

Statement of Significance

The Esso Oil Refinery, located on Boston Street in East Baltimore, was once one of the largest oil refineries in the world and the site of several of the earliest refineries in the oil industry. The 250 acre plant, rebuilt in 1895 and enlarged in 1943 to include gasoline production, was rapidly outdated shortly after World War II when the oil refining business changed significantly. Presently, the site operates only as a storage facility but represents an important aspect of the history of Baltimore's Oil industry.

MARYLAND HISTORICAL TRUST

INVENTORY FORM FOR STATE HISTORIC SITES SURVEY

**1 NAME**

HISTORIC Esso Refinery  
AND/OR COMMON

**2 LOCATION**

STREET & NUMBER  
3801 Boston Street

CITY, TOWN Baltimore VICINITY OF CONGRESSIONAL DISTRICT

STATE Maryland 21224 COUNTY

**3 CLASSIFICATION**

CATEGORY	OWNERSHIP	STATUS	PRESENT USE
<input type="checkbox"/> DISTRICT	<input type="checkbox"/> PUBLIC	<input type="checkbox"/> OCCUPIED	<input type="checkbox"/> AGRICULTURE <input type="checkbox"/> MUSEUM
<input type="checkbox"/> BUILDING(S)	<input checked="" type="checkbox"/> PRIVATE	<input type="checkbox"/> UNOCCUPIED	<input type="checkbox"/> COMMERCIAL <input type="checkbox"/> PARK
<input type="checkbox"/> STRUCTURE	<input type="checkbox"/> BOTH	<input type="checkbox"/> WORK IN PROGRESS	<input type="checkbox"/> EDUCATIONAL <input type="checkbox"/> PRIVATE RESIDENCE
<input checked="" type="checkbox"/> SITE	<b>PUBLIC ACQUISITION</b>	<b>ACCESSIBLE</b>	<input type="checkbox"/> ENTERTAINMENT <input type="checkbox"/> RELIGIOUS
<input type="checkbox"/> OBJECT	<input type="checkbox"/> IN PROCESS	<input type="checkbox"/> YES: RESTRICTED	<input type="checkbox"/> GOVERNMENT <input type="checkbox"/> SCIENTIFIC
	<input type="checkbox"/> BEING CONSIDERED	<input type="checkbox"/> YES: UNRESTRICTED	<input checked="" type="checkbox"/> INDUSTRIAL <input type="checkbox"/> TRANSPORTATION
		<input type="checkbox"/> NO	<input type="checkbox"/> MILITARY <input type="checkbox"/> OTHER:

**4 OWNER OF PROPERTY**

NAME Exxon Company USA Telephone #: 301-628-6600

STREET & NUMBER Baltimore Regional Office- P. O. Box 1288  
CITY, TOWN Baltimore VICINITY OF Maryland STATE, zip code

**5 LOCATION OF LEGAL DESCRIPTION**

COURTHOUSE, REGISTRY OF DEEDS, ETC. Baltimore City Courthouse

Liber #: SCL-5686/MLP-9674  
Folio #: 536 /498

STREET & NUMBER Fayette and Calvert Sts.  
CITY, TOWN Baltimore, Maryland 21202 STATE

**6 REPRESENTATION IN EXISTING SURVEYS**

TITLE  
DATE  
—FEDERAL —STATE —COUNTY —LOCAL

DEPOSITORY FOR SURVEY RECORDS  
CITY, TOWN STATE

# 7 DESCRIPTION

B-987

## CONDITION

EXCELLENT  
 GOOD  
 FAIR

DETERIORATED  
 RUINS  
 UNEXPOSED

## CHECK ONE

UNALTERED  
 ALTERED

## CHECK ONE

ORIGINAL SITE  
 MOVED DATE \_\_\_\_\_

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

Almost nothing remains of the nineteenth century origins of the Esso Refinery, one of the oldest petroleum refinery sites on the east coast. Two stone masonry tank foundations, probably late nineteenth century, remain just north of Cardiff Avenue (formerly 2nd Avenue), but this site was not owned by the oil company until the 1890's. Foundations also remain from what was probably part of the "pipe stills". These concrete pylons supported tank receivers for the various products of fractional distillation. The large smokestack probably dates to the late 1920's.

The site is now the major distribution center for Exxon in the Mid-Atlantic states. Consequently, the majority of the old refinery site is now occupied by truck loading facilities. The storage areas to the east and to the north have been expanded tremendously during the last twenty years.

CONTINUE ON SEPARATE SHEET IF NECESSARY

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW				
<input type="checkbox"/> PREHISTORIC	<input type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION	
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input type="checkbox"/> SCIENCE	
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE	
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> ARCHITECTURE	<input type="checkbox"/> EDUCATION	<input type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN	
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER	
<input type="checkbox"/> 1800-1899	<input type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input type="checkbox"/> TRANSPORTATION	
<input checked="" type="checkbox"/> 1900-	<input type="checkbox"/> COMMUNICATIONS	<input checked="" type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input type="checkbox"/> OTHER (SPECIFY)	
		<input type="checkbox"/> INVENTION			

SPECIFIC DATES

BUILDER/ARCHITECT

STATEMENT OF SIGNIFICANCE

The Esso Oil Refinery, located on Boston Street in east Baltimore, was once one of the largest oil refineries in the world and the site of several of the earliest refineries in the oil industry. The 250 acre plant, rebuilt in 1895 and enlarged in 1943 to include gasoline production, was rapidly outdated shortly after World War II when the oil refining business changed significantly. Presently, the site operates only as a storage facility but represents an important aspect of the history of Baltimore's oil industry.

Historical Significance

Oil refining began in the city of Baltimore in 1868, just nine years after the world's first oil well was drilled by Colonel E. L. Drake in Titusville, Pennsylvania. In that year a local merchant house--Poultney and Moale--started a small refinery at Locust Point. The Baltimore and Ohio Railroad provided a direct link to the new oilfields near Parkersburg, West Virginia and this refinery was located at the railroad's eastern terminus. Shortly after, several other refineries began in the city, most located in Canton on the other side of the harbor. By 1877, there were so many firms operating small refineries that several neighboring companies joined to form the Baltimore United Oil Company. These included the Camden Consolidated Oil Company (later the Esso site), Christopher West and Sons, Christopher and Company, Jarad Parkhurst Jr. and Company, Charles H. Nicolai, Merritt Jones and Company, J. H. Nicolai and Brown and Hammill.

From 1877 to 1892 the Baltimore United Oil Company operated these small refineries greatly expanding their production. At first, crude oil was transported to refineries in barrels or tank cars. In 1883, however, the National Transit Company constructed a pipe line connecting Baltimore refineries directly to wells in the Pennsylvania

**9 MAJOR BIBLIOGRAPHICAL REFERENCES**

Query & Vertical Files at Enoch Pratt Central Library, Baltimore, Md.  
Baltimore, December 1937  
Baltimore, March 1939  
oral interview with Mr. Pat O'Connor December 3, 1980  
Personnel Officer, Exxon Company, Baltimore, Maryland

CONTINUE ON SEPARATE SHEET IF NECESSARY

**10 GEOGRAPHICAL DATA**

ACREAGE OF NOMINATED PROPERTY \_\_\_\_\_

VERBAL BOUNDARY DESCRIPTION

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE COUNTY

STATE COUNTY

**11 FORM PREPARED BY**

NAME / TITLE

Linda Daur , Dennis Zembala

ORGANIZATION

Baltimore Industrial Museum

DATE

November 1980

STREET & NUMBER

217 N. Charles Street

TELEPHONE

301-396-1931

CITY OR TOWN

Baltimore, Maryland 21201

STATE

The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature, to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 Supplement.

The Survey and Inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

RETURN TO: Maryland Historical Trust  
The Shaw House, 21 State Circle  
Annapolis, Maryland 21401  
(301) 267-1438

fields. This increased the combined capacity of the refineries from about 2,500 barrels per day to over 5,000 barrels daily in 1892 when Standard Oil Company of New Jersey bought the Baltimore United Oil Company and its components.

Standard Oil Company began operation in 1892 in Baltimore under the name "Esso Standard Oil Company"--its manufacturing affiliate. At this time, the refineries were still simple operations employing between 75 and 80 workers with a daily output of about 5,000 barrels. In January of 1895, a huge fire destroyed most of the company's buildings, including several adjacent piers and factories. At this time, the plant was entirely rebuilt and modernized. One important addition included the construction of two piers to receive crude oil from tankers. The transport of crude oil by tanker was more economical than by pipe line; and by 1925 the operation of the line was discontinued.

Throughout the period 1910 to 1940, the Esso Refinery at Boston Street continually updated its operation. Allied demands during World War I forced the plant to expand so much that by 1949 the Baltimore Esso Refinery was one of the largest in the world. Included on the site were several warehouses and machine shops, a huge pump house to carry water from the Patapsco used in cooling condenser coils, a fire house, laboratory, stills, canning plant, storage tanks and hundreds of miles of pipes. A railroad spur track on the site allowed direct transfer of gasoline and heating oil from storage tanks to rail cars. Esso also operated its own printing plant at Pier two near Pratt Street to provide labels, posters, stationery and pamphlets for the company's products.

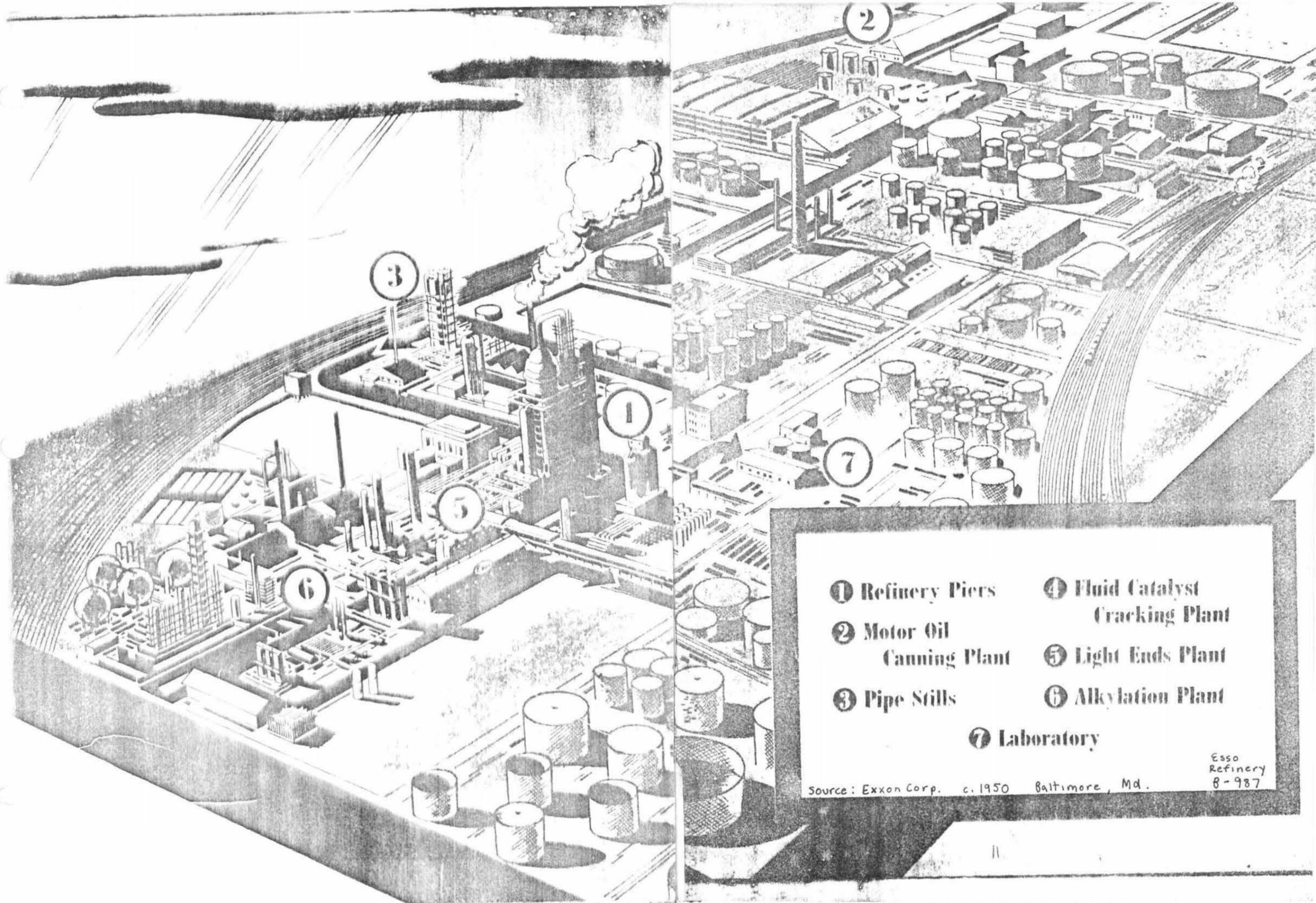
During World War II, the refinery began production of high octane aviation fuel--which necessitated further expansion. Unlike gasoline fuel oil, asphalt or roofing materials which were previously the company's principal products, aviation fuel requires a fluid or "cracking" method of refining rather than a heat/pressure process. High octane gasoline also requires a number of distilling and blending steps which involve special equipment. In order to meet the wartime demand for aviation fuel, in 1943 Standard Oil built a new 123-acre refinery on its South Baltimore site at the cost of 514 million and almost doubled the size of its property. During its peak the refinery employed almost 5,000 employees and produced almost 400,000 barrels of oil, fuel oil and aviation fuel daily. It was one of the biggest fuel suppliers to the United States government during World War II.

During the immediate post war years, however, improved refinery methods, a change in shipping methods and expansion in other areas sharply curtailed production at the Esso Refinery. The availability of natural gas in the South, used in the refining process, and large supplies of crude oil found there, shifted refining to the Gulf States. These new plants, equipped with more efficient machinery, rapidly surpassed Esso's older refineries. For example, the Baltimore plant refined only 400,000 barrels daily, while Standard Oil's Texas and Louisiana operations can produce over 600,000 barrels each.

Improved methods of shipping <sup>and</sup> allowed refined oil to be easily transported for the first time, refineries moved from the distribution point to the drill.

These changes marked the end of an era in Baltimore's refining business. In 1956, Standard Oil ceased refining operations at its Baltimore Esso plant. The site has been converted to a "marketing terminal" or distribution point for refined oil. Although most of the buildings have been closed or demolished, the huge metal tanks here are used for storage of the refined oil until it is shipped either by tank truck or barge to area homes, businesses and service stations. The site is presently owned and operated by the Exxon Corporation--which rededicated the property in 1974--as a storage facility.

While little remains of the original refining plants, this site retains the function of a major distribution center for the east coast.



- |                           |                                 |
|---------------------------|---------------------------------|
| ① Refinery Piers          | ④ Fluid Catalyst Cracking Plant |
| ② Motor Oil Canning Plant | ⑤ Light Ends Plant              |
| ③ Pipe Stills             | ⑥ Alkylation Plant              |
| ⑦ Laboratory              |                                 |

Source: Exxon Corp. c. 1950 Baltimore, Md.

Esso  
Refinery  
8-987

1. SITE I.D. NO

# B 987

## HAER INVENTORY

Historic American Engineering Record  
Department of the Interior, Washington, D.C. 20240

2. INDUSTRIAL CLASSIFICATION

Refining

3. PRIORITY

4. DANGER OF DEMOLITION?  
(SPECIFY THREAT) YES  NO  UNKNOWN

5. DATE

6. GOVT SOURCE OF THREAT

OWNER

ADMIN

7. OWNER/ADMIN

EXXON COMPANY USA

8. NAME(S) OF STRUCTURE

ESSO REFINERY

9. OWNER'S ADDRESS

BALTIMORE REGIONAL OFFICE

10. STATE

COUNTY NAME

CITY/VICINITY

CONG. DIST.

COUNTY

BALTIMORE

STATE

COUNTY NAME

CITY/VICINITY

CONG. DIST.

COUNTY

BALTIMORE

11. SITE ADDRESS (STREET &amp; NO.)

3801 BOSTON STREET

12. EXISTING SURVEYS

 NR NHL HABS HAER-I HAER NPS CLB CONF STATE COUNTY LOCAL OTHER

13. SPECIAL FEATURES (DESCRIBE BELOW)

 INTERIOR INTACT EXTERIOR INTACT ENVIRONS INTACT

14. UTM ZONE

EASTING

NORTHING

SCALE

SCALE

SCALE

QUAD NAME

18

364820

4348440

1:24

1:62.5

OTHER

BALTIMORE EAST

UTM ZONE

EASTING

NORTHING

SCALE

SCALE

SCALE

QUAD NAME

15. CONDITION

70  EXCELLENT71  GOOD72  FAIR73  DETERIORATED74  RUINS75  UNEXPOSED76  ALTERED82  DESTROYED85  DEMOLISHED

16. INVENTORIED BY

LINDA DAUR

AFFILIATION

BALTIMORE INDUSTRIAL MUSEUM

DATE

17. DESCRIPTION AND BACKGROUND HISTORY, INCLUDING CONSTRUCTION DATE(S), HISTORICAL DATE(S), PHYSICAL DIMENSIONS, MATERIALS, EXTANT EQUIPMENT, AND IMPORTANT BUILDERS, ENGINEERS, ETC.

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(CONT OVER)

18. ORIGINAL USE

PRESENT USE

ADAPTIVE USE

19. REFERENCES—HISTORICAL REFERENCES, PERSONAL CONTACTS, AND/OR OTHER

ORAL INTERVIEW MR. PAT O'CONNOR, PERSONNEL OFFICER, EXXON CO. BALTIMORE, MD.  
BALTIMORE, DECEMBER 1937  
BALTIMORE, MARCH 1939

(CONT OVER)

20. URBAN AREA 50,000 POP. OR MORE?

 YES  NO

21. NPS REGION

22. PUBLIC ACCESSIBILITY

 YES LIMITED YES UNLIMITED NO UNKNOWN

23. EDITOR

INDEXER

24. LOCATED IN AN HISTORIC DISTRICT?

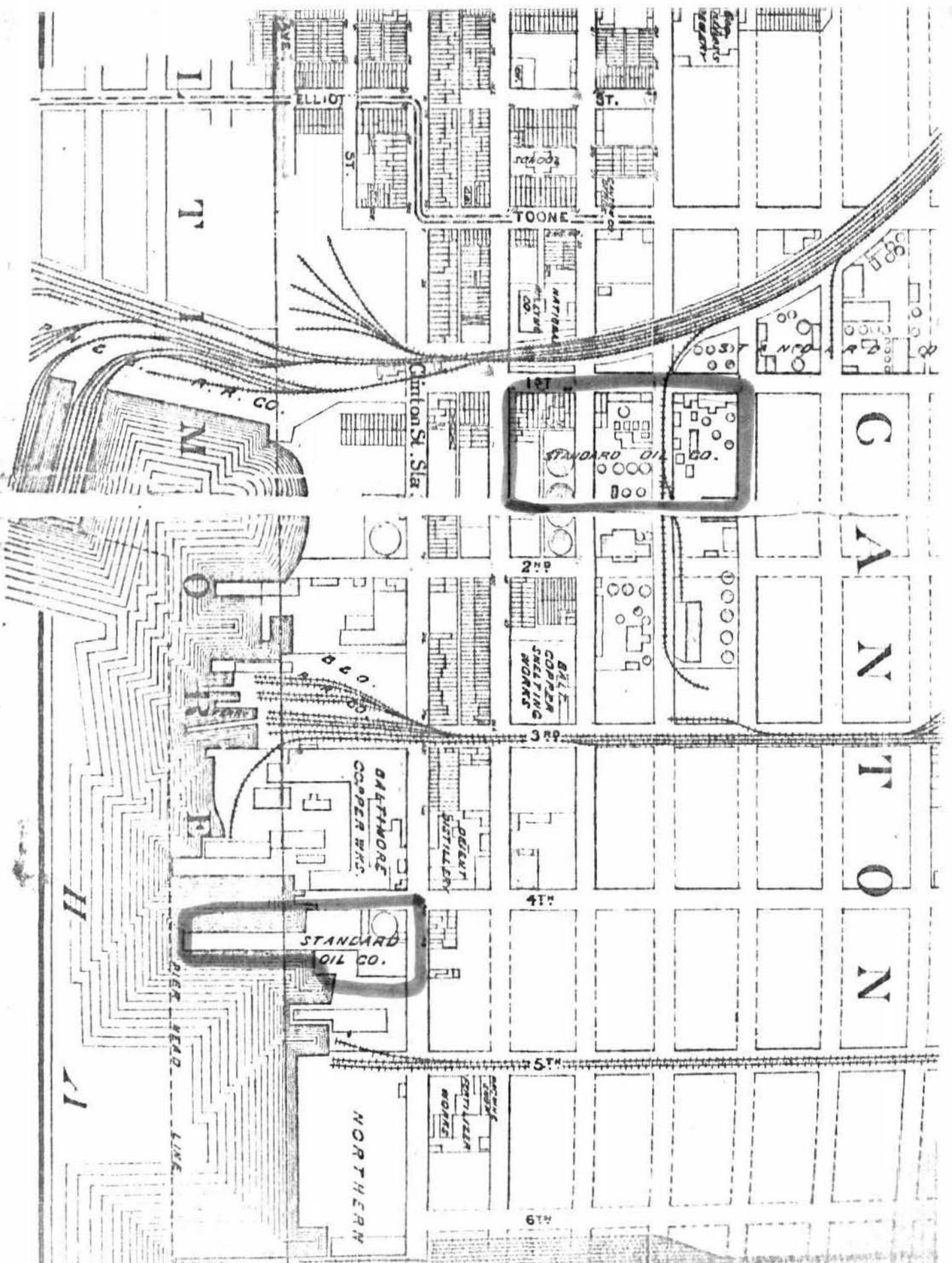
 YES NO

NAME

DISTRICT ID NO.

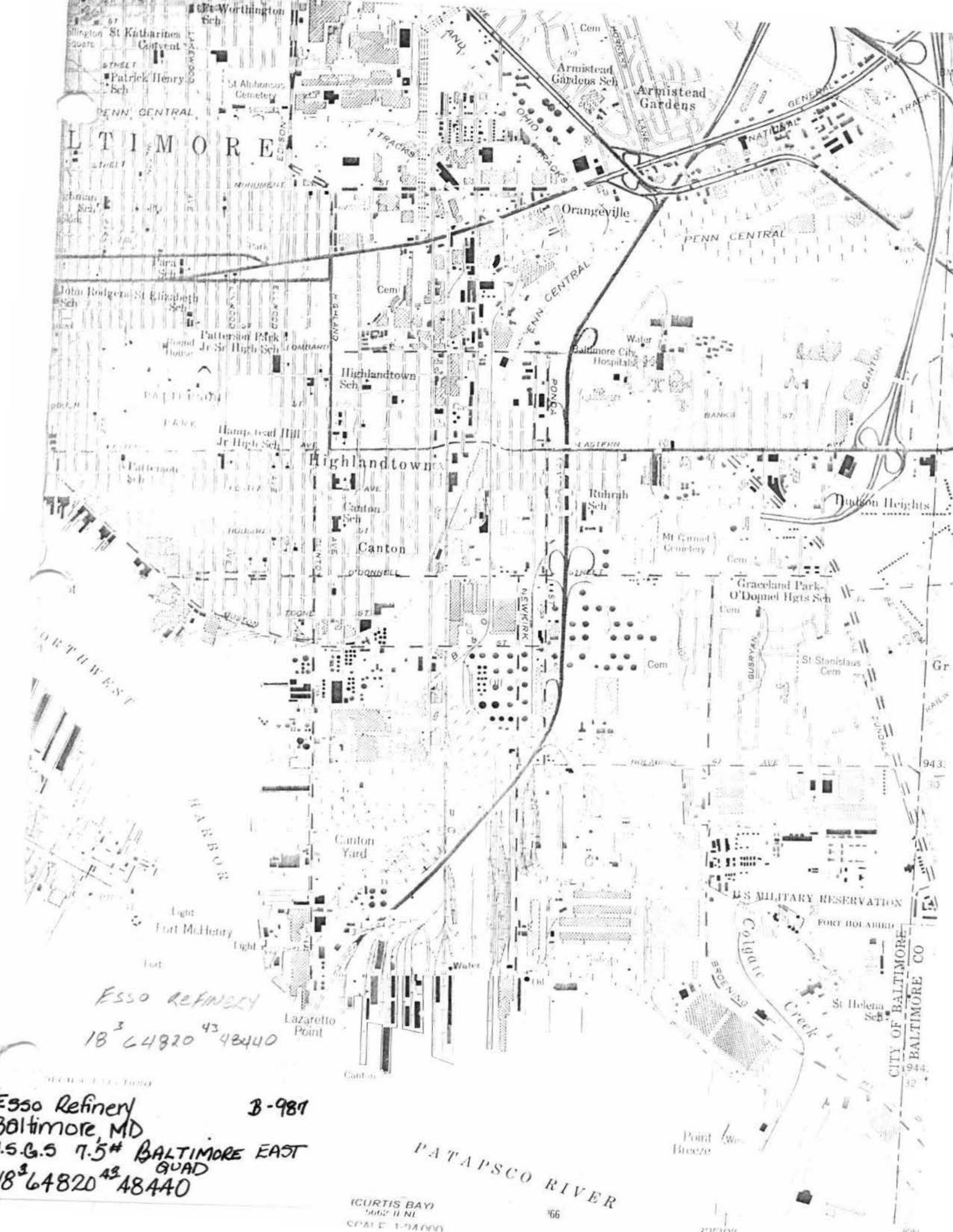
B-987





Eggo Refinery  
(STANDARD OIL)  
BROMLEY'S Atlas 1898

B-987



BALTIMORE

Esso Refinery

18<sup>3</sup> 64820<sup>43</sup> 48440

Esso Refinery B-981  
Baltimore, MD  
S.G.S 7.5# BALTIMORE EAST  
QUAD  
18<sup>3</sup> 64820<sup>43</sup> 48440

(CURTIS BAY)  
5062 II MI  
CPALE 1-241000

PATAPSCO RIVER

CITY OF BALTIMORE  
BALTIMORE CO



Esso Refinery  
Baltimore City, Maryland B-987  
Photo. Dennis Zembala  
NEB. LOC: MD HISTORIC TRUST  
11/80 Remains of Pipe Stills  
Looking West



ESSO REFINERY  
BALTIMORE CITY MARYLAND B-987  
PHOTO, DONNIS ZEMBALA  
NEW. LOC: MD HISTORIC TRUST  
"180 Pipe Stills - Foundations



B-987

ESSO REFINERY

BALTIMORE, MD

PHOTO: DENNIS ZEMBALA

NEG. LOC.: MD HISTORIC TRUST

11/80 *Looking West*



B-987

ESSO REFINERY

BALTIMORE, MD

PHOTO: DENNIS ZEMBALA 11/80

NEG. LOC.: MD HISTORIC TRUST

SMOKESTACK FROM CRACKING TOWER

ESSO

FXVSA

smoke stack from cracking tower



ESSO REFINERY  
BALTIMORE CITY, MARYLAND B-987  
PHOTO, DENNIS ZEMBALA  
NEG. LOC: MD HISTORIC TRUST  
"180 Refinery Tank Foundations



ESSO REFINERY  
BALTIMORE CITY, MARYLAND B-987  
PHOTO, DENNIS ZEMBALA

NEG. LOC: MD HISTORIC TRUST  
"180 Storage Building - Look-  
ing North.



ESSO REFINERY  
BALTIMORE CITY, MARYLAND B-987  
PHOTO. DENNIS ZEMBALA  
NEG. LOC: MD HISTORIC TRUST  
11/80 Remains of Grease Plant



ESSO REFINERY

BALTIMORE CITY, MARYLAND B-987

PHOTO, DENNIS ZETZALA

NEG. LOC: MD HISTORIC TRUST

NOV. 1980

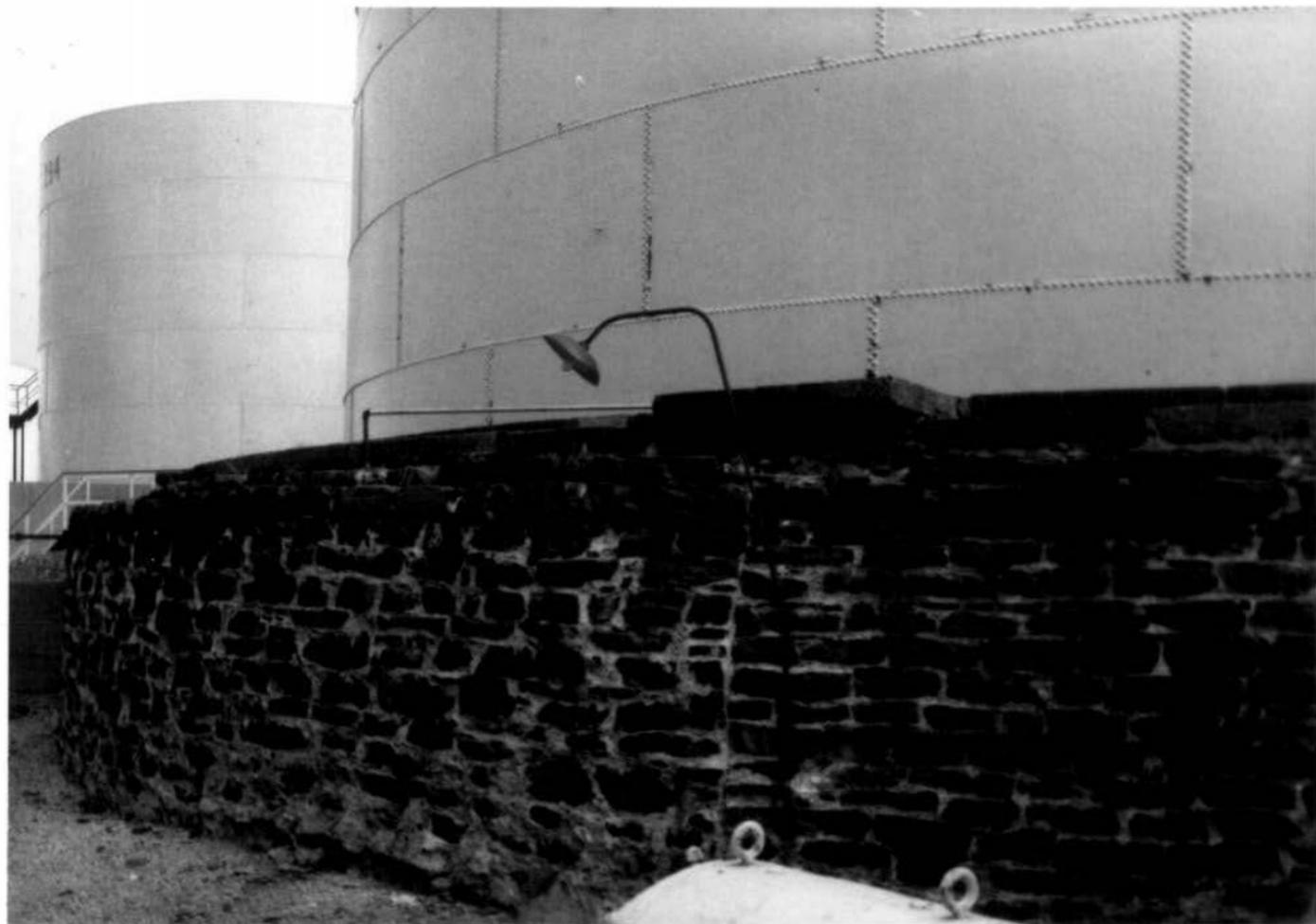
Grease Plant, North Facade



ESSO REFINERY  
BALTIMORE CITY, MARYLAND B-987  
PHOTO. DENNIS ZEMBALA

NEG. LOC: MD HISTORIC TRUST

11/80 Tank Foundations c. 1895



ESSO REFINERY  
BALTIMORE CITY, MARYLAND B-987  
PHOTO. DENNIS ZEMBLA  
NEG. LOC. MD HISTORIC TRUST  
"180 Tank Foundations c. 1895



ESSO REFINERY  
BALTIMORE CITY, MARYLAND B-987  
PHOTO, DENNIS ZEMBALA  
NEG. LOC: MD HISTORIC TRUST  
11/80 Pier Terminal, looking South



ESSO REFINERY  
BALTIMORE CITY, MARYLAND B-987  
PHOTO, DENNIS ZEMBALA

NEG. LOC: MD HISTORIC TRUST

11/80 Pier Facility (int.)



ESSO REFINERY  
BALTIMORE CITY, MARYLAND B-987  
PHOTO. DENNIS ZEMBA  
NEG. LOC: MD HISTORIC TRUST  
11/80 Copy - Tanker at Terminal  
c. 1960

CLEARANCE  
13 FT. - 6 IN.



ESSO REFINERY  
BALTIMORE CITY, MARYLAND B-987  
PHOTO, DENNIS ZEMBALA

NEG. LOC. MD HISTORIC TRUST  
11/80 Copy of Exxon Photo - Truck  
Filling Depot. 1950s