



Grauvogel & Associates

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May 8, 2000

Indiana Department of Environmental Management
UST Section
100 North Senate Avenue
PO Box 6015
Indianapolis, IN 46206-6015

Subject: UST Closure Assessment - Studebaker Building 92
EPA ID# INR000021667

Gentlemen:

Enclosed please find the closure assessment for the four UST's removed at this site in January 2000. It has taken a considerable amount of time to collect all of the information pertaining to this closure for submission. The intent of this submission is to provide proof of a clean closure sufficient to allow your office to issue a letter of "no further action necessary" for this installation.

The notification for these tanks submitted on January 14, 2000 included a fifth aboveground tank (Tank E) by mistake. This assessment deals with only the four UST's at the site. As the assessment report documents, there was no leakage encountered from any of the tanks and groundwater was also not involved.

Attachment 8 to the report contains our completed UST System Closure Report Review Checklist to assist you. Please direct questions to the undersigned at your convenience.

Sincerely,
Grauvogel & Associates

Lawrence W. Grauvogel, PE, CIH, CSP

cc: A. Kolata/South Bend; R. Nawrot/KHA

**Studebaker Building 92
UNDERGROUND STORAGE TANK
CLOSURE ASSESSMENT**

EPA Site ID# INR000021667

Prepared for

**Department of
Community and Economic Development
City of South Bend, Indiana**

for submission to the

Indiana Department of Environmental Management

Prepared by

Grauvogel & Associates

Granger, Indiana

with

Ken Herceg & Associates, Inc.

South Bend, Indiana

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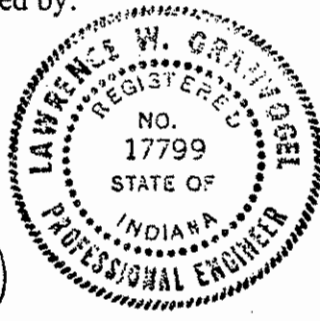
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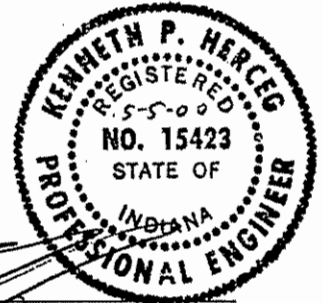
April, 2000

Prepared and Certified by:



Lawrence W. Grauvogel, PE, CIH, CSP
Grauvogel & Associates

Reviewed and Approved by:



Kenneth P. Herceg, PE, LS
Ken Herceg & Associates, Inc.

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ATTACHMENTS

1. Figure 1R: UST Layout, Building 92 with soil sampling locations, 1/14/00
 Figure 2: Studebaker Building 92 Site Plan
 Figure 3: Site Location Map
2. IDEM UST Notification, 1/14/00
3. EIS Analytical Services, Inc. Laboratory Reports: UST Contents
4. EIS Analytical Services, Inc. Laboratory Reports: Soil Samples
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6. UST Removal Supervisor Credentials
7. Pictures during UST removal, 1/6-14/00
8. UST System Closure Report Review Checklist

I. PURPOSE AND METHODS

This report presents the details of the closure of four underground storage tanks (USTs) at the Studebaker Building 92 site, 414 West Sample Street, South Bend IN 46601. This property is part of the Studebaker Corridor redevelopment area. A total of three tanks were cleaned, removed, cut-up and disposed - 2-8,000 gallon and 1-5,000 gallon. One 1,500-gallon tank was opened, cleaned, filled with flowable concrete fill and abandoned in-place.

The purpose of this Closure Assessment is to present the data sufficient to allow the Indiana Department of Environmental Management (IDEM) to provide written confirmation that the tanks were properly closed under the current regulations. This report provides the information required in by the IDEM *UST Notification, Reporting and Closure Requirements*, October 1994, as updated by the draft Risk-Integrated System of Closure (RISC) User's Guide.

II. SUMMARY

A June 1954 site map of the Studebaker Automobile Corporation manufacturing facilities located a company filling station with four UST's at the south end of Building 92, which housed the Engineering and engine testing departments. This print showed 2-8,000 gallon gasoline tanks, 1-5,000 gallon gasoline tank and 1-4,000 lubrication oil tank (to supply the engine test cells). Field investigation located these four tanks generally in the locations indicated on the print. However, the lubrication oil tank was found on excavation to have only 1,500 gallons capacity. The 2-8,000 gallon tanks were found on excavation to be oriented east-west rather than north-south as shown on the June 1954 Studebaker Corporation site plan (Figure 2 attached). Building 92 was completed in 1928, and presumably these tanks were all installed as part of the building construction.

Contract documents were prepared for closure of the USTs. Registration of these orphan USTs and notification of the IDEM UST Branch was made on January 14, 2000 by Taplin Environmental Services, of Kalamazoo MI. The cleaning and removal of a fifth tank, an aboveground storage tank of more recent construction, was included in the project and reported by Taplin Environmental on the IDEM notification. However, this tank is not addressed in this closure report as the tank was not a UST. The State Fire Marshal and the South Bend Fire Department were notified by Taplin concerning the removal and closure on January 10. Field investigation disclosed that the 2-8,000 gallon tanks and the 1-5,000 gallon tank contained water with a residual of gasoline, thus confirming their previous use listed by Studebaker. These three UST's were removed. The smaller fourth tank was found to contain approximately 5" (60 gallons) of mineral spirits. Because of its proximity to the building foundation, this tank was cleaned, filled with flowable fill and abandoned in place after the appropriate soil samples had been collected from the excavation walls and bottom. The tanks were removed on January 11, 2000 by Taplin Environmental Services under the director of Robert C. Bingham, a state licensed UST removal contractor, IFCI# 5034886-26. These activities were documented with the attached photographs.

The tanks were located in two separate excavations, the 2-8,000 gallon tanks and the 1,500-gallon tank in one and the 5,000-gallon tank in the second. Upon removal, the three UST's were found to be constructed of 3/8" steel with no visual evidence of leakage or perforations and only surface rust. The 1,500-gallon tank was of standard steel construction and no soil discoloration

Past Operations:

Inclusive Dates	Activity
1966 - present	City of South Bend - vacant
1928 - 1966	Studebaker Engineering and Engine Test Building
before 1928	residential

Coverage: 25% paved, 75% building

History of Spillage: none

Proximity to human and environmentally sensitive areas: see attached figures (Attachment 3)

Soil Texture: light brown to medium brown coarse sand

Site Specific Maps: see attached figures (Attachment 3)

Site Drainage Features: paved areas drain directly to grass or street; UST's under concrete pad (see Figures 1R and 2)

Underground Storage Tanks

Tank	Diameter	Length	Size (gallons)	Contents	
				at closure	historical
A	63"	10'	1,500	150 gal mineral Spirits	lube oil
B	102"	19'	8,000	1,120 gal water	gasoline
C	102"	19'	8,000	full-water w/ trace gasoline	gasoline
D	96"	13'	5,000	full-water w/trace gasoline	gasoline

Tank	Construction	Age (Install Date)	Leak Detection	Tightness/Other Leak Tests
A	1/4" painted steel	72 (1928)	none	none
B	3/8" painted steel	72 (1928)	none	none
C	3/8" painted steel	72 (1928)	none	none
D	3/8" painted steel	72 (1928)	none	none

Previously Closed Systems at this Site: none

Existing Tank Contents (refer to Attachment 3)

Preliminary testing during the project design phase was completed to confirm the existing contents of the tanks and the quantities. Tank A was listed historically to contain lube oil, but was labeled to and suspected of containing mineral spirits. Its contents were therefore tested for SVOC, VOC and metals. Tank C was found to have oil in the discharge pipe above the check valve and was thus suspected of containing used engine oil. This oil was analyzed for PCB's and metals, to anticipate the Tier II soil testing protocol requirements. No PCB's were detected, and the only regulated metal detected was lead. The check valve in Tank C prevented full depth sampling until the actual removal when the top of the tank was opened to prepare to pump the contents. At this point Tank C was found to be full of water with a petroleum odor rather than oil. Because of the presence of lead in the oil from the Tank C piping and the reported use of Tank A for lube oil storage, lead analysis was included in bottom and sidewall samples from the East tank excavation as a precaution. The contents were pumped and disposed of as a gasoline

The excavated soil returned to the holes and the additional backfill brought from off-site were also analyzed for TPH to assure that they were suitable.

Excavated Soil

Sample	Location	TPH (gasoline/8260B) (mg/Kg)
ESP1	east excavation - north pile	<20
ESP2	east excavation - south pile	<20
ESP3	east excavation - topsoil pile	<20
WSP-1	west excavation - east side of pile	<20
WSP-2	west excavation - west side of pile	<20

Additional Backfill

Sample	Location	TPH (gasoline/8260B) (mg/Kg)
0114-BF	off-site backfill pile	<20

The samples were analyzed by EIS Analytical Services, South Bend, IN. TPH analyses were done using EPA SW-846 Method 8260B calibrated for gasoline range petroleum hydrocarbons. The detection limit was 20 mg/Kg. Metal analyses were completed using EPA SW-846 Method 6010, with a detection limit of 5 mg/Kg. Please refer to the attached laboratory report and Chain of Custody (Attachment 4).

All of the TPH results were below the 20 mg/Kg detection limit. The lead results ranged from less than detection to a high of 119 mg/Kg. The background range for naturally occurring lead in soil is given by EPA-560/8-76-004 (1976), *Considerations Relating to Toxic Substances in the Application of Municipal Sludge to Cropland and Pastureland*, as 2-200 mg/Kg. Considering the extended period of time this property has been used for industrial activities and the absence of TPH in all of the samples, the lead detected was considered to be the normal background for soils on the site.

Miscellaneous Closure Documentation

Please refer to the attached photographs documenting the removal operation (Attachment 7).

Date of Closure: January 11, 2000

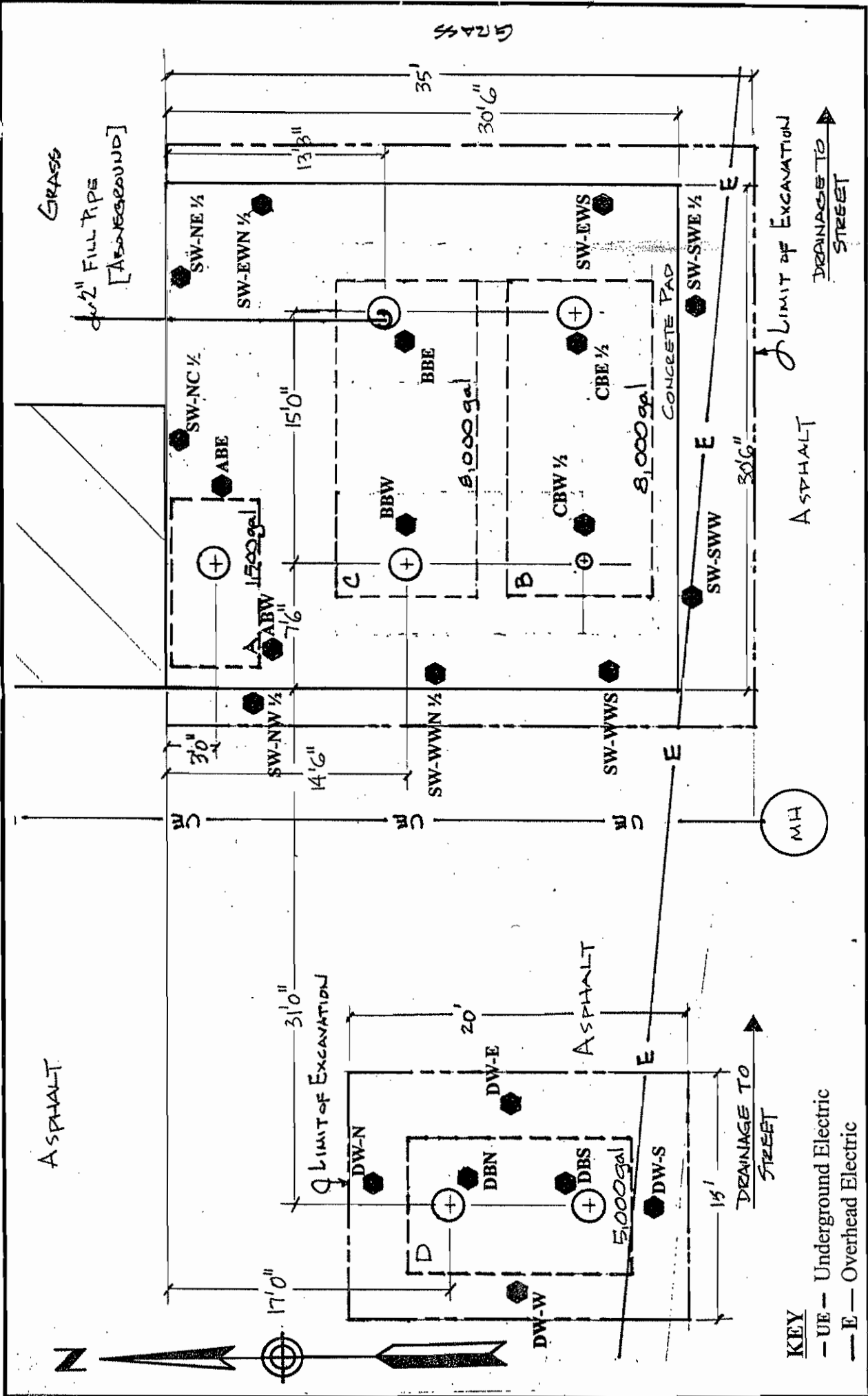
Soil Disposal/Treatment: none

Product/Sludge Disposal:

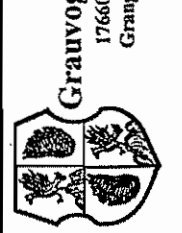
- ▶ **13,186 gallons of water and gasoline mixture** from Tanks A, B and C, including rinses hauled by Taplin Environmental to Advanced Resource recovery, LLC, 227146 Princeton Avenue, Inkster MI 48141 for disposal (Attachment 5)
- ▶ **897 gallons of mineral spirits** were hauled by Taplin Environmental to Pollution Control Industries, Inc., 4343 Kennedy Avenue, East Chicago IN 36312 for disposal (Attachment 5)

Attachment 1:

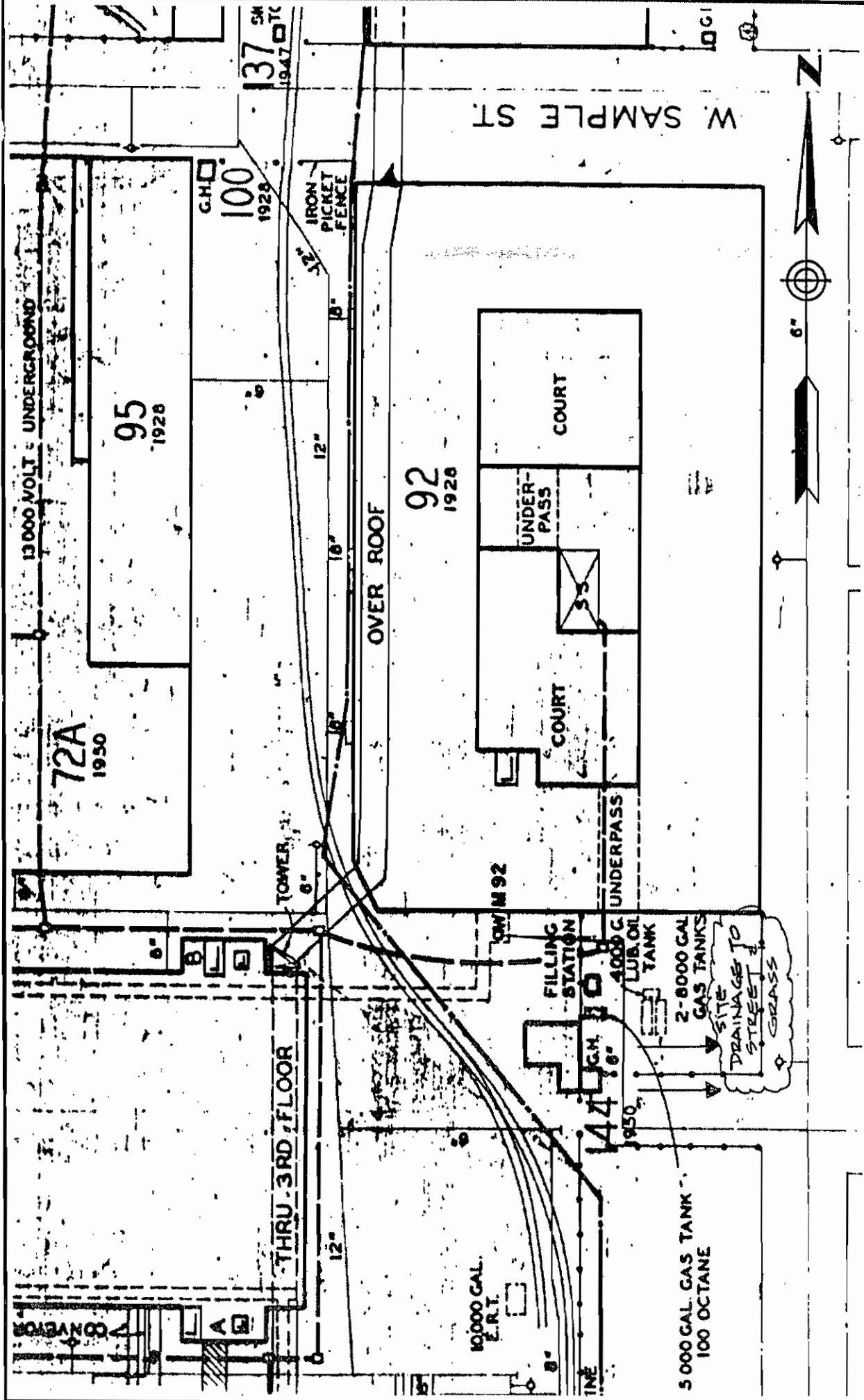
- Figure 1R - UST Layout, Building 92
- Figure 2 - Studebaker Building 92 Site Plan
- Figure 3 - Site Location Map




Drawn: LWG	Scale: 1/8" = 1'-0"	Date: 10/7/99 Rev: 5/2/00	City Project: 99-74	Figure 1R
Stuebaker Building 92 Environmental Remediation				
<h2 style="text-align: center;">Underground Storage Tank Layout</h2>				
Board of Public Works - South Bend, Indiana				



Grauvogel & Associates
 17660 Fall Creek Drive
 Granger, Indiana 46530



 <p>Grauvogel & Associates 17660 Fall Creek Drive Granger, Indiana 46530</p>	<p>Drawn: LWG</p>	<p>Scale: 1" = 80'</p>	<p>Date: 5/4/00</p>	<p>Project: 99018</p>	<p>Figure 2</p>
<p>Studebaker Building 92 Environmental Remediation Building 92 Site Plan Studebaker Corporation Dwg.# WX9266 (Revised June, 1954)</p>					



Drawn LWG

Check LWG

Date 5/4/00

Project 99018

Figure



Grauvogel & Associates
 17660 Fall Creek Drive
 Granger, Indiana 46530

USGS 7.5 Minute Quadrangle
Site Location Map - South Bend, Indiana
 South Bend East (1991), South Bend West (1986)

3

Studebaker Building 92 UST Closure
EPA Site ID# INR000021667
99018 April, 2000

Attachment 2:
IDEM UST Notification
January 14, 2000

NOTIFICATION FOR UNDERGROUND STORAGE TANKS

RETURN COMPLETED FORMS TO: Indiana Department of Environmental Management
Office of Environmental Response, UST Branch
N1255, 100 North Senate Avenue
P.O. Box 7015
Indianapolis, Indiana 46207-7015
UST: (317) 308-3064 LUST: (317) 308-3088



Facility ID Number	
Owner ID Number	
Federal ID Number	
EPA ID Number	IMR101010121617

Notification is required by Federal and State laws for all storage tanks that are operational or have been used to store regulated substances since January 1, 1974. The information requested is required by Section 9002 of the Resource Conservation and Recovery Act (RCRA) and Indiana Code 329 IAC 9, as amended. Specific detailed instructions for the completion of this form may be found in the Underground Storage Tank Branch Guidance Manual (Rev. 11/95), on page 4 of this form or by contacting the UST Branch at the above address.

TYPE OF NOTIFICATION

THIS NOTIFICATION FORM PROVIDES INFORMATION FOR (CHECK ALL THAT APPLY):

- | | | |
|--------------------------------------|---|--|
| <input type="radio"/> A NEW FACILITY | <input type="radio"/> A CHANGE OF OWNERSHIP | <input type="radio"/> A TEMPORARY CLOSURE |
| <input type="radio"/> A NEW OWNER | <input type="radio"/> A SYSTEM UPGRADE | <input type="radio"/> A REQUEST FOR CLOSURE |
| <input type="radio"/> A NEW TANK | <input type="radio"/> AN ADDRESS CHANGE | <input checked="" type="radio"/> A PERMANENT CLOSURE WITH CLOSURE REPORT |
| <input type="radio"/> A NEW OPERATOR | <input type="radio"/> OTHER _____ | |

B OWNER OF TANKS

OPERATOR OF FACILITY

OWNER NAME
Board of Public Works

MAILING ADDR
County-City Building

CITY
South Bend STATE
IN

ZIP CODE
4161011-111 TELEPHONE
(219) 235-5291

OPERATOR NAME (IF SAME AS OWNER, MARK BOX HERE)

MAILING ADDRESS

CITY

ZIP CODE TELEPHONE

TANK/FACILITY LOCATION

TYPE OF FACILITY/OWNER

FACILITY NAME (IF SAME AS OWNER, MARK BOX HERE)
Studebaker Bldg

MAILING ADDRESS (IF SAME AS OWNER, MARK BOX HERE)
414 W. Sample St.

LOCATION OF TANKS
South end of Bldg.

CITY
South Bend, IN

ZIP CODE COUNTY
4161011-111 St. Joseph

TYPE OF OWNER (Please Check One)	TYPE OF OPERATION (Please Check One)
<input type="radio"/> PRIVATE/BUSINESS	<input type="radio"/> MOTOR VEHICLE FUEL DISPENSING STATION
<input type="radio"/> STATE GOVERNMENT	<input type="radio"/> COMMERCIAL
<input checked="" type="radio"/> LOCAL GOVERNMENT	<input type="radio"/> RESIDENTIAL
<input type="radio"/> FEDERAL GOVERNMENT	<input checked="" type="radio"/> INDUSTRIAL
GSA FACILITY (ID# _____)	<input type="radio"/> AGRICULTURE
<input type="radio"/> OTHER	<input type="radio"/> OTHER
EFFECTIVE DATE OF OWNERSHIP ____/____/____	GIS COORDINATES:

D CONSULTANT/CONTRACTOR COMPLIANCE CERTIFICATION

OATH: I certify that the information concerning installation, upgrade, or closure provided in this notification is true and correct to the best of my knowledge.

NAME OF CONTACT PERSON AT TANK LOCATION <u>Robert C. Bingham</u>	NAME OF COMPANY <u>Apelin Environmental</u>
SIGNATURE OF CONTRACTOR (INK - NO PHOTOCOPIES WILL BE ACCEPTED) <u>Robert C. Bingham</u>	CERTIFICATION NUMBER _____ DATE <u>1/14/2000</u>

CONTACT AT TANK LOCATION

NAME OF CONTACT PERSON AT TANK LOCATION	NUMBER OF TANKS AT THIS LOCATION <u>5</u>
JOB TITLE	NUMBER OF PAGES ATTACHED TO THIS NOTIFICATION <u> </u>
TELEPHONE NUMBER () _____	

OWNER CERTIFICATION

STATE USE ONLY

OATH: I certify that under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

NAME AND TITLE OF OWNER OR AUTHORIZED REPRESENTATIVE

SIGNATURE OF OWNER (IN INK - NO PHOTOCOPIES WILL BE ACCEPTED) DATE

DESCRIPTION OF UNDERGROUND STORAGE TANK SYSTEMS (CONTINUED)

COMPLETE A COLUMN FOR EACH TANK. ATTACH ADDITIONAL SHEETS WHEN THE NUMBER OF TANKS EXCEEDS SIX.

Sequential Tank Number	A	B	C	D	E	
Manual Tank Gauging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tank Tightness Testing With Inventory Controls	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Automatic Tank Gauging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vapor Monitoring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ground Water Monitoring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interstitial Monitoring Within a Secondary Barrier	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interstitial Monitoring Within Secondary Containment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Automatic Line Leak Detectors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Line Tightness Testing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Statistical Inventory Reconciliation (SIR)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Another Method (Please specify below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For Coated Steel Tanks with Cathodic Protection - Impressed Current	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sacrificial Anodes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
For Coated Steel Piping with Cathodic Protection - Impressed Current	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sacrificial Anodes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Another Method (Please specify below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Catchment Basins	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Automatic Shutoff Devices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Overfill Alarms	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ball Float Valves	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Another Method (Please specify below)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indicate compliance specific to this installation upgrade, or closure	<input type="radio"/> Installer is certified by the tank and piping manufacturer. <input type="radio"/> Contractor is certified by the Office of the State Fire Marshal. <input checked="" type="radio"/> Work inspected/certified by a registered professional engineer. <input type="radio"/> Work inspected by the Office of the State Fire Marshal. <input type="radio"/> All work has been completed. <input type="radio"/> Another method of compliance was used (specify below).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

CERTIFICATION OF FINANCIAL RESPONSIBILITY

I have financial responsibility in accordance with Subtitle I Subpart H (Specify below).

- Self-Insurance
- Insurance & Risk Retention Group Coverage
- Trust Agreement
- Guarantee
- Surety Bond
- Letter of Credit
- Local Government - Bond Rating Test
- Local Government - Financial Test
- Local Government - Guarantee
- Local Government - Fund

30 - DAY REQUEST FOR TANK CLOSURE

To request a tank closure, mark the Request for Closure oval in type of notification in Section A, complete sections B, C, D, E, and mark D. REQUESTING CLOSURE in section F. Complete the remaining sections (G-N) and fill in the requested information below.

PROPOSED CONTRACTOR

CONTRACTOR NAME
TAPLIN ENVIRONMENTAL

MAILING ADDRESS
5100 W. Michigan Ave.

CITY
KALAMAZOO STATE
MI

ZIP CODE
49006-11 TELEPHONE
(616) 375-9585

CONTACT PERSON
MIKE TAPLIN CERTIFICATION NUMBER

LUST INCIDENT INFORMATION

LUST INCIDENT NUMBER, IF APPLICABLE

DATE INCIDENT REPORTED

***NOTE: Any tank closures must be performed by persons certified by the Indiana State Fire Marshal. City/County Fire Departments, the Indiana State Fire Marshal, and IDEM's UST Section must be notified 14 days prior to closure. Please report to the Leaking Underground Storage Tank Section at (317) 308-3067 if signs of soil or groundwater contamination are observed.**

Indiana State Fire Marshal (317) 232-2222

INSTRUCTIONS

FOR THE

NOTIFICATION FOR UNDERGROUND STORAGE TANKS

M. Contractor Information

Fill in all circles that apply to the contractor who has done the current tank work for which the notification form is being submitted (installation, closure, or upgrade). If the form is being submitted for a reason other than these tank activities, tank contractor compliance information does not have to be provided and this part of this section may be left uncompleted.

N. Certification of Financial Responsibility

Indicate the method of Financial Responsibility that is used to meet the deductible requirement for Excess Liability Fund eligibility. Fill in the circle(s) that apply for each method(s) being used to provide this coverage.

O. Closure Report

Proposed Contractor - Submit the tank contractor information in the spaces provided. The contractor certification number must be provided to insure that the closure will be performed by a tank contractor certified by the Office of the State Fire Marshal.

LUST Incident Information - If the tank(s) to be permanently closed are the source of a release or contamination, a Leaking Underground Storage Tank incident number must be obtained (call the IDEM LUST Section @ 317 308-3067) and submitted in the space provided.

UST System Closure Report

Within 30 days of closure of any tank system, an UST System Closure Report must be received. Below is a listing of the information needed for the adequate completion of an UST System Closure Report.

I ENVIRONMENTAL SOIL/GROUNDWATER SAMPLING RESULTS

Total Soil Samples - total number of soil samples that have been lab tested (not to include field screened samples)

Map Locations & Sample Results - location and TPH level of the three highest recorded soil samples

Depth to Groundwater - distance from the surface to groundwater in feet (only if groundwater is encountered during closure)

Groundwater Sample Results - (only if groundwater is encountered) the constituent sampled for and where the sample was obtained

Parameters Analyzed (petroleum) - parameters for all samples analyzed

Hazardous Substance - type of substance and parameters for samples analyzed

II. CURRENT SITE CORRECTIVE ACTION ACTIVITIES

If soil contamination present is greater than 100 ppm TPH or groundwater impact, contact IDEM @ 317 308-3067 for LUST incident reporting and site priority ranking. Visual/olfactory indications also accepted. Include in the report:

Priority - site priority ranking given by IDEM at time of initial LUST incident reporting.

Current site activity - Complete/Confirmatory if UST documentation supports "clean closure" (i.e. soil contamination <100 ppm TPH. Check Limited Corrective Action if soil overexcavation and/or landtreatment occurred.

III. REQUIRED ATTACHMENTS

Sample Information, Site Specific Maps, Miscellaneous Closure Documentation - all are to be submitted with the UST System Closure Report. Further information can be found in the current UST System Closure Guidelines or by contacting The UST Section @ 317 308-3064.

IV. RECOMMENDATIONS

This information should be completed by the contractor/consultant who performed the UST closure.

Clean Closure - if final soil contamination after UST closure is less than 100 ppm and no groundwater impacted.

Proper documentation must be provided.

Limited Over-Excavation/On-Site Landtreatment - if not already performed during UST Closure. Maintain landtreatment progress reporting.

20 Day Abatement Report - if free product present during closure (see the LUST Site Investigation Report Guidelines).

LUST Site Investigation - if soil/groundwater contamination not economically feasible and/or too extensive. Full contamination plume must be delineated. This report due in 45 days. (see Compliance Schedule section in LUST General Information of UST Branch Guidance Manual).

SUBSEQUENT DOCUMENTATION

This instruction page has been designed to be removed from the Notification For Underground Storage Tanks Form upon completion. Please do not submit this page with your notification.

All subsequent documentation, including continuation pages, Authorization to Act on Behalf of Owner certifications, maps, analytical results, and any other pertinent information required by activities described in this notification, must be attached to the back of this notification form. Please send the completed form and all attachments to the address located at the top of page of this form. All incomplete forms will be returned for correction and may hinder your compliance with federal and state rules.

Attachment 3:
EIS Analytical Services, Inc.
Laboratory Reports - UST Contents

CHAIN OF CUSTODY RECORD

9-244

CLIENT NO.	PROJECT NO.	PROJECT NAME	SEE REVERSE SIDE FOR INSTRUCTIONS		EIS LAB USE ONLY		
			ANALYSIS OR CONTAINER TYPES		ES LAB NO.	SAMPLE STATE	TEMP COOLER BLANK
SAMPLES (SIGNATURES) DATE AND TIME OF GRAB			NO. OF CONTAINERS	REMARKS			
			PRIMARY SAMPLE DESCRIPTION				
<input checked="" type="checkbox"/>		B92-A Tank A	5		water + solvent	63260	
<input checked="" type="checkbox"/>		B92-B Tank B	2		water + gasoline	63261	
<input checked="" type="checkbox"/>		B92-C Tank C	3		water oil	63262	
<input checked="" type="checkbox"/>		B92-D Tank D	2		water + gasoline	63263	
<input checked="" type="checkbox"/>		B92-E Tank E (AST)	3		water solvent	63264	
		Notes: Tank A - two layers - Totally immiscible Exceeds separate analysis					
		2) B92-C rlogged under Order 10-DB9 on 10-11-99 For Btu & Flask Point					
RELINQUISHED BY:			RECEIVED BY: Dan Shane	DATE: 9/22/99	TIME: 1509	DATE: _____	TIME: _____
RELINQUISHED BY: _____			RECEIVED BY: _____	DATE: _____	TIME: _____	DATE: _____	TIME: _____
MODE OF TRANSPORTATION			FIELD NOTES:		SHIPPING CHARGE:		
EIS VEHICLE #			PUBLIC		C = COLD N = NOT COLD I = INTACT B = BROKEN		

EIS LABORATORY ANALYSIS REQUEST FORM

EIS USE ONLY	Client Number: _____
	Project Number: _____
	Project Manager: _____

EIS USE ONLY	LABORATORY NO.: _____
	Quotation No.: _____
	Date Sample Received: _____

CLIENT INFORMATION	
Contact Person:	<u>Larry Granvogel</u>
Client Name:	<u>Granvogel & Associates</u>
Client Address:	<u>17660 Fall Creek Granger IN 46530</u>
Client Tel. No.:	<u>219/277-4770</u>
Client FAX No.:	<u>219/277-5281</u>
Client P.O. No.:	<u>99018</u>

SAMPLE TYPE	
<input type="checkbox"/> Waste H ₂ O (NPDES)	<input type="checkbox"/> Soil (SOIL)
<input checked="" type="checkbox"/> Waste H ₂ O (WW)	<input type="checkbox"/> Sludge (SLDG)
<input type="checkbox"/> Drinking H ₂ O (DW)	<input type="checkbox"/> Sediment (SED)
<input type="checkbox"/> Mon Well H ₂ O (MW)	<input type="checkbox"/> Solid (SLD)
<input type="checkbox"/> Ground H ₂ O (GW)	<input checked="" type="checkbox"/> Oil (OIL)
<input type="checkbox"/> Surface H ₂ O (SW)	<input type="checkbox"/> Asbestos (ASB)
<input type="checkbox"/> Leachate (LEACH)	<input type="checkbox"/> OSHA (OSHA)
<input checked="" type="checkbox"/> Free Product (FP)	<input type="checkbox"/> Other (OTH)

Report To:	<u>same</u>
Extra Report To:	<u>none</u>
Invoice To:	<u>same</u>

Sampling Site Location	<u>Studebaker Building 92</u>
Primary Sample Description	<u>UST/AST Contents</u>
Secondary Sample Description	<u>Wastewater + free product</u>
Composite <input checked="" type="checkbox"/>	Date Collected <u>9/22/99</u>
Grab <input type="checkbox"/>	Time Collected <u>n/a</u>
Both <input type="checkbox"/>	Collected By <u>L. Granvogel</u>

IMPORTANT INFORMATION REQUEST	If you suspect high levels (>10 ppm of Cyanide, Sulfide or Mercury) or elevated levels of other constituents such as PCB, Asbestos or Radioactivity, indicate this in the Special Instructions block on the reverse side of this form.
--------------------------------------	--

PARAMETER	X	PARAMETER	X	PARAMETER	X
Acidity, Total	_____	Hardness	_____	Solids, Vol Suspended	_____
Alkalinity, Bicarb	_____	Moisture	_____	Solids, Vol Total	_____
Alkalinity, Total	_____	Nitrogen Compounds	_____	Specific Conductance	_____
BOD ₅ , Carbonaceous	_____	• Ammonia (Dir) (Man Dist)	_____	Sulfate	_____
BOD ₅ , Soluble	_____	• Nitrate	_____	Sulfide, Tot Acid Sol	_____
BOD ₅ , Total	_____	• Nitrate + Nitrite	_____	Surfactants (CTAS) (MBAS)	_____
Chloride	_____	• Nitrite	_____	TOC	_____
Chlorine, Residual	_____	• Organic	_____	TOH	_____
Chlorophyll (a,b,c,)	_____	• TKN	_____	Additional Tests	
COD	_____	Oil & Grease (Freon)	_____	Asbestos, Bulk	_____
Coliform, E. Coli	_____	Oil & Grease (Soxhlet)	_____	Asbestos, Fiber	_____
Coliform, Fecal (MF)	_____	Oil & Grease (5520F)	_____	Gross Alpha	_____
Coliform, Fecal Strep	_____	pH	_____	Gross Beta	_____
Coliform, Total (MPN)	_____	Phenols (Dir) (Man Dist)	_____	Radium 228	_____
Coliform, Plate Count	_____	Pheophytin a	_____	Radon	_____
Coliform, Total + Fecal	_____	Phosphorus (Ortho) (Tot)	_____	Tritium	_____
Cyanide, Amenable	_____	Silica	_____	Turbidity	_____
Cyanide, Free	_____	Solids, Tot	_____	Color	_____
Cyanide, Tot (Direct)(Man)	_____	Solids, Tot Dissolved	_____		
Fluoride (Direct)(Man)	_____	Solids, Tot Suspended	_____		

EIS USE ONLY	Sample Plan: Type/Study _____	
	Profiles _____	
	Detection Limits _____	Normal (N) _____ Low (L) _____ Other _____



Mr. Larry Grauvogel
Grauvogel & Associates
17660 Fall Creek Drive
Granger, IN 46530

Tel No: 277-4770

Fax No: 277-5281

PO No:

Project Name: Studebaker Building 92

Report Date: 10/15/99

EIS Order No: 991000089

EIS Sample No: 063666

EIS Project No: 2730-1000-99

Client Sample ID: B92-C Tank C

Date Collected: 9/26/99

Date Received: 10/11/99

Collected By: L.G.

This report presents results of analysis for your sample(s) received under our Order No above. This Number is to be used in all inquiries concerning this report. The EIS Sample No above, as well as your Sample ID, refer to the first sample in a multi-sample submission

DEFINITIONS:

MDL = Method Detection Limit normally achieved in the absence of interferences or other matrix difficulties.

SDL = Sample Detection Limit achieved in your sample. If numerically greater than the MDL, dilutions were required in order to perform the analysis. If numerically less than the MDL, alternate techniques were employed.

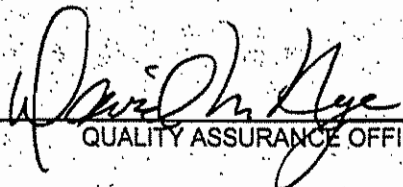
nd = Not Detected at the SDL value. If present, result is less than this value.

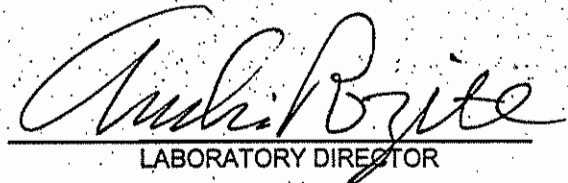
< = Not Detected at the numerical value shown. If present, result is less than this value.

CHAIN-OF-CUSTODY is enclosed if received with your sample submission.

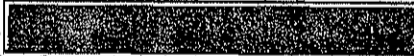
DRINKING WATER CERTIFICATIONS: Chemistry = C-71-02 Bacteriology = 52715

Reference EIS Order 990900244 Sample# 063262.


QUALITY ASSURANCE OFFICER


LABORATORY DIRECTOR

The data in this report has been reviewed and complies with EIS Quality Control unless specifically addressed above.



Mr Larry Grauvogel
Grauvogel & Associates
17660 Fall Creek Drive
Granger, IN 46530
Tel No: 277-4770
Fax No: 277-5281
PO No:
Project Name: Studebaker Building 92

Report Date: 10/15/99
EIS Order No: 990900244
EIS Sample No: 063260
EIS Project No: 2730-1000-99

Client Sample ID: B92-A Tank A
Date Collected: 9/22/99
Date Received: 9/22/99
Collected By: L.G.

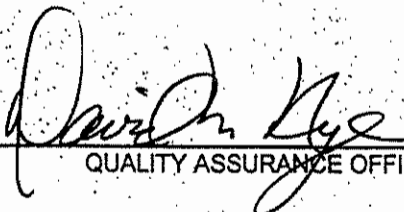
This report presents results of analysis for your sample(s) received under our Order No above. This Number is to be used in all inquiries concerning this report. The EIS Sample No above, as well as your Sample ID, refer to the first sample in a multi-sample submission

DEFINITIONS:

- MDL = Method Detection Limit normally achieved in the absence of interferences or other matrix difficulties.
- SDL = Sample Detection Limit achieved in your sample. If numerically greater than the MDL, dilutions were required in order to perform the analysis. If numerically less than the MDL, alternate techniques were employed.
- nd = Not Detected at the SDL value. If present, result is less than this value.
- < = Not Detected at the numerical value shown. If present, result is less than this value.

CHAIN-OF-CUSTODY is enclosed if received with your sample submission.

DRINKING WATER CERTIFICATIONS: Chemistry = C-71-02 Bacteriology = 52715


QUALITY ASSURANCE OFFICER


LABORATORY DIRECTOR

The data in this report has been reviewed and complies with EIS Quality Control unless specifically addressed above.

SAMPLE RESULTS

CLIENT SAMPLE ID: B92-A Tank A

Page 3 of 14

CLIENT PROJECT: Studebaker Building 92

Date Collected: 9/22/99

Report Date: 10/15/99

Date Received: 9/22/99

EIS Sample No: 063260

EIS Order No: 990900244

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
SEMIVOLATILE ORGANICS							
Acenaphthene	nd	ppm	300	500	DavisW	10/4/99	8270 C
Acenaphthylene	nd	ppm	300	500	DavisW	10/4/99	8270 C
Aniline	nd	ppm	300	500	DavisW	10/4/99	8270 C
Anthracene	nd	ppm	300	500	DavisW	10/4/99	8270 C
Benzydine	nd	ppm	1500	2500	DavisW	10/4/99	8270 C
Benzo(a)anthracene	nd	ppm	300	500	DavisW	10/4/99	8270 C
Benzo(a)pyrene	nd	ppm	300	500	DavisW	10/4/99	8270 C
Benzo(b)fluoranthene	nd	ppm	300	500	DavisW	10/4/99	8270 C
Benzo(ghi)perylene	nd	ppm	300	500	DavisW	10/4/99	8270 C
Benzo(k)fluoranthene	nd	ppm	300	500	DavisW	10/4/99	8270 C
Benzoic acid	nd	ppm	1500	2500	DavisW	10/4/99	8270 C
Benzyl alcohol	nd	ppm	600	1000	DavisW	10/4/99	8270 C
Bis(2-chloroethoxy)methane	nd	ppm	300	500	DavisW	10/4/99	8270 C
Bis(2-chloroethyl)ether	nd	ppm	300	500	DavisW	10/4/99	8270 C
Bis(2-chloroisopropyl)ether	nd	ppm	300	500	DavisW	10/4/99	8270 C
Bis(2-ethylhexyl)phthalate	nd	ppm	300	500	DavisW	10/4/99	8270 C
Bromophenyl-phenylether (4)	nd	ppm	300	500	DavisW	10/4/99	8270 C
Butyl benzyl phthalate	nd	ppm	300	500	DavisW	10/4/99	8270 C
Chloro-3-methylphenol (4)	nd	ppm	300	500	DavisW	10/4/99	8270 C
Chloroaniline (4)	nd	ppm	300	500	DavisW	10/4/99	8270 C
Chloronaphthalene (2)	nd	ppm	300	500	DavisW	10/4/99	8270 C
Chlorophenol (2)	nd	ppm	300	500	DavisW	10/4/99	8270 C
Chlorophenyl phenyl ether (4)	nd	ppm	300	500	DavisW	10/4/99	8270 C
Chrysene	nd	ppm	300	500	DavisW	10/4/99	8270 C
Di-n-butylphthalate	nd	ppm	300	500	DavisW	10/4/99	8270 C
Di-n-octylphthalate	nd	ppm	300	500	DavisW	10/4/99	8270 C
Dibenzo(a,h)anthracene	nd	ppm	300	500	DavisW	10/4/99	8270 C
Dibenzofuran	nd	ppm	300	500	DavisW	10/4/99	8270 C
Dichlorobenzene (1,2)	nd	ppm	300	500	DavisW	10/4/99	8270 C
Dichlorobenzene (1,3)	nd	ppm	300	500	DavisW	10/4/99	8270 C
Dichlorobenzene (1,4)	nd	ppm	300	500	DavisW	10/4/99	8270 C
Dichlorobenzidine (3,3')	nd	ppm	300	500	DavisW	10/4/99	8270 C
Dichlorophenol (2,4)	nd	ppm	300	500	DavisW	10/4/99	8270 C
Diethyl phthalate	nd	ppm	300	500	DavisW	10/4/99	8270 C
Dimethyl phthalate	nd	ppm	300	500	DavisW	10/4/99	8270 C
Dimethylphenol (2,4)	nd	ppm	300	500	DavisW	10/4/99	8270 C
4-nitrophenol (2,4)	nd	ppm	1500	2500	DavisW	10/4/99	8270 C
2-nitrotoluene (2,4)	nd	ppm	300	500	DavisW	10/4/99	8270 C
Dinitrotoluene (2,6)	nd	ppm	300	500	DavisW	10/4/99	8270 C
Diphenylhydrazine (1,2)	nd	ppm	300	500	DavisW	10/4/99	8270 C

SAMPLE RESULTS

CLIENT SAMPLE ID: B92-A Tank A
CLIENT PROJECT: Studebaker Building 92
Date Collected: 9/22/99
Date Received: 9/22/99

Page 5 of 14

Report Date: 10/15/99
EIS Sample No: 063260
EIS Order No: 990900244

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
VOLATILE ORGANICS							
Acetone	4.8	ppm	2.5	500	WilliamsJ	9/27/99	8260 B
Acrolein	nd	ppm	5	1000	WilliamsJ	9/27/99	8260 B
Acrylonitrile	nd	ppm	5	1000	WilliamsJ	9/27/99	8260 B
Benzene	nd	ppm	0.25	50	WilliamsJ	9/27/99	8260 B
Bromobenzene	nd	ppm	0.25	50	WilliamsJ	9/27/99	8260 B
Bromochloromethane	nd	ppm	0.25	50	WilliamsJ	9/27/99	8260 B
Bromodichloromethane	nd	ppm	0.25	50	WilliamsJ	9/27/99	8260 B
Bromoform	nd	ppm	0.5	100	WilliamsJ	9/27/99	8260 B
Bromomethane	nd	ppm	0.5	100	WilliamsJ	9/27/99	8260 B
Butylbenzene (normal)	nd	ppm	0.5	100	WilliamsJ	9/27/99	8260 B
Butylbenzene (sec)	2370	ppm	0.5	100	WilliamsJ	9/27/99	8260 B
Butylbenzene (tert)	nd	ppm	0.5	100	WilliamsJ	9/27/99	8260 B
Carbon disulfide	nd	ppm	0.5	100	WilliamsJ	9/27/99	8260 B
Carbon Tetrachloride	nd	ppm	0.5	100	WilliamsJ	9/27/99	8260 B
Chlorobenzene	nd	ppm	0.25	50	WilliamsJ	9/27/99	8260 B
Chloroethane	nd	ppm	0.5	100	WilliamsJ	9/27/99	8260 B
Chloroform	nd	ppm	0.25	50	WilliamsJ	9/27/99	8260 B
Chlorohexane (1)	nd	ppm	0.5	100	WilliamsJ	9/27/99	8260 B
Chloromethane	nd	ppm	2.5	500	WilliamsJ	9/27/99	8260 B
Chlorotoluene (2)	nd	ppm	0.25	50	WilliamsJ	9/27/99	8260 B
Chlorotoluene (4)	nd	ppm	0.25	50	WilliamsJ	9/27/99	8260 B
Cyclohexanone	nd	ppm	25	5000	WilliamsJ	9/27/99	8260 B
Dibromo-3-chloropropane (1,2)	nd	ppm	7.5	1500	WilliamsJ	9/27/99	8260 B
Dibromochloromethane	nd	ppm	0.25	50	WilliamsJ	9/27/99	8260 B
Dibromoethane (1,2)	nd	ppm	0.25	50	WilliamsJ	9/27/99	8260 B
Dibromomethane	nd	ppm	0.5	100	WilliamsJ	9/27/99	8260 B
Dichloro-2-butene (1,4)	nd	ppm	7.5	1500	WilliamsJ	9/27/99	8260 B
Dichlorobenzene (1,2)	nd	ppm	0.5	100	WilliamsJ	9/27/99	8260 B
Dichlorobenzene (1,3)	nd	ppm	0.5	100	WilliamsJ	9/27/99	8260 B
Dichlorobenzene (1,4)	nd	ppm	0.5	100	WilliamsJ	9/27/99	8260 B
Dichlorodifluoromethane	nd	ppm	0.5	100	WilliamsJ	9/27/99	8260 B
Dichloroethane (1,1)	nd	ppm	0.25	50	WilliamsJ	9/27/99	8260 B
Dichloroethane (1,2)	nd	ppm	0.25	50	WilliamsJ	9/27/99	8260 B
Dichloroethene (1,1)	nd	ppm	0.5	100	WilliamsJ	9/27/99	8260 B
Dichloroethene (c-1,2)	nd	ppm	0.25	50	WilliamsJ	9/27/99	8260 B
Dichloroethene (t-1,2)	nd	ppm	0.25	50	WilliamsJ	9/27/99	8260 B
Dichlorofluoromethane	nd	ppm	1.25	250	WilliamsJ	9/27/99	8260 B
Dichloropropane (1,2)	nd	ppm	0.25	50	WilliamsJ	9/27/99	8260 B
Dichloropropane (1,3)	nd	ppm	0.5	100	WilliamsJ	9/27/99	8260 B
Dichloropropane (2,2)	nd	ppm	1.25	250	WilliamsJ	9/27/99	8260 B

SAMPLE RESULTS

CLIENT SAMPLE ID: B92-B Tank B

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CLIENT PROJECT: Studebaker Building 92

Date Collected: 9/22/99

Report Date: 10/15/99

Date Received: 9/22/99

EIS Sample No: 063261

EIS Order No: 990900244

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
Benzene	nd	µg/L	50	1	WilliamsJ	9/28/99	8260 B
Ethylbenzene	nd	µg/L	50	1	WilliamsJ	9/28/99	8260 B
Methylbutylether (tert) (MTBE)	nd	µg/L	100	2	WilliamsJ	9/28/99	8260 B
Toluene	nd	µg/L	50	1	WilliamsJ	9/28/99	8260 B
Xylenes, Total	2300	µg/L	100	2	WilliamsJ	9/28/99	8260 B

SAMPLE RESULTS

CLIENT SAMPLE ID: B92-C Tank C
CLIENT PROJECT: Studebaker Building 92
Date Collected: 9/22/99
Date Received: 9/22/99

Page 9 of 14

Report Date: 10/15/99
EIS Sample No: 063262
EIS Order No: 990900244

Parameter	Results	Units	SDL	MDL	Analyst	Test Date	Method
POLYCHLORINATED BIPHENYLS							
PCB (AR1016)	nd	ppm	2	2	DavisW	9/28/99	8082
PCB (AR1221)	nd	ppm	2	2	DavisW	9/28/99	8082
PCB (AR1232)	nd	ppm	2	2	DavisW	9/28/99	8082
PCB (AR1242)	nd	ppm	2	2	DavisW	9/28/99	8082
PCB (AR1248)	nd	ppm	2	2	DavisW	9/28/99	8082
PCB (AR1254)	nd	ppm	2	2	DavisW	9/28/99	8082
PCB (AR1260)	nd	ppm	2	2	DavisW	9/28/99	8082

Attachment 4:
EIS Analytical Services, Inc.
Laboratory Reports - Soil Samples

EIS LABORATORY ANALYSIS REQUEST FORM

EIS USE ONLY	Client Number: _____
	Project Number: _____
	Project Manager: _____

EIS USE ONLY	LABORATORY NO.: _____
	Quotation No.: _____
	Date Sample Received: _____

CLIENT INFORMATION	
Contact Person:	<u>Larry Grauvogel</u>
Client Name:	<u>Grauvogel & Associates</u>
Client Address:	<u>17660 Fall Creek</u> <u>Granger IN 46530</u>
Client Tel. No.:	<u>219 277 4770</u>
Client FAX No.:	<u>277 5281</u>
Client P.O. No.:	<u>99018</u>

SAMPLE TYPE	
<input type="checkbox"/> Waste H ₂ O (NPDES)	<input type="checkbox"/> Soil (SOIL)
<input type="checkbox"/> Waste H ₂ O (WW)	<input type="checkbox"/> Sludge (SLDG)
<input type="checkbox"/> Drinking H ₂ O (DW)	<input type="checkbox"/> Sediment (SED)
<input type="checkbox"/> Mon Well H ₂ O (MW)	<input type="checkbox"/> Solid (SLD)
<input type="checkbox"/> Ground H ₂ O (GW)	<input type="checkbox"/> Oil (OIL)
<input type="checkbox"/> Surface H ₂ O (SW)	<input type="checkbox"/> Asbestos (ASB)
<input type="checkbox"/> Leachate (LEACH)	<input type="checkbox"/> OSHA (OSHA)
<input type="checkbox"/> Free Product (FP)	<input type="checkbox"/> Other (OTH)

Report To: <u>same</u>
Extra Report To: <u>none</u>
Invoice To: <u>same</u>

Sampling Site Location	<u>Studebaker Building 92</u>	
Primary Sample Description	<u>Soil</u>	
Secondary Sample Description		
Composite	Date Collected	<u>1/14/0</u>
Grab <input checked="" type="checkbox"/>	Time Collected	<u>1500</u>
Both	Collected By	<u>LDG</u>

IMPORTANT INFORMATION REQUEST	If you suspect high levels (>10 ppm of Cyanide, Sulfide or Mercury) or elevated levels of other constituents such as PCB, Asbestos or Radioactivity, indicate this in the Special Instructions block on the reverse side of this form.
--------------------------------------	--

PARAMETER	X
Acidity, Total	_____
Alkalinity, Bicarb	_____
Alkalinity, Total	_____
BOD ₅ , Carbonaceous	_____
BOD ₅ , Soluble	_____
BOD ₅ , Total	_____
Chloride	_____
Chlorine, Residual	_____
Chlorophyll (a,b,c)	_____
COD	_____
Coliform, E. Coli	_____
Coliform, Fecal (MF)	_____
Coliform, Fecal Strep	_____
Coliform, Total (MPN)	_____
Coliform, Plate Count	_____
Coliform, Total + Fecal	_____
Cyanide, Amenable	_____
Cyanide, Free	_____
Cyanide, Tot (Direct)(Man)	_____
Fluoride (Direct)(Man)	_____

PARAMETER	X
Hardness	_____
Moisture	_____
Nitrogen Compounds	_____
• Ammonia (Dir) (Man Dist)	_____
• Nitrate	_____
• Nitrate + Nitrite	_____
• Nitrite	_____
• Organic	_____
• TKN	_____
Oil & Grease (Freon)	_____
Oil & Grease (Soxhlet)	_____
Oil & Grease (5520F)	_____
pH	_____
Phenols (Dir) (Man Dist)	_____
Pheophytin a	_____
Phosphorus (Ortho) (Tot)	_____
Silica	_____
Solids, Tot	_____
Solids, Tot Dissolved	_____
Solids, Tot Suspended	_____

PARAMETER	X
Solids, Vol Suspended	_____
Solids, Vol Total	_____
Specific Conductance	_____
Sulfate	_____
Sulfide, Tot Acid Sol	_____
Surfactants (CTAS) (MBAS)	_____
TOC	_____
TOH	_____
Additional Tests	
Asbestos, Bulk	_____
Asbestos, Fiber	_____
Gross Alpha	_____
Gross Beta	_____
Radium 228	_____
Radon	_____
Tritium	_____
Turbidity	_____
Color	_____

EIS USE ONLY	Sample Plan: Type/Study	_____
	Profiles	_____
	Detection Limits	Normal (N) _____ Low (L) _____ Other _____

PROJ. NO	PROJECT NAME		DATE	TIME	STATION LOCATION	Total No. of Containers	Sample Type	Lab Order ID
	99018	Studebaker Building 92 VST Removal.						
SAMPLERS: (Print Name & Sign) Lawrence W Graunover Dan Shaver								
FIELD ID	DATE	TIME	C O M P	G R A B	STATION LOCATION	Total No. of Containers	Sample Type	Lab Order ID
CBD-1/2	1/6/00	1500	X		Tank C Bottom - West	2	Soil	0002 - 060 65444
CBE-1/2					Tank C Bottom - East	2		65445
BBW					Tank B Bottom - West	1		65446
BBE					Tank B Bottom - East	1		65447
ABW					Tank A Bottom - West	1		65448
ABE					Tank A Bottom - East	1		65449
SW-wws					Tank A/B/C Sidewall - West Wall	1		65450
SW-wnw1/2					" " - West wall - North	2		65451
SW-NW1/2					" " - North wall - West	2		65452
SW-NC1/2					" " - North wall	2		65453
SW-NE1/2					" " - East wall	2		65454
SW-NW1/2					" " - North	2		65455

Relinquished By: (Signature) *[Signature]* Date 1/7/00 11:43 Received By: (Signature) Dan Shaver

Relinquished By: (Signature) Date Time Received By: (Signature)

Relinquished By: (Signature) Date Time Received By: (Signature)

Ship To:

Log In:

- Moisture
 - TPH (gas) (8260)
 # Digest Details
 - head, Total
 # Extract Benz/TPH (6c125)

PROJ. NO. 99018		PROJECT NAME Studebaker Building 92 UST Removal		Total No. of Containers		Lab Order ID 001-060	
SAMPLERS: (Print Name & Sign) Layrence Grawvogel				STATION LOCATION		Sample Type	
FIELD ID	DATE	TIME	C O M P	G R A B			Lab Number
ESP 1	1/16/00		X		Tank C Bottom East		
ESP 2			X		Tank A/B/C Backfill - North Pile	✓	65465
ESP 3					Tank A/B/C Backfill - South Pile	✓	65466
WSP-1					" " - Topsoil	✓	65467
WSP-2					Tank D Backfill. Edge	✓	65468
					" " - West Edge	✓	65469
Relinquished By: (Signature)				Date	Time	Received By: (Signature)	Ship To:
<i>[Signature]</i>				1/16/00	1143	Dan Shure	
Relinquished By: (Signature)				Date	Time	Received By: (Signature)	
<i>[Signature]</i>							
Relinquished By: (Signature)				Date	Time	Received By: (Signature)	
<i>[Signature]</i>							

NOTE: Instructions & area for comments are on reverse side.

SAMPLE RESULTS

Client Name: Grauvogel & Associates
 Client Project: Studebaker Building 92

Report Date: 1/27/00
 EIS Order No: 000100060

EIS Lab Number	Client Description	Sample Date	Parameter	Result	Units	SDL	Test Date	Analyst	Method
065444	CBW-1/2	1/6/00	Lead, Total	38.6	mg/kg(wet)	1	1/13/00	ShaneD	6010
		1/6/00	Moisture	7.1	%	1	1/10/00	LozanoS	160.3
		1/6/00	TPH (GRO)	<20	mg/kg(wet)	20	1/14/00	WilliamsJ	8260 B
065445	CBE-1/2	1/6/00	Lead, Total	10.2	mg/kg(wet)	1	1/13/00	ShaneD	6010
		1/6/00	Moisture	8.6	%	1	1/10/00	LozanoS	160.3
		1/6/00	TPH (GRO)	<20	mg/kg(wet)	20	1/14/00	WilliamsJ	8260 B
065446	BBW	1/6/00	Moisture	7.6	%	1	1/10/00	LozanoS	160.3
		1/6/00	TPH (GRO)	<20	mg/kg(wet)	20	1/14/00	WilliamsJ	8260 B
065447	BBE	1/6/00	Moisture	8.8	%	1	1/10/00	LozanoS	160.3
		1/6/00	TPH (GRO)	<20	mg/kg(wet)	20	1/14/00	WilliamsJ	8260 B
065448	ABW	1/6/00	Moisture	4.5	%	1	1/10/00	LozanoS	160.3
		1/6/00	TPH (GRO)	<20	mg/kg(wet)	20	1/14/00	WilliamsJ	8260 B
5449	ABE	1/6/00	Moisture	4.6	%	1	1/10/00	LozanoS	160.3
		1/6/00	TPH (GRO)	<20	mg/kg(wet)	20	1/14/00	WilliamsJ	8260 B
065450	SW-WWS	1/6/00	Moisture	6.8	%	1	1/10/00	LozanoS	160.3
		1/6/00	TPH (GRO)	<20	mg/kg(wet)	20	1/14/00	WilliamsJ	8260 B
065451	SW-WWN 1/2	1/6/00	Lead, Total	119	mg/kg(wet)	1	1/13/00	ShaneD	6010
		1/6/00	Moisture	13	%	1	1/10/00	LozanoS	160.3
		1/6/00	TPH (GRO)	<20	mg/kg(wet)	20	1/14/00	WilliamsJ	8260 B
065452	SW-NW 1/2	1/6/00	Lead, Total	66.4	mg/kg(wet)	1	1/13/00	ShaneD	6010
		1/6/00	Moisture	9.6	%	1	1/10/00	LozanoS	160.3
		1/6/00	TPH (GRO)	<20	mg/kg(wet)	20	1/14/00	WilliamsJ	8260 B
065453	SW-NC 1/2	1/6/00	Lead, Total	45.3	mg/kg(wet)	1	1/13/00	ShaneD	6010
		1/6/00	Moisture	5.8	%	1	1/10/00	LozanoS	160.3
		1/6/00	TPH (GRO)	<20	mg/kg(wet)	20	1/14/00	WilliamsJ	8260 B
065454	SW-NE 1/2	1/6/00	Lead, Total	57.2	mg/kg(wet)	1	1/13/00	ShaneD	6010
		1/6/00	Moisture	6.5	%	1	1/10/00	LozanoS	160.3
		1/6/00	TPH (GRO)	<20	mg/kg(wet)	20	1/14/00	WilliamsJ	8260 B
065455	SW-EWN 1/2	1/6/00	Lead, Total	5.7	mg/kg(wet)	1	1/13/00	ShaneD	6010
		1/6/00	Moisture	2.3	%	1	1/10/00	LozanoS	160.3
		1/6/00	TPH (GRO)	<20	mg/kg(wet)	20	1/14/00	WilliamsJ	8260 B

ANALYSIS SUPPORT INFORMATION

CLIENT NAME: Grauvogel & Associates

Report Date: 1/27/00
EIS Order No: 000100060

Lab Number	Client Description	Sample Date	Procedure	Result	Date Completed	Analyst	Method
065444	CBW-1/2	1/6/00	Digest ICP Metals	Complete	1/10/00	ClarkS	3005 A
		1/6/00	Extract BETX/TPH	Complete	1/10/00	CarlsenS	8260 B
065445	CBE -1/2	1/6/00	Digest ICP Metals	Complete	1/10/00	ClarkS	3005 A
		1/6/00	Extract BETX/TPH	Complete	1/10/00	CarlsenS	8260 B
065446	BBW	1/6/00	Extract BETX/TPH	Complete	1/10/00	CarlsenS	8260 B
065447	BBE	1/6/00	Extract BETX/TPH	Complete	1/10/00	CarlsenS	8260 B
065448	ABW	1/6/00	Extract BETX/TPH	Complete	1/10/00	CarlsenS	8260 B
065449	ABE	1/6/00	Extract BETX/TPH	Complete	1/10/00	CarlsenS	8260 B
065450	SW-WWS	1/6/00	Extract BETX/TPH	Complete	1/10/00	CarlsenS	8260 B
065451	SW-WWN 1/2	1/6/00	Digest ICP Metals	Complete	1/10/00	ClarkS	3005 A
		1/6/00	Extract BETX/TPH	Complete	1/10/00	CarlsenS	8260 B
065452	SW-NW 1/2	1/6/00	Digest ICP Metals	Complete	1/10/00	ClarkS	3005 A
		1/6/00	Extract BETX/TPH	Complete	1/10/00	CarlsenS	8260 B
065453	SW-NC 1/2	1/6/00	Digest ICP Metals	Complete	1/10/00	ClarkS	3005 A
		1/6/00	Extract BETX/TPH	Complete	1/10/00	CarlsenS	8260 B
065454	SW-NE 1/2	1/6/00	Digest ICP Metals	Complete	1/10/00	ClarkS	3005 A
		1/6/00	Extract BETX/TPH	Complete	1/10/00	CarlsenS	8260 B
065455	SW-EWN 1/2	1/6/00	Digest ICP Metals	Complete	1/10/00	ClarkS	3005 A
		1/6/00	Extract BETX/TPH	Complete	1/10/00	CarlsenS	8260 B
065456	SW-EWS	1/6/00	Extract BETX/TPH	Complete	1/10/00	CarlsenS	8260 B
065457	SW-SWE 1/2	1/6/00	Digest ICP Metals	Complete	1/10/00	ClarkS	3005 A
		1/6/00	Extract BETX/TPH	Complete	1/10/00	CarlsenS	8260 B
065458	SW-SWW	1/6/00	Extract BETX/TPH	Complete	1/10/00	CarlsenS	8260 B
065459	DBN	1/6/00	Extract BETX/TPH	Complete	1/10/00	CarlsenS	8260 B
065460	DBS	1/6/00	Extract BETX/TPH	Complete	1/10/00	CarlsenS	8260 B
065461	DW-W	1/6/00	Extract BETX/TPH	Complete	1/10/00	CarlsenS	8260 B

QUALITY ASSURANCE / QUALITY CONTROL DATA
Method Specific Surrogate Compound Recoveries

EIS Order ID: 000100060

Normal Test	Surrogate	QUALITY CONTROL LIMITS			
		Methods		QC Limits	
		Water	Soil	Water	Soil
Herbicides	2,4-Dichlorophenylacetic acid(DCAA)	615 / 8151A / 515.1	8151A	15 - 135	
Pesticides / PCB	2,4,5,6-Tetrachloro-m-xylene(TCMX)	608 / 8081A / 8082 / 508	8082	22 - 135	40 - 150
Pesticides / PCB	Decachlorobiphenyl(DCB)	608 / 8081A / 508	8082	22 - 135	40 - 150
SOC (svoc)	Perylene, d12	525.2		70 - 130	
SVOC (acid)	2-Fluorophenol	625 / 8270C	8270C	21 - 100	25 - 121
SVOC (acid)	Phenol, d5	625 / 8270C	8270C	10 - 94	24 - 113
SVOC (base/neutral)	Nitrobenzene, d5	625 / 8270C	8270C	35 - 114	23 - 120
SVOC (base/neutral)	2-Fluorobiphenyl	625 / 8270C	8270C	43 - 116	30 - 115
SVOC (acid)	2,4,6-Tribromophenol	625 / 8270C	8270C	10 - 123	19 - 122
SVOC (base/neutral)	Terphenyl, d14	625 / 8270C	8270C	33 - 141	18 - 137
TPH	Styrene	8015M	8015M	30 - 70	34 - 66
VOC / BETX / TPH	1,2-Dichloroethane, d4	624 / 8260B / 524.2	8260B	76 - 114	70 - 121
VOC / BETX / TPH	Toluene, d8	624 / 8260B / 524.2	8260B	86 - 115	74 - 121
VOC / BETX / TPH	Bromofluorobenzene(BFB)	624 / 8260B / 524.2	8260B	86 - 115	74 - 121

EIS Lab No	Client Sample ID	Method	Matrix	Surrogate	%Recovery
065444	CBW-1/2	8260 B	Soil/Sludge/Solid	1,2-Dichloroethane-d4 (SS)	94
		8260 B	Soil/Sludge/Solid	4-Bromofluorobenzene (SS)	104
		8260 B	Soil/Sludge/Solid	Toluene-d8 (SS)	100
065445	CBE -1/2	8260 B	Soil/Sludge/Solid	1,2-Dichloroethane-d4 (SS)	89
		8260 B	Soil/Sludge/Solid	4-Bromofluorobenzene (SS)	101
		8260 B	Soil/Sludge/Solid	Toluene-d8 (SS)	96
065446	BBW	8260 B	Soil/Sludge/Solid	1,2-Dichloroethane-d4 (SS)	95
		8260 B	Soil/Sludge/Solid	4-Bromofluorobenzene (SS)	96
		8260 B	Soil/Sludge/Solid	Toluene-d8 (SS)	96
065447	BBE	8260 B	Soil/Sludge/Solid	1,2-Dichloroethane-d4 (SS)	93
		8260 B	Soil/Sludge/Solid	4-Bromofluorobenzene (SS)	108
		8260 B	Soil/Sludge/Solid	Toluene-d8 (SS)	94
065448	ABW	8260 B	Soil/Sludge/Solid	1,2-Dichloroethane-d4 (SS)	91
		8260 B	Soil/Sludge/Solid	4-Bromofluorobenzene (SS)	105
		8260 B	Soil/Sludge/Solid	Toluene-d8 (SS)	97
065449	ABE	8260 B	Soil/Sludge/Solid	1,2-Dichloroethane-d4 (SS)	95
		8260 B	Soil/Sludge/Solid	4-Bromofluorobenzene (SS)	107
		8260 B	Soil/Sludge/Solid	Toluene-d8 (SS)	93
065450	SW-WWS	8260 B	Soil/Sludge/Solid	1,2-Dichloroethane-d4 (SS)	93
		8260 B	Soil/Sludge/Solid	4-Bromofluorobenzene (SS)	100
		8260 B	Soil/Sludge/Solid	Toluene-d8 (SS)	92
065451	SW-WWN 1/2	8260 B	Soil/Sludge/Solid	1,2-Dichloroethane-d4 (SS)	94
		8260 B	Soil/Sludge/Solid	4-Bromofluorobenzene (SS)	104
		8260 B	Soil/Sludge/Solid	Toluene-d8 (SS)	94

Legend: -1 = Surrogates diluted out -2 = Surrogates not used () = methods with different QC Limits

QUALITY ASSURANCE / QUALITY CONTROL DATA

Method Specific Surrogate Compound Recoveries

EIS Order ID: 000100060

QUALITY CONTROL LIMITS

Formal Test	Surrogate	Methods		QC Limits	
		Water	Soil	Water	Soil
Herbicides	2,4-Dichlorophenylacetic acid(DCAA)	615 / 8151A / 515.1	8151A	15 - 135	
Pesticides / PCB	2,4,5,6-Tetrachloro-m-xylene(TCMX)	608 / 8081A / 8082 / 508	8082	22 - 135	40 - 150
Pesticides / PCB	Decachlorobiphenyl(DCB)	608 / 8081A / 508	8082	22 - 135	40 - 150
SOC (svoc)	Perylene, d12	525.2		70 - 130	
SVOC (acid)	2-Fluorophenol	625 / 8270C	8270C	21 - 100	25 - 121
SVOC (acid)	Phenol, d5	625 / 8270C	8270C	10 - 94	24 - 113
SVOC (base/neutral)	Nitrobenzene, d5	625 / 8270C	8270C	35 - 114	23 - 120
SVOC (base/neutral)	2-Fluorobiphenyl	625 / 8270C	8270C	43 - 116	30 - 115
SVOC (acid)	2,4,6-Tribromophenol	625 / 8270C	8270C	10 - 123	19 - 122
SVOC (base/neutral)	Terphenyl, d14	625 / 8270C	8270C	33 - 141	18 - 137
TPH	Styrene	8015M	8015M	30 - 70	34 - 66
VOC / BETX / TPH	1,2-Dichloroethane, d4	624 / 8260B / 524.2	8260B	76 - 114	70 - 121
VOC / BETX / TPH	Toluene, d8	624 / 8260B / 524.2	8260B	86 - 115	74 - 121
VOC / BETX / TPH	Bromofluorobenzene(BFB)	624 / 8260B / 524.2	8260B	86 - 115	74 - 121

EIS Lab No.	Client Sample ID	Method	Matrix	Surrogate	%Recovery
065460	DBS	8260 B	Soil/Sludge/Solid	1,2-Dichloroethane-d4 (SS)	92
		8260 B	Soil/Sludge/Solid	4-Bromofluorobenzene (SS)	103
		8260 B	Soil/Sludge/Solid	Toluene-d8 (SS)	91
065461	DW-W	8260 B	Soil/Sludge/Solid	1,2-Dichloroethane-d4 (SS)	96
		8260 B	Soil/Sludge/Solid	4-Bromofluorobenzene (SS)	103
		8260 B	Soil/Sludge/Solid	Toluene-d8 (SS)	97
065462	DW-E	8260 B	Soil/Sludge/Solid	1,2-Dichloroethane-d4 (SS)	94
		8260 B	Soil/Sludge/Solid	4-Bromofluorobenzene (SS)	102
		8260 B	Soil/Sludge/Solid	Toluene-d8 (SS)	94
065463	DW-S	8260 B	Soil/Sludge/Solid	1,2-Dichloroethane-d4 (SS)	96
		8260 B	Soil/Sludge/Solid	4-Bromofluorobenzene (SS)	110
		8260 B	Soil/Sludge/Solid	Toluene-d8 (SS)	97
065464	DW-N	8260 B	Soil/Sludge/Solid	1,2-Dichloroethane-d4 (SS)	98
		8260 B	Soil/Sludge/Solid	4-Bromofluorobenzene (SS)	107
		8260 B	Soil/Sludge/Solid	Toluene-d8 (SS)	93
065465	ESP 1	8260 B	Soil/Sludge/Solid	1,2-Dichloroethane-d4 (SS)	92
		8260 B	Soil/Sludge/Solid	4-Bromofluorobenzene (SS)	101
		8260 B	Soil/Sludge/Solid	Toluene-d8 (SS)	95
065466	ESP 2	8260 B	Soil/Sludge/Solid	1,2-Dichloroethane-d4 (SS)	93
		8260 B	Soil/Sludge/Solid	4-Bromofluorobenzene (SS)	99
		8260 B	Soil/Sludge/Solid	Toluene-d8 (SS)	93
065467	ESP 3	8260 B	Soil/Sludge/Solid	1,2-Dichloroethane-d4 (SS)	93
		8260 B	Soil/Sludge/Solid	4-Bromofluorobenzene (SS)	105
		8260 B	Soil/Sludge/Solid	Toluene-d8 (SS)	97

Legend: -1 = Surrogates diluted out -2 = Surrogates not used () = methods with different QC Limits



Mr Larry Grauvogel
Grauvogel & Associates
17660 Fall Creek Drive
Granger, IN 46530

Tel No: 277-4770

Fax No: 277-5281

PO No:

Project Name: Studebaker Building 92

Report Date: 1/27/00
EIS Order No: 000100129
EIS Sample No: 065591
EIS Project No: 2730-1000-00

Client Sample ID: UST Site - Backfill
Date Collected: 1/14/00
Date Received: 1/17/00
Collected By: L.G.

This report presents results of analysis for your sample(s) received under our Order No above. This Number is to be used in all inquiries concerning this report. The EIS Sample No above, as well as your Sample ID, refer to the first sample in a multi-sample submission.

DEFINITIONS:

- MDL = Method Detection Limit normally achieved in the absence of interferences or other matrix difficulties.
- SDL = Sample Detection Limit achieved in your sample. If numerically greater than the MDL, dilutions were required in order to perform the analysis. If numerically less than the MDL, alternate techniques were employed.
- nd = Not Detected at the SDL value. If present, result is less than this value.
- < = Not Detected at the numerical value shown. If present, result is less than this value.

CHAIN-OF-CUSTODY is enclosed if received with your sample submission.

DRINKING WATER CERTIFICATIONS: Chemistry = C-71-02. Bacteriology = 52715


QUALITY ASSURANCE OFFICER


LABORATORY DIRECTOR

The data in this report has been reviewed and complies with EIS Quality Control unless specifically addressed above.

ANALYSIS SUPPORT INFORMATION

CLIENT NAME: Grauvogel & Associates

Report Date: 1/27/00
EIS Order No: 000100129

EIS Lab Number	Client Description	Sample Date	Procedure	Result	Date Completed	Analyst	Method
065591	UST Site - Backfill	1/14/00	Extract BETX/TPH	Complete	1/18/00	WilliamsJ	8260 B

Attachment 5:
Uniform Hazardous Waste Manifests
for UST Contents



WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

RECEIVED
DO NOT WRITE IN THIS SPACE
ATT. DIS. REJ. PR.
MAR 10 2000

Required under authority of Part 111 a
Part 121 of Act 451, 1994, as amended
99-
Failure to file may subject you to
criminal and/or civil penalties under
Sections 324.11151 or 324.12118 MCL

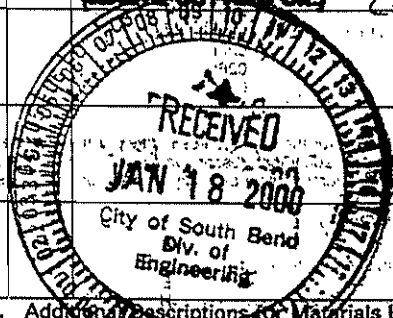
Please print or type.

Form Approved, OMB No. 2050-0039

T 1-800-292-4706 OR OUT OF STATE AT 517-373-7680 AND THE NATIONAL RESPONSE

ALL SUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MI 800-424-8802 24 HOURS PER DAY.

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. HR 000 0 2 1 0 0 7		Manifest Document No. SC01 INC		2. Page 1		Information in the shaded areas is not required by Federal law.					
3. Generator's Name and Mailing Address CITY OF SOUTH BEND 1316 COUNTY CITY BUILDING, 227 WEST JEFFERSON BLVD, 13TH FLOOR SOUTH BEND, IN 46801						A. State Manifest Document Number MI 7641525							
4. Generator's Phone (219) 235-4251 CARL LITRELL						B. State Generator's ID							
5. Transporter 1 Company Name TAPLIN ENVIRONMENTAL CONTRACTING CORP				6. US EPA ID Number MI D01 7 1 0 7 2 2 2		C. State Transporter's ID							
7. Transporter 2 Company Name				8. US EPA ID Number		D. Transporter's Phone							
9. Designated Facility Name and Site Address ADVANCED RESOURCE RECOVERY, L.L.C. 27146 PRINCETON AVENUE ROBSTER, MI 48141						10. US EPA ID Number MI D 0 5 7 0 0 2 0 2		G. State Facility's ID					
						H. Facility's Phone							
11. US DOT Description (including Proper Shipping Name, Hazard Class, and HM ID NUMBER)						12. Containers		13. Total Quantity		14. Unit, Wt/Vol		15. Waste No.	
a. NOT DOT REGULATED LIQUID (RQ) GASOLINE, 3, UN1203 NON HAZARDOUS LIQUID - PG# WASTE CUTTING OIL (SEE WORM) (RPP)						01 TT		5500				02	
b.													
c.													
d.													
J. Additional Descriptions for Materials Listed Above 11a. MATERIALS: 15B 77# WASTE SITE LOCATION: 114 WEST SAMPSON STREET, SOUTH BEND, IN 46801						materials RPP gas/water							
15. Special Handling Instructions and Additional Information JOB # 23421-M						IN AN EMERGENCY TELEPHONE 616-373-8065							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are class packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimize present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my generation and select the best waste management method that is available to me and that I can afford.										Date			
Printed/Typed Name Carl Litrell				Signature <i>[Signature]</i>				Month/Day/Year 01/18/00					
17. Transporter 1 Acknowledgement of Receipt of Materials						Printed/Typed Name Mike...		Signature <i>[Signature]</i>		Month/Day/Year 01/18/00			
18. Transporter 2 Acknowledgement of Receipt of Materials						Printed/Typed Name		Signature		Month/Day/Year			
19. Discrepancy Indication Space materials RPP gas/water notified generator and transporter and made necessary changes to Line 11 a. and I.													
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.										Date			
Printed/Typed Name Nickolas...				Signature <i>[Signature]</i>				Month/Day/Year 01/18/00					





WASTE MANAGEMENT DIVISION
MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY

DO NOT WRITE IN THIS SPACE
ATT. DIS. REJ. PR.

Required under authority of Part 111 of
Part 121 of Act 451, 1994, as amended

Failure to file may subject you to
criminal and/or civil penalties under
Sections 324.11151 or 324.12116 MCL

Please print or type.

Form Approved OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. 1 NR 000 0 2 1 0 0 7 4 1 5 1 9	Manifest Document No.	2. Page 1 of 1	Information in the shaded area is not required by Federal law.
3. Generator's Name and Mailing Address CITY OF SOUTH BEND 1916 COUNTY-CITY BUILDING, 227 WEST JEFFERSON BLVD, 15TH FLOOR SOUTH BEND, MI 49201			A. State Manifest Document Number MI 76-41519		B. State Generator's ID
4. Generator's Phone (299) 299-0294 CARL LITRELL			C. State Transporter's ID		
5. Transporter 1 Company Name TAPLIN ENVIRONMENTAL CONTRACTING CORP		6. US EPA ID Number MID 017167222		D. Transporter's Phone	
7. Transporter 2 Company Name		8. US EPA ID Number		E. State Transporter's ID	
9. Designated Facility Name and Site Address ADVANCED RESOURCE RECOVERY, L.L.C. 27140 MONCETON AVENUE BRIGHTON, MI 48114		10. US EPA ID Number MID 057002002		F. Transporter's Phone	
11. US DOT Description (including Proper Shipping Name, Hazard Class, and HM ID NUMBER)		12. Containers No. Type		13. Total Quantity	14. Unit, Wt/Vol
a. X 90% GASOLINE, 3 UNITS, PG II (GASOLINE AND WATER/RECOVERABLE PETROLEUM PRODUCT)		54 TT		5445	9
b.					
c.					
d.					
J. Additional Descriptions for Materials Listed Above 1% GASOLINE AND WATER, A RECOVERABLE PETROLEUM PRODUCT APPROVAL NUMBER: C-98-741-1200-B UNDETERMINED TANKS B & D MILWAUKEE STEELWORKS BUILDING #2, 314 WEST MAPLE STREET, SOUTH BEND, MI 49201					
15. Special Handling Instructions and Additional Information IN AN EMERGENCY TELEPHONE 616-375-0000 J08#23421-W					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.					
Printed/Typed Name Lawrence W. Grayson		Signature <i>[Signature]</i>		Date 10/10/99	
17. Transporter 1 Acknowledgement of Receipt of Materials					
Printed/Typed Name M. J. Emmons		Signature <i>[Signature]</i>		Date 10/10/99	
18. Transporter 2 Acknowledgement of Receipt of Materials					
Printed/Typed Name		Signature		Date	
19. Discrepancy Indication Space ADDRESS ALL WASTE MANIFEST COPIES TO: WASTE MANAGEMENT DIVISION MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.					
Printed/Typed Name Thomas B. Parnell		Signature <i>[Signature]</i>		Date 10/10/99	

T 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE

GENERATOR

TRANSPORTER

FACILITY

MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MI 800-424-8802 24 HOURS PER DAY.



PLEASE PRINT OR TYPE

(Form designed for use on elite (12-pitch) typewriter.)

Form Approved: OMB No. 2050-0039, Expires 9-30-99

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's U.S. EPA ID Number: **IND0000021667**
 Manifest Document No.: **87236**
 2. Page 1 of 1
 Information in the shaded areas is not required by Federal Law, but Items D, F, H, I and K are required by State Law.

3. Generator's Name and Mailing Address

CITY OF SOUTH BEND
SOUTH BEND, IN

4. Generator's Telephone Number ()

5. Transporter 1 Company Name

TAPLIN

6. U.S. EPA ID Number

IND0017167222

7. Transporter 2 Company Name

8. U.S. EPA ID Number

9. Designated Facility Name and Site Address

POLLUTION CONTROL INDUSTRIES INC.
4343 KENNEDY AVENUE
EAST CHICAGO, IN 46312

10. U.S. EPA ID Number

IND000646842

A. State Manifest Document Number

INA1445728

B. State Generator's ID

C. State Transporter's ID

D. Transporter's Phone: **606-815-9545**

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID

H. Facility's Phone

(219) 397-3951

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

a. RO, WASTE FLAMMABLE LIQUIDS, N.O.S. (MINERAL SPIRITS, PETROLEUM DISTILLATES) 3 UN1993 PGII

12. Containers No. Type

00.1 TT

13. Total Quantity

00897
1400 G

14. Unit Wt/Vol.

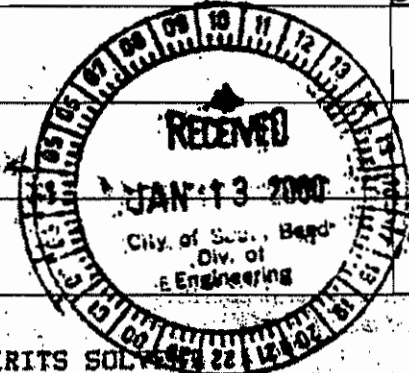
I. Waste No.

D001

b. ERG#127

c.

d.



J. Additional Descriptions for Materials Listed Above

11A WS-159170L MINERAL SPIRITS SOL

K. Handling Codes for Wastes Listed Above

S02

15. Special Handling Instructions and Additional Information

24 hour emergency phone #:
Land Ban Letter Attached

Trailer #:
Seal #:

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

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

Laura W. [Signature]

Signature

[Signature]

Date: Month Day Year
01 06 00

17. Transporter 1 - Acknowledgement of Receipt of Materials

Printed/Typed Name

MIKHAEL E Yonge

Signature

[Signature]

Date: Month Day Year
01 07 00

18. Transporter 2 - Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date: Month Day Year

19. Discrepancy Indication Space

13a AMENDED BASED ON MATERIAL RECEIVED AT PCT.
OK PER MICHAEL TAPLIN, TAPLIN ENVIRONMENTAL.

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

Printed/Typed Name

KIM MARCEIAK

Signature

[Signature]

Date: Month Day Year
01 07 00

In c. If a spill, call the Indiana Office of Environmental Response at 317-745 (day or night) and the National Response Center at 800/424-8802 or 202/426-2675.

HAZARDOUS WASTE FACILITY

Attachment 6:
UST Closure Supervisor Credentials



International Fire Code Institute



ROBERT C BINGHAM
is CERTIFIED in
UNDERGROUND STORAGE TANK
DECOMMISSIONING

The individual named hereon is CERTIFIED in the category shown,
pursuant to successful completion of the prescribed written
examination.
Expiration date: **February 16, 2002**
IFCI No. **5034886-26**
ASI No. **32019774**

Robert C. Bingham

Not valid unless signed by certificate holder.
*IFCI certification attests to competent knowledge of codes and standards.
Applicable experience should be verified by local jurisdictions.*

International Fire Code Institute

ROBERT C BINGHAM

**is CERTIFIED in
UNDERGROUND STORAGE TANK
DECOMMISSIONING**

The International Fire Code Institute attests that the individual named on this certificate has satisfactorily demonstrated knowledge of national underground storage tank regulations and industry standards in effect on this date in the category shown above by successfully completing the prescribed written examination.

Witnessed by our hand

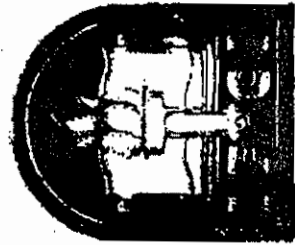
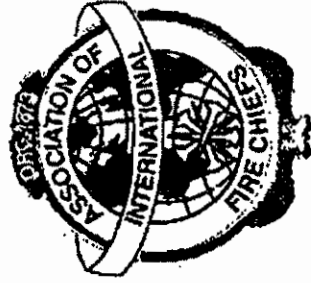
Certificate No. 5034886-26

Issued February 16, 2000

For the International Fire Code Institute

Jeff Stumwald

Chairman



TM

Attachment 7:
Picture during UST Removal
January 6-14, 2000



Picture 1: Tank A



Picture 2: Cleaning Tank A In-place



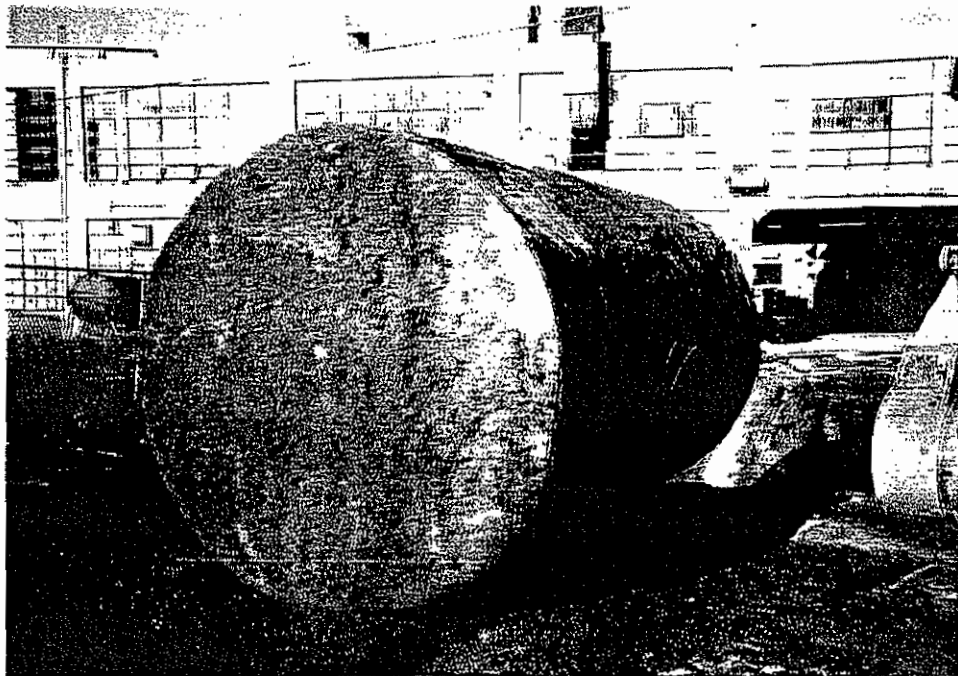
Picture 3: Tank B
(note bottom drainpipe connection)



Picture 4: Tank C
(note bottom drainpipe connection)



Picture 5: East Excavation looking East
(note bottom concrete hold-down pads)



Picture 6: Tank D



Picture 7: West Excavation looking Northwest



Picture 8: Backfilled Site looking Northwest

Attachment 8:
UST Closure Report Review Checklist

May 4, 2000

UST SYSTEM CLOSURE REPORT REVIEW CHECKLIST
(OCTOBER 1994 GUIDANCE)

FACILITY I.D.: INR000021667 OWNER I.D.: _____ LUST I.D.: _____

OWNER/OPERATOR NAME: Board of Public Works
CONTACT NAME/TITLE: Carl P. Littrell, PE City Engineer
ADDRESS LINE 1: 1300 County-City Building
ADDRESS LINE 2: _____
CITY/STATE: South Bend, IN
ZIP CODE: 46601
PHONE NUMBER: 219-235-9251

FACILITY NAME: Studebaker Building 92
CONTACT NAME/TITLE: Larry Grauvogel, PE 219-277-4770
ADDRESS: 414 West Sample Street
CITY: South Bend
COUNTY: St. Joseph
ZIP CODE: 46601

DATE REPORT
RECIEVED: _____
INITIAL DATE _____
REVIEWED: _____

CLOSURE DATE: 1/11/00
UST STAFF: _____
STAFF PHONE: _____
ADDITIONAL INFO
RECIEVED: _____

UST SYSTEM CLOSURE REPORT

N: NOT SUBMITTED

S: SUBMITTED

N/A: NOT APPLICABLE

I: INADEQUATE

A: ADEQUATE

	N	S	N/A	I	A	Complete Date	
							RESPONSIBLE PARTY
1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Owner/Operator Name, Owner I.D. #, Address, Phone #
2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Contact Person, Owner/Operator, Affiliation, Phone #
3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Past Owner/Operators
							UST CONTRACTOR
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	UST Closure Contractor Name & Address
5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Name And OSFM Certification #
							UST SITE
6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Facility Name, I.D. #, Address, & Phone #
7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Type Of Facility, Past And Present Operations
8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Coverage (Paved Or Nonpaved, Etc.)
9	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	History Of Spill Reports (By Incident #)
10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Site Surroundings
11	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Site Soil Texture
							SITE SPECIFIC MAP
12	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Appropriate Scale And Legends
13	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Buildings/Structures And Site Boundaries
14	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Locations Of All USTs At Site
15	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Tank Excavations With Dimensions
16	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Location Of Any Previously Closed UST Systems
17	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Location Of Pump Islands
18	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Location Of UST Piping (Removed And Non-Removed)
19	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Identified Buried Utility Lines
20	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Soil Boring Locations (In-Place Closure)
21	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Drainage Features (Natural And Constructed)
22	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Sampling Locations (Soil And Water)
23	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Groundwater Monitoring Well Locations
							UNDERGROUND STORAGE TANK(S)
24	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Number And Volume Of Tanks(s)
25	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Past And Present Contents Of Tank(s)
26	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Construction Material Of Tank(s)
27	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Age And Installation Dates Of Tank(s)
28	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Leak Detection Methods Used
29	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Records Of Tank Tightness Test Results
30	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Records Of Any Other Leak Detection (Last 2 Mos.)
31	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____	Information On Any Previously Closed UST Systems

*=See Specific Comments

