WHOLESALE PLANT OR WORKS

FOREMAN'S NAME

DEPT.

1000 12 - 1411
2000 6

DATE 25 Oct 1988

SHEET NO.

| GRADE OF PRODUCT | TANK NO. BARGE STEAMER | TIME OPEN CLOSE | LINE FULL OR EMPTY | FROM | | | | BARRELS OR GALLONS | | GAUGER OR PUMPER | GRADE OF PRODUCT | TANK NO. BARGE STEAMER | TEMP. | FEET | INCHES | DIFF. | TO | | BARRELS OR GALLONS | | GAUGER OR PUMPER | REMARKS RECEIVING DIFFERENCE |
|------------------|------------------------|---------------------------------|--------------------|-------|------|-------------------------------|--------------|--------------------|----------|------------------|------------------|------------------------|-------|-------------------------------|--------------------------------|-------|------------|----------|--------------------|--|------------------|------------------------------|
| | | | | TEMP. | FEET | INCHES | WATER INCHES | TANK TEMP. | WT TEMP. | | | | | | | | TANK TEMP. | WT TEMP. | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| SUP | 20 | 4 ³⁰ / _A | | 50 | 16 | 3 ¹ / ₈ | | 19771 | | C | | | | | | | | | | | | |
| | | | | | | | | DIFF. | | | | | | | | | | | | | | |
| REG | 96 | 4 ³⁰ / _A | | 64 | 14 | 4 | | 16722 | | C | | | | | | | | | | | | |
| | | | | | | | | DIFF. | | | | | | | | | | | | | | |
| UNK | 75 | 4 ³⁰ / _A | | 51 | 13 | 6 ³ / ₈ | | 15153 | | C | | | | | | | | | | | | |
| | | | | | | | | DIFF. | | | | | | | | | | | | | | |
| JET | 105 | 4 ³⁰ / _A | | 50 | 19 | 1 ⁷ / ₈ | | 9685 | | C | | | | | | | | | | | | |
| | | | | | | | | DIFF. | | | | | | | | | | | | | | |
| #1 | 169 | 4 ³⁰ / _A | | 66 | 24 | 9 ⁷ / ₈ | | 16980 | | C | | | | | | | | | | | | |
| | | | | | | | | DIFF. | | | | | | | | | | | | | | |
| #2 | 221 | 4 ³⁰ / _A | | 48 | 10 | 6 | | 10687 | | C | | | | | | | | | | | | |
| | | | | | | | | DIFF. | | | | | | | | | | | | | | |
| JET | 102 | 9 ⁰⁰ / _A | | 59 | 18 | 6 ¹ / ₂ | | 12698 | | C | | 375 | 27 | 3 | 2 ¹ / ₂ | | 1124 | | | | | |
| A | | | | | | | | R. LINE TO | | | | | | | | | | | | | | |
| | | | | | | | | DIFF. | | | | | | | | | | | | | | |
| SUP | 18 | 4 ³⁰ / _A | | 42 | 2 | 1 ¹ / ₈ | | 2563 | | C | | 171 | 48 | 5 | 3 ³ / ₄ | | 5938 | | | | | |
| | | | | | | | | DIFF. | | | | | | | | | | | | | | |
| HZ | 22 | 10 ⁵⁵ / _A | | 49 | 18 | 9 ⁵ / ₈ | | 22777 | | C | | 46 | 10 | 3 ³ / ₄ | | 0405 | | | | | | |
| F.O. | | 12 ⁰¹ / _A | | 48 | 18 | 1 | | 21913 | | C | | 46 | 10 | 4 ³ / ₈ | | 16458 | | | | | | |
| | | | | | | | | 864 | | | | | | | | 53 | | | | | | |
| | | | | | | | | DIFF. | | | | | | | | | | | | | | |
| JET | PL | 4 ³⁰ / _A | | | | | | | | | | 102 | 59 | 16 | 11 ¹ / ₈ | | 11593 | | | | | |
| | | | | | | | | DIFF. | | | | | | | | | | | | | | |

FIG. in each space across the sheet.

Check X where not needed.

When figures are for "Inventory" with Inventory in Remarks column.

For "Set off" remarks use two spaces at back of sheet.

ID: FEB 04 '92 10:01 No. 002 P.19

Use the following checklist as a guide, and as an information document to be sent to the Region addresses below. This is to be completed in the event of a visit by a government agent in connection with Federal, State or Local laws or regulations. Use back of this page for continuation of items.

- 1. Facility MOBIL Date & time of visit 10/26/88 0940 am
- 2. Name of Agency US Coast Guard MSO
- 3. Name, title and address of Agent MARINE SAFETY OFFICER
111 W. HURON ST. B/F/O
- 4. Description of credentials ATTORNEY INVESTIGATOR
- 5. Law or Authority under which Agent purports to act 46 CFR - 40.2
- 6. Does the Agent possess a warrant () Yes (X) No
- 7. Purpose of visit To inspect spill site
- 8. Specific units or activities which Agent wishes to visit CONTAINMENT AREA
- 9. Is information requested for use in any pending or planned civil or criminal proceeding against Mobil? NO
- 10. Documents, photographs, samples, etc. requested? NO If yes, please list on reverse side.
- 11. Have any requests been made for copies of any Mobil records or have copies of any Mobil records been taken? NO If yes, please list on reverse side.
- 12. Will the government agency furnish Mobil, at Mobil's expense, with the results of any tests run on such samples? N/A
(Whenever government samples or photographs are taken, parallel simultaneous samples or photographs must be taken by Mobil.)
- 13. Attendees during walk-around inspection Don McNERNEY
- 14. Items mentioned during closed conference None

Lt. J.F. Beauri USCGA
Government Agent

Don McNERNEY
Mobil Representative

cc: Manager of Plant Operations/Resale District Manager
Region Safety Manager
Region O. G. C.
Region Environmental Manager (if applicable)

0076E

GOVERNMENT AGENCY ISIT QUESTIONNAIRE

Use the following checklist as a guide, and as an information document to be sent to the Region addresses below. This is to be completed in the event of a visit by a government agent in connection with Federal, State or Local laws or regulations. Use back of this page for continuation of items.

1. Facility Mobil Date & time of visit 10/25/88-1315
2. Name of Agency NYS DEC
3. Name, title and address of Agent Lawrence Ross - Senior Engineer
600 Delaware Ave Buffalo N.Y.
4. Description of credentials Oil Spill Unit
5. Law or Authority under which Agent purports to act Navigational Law
Environment / Construction Law
6. Does the Agent possess a warrant () Yes (X) No
7. Purpose of visit #2 Fuel Oil Spill
8. Specific units or activities which Agent wishes to visit Fuel Spill
Area
9. Is information requested for use in any pending or planned civil or criminal proceeding against Mobil? No
10. Documents, photographs, samples, etc. requested? No If yes, please list on reverse side.
11. Have any requests been made for copies of any Mobil records or have copies of any Mobil records been taken? No If yes, please list on reverse side.
12. Will the government agency furnish Mobil, at Mobil's expense, with the results of any tests run on such samples? No samples taken
(Whenever government samples or photographs are taken, parallel simultaneous samples or photographs must be taken by Mobil.)
13. Attendees during walk-around inspection D.H. McVerney, G. Mouton
14. Items mentioned during closed conference Clean up spill as soon as possible

L. Ross
Government Agent

D.H. McVerney
Mobil Representative

cc: Manager of Plant Operations/Resale District Manager
Region Safety Manager
Region O. G. C.
Region Environmental Manager (if applicable)

0076E

VISIT QUESTIONNAIRE

Use the following checklist as a guide, and as an information document to be sent to the Region addresses below. This is to be completed in the event of a visit by a government agent in connection with Federal, State or Local laws or regulations. Use back of this page for continuation of items.

1. Facility Mobil Date & time of visit 10/25/88-1300

2. Name of Agency USCG

3. Name, title and address of Agent OML DAVID ANDERSON / OML AGAIN
USCG MARINE SAFETY OFFICE - 111 W. WASHINGTON ST.

4. Description of credentials POLLUTION INVESTIGATOR

5. Law or Authority under which Agent purports to act
46 CFR 40.2

6. Does the Agent possess a warrant () Yes (X) No

7. Purpose of visit INVESTIGATE OIL SPILL IN FACILITY

8. Specific units or activities which Agent wishes to visit
CONTAMINANT AREA

9. Is information requested for use in any pending or planned civil or criminal proceeding against Mobil? NO

10. Documents, photographs, samples, etc. requested? Yes If (yes) please list on reverse side. OIL SPILL SAMPLE

11. Have any requests been made for copies of any Mobil records or have copies of any Mobil records been taken? NO If yes, please list on reverse side.

12. Will the government agency furnish Mobil, at Mobil's expense, with the results of any tests run on such samples? NO
(Whenever government samples or photographs are taken, parallel simultaneous samples or photographs must be taken by Mobil.)

13. Attendees during walk-around inspection MR DAW McNEILSON

14. Items mentioned during closed conference none

[Signature]
Government Agent

[Signature]
Mobil Representative

cc: Manager of Plant Operations/Resale District Manager
Region Safety Manager
Region D. G. C.
Region Environmental Manager (if applicable)

0076E

GOVERNMENT AGENCY VISIT QUESTIONNAIRE

Use the following checklist as a guide, and as an information document to be sent to the Region addresses below. This is to be completed in the event of a visit by a government agent in connection with Federal, State or Local laws or regulations. Use back of this page for continuation of items.

1. Facility Mobil Terminal Date & time of visit 10/24/88 1010
2. Name of Agency NYSDEC
3. Name, title and address of Agent Michael J. Hinton
Senior Engineer 600 Delaware
4. Description of credentials Oil Spill Unit
5. Law or Authority under which Agent purports to act NAVIGATION LAW
ENVIRONMENTAL CONSERVATION LAW
6. Does the Agent possess a warrant () Yes () No
7. Purpose of visit #2 Fuel Spill
8. Specific units or activities which Agent wishes to visit Fuel Spill
9. Is information requested for use in any pending or planned civil or criminal proceeding against Mobil? No
10. Documents, photographs, samples, etc. requested? No If yes, please list on reverse side.
11. Have any requests been made for copies of any Mobil records or have copies of any Mobil records been taken? No If yes, please list on reverse side.
12. Will the government agency furnish Mobil, at Mobil's expense, with the results of any tests run on such samples? None taken
(Whenever government samples or photographs are taken, parallel simultaneous samples or photographs must be taken by Mobil.)
13. Attendees during walk-around inspection Gary Martine
14. Items mentioned during closed conference Report on Incident
to be forwarded to DEC

Michael J. Hinton
Government Agent

Mobil Representative

cc: Manager of Plant Operations/Resale District Manager
Region Safety Manager
Region O. G. C.
Region Environmental Manager (if applicable)

0076E

NYSDEC SPILL REPORT FORM



DEC REGION# 9 (Buffalo) SPILL NUMBER 8806247
 SPILL NAME: MOBIL OIL DEC LEAD: MJH
 CALLER'S NAME: DON MCNERNEY NOTIFIER'S NAME: _____
 CALLER'S AGENCY: MOBIL OIL NOTIFIER'S AGENCY: _____
 CALLER'S PHONE: (716) 847-5127 EXT. _____ NOTIFIER'S PHONE: _____ EXT. _____

SPILL DATE: 10/25/1988 TIME: 11:30
 CALL RECEIVED DATE: 10/25/1988 TIME: 13:00 RECEIVED BY CID #: _____

| Material Spilled | Mat. Class | Am't Spilled | Units | Am't Rec |
|-----------------------|---|---------------|--|---------------|
| 1) <u>#2 FUEL OIL</u> | <input type="radio"/> <u>Pet-Haz-Other-Unk.</u> | <u>35,000</u> | <input type="radio"/> <u>Gal - Lbs</u> | <u>35,000</u> |
| 2) _____ | <u>Pet-Haz-Other-Unk.</u> | _____ | <u>Gal - Lbs</u> | _____ |
| 3) _____ | <u>Pet-Haz-Other-Unk.</u> | _____ | <u>Gal - Lbs</u> | _____ |
| 4) _____ | <u>Pet-Haz-Other-Unk.</u> | _____ | <u>Gal - Lbs</u> | _____ |

| SPILL LOCATION | POTENTIAL SPILLER |
|---------------------------------------|---|
| PLACE: <u>MOBIL OIL</u> | NAME: <u>MOBIL OIL</u> |
| STREET: <u>BABCOCK STREET</u> | STREET: <u>ONE BABCOCK STREET</u> |
| T/C/V: <u>BUFFALO</u> CO: <u>ERIE</u> | CITY: <u>BUFFALO</u> |
| CONTACT: _____ | STATE: <u>NY</u> ZIP: <u>14210</u> |
| PHONE: _____ EXT. _____ | CONTACT: _____ |
| | PHONE: <u>(716) 847-4127</u> EXT. _____ |

| SPILL CAUSE | SPILL SOURCE |
|---|--|
| Human Error Traffic Accident <input checked="" type="radio"/> <u>Equipment Failure</u> Vandalism | Gas Station Passenger Vehicle Comm. Vehicle Tank Truck |
| Tank Test Failure* Housekeeping Deliberate Abandoned Drums | Private Dwelling Vessel Railroad Car <input checked="" type="radio"/> <u>Major Facility</u> |
| Tank Failure Tank Overfill Other Unknown | Non-Maj F Comm/Ind Non-Comm Unknown |

| RESOURCE AFFECTED | SPILL REPORTED BY |
|---|---|
| <input checked="" type="radio"/> <u>On Land</u> In Sewer | <input checked="" type="radio"/> <u>Responsible Party</u> Affected Persons Police Department Fire Department |
| Groundwater Surface Water** | Tank Tester DEC Citizen Health Dept. |
| Air | Local Age Federal Go Other |

** WATERBODY: _____

CALLER REMARKS: PIPE LINE RUPTURE IN CONTAINMENT PIT, USCG-MSO NOTIFIED, BSA NOTIFIED

| * PBS Number | Tank Number | Tank Size | Test Method | Leak |
|--------------|-------------|-----------|-------------|------|
| | | | | |
| | | | | |

PRIMARY CONTACT CALLED DATE: _____ TIME: _____ hrs. REACHED DATE: _____ TIMEs.
 SECONDARY CONT. CALLED DATE: _____ TIME: _____ hrs. FAXED BY CID#: _____

| | | | |
|------------------------------|------------------------|--------------------------------|---|
| PIN # | T & A | Cost Center | ISR to Central Office |
| Cleanup Ceased | <u>01/20/1989</u> | Meets St'ds <u>YES</u> | Last Inspection <u>01/26/1988</u> Penalty |
| RP-CUI | ENF-INIT | INVS-COM | CAP |
| UST Trust Eligible <u>NO</u> | Site: <u>A B C D E</u> | Resp. Party <u>1 2 3 4 5 6</u> | Reg Close Date <u>01/20/1989</u> |

Created on 10/26/1988 Last Updated on 01/26/1989 Is Updated? NO

| | |
|-----|------------|
| EDO | DATA INPUT |
|-----|------------|

Spill Number: 8806247 Spill Name: MOBIL OIL

Printed on: 04/13/2000

DEC REMARKS

10/26/88: MOBIL HIRED ENVIROMENTAL OIL AND USED OWN RESOURCES TO REMOVE SPILLED PRODUCT FROM CONTAINMENT PIT, 811 BBLs REPORTED LOST 805BBLs REPORTED ACCOUNTED FOR, NO DISCHARGE TO BSA OR BUFFALO RIVER NOTED.

01/24/89: REPORT SUBMITTED BY MOBIL CLEANUP SATISFACTORY NO FURTHER ACTION NEEDED.

Significant Spills/Releases in the STYA

NYSDEC SPILL REPORT FORM



DEC REGION# 9 (Buffalo) SPILL NUMBER 8607552
 SPILL NAME: MOBIL OIL CORP. DEC LEAD: MJH
 CALLER'S NAME: _____ NOTIFIER'S NAME: _____
 CALLER'S AGENCY: _____ NOTIFIER'S AGENCY: _____
 CALLER'S PHONE: _____ EXT. _____ NOTIFIER'S PHONE: _____ EXT. _____

SPILL DATE: 03/12/87 TIME: 10:00
 CALL RECEIVED DATE: 02/12/87 TIME: 10:47 RECEIVED BY CID #: _____

| Material Spilled | Mat. Class | Am't Spilled | Units | Am't Rec |
|--------------------|--|--------------|---------------------------------|--------------|
| 1) <u>GASOLINE</u> | <input type="radio"/> Pet-Haz-Other-Unk. | <u>4,620</u> | <input type="radio"/> Gal - Lbs | <u>4,620</u> |
| 2) _____ | <input type="radio"/> Pet-Haz-Other-Unk. | _____ | <input type="radio"/> Gal - Lbs | _____ |
| 3) _____ | <input type="radio"/> Pet-Haz-Other-Unk. | _____ | <input type="radio"/> Gal - Lbs | _____ |
| 4) _____ | <input type="radio"/> Pet-Haz-Other-Unk. | _____ | <input type="radio"/> Gal - Lbs | _____ |

SPILL LOCATION
 PLACE: MOBIL OIL CORP.
 STREET: 635 ELK STREET
 T/C/V: BUFFALO CO: ERIE
 CONTACT: _____
 PHONE: _____ EXT. _____

POTENTIAL SPILLER
 NAME: MOBIL OIL CORP.
 STREET: 1 BABCOCK STREET
 CITY: BUFFALO, N. Y. 14210
 STATE: _____ ZIP: _____
 CONTACT: _____
 PHONE: (716) 827-5127 EXT. _____

SPILL CAUSE
 Human Error _____ Tank Test Failure* _____ Tank Failure _____
 Traffic Accident _____ Housekeeping _____ Tank Overfill _____
 Equipment Failure _____ Deliberate _____ Other _____
 Vandalism _____ Abandoned Drums _____ Unknown _____

SPILL SOURCE
 Gas Station _____ Private Dwelling _____ Non-Maj F _____
 Passenger Vehicle _____ Vessel _____ Comm/Ind _____
 Comm. Vehicle _____ Railroad Car _____ Non-Comm _____
 Tank Truck Major Facility _____ Unknown _____

RESOURCE AFFECTED
 On Land _____ Groundwater _____ Air _____
 In Sewer _____ Surface Water** _____

SPILL REPORTED BY
 Responsible Party _____ Tank Tester _____ Local Age _____
 Affected Persons _____ DEC _____ Federal Go _____
 Police Department _____ Citizen _____ Other _____
 Fire Department _____ Health Dept. _____

** WATERBODY: _____

CALLER REMARKS: RUPTURED FLEXIBLE CONNECTOR DURING TRANSFER FROM TANK 18 TO 99

| * PBS Number | Tank Number | Tank Size | Test Method | Leak |
|--------------|-------------|-----------|-------------|-------|
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |

PRIMARY CONTACT CALLED DATE: _____ TIME: _____ hrs. REACHED DATE: _____ TIMEs. _____
 SECONDARY CONT. CALLED DATE: _____ TIME: _____ hrs. FAXED BY CID#: _____

| | | | |
|--------------------------------|------------------------|---------------------------------|--------------------------------|
| PIN # | T & A | Cost Center | ISR to Central Office |
| Cleanup Ceased <u>03/20/87</u> | Meets St'ds <u>YES</u> | Last Inspection <u>03/12/87</u> | Penalty <u>NO</u> |
| RP-CUI | ENF-INIT | INVS-COM | CAP |
| UST Trust Eligible <u>NO</u> | Site: A B C D E | Resp. Party 1 2 3 4 5 6 | Reg Close Date <u>03/20/87</u> |

Spill Number: 8607552 Spill Name: MOBIL OIL CORP.

Printed on: 01/07/00

DEC REMARKS

/ / : MJH SITE INSP. 03/12/87, CLEANUP UNDERWAY AND SATISFACTORY, SPILL CONTAINED, SOME TO SEPARATOR; NOTIFIED BSA 03/12/87; HOLD FOR REPORT.

/ / : REPORT SUBMITTED BY MOBIL TO DEC REGARDING INCIDENT, REPORT AND CLEANUP SATISFACTORY NO FURTHER ACTION ANTICIPATED.

Mobil Oil Corporation

1 BABCOCK STREET
BUFFALO, NEW YORK 14210-2250

September 9, 1993

New York State Department of
Environmental Conservation
Spill Response Unit
270 Michigan Avenue
Buffalo, New York, 14203-2999

RM /
TED -

Attention: Mr. T. E. Dieffenbach

SPILL # _____

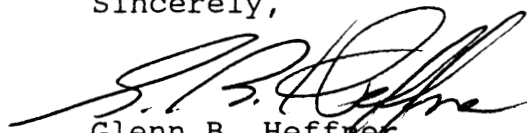
Dear Tim:

This letter is in reply to our conversation of Thursday,
September 9, 1993.

The letter of August 27, 1993 refers to the sewers in the
TCC/Crude unit as being abandoned (as highlighted on drawing
5). The drawing should have been #1. Drawing 5 was of the
sewer system that was effected from the spill.

If you have any further questions please advise.

Sincerely,



Glenn B. Heffner
Superintendent
Buffalo Terminal

Mobil Oil Corporation

1 BABCOCK STREET
BUFFALO, NEW YORK 14210-2250

August 27, 1993

New York State Department of
Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2999

Attn.: Mr. Tim Dieffenbach

RM J
→ TED
~~FSB~~
β

MOBIL TERMINAL #31010
NYSDEC SPILL #9305522
BUFFALO, NEW YORK

Dear Mr. Dieffenbach:

Mobil offers the following in response to your August 6, 1993 letter (attached) regarding a 1,043 barrel gasoline spill at the subject facility:

ACCOUNT OF SPILL

On Wednesday, August 4, 1993, between 0100 hours and 0500 hours the Mobil Buffalo Terminal facility spilled approximately 1,043 barrels of Super Unleaded gasoline on the terminal grounds. All of the spilled product was contained on Mobil property without further incident and at no time was any navigable water at risk. The spill was the result of human error.

On Tuesday, August 3, 1993, Pinto Construction Company was removing idled product lines running from the dock to our product receipt manifold area. While in the process of removing a 12" suction line from tanks #20 and #96 (a common pipe to both tanks/previously identified as an idled line) they found a residual quantity of product in the line and proceeded to pump the product out. To pump out the line they partially opened (2) valves (6" and 12") north of tanks #25 and #26 and proceeded to drain the line at this location. After they drained the line they moved to a new work location on site but neglected to close either of the valves. At approximately 0100 hours on August 4, 1993, the terminal operator opened both the upstream and downstream valves to prepare for an 0800 hours Super Unleaded pipeline receipt. When he opened the valves, Super Unleaded from tank #99 backed through the active line via gravity feed and passed through the 6" valve left open by Pinto Construction and into the

idled 12" suction line. Once in the idled 12" suction line, the product was released through a 12" flange on the suction line in the old tank 20 yard. The leak was discovered at approximately 0500 hours by the terminal operator during his routine walk-around. Upon discovery, he closed the appropriate valves and stopped the product flow.

PRODUCT RECOVERY

At the spill site, we collected all the fugitive product on the ground with the vac-truck and absorbent pads. However, this amounted to only about 500 gallons of product. The majority of the product went into the ground or into the facility sewer system which is connected to the facility oil/water separator. To date we have recovered 9,500 gallons of product from the three man-ways west of the tank 20 yard (see attached drawing). The recovered product was stored in rented tank trailers. Additionally, 12,500 gallons of product migrated through the sewer system, to the #1 box of the oil/water separator. We believe the amount of product collected in the #1 box to be more than the 12,500 gallons measured but it is difficult to assess accurately because of product evaporation and because a certain amount of the product co-mingled with oil already in the separator. It should be noted that we were able to recycle approximately 19,000 gallons of the 22,500 gallons recovered. The remaining 21,306 gallons have not been accounted for and are presumed to have evaporated or gone into the ground. We have also removed the top 6" (20 yards of fill material to a clay layer) of the contaminated dirt in the tank 20 yard and stored it for treatment at the bio-cell.

NOT RECOVERED

The product which did migrate into the ground will be recovered by the active product recovery system scheduled for start-up on September 23, 1993.

STORM SEWER SYSTEM

Included for your review is a complete set of drawings for the sewer system(s) at the Mobil Buffalo Terminal facility. The sewer system for the TCC/Crude units (as highlighted on drawing 1/3) is the only system that has been abandoned. The lines and man-ways in the TCC/Crude unit system were filled with concrete before abandonment. Thus, it is not possible for any of the spilled Super Unleaded to be "trapped" within this system. The rest of the storm systems are active and all drain to the oil/water separator. These systems are independent of each other and therefore it would be impossible for product to migrate from one system to another via piping.

PREVENTATIVE ACTIONS

We will review our current operation procedures with the appropriate terminal personnel. Additionally, we are taking steps to re-educate our contractors to insure that they operate within Mobil's strict guidelines.

We trust that this letter satisfies all questions and requests of your August 6, 1993 letter. If any additional information is required or should you have any questions or concerns regarding this matter, please feel free to contact me at (518) 453-5918 or (800) 227-0707 ext. 4685.

Sincerely,

MOBIL OIL CORPORATION

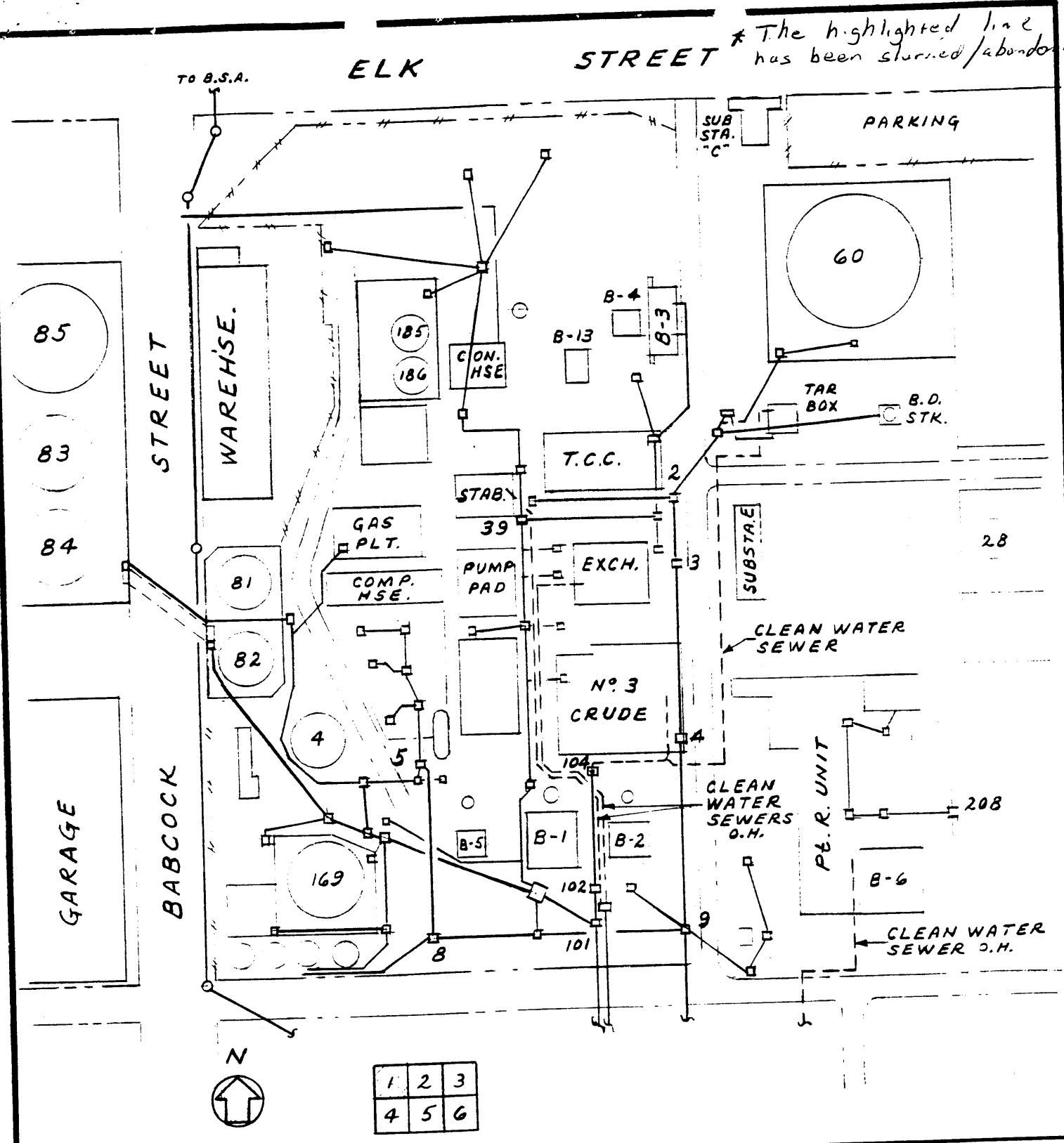
M. E. Mouton
For Kevin C. Schroeder
Project Engineer

Attachments

c.c.: C.E. Galloway - Westford
G.B. Heffner - Buffalo
R. Leary - NYSDEC
M.E. Mouton - Buffalo
J.F. Sullivan - Buffalo

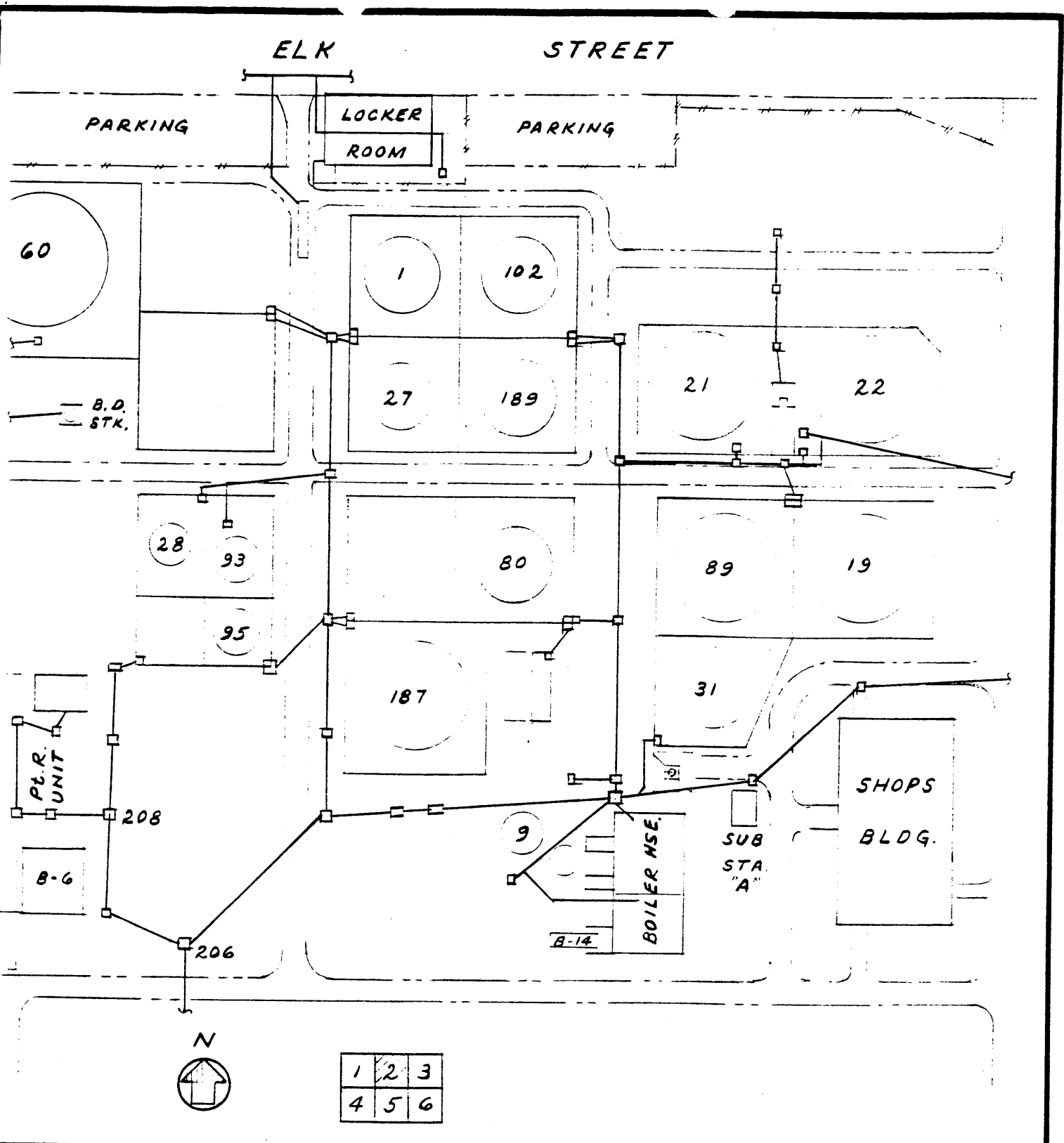
memspl

* The highlighted line has been stirred/abandoned



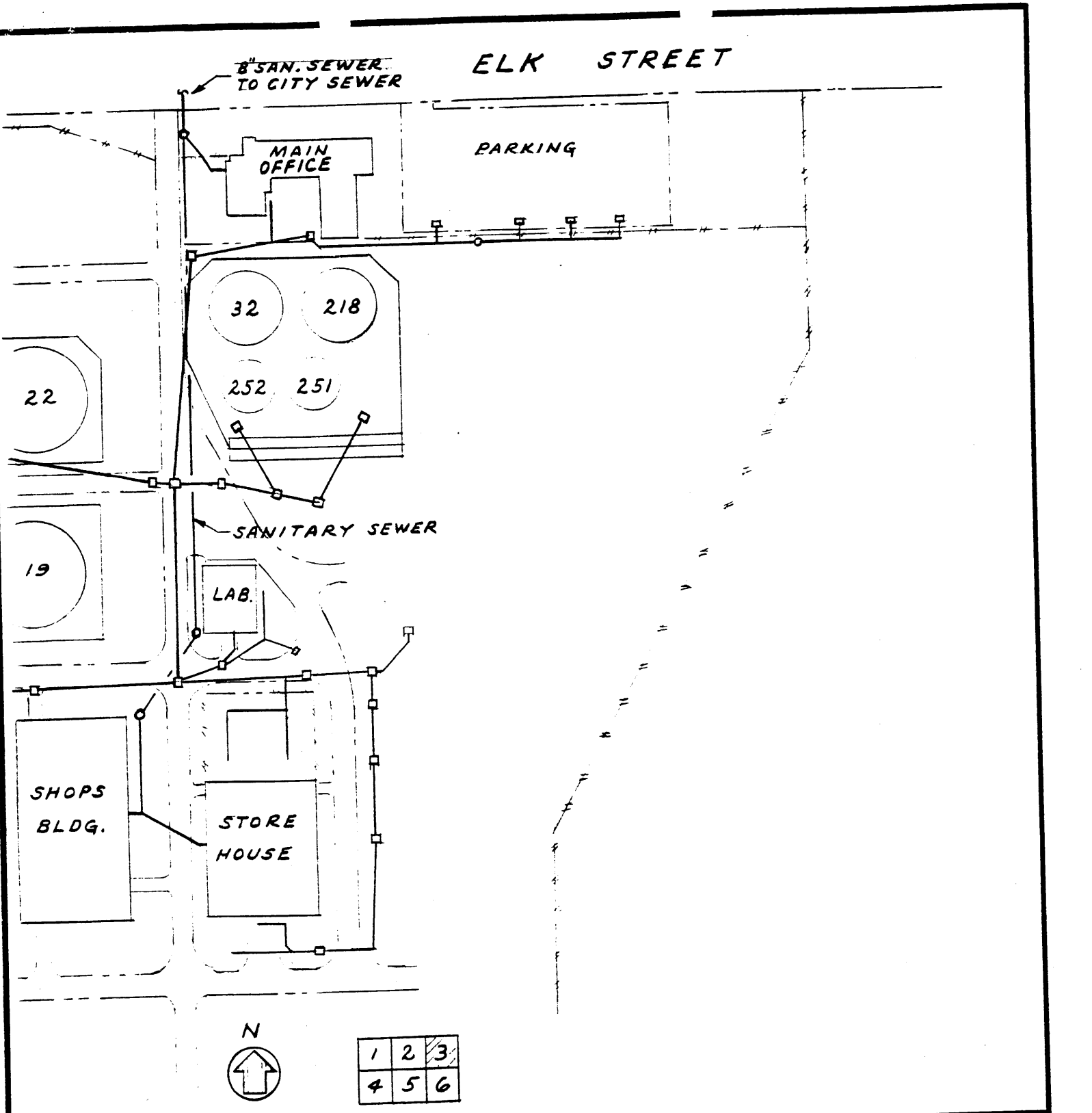
| | | |
|---|---|---|
| 1 | 2 | 3 |
| 4 | 5 | 6 |

| | | | | | | | | | |
|-------|------|----|-------------|-------|------|-------|----------|--|-----------|
| | | | | | | | SCALE | Mobil Oil Corporation ENGINEERING DEPARTMENT BUFFALO, NEW YORK BUFFALO REFINERY SEWER SYSTEM MAP #1 | |
| | | | | | | | NONE | | |
| | | | | | | | DR. R.S. | | |
| | | | | | | | CKD. | | |
| | | | | | | | APP. | | |
| | | | | | | | CERT. | | |
| ISSUE | DATE | BY | DESCRIPTION | CHKD. | APP. | CERT. | DATE | DWG. NO. SK-103030-1 | ISSUE NO. |

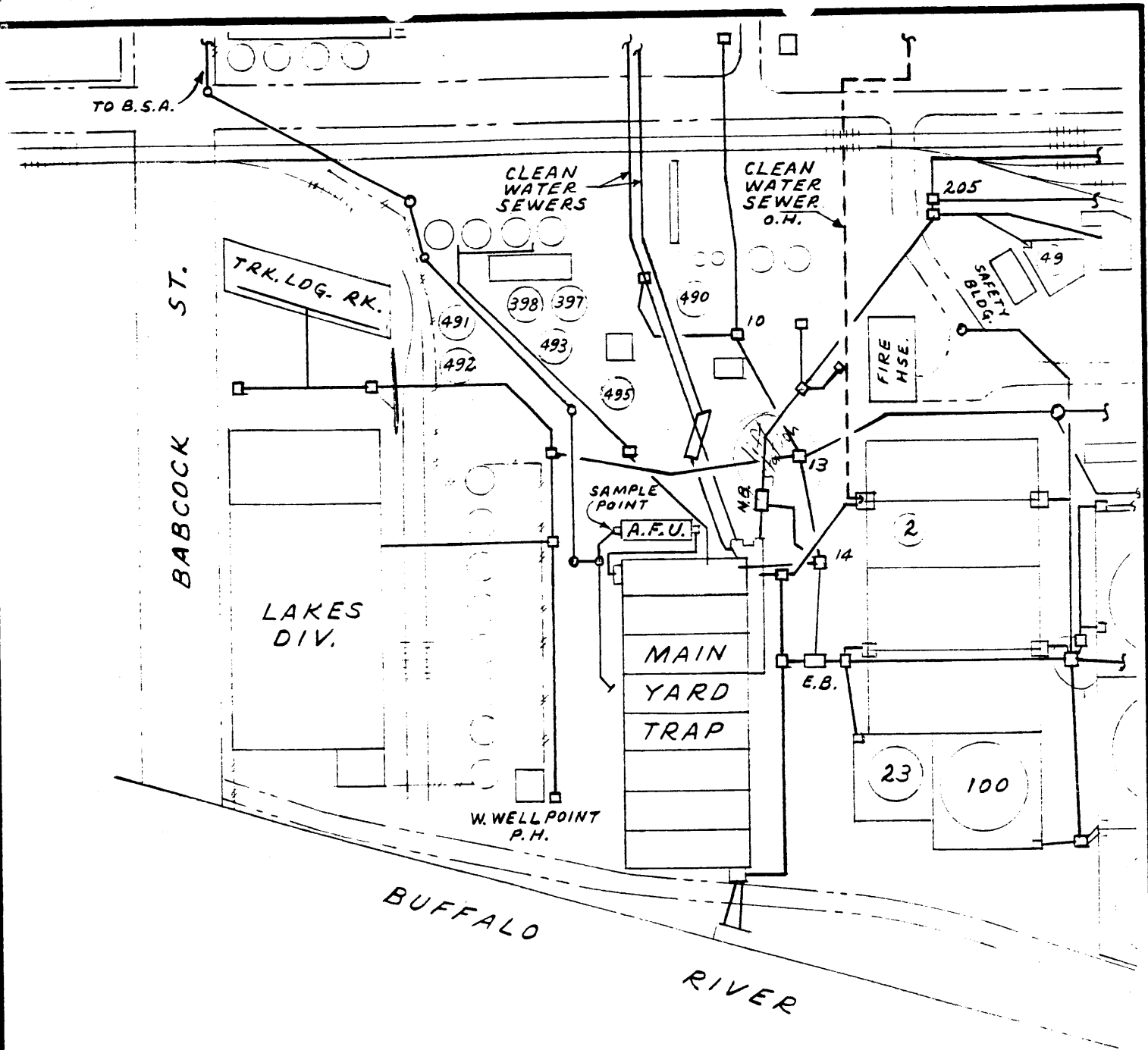


| | | |
|---|---|---|
| 1 | 2 | 3 |
| 4 | 5 | 6 |

| | | | | | | | | |
|-------|------|----|-------------|-------|------|---------------|---|-----------|
| | | | | | | SCALE NONE | Mobil Oil Corporation ENGINEERING DEPARTMENT BUFFALO, NEW YORK BUFFALO REFINERY SEWER SYSTEM MAP # 2 | |
| | | | | | | DR. R.S | | |
| | | | | | | CKD. | | |
| | | | | | | APP. | | |
| | | | | | | CERT. | | |
| ISSUE | DATE | BY | DESCRIPTION | CHKD. | APP. | CERT. | DATE | |
| | | | | | | | DWG. NO. SK-103080 - 2 | ISSUE NO. |



| | | | | | | | | | |
|-------|------|----|-------------|-------|------|----------|---|----------------------|-----------|
| | | | | | | SCALE | Mobil Oil Corporation ENGINEERING DEPARTMENT BUFFALO, NEW YORK BUFFALO REFINERY SEWER SYSTEM MAP #3 | | |
| | | | | | | NONE | | | |
| | | | | | | DR. R.S. | | | |
| | | | | | | CKD. | | | |
| | | | | | | APP. | | | |
| CERT. | | | | | | | | | |
| ISSUE | DATE | BY | DESCRIPTION | CHKD. | APP. | CERT. | DATE | DWG. NO. SK-103080-3 | ISSUE NO. |



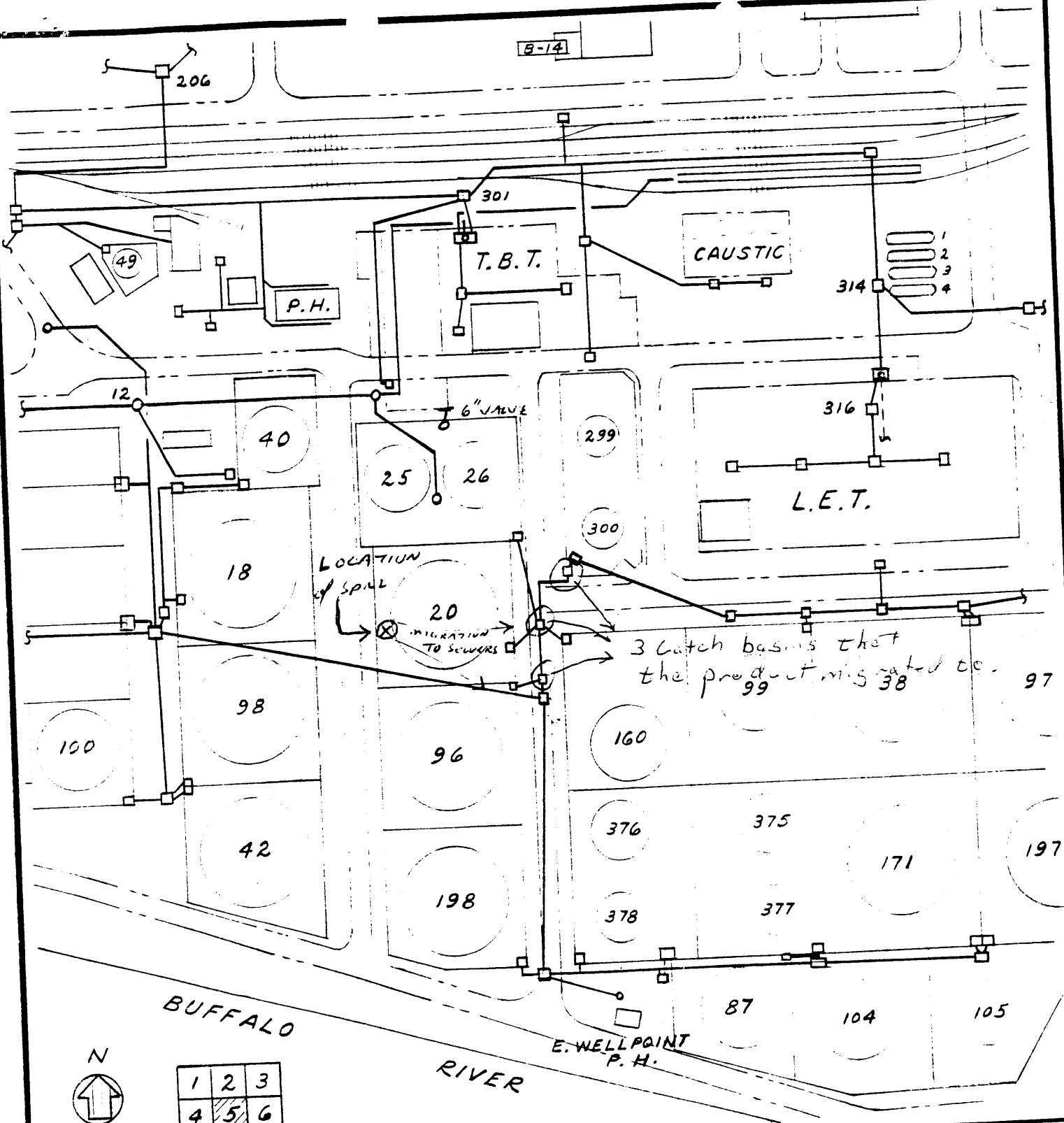
| | | |
|---|---|---|
| 1 | 2 | 3 |
| 4 | 5 | 6 |

| | | | | | | | |
|-------|------|----|-------------|-------|------|-------|---------------|
| | | | | | | | SCALE NONE |
| | | | | | | | DR. R.S. |
| | | | | | | | CKD. |
| | | | | | | | APP. |
| | | | | | | | CERT. |
| ISSUE | DATE | BY | DESCRIPTION | CHKD. | APP. | CERT. | DATE |

Mobil Oil Corporation
 ENGINEERING DEPARTMENT
 BUFFALO, NEW YORK

*BUFFALO REFINERY
 SEWER SYSTEM
 MAP # 4*

DWG. NO. *SK-103030-4* ISSUE NO.



LOCATION
of SPILL
MIGRATION
TO SEWERS

3 Catch basins that
the product migrated to.
99 38 97



| | | |
|---|---|---|
| 1 | 2 | 3 |
| 4 | 5 | 6 |

| ISSUE | DATE | BY | DESCRIPTION | CHKD. | APP. | CERT. | DATE |
|-------|------|----|-------------|-------|------|-------|------|
| | | | | | | | |

SCALE
NONE
DR. R.S.
CKD.
APP.
CERT.

Mobil Oil Corporation
ENGINEERING DEPARTMENT
BUFFALO, NEW YORK

**BUFFALO REFINERY
SEWER SYSTEM
MAP #5**

DWG. NO. **5K-103080-5** ISSUE NO.

SPILL CONTINUATION SHEET

Date

Comments

9/9/93

TED taken w/ Glen Hoffman, he said only portion of sewer system abandoned is that shown on map #2. Said sewers were flushed w/ water & pumped full w/ cement grout and line severed between catch basins 9 & 10 and two lines between catch basins 101 and south side of access road.

Also said no more gas collecting in sewer, ~~only~~ product in oil/water separator is from well point system.

Work progressing as scheduled, start up 9/27/93.

- Glen will send letter confirming correct description of sewer abandonment

- Weekly progress updates being sent to RNL

NYSDEC SPILL REPORT FORM



DEC REGION# 9 (Buffalo) SPILL NUMBER 9305522
 SPILL NAME: MOBIL OIL - BUFFALO TERM. DEC LEAD: TED
 CALLER'S NAME: GLEN HEFFNER NOTIFIER'S NAME: _____
 CALLER'S AGENCY: MOBIL OIL NOTIFIER'S AGENCY: _____
 CALLER'S PHONE: (716) 827-5127 EXT. _____ NOTIFIER'S PHONE: _____ EXT. _____

SPILL DATE: 08/04/93 TIME: 05:30
 CALL RECEIVED DATE: 08/04/93 TIME: 06:30 RECEIVED BY CID #: _____

| Material Spilled | Mat. Class | Am't Spilled | Units | Am't Rec |
|--------------------|--|---------------|---------------------------------|---------------|
| 1) <u>GASOLINE</u> | <input type="radio"/> Pet-Haz-Other-Unk. | <u>42,600</u> | <input type="radio"/> Gal - Lbs | <u>35,000</u> |
| 2) _____ | Pet-Haz-Other-Unk. | _____ | Gal - Lbs | _____ |
| 3) _____ | Pet-Haz-Other-Unk. | _____ | Gal - Lbs | _____ |
| 4) _____ | Pet-Haz-Other-Unk. | _____ | Gal - Lbs | _____ |

SPILL LOCATION

PLACE: MOBIL OIL - BUFFALO TERM.
 STREET: 1 BABCOCK STREET
 T/C/V: BUFFALO CO: ERIE
 CONTACT: _____
 PHONE: _____ EXT. _____

POTENTIAL SPILLER

NAME: MOBIL OIL
 STREET: 1 BABCOCK STREET
 CITY: BUFFALO
 STATE: NY ZIP: 14210-2250
 CONTACT: _____
 PHONE: (716) 827-5127 EXT. _____

SPILL CAUSE

Human Error
 Traffic Accident
 Equipment Failure
 Vandalism
 Tank Test Failure
 Housekeeping
 Deliberate
 Abandoned Drums
 Tank Failure
 Tank Overfill
 Other
 Unknown

SPILL SOURCE

Gas Station
 Passenger Vehicle
 Comm. Vehicle
 Tank Truck
 Private Dwelling
 Vessel
 Railroad Car
 Major Facility
 Non-Maj F
 Comm/Ind
 Non-Comm
 Unknown

RESOURCE AFFECTED

On Land
 In Sewer
 Groundwater
 Surface Water
 Air

SPILL REPORTED BY

Responsible Party
 Affected Persons
 Police Department
 Fire Department
 Tank Tester
 DEC
 Citizen
 Health Dept.
 Local Age
 Federal Go
 Other

** WATERBODY: _____

CALLER REMARKS: VALVE LEFT OPEN BY CONTRACTOR.

| * PBS Number | Tank Number | Tank Size | Test Method | Leak |
|--------------|-------------|-----------|-------------|-------|
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |

PRIMARY CONTACT CALLED DATE: _____ TIME: _____ hrs. REACHED DATE: _____ TIMEs.
 SECONDARY CONT. CALLED DATE: _____ TIME: _____ hrs. FAXED BY CID#: _____

| | | | |
|--------------------|-----------------|--|--|
| PIN # | T & A | Cost Center | ISR to Central Office |
| Cleanup Ceased | <u>02/03/93</u> | Meets St'd | NO |
| RP-CUI | ENF-INIT | INVES-COM | CAP |
| UST Trust Eligible | NO | Site: <input checked="" type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E | Resp. Party <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 |
| | | Reg Close Date | <u>02/03/93</u> |

Spill Number: 9305522 **Spill Name:** MOBIL OIL - BUFFALO TERM. **Printed on:** 01/07/00

DEC REMARKS

02/03/93: SPILL CONTAINED BY CURRENTLY OPERATING REMEDIATION SYSTEM, AS SUCH SITE RECLASSIFIED INACTIVE, LETTER SENT TO MOBIL INFORMING THEM OF STATUS. REFER TO SPILL#8808982 FOR FOLLOW UP ON OVERALL SITE REMED.

08/04/93: SAC/GLEN HEFFNER/TELECON - MOST OF THE GASOLINE WENT INTO THE SEPARATOR. PRODUCT ALSO IN TANK 20 YARD. SUCKED UP ALL PRODUCT ON SURFACE; REMAINED ON GROUND BETWEEN 2 RECOVERY WELLS.

08/16/93: RNL SITE MEETING WITH GLEN HEFNER, CHECKED SITE, SOIL REMOVED BUT MORE SOIL TO BE REMOVED, PIPELINE BEING REMOVED, DISCUSSED REMEDIATION OF ONGOING SPILL, MEETING SET FOR 08/18/93.

09/28/93: RNL TO WRITE LETTER. SOIL SAMPLE RESULTS ARE FINE.

Significant Spills/Releases in the ETYA

New York State Department of Environmental Conservation
600 Delaware Avenue, Buffalo, New York 14202



Thomas C. Jorling
Commissioner

September 6, 1989

Mr. Mark McClelland
Mobil Oil Corporation
1 Babcock Street
Buffalo, New York 14240

Dear Mr. McClelland:

Spill Number 8905279
Tank #176
Buffalo
Erie County

I have reviewed the incident report regarding the spill that occurred at tank #176 on August 28, 1989, and I am concerned with the volume of unaccounted product.

With a spill volume of 6,500 gallons and actual product recovery of, at most, 2,800 gallons by vacuum truck, and taking into account volatilization of the spilled product and contaminated soil removal, there could possibly be up to 3,000 gallons unaccounted for.

Therefore, you are directed to conduct a site assessment to identify local groundwater gradient and quality and to determine additional remediation work that may be needed.

If you have any questions, please call me at 847-4586.

Sincerely,

Michael J. Hinton, P.E.
Senior Sanitary Engineer

MJH:vu

August 30, 1989

Michael J. Hinton, P.E.
Senior Sanitary Engineer
N. Y. S. D. E. C.
600 Delaware Avenue
Buffalo, New York - 14202-1073

Dear Mr. Hinton:

On Monday, August 28, 1989, at approximately 8:15 P.M. the Buffalo Terminal overfilled Tank 176 during a receipt of Unleaded gasoline from the Mobil Pipeline by approximately 6,500 gallons. All of the gasoline was contained within the diked area.

The cause of the overfill of Tank 176 was apparently incorrect safe fill and hi alarm heights utilized on our Terminal records. Tank 176 was out of service for several years and upon reactivation in 1988, the tank was restrapped. This new information was never transposed to accurately update our records on the safe fill and hi alarm heights. The terminal operator during this receipt used the old data, was unaware of the new reference points and subsequently ran the tank over.

Product was contained within the diked area and approximately 2,800 gallons was recovered by our equipment. Per your instructions we will remove approximately 6" of the contaminated soil adjacent to Tank 176, stock pile and properly dispose of the soil.

Terminal records have been reviewed and adjusted accordingly to reflect the correct safe fill and alarm heights on all our product tanks.

If you have any questions concerning this matter, please feel free to contact me at the Buffalo Terminal.

Sincerely,

MOBIL OIL CORPORATION

J. F. SULLIVAN
Complex Manager
Western New York Complex

csn

**WESTERN NEW YORK COMPLEX
August 30, 1989**

R. B. MAYNARD
Fairfax - (4N505)

J. A. Wyatt

**LEAK POLLUTION INCIDENT
REPORT - TANK 176
BUFFALO TERMINAL**

Attached, please find subject report and related government agency visit questionnaires from the N.Y.S.D.E.C.

On Monday, August 28, 1989 at approximately 8:15 P.M. the Buffalo Terminal overfilled Tank 176 during a receipt of Unleaded gasoline from Mobil Pipeline by approximately 6,500 gallons which was contained within the diked area.

The cause of the overfill was apparently incorrect safe fill and hi alarm heights posted on our Terminal records as well as displayed in our P.C. remote gauging system. Tank 176 was out of service for several years and upon its return to service in 1988 was restrapped. The new information was not transposed to accurately update our safe fill heights and hi alarm marks in our records.

The gasoline was contained in the diked area by Tank 176 and approximately 2,600 gallons was recovered. The N.Y.S.D.E.C. visited the Terminal on August 29, 1989 and recommended that 6" of the contaminated soil by Tank 176 be removed and correctly disposed. The Plant Engineer, Mark McLellan, and I will schedule Clean Harbors, Inc. to handle the removal as soon as possible.

Any questions, please let me know.

J. F. SULLIVAN
Complex Manager

Attachment
lpir176-cen

06-2012
Exhibit B

TO: Region Environmental Manager

CC: Region Operations Manager
Region Claims Manager
Region Safety Manager
Region Public Relations Manager
Engineering Center Manager

LEAK/POLLUTION INCIDENT REPORT - WHOLESALE PLANT

General Information

- . Facility Buffalo Terminal
- . Location 1 Babcock Street, Buffalo, New York - 14210-2297
- . Date/Time Reported: 8/28/89 - 10:08 P.M.
- . Reported By: D. H. McNerney

Description of Reported Leak or Hazard

Unleaded gasoline overflowed from Tank #176

Investigation Results

- . Loss indicated by inventory reports - 4,341 gallons
- . Source of Leakage or Cause of Spill: Pipeline was delivering Unleaded Gasoline into Tank #176. The computer had an erroneous high level alarm notice of 30'6" and a high-high level alarm at 30'-9". Actual overflow condition occurred at 30'6".
- . Hazardous situation confirmed (Describe situation): Unleaded gasoline overflowed from Tank #176 into the tank dike.

Corrective Action

- . Action taken to make safe: Area was roped off and product sucked up with a vacuum truck
- . Date Made Safe: 8/29/89 - 12:15 A.M.

Corrective Action - continued

Local Agencies Notified:

| Agency or Title | Persons | Date and Time |
|---------------------------|---------------------|------------------------------|
| <u>NYS DEC - Albany</u> | <u>Operator #33</u> | <u>08/28/89 - 10:08 P.M.</u> |
| <u>Buffalo Fire Dept.</u> | _____ | <u>08/28/89 - 10:00 P.M.</u> |
| <u>NYS DEC Buffalo</u> | <u>James Cooke</u> | <u>08/29/89 - 12:45 A.M.</u> |

Repair action taken or planned: Recalculate high-level alarms

Product Recovery Required: Yes No

By (Agency) Mobil Oil

Report prepared by: D. H. McNerney
D. H. McNerney

J. F. Sullivan
J. F. Sullivan

Approved: [Signature]
Manager of Plant Operations

Issued

New

leak-cen

NYSDEC SPILL REPORT FORM



DEC REGION# 9 (Buffalo) SPILL NUMBER 8905279
 SPILL NAME: MOBIL OIL DEC LEAD: MJH
 CALLER'S NAME: DON MCNERNEY NOTIFIER'S NAME: _____
 CALLER'S AGENCY: MOBIL OIL NOTIFIER'S AGENCY: _____
 CALLER'S PHONE: (716) 827-5127 EXT. _____ NOTIFIER'S PHONE: _____ EXT. _____

SPILL DATE: 08/28/89 TIME: 21:15
 CALL RECEIVED DATE: 08/28/89 TIME: 22:04 RECEIVED BY CID #: _____

| Material Spilled | Mat. Class | Am't Spilled | Units | Am't Rec |
|--------------------|--|--------------|---------------------------------|--------------|
| 1) <u>GASOLINE</u> | <input type="radio"/> Pet-Haz-Other-Unk. | <u>4,000</u> | <input type="radio"/> Gal - Lbs | <u>2,500</u> |
| 2) _____ | Pet-Haz-Other-Unk. | _____ | Gal - Lbs | _____ |
| 3) _____ | Pet-Haz-Other-Unk. | _____ | Gal - Lbs | _____ |
| 4) _____ | Pet-Haz-Other-Unk. | _____ | Gal - Lbs | _____ |

| <u>SPILL LOCATION</u> | <u>POTENTIAL SPILLER</u> |
|---------------------------------------|---|
| PLACE: <u>MOBIL OIL</u> | NAME: <u>MOBIL OIL</u> |
| STREET: <u>1 BABCOCK STREET</u> | STREET: <u>1 BABCOCK STREET</u> |
| T/C/V: <u>BUFFALO</u> CO: <u>ERIE</u> | CITY: <u>BUFFALO</u> |
| CONTACT: _____ | STATE: <u>NY</u> ZIP: _____ |
| PHONE: _____ EXT. _____ | CONTACT: _____ |
| | PHONE: <u>(716) 827-5127</u> EXT. _____ |

| <u>SPILL CAUSE</u> | <u>SPILL SOURCE</u> |
|---|---|
| Human Error Traffic Accident <input checked="" type="radio"/> Equipment Failure Vandalism Tank Test Failure* Housekeeping Deliberate Abandoned Drums Tank Failure Tank Overfill Other Unknown | Gas Station Passenger Vehicle Comm. Vehicle Tank Truck Private Dwelling Vessel Railroad Car <input checked="" type="radio"/> Major Facility Non-Maj F Comm/Ind Non-Comm Unknown |

| <u>RESOURCE AFFECTED</u> | <u>SPILL REPORTED BY</u> |
|--|--|
| <input checked="" type="radio"/> On Land In Sewer Groundwater Surface Water** Air | <input checked="" type="radio"/> Responsible Party Affected Persons Police Department Fire Department Tank Tester DEC Citizen Health Dept. Local Age Federal Go Other |

** WATERBODY: _____

CALLER REMARKS: OVERFILL OF TANK 176

| * PBS Number | Tank Number | Tank Size | Test Method | Leak |
|--------------|-------------|-----------|-------------|------|
| | | | | |
| | | | | |
| | | | | |

PRIMARY CONTACT CALLED DATE: _____ TIME: _____ hrs. REACHED DATE: _____ TIMEs. _____
 SECONDARY CONT. CALLED DATE: _____ TIME: _____ hrs. FAXED BY CID#: _____

| | | | |
|------------------------------|-----------------|-------------------------|--|
| PIN # | T & A | Cost Center | ISR to Central Office |
| Cleanup Ceased | <u>06/11/91</u> | Meets St'ds <u>YES</u> | Last Inspected <u>05/03/91</u> No Penalty |
| RP-CUI | ENF-INIT | INVS-COM | CAP |
| UST Trust Eligible <u>NO</u> | Site: A B C D E | Resp. Party 1 2 3 4 5 6 | Reg Close <u>08/11/91</u> |

Created on 08/31/89 Last Updated on 10/04/91 Is Updated? NO EDO DATA INPUT
 Date Printed: 01/07/00 PrintFor 1/9/98 AAA

Spill Number: 8905279 Spill Name: MOBIL OIL

Printed on: 01/07/00

DEC REMARKS

08/31/89: MOBIL OIL HIRED CLEAN HARBORS TO CLEANUP CONTAMINATED AREAS.

12/07/90: MJH SITE VISIT DIKE RECONSTRUCTION COMPLETE SOME MONITORING WELLS
LOST SITE MONITORING CONTINUING.

06/11/91: SPILL FILE CLOSED OUT REFER TO SPILL #8808982 FOR FOLLOWUP
INFORMATION.

Significant Spills/Releases in the BSPA/Buffalo River

NYSDEC SPILL REPORT FORM



DEC REGION# 9 (Buffalo) SPILL NUMBER 8804710
 SPILL NAME: BABCOCK ST. OVERFLOW DEC LEAD: MJH
 CALLER'S NAME: JIM CARUSO NOTIFIER'S NAME: _____
 CALLER'S AGENCY: BSA NOTIFIER'S AGENCY: _____
 CALLER'S PHONE: (716) 883-1820 EXT. _____ NOTIFIER'S PHONE: _____ EXT. _____

SPILL DATE: 08/29/1988 TIME: 10:15
 CALL RECEIVED DATE: 08/29/1988 TIME: 10:25 RECEIVED BY CID #: _____

| Material Spilled | Mat. Class | Am't Spilled | Units | Am't Rec |
|-----------------------------|---|--------------|------------------|----------|
| 1) <u>UNKNOWN PETROLEUM</u> | <input type="radio"/> <u>Pet-Haz-Other-Unk.</u> | <u>0</u> | <u>Gal - Lbs</u> | <u>0</u> |
| 2) _____ | <u>Pet-Haz-Other-Unk.</u> | | <u>Gal - Lbs</u> | |
| 3) _____ | <u>Pet-Haz-Other-Unk.</u> | | <u>Gal - Lbs</u> | |
| 4) _____ | <u>Pet-Haz-Other-Unk.</u> | | <u>Gal - Lbs</u> | |

SPILL LOCATION

PLACE: BABCOCK ST. OVERFLOW
 STREET: BABCOCK STREET
 T/C/V: BUFFALO CO: ERIE
 CONTACT: _____
 PHONE: _____ EXT. _____

POTENTIAL SPILLER

NAME: UNKNOWN
 STREET: _____
 CITY: _____
 STATE: _____ ZIP: _____
 CONTACT: _____
 PHONE: _____ EXT. _____

SPILL CAUSE

Human Error Tank Test Failure Tank Failure
 Traffic Accident Housekeeping Tank Overfill
 Equipment Failure Deliberate Other
 Vandalism Abandoned Drums Unknown

SPILL SOURCE

Gas Station Private Dwelling Non-Maj F
 Passenger Vehicle Vessel Comm/Ind
 Comm. Vehicle Railroad Car Non-Comm
 Tank Truck Major Facility Unknown

RESOURCE AFFECTED

On Land Groundwater Air
 In Sewer Surface Water**

SPILL REPORTED BY

Responsible Party Tank Tester Local Age
 Affected Persons DEC Federal Go
 Police Department Citizen Other
 Fire Department Health Dept.

** WATERBODY: BUFFALO RIVER

CALLER REMARKS: SHEEN NOTED IN BUFFALO RIVER FROM BAGCOCK STREET OVERFLOW DISCHARGE

| * PBS Number | Tank Number | Tank Size | Test Method | Leak |
|--------------|-------------|-----------|-------------|------|
| | | | | |
| | | | | |

PRIMARY CONTACT CALLED DATE: _____ TIME: _____ hrs. REACHED DATE: _____ TIMEs. _____
 SECONDARY CONT. CALLED DATE: _____ TIME: _____ hrs. FAXED BY CID#: _____

| | | | |
|---------------------------|-----------------|---------------------------|----------------------------------|
| PIN # 98262 | T & A 681 | Cost Center 0082626--88 | ISR to Central Office 08/31/1988 |
| Cleanup Ceased 09/12/1988 | Meets St'ds YES | Last Inspected 08/06/1988 | NO Penalty |
| RP-CUI | ENF-INIT | INVS-COM | CAP |
| UST Trust Eligible NO | Site: A B C D E | Resp. Party 1 2 3 4 5 6 | Reg Close Date 08/12/1988 |

Spill Number: 8804710 **Spill Name:** BABCOCK ST. OVERFLOW

Printed on: 04/25/2000

DEC REMARKS

09/12/88: OVERFLOW INTO RIVER DURING SEVERE STORM SHEEN FROM ACCUMALTED OILS ETC IN STORM SEWER FLUSHED OUT BY RAIN WATER, FOLLOWUP INSPECTIONS NO SHEEN PRESENT NO FURTHER ACTION BY SPILL GROUP.

8804710 *** NYSDEC UPDATED SPILL REPORT FORM ***
8804710
DEC Region: 9 - Buffalo Spill N
o.: 8804710

Spill Name : Lead DEC
:
Caller Info : Notifier Info
:
JIM CARUSO

BSA

(716) 883-1820

Spill Date: 08/29/1988 CID#: Call Received Date
: 08/29/1988
Spill Time: 10:15 hrs. Call Received Time
: 10:25 hrs.

Material Spilled: Class: Spilled:
Recovered:
1) UNKNOWN PETROLEUM Petrol 0 Gal
0
2)
3)
4)

Spill Location: Potential Spiller Info
:
BABCOCK ST. OVERFLOW UNKNOWN
BABCOCK STREET
BUFFALO CO: Erie

Contact: Contact:
Phone: Phone:

Spill Cause: Unknown Resource Affected: I

n Sewer

Source: Unknown

Waterbody: BUFFALO RIVER
Agency

Spill Reported by: Local

Caller Remarks:

SHEEN NOTED IN BUFFALO RIVER FROM BAGCOCK STREET OVERFLOW DISCHARGE

PBS Number:

| | Tank Number | Tank Size | Test Method |
|----|-------------|-----------|-------------|
| 1) | Leak Rate | | |
| 2) | | | |
| 3) | | | |

Classification:

Meets Standards?:

EDO: Y - N UST Eligible?:

Regional Cl

Issue Date: 09/12/1988

NYSDEC SPILL REPORT FORM



DEC REGION# 9 (Buffalo) SPILL NUMBER 8907130
 SPILL NAME: BABCOCK ST OVERFLOW DEC LEAD: MJH
 CALLER'S NAME: DON MCNERNEY NOTIFIER'S NAME: _____
 CALLER'S AGENCY: MOBIL OIL NOTIFIER'S AGENCY: _____
 CALLER'S PHONE: (716) 827-5127 EXT. _____ NOTIFIER'S PHONE: _____ EXT. _____

SPILL DATE: 10/19/1989 TIME: 15:00
 CALL RECEIVED DATE: 10/19/1989 TIME: 15:10 RECEIVED BY CID #: _____

| Material Spilled | Mat. Class | Am't Spilled | Units | Am't Rec |
|-----------------------------|--|--------------|-----------|----------|
| 1) <u>UNKNOWN PETROLEUM</u> | <input type="radio"/> Pet-Haz-Other-Unk. | <u>0</u> | Gal - Lbs | <u>0</u> |
| 2) _____ | Pet-Haz-Other-Unk. | | Gal - Lbs | |
| 3) _____ | Pet-Haz-Other-Unk. | | Gal - Lbs | |
| 4) _____ | Pet-Haz-Other-Unk. | | Gal - Lbs | |

| <u>SPILL LOCATION</u> | <u>POTENTIAL SPILLER</u> |
|---------------------------------------|--------------------------|
| PLACE: <u>BABCOCK ST OVERFLOW</u> | NAME: <u>UNKNOWN</u> |
| STREET: <u>BABCOCK STREET</u> | STREET: _____ |
| T/C/V: <u>BUFFALO</u> CO: <u>ERIE</u> | CITY: _____ |
| CONTACT: _____ | STATE: _____ ZIP: _____ |
| PHONE: _____ EXT. _____ | CONTACT: _____ |
| | PHONE: _____ EXT. _____ |

| <u>SPILL CAUSE</u> | <u>SPILL SOURCE</u> |
|---|---|
| Human Error Tank Test Failure* Tank Failure Traffic Accident Housekeeping Tank Overfill Equipment Failure Deliberate Other Vandalism Abandoned Drums <input checked="" type="radio"/> Unknown | Gas Station Private Dwelling Non-Maj F Passenger Vehicle Vessel Comm/Ind Comm. Vehicle Railroad Car Non-Comm Tank Truck Major Facility <input checked="" type="radio"/> Unknown |

| <u>RESOURCE AFFECTED</u> | <u>SPILL REPORTED BY</u> |
|--|---|
| On Land Groundwater Air In Sewer <input checked="" type="radio"/> Surface Water | Responsible Party Tank Tester Local Age Affected Persons DEC Federal Go Police Department Citizen <input type="radio"/> Other Fire Department Health Dept. |

** WATERBODY: BUFFALO RIVER

CALLER REMARKS: SHEEN OBSERVED FROM BABCOCK ST SEWER OVERFLOW, HEAVY RAINS OCCURING AT THIS TIME, NOTIFIED BY MOBIL OIL

| * PBS Number | Tank Number | Tank Size | Test Method | Leak |
|--------------|-------------|-----------|-------------|------|
| | | | | |
| | | | | |
| | | | | |

PRIMARY CONTACT CALLED DATE: _____ TIME: _____ hrs. REACHED DATE: _____ TIMEs.
 SECONDARY CONT. CALLED DATE: _____ TIME: _____ hrs. FAXED BY CID#: _____

| | | | | | |
|--------------------|------------|---|-----------------------|-------------|----------------|
| PIN # | T & A | Cost Center | ISR to Central Office | | |
| Cleanup Ceased | 11/02/1989 | Meets St'ds <input checked="" type="checkbox"/> YES | Last Inspection | 10/19/1989 | NO Penalty |
| RP-CUI | ENF-INIT | INVES-COM | CAP | | |
| UST Trust Eligible | NO | Site: A B C D E | Resp. Party | 1 2 3 4 5 6 | Reg Close Date |
| | | | | | 10/2/1989 |

Created on 11/02/1989 Last Updated on 11/17/1989 Is Updated? NO EDO DATA INPUT
 Date Printed: 04/25/2000 PrintFor 3/30/1999

Spill Number: 8907130 **Spill Name:** BABCOCK ST OVERFLOW

Printed on: 04/25/2000

DEC REMARKS

11/02/89: BSA INSPECTED FOUND NOTHING NO FURTHER ACTION NEEDED.

8907130 *** NYSDEC UPDATED SPILL REPORT FORM ***
8907130
DEC Region: 9 - Buffalo Spill N
o.: 8907130

Spill Name : Lead DEC
:
Caller Info : Notifier Info
:
DON MCNERNEY

MOBIL OIL

(716) 827-5127

Spill Date: 10/19/1989 CID#: Call Received Date
: 10/19/1989
Spill Time: 15:00 hrs. Call Received Time
: 15:10 hrs.

Material Spilled: Class: Spilled:
Recovered:
1) UNKNOWN PETROLEUM Petrol 0 Gal
0
2)
3)
4)

Spill Location: Potential Spiller Info
:
BABCOCK ST OVERFLOW UNKNOWN

BABCOCK STREET

BUFFALO CO: Erie

Contact: Contact:

Phone: Phone:

Spill Cause: Unknown Resource Affected: S

urface Water

Source: Unknown

Waterbody: BUFFALO RIVER

Spill Reported by: Other

Caller Remarks:

SHEEN OBSERVED FROM BABCOCK ST SEWER OVERFLOW, HEAVY RAINS OCCURRING AT THIS TIME, NOTIFIED BY MOBIL OIL

PBS Number:

| | Tank Number | Tank Size | Test Method |
|----|-------------|-----------|-------------|
| 1) | Leak Rate | | |
| 2) | | | |
| 3) | | | |

Classification: Meets Standards?:

EDO: Y - N UST Eligible?:

Regional Cl

Issue Date: 11/02/1989

NYSDEC SPILL REPORT FORM



DEC REGION# 9 (Buffalo) SPILL NUMBER 9003889
 SPILL NAME: MOBIL OIL-OUTFALL DEC LEAD: MF
 CALLER'S NAME: DON MCNERNEY NOTIFIER'S NAME: _____
 CALLER'S AGENCY: MOBIL OIL NOTIFIER'S AGENCY: _____
 CALLER'S PHONE: (716) 827-5127 EXT. _____ NOTIFIER'S PHONE: _____ EXT. _____

SPILL DATE: 07/06/90 TIME: 13:15
 CALL RECEIVED DATE: 07/06/90 TIME: 13:25 RECEIVED BY CID #: _____

| Material Spilled | Mat. Class | Am't Spilled | Units | Am't Rec |
|-----------------------------|---|--------------|--|----------|
| 1) <u>UNKNOWN PETROLEUM</u> | <input type="radio"/> <u>Pet-Haz-Other-Unk.</u> | <u>1</u> | <input type="radio"/> <u>Gal - Lbs</u> | <u>0</u> |
| 2) _____ | <u>Pet-Haz-Other-Unk.</u> | _____ | <u>Gal - Lbs</u> | _____ |
| 3) _____ | <u>Pet-Haz-Other-Unk.</u> | _____ | <u>Gal - Lbs</u> | _____ |
| 4) _____ | <u>Pet-Haz-Other-Unk.</u> | _____ | <u>Gal - Lbs</u> | _____ |

SPILL LOCATION
 PLACE: MOBIL OIL-OUTFALL
 STREET: ONE BABCOCK STREET
 T/C/V: BUFFALO CO: ERIE
 CONTACT: _____
 PHONE: _____ EXT. _____

POTENTIAL SPILLER
 NAME: UNKNOWN
 STREET: _____
 CITY: _____
 STATE: _____ ZIP: _____
 CONTACT: _____
 PHONE: _____ EXT. _____

SPILL CAUSE
 Human Error _____ Tank Test Failure* _____ Tank Failure _____
 Traffic Accident _____ Housekeeping _____ Tank Overfill _____
 Equipment Failure _____ Deliberate _____ Other _____
 Vandalism _____ Abandoned Drums Unknown

SPILL SOURCE
 Gas Station _____ Private Dwelling _____ Non-Maj F _____
 Passenger Vehicle _____ Vessel _____ Comm/Ind _____
 Comm. Vehicle _____ Railroad Car _____ Non-Comm _____
 Tank Truck _____ Major Facility Unknown

RESOURCE AFFECTED
 On Land _____ Groundwater _____ Air _____
 In Sewer _____ Surface Water _____

** WATERBODY: BUFFALO RIVER

SPILL REPORTED BY
 Responsible Party _____ Tank Tester _____ Local Age _____
 Affected Persons _____ DEC _____ Federal Go _____
 Police Department ment _____ Citizen _____ Other _____
 Fire Department _____ Health Dept. _____

CALLER REMARKS: SHEEN ON THE RIVER COMING OUT OF BSA OUTFALL. COAST GUARD IS ON THE SCENE.

| * PBS Number | Tank Number | Tank Size | Test Method | Leak |
|--------------|-------------|-----------|-------------|-------|
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |

PRIMARY CONTACT CALLED DATE: _____ TIME: _____ hrs. REACHED DATE: _____ TIMEs. _____
 SECONDARY CONT. CALLED DATE: _____ TIME: _____ hrs. FAXED BY CID#: _____

| | | | |
|--------------------------------|------------------------|--------------------------------|--------------------------------|
| PIN # | T & A | Cost Center | ISR to Central Office |
| Cleanup Ceased <u>07/09/90</u> | Meets St'ds <u>YES</u> | Last Inspected <u>07/06/90</u> | NO Penalty |
| RP-CUI | ENF-INIT | INVES-COM | CAP |
| UST Trust Eligible <u>NO</u> | Site: <u>A B C D E</u> | Resp. Party <u>1 2 3 4 5 6</u> | Reg Close Date <u>07/09/90</u> |

Spill Number: 9003889 Spill Name: MOBIL OIL-OUTFALL

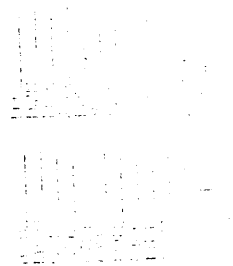
Printed on: 01/07/00

DEC REMARKS

07/09/90: MF SITE VISIT, BSA CHECKED SEWER UPGRADIENT, NO OIL. SHEEN BY
OUTFALL(NO MOVEMENT). NO MORE SHEEN COMING OUT OF OUTFALL. ONE SHOT SHEEN, NO
FUTHER ACTION NECESSARY.

MANAGEMENT
ENVIRONMENTAL

DEC 18 '91



INTEROFFICE CORRESPONDENCE

Date: December 12, 1991

To: File

cc:

BSA RIVER SPILL
BUFFALO RIVER

On December 9, 1991 at 0830 hours Bill Grondahl informed Paul Hazlett and myself that there was a sheen on the river.

On investigation it was discovered that the oil substance was coming from the Buffalo Sewer Authority outfall. It was noticed that the river was extremely low and that the outfall was flowing into the river and not the river into the outfall.

The following parties were notified, Buffalo Sewer Authority, local and state DEC, and the National Response Center.

The BSA arrived at 0900 hours, they were sent to investigate whether the outfall was indeed overflowing. While they were here the U.S. Coast Guard arrived. The Coast Guard and myself observed the BSA open the sewer covers and found that there was no additional water flowing into the outfall and that the water was not moving.

At 1030 hours Lt. Commander and we agreed that due to the spreading of the spill that he would call Environmental Products in to help contain the spill.

1100 hours Tim Dieffenbach from the N.Y. DEC arrived and review the river and all the BSA sewer drains. He also witnessed the deploying of the boom.

At 1200 Hours Environmental products showed up with boom and absorbants. We assisted in helping them deploy there boom.

1400 hours Chief Ron Endle from the Buffalo Fire Dept. showed up to review the scene. He requested that in the future that we notify him of all spills.

December 10, 1991 the U.S. Coast Guard requested that we leave the boom in one more day.

December 11, 1991 we removed our boom and the next day Environmental Products removed theirs.

A handwritten signature in black ink, appearing to read "G. E. Heffner". The signature is fluid and cursive, with a large initial "G" and "E".

G. E. Heffner
Terminal Superintendent
Buffalo Terminal

SPILL REPORT

FACILITY: BUFFALO TERMINAL

LOCATION OF SPILL BUFFALO RIVER

DATE/TIME DISCOVERED 12/9/91 0830

TIME REPORTED 0830

PERSON DISCOVERING BILL GRONPAHL

TYPE OF PRODUCT UNKNOWN AMOUNT UNKNOWN

SUPERVISOR NOTIFIED G. B. HEFFNER

N.Y.D.E.C. 1-800-457-7362 - NORMAL WORKING HOURS

518/457-7362 AFTER HOURS

NAME: GEORGE MAY TIME 0847

SPILL # 9109562

COMMENTS: _____

LOCAL D.E.C. - MON - FRI - 8:00 A.M. - 5:00 P.M.

716/851-7000

NAME: MIKE HINTON TIME 0840

PERSON ON LOCATION T. TIME/DATE 1000 12/9

COMMENTS: INFORMED HIM OF SOURCE. TOLD HIM THAT THE BSA HAD
BEEN INFORMED. ALSO THAT WE WERE PUTTING THE BOOM
IN TO CONTAIN THE SHEEP.

NATIONAL RESPONSE CENTER - 1-800-424-8802

NAME: PETTY OFFICER EVERSON TIME 0855

SPILL # 98855

COMMENTS: AGREED WITH LT. CAPT J. CUMMINGS TO CALL IN ENVIR. PM
AND PUT ADDITIONAL BOOM OUT

OFFICER P.O. CHRIS ALTMAN TIME/DATE 09:00 12/11

SPILL REPORT

-2-

STATE POLICE: 716/941-9300

NAME: _____ TIME: _____

COMMENTS: _____

LOCAL FIRE & POLICE "911" - 716/856-1870

NAME: CHIEF RON ENDLE TIME: 1400

COMMENTS: _____

BUFFALO SEWER AUTHORITY - IF THE SPILL HAS THE POTENTIAL OF REACHING THE SEWER STATION

TELEPHONE # 716/883-1820

NAME: JIM OVERHOLT TIME: 0835

PERSON ON LOCATION INVESTIGATION TIME/DATE 0900

COMMENTS: NONE

SOURCE OF SPILL AND DESCRIPTION: BUFFALO SEWER OUTFALL

ACTION TAKEN: INSTALLER ABSORBANT BOOM IN FRONT OF
OUTFALL AND DEPLOYED BOOM UP AND DOWN
RIVER

INTEROFFICE CORRESPONDENCE

DATE:

April 4, 1995

TO: S. S. Sobey

cc: G. B. Heffner

On Saturday April 1, 1995, at approximately 09:40 hrs, we received a call from PVS alerting us that there was a sheen on the Buffalo River and that it looked like it was coming from the Mobil dock area. We immediately investigated and came to the same conclusion. Following is a log for the events associated with the clean-up/spill reporting:

- 09:40 hrs - received call from PVS informing us of the spill
- 10:00 hrs - put the boat in the water and started containment and clean up measures
- 10:15 hrs - called NRC and reported spill (spill # 285244)
- 10:24 hrs - called DEC for spill # and could not get through (called again at 10:28, 10:40, and 12:09 and was unable to reach... the DEC inspector on sight informed us that they were having trouble with the phones)
- 10:30 hrs - beeped G. B. Heffner and brought up to speed
- 10:36 hrs - beeped J. Mitchell and brought up to speed
- 10:40 hrs - called S. S. Sobey and brought up to speed
- 10:45 hrs - called Tom Antinoff at GTI and brought him up to speed and requested that he report to sight
- 12:00 hrs - U. S. Coast Guard arrived to inspect the scene and were satisfied with our containment and clean-up efforts
- 12:30 S. S. Sobey arrived to inspect scene and help with investigation
- 01:00 hrs - New York State DEC arrived to inspect scene and were satisfied with our containment and clean-up efforts
- Sunday - continued clean-up and investigation of cause(s)

As of Monday morning April 3, 1995 we are still leeching product into the Buffalo River but we have the area boomed and are periodically changing out the absorbent pads. We are currently

investigating the cause(s) in order to resolve the problem.

Initially we suspected that the Well Point system was not working properly. However, we have systematically isolated the different sections of the Well Point system and believe it to be in working order. We will continue to investigate and keep you informed of our findings. If you have any questions or concerns please contact me.

Regards,

M. E. Mouton

From: GBHEFFNE--NECCVMD
To: SSSOBEY --NECCVMB SS SOBEY
cc: CMLABELL--FFX7 CM LABELLE
MEMOUTON--NECCVMD ME MOUTON

Date and time 04/08/95 10:09:12
SMMICHAU--NECCVMD SM MICHAUD

From: G.B.Heffner
Subject: Dock

The well point is still running well, over the last 20 hours it is averaging better than 110gpm. The wells are still down and we opened up the lift saturation full bore.

The three monitoring wells are, the far west and the one behind the well point building is 1/2 foot from the level in December, the far east one is 2 1/2 feet from the level in December. That well has come down 4 1/2 feet from last Saturday and 3 1/2 feet from yesterday.

The dock is still weeping. We have repositioned the boom and are in the process of removing the old absorbent boom and installing new boom and sucking out any free oil on the water.

We will continue to monitor the water and well point. I should be home later this afternoon if you wish to call. If not I will send you a note tomorrow as to the status.

Have good weekend.

GLENN
BUFFALO TERMINAL
8-423-5127

NYSDEC SPILL REPORT FORM



DEC REGION# 9 (Buffalo) SPILL NUMBER 9500007
 SPILL NAME: MOBIL OIL DEC LEAD: TED
 CALLER'S NAME: PETTI OFFICER BROD NOTIFIER'S NAME: _____
 CALLER'S AGENCY: USCG NOTIFIER'S AGENCY: _____
 CALLER'S PHONE: (716) 846-4168 EXT. _____ NOTIFIER'S PHONE: _____ EXT. _____

SPILL DATE: 04/01/95 TIME: 09:40
 CALL RECEIVED DATE: 04/01/95 TIME: 12:02 RECEIVED BY CID #: _____

| Material Spilled | Mat. Class | Am't Spilled | Units | Am't Rec |
|-----------------------------|---|--------------|------------------|----------|
| 1) <u>UNKNOWN PETROLEUM</u> | <input type="radio"/> <u>Pet-Haz-Other-Unk.</u> | <u>0</u> | <u>Gal - Lbs</u> | <u>0</u> |
| 2) _____ | <u>Pet-Haz-Other-Unk.</u> | | <u>Gal - Lbs</u> | |
| 3) _____ | <u>Pet-Haz-Other-Unk.</u> | | <u>Gal - Lbs</u> | |
| 4) _____ | <u>Pet-Haz-Other-Unk.</u> | | <u>Gal - Lbs</u> | |

SPILL LOCATION
 PLACE: MOBIL OIL
 STREET: 1 BABCOCK STREET
 T/C/V: BUFFALO CO: ERIE
 CONTACT: _____
 PHONE: _____ EXT. _____

POTENTIAL SPILLER
 NAME: MOBIL OIL
 STREET: 1 BABCOCK STREET
 CITY: BUFFALO
 STATE: NY ZIP: _____
 CONTACT: _____
 PHONE: _____ EXT. _____

SPILL CAUSE
 Human Error Tank Test Failure* Tank Failure
 Traffic Accident Housekeeping Tank Overfill
 Equipment Failure Deliberate Other
 Vandalism Abandoned Drums Unknown

SPILL SOURCE
 Gas Station Private Dwelling Non-Maj F
 Passenger Vehicle Vessel Comm/Ind
 Comm. Vehicle Railroad Car Non-Comm
 Tank Truck Major Facility Unknown

RESOURCE AFFECTED
 On Land Groundwater Air
 In Sewer Surface Water**

** WATERBODY: BUFFALO RIVER

SPILL REPORTED BY
 Responsible Party Tank Tester Local Age
 Affected Persons DEC Federal Go
 Police Department Citizen Other
 Fire Department Health Dept.

CALLER REMARKS: HEAVY OIL SHEEN ORIGINATING FROM MOBIL BREAKWALL NEAR MW #7

| * PBS Number | Tank Number | Tank Size | Test Method | Leak |
|--------------|-------------|-----------|-------------|------|
| | | | | |
| | | | | |

PRIMARY CONTACT CALLED DATE: _____ TIME: _____ hrs. REACHED DATE: _____ TIME: _____ hrs.
 SECONDARY CONT. CALLED DATE: _____ TIME: _____ hrs. FAXED BY CID#: _____

| | | | |
|------------------------------|--|--|---|
| PIN # | T & A | Cost Center | ISR to Central Office |
| Cleanup Ceased | <u>05/15/95</u> | Meets St'ds/ES | Last Inspection <u>05/12/95</u> Non-Penalty |
| RP-CUI | ENF-INIT | INVES-COM | CAP |
| UST Trust Eligible <u>NO</u> | Site: <input checked="" type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E | Resp. Party <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 | Reg Close Date <u>05/15/95</u> |

DEC REMARKS

04/01/95: JDC ON SITE W/ MARK MOUTON, MOBIL AND TOM ANTINOFF, GWT. SHEEN ON RIVER FROM MOBIL BREAKWALL TO BSA OUTFALL. BELEIVE OIL IS TRAPPED BETWEEN BREAKWALL AND WELL POINT SYSTEM.

04/01/95: CONTAINMENT BOOMS AND PADS WILL BE MAINTAINED. MW WILL BE CHECKED AGAINST QUARTERLY MONITORING DATA FRO ANY CHANGES. WELL POINT S WILL ALSO BE CHECKED FOR PROPER OPERATION.

04/01/95: JDC ON SITE W/ MARK MOUTON, MOBIL AND TOM ANTINOFF, GWT AND IDENTIFIED SHEEN IN RIVER. NO FREE PRODUCT WAS IDENTIFIED ACCEPT FOR MINOR OIL STAIN TO SORBENT PADS PLACE IN RIVER W/ CONTAINMENT BOOMS.

05/15/95: MOBIL HAS MADE REPAIRS TO WPS. NO FURTHER SHEEN EMINATING FROM FACILITY. SITE CLOSED 5/15/95. REFER TO SPILL #8808982.

* MOBIL BUFFALO TERMINAL

- 13 SAMPLES OF CLAY-MAT, ONE/DIRE.
- SHEEN ON RIVER AGAIN. GLENN SAYS WIND 'S FROM EAST, PUSHING WATER TO LAKE + LOWERING WATER. YESTERDAY, WHEN SHEEN WAS GONE, WIND WAS FROM WEST, PUSHING WATER LEVEL UP.

EPA LETTER

M2P2

- GLENN + TIM CONVERSATION: "I'D RATHER NOT TALK ABOUT IT NOW", 4:59S.
- RECOMMENDATIONS WILL NOT COME OUT YET.
- CRAIG LABELLE IS IN TOWN 12:20, 21.
- REECE, CRAIG IN THE LOW P. RIVER'S AN ATTY.
- KEITH IS RCRA AIDE.
- POINT OF CONTACT -

WPS-078900, 000 Gallons 10:57

* BILL KUBIK - GRATHAM PUMP-N-SCO AGENT TO LOOK = MBT OUNDS 11:30

* DE BOOTH CHADSEY - SHE SENT LETTER TO MARK III A 1:45 WHILE BACK + HAS GOTTEN NO RESPONSE, SHE'S LIKE RATTLE THEIR CAGE.

* GLENN - MBT

2:50

RED HOSE IN FIRE HOUSE NEEDS TO GO.

(11)

- DRIFILE UP AND 14" CLOSE DRIFILE.

11

SUZANNE - SMR, FIRST TIME REPORT ISSUE

(2)

* GLENN - E. PUMP CAUSE DOWN + REBAND; E. LEG SHUT DOWN COMPLETELY. MARK CAMPBELL TO HAVE MARTIN, A MECHANIC, ON SITE 4-7p to clean pumps.

MOBIL BUFFALO TERMINAL

4-1-95

11:00

INSPECTED BSA CSO OUTFALL. PSALODIC 12:30

FLOWS (SLOW) OF SIGNIFICANT COLORFUL SHEEN INTO RIVER. COAST GUARD ON SITE.

L.MOM FOR S. MICHAUD

BROWN PRODUCT SEEPING INTO RIVER 13:00

(DROP SURRY 30 SECONDS) FROM WOOD

PIPING BOLTS ON DOCK, APPROXIMATELY

IN AREA OF W/STEARLY FIRE PUMP HOUSE.

JIM COOK, DEC ON SITE.

36 OR 48" VERTICAL PIPE, APPROX 3 FEET

ABOVE GROUND, 15 FEET DEEP SHOWS PRODUCT

DIRECTLY UPGRADIENT OF SEEPS. DTP 14.93

DTW 15:09 ≈ 2:00pm. "OLD PUMP HOUSE WELL" 14:00

(OPHW). WELL IS THEN PLACED OUT. SEEPS

STOP ± 10 MINUTES LATER. FLOW INTO OPHW

FROM THE NORTH. 2:20pm. DTW 15.875; 14:20

DTP 15.870.

DTW OF RIVER MEASURED AT TIMBER ADJACENT 14:54

TO YELLOW "T" PIPE. DTW 12.90

WPS TOTAL FLOW 678,000

14:59

REPORTED TO SUZANNE MICHAUD.

15:30

DTW RIVER 12.42

16:17

WPS TOTAL FLOW 684,000

16:17

OPHW DTW 15.92 DTP 15.91, VALVE OUT 16:25

OPHW DTW 15.92 DTP 15.91

16:45

RW1-6 ALL NORMAL FLOW. STORM SEWER SUMP 17:30

LOW. TOTAL FLOW RECOVERY SYSTEM ± 140 GPM.

T. H. J.

OFF SITE

18:00

NYSDEC SPILL REPORT FORM



DEC REGION# 9 (Buffalo) SPILL NUMBER 9500223
 SPILL NAME: MOBIL OIL DEC LEAD: TED
 CALLER'S NAME: BRAD HOMAN NOTIFIER'S NAME: _____
 CALLER'S AGENCY: US COAST GUARD NOTIFIER'S AGENCY: _____
 CALLER'S PHONE: (716) 846-4168 EXT. _____ NOTIFIER'S PHONE: _____ EXT. _____

SPILL DATE: 04/06/95 TIME: 10:30
 CALL RECEIVED DATE: 04/06/95 TIME: 10:50 RECEIVED BY CID #: _____

| Material Spilled | Mat. Class | Am't Spilled | Units | Am't Rec |
|-----------------------------|--|----------------|---------------------------------|----------------|
| 1) <u>UNKNOWN PETROLEUM</u> | <input type="radio"/> Pet-Haz-Other-Unk. | <u>Unknown</u> | <input type="radio"/> Gal - Lbs | <u>Unknown</u> |
| 2) _____ | Pet-Haz-Other-Unk. | _____ | Gal - Lbs | _____ |
| 3) _____ | Pet-Haz-Other-Unk. | _____ | Gal - Lbs | _____ |
| 4) _____ | Pet-Haz-Other-Unk. | _____ | Gal - Lbs | _____ |

SPILL LOCATION

PLACE: MOBIL OIL
 STREET: 625 ELK STREET
 T/C/V: BUFFALO CO: ERIE
 CONTACT: _____
 PHONE: _____ EXT. _____

POTENTIAL SPILLER

NAME: MOBIL OIL
 STREET: 625 ELK STREET
 CITY: BUFFALO
 STATE: NY ZIP: _____
 CONTACT: _____
 PHONE: _____ EXT. _____

SPILL CAUSE

Human Error Tank Test Failure* Tank Failure
 Traffic Accident Housekeeping Tank Overfill
 Equipment Failure Deliberate Other
 Vandalism Abandoned Drums Unknown

SPILL SOURCE

Gas Station Private Dwelling Non-Maj F
 Passenger Vehicle Vessel Comm/Ind
 Comm. Vehicle Railroad Car Non-Comm
 Tank Truck Major Facility Unknown

RESOURCE AFFECTED

On Land Groundwater Air
 In Sewer Surface Water**

SPILL REPORTED BY

Responsible Party Tank Tester Local Age
 Affected Persons DEC Federal Go
 Police Department Citizen Other
 Fire Department Health Dept.

** WATERBODY: BUFFALO RIVER

CALLER REMARKS: PETROLEUM PRODUCT LEACHING FROM SOIL INTO BUFFALO RIVER.

| * PBS Number | Tank Number | Tank Size | Test Method | Leak |
|--------------|-------------|-----------|-------------|------|
| | | | | |
| | | | | |
| | | | | |

PRIMARY CONTACT CALLED DATE: _____ TIME: _____ hrs. REACHED DATE: _____ TIME: _____
 SECONDARY CONT. CALLED DATE: _____ TIME: _____ hrs. FAXED BY CID#: _____

| | | | |
|--------------------|-----------------|---|--|
| PIN # | T & A | Cost Center | ISR to Central Office |
| Cleanup Ceased | <u>05/15/95</u> | Meets St'ds/ES | Last Inspected <u>05/12/95</u> No Penalty |
| RP-CUI | ENF-INIT | INVES-COM | CAP |
| UST Trust Eligible | NO | Site <input checked="" type="radio"/> A B C D E | Resp. Party <input checked="" type="radio"/> 1 2 3 4 5 6 Reg Close Date <u>05/15/95</u> |

Created on 04/06/95 Last Updated on 05/18/95 Is Updated? NO EDO DATA INPUT

Spill Number: 9500223 Spill Name: MOBIL OIL

Printed on: 01/07/00

DEC REMARKS

04/07/95: TED, SITE INSPECTION SHEEN EMINATING FROM SAME LOCATION AS OCCURED ON 4/1/95. CAUSE MAY BE MALFUNCTION OF WELL POINT SYSTEM. MOBIL MAKING REPAIRS.

05/12/95: BOOM STILL IN PLACE ALONG BREAK WALL, NO FURTHER SHEEN EMINATING. MOBIL HAS MADE REPAIRS TO WPS.

05/15/95: TED SITE CLOSED 5/15/95. REFER TO SPILL # 8808982.

NYSDEC SPILL REPORT FORM



DEC REGION# 9 (Buffalo) SPILL NUMBER 9508906
 SPILL NAME: MOBIL OIL DEC LEAD: TED
 CALLER'S NAME: MARK MOUTON NOTIFIER'S NAME: SAME
 CALLER'S AGENCY: MOBIL OIL NOTIFIER'S AGENCY: _____
 CALLER'S PHONE: (716) 827-5127 EXT. _____ NOTIFIER'S PHONE: _____ EXT. _____

SPILL DATE: 10/19/95 TIME: 16:00
 CALL RECEIVED DATE: 10/19/95 TIME: 16:21 RECEIVED BY CID #: 351

| Material Spilled | Mat. Class | Am't Spilled | Units | Am't Rec |
|-----------------------------|--|----------------|---------------------------------|----------|
| 1) <u>UNKNOWN PETROLEUM</u> | <input type="radio"/> Pet-Haz-Other-Unk. | <u>Unknown</u> | <input type="radio"/> Gal - Lbs | <u>0</u> |
| 2) _____ | Pet-Haz-Other-Unk. | _____ | Gal - Lbs | _____ |
| 3) _____ | Pet-Haz-Other-Unk. | _____ | Gal - Lbs | _____ |
| 4) _____ | Pet-Haz-Other-Unk. | _____ | Gal - Lbs | _____ |

SPILL LOCATION
 PLACE: MOBIL OIL
 STREET: 625 ELK ST
 T/C/V: BUFFALO CO: ERIE
 CONTACT: MARK MOUTON
 PHONE: (716) 827-5127 EXT. _____

POTENTIAL SPILLER
 NAME: UNKNOWN
 STREET: _____
 CITY: _____
 STATE: _____ ZIP: _____
 CONTACT: _____
 PHONE: _____ EXT. _____

SPILL CAUSE
 Human Error _____ Tank Test Failure* _____ Tank Failure _____
 Traffic Accident _____ Housekeeping _____ Tank Overfill _____
 Equipment Failure _____ Deliberate _____ Other _____
 Vandalism _____ Abandoned Drums _____ Unknown _____

SPILL SOURCE
 Gas Station _____ Private Dwelling _____ Non-Maj F _____
 Passenger Vehicle _____ Vessel _____ Comm/Ind _____
 Comm. Vehicle _____ Railroad Car _____ Non-Comm _____
 Tank Truck _____ Major Facility _____ Unknown _____

RESOURCE AFFECTED
 On Land _____ Groundwater _____ Air _____
 In Sewer _____ Surface Water _____
 ** WATERBODY: BUFFALO RIVER

SPILL REPORTED BY
 Responsible Party Affected Persons _____ Tank Tester _____ Local Age _____
 Police Department _____ DEC _____ Federal Go _____
 Fire Department _____ Citizen _____ Other _____
 Health Dept. _____

CALLER REMARKS: OIL IS POSSIBLY COMING FROM THE BUFFALO SEWER AUTHORITY OUT FALL
IT IS A SHEEN ON THE RIVER AT THE BASE OF MOBIL'S DOCK

| * PBS Number | Tank Number | Tank Size | Test Method | Leak |
|--------------|-------------|-----------|-------------|-------|
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |

PRIMARY CONTACT CALLED DATE: _____ TIME: _____ hrs. REACHED DATE: _____ TIMEs.
 SECONDARY CONT. CALLED DATE: _____ TIME: _____ hrs. FAXED BY CID#: _____

| | | | | |
|--------------------|-----------------|--|--|--------------------------------|
| PIN # | T & A | Cost Center | ISR to Central Office | |
| Cleanup Ceased | <u>11/28/95</u> | Meets St'ds <input checked="" type="radio"/> NO | Last Inspection <u>10/95</u> | NO Penalty |
| RP-CUI | ENF-INIT | INVES-COM | CAP | |
| UST Trust Eligible | NO | Site: <input checked="" type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D <input type="radio"/> E | Resp. Party <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 | Reg Close Date <u>11/28/95</u> |

Created on 10/19/95 Last Updated on 11/28/95 Is Updated? YES EDO DATA INPUT
 Date Printed: 01/07/00

Spill Number: 9508906 Spill Name: MOBIL OIL

Printed on: 01/07/00

DEC REMARKS

10/19/95 JFO INSPECT. SHEEN ON BUFFALO RIVER FROM BSA OUTFALL. MOBIL PLACED AROUND OUTFALL W/ PADS. BSA, CITY OF BUFFALO & ERIE CO. NOTIFIED.

10/20/95 SAC INSPECT. SMALL SHEENNOTED AT BSA DISCHARGE PIPE, INSPECTED UPSTREAM MANHOLE, NO SHEEN VISIBLE.

11/10/95 TED INSPECT. NO SHEEN VISIBLE.

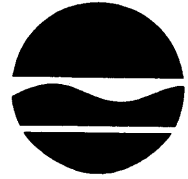
11/28/95 SITE CLOSED.

New York State Department of Environmental Conservation

Division of Environmental Remediation, Region 9

270 Michigan Avenue, Buffalo, New York, 14203-2999

Phone: (716) 851-7220 FAX: (716) 851-7226



John P. Cahill
Commissioner

June 29, 1998

Mr. Jeffrey A. Johnson
Mobil Oil Corporation
c/o Mobil Business Resources Corporation
464 Doughty Boulevard
2nd Floor
Inwood, New York 11096-1342

Dear Mr. Johnson:

Spill Number 9712937
Mobil Oil Corporation
Buffalo
Erie County

Enclosed is a copy of our spill file for the February 20, 1998 petroleum discharge to the Buffalo River.

If you have any questions, please call me at (716) 851-7220.

Sincerely,

A handwritten signature in cursive script that reads "Tim Dieffenbach".

Tim Dieffenbach
Engineering Geologist I

TED:dcm

NYSDEC SPILL REPORT FORM



DEC REGION# 9 (Buffalo) SPILL NUMBER 9712937
 SPILL NAME: MOBIL OIL CORP DEC LEAD: TED
 CALLER'S NAME: DON SHELDON NOTIFIER'S NAME: DON SHELDON
 CALLER'S AGENCY: MOBIL OIL NOTIFIER'S AGENCY: MOBIL OIL
 CALLER'S PHONE: (716) 827-5127 EXT. _____ NOTIFIER'S PHONE: (716) 827-5127 EXT. _____

SPILL DATE: 02/20/98 TIME: 08:00
 CALL RECEIVED DATE: 02/20/98 TIME: 08:28 RECEIVED BY CID #: 205

| Material Spilled | Mat. Class | Am't Spilled | Units | Am't Recovered |
|-----------------------------|---------------------------|----------------|------------------|----------------|
| 1) <u>UNKNOWN PETROLEUM</u> | <u>Pet-Haz-Other-Unk.</u> | <u>Unknown</u> | <u>Gal</u> Lbs | <u>0</u> |
| 2) _____ | <u>Pet-Haz-Other-Unk.</u> | _____ | <u>Gal</u> - Lbs | _____ |
| 3) _____ | <u>Pet-Haz-Other-Unk.</u> | _____ | <u>Gal</u> - Lbs | _____ |
| 4) _____ | <u>Pet-Haz-Other-Unk.</u> | _____ | <u>Gal</u> - Lbs | _____ |

SPILL LOCATION
 PLACE: MOBIL OIL CORP
 STREET: 1 BABCOCK STREET
 T/C/V: BUFFALO CO: ERIE
 CONTACT: CALLER
 PHONE: (716) 827-5127 EXT. _____

POTENTIAL SPILLER
 NAME: MOBIL OIL CORP
 STREET: 625 ELK STREET
 CITY: BUFFALO
 STATE: NY ZIP: 14210-
 CONTACT: MICHAEL LAMARRE
 PHONE: (516) 371-1484 EXT. _____

SPILL CAUSE
 Human Error _____ Tank Test Failure* _____ Tank Failure _____
 Traffic Accident _____ Housekeeping _____ Tank Overfill _____
 Equipment Failure _____ Deliberate _____ Other _____
 Vandalism _____ Abandoned Drums _____ Unknown

SPILL SOURCE
 Gas Station _____ Private Dwelling _____ Non-Maj Facility _____
 Passenger Vehicle _____ Vessel _____ Comm/Indust _____
 Comm. Vehicle _____ Railroad Car _____ Non-Comm/Instit _____
 Tank Truck _____ Major Facility _____ Unknown

RESOURCE AFFECTED
 On Land _____ Groundwater _____ Air _____
 In Sewer _____ Surface Water** _____
 **WATERBODY: BUFFALO RIVER

SPILL REPORTED BY
 Responsible Party _____ Tank Tester _____ Local Agency _____
Affected Persons _____ DEC _____ Federal Gov't _____
 Police Department _____ Citizen _____ Other _____
 Fire Department _____ Health Dept. _____

CALLER REMARKS: caller reported a sheen 5ft X 30ft. unk if it is there spill or not. caller is cleaning with vac at this time.

| * PBS Number | Tank Number | Tank Size | Test Method | Leak Rate |
|--------------|-------------|-----------|-------------|-----------|
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |

PRIMARY CONTACT CALLED DATE: _____ TIME: _____ hrs. REACHED DATE: _____ TIME: _____ hrs.
 SECONDARY CONT. CALLED DATE: _____ TIME: _____ hrs. FAXED BY CID#: _____

| | | | |
|-----------------------|-----------------|-------------------------|-----------------------|
| PIN # 00466 | T & A L963 | Cost Center 90004664-97 | ISR to Central Office |
| Cleanup Ceased | Meets St'ds NO | Last Inspection | Penalty NO |
| RP-CUI | ENF-INIT | INVS-COM | CAP |
| UST Trust Eligible NO | Site: A B C D E | Resp. Party 1 2 3 4 5 6 | Reg Close Date |

Created on 02/20/98 Last Updated on 03/02/98 Is Updated? YES EDO DATA INPUT []
 Date Printed: 03/02/98

NYSDEC SPILL REPORT FORM



DEC REGION# 9 (Buffalo) SPILL NUMBER 9712937
 SPILL NAME: MOBIL OIL CORP DEC LEAD: TED
 CALLER'S NAME: DON SHELDON NOTIFIER'S NAME: DON SHELDON
 CALLER'S AGENCY: MOBIL OIL NOTIFIER'S AGENCY: MOBIL OIL
 CALLER'S PHONE: (716) 827-5127 EXT. _____ NOTIFIER'S PHONE: (716) 827-5127 EXT. _____

SPILL DATE: 02/20/98 TIME: 08:00
 CALL RECEIVED DATE: 02/20/98 TIME: 08:28 RECEIVED BY CID #: 205

| Material Spilled | Mat. Class | Am't Spilled | Units | Am't Rec |
|-----------------------------|---|-----------------------|------------------|----------|
| 1) <u>UNKNOWN PETROLEUM</u> | <input type="radio"/> Pet-Haz-Other-Unk. <u>Unknown</u> | <input type="radio"/> | <u>Gal - Lbs</u> | <u>0</u> |
| 2) _____ | <u>Pet-Haz-Other-Unk.</u> | _____ | <u>Gal - Lbs</u> | _____ |
| 3) _____ | <u>Pet-Haz-Other-Unk.</u> | _____ | <u>Gal - Lbs</u> | _____ |
| 4) _____ | <u>Pet-Haz-Other-Unk.</u> | _____ | <u>Gal - Lbs</u> | _____ |

SPILL LOCATION

PLACE: MOBIL OIL CORP
 STREET: 1 BABCOCK STREET
 T/C/V: BUFFALO CO: ERIE
 CONTACT: CALLER
 PHONE: (716) 827-5127 EXT. _____

POTENTIAL SPILLER

NAME: MOBIL OIL CORP
 STREET: 625 ELK STREET
 CITY: BUFFALO
 STATE: NY ZIP: 14210-
 CONTACT: MICHAEL LAMARRE
 PHONE: (516) 371-1484 EXT. _____

SPILL CAUSE

Human Error Tank Test Failure* Tank Failure
 Traffic Accident Housekeeping Tank Overfill
 Equipment Failure Deliberate Other
 Vandalism Abandoned Drums Unknown

SPILL SOURCE

Gas Station Private Dwelling Non-Maj F
 Passenger Vehicle Vessel Comm/Ind
 Comm. Vehicle Railroad Car Non-Comm
 Tank Truck Major Facility Unknown

RESOURCE AFFECTED

On Land Groundwater Air
 In Sewer Surface Water

SPILL REPORTED BY

Responsible Party Tank Tester Local Age
 Affected Persons DEC Federal Go
 Police Department Citizen Other
 Fire Department Health Dept.

CALLER REMARKS: calle reported a sheen 5ft X 30ft. unk if it is there spill or not. caller is cleaning with vac at this time.

| * PBS Number | Tank Number | Tank Size | Test Method | Leak |
|--------------|-------------|-----------|-------------|------|
| | | | | |
| | | | | |
| | | | | |

PRIMARY CONTACT CALLED DATE: _____ TIME: _____ hrs. REACHED DATE: _____ TIMEs.
 SECONDARY CONT. CALLED DATE: _____ TIME: _____ hrs. FAXED BY CID#: _____

| | | | |
|-----------------------|-----------------|-------------------------|-----------------------|
| PIN # 00466 | T & A 963 | Cost Cert # 004664--97 | ISR to Central Office |
| Cleanup Ceased | Meets St'ds NO | Last Inspection | NO penalty |
| RP-CUI | ENF-INIT | INVS-COM | CAP |
| UST Trust Eligible NO | Site: A B C D E | Resp. Party 1 2 3 4 5 6 | Reg Close Date |

Created on 02/20/98 Last Updated on 03/02/98 Is Updated? YES EDO DATA INPUT
 Date Printed: 01/07/00

DEC REMARKS

02/20/98: RECIEVED PHONE CALL FROM DON SHELDON (MOBIL), REPORTED SHEEN ON BUFFALO RIVER APPROX. 5 X 30 FEET LONG. SAC NOTIFIED USCG, THEY ALREADY HAD SOMEONE ON THE SCENE, ALSO NOTIFIED ERIE COUNTY EMERGENCY SERVICES.

02/20/98: TED SITE INSPECTION, SHEEN COMING FROM BENEATH CONCRETE RETAINING WALL BEHIND PINTO CONST. BLDG. (FORMER MOBIL OIL LUBE OIL BLDG) APPROX. 82 FEET UPSTREAM OF BABCOCK ST. SEWER OVERFLOW OUTFALL. TOOK PICTURE OF MOBIL VACUUMING SEEP FROM RIVER. MOBIL AGREED TO INSTALL BOOM & MONITOR. CALLED MIKE LAMARRE, REQUESTED HE CHECK INTO STARTING UP EASTERN END OF WELL POINT SYSTEM (WPS). SCHEDULED SITE MEETING W/ LAMARRE ON 2/24/98.

02/24/98: TED SITE MEETING W/ MIKE LAMARRE (MOBIL) BRIAN CAREY & CRAIG ZINK (GES). CONTRACTORS WHO ORIGINALLY INSTALLED WPS (GRIFFIN DEWATERING CORP). TO INSPECT SYSTEM 2/26/98. I REQUESTED WEST END OF WPS REACTIVATED, STORM SEWERS SAMPLED FOR PETRO ID BY 2/27/98 & TEST PIT EXCAVATION BY BSA COMBINED SEWER OVERFLOW LINE BY OUTFALL TO RIVER.

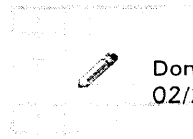
02/25/98: TED SITE INSPECT. W/ BRIAN CAREY, INSPECTED RIVER NO OIL BEHIND BOOM. MOBIL VACCED PRODUCT FROM SEWER CATCH BASINS. VACCED PRODUCT FROM SEWER CATCH BASIN BY BIOTREATMENT CELL AREA (20+ GALLONS?). CONTENTS OF VAC TRUCK TO BE EMPTIED INTO 8K RECOVERY TANK, BRIAN AGREED TO RECORD PRODUCT LEVELS BEFORE & AFTER TRUCK EMPTIED TO DETERMINE AMOUNT OF PRODUCT RECOVERED. SPOKE W/ JIM PANEPINTO, HE HAD NO PROBLEM W/ US SAMPLING SEWERS ON PINTO PROPERTY IF MOBIL DECLINED TO DO SAMPLING. TOLD JIM WE WOULD ALSO WANT TO EXCAVATE TEST PITS AT LATER DATE IF MOBIL DECLINED TO DO EXCAVATION WORK. JIM MENTIONED PROBLEMS IN THE PAST W/ SEWERS BACKING UP AFTER HEAVY RAINS & OVERFLOWING PRODUCT ONTO PARKINGLOT.

02/26/98: FAXED COPY OF 2/26/98 LETTER TO MIKE LAMARRE REQUESTING STARTUP OF WEST END OF WPS, SEWER SAMPLING, & TEST PITS. RECEIVED TELEPHONE MESSAGE FROM LAMARRE, MOBIL WILL NOT DO SAMPLING. OPENED PIN # FOR SPILL, CALLED STEVE MARCHETTI (MATRIX), WILL SAMPLE SEWERS MONDAY MORNING. CALLED WASTE STREAM, WILL PICKUP SAMPLE JARS MONDAY.

02/27/98: RECEIVED E-MAIL FROM LAMARRE. GRIFFIN INSPECTED WPS 2/26/98, EXPECT REPORT FROM THEM WITHIN NEXT FEW WEEKS, MOBIL WILL EVALUATE & RESPOND WITH THEIR DECISION. SAID NOT ENOUGH PRODUCT IN SEWERS TO SAMPLE NOR DO THEY BELIEVE THERE IS ANY REASON TO IDENTIFY THE MATERIAL. WILL REVIEW REQUEST FOR TEST PITS W/ MANAGEMENT & FORWARD RESPONSE ALONG W/ RESPONSE TO WPS QUESTION.

03/02/98: SITE INSPECT. W/ STEVE MARCHETTI, SAMPLED SEWERS, TOOK PICTURES OF SAMPLE LOCATIONS. INSPECTED RIVER, SHEEN CONTAINED BEHIND BOOM. CALLED JIM OVERHOLT, HE WILL DROP OFF BABCOCK ST. SEWER DRAWINGS TOMARROW MORNING, SAID TO CONTACT FRANK DIMASCIO (BSA ENGINEERING DEPT., CITY HALL) RE: TEST PIT EXCAVATIONS BY SEWER. CALLED FRANK DIMASCIO, HE REQUESTED WE SUBMIT SAMPLING PLAN FOR HIS REVIEW & NOTIFY BSA PRIOR TO CONDUCTING WORK SO THEY CAN BE PRESENT DURING UTILITY STAKEOUT & EXCAVATION WORK. CALLED EPA, SPOKE TO JIM DALOIA, NOTIFIED HIM OF POTENTIAL OPA90 SPILL, FAXED COPY OF SPILL REPORT TO JIM.

Buffalo Terminal



Don N Sheldon
02/20/98 02:42 PM

To: Michael A Lamarre/EastCoast/Mobil-Notes@Mobil
cc: Claudine Gorman/Fairfax/Mobil-Notes@Mobil
Subject: Sheen in Water alongside Buffalo Dock

A quick recap of what happened this A.M.. At approximately 7:45 a.m. while checking the dock area with Bill Grondahl, Buffalo plantman, we observed a sheen of about 5' by 30' alongside our dock, just a bit to the left of the forced water separator.(facing separator from dock) The initial deduction was that it was coming from our property,seeping thru the ground and exiting into the water.

I instructed my plantman to get some pads, and see if the sheen could be picked up by the pads. If that didn't pick up the sheen ,he was instructed to take our vac truck to the dock and skim the sheen area.

I came back to the terminal,called D.C. Champion and advised him of what was happening. He advised me that he was going to call M.Lamarre and C. Gorman and then get back to me. He called me back in about 10 minutes, and advised me to call the National Response Center and the NYDEC.

I called the NRC at about 8:10 am,spoke to PO Chancellor ,received spill #425263 and reported sheen alongside our dock. I told him that the sheen was approximately 5' by 30' and was located alongside our dock. I described the sheen as being brownish-rainbow in color. I also advised him that my plantman was already in the process of skimming the sheen up, using our vac truck.

I then called NYSDEC at 8:18 am and spoke to operator #205,who gave me spill #9712937. I reiterated that their was a sheen alongside our dock about 5' by 30' of unknown petroleum product,I let him know that the sheen was brownish-rainbow colored . I also advised him that my plantman was already in the process of skimming the sheen up.

After making the required calls I went to the dock area to see how things were going. I was advised by my plantman that our initial deduction that the product was coming from our property was incorrect. At this time, the USCG arrived at our location. I took the USCG out to the area where the sheen was 1st noticed. My plantman had skimmed it clean. They then walked along the dock thru the gate to Pinto and up past Pinto's property by PVS 's property.A sheen existed up to where PVS's property started. We came back the same way and on our return, we stopped by the BSA outflow and we were walking along the dock, when Lt. Sean O'Brien of the USCG noticed a fresh sheen

which was seeping out from along the dock wall behind Pinto's building. He asked about the property and I told him it belonged to Pinto construction. He suggested we spread boom to isolate the location of the sheen. I told him that I would have my plantman skim up the sheen. They then went alongside the dock where the original sheen was detected and determined that there was no more sheen visible. We came back to the office where I gave the USCG the number to get in touch with the Pinto people. They called Pinto and told them they would be over there in a few minutes. I called DEC and spoke to Tim Dieffenbach and advised him what was happening. He advised me and Lt. O'Brien that he would meet us at Pinto's. I stood behind and called Jim Haggerman from Environmental Products and Services to order a boat and some boom to run from the forced water separator to the BSA outflow.(approx.650 '). Jim told me he would call me back asap and let me know how soon he could mobilize his people to respond. After speaking with Jim, I received a call from the USCG from Pinto's and they asked me to come to Pinto. I drove over to Pinto and after speaking with them and the authorities, I was asked what could I do to help Pinto. I already had my man skim the sheen that was seeping into the river, and after the USCG and NYDEC talked they recommended I spread boom by the location of where the sheen was coming from. (isolate) They (USCG) advised me that they would like to come by Saturday am and check to see if by booming off this area they could determine where the product in the river was coming from. I was then asked by Tim Dieffenbach if I could have my plantman vac up three sewer basins on Pinto's property. I advised him I would try to take care of it. I then rushed back to the office and called Jim Haggerman at EP&S and told him to cancel any mobilization plans we had previously discussed. I then got in touch with my plantman and started to make the arrangements to put the sorbent boom in the area designated by the USCG. We finished putting the boom in at around 11:30 am.

Mobil Business Resources Corporation

464 Doughty Boulevard
Inwood, New York 11096-1342

April 10, 1998

Sent via E-Mail - No Hardcopy to Follow

New York State Department of
Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2999
ATTN: Mr. Tim Dieffenbach

**Mobil Buffalo Terminal
625 Elk Street
Buffalo, New York
NYSDEC Spill #: 97-12937**

Dear Mr. Dieffenbach:

This letter is a formal response to your December 18, 1997 and your April 6, 1998 letter. We have discussed each of these letters in detail in the past months, and this letter should answer or at least put forth a definitive time frame to find out answers to all of the Department's questions.

In 1997, there was a difference of opinion between the Department and Mobil with regards to when the reporting time frame for system downtime was to begin. Upon our initial review of the Consent Order, we had determined that the notification period would not begin until the after the SFI WP was approved. The Department's counsel notified us that notification would begin as of the date of execution of the Order. Mobil will concur with the Department's interpretation. In addition, Groundwater & Environmental Service ("GES") is developing a plan for which the terminal operators will review all component of the remedial system and the well point system on a daily basis and report the information back to GES. Our difficulty in the past has been that GES would only visit the site on a weekly basis, the teledialer would only kick in when a major component of the system would go down (i.e. high water float, transfer pump down, etc) and not take into consideration the individual pump. This new system will take care of those problems.

Another question of the Department's has been the location of where the product captured from the remedial system has been sent to. At the present time, I do not have any information with regards to the product. GES will start to look into this in the near future, combing their files as well as the Terminal's files.

In 1998, there were a few incidents were sheens have been observed in the Buffalo River in relative proximity to the former Lube Building and the BSA outfall along Babcock Street. With these events, your Department had requested that Mobil excavate a test hole near the BSA outfall and one between the former Lube Building and the bulk head. Mobil had responded stating that these areas are not on Mobil property and that we were not prepared to make a decision in terms of performing the work. At the present time, Mobil has agreed to re-activate the well point

system which extends from the Mobil property line to the northern end of the former Lube Building. This work should be completed and operational by the end of June 1998, barring any

Mobil Business Resources Corporation

Mr. Tim Dieffenbach - Mobil Buffalo Terminal (cont)

Page 2

difficulties with the procurement of the properly size liquid ring pump. In addition, as part of the SFI WP, Mobil will be installing borings in the rear of the former Lube Building which should satisfy the Department as an appropriate alternative to the test hole.

With reference to the test hole near the BSA outfall, Mobil is still not prepared to perform that excavation for numerous reasons. First and foremost, any contamination that you may find in the bedding of the pipe may have come from anywhere within the piping system associated with the BSA. In addition, due to the age and construction of the pipe, there is a good possibility that contamination flowing from within the BSA outfall pipe, which we both observed in February 1998 in the presence of GES personnel, could leach into the bedding and travel within. There have been other occasions where sheens and other debris have entered the River that were the result of a storm that emptied the contents of the pipe.

I hope this answered all of your questions. If there are any questions and/or comments, please feel free to call me at (516) 371-1484 or write to the above noted address.

Sincerely,

Original Signature of File

Michael A. Lamarre
Environmental Engineer

cc: B. Carey - GES
D. Sheldon - Mobil Buffalo Terminal

U. S. Department
of Transportation

United States
Coast Guard



Commanding Officer
U.S. Coast Guard
Marine Safety Office

1 Fuhrmann Blvd.
Buffalo, NY 14203
(716) 843-9570
Fax: 843-9571

16111/120
March 30, 1998

One Babcock Terminal Inc.
1 Babcock Street
Buffalo, New York 14210
Attn: Mr. James J. Panepinto

→TM

Dear Mr. Panepinto:

I have reviewed your comments concerning the oil discharge that occurred from your property into the Buffalo River on February 20, 1998. Your documentation reveals that Mobil Corporation may be responsible for pollution incidents that occur on or from your premises. With this new evidence, I am going to rescind the Coast Guard's Violation Ticket #00052933. If you have any questions, please call Lieutenant Sean K. O'Brien or me at (716) 843-9570.

Sincerely,

A handwritten signature in cursive script, appearing to read "J. J. Gleason".

J. J. GLEASON
Lieutenant, U.S. Coast Guard
By direction of the Commanding Officer

Copy: Mr. Tim Dieffenbach, New York DEC ✓
Mr. Don Sheldon, Mobil Corpotation Buffalo Terminal

RECEIVED

APR 2 1998

NYSDEC - REG. 9
FOIL
REL UNREL

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue, Buffalo, New York, 14203-2999
Phone: (716) 851-7220 FAX: (716) 851-7226



John P. Cahill
Commissioner

TO: Russell Biggs, Contract Unit, Room 686, Albany
FROM: ^{TED} Timothy Dieffenbach, Regional Spill Engineer, Region 9
SUBJECT: CONTRACT PAYMENT PACKAGE NO. 1 CONTRACT NO. D100847
CONTRACTOR'S NAME Matrix Environmental Technology, Inc.
PROJECT NUMBER SP 00466 SPILL NUMBER 9712937
STATE OIL SPILL PROJECT 9712937 FEDERAL UST TRUST PROJECT ---
DATE: April 7, 1998

Narrative of Events

Date of Spill: February 20, 1998

Location of Spill: 1 Babcock Street Buffalo, Erie County

Spillers: Mobil Oil Company

Material Spilled: Unknown Petroleum

Amount Spilled: < 5 gallons

Amount Recovered: < 5 gallons

Current Activity: On February 17, 1998 a petroleum sheen was reported emanating to the Buffalo River from the Mobil Oil Terminal and the Buffalo Sewer Authority's (BSA) combined sewer overflow at Babcock Street. The sheen from the terminal dissipated that day and Mobil Oil Corporation (Mobil) placed a boom around the sewer outfall. A petroleum product layer was found in several catch basins around the former Mobil Lube Oil Building.

On February 20, 1998 another petroleum sheen was reported emanating to the Buffalo River from beneath the retaining wall behind the former Mobil Lube Oil Building. The DEC requested Mobil sample the catch basins, excavate and sample test pits near the seeps and restart the wellpoint recovery system near the former Lube Oil Building. Mobil declined to do the sampling. The DEC hired Matrix Environmental Technology to conduct the sampling and Waste Stream Technology to analyze the samples.

Purpose of Expenditures: Waste Stream Technology was hired to analyze petroleum product samples for ignitability and petroleum identification. The cost of this work is \$343.28.

Attached are an original and two copies of the following documents for work performed from 03/02/98 to 03/13/98.

- Contractor's Payment Application/Voucher Certification
- Contractor's Invoice Number 5382, 2 Pages
- Contractor's Satisfactory Completed Job CAN 121a - Final Payment Only
- Receipts plus supporting documentation for non-contractual items
- Solicitation record as required

RECEIVED

CONTRACTOR'S PAYMENT APPLICATION/VOUCHER CERTIFICATION
Oil Spill Program

APR 6 1998

| | | |
|---|--|--|
| PAYEE (Name and Address) Matrix Environmental Technologies Inc. P.O. Box 427 Orchard Park, NY 14127-0427 | FOR INTERNAL USE ONLY | |
| | STATE COMPTROLLER'S PRE-AUDIT CERTIFIED FOR PAYMENT IN THE SUM OF \$ _____ BY: _____ | COMPTROLLER'S CONTRACT NUMBER D100847 CERTIFICATE NUMBER _____ ORIGINATING AGENCY 09000 DATE PREPARED _____ |
| WORK PERIOD <u>3/2/98</u> TO <u>3/13/98</u> | | |

| | |
|---|---|
| EMPLOYER IDENTIFICATION NUMBER 16-1391428 | LOCATION OF SPILL <u>Mobil Oil Corp. Babcock St. Buffalo, NY</u> |
| With Final Payment Attach Labor Affidavits for Payroll Period to Conform to New York State Labor Law Section 220. | |

| | |
|---|--|
| SCHEDULE I FINANCIAL STATEMENT | |
| SPILL NUMBER: <u>9712937</u> P.I.N.: <u>5P00466</u> CONTRACT VALUE Line 1. Original Contract: \$ _____ 2. Supplemental Agreement: \$ _____ 3. Net Contract Amount: \$ _____ | WORK PERFORMED Line 1. Contract Work Performed to Date \$ _____ 2. Work Performed This Estimate \$ <u>343.28</u> 3. Work Done to Date (Line 1 + 2) \$ _____ 4. Less Previous Payments \$ _____ 5. Pay This Estimate \$ <u>343.28</u> |

SCHEDULE II CERTIFICATION BY CONTRACTOR

I, RENÉE GAVENDY (name) do hereby certify that I am
Zini Ach... (Title) of the Company/Corporation
 herein referenced and contractor for the work described in the foregoing application for payment. According to my knowledge and belief all items and amounts shown on the face of this application for payment are correct, all work has been performed and/or materials supplied, the foregoing is a true and correct statement of the contract amount up to and including the last day of the period covered by the application.

4-2-98 Date Renée Gavendy Signature

SCHEDULE III CERTIFICATION TO THE ADMINISTRATOR OF THE NY ENVIRONMENTAL PROTECTION AND SPILL COMPENSATION FUND BY THE COMMISSIONER OF ENVIRONMENTAL CONSERVATION

I do hereby certify that the materials and labor stated therein have been furnished and the work properly performed in cleaning up and removing discharged petroleum products pursuant to Section 176 of Article 12 of the Navigation Law, and that payment can be made on this contract/voucher without detriment to the interests of the State to the best of my knowledge and belief.

4/7/98 Date BY Timothy E. Dieller Bach Commissioner of Environmental Conservation Signature

SCHEDULE IV CERTIFICATION TO THE COMPTROLLER BY THE ADMINISTRATOR

I hereby certify that, to the best of my knowledge and belief, the expenses for which I am approving payment for have been incurred and comply with the provisions and purposes set forth in Article 12 of the Navigation Law.

_____ Date _____ Signature

Contract No.: D100847 **Invoice Date:** 4/2/98 **Invoice No.:** 5382 **Invoice Amount:** \$343.28

Spill No.: 9712937 **Project I.D. No.:** 98004 **Work Period:** 3/2/98 – 3/13/98

Contractor Name: Matrix Environmental Technologies Inc.

Job Name & Description: Mobil Oil Corp., Babcock St, Buffalo, NY – Report consolidation/preparation. Picture processing for report and file.

Work Date: 3/13/98 **Start Time:** 1030 **End Time:** 1400 **Off Time:** NA

LABOR:

| Item No. | Employee Name Job Title | Regular Time | | Premium Time | | Profit Hrly Rate | Start Time | End Time | Off Time | Total Cost |
|----------|----------------------------|--------------|-------|--------------|------|---------------------|---------------|-------------|-------------|---------------|
| | | Hours | Rate | Hours | Rate | | | | | |
| L1R | S. Marchetti, Supervisor | 3.5 | 16.35 | | | 3.00 | | | | 67.13 |
| OH | Overhead Rate 140% | | | | | | | | | 80.12 |
| | | | | | | | | | | |
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EQUIPMENT:

| Item No. | Description | Charge Basis (X One) | | | | | No. of Units | Rate | Start Time | End Time | Total Cost |
|----------|-------------|----------------------|-----|------|------|-----|-----------------|------|---------------|-------------|---------------|
| | | Hrly | Dly | Disc | Wkly | Mon | | | | | |
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MATERIALS/MISCELLANEOUS:

| Item No. | Description | Invoice Reference | Quantity | Cost / Rate | Surcharge | Total Cost |
|----------|-------------|-------------------|----------|-------------|-----------|------------|
| X | Ritz Camera | 3/13/98 | | 12.33 | 1.23 | 13.56 |
| | | | | | | |
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|-------|-----|------|----------------|--------------|-------------|-----------------|
| MONTH | DAY | YEAR | PRINT NAME | COMPANY CODE | OFFICE CODE | EMPLOYEE NUMBER |
| 3 | 15 | 79 | Steve March 14 | 03 | 03 | 046 |
| | | | SIGNATURE | | | |

| JOB NAME | JOB DESCRIPTION | TIME DISTRIBUTION BY DAY | | | | | | | JOB NUMBER | TOTAL HOURS | UNIT PRICED |
|---------------------------|--|--------------------------|-------|------|--------|------|------|------|------------|-------------|-------------|
| | | MON. | TUES. | WED. | THURS. | FRI. | SAT. | SUN. | | | |
| Sun/Grant | Pack Samples - Place Samples in Jars | 2.0 | / | / | / | / | / | / | 91002 | 2.0 | |
| Sun/union & Cantor | Edit T-Probe RPT. | 0.5 | 1.0 | / | / | / | / | / | 93003 | 1.5 | |
| Ebernez Corp | Oric Installation | 2.0 | / | / | / | / | / | / | 93091 | 2.0 | |
| Ebernez Corp | Project Coordination Due To Poor Job Prep. | / | 1.0 | / | / | / | / | / | 93091 | 1.0 | |
| Sun/Latta | Project Coordination | / | 1.5 | / | / | / | / | / | 92029 | 1.5 | |
| Sun/Meadow ST | T-Probe RPT | / | 4.0 | / | / | 3.5 | 0.5 | / | 94134 | 6.5 | |
| CTO Hegue ST | Terrestrial Investigation | / | / | 0.5 | / | / | / | / | 98005 | 0.5 | X |
| Tyree/Roberson | Site Check | / | / | / | 6.5 | / | / | / | 98000 | 6.5 | X |
| LYSDEE/Mobil Oil Corp. | Report - Analytical Results/Edit | / | / | / | / | 3.5 | / | / | 98004 | 3.5 | |
| Sun/Colin & Egert | Bi-Weekly Evaluation | / | / | / | / | 1.0 | / | / | 93015 | 1.0 | X |
| Sun/Grant ST | Feb Q Report | / | / | / | / | / | 0.5 | / | 91002 | 0.5 | |
| Non-Chargeable | Paper work | / | / | / | / | / | / | 0.5 | | | |
| CHARGEABLE | Scheduling meeting + Site Schedule | 1.0 | / | / | 3.0 | / | / | / | | | |
| | Office work/Organize Chid | 3.5 | 1.5 | 1.0 | / | 3.0 | / | / | | | |
| | Drop off Samples | / | / | / | 0.5 | / | / | / | | | |
| AVAILABLE HOURS | | 4.5 | 7.5 | 9.5 | 6.5 | 7.0 | 2.5 | | | 37.5 | |
| TOTAL HOURS | | 9.0 | 9.0 | 11.5 | 10.0 | 10.0 | 3.0 | | | 52.5 | |

OF _____ BILLABILITY _____ %

APPROVAL SIGNATURE: _____

98004 DEC (12.33) ←
 91002 Sun-Land (12.34)

SITE CAMPAIGN #119, ORCHARD PARK, NY
 11571-0000

| TO | BY | DATE | AMOUNT | REMARKS |
|-----|----|----------|--------|-----------------------|
| 944 | | 12/13/83 | 10.00 | RTZ 1 HOUR PROTECT |
| | | | 1.00 | DISC |
| 944 | | 12/13/83 | 10.00 | RTZ 1 HOUR PROTECT |
| | | | 1.00 | DISC |
| | | | 20.00 | SUBTOTAL |
| | | | 21.00 | TAX |
| | | | 1.00 | TOTAL |
| | | | 14.50 | RECEIVED CHECK # 2450 |

OUR OFFICE IS OPEN MONDAY THROUGH FRIDAY 9:00 AM TO 5:00 PM
 SATURDAY 10:00 AM TO 4:00 PM SUNDAY 12:00 PM TO 4:00 PM

THANK YOU

FAX



New York State
Department of Environmental Conservation
Spill Response Unit
Region 9

DATE: 4/6/98

NUMBER OF PAGES BEING SENT 2 (INCLUDING THIS ONE)

SENT TO: Mike Lamarre

FAX NUMBER: _____

FROM: Tim Dieffenbach

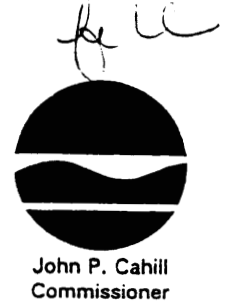
MESSAGE: Spill # 9712937 - 4/6/98 DEC letter
requesting reactivation of inactive
portion of WPS and additional
sampling in areas of petro seeps
to Buffalo River. Please confirm receipt

CONFIDENTIALITY NOTICE

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
270 MICHIGAN AVENUE, BUFFALO, NEW YORK 14203-2999
(716) 851-7220, FAX (716) 851-7252

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue, Buffalo, New York, 14203-2999
Phone: (716) 851-7220 FAX: (716) 851-7226



TO: Russell Biggs, Contract Unit, Room 686, Albany
FROM: ^{TED} Timothy Dieffenbach, Regional Spill Engineer, Region 9
SUBJECT: CONTRACT PAYMENT PACKAGE NO. 1 CONTRACT NO. D100937
CONTRACTOR'S NAME Waste Stream Technology, Inc.
PROJECT NUMBER SP 00466 SPILL NUMBER 9712937
STATE OIL SPILL PROJECT 9712937 FEDERAL UST TRUST PROJECT ---
DATE: April 6, 1998

Narrative of Events

Date of Spill: February 20, 1998

Location of Spill: 1 Babcock Street Buffalo, Erie County

Spillers: Mobil Oil Company

Material Spilled: Unknown Petroleum

Amount Spilled: < 5 gallons

Amount Recovered: < 5 gallons

Current Activity: On February 17, 1998 a petroleum sheen was reported emanating to the Buffalo River from the Mobil Oil Terminal and the Buffalo Sewer Authority's (BSA) combined sewer overflow at Babcock Street. The sheen from the terminal dissipated that day and Mobil Oil Corporation (Mobil) placed a boom around the sewer outfall. A petroleum product layer was found in several catch basins around the former Mobil Lube Oil Building.

On February 20, 1998 another petroleum sheen was reported emanating to the Buffalo River from beneath the retaining wall behind the former Mobil Lube Oil Building. The DEC requested Mobil sample the catch basins, excavate and sample test pits near the seeps and restart the wellpoint recovery system near the former Lube Oil Building. Mobil declined to do the sampling. The DEC hired Matrix Environmental Technology to conduct the sampling and Waste Stream Technology to analyze the samples.

Purpose of Expenditures: Waste Stream Technology was hired to analyze petroleum product samples for ignitability and petroleum identification.

Attached are an original and two copies of the following documents for work performed from 03/09/98 to 03/24/98.

- Contractor's Payment Application/Voucher Certification
- Contractor's Invoice Number DEC9807, 1 Page
- Contractor's Satisfactory Completed Job CAN 121a - Final Payment Only
- Receipts plus supporting documentation for non-contractual items
- Solicitation record as required

**CONTRACTOR'S PAYMENT APPLICATION/VOUCHER CERTIFICATION
Oil Spill Program**

| | | | |
|---|--|--|--|
| PAYEE (Name and Address) Waste Stream Technology Inc. 302 Grote Street Buffalo, N.Y. 14207 D100737 | | FOR INTERNAL USE ONLY | |
| | | STATE COMPTROLLER'S PRE-AUDIT CERTIFIED FOR PAYMENT IN THE SUM OF \$ _____ BY: _____ | COMPTROLLER'S CONTRACT NUMBER D100937 CERTIFICATE NUMBER ORIGINATING AGENCY 09001 DATE PREPARED |
| WORK PERIOD March 09, 98 to <u>3/24/98</u> | | | |
| EMPLOYER IDENTIFICATION NUMBER 16-1353695 | LOCATION OF SPILL Mobil Oil Terminal | | |
| With Final Payment Attach Labor Affidavits for Payroll Period to Conform to New York State Labor Law Section 220. | | | |
| SCHEDULE I FINANCIAL STATEMENT | | | |
| SPILL NUMBER: 9712937 P.I.N.: SP 00466 CONTRACT VALUE Line SEE ATTACHED | WORK PERFORMED Line 2. Work Performed This Estimate \$ <u>410.00</u> 5. Pay This Estimate \$ <u>410.00</u> | | |
| SCHEDULE II CERTIFICATION BY CONTRACTOR | | | |
| I <u>Edward M. Oddo</u> (name) do hereby certify that I am <u>Vice President</u> (Title) of the Company/Corporation herein referenced and contractor for the work described in the foregoing application for payment. According to my knowledge and belief all items and amounts shown on the face of this application for payment are correct, all work has been performed and/or materials supplied, the foregoing is a true and correct statement of the contract amount up to and including the last day of the period covered by the application. <u>March 24, 1998</u> Date <u>Edward M. Oddo</u> Signature | | | |
| SCHEDULE III CERTIFICATION TO THE ADMINISTRATOR OF THE NY ENVIRONMENTAL PROTECTION AND SPILL COMPENSATION FUND BY THE COMMISSIONER OF ENVIRONMENTAL CONSERVATION | | | |
| I do hereby certify that the materials and labor stated therein have been furnished and the work properly performed in cleaning up and removing discharged petroleum products pursuant to Section 176 of Article 12 of the Navigation Law, and that payment can be made on this contract/voucher without detriment to the interests of the State to the best of my knowledge and belief. | | | |
| <u>4/6/98</u> Date | RECEIVED APR 3 1998 | Commissioner of Environmental Conservation BY <u>Timothy E. DiEffenbach</u> Signature | |
| SCHEDULE IV CERTIFICATION TO THE COMPTROLLER BY THE ADMINISTRATOR | | | |
| I hereby certify that, to the best of my knowledge and belief, the expenses for which I am approving payment for have been incurred and comply with the provisions and purposes set forth in Article 12 of the Navigation Law. _____ Date _____ Signature | | | |



Waste Stream Technology Inc.

302 Grote Street
Buffalo, N.Y. 14207-2442
Phone (716) 876-5290
FAX (716) 876-2412

INVOICE

Please Remit Payment To:
Waste Stream Technology, Inc.
2749 Lockport Rd.
Niagara Falls, N.Y. 14302

March 24, 1998

INVOICE NO. DEC9807
CONTRACT NO. D10093

NYS Dept. of Environmental Conservation
270 Michigan Ave.
Buffalo, NY 14203-2999
ATTN: Mr. Timothy Diefenbach

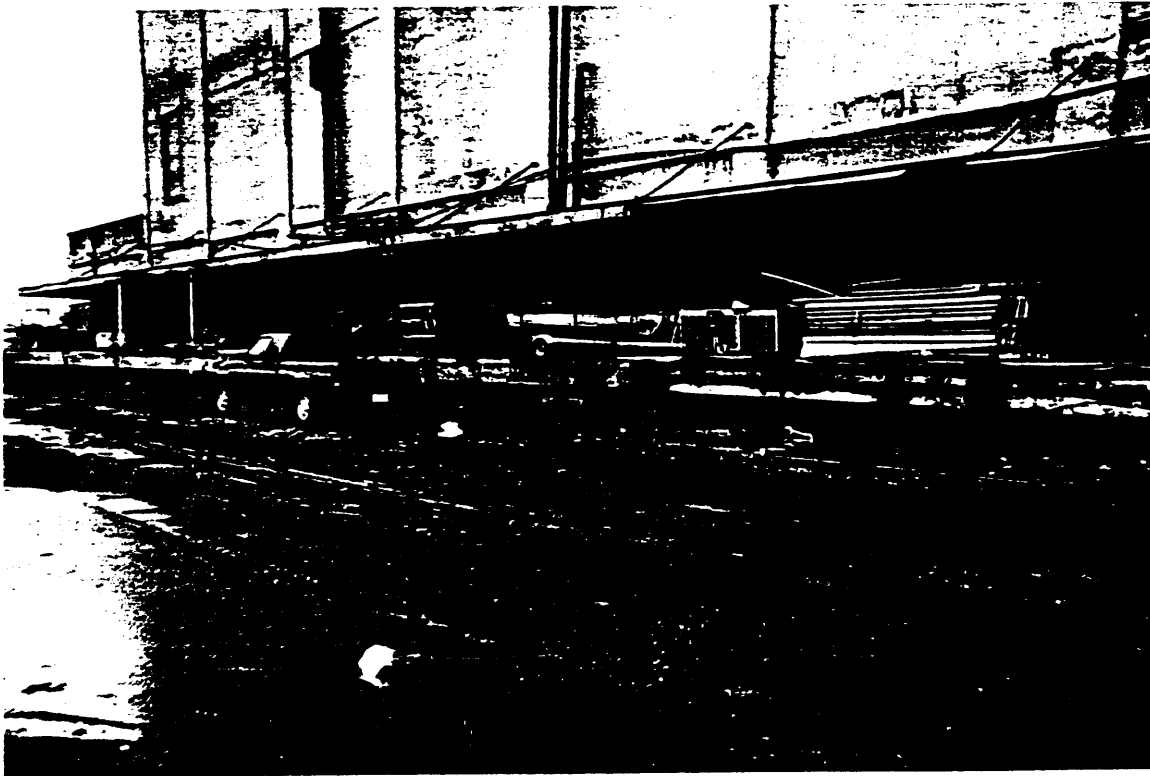
Spill No.: 9712937
PIN Number: SP 00466
WST Job No. 9801

Spill Location:
Mobil Oil Terminal

| Item No. | Quantity | Description | Price | |
|----------|----------|---------------|----------|---------------|
| | | | Unit | Total |
| ID-02-D | 4 | TPH by 310.14 | \$ 95.00 | \$ 380.00 |
| SS-55-D | 1 | Ignitability | \$ 30.00 | \$ 30.00 |
| Total | | | \$ | <u>410.00</u> |

Group No: 9701-261

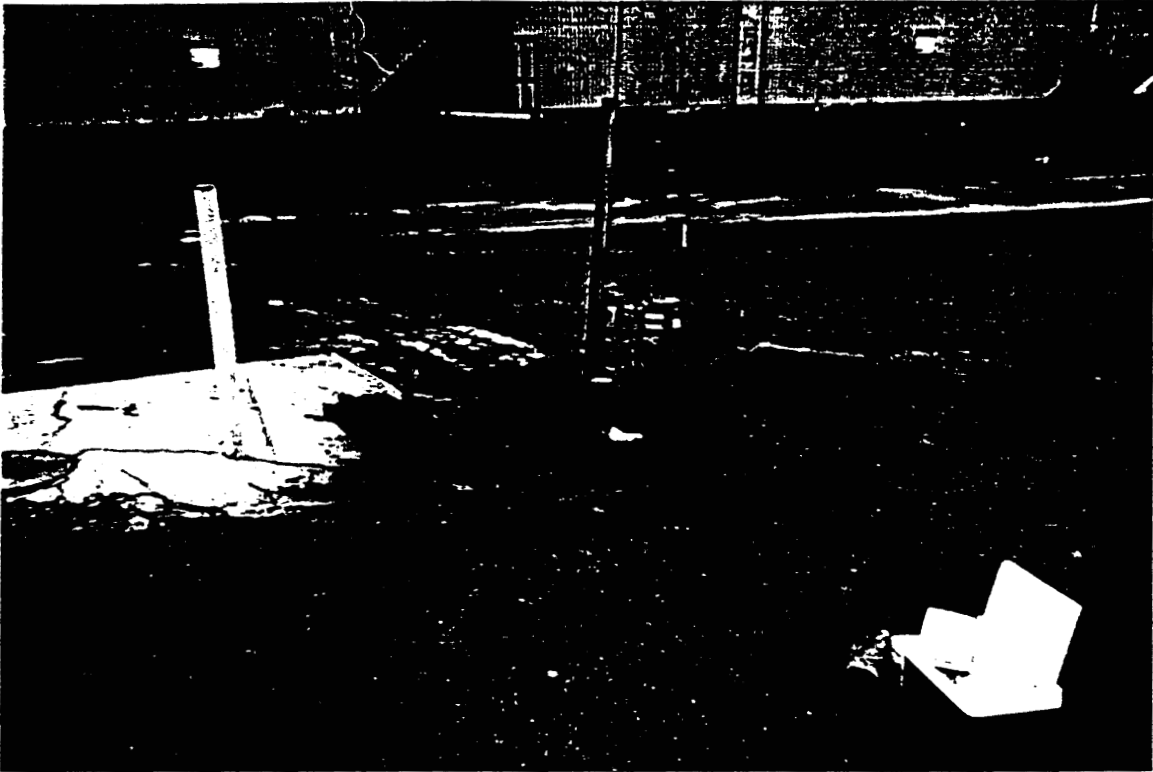
Catch Basin #1



Catch Basin #2



Catch Basin #3



Catch Basin #4



Laboratory Analytical Results

RECEIVED MAR 11 1998

WASTE STREAM TECHNOLOGY, INC.

302 Grote Street
Buffalo, NY 14207
(716) 876-5290

Analytical Data Report

Report Date : 03/09/98

Group Number : 9801-261

Prepared For :

Mr. Timothy Diefenbach
New York State

Department of Environmental Conservation
270 Michigan Ave.
Buffalo, New York 14203

Site : NYSDEC Mobile Oil Terminal

Field and Laboratory Information

| Client Id | WST Lab # | Matrix | Date Sampled | Date Received | Time |
|---------------|-----------|--------|--------------|---------------|------|
| Catch Basin 1 | WS40151 | Oil | 3/2/98 | 3/2/98 | 1030 |
| Catch Basin 2 | WS40152 | Oil | 3/2/98 | 3/2/98 | 1030 |
| Catch Basin 3 | WS40153 | Oil | 3/2/98 | 3/2/98 | 1030 |
| Catch Basin 4 | WS40154 | Oil | 3/2/98 | 3/2/98 | 1030 |

Sample Status Upon Receipt : No irregularities.

Analytical Parameters

TPH by 310.14
Ignitability

Analytical Services

Number of Samples

4
1

Turnaround Time

5 Business Days
5 Business Days

Report Released By : Daniel W. Vollmer
Daniel Vollmer, Laboratory QA/QC Officer

ENVIRONMENTAL LABORATORY ACCREDITATION CERTIFICATION NUMBERS
NYSDOH ELAP #11179 NJDEPE #73977 CDHS ELAP #2189



METHODOLOGIES

The specific methodologies employed in obtaining the analytical data reported are indicated on each of the result forms. The method numbers shown refer to the following analytical method references:

Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020, March 1979, Revised 1983, U.S. Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268.

Federal Register, 40 CFR Part 136: Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act. Revised July 1992.

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. Third Edition, Revised December 1996, United States EPA SW-846.

Annual Book of ASTM Standards, Volume II. ASTM, 100 Harbor Drive, West Conshohocken, PA 19428-2959.

Standard Methods for the Examination of Water and Wastewater. (18th Edition). American Public Health Association, 1105 18th Street, NW, Washington, D.C. 20036.

Waste Stream Technology, Inc
Ignitability (flash point)
SW-846 1010

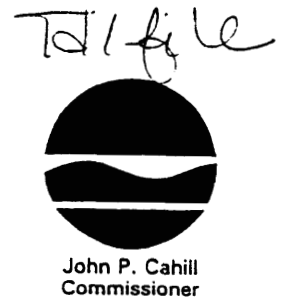
Site: NYSDEC MOBIL OIL TERMINAL
Date Sampled: 03/02/98
Date Received: 03/02/98

Group Number: 9801-261
Matrix: Oil

| WST Lab ID | Client ID | Analysis Date | Result |
|------------|---------------|---------------|--------|
| WS40152 | CATCH BASIN 2 | 03/05/98 | 100.4 |

> 200 = No flash detected at a temperature up to 200 degrees Fahrenheit.

New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue, Buffalo, New York, 14203-2999
Phone: (716) 851-7220 FAX: (716) 851-7226



April 6, 1998

**SENT VIA FAX AND
FIRST CLASS MAIL**

Mr. Michael A. Lamarre
Mobil Business Resource Corp.
2nd Floor/Environmental
464 Doughty Boulevard
Inwood, New York 11096-1342

Dear Mr. Lamarre:

Spill # 9712937
Mobil Oil Corp.
Buffalo, Erie County

On February 26, 1997, I sent you a letter (copy enclosed) requesting Mobil reactivate the Well Point System (WPS) between the former Mobil Lube Oil Building and the Buffalo River, sample the product in the catch basins around the former Lube Oil Building for petroleum identification and ignitability, and excavate and sample test pits in the vicinity of the oil seeps. In your February 27, 1998 letter of reply, you declined to perform the product sampling and deferred making a decision on the other two requests until after reviewing Griffin Dewatering Corp.'s evaluation report of the WPS which you expected within a few weeks. This Department then hired its own contractors to perform the product sampling and analysis and submit a report of the results (copy enclosed).

The petroleum hydrocarbon patterns exhibited by analysis of product from catch basins 1, 3 & 4 matched the pattern of a #2 fuel oil. The product sample from catch basin 2 was reported as an apparent mixture of weathered gasoline and #2 fuel oil and had a flash point of 100.4 Fahrenheit.

We are now requesting you inform us of Mobil's decision regarding the requests for additional sampling in the area of the seeps and reactivation of the inactive portion of the WPS by April 16, 1998.

If you have any questions, please contact me at 716/851-7220.

Sincerely,

Tim Dieffenbach
Tim Dieffenbach
Engineering Geologist I

TD/tml
Enclosure

March 18, 1998

Mr. Tim Dieffenbach
NYSDEC Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999

RE: Mobil Oil Corporation
Babcock Street
Buffalo, NY
NYSDEC Spill #97-12937
Matrix Project #98-004

MATRIX

Environmental Technologies

5835 Ellis Road
P.O. Box 427
Orchard Park, N. Y. 14127-0427

(716) 662-0745
(716) 662-0946 (Fax)

RECEIVED

MAR 23 1998

NYSDEC - REG. 9
FOIL
REL UNREL

Dear Mr Dieffenbach:

On March 2, 1998 Matrix Environmental Technologies Inc. collected product samples from four (4) catch basins at the site referenced above. Catch-basin #3 and catch basin #4 are reportedly connected to Mobil Oil's sewer system. The objective of the sampling event was to identify the product type through laboratory analysis. The following summarizes the methods and results of the investigation.

Methods of Investigation

The catch basins were located and photographs were taken for reference. After removing the protective covers, product samples were collected with a glass pipette and placed into glass jars. The samples were submitted to Waste Stream Technology, Inc. (NYS ID# 11179) for laboratory analysis for product identification using DOH Method 310-14 and for ignitability. A site map and photographs of the sample locations are attached.

Results

The samples were analyzed along with laboratory provided 75% weathered gasoline, and #2 fuel oil standards for comparison. The petroleum hydrocarbon patterns exhibited by the samples from catch basin 1, catch basin 3 and catch basin 4 matched the pattern of the #2 fuel oil standard. The sample from catch basin 2 was reported as being an apparent mixture of weathered gasoline and #2 fuel oil as the patterns of both hydrocarbon standards we present in the sample. Due to a limited amount of sample, ignitability could only be performed on the sample from catch basin 2. The flashpoint for the sample was 100.4 degrees Fahrenheit. The complete laboratory report, which includes chromatograms, is attached.

Mr. Tim Dieffenbach – Page 2

March 13, 1998

If you have any questions or require additional information, please contact me.

Sincerely,

Matrix Environmental Technologies Inc.

A handwritten signature in black ink that reads "Steve Marchetti". The signature is written in a cursive style with a large, stylized "S" and "M".

Steve Marchetti

Project Manager

cc: file

Attacments: Site Map
Photographs
Laboratory Report



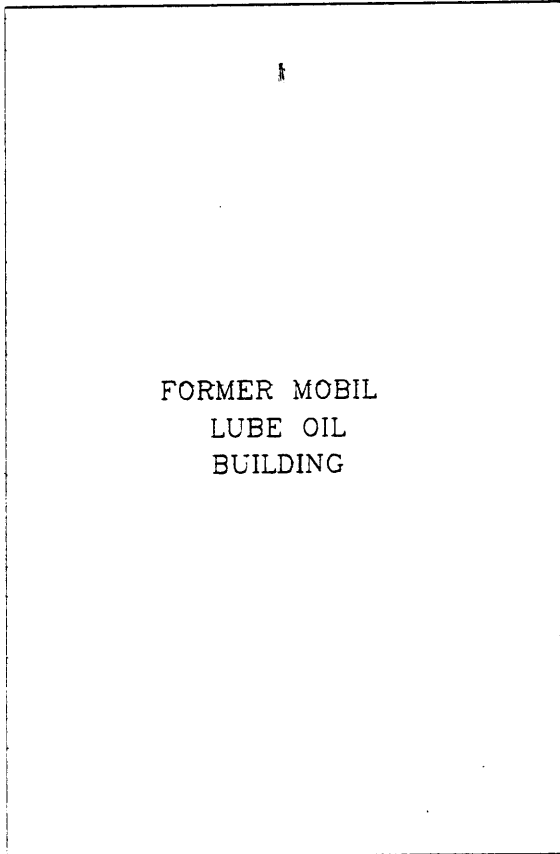
Catch Basin #4



Catch Basin #3



BABCOCK STREET



FORMER MOBIL
LUBE OIL
BUILDING

Catch Basin #2



Catch Basin #1



BUFFALO RIVER

NOT TO SCALE

FORMER MOBIL LUBE
OIL BLDG.
1 BABCOCK STREET
BUFFALO, NEW YORK
Prepared For
NYSDEC Region 9

CATCH BASIN LOCATIONS
SITE MAP

March 2, 1998



DRAWN BY S. Marchetti 3/13/98

CHECKED BY

APPROVED BY

REVISED

DRAWING NUMBER 98-004

Mobil Business Resources Corporation

464 Doughty Boulevard
Inwood, New York 11096-1342

February 27, 1998

Sent via E-Mail Only

New York State Department of
Environmental Conservation
Region 9
270 Michigan Avenue
Buffalo, New York 14203-2999
ATTN: Mr. Tim Dieffenbach

Mobil's Buffalo Terminal
625 Elk Street
Buffalo, New York
NYSDEC Spill #: 97-12937

Dear Mr. Dieffenbach:

This letter is in reply to your February 26, 1998 fax regarding the above noted property and the spill number associated. You had requested that numerous activities be completed by Mobil. Below is a item by item response to your requests.

Bring the Well Point System (WPS) between the Pinto Property and the Buffalo River back into operation

At the present time, Griffin Dewatering Corp. visited the site on Thursday, February 26, to review the existing active WPS and determine what, if anything, needs to be done to enhance its operation. A report is anticipated within the next few weeks. With regards to the inoperable portion of the WPS, I believe Griffin will evaluate this as well. Based upon their evaluation along with a review of the entire area with my management, Mobil will respond with our decision.

Sample the product in each of the storm sewer catch basins for petroleum identification and ignitability

Product has been observed in these catch basins for at least two years, and recently, Mobil has begun to vacuum the films of product off the water and disposing of it, as well as placing pads and boom in them to adsorb the material. At the present time there is not enough product in these catch basins, as you observed on Wednesday, February 25, to sample nor do we believe there is any reason to identify the material. Mobil will continue to maintain the pad, booms and vac truck services as required.

Mobil Business Resources Corporation

Mr. Tim Dieffencach; Buffalo Terminal Request (cont)

Page 2

Excavate a test pit along the Buffalo Sewer Authority overflow and another test pit approximately 80 feet where a seep was observed

At the present time, I am not in a position to state whether or not Mobil will or will not perform these excavation. I will review this information with my management and I will forward a response along with our response to the WPS question.

Please forward this correspondence as you deem necessary. If there are any questions and/or comments, I can be reached via E-Mail at "michael_a_lamarre@email.mobil.com", at (516) 371-1484 or at the above noted address.

Sincerely,

**ORIGINAL SIGNATURE ON
FILE**

Michael A. Lamarre
Environmental Engineer

cc: D. Champion - Mobil Rochester
D. Sheldon - Mobil Buffalo
S. McCullough - Mobil Albany

New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, New York 14203-2999
(716) 851-7220



John P. Cahill
Commissioner

February 26, 1998

**SENT VIA FAX AND
FIRST CLASS MAIL**

Mr. Michael Lamarre
Mobil Business Resource Corporation
2nd Floor/Environmental
464 Doughty Boulevard
Inwood, New York 11096-1342

Dear Mr. Lamarre:

Spill Number 9712937
Mobil Oil Corporation
Buffalo, Erie County

This letter is to confirm our February 24, 1998 meeting at the above-referenced site. I requested Mobil conduct the following work:

1. Bring the well point system(WPS) between Pinto's (former Mobil Lube Oil Building) and the Buffalo River back into operation. You stated Griffin, the contractors who originally installed the WPS, would be on-site on February 26, 1998, to access the current condition of this portion of the WPS.

I request a work schedule be submitted by March 13, 1998, for starting up this portion of the WPS.

2. Sample the product in each of the storm sewer catch basins by February 27, 1998, for petroleum identification. I am also requesting the samples be tested for ignitability and that chromatographs for the petroleum identification analyses be submitted.

As I stated at our meeting, if we do not receive a positive response from Mobil for conducting the sampling this Department will hire its own contractors to perform the work. Mobil, as the potentially responsible party for the spill, may then be held liable for all costs incurred by the State of New York.

Mr. Michael Lamarre
February 26, 1998
Page 2

3. Excavate a test pit along the Buffalo Sewer Authority combined sewer overflow line near the outfall to the Buffalo River. Additionally, I am requesting a second test pit, approximately 80 feet east of the outfall, in the location of the petroleum seep behind the former Lube Oil Building. Sampling will be required if contaminated material is encountered.

I request that the test pits be completed by March 13, 1998. If Mobil decides to do the work, our office must be notified in advance so that we may be present to inspect the work.

If you have any questions, please call me at (716)851-7220.

Sincerely,



Tim Dieffenbach
Engineering Geologist I

TD:ma

cc: Mr. Peter Buechi - Regional Remediation Engineer
Mr. Robert Leary - Regional Spill Engineer
Mr. David Stever - Assistant Attorney
Mr. James Caruso - Buffalo Sewer Authority
Mr. James Panepinto - Pinto Construction Services

Petroleum Product Identification Analysis Report
Method 310-14

Site : Mobil Oil Corp
NYS DEC Spill # : 9712937
Date Sampled : 3/2/98
Date Received : 3/2/98
WST Sample ID # : WS40151
Client ID : Catch Basin 1
Date Extracted : 3/6/98
Date Analyzed : 3/6 - 3/7/98

Result :

Approximately 0.04 g of the sample was diluted in 25 mL of methylene chloride and analyzed for petroleum hydrocarbon identification. The sample was analyzed along with a 75 % weathered gasoline and #2 fuel oil standard for comparison. The petroleum hydrocarbon pattern exhibited by sample number WS40151 is presented in figure 1, while the patterns exhibited by the 75 % weathered gasoline and #2 fuel oil standards are presented in figures 2 and 3 respectively.

Figure 4 shows the comparison of the sample pattern to the #2 fuel oil standard. The pattern exhibited by the sample matches the pattern of #2 fuel oil. A weathered gasoline pattern was not detected in the sample as analyzed.

Petroleum Product Identification Analysis Report
Method 310-14

Site : Mobil Oil Corp.
NYS DEC Spill # : 9712937
Date Sampled : 3/2/98
Date Received : 3/2/98
WST Sample ID # : WS40152
Client ID : Catch Basin 2
Date Extracted : 3/6/98
Date Analyzed : 3/6 - 3/7/98

Result :

Approximately 0.04 g of the sample was diluted in 25 mL of methylene chloride and analyzed for petroleum hydrocarbon identification. The sample was analyzed along with a 75 % weathered gasoline and #2 fuel oil standard for comparison. The petroleum hydrocarbon pattern exhibited by sample number WS40152 is presented in figure 5.

Figure 6 shows the comparison of the sample pattern to the weathered gasoline standard while figure 7 compares the sample to the #2 fuel oil standard. The sample appears to be a mixture of weathered gasoline and #2 fuel oil as the patterns of both hydrocarbons are present in the sample.

Petroleum Product Identification Analysis Report
Method 310-14

Site :: Mobil Oil Corp.
NYS DEC Spill # : 9712937
Date Sampled : 3/2/98
Date Received : 3/2/98
WST Sample ID # : WS40153
Client ID : Catch Basin 3
Date Extracted : 3/6/98
Date Analyzed : 3/6 - 3/7/98

Result :

Approximately 0.04 g of the sample was diluted in 25 mL of methylene chloride and analyzed for petroleum hydrocarbon identification. The sample was analyzed along with a 75 % weathered gasoline and #2 fuel oil standard for comparison. The petroleum hydrocarbon pattern exhibited by sample number WS40153 is presented in figure 8. The pattern exhibited by the sample matches the pattern of #2 fuel oil. A weathered gasoline pattern was not detected in the sample as analyzed.

Petroleum Product Identification Analysis Report
Method 310-14

Site: Mobil Oil Corp.
NYS DEC Spill # : 9712937
Date Sampled : 3/2/98
Date Received : 3/2/98
WST Sample ID # : WS40154
Client ID : Catch Basin 4
Date Extracted : 3/6/98
Date Analyzed : 3/6 - 3/7/98

Result :

Approximately 0.04 g of the sample was diluted in 25 mL of methylene chloride and analyzed for petroleum hydrocarbon identification. The sample was analyzed along with a 75 % weathered gasoline and #2 fuel oil standard for comparison. The petroleum hydrocarbon pattern exhibited by sample number WS40154 is presented in figure 9. The pattern exhibited by the sample matches the pattern of #2 fuel oil. A weathered gasoline pattern was not detected in the sample as analyzed.

GC/FID TPH Analysis

Sample Name : WS40151

Sample #: 20

Page 1 of 1

FileName : Q:\TC4\DATA2\T065020.raw

Date : 3/7/98 08:44 AM

Method : FIDTPH

Time of Injection: 3/7/98 08:08 AM

Start Time : 0.00 min

End Time : 35.00 min

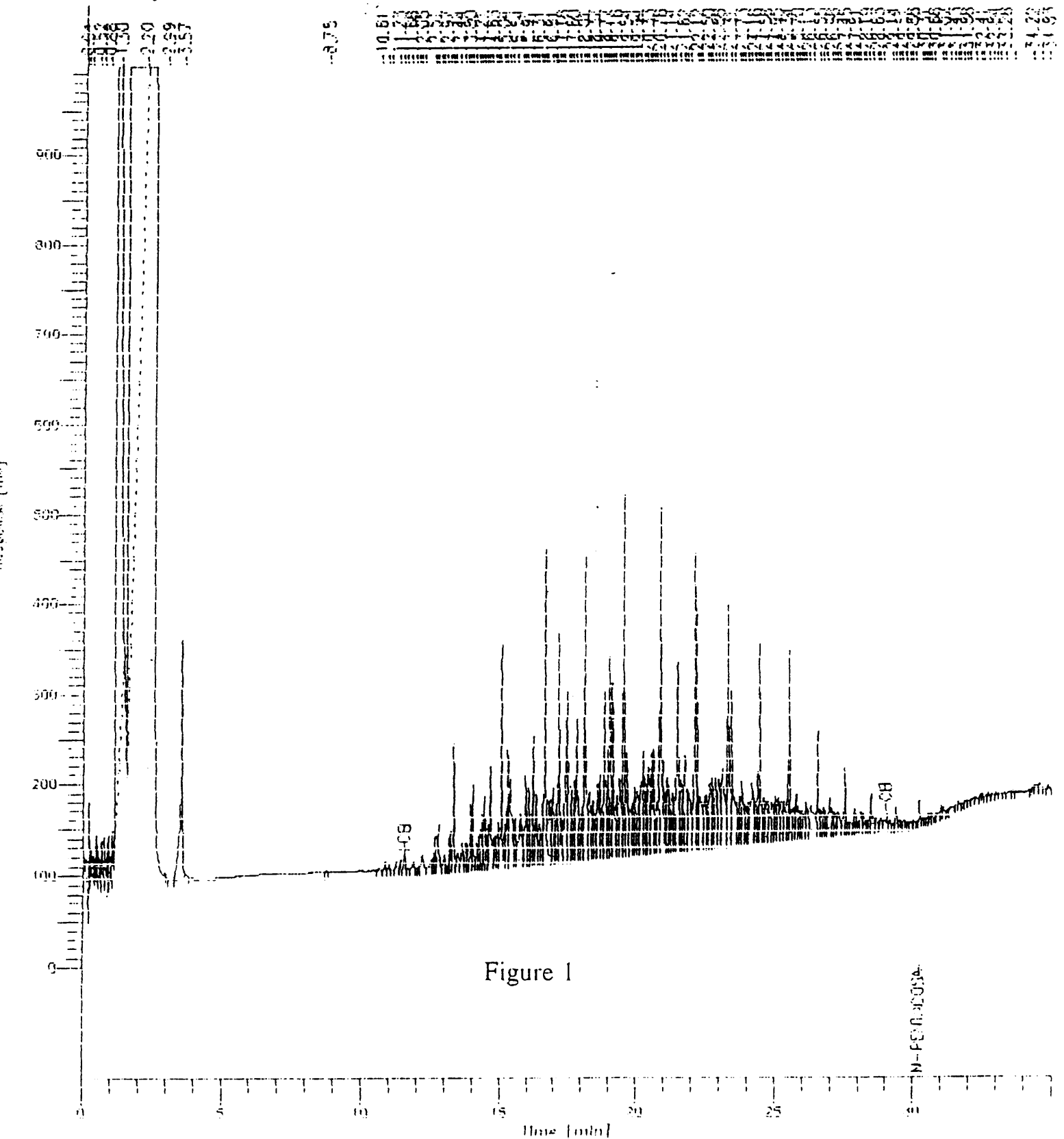
Low Point : 0.00 mV

High Point : 1000.00 mV

Scale Factor: 0.0

Plot Offset: 0 mV

Plot Scale: 1000.0 mV



GC/FID TPH Analysis

Sample Name : 500PPH 75% WEATHERED GAS STD

Sample #: 5

Page 1 of 1

Filename : F:\ATC\DATA\2\1065005.Law

Date : 3/6/98 06:17 AM

Method : FIDTPH

Time of Injection: 3/6/98 05:40 PM

Start Time : 0.00 min

End Time : 35.00 min

Low Point : 0.00 mV

High Point : 1000.00 mV

Scale Factor: 0.0

Plot Offset: 1000.0 mV

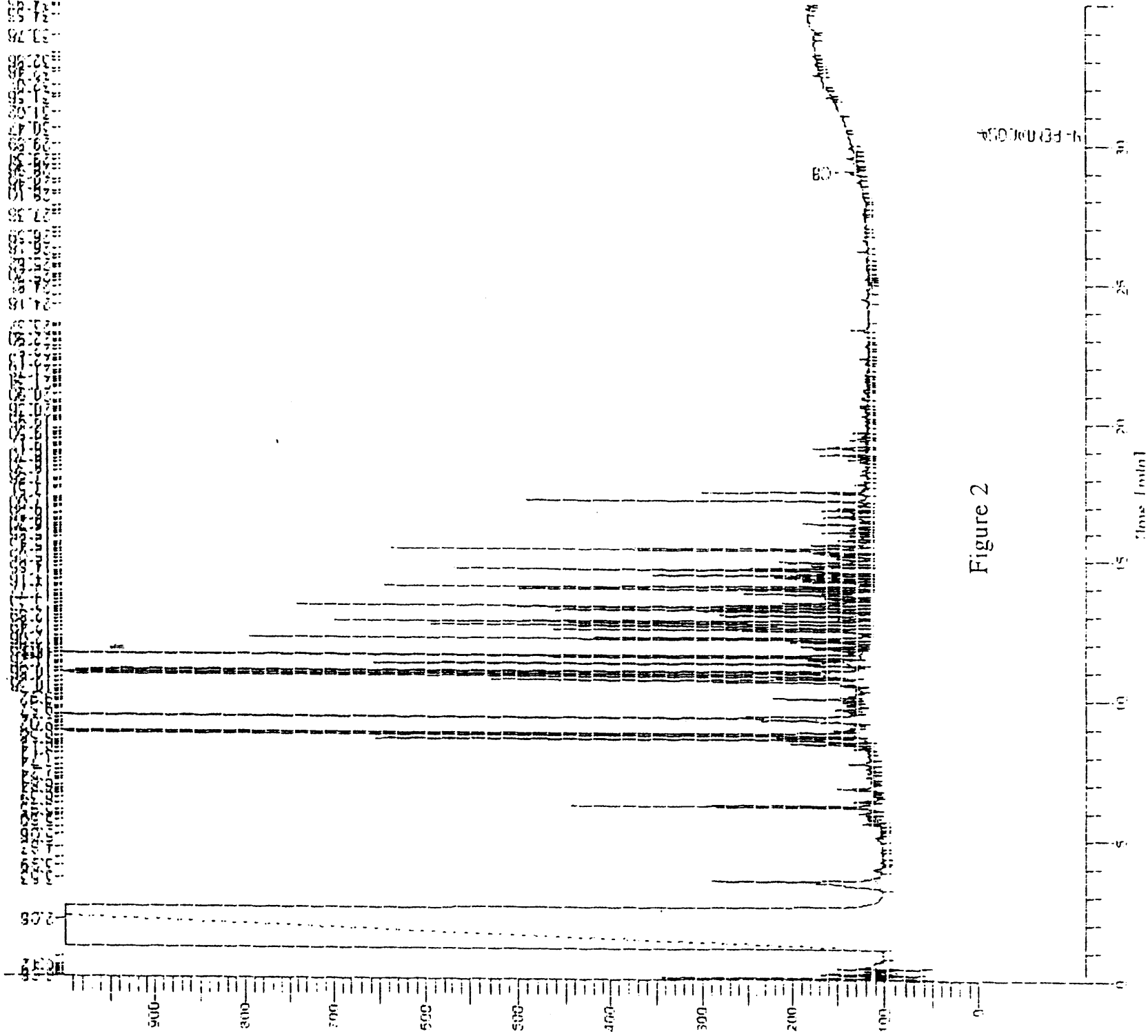


Figure 2

4-PEAKS

GC/FID TPH ANALYSIS

Sample Name : 550PPM FUEL 01142 STD
Sample #: 8
Page 1 of 1
Data : 3/6/98 09:12 PM
Time of Injection: 3/6/98 08:30 PM
Method : FID/TPH
Start Time : 0.00 min
End Time : 35.00 min
Low Point : 0.00 mV
High Point : 1000.00 mV
Scale Factor: 0.0
Plot Offset: 0 mV
Plot Scale: 1000.0 mV

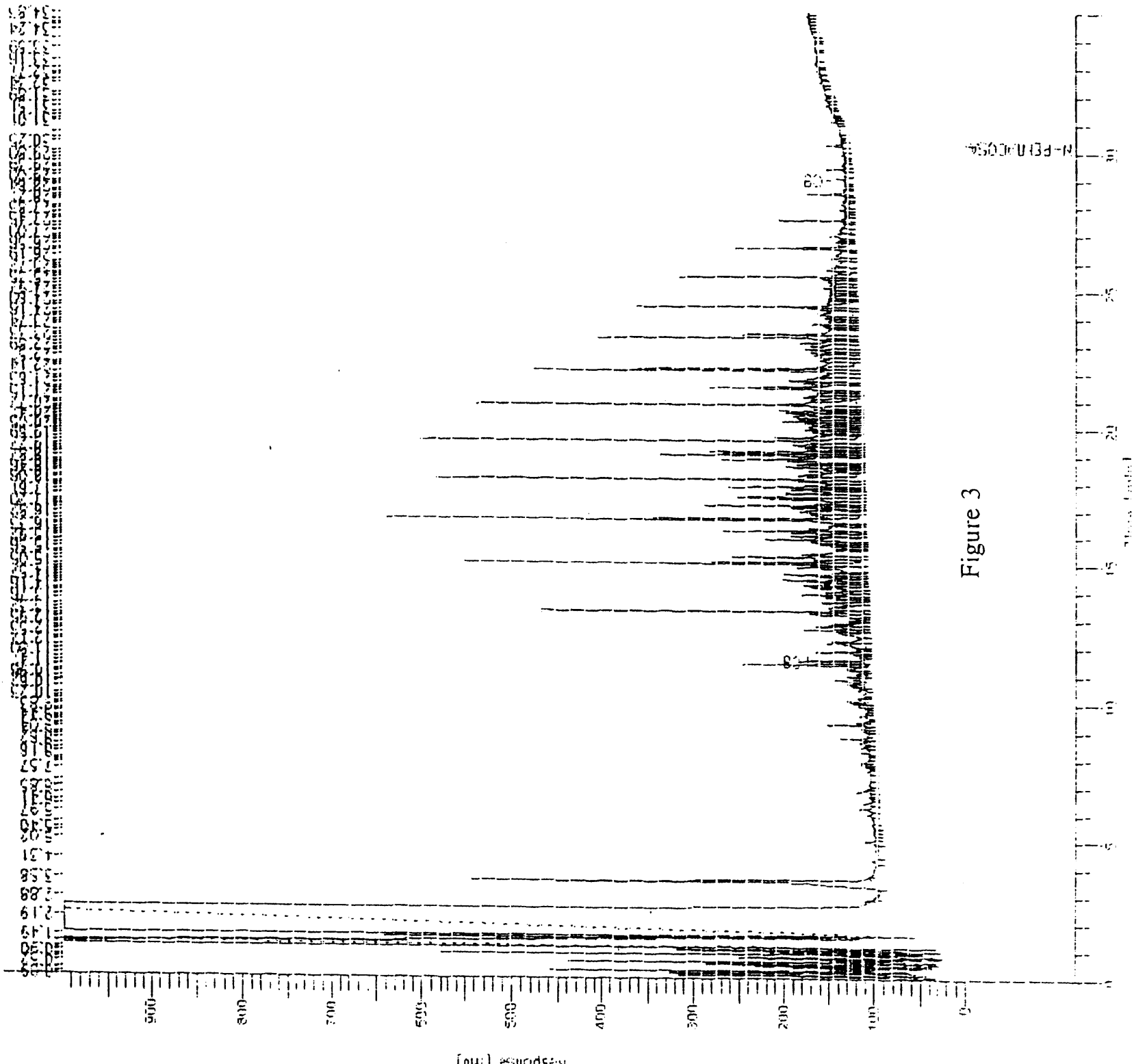
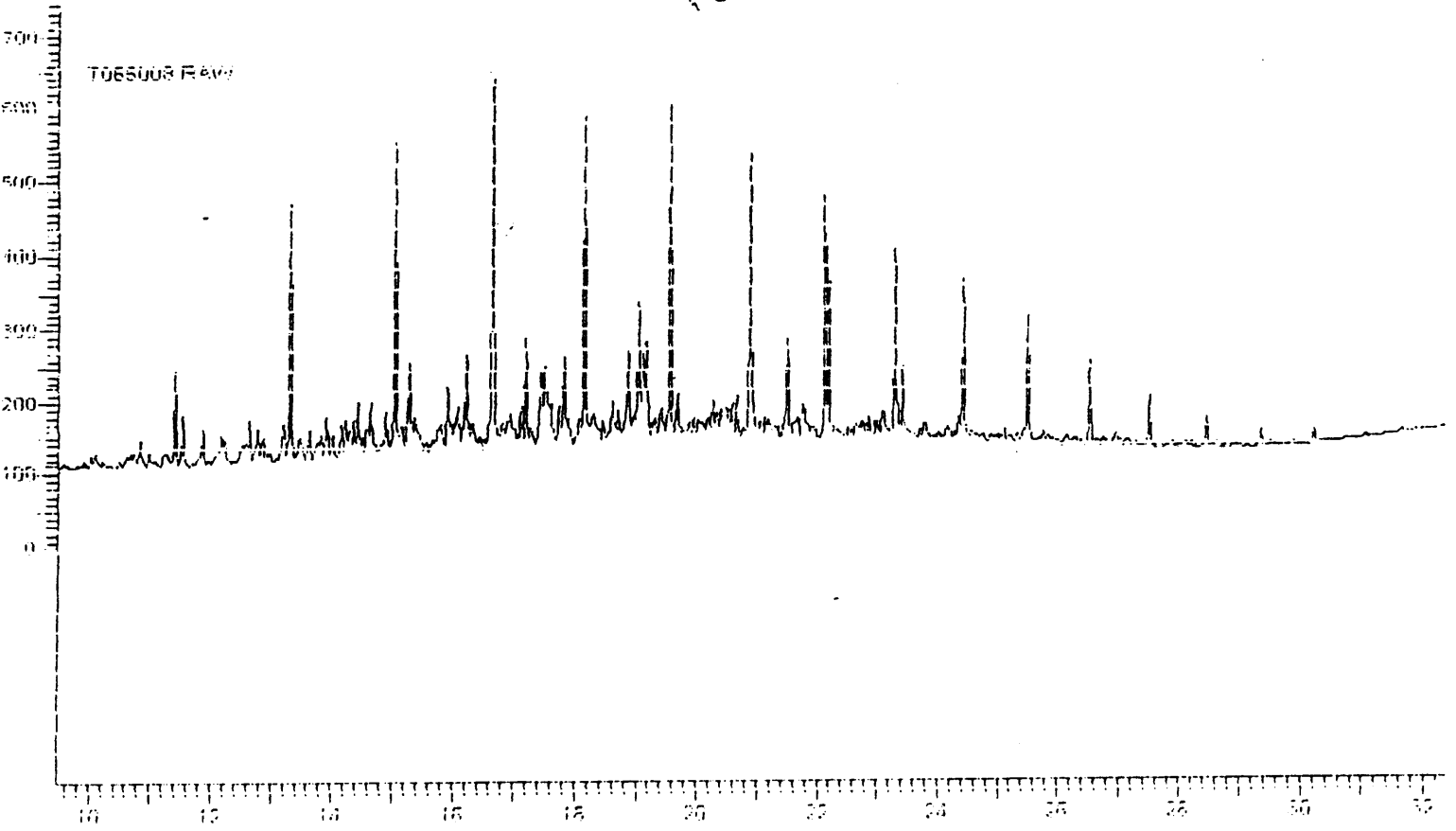


Figure 3

N-FERNA-COSEA

Fuel Oil # 2

1065008 RAW



1065020 RAW

1065 A0151

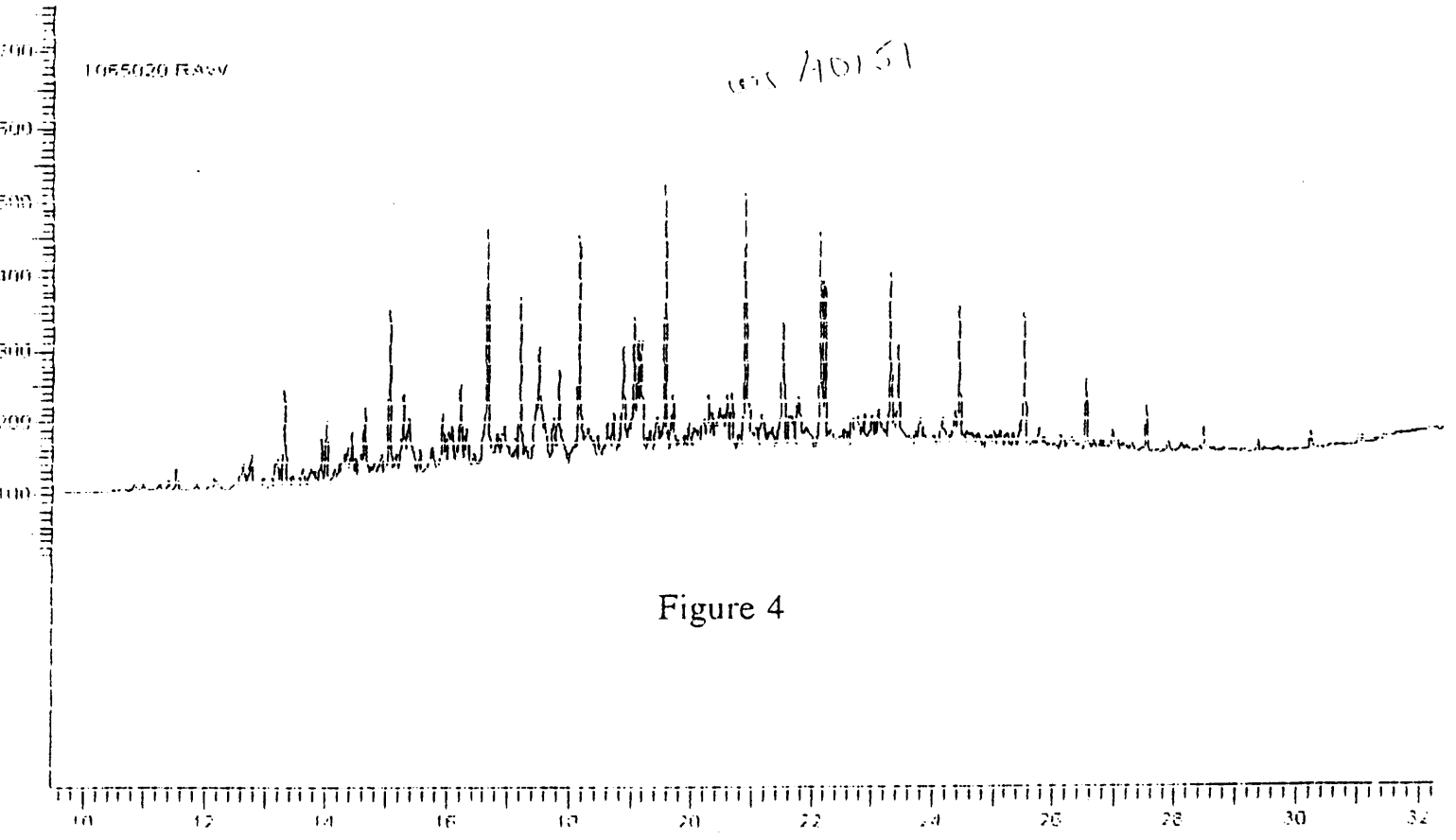


Figure 4

GC/FID TPH Analysis

Sample Name : WS40152 Sample #: 21 Page 1 of 1
FileName : J:\TC4\DATA\2\T065021.csw Date : 3/7/98 09:42 AM
Method : FIDTPH Time of Injection: 3/7/98 09:05 AM
Start Time : 0.00 min End Time : 35.00 min Low Point : 0.00 mV High Point : 1000.00 mV
Scale Factor: 0.0 Plot Offset: 0 mV Plot Scale: 1000.0 mV

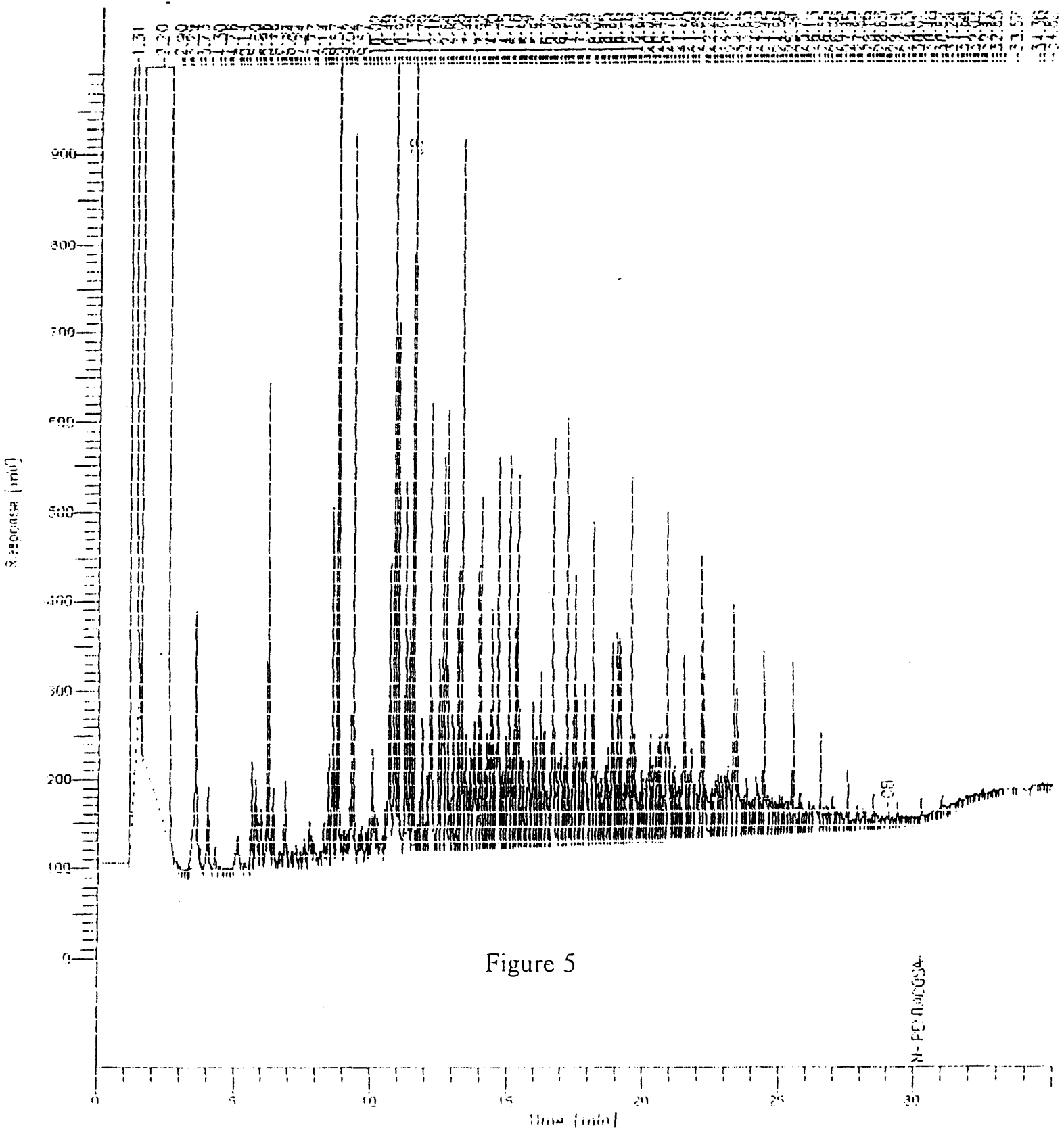
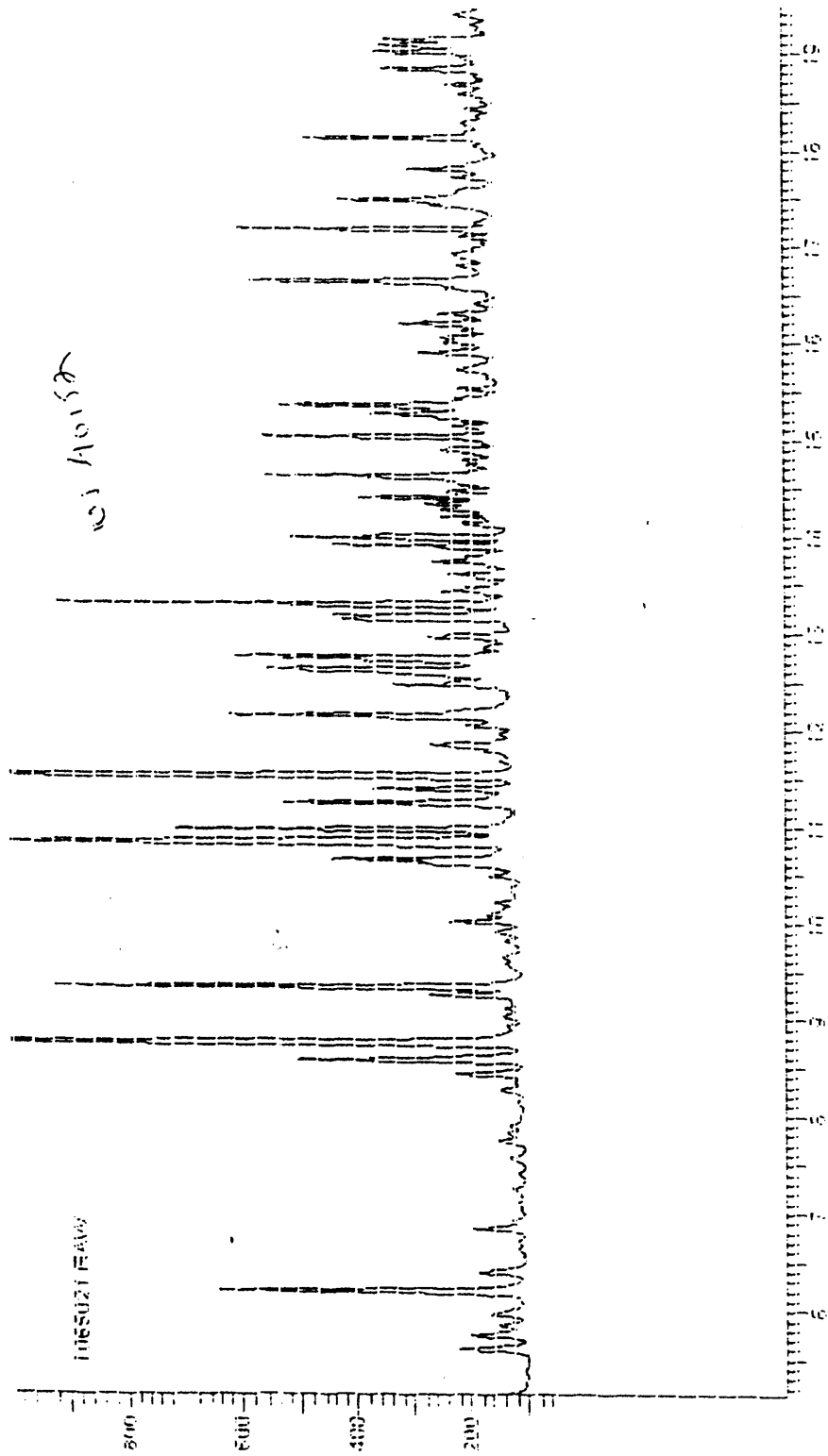
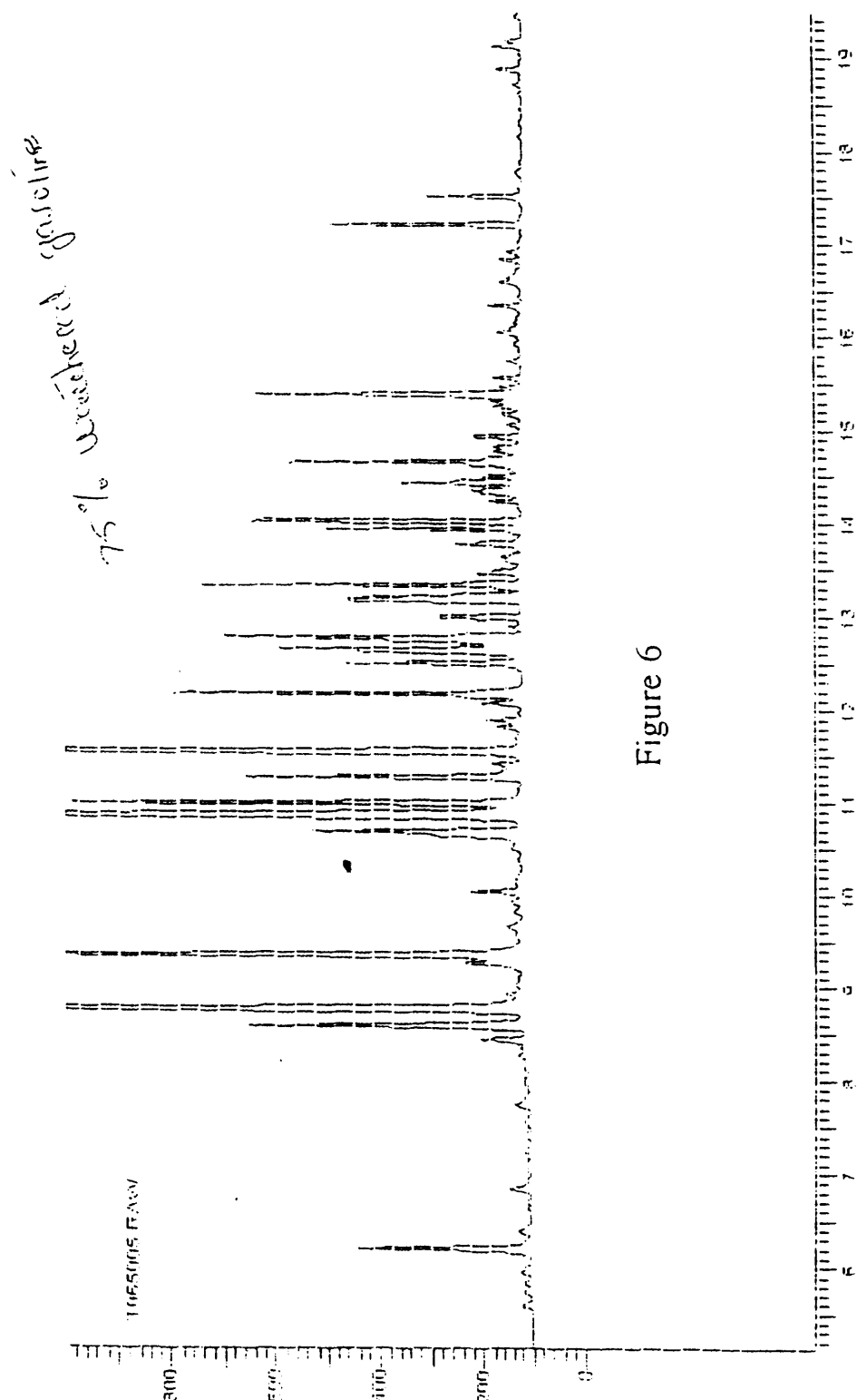


Figure 5

N-FC-000034



100 Noise



75% Unsubstituted gasoline

Figure 6

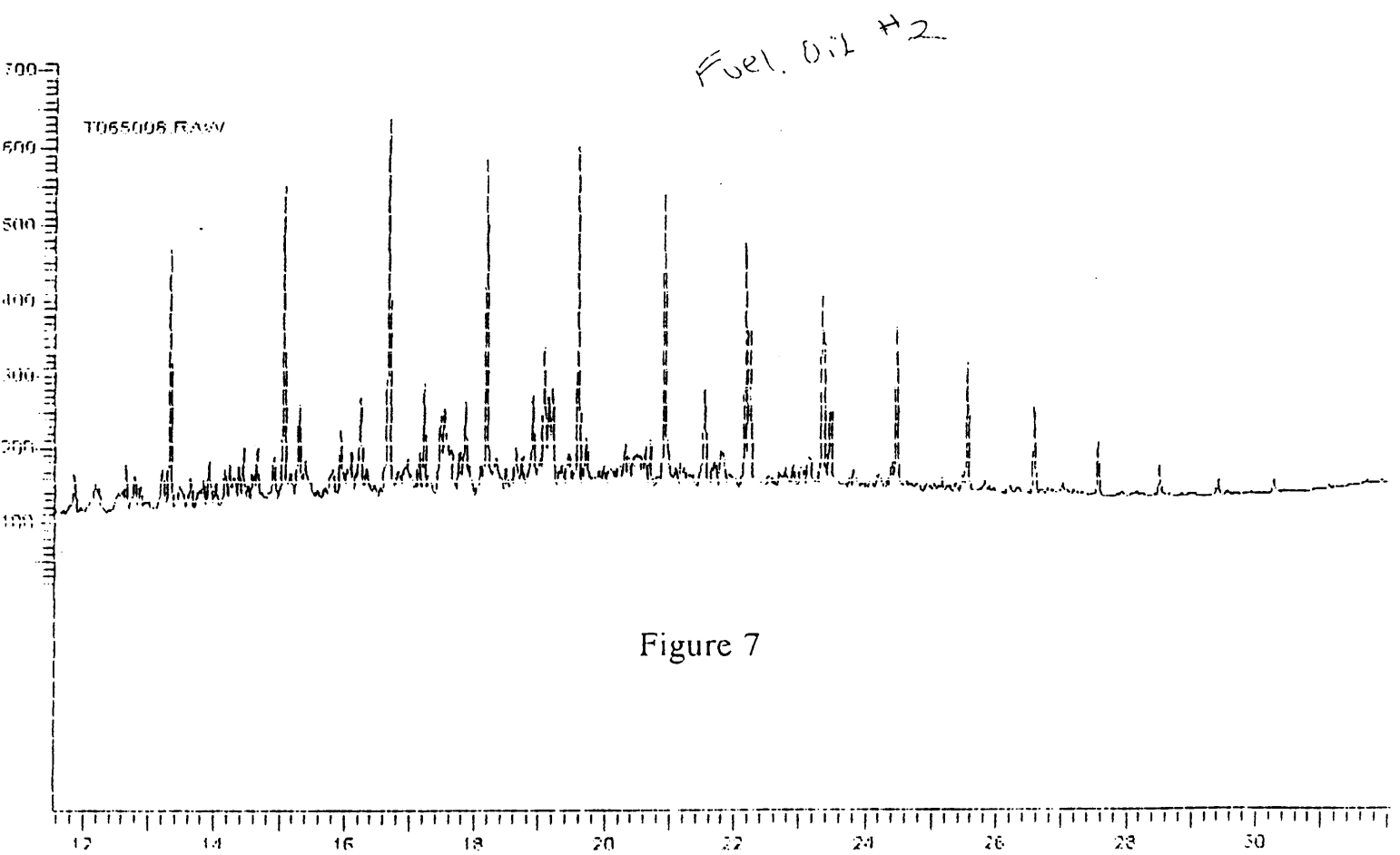
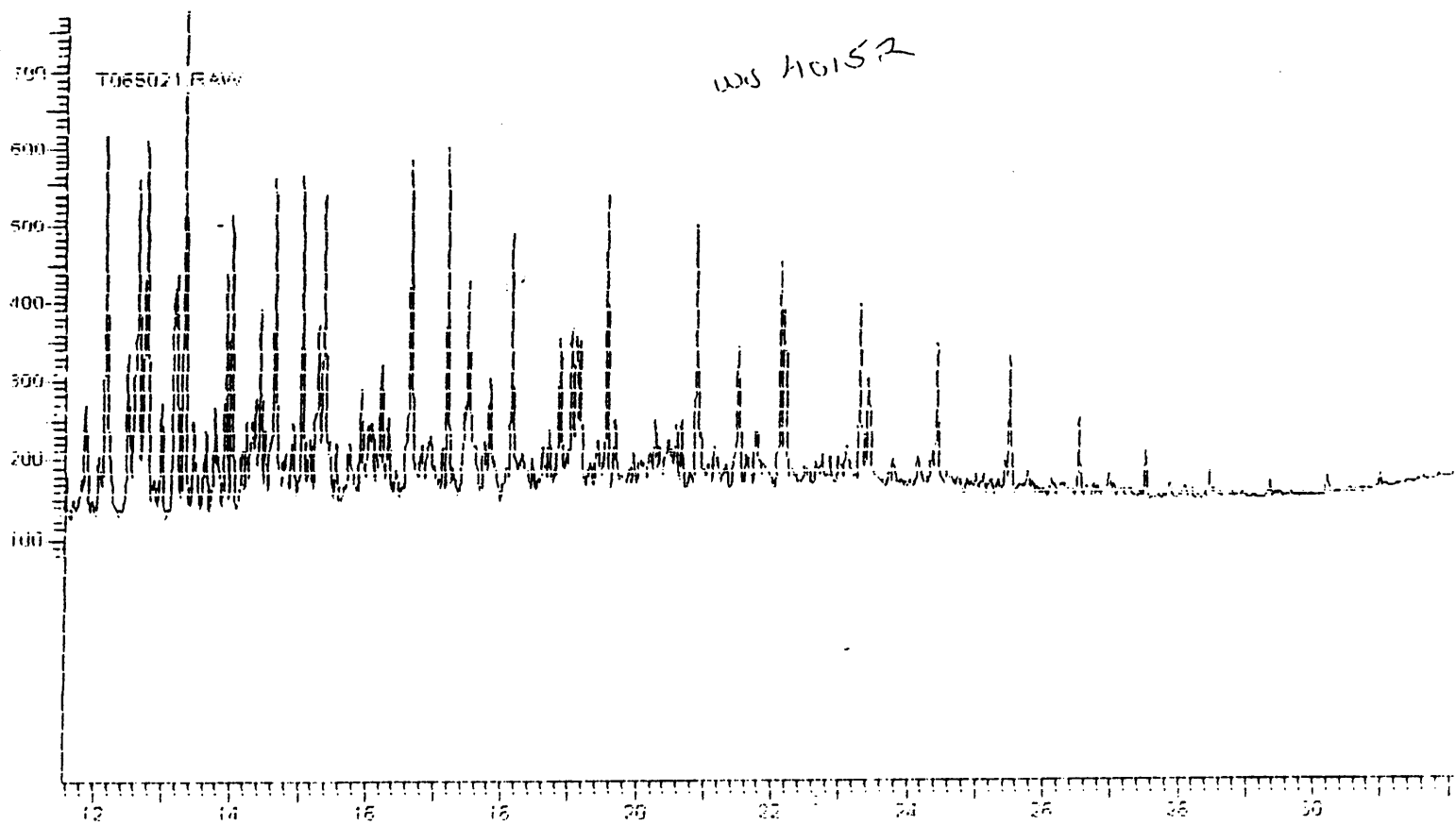


Figure 7

Sample Name : WS40153

Sample #: 22

Page 1 of 1

FileName : Q:\ATC\DATA\AT065022.raw

Date : 3/7/98 10:59 AM

Method : FIDTSM

Time of Injection: 3/7/98 10:03 AM

Start Time : 0.00 min

End Time : 35.00 min

Low Point : 0.00 mV

High Point : 1000.00 mV

Scale Factor: 0.0

Plot Offset: 0 mV

Plot Scale: 1000.0 mV

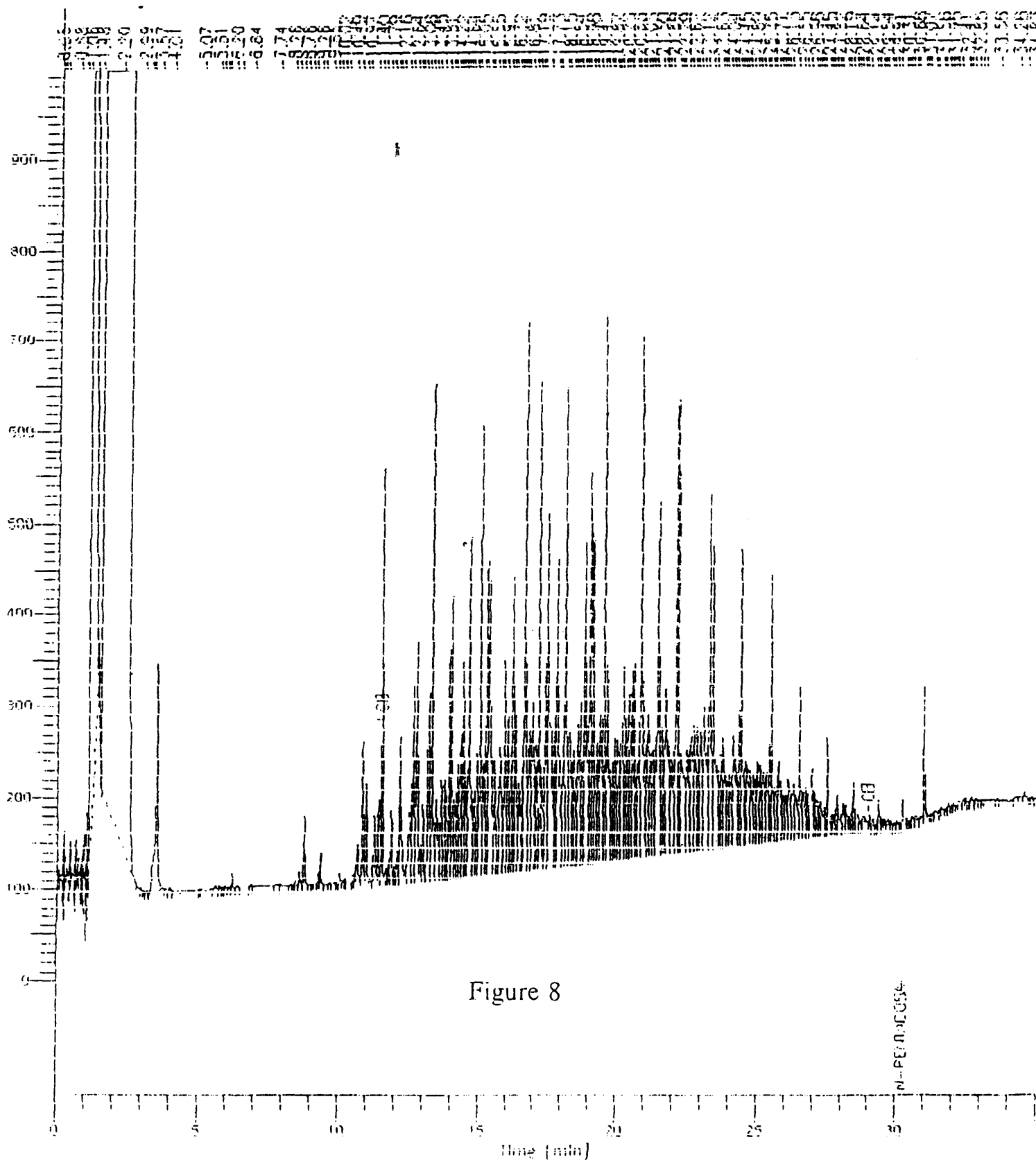


Figure 8

N:\PC\N:\00554

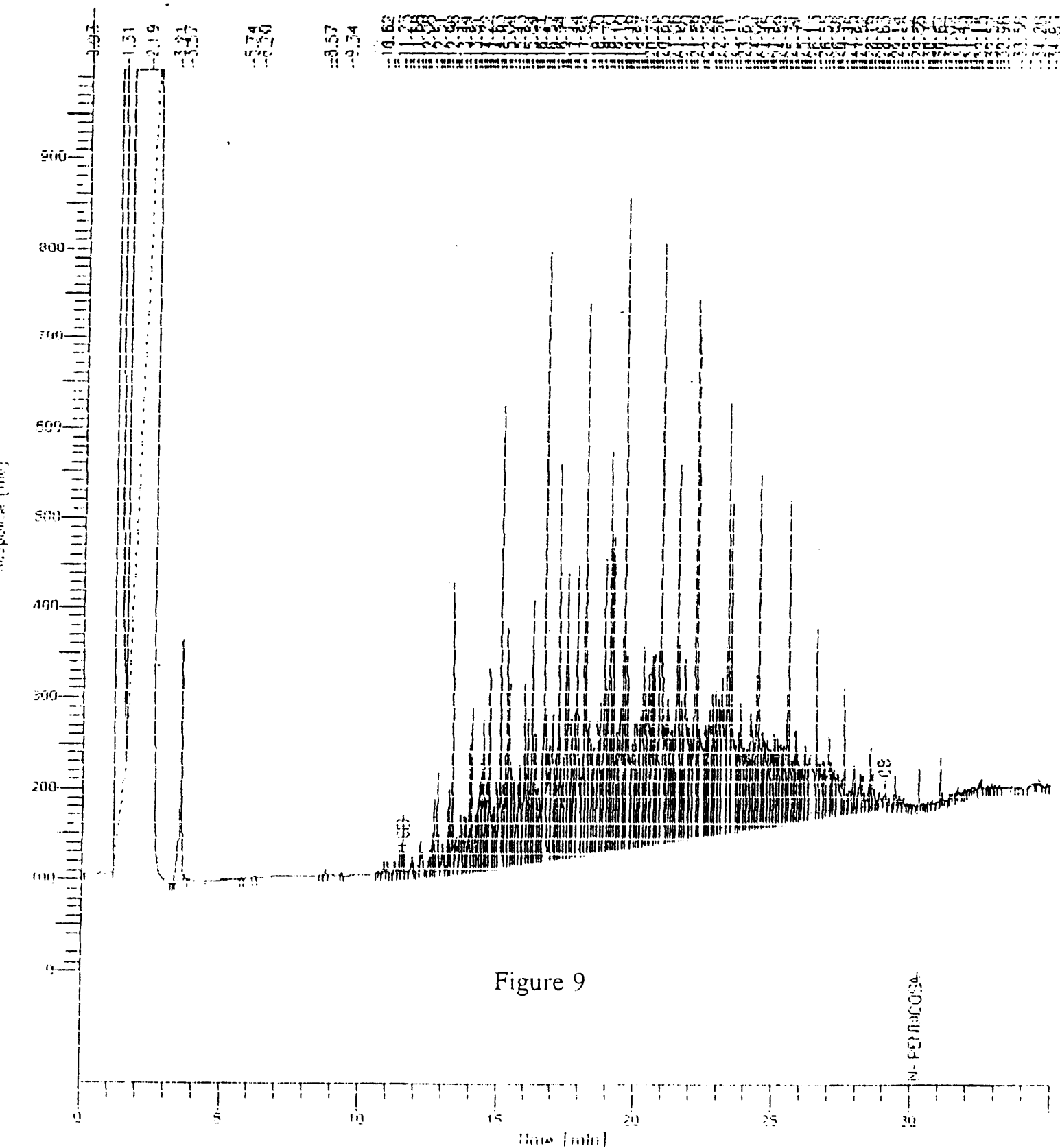


Figure 9

NI-FID 06/03/94

98-004-261

CHAIN OF CUSTODY RECORD

PROJECT NO: 98-004 SITE NAME: Nelson Mtn / 31 E

SAMPLERS (SIGNATURE): [Signature]

| SAMPLE NO. | DATE | TIME | COMP | GRAB | MATRIX | SAMPLE LOCATION | SIZE & NO. OF CONTAINERS | PRESERVATIVES | | | | | | | | | | REMARKS | | | | |
|------------|--------|-------|------|------|--------|-----------------|--------------------------|---------------|---|---|---|---|---|---|---|---|----|---------|----|----|--|-------------|
| | | | | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | 11 | 12 | | |
| 124 | 3/2/98 | 9:00 | | X | W | Center Basin 1 | 1 | ✓ | ✓ | | | | | | | | | | | | | |
| 124 | 3/2/98 | 9:15 | | X | W | Center Basin 2 | 1 | ✓ | ✓ | | | | | | | | | | | | | at 01 layer |
| 124 | 3/2/98 | 9:30 | | X | W | Center Basin 3 | 1 | ✓ | ✓ | | | | | | | | | | | | | |
| 124 | 3/2/98 | 10:00 | | X | W | Center Basin 4 | 1 | ✓ | ✓ | | | | | | | | | | | | | |

| | | | | | |
|--|-------------------------|--------------------------------------|------------------------------|------------|--------------------------|
| RELINQUISHED BY (SIGNATURE): [Signature] | DATE/TIME: 3/2/98 10:30 | RECEIVED BY (SIGNATURE): [Signature] | RELINQUISHED BY (SIGNATURE): | DATE/TIME: | RECEIVED BY (SIGNATURE): |
| RELINQUISHED BY (SIGNATURE): | DATE/TIME: | RECEIVED BY (SIGNATURE): | RELINQUISHED BY (SIGNATURE): | DATE/TIME: | RECEIVED BY (SIGNATURE): |

SPECIAL INSTRUCTIONS: send lead to matrix & MSDCL (B.N. NYSDCL)
Phone 662-0745
Send from

TURNAROUND TIME: 5 PD @

SPILL CONTINUATION SHEET

Spill Number _____

Date _____

| Date/Time | Comments |
|-----------|--|
| 3/2/98 | <p>TEP site inspect w/ Steve Marchetti (Matrix) sampled storm sewer catch basins for DOH 310-14 hydrocarbon fingerprint + ignitability analysis. Pictures taken of sample locations. Inspected Buffalo River, schan contained behind booms. Requested Steve submit letter report of sampling + analytical results w/ pictures of sample locations + table summary of results.</p> |
| | <p>Called Dan Wallmer (Waste Stream) requested 5 working day turn-around, they are awaiting weathered gasoline standard for DOH 310-14 analysis, d/c didn't know if they could make turn-around time, will call back to let me know. Will copy Matrix on lab results.</p> |
| | <p>Called Jim Daloia EPA - 732-548-8730, notified him of potential OPA 90 spill, Filed spill report. Called Jim Overholdt (BSA), will drop of sewer drawing tomorrow morning, said to call Frank Dimascio BSA Eng. Dept - City Hall re: test pit by sewer. Called Frank he requested sampling plans + notification prior to any work so someone from BSA could be present during utility stakeout + excavation work.</p> |

Spill Number _____

Date _____

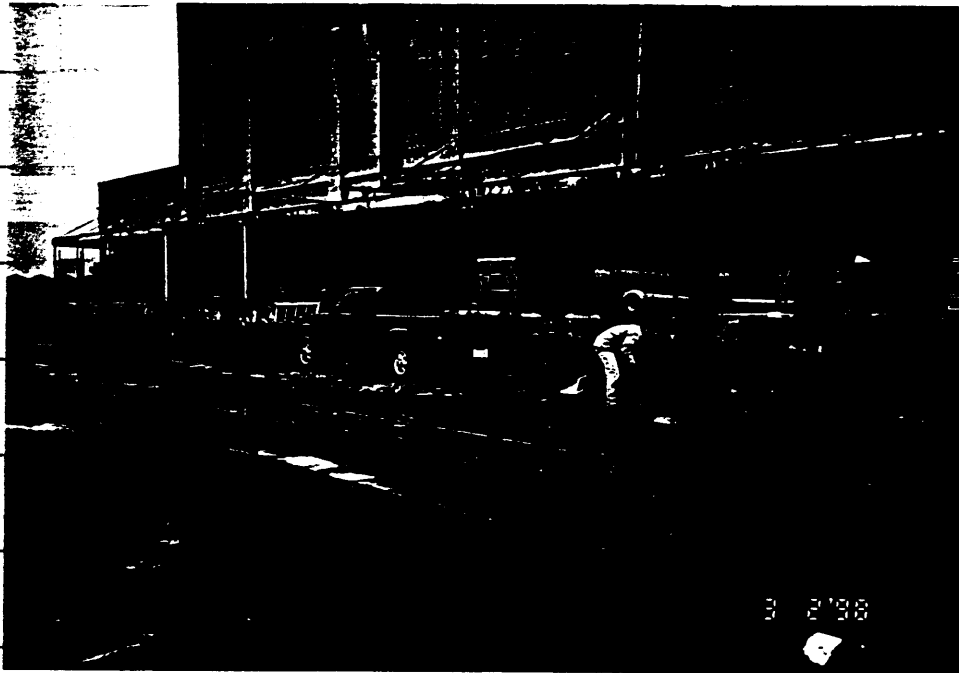
SPILL CONTINUATION SHEET

Date

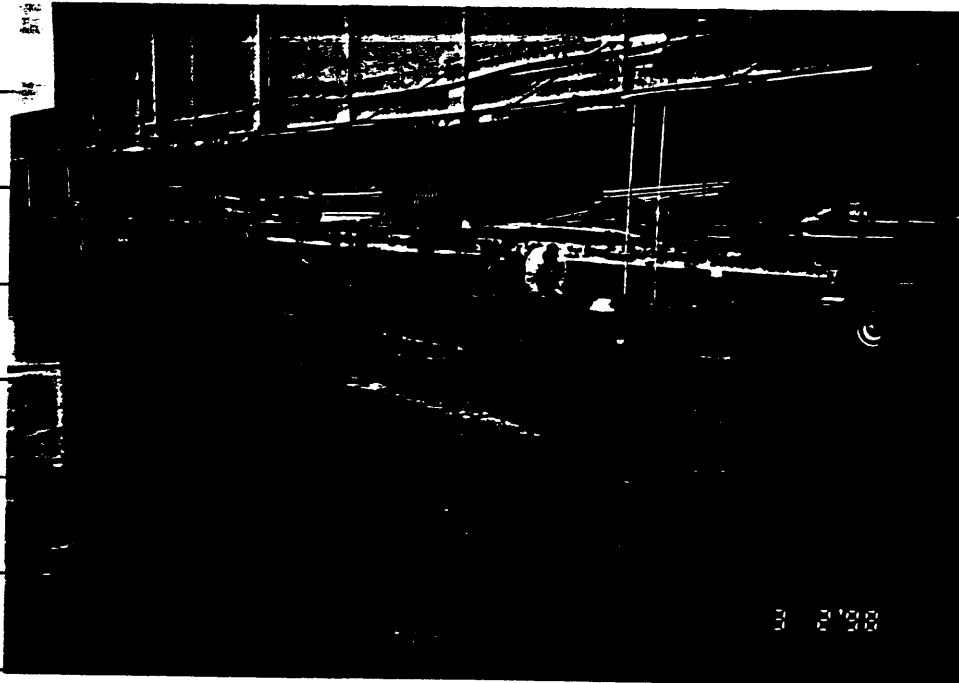
Comments

3/2/98

TEO- Photos showing catch basin sampling locations



Catch Basin #1



Catch Basin #2

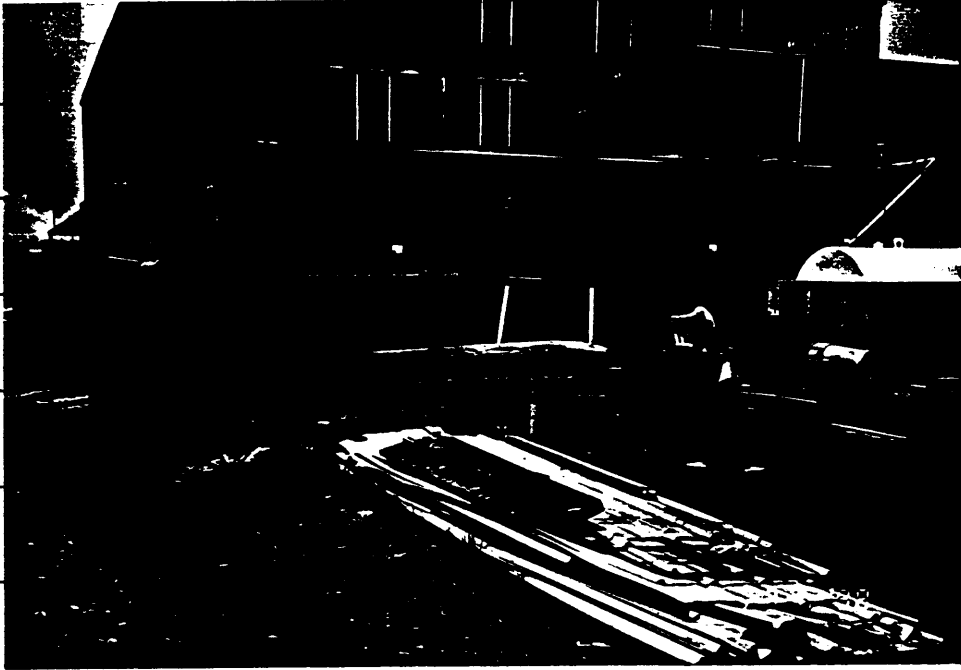
Spill Number _____

Date _____

SPILL CONTINUATION SHEET

Date

3/2/98



Catch Basin #3



Catch Basin #4

Sampling conducted by Steve Marchetti (Matrix)

FAX



New York State
Department of Environmental Conservation
Spill Response Unit
Region 9

DATE: 3/2/98

NUMBER OF PAGES BEING SENT 2 (INCLUDING THIS ONE)

SENT TO: Jim Daloia

FAX NUMBER: 732-906-6865

FROM: Tim Dieffenbach

MESSAGE: Potential OPA 90 Spill

Spill # 9712937 - Mobil Oil Corp.

CONFIDENTIALITY NOTICE

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
270 MICHIGAN AVENUE, BUFFALO, NEW YORK 14203-2999
(716) 851-7220, FAX (716) 851-7252

FAX



New York State
Department of Environmental Conservation
Spill Response Unit
Region 9

DATE: 2/26/97

NUMBER OF PAGES BEING SENT 3 (INCLUDING THIS ONE)

SENT TO: Mike Lamarre

FAX NUMBER: (516) 371-1484 & (203)-740-9370

FROM: Tim Dieffenbach

MESSAGE: Letter confirm our 2/24/97
meeting and request for additional
work.

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270 MICHIGAN AVENUE, BUFFALO, NEW YORK 14203-2999
(716) 851-7220, FAX (716) 851-7252



John P. Cahill
Commissioner

February 26, 1998

**SENT VIA FAX AND
FIRST CLASS MAIL**

Mr. Michael Lamarre
Mobil Business Resource Corporation
2nd Floor/Environmental
464 Doughty Boulevard
Inwood, New York 11096-1342

Dear Mr. Lamarre:

Spill Number 9712937
Mobil Oil Corporation
Buffalo, Erie County

This letter is to confirm our February 24, 1998 meeting at the above-referenced site. I requested Mobil conduct the following work:

1. Bring the well point system(WPS) between Pinto's (former Mobil Lube Oil Building) and the Buffalo River back into operation. You stated Griffin, the contractors who originally installed the WPS, would be on-site on February 26, 1998, to access the current condition of this portion of the WPS.

I request a work schedule be submitted by March 13, 1998, for starting up this portion of the WPS.

2. Sample the product in each of the storm sewer catch basins by February 27, 1998, for petroleum identification. I am also requesting the samples be tested for ignitability and that chromatographs for the petroleum identification analyses be submitted.

As I stated at our meeting, if we do not receive a positive response from Mobil for conducting the sampling this Department will hire its own contractors to perform the work. Mobil, as the potentially responsible party for the spill, may then be held liable for all costs incurred by the State of New York.

Mr. Michael Lamarre
February 26, 1998
Page 2

3. Excavate a test pit along the Buffalo Sewer Authority combined sewer overflow line near the outfall to the Buffalo River. Additionally, I am requesting a second test pit, approximately 80 feet east of the outfall, in the location of the petroleum seep behind the former Lube Oil Building. Sampling will be required if contaminated material is encountered.

I request that the test pits be completed by March 13, 1998. If Mobil decides to do the work, our office must be notified in advance so that we may be present to inspect the work.

If you have any questions, please call me at (716)851-7220.

Sincerely,



Tim Dieffenbach
Engineering Geologist I

TD:ma

cc: Mr. Peter Buechi - Regional Remediation Engineer
- Mr. Robert Leary - Regional Spill Engineer
Mr. David Stever - Assistant Attorney
Mr. James Caruso - Buffalo Sewer Authority
Mr. James Panepinto - Pinto Construction Services

Spill Number _____

Date _____

SPILL CONTINUATION SHEET

Date

Comments

2/25/98 ^{Afternoon}
 TED site inspect, no signs of product film behind boom, strong west wind breeze may have blown down film back into sewer, traced product from a couple of sewers called basins around Duke Oil Field. Found an additional catch basin for the south along road west of former Duke Oil Field, adjacent to this basin was an inground access to piping pit which also contained water & product which was traced. Traced product from sewer manure near biotreatment cell (50+ gallons?). Brian tried to empty VAC truck contents into 54 recovery tank. I requested Brian agreed to stick hand lines & after to determine amount of product recovered.

Spoke w/ Jim Parsipato to find no problem with us doing sampling sewers on Hinto property if Mobil declines to work. Told him we may want to excavate


 conti

SPILL CONTINUATION SHEET

Spill Number _____

Date _____

| Date/Time | Comments |
|-----------|--|
| 2/24/98 | <p>TEP site mtg. w/ Mike Lammere (Mobil), Brian Carey + Craig Jink (GFS). Contractors from Griffin will be at terminal this Thursday to inspect WPS between former Lake Oil Pldg. + Bullalohiver. Mike said pump which controls this section of WPS not operable. Inspected river by outfall. Mobil installed boom (supplied by BSA7) from outfall upstream to area of SPDES discharge, shear + product film contained by boom. Inspected storm sewers around former Lake Oil Pldg, all contained floating product. Brian said they had recovered \approx 50 gal prod. (recovered from sorbents). Note, additional unknown amount product recovered from surrounding storm sewers + contained in spent sorbents. Requested product from all storm sewers sampled for PCBs ID. Mike said he would have to get approval from management. Told Mike if Mobil didn't agree to sampling by this Friday, DEC would undertake work. Removed manhole cover by from BSA sewer by Pinta (Lake Oil Pldg) note more slight air bus. - Sheen. Requested test pits by BSA sewer near outfall, Mike wouldn't commit to perform work.</p> |

Spill Number _____

Date _____

SPILL CONTINUATION SHEET

Date

Comments

2/20/98 Photo by Tim Diellenbach



Photo showing location of petroleum seep beneath retaining wall behind former Mobil Lube Oil Bldg. Seep located approx. 82 feet upstream of Babcock St. sewer overflow.

Spill Number _____

Date _____

SPILL CONTINUATION SHEET

Date

Comments

Site report
Mobil
Pinto Const.

Pinto Const.

Mobil vacuuming seep from kiver tank picture.
Mobil to install boom around seep area & monitor twice per day. Requested, & Don Helton agreed, that Mobil would inc. storm sewers around lube bldg. Spoke w/ Matt (Pinto Const.) he said purchase agreement between Mobil & Pinto for former Lube Oil Bldg. specified Mobil responsible for any pre-existing contamination.
- Spoke w/ Sean O'Brien (USCG) he will inspect site tomorrow.

- Called Mike Lammie, requested he check into starting up eastern most leg of well pt. system. He is into w/ Griffin (Company that originally installed well pt. system Tuesday (2/24/98) I will meet him at site 2:30 Tuesday.

NYSDEC SPILL REPORT FORM



DEC REGION# 9 (Buffalo) SPILL NUMBER 9908124
 SPILL NAME: BUFFALO RIVER DEC LEAD: TED
 CALLER'S NAME: DONALD SHELDON NOTIFIER'S NAME: SAME
 CALLER'S AGENCY: MOBIL OIL NOTIFIER'S AGENCY: SAME
 CALLER'S PHONE: (716) 827-5114 EXT. _____ NOTIFIER'S PHONE: _____ EXT. _____

SPILL DATE: 10/04/1999 TIME: 15:45
 CALL RECEIVED DATE: 10/04/1999 TIME: 16:10 RECEIVED BY CID #: 282

| Material Spilled | Mat. Class | Am't Spilled | Units | Am't Recovered |
|---------------------------|---------------------------|----------------|------------------|----------------|
| 1) <u>OTHER PETROLEUM</u> | <u>Pet-Haz-Other-Unk.</u> | <u>Unknown</u> | <u>Gal</u> - Lbs | <u>Unknown</u> |
| 2) _____ | <u>Pet-Haz-Other-Unk.</u> | _____ | <u>Gal</u> - Lbs | _____ |
| 3) _____ | <u>Pet-Haz-Other-Unk.</u> | _____ | <u>Gal</u> - Lbs | _____ |
| 4) _____ | <u>Pet-Haz-Other-Unk.</u> | _____ | <u>Gal</u> - Lbs | _____ |

SPILL LOCATION
 PLACE: BUFFALO RIVER
 STREET: FOOT OF BABCOCK STREET
 T/C/V: BUFFALO CO: ERIE
 CONTACT: DONALD SHELDON
 PHONE: (716) 827-5114 EXT. _____

POTENTIAL SPILLER
 NAME: MOBIL OIL CORPORATION
 STREET: 625 ELK STREET
 CITY: BUFFALO
 STATE: NY ZIP: 14210-
 CONTACT: RICHARD CICCOTELLI
 PHONE: (516) 371-1484 EXT. _____

SPILL CAUSE
 Human Error _____ Tank Test Failure * _____ Tank Failure _____
 Traffic Accident _____ Housekeeping _____ Tank Overfill _____
 Equipment Failure _____ Deliberate _____ Other _____
 Vandalism _____ Abandoned Drums _____ Unknown

SPILL SOURCE
 Gas Station _____ Private Dwelling _____ Non-Maj Facility _____
 Passenger Vehicle _____ Vessel _____ Comm/Indust
 Comm. Vehicle _____ Railroad Car _____ Non-Comm/Instit _____
 Tank Truck _____ Major Facility _____ Unknown _____

RESOURCE AFFECTED
 On Land _____ Groundwater _____ Air _____
 In Sewer _____ Surface Water _____
 WATERSBODY: BUFFALO RIVER

SPILL REPORTED BY
 Responsible Party _____ Tank Tester _____ Local Agency _____
 Affected Persons _____ DEC _____ Federal Gov't _____
 Police Department _____ Citizen _____ Other _____
 Fire Department _____ Health Dept. _____

CALLER REMARKS: mobil oil states they have a sheen on the water, they suspect it is coming from a outflow that runs into the buffalo river

contact mobil*****

| PBS Number | Tank Number | Tank Size | Test Method | Leak Rate |
|------------|-------------|-----------|-------------|-----------|
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ |

PRIMARY CONTACT CALLED DATE: _____ TIME: _____ hrs. REACHED DATE: _____ TIME: _____ hrs.
 SECONDARY CONT. CALLED DATE: _____ TIME: _____ hrs. FAXED BY CID#: _____

| | | | |
|--------------------|-------------|------------------------|--------------------------------|
| PIN # | T & A | Cost Center | ISR to Central Office |
| Cleanup Caused | Meets St'ds | NO | Last Inspection |
| RP-CUI | ENF-INIT | INVS-COM | CAP |
| UST Trust Eligible | NO | Site: A B <u>C</u> D E | Resp. Party 1 2 <u>3</u> 4 5 6 |
| Reg Close Date | | | |

Spill Number: 9908124 Spill Name: BUFFALO RIVER

Printed on: 04/10/20

DEC REMARKS

10/04/99: 1735 HRS - MJS PAGED BY KAH. REPORT FOUND LATE IN DAY ON FAX MACHINE, SENT FROM HOTLINE.

MJS TELECON TO DON SHELDON, TERMINAL MANAGER. HE STATED THAT THEY NOTICED SHEEN ON BUFFALO RIVER IN AREA THEY BELIEVE NOT TO BE THEIR PROPERTY. AREA AFFECTED IS NEAR BSA OUTFALL. MOBIL INSTALLED SKIRT BOOM AND SORBENT BOOM AROUND AREA. USCG INSPECTED SITE AND SATISFIED WITH RESPONSE. MJS ADVISED I WILL CONTACT HIM IN A.M. TO INSPECT.

1930 HRS - MJS TELECON WITH DON SHELDON, UPDATE. HE STATED THAT SHEEN APPEARED TO TO BE LEACHING FROM RIVER BANK.

10/05/99: MJS TELECON WITH MR SHELDON AND INFORMED HIM I CANNOT MAKE APPOINTMENT TODAY. HE STATED THAT VERY LITTLE SHEEN LEFT IN RIVER. SORBENT PADS INSTALLED INSIDE SKIRT BOOM.

LATER: MJS TELECON WITH MR SHELDON AND I WILL CALL TOMORROW TO INSPECT.

10/06/99: MJS SITE INSPECT. MET WITH DALE KIVETT. BOOMS NOW PARTIALLY ON LAND DUE TO RECEDING WATER LEVEL IN RIVER. NO SHEEN NOTICED IN RIVER. MJS ASKED THAT BOOMS BE MOVED SO THAT THEY ARE COMPLETELY IN WATER. HE AGREED.

MJS DISCUSSED SITE WITH TED. HE INSPECTED SITE TODAY ALSO. FILE REASSIGNED TO TED.

10/06/99: TED, SITE INSPECT. NOTED SKIRT BOOM INSTALLED BY MOBIL ALONG NORTH SIDE OF RIVER FROM APPROX. 100-150 FT. WEST OF BABCOCK ST. SEWER OUTFALL TO APPROX. 50 FT. EAST (UPSTREAM) OF SEWER OUTFALL, ALSO ABSORBENT BOOM INSTALLED INSIDE SKIRT BOOM ON WEST SIDE OF OUTFALL. NO SHEEN PRESENT EXCEPT A COUPLE SQUARE FOOT AREA AT JUNCTURE OF WEST END OF BOOM AND RETAINING WALL. MET WITH NOELLE CLARK (ROUX) and MARC FALZONE (GES) MARC SAID HE, NOELLE, DREW BARRIS (ROUX) AND RICHARD CICCOTELLI (MOBIL) WERE PRESENT WHEN WHEN SHEEN FIRST FOUND. COAST GUARD RESPONDED, MOBIL INSTALLED BOOM. SEWER COVER CLOSEST TO OUTFALL WAS REMOVED, NO SHEEN NOTED ON WATER, OR ON SAMPLE TAKEN WITH BAILER FROM SEWER.

10/12/99: TED GAVE COPIES OF SPILL REPORT TO STAN RADON & BRUCE WAGER. STAN SAID HE HAD NO KNOWLEDGE PETRO CONTAMINATION FROM PVS IN THIS AREA. SCHEDULED SITE INSPECTION W/ STAN FOR 10/14/99, STAN TO CONTACT PVS FOR SITE ACCESS. CALLED MARC FALZONE TO SCHED. INSPECTION FOR 10/14/99.

10/14/99: TED & STAN RADON SITE INSPECT. MET W/ MARC FALZONE (GES), CHRIS CANCELLA, RONALD RAZZOLINI AND ANN SCHILLACI (PVS CHEMICALS). MR. CANCELLA SAID N - S FENCE LINE (WEST SIDE BABCOCK ST.) PROPERTY LINE BETWEEN PVS 7 FORMER MOBIL PROPERTY. APPARENTLY PVS WASN'T AWARE OF SEEPAGE UNTIL TODAY. THEY SAID THEY WOULD ALLOW MOBIL SITE ACCESS TO MAINTAIN BOOM. MARC SAID WELLS MW-1, 2 7 3 AND SEWER MANHOLE AT END OF WET SAID OF BABCOCK ST. INSPECTED 10/7/99 AND APPEARED CLEAN. CHECKED MANHOLE WATER APPEARED SHEENLESS. INSPECTED RIVER BANK, LARGE PIECES OF SULPHUR? AND CONST DEBRIS. TOOK PICTURES OF BOOM LAYOUT AND SHORE.

11/03/99: DEC SENT LETTER TO MOBIL NAMING THEM POTENTIAL RP. REQUESTED INVESTIGATIVE WORK PLAN BE SUBMITTED BY 11/23/99.

11/17/99: MTG. WITH RICHARD CICCOTELLI TO DISCUSS MOBIL OIL SPILL SITES. REITERATED REQUEST FOR SUBMISSION OF INVESTIGATIVE WORK PLAN.

11/23/99: RECEIVED WORK PLAN FROM ROUX ASSOC. ANALYSIS OF RIVER BANK MATERIAL

Spill Number: 9908124 Spill Name: BUFFALO RIVER

Printed on: 04/10/20

DEC REMARKS (Continued)

INDICATED PRESCENCE OF PETROLEUM CONSTITUENTS. BORINGS PROPOSED WITHIN FORMER LUBE OIL BLDG. FENCE LINE.

01/03/00: TED TELECON W/ NOELLE CLARK (ROUX) SHE WANTS TO CHANGE PROPOSED SOIL ANALYTICAL METHOD FROM 8260 TO 8021 TO BE CONSISTENT WITH OTHER WORK DONE AT SITE , TOLD HER OK.

01/06/00: TED SITE INSPECTION, 5 BORINGS COMPLETED W/ GEOPROBE

APPENDIX G

Sources of Information

APPENDIX G
SOURCES OF INFORMATION

Reports and Correspondence

Empire Soils Investigations, Inc. 1989a. Ground Water Monitoring Well Installation Water Level Measurements and Free Product Thickness Measurements. May 1989.

Empire Soils Investigations, Inc. 1989b. Ground Water Monitoring Well Installation Water Level Measurements and Free Product Thickness Measurements. September 13, 1989.

Empire Soils Investigations, Inc. 1989c. Ground Water Monitoring Well Installation Water Level Measurements and Free Product Thickness Measurements. December 14, 1989.

Empire Soils Investigations, Inc. 1989d. Ground Water Monitoring Well Installation Tank No. 176, Mobil Oil Refinery and Yard. December, 1989.

Empire Soils Investigations, Inc. 1990a. Ground Water Monitoring Well Installation Water Level Measurements and Free Product Thickness Measurements. February 8, 1990.

Empire Soils Investigations, Inc. 1990b. Drive Point Piezometer Installation Tank No. 176. May 1990.

Empire Soils Investigations, Inc. 1990c. Abandonment and Replacement of Well B-5MW. May 30, 1990.

Empire Soils Investigations, Inc. 1990d. Abandonment and Replacement of Well B-5MWR. July 24, 1990.

Exxon Mobil Corporation, 2000. Personal communication between J. Abel of Exxon Mobil and PVS Chemical. April 2000.

Groundwater Technology, Inc. 1994a. Environmental Site Assessment, Parcels North of Elk Street. February 1, 1994.

Groundwater Technology, Inc. 1994b. Environmental Site Assessment, Lube Oil Building and Surrounding Area. February 8, 1994.

Groundwater Technology, Inc. 1994c. Lube Building Site Assessment. April 21, 1994.

Groundwater Technology, Inc. 1994d. Babcock Street Garage Environmental Assessment. April 29, 1994.

Heffner, G.B., 1994. Correspondence to New York State Department of Environmental Conservation (NYSDEC), Response to RCRA Facility Assessment Report, October 21, 1994.

Mobil, 1987. RCRA Facility Questionnaire Package, March 11, 1987.

APPENDIX G
SOURCES OF INFORMATION (Continued)

- Mobil, 1988. Disposal of Material for Buffalo Refinery Demolition Project 1988-1989.
- Mobil, 1993. Correspondence from R. Schroeder of Mobil to T. Dieffenbach of NYSDEC regarding NYSDEC Spill No. 9305522. August 27, 1993.
- New York State Department of Environmental Conservation. 1995 Draft Multi-Media/Pollution Prevention Inspection Report. March 29 1995.
- Roux Associates, Inc. 1988. Site Facility Investigation Report, Mobil Buffalo Terminal, November 25, 1988.
- Roux Associates, Inc. 1999. Site Facility Investigation Completion Report, Mobil Buffalo Terminal, December 14, 1999.
- Roux Associates, Inc., 2000a. Telephone conversation between N. Clarke of Roux Associates and Erie County Department of Health. April 7, 2000.
- Roux Associates, Inc., 2000b. Telephone conversation between N. Clarke of Roux Associates and Cameron O'Connor of New York State Department of Health. April 12, 2000.
- Roux Associates, Inc., 2000c. Telephone conversation between N. Clarke of Roux Associates and Captain Fitzpatrick of the City of Buffalo fire Department. April 12, 2000.
- Roux Associates, Inc. 2000d. Western Leg of the Well Point System Startup Evaluation and Summary of Seepage Investigation, Mobil Buffalo Terminal, March 13, 2000.
- URS Company, Inc. 1986. Phase II Investigation Report, Buffalo Terminal Disposal Site, City of Buffalo, Erie County, New York, NYS ID #915040. March 1996.

Newspaper Articles

- Andrews, Peter C., 1963. Old Refinery is Modern Marvel. Buffalo Courier Express, December 8, 1963.
- Buckham, Tom, 1968. Shutdown of Mobil Refinery Delayed Until Later This Year, Planned Closing Postponed for While Because of Demand for Oil in War. Buffalo Express News, January 11, 1968, Section 4, p. 68.
- Buffalo Courier Express, 1950. City Industries Warned of Oil Seepage Danger, June 1, 1950 p. 30.
- Buffalo Courier Express, 1956. SOCONY Readies Sovaformer Unit.
- Buffalo Courier Express, 1956. SOCONY Will Build Unit Here to Boost High Octane Output, p. 25.
- Buffalo Courier Express, 1959. New SOCONY Unit Nearly Completed, February 28, 1959.

APPENDIX G
SOURCES OF INFORMATION (Continued)

Buffalo Courier Express, 1966. Mobil Sets Closing Time on Refinery, March 12, 1966.

Buffalo Courier Express, 1975, Mobil Plant Strike Hinges on Talks, September 17, 1975.

Buffalo Express News, 1938. SOCONY to Build New Unit Here, Refinery Plant Will Add Substantially to Local Capacity, November 18, 1938.

Buffalo Express News, 1939. New \$3,000,000 Oil Refinery is Wizard of Oz Workshop, Flashing Lights in Weird Control Room Record Progress of Catalytic Process, November 1, 1939.

Buffalo Express News, 1955. SOCONY to Build New Catalytic Unit in Elk Street Plant, July 9, 1955.

Buffalo Express News, 1958. New Distillation Unit of SOCONY Mobil to be Ready by '59, October 6, 1958.

Buffalo Express News, 1959. SOCONY Mobil Oil Demolishing 50 Big Storage Tanks, January 23, 1959.

Buffalo Express News, 1980. Mobil Oil Refinery Marks Centennial, February 24, 1980.

Griggs, Lee, 1952. SOCONY's Buffalo Plant is Modern Giant of Industry, Buffalo Courier Express, November 23, 1952.

Joseph Ritz, 1988. Refinery Demolition Starts, Buffalo News, August 9, 1988.

The Buffalo Courier, 1901. Standard Oil Company of New York, Atlas Works-1880.

Buffalo: Old and New, A Chronological History of the Queen City of Lakes

The Courier Printing Company, 1890. Buffalo Illustrated. Commerce, Trade, and Industries of Buffalo, 64-65.

Watson, Bob, 1966. Mobil Oil is Considering Closing Elk Street Refinery, Operation Called Economically Unfeasible; Company to Make Final Decision in March. Local Buffalo Newspaper, January 7, 1966.

Wayland Hill, Henry, 1923. Municipality of Buffalo, New York, A History 1720-1923, pp. 780-788.

Historical Drawings

"Atlas of the City of Buffalo New York" Plate 31, G.M. Hopkins, C.E., Philadelphia, 1884.

"Atlas City of Buffalo New York" vol. 3, Plates 55 and 57, American Atlas Company, New York City, 1894.

APPENDIX G
SOURCES OF INFORMATION (Continued)

- "The New Century Atlas of Greater Buffalo" vol. 2, Plates 47, 48, and 49, Century Atlas Company, Philadelphia, 1915.
- "Simplified Refinery Flow Diagram" DWG 13-Z-B24-22, Standard Oil Company of New York, November 9, 1922.
- "Schedule & Sketch Showing Typical Installations, Sanitary Septic Tanks", SOCONY Vacuum Oil Co., Inc., January 24, 1938.
- "Sewers of the Barrel House" DWG A-969, SOCONY Vacuum Oil Company, March 14, 1938.
- Survey, Part of Lot 200, T.10, R.8, City of Buffalo, Erie County, New York, Herth & Sonnenberger Engineers and Surveyors, March 26, 1960.
- "Map of Yard, SOCONY Vacuum Oil Company" DWG A689, Redrawn July 20, 1939, Revised September 12, 1941.
- "Map of Yard, SOCONY Vacuum Oil Company" DWG A689, Redrawn July 20, 1939, Revised September 12, 1941.
- "Pipe Conduit under Babcock Street" DWG A1213, SOCONY Vacuum Oil Company, August 5, 1943.
- "First Floor, Barrel House" DWG BU43-1, SOCONY Vacuum Oil Company, September 22, 1943.
- "Third Floor, Barrel House" DWG BU43-3, SOCONY Vacuum Oil Company, September 22, 1943.
- "Map of Tank Area on Babcock and Orlando Streets" DWG A-1223, SOCONY Vacuum Oil Company, November 15, 1943.
- "Pit for 30, Sewer at Old Tunnel Under Babcock Street" DWG A-1226, SOCONY Vacuum Oil Company, December 15, 1943.
- "Refinery Flow Diagram" DWG A-1278, SOCONY Vacuum Oil Company, September 20, 1945.
- "Proposed Sludge Acid Line" SOCONY Mobil Oil Company, December 16, 1948.
- "Sketch of Pipe Well for Pumping Oil from Ground" SOCONY Vacuum Oil Company, DWG C1409, June 28, 1949.
- "Storm Sewers Layout for Phase One of 1955 Roadways" DWG A-1954 SOCONY Vacuum Oil Company, April 25, 1955.

APPENDIX G
SOURCES OF INFORMATION (Continued)

Sewers & Underground Service Piping, Treating & Blending Facilities, SOCONY Vacuum Oil Co., Inc.", DWG Nos. E431-231A, B and C, Badger Manufacturing Company, April 27, 1955.

"Storm Sewers, Phase Two of 1955 Roadways" DWG A-1970 SOCONY Vacuum Oil Company, June 8, 1955.

"Buffalo Sovaformer Unit Underground Piping DWG RH 20259-4, Arthur G. McKee & Company, November 9, 1955.

"Roadways, Part I and Part II of Roadways" DWGS 11-A-A-2444 and 2445, SOCONY Vacuum Oil Company, September 1957.

"New Office Building Plot Plan" DWG 10-Z-A-3112, Mobil Oil Corporation, March 20, 1961.

"Main Office, Utility Plot Plan" DWG 2-A-3183, Mobil Oil Corporation, November 2, 1961.

"Main Office, Parking Lot Details" DWG 10-A-A-3197, Mobil Oil Corporation, December 13, 1961.

"Creek Dike, Southeast Sewer Area, Master Catch Basin Replacement and New Sluice Gate at Main Entrance to Yard Traps" DWG 11-H-A-3461, SOCONY Mobil Oil Company, August 27, 1963.

"TBT Unit, Concrete Slab and Sewer System for Clay Filter and Salt Dryer" DWG 6j-A-A-3524, SOCONY Vacuum Oil Company, September 6, 1964.

"TBT Unit, P&I Drawing for Interim Mobil Jet Fuel System" DWG 6j-Z-A-3517, SOCONY Mobil Oil Company, October 13, 1964.

"TBT Unit, Flow Diagram for Kerosene Treating and Mobil Jet Fuel System" DWG 6j-Z-A-3516, SOCONY Mobil Oil Company, October 13, 1964.

"Buffalo River Improvement Project, System Piping Schematic" DWG 11-Z-A-3670, SOCONY Mobil Oil Company, December 14, 1964.

"LK Erie Water System General Plans and Details" DWG 8b-Z-A-3846, SOCONY Mobil Oil Company, January 10, 1967.

"Map of Yard Waste Collection System" DWG B-3886, SOCONY Mobil Oil Company, January 24, 1969.

"Plot Plan of Yard Trap Area" DWG A-3973, SOCONY Mobil Oil Company, July 29, 1970.

"Surface Oil and Skimmer at Traps" DWGS B-3987 through B 3991-SH2, Mobil Oil Corporation, October 8, 1970.

APPENDIX G
SOURCES OF INFORMATION (Continued)

- "Main Yard Trap, Revamped Suction Piping" DWG A-4254, Mobil Oil Corporation, March 10, 1972.
- "Main Yard Trap, Revamped Suction Piping, Phase II" DWG A-4289, Mobil Oil Corporation, June 8, 1972.
- "Revised Plans of New 10" C.I. Oily Water Sewer from Baffled Separator Pit", DWG. No. 73-53-7, Mobil Oil Corporation, April 1, 1974.
- "Block Flow Diagram" DWG SK-61874, Mobil Oil Corporation, June 18, 1974.
- "Water Pollution Abatement, Phenolic Water Collection Plot Plan", DWG-75-13-2, 3, 4, 5, 6, 8, 9, 10, August 11, 1975.
- "Yard Sewers, Main Yard Trap Area, Southeast Sewer Diversion to Oily Water Sewer-New 10" Diameter Sewer Line and Miscellaneous Details", DWG. No. 76-2-1, Mobil Oil Corporation, July 8, 1976.
- "Main Yard Trap, Divert TCC-Crude Water to Trap Outlet" DWG-76-150-1, Mobil Oil Corporation, undated.
- "Sewer System, Proposed, Air Flotation Effluent to Buffalo Sewer Authority-Piping Plot Plan", DWG. No. 76-114-1, Mobil Oil Corporation, November 28, 1977.
- "Yard Sewers, Main Yard Trap, Southeast Sewer Diversion to Oily Water Sewer-New 10" Diameter Overflow Line", DWG. No. 76-2-2, Mobil Oil Corporation, August 15, 1977.
- "New Safety Building, Plans and Details of Water and Sewer Lines" DWG 76-28-3, Mobil Oil Corporation, February 8, 1977.
- "Map of Yard, Buffalo Terminal" DWG A-689, November 9, 1977.
- "Topographic Maps" URS Company Inc., various dates in the 1980s.
- "Mobil Oil Corporation", DWG. Nos. B-12196 and 12197 showing sewers and structures in the BSPA prepared by Tallamy, Van Kuren, Gertis and Thielman, July 1980.
- "Main Yard Trap, New Oily Water Bypass" DWG 79-87-1, Mobil Oil Corporation, September 17, 1980.
- "New L/R Mat Paving & Drainage", DWG. No. BU81-01, Mobil Oil Corporation, April 2, 1981.
- "Yard Map Section # 1 through Section # 6 Sewer System", DWG No. A-1190-1, 2, 3, 4, 5 and 6. Mobil Oil Corporation, April 1, 1981.
- "Loading Rack Modification" DWGS 1, 2, 3, 4 of 4, Mobil Oil Corporation, September 28, 1984.

APPENDIX G
SOURCES OF INFORMATION (Continued)

"Buffalo Terminal Piping Systems" DWGS 81-13-132, 133, 134, 135, 137, Mobil Oil Corporation, 1986.

"Photogrammetric Base Mapping for Mobil Refinery" DWG. No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, and 15, 1987. Dunluck-Hyde and Endman, Anthony Associates, 1987.

"Study Area Location Map", Figure 2, Woodward-Clyde, January 1, 1988.

"Map of a Survey of Parcel being Part of Town, Lots 52, 55, 196, 198, 199, 200" Denluck-O'Neill, December 15, 1988.

"Tank Farm Drainage and Liner Placement" Sheets 1, 2, 3, 4, 5, 6, 7, 8 and E-1, Pratt and Huth Associates, March 1990.

"New Vapor Recovery Installation" DWG BU11VRU 1 through 5, Pratt & Huth/Mobil Oil Corporation, October 25, 1990.

"New Loading Rack" DWG BU11LAR S1, S2, S3, 1 of 1, D1, C1, C2, C3, Pratt & Huth/Mobil Oil Corporation, January 18, 1991.

"Barge Berth Dredging Project, Hydrographic Survey, Pre-dredge Condition" DWG 9211-1-1, Mobil Oil Corporation, May 12, 1992.

"Electrical Site Plan", Pratt & Huth, Sheet E-1, January 1992, revised May 1992.

"Oil Separator, Site Plan" Pratt & Huth Associates, Sheet S-1, S-2, S-3, S-4, January 1992, revised May 1992.

"Liquid Phase Petroleum Recovery and Water Treatment System Final Engineering Design", DWG. No. Y1 through Y3, P1 through P11 and E1 through E5, Groundwater Technology, Inc., December 1992.

"Boundary Survey" DWG SC-2286, Nussbaumer & Clarke, February 6, 1995.

Real Estate Maps

"Site Survey of Old Buffalo River" Cover 159, P. Emslie, October 1, 1880.

"Map of City of Buffalo" Traced drawing, Department of Public Works, 1902.

"Site Survey of Old Buffalo River" August 1, 1914.

"Map Showing New Channel Lines of Buffalo River from Abbot Road to Upper DL&W Bridge" Cover 960, G.W.H Norton Engineer, Department of Public Works, 1916.

Map of Adjacent Properties (North of Elk Street), December 9, 1918.

"Property Surveys of Lots West of Babcock Purchased by SOCONY" various dates.

APPENDIX G
SOURCES OF INFORMATION (Continued)

Buffalo Railroad Tracks on Prenatt Street (West of Babcock Street), 12/9/1920.

Babcock and Elk Street Properties, 8/29/1925.

Map of Property - Standard Oil Vacuum Company (North of Elk and Babcock), 6/21/1926.

Deed Map by the Department of Public Works (Eastern Terminal), 11/8/1930.

Site Map (West of Babcock Street), 2/19/1943.

Lot Map (Ownership of West of Babcock Street Properties), 3/11/1943.

Proposed Tracks and Motor Truck Scale on Prenatt Street, 3/15/1949.

Site Survey (Presently Biotreatment Cell Area), 6/15/1951.

Site Map of SOCONY-Vacuum Pipelines to Tanks, 7/20/1951.

Diagram Arrangement of Tank Pipes (Buffalo Terminal Disposal Area), 7/27/1951.

Site Survey (Buffalo Terminal Disposal Area), 8/24/1951.

Map of Atlas Works Properties (Property Transactions), 9/12/1951.

Map of Buffalo Creek Trackage on Prenatt Street, 3/24/1953.

Map of Yard Prenatt Street Details, 4/6/1953.

Plot Plan of Babcock Street Property, 9/3/1954.

Plot Plan Showing Centralized Tank Truck Leading Facilities, 5/21/1955.

Buffalo Creek RR Right of Way in Prenatt Street, 7/7/1955.

Lot Adjacent to RR (Currently Biotreatment Cell Area), 7/7/1955.

Map Showing Property Owned By Mobil, 12/15/1958.

Site Survey (Currently Biotreatment Cell), 12/8/1960.

Site Survey (Adjacent to West of Biotreatment Cell), 12/8/1960.

Plot Plan of Property West of Babcock Street, 2/29/1972.

Plot Plan of Elk and Babcock Properties, 2/14/1974.

Sketch of properties west of Babcock Street showing ownership. Attached to correspondence between H.C. Meinke, Lakes Division to H.M. Park, September 22, 1941.

APPENDIX H

List of Material Disposed for Buffalo Refinery Demolition

New York State Department of Environmental Conservation
600 Delaware Avenue, Buffalo, New York 14202



Thomas C. Jorling
Commissioner

February 1, 1990

Mr. Mark McClelland
Mobil Oil Corporation
1 Babcock Street
Buffalo, New York 14210-2250

Dear Mr. McClelland:

MOSF License #09-1200
Tank Closures
Buffalo Product Terminal

As we discussed during a meeting at your office, you are requested to provide this Department with documentation of the proper disposal of waste materials generated by closure of the aboveground tanks at this facility.

This information is to be provided at the completion of your current tank removal project.

If you have any questions, please call me at (716) 847-4590.

Sincerely,

Michael J. Hinton, P.E.
Senior Sanitary Engineer

MJH:vu

2/14/90 REVIEWED WITH LACU.
PLAN TO GIVE ATTACHED REPORT DELETING
COLUMNS HEADED TANK(#) AND ADDITIONAL
DOCUMENTATION/COMMENTS.
OKAY
ADVISED TIM SULLIVAN.

DISPOSAL OF MATERIAL FOR
BUFFALO REFINERY DEMOLITION PROJECT

1988 -----
DATE: 08-Feb-90

BUFFALO TERMINAL
BUFFALO TERMINAL
TRACKING OF DISPOSED MATERIAL

| TANK # | MATERIAL(S) | QUANTITY DISPOSED | CLASSIFICATION | VENDOR(S) | FACILITY DESTINATION | MANIFEST # | BILL OF LADING # | FACILITY SIGNED DOCUMENT | DATE SIGNED | ADDITIONAL DOCUMENTATION/COMMENTS |
|--------|---|--|--|--|--|---|--|---|--|--|
| 1. | 83,84,85 #6 OIL (SOLID) | 42,660 LBS 46,961 LBS 45,800 LBS | NON-HAZARDOUS NON-HAZARDOUS NON-HAZARDOUS | B. N. H. (CONTRACTOR) NOBLE OIL(SUBCONTRACTOR) PARISO INC.(TRANSPORTER) | B. P. I. WASTE SYSTEMS (NIAGARA LANDFILL & NIAGARA RECYCLING-NY) | 00030 00031 00032 00025 | 48579 13113 13112 | YES YES YES | 01/05/89 01/06/89 01/06/89 | (1)NON-HAZARDOUS SPECIAL WASTE MANIFESTS (2)LAB ANALYSIS (3)LETTER FROM E. M. H. |
| 2. | 31,89,499, 83,84,85 #6 OIL (LIQUID) (OIL/WATER) | 22,900 GAL 22,900 GAL 22,900 GAL 22,500 GAL 22,976 GAL 22,000 GAL 22,000 GAL 22,000 GAL | NON-HAZARDOUS NON-HAZARDOUS NON-HAZARDOUS NON-HAZARDOUS NON-HAZARDOUS NON-HAZARDOUS NON-HAZARDOUS NON-HAZARDOUS | NOBLE OIL(CONTRACTOR) EASTERN PETR. (BROKER & TRANSPORTER-VIA RAILCAR) C. I. M. CO. (MICHIGAN) SELLERS OIL(GEORGIA) GIANT CEMENT CO. (SC) GIANT CEMENT CO. (SC) GIANT CEMENT CO. (SC) | SELLERS OIL(GEORGIA) SELLERS OIL(GEORGIA) SELLERS OIL(GEORGIA) C. I. M. CO. (MICHIGAN) SELLERS OIL(GEORGIA) GIANT CEMENT CO. (SC) GIANT CEMENT CO. (SC) GIANT CEMENT CO. (SC) | 00030 00031 00032 00025 00029 00037 00036 | 03/14/89 03/14/89 03/14/89 01/12/89 03/30/89 04/04/89 05/03/89 | YES YES YES YES YES YES YES | 03/14/89 03/14/89 03/14/89 01/12/89 03/30/89 04/04/89 05/03/89 | (1)MANIFESTS (2)LETTERS OF RECEIPT FROM GIANT CEMENT (3)C. I. M. -LAB ANALYSIS (4)AUTHORIZATION REQUEST FORMS W/ LAB ANALYSIS FROM GIANT CEMENT (5)LETTER FROM GIANT STATING APPROVAL OF S.C. DEPT. OF HEALTH (6)SATBOLT LAB ANALYSIS & INVOICE TANKS #31, #83, #84, #85, #89 (7)STATE OF S. C. CONSIDERS THE MATERIAL TO BE HAZARDOUS-DO POSSESS A DISPOSAL FACILITY INCORPORATING OIL RECEIVING TICKET FROM SELLERS OIL (8)BOOTH SELLERS & C. I. M. ARE REPROCESSORS WHILE GIANT BURNS EVERYTHING IN ITS CEMENT KILNS |
| 3. | 395,490-391, 392,393,394, 395,396,397, 398,490,491, 492,496,497, 499 ASPHALT | 750 CUBIC YARDS(SOLID) | NON-HAZARDOUS | B. N. H. (CONTRACTOR) BROWNS GENERAL DUMP(SUB- CONTRACTOR) | BROWNS GENERAL DUMP (ORCHARD PARK, NY) | | | | | (1)LAB ANALYSIS FOR TANKS #395 & #499 (2)TANK #499 STILL UNCORRECTED (3)LETTER FROM E. M. H. STATING DESTINATION OF ASPHALT & ITS INTENDED USE (4) LAB ANALYSIS INVOICE (5)QUANTITIES ESTIMATED BASED ON TANK SIZES (6)PAYMENT FOR SERVICES UNDER E. M. H.'S GENERAL CONTRACT |
| 4. | 86,107,168, 169,82,817, 817-ALUMINATE CLAY FILTER A14-P. O. ADDITIVE INHIB. V131-BOTANE SURGE V285-D. I. B. REFLOX (45,100 LBS) | 84-55 GAL DR 62-10 GAL DR (45,100 LBS) | HAZARDOUS HAZARDOUS | B. N. H. (CONTRACTOR) V. S. I. (SUBCONTRACTOR) SUTTLERS TROCK (TRANSPORTER) | MANIRE SHALE PROCESS. (LOUISIANA) | 80783 80783 | | YES YES | 12/16/88 12/16/88 | (1)LAB ANALYSIS FOR ALL TANKS (2)MANIFESTS (3)TRANSPORTER-CERT. OF INS., WASTE TRANSPORTER PERMIT (4)WASTE PRODUCT RECORDS FOR TANKS #86, #169, #817, #107 (5)LAND DISPOSAL RESTRICTIONS INFORMATION (6)MATERIALS CHARACTERIZATION DATA SHEETS FOR MARINE SHALE SIGNED BY GENERATOR (7)ALL WASTE WAS INCINERATED (8)TANKS WERE LOCATED IN THE TBT AREA |
| 5. | N/A ASBESTOS | 800 CUBIC YARDS | ASBESTOS | B. N. H. (CONTRACTOR) B. N. D. (BROKER & TRANSPORTER) | SAS LANDFILL (WEST VIRGINIA) | VARIOUS | | YES | 08/23/88 TO 09/27/88 | (1)THERE WERE 8 TOTAL SHIPMENTS (2)BILL OF LADING (3)WASTE MANIFESTS FROM E. M. H. W/ A RECEIPT SIGNATURE BY SAS LANDFILL |
| 6. | 181 TANK BOTTOM (LIQUID) | 1-55 GAL DR | HAZARDOUS | B. N. H. (CONTRACTOR) CATARACT IND. (TRANSPORTER) | FRONTIER CHEMICAL (NIAGARA FALLS, NY) | 5285007 | | YES | 12/28/88 | (1)FRONTIER CHEMICAL IS OWNED BY ENVIROSOBE |
| 7. | 40 TANK-BOTTOM (LIQUID) | 7-55 GAL DR (250 G+1000P) 8-55 GAL DR (4,000 LBS) | HAZARDOUS HAZARDOUS HAZARDOUS | ENVIRONMENTAL OIL (ALSO TRANSPORTER) | FRONTIER CHEMICAL (NIAGARA FALLS, NY) | 508183 2 508182 3 | | YES YES | 09/11/88 09/11/88 | |
| 8. | 40 TANK BOTTOM | 5-55 GAL DR | HAZARDOUS | ENVIRONMENTAL OIL | FRONTIER CHEMICAL | 799380 9 | | YES | 08/31/88 | |

BUFFALO TERMINAL

| (SOLID) | (2,000 LBS) | (ALSO TRANSPORTER) | (NIAGARA FALLS, NY) | NO(SEE COMMENTS) | (1)MORCO ENERGY SIGNED THE MANIFESTS ONLY AS A TRANSPORTER TO ACKNOWLEDGE RECEIPT OF THE MATERIALS(NON-HAZARDOUS) (2)MANIFESTS NOT REQUIRED (3)WEIGHT TICKETS (4)LAB ANALYSIS (5)INVOICES (6)MORCO IS A REPROCESSOR |
|---|--|--|--|--|---|
| 40 SLOP OIL (LIQUID) (OIL/WATER) | 6,100 GAL 6,478 GAL 6,316 GAL 6,365 GAL 6,046 GAL 6,159 GAL 5,096 GAL 5,349 GAL 5,349 GAL 1,053 GAL | ENVIRONMENTAL OIL MORCO ENERGY(TRANSPORTER) | MORCO ENERGY (DETROIT, MICHIGAN) | - - - - - - - - - - | (1)MANIFESTS NOTTING NON-HAZARDOUS, NON-REGULATED |
| 8. TANK BOTTOMS (LIQUIDS) | 7-55 GAL DR 10-55 GAL DR (6,800 LBS) | ENVIRONMENTAL OIL CATARACT IND.(TRANSPORTER) | FRONTIER CHEMICAL (NIAGARA FALLS, NY) | YES YES | |
| 9. 495 SLOP OIL (LIQUID) (OIL/WATER) | 5,800 GAL 5,770 GAL 6,219 GAL | ENVIRONMENTAL OIL MORCO ENERGY(TRANSPORTER) | MORCO ENERGY (DETROIT, MICHIGAN) | YES YES NO(SEE COMMENTS) | (1)MORCO IS A BLENDING REPROCESSING FACILITY WHICH WAS RECENTLY PURCHASED BY SAFETY GREEN (2)MORCO IS UNABLE TO LOCATE THE DOCUMENT BUT THEY DO ACKNOWLEDGE RECEIPT AND HAVE GIVEN US A LETTER STATING THIS (3)MANIFESTS (4)APPROVED APR & PROPOSAL (5)RECOMMENDATION LETTER FROM TECHNICAL SERVICE STATING THAT ANALYSIS INDICATES THAT MATERIAL SHOULD BE DISCARDED & NOT BLENDED |
| 10. SLOP OIL (LIQUID) (HEAVY OIL) | 23,391 | NOBLE OIL (CONTRACTOR) EASTERN PETR.(BROKER & TRANSPORTER-VIA RAILCAR) | INTERNATIONAL (FLORIDA) | SENT ON 190 CONSOLIDATED RAIL CORP FORN | |
| 11. 19 SLOP OIL (LIQUID) (HEAVY OIL) | 56,371 | NOBLE OIL (CONTRACTOR) EASTERN PETR.(BROKER & TRANSPORTER-VIA RAILCAR) | GIANT CEMENT CO.(SC) | 00043 00045 00046 | 06/06/89 07/03/89 07/05/89 |
| 12. 38, 160 FOUNDATION TANK FOUNDATIONS | 692 TONS | ENVIRONMENTAL OIL TRANSPORTERS-RECO,WILLS, FRONTIER, TOMAHAWK TRUCKING | WAYNE DISPOSAL (BELLEVILLE, MICHIGAN) | VARIOUS | (1)THERE WERE A TOTAL OF 34 LOADS (2) ONLY HAVE TRANSPORTERS SIGNATURE ON MANIFESTS (3)MANIFESTS FOR TRACKING PURPOSES ONLY AS MATERIAL IS NON-HAZARDOUS (4)LAB ANALYSIS (5)WEIGHT TICKETS |
| 13. CONCRETE TANK FOUNDATIONS | 513 TONS | PINTO EQUIP-CONTRACTOR AC SERVICE-TRANSPORTATION | A. X. INC., SERVICE BUFFALO, N.Y. | YES | 30 LOADS 6/6 - 7/18/89 SEE FILE |
| 14. BATTERIES FROM BOILER HOUSE | 3.14 TON | LIBBINS | UNITED ALLOY & STEEL BUFFALO, N.Y. | YES | 82 BATTERIES |
| 15. URETHANE, 218, 251, 252 INSULATION | 30 TONS | ATLAS PAINTING | MODERN LANDFILL MODEL CITY, N.Y. | YES | 345 CUBIC YARDS - 12 LOADS 6/7-29/89 SEE FILE |
| 16. TRANSITE PANELS | 30 CU. YARDS | KIRKINS | MODERN LANDFILL | YES | TRANSITE FROM BOILER HOUSE |

BUFFALO TERMINAL

20 CU. YARDS

MODEL CITY, N.Y.

YES

04/10/89 AND ASPHALT COMPRESSOR BLDG.

16. 97 TANK
TANK SOIL

NON-HAZARDOUS
NON-HAZARDOUS
NON-HAZARDOUS
NON-HAZARDOUS
NON-HAZARDOUS
NON-HAZARDOUS
NON-HAZARDOUS

MODERN DISPOSAL

MODERN LANDFILL
MODEL CITY, N.Y.

YES
YES
YES
YES
YES
YES
YES

01
02
03
04
05
06
07
08

09/09/88
09/09/88
09/12/88
09/12/88
09/13/88
09/13/88
09/19/88
09/19/88

5. BARCOCI ST.
WAREHOUSE

ASBESTOS

KIRKINS

MODERN DISPOSAL
MODEL CITY, N.Y.

YES

08/30/89

17. TANK BOTTOMS
LIQUID (GASOLINE)

HAZARDOUS

CLEAN HARBOR

CLEAN HARBOR
BRAintree, MASS.

YES

09/01/89

18. SEWER SYSTEM
SOLIDITY

NON-HAZARDOUS

POWER CITY COMP
CLEAN HARBOR (TRANSPORTER)

CLEAN HARBOR
BRAintree, MA.

YES

12/01/89

19. TCR - CRUDE
AREA

ASBESTOS

AWB (CONTRACTOR)
J&I DISPOSAL (TRANSPORTER)
TRI-COUNTY DISPOSAL (TRANSP.)

J&I DISPOSAL
ORLEANS SANITARY LANDFILL N.Y.

YES

SEE FILES

LAB ANALYSIS FOR ALL DRUMS WHICH
INCLUDED PCB TESTING ON JUNE 23, 1989

19. 31
19 AREA

NON-HAZARDOUS

PINTO EQUIPMENT CO.
J&I DISPOSAL (TRANSPORTER)

ORLEANS SANITARY LANDFILL

YES

SEE FILES

42 LOADS. AS OF REPORT DATED
MISSING SHEETS 1824-32 AND 1847-33.
ON FILE ARE DAILY CLEARANCE
MONITORING SAMPLES.

20. 21, 22 AREA

NON-HAZARDOUS

PINTO EQUIPMENT CO
J & I DISPOSAL (TRANSP.)

J & I DISPOSAL
ORLEANS SANITARY LANDFILL

YES

SEE FILE
FOR SPECI.
INFO.

TOO NUMEROUS TO LIST ON REPORT.
FILE IS COMPLETE

21. 83, 84, 85 AREA

NON-HAZARDOUS

PINTO EQUIPMENT CO
J & I DISPOSAL (TRANSP.)

J & I DISPOSAL
ORLEANS SANITARY LANDFILL

YES

SEE FILE
FOR SPECI.
INFO.

STATE APPROVAL, ANALYTICAL RESULTS
AND WASTE TRANSPORTER PERMIT ON FILE

22. SANDBLASTING
MATERIAL AREA

NON-HAZARDOUS

PINTO EQUIPMENT CO.
J & I DISPOSAL (TRANSP.)

J & I DISPOSAL
ORLEANS SANITARY/LANDFILL

YES

SEE FILE
FOR SPECI.
INFO.

STATE APPROVAL, ANALYTICAL RESULTS
AND WASTE TRANSPORTER PERMIT ON FILE

23. 89, 91, 19,
21, 22, 83,
84, 85 AREA

NON-HAZARDOUS

PINTO EQUIPMENT CO
A.T. INC. (TRANSP.)

A.T. INC. SERVICES
BUFFALO, NEW YORK

YES

SEE FILE
FOR INFO

161 LOADS - MISSING 5 SIGNED FACILITY
DOCUMENTS.
ANALYTICAL RESULTS, STATE APPROVAL,
STATE TRANSPORTER PERMITS, ALL ON FILE

24. 89, 498, 495,
95, 378, 86 OIL TANK
BOTTOMS, BOTTLER
BOOSE, 105

HAZARDOUS

CLEAN HARBOR, INC (CONTRACTOR)
PRICE TRUCKING (TRANSP)
CLEAN HARBOR (TRANSP)
BUFFALO FUEL CORP (TRANSP)

ORLEANS SANITARY LANDFILL
ORLEANS, NEW YORK

YES

SEE FILE
FOR SPECI.
INFO.

LAB ANALYSIS FOR TANK 186
WASTE TRANSPORTER PERMIT NUMBER

25. 186

HAZARDOUS

CLEAN HARBOR, INC (CONTRACTOR)
CLEAN HARBOR (TRANSP)

CLEAN HARBOR, INC
BALTIMORE, MD

YES

11/27/89

LAB ANALYSIS FOR TANK 186
WASTE TRANSPORTER PERMIT NUMBER

| PROJECT | DESCRIPTION | QTY | HAZARDOUS | CONTRACTOR | ADDRESS | DATE | STATUS | REMARKS |
|---------|---|------------------------|--------------------|---|--|--|--------------------------|--------------------------------------|
| 31 | BUFFALO TERMINAL TANK BOTTOM LIQUID | 225 GALS | HAZARDOUS | CLEAN HARBOR, INC. CLEAN HARBOR, INC (TRANSP) | CLEAN HARBOR, INC. BRAINTREE, MD | 09/01/89 | YES | 445781 |
| 32 | VACUUM TRC FROM ALL PROJECTS | 150 GALS | NON-HAZARDOUS | CLEAN HARBOR (CONTRACTOR) CLEAN HARBOR (TRANSP) | CLEAN HARBOR BRAINTREE, MD | 10/31/89 | YES | 445789 |
| 36 | CONTRACTOR ERIC TANKS | 15,000 GALS | NON-HAZARDOUS | CLEAN HARBOR (CONTRACTOR) CLEAN HARBOR (TRANSP) | CLEAN HARBOR OF KINGSTON, MD CLEAN HARBOR S. PORTLAND, HI | 12/01/89 11/30/89 11/29/89 11/29/89 | YES YES YES YES | 445163 011237 011235 011236 |
| 37 | BARCOCK ST WAREHOUSE | 55 GALS | HAZARDOUS PCB'S | CLEAN HARBOR (CONTRACTOR) CLEAN HARBOR OF KINGSTON, MA (TRANSP) | CLEAN HARBOR BRAINTREE, MD | 11/18/89 | YES | 445782 |
| 38 | BARCOCK ST WAREHOUSE | 13 DRUMS 4,040 GALS | HAZARDOUS | KINGMS THERMAL CORP (CONTRACTOR) | ENSCA, INC ELMORINO, AR | 12/21/89 | NO | 422712 |
| 39 | 176 | CONTAMINATED SOIL | NON-HAZARDOUS | TRI-STATE MOTOR TRANSIT (TRANSPORTOR) | | | | |
| 39 | 86 OIL TANK | 50 CU YDS | NON-HAZARDOUS | CLEAN HARBOR (CONTRACTOR) (TRANSPORTOR) | ORLEANS SANITARY LANDFILL ORLEANS, N.Y. | | NO | |
| 39 | 86 OIL TANK | 11,000 GALS | NON-HAZARDOUS | CLEAN HARBOR (CONTRACTOR) SAFETY CLEAN (TRANSP) | SAFETY CLEAN BUFFALO, N.Y. | 9/29/89 | YES | 1845-22 1845-48 |

SPENT VACUUM TRUCK SLUDGES FROM ALL PROJECTS.

TOTAL MATERIAL FROM CLEAN HARBOR
ERIC TANK ON SITE

REMOVED PRIOR TO WAREHOUSE DEMOLITION

WAITING ON SIGNED COPY SHIPPED 12/21/89

TANK OVERFILL 4 LOAD - WAITING ON
SIGNED COPY SHIPPED 11/1/89

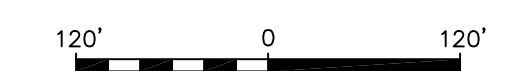
WAITING TO RECEIVE 1845-22 SIGNED COPY



| AREA | Structure Number | Original Structure Name in History Document |
|--|---|---|
| Northeast Process and Storage Area | 1 | Paraffin Boiler House |
| | 2 | Paraffin Office |
| | 3 | Engine House and Press Rooms |
| | 4 | Sweaters Structures |
| | 5 | Pan House |
| | 6 | Wax House |
| | 7 | Iroquois Gas Company Buildings |
| | 8 | Hose House #87 |
| | 9 | Car Shop |
| | 10 | Car Repair Shop |
| | 11 | Scrap Shed |
| Northern Tank Yard Area | 24 | Hose House |
| | 25 | Condenser and Receiving House |
| | 26 | Cooler |
| | 27 | Blanket Room/Pipe Shop/Electrical Shop |
| | 28 | Bleachers Structure |
| | 29 | Yard Trap |
| | 30 | Pulp Oil Building |
| | 31 | Cripple Shed |
| | 32 | UTL Storehouse and Bull Room |
| | 36 | Star Oil Barns and Offices |
| | 37 | Warehouses |
| Former Refinery Area | 38 | Watchman's House |
| | 39 | Main Office of Atlas Works |
| | 40 | Garages |
| | 41 | Barn |
| | 42 | Fan Houses |
| | 43 | Watchman's House at Gate #5 |
| | 44 | Sheds |
| | 45 | Pressure Stills and Coal Shed |
| | 46 | Condensers |
| | 47 | Tower Stills and Coal Sheds |
| | 48 | Receiving House |
| | 49 | Tar Cooler |
| | 50 | Watchman's House at Gate #21 |
| | 51 | Hose House |
| | 52 | WC Structure |
| | 53 | Pipe Shop/Experimental Stills |
| | 54 | Laboratory |
| | 55 | Watchman/Clock House |
| | 56 | Coal Shed and Reducing Stills |
| | 57 | Coal Sheds and Tar Stills |
| 58 | Condensers and Receiving House | |
| 59 | Cooler | |
| 60 | Pump House | |
| 61 | Coal Shed/Crude Oil Sheds/Condenser Structure | |
| 62 | Steam Still Condensers/Receiving House | |
| 63 | Refinery Office | |
| 64 | Locomotive House | |
| 65 | Refinery Boiler House/Pump House | |
| 66 | Icehouse | |
| 67 | Acid Shed | |
| 68 | Inground Oil/Water Separator | |
| Central Rail and Process Area | 95 | Hose House |
| | 96 | Coal Shed |
| | 97 | Old Store House/Rivet Storage Room |
| | 98 | Stove shed/cooper shop |
| | 99 | Paint Shed |
| | 100 | Acid oil box |
| | 102 | Filling Rack |
| Southern Tank Yard Area | 113 | Acid Treating/Clay Contacting Area |
| | 114 | Barrel House |
| | 115 | Hose House |
| | 116 | Pan House/Boiler House |
| | 117 | Bottle Houses/Pan House |
| Administrative Offices and Operations Area | 118 | Atlas Works Office |
| | 142 | Coal Shed |
| | 143 | Wheel Shop/Blacksmith Shop/Machine Shop |
| | 144 | Iron Rack |
| | 145 | Car Shop |
| | 146 | Furnace Room |
| | 147 | Car repair/Steel Shed |
| | 148 | Car Shop Store House and Offices |
| | 149 | Firehouse/Fire Foam House |
| | Elk Street Properties Area | |

LEGEND

- 32 TANK EXISTING IN 1917
- 58 STRUCTURE EXISTING IN 1917
- FORMER BUFFALO RIVER PRIOR TO 1914
- GEOGRAPHIC AREA BOUNDARY
- CURRENT PROPERTY BOUNDARY



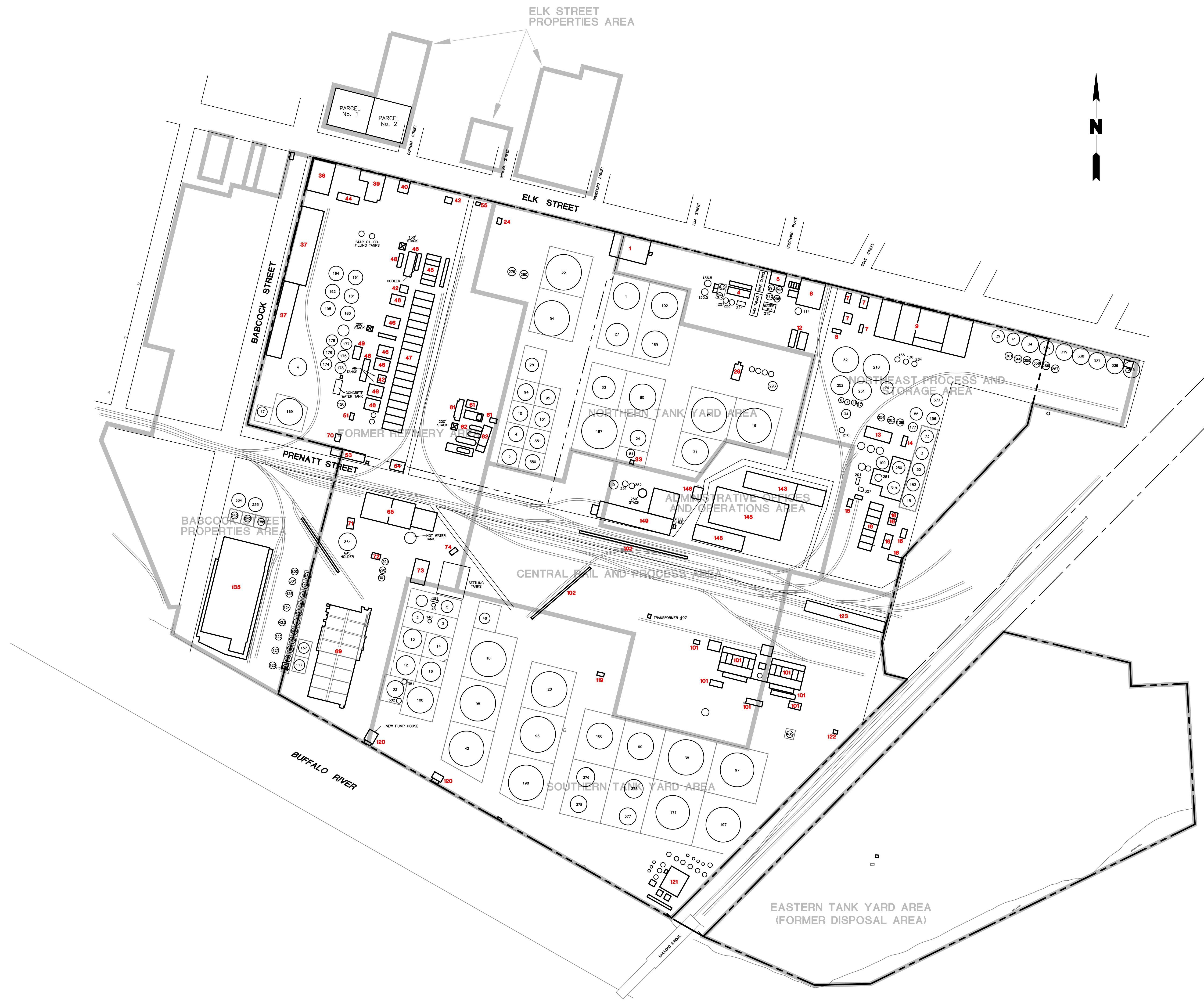
Title: **1917 CONDITIONS - SITE PLAN AND GEOGRAPHIC AREAS OF THE BUFFALO TERMINAL**

Buffalo Terminal, Buffalo, New York

Prepared For: **EXXON MOBIL CORPORATION**

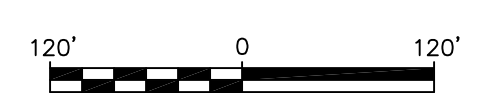
| | | | |
|--|--------------------|-------------------|-------|
| <small>ROUX ASSOCIATES, INC. Environmental Consulting & Management</small> | Compiled by: A.B. | Date: 04/00 | PLATE |
| | Prepared by: G.M. | Scale: AS SHOWN | |
| | Project Mgr: A.B. | Office: NY | |
| | File No: MC5212201 | Project: 17252Y03 | |

1



| AREA | Structure Number | Original Structure Name |
|--|-------------------------------|--|
| Northeast Process and Storage Area | 1 | Paraffin Boiler House |
| | 4 | Swesters Structures |
| | 5 | Pan House |
| | 6 | Wax House |
| | 7 | Iroquois Gas Company Buildings |
| | 8 | Hose House #87 |
| | 9 | Car Shop |
| | 12 | Pump House and Sweater Structure |
| | 13 | Pump House #26 |
| | 14 | Inground Oil/Water Separator |
| | 15 | Engine House #40 |
| | 16 | Pressed Distillate Unit |
| | 24 | Hose House |
| | 29 | Yard Trap |
| | 33 | Pump House #47 |
| | Northern Tank Yard Area | 36 |
| 37 | | Warehouses |
| 39 | | Main Office of Atlas Works |
| 40 | | Garages |
| 42 | | Fan Houses |
| 44 | | Sheds |
| 45 | | Pressure Stills and Coal Shed |
| 46 | | Condensers |
| 47 | | Tower Stills and Coal Sheds |
| 48 | | Receiving House |
| 49 | | Tor Cooler |
| 51 | | Hose House |
| 53 | | Pipe Shop/Experimental Stills Laboratory |
| 54 | | Laboratory |
| 55 | | Watchman/Clock House |
| Former Refinery Area | | 61 |
| | 62 | Steam Still Condensers/Receiving House |
| | 65 | Refinery Boiler House/Pump House |
| | 69 | Main Inground Oil/Water Separator/Trap |
| | 70 | Building #50 |
| | 71 | Building #28 |
| | 72 | Pump House #27 |
| | 73 | Pump House #25, Fire House |
| | 74 | Hose House #84 |
| | 101 | Pump House #95/Tool House #93 Structures |
| | 102 | Filling Rack |
| | 119 | Hose House #88 |
| | 120 | Pump Houses #44 and #24 |
| | 121 | Building #79 |
| | 122 | Hose House #89 |
| | Central Rail and Process Area | 123 |
| 135 | | Barrel House |
| Southern Tank Yard Area | 143 | Wheel Shop/Blacksmith Shop/Machine Shop |
| | 145 | Car Shop |
| Babcock Street Properties Area | 146 | Furnace Room |
| | 148 | Car Shop Store House and Offices |
| | 149 | Boiler House/Fire Foam House |
| | 149 | Parcel #1 |
| Administration Offices and Operations Area | 149 | Parcel #2 |
| | 149 | Parcel #2 |

- LEGEND**
- 32 TANK EXISTING IN 1924
 - 65 STRUCTURE EXISTING IN 1924
 - GEOGRAPHIC AREA BOUNDARY
 - - - - - CURRENT PROPERTY BOUNDARY



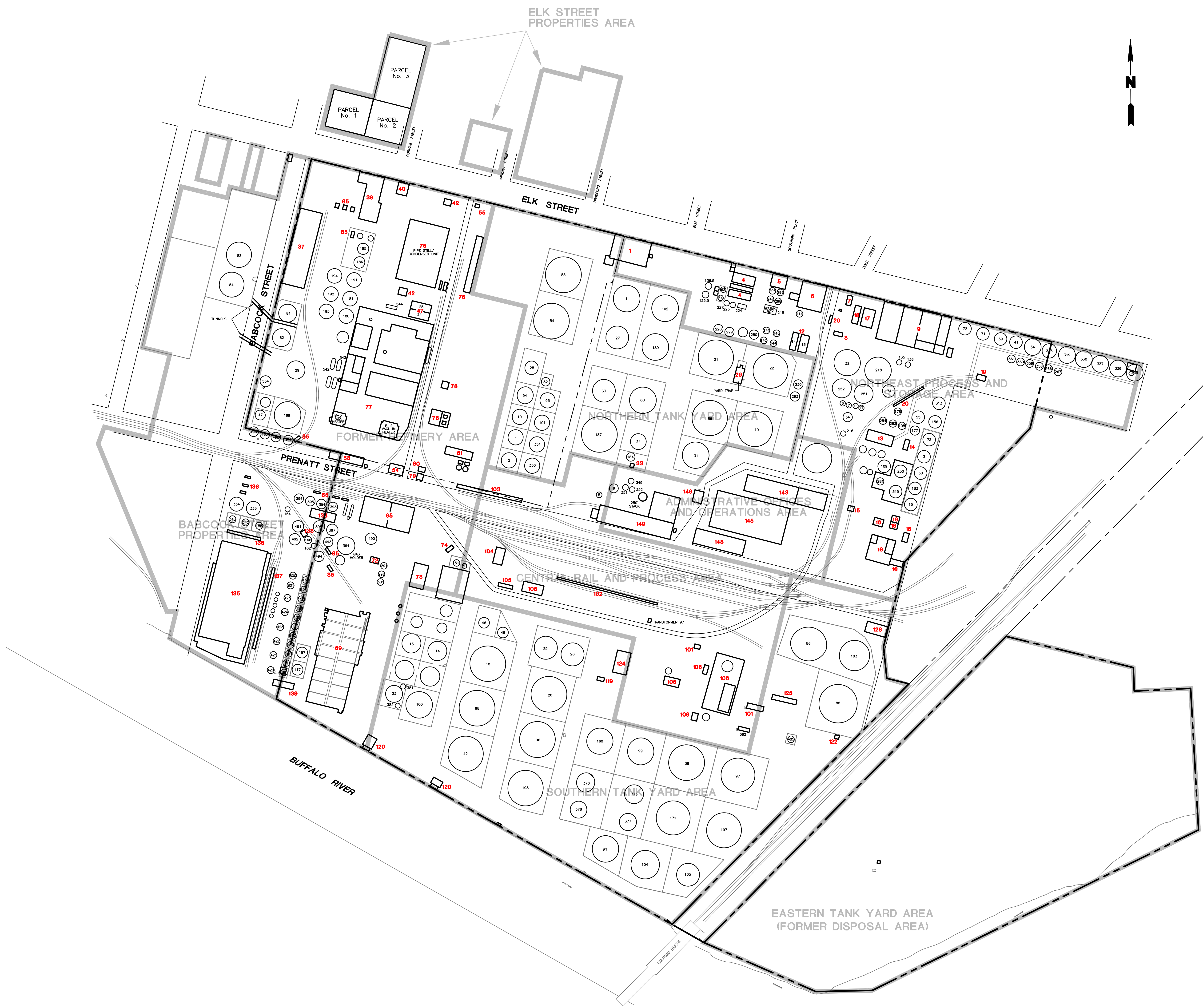
Title: **1924 CONDITIONS - SITE PLAN AND GEOGRAPHIC AREAS OF THE BUFFALO TERMINAL**

BUFFALO TERMINAL, BUFFALO, NEW YORK

Prepared For: **EXXON MOBIL CORPORATION**

| | | |
|--------------------|-------------------|----------|
| Compiled by: A.B. | Date: 04/00 | PLATE |
| Prepared by: G.M. | Scale: AS SHOWN | 2 |
| Project Mgr: A.B. | Office: NY | |
| File No: MC5212202 | Project: 17252Y03 | |

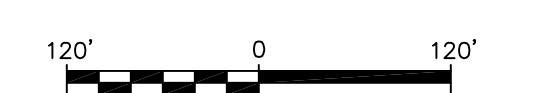
ROUX ASSOCIATES, INC. Environmental Consulting & Management



| AREA | Structure Number | Original Structure Name | |
|--|-------------------------|---|----------------------------|
| Northeast Process and Storage Area | 1 | Paraffin Boiler House | |
| | 4 | Sweaters Structures | |
| | 5 | Pan House | |
| | 6 | Wax House | |
| | 7 | Iroquois Gas Company Buildings | |
| | 8 | Hose House #87 | |
| | 9 | Car Shop | |
| | 12 | Pump House and Sweater Structure | |
| | 13 | Pump House #26 | |
| | 14 | Inground Oil/Water Separator | |
| | 15 | Engine House #40 | |
| | 16 | Pressed Distillate Unit | |
| | 17 | Sweater Structure #7 | |
| | 18 | Building #38 | |
| | 19 | Locomotive House | |
| | 20 | Rail Loading Racks | |
| | 29 | Yard Trap | |
| | Northern Tank Yard Area | 33 | Pump House #47 |
| | | 37 | Warehouses |
| | Former Refinery Area | 39 | Main Office of Atlas Works |
| 40 | | Garages | |
| 42 | | Fan Houses | |
| 47 | | Tower Stills and Cool Sheds | |
| 53 | | Pipe Shop/Experimental Stills | |
| 54 | | Laboratory | |
| 55 | | Watchman/Clock House | |
| 61 | | Cool Shed/Crude Oil Sheds/Condenser Structure | |
| 65 | | Refinery Boiler House/Pump House | |
| 69 | | Main Inground Oil/Water Separator/Trap | |
| 72 | | Pump House #27 | |
| 73 | | Pump House #25, Fire House | |
| 74 | | Hose House #84 | |
| 75 | | Pipe Still/Condenser Unit | |
| 76 | | Building #35 | |
| 77 | | Houdry Unit | |
| 78 | | Salt Heater/Electric Substation/Pump House | |
| 79 | | Hose House #85 | |
| 80 | | Lab Sample Structure | |
| Central Rail and Process Area | | 85 | Loading Racks |
| | 101 | Pump House #95/Tool House #93 Structures | |
| | 102 | Filling Rack | |
| | 103 | Tar Loading Rack | |
| | 104 | Ethyl Plant | |
| | 105 | Dehydrator/Pipe Line Pump House #38 | |
| Southern Tank Yard Area | 106 | Dehloz Cracking Unit/Cross-Cracking Unit | |
| | 119 | Hose House #85 | |
| | 120 | Pump Houses #44 and #24 | |
| | 122 | Hose House #89 | |
| | 124 | Stabilization Unit #35 | |
| | 125 | Wash Room (Fire Truck House #31) | |
| Babcock Street Properties Area | 126 | Storage Shed #54 | |
| | 135 | Barrel House | |
| | 136 | Loading Platforms | |
| | 137 | Unloading Trench | |
| Administrative Offices and Operations Area | 138 | Pump Houses | |
| | 139 | Ethyl Plant | |
| | 143 | Wheel Shop/Blacksmith Shop/Machine Shop | |
| | 145 | Car Shop | |
| | 146 | Furnace Room | |
| Elk Street Properties Area | 148 | Car Shop Store House and Offices | |
| | 149 | Boiler House/Fire Foam House | |
| | | Parcel #1 | |
| | | Parcel #2 | |
| | | Parcel #3 | |

LEGEND

- 32 TANK EXISTING IN 1939
- 40 STRUCTURE EXISTING IN 1939
- GEOGRAPHIC AREA BOUNDARY
- CURRENT PROPERTY BOUNDARY



Title: **1939 CONDITIONS - SITE PLAN AND GEOGRAPHIC AREAS OF THE BUFFALO TERMINAL**

BUFFALO TERMINAL, BUFFALO, NEW YORK





Prepared For: **EXXON MOBIL CORPORATION**

| | | | |
|--|--------------------|-------------------|-------------------|
| ROUX ROUX ASSOCIATES, INC. <i>Environmental Consulting & Management</i> | Compiled by: A.B. | Date: 04/00 | PLATE 3 |
| | Prepared by: G.M. | Scale: AS SHOWN | |
| | Project Mgr: A.B. | Office: NY | |
| | File No: MC5212203 | Project: 17252Y03 | |



| AREA | Structure Number | Original Structure Name | |
|--|----------------------------------|--|----------------|
| Northeast Process and Storage Area | 1 | Paraffin Boiler House | |
| | 4 | Sweaters Structures | |
| | 5 | Pan House | |
| | 6 | Wax House | |
| | 7 | Iroquois Gas Company Buildings | |
| | 8 | Hose House #87 | |
| | 9 | Cor Shop | |
| | 12 | Pump House and Sweater Structure | |
| | 13 | Pump House #26 | |
| | 14 | Inground Oil/Water Separator | |
| | 15 | Engine House #40 | |
| | 16 | Pressed Distillate Unit | |
| | 17 | Sweater Structure #7 | |
| | 18 | Building #38 | |
| | 19 | Locomotive House | |
| | 20 | Rail Loading Racks | |
| | 29 | Yard Trap | |
| | Northern Tank Yard Area | 33 | Pump House #47 |
| | | 34 | Point Shed |
| 37 | | Warehouses | |
| Former Refinery Area | 39 | Main Office of Atlas Works | |
| | 40 | Garages | |
| | 42 | Fan Houses | |
| | 53 | Pipe Shop/Experimental Stills | |
| | 54 | Laboratory | |
| | 55 | Watchman/Clock House | |
| | 61 | Coal and Crude Oil Sheds/Condenser Structure | |
| | 65 | Refinery Boiler House/Pump House | |
| | 69 | Main Inground Oil/Water Separator/Trap | |
| | 72 | Pump House #27 | |
| | 73 | Pump House #25, Fire House | |
| | 74 | Hose House #84 | |
| | 75 | Pipe Still/Condenser Unit | |
| | 76 | Building #35 | |
| | 77 | Houdry Unit | |
| | 78 | Salt Heater/Electric Substation/Pump House | |
| | 79 | Hose House #85 | |
| | 80 | Lab Sample Structure | |
| | 81 | TCC Unit | |
| | 82 | Catalytic Polymerization Area | |
| | 83 | Compressor House | |
| | 84 | Cooling Tower | |
| | 85 | Loading Racks | |
| Central Rail and Process Area | 101 | Pump House #95/Tool House #93 | |
| | 102 | Filling Rack Structures | |
| | 103 | Tar Loading Rack | |
| | 104 | Ethyl Plant | |
| | 105 | Dehydrator/Pipe Line Pump House #38 | |
| Southern Tank Yard Area | 106 | Deflocc Cracking Unit/Cross-Cracking Unit | |
| | 107 | Instrument Shop/Water Separator | |
| | 119 | Hose House #88 | |
| | 120 | Pump Houses #44 and #24 | |
| | 124 | Stabilization Unit #35 | |
| Babcock Street Properties Area | 125 | Wash Room (Fire Truck House #31) | |
| | 126 | Storage Shed #54 | |
| | 127 | Hose House #131 | |
| | 128 | Shelter House | |
| | 135 | Barrel House | |
| Administrative Offices and Operations Area | 136 | Loading Platforms | |
| | 137 | Unloading Trench | |
| | 138 | Pump Houses | |
| | 140 | Lakes Division Garage | |
| | 143 | Wheel Shop/Blacksmith Shop/Machine Shop | |
| | 145 | Car Shop | |
| 146 | Furnace Room | | |
| 148 | Car Shop Store House and Offices | | |
| 149 | Boiler House/Fire Foam House | | |

LEGEND


-  TANK EXISTING IN 1951
-  STRUCTURE EXISTING IN 1951
-  GEOGRAPHIC AREA BOUNDARY
-  CURRENT PROPERTY BOUNDARY

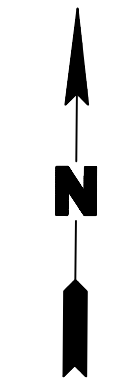


Title: **1951 CONDITIONS - SITE PLAN AND GEOGRAPHIC AREAS OF THE BUFFALO TERMINAL**

Buffalo Terminal, Buffalo, New York

Prepared For: **EXXON MOBIL CORPORATION**

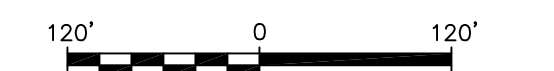
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|--|--------------------|-------------------|-------------------|
|  ROUX ASSOCIATES, INC. <i>Environmental Consulting & Management</i> | Compiled by: A.B. | Date: 04/00 | PLATE 4 |
| | Prepared by: G.M. | Scale: AS SHOWN | |
| | Project Mgr: A.B. | Office: NY | |
| | File No: MC5212204 | Project: 17252Y03 | |



| AREA | Structure Number | Original Structure Name |
|---|------------------|--|
| Northeast Process and Storage Area | 1 | Paraffin Boiler House |
| Northeast Process and Storage Area | 21 | Main Office |
| Northern Tank Yard Area | 29 | Yard Trap |
| Former Refinery Area | 35 | Sub-Station C |
| Former Refinery Area | 37 | Warehouses |
| Former Refinery Area | 69 | Main Inground Oil/Water Separator/Trap |
| Former Refinery Area | 72 | Pump House #27 |
| Former Refinery Area | 73 | Pump House #25, Fire House |
| Former Refinery Area | 81 | TCC Unit |
| Former Refinery Area | 83 | Compressor House |
| Former Refinery Area | 86 | Control House |
| Former Refinery Area | 87 | Gas Compressor/Exchanger Structure |
| Former Refinery Area | 88 | Substation E |
| Former Refinery Area | 89 | Tar Box |
| Former Refinery Area | 90 | Sovaformer Area |
| Former Refinery Area | 91 | Asphalt Control House |
| Former Refinery Area | 92 | Dissolved Air Flotation Unit |
| Former Refinery Area | 93 | Asphalt Loading Area/heater |
| Former Refinery Area | 94 | Fire Pump Houses |
| Central Rail and Process Area | 102 | Filling Rack |
| Central Rail and Process Area | 104 | Ethyl Plant #16 |
| Central Rail and Process Area | 105 | Dehydrator/Pipeline Pump House #38 |
| Central Rail and Process Area | 108 | Pipeline Storage House |
| Central Rail and Process Area | 109 | Treating, Blending and Shipping Area |
| Central Rail and Process Area | 110 | Alkylation Unit Area |
| Central Rail and Process Area | 111 | Safety Building |
| Southern Tank Yard Area | 129 | Pump Pad |
| Southern Tank Yard Area | 130 | Crude Scale House |
| Southern Tank Yard Area | 131 | Cooling Tower |
| Southern Tank Yard Area | 134 | Propane Loading Rack |
| Eastern Tank Yard Area (Former Disposal Area) | 135 | Barrel House |
| Babcock Street Properties Area | 140 | Lakes Division Garage |
| Babcock Street Properties Area | 141 | Truck Loading Rack |
| Babcock Street Properties Area | 141A | Truck Wash Building |
| Babcock Street Properties Area | 146 | Furnace Room |
| Administrative Offices and Operations Area | 150 | Laboratory Building |
| Administrative Offices and Operations Area | 151 | Boiler House |
| Administrative Offices and Operations Area | 152 | Mechanical Shops |
| Administrative Offices and Operations Area | 153 | Store House |
| Elk Street Properties Area | | Parcel #4 |
| Elk Street Properties Area | | Parcel #5 |

LEGEND

- 32 TANK EXISTING IN 1977-1987
- 83 STRUCTURE EXISTING IN 1977-1987
- 89 STRUCTURE PRESENT IN 1977
- 146 CURRENTLY EXISTING STRUCTURE
- WHA-4 TANK YARDS (WASTE HANDLING AREAS)
- WHA-7 WASTE HANDLING AREA
- GEOGRAPHIC AREA BOUNDARY
- CURRENT PROPERTY BOUNDARY



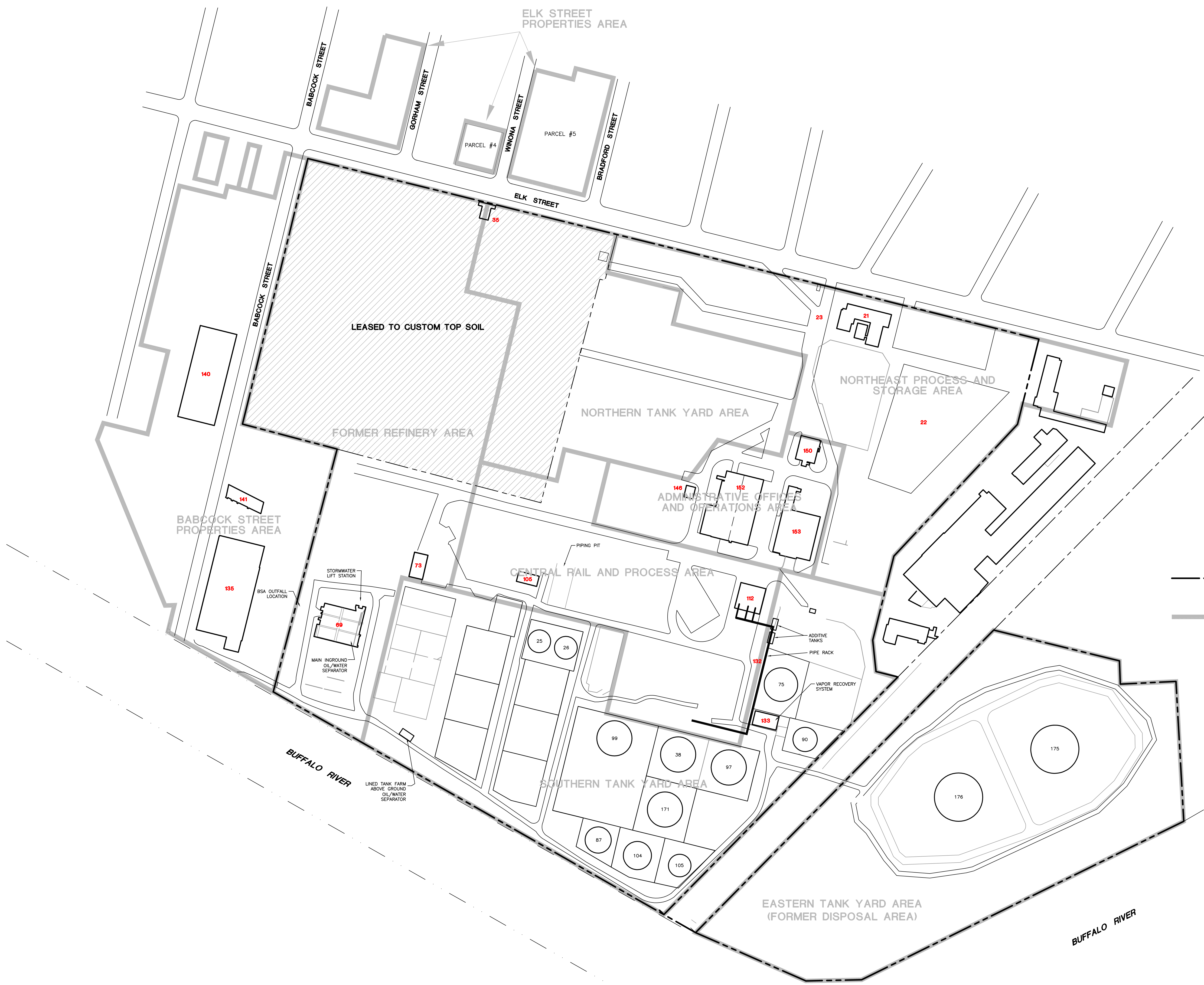
Title: **1977-1987 CONDITIONS - SITE PLAN AND GEOGRAPHIC AREAS OF THE BUFFALO TERMINAL**

BUFFALO TERMINAL, BUFFALO, NEW YORK

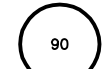



Prepared For: **EXXON MOBIL CORPORATION**

| | | | |
|--|--------------------|-------------------|-------------------|
| ROUX ROUX ASSOCIATES, INC. <i>Environmental Consulting & Management</i> | Compiled by: A.B. | Date: 04/00 | PLATE 5 |
| | Prepared by: G.M. | Scale: AS SHOWN | |
| | Project Mgr: A.B. | Office: NY | |
| | File No: MC5212205 | Project: 17252Y03 | |

| AREA | Structure Number | Original Structure Name |
|--|------------------|--|
| Northeast Process and Storage Area | 21 | Main Office |
| | 22 | Biotreatment Cell |
| | 23 | Gated Entrance |
| Northern Tank Yard Area | 35 | Sub-Station C |
| Former Refinery Area | 69 | Main Inground Oil/Water Separator/Trap |
| | 73 | Pump House #25, Fire House |
| Central Rail and Process Area | 105 | Dehydrator/Pipe Line Pump House #38 |
| | 112 | Tank Truck Loading Rack |
| Southern Tank Yard Area | 132 | Pipe Rack |
| | 133 | Vapor Recovery Unit |
| Babcock Street Properties Area | 135 | Barrel House |
| | 140 | Lakes Division Garage |
| | 141 | Truck Loading Rack |
| Administrative Offices and Operations Area | 146 | Furnace Room |
| | 150 | Laboratory Building |
| | 152 | Mechanical Shops |
| Elk Street Properties Area | 153 | Store House |
| | | Parcel #4 |
| | | Parcel #5 |



LEGEND


-  EXISTING TANK
-  EXISTING STRUCTURE
-  CURRENT PROPERTY LINE (BASED ON DENLUCK-O'NEILL ENGINEERING AND SURVEYING, DEC. 15, 1988; AND NUSSBAUMER & CLARKE, INC. FEBRUARY 6, 1995)
-  GEOGRAPHIC AREA BOUNDARY AND/OR FORMER PROPERTY LINES



Title: **EXISTING CONDITIONS SITE PLAN AND GEOGRAPHIC AREAS OF THE BUFFALO TERMINAL**

BUFFALO TERMINAL, BUFFALO, NEW YORK

Prepared For: **EXXON MOBIL CORPORATION**

| | | | |
|--|--------------------|-------------------|-------------------|
|  ROUX ASSOCIATES, INC. <i>Environmental Consulting & Management</i> | Compiled by: A.B. | Date: 04/00 | PLATE 6 |
| | Prepared by: G.M. | Scale: AS SHOWN | |
| | Project Mgr: A.B. | Office: NY | |
| | File No: MC5212206 | Project: 17252Y03 | |