



AC Rochester

300 N. Chevrolet Avenue  
Flint, Michigan 48555 USA

September 5, 1989

Mr. Ben Hall  
Michigan Department of Natural Resources  
Lansing District  
Secondary Complex  
General Building - 3rd Floor  
P.O. Box 30028  
Lansing, Michigan 48909

RECEIVED

SEP 05 1989

Re: Phase I UST Compliance Program  
Ac Rochester Flint West

Dear Mr. Hall:

Enclosed for your review is a copy of the Phase I UST compliance program for the referenced facility. The Phase I program was managed by our consultant, Hunter/Keck, Inc. of Williamston, Michigan.

Hunter/Keck, Inc. is currently developing a work plan to address the contamination discovered during the program implementation. We anticipated completion of the plan within two to three weeks. Upon its completion, we will send you a copy for review, comments and approval. Any effort to expedite our continuing venture at the site would be greatly appreciated.

If you have any question or comments, or require additional information, please contact our office. (313-236-6588)

Sincerely,

Ronald L. Neahusan  
Senior Environmental Engineer

cc: C. Wendell           AC East  
G. George             Hunter/Keck

RLN:sls  
090589.DNR

Report of Phase I  
Underground Storage Tanks  
Compliance Program  
AC Rochester Flint West  
Flint, Michigan

Report of Phase I  
Underground Storage Tanks  
Compliance Program  
AC Rochester Flint West  
Flint, Michigan

Prepared for:

Mr. Ronald Neahusan  
AC Rochester Flint West  
300 North Chevrolet Avenue  
Flint, Michigan 48555

Prepared by:

Mr. Michael T. Hebert  
Mr. Gus A. George  
Mr. Charles S. Annett. Ph.D.  
Hunter/Keck, Inc.  
1099 West Grand River Avenue  
Williamston, Michigan 48895

August 31, 1989

Hunter/Keck Project No. 484-2518

## Table of Contents

	<u>Page</u>
Introduction	1
Background	2
General	2
Regulatory	2
UST Systems Description	6
Gasoline UST System No. 2	6
Fuel Oil UST System Nos. 3, 4, 5 and 6	6
Gasoline UST System No. 12	7
Paint Wash-Water UST System No. 13	7
Underground Storage Tank Program Implementation	7
Planning	7
USTs Removal	8
Initial Corrective Action	13
Laboratory Analyses	15
Assessment of Analytical Results	15
Conclusions and Recommendations	20

## Figures

1. Facility Location
2. Facility Layout
3. UST Systems Location Map
4. Plant No. 37 Sample Locations
5. Plant No. 2 Sample Locations
6. Plant No. 5 Sample Locations
7. Plant No. 37 Contaminant Concentrations
8. Plant No. 2 Contaminant Concentrations
9. Plant No. 5 Contaminant Concentrations

## Appendices

- A. Underground Storage Tanks (USTs) List
- B. Hunter/Keck's Proposed Work Plan
- C. Tank Removal Notification Letter
- D. MPC Daily Work Sheets
- E. Removal Permits
- F. Flint Fire Department Letter
- G. Venice Park Development Certificate of Acceptance and Disposal of Contaminated Soils
- H. Certificate of Tank Disposal
- I. Chain-of-Custody Forms
- J. Laboratory Analytical Results
- K. Photographic Documentation

## INTRODUCTION

AC Rochester Flint West began an underground storage tank compliance program in May, 1989, in order to bring its Flint, Michigan facility into full compliance with underground storage tanks (USTs) regulations. The objectives of the program were to:

- o remove and dispose of all non-essential USTs at the facility;
- o test for and remediate any environmental impact having occurred from UST leakage; and
- o perform these operations in compliance with applicable local, state and federal regulations.

Hunter/Keck, Inc., a subsidiary of Hunter Environmental Services, Inc., has been retained by AC Rochester Flint to develop a UST management program necessary to permanently close 13 existing tanks (presented in Appendix A) and to provide project management and on-site supervision and evaluation of the UST areas. A copy of Hunter/Keck's work plan is presented in Appendix B.

This report documents the completion of the Phase I compliance program which involved the removal of UST Numbers 2,

3, 4, 5, 6, 12, 13 and A. UST Numbers 8, 9, 10, 14, 15, 18, 19 and 20 are not being addressed at this time due to on-line usage and inaccessibility.

## BACKGROUND

### General

AC Rochester Flint West is a 194-acre manufacturing complex located in Flint, Michigan (see Figure 1). This location employs approximately 3000 employees. The complex is comprised of 31 buildings, which have a total area of 3,190,210 square feet. Figure 2 shows a layout of the complex.

AC Rochester Flint West produces metal and plastic automobile components for General Motors Corporation (GMC).

### Regulatory

Federal USEPA Program - On September 23, 1988, the U.S. Environmental Protection Agency (USEPA) promulgated regulations for USTs containing petroleum or hazardous substances under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). These regulations exclude any substances regulated as hazardous waste under Subtitle C of the Resource Conservation and Recovery Act (RCRA). The federal UST regulations address both new and existing UST systems to control the major

causes of releases from these tank systems and included, among other things, corrosion controls, proper installation requirements, spill and overfill prevention measurements and closure requirements.

These regulations were first proposed on April 17, 1987 (52 FR 12662) and a subsequent supplemental notice published on December 23, 1987 (52 FR 48528). USEPA's final rule sets forth requirements satisfying the mandates of Section 9003 of RCRA (leak detection, leak prevention and financial responsibility requirements). These rules became effective on December 22, 1988 except for Section 280.22(g) which became effective on October 28, 1988. Included in the regulations are requirements for both temporary and permanent closure of USTs (Section 280.71).

The principal objectives of the closure requirements are to identify and contain existing contamination and to prevent future releases. The requirements concerning permanent closure are summarized below:

- o Owners or operators of UST systems must notify the implementing agency at least 30 days before beginning permanent closure. (This period can be utilized for site assessment as appropriate).

- o Owners or operators permanently closing a system must empty and clean the tank by removing all liquids and accumulated sludges. This may be accomplished by complying with the API Publication 1604 "Removal and Disposal of Used Underground Petroleum Storage Tanks".
  
- o Before completing permanent closure, the owner or operator must measure for the presence of a release where contamination is most likely to be present (Section 280.72). If a UST system is equipped with the external release detection methods (vapor monitor or groundwater monitoring wells), a site assessment is not required (assuming no detection). If contaminated soils, contaminated groundwater, free product and/or vapors are discovered, corrective action measures must be initiated (Section 280.72(b)).

Michigan UST Program - The Michigan UST program was transferred to the Department of State Police effective October 1, 1988 for tank registration, maintenance and regulatory development/maintenance and other related requirements. The State Police has been governing the design of flammable and combustible storage tanks since 1983. The Michigan Department of Natural Resources (MDNR) handled tank notifications until October, 1988 at which time they transferred the program to the Department of State Police, Fire Marshal

Division. The MDNR will continue to administer the leaking UST program (assessment/corrective action), while the Fire Marshal Division will expand the scope of its regulations to be equivalent to the USEPA rule. The division plans to adopt the USEPA final rule by reference along with NFPA 30A.

In Michigan, all USTs regardless of size, storing flammable or combustible liquids are regulated. Fiberglass clad steel tanks (composite tanks) must have corrosion protection.

UST owners are required to register their USTs each year and pay an annual fee of \$100.00 per UST. This fee will be placed in a fund and used to finance the regulatory program. The MDNR has general authority to require cleanup of contaminants in soils or groundwater. The state has also received a grant from the USEPA LUST (leaking USTs) Trust Fund. Leaks must be reported in writing within 10 days to the Fire Marshal Division and verbally within 24 hours to 1-800-MICH-UST.

Prior to closure, the owners or operators of the UST system must notify the office of the Fire Marshal Division of intent to closure the system within 30 days. Other closure requirements are similar to the federal requirements described above.

AC Rochester Flint West elected to remove all non-essential USTs from their facility in order to ensure compliance with these regulations.

AC Rochester Flint West submitted USTs removal notification to the Fire Marshal Division, MDNR, Lansing District Office and the Flint Fire Department, Fire Prevention Bureau on March 30, 1989. A copy of the notification letter is presented in Appendix C.

#### UST SYSTEMS DESCRIPTION

A description of each UST system removed is included in the following text. Figure 3 is a site drawing showing the locations of each UST system.

#### Gasoline UST System No. 2

This gasoline system, located north of Building 5, consisted of a 2000-gallon steel tank, the associated piping and pump were located west of the tank. The tank was installed in 1959 and was utilized for regular gasoline storage for in-plant vehicle usage. The system was later used for unleaded gasoline storage.

#### Fuel Oil UST System Nos. 3, 4, 5 and 6

The fuel oil system, located east of Building 37, consisted of four, 50,000-gallon steel USTs. Two tanks were installed

in 1972 and the other two in 1974. The tanks were utilized for No. 2 fuel oil storage used to fire the boilers of the complex powerhouse (Building 11). Building 44 housed the pumps and the meters for these tanks.

#### Gasoline UST System No. 12

The gasoline system, located north of Building 12, consisted of a 16,000-gallon steel UST. The associated piping ran to a pump adjacent to Building 21. The tank was installed in 1950 and was utilized for regular gasoline and later for unleaded gasoline storage for in-plant and company cars usage.

#### Paint Wash-Water UST System No. 13

The paint wash-water system, located north of Building 2, consisted of a 16,000-gallon steel tank, with its piping running to the second and third floors of Plant 2 where auto parts are painted using automated robotic paint processes. The subject UST was installed in 1950 adjacent to UST No. 12 (same tank pit).

### UNDERGROUND STORAGE TANK (UST) PROGRAM IMPLEMENTATION

#### Planning

During the 30-day notification period, AC Rochester Flint West retained Marine Pollution Control (MPC) to empty, clean and vapor purge all USTs prior to removal. All liquid

was discovered located south of the pump house. The tank was later emptied.

On May 22, 1989, Genesee Bay Constructors began removal and transportation of the asphalt cover. The 550-gallon tank (A) was excavated and removed.

No soil discoloration was observed. Soil adjacent to the pipe joints did not appear to be discolored or saturated with fuel oil. The tank appeared to be structurally sound and showed only limited signs of superficial rust. The excavated area was screened with an organic vapor analyzer (OVA) registering no soils above the instrument detection limit of 1 ppm. A total of three samples were collected from Tank A excavation. The location of each sample is shown in Figure 4. Sample Nos. 1 and 2 were taken from the base of the excavation and Sample No. 3 was a composite of the four side walls. Soils excavated around UST No. 3 were screened using an OVA and showed no readings above the instrument detection limit of 1 ppm. These soils were later used as backfill for Tank A excavation.

The internal atmosphere of each tank was tested using an explosimeter. All tanks recorded readings ranging from one to three percent LEL (Lower Explosive Limit) which indicated an explosion-safe environment.

The four, 50,000-gallon tanks were cut in place into three sections and later to six sections prior to their removal due to their size and weight.

The 50,000-gallon tanks were resting on a concrete foundation greater than the outer dimension of the USTs. The excavation of the western wall was confined by metal sheet piling and the excavation of the southern wall was restricted by the location of a 46,000-volt underground electrical power line, while the excavation of the north wall was restricted by the possible collapse of the railroad track line 15 feet away.

All 50,000-gallon tanks were inspected and found to be in good condition with some superficial rust. The underlying soils above the concrete foundation appeared to be discolored and impacted (20 to 50 ppm OVA reading), these soils were excavated down to the concrete foundation which appeared to be in excellent condition with no cracks, and were transported to Venice Park Development Landfill for disposal. Approximately 380 cubic yards were transported and disposed of at the landfill.

A total of eight samples (seven soil and one water) were collected from the excavation (Figure 4). Sample Nos. 4, 6, 9 and 11 were collected at the corners of the concrete

foundation. Sample Nos. 5, 7, 8 and 10 were composite soil samples collected from the middle of each wall. Sample No. 6 was a water sample which covered part of the northwestern corner of the excavation which was caused by groundwater seepage.

MPC was commonly used to remove all excess rain water from the base of the excavation. The water was placed into the plant's industrial wastewater system for treatment.

The sampling plan described above was discussed with and approved by Mr. Ben Hall of the MDNR.

The excavation was later backfilled using clean fill from previously stockpiled soils and off-site sources (below the OVA's detection limit).

Plant No. 2 (UST Nos. 12 and 13) - Prior to removal, the tanks were emptied, cleaned and vapor purged by MPC. On May 26, 1989, excavation of the USTs began. The asphalt and the concrete slab overlying the tanks were demolished and transported by Genesee Bay Excavation.

During excavation, soil discoloration was observed at approximately four feet below ground level. Soils were screened with an OVA which registered readings from 20 to 30

ppm. Excavated soils were stockpiled on a 4-mil plastic (visqueen) tarp. The tanks internal atmosphere was tested using an explosimeter which indicated an explosion-safe working environment. After removal, the tanks were inspected and found to be in fair condition with limited superficial rust.

Excavation of the soils continued in order to remove the impacted soils. The excavated walls and base were screened, registering OVA readings ranging from 1 to 15 ppm.

Eight soil samples were collected from the excavation. Four samples were collected from the base of the excavation (Sample Nos. 1, 2, 3 and 4) and four composite samples of the side walls (Sample Nos. 5, 6, 7 and 8). Figure 5 shows the location of these samples.

The excavation was later backfilled using clean fill and covered with a one-foot concrete slab.

On May 27, 1989, stockpiled soils, approximately 250 cubic yards, were transported to Venice Park Development Landfill for disposal.

Plant No. 5 (UST No. 2) - On June 9, 1989, excavation of the tank began by removing the asphalt cover and the soils. The tank was removed and visually inspected. It appeared to be in good condition with limited superficial rust. No hydrocarbon odors or soil discoloration was observed. The soils were screened using an OVA registering all readings below the detection limit.

Three soil samples were collected, two of these were collected from the base of the excavation (Sample Nos. 1 and 2) and one composite of the side walls (Sample No. 3). The excavation was backfilled using clean fill. See Figure 6 for sample locations.

Note: The MDNR and the Flint Fire Department were informed as to the progress of the removal and backfilling activities. Also, representatives of each visited the site on a regular basis. A Hunter/Keck representative was on site during all removal operations. A letter drafted by the Flint Fire Department is presented in Appendix F.

#### INITIAL CORRECTIVE ACTION

Initial corrective actions to remediate impacted soils were implemented as follows:

- o Approximately 380 cubic yards of petroleum contaminated soils were removed from UST Nos. 3, 4, 5 and 6 excavations. The soils were transported to Venice Park Development Landfill for disposal.
- o Approximately 500 gallons of contaminated rain water which accumulated in UST Nos. 3, 4, 5 and 6 excavations were pumped out by MPC and transported to the AC Rochester Flint industrial wastewater system for treatment.
- o Approximately 250 cubic yards of petroleum contaminated soils were removed from UST Nos. 12 and 13 excavations. The soils were transported to Venice Park Development Landfill.
- o Petroleum contaminated soils, transported to Venice Park Development Landfill were disposed of properly in accordance with MDNR requirements. The certificate (letter) of acceptance and disposal provided by Venice Park Development Landfill is presented in Appendix G along with transportation receipts (manifest).
- o All removed tanks were cut into small pieces and disposed of as recycled scrap as presented in Appendix H.

## LABORATORY ANALYSES

As part of the Phase I program, 23 samples (22 soil and one water) were collected and delivered to Snell Environmental Group (SEG) under strict chain-of-custody transfer procedures. Copies of the chain-of-custody forms are presented in Appendix I. Samples were analyzed as follows:

### Plant No. 37 UST Nos. 3, 4, 5, 6 and A Excavations

- o Aromatic Volatile Organics (602/8020)
- o Total Petroleum Hydrocarbons (418.1)

### Plant No. 2 UST Nos. 12 and 13 Excavations

- o Halogenated Volatile Organics (8010)
- o Non-Halogenated Volatile Organics (8015)
- o Aromatic Volatile Organics (602.8020)
- o Total Petroleum Hydrocarbons (418.1)
- o EP Toxicity for Lead

### Plant No. 5 UST No. 2 Excavation

- o Aromatic Volatile Organics (602/8020)
- o Total Petroleum Hydrocarbons (418.1)
- o EP Toxicity for Lead

### Assessment of Analytical Results

The results of the analyses for volatile organics and total petroleum hydrocarbons are contained in Appendix J. In

addition, the detections of these compounds at each excavation site has been depicted in Figures 7 through 9.

The MDNR has recently issued a new policy statement relating to remediation at UST sites. These guidelines indicate that the detection of each volatile aromatic compound in soils is limited to 10 ppb and the presence of total petroleum hydrocarbons is limited to 10 ppm, or the method detection limit. Because of the extensive nature of the data and the presence of three distinct sites, the analytical results from each of the excavation sites will be discussed separately. Part of that discussion will be a comparison of the analytical results to the MDNR cleanup criteria.

UST No. 2 Excavation: North of Building 5 - Tank No. 2, previously located north of Building 5, had been utilized for the storage of gasoline. The analysis of samples from both the bottom and side walls of the excavation resulted in non-detection of all volatile aromatic compounds. However, 680 mg/kg of total petroleum hydrocarbons (TPH) were detected in the sample from the west end of the excavation and 87 mg/kg TPH in the side wall composite. In addition, concentrations of EP Toxicity lead in excess of the 5.0 "Maximum Concentration of Contaminants for Characteristics of EP Toxicity" were detected in the sidewall composite sample.

The presence of TPH along with non-detection of volatile organics suggest that the petroleum release had not been a recent event. Following a release to the environment, it is expected that the fate of these compounds would be primarily affected by the mechanisms of adsorption, biodegradation and volatilization. However, while adsorption and biodegradation will impact both the TPH and volatile aromatic fractions of the petroleum, the volatilization is likely to be the predominant fate of only these aromatic compounds. Therefore, under environmental conditions which promote volatilization, it is reasonable to expect that the concentrations of the volatile fractions will diminish more rapidly than the heavier, less volatile TPH fraction. The analytical results suggests that such a process has occurred in this vicinity.

Based on the cleanup criteria provided by the MDNR, the presence of the 680 mg/kg TPH in the sample from the east end of the bottom of the excavation indicates that further remediation is required. It is recommended that additional investigation is undertaken to define the extent of the presence of the TPH at the site.

UST Nos. 3, 4, 5, 6 and A Excavations: East of Building 37 -  
Tank Nos. 3, 4, 5, 6 and A had been utilized for the storage of fuel oil. Analyses of these samples for volatile organics resulted in non-detection of all compounds with the exception of Sample No. 9. This sample, obtained from the southeast corner of the excavation, was reported to contain 810 ug/kg xylene. However, it should be noted that the detection limit for Sample No. 7 was 100 ug/kg while those for the other samples was 10 ug/kg. As a result of this high detection limit, it is not possible to determine if concentrations between 10 and 100 ug/kg were present in this vicinity. The high detection limit may be attributable to dilutions performed in response to the high TPH concentrations found in this sample.

Significant concentrations of TPH were reported in Sample Nos. 2, 7, 9 and 10. It is noteworthy that all these locations are situated in the southeastern portion of the excavation. The presence of xylene at Sample No. 9 and the detection of TPH in the three adjoining sample locations indicates that the presence of the fuel oil is limited to this area. Additional investigation is required to determine if the hydrocarbons are present further to the southeast.

UST Nos. 12 and 13: North of Building 2 - Tank No. 12 was reported to have been utilized for the storage of gasoline while Tank No. 13 was associated with the storage of paint wash water. Analyses for volatile organics resulted in detections of xylenes in Sample Nos. 1, 2 and 6, while both xylenes and ethylbenzene were detected in Sample No. 3. The highest concentrations of xylenes were reported in Sample No. 1 with 207,000 ug/kg, followed by Sample No. 6 with 3800 ug/kg, Sample No. 3 with 2060 ug/kg and Sample No. 2 with 254 ug/kg.

It should be noted that the high concentrations of xylenes in Sample No. 1 necessitated the dilution of the sample to keep the analytical response with a measurable range. This dilution resulted in a significant increase in the detection limit for the other aromatic compounds. It should be recognized that these other compounds may be present in the sample - but at concentrations below 5000 ug/kg.

Detections of TPH also occurred in all the samples taken from this excavation. The combined presence of TPH and volatile aromatics suggests that gasoline from Tank No. 12 was the source of the degradation. The high ratio of xylenes to TPH in the sample from Sample No. 1 could lead to speculation that a release had also occurred from Tank No.

13. However, if this had been the case, it is expected that toluene would have also been present at significant concentrations. Concentrations of EP Toxicity lead were below method detection limits in all samples.

As with the other excavation sites, the presence of TPH and/or volatile organics in the soils at concentrations above the MDNR guidelines indicates that further investigation is required at this site. This investigation should be designed to determine if the degradation has migrated beyond the zone of excavation, with special emphasis given to the area southeast of the excavation.

#### CONCLUSIONS AND RECOMMENDATIONS

Under the UST compliance program, AC Rochester Flint West removed eight USTs subject to the regulations. These USTs were emptied and cleaned as necessary, and were removed and disposed of in accordance with applicable regulations and codes.

Upon removal, the USTs were found to be in fair to good condition. Underlying soils at Plant Nos. 2 and 37 were found to be impacted; limited cleanup of impacted soils was conducted. Approximately 650 cubic yards of impacted soils were transported and disposed at Venice Park Development Landfill.

Laboratory analyses performed on the soil samples obtained from tank excavations indicate the presence of high and elevated concentrations of hydrocarbons, also presence of lead contamination in the Plant No. 5 excavation.

The active source of the hydrocarbon contamination detected in the soils has been removed (i.e., USTs). UST closure operations were documented by photographs which are presented in Appendix K.

The MDNR and local/state fire officials were informed of the project progress and were also notified within 24 hours when suspect impacted soils were discovered.

Therefore, Hunter/Keck recommends that:

- o The extent of the hydrocarbon contamination be identified. A work plan should be prepared including borings and monitor wells installation and includes sampling and analysis.
- o The UST notification forms be modified to reflect the removal of UST Nos. 2, 3, 4, 5, 6, 12 and 13.

o Removal of the remaining USTs (Nos. 8, 9, 10, 14, 15 and 20) or meeting the following deadlines for compliance as follows:

<u>Tank</u>	<u>Age (years)</u>	<u>Release Detection Options</u>	<u>Deadline</u>
8	26	monthly monitoring* or monthly inventory control combined with annual tightness testing	12/23/89
9	26	"	12/23/89
10	38	"	12/23/89
14	22	"	12/23/90
15	17	"	12/23/91
20	9	"	12/23/93

\*monthly monitoring includes: automatic tank gauging, vapor monitoring and groundwater sampling

Also, corrosion protection and spill and overfill prevention must be complied with by December, 1998.

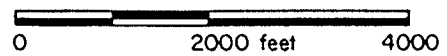
Figure 1  
Facility Location

Figure 1



# Facility Location

AC Rochester  
 Flint West Facility  
 T.7N., R.6E.,  
 Genesee County,  
 Flint, Michigan



Adapted from 7.5' USGS topographic quadrangles: Flint North & South, 1975.

Figure 2

Facility Layout

Facility Layout  
AC ROCHESTER  
FLINT WEST FACILITY  
T.7N., R.6E.,  
Genesee County,  
Flint, Michigan

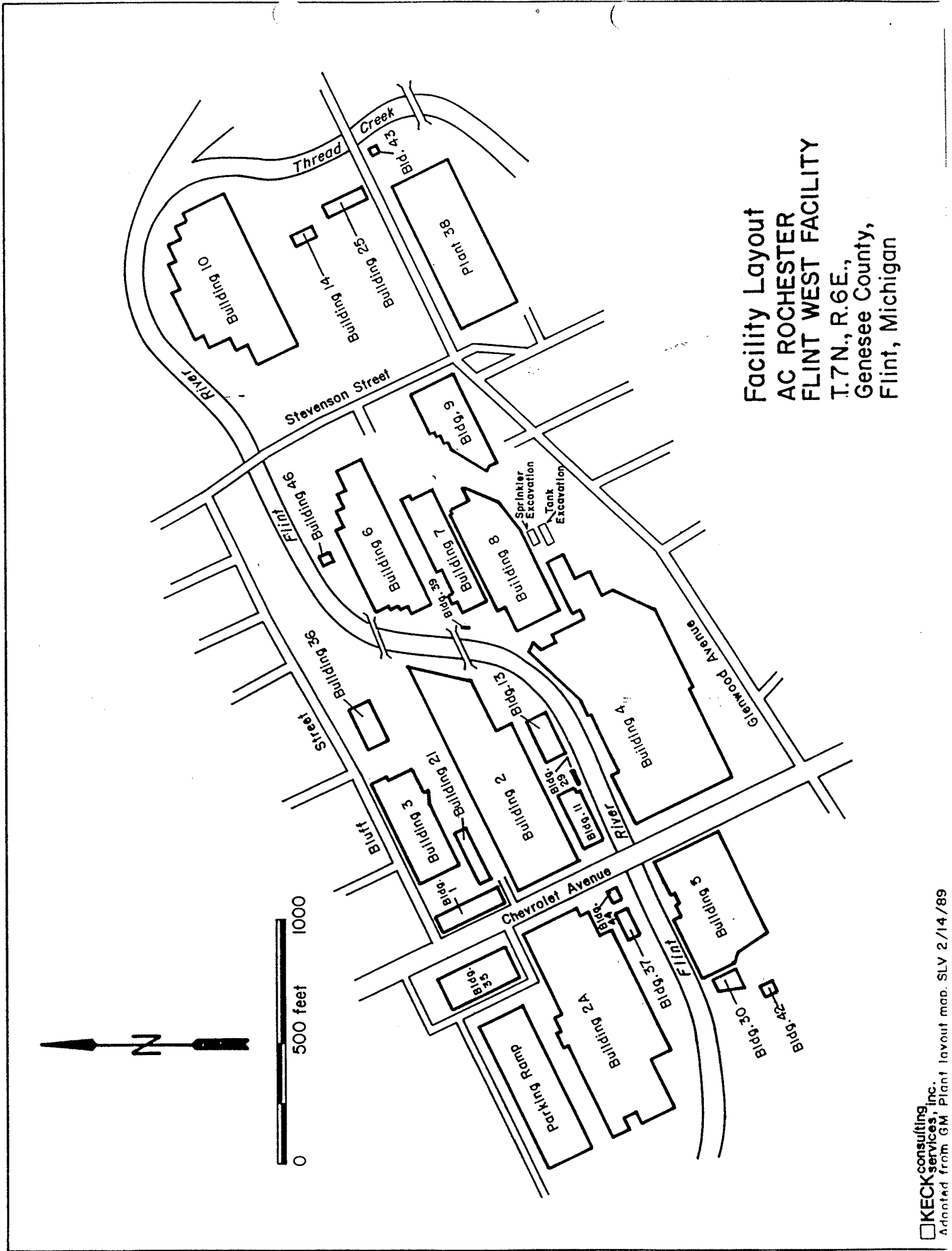


Figure 3

UST Systems Location Map

KECK consulting services, Inc.  
 Adopted from GM Plant layout map. SLV 2/14/89

Removed Tanks  
 Tank to be removed

**Underground Tank Locations  
 AC ROCHESTER  
 FLINT WEST FACILITY  
 T. 7N., R. 6E.,  
 Genesee County,  
 Flint, Michigan**

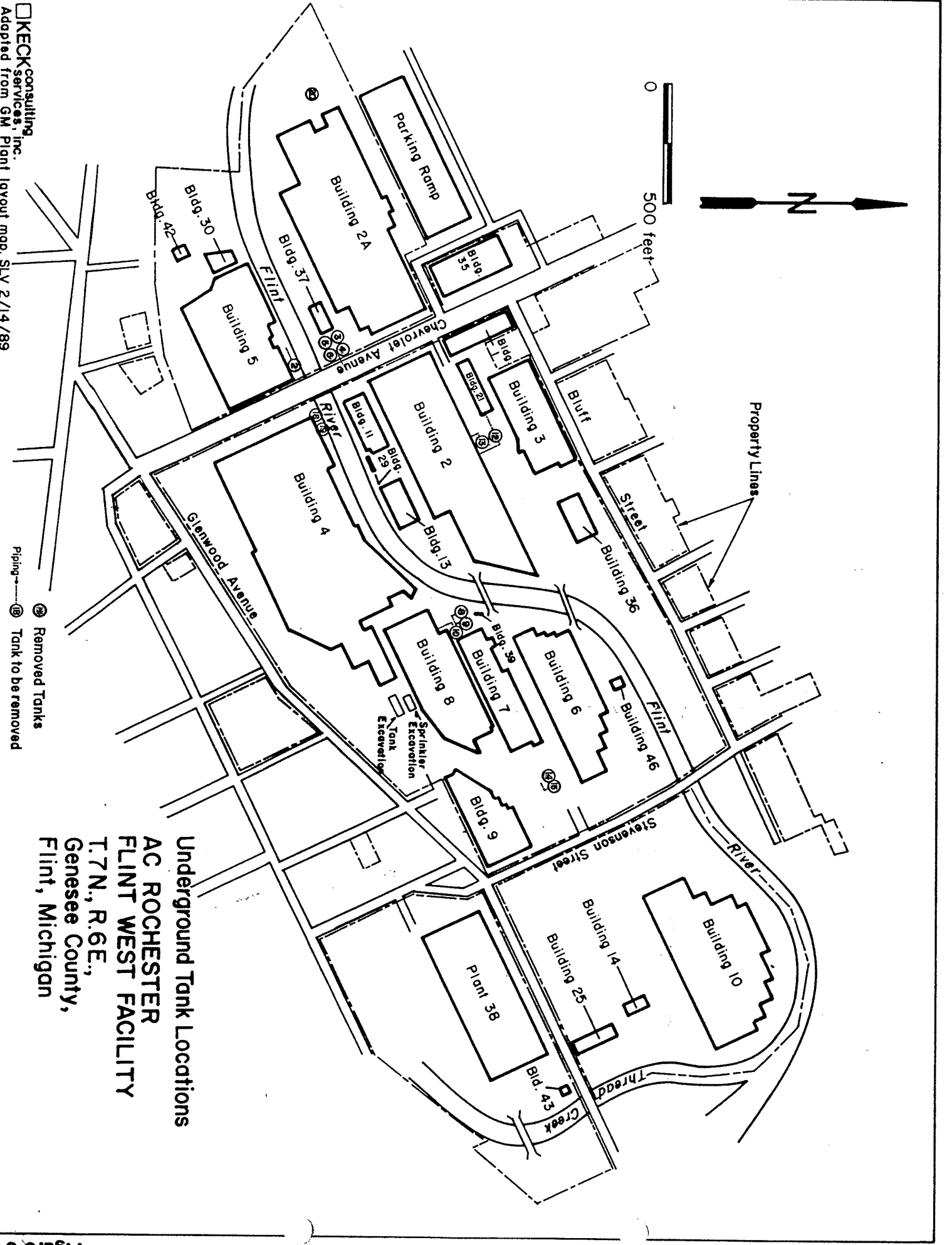


Figure 3

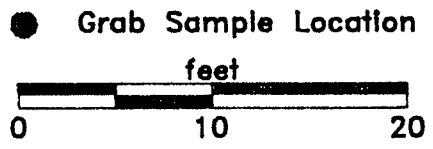
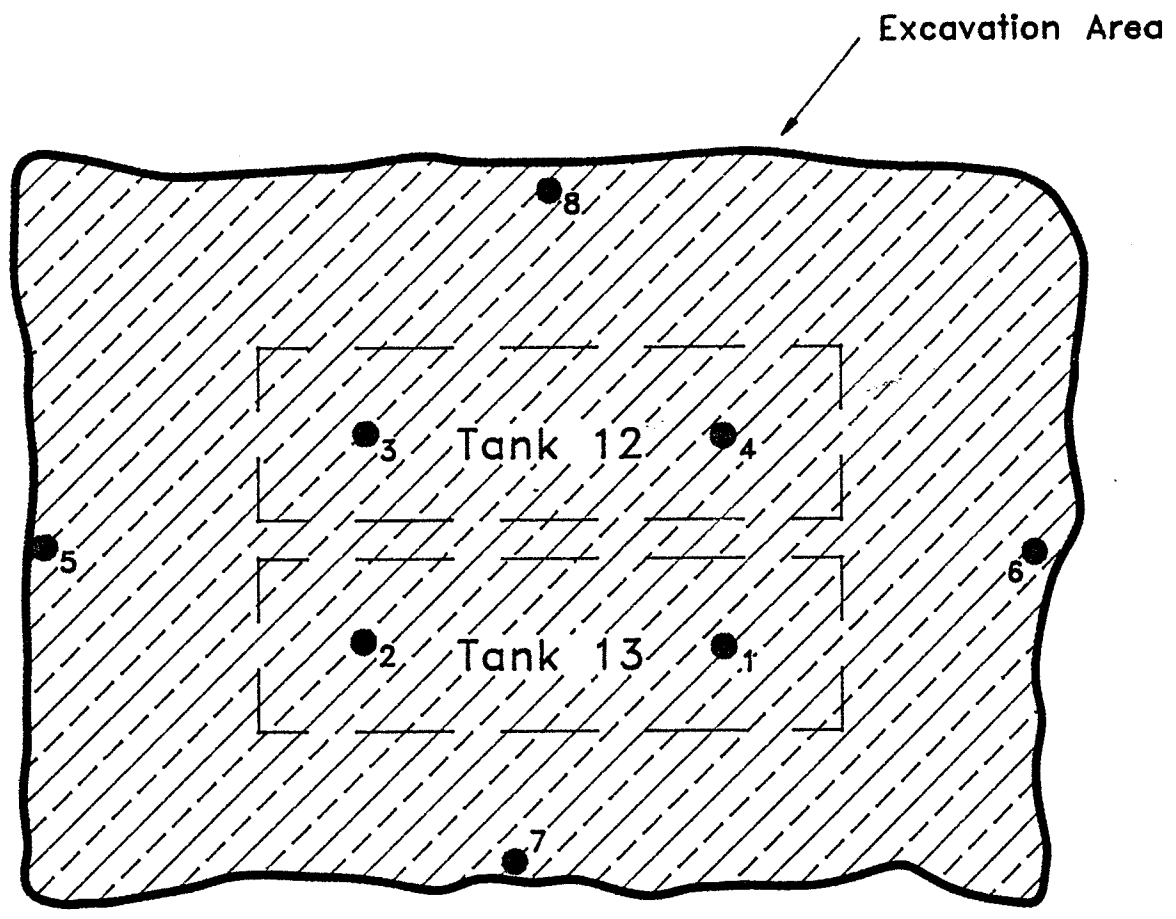
Figure 4

Plant No. 37 Sample Locations

Figure 5

Plant No. 2 Sample Locations

Figure 5



Building 2

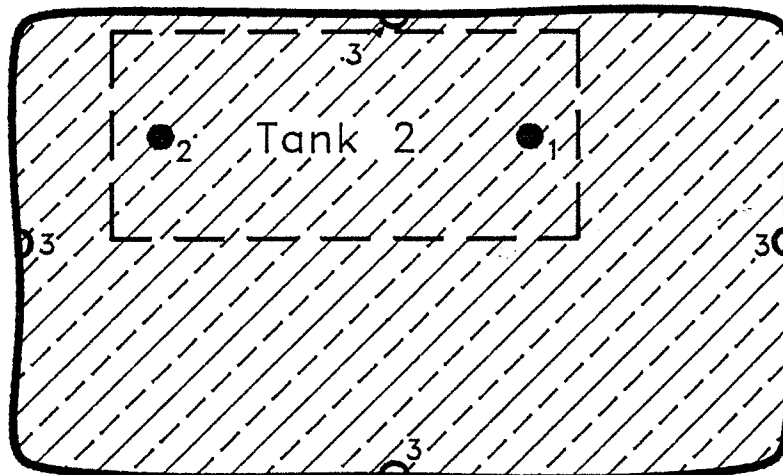
AC Rochester  
Flint West Facility  
T.7N., R.6E.,  
Genesee County,  
Flint, Michigan

Figure 6

Plant No. 5 Sample Locations

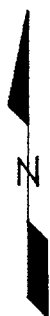
*Flint River*

Retaining Wall



Excavation Area

Building 5



⌋ Composite Grab Sample of Excavation Side Walls

● Grab Sample Location



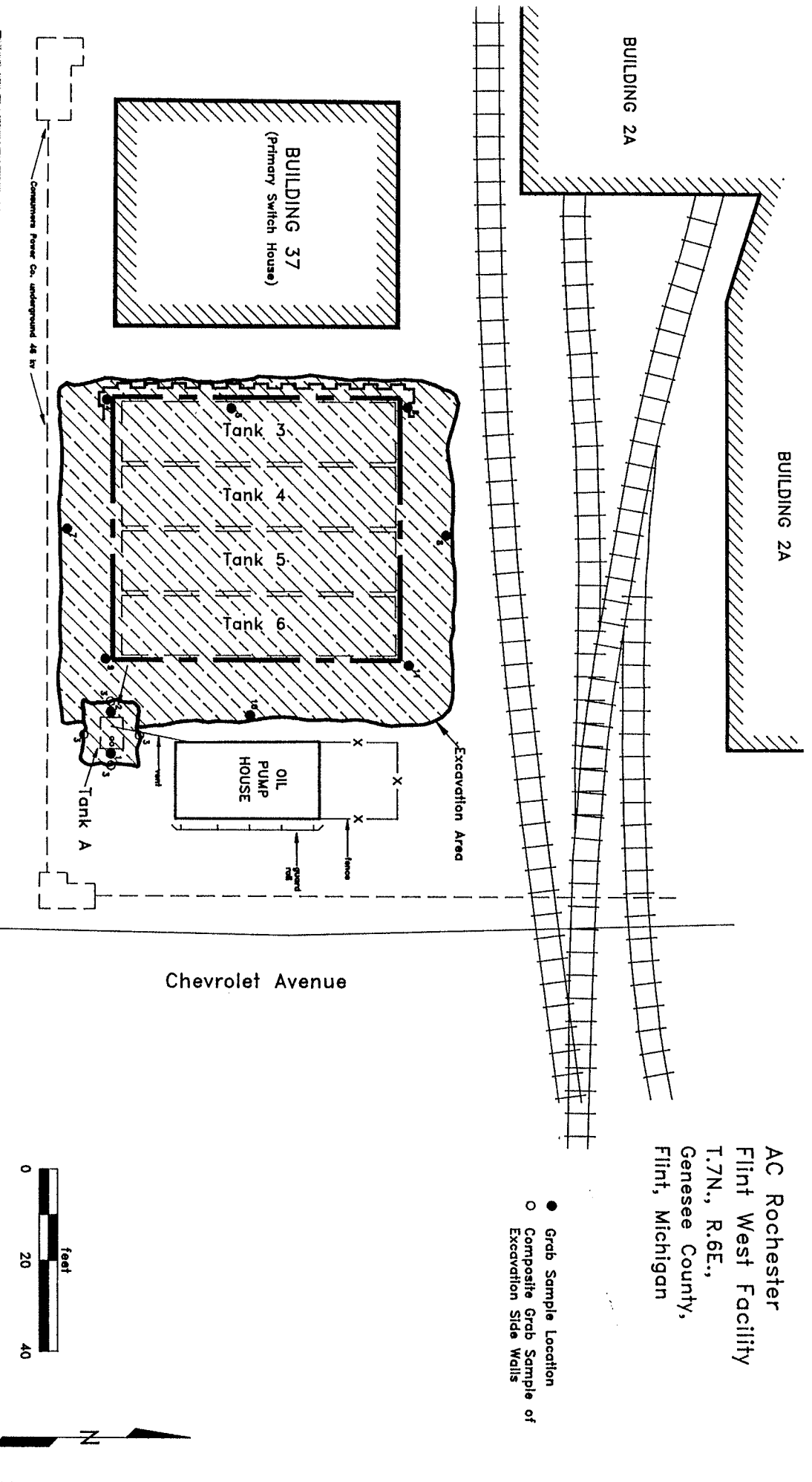
AC Rochester  
 Flint West Facility  
 T.7N., R.6E.,  
 Genesee County,  
 Flint, Michigan

Figure 7

Plant No. 37 Contaminant Concentrations

Figure 4

AC Rochester  
Flint West Facility  
T.7N., R.6E.,  
Genesee County,  
Flint, Michigan



Huntair/KECK

oct837

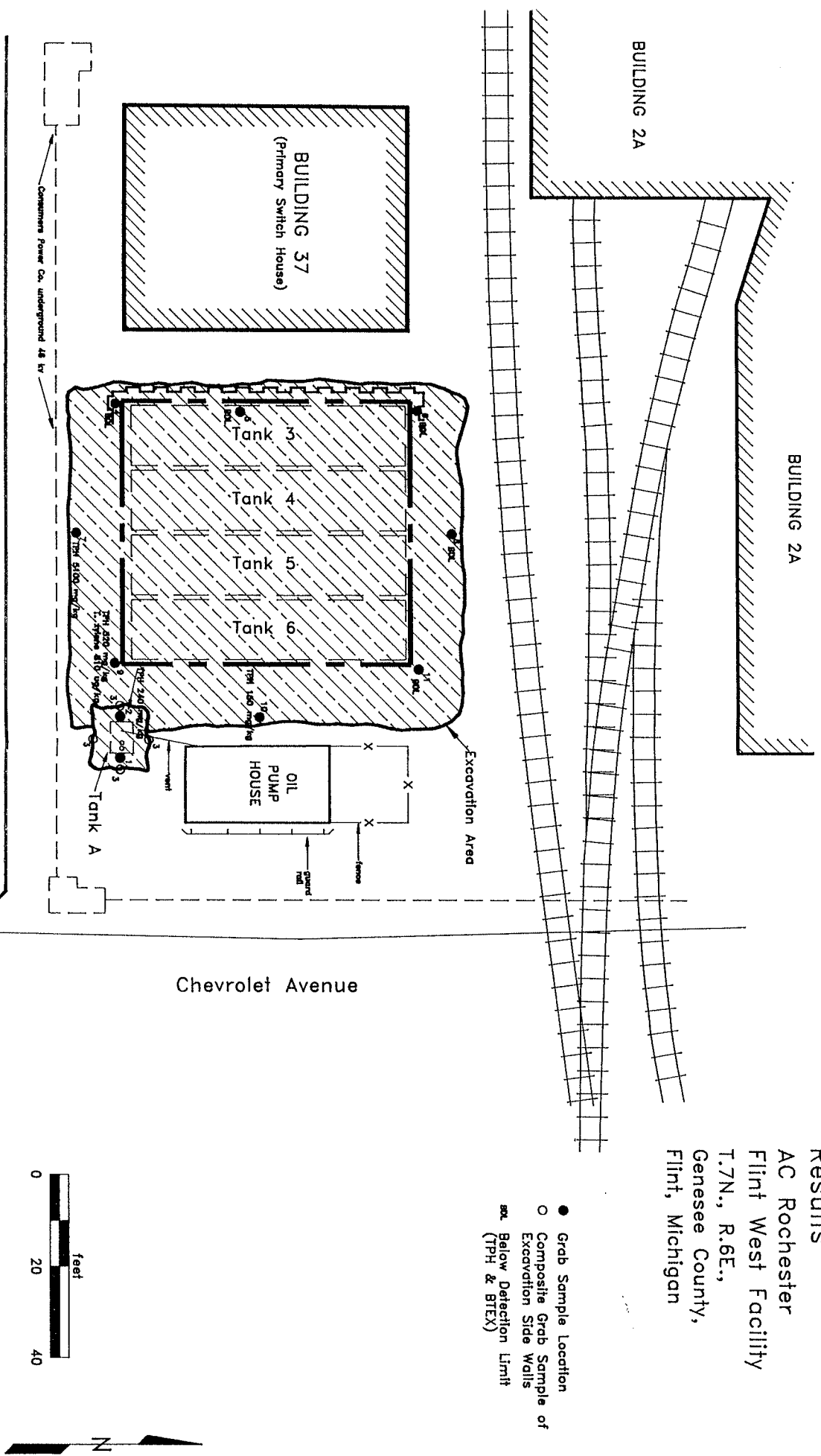
revised 8/29/89

Flint River

Adapted from Chevrolet-Flint Manufacturing, Plant Engineering Dept. drawing no. P.C.C.-8000. SLV 8/7/89

Figure 7

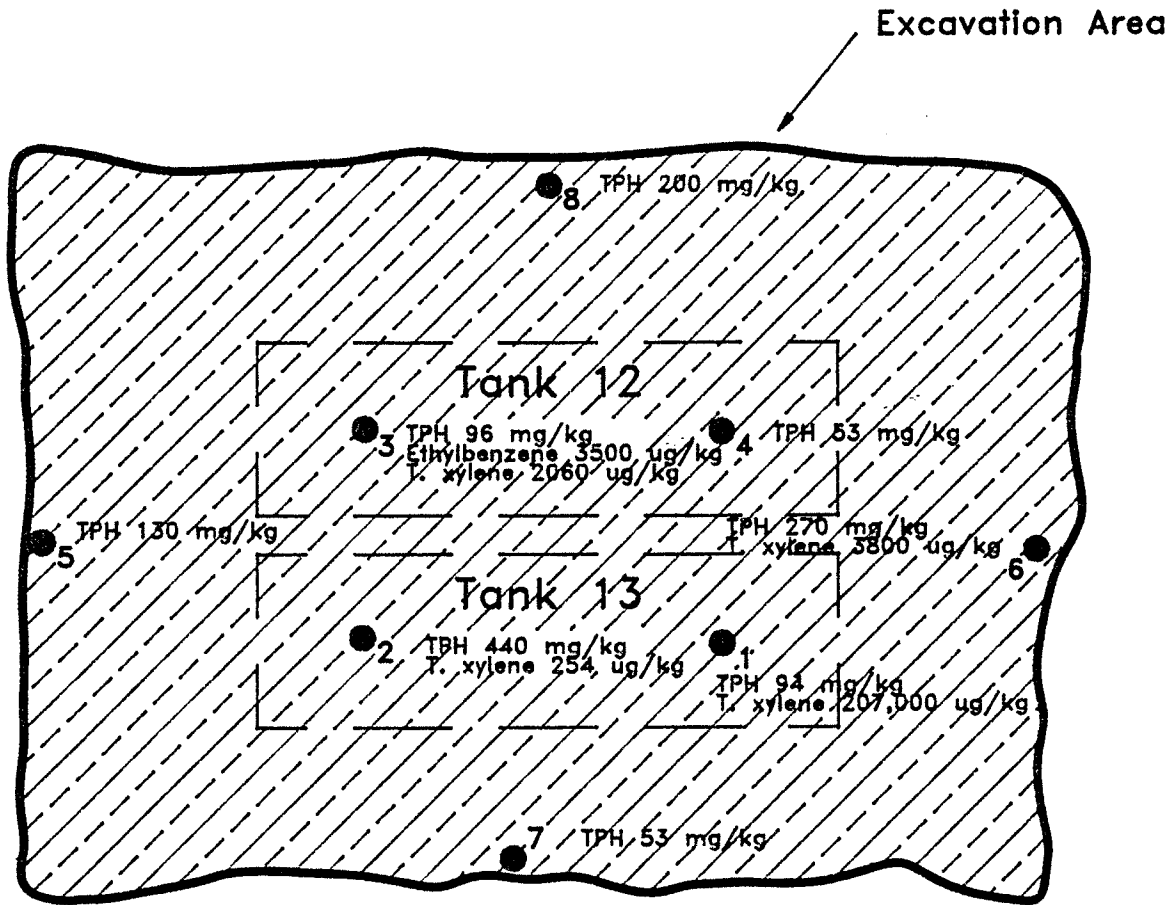
Summary of Analytical Results  
 AC Rochester  
 Flint West Facility  
 T.7N., R.6E.,  
 Genesee County,  
 Flint, Michigan



- Grab Sample Location
- Composite Grab Sample of Excavation Side Walls
- Below Detection Limit (TPH & BTEX)

Figure 8

Plant No. 2 Contaminant Concentrations



Building 2

Summary of Analytical Results

AC Rochester  
 Flint West Facility  
 T.7N., R.6E.,  
 Genesee County,  
 Flint, Michigan

- Grab Sample Location
- 1-8 ● Below Detection Limit (EP Tox. Lead)

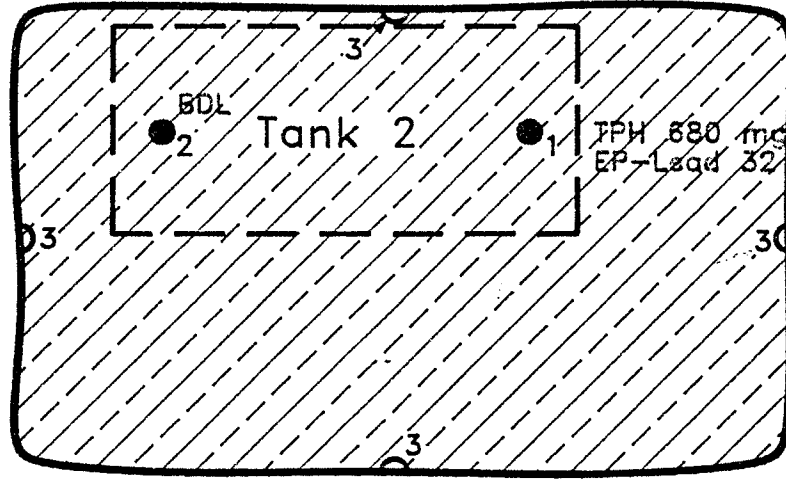


Figure 9

Plant No. 5 Contaminant Concentrations

Flint River

Retaining Wall



Excavation Area


Building 5



### Summary of Analytical Results

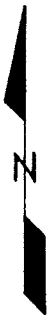
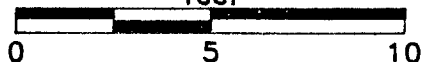
AC Rochester  
 Flint West Facility  
 T.7N., R.6E.,  
 Genesee County,  
 Flint, Michigan

BDL Below Detection Limit (TPH, BTEX, EP Toxicity Lead)

 Composite Grab Sample of Excavation Side Walls

 Grab Sample Location

feet



Appendix A

Underground Storage Tanks (USTs) List

AC Rochester West  
Flint, Michigan  
Underground Storage Tank List

<u>Tank No.</u>	<u>Capacity (gallons)</u>	<u>Contents</u>	<u>Location</u>	<u>Age (years)</u>
2	2,000	water/trace of gasoline	PLT.5	38
3	50,000	fuel oil	PLT.37	15
4	50,000	fuel oil	PLT.37	15
5	50,000	fuel oil	PLT.37	13
6	50,000	fuel oil	PLT.37	13
8	7,500	gasoline	PLT.7W	24
9	7,500	water/trace of gasoline	PLT.7W	24
10	1,000	water/trace of gasoline	PLT.7W	36
12	16,000	gasoline	PLT.2N	36
13	16,000	wash water	PLT.2N	36
14	20,000	gasoline	PLT.7E	21
15	10,000	diesel fuel	PLT.7E	15
20	550	diesel fuel	PLT.2A	7

Appendix B

Hunter/Keck's Proposed Work Plan

Proposed Work Plan  
Underground Storage Tanks (USTs)  
Management Program  
AC Flint West  
Flint, Michigan

## 1.0 INTRODUCTION

Hunter/Keck, Inc. (Hunter) is pleased to submit this proposal to AC Flint West for developing an underground storage tanks (USTs) management program necessary to close 15 existing tanks. As proposed, this UST project will be conducted in accordance with all local, state and federal (USEPA) codes and requirements, as well as American Petroleum Institute (API) and the National Fire Protection Association (NFPA) recommended practices.

This program has been prepared to address specific tasks in response to the AC Flint West request of January 19, 1989. AC Flint West has expressed interest in removing all referenced USTs prior to the end of 1989. We understand that AC Flint West maintains contracts with various vendors for waste handling (cleaning, transportation and disposal companies).

While we have provided budgetary costs for these items, we can utilize the existing vendors wherever appropriate and cost effective. Additionally, we foresee the use of local union personnel. While we are uncertain as to their involvement, we are prepared to utilize your in-house services wherever possible and cost effective.

## 2.0 REGULATORY OVERVIEW

### 2.1 Federal (USEPA) Program

On September 23, 1988, the U.S. Environmental Protection Agency (USEPA) promulgated regulations for underground storage tanks (USTs) containing petroleum or hazardous substances under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). These regulations exclude any substances regulated as hazardous waste under Subtitle C of the Resource Conservation and Recovery Act (RCRA). The federal UST regulations address both new and existing UST systems to control the major causes of releases from these tank systems and included, among other things, corrosion controls, proper installation requirements, spill and overfill prevention measures and closure requirements.

These regulations were first proposed on April 17, 1987 (52 FR 12662) and a subsequent supplemental notice published on December 23, 1987 (52 FR 48538). USEPA's final rule sets forth requirements satisfying the mandates of Section 9003 of RCRA (leak detection, leak prevention and financial responsibility requirements). These rules became effective on December 22, 1988 except for Section 280.22(g) which became effective October 28, 1988. Included in the regulations are requirements for both temporary and permanent closure of USTs (Section 280.71).

The principal objectives of the closure requirements are to identify and contain existing contamination and to prevent future releases. The requirements concerning permanent closure (as required at the Flint facility) are summarized below:

- o Owners or operators of UST systems must notify the implementing agency at least thirty (30) days before beginning permanent closure. (This period can be utilized for site assessment as appropriate).
  
- o Owners or operators permanently closing a system must empty and clean the tank by removing all liquids and accumulated sludges. This may be accomplished by complying with the American Petroleum Institute (API) Publication 1604 "Removal and Disposal of Used Underground Petroleum Storage Tanks."
  
- o Before completing permanent closure, the owner or operator must measure for the presence of a release where contamination is most likely to be present (Section 280.72). If a UST system is equipped with the external release detection methods (vapor monitor or groundwater monitoring wells), a site assessment is not required (assuming no detection). If contaminated soils, contaminated

groundwater, free product and/or vapors is discovered, corrective action measures must be initiated (Section 280.72(b)).

## 2.2 Michigan UST Program

Description - The Michigan UST program was transferred to the Department of State Police effective October 1, 1988 for tank registration, maintenance and regulatory development/maintenance and other related requirements. The state police have been governing the design of flammable and combustible liquid storage tanks since 1983. The Michigan Department of Natural Resources (MDNR) handled tank notifications until October, 1988, at which point they transferred the program to the State Police, Fire Marshal Division. MDNR will continue to administer the leaking UST program (assessment/corrective action), while the State Fire Marshal Division will expand the scope of its regulations to be equivalent to the USEPA rule. The division plans to adopt the USEPA final rule by reference, along with NFPA 30A.

General Requirements - In Michigan, all USTs regardless of size, storing flammable or combustible liquids are regulated. Fiberglass clad steel tanks (composite tanks) must have corrosion protection.

UST owners are required to register their USTs each year and pay an annual fee of \$100 per UST. This fee will be placed in a fund and be used to finance the regulatory program.

MDNR has general authority to require cleanup of contaminants in soils or groundwater. The state has also received a grant from the USEPA LUST (Leaking USTs) Trust Fund. Leaks must be reported in writing within 10 days to the State Fire Marshal and verbally within 24 hours to 1-800-MICH-UST.

Prior to closure, the owners or operators of the UST system must notify the office of the Fire Marshal of intent to close the system (30 days). Other closure requirements are similar to the Federal requirements described above.

### 3.0 SCOPE OF SERVICES

The following scope of services has been prepared using Hunter's comprehensive knowledge of UST requirements as well as Hunter's extensive experience in preparing and implementing UST programs. Hunter believes this scope of work represents the best approach to achieving the goals of AC Flint West for the UST removal program in a cost effective manner (see Attachment 1 for USTs List). We have allowed

for a flexible approach to the project to ensure utilization of both existing vendors and union personnel as may be required and appropriate.

#### 4.0 TECHNICAL APPROACH

Hunter will provide complete engineering and construction management services for an appropriate site evaluation, removal of the existing UST systems and site assessment/cleanup (corrective action steps) if necessary. The approach to be used at the AC Flint West facility is as follows:

Phase I: Facility Evaluation/Planning (partially complete)

Phase II: Existing UST Removal

Phase III: Regulatory Notification and Final Closure Report  
Preparation

Phase IV: Corrective Action (if necessary)

#### 4.1 Phase I: Facility Evaluation/Planning

Task 1.0 - Evaluate UST systems and establish priorities.

1.1 - Collect census data on each tank system including tank(s), piping, transfer facilities and associated equipment. The census data may include\*:

- o location of UST
- o type
- o capacities
- o installation drawings
- o type and condition of surface cover
- o test/repair/leak history
- o surface status

\*We will utilize existing AC Flint West information and revisit each tank location to obtain/confirm this information.

1.2 - Review applicable regulations, codes and standards (as recommended practices) including:

- o federal
- o state
- o local ordinances
- o National Fire Prevention Association (NFPA) codes
- o American Petroleum Institute (API) recommended practices

1.3 - Develop a preliminary schedule for each UST system removal prioritized by:

- o regulatory compliance requirements
- o AC Flint West requirements
- o tank leak history
- o age, etc.

## Task 2.0 - Project Planning

### 2.1 - Notification/Reporting

- o Notify local and state officials of intent to remove UST(s) in accordance with applicable codes and regulations. (Notification is required 30 days prior to removal).

### 2.2 - Identify and Obtain Necessary Permits

- o Contact local authorities to identify required building permits or modifications to town records.
- o Execute permit applications process, as required.

### 2.3 - Prepare Field Program

- o Contact appropriate utility companies (internal/external).
- o Procure subcontractor commitments (vendors/union).
- o Coordinate project schedule with individual plan representatives, as necessary.

## 4.2 Phase II: Existing UST Removal

### Task 1.0 - Removal and Disposal of USTs

#### 1.1 - Clean UST(s) and Dispose of Cleaning Wastes

- o Flush any lines into tanks.
- o Clean UST(s) and associated underground piping in accordance with applicable regulations and recommended practices (API 1604). (Assumes manholes are available).
- o Prepare manifest document for transportation and disposal of cleaning wastes (see Section 8.0).
- o Arrange for transportation and disposal of cleaning wastes at a licensed disposal facility by a licensed contractor.

#### 1.2 - Excavation/Removal/Disposal/Assessment

- o Remove cover (concrete/asphalt).
- o Excavate soils surrounding UST(s) (segregate contaminated material if present).
- o Remove UST(s), cap any underground lines.
- o Inspect tank walls, seams and connections to breaches in integrity (i.e. cracks, holes, corrosion, etc.).
- o Inspect tank excavations for visible indications of leakage. Conduct field analytical screening.
- o Notify facility representatives if contamination is found or suspected in the tank excavations (see Attachment 2 for actions to be taken in case of release).
- o Remove aboveground piping as required.
- o Prepare tank(s) for shipment and proper disposal.
- o Transport UST(s) and piping to scrap dealer for recycling or cut up on site, if possible.
- o Document UST(s) and site activities with photographs.

#### 1.3 - Collect and Analyze Soil Samples from UST Excavations

- o Collect six grab soil samples from each tank excavation (four sides plus two bottom).
- o Screen each grab sample (by head space) for the presence of volatile organic compounds (VOC) using a portable PID instrument.
- o If the presence of VOC is less than 10 ppm, the six grab samples will be composited into two and submitted for analysis (one for walls, one from bottom).

- o If the presence of VOC is higher than 10 ppm, submit the sample with the highest concentration for analysis.
- o Analysis will consist of total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene and xylene (BTEX). The soil sample collected from UST #13 excavation will be analyzed for Purgeable Halocarbons (601/8010) in addition to TPH and BTEX.
- o Any leaded gasoline tanks (past or present) will be checked for lead content).

1.4 - Complete Site Activities

- o Backfill tank excavation with clean excavated soil and clean fill (following confirmation that the excavation is not contaminated).
- o Restore area to original condition (if practical).
- o Provide closure documentation report.

4.3 Phase III: Regulatory Notification and Final Closure

Report Preparation

Task 1.0 - Regulatory Notification

- o Revise the tank notification forms.
- o Submit notification forms to the state and notify other regulatory agencies, as required.

Task 2.0 - Prepare Closure Report on UST Systems

The report shall include the following:

- o UST system background.
- o Tank program overview and photographs.
- o Permits and notification forms.
- o Waste manifests.
- o Scrap dealer receipts.
- o Laboratory analytical results.
- o Permanent closure and assessment documentation.
- o Corrective action documentation (if applicable).

4.4 Phase IV: Corrective Action (if necessary)

Contingent upon the above, a detailed plan for additional work and/or remediation will be prepared by Hunter. The plan will be prepared in compliance with state/federal

regulations for site assessment and corrective action procedures. Hunter is prepared to implement corrective action steps when immediate response is necessary or requested.

#### 5.0 PROJECT SCHEDULE

Hunter can initiate the UST program described in this proposal within one week after receiving your authorization in the form of a purchase order or work order under our existing contract (FM-01491). Our first activity will be a coordination meeting with AC Flint West and Hunter personnel to discuss the overall program, determine vendor and prioritize site activities. Phases I, II and III can typically be completed within eight to ten weeks (including 30-day notification period). This includes a one week allowance for AC Flint West to review the project report in a draft form. The proposed schedule showing project activities is provided in Attachment 3.

#### 6.0 PROJECT COST

Hunter proposes to conduct the work described above on a Time and Materials Basis in accordance with our "Fee Schedule for Professional and Other Related Services" (Attachment 4).

Actual costs may vary from the estimate depending on conditions encountered (client will be notified when such conditions exist).

We recognize the potential for involvement of AC Flint West personnel and anticipate their involvement.

The cost estimate is contingent upon the statements contained in Section 8.0, Basis for Proposal. If contamination is encountered, both the project cost and schedule will be impacted.

Cost Estimate

Project Management and Coordination	\$ 3,500.00
Phase I: Facility Evaluation/Planning	\$ 3,500.00
Phase II: Existing UST Removal	\$ 82,000.00
Sampling and Analytical	10,000.00
On Site Supervision/Evaluation	8,500.00
Phase III: Regulatory Notification and Final Report Preparation	\$ <u>5,000.00</u>
Estimated Project Cost:	\$112,500.00
Average Cost Per Tank:	\$ 7,500.00
Phase IV: Corrective Action (if necessary)	\$ To Be Determined

7.0 TERMS OF PAYMENT

The terms of agreement and payment will be according to your existing Purchase Order No. FM-01491. We anticipate a rate increase effective April 1, 1989.

## 8.0 BASIS FOR PROPOSAL

The proposed scope of work, schedule and cost estimate are based on information provided by AC Flint West and the following assumptions:

- o When referred to in this proposal, Hunter includes any of Hunter's subsidiaries or subcontractors.
- o AC Flint West will provide Hunter personnel with necessary information (drawings, specifications, etc.) for tank program implementation.
- o Hunter will identify and apply for, on behalf of AC Flint West, all necessary local and state permits. AC Flint West will be responsible for payment of all applicable fees and taxes.
- o One advance site visit will be conducted prior to initiation of the field program.
- o AC Flint West will provide access to the site for Hunter personnel and equipment to perform the work. AC Flint West will identify a primary facility contact to furnish local assistance and logistical support.

- o Mobilization, demobilization, equipment transport and standby labor charges will apply during unanticipated project delays not under the control of Hunter.
  
- o Removal and disposal of residual product, sludge or other materials in the tanks are not included in the proposed scope of work (this service will be offered as an option). AC Flint West will provide removal and disposal of product within existing USTs prior to execution of the site work.
  
- o The AC Flint West pollution system (i.e. on-site treatment plant) can be utilized for contaminated water, as encountered.
  
- o The scope of work for excavation is based on normal conditions. In the event any underground structures, cables or utilities (not shown in site drawings) destroyed or damaged, also, if debris, rock, water, frozen ground or sand are encountered or if shoring is needed, Hunter shall not be held responsible for damages or limited to the estimated fees contained in this proposal.
  
- o We have assumed that excavated soil will not be contaminated and will be used in backfill operations.

- o Removal and disposal of any contaminated soil is not included in the proposed scope of work.
- o Thirty soil samples will be submitted for analysis on a regular turnaround basis.
- o No groundwater analysis will be performed (available as an option if necessary).
- o AC Flint West will provide an area in close proximity to the plant to clean and cut up all tanks removed (off-site services can be utilized if necessary).
- o Backfill, compaction and surface grading is included in the proposed scope of work. Paving cost is not included. Finished grades are to be established and verified by the client.
- o A Level D Health and Safety Program will be adhered to by all on-site personnel. Hunter representatives will use an FID or PID to screen soil samples and monitor ambient air quality.

#### 9.0 PROJECT ORGANIZATION AND MANAGEMENT

A key aspect of this project will be the organizational structure and dedication of project management. A project

manager will be assigned to the project. He will maintain overall responsibility for each of the individual tank removals and will maintain regular contact with AC Flint West representatives.

In addition to the project management requirements, a number of support personnel will be assigned to furnish technical support and provide overall project coordination, assist with sampling and analytical protocols, site assessment and remedial actions (as needed). Resumes of key personnel are provided in Attachment 5.

We recognize the need for good communication with AC Flint West and among our project personnel. The proposed organization is designed to ensure effective implementation of the program and ultimate fiscal control.

#### 10.0 QUALIFICATIONS AND EXPERIENCE

Hunter is well qualified to develop and implement the AC Flint West UST Management Program. Hunter has established and maintained an outstanding working relationship with local and state agencies and the regional offices of the USEPA.

Hunter is experienced in all aspects of UST management. We have provided a wide range of UST services both to private industry and government including:

- o Activity Priorization
- o Project and Construction Management
- o Environmental Audits
- o Preliminary Assessments to Identify Environmental Contamination
- o Detailed Assessments to Define the Location and Extent of Contaminants
- o Feasibility Studies and Risk Assessments
- o Development of Remedial Plans
- o Implementation of Corrective Actions
- o Compliance Monitoring and Remedial Maintenance
- o UST Testing, Removal and Abandonment
- o Design and Oversight of New Tank Installations

Representative project summaries have been included in Attachment 6.

Hunter is staffed with all professional disciplines necessary to ensure an effective Tank Removal Program. Our staff of highly qualified and experienced personnel

include: project managers, engineers, geologists, hydro-geologists, scientists, industrial hygienists, cartographers, computer specialists and associated technical support personnel dedicated to excellence and service.

Your confidence in Hunter Environmental Services, Inc. is appreciated and we look forward to working with you on this project. If you have any questions or comments, please do not hesitate to call us.

Appendix C

Tank Removal Notification Letter

# HUNTER/KECK

Environmental Services

1099 West Grand River Avenue  
Williamston, Michigan 48895  
(517) 655-4391 • Fax (517) 655-5220

March 30, 1989

Michigan State Police  
Fire Marshal Division  
7150 Harris Drive  
Lansing, Michigan 48913

ATTN: F/Lt. Arthur Nash, Jr.  
UST Program Manager

SUBJECT: AC Rochester Flint West, 300 North Chevrolet Avenue,  
Flint, Michigan  
Notice of Removal of Underground Storage Tanks

Dear Mr. Nash:

In accordance with Federal/State Underground Storage Tank Rules and Regulations for Tank Removal, Hunter/Keck, Inc., on behalf of AC Flint West, herein notifies the Michigan State Police (Fire Marshal Division) of intent to remove fifteen (15) underground storage tanks from the AC Flint West facility located in Genesee County (7N, 6E) in Flint, Michigan.

This letter will also serve as written notification to the MDNR Lansing District Office (UST Program), and the office of the Flint Fire Marshal.

The tanks to be removed are identified as follows:

AC ROCHESTER FLINT WEST  
UNDERGROUND STORAGE TANK LIST

Tank No.	Capacity (gallons)	Contents	Location	Age (years)
2	2,000	water/trace of gasoline	PLT.5	38
3	50,000	fuel oil	PLT.37	15
4	50,000	fuel oil	PLT.37	15
5	50,000	fuel oil	PLT.37	13
6	50,000	fuel oil	PLT.37	13
8	7,500	gasoline	PLT.7W	24
9	7,500	water/trace of gasoline	PLT.7W	24

F/Lt. Arthur Nash, Jr.  
UST Program Manager  
Page 2  
March 30, 1989

AC ROCHESTER FLINT WEST  
UNDERGROUND STORAGE TANK LIST

<u>Tank No.</u>	<u>Capacity (gallons)</u>	<u>Contents</u>	<u>Location</u>	<u>Age (years)</u>
10	1,000	water/trace of gasoline	PLT.7W	36
12	16,000	gasoline	PLT.2N	36
13	16,000	wash water	PLT.2N	36
14	20,000	gasoline	PLT.7E	21
15	10,000	diesel fuel	PLT.7E	15
20	550	diesel	PLT.2A	7

All tanks will be emptied, cleaned, removed and disposed of in accordance with all applicable regulations, ordinance codes and recommended practices. Permanent closure of the above tanks is scheduled to begin on May 1, 1989.

Your office will be verbally notified of any changes in the removal schedule.

Please note the following information:

- The AC Rochester Flint West facility contact person is Mr. Ron Neahusan, at (313) 236-6588.
- Tank Recyclers, Inc. (517-323-6313) of Lansing, Michigan and/or Genesee Bay Excavating (313-653-4117) of Flint, Michigan, will be the removal contractors.
- Hunter/Keck, Inc. of Williamston, Michigan is the Environmental Consulting firm acting on behalf of AC Flint West. Contact persons at (517) 655-4391 are:

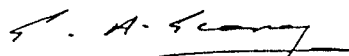
Gus George and/or Mike McDermott

F/Lt. Arthur Nash, Jr.  
UST Program Manager  
Page 3  
March 30, 1989

If you have any questions regarding this information, please contact our office at (517) 655-4391.

Very truly yours,

HUNTER/KECK, INC.



Gus A. George  
UST Program Manager

GG/dkp

cc: Mr. Ben Hall, MDNR Lansing District Office  
Mr. Wayne Tingley, Fire Marshal, Fire Prevention Bureau  
Mr. Ron Neahusan, AC Flint West  
Mr. Michael McDermott, Hunter/Keck, Inc.  
Mr. James R. Quince, Hunter/Keck, Inc.

Appendix D

MPC Daily Work Sheets

8631 WEST JEFFERSON, DETROIT, MI 48209  
(313) 849-2333 800-521-8232

COMPANY A.C. SPARK Plug west Flint HAZ-MAT  Yes  No DAY/DATE 5/30/89 Tuesday

ADDRESS \_\_\_\_\_ INDICATE AIR MASK WORN BY \* \_\_\_\_\_ P.O. # \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_ EMERGENCY CALL-OUT  \_\_\_\_\_ MPC JOB # \_\_\_\_\_

CONTACT NAME \_\_\_\_\_ SPILL CLEAN-UP  Land  Water \_\_\_\_\_

TELEPHONE \_\_\_\_\_ MILEAGE TO SITE 20 \_\_\_\_\_ JOB TIME 1100 TO 1700

JOB DESCRIPTION: Pump Fuel oil mix WATER From UNDER GROUND TANK A.C. Flint west. 250 GALS Pump on site

CUSTOMER CALL FOR TRUCK TO RETURN ON 5/31/89

PERSONNEL NAME	TIME WORKED	TITLE	STRAIGHT TIME			OVERTIME			AMOUNT
			HOURS	RATE	AMOUNT	HOURS	RATE	AMOUNT	
<u>LARRY McINCHAK</u>	<u>11:00</u> <u>17:00</u>	<u>E.O.</u>							
<b>'A' TOTAL</b>									

EQUIP. I.D. #	EQUIPMENT DESCRIPTION	TIME WORKED	RENTAL RATE	DAY RATE	AMOUNT
<u>#10</u>	<u>VAC TRUCK</u>	<u>11:00</u> <u>17:00</u>			
<b>'B' TOTAL</b>					

SUPPLIES AND MATERIALS	NUMBER	PRICE	AMOUNT	SUPPLIES AND MATERIALS	NUMBER	PRICE	AMOUNT
<u>Gloves</u>	<u>1 PR.</u>						
<u>Hose</u>	<u>100 FT</u>						
<b>'C' TOTAL</b>							

DISPOSAL: DUMP TIME INCLUDED <input type="checkbox"/> Yes <input type="checkbox"/> No TICKET # _____ MANIFEST # <u>1</u> WASTE DESCRIPTION <u>Fuel oil &amp; mix water</u> QUAN. <u>250</u> RATE _____ SITE: _____ 'D' TOTAL _____	EQUIPMENT DECONTAMINATION <input type="checkbox"/> _____ <input type="checkbox"/> No Yes Ticket # _____ TANK WASH REQUIRED <input checked="" type="checkbox"/> _____ <input type="checkbox"/> No Yes Ticket # _____ 'E' TOTAL _____	SUBCONTRACTOR NAME: _____ P.O. #: _____ 'F' TOTAL _____	<b>TOTALS</b>	
			'A' TOTAL	
			'B' TOTAL	
			'C' TOTAL	
			'D' TOTAL	
			'E' TOTAL	

CHARGES ARE PORTAL TO PORTAL FOUR HOUR MINIMUM CALL-OUT.

PREPARED BY Larry McInchak DATE 5/30/89

Stephen S. ... DATE 5/30/89

CUSTOMER \_\_\_\_\_ DATE \_\_\_\_\_

'F' TOTAL	
MISC. TOTAL	
GRAND TOTAL	



8631 WEST JEFFERSON, DETROIT, MI 48209  
(313) 849-2333 800-521-8232

COMPANY <u>16-507 Env</u>	HAZ-MAT <input type="checkbox"/> Yes <input type="checkbox"/> No	DAY/DATE <u>6-2-77</u>
ADDRESS <u>220 W. Chalmers St</u>	INDICATE AIR MASK WORN BY *	P.O. #
CITY, STATE, ZIP <u>Flint MI 48855</u>	EMERGENCY CALL-OUT <input type="checkbox"/>	MPC JOB #
CONTACT NAME <u>John Grant</u>	SPILL CLEAN-UP <input type="checkbox"/> Land <input type="checkbox"/> Water	JOB TIME <u>0930</u> TO <u>1730</u>
TELEPHONE <u>313-236-3474</u>	MILEAGE TO SITE _____	

JOB DESCRIPTION: Dumped water tank pit level 7' high. Tank's out. Put on stand by water tank. Tank removed. (Bill base not include travel & time)

PERSONNEL NAME	TIME WORKED	TITLE	STRAIGHT TIME			OVERTIME			AMOUNT
			HOURS	RATE	AMOUNT	HOURS	RATE	AMOUNT	
<u>Robert Hall</u>	<u>0930-1730</u>	<u>3.0</u>							

'A' TOTAL

EQUIP. I.D. #	EQUIPMENT DESCRIPTION	TIME WORKED	RENTAL RATE	DAY RATE	AMOUNT

'B' TOTAL

SUPPLIES AND MATERIALS	NUMBER	PRICE	AMOUNT	SUPPLIES AND MATERIALS	NUMBER	PRICE	AMOUNT
<u>Gloves</u>	<u>1</u>						

'C' TOTAL

DISPOSAL: DUMP TIME INCLUDED <input type="checkbox"/> Yes <input type="checkbox"/> No	EQUIPMENT	SUBCONTRACTOR	TOTALS	
TICKET # _____	DECONTAMINATION	NAME:	'A' TOTAL	
MANIFEST # <u>Dumped on site</u>	<input type="checkbox"/> _____ <input type="checkbox"/> No	P.O. #:	'B' TOTAL	
WASTE DESCRIPTION _____	Yes Ticket # _____		'C' TOTAL	
QUAN. _____ RATE _____	TANK WASH REQUIRED		'D' TOTAL	
SITE: _____	<input type="checkbox"/> _____ <input type="checkbox"/> No		'E' TOTAL	
	Yes Ticket # _____		'F' TOTAL	
'D' TOTAL _____	'E' TOTAL _____	'F' TOTAL _____	MISC. TOTAL	
			GRAND TOTAL	

CHARGES ARE PORTAL TO PORTAL FOUR HOUR MINIMUM CALL-OUT.

PREPARED BY Robert Lee DATE 6/2-77  
 CUSTOMER Edward [unclear] DATE 6/7/77

Appendix E

Removal Permits

CITY OF FLINT  
 FIRE PREVENTION BUREAU  
 310 E. FIFTH STREET  
 FLINT, MICHIGAN 48502  
 (313) 762-7364  
 (313) 232-2222 (24-hrs.)

# FIRE PREVENTION APPLICATION-PERMIT

© 1978 BOCA International

APPLICATION DATE <i>5/12/89</i>	DATE ISSUED	EXPIRATION DATE	PERMIT NUMBER
APPLICANT <i>Ac. Rochester - west</i>	ADDRESS <i>300 N. Chevrolet Ave. Flint Mi</i>	PHONE NUMBER <i>236-658</i>	

THE ABOVE NAMED INDIVIDUAL/BUSINESS HEREBY MAKES APPLICATION TO CONDUCT THE FOLLOWING BUSINESS AT THE ABOVE LOCATION UNDERGROUND STORAGE TANK WORK

DESCRIPTION OF WORK TO BE DONE:  
 NUMBER OF TANKS/SIZES: *Tanks to be removed 150 gal.*

AND FOR THE KEEPING, STORAGE, OCCUPANCY, USE, SALE, HANDLING, OR MANUFACTURE OF THE FOLLOWING: \_\_\_\_\_  
 (STATE QUANTITIES NORMALLY TO BE STORED, HOW STORED, OR USED, GIVING AMOUNTS FOR EACH KIND OR CATEGORY.)

ALL WORK TO BE DONE IN ACCORDANCE WITH 1987 "Seventh edition" of THE BOCA NATIONAL FIRE PREVENTION CODE. (Applicants must submit work-related site plans/drawings on 8 1/2 x 11 paper.)  
 IN ACCORDANCE WITH SECTION 103.0 (PERMITS) AND SECTION(S) Article 28 Flammable & Combustible Liquid  
 OF THE FIRE PREVENTION CODE OF THIS JURISDICTION. NFPA 30

APPROVED BY FIRE OFFICIAL <i>Sgt. S. Miller</i>	DATE <i>5/12/89</i>	FEE PAID
--	------------------------	----------

THIS PERMIT MUST BE POSTED ON THE ABOVE MENTIONED PREMISES

Account No.	CITY OF FLINT PERMIT & RECEIPT	NO. 50844
Legal Descp. <i>10-14-77</i>		
Date <i>May 12, 1989</i>	Fee <i>50.00</i>	Est. cost _____ PF _____
<input type="checkbox"/> BUILDING <input type="checkbox"/> WRECKING      INSPECTOR'S AREA _____ <input type="checkbox"/> NEW WORK <input type="checkbox"/> REPAIR WORK <input type="checkbox"/> SIGN <input type="checkbox"/> MISC'L.		
<i>Removal of 2x20 200 gallon tanks (1981-1982)</i>		
Owner _____	Ph. _____	
Address _____		
Contractor _____	Ph. _____	
Address _____		
DIVISION OF BUILDING INSPECTION BY <i>J. [Signature]</i>		

Account No.                      CITY OF FLINT  
PERMIT & RECEIPT

NO. 50843

Legal Descp. 10 14 279 000 5

Date May 12, 1989 Fee 50.00 Est. cost            PF             
 BUILDING     WRECKING    INSPECTOR'S AREA             
 NEW WORK     REPAIR WORK     SIGN     MISCL.  
Removal of 2x7,500 gallons used removal of 1x1,000 gallons used  
removal of 1x7,000 gallons used removal of 1x1,000 gallons used  
check #11824/rh

Owner Edn Heahusan Ph. 2366588  
Address AC Rochester West  
Contractor Gus George Ph. 5176552391  
Address Hunter/Reed, Inc. Williamston, MI

DIVISION OF BUILDING INSPECTION BY T. STEPHANIS

1ST COPY - INSPECTOR    2ND COPY - TREASURY    3RD COPY - OFFICE  
4TH COPY - TEMP. FILE    5TH COPY - ASSESSMENT    6TH COPY - CUSTOMER

4953 AC Rochester West  
Account No.                      CITY OF FLINT  
PERMIT & RECEIPT

NO. 50842

Legal Descp. 10 14 279 000 5  
Date May 12, 1989 Fee 50.00 Est. cost            PF           

NEW WORK     BUILDING     WRECKING    INSPECTOR'S AREA             
 REPAIR WORK     SIGN     MISCL.

Removal of 1x500 gallons used check #11824/rh

Owner Edn Heahusan Ph. 2366588  
Address AC Rochester West  
Contractor Gus George Ph. 5176552391  
Address Hunter/Reed, Inc. Williamston, MI

DIVISION OF BUILDING INSPECTION BY T. STEPHANIS

1ST COPY - INSPECTOR    2ND COPY - TREASURY    3RD COPY - OFFICE  
4TH COPY - TEMP. FILE    5TH COPY - ASSESSMENT    6TH COPY - CUSTOMER

Account No.                      CITY OF FLINT  
PERMIT & RECEIPT

NO. 50846

Legal Descp. 10 14 279 000 5

Date May 12, 1989 Fee 50.00 Est. cost            PF             
 BUILDING     WRECKING    INSPECTOR'S AREA             
 NEW WORK     REPAIR WORK     SIGN     MISCL.  
Removal of 1x1,000 gallons used check #11824/rh

Owner Edn Heahusan Ph. 2366588  
Address AC Rochester West  
Contractor Gus George Ph. 5176552391  
Address Hunter/Reed, Inc. Williamston, MI

DIVISION OF BUILDING INSPECTION BY T. STEPHANIS

1ST COPY - INSPECTOR    2ND COPY - TREASURY    3RD COPY - OFFICE  
4TH COPY - TEMP. FILE    5TH COPY - ASSESSMENT    6TH COPY - CUSTOMER

4953 AC Rochester West  
Account No.                      CITY OF FLINT  
PERMIT & RECEIPT

NO. 50845

Legal Descp. 10 14 279 000 5  
Date May 12, 1989 Fee 50.00 Est. cost            PF           

NEW WORK     BUILDING     WRECKING    INSPECTOR'S AREA             
 REPAIR WORK     SIGN     MISCL.

Removal of 1 2,000 gallon used check #11824/rh

Owner Edn Heahusan Ph. 2366588  
Address AC Rochester West  
Contractor Gus George Ph. 5176552391  
Address Hunter/Reed, Inc. Williamston, MI

DIVISION OF BUILDING INSPECTION BY T. STEPHANIS

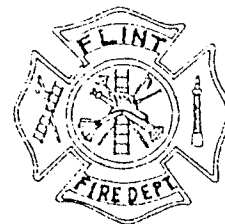
1ST COPY - INSPECTOR    2ND COPY - TREASURY    3RD COPY - OFFICE  
4TH COPY - TEMP. FILE    5TH COPY - ASSESSMENT    6TH COPY - CUSTOMER

Appendix F

Flint Fire Department Letter



FLINT FIRE DEPARTMENT  
FIRE PREVENTION BUREAU



Matthew S. Collier  
MAYOR

Samuel Dixon  
FIRE CHIEF  
(313) 762-7336

Wayne Tingley  
FIRE MARSHAL  
(313) 762-7364

April 3rd 1989

Hunter / Keck  
Environmental Services  
1099 West Grand River Avenue  
Williamston, Michigan 48895

Attn: Gus A. George  
Mike McDermott

Sir:

We have recieved a copy of a March 30th 1989 letter you sent to Lt. Art Nash MSP Fire Marshal Divison in reference to the removal of 15 UST'S located on AC Rochester Flint West, 300 N. Chevrolet Ave Flint, Michigan.

This return letter is to inform you that the City of Flint Fire Inspector assigned to this project will be Sgt./Inspector Willie Miller 313-762-7364 also enclosed is a copy of "City of Flint Fire Prevention Bureau Underground Storage Tank Procedures"

Very turly yours,

Wayne A. Tingley  
Fire Marshal

CC: City of Flint Building Dept. Jim Brady  
City of Flint Sgt./Inspector Willie Miller & Theron Wiggins

CITY OF FLINT, MICHIGAN

MEMORANDUM

FROM: SGT. WILLIE MILLER

DATE: June 7, 1989

TO: FIRE MARSHAL WAYNE TINGLEY

SUBJECT: U.S.T. REMOVAL FROM A.C. WEST  
300 CHEVROLET AVENUE, PLANT #2  
FRIDAY, MAY 26, 1989

I arrived at 4:00 PM. The tank contents of approximately 200 gallons of waste water was removed by Marine Pollution Control and taken to A.C.'s Waste Water Treatment Plant in Flint.

Genesee Bay, 4335 N. State Street, Davison, MI, was the contractor that removed the tanks and contaminated soil, approximately 350 yards. The soil was taken to Venus Park Landfill, 9536 Lennon Road, Lennon, MI. 43449. The tank was purged and destroyed on site.

I left scene at 8:00 PM. Soil was tested for explosive vapors and was OK.

Contact Person: Ron Neahusan, A. C. West.

*Willie Miller WAM*  
\_\_\_\_\_  
Sgt. Willie Miller

b

Appendix G

Venice Park Development  
Certificate of Acceptance and  
Disposal of Contaminated Soils

# Venice Park Development

A P.A. 641 Sanitary Landfill

JUN 27 1989



June 26, 1989

FISHER GUIDE - FLINT PLANTS  
300 N. CHEVROLET AVE.  
FLINT, MI 48555

Re: Damaged Soils  
Invoice #2953

Dear Sirs:

Enclosed you will find a copy of the analytical results for the soils that were brought to our landfill on the above referenced invoice. This is to advise you that these soils were acceptable to go into our landfill and have been placed into the fill area in the manner required by the MDNR.

If you have any further questions on this matter, please feel free to contact me.

Thanking you.

Yours truly,

A handwritten signature in cursive script that reads "Ric Crawford".

Ric Crawford  
President

/jmm

Enclosure

P.O. Box 212  
Vernon, Michigan 48476  
(313) 621-9080

# SEG LABORATORIES, INC.

SEG LABORATORIES, INC.  
 1120 MAY STREET  
 LANSING, MI 48906  
 PHONE - 517-374-6800

Venice Park Development  
 P.O. Box 212  
 Vernon, Michigan  
 Mr. Rick Crawford

PROJECT NUMBER

Location	Lab No	Time Sampled	Date Sampled	Date Received
- JOB SD#1 SAMPLE #1	5404	0	05/23/89	05/24/89
- JOB AC#1 SAMPLE #1 ✓	5405	0	05/23/89	05/24/89

INV # 2953

ANALYTICAL REPORT  
 DATE REPORTED 06/07/89

TEST	UNITS	LAB NO. 5404	LAB NO. 5405
EP-Lead	ug/L	<0.04	<0.04
Total Solids	%	93	87
PURGEABLE AROMATICS		EPA 602	EPA 602
Benzene	ug/kg	<10	<500
Toluene	ug/kg	<10	<500
Ethylbenzene	ug/kg	<10	<500
Chlorobenzene	ug/kg	<10	<500
1,3-Dichlorobenzene	ug/kg	<10	<500
1,4-Dichlorobenzene	ug/kg	<10	<500
1,2-Dichlorobenzene	ug/kg	<10	<500
p-Xylene	ug/kg	<10	860
m-Xylene	ug/kg	<10	3000 -
o-Xylene	ug/kg	<10	2500 -
PURGEABLE HALOCARBONS		EPA 601	EPA 601
Dichlorodifluoromethane	ug/kg	<50	<50
Chloromethane	ug/kg	<50	<50
Vinyl chloride	ug/kg	<50	<50
Bromomethane	ug/kg	<50	<50
Chloroethane	ug/kg	<10	<10
Trichlorofluoroethane	ug/kg	<10	<10
1,1-Dichloroethene	ug/kg	<10	<10
Methylene chloride	ug/kg	<10	<10
trans-1,2-Dichloroethene	ug/kg	<10	<10
1,1-Dichloroethane	ug/kg	<10	<10
Chloroform	ug/kg	<10	<10
1,1,1-Trichloroethane	ug/kg	<10	<10

Carbon tetrachloride	ug/kg	<10	<10
1,2-Dichloroethane	ug/kg	<10	<10
Trichloroethene	ug/kg	<10	<10
1,2-Dichloropropane	ug/kg	<10	<10
Bromodichloromethane	ug/kg	<10	<10
2-Chloroethylvinyl ether	ug/kg	<50	<50
cis-1,3-Dichloropropene	ug/kg	<10	<10
trans-1,3-Dichloropropene	ug/kg	<10	<10
1,1,2-Trichloroethane	ug/kg	<10	<10
Tetrachloroethene	ug/kg	<10	<10
Dibromochloromethane	ug/kg	<10	<10
Chlorobenzene	ug/kg	<10	<10
Bromoform	ug/kg	<10	<10
1,1,2,2-Tetrachloroethane	ug/kg	<10	<10
1,3-Dichlorobenzene	ug/kg	<10	<10
1,4-Dichlorobenzene	ug/kg	<10	<10
1,2-Dichlorobenzene	ug/kg	<10	<10

PROJECT MANAGER

*Lori A. Vachon*

LORI A. VACHON

# RUBBISH REMOVAL PASS

751337

DATE 5/27/59

FROM: AC Rochester - West  
300 N: Chevrolet Ave.  
Flint, Michigan 48555

TO VENICE TARI

9501 LOUISIANA

FLINT, MI

PLANT 2 YARD

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT 7:10:20 TIME IN \_\_\_\_\_

HM (place "X" in proper column)

WEIGHT

WASTE PAPER, WET, FLAMMABLE SOLID  
HAZARDOUS WASTE, NOS, ORM-E  
MUD

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5

AUTHORIZED SIGNATURE Gatekeeper

DRIVERS SIGNATURE Kenneth B...

FILE COPY

# RUBBISH REMOVAL PASS

751336

DATE 5/27/89

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO VENICE PARK  
615236 LENNON RD  
LENNON MI

PLANT 2 YARD

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT 10:15 TIME IN \_\_\_\_\_

(place "X" in proper column)

WASTE PAPER, WET, FLAMMABLE SOLID  
HAZARDOUS WASTE, NOS, ORM-E

MUD  
 SAND 10 yards

WEIGHT

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

AUTHORIZED SIGNATURE [Signature]

DRIVERS SIGNATURE \_\_\_\_\_

FILE COPY

# RUBBISH REMOVAL PASS

751360

DATE 5-27-89

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO VENICE PARK  
9631a LENOVA RD  
LENOVA, MI

PLANT 2 YARD

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_ TIME OUT 10:15 TIME IN \_\_\_\_\_

HM (place "X" in proper column)

WEIGHT

<input type="checkbox"/>	WASTE PAPER, WET, FLAMMABLE SOLID	_____
<input type="checkbox"/>	HAZARDOUS WASTE, NOS, ORM-E	_____
<input type="checkbox"/>	MUD	_____
<input checked="" type="checkbox"/>	<u>SAND</u>	_____

_____
_____
_____
_____

AUTHORIZED SIGNATURE Catlyn

DRIVERS SIGNATURE \_\_\_\_\_

FILE COPY

# RUBBISH REMOVAL PASS

751339

DATE 9-27-89

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO VENICE PARK  
4536 CANTON RD  
LENNON, MI

PLANT 1100

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT 11:00 TIME IN \_\_\_\_\_

HM (place "X" in proper column)

WEIGHT \_\_\_\_\_

WASTE PAPER, WET, FLAMMABLE SOLID  
HAZARDOUS WASTE, NOS, ORM-E  
MUD

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

AUTHORIZED SIGNATURE [Signature]

DRIVERS SIGNATURE [Signature]

FILE COPY

**NOVEMBER 1989**

# RUBBISH REMOVAL PASS

751344

DATE \_\_\_\_\_

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

PLANT \_\_\_\_\_

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT

6:45

TIME IN \_\_\_\_\_

HM (place "X" in proper column)

WEIGHT

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

WASTE PAPER, WET, FLAMMABLE SOLID  
HAZARDOUS WASTE, NOS, ORM-E  
MUD

*to Nisipad*

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*CS*

AUTHORIZED SIGNATURE *[Signature]*

DRIVERS SIGNATURE *[Signature]*

FILE COPY

# RUBBISH REMOVAL PASS

751357

DATE 5-27-89

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO VENUE #100

1000

1000

PLANT 2 yard

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT 8:25 TIME IN \_\_\_\_\_

HM (place "X" in proper column)

WEIGHT

<input type="checkbox"/>	WASTE PAPER, WET, FLAMMABLE SOLID
<input type="checkbox"/>	HAZARDOUS WASTE, NOS, ORM-E
<input type="checkbox"/>	MUD
<input checked="" type="checkbox"/>	<u>SAND 245 yards</u>

_____
_____
_____

AUTHORIZED SIGNATURE [Signature]

DRIVERS SIGNATURE [Signature]

FILE COPY

# RUBBISH REMOVAL PASS

751346

DATE \_\_\_\_\_

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PLANT yard

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT 8:15 TIME IN \_\_\_\_\_

HM (place "X" in proper column)

WEIGHT

<input type="checkbox"/>	WASTE PAPER, WET, FLAMMABLE SOLID	_____
<input type="checkbox"/>	HAZARDOUS WASTE, NOS, ORM-E	_____
<input type="checkbox"/>	MUD	_____

good to go

AUTHORIZED SIGNATURE [Signature]

DRIVERS SIGNATURE \_\_\_\_\_

FILE COPY

# RUBBISH REMOVAL PASS

751345

DATE 5/27/74

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PLANT \_\_\_\_\_

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT \_\_\_\_\_ TIME IN \_\_\_\_\_

HM (place "X" in proper column)

WEIGHT:

<input type="checkbox"/>	WASTE PAPER, WET, FLAMMABLE SOLID
<input type="checkbox"/>	HAZARDOUS WASTE, NOS, ORM-E
<input type="checkbox"/>	MUD

6-45

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_ CS

AUTHORIZED SIGNATURE [Signature]

DRIVERS SIGNATURE \_\_\_\_\_

FILE COPY

# RUFGISH REMOVAL PASS

751359

DATE 5/27/89

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO GENIE PARK  
1526 HENNINGTON  
HENNINGTON

PLANT 2 yard

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_ TIME OUT 9:30 TIME IN \_\_\_\_\_

HM (place "X" in proper column)

WEIGHT

<input type="checkbox"/>	WASTE PAPER, WET, FLAMMABLE SOLID	_____
<input type="checkbox"/>	HAZARDOUS WASTE, NOS, ORM-E	_____
<input type="checkbox"/>	MUD	_____
<input checked="" type="checkbox"/>	<u>SAND</u>	<u>245 yards</u>

AUTHORIZED SIGNATURE Bob Miller

DRIVERS SIGNATURE [Signature]

FILE COPY

# RUBBISH REMOVAL PASS

751342

DATE 5-27-89

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO Venice Park  
9536 Lennon Rd  
Lennon, Mi

PLANT 2 Yard

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_ TIME OUT \_\_\_\_\_ TIME IN \_\_\_\_\_

HM (place "X" in proper column)

<input type="checkbox"/>	WASTE PAPER, WET, FLAMMABLE SOLID
<input type="checkbox"/>	HAZARDOUS WASTE, NOS, ORM-E
<input type="checkbox"/>	MUD
<input checked="" type="checkbox"/>	<u>sand</u>

WEIGHT

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

AUTHORIZED SIGNATURE C. A. Dwyer

*Subcopy*

DRIVERS SIGNATURE [Signature]

DUMP COPY

**NON-HAZARDOUS**

# RUBBISH REMOVAL PASS

751361

DATE 5/27/89

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO Venice Park  
4930 Lannon Rd  
Lennon, MI

PLANT 2 yard

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT 7:00 TIME IN \_\_\_\_\_

HM (place "X" in proper column)

WASTE PAPER, WET, FLAMMABLE SOLID  
HAZARDOUS WASTE, NOS, ORM-E  
MUD

Sand ~ 45 yards

WEIGHT

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

AUTHORIZED SIGNATURE [Signature]

DRIVERS SIGNATURE \_\_\_\_\_

FILE COPY

**NON-HAZARDOUS**

# RESIDUAL REMOVAL PASS

751358

DATE 5/27/89

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO VENICE PARK

10216 TERRON RD

TERRON, MI

PLANT 3 yard

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT 3:45 TIME IN \_\_\_\_\_

HM (place "X" in proper column)

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input checked="" type="checkbox"/>

WASTE PAPER, WET, FLAMMABLE SOLID  
HAZARDOUS WASTE, NOS, ORM-E  
MUD

Sand & Dirt

WEIGHT

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

AUTHORIZED SIGNATURE Cat... [Signature]

DRIVERS SIGNATURE \_\_\_\_\_

FILE COPY

NON-HAZARDOUS

# RUBBISH REMOVAL PASS

751342

DATE \_\_\_\_\_

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PLANT \_\_\_\_\_

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT \_\_\_\_\_ TIME IN \_\_\_\_\_

HM (place "X" in proper column)

WEIGHT

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

WASTE PAPER, WET, FLAMMABLE SOLID  
HAZARDOUS WASTE, NOS, ORM-E  
MUD

_____
_____
_____

AUTHORIZED SIGNATURE Barry Doyle

DRIVERS SIGNATURE \_\_\_\_\_

FILE COPY

*WON'T BE NEARBY*

# RUBISH REMOVAL PASS

751343

DATE 5.27.89

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PLANT 2 Yard

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT \_\_\_\_\_ TIME IN \_\_\_\_\_

HM (place "X" in proper column)

WEIGHT

<input type="checkbox"/>	WASTE PAPER, WET, FLAMMABLE SOLID
<input type="checkbox"/>	HAZARDOUS WASTE, NOS, ORM-E
<input checked="" type="checkbox"/>	MUD

sand 200

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

99

AUTHORIZED SIGNATURE Gar Dwyer

DRIVERS SIGNATURE \_\_\_\_\_

FILE COPY

F-1779 Rev. 3-82

# RUBBISH REMOVAL PASS

751389

DATE 5/21/84

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO Wentworth Park  
9500 Kenwood Rd  
Kenwood, Mich

PLANT 37 Yard

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT \_\_\_\_\_ TIME IN \_\_\_\_\_

HM \_\_\_\_\_ (place "X" in proper column)

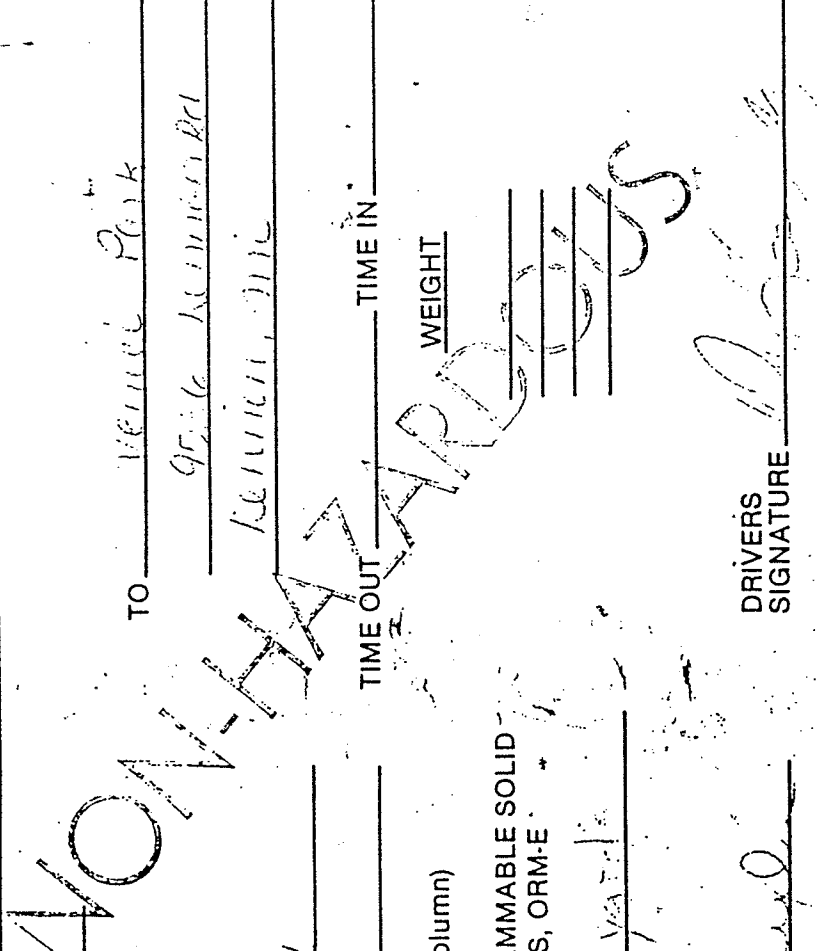
	WEIGHT
<input type="checkbox"/>	_____
<input type="checkbox"/>	_____
<input type="checkbox"/>	_____
<input type="checkbox"/>	_____
<input type="checkbox"/>	_____
<input type="checkbox"/>	_____

WASTE PAPER, WET, FLAMMABLE SOLID  
HAZARDOUS WASTE, NOS, ORM-E  
MUD

Sand 12 yards

AUTHORIZED SIGNATURE CAW DRIVERS SIGNATURE [Signature]

FILE COPY



# RUBBISH REMOVAL PASS

751340

DATE 6-5-59

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO Waste Dept

City of Flint

PLANT 57 (road)

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT \_\_\_\_\_ TIME IN \_\_\_\_\_

HM (place "X" in proper column)

<input type="checkbox"/>	WASTE PAPER, WET, FLAMMABLE SOLID
<input type="checkbox"/>	HAZARDOUS WASTE, NOS, ORM-E
<input type="checkbox"/>	MUD

WEIGHT

\_\_\_\_\_

AUTHORIZED SIGNATURE Ca D... [Signature]

DRIVERS SIGNATURE [Signature]

FILE COPY

*NOV 11 1959*

# RUBBISH REMOVAL PASS

751265

DATE 6/15/87

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO \_\_\_\_\_

PLANT NON-HAZARDOUS

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT \_\_\_\_\_ TIME IN \_\_\_\_\_

HM \_\_\_\_\_ (place "X" in proper column) \_\_\_\_\_ WEIGHT \_\_\_\_\_

WASTE PAPER, WET, FLAMMABLE SOLID  
 HAZARDOUS WASTE, NOS, ORM-E  
 MUD

AUTHORIZED SIGNATURE [Signature] DRIVERS SIGNATURE [Signature]

FILE COPY

# RUBBISH REMOVAL PASS

751341

DATE 6/19/82

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO VENUE PARK  
1200 W. 4536 LYNN RD  
FLINT, MI 48502

PLANT 37 yard

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT \_\_\_\_\_ TIME IN \_\_\_\_\_

HM \_\_\_\_\_ (place "X" in proper column)

WASTE PAPER, WET, FLAMMABLE SOLID  
HAZARDOUS WASTE, NOS, ORM-E  
MUD

WEIGHT \_\_\_\_\_

AUTHORIZED SIGNATURE [Signature]

DRIVERS SIGNATURE [Signature]

FILE COPY

**NOX**

# RUBBISH REMOVAL PASS

751323

DATE \_\_\_\_\_ TO \_\_\_\_\_  
 FROM: AC Rochester - West  
 300 N. Chevrolet Ave.  
 Flint, Michigan 48555

PLANT Waste TRAILER \_\_\_\_\_  
 TIME OUT \_\_\_\_\_ TIME IN \_\_\_\_\_

TRACTOR \_\_\_\_\_ WEIGHT \_\_\_\_\_  
 HM (place "X" in proper column)

WASTE PAPER, WET, FLAMMABLE SOLID  
 HAZARDOUS WASTE, NOS, ORM-E  
 MUD  
Waste

**NON-HAZARDOUS**

AUTHORIZED SIGNATURE Carla Dwyer DRIVERS SIGNATURE [Signature]

FILE COPY

# RUBBISH REMOVAL PASS

751322

DATE 6-8-89

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO \_\_\_\_\_  
\_\_\_\_\_

PLANT 371 road TRAILER \_\_\_\_\_

TRACTOR \_\_\_\_\_ TIME OUT \_\_\_\_\_ TIME IN \_\_\_\_\_

HM (place "X" in proper column)

<input type="checkbox"/>	WASTE PAPER, WET, FLAMMABLE SOLID
<input type="checkbox"/>	HAZARDOUS WASTE, NOS, ORM-E
<input checked="" type="checkbox"/>	MUD

# HAZARDOUS

WEIGHT \_\_\_\_\_

AUTHORIZED SIGNATURE Bob Dwyer

DRIVERS SIGNATURE \_\_\_\_\_

FILE COPY

# RUBBISH REMOVAL PASS

751321

DATE 2/15/84

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

PLANT AC Rochester - West

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT \_\_\_\_\_ TIME IN \_\_\_\_\_

HM (place "X" in proper column)

WEIGHT

WASTE PAPER, WET, FLAMMABLE SOLID  
 HAZARDOUS WASTE, NOS, ORM-E  
 MUD

**NON-HAZARDOUS**

AUTHORIZED SIGNATURE [Signature]

DRIVERS SIGNATURE [Signature]

FILE COPY

# RUBBISH REMOVAL PASS

751382

DATE \_\_\_\_\_

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO \_\_\_\_\_

PLANT \_\_\_\_\_

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT 11:10 TIME IN \_\_\_\_\_

HM \_\_\_\_\_ (place "X" in proper column)

WEIGHT

<input type="checkbox"/>	WASTE PAPER, WET, FLAMMABLE SOLID
<input type="checkbox"/>	HAZARDOUS WASTE, NOS, ORM-E
<input type="checkbox"/>	MUD

**NO HAZARDOUS**

AUTHORIZED SIGNATURE Carroll DRIVERS SIGNATURE H Rainey

FILE COPY

# RUBBISH REMOVAL PASS

751317

DATE May 26, 1989

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO Venita Park  
4524 Lounsbury Rd  
Warren, Mich

PLANT 37 yard

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT 9:00 TIME IN \_\_\_\_\_

HM (place "X" in proper column)

<input type="checkbox"/>	WASTE PAPER, WET, FLAMMABLE SOLID
<input type="checkbox"/>	HAZARDOUS WASTE, NOS, ORM-E
<input checked="" type="checkbox"/>	MUD

sand ~ 10 yds

DOUS

AUTHORIZED SIGNATURE G. A. [Signature]

DRIVERS SIGNATURE [Signature]

FILE COPY

# RUBBISH REMOVAL PASS

751316

DATE \_\_\_\_\_

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO \_\_\_\_\_  
\_\_\_\_\_

PLANT \_\_\_\_\_

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT \_\_\_\_\_ TIME IN \_\_\_\_\_

HM \_\_\_\_\_ (place "X" in proper column) \_\_\_\_\_

WASTE PAPER, WET, FLAMMABLE SOLID  
HAZARDOUS WASTE, NOS, ORM-E  
MUD

**NON-HAZARDOUS**

AUTHORIZED SIGNATURE \_\_\_\_\_  
DRIVERS SIGNATURE A Rainey

FILE COPY

# RUBBISH REMOVAL PASS

751383

DATE 6-26-89

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO \_\_\_\_\_

PLANT \_\_\_\_\_

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT \_\_\_\_\_ TIME IN \_\_\_\_\_

HM (place "X" in proper column)

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

WASTE PAPER, WET, FLAMMABLE SOLID  
HAZARDOUS WASTE, NOS, ORM-E  
MUD

WEIGHT \_\_\_\_\_

**NON-HAZARDOUS**

AUTHORIZED SIGNATURE C. A. Swisher

DRIVERS SIGNATURE

Kenneth M. Br

FILE COPY



# RUBBISH REMOVAL PASS

751314

DATE \_\_\_\_\_

FROM: AC Rochester - West  
 300 N. Chevrolet Ave.  
 Flint, Michigan 48555

TO: Waste Removal  
Waste Removal  
Flint, Michigan, Inc.

PLANT \_\_\_\_\_

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT \_\_\_\_\_ TIME IN \_\_\_\_\_

HM \_\_\_\_\_ (place "X" in proper column)

WASTE PAPER, WET, FLAMMABLE SOLID  
 HAZARDOUS WASTE, NOS, ORM-E  
 MUD

**NON-HAZARDOUS**

AUTHORIZED SIGNATURE \_\_\_\_\_

DRIVERS SIGNATURE [Signature]

FILE COPY

# RUBBISH REMOVAL PASS

751378

DATE May 24, 1989

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO Venue Park  
9636 Lemon Rd.  
Lemon, MI

PLANT \_\_\_\_\_

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT 7:00 TIME IN \_\_\_\_\_

HM (place "X" in proper column)

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

WASTE PAPER, WET, FLAMMABLE SOLID  
HAZARDOUS WASTE, NOS, ORM-E  
MUD

~15 yards

**WASTE**

WEIGHT \_\_\_\_\_

AUTHORIZED SIGNATURE Carl S. [Signature]

DRIVERS SIGNATURE Kenneth M. Brown

FILE COPY

# RUBBISH REMOVAL PASS

751313

DATE 11/11/82

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO AC Rochester - West

**NON-HAZARDOUS**

PLANT AC Rochester - West

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT \_\_\_\_\_ TIME IN \_\_\_\_\_

HM (place "X" in proper column)

<input type="checkbox"/>	WASTE PAPER, WET, FLAMMABLE SOLID
<input type="checkbox"/>	HAZARDOUS WASTE, NOS, ORM-E
<input type="checkbox"/>	MUD

WEIGHT

1000

AUTHORIZED SIGNATURE [Signature]

DRIVERS SIGNATURE [Signature]

FILE COPY

# RUBBISH REMOVAL PASS

751378

DATE May 24, 1989

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO Venue Park  
9536 Lennon Rd  
Lennon, mi

PLANT \_\_\_\_\_

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT 7:00 TIME IN \_\_\_\_\_

HM (place "X" in proper column)

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	-------------------------------------

WASTE PAPER, WET, FLAMMABLE SOLID  
HAZARDOUS WASTE, NOS, ORM-E  
MUD

sent n/5 yards

**NOXIOUS WASTE**

AUTHORIZED SIGNATURE C. A. [Signature]

DRIVERS SIGNATURE Kenneth Brown

PLANT SECURITY COPY

# RUBBISH REMOVAL PASS

751377

DATE May 23, 1979

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO: Demico Park  
4536 Leaning Rd  
Leaning, MI

PLANT 37 yard TRAILER \_\_\_\_\_

TRACTOR \_\_\_\_\_ TIME OUT 3:45 TIME IN \_\_\_\_\_

HM \_\_\_\_\_ (place "X" in proper column) \_\_\_\_\_ WEIGHT \_\_\_\_\_

<input type="checkbox"/>	WASTE PAPER, WET, FLAMMABLE SOLID
<input type="checkbox"/>	HAZARDOUS WASTE, NOS, ORM-E
<input type="checkbox"/>	MUD
<input checked="" type="checkbox"/>	<u>Sand</u>

**HAZARDOUS**

AUTHORIZED SIGNATURE Co. D. [Signature]

DRIVERS SIGNATURE [Signature]

136-9391

PLANT SECURITY COPY



# RUBBISH REMOVAL PASS

751377

DATE \_\_\_\_\_

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO \_\_\_\_\_

PLANT \_\_\_\_\_

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT \_\_\_\_\_ TIME IN \_\_\_\_\_

HM (place "X" in proper column)

WEIGHT

<input type="checkbox"/>	WASTE PAPER, WET, FLAMMABLE SOLID
<input type="checkbox"/>	HAZARDOUS WASTE, NOS, ORM-E
<input type="checkbox"/>	MUD

*NON-HAZARDOUS*

AUTHORIZED SIGNATURE C. A. Swisher

DRIVERS SIGNATURE A. Rainey

FILE COPY

# RUBBISH REMOVAL PASS

751392

DATE 5-31-89

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO Waste Ponds  
4534 Lannon Rd  
Lannon, MI

PLANT 37 yard

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT 12:30 TIME IN \_\_\_\_\_

HM (place "X" in proper column)

WASTE PAPER, WET, FLAMMABLE SOLID  
 HAZARDOUS WASTE, NOS, ORM-E  
 MUD

Sand 17 yd

WEIGHT  
1000  
1000  
1000

SS

AUTHORIZED SIGNATURE C. C. S. W. D.

DRIVERS SIGNATURE R. J. [Signature]

FILE COPY

# RUBBISH REMOVAL PASS

751391

DATE 5/31/89 **VOID**

FROM: AC Rochester - West  
 300 N. Chevrolet Ave.  
 Flint, Michigan 48555

TO Verme Park  
Eric Lennon Rd  
Flint, MI

PLANT 39 Vaid

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_ TIME OUT \_\_\_\_\_ TIME IN \_\_\_\_\_

HM (place "X" in proper column)

<input type="checkbox"/>	WASTE PAPER, WET, FLAMMABLE SOLID
<input type="checkbox"/>	HAZARDOUS WASTE, NOS, ORM-E
<input checked="" type="checkbox"/>	MUD

sand ~ 10 yds

WEIGHT

1000 lbs

AUTHORIZED SIGNATURE Ca Sawyer

DRIVERS SIGNATURE Alamy

FILE COPY



# RUBBISH REMOVAL PASS

751390

**NON-HAZARDOUS**

DATE 5/31/89

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO: VENICE PARK  
4526 Venison Rd  
VENISON, MI

PLANT 377 Ford

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT 7:30 TIME IN \_\_\_\_\_

HM (place "X" in proper column)

<input type="checkbox"/>	WASTE PAPER, WET, FLAMMABLE SOLID
<input type="checkbox"/>	HAZARDOUS WASTE, NOS, ORM-E
<input type="checkbox"/>	MUD
<input checked="" type="checkbox"/>	<u>solid waste</u>

WEIGHT \_\_\_\_\_

AUTHORIZED SIGNATURE C. S. ...

DRIVERS SIGNATURE A. ...

FILE COPY

# RUBBISH REMOVAL PASS

751388

DATE 5/30/89

110N/HAZ

TO Waste Truck

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

PLANT 38 Wood

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_ TIME OUT 11:30 TIME IN \_\_\_\_\_

HM \_\_\_\_\_ (place "X" in proper column)

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

WASTE PAPER, WET, FLAMMABLE SOLID  
HAZARDOUS WASTE, NOS, ORM-E  
MUD

Waste Truck

110N/HAZ

WEIGHT \_\_\_\_\_

AUTHORIZED SIGNATURE G. Cassano

DRIVERS SIGNATURE A. Kowey

FILE COPY

# RUBBISH REMOVAL PASS

751387

DATE 5/30/89

**MON**

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO Wm. Ford  
4224 LAMAR  
GENOVA

**MON**

PLANT 3710nd

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT 9:50 TIME IN \_\_\_\_\_

HM (place "X" in proper column)


WASTE PAPER, WET, FLAMMABLE SOLID  
HAZARDOUS WASTE, NOS, ORM-E  
MUD

WEIGHT \_\_\_\_\_

AUTHORIZED SIGNATURE [Signature]

DRIVERS SIGNATURE [Signature]

FILE COPY

# RUBBISH REMOVAL PASS

751381

DATE 5-26-79

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO W. J. Park

W. J. Park

W. J. Park

PLANT 371000

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT 10:30 TIME IN \_\_\_\_\_

HM (place "X" in proper column)

<input type="checkbox"/>	WASTE PAPER, WET, FLAMMABLE SOLID
<input type="checkbox"/>	HAZARDOUS WASTE, NOS, ORM-E
<input type="checkbox"/>	MUD
<input type="checkbox"/>	<u>sand</u>

WEIGHT \_\_\_\_\_

AUTHORIZED SIGNATURE W. J. Park

DRIVERS SIGNATURE W. J. Park

FILE COPY

# RUBBISH REMOVAL PASS

751315

DATE May 26 1989

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO: Venice Park  
6836 Leavon Rd  
Warren, Mich

PLANT 37 Yards TRAILER \_\_\_\_\_

TIME OUT 10:15 TIME IN \_\_\_\_\_

HM \_\_\_\_\_ (place "X" in proper column)

<input type="checkbox"/>	WASTE PAPER, WET, FLAMMABLE SOLID
<input type="checkbox"/>	HAZARDOUS WASTE, NOS, ORM-E
<input checked="" type="checkbox"/>	MUD

**HAZARDOUS**

SAND & BRICKS

AUTHORIZED SIGNATURE \_\_\_\_\_

DRIVERS SIGNATURE

Kenneth Brown

FILE COPY

# RUBBISH REMOVAL PASS

751318

DATE 5-26-89

FROM: AC Rochester - West  
300 N. Chevrolet Ave.  
Flint, Michigan 48555

TO Venue Park  
4536 Larrison Rd  
Lemont, Ill

PLANT 37 yard

TRACTOR \_\_\_\_\_ TRAILER \_\_\_\_\_

TIME OUT \_\_\_\_\_ TIME IN \_\_\_\_\_

HM (place "X" in proper column)

<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

WASTE PAPER, WET, FLAMMABLE SOLID  
HAZARDOUS WASTE, NOS, ORM-E  
MUD

SAND - 10 yd

*Handwritten signature/initials*

AUTHORIZED SIGNATURE \_\_\_\_\_

DRIVERS SIGNATURE \_\_\_\_\_

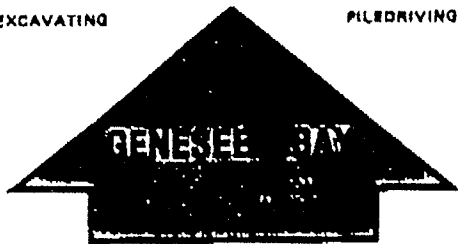
FILE COPY



Appendix H

Certificate of Tank Disposal





July 15, 1989

A.C. Rochester West  
General Motors Corp.  
300 N Chevrolet Ave  
Flint, Michigan 48555

Attention: Ron Neahusan

Reference: Tank Removal  
P.O. # FM-01643 PMPE # 0283  
GB # D8913

Gentlemen:

Please find herein confirmation of tank disposal. We have removed the following :

1ea @ 2,000gal Gasoline Tank  
4ea @ 50,000gal Fuel Oil Tanks  
1ea @ 15,000gal Gasoline Tank  
1ea @ 15,000gal Paint Tank

These tanks were hauled to Genesee-Bay Constructors yard, cut into pieces and hauled to Flint Recycling, Inc. and disposed of for recycled steel.

If you have any questions please contact me.

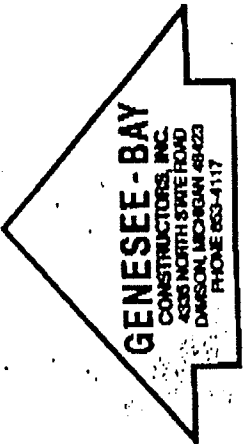
Very truly yours,

Genesee-Bay Constructors, Inc.

Douglas L Walls

DLW/amb

U UUS9U4

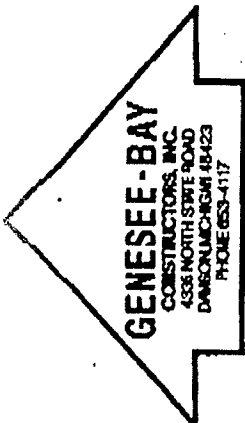


DATE 7-14-89

CUSTOMER AC West D#913  
 BILLING ADDRESS Leak Removal

HOURS	DESCRIPTION	RATE	AMOUNT
	Labor & Equip to Haul Scrap from tanks to Scrap yard		
4 Hrs	Cowboy w/transfer <sup>(.56<sup>00</sup>)</sup> (.29 <sup>40</sup> )	79 <sup>20</sup>	318 <sup>00</sup>
4 Hrs	forklift	20 <sup>00</sup>	80 <sup>00</sup>
4 Hrs	operator	39 <sup>00</sup>	156 <sup>00</sup>
TOTAL			554 <sup>00</sup>

SIGNED Sam Jotka



DATE 7-10-89

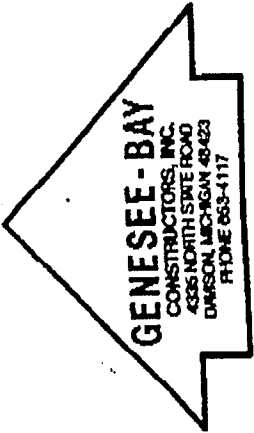
CUSTOMER AC west D: 0913  
BILLING ADDRESS Bank Removel

HOURS	DESCRIPTION	RATE	AMOUNT
8 hrs ea	2 Laborers	2650	424 00
	2 Sets torches	7500	150 00
	Fork Lift. (239.00)	6900	172 50
	Labor & Equip to Cut tanks Removed from AC west		
	TOTAL		1046 50

SIGNED Gene Saska



00000000



DATE 7-13-89

CUSTOMER AC West  
 BILLING ADDRESS Academe

HOURS	DESCRIPTION	RATE	AMOUNT
	Labor & Equip to haul Scrap from tanks to scrap yard	79.50	318.00
4 Hrs	Cowboy w/ (6 29.50)	30.00	120.00
4 Hrs	Forklift	39.00	156.00
	TOTAL		594.00

SIGNED Mike Laska



Appendix I

Chain-of-Custody Forms



LABORATORY ADDRESS:

**MILLER/KECK**

1099 West Grand River  
Williamson, MI  
48895

# CHAIN-OF-CUSTODY RECORD

NO 1284

PROJECT LOCATION		NAME OF CLIENT		PROJECT TELEPHONE NO.		PROJECT NUMBER	
AC west Flint mi.		AC west Task removal				484 2518	
ITEM NO.	SAMPLE NO.	TIME	NO. OF CONTAINERS	SAMPLE TYPE	SAMPLE DESCRIPTION	TRANSFER NO.	CHECK
1					500gal Tank Bldg 37	1	
2	SS 1	11:30	1	soil	sand Bottom Excavation (E) <sup>End</sup>	2	
3	SS 2	11:30	1	soil	sand Bottom Excavation (W) <sup>End</sup>	3	
4	SS 3	11:30	1	soil	Composite side walls	4	
5						5	
6						6	
7						7	
8						8	

PERSON RESPONSIBLE FOR SAMPLE COLLECTION		AFFILIATION	TRANSFERS RELINQUISHED BY	ACCEPTED BY	DATE	TIME
MT Hebert	MT Hebert	Miller/Keck	MT Hebert	Jacqueline A. Smith	5/22/89	4:40
DATE: May 22 1989	TIME: 7:00 AM					

PURPOSE OF ANALYSIS (use back of front sheet if needed)

BTEX  
TPH

**HUNTER/KECK**

**CHAIN-OF-CUSTODY RECORD**

LABORATORY ADDRESS:

1099 Grand River  
Williamston MI 48815

NO 1987

PROJECT NUMBER

484-2518

PROJECT TELEPHONE NO.

NAME OF CLIENT

AC Flint West

PROJECT LOCATION

Flint, MI

ITEM NO.	SAMPLE NO.	TIME	NO. OF CONTAINERS	SAMPLE TYPE	SAMPLE DESCRIPTION	TRANSFER NO. & CHECK											
						1	2	3	4	5	6	7					
1	1	1:10	1	Soil	Bottom of excavation, East <del>End</del> End												
2	2	1:10	1	soil	Bottom of excavation, west End												
3	3	1:10	1	soil	Composite of the side walls												
4																	
5																	
6					Location: Pkt 5, Bldg 5												
7					ID POST NO 2												
8																	
PERSON RESPONSIBLE FOR SAMPLE COLLECTION						AFFILIATION		TRANSFERS RELINQUISHED BY		ACCEPTED BY		DATE		TIME			
Michael T Hebert						Houston/Keck		MTH		Came Hebert		0/9/89		4:30			
DATE						TIME											
August 9 89						2:00 PM											
PURPOSE OF ANALYSIS (use back of front sheet if needed)																	
BTEX, TPH,																	
EP tox. LEAD																	

484-2518  
566

## CHAIN-OF-CUSTODY RECORD

566  
484-2518

PROJECT LOCATION

Flint MI  
Ac Flint

PROJECT TELEPHONE NO.

PROJECT NUMBER

484-2518

ITEM NO.	SAMPLE NO.	TIME	NO. OF CONTAINERS	SAMPLE TYPE	SAMPLE DESCRIPTION	TRANSFER NO. & CHECK										
						1	2	3	4	5	6	7				
1					Bldg 37, sewage tank											
2																
3	SS 4		1	Soil Sample	Soil Sample											
4																
5																
6																
7																
8																

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	ACCEPTED BY	DATE	TIME
1	1	Michael T. Hebert	Michael T. Hebert	5-25-89	8:00pm
2	1	Michael T. Hebert	Michael T. Hebert	5-25-89	2:15
3					
4					
5					
6					
7					

PERSON RESPONSIBLE FOR SAMPLE COLLECTION

Michael T. Hebert  
Affiliation: Hunter/Keck

DATE

5/25/89  
Time: 8:00pm

PURPOSE OF ANALYSIS (use back of front sheet if needed)

BTEx + TPH  
P.O. # W1-0329

## CHAIN-OF-CUSTODY RECORD

LABORATORY ADDRESS: 566

1285

OFFICE ADDRESS: 1099 West Grand Ave.  
Flint, MI 48895

PROJECT LOCATION: Flint MI PROJECT TELEPHONE NO.: 48895 PROJECT NUMBER: 1841-2518

NAME OF CLIENT: Ac Flint

ITEM NO.	SAMPLE NO.	TIME	NO. OF CONTAINERS	SAMPLE TYPE	SAMPLE DESCRIPTION	TRANSFER NO. & CHECK										
						1	2	3	4	5	6	7				
1	6	1130	2	VOA	VOA Bldg 2000 Park / 50,000 gal											
2	5	9:45	1		VOA Bldg 2000 Park / 50,000 gal											
3																
4																
5																
6																
7																
8																

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	ACCEPTED BY	DATE	TIME
1					
2		<u>Michael Blythe</u>	<u>Michael Blythe</u>	<u>5-25-89</u>	<u>2:15</u>
3					
4			<u>Robert H.</u>		
5			<u>Robert H.</u>		
6			<u>Robert H.</u>		
7			<u>Robert H.</u>		

PERSON RESPONSIBLE FOR SAMPLE COLLECTION: MT H. K. AFFILIATION: Flint MI

DATE: 5/25/89 TIME: 2:15

PURPOSE OF ANALYSIS (use back of front sheet if needed)

1099 Grand River Av.  
Williamston, MI 48895

SEG

## CHAIN-OF-CUSTODY RECORD

NO 1291

PROJECT LOCATION: Flint, MI  
NAME OF CLIENT: AC west Flint

PROJECT TELEPHONE NO.

PROJECT NUMBER

484-2509

ITEM NO.	SAMPLE NO.	TIME	NO. OF CONTAINERS	SAMPLE TYPE	SAMPLE DESCRIPTION	TRANSFER NO. & CHECK										
						1	2	3	4	5	6	7				
1	7	3830	1	Soil Sample	Soil sample, Bldg 39 middle south wall											
2	8	3815	1	Soil Sample	Soil sample Bldg 37 middle north wall											
3																
4																
5																
6																
7																
8																

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	ACCEPTED BY	DATE	TIME
2	2	KECK	R. Varner	6/1/89	8:04 AM
3	2	R. Varner	R. Varner	6/1/89	9:13 AM
4					
5					
6					
7					

PERSON RESPONSIBLE FOR SAMPLE COLLECTION: Michael T. Hebert

AFFILIATION: Hunter Keck

DATE: June 1, 1989 7:00 PM

PURPOSE OF ANALYSIS (use back of front sheet if needed):

run BTEX  
TPH



OFFICE ADDRESS:  
 1099 ...  
 13 ...  
 YES/5

LABORATORY ADDRESS:  
 SEG

1290

## CHAIN-OF-CUSTODY RECORD

ITEM NO.	SAMPLE NO.	TIME	NO. OF CONTAINERS	SAMPLE TYPE	AFFILIATION	PERSON RESPONSIBLE FOR SAMPLE COLLECTION		TRANSFER NO.	TRANSFER NO. & CHECK										
						DATE	TIME		1	2	3	4	5	6	7				
1		7:30	1	soil	Keck														
2		7:30	1	soil	Keck														
3		7:45	1	soil	Keck														
4		7:45	1	soil	Keck														
5		7:10	1	soil	Keck														
6		7:45	1	soil	Keck														
7		8:20	1	soil	Keck														
8		8:00	1	soil	Keck														
PERSON RESPONSIBLE FOR SAMPLE COLLECTION						AFFILIATION		TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	ACCEPTED BY	DATE	TIME						
DATE: 11/11/89						Keck		1	8										
PURPOSE OF ANALYSIS (use back of front sheet if needed)								2	8	KCS STORAGE TANK		5/31/89	8:30 AM						
on 11/11/89 } non								3	8	Keck		5/31/89	9:15 AM						
1, 2, 3, 4 } non								4											
on 11/11/89 } non								5											
3, 4, 5, 6, 8 } non								6											
								7											

PROJECT LOCATION: Flint  
 NAME OF CLIENT: Ac Flint  
 PROJECT TELEPHONE NO.:  
 PROJECT NUMBER: 184-2578-09

OFFICE ADDRESS:

1099 Goodriver  
Liveston MI 48045

## CHAIN-OF-CUSTODY RECORD

LABORATORY ADDRESS:

See

1987

PROJECT LOCATION

Flint, mi.

NAME OF CLIENT

Ac Flint West

PROJECT TELEPHONE NO.

PROJECT NUMBER

184-2518

ITEM NO.	SAMPLE NO.	TIME	NO. OF CONTAINERS	SAMPLE TYPE	SAMPLE DESCRIPTION	TRANSFER NO. & CHECK								
						1	2	3	4	5	6	7		
1	1	1:10	1	soil	Bottom of excavation, East <del>side</del> End TPH									
2	2	1:10	1	soil	Bottom of excavation, west End TPH									
3	3	1:10	1	soil	Composite of the side walls TPH									
4														
5														
6					Location: PLOT 5, Bldg 5 Bldg 5 ID POST NO 2									
7														
8														

TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	ACCEPTED BY	DATE	TIME
1	3	MTI/Hubert	Carrie Hebert	6/19/89	4:30
2					
3					
4					
5					
6					
7					

PERSON RESPONSIBLE FOR SAMPLE COLLECTION

Hubert / T Hebert

AFFILIATION

Howster/Keck

DATE

June 9 89

TIME

2:00 PM

PURPOSE OF ANALYSIS (use back of front sheet if needed)

BTEX, TPH,

EP tox. LEAD

Appendix J

Laboratory Analytical Results

# SEG

## SEG LABORATORIES, INC.

Hunter/Keck Inc.  
 1099 West Grand River  
 Williamston, MI 48895  
 Mr. Michael T. Hebert

Gasoline, Paint Wash UST System

LOCATION: Pit 2N, area of Bldg. 21-2  
 UST Id Bldg. 21-2, No. UST12, UST13

Location	Lab No	Time Sampled	Date Sampled	Date Received
16000 Tank Paint Wash, Bottom East	5502	7:30	5/26/89	5/31/89
16000 Tank Paint Wash, Bottom West	5503	7:30	5/26/89	5/31/89
South Wall	5508	8:20	5/26/89	5/31/89

TEST	UNITS	LAB NO. 5502	LAB NO. 5503	LAB NO. 5508
Petroleum Hydrocarbons	ug/kg	94	440	53
Total Solids	%	84	84	87
<b>PURGEABLE AROMATIC/BTEX Compounds (9020)</b>				
Benzene	ug/kg	<5000	<10	<10
Toluene	ug/kg	<5000	<10	<10
Ethylbenzene	ug/kg	<5000	<10	<10
Chlorobenzene	ug/kg	<5000	<10	<10
1,3-Dichlorobenzene	ug/kg	<5000	<10	<10
1,4-Dichlorobenzene	ug/kg	<5000	<10	<10
1,2-Dichlorobenzene	ug/kg	<5000	<10	<10
p-Xylene	ug/kg	76,000	96	<10
m-Xylene	ug/kg	120,000	86	<10
o-Xylene	ug/kg	11,000	72	<10
<b>PURGEABLE HALOCARBONS (9010)</b>				
Dichlorodifluoroethane	ug/kg	<50	<50	<50
Chloroethane	ug/kg	<50	<50	<50
Vinyl chloride	ug/kg	<50	<50	<50
Bromoethane	ug/kg	<50	<50	<50
Chloroethane	ug/kg	<10	<10	<10
Trichlorofluoroethane	ug/kg	<10	<10	<10
1,1-Dichloroethene	ug/kg	<10	<10	<10
Methylene chloride	ug/kg	<10	<10	<10
trans-1,2-Dichloroethene	ug/kg	<10	<10	<10
1,1-Dichloroethane	ug/kg	<10	<10	<10
Chloroform	ug/kg	<10	<10	<10
1,1,1-Trichloroethane	ug/kg	<10	<10	<10
Carbon tetrachloride	ug/kg	<10	<10	<10

Gasoline, Paint Wash UST System

LOCATION: Plt 2N, area of Bldg. 21-2

UST Id Bldg. 21-2, No. UST12, UST13

Location	Lab No	Time Sampled	Date Sampled	Date Received
16000 Tank Gasoline, Bottom West	5504	6:15	5/26/89	5/31/89
16000 Tank Gasoline, Bottom East	5505	6:15	5/26/89	5/31/89
West Wall	5506	7:20	5/26/89	5/31/89
East Wall	5507	7:45	5/26/89	5/31/89

TEST	UNITS	LAB NO. 5504	LAB NO. 5505	LAB NO. 5506	LAB NO. 5507
Petroleum Hydrocarbons	ug/kg	96	53	130	270
EP-Lead	ug/L	<0.04	<0.04	<0.04	<0.04
Total Solids	%	84	88	89	84
BTEX Compounds		**	**	**	**
Benzene	ug/kg	<500	<100	<10	<100
Toluene	ug/kg	<500	<100	<10	<100
Ethylbenzene	ug/kg	3500	<100	<10	<100
p-Xylene	ug/kg	850	<100	<10	1400
m-Xylene	ug/kg	650	<100	<10	1300
o-Xylene	ug/kg	560	<100	<10	1100

\*\* Dilution due to matrix interference

# SEG LABORATORIES, INC.

Hunter/Keck Inc.  
 1099 West Grand River  
 Williamston, MI 48995  
 Mr. Michael T. Hebert

LOCATION: Pit 5, Bldg. 5  
 UST Id Bldg 5 UST No 2

Location	Lab No	Time Sampled	Date Sampled	Date Received
Bottom of excavation, East end	5733		6/09/89	6/09/89
Bottom of excavation, West end	5734		6/09/89	6/09/89
Composite of side walls	5735		6/09/89	6/09/89

TEST	UNITS	LAB NO. 5733	LAB NO. 5734	LAB NO. 5735
Petroleum Hydrocarbons	ug/kg	680	<50	87
EP-Lead	ug/L	32	<0.44	8.6
Total Solids	%	93	95	93
BTEX Compounds				
Benzene	ug/kg	<10	<10	<10
Toluene	ug/kg	<10	<10	<10
Ethylbenzene	ug/kg	<10	<10	<10
p-Xylene	ug/kg	<10	<10	<10
m-Xylene	ug/kg	<10	<10	<10
o-Xylene	ug/kg	<10	<10	<10

PROJECT MANAGER *Lori A. Vachon*  
 LORI A. VACHON

LOCATION: Plt 37, East of Bldg 37  
 UST 1d, Bldg 37 No. UST3, UST4, UST5, UST6, USTA

Location	Lab No	Time Sampled	Date Sampled	Date Received
5	5425		5/24/89	5/25/89
7	5543		5/22/89	5/22/89
8	5544			

TEST	UNITS	LAB NO. 5425	LAB NO. 5543	LAB NO. 5544
Petroleum Hydrocarbons	ug/kg	<50	5100	<50
Total Solids	%	87	85	90
BTEX Compounds				
Benzene	ug/kg	<10	<100	<10
Toluene	ug/kg	<10	<100	<10
Ethylbenzene	ug/kg	<10	<100	<10
p-Xylene	ug/kg	<10	<100	<10
m-Xylene	ug/kg	<10	<100	<10
o-Xylene	ug/kg	<10	<100	<10

LOCATION: Plt 37, East of Bldg 37  
 UST Id, Bldg 37 No. UST3, UST4, UST5, UST6, USTA

Location	Lab No	Time Sampled	Date Sampled	Date Received
9	5648		6/02/89	6/05/89
10	5649		6/02/89	6/05/89
11	5650		6/02/89	6/05/89
Infill Sand	5651		6/02/89	6/05/89

TEST	UNITS	LAB NO. 5648	LAB NO. 5649	LAB NO. 5650	LAB NO. 5651
Petroleum Hydrocarbons	ug/kg	520	150	<50	<50
Total Solids	%	88	92	85	96
BTEX Compounds					
Benzene	ug/kg	<10	<10	<10	<10
Toluene	ug/kg	<10	<10	<10	<10
Ethylbenzene	ug/kg	<10	<10	<10	<10
p-Xylene	ug/kg	810	<10	<10	<10
m-Xylene	ug/kg	<10	<10	<10	<10
o-Xylene	ug/kg	<10	<10	<10	<10

LOCATION: Pit 37, East of Bldg 37

UST Id, Bldg 37 No. UST3, UST4, UST5, UST6, UST8

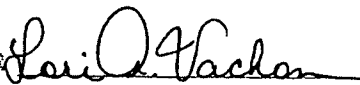
Location	Lab No	Time Sampled	Date Sampled	Date Received
6	5424		5/24/89	5/25/89

TEST                      UNITS                      LAB NO. 5424

BTEX Compounds

Benzene	ug/L	<1.0
Toluene	ug/L	<1.0
Ethylbenzene	ug/L	<1.0
p-Xylene	ug/L	<1.0
m-Xylene	ug/L	<1.0
o-Xylene	ug/L	<1.0

PROJECT MANAGER



LORI A. VACHON

Appendix K

Photographic Documentation

## Photographic Documentation

Photographs 1 through 25: UST System Nos. 3, 4, 5, 6 and A  
Closure

Photographs 26 through 30: UST System No. 2 Closure

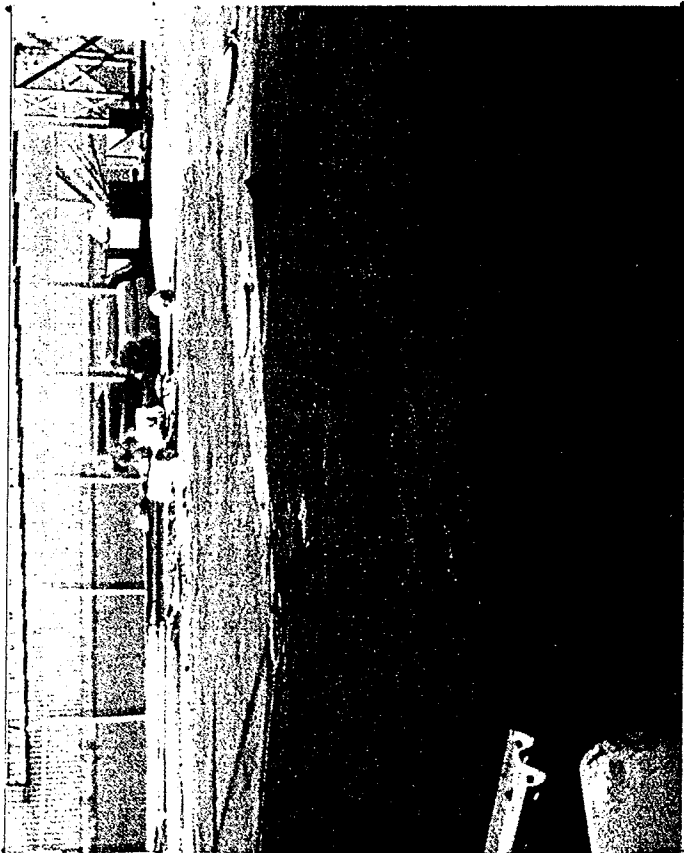
Photographs 31 through 34: UST System Nos. 12 and 13  
Closure



2



4



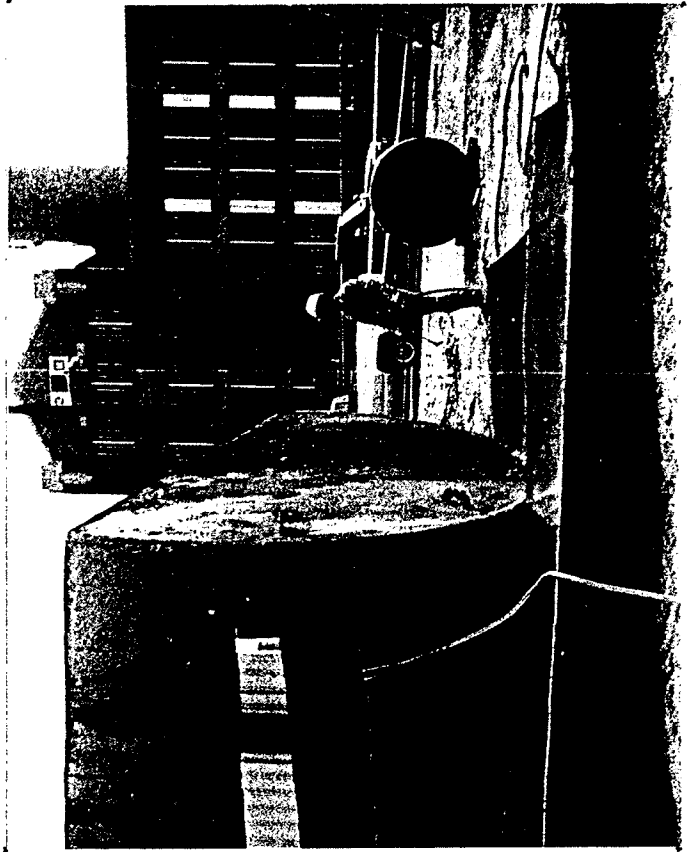
1



3



6



8



5



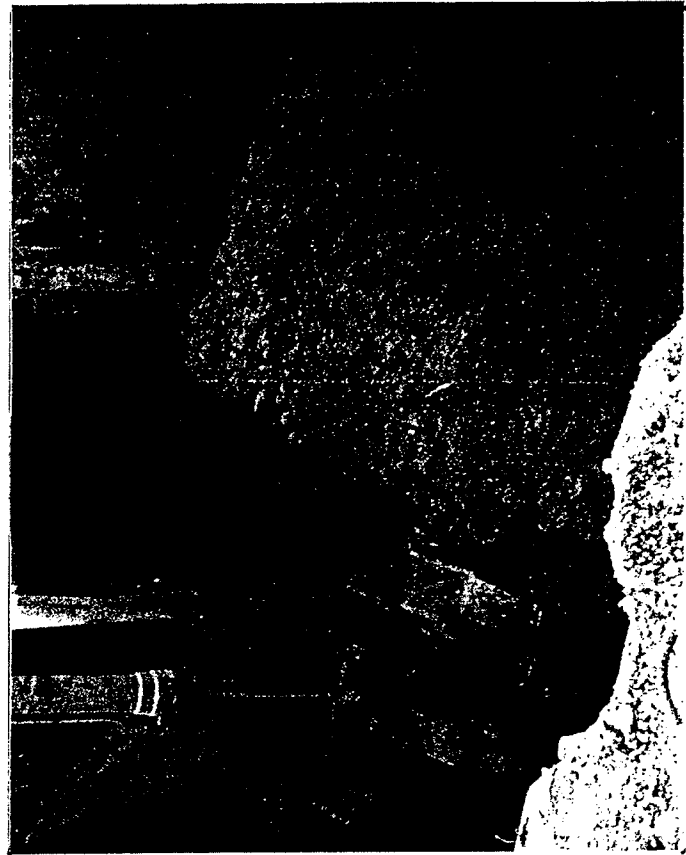
7



12



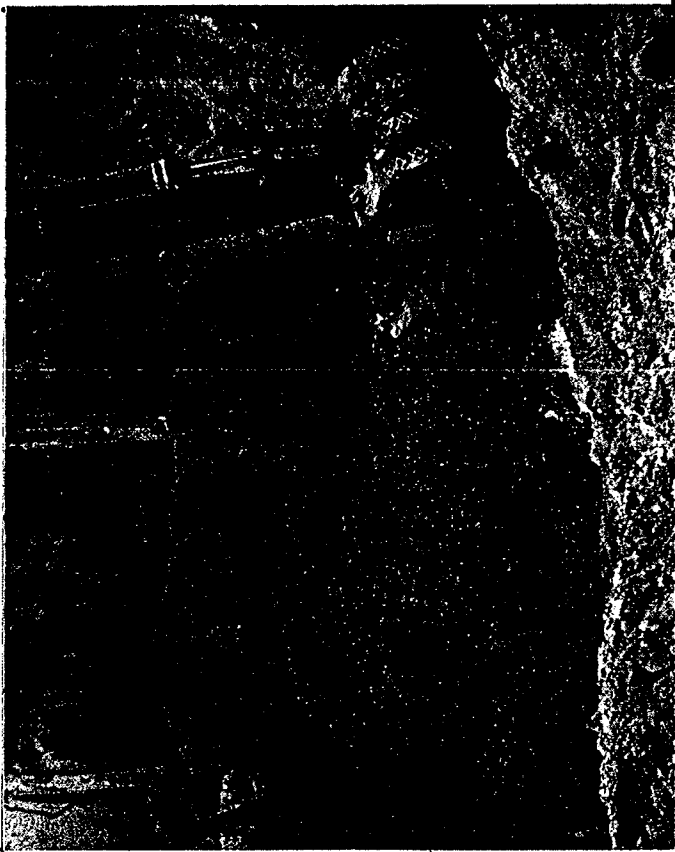
11



10



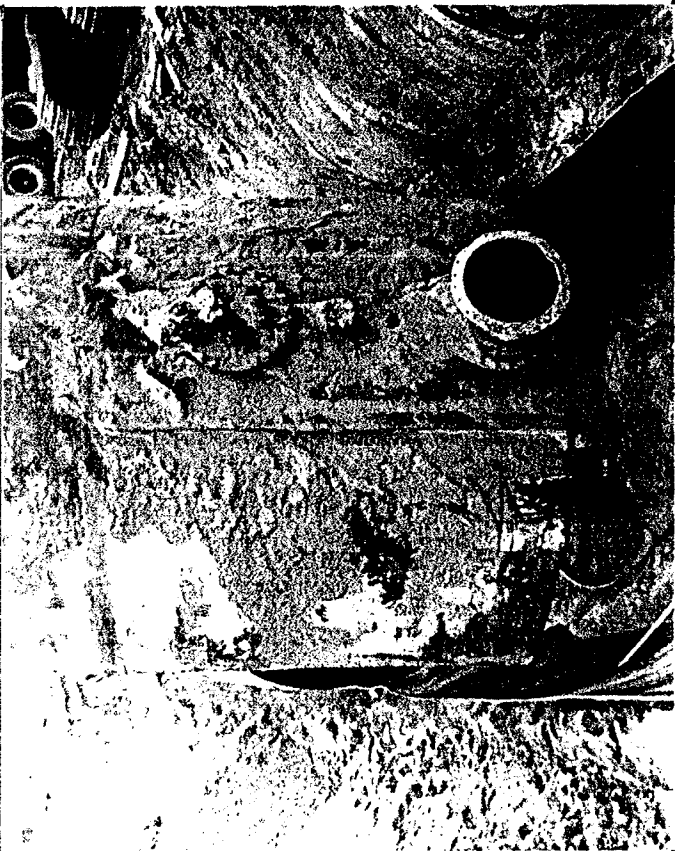
9



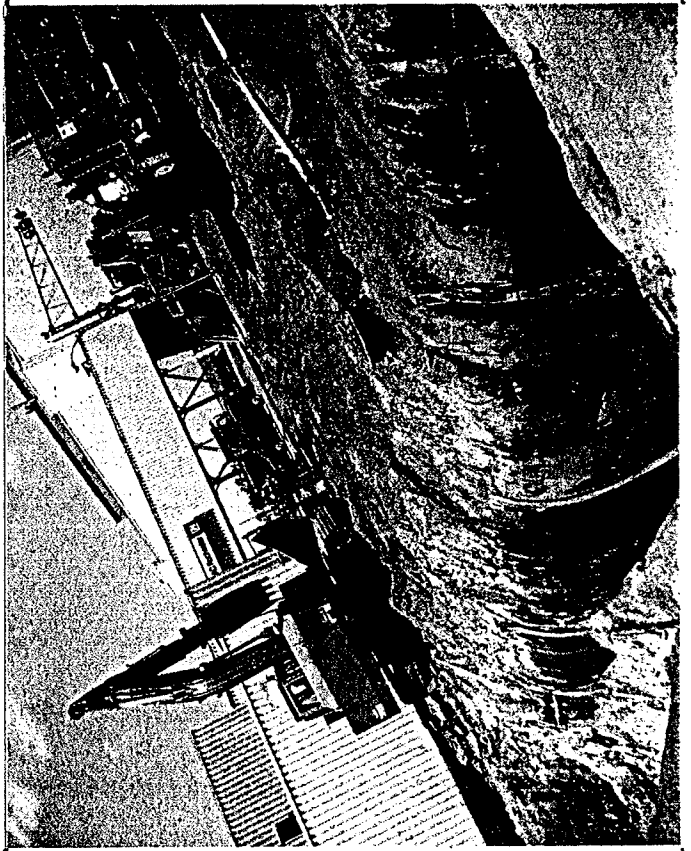
14



16



13



15



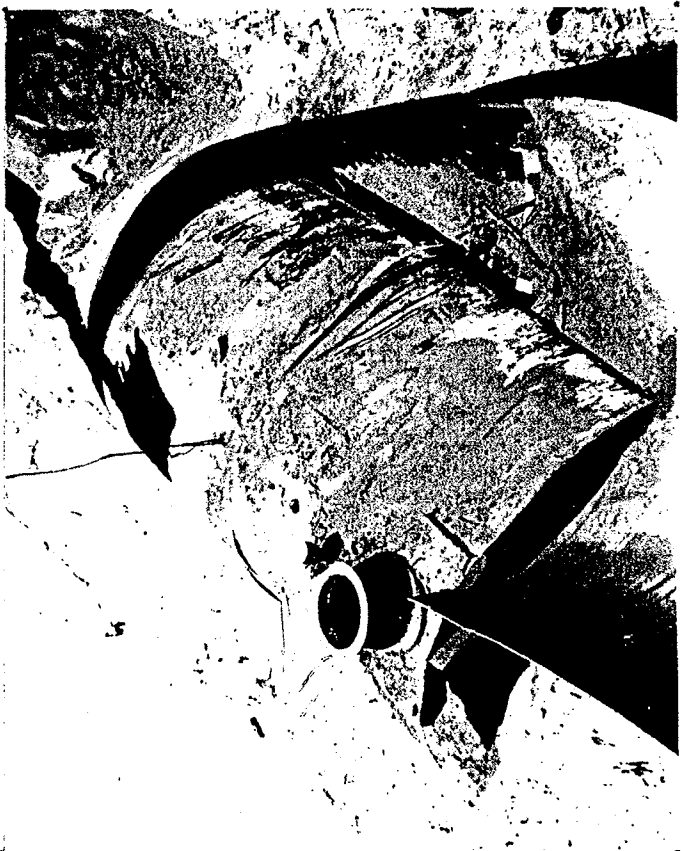
20



19



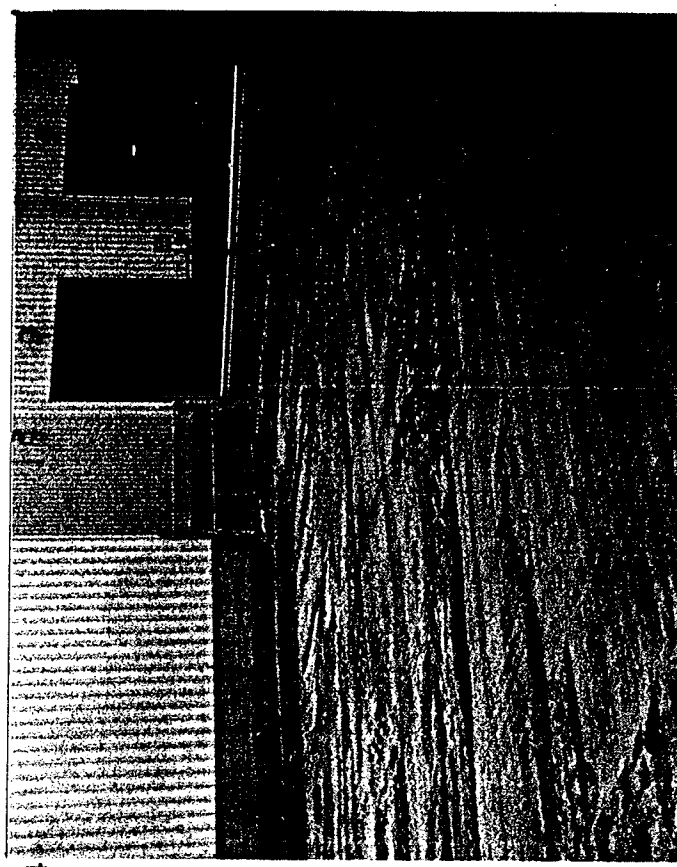
18



17



23



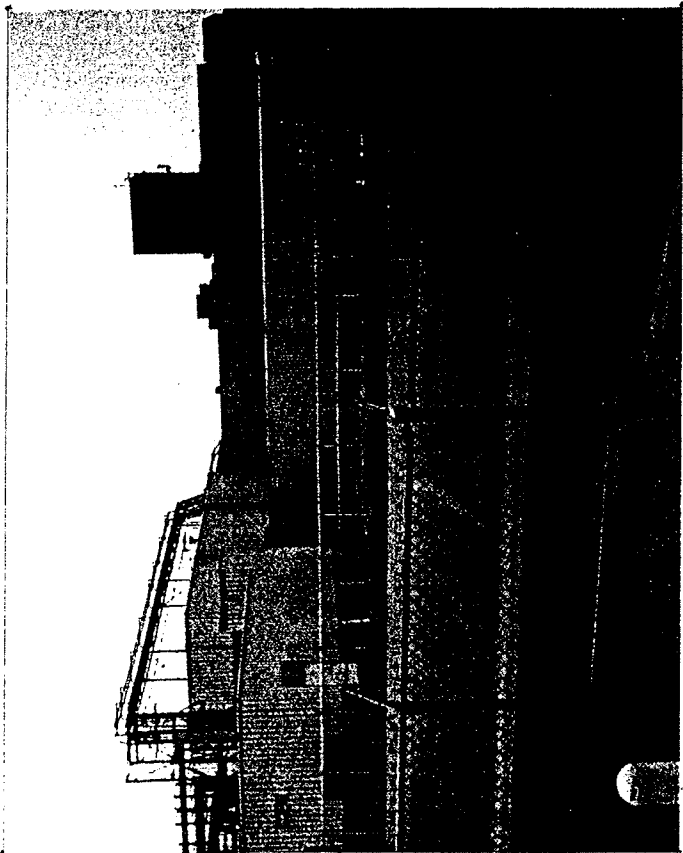
24



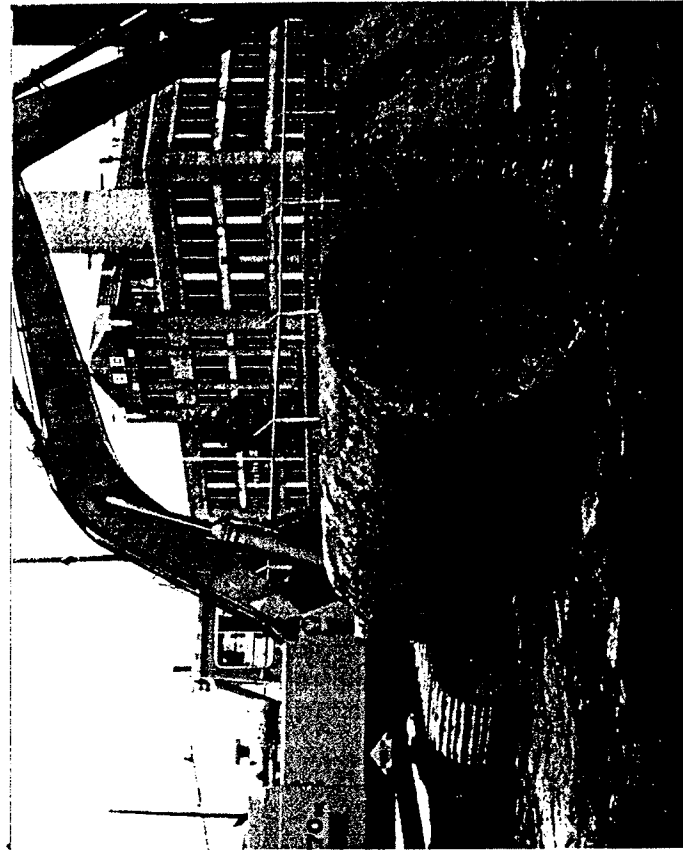
21



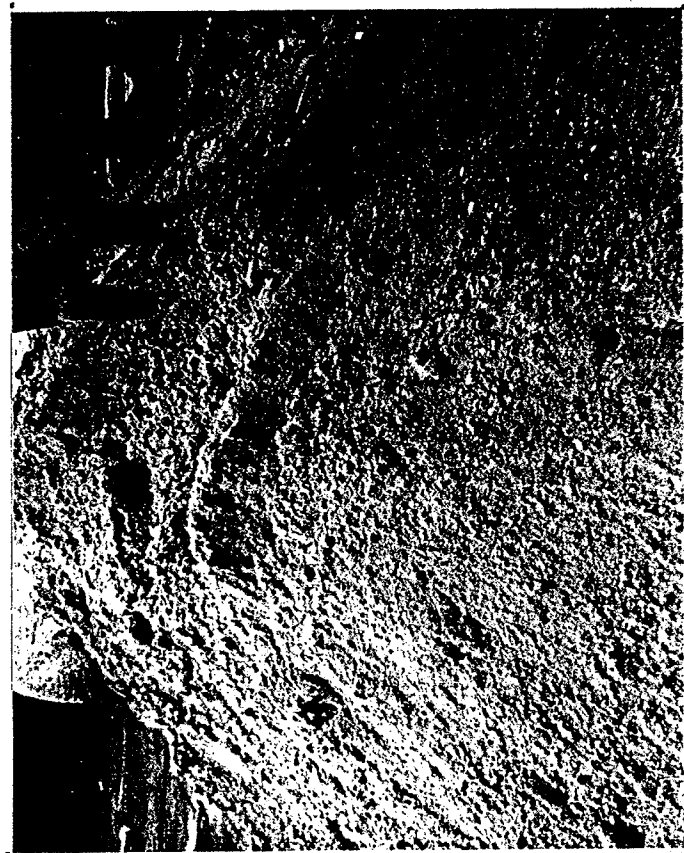
22



25



26



27



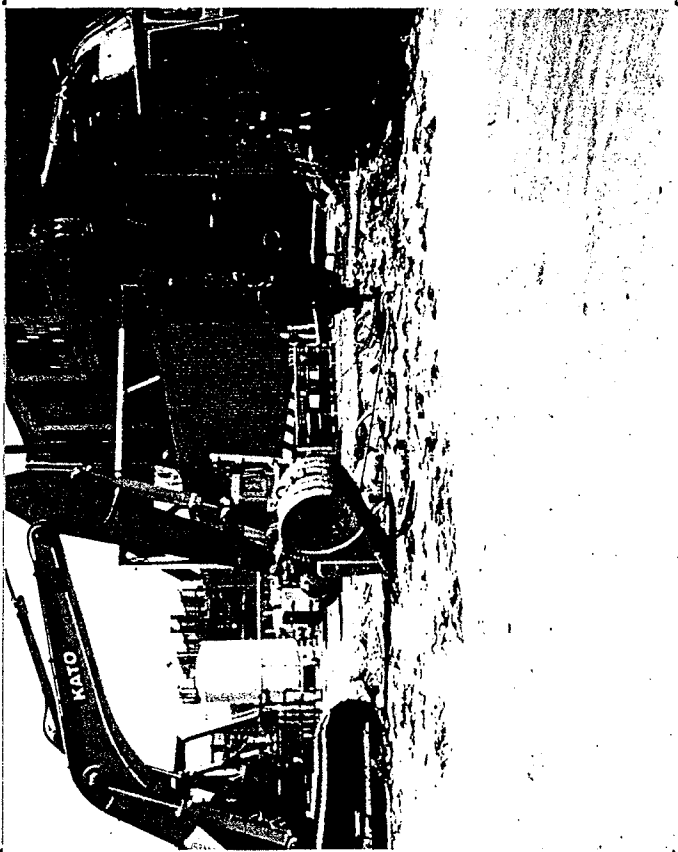
28



29



30

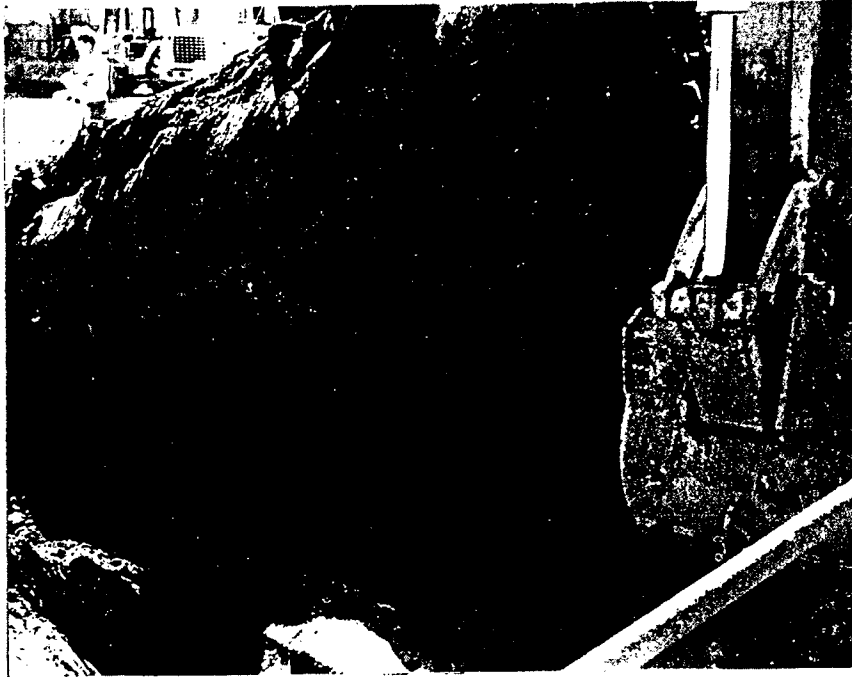


31



32

33



34

