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Mercury Refining Co., Inc.
PROCESSORS OF MERCURY AND SILVER

FINAL REPORT

**Remedial Program
Albany Plant Site**

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PROCESSORS OF MERCURY AND SILVER

FINAL REPORT
Remedial Program
Albany Plant Site

March 7, 1986
Ref. No. 1111

CONESTOGA-ROVERS & ASSOCIATES LIMITED

301915

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CONESTOGA-ROVERS

1.0 INTRODUCTION

On September 11, 1985 an Order on Consent was signed between Mercury Refining Co., Inc. and the State of New York. Appendix B of the judgment contains the Approved Remedial Plan Summary. The plan for the remedial program was prepared by Conestoga-Rovers & Associates Limited (CRA) and was approved by the New York State Department of Environmental Conservation (NYSDEC). The details of the plans were presented in the documents entitled "Contract Documents & Specifications - Remedial Program - Albany Plant Site - April 1985". Tenders were called on May 31, 1985 and the contract was awarded to Sevenson Containment Corporation on August 23, 1985.

The purpose of this report is to document the remedial activities that were undertaken at the Mercury Refining Site (Site) and to confirm completion of each activity in accordance with the April 1985 document. The location of the Site is illustrated on Figure 1. A plan of the Site is presented on Figure 2.

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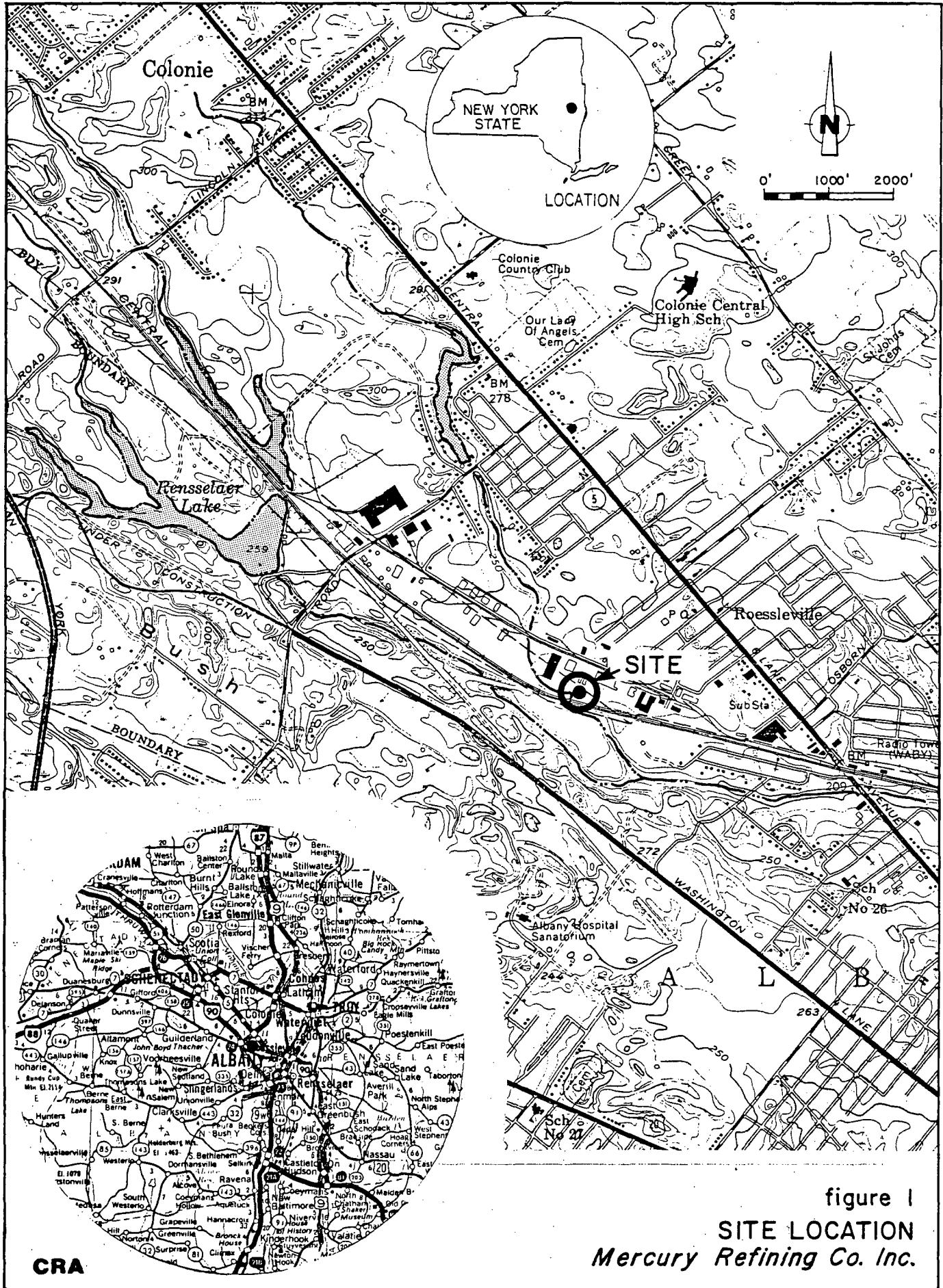


figure 1

SITE LOCATION

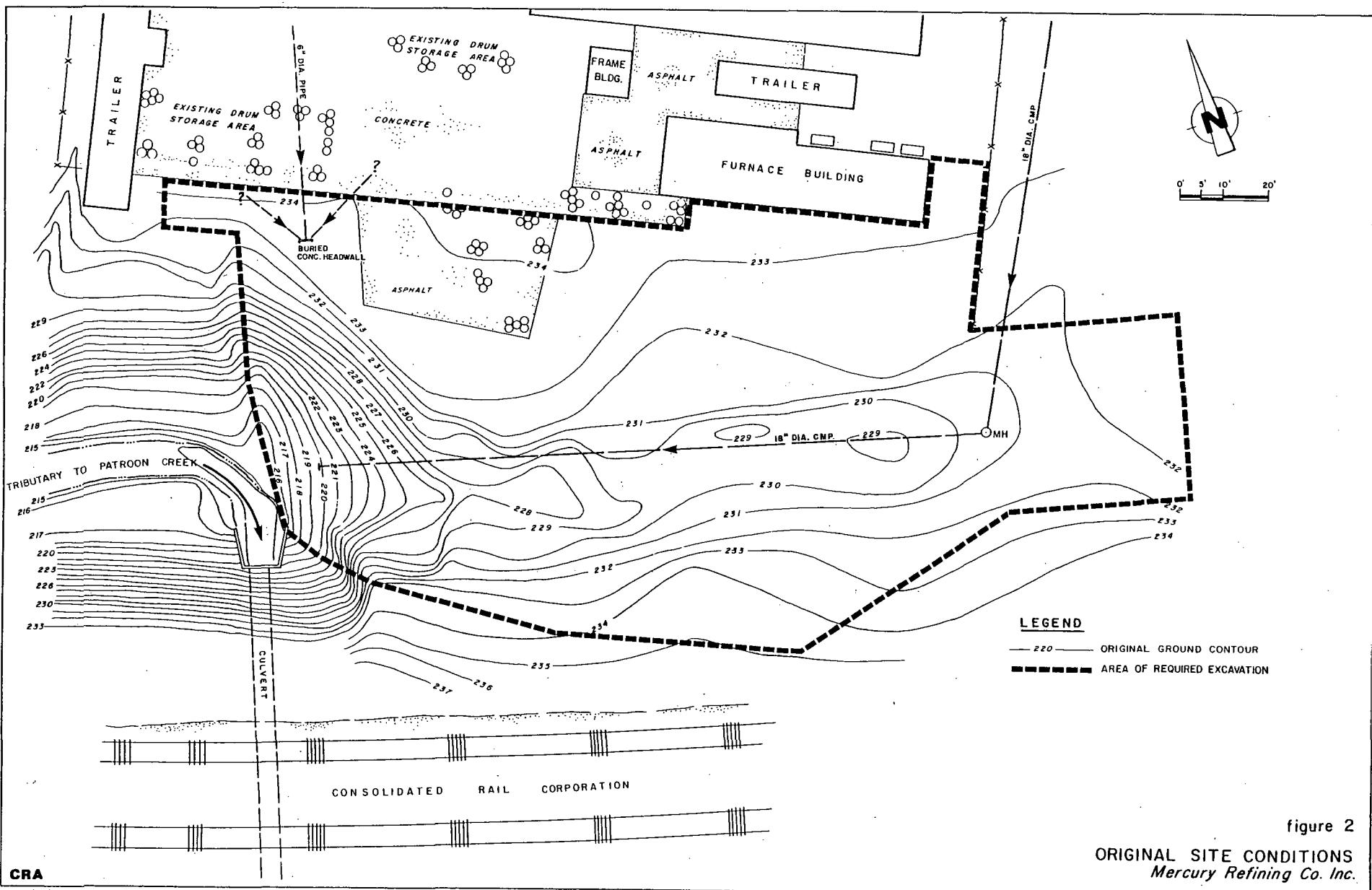


figure 2

2.0 SCOPE OF WORK

The scope of work performed under the approved Remedial Program was as follows:

- i) Excavation of PCB contaminated soils and debris from the Site as approved by the NYSDEC.
- ii) Excavation of mercury contaminated soils and debris from the Site as approved by the NYSDEC.
- iii) Transport to, and disposal of all excavated materials at SCA Chemical Services' permitted landfill facility located in Model City, New York.
- iv) Backfill of excavated areas with clean imported fill.
- v) Construction of a clay or concrete cap over all excavated areas.
- vi) Installation of a new 8-inch diameter storm sewer system to handle surface water drainage at the plant site.
- vii) Installation of a gabion wall at the stream edge to prevent erosion.
- viii) Implementation of a Site health and safety program designed to minimize the impact of program implementation on on-site workers and the environment at large.

3.0 EXCAVATION, TRANSPORTATION AND DISPOSAL OF WASTE

3.1 GENERAL

All of the excavated waste from the Mercury Refining Site was transported to the disposal facility by truck. The contaminated soils were initially proposed to be transported by rail using bottom-dumping hopper cars. However, when the rail hopper cars were delivered to the Site they were deemed to be unsuitable for use as hazardous waste transportation units for the following reasons:

- some cars were perforated
- some unloading doors were inoperable
- some cars had residual product left in them

The above noted state of disrepair, liability considerations and legal complications resulted in the decision by the Contractor to haul all of the wastes by truck.

Prior to loading, each truck was lined with polyethylene to prevent leakage and contamination of the truck bed. When loading, the trucks were driven onto polyethylene sheets to further prevent truck contamination. A tarpauline was placed over the waste before the trucks were allowed to leave the Site.

The excavated waste was transported to and disposed at SCA Chemical Services' permitted disposal facility in Model City, N.Y. Each truck was weighed and inspected upon arrival. PCB contaminated soils were manifested as Waste Polychlorinated Biphenyls, Mixture N.O.S. The mercury contaminated soils did not require manifesting. The mercury soils were transported, with State approval, as "Dirt Contaminated with Trace Mercury, Non-Hazardous and Non-Regulated". A copy of the letter from the NYSDEC representative authorizing this handling of the waste is presented in Appendix A.

3.2 CLEARING AND GRUBBING

Prior to beginning the excavation of Site wastes, it was necessary to remove some surficial obstructions including trees, shrubs and fences. With the exception of the usable firewood, all of the surficial debris was taken to a sanitary landfill for disposal. These obstructions were removed during the three day period of September 13 - 15, 1985.

Two existing observation wells were also removed during excavation. The well materials were disposed of with the mercury waste as they were deemed contaminated.

3.3 PCB WASTE

The PCB contaminated soils which also contain some mercury will hereinafter be referred to as "PCB waste".

Actual excavation of the PCB waste commenced on September 16, 1985 and was completed on September 17, 1985 (2 days). Figure 3 indicates the area of PCB excavation and the bottom ground contours of the completed PCB excavation. In total, 340 cubic yards of PCB waste was excavated and stockpiled using a JCB rubber tired backhoe. A Komatsu 220 backhoe was used to load the PCB waste into the trucks.

The excavated PCB waste filled 23 trucks totalling 412.89 tons. Each truck was individually manifested. Appendix B lists each truck manifested and the corresponding waste tonnage. Copies of the actual manifests are found in Appendix C.

Following completion of the PCB excavation, all of the waste handling equipment was decontaminated in the PCB decontamination facility constructed on-site. Figure 4 illustrates the decontamination facility constructed. The PCB decontamination facility was disassembled following PCB excavation completion and disposed of with the PCB waste.

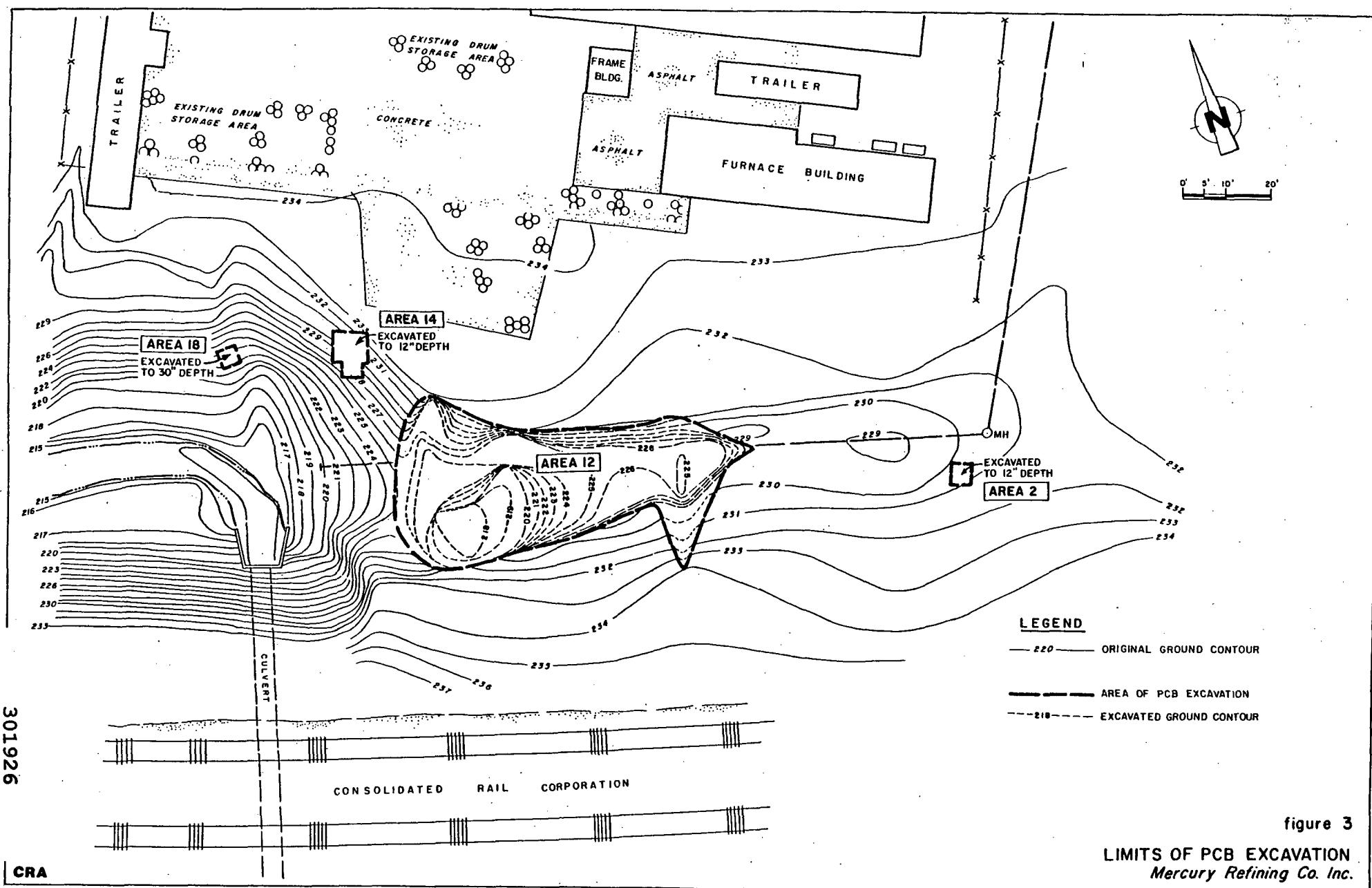


figure 3

LIMITS OF PCB EXCAVATION
Mercury Refining Co. Inc.

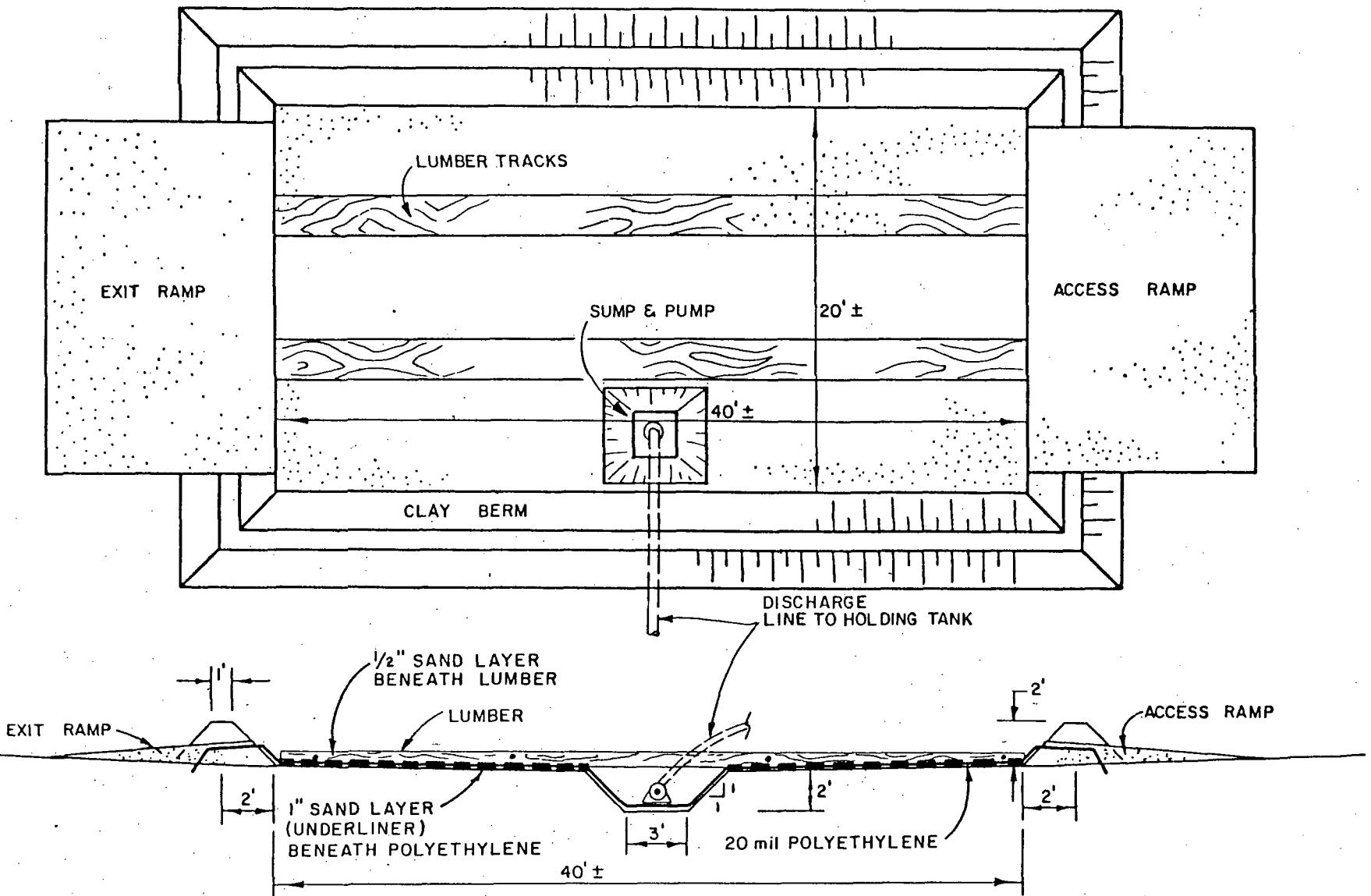


figure 4

TEMPORARY EQUIPMENT DECONTAMINATION FACILITY
Mercury Refining Co. Inc.

3.4 MERCURY WASTE

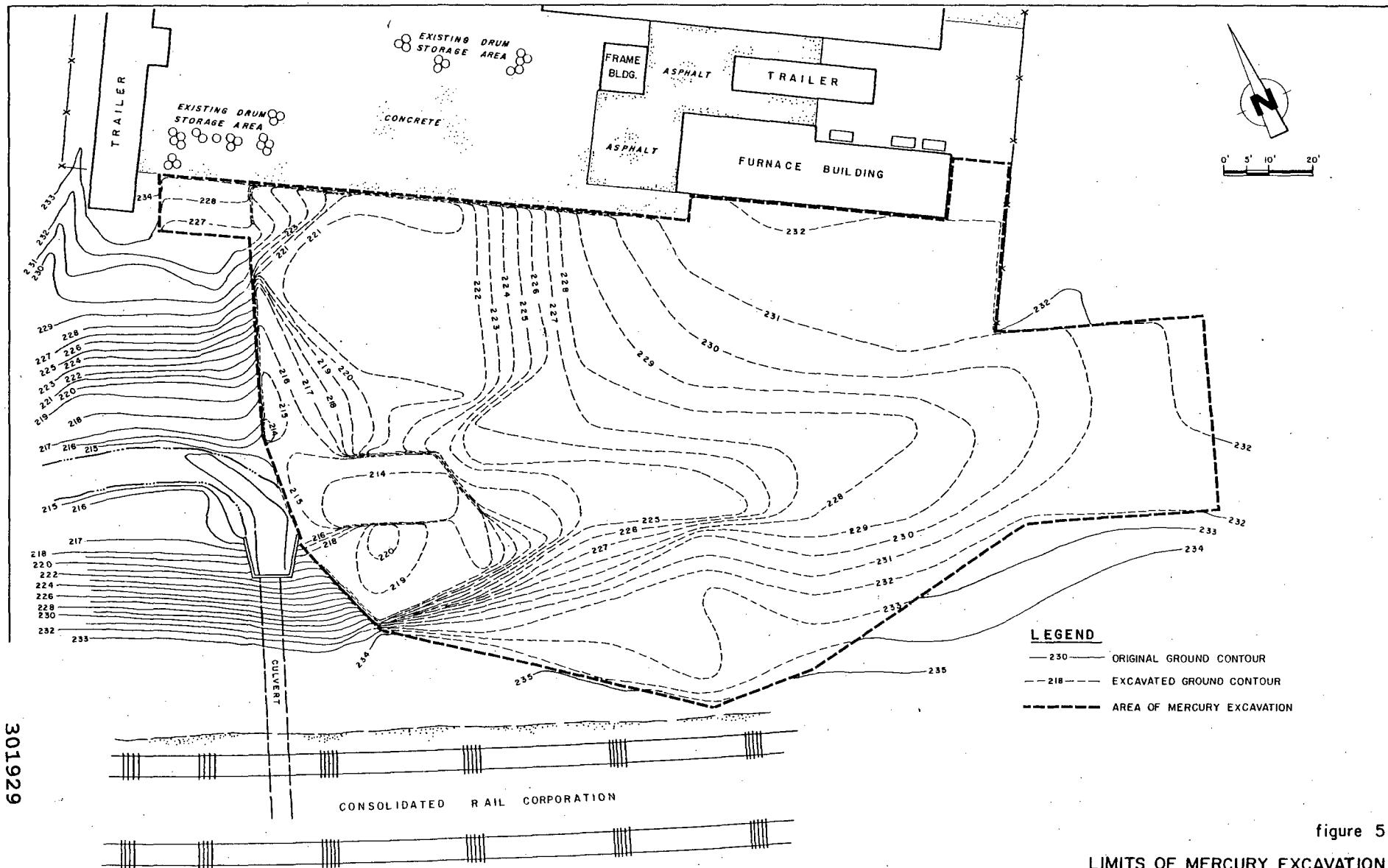
Mercury contaminated soils which may contain PCB's of concentrations up to 50 ppm will hereinafter be referred to as "mercury waste".

Excavation of the mercury waste commenced on September 18, 1985 and continued until September 30, 1985. A total of 1,820 cubic yards of mercury waste was removed from within the areal limits indicated on Figure 5. This figure also indicates the bottom ground contours of the completed excavation. The Komatsu 220 backhoe and a bulldozer worked in tandem to excavate and stockpile the waste in preparation for loading. The waste was loaded into the trucks with the backhoe.

Besides soil and waste batteries, debris including scrap metal, wood and concrete was excavated. The central section of the site (southwest of the furnace building near the creek) contained a large percentage of such debris.

The excavated mercury waste filled 82 trucks totalling 2,044.63 tons. Appendix D lists each truck and the corresponding waste tonnage.

The existing concrete storm sewer headwall was broken up and disposed with the mercury contaminated soils.



Following completion of the mercury excavation, all waste handling equipment was decontaminated in the mercury decontamination facility constructed on-site. As with the PCB facility, the mercury decontamination facility was disassembled and disposed with the mercury waste.

4.0 SITE RESTORATION

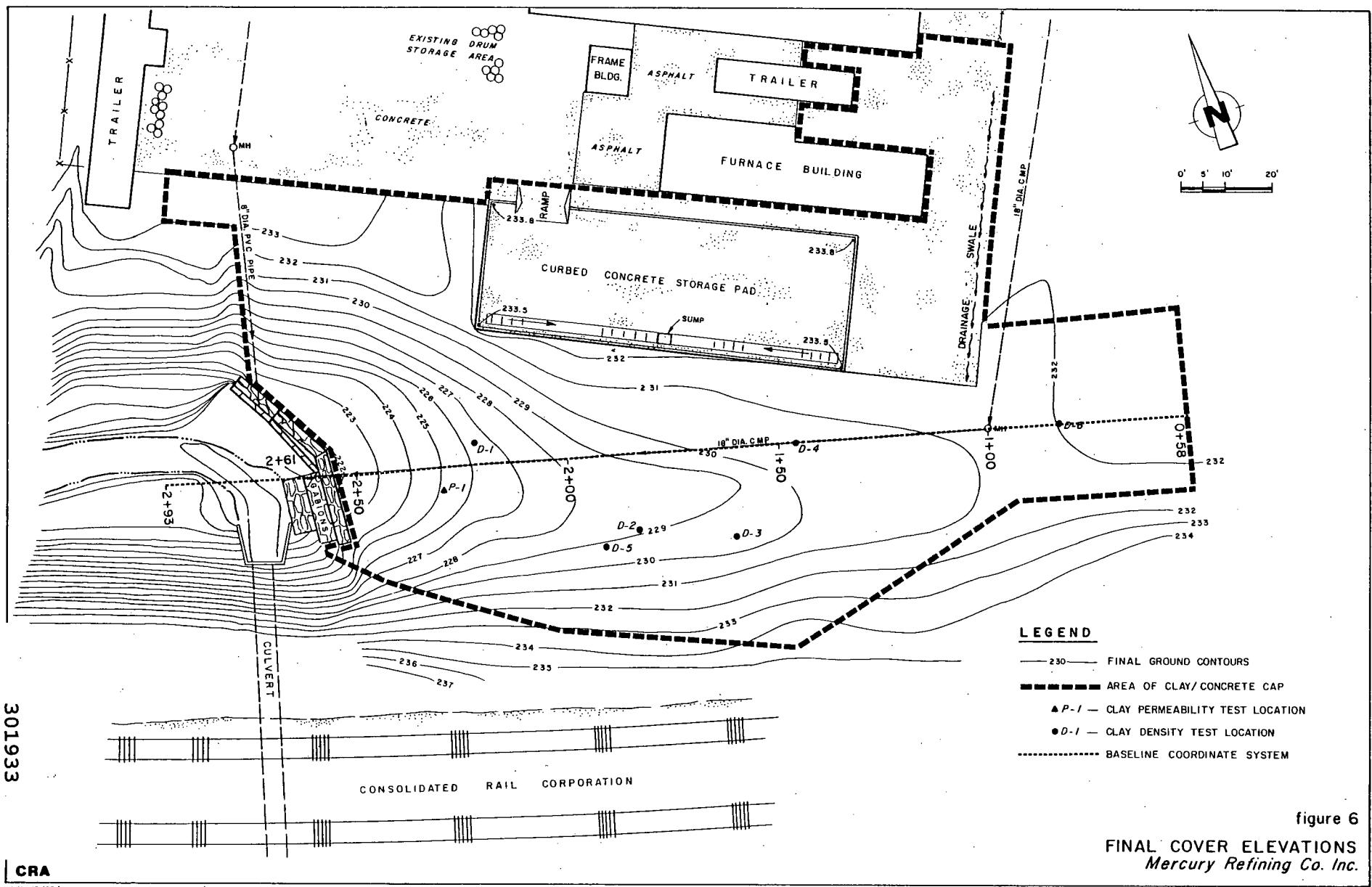
4.1 BACKFILLING EXCAVATION

On September 28, 1985, following completion of the waste excavation program, the backfilling operation began. Initially, the site was pregraded to eliminate the major excavations and level the Site. A sulfur treatment was then applied to the entire site. Backfill consisted of 724 cubic yards of imported loam fill placed in the areas designated for clay cover and 247 cubic yards of gray brown running bank granular fill placed in the areas designated for concrete cover. The backfilling operation was completed by October 14, 1985.

Density tests were performed on the regraded soils, granular fill and loam fill after compaction with a 6-ton Lokomo vibratory smooth drummed roller. The results of these tests are presented in Appendix E and summarized in Table 1. The locations of these samples are shown on Figure 6. When compaction results were less than 95 percent, these specific areas were excavated and recompacted to the Site Engineer's satisfaction.

TABLE 1
SUMMARY OF FIELD DENSITY TEST RESULTS

<u>Soil Type</u>	<u>Sample Location</u>	<u>Date Sampled</u>	<u>Maximum Dry Density (pcf)</u>	<u>Optimum Water Content (%)</u>	<u>% Compaction</u>
Native Fill	on-site 1+10 o/s 5'S	Sept. 30/85 Oct. 10/85	107.4 112.8	14.0 9.6	100+
Sewer Bedding	on-site 25'E of CB #3 2' E of CB #3 25'S of CB #3 30'S of CB #4 15'W of CB #1 6' E of CB #1 10'S of CB #3	Sept. 30/85 Oct. 11/85 Oct. 11/85 Oct. 11/85 Oct. 14/85 Oct. 14/85 Oct. 14/85 Oct. 17/85	107.4 118.7 101.0 96.8 96.5 96.5 100.3 112.7	14.0 11.2 13.0 13.8 10.9 11.7 17.7 13.4	100+ 94.0 90.1 89.9 89.9 93.4 100+
Loam Fill	at pit 2+25 o/s 10'N retest of above	Sept. 30/85 Oct. 10/85 Oct. 14/85	134.0 114.5 133.5	8.0 13.7 9.7	85.4 99.6
Granular Fill	at pit 1+35 o/s 42'N 1+75 o/s 32'N 1+35 o/s 36'N 1+50 o/s 40'S 1+18 o/s 25'S 1+83 o/s 40'S	Sept. 30/85 Oct. 2/85 Oct. 2/85 Oct. 2/85 Oct. 3/85 Oct. 3/85 Oct. 3/85	131.0 122.0 130.9 125.0 123.6 123.0 128.0	6.2 4.0 4.3 4.1 4.0 5.0 4.1	93.1 99.9 95.4 94.6 93.9 98.3
Clay Cover	at pit 2+25 o/s 5'N 1+88 o/s 17'S 1+65 o/s 20'S 0+83 o/s 0 1+96 o/s 20'S 2+48 o/s 12'N	Aug. 25/85 Oct. 14/85 Oct. 14/85 Oct. 14/85 Oct. 17/85 Oct. 17/85 Oct. 18/85	111.4 106.9 106.1 129.7 112.2 115.9 126.3	18.3 19.7 17.3 15.3 18.5 16.9 15.4	96.0 95.2 100+ 100+ 100+ 100+ 100+



4.2 GABIONS

Construction of the gabion wall commenced on October 7, 1985 and continued for three days. Figure 7 provides the details of the as-constructed gabions. The gabions were extended on each end to tie into the existing banks. As well, an additional mat was installed at creek level to prevent scouring beneath the wall. Concrete pieces were placed at the upstream end to prevent scouring behind the wall.

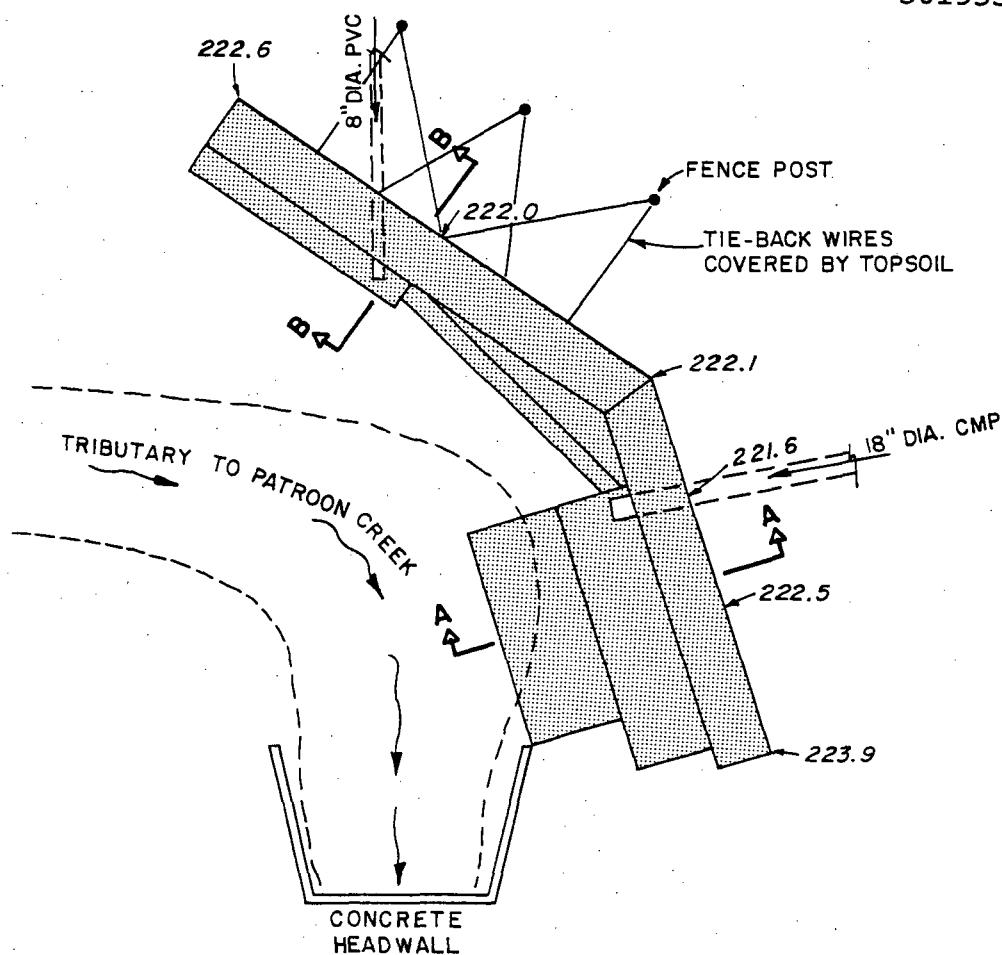
The gabion wall was tied back into the bank as illustrated on Figure 7, for added structural support. The wire tie-backs were placed on top of the clay and secured to the supporting fence posts. The wire and posts were then covered with topsoil.

The existing 18-inch diameter corrugated metal pipe (CMP) storm sewer as well as the new 8-inch diameter polyvinyl chloride (PVC) storm sewer extended through the gabion wall.

4.3 STORM SEWER

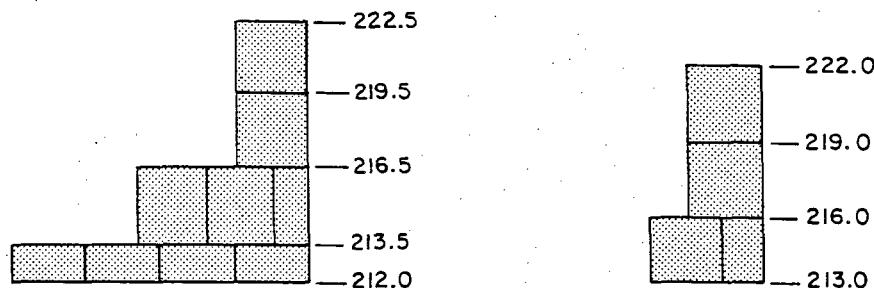
There were originally two separate storm sewer systems traversing the Site. The system which flows

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P L A N

1" = 1'-0"



SECTION A-A

N.T.S.

SECTION B-B

N.T.S.

figure 7

GABION WALL DETAIL
Mercury Refining Co. Inc.

CRA

along the eastern and southern side of the Site (18-inch diameter CMP) was not affected by the remedial program. Although a 20-foot extension of this pipe at the outfall was specified to be added, the final position of the gabion wall eliminated the need for this extension. As a result, the CMP sewer system was not modified in any way for the remedial program.

The on-site sewer system which originally discharged at the buried headwall east of the office trailer was abandoned in place as specified. When excavating the buried headwall, it was noted that three sewer lines discharged there. Besides the known sewer line heading north to the existing catchbasin, one sewer line headed northwest towards the trailer and the other headed northeast towards the furnace building (see Figure 2). These sewer lines were cleaned and then filled with cement grout which was pumped into place. The cleaning of the existing catchbasins involved removal of all of the sediment from their sumps. Concrete was used to fill in all of the existing catchbasins except CB4 at the north end of the site which was reused. CB4 was cleaned out and deemed to be acceptable to the NYSDEC Site representative. A copy of the NYSDEC's approval letter for reuse of CB4 is presented in Appendix F. All of the existing on-site sewer lines were also cleaned and pumped full of cement grout as specified.

Construction of the new storm sewer system to replace the abandoned system was started on September 23, 1985. The sewer was installed as detailed on enclosed Plan AB-1. The sewer system was completed on October 21, 1985.

During backfilling of the storm sewer trench, density tests were performed on the compacted backfill. Backfill from all segments of the alignment (MH to CB3, CB3 to CB2, CB4 to CB1, and CB2 to CB1) did not meet compaction requirements. As a result, these sections had to be excavated and recompacted. Sumps were added to the bottom of all of the new catchbasins and to the existing, reused catchbasin.

Restoration of all concrete surfaces impacted by the storm sewer construction began on October 16, 1985 and was completed by October 29, 1985. A minimum of 4 inches of 1-inch stone was placed and compacted as a base for the concrete restoration. Appendix G presents all of the concrete testing results.

4.4 REINFORCED CONCRETE COVER

Placement of the reinforced concrete cover in the excavation area began on October 23, 1985. Plan AB-1 indicates the limits of the installed concrete cover. Construction was completed by November 12, 1985.

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A major revision in the proposed concrete cover involved the installation of a curbed area. This curbed area was constructed for potential future use as an enclosed drum storage area. The limits of this curbed concrete cover are also shown on the enclosed Plan AB-1.

Another minor revision was required along the property line between Mercury Refining and the D.J. Property to the east. The concern here involved possible surface water drainage from Mercury Refining onto D.J.'s Property. To alleviate this concern, the concrete cover was extended beyond the eastern property fenceline to the existing pavement on D.J.'s Property. When pouring this portion of the concrete cover, a swale was constructed immediately west of the property line (see Figure 6) to handle surface water drainage from Mercury Refining's property. In this area, sonotubes were installed along the property line to facilitate the future installation of a fence between Mercury Refining and D.J.'s Properties.

4.5 CLAY CAP

Placement of the clay cap began on October 14, 1985, immediately following completion of the excavation and backfilling operations. Blue clay was obtained from the

Finushi Pit and was placed as a clay cap as specified in the Contract Documents. This portion of the work proceeded until October 17, 1985. Prior to use of this clay source, samples were collected at three pits and tested for permeability. The Finushi Pit material was deemed to be suitable from this testing program.

Three shelby tube samples were collected from the in-place cap at random locations. One was disturbed during visual inspection and the second did not penetrate the clay cap to a significant depth. The remaining sample was tested for permeability. In addition, six density tests were performed on compacted clay during placement of the cap. The testing locations were jointly determined by NYSDEC and CRA representatives and are shown on Figure 6. Table 2 summarizes the permeability results of the tested clay samples from the pit and from the shelby tube sample. Detailed density and permeability results on the clay are presented in Appendix H.

Following placement of the clay cap, topsoil was placed over the clay. This 6-inch layer of topsoil is intended to provide surface protection of the clay cap area. Due to the unfavorable weather conditions following topsoil placement, final grading and seeding of the topsoil will not take place until the spring of 1986. The owner will be

will be done

LABORATORY TESTING OF CLAY SAMPLES

<u>Sample No.</u>	<u>Source Location</u>	<u>Soil Description</u>	<u>Maximum Dry Density (pcf)</u>	<u>Optimum Water Content (%)</u>	<u>Constant Head (cm/s)</u>	<u>Triaxial (cm/s)</u>
1	Bonded Concrete Limited Colonie, N.Y. Plant	brown CLAY and SILT, some sand, little gravel	123.2	11.8	6.86×10^{-9}	5.91×10^{-9}
2.	Finushi Pit Waterford, N.Y.	gray CLAY, little silt	111.4	18.3	1.17×10^{-8}	1.14×10^{-8}
3.	West Sand Lake, Troy Sand and Gravel (gravel washings)	brown SILT, little sand and clay, trace gravel	122.0	11.0	8.47×10^{-7}	8.63×10^{-7}
4.	Sta. 2+33 o/s 5'S (shelby tube sample)	gray SILT and CLAY some gravel, trace organic			1.42×10^{-8}	1.36×10^{-8}

Based on the above testing, material from either Bonded Concrete or Finushi were deemed acceptable clay sources for this program. The clay from Finushi was used for the Site's clay cover.

responsible for this portion of the work including the placement of an additional 15 cubic yards of topsoil.

Final cover elevations are illustrated on Figure 6. This includes both the clay/topsoil and concrete areas.

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5.0 WELL INSTALLATIONS

*Hand Open w/ 11
Samples be taken
and by who?*

An additional portion of the approved remedial plan, which was not part of the contract with Sevenson Containment Corporation, was the installation of four new monitoring wells. This work was contracted separately to Empire Soils Investigations Inc. The wells were installed during the period from October 25 to 29, 1985 at the locations shown on Figure 8.

Stake w/ 11

The 8-inch diameter boreholes were drilled 10 feet into saturated soil using a hollow stem auger with continuous split spoon sampling. PVC well screens five feet in length and two inches in diameter (#10 slot) were installed. The PVC schedule 80 well pipe was also two inches in diameter with coupled joints. The borehole was backfilled with #4 quartzite sand around the well screen, a 1-foot bentonite pellet plug above the well screen and cement grout to the ground surface. A lockable cap and lock was installed for security.

Appendix I contains the stratigraphic and instrumentation logs for all four new well installations.

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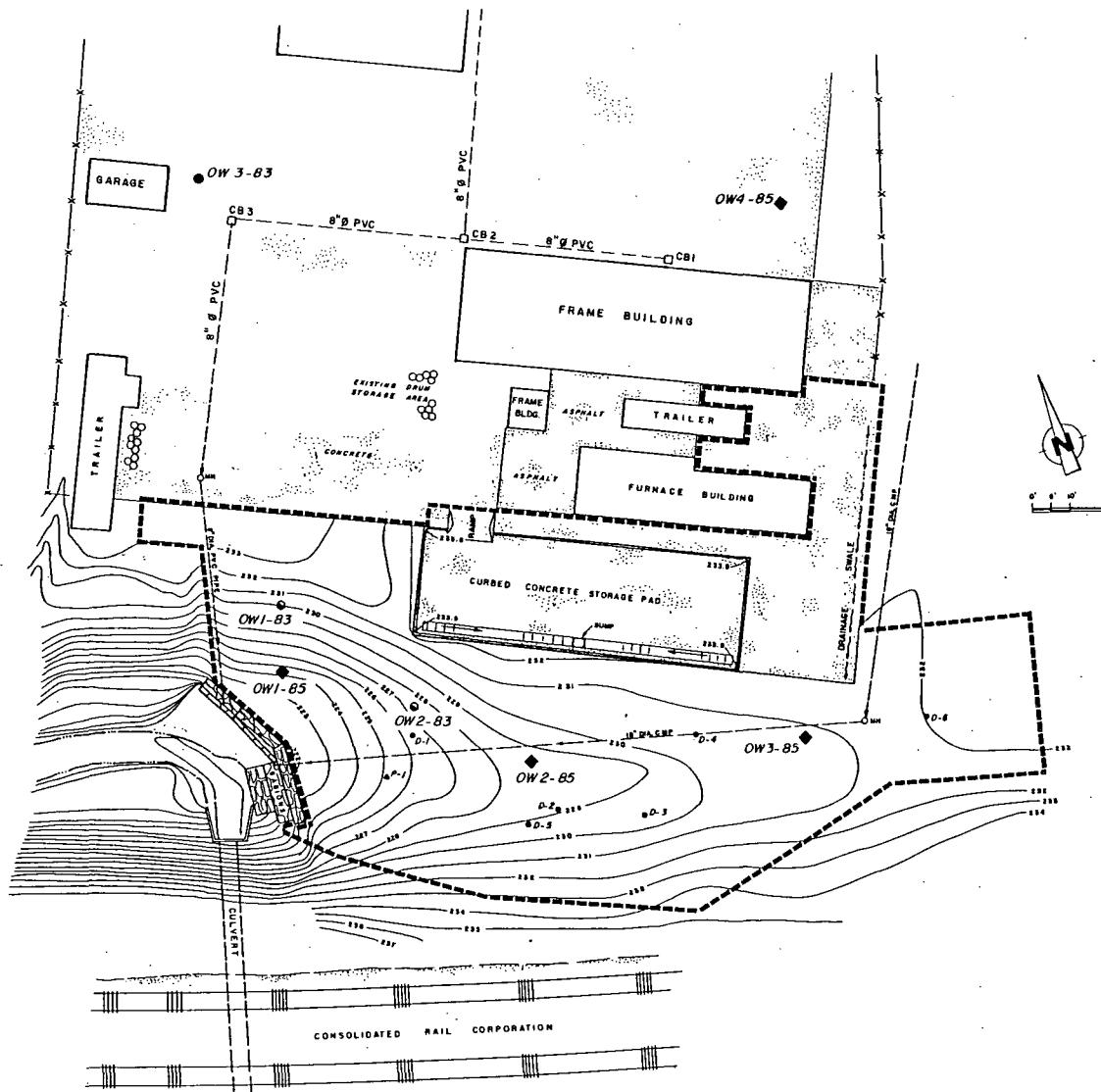


figure 8

6.0 HEALTH AND SAFETY PROGRAM

Health and safety protocols were implemented during all remedial activities. For the waste excavation and removal activities the Site was separated into two areas; dirty and clean. The dirty area consisted of the entire excavation area while all other areas were designated clean. Temporary fences were used to define the limits of these areas. Personnel leaving the dirty area had to exit through a contaminant reduction zone.

The Safety Officer was provided by the contractor for the entire period. His responsibilities were to ensure that all on-site personnel within the dirty area followed the health and safety program as specified in the contract documents.

All personnel engaged in excavation activities were provided with and required to use at all times, the following equipment:

- hard hat
- safety glasses with side shields
- neoprene gloves
- neoprene boots
- safety shoes
- Tyvek coveralls (disposed daily)

- respiratory protection providing protection for mercury vapors and respirable dust

Air monitoring was conducted regularly throughout the program. Both mercury and organic vapor concentrations were monitored and recorded during all waste excavation and removal operations. Appendix J summarizes the mercury and organic vapor concentrations measured during the air monitoring program.

During the waste excavation and removal program respiratory protection was required for all on-site personnel within the dirty area.

The contract documents also specified medical surveillance of all personnel working in dirty areas. This surveillance required that both entrance and exit medical examinations be performed on each applicable worker. Appendix K includes documentation of all such examinations.

7.0 NYSDEC SITE REPRESENTATIVES

The New York State Department of Environmental Conservation was also involved in this waste removal and cleanup project. There was a representative of this agency on-site throughout most of the project. Mr. James Ludlum was present on-site from September 16, 1985 through October 4, 1985 and Mr. Bob Senior was the site representative from October 9, 1985 through October 21, 1985. Periodic visits by representatives of the agency were also made throughout the program.

8.0 ADDITIONAL NOTES

8.1 BATTERY CELLS UNDER FURNACE BUILDING

During the excavation program, battery cells were found beneath the floor slab of the western portion of the furnace building. Removal of these cells would have undermined the furnace building floor slab and possibly created structural problems. As a result, those batteries that were not readily accessible were left in place.

In order to contain the battery cells under the furnace building, a plastic sheet was placed along the face of the waste excavation and along the side of the building. This plastic sheet was left in place during the backfilling of the excavation to maintain a separation between the two areas. The NYSDEC representative, James Ludlum, inspected this area and approved of the chosen containment program.

8.2 HURRICANE GLORIA

On September 27, 1985 the effects of Hurricane Gloria were felt in the Albany area. Heavy rains fell on-site and actions needed to be taken to prevent

migration of contaminated waste and soil off-site. These actions included the following:

- i) pumping of the water from the existing on-site storm sewers around the excavation to prevent surface runoff into the excavation,
- ii) construction of an earthen dam upgradient of the excavation areas to prevent surface runoff into the excavation,
- iii) construction of earthen dams on-site to eliminate surface water runoff from the site, and
- iv) covering of the stockpiled contaminated waste soils with plastic to prevent infiltration.

As a result of the above actions, the effects of Hurricane Gloria were minimized.

8.3 UNKNOWN SEWER LINE

Following the excavation program, water was noted to be bubbling to the surface near the on-site manhole of the 18-inch diameter CMP sewer. A small excavation was

opened in the area to identify the source of the water. At a depth of approximately five feet, (previously unexcavated beyond \pm 1 foot by the soil removal program) a clay tile, approximately eight inches in diameter, was uncovered. This sewer line was heading southwest in the direction of D.J.'s Property. After some investigation, the sewer line was determined to be not in use by D.J.'s and was therefore plugged with concrete on October 7, 1985 and backfilled with the excavated material.

There was one incident that occurred on the weekend of October 5, 1985, while the sewer line was uncovered. During that weekend, heavy rains fell. The crew that had uncovered the sewer line, inadvertently perforated the adjacent 18-inch diameter sewer line. Unbeknownst to the investigation crew, this perforation created a slight flow restriction in the sewer line. When the heavy rain occurred, the reduced flow capacity resulted in a portion of the flow being diverted out of the pipe and some surface flow along the drainage swale to the creek resulted. When work crews returned on Monday, October 7, 1985, it was noted that some erosion of soil along the surface flow path had also occurred. Since all of the waste materials had already been removed from the site, none of the contaminated wastes were included in the eroded material. The area was regraded, the crease in the sewer line was reshaped and a metal collar was placed around the CMP sewer to mend the perforation.

8.4 WASTE DENSITY

Prior to the start of the remedial construction at the Mercury Refining Site, Empire Soil Investigations Inc. conducted some in-place density testing of the waste materials. The purpose of this testing was to provide information to be used in estimating the total tonnage of waste material to be removed from the site. The results of the testing program indicated an in-place waste density ranging from 107 to 138 pounds per cubic foot (see Appendix L). During the excavation operation, it became apparent that a large percentage of the covered wastes were large, bulky and considerably less dense than the surface materials originally tested. As a result, the average density of the excavated wastes was measured to be on the order of 84 pounds per cubic foot and the preliminary estimates of waste density proved to be high.

9.0 SUMMARY

A total of 2,160 cubic yards of contaminated soil and debris was excavated from the Site between September 16 and September 30, 1985. The excavation area was regraded and backfilled to the designed grades with imported fill and capped with either clay or concrete between September 28 and November 12, 1985. Figure 9 presents a chronological summary of the entire remedial program for the Site.

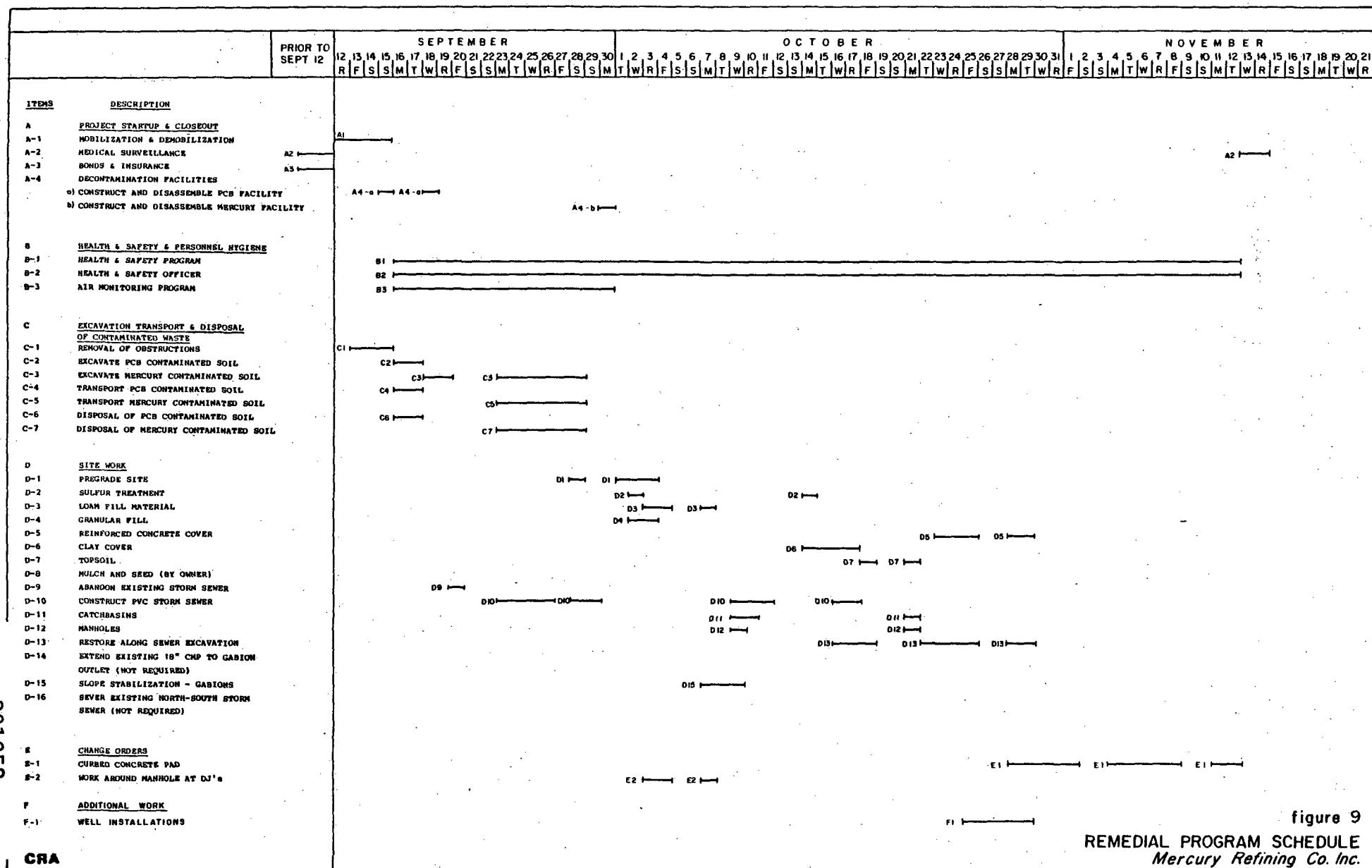
All of the excavated material was transported by licensed waste hauling units to SCA Chemical Services' permitted disposal facility in Model City, New York. The transport and disposal of the PCB waste was documented by State of New York Hazardous Waste Manifests.

A new storm sewer was installed between September 23 and October 21, 1985. A gabion wall was constructed from September 7-9, 1985 to stabilize the Site soils. These were both installed as part of the remedial program to preserve the integrity of the remediated Site.

Photographs of various aspects of the project are included in Appendix M.

The program was carried out under a stringent health and safety program in order to provide a safe and

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1111-10/03/86

figure 9
REMEDIAL PROGRAM SCHEDULE
Mercury Refining Co. Inc.

minimal risk working environment and to prevent off-site migration of contaminated materials.

All of the activities of the remedial program were completed in accordance with the specifications of Appendix B of the Order on Consent and sound environmental practices.

All of which is respectfully submitted,
CONESTOGA-ROVERS & ASSOCIATES LIMITED



James K. Kay, P. Eng.



Kevin T. Bricknell, P. Eng.

C. Richard Hoekstra, B.A.Sc.

APPENDIX A

**LETTER APPROVING SHIPMENT OF
MERCURY WASTE WITHOUT MANIFESTS**

James N. Luddemann, P.E.

1125185

Sanitary Engineer

1111

Bureau of Remedial Action

Division of Solid and Hazardous Waste

Re: Mercury Refining Co -- shipment of mercury contaminated soil

Dear James N. Luddemann, P.E.

The purpose of this letter is to confirm our conversation of this morning relating to the shipment of mercury contaminated soil from the Mercury Refining Site. The material has been tested for EP toxicity and shown not to be a dangerous characteristic hazardous waste. (Accordingly,) However, the material will be shipped by a licensed hazardous waste hauler and to SCM facility in Middle City, New York and disposed in the heavy metal cell. This is because the material test to be non-hazardous waste. The material will be shipped with a Bill of Lading as a non-hazardous waste -- not with a hazardous waste manifest.

If the foregoing accurately confirms our understanding, please sign on the line below.

Sincerely,

Kevi M. Yang

Based on my conversations with Edward Belmore and John Iannotti of NYSDOE, the material can be shipped with a Bill of lading^{and} without a hazardous waste manifest.

James A. Fudlam

James A. Fudlam, P.E.

APPENDIX B

WASTE DISPOSAL AND SHIPPING SUMMARY

PCBs

301957

PCB CONTAMINATED SOILS

<u>Truck Load No.</u>	<u>Weight (lbs)</u>	<u>State Manifest Document</u>
100909	36,000	253272-6
100910	33,300	253267-2
100911	36,440	253266-3
100912	33,140	253264-5
100913	33,860	253265-4
100914	31,940	253268-1
100915	34,140	253270-8
100916	34,380	253271-7
100917	29,520	253273-5
100918	31,240	253277-1
100919	31,640	253278-9
100920	31,420	253279-8
100921	38,520	253280-7
100922	36,620	253281-6
100923	38,020	253282-5
100924	42,900	253283-4
100925	38,560	253284-3
100926	37,900	253285-2
100927	40,040	253286-1
100928	42,280	253287-9
100929	36,380	253288-8
100930	39,500	253289-7
100931	38,040	253290-6

825,040 lbs.
412.89 tons

APPENDIX C

PCB WASTE MANIFESTS

301959



STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
HAZARDOUS WASTE MANIFEST

301960

Please print or type.

P.O. Box 12820, Albany, New York 12212

Form Approved. OMB No. 2000-0404. Expires 7-31-06

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. N Y D 0 4 8 1 4 8 1 1 7 5 0 0 0 0 5	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.																																																		
<p>3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205</p> <p>4. Generator's Phone (518) 489-7363</p> <p>5. Transporter 1 (Company Name) Coastal West Service</p> <p>6. US EPA ID Number P A 0 9 8 0 7 1 4 8 6 9</p> <p>7. Transporter 2 (Company Name)</p> <p>8. US EPA ID Number</p> <p>9. Designated Facility Name and Site Address SCA Chemical Services 1135 Balmer Road Model City, NY 14107</p> <p>10. US EPA ID Number N Y D 0 4 9 8 3 6 6 7 9 7 1 6 - 7 5 4 - 8 2 1</p>																																																							
<p>11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)</p> <p>a. Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORM-E UN2315</p> <p>b.</p> <p>c.</p> <p>d.</p>																																																							
<p>12. Containers</p> <table border="1"> <thead> <tr> <th>No.</th> <th>Type</th> <th>13. Total Quantity</th> <th>14. Unit Wt/Vol</th> <th>15. Weight Net</th> </tr> </thead> <tbody> <tr> <td>0 0 1</td> <td>D I T</td> <td>2 0</td> <td>Cy</td> <td>3 0 0 7</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						No.	Type	13. Total Quantity	14. Unit Wt/Vol	15. Weight Net	0 0 1	D I T	2 0	Cy	3 0 0 7																																								
No.	Type	13. Total Quantity	14. Unit Wt/Vol	15. Weight Net																																																			
0 0 1	D I T	2 0	Cy	3 0 0 7																																																			
<p>J. Additional Descriptions for Materials Listed Above</p> <p>a. PCB Soil</p> <p>b.</p>																																																							
<p>K. Handling Codes for Wastes Listed Above</p> <p>a. L</p> <p>b.</p>																																																							
<p>15. Special Handling Instructions and Additional Information</p> <p>SCA Code 3331-D</p> <p>Material also RCRA hazardous for Mercury D009</p> <p>SCA W.O.# 100909</p>																																																							
<p>16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and state laws and regulations.</p>																																																							
<p>Printed/Typed Name A K L Agency Signature Dick Tolay DATE 09/16/85</p>																																																							
<p>17. Transporter 1 (Acknowledgement of Receipt of Materials)</p> <p>Printed/Typed Name DAVID J. Millsp Signature David J. Millsp DATE 09/16/85</p>																																																							
<p>18. Transporter 2 (Acknowledgement or Receipt of Materials)</p> <p>Printed/Typed Name Signature DATE</p>																																																							
<p>19. Discrepancy Indication Space</p>																																																							
<p>20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.</p> <p>Printed/Typed Name Signature DATE</p>																																																							



DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DIVISION OF SOLID AND HAZARDOUS WASTE

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Form Approved, OMB No. 2000-0404, Expires 7-31-88

Please print or type.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. N Y D 0 4 8 1 4 8 1 7 5 0 0 0 0 4	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.
3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205					
4. Generator's Phone (518) 489-7363					
5. Transporter 1 (Company Name) Tonawanda Tank Transport Service		8. US EPA ID Number W Y D 0 9 7 6 4 4 8 0 1			
7. Transporter 2 (Company Name)		8. US EPA ID Number			
9. Designated Facility Name and Site Address SCA Chemical Services 1135 Balmer Road Model City, NY 14107					
10. US EPA ID Number N Y D 0 4 9 8 3 6 6 7 9		12. Containers No.	13. Total Quantity	14. Unit Wt/Vol	
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) a. Wasta Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORM-E UN2315		0 0 1	D T	20	CY
b.					
c.					
d.					
J. Additional Descriptions for Materials Listed Above a. PCB Soil					
K. Handling Codes for Wastes Listed Above L					
15. Special Handling Instructions and Additional Information SCA Code 3331-D Material also RCRA hazardous for Mercury D009 SCA W.O.# 100910					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and state laws and regulations.					
Printed/Typed Name DICK WAGGONER		Signature Dick Waggoner		Mo. Day Year 09/16/85	DATE
17. Transporter 1 (Acknowledgement of Receipt of Materials)					
Printed/Typed Name THOMAS SCOTT		Signature Thomas Scott		Mo. Day Year 09/16/85	DATE
18. Transporter 2 (Acknowledgement or Receipt of Materials)					
Printed/Typed Name		Signature		Mo. Day Year	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name		Signature		Mo. Day Year	



STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

301962

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Form Approved. OMB No. 2000-0404. Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. N Y D 0 4 8 1 4 8 1 7 5 0 1 0 0 3	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.	
3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205						
4. Generator's Phone (518) 489-7363						
5. Transporter 1 (Company Name) Tonawanda Tank Transport Service		6. US EPA ID Number N Y D 0 9 7 6 4 4 8 0 1				
7. Transporter 2 (Company Name)		8. US EPA ID Number				
9. Designated Facility Name and Site Address SCA Chemical Services 1135 Balmer Road Model City, NY 14107						
10. US EPA ID Number N Y D 0 4 9 8 3 6 6 7 9						
GENERATOR	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers	13. Total Quantity	14. Unit	15. Waste No.	
	a. Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORM-E UN2315	0 0 1	20	CY	3007	
	b.					
	c.					
	d.					
J. Additional Descriptions for Materials Listed Above						
a. PCB Soil						
b.						
K. Handling Codes for Wastes Listed Above						
L						
b.						
15. Special Handling Instructions and Additional Information						
SCA Code 3331-D Material also RCRA hazardous for Mercury D009						
SCA W.O.# 100911						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable International and national governmental regulations and state laws and regulations.						
Printed/Typed Name RICK LAGY		Signature Dick Lagy		Mo. 09	Day 16	Year 1985
DATE -						
17. Transporter 1 (Acknowledgement of Receipt of Materials)						
Printed/Typed Name Douglas A. Gero		Signature Douglas A. Gero		Mo. 09	Day 16	Year 1985
DATE						
18. Transporter 2 (Acknowledgement or Receipt of Materials)						
Printed/Typed Name		Signature		Mo. Day Year		
DATE						
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name		Signature		Mo. Day Year		
DATE						

**DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
HAZARDOUS WASTE MANIFEST**

P.O. Box 12820, Albany, New York 12212

301963

Form Approved, OMB No. 2000-0404. Expires 7-31-86

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UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. N Y D 0 4 8 1 4 8 1 7 5 0 0 0 0 1	Manifest Document No.	2. Page 1 of	Information in the shaded areas is not required by Federal Law.
3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205 4. Generator's Phone (518) 489-7363		NYA 253264-5			
5. Transporter 1 (Company Name) Coastal Well Service 7. Transporter 2 (Company Name)		6. US EPA ID Number PA 0 9 8 1 0 7 1 4 8 6 9 8. US EPA ID Number N Y D 0 4 9 1 8 1 3 1 6 6 1 7 9			
9. Designated Facility Name and Site Address SCA Chemical Services 1135 Balmer Road Model City, NY 14107		10. US EPA ID Number N Y D 0 4 9 1 8 1 3 1 6 6 1 7 9			
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) a. Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORM-E UN2315 b. Normal leaded gasoline c. Normal unleaded gasoline d. Motor oil		12. Containers No.	13. Total Quantity	14. Unit Wt/Vol	15. Waste No.
		0 1 0 1 1	2 0	CY	3007
J. Additional Descriptions for Materials Listed Above a. PCB Soil		K. Handling Codes for Wastes Listed Above <input checked="" type="checkbox"/> L			
15. Special Handling Instructions and Additional Information SCA Code 333-1 SCA W.O.# 100912		Material also RCRA hazardous for Mercury D009			
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and state laws and regulations.		DATE			
Printed/Typed Name Rick Tabor		Signature 		Mo. Day Year 0 9 1 1 6 1 5 5	
17. Transporter 1 (Acknowledgement of Receipt of Materials) Printed/Typed Name Richard Tosey		Signature 		Mo. Day Year DATE	
18. Transporter 2 (Acknowledgement of Receipt of Materials) Printed/Typed Name		Signature		Mo. Day Year DATE	
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.		DATE			
Printed/Typed Name		Signature		Mo. Day Year	



DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
HAZARDOUS WASTE MANIFEST

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Form Approved. OMB No. 2000-0404. Expires 7-31-88

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.
		N Y D 0 4 8 1 4 8 1 7 5 6 1 0 1 0 1 2		N Y D 0 4 8 1 4 8 1 7 5 6 1 0 1 0 1 2	
<p>3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205</p> <p>4. Generator's Phone (518) 489-7363</p>					
<p>5. Transporter 1 (Company Name)</p> <p>Coastal Well Service</p>		<p>6. US EPA ID Number</p> <p>P A D 9 8 0 7 1 4 8 6 4</p>		<p>7. State Transporter's ID Number</p> <p>P A T 6 8 7 9 7</p>	
<p>7. Transporter 2 (Company Name)</p>		<p>8. US EPA ID Number</p>		<p>8. State Transporter's ID Number</p> <p>P A T 6 8 7 9 7</p>	
<p>9. Designated Facility Name and Site Address</p> <p>SCA Chemical Services 1135 Balmer Road Model City, NY 14107</p>		<p>10. US EPA ID Number</p> <p>N Y D 0 4 9 8 3 6 6 7 9</p>		<p>9. Facility's Phone</p> <p>716-544-2311</p>	
<p>11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)</p> <p>a. Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORM-E UN2315</p>		12. Containers	13. Total Quantity	14. Unit Wt/Vol	
		No. Type			
		0 0 1 D T	20	cy	
<p>b. PCB Soil</p>					
<p>c. PCB Soil</p>					
<p>d. PCB Soil</p>					
<p>J. Additional Descriptions for Materials Listed Above</p> <p>a. PCB Soil</p>					
<p>K. Handling Codes for Wastes Listed Above</p> <p>L</p>					

15. Special Handling Instructions and Additional Information

Material also RCRA hazardous for Mercury D009

SCA W.O. # 100913

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport.

by highway according to applicable international and national governmental regulations and state laws and regulations.			DATE
Printed/Typed Name <i>Rick LaGoy</i>	Signature <i>Rick LaGoy</i>	Mo. Day Year 09/16/85	
17. Transporter 1 (Acknowledgement of Receipt of Materials)			DATE
Printed/Typed Name <i>Mike Onisko</i>	Signature <i>Mike Onisko</i>	Mo. Day Year 09/16/85	
18. Transporter 2 (Acknowledgement or Receipt of Materials)			DATE
Printed/Typed Name	Signature	Mo. Day Year	

19. Discrepancy Indication Space

Rec'd - 33860 lbs

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name <u>M. Thompson</u>	Signature <u>M. Thompson</u>	Mo. Day Year 09/17/85
--	---------------------------------	--------------------------

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

301965

Form Approved. OMB No. 2000-0404. Expires 7-31-88

Print or type.

**UNIFORM HAZARDOUS
WASTE MANIFEST**

1. Generator's US EPA No.

N Y D 0 4 8 1 4 8 1 7 5 0 0 0 0 5

Manifest
Document No.

2. Page 1
of
1

Information in the shaded areas
is not required by Federal Law.

3. Generator's Name and Mailing Address

Mercury Refining, Inc., 14 Commercial Road
Albany, NY 12205

4. Generator's Phone (518) 489-7363

5. Transporter 1 (Company Name)

Coastal Well Service

6. US EPA ID Number

P 9 0 9 8 0 7 1 4 8 6 9

7. Transporter 2 (Company Name)

8. US EPA ID Number

9. Designated Facility Name and Site Address

10. US EPA ID Number

SCA Chemical Services

1135 Balmer Road

Model City, NY 14107

N Y D 0 4 9 8 3 6 6 7 9

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)

a. Waste Polychlorinated Biphenyls, mixture
(soil contaminated with PCB) ORM-E UN2315

12. Containers

No.

Type

13. Total
Quantity

Wt/Vol

Wt/Vol

14. Unit

Wt/Vol

Wt/Vol

20 Cy

3007

b. Other dangerous goods listed above

c. Other dangerous goods listed above

d. Other dangerous goods listed above

J. Additional Descriptions for Materials Listed Above

a. PCB Soil

K. Handling Codes for Wastes Listed Above

b.

15. Special Handling Instructions and Additional Information

SCA Code 331-D

Material also RCRA hazardous for Mercury D009

SCA W.O.# 100 914

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and state laws and regulations.

DATE

Printed/Typed Name

Rick Lagoy

Signature

Rick Lagoy

Mo. Day Year

09/16/85

17. Transporter 1 (Acknowledgement of Receipt of Materials)

DATE

Printed/Typed Name

Victor Slagle

Signature

Victor Slagle

Mo. Day Year

09/16/85

18. Transporter 2 (Acknowledgement or Receipt of Materials)

DATE

Printed/Typed Name

Signature

Mo. Day Year

19. Discrepancy Indication Space

DATE

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

DATE

Printed/Typed Name

Signature

Mo. Day Year

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Form Approved. OMB No. 2000-0404. Expires 7-31-86

except print or type.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. N Y D 0 4 8 1 4 8 1 7 1 5 0 1 0 1 0	Manifest Document No. 1	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.	
<p>3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205</p> <p>4. Generator's Phone (518) 489-7363</p>						
<p>5. Transporter 1 (Company Name) Coastal well service</p> <p>7. Transporter 2 (Company Name)</p>		6. US EPA ID Number P A 0 9 5 0 7 1 4 8 6 9	8. US EPA ID Number			
<p>9. Designated Facility Name and Site Address SCA Chemical Services 1135 Balmer Road Model City, NY 14107</p>		10. US EPA ID Number N Y D 0 4 9 8 1 3 6 6 7 9				
<p>11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)</p> <p>Waste Polychlorinated Biphenyls; mixture (soil contaminated with PCB) ORM-E UN2315</p>		12. Containers No. Type 0 0 1 D T	13. Total Quantity 20	14. Unit Weight G		
GENERATOR	b.					
	c.					
	d.					
	e.					
<p>15. Special Handling Instructions and Additional Information</p> <p>SCA Code 3331-D</p> <p>SCA W.O.# 100915</p>		<p>Material also RCRA hazardous for Mercury D009</p>				
<p>16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and state laws and regulations.</p>						
<p>Printed/Typed Name Dick Lagooy</p>		<p>Signature Dick Lagooy</p>		<p>Mo. Day Year 09/16/85</p>		
TRANSPORTER	<p>17. Transporter 1 (Acknowledgement of Receipt of Materials)</p> <p>Printed/Typed Name William Johnson</p> <p>Signature William Johnson</p> <p>Mo. Day Year 09/16/85</p>					
	<p>18. Transporter 2 (Acknowledgement or Receipt of Materials)</p> <p>Printed/Typed Name</p> <p>Signature</p> <p>Mo. Day Year</p>					
FACILITY	<p>19. Discrepancy Indication Space</p> <p>—</p>					
	<p>20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.</p> <p>Printed/Typed Name</p> <p>Signature</p> <p>Mo. Day Year</p>					

In case of emergency or spill immediately call into individual responsible

**DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
HAZARDOUS WASTE MANIFEST**

Please print or type.

P.O. Box 12820, Albany, New York 12212

301967

Form Approved. OMB No. 2000-0404. Expires 7-31-08



STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
HAZARDOUS WASTE MANIFEST

301968

Please print or type.

P.O. Box 12820, Albany, New York 12212

Form Approved. OMB No. 2000-0404. Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. N Y D 0 4 8 1 4 8 1 7 5	Manifest Document No. 6 0 0 0 0 9	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.
<p>3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205</p> <p>4. Generator's Phone (518) 489-7363</p> <p>5. Transporter 1 (Company Name) Buffalo Fuel</p> <p>6. US EPA ID Number W Y D 0 5 1 8 0 9 9 5 2</p> <p>7. Transporter 2 (Company Name)</p> <p>8. Designated Facility Name and Site Address SCA Chemical Services 1135 Balmer Road Model City, NY 14107</p> <p>9. Facility's Phone N Y D 0 4 9 8 3 6 6 7 9</p> <p>10. US EPA ID Number 10000000000000000000000000000000</p> <p>11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)</p> <p>a. Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORM-E UN2315 No. 0 0 1 Type D, T</p> <p>b. PCB Soil No. 0 0 1 Type D, T</p> <p>c. PCB Soil No. 0 0 1 Type D, T</p> <p>d. PCB Soil No. 0 0 1 Type D, T</p> <p>12. Containers</p> <p>13. Total Unit Quantity</p> <p>14. Unit Wt/Vol</p> <p>20 cy 3007</p>					
<p>J. Additional Descriptions for Materials Listed Above</p> <p>a. PCB Soil</p> <p>b. PCB Soil</p> <p>K. Handling Codes for Wastes Listed Above</p> <p>L. RCRA hazardous for Mercury D009</p> <p>M. RCRA hazardous for Mercury D009</p> <p>N. RCRA hazardous for Mercury D009</p> <p>O. RCRA hazardous for Mercury D009</p>					
<p>15. Special Handling Instructions and Additional Information</p> <p>SCA Code 3331D Material also RCRA hazardous for Mercury D009</p> <p>SCA W.O.# 100917</p>					
<p>16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and state laws and regulations.</p>					
Printed/Typed Name Rick Tolsey		Signature 		Mo. Day Year 09 11 1985	
DATE					
TRANSPORTER		Printed/Typed Name Don A Johnson		Signature 	
Mo. Day Year 09 11 1985					
DATE					
FACILITY		Printed/Typed Name		Signature	
Mo. Day Year					
DATE					
<p>19. Discrepancy Indication Space</p>					
<p>20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.</p>					
Printed/Typed Name		Signature		Mo. Day Year	
DATE					



**DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
HAZARDOUS WASTE MANIFEST**

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P.O. Box 12820, Albany, New York 12212

301969

Form Approved. OMB No. 2000-0404. Expires 7-31-04

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. N Y D 0 4 8 1 4 8 1 7 5	Manifest Document No. 0010110	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.
3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205		4. Generator's ID 14			
4. Generator's Phone (518) 489-7363					
5. Transporter 1 (Company Name) Buffab Fuel Corp.		6. US EPA ID Number NYD051809952			
7. Transporter 2 (Company Name)		8. US EPA ID Number			
9. Designated Facility Name and Site Address SCA Chemical Services 1135 Balmer Road Modal City, NY 14107		10. US EPA ID Number NYD049836679			
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) a. Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORM-E UN2315		12. Containers No. Type 0 0 1 D T			
b.					
c.					
d.					
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above			
a. PCB Soil		L			
15. Special Handling Instructions and Additional Information SCA Code 33310 SCA W.O. # 100918		Material also RCRA hazardous for Mercury D009			
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable International and national governmental regulations and state laws and regulations.		DATE			
Printed/Typed Name Rick Lagay		Signature Rick Lagay			
17. Transporter 1 (Acknowledgement of Receipt of Materials)		Mo. Day Year 09/16/85			
Printed/Typed Name William T. Hack		DATE			
18. Transporter 2 (Acknowledgement of Receipt of Materials)		19/11/85			
Printed/Typed Name		Mo. Day Year			
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.		DATE			
Printed/Typed Name		Signature			

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
HAZARDOUS WASTE MANIFEST

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301970

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2. Page 1 of Information in the shaded area is not required by Federal Law.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.
3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205		NY D0481481750010111 N.Y. 253278-3			
4. Generator's Phone (518) 489-7363					
5. Transporter 1 (Company Name) Hausee Trucking		6. US EPA ID Number NYD00023263			
7. Transporter 2 (Company Name)		8. US EPA ID Number			
9. Designated Facility Name and Site Address SCA Chemical Services 1135 Balmer Road Model City, NY 14107		10. US EPA ID Number NYD0149836679			
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORM-E UN2315		12. Containers No.	Type DIT	13. Total Quantity 01011	14. Unit Measure CY
b.					
c.					
d.					
J. Additional Descriptions for Materials listed Above PCB Soil		K. Handling Codes for Wastes Listed Above L			
b.					
L. Discrepancy Indication Space Actual Rec'd - 31640 lbs					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name M. Thompson		Signature M. Thompson		Mo. Day Year 09/11/2005	

301971

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
HAZARDOUS WASTE MANIFEST

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UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. N Y D 0 4 8 1 4 8 1 7 5 0 0 0 1 2	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.
3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205 4. Generator's Phone (518) 489-7363		5. Generator's Name and Mailing Address Haussee Trucking 6. US EPA ID Number N Y D 0 0 0 2 3 7 2 6 3 7. Transporter 2 (Company Name) SCA Chemical Services 8. US EPA ID Number N Y D 0 4 9 8 3 6 6 7 9 9. Designated Facility Name and Site Address 1135 Balmer Road Model City, NY 14107 10. US EPA ID Number N Y D 0 4 9 8 3 6 6 7 9			
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers	13. Total Quantity	14. Unit Wt/Vol	
a. Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORM-E UN2315 b. PCB Soil c. PCB Soil d. PCB Soil		No. Type 0 0 1 D T	20	CY	5007
f. Additional Descriptions for Materials listed Above PCB Soil		g. Handling Codes for Wastes Listed Above I			
15. Special Handling Instructions and Additional Information SCA Code 33310 SCA W.O.# 100920		Material also RCRA hazardous for Mercury D009			
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and state laws and regulations.		DATE			
Printed/Typed Name Rick LaGoy		Signature 		Mo. Day Year 09/17/85	
17. Transporter 1 (Acknowledgement of Receipt of Materials)					
Printed/Typed Name Joseph Hansen		Signature 		Mo. Day Year 09/17/85	
18. Transporter 2 (Acknowledgement of Receipt of Materials)					
Printed/Typed Name Dow R Fullen		Signature 		Mo. Day Year 09/17/85	
19. Discrepancy Indication Space Actual Recd - 3/4/20					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name M. Thompson		Signature 		Mo. Day Year 09/18/85	

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
HAZARDOUS WASTE MANIFEST

301972

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UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. NYD0481481750000113	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.																																				
3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205																																									
4. Generator's Phone (518) 489-7363																																									
5. Transporter 1 (Company Name) Hauser Trucking		6. US EPA ID Number WY0000237263																																							
7. Transporter 2 (Company Name)		8. US EPA ID Number																																							
9. Designated Facility Name and Site Address SCA Chemical Services 1135 Balmer Road Model City, NY 14107		10. US EPA ID Number NYD049836679																																							
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)																																									
<p>a. Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORK-E UN2315</p> <table border="1"> <tr> <td>No.</td> <td>Type</td> <td>Total Quantity</td> <td>Unit Wt/Vol</td> </tr> <tr> <td>001</td> <td>D T</td> <td>20</td> <td>CY</td> </tr> <tr> <td></td> <td></td> <td></td> <td>300T</td> </tr> </table> <p>b. PCB Soil</p> <table border="1"> <tr> <td>No.</td> <td>Type</td> <td>Total Quantity</td> <td>Unit Wt/Vol</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>c. PCB Soil</p> <table border="1"> <tr> <td>No.</td> <td>Type</td> <td>Total Quantity</td> <td>Unit Wt/Vol</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>d. PCB Soil</p> <table border="1"> <tr> <td>No.</td> <td>Type</td> <td>Total Quantity</td> <td>Unit Wt/Vol</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>						No.	Type	Total Quantity	Unit Wt/Vol	001	D T	20	CY				300T	No.	Type	Total Quantity	Unit Wt/Vol					No.	Type	Total Quantity	Unit Wt/Vol					No.	Type	Total Quantity	Unit Wt/Vol				
No.	Type	Total Quantity	Unit Wt/Vol																																						
001	D T	20	CY																																						
			300T																																						
No.	Type	Total Quantity	Unit Wt/Vol																																						
No.	Type	Total Quantity	Unit Wt/Vol																																						
No.	Type	Total Quantity	Unit Wt/Vol																																						
<p>J. Additional Descriptions for Materials listed Above a. PCB Soil</p> <p>K. Handling Codes for Wastes Listed Above L</p>																																									
15. Special Handling Instructions and Additional Information SCA Code 33310 SCA W.O. # 100921 Material also RCRA hazardous for Mercury D009																																									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and state laws and regulations.																																									
Printed/Typed Name Rick Zeloy		Signature Rick Zeloy		DATE 09/17/85																																					
17. Transporter 1 (Acknowledgement of Receipt of Materials) PAUL HAUSER																																									
Printed/Typed Name PAUL HAUSER		Signature Rugha		DATE 9/17/85																																					
18. Transporter 2 (Acknowledgement or Receipt of Materials) Jennett Monroe																																									
Printed/Typed Name Jennett Monroe		Signature Jennett Monroe		DATE 09/18/85																																					
19. Discrepancy Indication Space																																									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.																																									
Printed/Typed Name		Signature		DATE																																					

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DIVISION OF SOLID AND HAZARDOUS WASTE

HAZARDOUS WASTE MANIFEST

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UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. N Y D 0 4 8 1 4 8 1 7 5 0 0 1 9	Manifest Document No. 1	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.
3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205					
4. Generator's Phone (518) 489-7363					
5. Transporter 1 (Company Name) BUFFalo Fuel corp		6. US EPA ID Number NY 0051809952	7. Transporter 2 (Company Name)	8. Designated Facility Name and Site Address SCA Chemical Services 1135 Balmer Road Model City, NY 14107	9. Designated Facility ID Number N Y D 0 4 9 1 8 3 1 6 6 1 7 9
10. US EPA ID Number		11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) a. Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORM-E UN2315	12. Containers No. Type 0101 DIT	13. Total Quantity 20	14. Unit of Measure Cy
15. Special Handling Instructions and Additional Information SCA Code <u>33310</u> SCA W.O. # <u>100922</u>		Material also RCRA hazardous for Mercury D009			
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable International and national governmental regulations and state laws and regulations.					
Printed/Typed Name <u>Rick LaBoy</u>		Signature <u>Rick LaBoy</u>		Mo. Day Year <u>09/17/85</u>	
17. Transporter 1 (Acknowledgement of Receipt of Materials)					
Printed/Typed Name <u>Timothy J. HALEY</u>		Signature <u>Timothy J. HALEY</u>		Mo. Day Year <u>09/17/85</u>	
18. Transporter 2 (Acknowledgement of Receipt of Materials)					
Printed/Typed Name		Signature		Mo. Day Year	
19. Discrepancy Indication Space <u>Recd - 36620 16</u>					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name		Signature <u>John</u>		Mo. Day Year <u>09/18/85</u>	



STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
HAZARDOUS WASTE MANIFEST

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Form Approved, OMB No. 2000-0404, Expires 7-31-06

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. H Y D 0 4 8 1 4 8 1 7 5 0 0 0 1 5	Manifest Document No. NY 2532825	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.
<p>3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205</p> <p>4. Generator's Phone (518) 489-7363</p> <p>5. Transporter 1 (Company Name) Buffalo Fuel Corp</p> <p>6. US EPA ID Number NYD051809952</p> <p>7. Transporter 2 (Company Name)</p> <p>8. US EPA ID Number</p> <p>9. Designated Facility Name and Site Address SCA Chemical Services 1135 Balmer Road Model City, NY 14107</p> <p>10. US EPA ID Number NYD04983166179</p> <p>11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) *Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORM-E UN2315</p> <p>12. Containers No. Type 0101 DT</p> <p>13. Total Quantity 20 cy</p> <p>14. Unit of Measure cu yd</p> <p>GENERATOR</p> <p>a. Quantity shipped to consignee 2000 cu yd soil contaminated with PCB from SCA Chemical Services 1135 Balmer Road Model City, NY 14107</p> <p>b. Consignment number PCB Soil</p> <p>c. Consignment number PCB Soil</p> <p>d. Consignment number PCB Soil</p> <p>15. Special Handling Instructions and Additional Information SCA Code 33310 Material also RCRA hazardous for Mercury D009 SCA W.O.# 100923</p> <p>16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable International and national governmental regulations and state laws and regulations.</p> <p>DATE 29/12/85</p> <p>TR A S P O R T E</p> <p>Printed/Typed Name Rich L. Goy</p> <p>Signature Rich L. Goy</p> <p>Mo. Day Year 29 12 85</p> <p>17. Transporter 1 (Acknowledgement of Receipt of Materials)</p> <p>Printed/Typed Name G.G. GALT Williams</p> <p>Signature G.G. GALT Williams</p> <p>Mo. Day Year 29 12 85</p> <p>FACILITY</p> <p>18. Transporter 2 (Acknowledgement of Receipt of Materials)</p> <p>Printed/Typed Name</p> <p>Signature</p> <p>Mo. Day Year</p> <p>19. Discrepancy Indication Space Rec'd - 38020 lbs</p> <p>20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 18</p> <p>Printed/Typed Name</p> <p>Signature</p> <p>Mo. Day Year</p>					

**DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
HAZARDOUS WASTE MANIFEST
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UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. N Y D 0 4 8 1 4 8 1 7 5 0 0 1 6	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.
3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205		4. Generator's Phone (518) 489-7363			
5. Transporter 1 (Company Name) BUFFalo FUEL CORP		6. US EPA ID Number W Y D 0 0 5 1 8 0 9 9 5 2			
7. Transporter 2 (Company Name)		8. US EPA ID Number			
9. Designated Facility Name and Site Address SCA Chemical Services 1135 Balmer Road Model City, NY 14107		10. US EPA ID Number N Y D 0 4 9 8 3 6 6 7 9			
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) A. Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORM-E UN2315		12. Containers No.	13. Total Quantity	14. Unit of Measure Wt/Vol	
		0101 DIT	20	Cy	
b. Weight or Volume to be Shipped CONTAINERS 4000 POUNDS TO 9999.99 CONTAINERS 1000 LITERS TO 9999.99 CONTAINERS 1000 GALLONS TO 9999.99					
c.					
d.					
e. Additional Descriptions for Materials listed Above PCB Soil		K. Handling Codes for Wastes Listed Above L			
f. MORTALITY INFORMATION OR HAZARD STATEMENT Hazardous wastes contain PCBs. Contaminated materials may pose a threat to human health and the environment.					
15. Special Handling Instructions and Additional Information SCA Code 33310 SCA W.O. # 100924 Material also RCRA hazardous for Mercury D009					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and state laws and regulations.					
Printed/Typed Name RICK LAGAY		Signature Dick Lagay		Mo. Day Year 09/11/85	
DATE					
17. Transporter 1 (Acknowledgement of Receipt of Materials) JOHN GIESELE		Signature John Gieseler		Mo. Day Year 09/11/85	
DATE					
18. Transporter 2 (Acknowledgement or Receipt of Materials)		Signature		Mo. Day Year 09/11/85	
DATE					
19. Discrepancy Indication Space Recd -42900 lbs					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name		Signature M J Tracy		Mo. Day Year 09/18/85	
DATE					

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
HAZARDOUS WASTE MANIFEST

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UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.
3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205		NYD04814817560001D 953294-3			
4. Generator's Phone (518)489-7363					
5. Transporter 1 (Company Name) BUFFalo Fuel Corp		6. US EPA ID Number	State Transporter ID No. 16557		
7. Transporter 2 (Company Name)		8. US EPA ID Number	Transporter Phone 518/733-7221		
9. Designated Facility Name and Site Address SCA Chemical Services 1135 Balmer Road Model City, NY 14107		10. US EPA ID Number	State Facility ID No. 16557		
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)		12. Containers	13. Total Quantity	14. Unit Wt/Vol	
a. Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORM-E UN2315		No. Type	20	cy	300T
b.	PCB	001DT			
c.					
d.					
J. Additional Descriptions for Materials Listed Above PCB Soil		K. Handling Codes for Wastes Listed Above L			
15. Special Handling Instructions and Additional Information SCA Code <u>33310</u> SCA W.O. # <u>100925</u>		Material also RCRA hazardous for Mercury D009			
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and state laws and regulations.					
Printed/Typed Name <u>Rick Lagoy</u>		Signature <u>Rick Lagoy</u>		Mo. Day Year <u>09/17/85</u>	
DATE					
17. Transporter 1 (Acknowledgement of Receipt of Materials) Printed/Typed Name <u>R Gilbert</u>		Signature <u>R Gilbert</u>		Mo. Day Year <u>9/17/85</u>	
DATE					
18. Transporter 2 (Acknowledgement or Receipt of Materials) Printed/Typed Name		Signature		Mo. Day Year	
DATE					
19. Discrepancy Indication Space <u>Recd - 38568 1/6s</u>					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name		Signature <u>J. Thomas</u>		Mo. Day Year <u>09/18/85</u>	
DATE					

DIVISION OF SOLID AND HAZARDOUS WASTE

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

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UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. N Y D 0 4 8 1 4 8 1 7 5 0 0 2 1 8	Manifest Document No. 1	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.
<p>3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205</p> <p>4. Generator's Phone (518) 489-7363</p> <p>5. Transporter 1 (Company Name) BUFFalo Fuel Corp</p> <p>6. US EPA ID Number W Y D 0 5 1 8 0 9 9 5 2</p> <p>7. Transporter 2 (Company Name): SCA Chemical Services</p> <p>8. US EPA ID Number N Y D 0 4 9 8 3 6 6 7 9</p>					
<p>9. Designated Facility Name and Site Address SCA Chemical Services 1135 Balmer Road Model City, NY 14107</p> <p>10. US EPA ID Number N Y D 0 4 9 8 3 6 6 7 9</p>					
GEN- ERA- TO- R	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers	13. Total Quantity	14. Unit Wt/Vol	
	a. Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORM-E UN2315	0 0 1	20	Cy	5007
	b. PCB				
	c. PCB				
	d. PCB				
<p>15. Special Handling Instructions and Additional Information</p> <p>SCA Code 33310D</p> <p>Material also RCRA hazardous for Mercury D009</p> <p>SCA W.O.# 100926</p>			<p>16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and state laws and regulations.</p> <p>DATE</p>		
Printed/Typed Name RICK LAGOY		Signature Rick Lago		Mo. Day Year 09/17/85	
17. Transporter 1 (Acknowledgement of Receipt of Materials)					
Printed/Typed Name CLIFF HOLLAND		Signature Cliff Holland		Mo. Day Year 09/17/85	
18. Transporter 2 (Acknowledgement or Receipt of Materials)					
Printed/Typed Name —		Signature		Mo. Day Year	
19. Discrepancy Indication Space Rec'd 379.00 /+					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name M. Thompson		Signature M. Thompson		Mo. Day Year 09/17/85	

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
HAZARDOUS WASTE MANIFEST

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UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. N Y D 0 4 8 1 4 8 1 7 5 0 0 0 1 9	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.	
<p>3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205</p> <p>4. Generator's Phone (518) 489-7363</p> <p>5. Transporter 1 (Company Name) RUFFAH Fuel Corp</p> <p>6. US EPA ID Number W Y A 0 5 1 8 0 9 9 5 2</p> <p>7. Transporter 2 (Company Name)</p> <p>8. US EPA ID Number</p> <p>9. Designated Facility Name and Site Address SCA Chemical Services 1135 Balmer Road Model City, NY 14107</p> <p>10. US EPA ID Number N Y D 0 4 9 8 3 6 6 7 9</p>						
G E N E R A T O R	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	13. Total Quantity	14. Unit Unit/Vol	15. Waste No.	
	"Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORM-E UN2315	0 0 1	2 0	C Y	0 0 7	
	b.					
	c.					
	d.					
J. Additional Descriptions for Materials Listed Above			K. Handling Codes for Wastes Listed Above			
a PCB Soil			<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
b			<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
15. Special Handling Instructions and Additional Information						
SCA Code 33310 Material also RCRA hazardous for Mercury D009 SCA W.O.# 100927						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable International and national governmental regulations and state laws and regulations.						
Printed/Typed Name RICK LAGoy		Signature Rick Lago		Mo. Day Year 0 9 1 7 8 5		
17. Transporter 1 (Acknowledgement of Receipt of Materials)						
Printed/Typed Name John Veltas		Signature John Veltas		Mo. Day Year 0 9 1 7 8 5		
18. Transporter 2 (Acknowledgement or Receipt of Materials)						
Printed/Typed Name		Signature		Mo. Day Year		
19. Discrepancy Indication Space						
20. Facility Owner or Operator. Certification of receipt of hazardous materials covered by this manifest except as noted in Item 18.						
Printed/Typed Name		Signature		Mo. Day Year		



301979

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
HAZARDOUS WASTE MANIFEST

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UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. N Y D 0 4 8 1 4 8 1 7 5 0 0 0 2 0	Manifest Document No. W Y D 0 0 0 0 2 3 7 2 6 3	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.
3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205					
4. Generator's Phone (518) 489-7363					
5. Transporter 1 (Company Name) HAUSER TRUCKING		6. US EPA ID Number W Y D 0 0 0 0 2 3 7 2 6 3		7. State Transportation Department NY	
7. Transporter 2 (Company Name)		8. US EPA ID Number		8. Facility's Name SCA Chemical Services 1135 Balmer Road Model City, NY 14107	
9. Designated Facility Name and Site Address		10. US EPA ID Number N Y D 0 4 9 8 3 6 6 7 9		11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORM-E UN2315	
12. Containers No. Type 0 0 1 D I T		13. Total Quantity 20 Cy		14. Unit Weight 1000	
b. PCB Soil					
c.					
d.					
J. Additional Descriptions for Materials Listed Above PCB Soil					
K. Handling Codes for Wastes Listed Above PCB Soil					
L. Discrepancy Indication Space Rec'd - 242280 lbs					
15. Special Handling Instructions and Additional Information SCA Code 33310 SCA W.O. # 100928 Material also RCRA hazardous for Mercury D009					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and state laws and regulations.					
Printed/Typed Name Ark L. Goy		Signature Dick Goy		Mo. Day Year 09 17 85	
17. Transporter 1 (Acknowledgement of Receipt of Materials) JOSEPH HAUSER		Signature Joseph Hauser		Mo. Day Year 11 11 85	
18. Transporter 2 (Acknowledgement or Receipt of Materials) John Terry		Signature John Terry		Mo. Day Year 09 11 85	
19. Discrepancy Indication Space Rec'd - 242280 lbs					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name M. Thompson		Signature M. Thompson		Mo. Day Year 09 18 85	

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
HAZARDOUS WASTE MANIFEST

Please print or type. P.O. Box 12820, Albany, New York 12212

301980

Form Approved. OMB No. 2000-0404. Expires 7-31-86.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. NYD0481481075000211	Manifest Document No. 1	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law. 203288-8	
3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205						
4. Generator's Phone (518)489-7363						
5. Transporter 1 (Company Name) BUFFalo Fuel CORP		6. US EPA ID Number WYD051809952				
7. Transporter 2 (Company Name)		8. US EPA ID Number				
9. Designated Facility Name and Site Address SCA Chemical Services 1135 Balmer Road Model City, NY 14107		10. US EPA ID Number NYD041918131661719				
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORM-E UN2315		12. Containers No. Type 001 DT	13. Total Quantity 20 CY	14. Unit Mt/Vol		
b. PCB Soil						
c.						
d.						
J. Additional Descriptions for Materials Listed Above PCB Soil		K. Handling Codes for Wastes Listed Above L				
15. Special Handling Instructions and Additional Information SCA Code 33310 SCA W.O. # 100929		Material also RCRA hazardous for Mercury D009				
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and state laws and regulations.		DATE				
Printed/Typed Name RICK LAGoy		Signature Dick Gaggy		Mo. Day Year 09/17/85		
17. Transporter 1 (Acknowledgement of Receipt of Materials)		DATE				
Printed/Typed Name Lloyd Gordon		Signature Lloyd Gordon		Mo. Day Year 09/17/85		
18. Transporter 2 (Acknowledgement or Receipt of Materials)		DATE				
Printed/Typed Name		Signature		Mo. Day Year		
19. Discrepancy Indication Space Rec'd - 36380 lbs.						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.		DATE				
Printed/Typed Name M. J. Long		Signature M. J. Long		Mo. Day Year 09/18/85		



STATE OF NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DIVISION OF SOLID AND HAZARDOUS WASTE

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Form Approved, OMB No. 2000-0404. Expires 7-31-98

301981

Please print or type.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. N Y D 0 4 8 1 4 8 1 7 5	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.	
<p>3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205</p> <p>4. Generator's Phone (518) 489-7363</p> <p>5. Transporter 1 (Company Name) Buffalo Fuel Corp</p> <p>6. US EPA ID Number N Y D 0 5 1 8 0 9 9 5</p> <p>7. Transporter 2 (Company Name)</p> <p>8. Designated Facility Name and Site Address SCA Chemical Services 1135 Balmer Road Model City, NY 14107</p> <p>9. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)</p> <p>a. Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) OEM-E UN2315</p> <p>b. <i>Estimated quantity to recipient</i> <i>estimated weight shipping to recipient</i> <i>estimated shipping date</i> <i>estimated arrival date</i></p> <p>c. <i>estimated shipping date</i> <i>estimated arrival date</i></p> <p>d. <i>estimated shipping date</i> <i>estimated arrival date</i></p> <p>12. Containers</p> <p>No. Type 0 0 1 D T</p> <p>13. Total Quantity 20 CY</p> <p>14. Unit Weight/Vol 007</p>						
GENERATOR	J. Additional Descriptions for Materials listed Above					K. Handling Codes for Wastes Listed Above
	PCB Soil ROUTINE HAZARDOUS WASTE REMOVAL STATE FRCY WASH					<input checked="" type="checkbox"/> L <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> O <input type="checkbox"/> P <input type="checkbox"/> Q <input type="checkbox"/> R <input type="checkbox"/> S <input type="checkbox"/> T <input type="checkbox"/> U <input type="checkbox"/> V <input type="checkbox"/> W <input type="checkbox"/> X <input type="checkbox"/> Y <input type="checkbox"/> Z
15. Special Handling Instructions and Additional Information						
SCA Code <u>33310</u> Material also RCRA hazardous for Mercury D009 SCA W.O.# <u>700930</u>						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and state laws and regulations.						
Printed/Typed Name		Signature		Mo. Day Year		
<input checked="" type="checkbox"/> <i>Transporter 1 (Acknowledgement of Receipt of Materials)</i> Lewis LeFever				09/17/85		
Printed/Typed Name		Signature		Mo. Day Year		
<input type="checkbox"/> <i>Transporter 2 (Acknowledgement or Receipt of Materials)</i> Lewis LeFever				09/17/85		
18. Discrepancy Indication Space						
20. Facility Owner or Operator. Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name		Signature		Mo. Day Year		



DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID AND HAZARDOUS WASTE
HAZARDOUS WASTE MANIFEST

301982

Please print or type.

P.O. Box 12820, Albany, New York 12212

Form Approved, OMB No. 2000-0404. Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA No. N Y D 0 4 8 1 4 8 1 7 5 0 0 0 2 3	Manifest Document No. 	2. Page 1 of 1	Information in the shaded areas is not required by Federal Law.	
3. Generator's Name and Mailing Address Mercury Refining, Inc., 14 Commercial Road Albany, NY 12205						
4. Generator's Phone (518) 489-7363						
5. Transporter 1 (Company Name) BUFFalo Fuel CORP		6. US EPA ID Number W Y D 0 5 1 8 0 9 9 5 2				
7. Transporter 2 (Company Name)		8. US EPA ID Number				
9. Designated Facility Name and Site Address SCA Chemical Services 1135 Balmer Road Model City, NY 14107		10. US EPA ID Number N Y D 0 4 9 8 3 6 6 7 9				
11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number) Waste Polychlorinated Biphenyls, mixture (soil contaminated with PCB) ORM-E UN2315		12. Containers No. Type 0 0 1 D T	13. Total Quantity 20 CY	14. Unit Wt/Vol 		
b. PCB Soil						
c.						
d.						
15. Special Handling Instructions and Additional Information SCA Code 33310 SCA W.O.# 100931		Material also RCRA hazardous for Mercury D009				
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and state laws and regulations.		DATE				
Printed/Typed Name RICK LAGAY		Signature Rick Lagay		Mo. Day Year 01/11/785		
17. Transporter 1 (Acknowledgement of Receipt of Materials) Robert D. Doty		Signature Robert D. Doty		Mo. Day Year 09/11/785		
Printed/Typed Name Robert D. Doty		Signature Robert D. Doty		Mo. Day Year 09/11/785		
18. Transporter 2 (Acknowledgement or Receipt of Materials)						
Printed/Typed Name M. Thony		Signature M. Thony		Mo. Day Year 09/11/785		
19. Discrepancy Indication Space Recd - 38040						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.		DATE				

APPENDIX D

WASTE DISPOSAL AND SHIPPING SUMMARY

MERCURY

301983

MERCURY CONTAMINATED SOILS

<u>Truck Load #</u>	<u>Weight (lbs)</u>
101738	45,920
101741	47,460
101672	43,160
101673	48,060
101688	39,920
101689	41,520
101690	39,900
101730	42,960
101731	39,320
101732	42,140
101733	43,380
101734	38,140
101735	40,540
101736	44,420
101737	52,640
101661	31,580
101662	38,140
101663	39,640
101664	42,620
101665	44,480
101666	44,820
101667	44,560
101668	45,540
101669	42,580
101670	43,080
101671	38,360
101674	42,340
101675	42,100
101676	48,660
101677	45,000
101678	44,220
101679	50,820
101680	45,920
101681	47,320
101682	44,040
101683	40,960
101684	43,640
101685	45,600
101686	44,980
101687	33,500
101629	45,060
101630	46,760
101631	50,520

MERCURY CONTAMINATED SOILS (cont'd)

<u>Truck Load #</u>	<u>Weight (lbs)</u>
100932	44,080
100933	47,440
100934	51,000
101614	72,760
101618	52,760
101622	61,920
101623	57,660
101624	56,760
101625	55,640
101626	53,040
101627	52,040
101628	55,680
101588	71,120
101589	68,520
101590	65,980
101591	65,320
101592	63,740
101593	65,760
101594	64,640
101613	62,520
101615	58,900
101616	73,140
101617	54,700
101619	56,020
101620	56,460
101621	57,920
101653	45,740
100936	72,400
100935	70,560
101739	50,020
101740	58,560
101742	49,680
101743	48,680
101744	54,680
101745	47,020
101746	46,240
101747	41,860
101748	45,680
101749	46,300

4,089,260 lbs.
2,044.63 tons

301985

APPENDIX E

DENSITY TEST RESULTS

- E-1: NATIVE FILL AND SEWER BEDDING SAMPLES
- E-2: LOAM FILL SAMPLES
- E-3: GRANULAR FILL SAMPLES

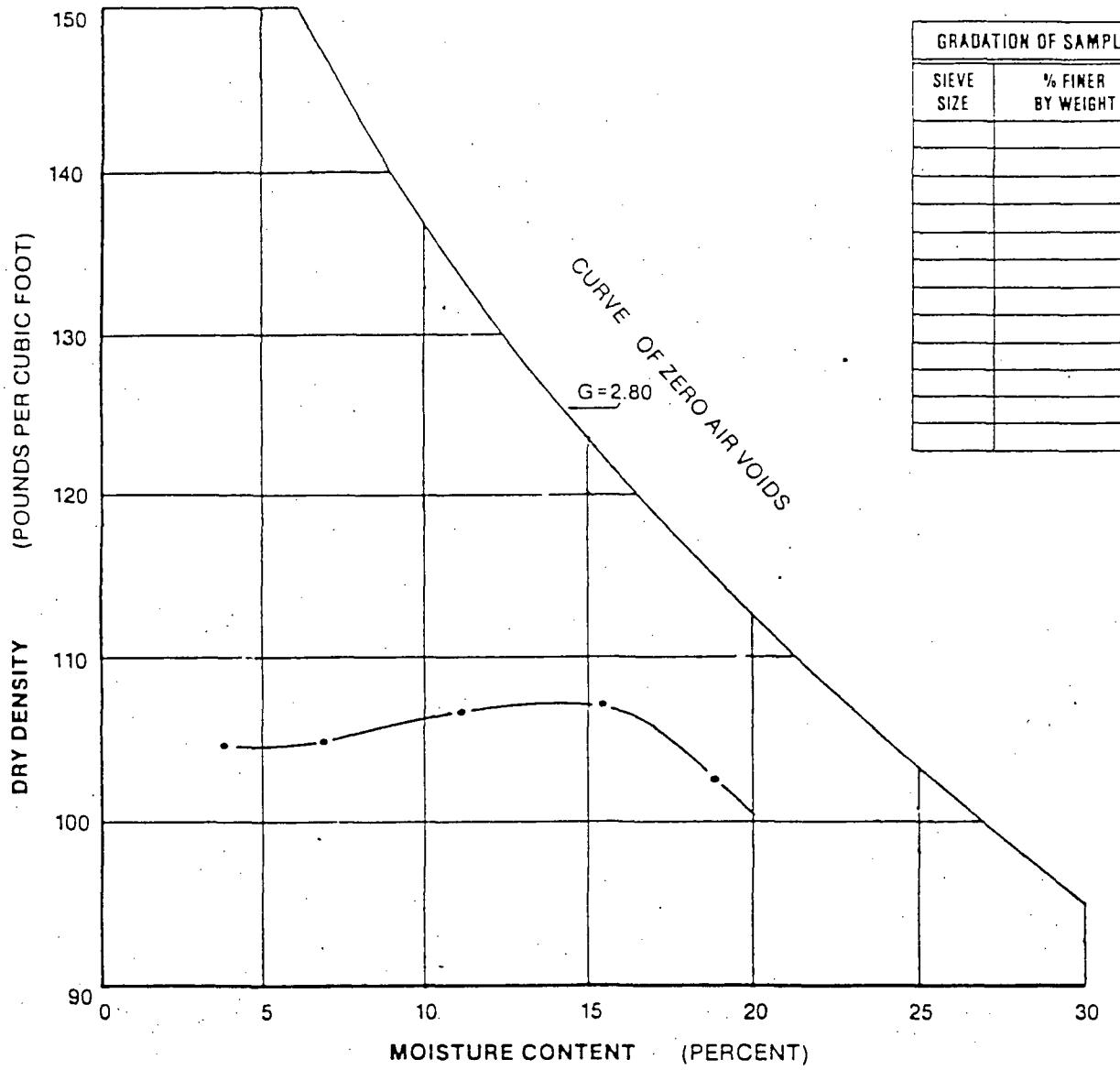
301986

APPENDIX E-1

NATIVE FILL AND SEWER BEDDING SAMPLES

301987

301988



SAMPLE DESCRIPTION

TEST RESULTS

Material Fine to Medium SAND

Maximum Dry Density 107.4 pcf

Color Brown Source On-site

Optimum Water Content 14.0 %

Sampled By DTC At Site

METHOD OF TEST	
STANDARD	METHOD
ASTM D-698	A
AASHTO	
MILITARY	
OTHER	

EMPIRE
SOILS INVESTIGATIONS INC

OPTIMUM MOISTURE—MAXIMUM DENSITY

MERCURY REFINING FACILITY
RAILROAD AVENUE
ALBANY, N.Y.

DR. BY: DTC DATE SAMPLED: 9/30/85 PROJ. NO. AD-84-46

CK'D. BY: TESTED BY: SB CURVE NO. 2

FIELD IN-PLACE DENSITY TEST REPORT

301989



- 685 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14127 716-849-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 807-898-5881
 - RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 835 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refining

Report No. 3

Client Whiteman, Ousterman & Honna

Date: 10/10/85

Contractor: Sevenson Containment Co.

Job No. AD-84-33

Respectfully submitted,

Remarks: _____

EMPIRE SOILS INVESTIGATIONS, INC.

Technician Time: _____

Technician: S. Brodell

David Cunningham

FIELD IN-PLACE DENSITY TEST REPORT

301990



- 685 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 228, ORCHARD PARK, NY 14127 716-649-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 807-898-5881
 - RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 835 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refining Report No. 4

Report No. 4

Client Whiteman, Ousterman & Honna Date: 10/11/85

Date: 10/11/85

Contractor: Sevenson Containment Co. Job No. AD-84-33

Job No. AD-84-33

Respectfully submitted,

Remarks: F.G.=finish grade

EMPIRE SOILS INVESTIGATIONS, INC.

Test #3 was done in a test pit

Technician Time: _____

Technician: S. Brodell

David Cunningham

FIELD IN-PLACE DENSITY TEST REPORT

301991



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 228, ORCHARD PARK, NY 14127 716-849-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 607-898-5881
 - RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1184 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 835 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refining Report No. 5

Report No. ⁵

Client Conestoga-Rovers & Associates **Date:** 10/14/85

Date: 10/14/85

Contractor: Sevenson Construction **Job No.** AD-84-33

Job No. AD-84-33

Proctor Code	Maximum Density (pcf)	Optimum Moisture (%)	Material Type and Source
1	107.4	14.0	Brown fine medium sand; on-site
3	111.4	18.3	Gray clay; Troy Sand & Gravel; little silt
4	134.0	8.0	Gray-brown; sand & gravel; Troy Sand & Gravel

Respectfully submitted,

Remarks: F.G.=Finish grade, for clay only 91%

EMPIRE SOILS INVESTIGATIONS, INC.

needed to reach desired permeability

Technician Time:

Technician: S. Brodell

David Cunningham

FIELD IN-PLACE DENSITY TEST REPORT

301992



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14127 716-649-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 807-898-5881
 - RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 635 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refining Report No. 6

Report No. ⁶

Client Whiteman, Ousterman & Honna Date: 10/17/85

Date: 10/17/85

Contractor: Sevenson Containment Co. Job No. AD-84-33

Job No. AD-84-33

Respectfully submitted,

Remarks: F.G.=finish grade

EMPIRE SOILS INVESTIGATIONS, INC.

*only 91% compaction needed to get reg. Permeability

Technician Time: _____

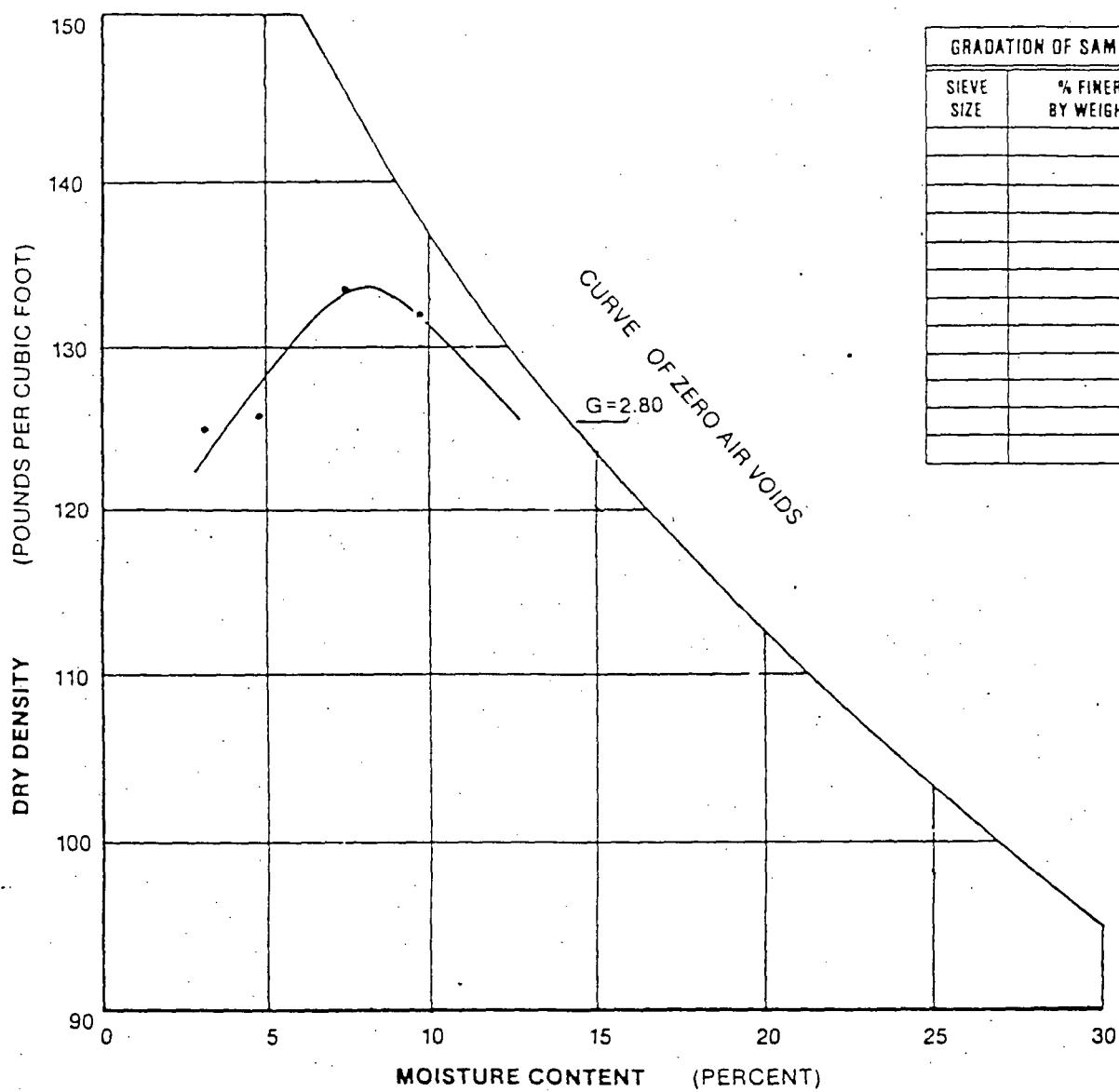
Technician: S. Brodell

David Cunningham

APPENDIX E-2

LOAM FILL SAMPLES

301993



SAMPLE DESCRIPTION

Material Sand and Gravel

Maximum Dry Density 134.0pcf

Color Grey Source Troy S & G
Brown

Optimum Water Content 8.0 %

Sampled By JG At Site

TEST RESULTS.

METHOD OF TEST	
STANDARD	METHOD
ASTM D-698	C
AASHTO	
MILITARY	
OTHER	



OPTIMUM MOISTURE—MAXIMUM DENSITY

Mercury Refinery Facility
Railroad Avenue, Albany, NY

DR. BY: D.T.C.	DATE SAMPLED: 10/12	PROJ. NO. AD-84-46
CK'D BY:	TESTED BY: JG	CURVE NO. 3

FIELD IN-PLACE DENSITY TEST REPORT

301995



- 685 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14127 716-849-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 807-898-5881
 - RARITAN CENTER, 300 McGRAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 835 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refining Report No. 3

Report No. 3

Client Whiteman, Ousterman & Honna **Date:** 10/10/85

Date: 10/10/85

Contractor: Sevenson Containment Co. Job No. AD-84-33

Job No. AD-84-33

Respectfully submitted,

Remarks: _____

EMPIRE SOILS INVESTIGATIONS, INC.

Technician Time: _____

Technician: S. Brodell

David Cunningham

FIELD IN-PLACE DENSITY TEST REPORT

301996



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14127 716-649-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 807-898-5881
 - RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 835 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refining Report No. 5

Report No. 5

Client Conestoga-Rovers & Associates **Date:** 10/14/85

Date: 10/14/85

Contractor: Sevenson Construction Job No. AD-84-33

Job No. AD-84-33

Proctor Code	Maximum Density (pcf)	Optimum Moisture (%)	Material Type and Source
1	107.4	14.0	Brown fine medium sand; on-site
3	111.4	18.3	Gray clay; Troy Sand & Gravel; little silt
4	134.0	8.0	Gray-brown; sand & gravel; Troy Sand & Gravel

Respectfully submitted,

Remarks: F.G.=Finish grade, for clay only 91%

EMPIRE SOILS INVESTIGATIONS, INC.

needed to reach desired permeability

Technician Time: _____

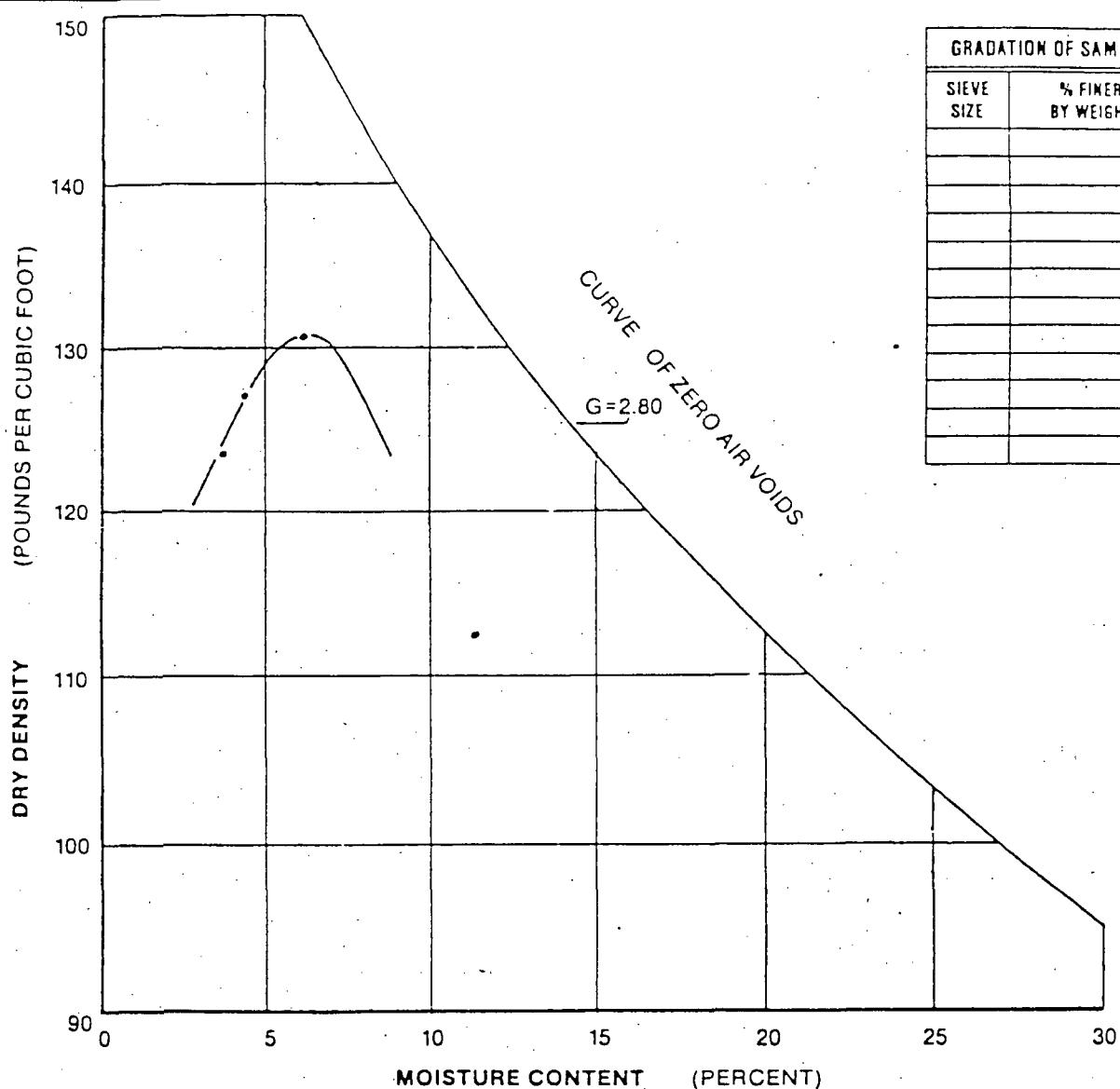
Technician: S. Brodell

David Cunningham

APPENDIX E-3

GRANULAR FILL SAMPLES

301997



SAMPLE DESCRIPTION

Material R.O.B. Sand and Gravel Maximum Dry Density 131.0 pcf
Color Gray Source Troy Sand & Gravel Optimum Water Content 6.2 %
Brown
Sampled By DTC At Source

TEST RESULTS

METHOD OF TEST	
STANDARD	METHOD
ASTM <u>D-698</u>	<u>C</u>
AASHTO _____	_____
MILITARY _____	_____
OTHER _____	_____



OPTIMUM MOISTURE—MAXIMUM DENSITY

Mercury Refining Facility
Railroad Avenue
Albany, NY

DR. BY: DTC DATE SAMPLED: 9/30/85 PROJ. NO. AD-84-46
CK'D. BY: TESTED BY: SB CURVE NO: 1

FIELD IN-PLACE DENSITY TEST REPORT



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14127 716-649-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 807-898-5881
 - RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1184 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 635 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refining Facility Report No. 1

Report No. 1

Client Whiteman, Ousterman & Honna Date: 10/2/85

Date: 10/2/85

Contractor: Sevenson Containment Job No. AD-84-33

Job No. AD-84-33

Respectfully submitted,

Remarks: _____

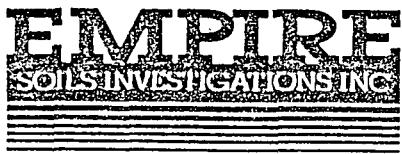
EMPIRE SOILS INVESTIGATIONS, INC.

Technician Time: _____

Technician: J. Vincent

David Cunningham

FIELD IN-PLACE DENSITY TEST REPORT



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3658 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14127 716-649-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 807-898-5881
 - RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1184 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 635 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refining Facility Report No. 2

Report No. 2

Client Whiteman, Ousterman & Honna Date: 10/3/85

Date: 10/3/85

Contractor: Sevenson Containment Co. Job No. AD-84-33

Job No. AD-84-33

Respectfully submitted,

Remarks: _____

EMPIRE SOILS INVESTIGATIONS, INC.

Technician Time: _____

Technician: J. Geiger

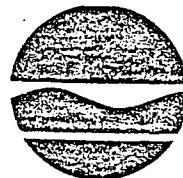
David Cunningham

APPENDIX F

LETTER APPROVING REUSE OF CATCHBASIN

302001

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233-0001



Henry G. Williams
Commissioner

October 15, 1985

Mr. Kevin Bricknell
Conestoga and Rovers Associates
Mercury Refinery Site
Albany, New York

Dear Mr. Bricknell:

Per your discussion with Mr. James Ludlam of this Department and concurrence with myself, we agree to keep the existing catch basin near catch basin #4 in tact.

During a major storm event, Mr. Ludlam observed that this existing catch basin could not receive contaminated run-off from the Mercury Refinery Site. It is this Department's judgement that there is no need to eliminate this catch basin.

Very truly yours,

Robert J. Senior, P.E.
Senior Sanitary Engineer
Technical Support Section
Bureau of Eastern Remedial Action
Division of Solid and Hazardous Waste

302002

APPENDIX G

CONCRETE TESTING RESULTS

302003

CONCRETE FIELD OBSERVATION REPORT



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14127 716-649-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 607-898-5881
 - RARITAN CENTER, 300 McGRAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 635 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refinery Report No. 1

Report No. 1

Client Whiteman, Osterman & Honna Date: 10-22-85

Date: 10-22-85

Contractor: Sevensons Job No. AD-84-33

Job No. AD-84-33

Concrete Supplier: Bonded Concrete Mix No. 4000 Sheet 1 of 1

Mix No. 4000 Sheet 1 of 1

Weather: sunny and cool Air Temperature: A.M. 45 P.M.

Air Temperature: A.M. 45 P.M. _____

General Placement Location: patch over drain 4½ feet from catch basin #1

Set No.	Specimen Type and Number
1	6" x 12" round x3

Cubic Yards Placed: 8 Rejected: 0

Remarks: _____

On-Site Time: _____ Technician: D. Haynes

Technician: D. Haynes

D. Haynes

Copies to:

Respectfully submitted,

EMPIRE SOILS INVESTIGATIONS, INC.

David Cunningham

302004

CONCRETE FIELD OBSERVATION REPORT



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14127 716-649-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 607-898-5881
 - RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 635 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury-Refining Inc. Report No. 2

Report No. 2

Client Conestoga-Rovers Assoc. Ltd. Date: 10-24-85

Date: 10-24-85

Contractor: Sevenson Const. Co. Job No. Ad-84-33

Job No. Ad-84-33

Concrete Supplier: Bonded Concrete Corp. Mix No. _____ Sheet 1 of 1

Mix No. _____ Sheet 1 of 1

Weather: cloudy light rain late Air Temperature: A.M. 33 P.M. 62

General Placement Location: 1) slab on grade between furnace & frame bldg.

Set No.	Specimen Type and Number	Cubic Yards Placed: <u>12</u> Rejected: <u>0</u>
1	6" x 12" round -4-	Remarks: <u>4000 PSI concrete mix with A.E.A.</u> <u>Note: checked 2nd load & loft site</u>

On-Site Time: _____ Technician: P.J. Ford, Jr.

Technician: P.J. Ford, Jr.

Copies to:

Respectfully submitted,
EMPIRE SOILS INVESTIGATIONS, INC.

David Cunningham

302005

CONCRETE FIELD OBSERVATION REPORT



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14217 716-649-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 607-898-5881
 - RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 635 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refining Inc. Report No. 3

Report No. 3

Client Conestoga-Rovers Assoc. Ltd. **Date:** 10-25-85

Date: 10-25-85

Contractor: Sevenson Const. Co. Job No. AD-84-33

Job No. AD-84-33

Concrete Supplier: Bonded Concrete Co. Mix No. - Sheet 1 of 1

Mix No. - Sheet 1 of 1

Weather: clear breezy Air Temperature: A.M. 49 P.M. 62

General Placement Location: 1) slab on grade adjacent to furnace building

Set No.	Specimen Type and Number
1	6" x 12" round -4-

Cubic Yards Placed: 17 Rejected: 0
Remarks: 4000 PSI mix with AEA

On-Site Time: _____ Technician: P.J. Ford, Jr.

Copies to:

Respectfully submitted,
EMPIRE SOILS INVESTIGATIONS, INC.

Daniel Cunningham

302006

CONCRETE FIELD OBSERVATION REPORT



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14127 716-649-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 607-898-5881
 - RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 635 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refining Report No. 4

Report No. 4

Client Conestoga Rovers & Assoc. Date: 11-4-85

Date: 11-4-85

Contractor: Sevenson Const. Job No. AD-84-33

Job No. AD-84-33

Concrete Supplier: Bonded Mix No. _____ Sheet ___ of ____

Mix No. _____ Sheet _____ of _____

Weather: cloudy, cool Air Temperature: A.M. 49° P.M.

ture: A.M. 49° P.M. _____

General Placement Location: floor slab - drum storage area

Page 10 of 10

Set No.	Specimen Type and Number	Cubic Yards Placed:	10	Rejected:	0
1	6" x 12" round -4-	Remarks:			

On-Site Time: _____ Technician: S. Brodell

Technician: S. Brodell

Copies to:

Respectfully submitted,
EMPIRE SOILS INVESTIGATIONS, INC.



302007

CONCRETE FIELD OBSERVATION REPORT



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14127 716-649-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 607-898-5881
 - RARITAN CENTER, 300 McGRAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 635 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refining Report No. 5

Report No. 5

Client Conestoga Rovers & Assoc. Date: 11-5-85

Date: 11-5-85

Contractor: Sevenson Job No. AD-84-33

Job No. AD-84-33

Concrete Supplier: Bonded Mix No. Sheet of

Mix No. _____ Sheet _____ of _____

Weather: cloudy, cool Air Temperature: A.M. _____ P.M. 50°

General Placement Location: east "BREAKOUT - OUT" slab

Set No.	Specimen Type and Number	Cubic Yards Placed:	10	Rejected:	0
1	6" x 12" round -4-				

On-Site Time: _____ Technician: S. Brodell

Technician: S. Brodell

Copies to:

Respectfully submitted,
EMPIRE SOILS INVESTIGATIONS, INC.

[Signature]

302008

CONCRETE FIELD OBSERVATION REPORT



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14217 716-649-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 607-896-5881
 - RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 635 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refinery Report No. 6

Report No. 6

Client Conestoga Rovers Date: 11-8-85

Date: 11-8-85

Contractor: Sevenson Construction Job No. AD-84-33

Job No. AD-84-33

Concrete Supplier: Bonded Concrete Mix No. 4000 Sheet 1 of 1

Mix No. 4000 Sheet 1 of 1

Weather: partly sunny Air Temperature: A.M. 48 P.M.

General Placement Location: floor slab - north east section, ramp area

Set No.	Specimen Type and Number
1	6" x 12" round -4-

Cubic Yards Placed: 18 Rejected: 0

Remarks: _____

On-Site Time: _____ Technician: _____ J. Geiger _____

Technician: J. Geiger

Copies to:

Respectfully submitted,
EMPIRE SOILS INVESTIGATIONS, INC.

302009

CONCRETE FIELD OBSERVATION REPORT

Rec'd CRA
EC 12 1925



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14127 716-649-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 607-898-5881
 - RARITAN CENTER, 300 McGRAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 635 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refinery Report No. 7

Report No. 7

Client _____ Date: 11-6-85

Date: 11-6-85

Contractor: Sevenson Job No. AD-84-33

Job No. AD-84-33

Concrete Supplier: Bonded Mix No. 1 Sheet 1 of 1

Mix No. 1 Sheet 1 of 1

Weather: cool/overcast Air Temperature: A.M. 50 P.M.

General Placement Location: slab - mercury platform (storage)

Set No.	Specimen Type and Number	Cubic Yards Placed: <u>13</u>	Rejected: <u>0</u>
1	6 x 12 -4-	Remarks: <u>total 24 c.y. placed</u>	

On-Site Time: _____ Technician: _____ R. Schongar _____

Technician: R. Schongar

R. Schongar

Copies to:

Respectfully submitted,
EMPIRE SOILS INVESTIGATIONS, INC.

[Signature]

302010

Rec'd CRA

DEC 17 1985

CONCRETE TEST REPORT



585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 5-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14227 716-649-8110
 105 CORONA AVENUE, GROTON, NY 13073 607-898-5881
 RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 635 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: MERCURY REFINERY Report No. 1A
 Client WHITEMAN, OUSTMAN & HONNA Job No. AD-84-33
 Contractor: SEVENSONS Date Molded: 10/22/85

FIELD DATA

Placement Location Patch over Drain

Quantity Placed: N.S. C.Y. Specimens Made By: D. Haynes
 Truck No. 108 Mix No. 4000 Concrete Temp. 69 ° Air Temp. 50 °
 Time Specimens Made: 10:30 Set No. 1 Slump: 4.5 in. Air Content: 5.0 %
 Remarks:

MIX PROPORTION DATA (per cubic yard)

Concrete Supplier: Bonded Concrete Water: _____ gallons
 Cement: Brand: _____ Type: _____ Amount: _____ pounds or _____ bags
 Aggregate: Fine: Source: _____ Amount: _____ lb.
 Coarse: Type: _____ Source: _____ Amount: _____ lb.
 Type: _____ Source: _____ Amount: _____ lb.
 Air Entraining Agent: Brand: _____ Amount: _____ oz.
 Admixture: Brand: _____ Amount: _____ oz.
 Remarks:

COMPRESSIVE STRENGTH DATA

Field Marking	Laboratory Number	Cyl. Wgt.	Date Tested	Age (days)	Compressive Strength (psi)	Report Number
	6313		10/29	7	3640	1
	6314		11/19	28	4460	1A
	6315		11/19	28	4470	1A

Specification Requirement At 28 Days

4000

Respectfully submitted,

Date Received

10/23/85

Remarks
Field Data

- by E.S.I.
 by Contractor
 Transportation
 by E.S.I.
 by Contractor
 Other _____

EMPIRE SOILS INVESTIGATIONS, INC.

Cylinder Size: 6" x 12" unless otherwise noted.
 Tested in accord with A.S.T.M. C-39.

Copies to:

CONCRETE TEST REPORT

Rec'd CRA

DEC 17 1985



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
- S-3858 SHELDON RD., P.O. BOX 228, ORCHARD PARK, NY 14127 716-649-8110
- 105 CORONA AVENUE, GROTON, NY 13073 807-898-5881
- RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
- 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
- 635 JAMES STREET, SYRACUSE, NY 13203 315-472-8333

Project: MERCURY REFINING CO. Report No. 2 A

Client CONESTOGA-ROVERS ASSOC., LTD. Job No. AD-84-33

Contractor SEVENSON CONSTRUCTION CO. Date Molded: 10/24/85

FIELD DATA

Placement Location Slab on grade between furnace & frame buildings

Quantity Placed: N.S. C.Y. Specimens Made By: P.J. FORD, JR.
 Truck No. 7 Mix No. N.S. Concrete Temp. 58 ° Air Temp. N.S.
 Time Specimens Made: 11:15 a.m. Set No. 1 Slump: 4 in. Air Content: 5.1 %
 Remarks:

MIX PROPORTION DATA (per cubic yard)

Concrete Supplier: Bonded Water: _____ gallons
 Cement: Brand: _____ Type: _____ Amount: _____ pounds or _____ bags
 Aggregate: Fine: Source: _____ Amount: _____ lb.
 Coarse: Type: _____ Source: _____ Amount: _____ lb.
 Type: _____ Source: _____ Amount: _____ lb.
 Air Entraining Agent: Brand: _____ Amount: _____ oz.
 Admixture: Brand: _____ Amount: _____ oz.
 Remarks:

COMPRESSIVE STRENGTH DATA

Field Marking	Laboratory Number	Cyl. Wgt.	Date Tested	Age (days)	Compressive Strength (psi)	Report Number
	6405		10/31	7	3310	2
	6406		10/31	7	3010	2
	6407		11/21	28	4030	2A
	6408		11/21	28	3730	2A

Specification Requirement At 28 Days

4000

Respectfully submitted,

Cylinder Size: 6" x 12" unless otherwise noted.
 Tested in accord with A. S. T. M. C-39.

302012

EMPIRE SOILS INVESTIGATIONS, INC.

Copies to:

David Cunningham

Date Received

10/25/85

Remarks
Field Data

- by E.S.I.
- by Contractor
- Transportation
- by E.S.I.
- by Contractor
- Other _____

Date Received

10/25/85

CONCRETE TEST REPORT



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14217 716-649-8110
 105 CORONA AVENUE, GROTON, NY 13073 607-898-5881
 RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 635 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refining Co. Report No. 3A

Client Conestoga-Rovers Assoc. Job No. AD-84-33

Contractor: Sevenson Construction Co. Date Molded: 10/25/85

FIELD DATA

Placement Location Slab on grade adjacent to furnace building

Quantity Placed: 17 C.Y. Specimens Made By: P.J. Ford, Jr.

Truck No. 7 Mix No. N.S. Concrete Temp. 63 ° Air Temp. 60 °

Time Specimens Made: 3:30 p.m. Set No. 1 Slump: 3 3/4 in. Air Content: 4.5 %

Remarks: _____

MIX PROPORTION DATA (per cubic yard)

Concrete Supplier: Bonded Water: _____ gallons

Cement: Brand: _____ Type: _____ Amount: _____ pounds or _____ bags

Aggregate: Fine: Source: _____ Amount: _____ lb.

Coarse: Type: _____ Source: _____ Amount: _____ lb.

Type: _____ Source: _____ Amount: _____ lb.

Air Entraining Agent: Brand: _____ Amount: _____ oz.

Admixture: Brand: _____ Amount: _____ oz.

Remarks: _____

COMPRESSIVE STRENGTH DATA

Field Marking	Laboratory Number	Cyl. Wgt.	Date Tested	Age (days)	Compressive Strength (psi)	Report Number
	6524		11/1	7	3200	3
	6525		11/1	7	3390	3
	6526		11/22	28	4950	3A
	6527		11/22	28	4970	3A

Remarks
Field Data

- by E.S.I.
 by Contractor
 Transportation
 by E.S.I.
 by Contractor
 Other _____

Date Received

10/28/85

Specification Requirement At 28 Days 4000

Respectfully submitted,

Cylinder Size: 6" x 12" unless otherwise noted.
Tested in accord with A.S.T.M. C-39.

302013

EMPIRE SOILS INVESTIGATIONS, INC.

Daniel Cunningham

Copies to:

CONCRETE TEST REPORT

CRA

EMPIRE
SOILS INVESTIGATIONS INC.

- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
- S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14217 716-649-8110
- 105 CORONA AVENUE, GROTON, NY 13073 607-898-5881
- RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
- 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
- 635 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

DEC 27 1985

Project: Mercury Refinery Report No. 4 A B
 Client Conestoga Rovers & Associates Job No. AD-84-33
 Contractor: Sevenson Date Molded: 11/1/85

FIELD DATA

Placement Location Slab
 Quantity Placed: 24 C.Y. Specimens Made By: R. Schongar
 Truck No. N.S. Mix No. N.S. Concrete Temp. N.S. ° Air Temp. 40 °
 Time Specimen's Made: 9:00 a.m. Set No. 1 Slump: 5½ in. Air Content: 5½ %
 Remarks: _____

MIX PROPORTION DATA (per cubic yard)

Concrete Supplier: Bonded Concrete Water: _____ gallons
 Cement: Brand: _____ Type: _____ Amount: _____ pounds or _____ bags
 Aggregate: Fine: Source: _____ Amount: _____ lb.
 Coarse: Type: _____ Source: _____ Amount: _____ lb.
 Type: _____ Source: _____ Amount: _____ lb.
 Air Entraining Agent: Brand: _____ Amount: _____ oz.
 Admixture: Brand: _____ Amount: _____ oz.
 Remarks: _____

COMPRESSIVE STRENGTH DATA

Field Marking	Laboratory Number	Cyl. Wgt.	Date Tested	Age (days)	Compressive Strength (psi)	Report Number
	6737		11/8	7	2620	4
	6738		11/8	7	2600	4
	6739		11/29	28	3240	4A
	6740		12/16	45	3540	4AB

Specification Requirement At 28 Days

4,000

Respectfully submitted,

Cylinder Size: 6" x 12" unless otherwise noted.
 Tested in accord with A. S. T. M. C-39.

302014

EMPIRE SOILS INVESTIGATIONS, INC.

Copies to:

Kirkland C. Walkeran

CONCRETE TEST REPORT



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14217 716-649-8110
 105 CORONA AVENUE, GROTON, NY 13073 607-898-5881
 RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 635 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refinery Report No. 5A

Client Conestoga Rovers & Associates Job No. AD-84-33

Contractor: Sevenson Date Molded: 11/4/85

FIELD DATA

Placement Location Slab

Quantity Placed: N.S. C.Y. Specimens Made By: R. Schongaer

Truck No. N.S. Mix No. N.S. Concrete Temp. N.S. ° Air Temp. 50 °

Time Specimens Made: 10:00 a.m. Set No. 1 Slump: 3.5 in. Air Content: 3.0 %

Remarks: _____

MIX PROPORTION DATA (per cubic yard)

Concrete Supplier: Bonded Concrete Water: _____ gallons

Cement: Brand: _____ Type: _____ Amount: _____ pounds or _____ bags

Aggregate: Fine: Source: _____ Amount: _____ lb.

Coarse: Type: _____ Source: _____ Amount: _____ lb.

Type: _____ Source: _____ Amount: _____ lb.

Air Entraining Agent: Brand: _____ Amount: _____ oz.

Admixture: Brand: _____ Amount: _____ oz.

Remarks: _____

COMPRESSIVE STRENGTH DATA

Field Marking	Laboratory Number	Cyl. Wgt.	Date Tested	Age (days)	Compressive Strength (psi)	Report Number
	6900		11/14	7	3840	5
	6901		11/14	7	4280	5
	6902		12/5	28	5620	5A
	6903		12/5	28	5290	5A

Specification Requirement At 28 Days 4000

Respectfully submitted,

Cylinder Size: 6" x 12" unless otherwise noted.

Tested in accord with A. S. T. M. C-39.

302015

EMPIRE SOILS INVESTIGATIONS, INC.

Copies to:

David T. Cunningham

Date Received

11/9/85

Remarks Field Data

- by E.S.I.
 by Contractor
Transportation
 by E.S.I.
 by Contractor
 Other _____

CONCRETE TEST REPORT



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14217 716-649-8110
 105 CORONA AVENUE, GROTON, NY 13073 607-898-5881
 RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 635 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refinery Report No. 6 A
Client Conestoga Rovers & Associates Job No. AD-84-33
Contractor: Sevenson Date Molded: 11/4/85

FIELD DATA

Placement Location Floor Slab-Drum Storage Area

Quantity Placed: 10 C.Y. Specimens Made By: S. Brodell
Truck No. 8 Mix No. N.S. Concrete Temp. 63 ° Air Temp. 49 °
Time Specimens Made: 10:00 Set No. 1 Slump: 4½ in. Air Content: 5.0 %
Remarks: _____

MIX PROPORTION DATA (per cubic yard)

Concrete Supplier: Bonded Water: _____ gallons
Cement: Brand: _____ Type: _____ Amount: _____ pounds or _____ bags
Aggregate: Fine: Source: _____ Amount: _____ lb.
Coarse: Type: _____ Source: _____ Amount: _____ lb.
Type: _____ Source: _____ Amount: _____ lb.
Air Entraining Agent: Brand: _____ Amount: _____ oz.
Admixture: Brand: _____ Amount: _____ oz.
Remarks: _____

COMPRESSIVE STRENGTH DATA

Field Marking	Laboratory Number	Cyl. Wgt.	Date Tested	Age (days)	Compressive Strength (psi)	Report Number
	6812		11/11	7	2550	6
	6813		11/11	7	2620	6
	6814		12/2	28	3730	6A
	6815		12/2	28	4160	6A

Specification Requirement At 28 Days 4000

Respectfully submitted,

Cylinder Size: 6" x 12" unless otherwise noted.
Tested in accord with A. S. T. M. C-39.

302016

EMPIRE SOILS INVESTIGATIONS, INC.

Copies to:

David Curran

CONCRETE TEST REPORT

EMPIRE SOILS INVESTIGATIONS INC.

- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14127 716-649-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 607-898-5881
 - RARITAN CENTER, 300 McGRAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 635 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refining Report No. 7.A
Client Conestoga Rovers & Associates Job No. AD-84-33
Contractor: Sevenson Date Molded: 11/5/85

FIELD DATA

Placement Location East "Break-Out" slab

Quantity Placed: N.S. C.Y. Specimens Made By: S. Brodell
40 N.S. 60 100 50

Truck No. 40 Mix No. N.S. Concrete Temp. 60 ° Air Temp. 50 °
Time Spent at Mixer 3:30 Set No. 1 Slump 5.5 in. Air Content: 50 %

Time Specimens Made: 9:30 Set No. 1 Slump: 52 in. Air Content: 30 %

MIX PROPORTION DATA (per cubic yard)

Concrete Supplier: Bonded Water: _____ gallons

Cement: Brand: _____ Type: _____ Amount: _____ pounds or _____ bags

Aggregate: Fine: Source: _____ Amount: _____ lb.

Coarse: Type: _____ Source: _____ Amount: _____ lb.

Type: _____ Source: _____ Amount: _____ lb

Air Entraining Agent: Brand: _____ Amount: _____ oz.

Admixture: Brand: _____ Amount: _____ oz.

Remarks: _____

COMPRESSIVE STRENGTH DATA

Field Marking	Laboratory Number	Cyl. Wgt.	Date Tested	Age (days)	Compressive Strength (psi)	Report Number
	6830		11/12	7	2976	7
	6831		11/12	7	3250	7A
	6832		12/3	28	3930	7A
	6833		12/3	28	4580	7A

Remarks
Field Data

- by E.S.I.
 - by Contractor

Transportation

 - by E.S.I.
 - by Contractor
 - Other

Date Received

11/6/85

Cylinder Size: 6" x 12" unless otherwise noted.

4000

EMPIRE SOILS INVESTIGATIONS, INC.

Cylinder Size: 6" x 12" unless otherwise noted.
Tested in accord with A. S. T. M. C-39.

Copies to:

David Cunningham
SOCIETY FOR TESTING & MATERIALS

CONCRETE TEST REPORT



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14217 716-649-8110
 105 CORONA AVENUE, GROTON, NY 13073 607-898-5881
 RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 635 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refinery Report No. 8A

Client Conestoga-Rovers & Associates Job No. AD-84-33

Contractor: Sevenson Date Molded: 11/8/85

FIELD DATA

Placement Location Floor slab North East Section - Ramp area

Quantity Placed: N.S. C.Y. Specimens Made By: J. Geiger

Truck No. 40 Mix No. 1 Concrete Temp. 60 ° Air Temp. 49 °

Time Specimens Made: 9:45 Set No. 1 Slump: 3.0 in. Air Content: 4.6 %

Remarks: _____

MIX PROPORTION DATA (per cubic yard)

Concrete Supplier: Bonded Concrete Water: _____ gallons

Cement: Brand: _____ Type: _____ Amount: _____ pounds or _____ bags

Aggregate: Fine: Source: _____ Amount: _____ lb.

Coarse: Type: _____ Source: _____ Amount: _____ lb.

Type: _____ Source: _____ Amount: _____ lb.

Air Entraining Agent: Brand: _____ Amount: _____ oz.

Admixture: Brand: _____ Amount: _____ oz.

Remarks: _____

COMPRESSIVE STRENGTH DATA

Field Marking	Laboratory Number	Cyl. Wgt.	Date Tested	Age (days)	Compressive Strength (psi)	Report Number	Remarks Field Data
	6943		11/15	7	5700	8	<input checked="" type="checkbox"/> by E.S.I.
	6944		11/15	7	5450	8	<input type="checkbox"/> by Contractor
	6945		12/6	28	7240	8A	<input checked="" type="checkbox"/> Transportation by E.S.I.
	6946		12/6	28	7070	8A	<input type="checkbox"/> by Contractor
Specification Requirement At 28 Days				4000	Respectfully submitted,		<input type="checkbox"/> Other _____

Cylinder Size: 6" x 12" unless otherwise noted.
Tested in accord with A. S. T. M. C-39.

302018

EMPIRE SOILS INVESTIGATIONS, INC.

Copies to:

David T. Cunningham

APPENDIX H

CLAY TESTING RESULTS

- H-1: CLAY BORROW PIT SAMPLES
- H-2: IN-PLACE CLAY SAMPLES
- H-3: SHELBY TUBE CLAY SAMPLE

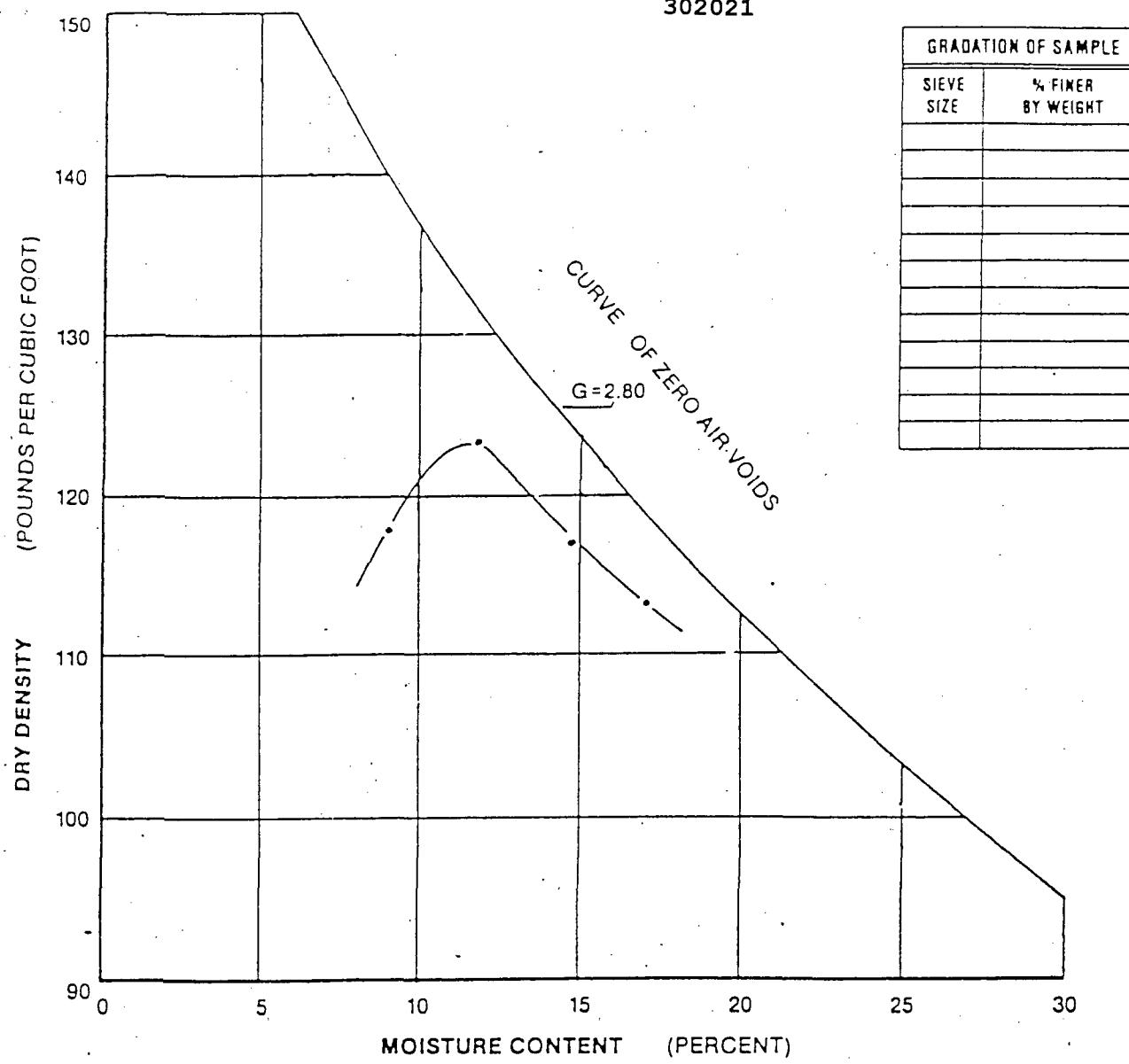
302019

APPENDIX H-1

CLAY BORROW PIT SAMPLES

302020

302021



SAMPLE DESCRIPTION

TEST RESULTS

Material CLAY & SILT, Some Sand, little gravel Maximum Dry Density 123.2 pcf

Color Brown Source On-Site Optimum Water Content 11.8 %

Sampled By client At _____

METHOD OF TEST

STANDARD

METHOD

ASTM D-1557A

AASHTO _____

MILITARY _____

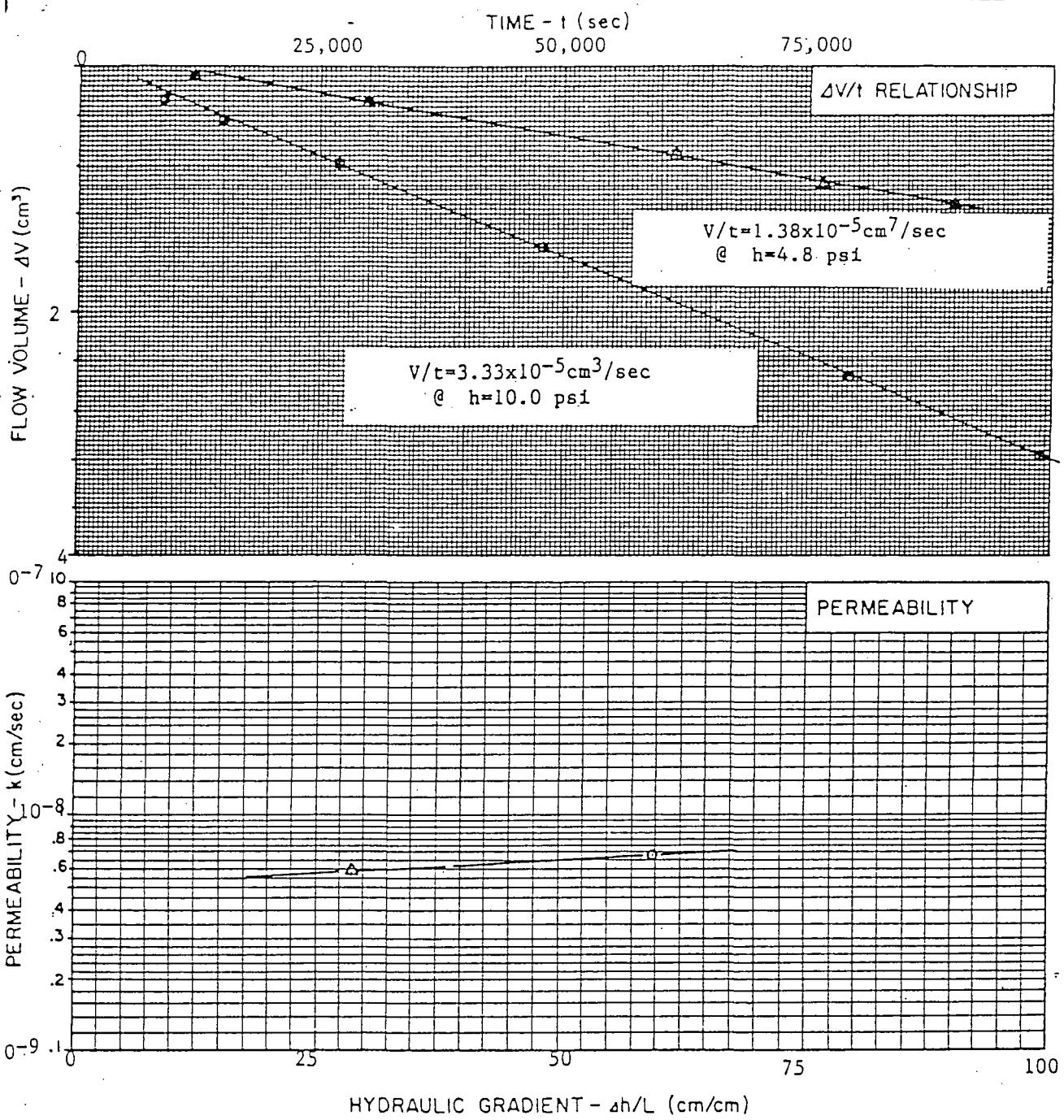
OTHER _____

EMPIRE
SOILS INVESTIGATIONS INC

OPTIMUM MOISTURE—MAXIMUM DENSITY

MERCURY REFINING CO.
Whiteman, Ousterman & Honna

DR. BY	DTC	DATE SAMPLED: 8-85	PROJ. NO. AD-84-33
CK'D BY	TESTED BY	Groton	CURVE NO. 1

**TEST DATA:**

TYPE OF PERMEAMETER	Constant Head, Triaxial	
SPECIMEN HEIGHT (cm)	11.77	
SPECIMEN DIAMETER (cm)	10.18	
DRY UNIT WEIGHT (pcf)	110.7	
MOISTURE CONTENT BEFORE TEST (%)	17.8	
MOISTURE CONTENT AFTER TEST (%)	17.5	
MAXIMUM DRY DENSITY (ASTM D 1557) (pcf)	123.2	
OPTIMUM MOISTURE CONTENT (%)	11.8	
CELL CONFINING PRESSURE (psi)	95.0	95.0
TEST PRESSURE (psi)	89.8	84.8
BACK PRESSURE (psi)	79.8	80.0
DIFFERENTIAL HEAD (psi)	10.0	4.8
PERMEABILITY (cm/sec)	6.86×10^{-9}	5.91×10^{-9}

SAMPLE IDENTIFICATION:

SAMPLE NO. 1

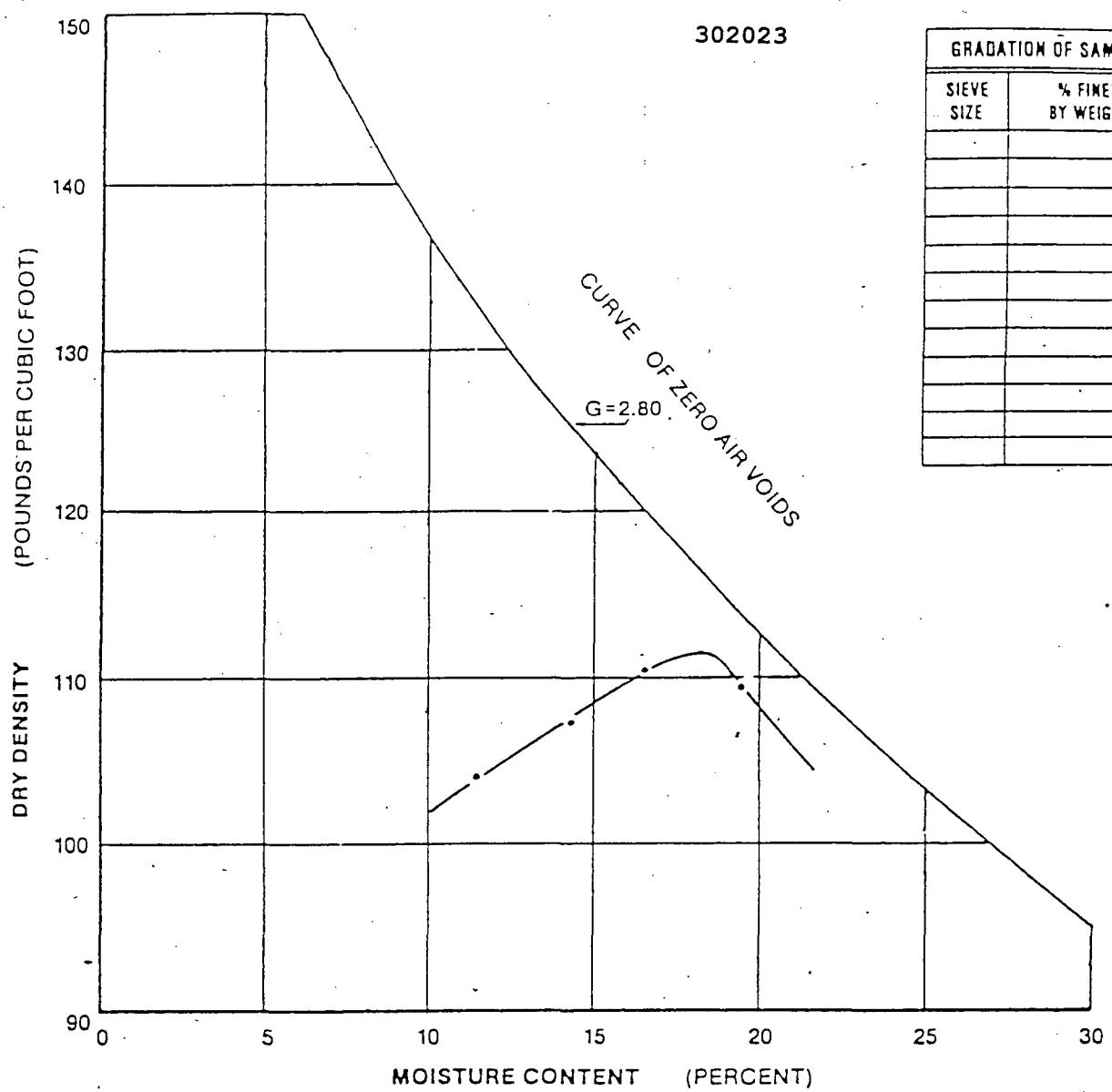
VISUAL DESCRIPTION: Brown CLAY & SILT, Some Sand, little gravel



EMPIRE SOILS INVESTIGATIONS, INC.

PERMEABILITY TEST REPORTMERCURY REFINING CO.
Whitman, Ousterman & Honna

DATE Sept. 1985 PROJ. NO Ad-84-33



SAMPLE DESCRIPTION

Material CLAY, little silt

Maximum Dry Density 111.4 pcf

Color Gray Source On-Site

Optimum Water Content 18.3 %

Sampled By client At Site

TEST RESULTS

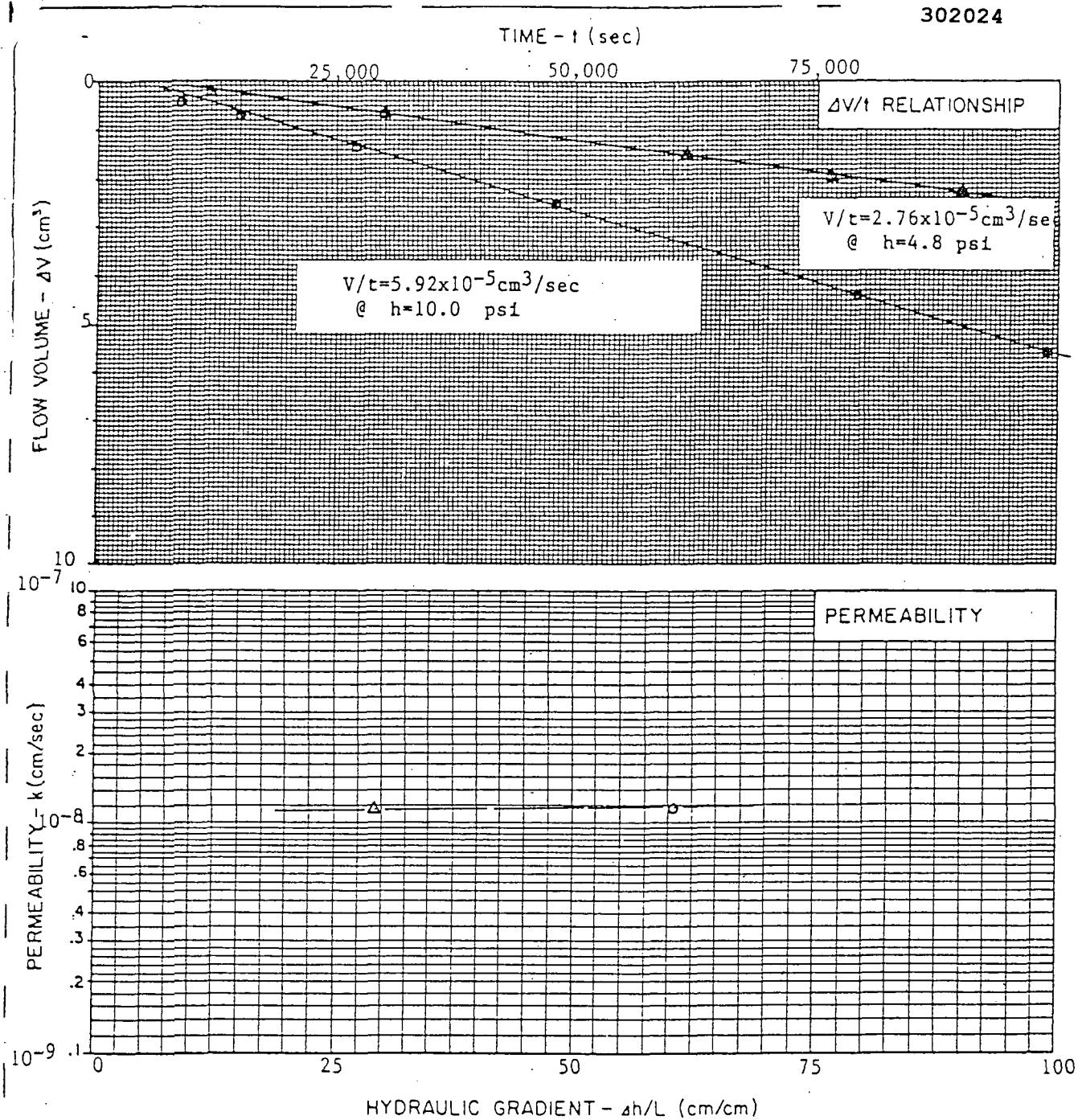
METHOD OF TEST	
STANDARD	METHOD
ASTM _____	_____
AASHTO _____	_____
MILITARY _____	_____
OTHER _____	_____



OPTIMUM MOISTURE—MAXIMUM DENSITY

MERCURY REFINING CO.
Whiteman, Ousterman & Honna

DR. BY	DTC	DATE SAMPLED	8-25-85	PROJ. NO.	AD-84-33
CK'D BY		TESTED BY	Groton	CURVE NO	2



TEST DATA:

TYPE OF PERMEAMETER	Constant Head, Triaxial	
SPECIMEN HEIGHT (cm)	11.56	
SPECIMEN DIAMETER (cm)	10.29	
DRY UNIT WEIGHT (pcf)	101.2	
MOISTURE CONTENT BEFORE TEST (%)	24.3	
MOISTURE CONTENT AFTER TEST (%)	23.3	
MAXIMUM DRY DENSITY (ASTM D 1557) (pcf)	111.4	
OPTIMUM MOISTURE CONTENT (%)	18.3	
CELL CONFINING PRESSURE (psi)	95.0	95.0
TEST PRESSURE (psi)	89.8	84.8
BACK PRESSURE (psi)	79.8	80.0
DIFFERENTIAL HEAD (psi)	10.0	4.8
PERMEABILITY (cm/sec)	1.17×10^{-8}	1.14×10^{-8}

SAMPLE IDENTIFICATION:

SAMPLE NO. 2

VISUAL DESCRIPTION: Gray CLAY, little silt

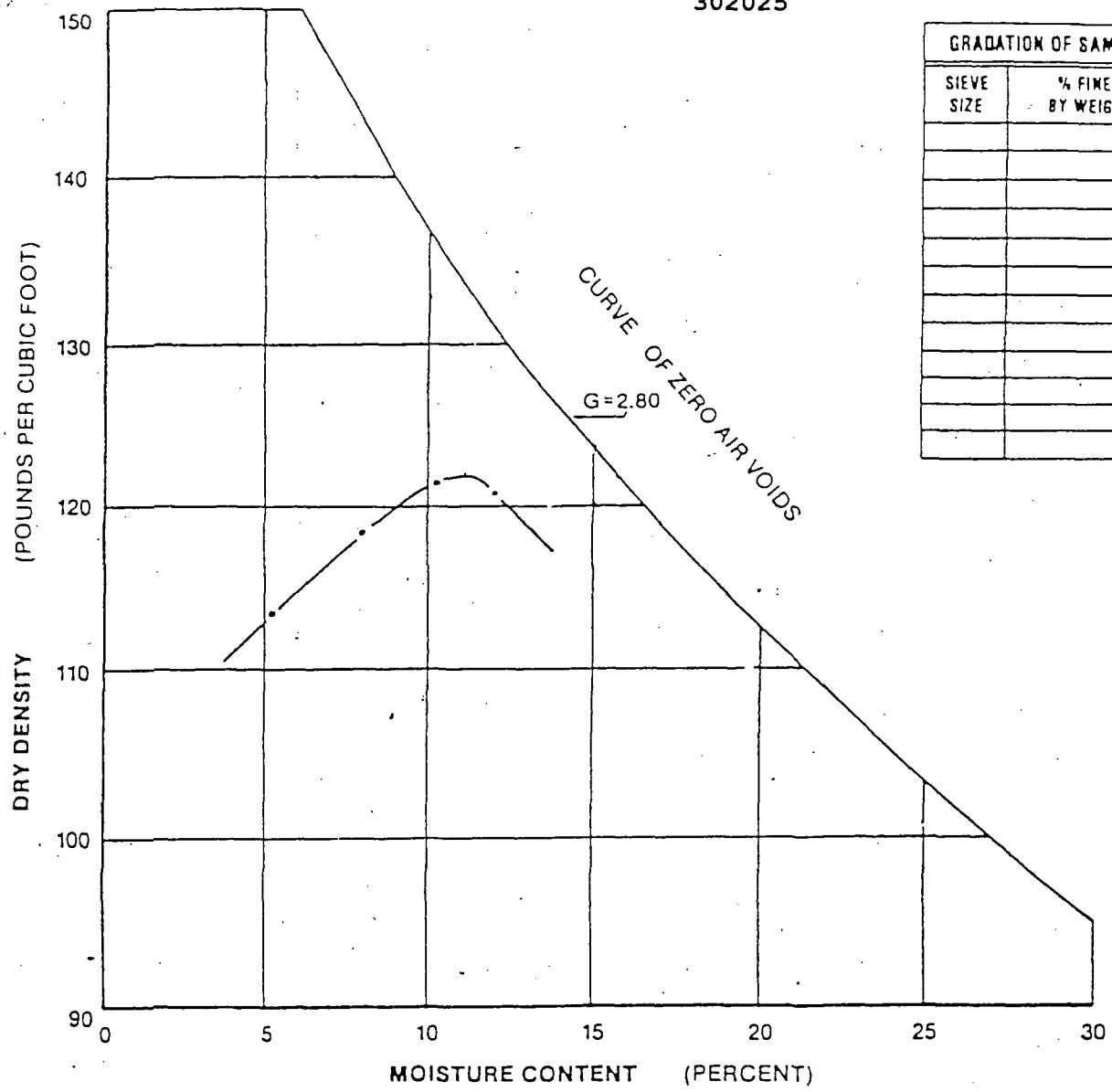


EMPIRE SOILS INVESTIGATIONS, INC.

PERMEABILITY TEST REPORT

MERCURY REFINING CO.
Whiteman, Ousterman & Honna

302025



SAMPLE DESCRIPTION

TEST RESULTS

Material SILT, little sand & clay, trace gravel Maximum Dry Density 122.0pcf

Color Brown Source On-Site Optimum Water Content 11.0 %

Sampled By client At _____.

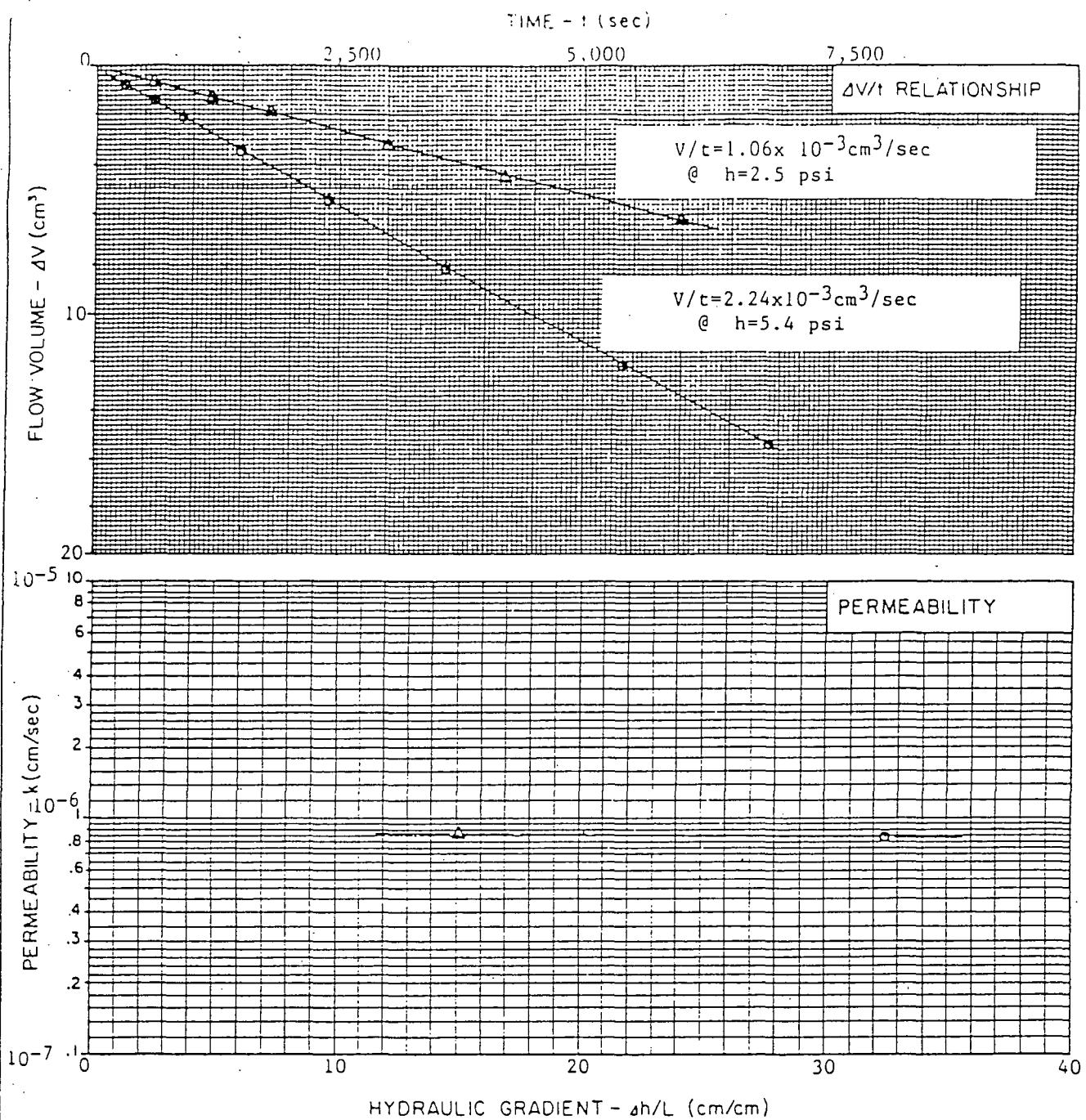
METHOD OF TEST	
STANDARD	METHOD
ASTM D-1557	A
AASHTO	
MILITARY	
OTHER	



OPTIMUM MOISTURE—MAXIMUM DENSITY

MERCURY REFINING CO.
Whiteman, Ousterman, & Honna

DR BY	DTC	DATE SAMPLED	8-85	PROJ. NO.	AD-84-33
CK'D BY		TESTED BY	Groton	CURVE NO	3



TEST DATA:		
TYPE OF PERMEAMETER	Constant Head, Triaxial	
SPECIMEN HEIGHT (cm)	11.67	
SPECIMEN DIAMETER (cm)	10.17	
DRY UNIT WEIGHT (pcf)	111.8	
MOISTURE CONTENT BEFORE TEST (%)	14.9	
MOISTURE CONTENT AFTER TEST (%)	17.2	
MAXIMUM DRY DENSITY (ASTM D 1557) (pcf)	122.0	
OPTIMUM MOISTURE CONTENT (%):	11.0	
CELL CONFINING PRESSURE (psi)	95.0	95.0
TEST PRESSURE (psi)	85.2	82.5
BACK PRESSURE (psi)	79.8	80.0
DIFFERENTIAL HEAD (psi)	5.4	2.5
PERMEABILITY (cm/sec)	8.47×10^{-7}	8.63×10^{-7}

SAMPLE IDENTIFICATION:

SAMPLE NO. 3

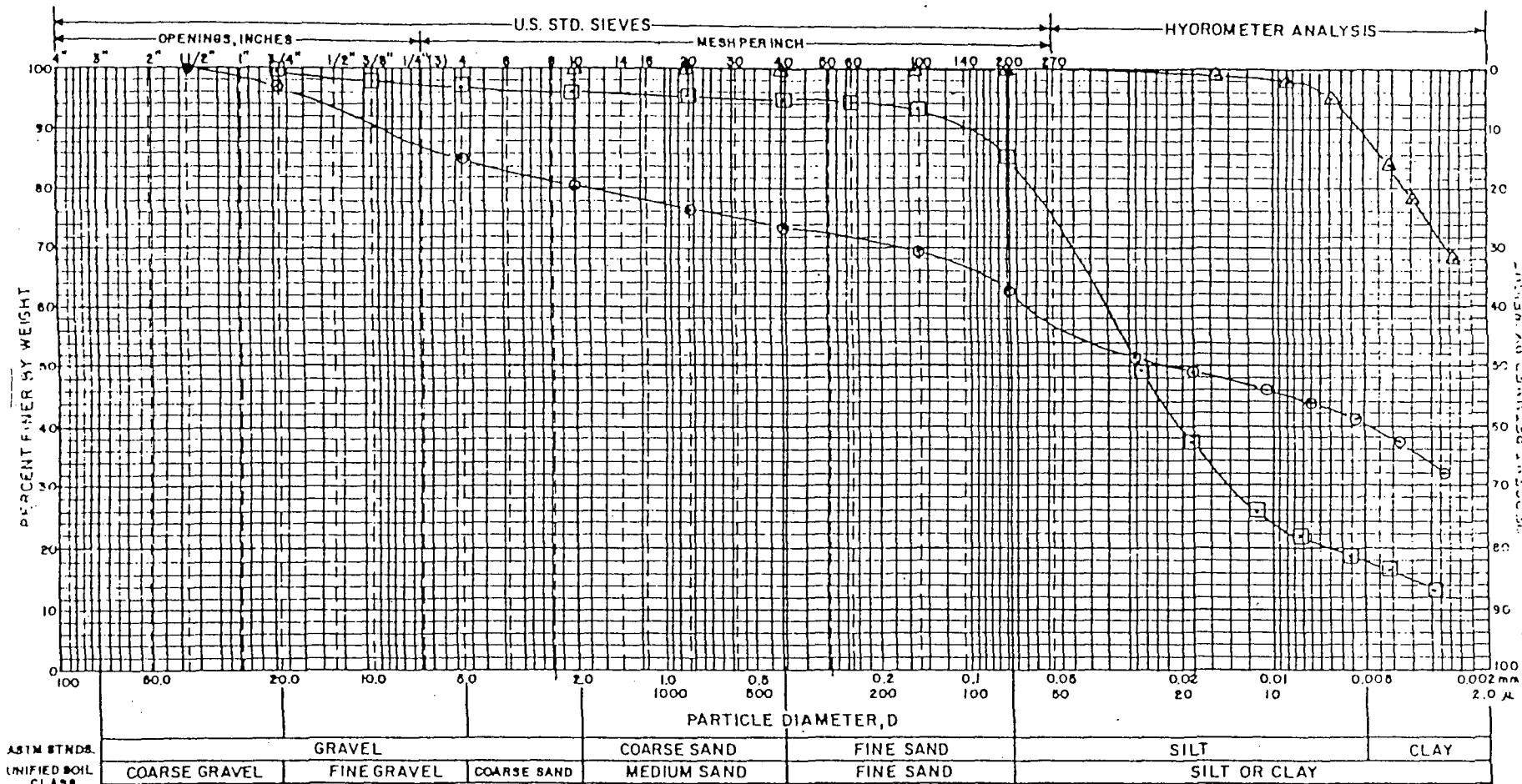
VISUAL DESCRIPTION: Brown SILT,
little sand & clay, trace gravel

EMPIRE SOILS INVESTIGATIONS, INC.

PERMEABILITY TEST REPORT

MERCURY REFINING CO.
Whiteman, Ousterman & Honna

GRAIN SIZE DISTRIBUTION CURVE



APPENDIX H-2

IN-PLACE CLAY SAMPLES

302028

FIELD IN-PLACE DENSITY TEST REPORT



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14217 716-849-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 807-898-5881
 - RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1184 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 835 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refining Report No. 5

Report No. 5

Client Conestoga-Rovers & Associates **Date:** 10/14/85

Date: 10/14/85

Contractor: Sevenson Construction Job No. AD-84-33

Job No. AD-84-33

Proctor Code	Maximum Density (pcf)	Optimum Moisture (%)	Material Type and Source
1	107.4	14.0	Brown fine medium sand; on-site
3	111.4	18.3	Gray clay; Troy Sand & Gravel; little silt
4	134.0	8.0	Gray-brown; sand & gravel; Troy Sand & Gravel

Respectfully submitted,

Remarks: F.G.=Finish grade, for clay only 91%

EMPIRE SOILS INVESTIGATIONS, INC.

needed to reach desired permeability

Technician Time: _____

Technician: S. Brodell

David Cunningham

FIELD IN-PLACE DENSITY TEST REPORT

302030



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14127 716-649-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 807-898-5881
 - RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 835 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

Project: Mercury Refining Report No. 6

Report No. 6

Client Whiteman, Ousterman & Honna Date: 10/17/85

Date: 10/17/85

Contractor: Sevenson Containment Co. Job No. AD-84-33

Job No. AD-84-33

Respectfully submitted,

Remarks: F.G.=finish grade

EMPIRE SOILS INVESTIGATIONS, INC.

*only 91% compaction needed to get reg. Permeability

Technician Time: _____

Technician: S. Brodell

David Cunningham

FIELD IN-PLACE DENSITY TEST REPORT



- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 228, ORCHARD PARK, NY 14127 716-649-8110
 - 105 CORONA AVENUE, GROTON, NY 13073 607-898-5881
 - RARITAN CENTER, 300 McGAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1164 RIDGE RD. EAST, ROCHESTER, NY 14821 716-342-5320
 - 835 JAMES STREET, SYRACUSE, NY 13203 315-472-0333

Project: Mercury Refining Report No. 7

Report No. 7

Client Conestoga-Rovers & Associates Date: 10/18/85

Date: 10/18/85

Contractor: Sevenon Construction Corp. Job No. AD-84-33

Job No. AD-84-33

Respectfully submitted,

Remarks: * 6" higher than drainage line
baseline.

EMPIRE SOILS INVESTIGATIONS, INC.

Technician Time: _____

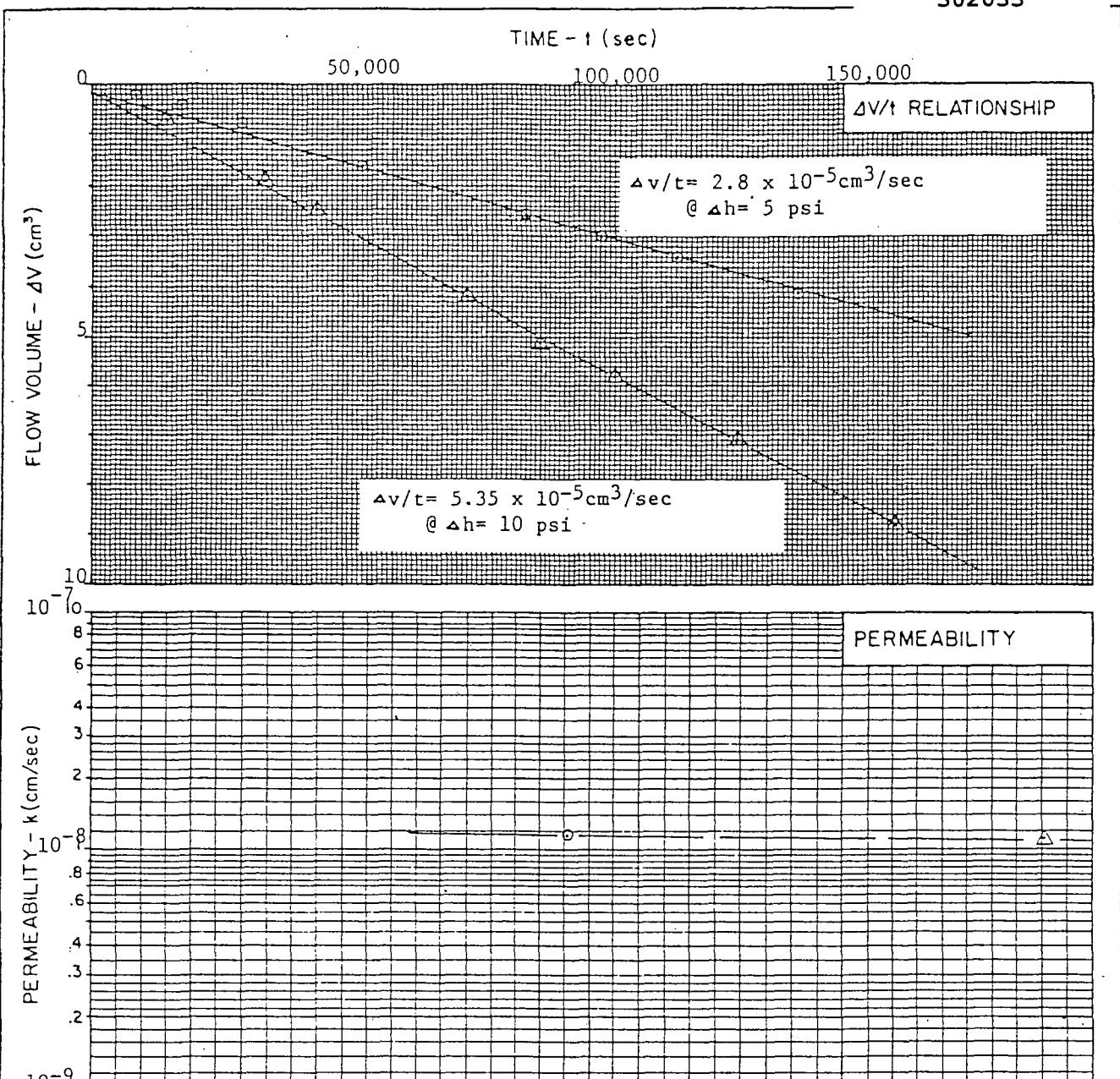
Technician: S. Brodell

David Cunningham

APPENDIX H-3

SHELBY TUBE CLAY SAMPLE

302032



TEST DATA:	
TYPE OF PERMEAMETER	Constant Head, Triaxial
SPECIMEN HEIGHT (cm)	7.37
SPECIMEN DIAMETER (cm)	7.26
DRY UNIT WEIGHT (pcf)	115.4
MOISTURE CONTENT BEFORE TEST (%)	16.1
MOISTURE CONTENT AFTER TEST (%)	15.4
MAXIMUM DRY DENSITY (ASTM D) (pcf)	
OPTIMUM MOISTURE CONTENT (%)	
CELL CONFINING PRESSURE (psi)	95 95
TEST PRESSURE (psi)	85 90
BACK PRESSURE (psi)	80 80
DIFFERENTIAL HEAD (psi)	5 10
PERMEABILITY (cm/sec)	1.42×10^{-8} 1.36×10^{-8}

SAMPLE IDENTIFICATION: ST-3, STA 2+33,
5 LT

VISUAL DESCRIPTION: Grey Silt & Clay,
Some Gravel, trace organic



EMPIRE SOILS INVESTIGATIONS, INC.

PERMEABILITY TEST REPORT

Cap Material
Mercury Refining

APPENDIX I

STRATIGRAPHIC AND INSTRUMENTATION LOGS

302034

STRATIGRAPHIC AND INSTRUMENTATION LOG

PROJECT NAME: MERCURY REFINING COMPANY, INC. JOB NO: 9-1111 HOLE NO: OW1-85
 CLIENT: WHITEMAN, OSTFERMAN & HANNA DATE COMPLETED: OCTOBER 25, 1985
 HOLE TYPE: HOLLOW STEM AUGER LOCATION: SOUTHWEST CORNER OF SITE
 GEOLOGIST/ENGINEER: D. BLACK GROUND ELEVATION: * 224.25 TOP OF PIPE ELEVATION: * 226.96

DEPTH (ELEVATION)	PROFILE STRATIGRAPHY DESCRIPTION & REMARKS	MONITOR INSTALLATION	SAMPLE		PENETRATION TEST BLOWS / FOOT
			NUMBER	TYPE	
0	Brown fine SAND - some medium sand, some silt (FILL) Dry	229.29 Protective casing	1	SS	7
		226.96			9
		224.25	2	SS	29
	Brown fine to medium SAND - some silt, some fine gravel (FILL) Dry	6" Ø borehole			44
5	Brown medium SAND - some fine sand, some silt (FILL) Dry	Well pipe	3	SS	13
		Cement/bentonite grout			17
		6.0'	4	SS	16
		Bentonite seal 8.0'	5	SS	7
		Sand pack	6	SS	4
			7	SS	3
10	Brown SILT - some fine sand (NATIVE) Wet				11
					5
	Brown-gray SILT - some fine sand Wet	14.0'	8	SS	6
15	Gray SILT - some fine sand Wet	Well screen	9	SS	4
	Gray-brown SILT - some fine sand Wet				12
			10	SS	6
20	Brown fine SAND - some silt Wet	19.0'			13
	NOTE: "Quick sand" filled inside of augers from bottom to 15.0' after taking sample #10. Flushed augers with 3" diameter tricone.	20.0'			
	Well Pipe: 2" dia. PVC pipe Well Screen: 2" dia. PVC, #10 slot, 5' length				

* REFER TO "WATER ELEVATIONS" TABLE FOR CURRENT REFERENCE ELEVATIONS
 ▼ WATER FOUND ▽ STATIC WATER LEVEL 37 GRAIN SIZE ANALYSIS

302035

STRATIGRAPHIC AND INSTRUMENTATION LOG

PROJECT NAME: MERCURY REFINING COMPANY, INC. JOB NO: 9-1111 HOLE NO: OW2-85
 CLIENT: WHITEMAN, OSTERMAN & HANNA DATE COMPLETED: OCTOBER 28, 1985
 HOLE TYPE: HOLLOW STEM AUGER LOCATION: SOUTH CENTRAL AREA OF SITE
 GEOLOGIST / ENGINEER: W. CLARKE GROUND ELEVATION: * 228.08 TOP OF PIPE ELEVATION: * 230.69

DEPTH (ELEVATION)	PROFILE STRATIGRAPHY DESCRIPTION & REMARKS	MONITOR INSTALLATION	SAMPLE		PENETRATION TEST BLOWS / FOOT
			NUMBER	TYPE	
		230.82 Protective casing			20 40 60 80
0	Brown fine to medium SAND - some silt, trace clay (FILL)	230.69	1	SS	9
	Brown fine to medium SAND - some silt, some coarse sand, some fine gravel, trace clay (FILL)	228.98			7
5	Brown to dark brown medium SAND - some fine and coarse sand, some silt (FILL)	Well pipe	2	SS	15
	Brown fine to medium SAND - some coarse sand, well sorted (NATIVE)	Cement/bentonite grout	3	SS	23
	No recovery	8.0' Bentonite seal	4	SS	8
10	Brown SILT - some fine sand, thixotropic	10.0'	5	SS	9
	Brown-gray SILT - some fine sand, changing to brown for bottom 4"	Sand pack	6	SS	7
15	Brown SILT - some fine sand	14.5'	7	SS	2
		Well screen	8	SS	5
20	NOTE: Well Pipe: 2" dia. PVC pipe Well Screen: 2" dia. PVC, #10 slot, 5' length	19.5' 20.0'	9	SS	9
			10	SS	WOR

* REFER TO "WATER ELEVATIONS" TABLE FOR CURRENT REFERENCE ELEVATIONS
 ▼ WATER FOUND ▽ STATIC WATER LEVEL 37 GRAIN SIZE ANALYSIS

302036

STRATIGRAPHIC AND INSTRUMENTATION LOG

PROJECT NAME: MERCURY REFINING COMPANY, INC. JOB NO.: 9-1111 HOLE NO.: 0W3-85
 CLIENT: WHITEMAN, OSTERMAN & HANNA DATE COMPLETED: OCTOBER 28, 1985
 HOLE TYPE: HOLLOW STEM AUGER LOCATION: SOUTHEAST CORNER OF SITE
 GEOLOGIST / ENGINEER: W. CLARKE GROUND ELEVATION: * 230.95 TOP OF PIPE ELEVATION: * 232.77

DEPTH (ELEVATION)	PROFILE STRATIGRAPHY DESCRIPTION & REMARKS	MONITOR INSTALLATION		SAMPLE		PENETRATION TEST BLOWS / FOOT
		NUMBER	TYPE	BLOWS / FOOT	20 40 60 80	
0	Brown fine SAND - some medium sand, moist some silt (FILL)	232.91	Protective casing	4	*	
	Mottled brown & dark brown medium SAND - some fine & coarse sand, some silt, some glass, some wood (FILL)	232.77		15		
5	Mottled dark brown & dark gray medium SAND - some cinders, some brick (FILL)	230.95	6" Ø bore- hole	19		
			Well pipe	11		
10	Dark gray CINDERS - some fine sand (FILL) moist		Cement/ benton- ite grout	5		
			4	7		
15	Gray-brown SILT - some fine sand, water reported at 12.0' (NATIVE)		5	8		
			6	7		
20			9.5'	6		
			Benton- ite seal	3		
			12.0'	7		
			Sand pack	5		
			16.5'	8		
			Well screen	3		
			21.5' 22.0'	9		
				10		
				11		
				10		
NOTE: Well Pipe: 2" dia. PVC Well Screen: 2" dia. PVC, #10 slot, 5' length						

* REFER TO "WATER ELEVATIONS" TABLE FOR CURRENT REFERENCE ELEVATIONS
 ▼ WATER FOUND ▽ STATIC WATER LEVEL (37) GRAIN SIZE ANALYSIS

302037

STRATIGRAPHIC AND INSTRUMENTATION LOG

PROJECT NAME: MERCURY REFINING COMPANY, INC. JOB NO: 9-1111 HOLE NO: OW4-85
 CLIENT: WHITEMAN, OSTERMAN & HANNA DATE COMPLETED: OCTOBER 20, 1985
 HOLE TYPE: HOLLOW STEM AUGER LOCATION: NORTHEAST CORNER OF SITE
 GEOLOGIST/ENGINEER: W. CLARKE GROUND ELEVATION: * 234.05 TOP OF PIPE ELEVATION: * 233.88

DEPTH (ELEVATION)	PROFILE STRATIGRAPHY DESCRIPTION & REMARKS	MONITOR INSTALLATION	SAMPLE		PENETRATION TEST BLOWS / FOOT			
			NUMBER	TYPE	BLOWS / FOOT	20	40	60
0	ASPHALT - augered through Dark brown & brown medium SAND Dry-moist - some fine & coarse sand, some fine gravel (FILL) Void 2.0'-2.9'	Protective casing 234.05 234.00 233.88 6" Ø bore-hole	1	SS	3	•		
5	Brown medium SAND - some fine & Dry-moist coarse sand, well sorted (NATIVE) Augered through at 9.0-10.0'	Well pipe Cement/bentonite grout 8.0' Bentonite Seal 10.0' Sand pack	2	SS	4	•		
10	Dark gray medium SAND - some fine & Wet coarse sand, trace silt		3	SS	11	•		
15	Brown-gray medium SAND - some fine & Saturated coarse sand, trace vegetation (rootlets) Dark brown PEAT Wet Gray SILT - some clay Wet Dark gray medium SAND - some fine & Saturated coarse sand Blue-gray SILT - some clay, vegetation Wet (wooden stems)	15.0' Well screen	4	SS	9	•		
20	Brown-gray SILT - some fine sand, Saturated trace clay	20.0'	5	SS	7	•		
	NOTE: Well Pipe: 2" dia. PVC Well Screen: 2" dia. PVC, #10 slot, 5' length		6	SS	5	•		
			7	SS	3	•		
			8	SS	12	•		
			9	SS	9	•		
					18	•		
					11	•		
					16	•		

* REFER TO "WATER ELEVATIONS" TABLE FOR CURRENT REFERENCE ELEVATIONS
 ▼ WATER FOUND ▽ STATIC WATER LEVEL (37) GRAIN SIZE ANALYSIS

302038

APPENDIX J

SUMMARY OF AIR MONITORING RESULTS

302039



March 10, 1986

Conestoga-Rovers & Associates Ltd.
651 Colby Drive
Waterloo, Ontario, Canada N2V 1C2

Subject: Safety Report for Mercury Refining

All Sevenson Construction Corporation personnel received a two (2) hour refresher training session prior to onsite work. This session covered the chemical health hazards, physical health hazards and personal respiratory equipment and usage. All personnel were assigned individual respirator and fit tested.

All personnel involved in the excavation of the PCB's and mercury contaminated material wore the following safety equipment:

1. TYVEK coveralls suit
2. MSA half face respirator with mercury vapor cartridges
3. Nitrile outergloves
4. Latex disposable innergloves
5. Overboots, chemical resistant
6. Hard hat
7. Safety glasses
8. Taped between suit and boots and suit and gloves

Sevenson Construction Corporation used three instruments on the Mercury Refining Project to monitor the ambient air during the excavation of PCB and mercury contaminated soils. The instruments are listed below:

1. BachArack MV-2 mercury vapor detector
2. HNU Systems PI-101 photo-ionizer
3. SIBATA P-5 dust indicator

The instruments were used to monitor the ambient air of the excavated material, breathing zone, and perimeter of the site. The readings from these instruments during the excavation of hazardous waste are listed on the following page:

302040

S

<u>Instrument</u>	<u>Location</u>	<u>Readings</u>
MV-2	Excavated Material	0.01 - 0.9 ppm
	Breathing Zone	0.0 - 0.09 ppm
	Perimeter of site	0.0 - 0.05 ppm
HNU PI-101	Excavated Material	BKGR - 1.6 ppm
	Breathing Zone	BKGR - 0.6 ppm
	Perimeter of site	BKGR - 0.4 ppm
P-5	Perimeter of site	0.009 - 0.031mg/m ³

Very truly yours,

SEVENSON CONSTRUCTION CORP.

Dana A. Tipton

Dana A. Tipton
Safety Officer

DRT/bh

cc: File

302041

APPENDIX K

MEDICAL SURVEILLANCE

302042

niagara falls memorial medical center

621 Tenth Street Niagara Falls, New York 14302 (716) 278-4311

INT NUMBER	PATIENT'S NAME, ADDRESS	SERVICE DATE	PHYSICIAN
1_748-012	TIPTON DANA 310 BRAMPTON RD YOUNGSTOWN NY 14174	A 08/08/85	COMERFORD, THOMAS

FINANCIALLY RESPONSIBLE PERSON'S NAME, ADDRESS

SEVENSON CONSTRUCTION 2749 LOCKPORT RD NIAGARA FALLS NY 14305

DATE	DESCRIPTION OF SERVICES	CHARGES	CREDIT OR PAYMENT
8 08 85	SEVENSON CAT 2 PAN 8	36.00	
8 08 85	PROTHROMBIN TIME		
8 08 85	APTT		
8 08 85	R/PLATELET COUNT		
8 08 85	SEVENSON CAT3 PAN 3	321.25	
8 08 85	PHYSICAL EXAMINATION		
8 08 85	EKG WITH INTERPRETATE		
8 08 85	PUL FUNCTION SCREEN		
8 08 85	R DIAG 811		
8 08 85	R AMYLASE SERUM		
8 08 85	R LIPASE SERUM		
8 08 85	R HEAVY METALS SCREEN		
8 08 85	R CHOLINESTERASE PSEUD		
8 08 85	METHOGLOBIN		

Professional anesthesia services provided in the Medical Center will be billed for by the physician.

ACCOUNT BALANCE

357.25

302043

niagara falls memorial medical center

621 Tenth Street Niagara Falls, New York 14302 (716) 278-4311

WT NUMBER	PATIENT'S NAME, ADDRESS	SERVICE DATE	PHYSICIAN
633-013	LEONE DANIEL 5420 VANDERBILT AVE NIAGARA FALLS NY 14305	J 08/08/85	COMERFORD, THOMAS

FINANCIALLY RESPONSIBLE PERSON'S NAME, ADDRESS
EVENSON CONSTRUCTION 2749 LOCKPCRT RD NIAGARA FALLS NY 14305

ATE	DESCRIPTION OF SERVICES	CHARGES	CREDIT OR PAYMENT
8 08 85	SEVENSON CAT 3 PANEL 1	364.25	
8 08 85	PHYSICAL EXAMINATION		
8 08 85	EKG WITH INTERPRETATE		
8 08 85	PUL FUNCTION SCREEN		
8 08 85	XRAY CHEST TWO VIEWS		
8 08 85	R DIAG 811		
8 08 85	R AMYLASE SERUM		
8 08 85	R LIPASE SERUM		
8 08 85	R HEAVY METALS SCREEN		
8 08 85	R CHOLINESTERASE PSEUD		
8 08 85	METHOGLOBIN		

Professional anesthesia services provided in the Medical Center will be billed for by the physician.

ACCOUNT BALANCE	364.25
-----------------	--------

302044

niagara falls memorial medical center

621 Tenth Street Niagara Falls, New York 14302 (716) 278-4311

T NUMBER	PATIENT'S NAME, ADDRESS	SERVICE DATE	PHYSICIAN
558-008	VENTRY ERNEST 540 CHURCH STREET YOUNGSTOWN NY 14174	P 08/14/85	DYSTER, MELVIN

FINANCIALLY RESPONSIBLE PERSON'S NAME, ADDRESS

SEVENSON CONSTRUCTION 2749 LOCKPORT RD NIAGARA FALLS NY 14305

DATE	DESCRIPTION OF SERVICES	CHARGES	CREDIT OR PAYMENT
3 14 85	SEVENSON CAT 3 PANEL 1	364.25	
3 14 85	PHYSICAL EXAMINATION		
3 14 85	EKG WITH INTERPRETATE		
3 14 85	PUL FUNCTION SCREEN		
3 14 85	XRAY CHEST TWO VIEWS		
3 14 85	R DIAG 811		
3 14 85	R AMYLASE SERUM		
3 14 85	R LIPASE SERUM		
3 14 85	R HEAVY METALS SCREEN		
3 14 85	R CHOLINESTERASE PSEUD		
3 14 85	METHOGLOBIN		

Professional anesthesia services provided in the Medical Center will be billed for by the physician.

ACCOUNT BALANCE	364.25
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302045

ALL RECORDS LOCATED IN FILE #

niagara falls memorial medical center

621 Tenth Street Niagara Falls, New York 14302 (716) 278-4311

PATIENT NUMBER	PATIENT'S NAME, ADDRESS	SERVICE DATE	PHYSICIAN
848-006	SPATORICO SALVATORE 307 1/2 9TH STREET NIAGARA FALLS NY 14303	8 08/14/85	COMERFORD, THOMAS

FINANCIALLY RESPONSIBLE PERSON'S NAME, ADDRESS
 SEVENSON CONSTRUCTION 2749 LOCKPORT ROAD NIAGARA FALLS NY 14305

DATE	DESCRIPTION OF SERVICES	CHARGES	CREDIT OR PAYMENT
8 14 85	SEVENSON CAT 3 PANEL 1	364.25	
8 14 85	PHYSICAL EXAMINATION		
8 14 85	EKG WITH INTERPRETATE		
8 14 85	PUL FUNCTION SCREEN		
8 14 85	XRAY CHEST TWO VIEWS		
8 14 85	R DIAG 811		
8 14 85	R AMYLASE SERUM		
8 14 85	R LIPASE SERUM		
8 14 85	R HEAVY METALS SCREEN		
8 14 85	R CHOLINESTERASE PSEUD		
8 14 85	METHOGLOBIN		

Professional anesthesia services provided in the Medical Center will be billed for by the physician.

ACCOUNT BALANCE	364.25
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302046

niagara falls memorial medical center

621 Tenth Street Niagara Falls, New York 14302 (716) 278-4311

ST NUMBER	PATIENT'S NAME, ADDRESS		SERVICE DATE	PHYSICIAN
266-005	MAYES BRUCE 9611 SAUNDERS SETLMNT RD NIAGARA FALLS	E	08/14/85	DYSTER, MELVIN

FINANCIALLY RESPONSIBLE PERSON'S NAME, ADDRESS
SEVENSON CONSTRUCT 2749 LOCKPCRT RD NIAGARA FALLS NY 14305

ATE	DESCRIPTION OF SERVICES	CHARGES	CREDIT OR PAYMENTS
3 14 85	SEVENSON CAT 3 PANEL 1	364.25	
3 14 85	PHYSICAL EXAMINATION		
3 14 85	EKG WITH INTERPRETATE		
3 14 85	PUL FUNCTION SCREEN		
3 14 85	XRAY CHEST TWO VIEWS		
3 14 85	R DIAG 811		
3 14 85	R AMYLASE SERUM		
3 14 85	R LIPASE SERUM		
3 14 85	R HEAVY METALS SCREEN		
3 14 85	R CHOLINESTERASE PSEUD		
3 14 85	METHOGLOBIN		

Professional anesthesia services provided in the Medical Center will be billed for by the physician.

ACCOUNT BALANCE	364.25
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302047

niagara falls memorial medical center

621 Tenth Street Niagara Falls, New York 14302 (716) 278-4311

PATIENT'S NAME, ADDRESS	SERVICE DATE	PHYSICIAN
249-007 LAMORTICELLA ALBERT 6113 KIES AVE NIAGARA FALLS	08/14/85	DYSTER, MELVIN

FINANCIALLY RESPONSIBLE PERSON'S NAME, ADDRESS
EVENSON CONSTRUCT 2749 LOCKPORT RD NIAGARA FALLS NY 14305

DATE	DESCRIPTION OF SERVICES	CHARGES	CREDIT OR PAYMENT
3 14 85	SEVENSON CAT 3 PANEL 1	364.25	
3 14 85	PHYSICAL EXAMINATION		
3 14 85	EKG WITH INTERPRETATE		
3 14 85	PUL FUNCTION SCREEN		
3 14 85	XRAY CHEST TWO VIEWS		
3 14 85	R DIAG 811		
3 14 85	R AMYLASE SERUM		
3 14 85	R LIPASE SERUM		
3 14 85	R HEAVY METALS SCREEN		
3 14 85	R CHOLINESTERASE PSEUD		
3 14 85	METHOGLOBIN		

Professional anesthesia services provided in the Medical Center will be billed for by the physician.

ACCOUNT BALANCE 364.25

302048

niagara falls memorial medical center

621 Tenth Street Niagara Falls, New York 14302 (716) 278-4311

PATIENT'S NAME, ADDRESS	SERVICE DATE	PHYSICIAN
MAYES KENNETH A 13 B ST NIAGARA FALLS NY 14303	08/20/85	COMERFORD, THOMAS

FINANCIALLY RESPONSIBLE PERSON'S NAME, ADDRESS

VENSON CUNST 2749 LOCKPORT RD NIAGARA FALLS NY 14305

DATE	DESCRIPTION OF SERVICES	CHARGES	CREDIT OR PAYMENT
20 85	SEVENSON CAT 3 PANEL 1		
20 85	PHYSICAL EXAMINATION	364.25	
20 85	EKG WITH INTERPRETATE		
20 85	PUL FUNCTION SCREEN		
20 85	XRAY CHEST TWO VIEWS		
20 85	R DIAG 811		
20 85	R AMYLASE SERUM		
20 85	R LIPASE SERUM		
20 85	R HEAVY METALS SCREEN		
20 85	R CHOLINESTERASE PSEUD		
20 85	METHOGLOBIN		

Professional anesthesia services provided in the Medical Center will be billed for by the physician.

ACCOUNT BALANCE	364.25
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302049

niagara falls memorial medical center

621 Tenth Street Niagara Falls, New York 14302 (716) 278-4311

PATIENT NUMBER	PATIENT'S NAME, ADDRESS	SERVICE DATE	PHYSICIAN
249-008	LAMURTELLA ALBERT 6113 KIES AVE NIAGARA FALLS	08/23/85	CUMERFORD, THOMAS

FINANCIALLY RESPONSIBLE PERSON'S NAME, ADDRESS
 VENSON CONSTRUCT 2749 LOCKPORT RD NIAGARA FALLS NY 14305

DATE	DESCRIPTION OF SERVICES	CHARGES	CREDIT OR PAYMENT
23 85	SEVENSON CAT 2 PAN 10	15.00	
23 85	R/T GLYCEKIDES		

Professional anesthesia services provided in the Medical Center will be billed for by the physician.

ACCOUNT BALANCE	15.00
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302050

niagara falls memorial medical center

621 Tenth Street Niagara Falls, New York 14302 (716) 278-4311

PATIENT NUMBER	PATIENT'S NAME, ADDRESS	SERVICE DATE	PHYSICIAN
+ 248-002	STEIN RICHARD 252 MCCONKEY DRIVE TOWN OF TONAWANDA NY 14223	P 08/30/85	DYSTER, MELVIN

FINANCIALLY RESPONSIBLE PERSON'S NAME, ADDRESS

SEVENSON CONSTRUCT 2749 LOCKPORT RD NIAGARA FALLS NY 14305

DATE	DESCRIPTION OF SERVICES	CHARGES	CREDIT OR PAYMENTS
3 30 85	SEVENSON CAT 5 PAN 1	262.00	
3 30 85	PHYSICAL EXAMINATION		
3 30 85	PHY EXAM COMP INITIAL		
3 30 85	R DIAG 814 PLUS 800		
3 30 85	R/MERCURY URINE		
3 30 85	XRAY CHEST TWO VIEWS		
3 30 85	PUL FUNCTION SCREEN		
3 30 85	EKG WITH INTERPRETATE		
3 30 85	GENERAL SERVICE CHARGE		

Professional anesthesia services provided in the Medical Center will be billed for by the physician.

ACCOUNT BALANCE	262.00
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302051

niagara falls memorial medical center

621 Tenth Street Niagara Falls, New York 14302 (716) 278-4311

PATIENT'S NAME, ADDRESS	SERVICE DATE	PHYSICIAN
KCDESKI 3530 FERRY AVE NIAGARA FALLS	L 09/10/85	DYSTER, MELVIN

FINANCIALLY RESPONSIBLE PERSON'S NAME, ADDRESS

EVENSON CONSTRUCT 2749 LOCKPORT RD NIAGARA FALLS NY 14305

DATE	DESCRIPTION OF SERVICES	CHARGES	CREDIT OR PAYMENT
10 85	SEVENSON CAT 5 PAN 1	262.00	
10 85	PHYSICAL EXAMINATION		
10 85	PHY EXAM COMP INITIAL		
10 85	R DIAG 814 PLUS 800		
10 85	R/MERCURY URINE		
10 85	XRAY CHEST TWO VIEWS		
10 85	PUL FUNCTION SCREEN		
10 85	EKG WITH INTERPRETATE		
10 85	GENERAL SERVICE CHARGE		

Professional anesthesia services provided in the Medical Center will be billed for by the physician.

ACCOUNT BALANCE	262.00
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302052

niagara falls memorial medical center

621 Tenth Street Niagara Falls, New York 14302 (716) 278-4311

PATIENT NUMBER	PATIENT'S NAME, ADDRESS	SERVICE DATE	PHYSICIAN
482-004	CERTO ANTHONY 892 UPPER MT RD LEWISTON NY 14092	D 09/11/85	DYSTER, MELVIN

FINANCIALLY RESPONSIBLE PERSON'S NAME, ADDRESS
EVENSON CONSTRUCTION 2749 LOCKPORT ROAD NIAGARA FALLS NY 14305

DATE	DESCRIPTION OF SERVICES	CHARGES	CREDIT OR PAYMENT
9 11 85	SEVENSON CAT 5 PAN 2	213.00	
9 11 85	PHYSICAL EXAMINATION		
9 11 85	PHY EXAM COMP INITIAL		
9 11 85	R DIAG 814 PLUS 800		
9 11 85	R/MERCURY URINE		
9 11 85	PUL FUNCTION SCREEN		
9 11 85	EKG WITH INTERPRETATE		
9 11 85	GENERAL SERVICE CHARGE		

Professional anesthesia services provided in the Medical Center will be billed for by the physician.

ACCOUNT BALANCE 213.00

302053

APPENDIX L

IN PLACE DENSITY TESTING PROGRAM

302054

EMPIRE

- 585 TROY-SCHENECTADY RD., LATHAM, NY 12110 518-783-1555
 - S-3858 SHELDON RD., P.O. BOX 229, ORCHARD PARK, NY 14127 716-64
 - 105 CORONA AVENUE, GROTON, NY 13073 607-898-5881
 - RARITAN CENTER, 300 MCGAW DRIVE, EDISON, NJ 08837 201-225-0202
 - 1164 RIDGE RD. EAST, ROCHESTER, NY 14621 716-342-5320
 - 635 JAMES STREET, SYRACUSE, NY 13203 315-472-9333

¹¹⁰AfR 23.10.

Project: Mercury Refining, Inc.

Report No. 1

Client Conestoga-Rovers & Associates, LTD.

Date: 3/20/85

Contractor: _____

Job No. AD-84-33

Proctor Code	Maximum Density (pcf)	Optimum Moisture (%)	Material Type and Source

Respectfully submitted,

Remarks: In-Place Density presented is
total "Wet" Unit Weight

EMPIRE SOILS INVESTIGATIONS, INC.

Technician Time: _____

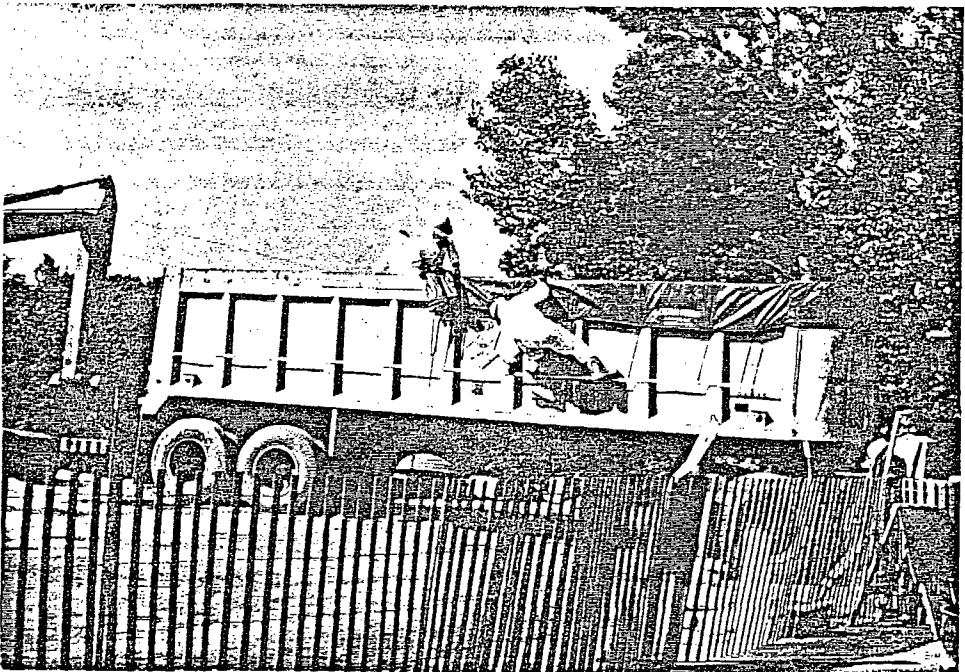
APPENDIX M

PHOTOGRAPHS

302056

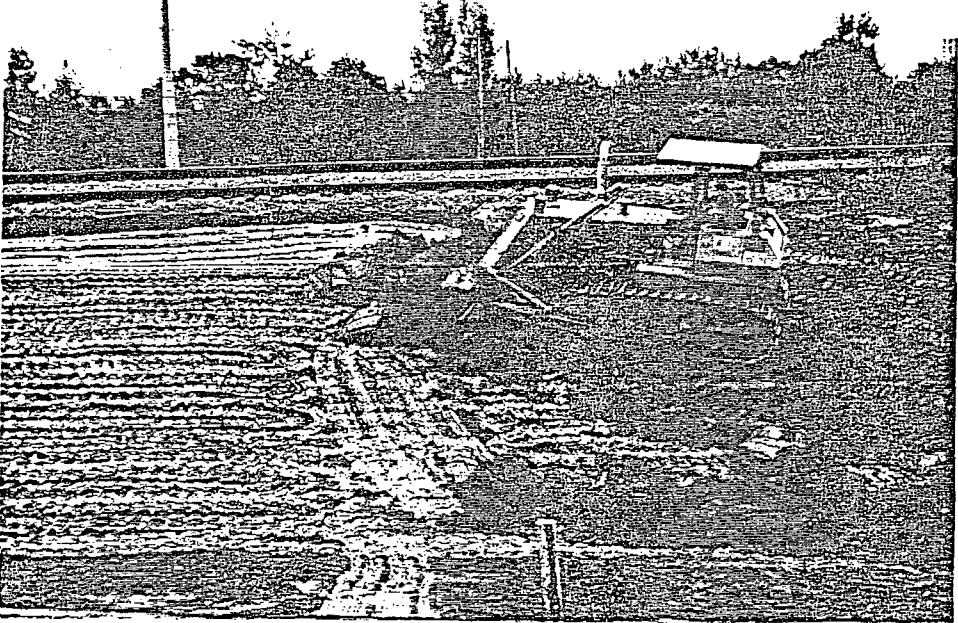


PCB EXCAVATION

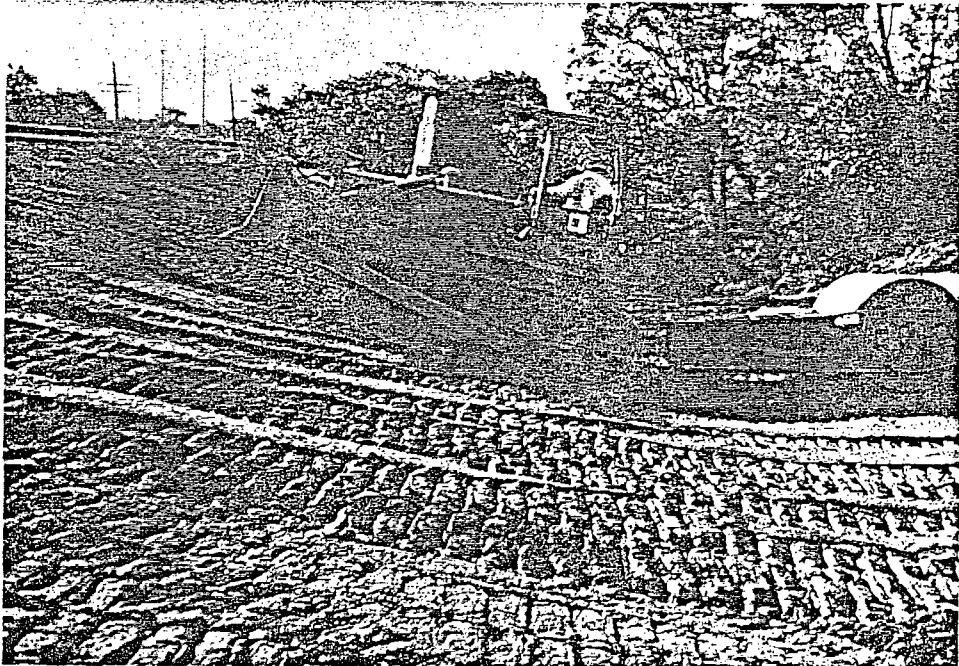


TARPING TRUCKS

302057

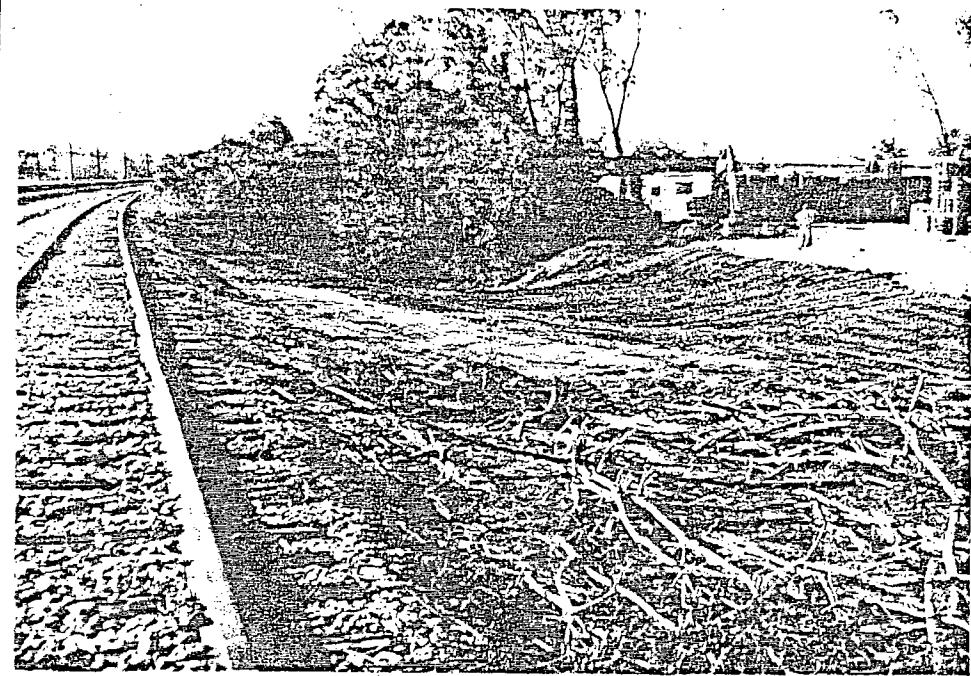


PLACING CLAY CAP

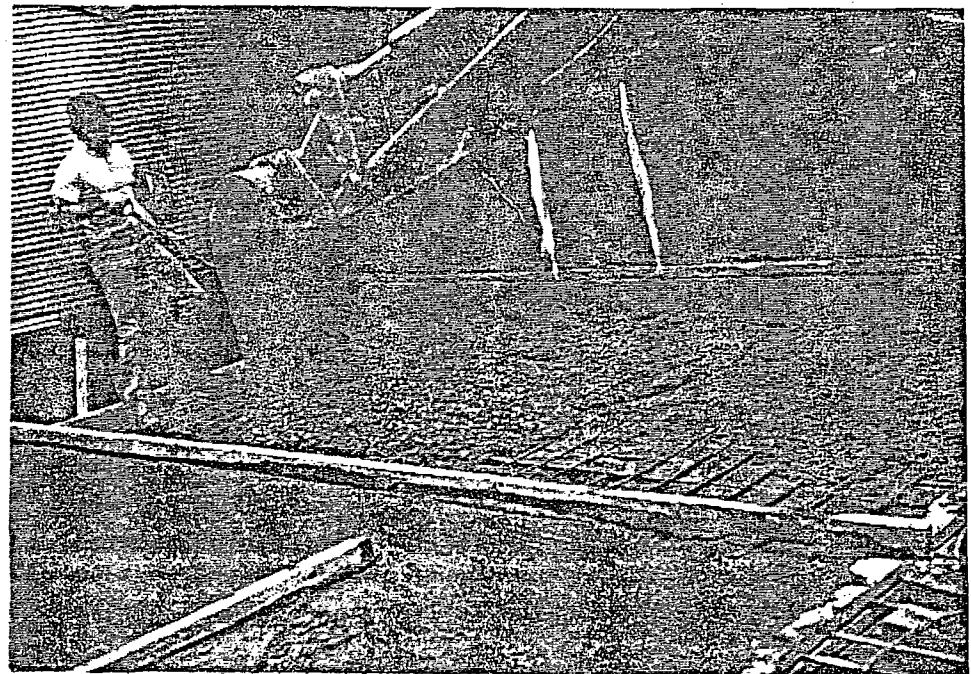


COMPACTING CLAY

302058

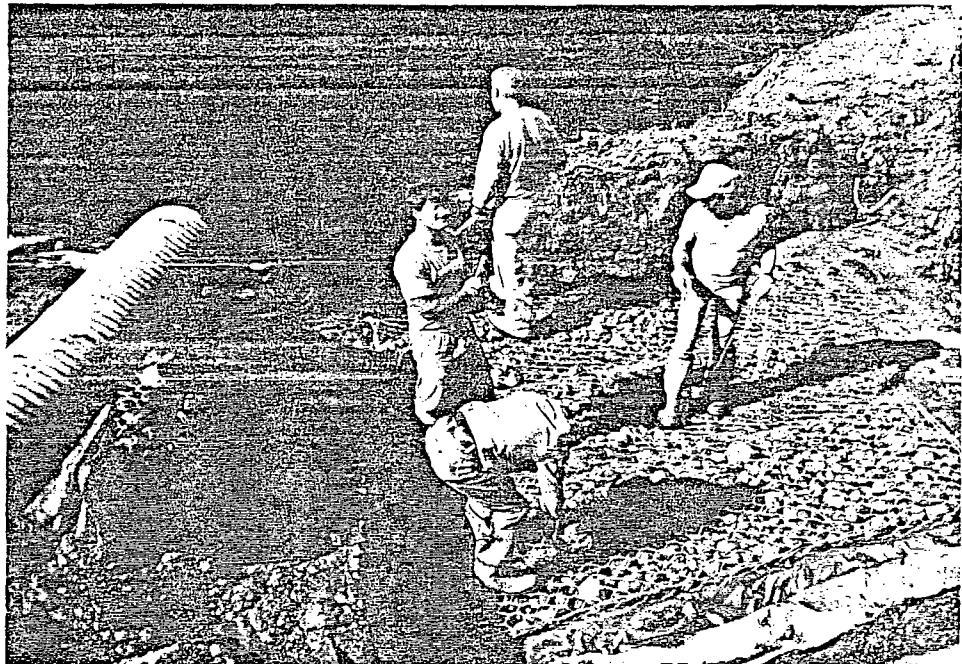


CLAY CAP



PLACING CONCRETE CAP

302059

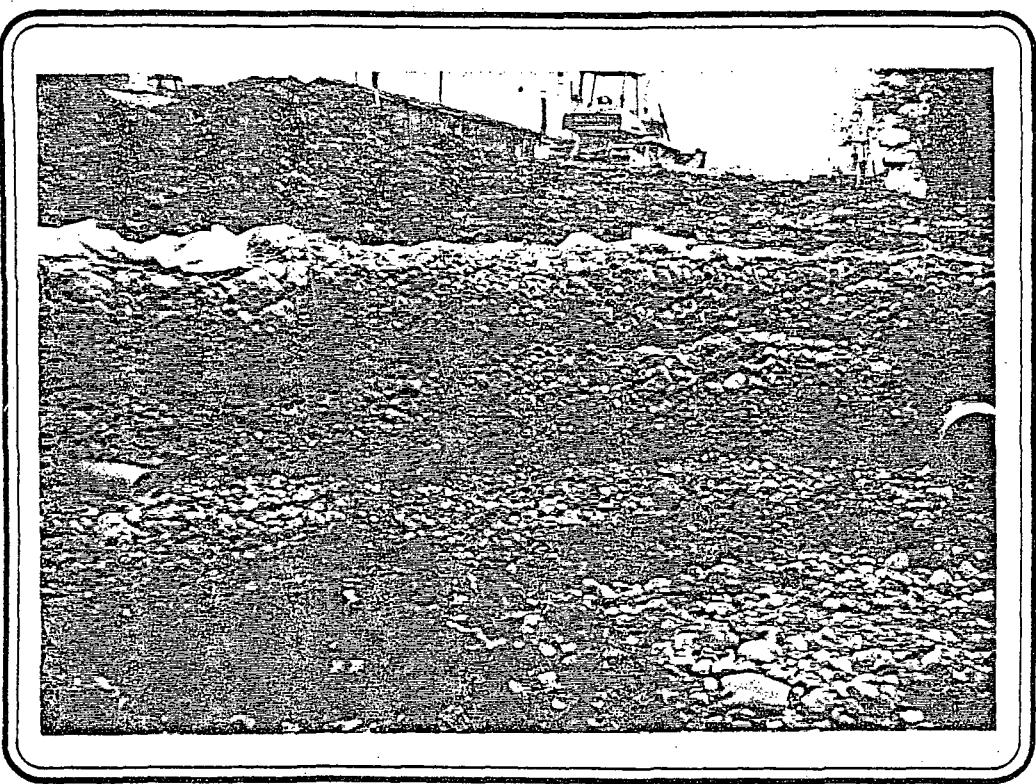


CONSTRUCTING GABION WALL



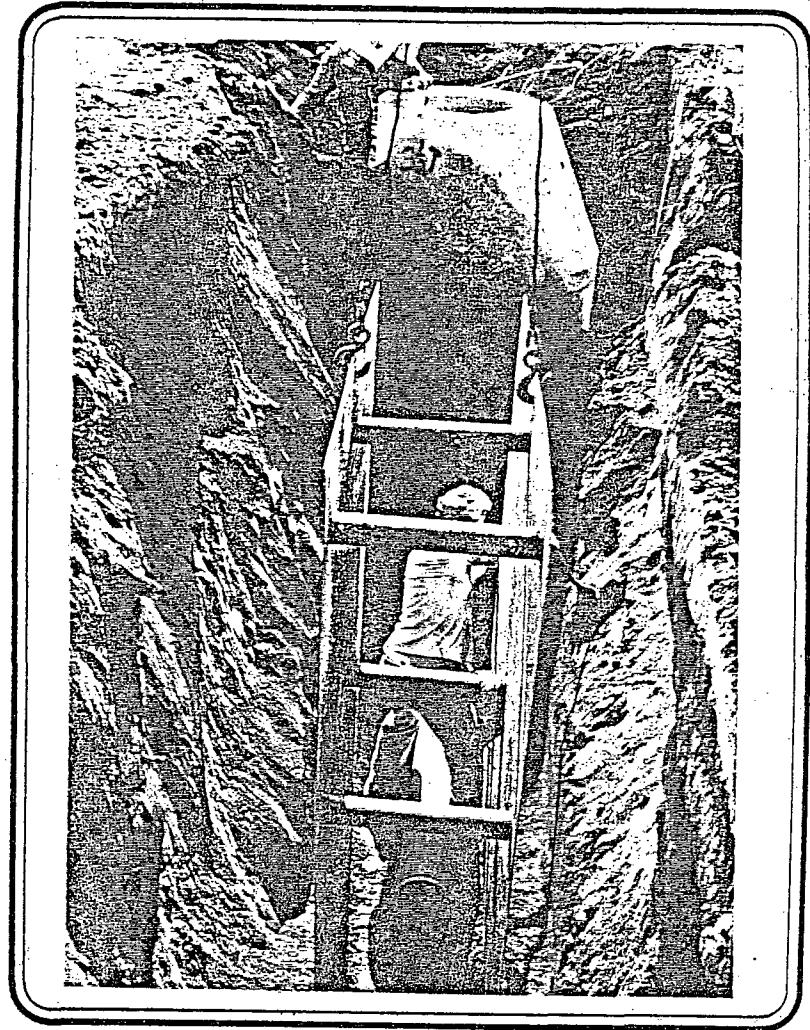
GABION WALL

302060



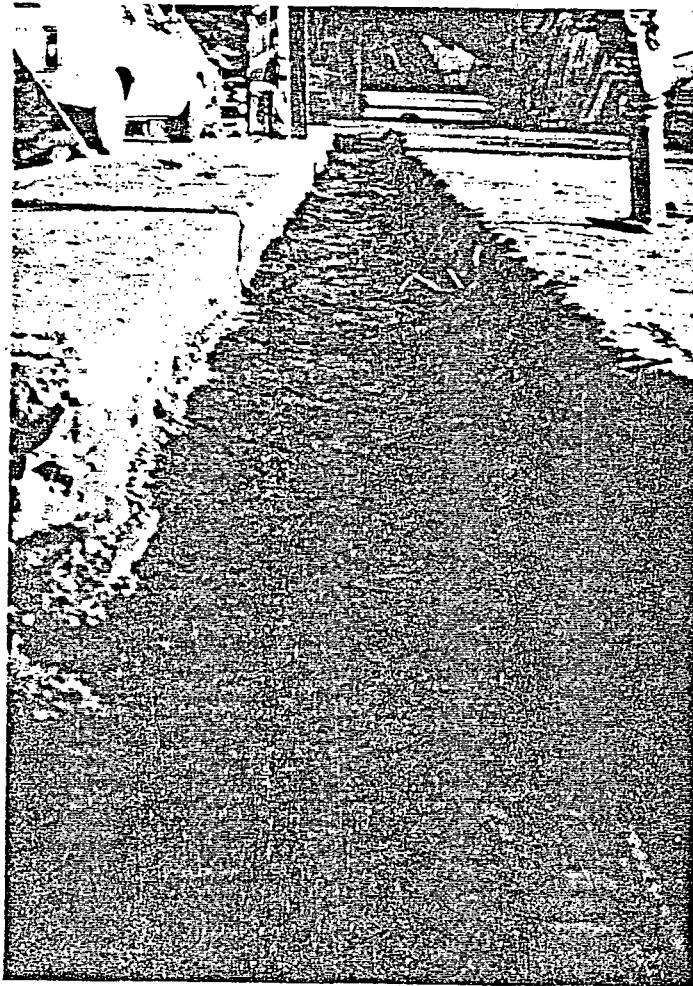
GABION WALL

302061



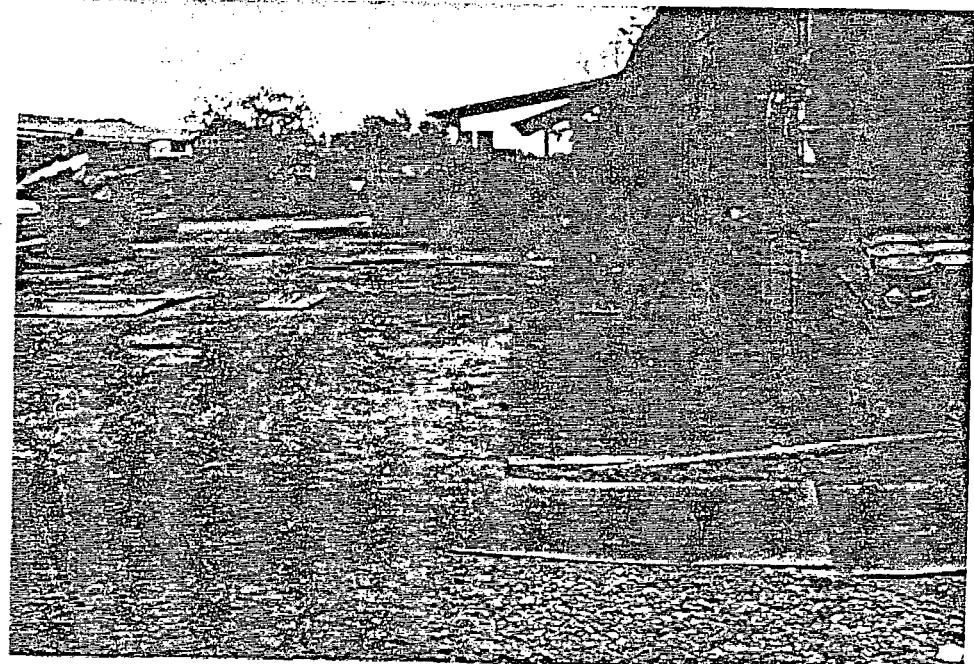
PIPE INSTALLATION
MH TO CB3

302062



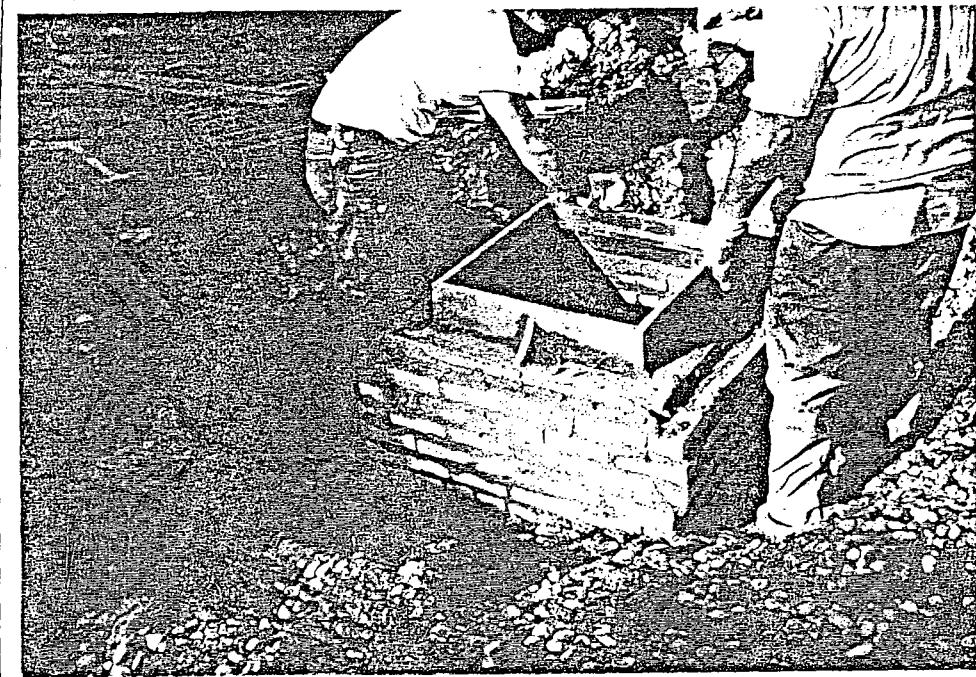
COMPACTED BACKFILL
CB2 TO CB4

302063



CONCRETE RESTORATION
CB3 TO CB1

302064



CATCHBASIN



MANHOLE

302065