



**Worldwide Facilities Group
Environmental & Regulatory Support
Remediation Team**

December 20, 1996

Mr. Daniel Dailey
Michigan Department of Environmental Quality
Waste Management Division
608 West Allegan Street
Lansing, MI 48909

Dear Mr. Dailey:

Re: General Motors Clark Street Facility
Interim Status Hazardous Waste Container Storage Unit
MID 005356704
Final Closure Report Addendum Submittal

Pursuant to your October 4, 1996 letter approving an extension of the closure period for the Clark Street Facility interim status hazardous waste container storage unit, GM has completed final closure activities as discussed in the letter to you dated September 27, 1996. The purpose of this letter is to submit the Final Closure Report Addendum for the Clark Street Facility. Enclosed, please find six (6) copies of the referenced report.

Should you have any question or comments, please contact me at 313-556-0816.

Sincerely,

Box Bridget R. Pitlock

c: J. Caufield, GM
K. West, GM
W. McFarland, GM
K. Richards, GM
G. Turchan, CRA



JOHN ENGLER, Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY

HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

INTERNET: <http://www.deq.state.mi.us>

RUSSELL J. HARDING, Director

REPLY TO:

WASTE MANAGEMENT DIVISION
PO BOX 30241
LANSING MI 48909-7741

February 27, 1997

CERTIFIED MAIL

Ms. Bridget R. Pitlock
Environmental and Regulatory Support Remediation Team
Worldwide Facilities Group
General Motors Corporation
485 West Milwaukee Avenue, MC 482-310-004
Detroit, Michigan 48202-3220

Dear Ms. Pitlock:

SUBJECT: Acceptance of Closure Certification, Cadillac Motor Car-Clark Street Facility,
General Motors Corporation, Detroit, Wayne County: MID 005 356 704

The Michigan Department of Environmental Quality, Waste Management Division, has reviewed the closure certification and its addenda, received June 11, 1990, February 6, 1996, and December 26, 1996, respectively, for General Motors Corporation's (GM's) Cadillac Motor Car-Clark Street facility located in Detroit, Michigan (the facility). The closure certification was submitted pursuant to the requirements of Part 111 (Hazardous Waste Management) of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Based on our review, GM is hereby released from its closure responsibilities at the facility under Part 111. GM is, therefore, no longer required to demonstrate financial capability for closure and liability coverage at the facility.

Facility Status

With this acceptance of the certification of closure, the facility can no longer be operated as a hazardous waste treatment, storage, or disposal facility. If hazardous waste is generated at the facility, it must be managed in accordance with all applicable generator requirements in Part 3 of the Part 111 Administrative Rules.

Financial Capability

GM demonstrates financial assurance for closure of the facility by use of a Financial Test. In accordance with R 299.9703(5), this acceptance of the certification of closure constitutes a release from the requirement to maintain such financial assurance. GM is no longer required to demonstrate closure coverage for the facility with updated Financial Test information.

#8889

- * Dea Montgomery 512-373-7973
- * Bridget Pitlock 313-556-0816
- (Ren Stone - geologist for MDEQ.
512-373-7141 - 0.25 acre site

* VSR - 576 ft² total wall sq ft Area B.

* random samples.

INTERIM STATUS HAZARDOUS WASTE CONTAINER STORAGE UNIT

CLOSURE REPORT ADDENDUM

**General Motors Corporation
2860 Clark Avenue
Detroit, Michigan 48232
MID 005 356 704**

DECEMBER 1996

REF. NO. 8889 (5)

This report is printed on recycled paper.

CONESTOGA-ROVERS & ASSOCIATES

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LIST OF ACRONYMS

BGL	- Below Grade Level
CRA	- Conestoga-Rovers & Associates
GM	- General Motors Corporation
MDEQ	- Michigan Department of Environmental Quality
MDNR	- Michigan Department of Natural Resources
MERA	- Michigan Environmental Response Act
MPS	- Michigan Pumping Service, Inc.
RCRA	- Resource Conservation & Recovery Act
SCA	- Supplemental Closure Assessment
TEX	- Toluene, ethylbenzene, xylenes
U.S. EPA	- United States Environmental Protection Agency
VSR	- Verification of Soil Remediation
WMD	- Waste Management Division
WWTP	- Wastewater Treatment Plant

1.0 PLANT CERTIFICATION FOR CLOSURE REPORT ADDENDUM

The General Motors Corporation (GM) Clark Avenue Interim Status Hazardous Waste Container Storage Unit Closure Report Addendum (Closure Report Addendum) presents the results of supplemental closure activities conducted pursuant to a verbal communication from the Michigan Department of Environmental Quality (MDEQ) - Waste Management Division (WMD) that additional remediation activities were required to obtain a Type B "clean closure" for the former Interim Status Hazardous Waste Container Storage Unit.

Conestoga-Rovers & Associates (CRA) and GM are herewith certifying the data that was collected and analyzed by CRA and its subcontractors. Closure activities that were conducted and data that was collected prior to CRA's involvement at the Site were certified by Chester Engineers, Techna Corporation, and GM in previous submissions to the MDEQ-WMD (formerly Michigan Department of Natural Resources (MDNR)).

I certify under penalty of law that this document and all appendices were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



John Turchan
12/20/96

Signature: Edward A. McBean
Name: EDWARD A. MCBEAN
Date: Dec. 25/96
Professional Engineer Registration No.: _____

GENERAL MOTORS CORPORATION
CLARK AVENUE FACILITY

Signature: Ronald G. Pordon
Name: RONALD G. PORDON
Date: 12/13/96
Certified on behalf of General Motors Corporation

2.0 INTRODUCTION

CRA was retained by GM to conduct supplemental closure activities for the former Interim Status Hazardous Waste Container Storage Unit (RCRA Pad) located at the Clark Avenue Facility (Generator No. MID005356704) at 2860 Clark Avenue in Detroit, Michigan. The location of the Clark Avenue Facility is presented on Figure 2.1. The location of the former Interim Status Hazardous Waste Container Storage Unit (RCRA Pad) is presented on Figure 2.2. A Site plan for the former Interim Status Hazardous Waste Container Storage Unit is presented on Figure 2.3.

The supplemental closure activities were designed to achieve a Type B "clean closure" of the RCRA Pad by removing and disposing of impacted soils in accordance with earlier verbal communication with the MDEQ-WMD.

This Closure Report Addendum presents a summary of past Site activities and the supplemental closure activities conducted by CRA in October 1996 and November 1996.

3.0 SUMMARY OF PAST CLOSURE ACTIVITIES

The following provides a chronology of past activities conducted to support the Type B "clean closure" of the former Interim Status Hazardous Waste Container Storage Unit.

A. Closure Plan Development

GM initiated closure of the RCRA Pad in May 1989 in accordance with the MDNR approved Closure Plan (January 1989). GM contracted The Chester Engineers (Chester) of Ann Arbor, Michigan to perform closure activities as outlined in the approved Closure Plan. Closure activities included waste disposal, pad decontamination and sampling activities which took place between May 1989 and May 1990.

B. Closure Report Development

In 1994, GM reviewed all closure sampling data to determine the RCRA pad status under current regulations (Act 307 Type B 20 x Drinking Water soil criteria, MERA Operational Memorandum #8, Revision 3, February 4, 1994). Only soil borings SB-7 and SB-8 showed any constituents above the criteria. SB-7 (1' to 3') and SB-8 (1' to 3' and 3' to 5') contained concentrations of TEX above the Act 307 Type B 20 x Drinking Water soil criteria.

In December, 1994, soils adjacent to SB-7 and SB-8 were sampled to re-evaluate current conditions. Supplemental soil borings (SB-7B and SB-8A) were installed adjacent to SB-7 and SB-8 in the locations presented on Figure 3.1. None of the soil samples from the supplemental soil borings contained TEX at concentrations above the Act 307 Type B 20 x Drinking Water soil criteria.

In August 1995, Chester prepared and GM submitted the RCRA Container Storage Pad Closure Certification (Closure Report) to the MDEQ-WMD. Based on its review of the Closure Report, the MDEQ-WMD requested that an additional soil assessment be conducted to further

investigate soil conditions in the vicinity of soil borings SB-7, SB-8, SB-7B and SB-8A. MDEQ-WMD concluded that the data sets for these soil borings were insufficient for clean closure certification.

C. Supplemental Closure Assessment

GM contracted Techna of Plymouth, Michigan, to prepare and submit on behalf of GM, a Supplemental Closure Assessment (SCA) letter to MDEQ-WMD on February 9, 1996, which identified the scope of work for final investigations to be conducted at the RCRA Pad. The SCA was verbally approved by MDEQ-WMD on February 13, 1996. SCA investigative activities were completed on February 22, 1996 and included the installation of 4 soil borings (HP1-HP4), and the collection and analysis of eight soil samples for TEX (analyzed by U.S. EPA SW-846 Method 8021 and TCLP). SCA investigative results are presented in the Supplemental Closure Assessment Report (SCA Report), dated November 7, 1996, which is included as Appendix A.

3.1 SUPPLEMENTAL CLOSURE ACTIVITIES

Based on the results of the SCA, Techna concluded that impacted soil was limited to the area of SB-7 and SB-8/HP-4.

Data from the Closure Report and SCA indicate that the exceedances of Act 307 Type B 20 x Drinking Water soil criteria were limited to approximately 5 feet below grade level.

4.0 SUPPLEMENTAL CLOSURE ACTIVITIES

The supplemental closure activities conducted by CRA at the RCRA Pad were designed to address remaining TEX exceedances of the Type B 20 x Drinking Water soil criteria identified in historical samples collected at SB-7 and SB-8 as identified in the Closure Report (see Figure 3.1).

As identified in GM's September 27, 1996 letter to MDEQ-WMD (see Appendix B), CRA was retained by GM to supervise final "clean closure" activities at the former RCRA Pad. Technical requirements for the supplemental closure activities including excavation, soil verification sampling, and decontamination procedures, were performed in accordance with the Closure Plan and sound engineering practice.

Under the supervision of CRA, Carlo Environmental Technologies (CET) of Clinton Township, Michigan, excavated two areas of impacted soil around SB-7 and SB-8 from the former RCRA Pad area. The excavation areas are presented on Figure 4.1. The following summarizes information regarding the excavation areas:

	<i>Related Historic Soil Boring</i>	<i>Dimensions</i>	<i>Approximate Excavation Area (sq. feet)</i>	<i>Approximate Excavation Depth (feet bgs)</i>	<i>Approximate Volume (in place cubic yards)</i>
<i>Area A</i>	SB-8	21' x 21'	441	10	164
<i>Area B</i>	SB-7	24' x 24'	576	10	214

Concrete overlying the excavation areas was removed and stockpiled on Site on polyethylene sheeting. The excavation of potentially impacted soil at Area A (SB-8) began on October 10, 1996. Perched water was encountered in the excavation area at approximately 4 feet below ground surface (bgs). Michigan Pumping Service (MPS) of Trenton, Michigan, was retained by GM to pump the perched water out of the excavation area in order to complete the excavation to the native clay. Approximately 18,738 gallons of water were removed from Area A and transported by MPS to the GM Clark Avenue Waste Water Treatment Plant (WWTP) on October 11, 15, and 16, 1996.

Uniform hazardous waste manifests utilized for transportation of the non-hazardous water are included in Appendix C. Once the excavation area was dewatered, the Area A excavation was completed on October 16, 1996. The excavation at Area B was completed on October 10, 1996, (no water infiltrated this excavation). Verification soil samples were collected from Area A on October 16, 1996, and Area B on October 10, 1996, in accordance with MDNR Guidance on Verification of Soil Remediation (VSR), April 1994, Revision 1, and analyzed for TEX. A sample summary is presented in Table 4.1. Soil verification sample locations are presented on Figure 4.2.

The soil verification sample results are presented in Table 4.2 for both excavation areas. No TEX compounds were detected in any of the soil samples above the Act 307 Type B 20 x Drinking Water Soil Cleanup Criteria. The analytical data is presented in Appendix D. The data validation memorandum is presented in Appendix E.

Before backfilling the excavation areas, MPS removed stormwater which had collected in the two excavation areas and transported it to the Clark Avenue WWTP. Uniform hazardous waste manifests are included in Appendix C. Approximately 21,717 gallons of water were removed on October 28, 1996, from Area A and Area B. Both excavations were backfilled with clean aggregate and compacted to at least 95% modified proctor, to match the existing grade. Certification for the clean fill material is included in Appendix F.

The impacted soil was staged adjacent to the RCRA Pad on visqueen and covered with polyethylene sheeting until transportation began on November 13, 1996, by Laidlaw Environmental (Laidlaw). Laidlaw transported impacted soil to their Echo Mountain Facility in Sawyer, North Dakota. Bills of lading for the soil disposal are presented in Appendix G.

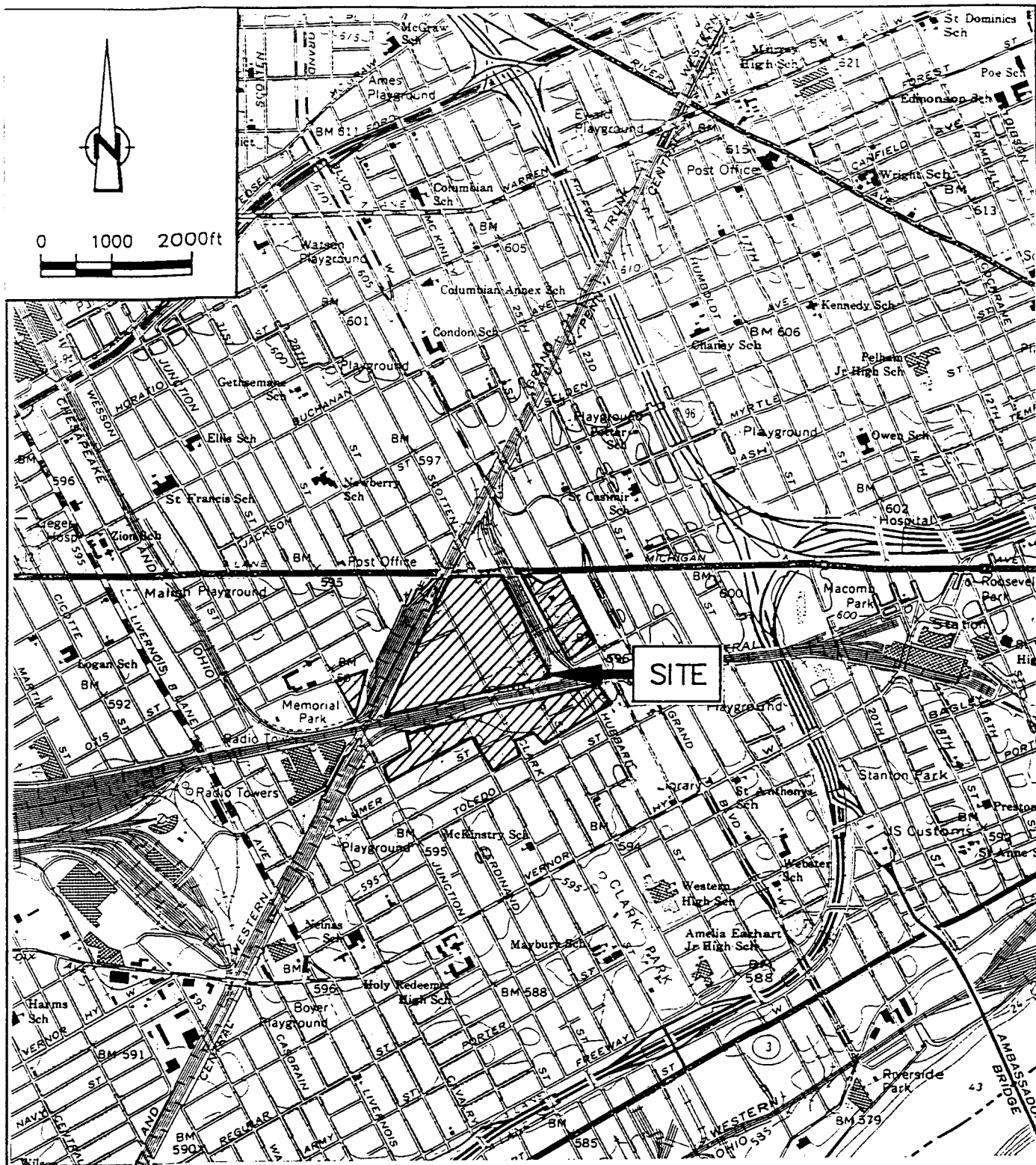
5.0 SUMMARY

The following summarizes the supplemental closure activities at the Site:

1. Potentially impacted soil from the areas of historic soil borings SB-7 and SB-8 has been removed;
2. Excavated soil was disposed of off Site by Laidlaw Environmental;
3. The following in-place volumes of soil were excavated and disposed of:

Area A	164 cy
Area B	<u>214 cy</u>
Total	<u>378 cy</u>
4. Verification samples were collected in accordance with MDEQ-WMD soil verification guidance;
5. Analytical results of the verification soil samples indicate that all impacted soil was removed and Type B "clean closure" was obtained; and
6. The excavation was backfilled with a clean aggregate and compacted to at least 95% modified proctor, to match the existing grade.

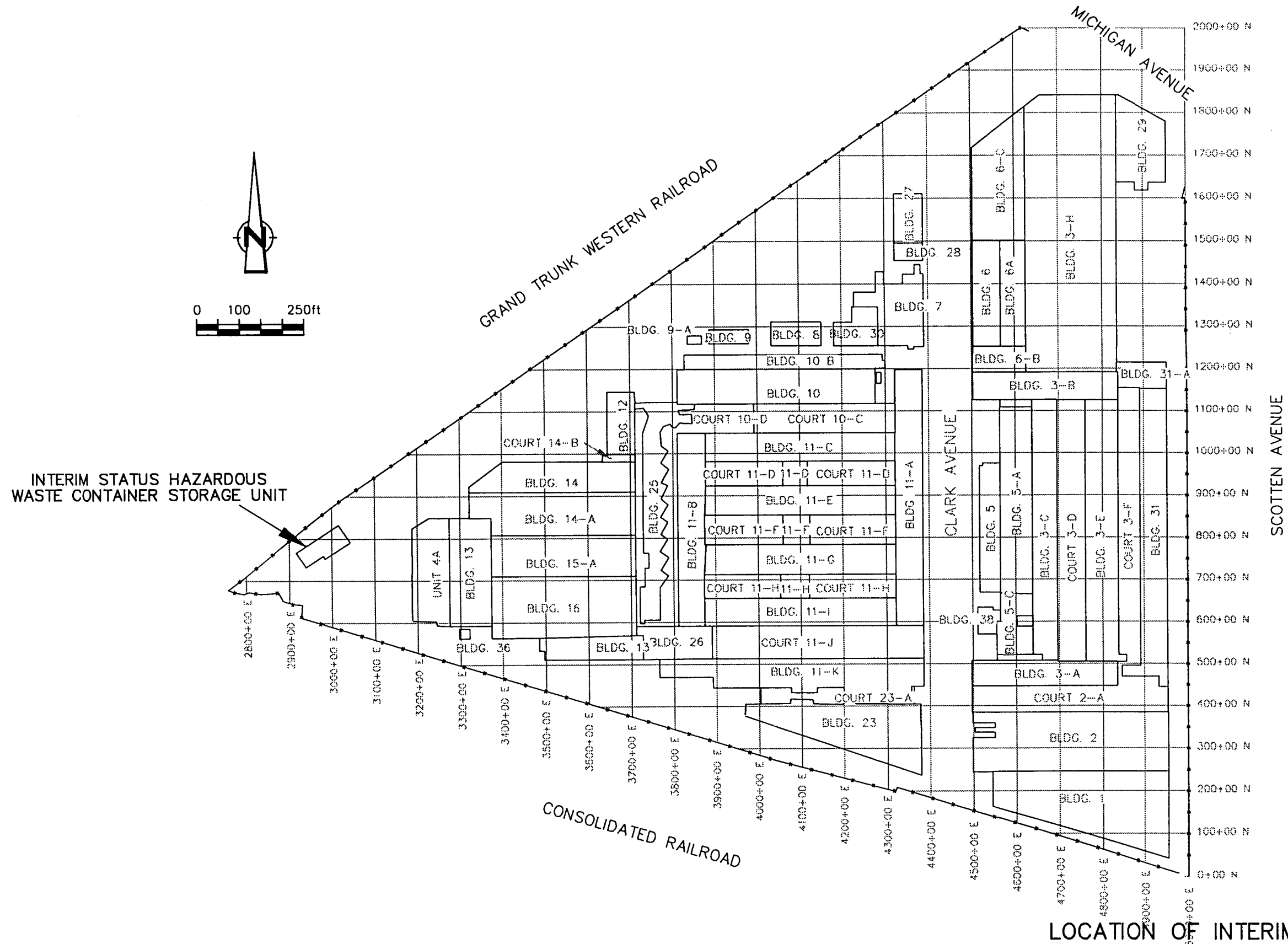
Closure activities completed at the former Interim Status Hazardous Waste Container Storage Unit were in accordance with the Closure Plan, discussions with MDEQ-WMD, MDEQ-WMD guidance, and sound engineering practice and achieved "clean closure" to Michigan Type B 20x Drinking Water Soil Criteria. No further remediation activities are required based upon the activities which have been completed.



SOURCE: USGS QUADRANGLE MAPS;
DETROIT

figure 2.1
FACILITY LOCATION
GM CLARK AVENUE FACILITY
Detroit, Michigan

CRA



ENGINEERING
BUILDING 40

figure 2.2
LOCATION OF INTERIM STATUS HAZARDOUS
WASTE CONTAINER STORAGE UNIT
GENERAL MOTORS CLARK AVENUE SITE
Detroit, Michigan

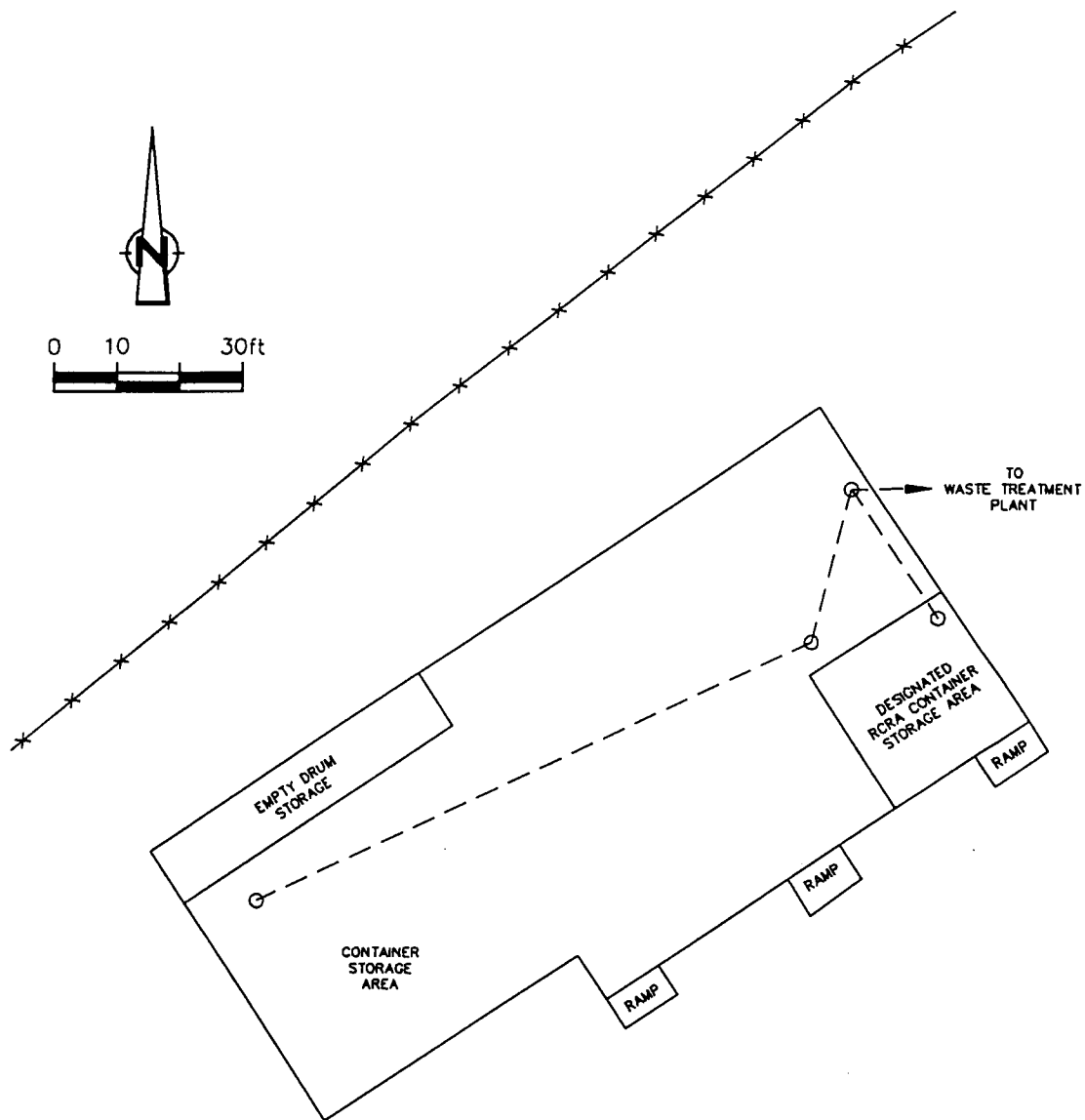
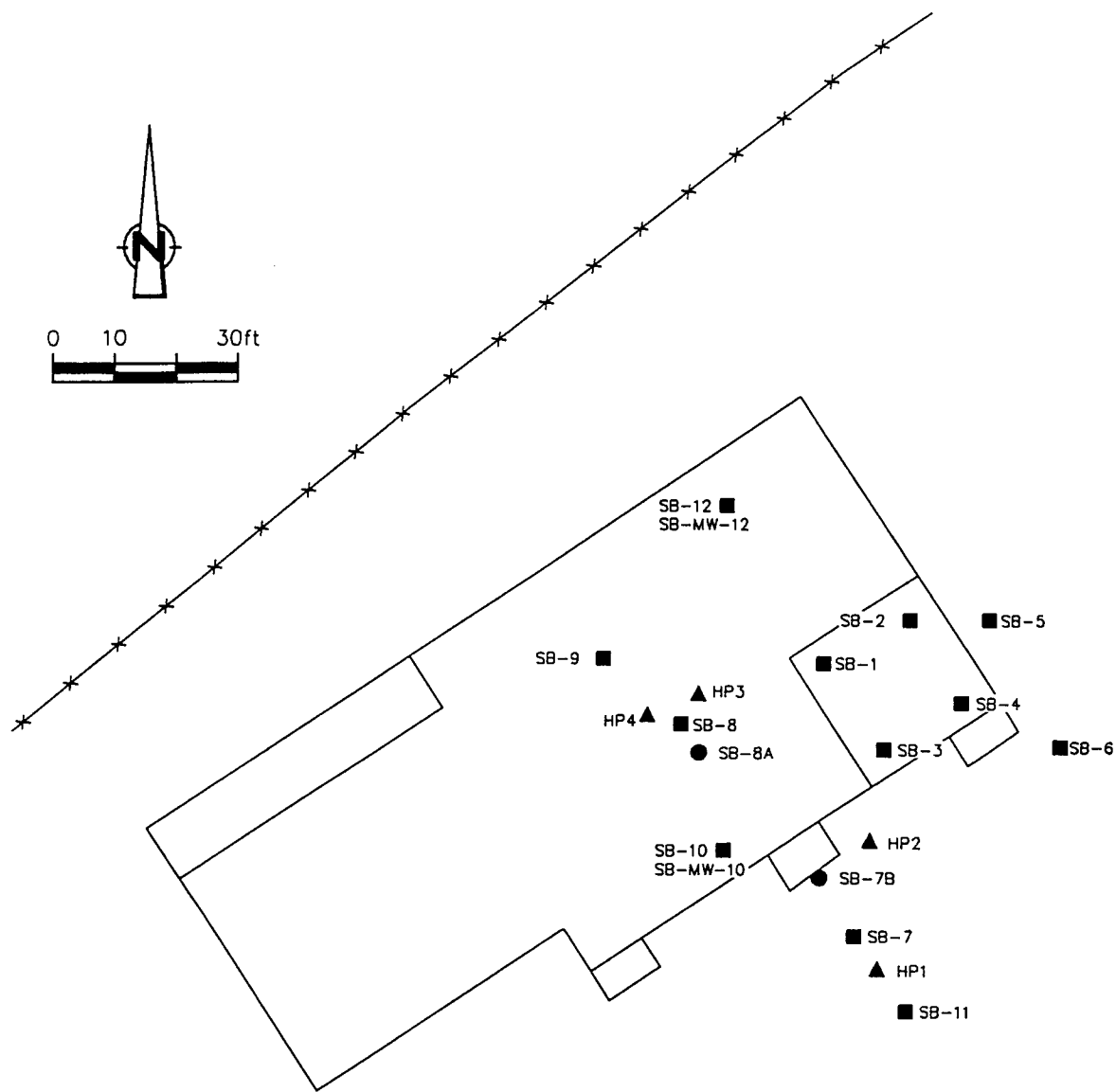


figure 2.3

SITE PLAN
 INTERIM STATUS
 HAZARDOUS WASTE CONTAINER STORAGE UNIT
 GM CLARK AVENUE FACILITY
Detroit, Michigan

CRA



LEGEND

- SB-1 CHESTER PHASE I/II SOIL BORINGS/MONITORING WELLS-DECEMBER 1989
- SB-7B CHESTER SUPPLEMENTAL SOIL BORINGS-DECEMBER 1994
- ▲ HP1 TECHNIA SUPPLEMENTAL SOIL BORINGS-FEBRUARY 1996

figure 3.1

HISTORIC SOIL SAMPLE LOCATIONS
INTERIM STATUS
HAZARDOUS WASTE CONTAINER STORAGE UNIT
GM CLARK AVENUE FACILITY
Detroit, Michigan

CRA



**Worldwide Facilities Group
Environmental & Regulatory Support
Remediation Team**

December 20, 1996

Mr. Daniel Dailey
Michigan Department of Environmental Quality
Waste Management Division
608 West Allegan Street
Lansing, MI 48909

Dear Mr. Dailey:

Re: General Motors Clark Street Facility
Interim Status Hazardous Waste Container Storage Unit
MID 005356704
Final Closure Report Addendum Submittal

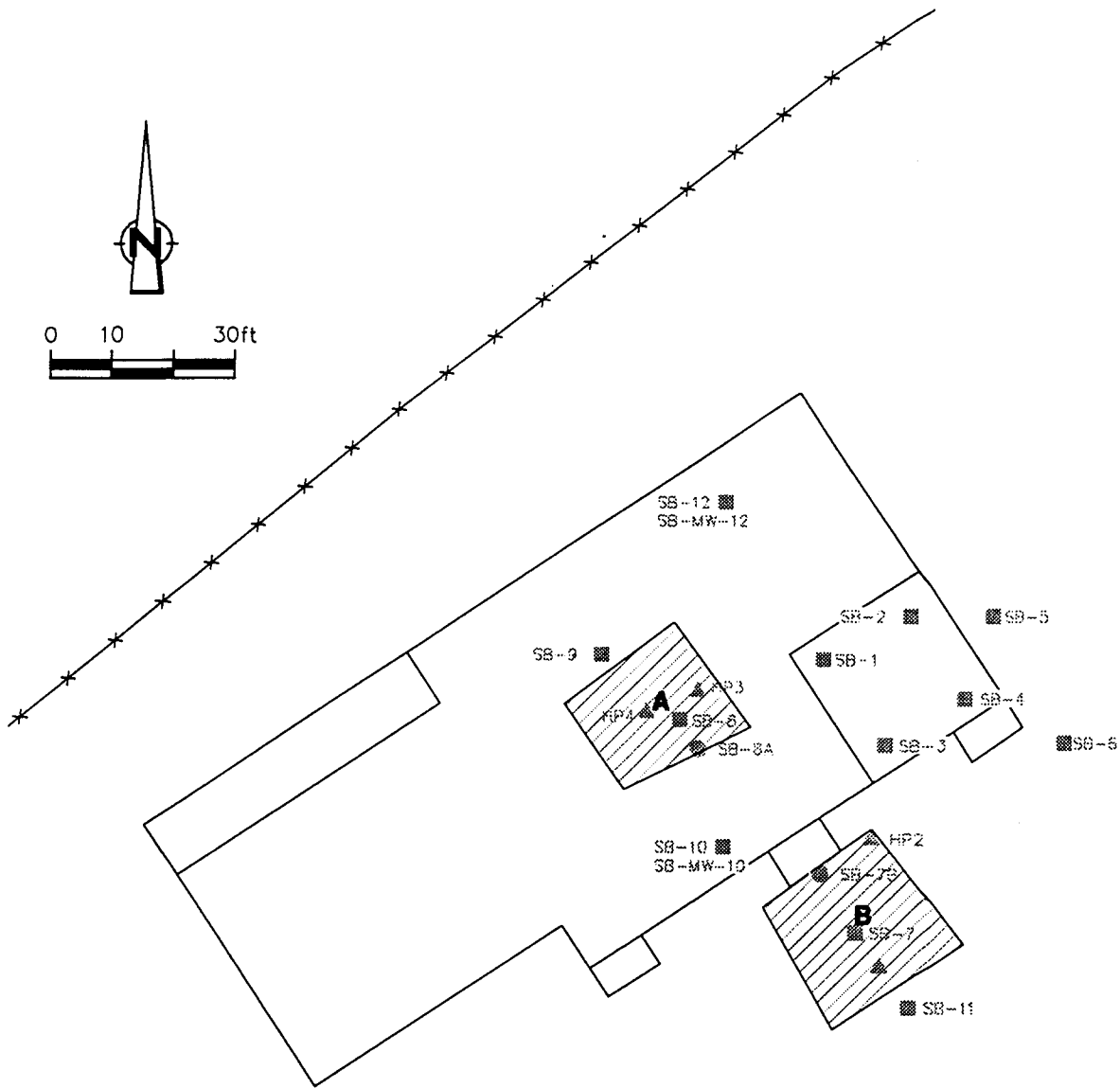
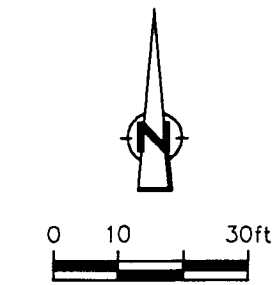
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Should you have any question or comments, please contact me at 313-556-0816.

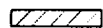
Sincerely,

Box Bridget R. Pitlock

c: J. Caufield, GM
K. West, GM
W. McFarland, GM
K. Richards, GM
G. Turchan, CRA



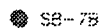
LEGEND



EXCAVATION AREA



SB-1 CHESTER PHASE I/II SOIL BORINGS/MONITORING WELLS-DECEMBER 1989



SB-7B CHESTER SUPPLEMENTAL SOIL BORINGS-DECEMBER 1994

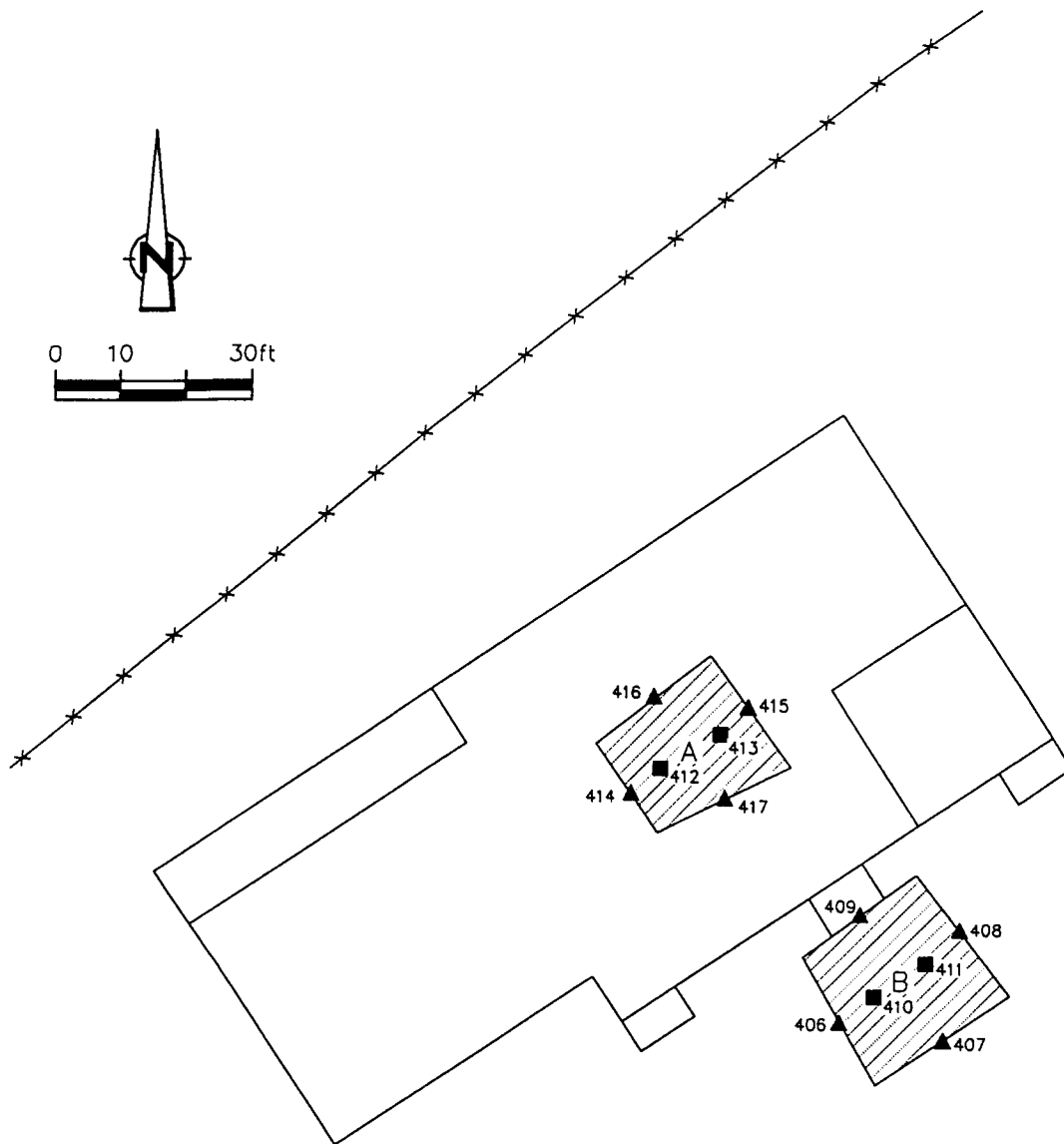


HP1 TECHNIA SUPPLEMENTAL SOIL BORINGS-FEBRUARY 1996

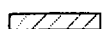
figure 4.1

LOCATION OF EXCAVATION AREAS
INTERIM STATUS
HAZARDOUS WASTE CONTAINER STORAGE UNIT
GM CLARK AVENUE FACILITY
Detroit, Michigan

CRA



LEGEND



EXCAVATION AREA



410 FLOOR SAMPLE LOCATION



406 SIDEWALL SAMPLE LOCATION

figure 4.2

VERIFICATION SOIL SAMPLE LOCATIONS
INTERIM STATUS
HAZARDOUS WASTE CONTAINER STORAGE UNIT
GM CLARK AVENUE FACILITY
Detroit, Michigan

CRA

TABLE 4.1

SOIL VERIFICATION SAMPLE SUMMARY
 INTERIM STATUS HAZARDOUS WASTE CONTAINER STORAGE UNIT
 GM CLARK AVENUE FACILITY
 DETROIT, MICHIGAN

	<i>Sample Number</i>	<i>Sample Location (1)</i>	<i>Chemical Analysis</i>
Area A	S-8889-101696-JM-412	Floor	TEX
	S-8889-101696-JM-413	Floor	TEX
	S-8889-101696-JM-414	South Sidewall	TEX
	S-8889-101696-JM-415	North Sidewall	TEX
	S-8889-101696-JM-416	West Sidewall	TEX
	S-8889-101696-JM-417	East Sidewall	TEX
Area B	S-8889-101096-JM-406	West Sidewall	TEX
	S-8889-101096-JM-407	South Sidewall	TEX
	S-8889-101096-JM-408	East Sidewall	TEX
	S-8889-101096-JM-409	North Sidewall	TEX
	S-8889-101096-JM-410	Floor	TEX
	S-8889-101096-JM-411	Floor	TEX

Notes:

TEX = Toluene, ethylbenzene, xylenes

(1) - Based upon MDNR VSR Guidance (April 1994, Revision 1)

TABLE 4.2

DETECTED COMPOUNDS IN SOIL VERIFICATION SAMPLES
INTERIM STATUS HAZARDOUS WASTE CONTAINER STORAGE UNIT
GM CLARK AVENUE FACILITY
DETROIT, MICHIGAN

Excavation Area Sample Location Sample ID (S-8889-)	A Floor 101696-JM-412	A Floor 101696-JM-413	A South Sidewall 101696-JM-414	A North Sidewall 101696-JM-415	A West Sidewall 101696-JM-416	A East Sidewall 101696-JM-417
Date Sampled	10/16/96	10/16/96	10/16/96	10/16/96	10/16/96	10/16/96
Michigan Act 307 Type B 20x Drinking Water Criteria (1)						
Parameter (ug/kg)						
Toluene	16,000					
Ethylbenzene	1,500	2.6	ND(1.5)	23 J	36 J	ND(1.2)
Xylenes	5,600	ND(1.2)	ND(1.5)	ND(1.2) UJ	53 J	ND(1.2)
		2.1	2.2	2.0 J	1,100 J	ND(1.2)

Notes:

ND() - Parameter was not detected above level in parenthesis.

(1) - Values taken from MERA Operational Memorandum #8, Revision 3, dated June 21, 1994.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample (for detected analytes).

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

TABLE 4.2

**DETECTED COMPOUNDS IN SOIL VERIFICATION SAMPLES
INTERIM STATUS HAZARDOUS WASTE CONTAINER STORAGE UNIT
GM CLARK AVENUE FACILITY
DETROIT, MICHIGAN**

Excavation Area Sample Location Sample ID (S-8889-)	B	West Sidewall 101096-JM-406	B	South Sidewall 101096-JM-407	B	East Sidewall 101096-JM-408	B	North Sidewall 101096-JM-409	B	Floor 101096-JM-410	B	Floor 101096-JM-411
Date Sampled	10/10/96	10/10/96	10/10/96	10/10/96	10/10/96	10/10/96	10/10/96	10/10/96	10/10/96	10/10/96	10/10/96	10/10/96
Parameter (ug/kg)												
Toluene		16 J	ND(13) UJ	ND(13)	ND(13)	ND(13)	ND(13)	ND(13)	ND(12)	ND(13)	ND(13)	ND(13)
Ethylbenzene		27 J	ND(13) UJ	ND(13)	ND(13)	ND(13)	ND(13)	ND(13)	ND(12)	ND(13)	ND(13)	ND(13)
Xylenes		110 J	ND(40) UJ	ND(40)	ND(40)	ND(40)	ND(40)	ND(40)	ND(36)	ND(40)	ND(40)	ND(40)

Notes:

ND() - Parameter was not detected above level in parenthesis.

(1) - Values taken from MERA Operational Memorandum #8, Revision 3, dated June 21, 1994.

J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample (for detected analytes).

UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

APPENDIX A

SUPPLEMENTAL CLOSURE ASSESSMENT REPORT
- TECHNA CORPORATION, NOVEMBER 1996



Knowledge, and the Creativity to Use It

44808 Helm St. Plymouth, MI 48170 (313) 454-1100 Fax. 454-1233

**CLARK STREET FACILITY
INTERIM STATUS HAZARDOUS WASTE
CONTAINER STORAGE UNIT
SUPPLEMENTAL CLOSURE ASSESSMENT REPORT**

**GENERAL MOTORS CORPORATION
2860 CLARK STREET
DETROIT, MICHIGAN 48232**

MID 005 356 704

Prepared for:

General Motors Corporation
Worldwide Facilities Group - Remediation
Argonaut A - 10th Floor
485 West Milwaukee Avenue
Detroit, Michigan 48202

TPN: 00642-01M

November 7, 1996



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Figure 4	Soil boring/Monitor Well Locations

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Appendix B	Laboratory Reports - Supplemental Soil Samples
Appendix C	Referenced Tables
Appendix D	Waste Documentation

**CLARK STREET FACILITY
INTERIM STATUS HAZARDOUS WASTE CONTAINER STORAGE UNIT
SUPPLEMENTAL CLOSURE ASSESSMENT REPORT**

**GENERAL MOTORS CORPORATION
2860 CLARK STREET
DETROIT, MICHIGAN 48232**

MID 005 356 704

**1.0 PLANT CERTIFICATION FOR SUPPLEMENTAL CLOSURE ASSESSMENT
REPORT**

The Clark Street Facility Interim Status Hazardous Waste Container Storage Unit Supplemental Closure Assessment Report presents the results of supplemental soil assessment activities pursuant to the February 9, 1996 *Supplemental Closure Assessment* letter, with Michigan Department of Environmental Quality, Waste Management Division approval.

Techna Corporation and General Motors Corporation are herewith certifying the assessment data that was collected and analyzed by Techna Corporation and its subcontractors. Assessment activities and data that were conducted or generated previous to Techna's involvement at the site were certified by Chester Environmental and General Motors Corporation in previous submissions to the Michigan Department of Natural Resources, Waste Management Division.

I certify under penalty of law that this document and all appendices were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Date: _____

Professional Engineer Registration No.: _____

**GENERAL MOTORS CORPORATION
CLARK STREET FACILITY**

Signature: _____

Name: _____

Date: _____

Certified on behalf of General Motors Corporation

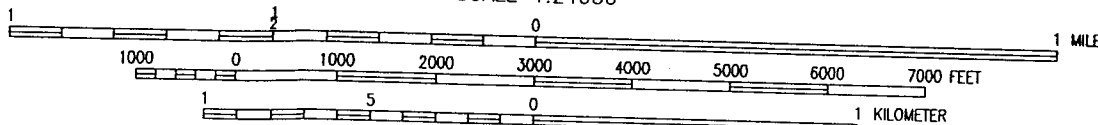
2.0 INTRODUCTION

Supplemental soil closure assessment activities have been completed on behalf of General Motors Corporation (GMC) by Techna Corporation for the former Clark Street facility (MID 005 356 704) hazardous waste container storage unit. The activities performed by Techna were conducted in accordance with the following documents and communications: 1) the revised and reissued January 1989 *General Motors Corporation, Cadillac Motor Car Division, Clark Street Plant, Detroit, Michigan, Closure Plan And Cost Estimate* and Michigan Department of Natural Resources (MDNR) approval stipulations (Closure Plan), and 2) Techna's February 9, 1996 *Supplemental Closure Assessment* (SCA) letter which was verbally approved by Mr. Ron Stone of the Michigan Department of Environmental Quality (MDEQ), Waste Management Division (WMD) on February 13, 1996. The Closure Plan was prepared by Chester Environmental (Chester), Ann Arbor, Michigan. The location of the site and proximate surface waters are presented in Figure 1, a portion of the United States Geological Survey (USGS), Detroit Quadrangle, Wayne County, Michigan 7.5 Minute Series, Topographic Map. Site diagrams showing the former GMC Clark Street facility, property boundaries, and surrounding properties and all known underground utilities in the hazardous waste container storage area are shown on Figures 2 and 3.

Results of previous Phase I, Phase II, and Follow-up assessments conducted by Chester are presented in the August 4, 1995 *General Motors Corporation North American Operations, Clark Street Facility, Detroit, Michigan, RCRA Container Storage Pad Closure Certification* (Closure Report). The approved SCA was implemented to resolve conflicting assessment results for toluene, ethylbenzene, and xylenes near soil borings SB7 and SB8 (Figure 4). Phase II closure assessment results (December 1989) revealed the presence of toluene, ethylbenzene, and xylenes at levels above Type B closure criteria (*MERA Operational Memorandum #8, Revision 3 - Type B Criteria*, February 4, 1994) in one or more soil samples collected at depths of one to five feet below grade level (BGL) in borings SB7 and SB8. Toluene, ethylbenzene, and xylenes species were not detected at levels above Type B closure criteria in deeper samples. Follow-up step-out borings (SB7B and SB8A) were then advanced in December 1994 proximate to each of the previous borings, respectively, and soil samples were collected to a depth of five feet BGL. None of the soil samples from these follow-up borings contained toluene, ethylbenzene, and xylenes at levels above Type B closure criteria. After a preliminary review of the submitted data, the MDEQ indicated in verbal communication to GMC that the data sets for areas SB7 and SB8 were insufficient for clean closure characterization.



SCALE 1:24000



QUADRANGLE LOCATION

Source: USGS

Detroit, Michigan-Ontario
7.5 Minute Quadrangle 1968 (Photorevised 1980)

TECHNA
CORPORATION

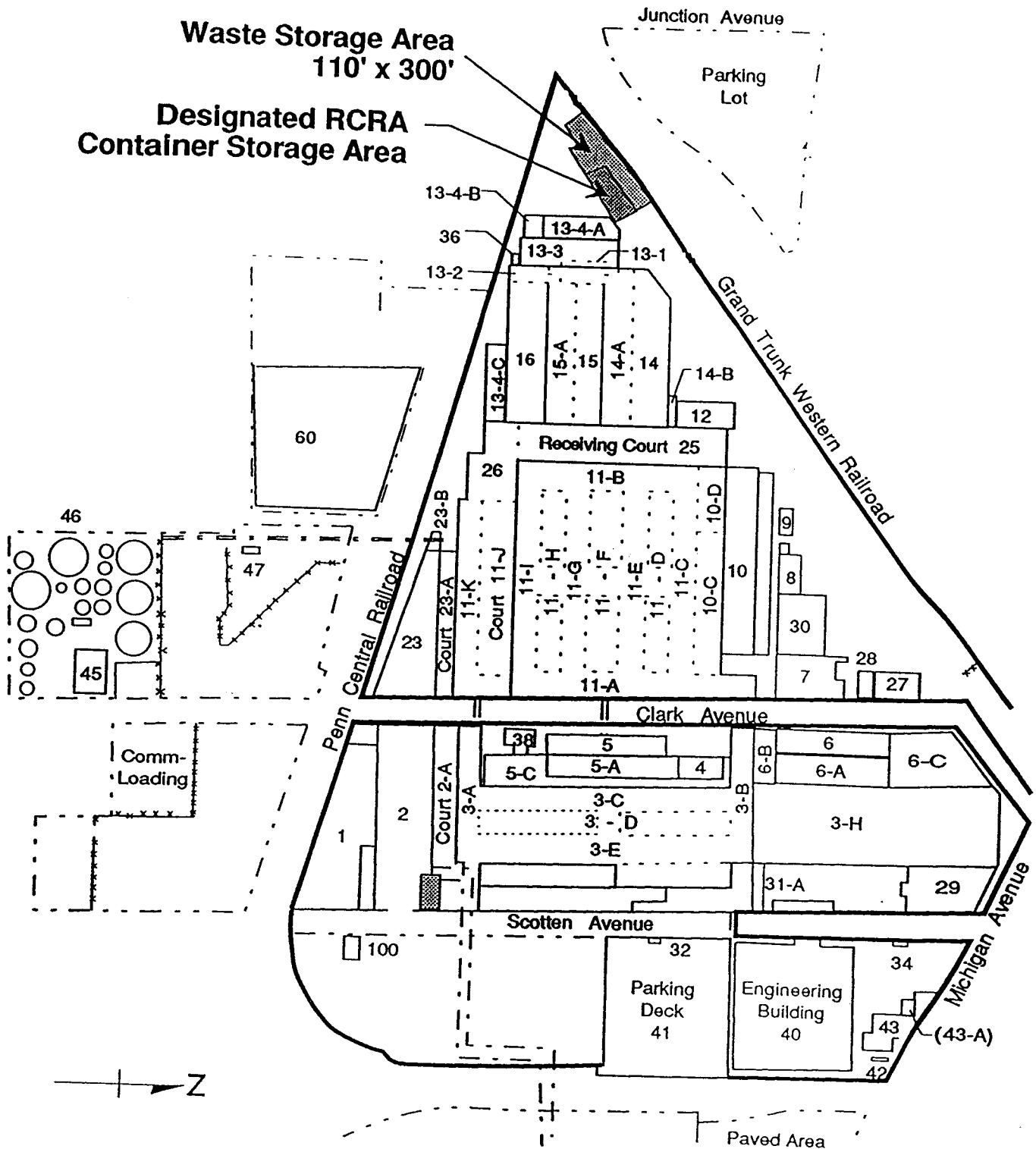
44808 Helm Street
Plymouth, MI 48170
(313) 454-1100

Figure 1
Site Location Map
General Motors Corporation - Clark Street Facility
2860 Clark Street
Detroit, Michigan 48232

TPN:00642.01M.003
Date: 5-8-96
Rev.
Drn: 060
Ref:
File:64201M-L.DWG

Figure 2

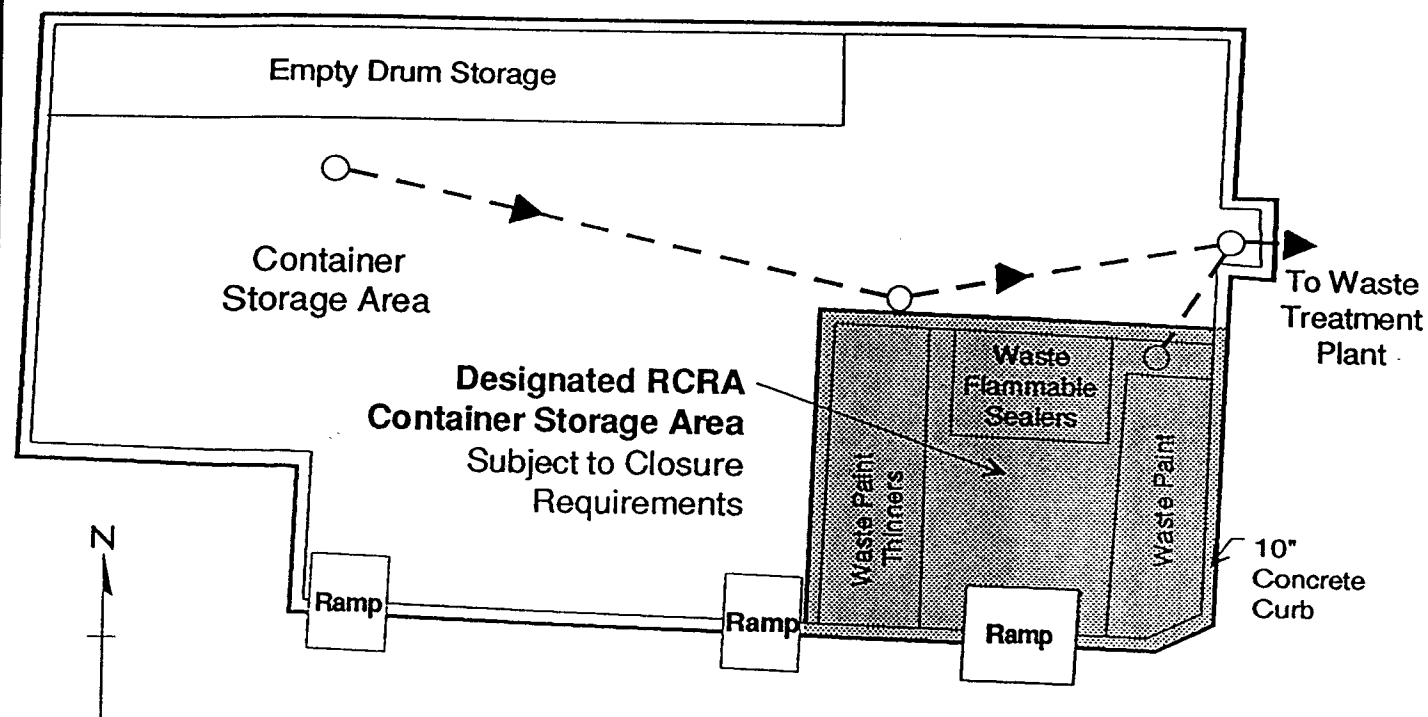
Reference: August 4, 1995 General Motors Corporation North American Operations, Clark Street Facility, Detroit, Michigan, RCRA Container Storage Pad Closure Certification prepared by Chester Environmental, Ann Arbor, Michigan



 CHESTER ENVIRONMENTAL			PROJECT NO.: 3961-55	General Motors Corporation Clark Street Plant Site Location
DWN BY: JT	CHK'D BY: JL	SCALE NTS	FIGURE NO.: Figure 1	
APPR BY:	DATE 8/3/95	FILE NAME gmcsfm		

Figure 3

Reference: August 4, 1995 General Motors Corporation North American Operations, Clark Street Facility, Detroit, Michigan, RCRA Container Storage Pad Closure Certification prepared by Chester Environmental, Ann Arbor, Michigan



LEGEND

○ Drains to Waste Treatment Plant



CHESTER
ENVIRONMENTAL

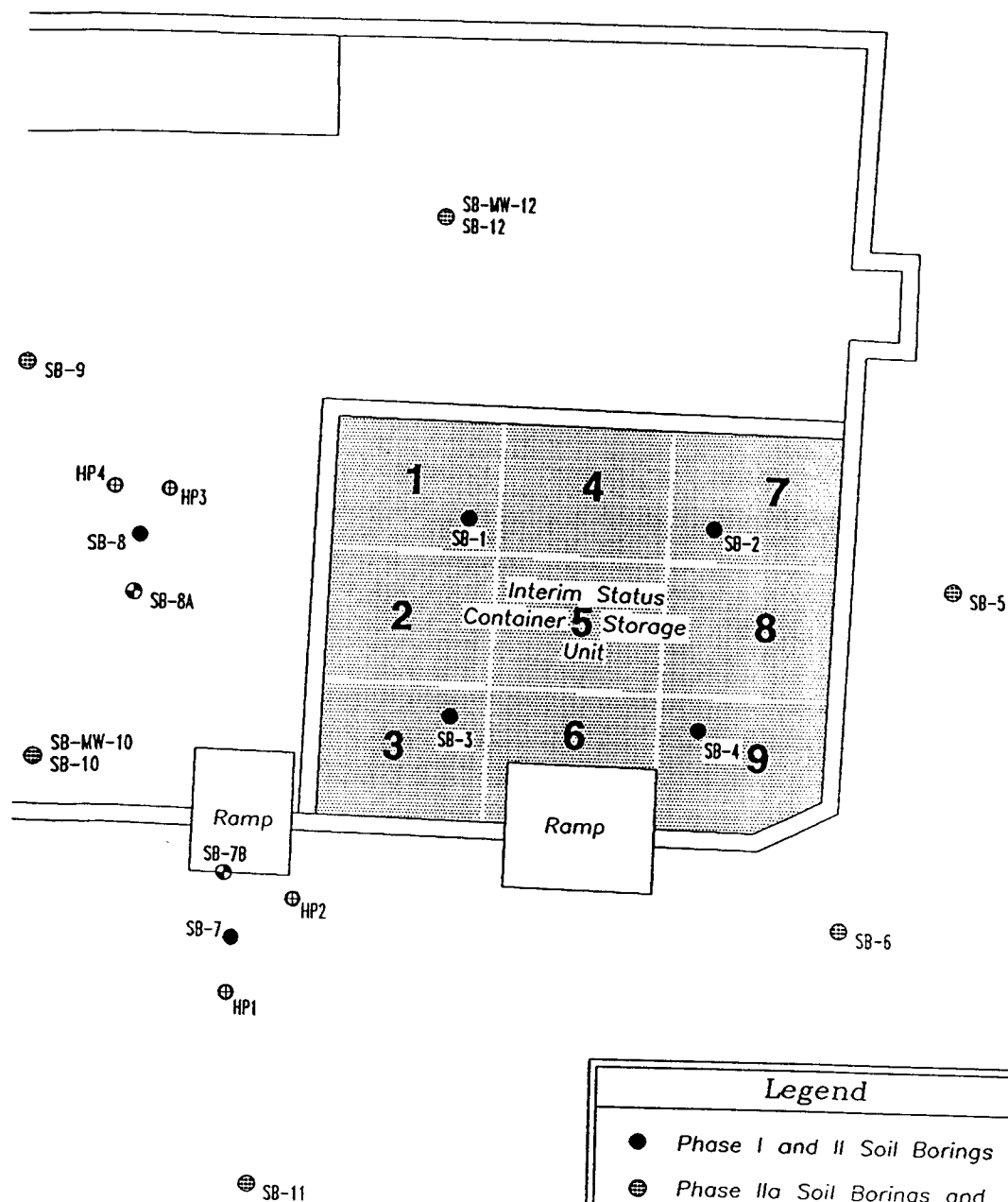
PROJECT NO.:
3961-55

FIGURE NO.:

Figure 2

DWN BY: JT	CHKD BY: JL	SCALE NTS
APPR BY:	DATE 8/3/95	FILE NAME gmcsad

General Motors Corporation
Clark Street Plant
Storage Area Details



Legend	
●	Phase I and II Soil Borings
⊕	Phase IIa Soil Borings and Monitoring Wells
⊕	Follow-up Soil Borings
⊕	Supplemental Soil Borings

Map based on Figure 5 presented in the August 4, 1995 General Motors Corporation North American Operations, Clark Street Facility, Detroit, Michigan, RCRA Container Storage Pad Closure Certification prepared by Chester Environmental.

TECHNA
CORPORATION

44808 Helm Street
Plymouth, MI 48170-6026
(313) 454-1100

Figure 4
Soil Boring/Monitor Well Locations
General Motors Corporation - Clark Street Facility
2860 Clark Street
Detroit, Michigan 48232

TPN: 00642-01M
Date: 5-16-96
Rev. 060
Drn:
Ref:
File: 64201M-4.DWG

Additional soil samples were collected in the SB7 and SB8 areas on February 22, 1996 pursuant to the MDEQ approved SCA. The objective of these activities was to determine if significant areas of contamination were present near SB7 and SB8. The technical approaches used during the implementation of these supplemental activities were consistent with those described in both the approved SCA and Closure Plan. This report presents the supplemental soil assessment results.

3.0 RESULTS

3.1 Supplemental Soil Sampling

Supplemental soil samples were collected on February 22, 1996 from the unsaturated zone in two additional step-out borings around each of the sample points SB7 and SB8 to provide sufficient data to evaluate local contamination potential. Hydraulic probe (HP) drilling services were provided by Subsurface Alternatives, Inc. of Howell, Michigan. Figure 4 shows the Phase I, Phase II, follow-up, and supplemental (HP1, HP2, HP3, and HP4) soil sampling locations. A complete set of soil boring logs showing sample collection depths are presented in Appendix A.

The supplemental soil samples for laboratory analysis were collected from each boring at depths of 2 feet to 3 feet (A designation) and 3 feet to 6 feet (B designation) below grade level (BGL), beneath 1 foot to 2 feet of concrete. Soil samples were collected using four-foot long, two-inch diameter hydraulic probe sampling tubes with acetate liners. Chemical analyses for toluene, ethylbenzene, and xylenes were performed by Huron Valley Laboratories, Inc. (HVLI) of Romulus, Michigan, using USEPA Method 8021 and the Toxicity Characteristic Leaching Procedure (TCLP). Complete soil analysis laboratory reports are presented in Appendix B. Soil samples HP1A, HP2A, HP2B, HP3A, HP3B, and HP4B were split with the MDEQ-WMD.

The supplemental soil sample data locations, depths, analysis results, and applicable Type B closure criteria are summarized in Table 1. Tables 3, 4, 5, 6, and 7 from the August 4, 1995 Closure Report, summarizing the previous Phase I, Phase II and sample analysis results for volatile organic species are included in Appendix C.

3.1.1 SB7 Area

Results (Appendix C, Table 5) from analysis of soil samples collected by Chester in December 1989 to a depth of 13 feet BGL in the previous Phase II closure sampling at SB7 (Figure 4) indicated that ethylbenzene (4,700 $\mu\text{g/kg}$) was the only contaminant present at levels above its clean closure criterion (1,500 $\mu\text{g/kg}$). The exceedence was only measured in soils collected from 1 foot to 3 feet BGL; the concentration of ethylbenzene (450 $\mu\text{g/kg}$) was reported below the closure criteria in soils collected from 3 feet to 5 feet BGL, and no concentrations of ethylbenzene were reported above the detection limit in deeper soils (5 feet to 11 feet BGL).

Table 1

Summary of Toluene, Ethylbenzene, and Xylene Laboratory Results - Supplemental Soil Samples
Sample Date: February 22, 1996

Sample ID	Sample Depth (BGL)	Soil Type	USEPA Method 8021 Concentrations (µg/kg)			TCLP Testing Concentrations (µg/l)		
			Toluene	Ethylbenzene	Xylenes	Toluene	Ethylbenzene	Xylenes
HP1A	2-3	Sand	<10	<10	<30	NA	NA	NA
HP1B	3-4	Sand	31	<10	<30	NA	NA	NA
HP2A	2-3	Sand	69	<10	<30	NA	NA	NA
HP2B	4-5	Sand/clay	<10	<10	<30	NA	NA	NA
HP3A	2-3	Sand/fine gravel	140	380	180	NA	NA	NA
HP3B	4-6	Sand/fine gravel	13	23	110	NA	NA	NA
HP4A & DUP	2-3	Sand	280,000	18,000	430,000	1,700	99	2,800
			53,000	3,300	87,000			
HP4B	4-6	Sand	44	59	430	NA	NA	NA
20x Drinking Water Value ¹			16,000	1,500	5,600	NA	NA	NA
Drinking Water Value ¹			NA	NA	NA	790	74	280

¹ MDEQ Interim Environmental Response Division Operational Memorandum #8, Revision 3 (February 4, 1994)

BGL - Feet Below Grade Level

☐ Above Type B Cleanup Criteria Values

NA - Not analyzed or not applicable

A step-out boring , SB7B, was advanced by Chester in December 1994 near SB7 to determine the validity and/or extent of contamination detected in SB7 from 1 foot to 3 feet BGL. No concentrations of ethylbenzene (Appendix C, Table 7) were reported above the detection limits in the soil sample, collected from 1 foot to 3 feet BGL in boring SB7B, or its TCLP leachate.

Supplemental borings HP1A and HP1B were advanced by Techna in February 1996 to further verify the presence or absence of significant contamination in the area of SB7. No target volatile aromatic hydrocarbons were detected (Table 1) at levels above Type B clean closure criteria in the samples collected from these locations. Toluene was the only target specie detected. It was reported at a concentration of 69 $\mu\text{g/kg}$ in sample HP2A. This concentration of toluene is below the Type B closure criteria of 16,000 $\mu\text{g/kg}$.

3.1.2 SB8 Area

Results (Appendix C, Table 5) from analysis of soil samples collected by Chester in December 1989 to a depth of 9 feet BGL in the previous Phase II closure sampling at SB8 (Figure 4) revealed the presence of toluene, ethylbenzene, and xylenes in soils collected from 1 foot to 5 feet BGL. No target volatile aromatic hydrocarbons were detected in deeper soils. The concentrations of toluene, ethylbenzene, and xylenes reported in sample SB8 (1' - 3') were above their respective Type B clean closure criteria. The concentrations of ethylbenzene and xylenes reported in sample SB8 (3' - 5') also were above the Type B closure criteria.

No target volatile aromatic hydrocarbons were detected (Appendix C, Table 7) above clean closure criteria in soil samples (1 foot to 5 feet BGL), or their leachates, collected in December 1994 from boring SB8A. This boring advanced by Chester was a step-out sampling location located near SB8 to determine the validity and/or extent of contamination detected in SB8.

The target volatile aromatic hydrocarbons were detected (Table 1) in one of the supplemental step-out borings (HP3; 2 - 6 feet BGL) advanced by Techna in February 1996, but at levels below cleanup criteria. The target analytes were detected in soils at HP4 at levels above cleanup criteria at the 2 feet to 3 feet BGL depth, and below cleanup criteria at the 4 feet to 6 feet BGL depth. TCLP testing was performed on a composite of sample HP4A and its duplicate to determine site-specific leachability of contaminants in concentrations greater than default criteria. Concentrations of toluene, ethylbenzene, and xylenes were determined to leach above the Type B criteria for groundwater protection (Table 1).

These results, combined with the earlier closure findings, indicate a limited area of confirmed shallow contamination at levels above clean closure criteria near SB8 and HP4 (Figure 4).

3.2 QA/QC Data

The chemical analysis data was verified through a review of relevant laboratory quality assurance/quality control (QA/QC) data included in Appendix B. A duplicate (DUP 1) soil sample of HP4A was submitted for analysis to document any precision variance resulting from sample composition, sampling technique, and analytical technique. Duplicate results (Table 1) indicate high variability in sample medium. Analysis of a trip blank (TB) showed that no external contamination of samples by volatile species had occurred during storage or transportation. Evaluation of results from analyses of laboratory duplicates and matrix spikes show that the laboratory procedures were performed within acceptable QA/QC control limits.

3.3 Waste Management

Aqueous wastes (steam-cleaning decontamination fluids) generated during this supplemental closure assessment were contained in one 55-gallon Department of Transportation (DOT) drum and transported to the on-site GMC Clark Street wastewater facility for treatment in accordance with the approved Closure Plan. (Waste solids {residual soil sample, hydraulic probe sample tube acetate liners, and disposable sampling gloves, etc.} generated from sampling activities were contained on site in one 55-gallon DOT drum pending approval for off-site disposal.) Laboratory analysis reports for characterization of solid and aqueous wastes, and Bill of Lading documentation, are presented in Appendix D.

APPENDIX A

SOIL BORING/MONITOR WELL LOGS

Techna Corporation
Plymouth, Michigan

Log of Boring HP1

PROJECT: *General Motors Corporation*

LOCATION: *2880 Clark Street, Detroit, MI*

PROJECT NO.: *00642-01M-002*

SURFACE ELEVATION:

DATE START/FINISH: *2/22/96*

INITIAL H2O LEVEL:

DRILLING METHOD: *Hydraulic Probe Boring*

STATIC H2O ELEV.:

SAMPLING METHOD: *4-Foot Plastic-lined Steel Tubes*

TOTAL DEPTH: *4 Feet*

DRILLING COMPANY: *SAI*

LOGGED BY: *(096)*

DEPTH feet	LAB SAMPLE NO.	BLOWS/0.5 ft.	PID (relative ppm)		GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
			VALUES	PROFILE				
			0	50				
	HP1A 2-3'		<1				Concrete	
2							Brick fill debris.	
	HP2B 3-4'		<1			SM	SAND: fine to medium, damp, black.	
4							Refusal at 4 feet. END OF BORING	Reset probe boring locations twice, refusal at 2- feet for alternative locations.
6								
8								
10								
12								
14								

Techna Corporation
Plymouth, Michigan

Log of Boring HP2

PROJECT: *General Motors Corporation*

LOCATION: *2860 Clark Street, Detroit, MI*

PROJECT NO.: *00642-01M-002*

SURFACE ELEVATION:

DATE START/FINISH: *2/22/96*

INITIAL H2O LEVEL:

DRILLING METHOD: *Hydraulic Probe Boring*

STATIC H2O ELEV.:

SAMPLING METHOD: *4-Foot Plastic-lined Steel Tubes*

TOTAL DEPTH: *5 Feet*

DRILLING COMPANY: *SAI*

LOGGED BY: *(096)*

DEPTH feet	LAB SAMPLE NO.	BLOWS/0.5 ft.	PID (relative ppm)		GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
			VALUES	PROFILE				
				0 50				
							Concrete	
2	HP2A 2-3'		<1			SM	SAND: fine to medium, damp to moist, black, sheen observed on soil.	
4	HP2B 4-5'		<1			SC	SAND and CLAY: fine to medium sand, moist, sheen observed on soil. END OF BORING	
6								
8								
10								
12								
14								

Techna Corporation
Plymouth, Michigan

Log of Boring HP3

PROJECT: *General Motors Corporation*

LOCATION: *2860 Clark Street, Detroit, MI*

PROJECT NO.: *00642-01M-002*

SURFACE ELEVATION:

DATE START/FINISH: *2/22/96*

INITIAL H2O LEVEL:

DRILLING METHOD: *Hydraulic Probe Boring*

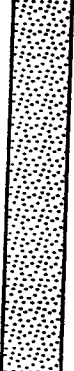
STATIC H2O ELEV.:

SAMPLING METHOD: *4-Foot Plastic-lined Steel Tubes*

TOTAL DEPTH: *6 Feet*

DRILLING COMPANY: *SAI*

LOGGED BY: *(096)*

DEPTH feet	LAB SAMPLE NO.	BLOWS/0.5 ft.	PID (relative ppm)		GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
			VALUES	PROFILE				
			0	50				
2	HP3A 2-3'		4				Concrete	
4	HP3B 4-6'		1				SAND: fine to coarse, trace fine subrounded gravel, moist, light brown (dark brown to black from 3 to 4 feet).	
6							END OF BORING	
8								
10								
12								
14								

Techna Corporation
Plymouth, Michigan

Log of Boring HP4

PROJECT: *General Motors Corporation*

LOCATION: *2860 Clark Street, Detroit, MI*

PROJECT NO.: *00642-01M-002*

SURFACE ELEVATION:

DATE START/FINISH: *2/22/96*

INITIAL H2O LEVEL:

DRILLING METHOD: *Hydraulic Probe Boring*

STATIC H2O ELEV.:

SAMPLING METHOD: *4-Foot Plastic-lined Steel Tubes*

TOTAL DEPTH: *6 Feet*

DRILLING COMPANY: *SAI*

LOGGED BY: *(096)*

DEPTH feet	LAB SAMPLE NO.	BLOWS/0.5 ft.	PID (relative ppm)		GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
			VALUES	PROFILE				
			0	500				
2	HP4A 2-3'		500				Concrete	
4	HP4B 4-6'		9				SAND: fine to medium sand, little clay, moist, brown to black.	
6							END OF BORING	
8								
10								
12								
14								

BORING LOG

PROJECT: RCRA ContAINER STORAGE CLOSURE Phase II Activities

JOB NO: 1297-80

SHEET NO: 1/1

WELL NO: SB-1

LOCATION: 601 Clark Street

COORDINATES: 13.7' South; 43.7' West from North East Corner of 2nd

ANGLE FROM MAGNETIC: 90°

BEARING: NA

DATE: 12/19/89
 COMPLETION: 12/19/89
 DRILLER: Sawyer-Horner
 DRILL MAKE AND MODEL: Mobil Drill 51
 HOLE SIZE: 4"
 OVERBURDEN (ft): 11.0'
 ROCK (ft): NA
 TOTAL DEPTH (ft): 11.0'

WATER DEPTH (ft): NA
 WATER TEMPERATURE (°F): NA
 SAMPLES: NA
 EL TOP OF CASING: NA
 GROUNDWATER: NA
 DEPTH OF GROUNDWATER: 5.0' Below Grade
 DEPTH OF ROCK: NA

WELL CLOSURE: 140# / 30 in.
 CASING LEFT IN HOLE: None backfilled with GROUT
 LOGGED BY: J. S. Brown

J. S. Brown												
SAMPLER TYPE AND DIAMETER	SAMPLER ADVANCE LENGTH CORE RUN	SAMPLER RECOVERY CORE RECOVERY	SAMPLER BLOWS 11" CORE RECOVERY	PENETRATION BLOWS			ELEVATION	DEPTH (feet)	UNIFIED SOIL CLASSIFICATION	SAMPLE	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC.
				1st 6"	2nd 6"	3rd 6" 4th 6"						
								1			concrete	Cored by Barton-Malow
1 1/2"	2.0'	12"	12	16	15	16 20		2			5" fill sand under concrete	Boring advanced using 2 1/2 in. I.D. Hollow Stem auger
								3			1 Fill: black sand, cinders, slag, trace of gravel, trace of clay, moist	
1 1/2"	2.0'	18"	5	12	5	2 3		4		2	Very moist	
								5				
2"	2.0'	18"	1	2	2	2 2		6		3		
								7			Black, gray silty clay moist	
1 1/2"	2.0'	18"	1	1	2	1 3		8		4		
								9			Gray-tan silty clay	
1"	2.0'	24"	2	1	2	1 1		10				
								11			Boring completed at 11.0' backfilled with grout	
								12				
								13				

SPILL SPOON: S1 - SHELBY TUBE
 TUNISON: P - PITCHER, Q - OTHER

601 Clark Street

WELL NO: SB-1

BORING LOG

PROJECT
RCRA Container Storage Closure Phase II ActivitiesJOB NO
1197-90SHEET NO
1/1HOLE NO
SB-2

ON Clark Street

COORDINATES
14.3° South, 14.0° West of Northeast
Corner of PadANGLE FROM HORIZON
90°BEARING
NADATE
12/20/89COMPLETED
12/20/89DRILLER
Sower-MornerDRILL MAKE AND MODEL
Mobil Drill SIHOLE SIZE
4"DEPTH FROM HOLE
9.0'ROCK TYPE
NATOTAL DEPTH (ft)
9.0'CORE RECOVERY (%)
NACORE NOTES
NASAMPLES
NAFL TOP OF CASING
NAGROUNDWATER
NADEPTH OF GROUNDWATER
2.5' Below GradeDEPTH OF TOP OF ROCK
NA

CASING MAKE AND MODEL

CASING LEFT IN HOLE (ft) LENGTH

LOGGED BY

140#/30 In.

None backfilled with Grout

J. S. Brown

SAMPLE TYPE AND DIAMETER	SAMPLER ADVANCE LENGTH CORE RUN	SAMPLER RECOVERY CORE RECOVERY	SAMPLER BLOW COUNT % CORE RECOVERY	PENETRATION BLOWS			ELEVATION	DEPTH (feet)	UNIFIED SOIL CLASSIFICATION SAMPLE	DESCRIPTION AND CLASSIFICATION	NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC
				1st 6"	2nd 6"	3rd 6" - ch 6"					
								1		concrete	Core by Barcon-Hallow
1/2"	2.0'	24"	12	24	19	15		2		Fill: black sand, cinders, trace of gravel, trace of clay - moist	Boring advanced using 1 1/2 in. I.D. Hollow Stem pump
								3			
1/2"	2.0'	18"	13	14	11	9		4	2		
								5			
1/2"	2.0'	20"	5	4	7	2		6	3	Very moist	
								7			
1/2"	2.0'	24"	7	0	2	4		8	4	Gray - tan silty clay moist	
								9			
								10		Boring completed at 9.0' Backfilled with grout	
								11			
								12			
								13			

SPLIT SPOON - S - SHELBY TUBE,
DENNISON: P - PITCHER - O - OTHER

ON Clark Street

HOLE NO
SB-2

BORING LOG

PROJECT: RCRA Container Storage Closure Phase II Activities

HOLE NO: 3297-90

SHEET NO: 1/1

HOLE NO: SB-3

ON Clark Street

COORDINATES 18.3' South, 44.9' West of Northeast corner of Pad

ANGLE FROM HORIZON 90°

BEARING NA

DATE	COMPLETED	DRILLER	DRILL MAKE AND MODEL	HOLE SIZE	OVERBURDEN (ft)	ROCK (ft)	TOTAL DEPTH (ft)
12/19/89	12/19/89	Bowmer-Morner	Nobell Drill SI	4"	11.0	NA	11.0

DATE OF LOG	DATE OF CORE	SAMPLE	TYPE OF CASING	DEPTH OF GROUNDWATER	DEPTH OF TOP OF ROCK
NA	NA	NA	NA	5' Below grade	NA

Casing diameter

Casing left in hole dia. length

LOGGED BY

140# x 10 in.

None backfilled with Grout

J. S. Brown

SAMPLE AND DIAMETER	SAMPLER ADVANCE LENGTH CORE RUN	SAMPLER RECOVERY CORE RECOVERY	SAMPLER DIAMETER CORE RECOVERY	PENETRATION SLOWS			ELEVATION	DEPTH (feet)	UNIFIED SOIL CLASSIFICATION	SAMPLE	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, WATER RETURN CHARACTER OF DRILLING, ETC
				1st 6"	2nd 6"	3rd 6"						
											concrete	Cored by Barton-Mallory
5/2"	2.0'	18"	16	8	6	9		2	1		Fill sand under concrete	Boring advanced using 2 1/2 in. C.D. Hollow Stem Auger moist
								3			Fill; black sand, cinders, slag, trace of gravel, trace of clay- moist	
7/2"	2.0'	18"	6	6	4	3		4	2			
								5				very moist oily sheen on water
2"	2.0'	18"	2	2	3	1		6	3			
								7			Gray tan silty clay, interbedded sand lenses saturated with black water	
7/2"	2.0'	16"	2	2	1	1		8	4			moist
								9			Gray-tan soft clay trace of silt	
2"	2.0"	18"	2	0	0	3		10	5			Boring completed at 11.0' Backfilled with grout
								11				
								12				
								13				

SPILL SPOON, SI - SHELBY TUBE, SH
FENNISON, P - PITCHER, O - OTHER

ON Clark Street

HOLE NO: SB-3

BORING LOG

PROJECT
RCRA Container Storage Closure Phase II Activities

JOB NO
1297-80

SHEET NO
1/1

HOLE NO
SB-4

LOCATION
ON Clark Street

COORDINATES
33.5' south, 13.9' west of northeast corner of pad

ANGLE FROM HORIZON
90°

BEARING
NA

BEGAN 12/20/89	COMPLETED 12/20/89	DRIILLER Bovser-Horner	DRIILL MAKE AND MODEL Mobil Drill 51	HOLESIZE 4"	3/4" HYPHEN 11.0	ROCK (FT.) NA	TOTAL DEPTH (FT.) 11.0
-------------------	-----------------------	---------------------------	---	----------------	------------------	------------------	---------------------------

CORE RECOVERY (FT.) NA	CORE BOXES NA	SAMPLES NA	CL TOP OF CASING NA	CASING MODEL NA	DEPTH OF GROUND WATER 5.0 feet below grade	DEPTH OF TOP OF ROCK NA
---------------------------	------------------	---------------	------------------------	--------------------	---	----------------------------

CAMPUS HAMMER WEIGHT (LBS.) 140#/30 in.	CASING LEFT 4" HOLE DIA LENGTH None backfilled with GROUT	LOGGED BY J. S. Brown
--	--	--------------------------

SAMPLER TYPE AND DIAMETER	SAMPLER ADVANCE LENGTH (CORE RUN)	SAMPLER RECOVERY CORE RECOVERY	SAMPLER BLOWS 11" CORE RECOVERY	PENETRATION BLOWS			ELEVATION	DEPTH (feet)	UNIFIED SOIL CLASSIFICATION	SAMPLE	DESCRIPTION AND CLASSIFICATION	NOTES ON WATER LEVELS, WATER RETURN CHARACTER OF DRILLING, ETC.
				1st 6"	2nd 6"	3rd 6" 6"						
											concrete	Cored by Barton-Mallow
4S/2"	2.0'	24"	9	3	6	5		2	1		Brown fill sand under concrete	Boring advanced using 2 1/2 in. I.D. Hollow Stem Auger Moist
								3			Brown-black fill sand, cinders, slag, some gravel and clay	
1/2"	2.0'	24"	6	2	2	3		4	2		Gray-tan silty clay with interbedded sand	
1/2"	2.0'	18"	7	2	2	5		6	3		Wood fragments	
5/2"	2.0'	18"	3	1	1	2		8	4		Gray-tan clay with silty layers	
2"	2.0"	18"	4	1	1	3		10	5		Gray-tan clay	Moist-dry
								11			Boring completed at 11.0'	
								12			Backfilled with grout	
								13				

SPIG SPOON, ST = SHELBY TUBE, OMINSON, P = PITCHER, O = OTHER

ON Clark Street

HOLE NO SB-4

BORING LOG

PROJECT

RCRA Container Storage Closure Phase II Activities

JOB NO

1297-80

SHEET NO

1/1

WELL NO

SB-5

ON Clark Street

COORDINATES

19.0 feet south, 13.9 feet east of northeast corner of pad

ANGLE FROM HORIZON

90°

BEARING

NA

DATE

2/19/89

COMPLETED

BY

12/19/89 J. Souster-Morner

DRILL MAKE AND MODEL

Mobil Drill SI

WELL SIZE

4"

OVERBURDEN (ft)

9.0

ROCK (ft)

NA

TOTAL DEPTH (ft)

9.0

CORE RECOVERY (%)

NA

CORE TYPES

NA

SAMPLES

NA

EL. TOP OF CASING

NA

GROUND EL.

NA

DEPTH/EL. GROUND WATER

5.0' below grade

DEPTH/EL. TOP OF ROCK

NA

APPROXIMATE WEIGHT (lb)

150#/30 in.

CASING LEFT IN HOLE DIA. (LENGTH)

None backfilled with Grout

LOGGED BY

J. S. Brown

SAL. TYPE AND DIAMETER	SAMPLER ADVANCE LENGTH CORE RUN	SAMPLE RECOVERY CORE RECOVERY	SAMPLE DIAMETER IN % CORE RECOVERY	PENETRATION BLOWS			ELEVATION	DEPTH (feet)	UNIFIED SOIL CLASSIFICATION	SAMPLE	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC.
				1st 6"	2nd 6"	3rd 6"						
								1			concrete	Cored by Barton-Malow
2"	2.0'	18	11	4	7	3		2	1		Black fill: sand, silt, slag, cinders	Boring advanced using 2 1/2 in. I.D. Hollow Stem Auger
								3				Moist
								4	2		Gray silty clay	Stiff
2"	2.0'	18	13	4	4	5		5			Black fill: sand, slag, cinders, trace of gravel	Moist
								6	3			
2"	2.0'	19	7	2	3	4		7			Gray-can clay, trace of silt	
2"	2.0'	18	10	2	4	5		8	4			
								9				
								10			Boring completed at 9.0'. Backfilled with grout	
								11				
								12				
								13				

* SPLIT SPOON, ST = SHELBY TUBE, MINSON: P = PITCHER Q = OTHER

ON Clark Street

WELL NO

SB-5

BORING LOG

PROJECT RCRA Canconer Storage Closure Phase II Activities

DR NO 1297-40

SHEET NO 1/1

FILE NO 58-6

41 Clark Street

COORDINATES 51.5' south, 10.7' west of northeast corner of pad

ANGLE FROM MAGNETIC 90°

BEARING NA

DATE 12/19/89 COMPLETED 12/19/89 BOREHOLE BOWSER-MORNER DRILL MAKE AND MODEL Mobil Drill S1 DRILL SIZE 1" OVERBURDEN 11.0 ROCK NA TOTAL DEPTH 11.0

BOREHOLE TYPE NA CORE BORES NA SAMPLES NA EL TOP OF CASING NA GROUND EL NA DEPTH-EL GROUND WATER 5.0 Below Grade DEPTH-EL TOP OF ROCK NA

CAUSEWAY/PAVEMENT DEPTH 140#730 in. CASING LEFT IN HOLE DIA. 1.75 in. None backfilled with Grout LOGGED BY J. S. Brown

SAMPLER TYPE AND DIAMETER	SAMPLER ADVANCE LENGTH CORE RUN	SAMPLER RECOVERY CORE RECOVERY	SAMPLER BLOWS TO 1% CORE RECOVERY	PENETRATION BLOWS			ELEVATION	DEPTH (feet)	UNIFIED SOIL CLASSIFICATION	SAMPLE	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC.
				1st 6"	2nd 6"	3rd 6" 6" ch						
											concrete	Cored by Barcon-Malow
1 1/2"	2.0'	21"	17	5	7	9		1			Black fill; sand, clinders, slag, clay	Boring advanced using 1 1/2 in. I.D. Hollow Stem Auger Moist
								2			Gray clay, some silt, trace of sand	
								3				
1 1/2"	2.0'	17"	18	5	7	10		4		2	Brown-can clay, silt, sand	Moist
								5				
2"	2.0'	21"	22	4	33	33		6		3		
								7				Gray-can stiff clay
1 1/2"	2.0'	20"	11	8	6	7		8		4		
								9				
1 1/2"	2.0'	18"	7	2	2	4		10		5		Boring completed at 11.0' - Backfilled with grout
								11				
								12				
								13				

* SPLIT SPOON ST = SHELBY TUBE
JENNISON: P = PITCHER, O = OTHER

41 Clark Street

DR NO 58-6

BORING LOG

PROJECT RCRA Container Storage Closure Phase II Activities		LOG NO 1297-A0	SHEET NO 1/1	HOLE NO SB-7
LOCATION 11 Clark Street		COORDINATES 74.0' SOUTH, 79.0' West of northeast corner of pad		ANGLE FROM HORIZON 90°
DATE 12/19/89		DRILLER Bower-Horner	DRILL MAKE AND MODEL Mobil Drill 51	DRILL SIZE 4"
TOTAL DEPTH (ft.) 13.0		OVERBURDEN (ft.) 13.0	ROCK (ft.) NA	DEPTH (ft.) 13.0
REMARKS NA	TESTS NA	SAMPLES NA	EL. TOP OF CASING NA	GROUNDWATER 5.5' Below grade
Casing Left in Hole C.A. Length 150# / 30 in.		None backfilled with Grout		
LOGGED BY J. S. Brown				

AND DIAMETER	SAMPLER ADVANCE LENGTH (ft.)	SAMPLER RECOVERY CORE RECOVERY	SAMPLE BLOWS % CORE RECOVERY	PENETRATION BLOWS			ELEVATION	DEPTH (feet)	UNIFIED SOIL CLASSIFICATION	SAMPLE	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC.
				1st 6"	2nd 6"	3rd 6"						
											concrete	Cored by Barton-Halow
2.0'	11	13	12	29	35	38		1			Black fill: silty sand, wood and metal fragments, gravelly	Boring advanced using 2 1/2 in. I.D. Hollow Stem Auger
2.0'	12	22	29	43	10	12		2			Black fill: silty sand, some clay very stiff	Moist
2.0'	11	11	4	2	7	4		3				
2.0'	18	17	37	28	8	9		4			Tan-gray silty clay, some interbedded sand	Very moist
2.0'	12	10	2	3	6	4		5				
2.0'	18	10	4	4	4	4		6			Tan - Gray clay, some silt - stiff	Moist
Boring completed at 13.0' - Backfilled with grout												

SPLIT SPOON, ST = SHELBY TUBE
UNISON, P = RICHER, Q = OTHER

11 Clark Street

HOLE NO SB-7

BORING LOG

PROJECT
RCRA Container Storage Closure Phase II Activities

DATE
12/97-20

SHEET NO
1/1

WELL NO
SB-8

LOCATION
GM Clark Street

COORDINATES
15.5' South, 77.7' West of Northeast corner of pad

ANGLE FROM HORIZON
90°

BEARING
NA

BEGAN 12/20/89	COMPLETED 12/20/89	DRIER Sowser-Morner	DRILL MAKE AND MODEL Mobil Drill SI	BIT SIZE 4"	REBURDENMENT 9.0	ROCK TEST NA	TOTAL DEPTH 9.0
-------------------	-----------------------	------------------------	--	----------------	---------------------	-----------------	--------------------

ROCK RECOVERY NA	ROCK TYPES NA	SAMPLES NA	EL. TOP OF CASING NA	GROUND EL. NA	DEPTH EL. GROUND WATER 5.0 feet below grade	DEPTH EL. TOP OF ROCK NA
---------------------	------------------	---------------	-------------------------	------------------	--	-----------------------------

ROCK RECOVERY 140#/30 in.	ROCK RECOVERY None backfilled with Grouc	LOGGED BY J. S. Brown
------------------------------	---	--------------------------

SAMPLER TYPE AND DIAMETER	SAMPLER ADVANCE LENGTH CORE RUN	SAMPLE RECOVERY CORE RECOVERY	SAMPLE BLOWS % CORE RECOVERY	PENETRATION BLOWS			ELEVATION	DEPTH (feet)	UNIFIED SOIL CLASSIFICATION	SAMPLE	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC
				1st 6"	2nd 6"	3rd 6"						
								1			concrete	Cored by Barton-Hallaw
1/2"	2.0'	15"	10	13	12	13		2		1	Brown sand and gravel	Boring advanced using 2 1/2 in. I.D. Hollow Stem auger Moist
								3			Black fill; sand, silt, slag, gravel, some clay	
1/2"	2.0'	24"	10	7	8	6		4		2		
								5				
1/2"	2.0'	24"	10	3	1	1		6		3		Moist Moist
								7				
1/2"	2.0'	18"	7	0	2	2		8		4	Gray-tan clay	
								9				
								10			Boring completed at 9.0' backfilled with grouc	
								11				
								12				
								13				

→ SPLIT SPOON, ST → SHELBY TUBE
DEFINITION: P → PITCHER, Q → OTHER

GM Clark Street

WELL NO SB-8

BORING LOG

PROJECT

RCRA Container Storage Closure Phase IIa Activities

JOB NO

3297-80

SHEET NO

1/1

HOLE NO

SB-9

GENERAL MOTORS CORPORATION
CLARK STREET

COORDINATES

2.0' South; 99.0' west from North west corner of pad

ANGLE FROM HORIZON

90°

BEARING

N/A

BEGAN	COMPLETED	DRILLER	DRILL MAKE AND MODEL	MOLE SIZE	OVERBURDEN (FT)	ROCK (FT)	TOTAL DEPTH (FT)
5/8/90	5/8/90	Bowser-Morner Bruce Kirkpatrick	Mobile Drill 861	6"	10.0'	N/A	10'

CORE RECOVERY (FT / %)	CORE BOXES	SAMPLES	EL. TOP OF CASING	GROUND EL.	DEPTH/EL. GROUND WATER	DEPTH/EL. TOP OF ROCK
N/A	N/A	N/A	N/A	N/A	2 feet	

SAMPLE HAMMER WEIGHT / FALL	CASING LEFT IN HOLE DIA / LENGTH	LOGGED BY
140#/30 in.	None - backfilled with grout	D. M. Dusbiber

SAMPLER TYPE AND DIAMETER	SAMPLER ADVANCE LENGTH CORE RUN	SAMPLE RECOVERY CORE RECOVERY	SAMPLER BLOWS "N"	% CORE RECOVERY	PENETRATION BLOWS			ELEVATION	DEPTH	UNIFIED SOIL CLASSIFICATION	SAMPLE	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC.
					1st 6"	2nd 6"	3rd 6"						
SS/2"	15"				9	7	12		1	1		Concrete Coarse light brown fill	jackhammer through concrete 3" hollow stem auger advanced through overburden
SS/2"	18"				6	9	7		2	2		Coarse fill and clay material dark somewhat moist Coarse light brown fill very moist Dark fine-grained sand somewhat moist	PID: 3 ppm No PID
1/2"	18"				3	1	3		3	3		Silty sand brown Very moist Blue clay moist	No PID
1/2"	18"				2	3	6		4	4			No PID
									10			End sampling at 10' Boring completed at 10.0' - backfilled with grout	

BORING LOG

PROJECT

RCRA Container Storage Closure Phase IIa Activities

JOB NO.

3297-80

SHEET NO.

1/1

HOLE NO.

SB-10

SITE

General Motors Corporation
Clark Street

COORDINATES

41.0' South; 98.0' West from Northwest corner of
pad

ANGLE FROM HORIZON

90°

BEARING

N/A

BEGAN

5/8/90

COMPLETED

5/8/90

DRILLER

Souwer-Horner
Bruce Kirkpatrick

DRILL MAKE AND MODEL

Mobile Drill 861

HOLE SIZE

7.5"

OVERBURDEN (FT)

ROCK (FT)

N/A

TOTAL DEPTH (FT)

CORE RECOVERY (FT %)

N/A

CORE BOXES

N/A

SAMPLES

N/A

EL. TOP OF CASING

N/A

GROUND EL.

N/A

DEPTH/EL. GROUND WATER

4'

DEPTH/EL. TOP OF ROCK

SAMPLE HAMMER WEIGHT/FALL

140#/30 in.

CASING LEFT IN HOLE: DIA / LENGTH

2" Groundwater Monitor Well 9.5'

LOGGED BY:

D. M. Dusbiber

SAMPLER TYPE AND DIAMETER	SAMPLER ADVANCE LENGTH CORE RUN	SAMPLE RECOVERY CORE RECOVERY	SAMPLE BLOWS "N" % CORREL. IN COV. LIT	PENETRATION BLOWS			ELEVATION	DEPTH	UNIFIED SOIL CLASSIFICATION SAMPLE	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC.
				1st 6"	2nd 6"	4th 6"					
								1		Concrete	Jackhammer through concrete
								2		Dark top soil	4 1/4" hollow stem auger advanced through overburden
SS/2"	8"			2	3	3		3	1	Greenish Silty clay, moist	PID: 18 ppm
SS/2"	15"			2	1	2		5	2	Clay Greenish hue	No PID
SS/2"	18"			3	1	2		7	3	Dark soil with some organic matter medium grained, very moist	No PID
SS/2"	3"			1	1	2		9		Lost sample	
SS/2"	24"			2	7	3		11	4	Greenish clay Brownish - grey clay moist	Hit piece of wood No PID
								12		Well set at 9.5' with 5' screen	

- SPLIT SPOON: ST - SHELBY TUBE: SITE

General Motors Corporation - Clark Street

HOLE NO.

SB-10

Monitoring Well

PROJECT

RCRA Container Storage Closure

WELL NO

SB-MW-10

CHARGE NO

SITE

COORDINATES

3297-80

GMC-Clark Street

41' south; 98' west

BEGAN

COMPLETED

PREPARED BY

REFERENCE POINT FOR MEASUREMENTS

5/8/90

5/8/90

D. M. Dusbiber

Northwest corner of RCRA container storage pad

GENERALIZED GEOLOGIC LOG

Concrete

1'

Silty-Clay

4'

Clay

6'

Medium - Grained Sand

10'

Greenish - Brown Clay

Elevation - Top of Surface Casing:

Elevation - Top of Riser Casing:

Ground Surface

DEPTH
(ft)

ELEV.
(MSL)

0

Surface Casing

Diameter: 6"

Type: flush mount steel

Bottom of Surface Casing:

1'

Backfill Material

Type: cement- Bentonite

Riser Casing

Diameter: 2" PVC

Type: Sch 40

Top of Seal:

1.5'

Annular Seal

Type: Bentonite Pellets

Top of Filter Pack:

3'

Filter Pack

Type: Granule sized silicon sand

Top of Screen:

4.5'

Screen

Dia.: 2" Type: Sch 40 PVC

Openings Width: 0.01"

Type: Machine slot

Bottom of Screen:

9.5'

Bottom of Sump:

9.5'

Bottom of Hole:

9.5'

Hole Diameter: 7.5"

BORING LOG

PROJECT

RCRA Container Storage Closure Phase IIa Activities

JOB NO.

3297-80

SHEET NO.

1/1

HOLE NO.

SB-11

General Motors Corporation
Clark Street

COORDINATES

113' south; 6' west of Northwest corner of pad

ANGLE FROM HORIZON

90°

BEARING

N/A

LOGAN

5/8/90

COMPLETED

5/8/90

DRILLER

Sowser-Horner
Bruce Kirkpatrick

DRILL MAKE AND MODEL

Mobile Drill B61

HOLE SIZE

6"

OVERBURDEN (FT.)

ROCK (FT.)

N/A

TOTAL DEPTH (FT.)

CORE RECOVERY (FT. / %)

N/A

CORE BOXES

N/A

SAMPLES

N/A

EL. TOP OF CASING

N/A

GROUND EL.

N/A

DEPTH/EL. GROUND WATER

4 feet

DEPTH/EL. TOP OF ROCK

SAMPLE HAMMER WEIGHT/FALL

140#/30 in.

CASING LEFT IN HOLE, DIA. / LENGTH

None-Backfilled with grout

LOGGED BY:

D. M. Dusbiber

APPROX. AND DIAMETER	SAMPLER ADVANCE LENGTH CORE RUN	SAMPLER RECOVERY CORE RECOVERY	SAMPLER BLOWS "N" % CORE RECOVERY	PENETRATION BLOWS			ELEVATION	DEPTH	UNIFIED SOIL CLASSIFICATION SAMPLE	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS. WATER RETURN. CHARACTER OF DRILLING, ETC.
				1st 6"	2nd 6"	4th 6"					
								1		Concrete	Jackhammer through concrete
								2		Dark fill	3" hollow stem auger advanced through overburden
5/2"	18"			9	30	13		3	1	Bluish clay, somewhat moist Dark fill, dry	No PID
1/2"	18"			6	6	5		5	2	Some clay, moist dark fine-grained soil moist	No PID
2"	12"			7	5	6		7	3	Dark fine-grained sand very moist	No PID
	18"			3	3	5		8		Silty clay dark, moist	
								9	4	Blue-grey clay moist	No PID
	18"			3	3	6		10			
								11	5	Brownish grey Mottled, moist	No PID
								12		Boring completed at 12'	

BORING LOG

PROJECT

RCRA Container Storage Closure Phase IIa Activities

JOB NO.

3297-80

SHEET NO.

1/1

HOLE NO.

SB-12

General Motors Corporation
Clark Street

COORDINATES

22 North; 43' east of North-west corner of pad

ANGLE FROM HORIZON

90°

BEARING

N/A

BEGAN

5/8/90

COMPLETED

5/8/90

DRILLER

Bovner-Horner
Bruce Kirkpatrick

DRILL MAKE AND MODEL

Mobile Drill 861

HOLE SIZE

7.5"

OVERBURDEN (FT)

ROCK (FT)

N/A

TOTAL DEPTH (FT)

CORE RECOVERY (FT) (%)

N/A

CORE BOXES

N/A

SAMPLES

N/A

EL. TOP OF CASING

N/A

GROUND EL.

N/A

DEPTH/EL. GROUND WATER

4 feet

DEPTH/EL. TOP OF ROCK

SAMPLE HAMMER WEIGHT/FALL

140#/30 in.

CASING LEFT IN HOLE DIA / LENGTH

2" Groundwater monitor well, 9'

LOGGED BY

D. M. Dusbiber

SAMPLER TYPE AND DIAMETER	SAMPLER ADVANCE LENGTH CORE RUN	SAMPLE RECOVERY CORE RECOVERY	SAMPLE BLOWS "N" % CORE RECOVERY	PENETRATION BLOWS			ELEVATION	DEPTH	UNIFIED SOIL CLASSIFICATION	SAMPLE	DESCRIPTION AND CLASSIFICATION	NOTES ON: WATER LEVELS. WATER RETURN. CHARACTER OF DRILLING. ETC.
				1st 6"	2nd 6"	4ch 3rd 6"						
								1			Concrete	Jackhammer through concrete
								2				4 1/4" hollow stem auger advanced through overburden
SS/2"	24"			21	21	33/45		3	1		Dark top soil	
								4			Coarse-grained fill dry	No PID
SS/2"	24"			11	9	5/9		5	2		Coarse-grained fill moist	No PID
								6			Dark soil dry	
2"	24"			2	3	3/4		7	3		Coarse fill	No PID
								8			Fine sand	
								9			Silt very moist	
1/2"	24"			3	3	7/6		9	4		Mottled clay	No PID
								10			Moist	
											Well sec at 9' with 5' screen	

Monitoring Well

PROJECT
RCRA Container Storage Closure

WELL NO
SB-MW-12

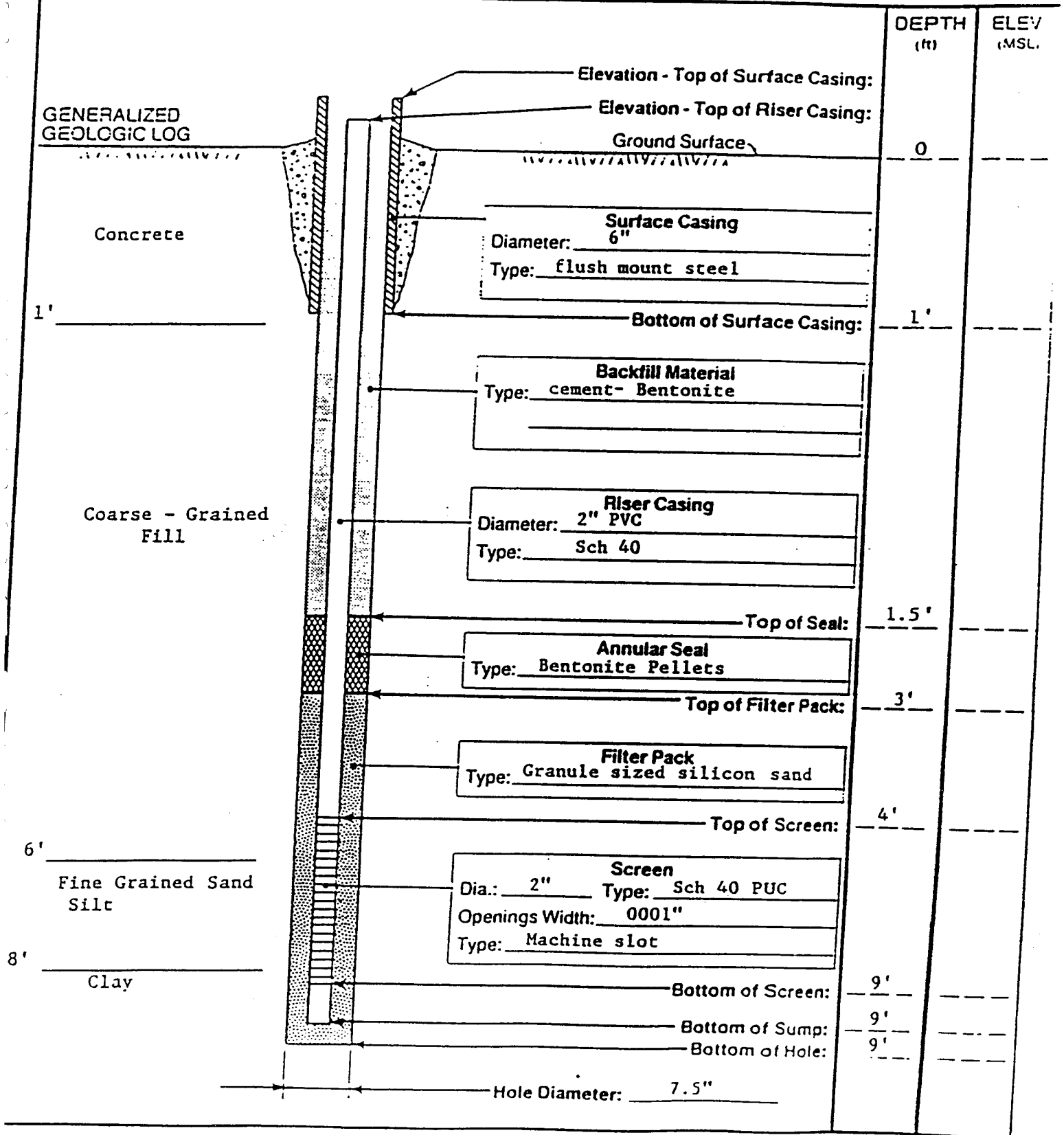
CHARGE NO. SITE
329780 GMC-Clark Street

COORDINATES
22' north; 43' east

BEGAN COMPLETED PREPARED BY
5/8/90 5/8/90 D. M. Dusbiber

REFERENCE POINT FOR MEASUREMENTS
Northwest corner of RCRA container storage pad

GENERALIZED GEOLOGIC LOG



APPENDIX B

LABORATORY REPORTS - SUPPLEMENTAL SOIL SAMPLES

Huron Valley Laboratories, Inc.



Analytical Report
for
Techna Corporation
44808 Helm Street
Plymouth, MI 48170-6026

March 27, 1996

Techna Corporation Project:
HVLI Project:
Date Received:

00642-01M-002
L1283
February 23, 1996

⌘=Parameter not detected at or above MQL or MRL.

MQL=Minimum quantitation limit - The minimum limit at which quantitation can be achieved. This limit is dependent on both matrix and dilution factors and may vary from one report to another.

MRL=Minimum reporting limit - This is the limit below which quantitation is not required due to threshold limits and/or customer request.

These levels as well as the results for all soil samples in this project are reported on a dry weight basis.

Respectfully submitted,

Robert S. Lynch
Laboratory Manager

Enclosure
dhb/RSL

ARRISON ST.
LUS, MI 48174
46-4990
3) 946-4887

1689 HARBOR RD.
PETOSKEY, MI 49880
(616) 348-5410
FAX (616) 347-8881

Huron Valley Laboratories, Inc.

Techna Corporation Project #: 00642-01M-002
HVLI Project: L1283

HVLI sample: L1283-1
Sampling date: February 22, 1996
Analyst: Robert S. Lynch
Sample description: T.B.

Parameter	Results	MRL	Analysis Date
Volatile Organics: $\mu\text{g/l}$			
Toluene	⌘	1	02/28/96
Ethylbenzene	⌘	1	02/28/96
Xylenes	⌘	3	02/28/96

HVLI sample: L1283-2
Sampling date: February 22, 1996
Analyst: Robert S. Lynch
Sample description: HP1A

Parameter	Results	MRL	Analysis Date
Solids, total %	86.32	-----	03/04/96
Volatile Organics: $\mu\text{g/kg}$			
Toluene	⌘	10	03/03/96
Ethylbenzene	⌘	10	03/03/96
Xylenes	⌘	30	03/03/96

Huron Valley Laboratories, Inc.

Techna Corporation Project #: 00642-01M-002
HVLI Project: L1283

HVLI sample: L1283-3

Sampling date: February 22, 1996

Analyst: Robert S. Lynch

Sample description: HP1B

Parameter	Results	MRL	Analysis Date
Solids, total %	86.27	-----	03/04/96
Volatile Organics: $\mu\text{g/kg}$			
Toluene	31	10	02/27/96
Ethylbenzene	%	10	02/27/96
Xylenes	%	30	02/27/96

HVLI sample: L1283-4

Sampling date: February 22, 1996

Analyst: Robert S. Lynch

Sample description: HP2A

Parameter	Results	MRL	Analysis Date
Solids, total %	86.16	-----	03/04/96
Volatile Organics: $\mu\text{g/kg}$			
Toluene	69	10	02/27/96
Ethylbenzene	%	10	02/27/96
Xylenes	%	30	02/27/96

Huron Valley Laboratories, Inc.

Techna Corporation Project #: 00642-01M-002
HVLI Project: L1283

HVLI sample: L1283-5
Sampling date: February 22, 1996
Analyst: Robert S. Lynch
Sample description: HP2B

Parameter	Results	MRL	Analysis Date
Solids, total %	72.40	-----	03/04/96
Volatile Organics: $\mu\text{g/kg}$			
Toluene	3%	10	03/03/96
Ethylbenzene	3%	10	03/03/96
Xylenes	3%	30	03/03/96

HVLI sample: L1283-6
Sampling date: February 22, 1996
Analyst: Robert S. Lynch
Sample description: HP3A

Parameter	Results	MRL	Analysis Date
Solids, total %	85.94	-----	03/04/96
Volatile Organics: $\mu\text{g/kg}$			
Toluene	140	10	02/27/96
Ethylbenzene	380	10	02/27/96
Xylenes	180	30	02/27/96

Huron Valley Laboratories, Inc.

Techna Corporation Project #: 00642-01M-002
HVLI Project: L1283

HVLI sample: L1283-7
Sampling date: February 22, 1996
Analyst: Robert S. Lynch
Sample description: HP3B

Parameter	Results	MRL	Analysis Date
Solids, total %	88.75	-----	03/04/96
Volatile Organics: $\mu\text{g/kg}$			
Toluene	13	10	03/03/96
Ethylbenzene	23	10	03/03/96
Xylenes	110	30	03/03/96

HVLI sample: L1283-8
Sampling date: February 22, 1996
Analyst: Robert S. Lynch
Sample description: HP4A

Parameter	Results	MQL	Analysis Date
Solids, total %	88.7	-----	03/04/96
Volatile Organics: $\mu\text{g/kg}^*$			
Toluene	280000	170	03/03/96
Ethylbenzene	18000	430	03/03/96
Xylenes	430000	580	03/03/96

*Note: Analysis performed at a 1:250 dilution

Huron Valley Laboratories, Inc.

Techna Corporation Project #: 00642-01M-002
HVLI Project: L1283

HVLI sample: L1283-9
Sampling date: February 22, 1996
Analyst: Robert S. Lynch
Sample description: HP4B

Parameter	Results	MRL	Analysis Date
Solids, total %	94.25	-----	03/04/96
Volatile Organics: $\mu\text{g/kg}$			
Toluene	44	10	03/03/96
Ethylbenzene	59	10	03/03/96
Xylenes	430	30	03/03/96

HVLI sample: L1283-10
Sampling date: February 22, 1996
Sample description: Dup 1

Parameter	Results	MQL	Analysis Date
Solids, total %	85.98	-----	03/04/96
Volatile Organics: $\mu\text{g/kg}^*$			
Toluene	53000	190	03/03/96
Ethylbenzene	3300	480	03/03/96
Xylenes	87000	640	03/03/96

*Note: Analysis performed at a 1:250 dilution

Huron Valley Laboratories, Inc.

Techna Corporation Project #: 00642-01M-002
HVLI Project: L1283

HVLI sample: L1283-11

Sampling date: February 22, 1996

Analyst: Robert S. Lynch

Sample description: Composite of HP4A & DUP 1

Parameter	Results	MQL	Analysis Date
TCLP: $\mu\text{g/l}$ extract level			
Toluene	1700	14	03/15/96
Ethylbenzene	99	36	03/15/96
Xylenes	2800	48	03/15/96

Huron Valley Laboratories, Inc.

Surrogate Data for VOCs
 Analysis Date: 02-27-96
 Analyst: rsl
 For HVLI Projects: L1249/L1283
 US EPA method 8021

a,a,a-Trifluorotoluene

Sample ID	Analytical Value	True Value	% Recovery	LCL	UCL	Units
blank	200.0	200.0	100.00	80.00	120.00	ng
Calibration standard-1	236.4	200.0	118.22	80.00	120.00	ng
Calibration standard-2	214.3	200.0	107.16	80.00	120.00	ng
L1249-13	41.9	40.0	104.63	80.00	120.00	µg/l
L1249-14	93.4	88.5	105.56	60.00	120.00	µg/kg
L1249-15a	76.9	83.7	91.89	60.00	120.00	µg/kg
L1249-15b	77.6	101.0	76.83	60.00	120.00	µg/kg
L1249-15asa	113.7	97.1	117.12	60.00	120.00	µg/kg
L1249-15asb	70.1	84.7	82.75	60.00	120.00	µg/kg
L1249-15bs	90.8	101.5	89.41	60.00	120.00	µg/kg
L1249-16	81.0	88.5	91.49	60.00	120.00	µg/kg
L1249-17	115.6	141.8	81.50	60.00	120.00	µg/kg
L1249-18	89.1	119.0	74.84	60.00	120.00	µg/kg
L1283-2	28.1	86.8	32.41	60.00	120.00	µg/kg
L1283-3	67.3	98.5	68.26	60.00	120.00	µg/kg
L1283-4	80.1	115.6	69.30	60.00	120.00	µg/kg
L1283-5		151.5		60.00	120.00	µg/kg
L1283-6	84.5	119.0	70.98	60.00	120.00	µg/kg

Bromochloromethane

Sample ID	Analytical Value	True Value	% Recovery	LCL	UCL	Units
blank	200.0	200.0	100.00	80.00	120.00	ng
Calibration standard-1	190.6	200.0	95.32	80.00	120.00	ng
Calibration standard-2	179.7	200.0	89.87	80.00	120.00	ng
L1249-13	40.6	40.0	101.40	80.00	120.00	µg/l
L1249-14	91.1	88.5	102.97	60.00	120.00	µg/kg
L1249-15a	81.3	83.7	97.19	60.00	120.00	µg/kg
L1249-15b	87.6	101.0	86.77	60.00	120.00	µg/kg
L1249-15asa	102.4	97.1	105.49	60.00	120.00	µg/kg
L1249-15asb	58.8	84.7	69.40	60.00	120.00	µg/kg
L1249-15bs	104.8	101.5	103.20	60.00	120.00	µg/kg
L1249-16	98.1	88.5	110.90	60.00	120.00	µg/kg
L1249-17	161.9	141.8	114.16	60.00	120.00	µg/kg
L1249-18	113.9	119.0	95.69	60.00	120.00	µg/kg
L1283-2	80.6	86.6	93.05	60.00	120.00	µg/kg
L1283-3	104.2	98.5	105.80	60.00	120.00	µg/kg
L1283-4	113.0	115.6	97.76	60.00	120.00	µg/kg
L1283-5		151.5		60.00	120.00	µg/kg
L1283-6	141.5	119.0	118.88	60.00	120.00	µg/kg

* Low % recovery. Reanalyze sample

% Recovery=100*Analytical value/True value

Acceptable % recoveries are between the lower (LCL) & upper (UCL) control limits.

Approved by 125L

Huron Valley Laboratories, Inc.

Surrogate Data for VOCs

Analysis Date: 02-27-96

Analyst: rsl

For HVLI Projects: L1249/L1283

US EPA method 8021

2-Bromo-1-chloropropane

Sample ID	Analytical Value	True Value	% Recovery	LCL	UCL	Units
blank	200.0	200.0	100.00	80.00	120.00	ng
Calibration standard-1	224.0	200.0	112.00	80.00	120.00	ng
Calibration standard-2	196.0	200.0	97.98	80.00	120.00	ng
L1249-13	42.8	40.0	106.90	80.00	120.00	ng
L1249-14	92.8	88.5	104.84	60.00	120.00	µg/l
L1249-15a	80.6	83.7	96.27	60.00	120.00	µg/kg
L1249-15b	84.8	101.0	83.97	60.00	120.00	µg/kg
L1249-15asa	106.7	97.1	109.88	60.00	120.00	µg/kg
L1249-15asb	68.2	84.7	80.53	60.00	120.00	µg/kg
L1249-15bs	172.8	101.5	** 170.18	60.00	120.00	µg/kg
L1249-16	88.3	88.5	99.79	60.00	120.00	µg/kg
L1249-17	119.3	141.8	84.13	60.00	120.00	µg/kg
L1249-18	90.1	119.0	75.66	60.00	120.00	µg/kg
L1283-2	45.9	86.6	* 53.05	60.00	120.00	µg/kg
L1283-3	75.8	98.5	76.90	60.00	120.00	µg/kg
L1283-4	90.4	115.6	78.22	60.00	120.00	µg/kg
L1283-5	22.5	151.5	* 14.82	60.00	120.00	µg/kg
L1283-6	94.9	119.0	79.70	60.00	120.00	µg/kg

1,4-Dichlorobutane

Sample ID	Analytical Value	True Value	% Recovery	LCL	UCL	Units
blank	200.0	200.0	100.00	80.00	120.00	ng
Calibration standard-1	225.1	200.0	112.53	80.00	120.00	ng
Calibration standard-2	218.5	200.0	109.27	80.00	120.00	ng
L1249-13	37.5	40.0	93.66	80.00	120.00	ng
L1249-14	81.3	88.5	91.92	60.00	120.00	µg/l
L1249-15a	75.6	83.7	90.39	60.00	120.00	µg/kg
L1249-15b	79.9	101.0	79.09	60.00	120.00	µg/kg
L1249-15asa	96.0	97.1	98.83	60.00	120.00	µg/kg
L1249-15asb	67.9	84.7	80.09	60.00	120.00	µg/kg
L1249-15bs	91.0	101.5	89.67	60.00	120.00	µg/kg
L1249-16	77.0	88.5	87.01	60.00	120.00	µg/kg
L1249-17	89.0	141.8	62.73	60.00	120.00	µg/kg
L1249-18	128.3	119.0	107.73	60.00	120.00	µg/kg
L1283-2	30.6	86.6	* 35.34	60.00	120.00	µg/kg
L1283-3	85.1	98.5	86.38	60.00	120.00	µg/kg
L1283-4	92.0	115.6	79.59	60.00	120.00	µg/kg
L1283-5	28.6	151.5	* 18.87	60.00	120.00	µg/kg
L1283-6	139.3	119.0	116.99	60.00	120.00	µg/kg

* Low % recovery. Reanalyze sample

** % Recovery outside acceptance limits, chromatogram checked and integration is ok.

% Recovery=100*Analytical value/True value

Acceptable % recoveries are between the lower (LCL) & upper (UCL) control limits.

Approved by BSC

Huron Valley Laboratories, Inc.

QC Data for VOCs

Analysis Date: 02-27-96

Analyst: rsl

For HVLI Projects: L1249/L1283

US EPA method 8021

Sample ID	Parameter	Blank (ng)	A (µg/kg)	B (µg/kg)	Mean (µg/kg)	RPD	CL %RSD
L1249-15	Chloromethane	< 4.0	< 2.0	< 2.0	< 2.0		
	Vinyl chloride	< 4.0	< 2.0	< 2.0	< 2.0		40.00
	Bromomethane	< 4.0	< 2.0	< 2.0	< 2.0		40.00
	Chloroethane	< 4.0	< 2.0	< 2.0	< 2.0		40.00
	Dichlorodifluoromethane	< 4.0	< 2.0	< 2.0	< 2.0		40.00
	Trichlorofluoromethane	< 2.1	< 1.1	< 1.1	< 1.1		40.00
	1,1,2-Trichlorotrifluoroethane	< 2.2	< 1.1	< 1.1	< 1.1		40.00
	1,1-Dichloroethene	< 2.0	< 1.0	< 1.0	< 1.0		40.00
	Methylene chloride	< 3.1	< 1.5	< 1.5	< 1.5		40.00
	trans-1,2-Dichloroethene	< 2.0	< 1.0	< 1.0	< 1.0		40.00
	1,1-Dichloroethane	< 2.2	< 1.1	< 1.1	< 1.1		40.00
	cis-1,2-Dichloroethene	< 2.0	< 1.0	< 1.0	< 1.0		40.00
	Chloroform	< 1.3	< 0.6	< 0.6	< 0.6		40.00
	1,1,1-Trichloroethane	< 3.9	< 2.0	< 2.0	< 2.0		40.00
	Carbon tetrachloride	< 2.0	< 1.0	< 1.0	< 1.0		40.00
	Benzene	< 1.6	< 0.8	< 0.8	< 0.8		40.00
	1,2-Dichloroethane	< 1.9	< 0.9	< 0.9	< 0.9		40.00
	Trichloroethene	< 4.3	< 2.2	< 2.2	< 2.2		40.00
	1,2-Dichloropropane	< 1.6	< 0.8	< 0.8	< 0.8		40.00
	Bromodichloromethane	< 2.7	< 1.4	< 1.4	< 1.4		40.00
	2-Chloroethylvinyl ether	< 4.0	< 2.0	< 2.0	< 2.0		40.00
	cis-1,3-Dichloropropene	< 1.5	< 0.7	< 0.7	< 0.7		40.00
	Toluene	< 1.4	< 0.7	< 0.7	< 0.7		40.00
	trans-1,3-Dichloropropene	< 1.0	< 0.5	< 0.5	< 0.5		40.00
	1,1,2-Trichloroethane	< 1.0	< 0.5	< 0.5	< 0.5		40.00
	Tetrachloroethene	< 2.6	< 1.3	< 1.3	< 1.3		40.00
	Dibromochloromethane	< 4.0	< 2.0	< 2.0	< 2.0		40.00
	Chlorobenzene	< 4.8	< 2.4	< 2.4	< 2.4		40.00
	Ethylbenzene	< 3.6	< 1.8	< 1.8	< 1.8		40.00
	m-Xylene	< 4.8	< 2.4	< 2.4	< 2.4		40.00
	o-Xylene	< 4.8	< 2.4	< 2.4	< 2.4		40.00
	Bromoform	< 2.9	< 1.4	< 1.4	< 1.4		40.00
	1,1,1,2-Tetrachloroethane	< 4.6	< 2.3	< 2.3	< 2.3		40.00
	1,3-Dichlorobenzene	< 3.4	< 1.7	< 1.7	< 1.7		40.00
	1,4-Dichlorobenzene	< 3.1	< 1.6	< 1.6	< 1.6		40.00
	1,2-Dichlorobenzene	< 1.9	< 1.0	< 1.0	< 1.0		40.00

Mean=(A+B)/2

RPD=100*ABS(A-B)/Mean

Acceptable RPD values are lower than the control limit (CL).

Approved by RSX

Huron Valley Laboratories, Inc.

QC Data for VOCs

Analysis Date: 02-27-96

Analyst: rsl

For HVLI Projects: L1249/L1283

US EPA method 8021

Sample ID	Parameter		Sample Value (µg/kg)	Spike Value (µg/kg)	True Value (µg/kg)	% Recovery	LCL	UCL
L1249-15	1,1-Dichloroethene	<	1.0	87.4	101.5	86.09	60.00	120.00
	Methylene chloride	<	1.5	92.4	101.5	91.01	60.00	120.00
	trans-1,2-Dichloroethene	<	1.0	82.6	101.5	81.36	60.00	120.00
	1,1-Dichloroethane	<	1.1	87.5	101.5	86.19	60.00	120.00
	cis-1,2-Dichloroethene	<	1.0	81.9	101.5	80.67	60.00	120.00
	Chloroform	<	0.6	87.3	101.5	86.02	60.00	120.00
	1,1,1-Trichloroethane	<	2.0	74.9	101.5	73.75	60.00	120.00
	Carbon tetrachloride	<	1.0	74.8	101.5	73.70	60.00	120.00
	Benzene	<	0.8	79.1	101.5	77.91	60.00	120.00
	1,2-Dichloroethane	<	0.9	78.4	101.5	77.22	60.00	120.00
	Trichloroethene	<	2.2	84.0	101.5	82.70	60.00	120.00
	1,2-Dichloropropane	<	0.8	82.4	101.5	81.16	60.00	120.00
	Bromodichloromethane	<	1.4	93.7	101.5	92.29	60.00	120.00
	cis-1,3-Dichloropropene	<	0.7	79.5	101.5	78.31	60.00	120.00
	Toluene	<	0.7	78.8	101.5	77.66	60.00	120.00
	1,1,2-Trichloroethane	<	0.5	67.1	101.5	66.14	60.00	120.00
	Tetrachloroethene	<	1.3	78.0	101.5	76.81	60.00	120.00
	Dibromochloromethane	<	2.0	118.2	101.5	116.43	60.00	120.00
	Chlorobenzene	<	2.4	74.9	101.5	73.78	60.00	120.00
	Ethylbenzene	<	1.8	78.5	101.5	77.34	60.00	120.00
	m-Xylene	<	2.4	157.2	203.0	77.44	60.00	120.00
	o-Xylene	<	2.4	78.3	101.5	77.11	60.00	120.00
	1,1,2,2-Tetrachloroethane	<	2.3	81.5	101.5	80.24	60.00	120.00
	1,3-Dichlorobenzene	<	1.7	69.9	101.5	68.85	60.00	120.00
	1,4-Dichlorobenzene	<	1.6	68.4	101.5	67.37	60.00	120.00
	1,2-Dichlorobenzene	<	1.0	67.5	101.5	66.49	60.00	120.00

%Recovery=100*(Spike value-Sample value)/True value

Acceptable %Recovery values are between the lower (LCL) and upper (UCL) control limits.

Approved by RSL

Huron Valley Laboratories, Inc.

QC Data for VOCs
 Analysis Date: 02-27-96
 Analyst: rsl
 For HVL Projects: L1249/L1283
 US EPA method 8021

Spike duplicate

Sample ID	Parameter	A (ng)	B (ng)	Mean (ng)	RPD	CL %RSD
L1249-15	1,1-Dichloroethane	182.4	162.4	172.4	11.61	40.00
	Chloroform	181.9	162.1	172.0	11.51	40.00
	1,1,1-Trichloroethane	160.5	134.5	147.5	17.59	40.00
	Carbon tetrachloride	159.6	135.2	147.4	16.51	40.00
	Benzene	167.7	144.0	155.8	15.23	40.00
	1,2-Dichloroethane	161.1	147.7	154.4	8.68	40.00
	Trichloroethene	183.1	147.7	165.4	21.36	40.00
	1,2-Dichloropropane	178.5	146.1	162.3	20.00	40.00
	Toluene	169.3	141.4	155.3	17.97	40.00
	1,1,2-Trichloroethane	138.8	125.8	132.3	9.81	40.00
	Tetrachloroethene	171.3	135.9	153.6	23.03	40.00
	Ethylbenzene	171.1	138.3	154.7	21.19	40.00
	m-Xylene	345.8	273.8	309.8	23.25	40.00
	o-Xylene	170.6	137.8	154.2	21.27	40.00
	1,1,2,2-Tetrachloroethane	165.0	156.0	160.5	5.60	40.00

$$\text{Mean} = (A+B)/2$$

$$\text{RPD} = 100 \cdot \text{ABS}(A-B)/\text{Mean}$$

Acceptable RPD values are lower than the control limit (CL).

Approved by ES

Huron Valley Laboratories, Inc.

Surrogate Data for VOCs

Analysis Date: 02-28-96

Analyst: rsl

For HVLI Projects: L1283/L1255/L1277

US EPA method 8021

a,a,a-Trifluorotoluene

Sample ID	Analytical Value	True Value	% Recovery	LCL	UCL	Units
blank	200.0	200.0	100.00	80.00	120.00	ng
Calibration standard-1	242.0	200.0	120.98	80.00	120.00	ng
Calibration standard-2	203.6	200.0	101.78	80.00	120.00	ng
L1283-1	34.5	40.0	86.31	80.00	120.00	µg/l
L1255-5	42.7	40.0	106.77	80.00	120.00	µg/l
L1255-1	459.1	400.0	114.78	80.00	120.00	µg/l
L1255-2	3431	4000	85.77	80.00	120.00	µg/l
L1255-3	47.0	40.0	117.59	80.00	120.00	µg/l
L1255-4a	47.3	40.0	118.29	80.00	120.00	µg/l
L1255-4b	45.8	40.0	114.51	80.00	120.00	µg/l
L1255-4sa	34.0	40.0	85.09	80.00	120.00	µg/l
L1255-4sb	40.7	40.0	101.75	80.00	120.00	µg/l
L1277-1a	4154	4000	103.84	80.00	120.00	µg/l
L1277-1b	4481	4000	112.03	80.00	120.00	µg/l
L1277-1sa	4717	4000	117.91	80.00	120.00	µg/l
L1277-1sb	4242	4000	106.05	80.00	120.00	µg/l

Bromochloromethane

Sample ID	Analytical Value	True Value	% Recovery	LCL	UCL	Units
blank	200.0	200.0	100.00	80.00	120.00	ng
Calibration standard-1	196.6	200.0	98.28	80.00	120.00	ng
Calibration standard-2	208.3	200.0	104.15	80.00	120.00	ng
L1283-1	37.9	40.0	94.63	80.00	120.00	µg/l
L1255-5	40.7	40.0	101.68	80.00	120.00	µg/l
L1255-1	416.7	400.0	104.18	80.00	120.00	µg/l
L1255-2	3543	4000	88.56	80.00	120.00	µg/l
L1255-3	39.4	40.0	98.56	80.00	120.00	µg/l
L1255-4a	41.0	40.0	102.39	80.00	120.00	µg/l
L1255-4b	39.3	40.0	98.27	80.00	120.00	µg/l
L1255-4sa	31.4	40.0	78.40	80.00	120.00	µg/l
L1255-4sb	40.9	40.0	102.19	80.00	120.00	µg/l
L1277-1a	3914	4000	97.85	80.00	120.00	µg/l
L1277-1b	3925	4000	98.12	80.00	120.00	µg/l
L1277-1sa	3755	4000	93.88	80.00	120.00	µg/l
L1277-1sb	3741	4000	93.54	80.00	120.00	µg/l

* % Recovery outside acceptance limits, chromatogram checked and integration is ok.

% Recovery=100*Analytical value/True value

Acceptable % recoveries are between the lower (LCL) & upper (UCL) control limits.

Approved by PSL

Huron Valley Laboratories, Inc.

Surrogate Data for VOCs

Analysis Date: 02-28-96

Analyst: rsl

For HVLI Projects: L1283/L1255/L1277

US EPA method 8021

2-Bromo-1-chloropropane

Sample ID	Analytical Value	True Value	% Recovery	LCL	UCL	Units
blank	200.0	200.0	100.00	80.00	120.00	ng
Calibration standard-1	215.2	200.0	107.61	80.00	120.00	ng
Calibration standard-2	237.0	200.0	118.50	80.00	120.00	ng
L1283-1	35.5	40.0	88.76	80.00	120.00	µg/l
L1255-5	41.4	40.0	103.59	80.00	120.00	µg/l
L1255-1	439.4	400.0	109.84	80.00	120.00	µg/l
L1255-2	3042	4000	76.04	80.00	120.00	µg/l
L1255-3	41.8	40.0	104.55	80.00	120.00	µg/l
L1255-4a	43.5	40.0	108.85	80.00	120.00	µg/l
L1255-4b	42.3	40.0	105.65	80.00	120.00	µg/l
L1255-4sa	39.9	40.0	99.84	80.00	120.00	µg/l
L1255-4sb	41.7	40.0	104.24	80.00	120.00	µg/l
L1277-1a	3997	4000	99.92	80.00	120.00	µg/l
L1277-1b	4100	4000	102.50	80.00	120.00	µg/l
L1277-1sa	3840	4000	95.99	80.00	120.00	µg/l
L1277-1sb	6996	4000	174.89	80.00	120.00	µg/l

1,4-Dichlorobutane

Sample ID	Analytical Value	True Value	% Recovery	LCL	UCL	Units
blank	200.0	200.0	100.00	80.00	120.00	ng
Calibration standard-1	207.0	200.0	103.48	80.00	120.00	ng
Calibration standard-2	214.3	200.0	107.16	80.00	120.00	ng
L1283-1	34.2	40.0	85.39	80.00	120.00	µg/l
L1255-5	42.1	40.0	105.17	80.00	120.00	µg/l
L1255-1	425.3	400.0	106.31	80.00	120.00	µg/l
L1255-2	3701	4000	92.52	80.00	120.00	µg/l
L1255-3	38.6	40.0	96.38	80.00	120.00	µg/l
L1255-4a	38.7	40.0	96.75	80.00	120.00	µg/l
L1255-4b	39.3	40.0	98.21	80.00	120.00	µg/l
L1255-4sa	32.2	40.0	80.38	80.00	120.00	µg/l
L1255-4sb	41.0	40.0	102.52	80.00	120.00	µg/l
L1277-1a	3709	4000	92.74	80.00	120.00	µg/l
L1277-1b	4004	4000	100.09	80.00	120.00	µg/l
L1277-1sa	3794	4000	94.85	80.00	120.00	µg/l
L1277-1sb	3971	4000	99.29	80.00	120.00	µg/l

* % Recovery outside acceptance limits, chromatogram checked and integration is ok.

% Recovery = $100 \times \text{Analytical value} / \text{True value}$

Acceptable % recoveries are between the lower (LCL) & upper (UCL) control limits.

Approved by BSC

Huron Valley Laboratories, Inc.

QC Data for VOCs

Analysis Date: 02-28-96

Analyst: rsl

For HVLI Projects: L1283/L1255/L1277

US EPA method 8021

Sample ID	Parameter	Blank (µg/l)	A (µg/l)	B (µg/l)	Mean (µg/l)	RPD	CL %RSD
L1255-4	Benzene	< 0.3	21.2	20.5	20.9	3.36	20.00
	Toluene	< 0.3	4.4	4.2	4.3	4.65	20.00
	Ethylbenzene	< 0.7	47.4	40.1	43.8	16.69	20.00
	m-Xylene	< 1.0	17.0	20.4	18.7	18.18	20.00
	o-Xylene	< 1.0	1.2	1.1	1.2	8.70	20.00
	Methyl tertbutyl ether	< 0.6	25.0	25.0	25.0		20.00

Sample ID	Parameter	Sample Value (µg/l)	Spike Value (µg/l)	True Value (µg/l)	% Recovery	LCL	UCL
L1255-4	Benzene	20.9	64.3	40.0	108.50	80.00	120.00
	Toluene	4.3	45.0	40.0	101.75	80.00	120.00
	Ethylbenzene	43.8	83.0	40.0	98.13	80.00	120.00
	m-Xylene	18.7	87.3	80.0	85.69	80.00	120.00
	o-Xylene	1.2	45.6	40.0	111.00	80.00	120.00
	Methyl tertbutyl ether	< 25.0	48.2	56.2	85.71	80.00	120.00

Spike duplicate

Sample ID	Parameter	A (µg/l)	B (µg/l)	Mean (µg/l)	RPD	CL %RSD
L1255-4	Benzene	63.5	65.0	64.3	2.33	20.00
	Toluene	47.0	43.0	45.0	8.89	20.00
	Ethylbenzene	83.7	82.3	83.0	1.69	20.00
	m-Xylene	94.3	80.2	87.3	16.16	20.00
	o-Xylene	49.9	41.2	45.6	19.10	20.00
	Methyl tertbutyl ether	48.2	48.1	48.2	0.25	20.00

$$\text{Mean} = (A+B)/2$$

$$\text{RPD} = 100 \cdot \text{ABS}(A-B) / \text{Mean}$$

Acceptable RPD values are lower than the control limit (CL).

$$\% \text{Recovery} = 100 \cdot (\text{Spike value} - \text{Sample value}) / \text{True value}$$

Acceptable %recovery values are between the lower (LCL) and upper (UCL) control limits.

Approved by

RSV

Huron Valley Laboratories, Inc.

QC Data for VOCs

Analysis Date: 02-28-96

Analyst: rsl

For HVLI Projects: L1283/L1255/L1277

US EPA method 8021

Sample ID	Parameter	Blank (µg/l)	A (µg/l)	B (µg/l)	Mean (µg/l)	RPD	CL %RSD
L1277-1	Chloromethane	< 0.8	< 80.0	< 80.0	< 80.0		
	Vinyl chloride	< 0.8	< 80.0	< 80.0	< 80.0		20.00
	Bromomethane	< 0.8	< 80.0	< 80.0	< 80.0		20.00
	Chloroethane	< 0.8	< 80.0	< 80.0	< 80.0		20.00
	Dichlorodifluoromethane	< 0.8	< 80.0	< 80.0	< 80.0		20.00
	Trichlorofluoromethane	< 0.4	< 42.0	< 42.0	< 42.0		20.00
	1,1,2-Trichlorotrifluoroethane	< 0.4	< 44.0	< 44.0	< 44.0		20.00
	1,1-Dichloroethene	< 0.4	< 40.0	< 40.0	< 40.0		20.00
	Methylene chloride	< 0.6	< 61.0	< 61.0	< 61.0		20.00
	trans-1,2-Dichloroethene	< 0.4	< 40.0	< 40.0	< 40.0		20.00
	1,1-Dichloroethane	< 0.4	< 44.4	< 44.4	< 44.4		20.00
	cis-1,2-Dichloroethene	< 0.4	< 40.0	< 40.0	< 40.0		20.00
	Chloroform	< 0.3	< 25.0	< 25.0	< 25.0		20.00
	1,1,1-Trichloroethane	< 0.8	< 77.8	< 77.8	< 77.8		20.00
	Carbon tetrachloride	< 0.4	< 39.2	< 39.2	< 39.2		20.00
	Benzene	< 0.3	< 31.8	< 31.8	< 31.8		20.00
	1,2-Dichloroethane	< 0.4	< 37.2	< 37.2	< 37.2		20.00
	Trichloroethene	< 0.9	< 85.8	< 85.8	< 85.8		20.00
	1,2-Dichloropropane	< 0.3	< 32.4	< 32.4	< 32.4		20.00
	Bromodichloromethane	< 0.5	< 54.2	< 54.2	< 54.2		20.00
	2-Chloroethylvinyl ether	< 0.8	< 80.0	< 80.0	< 80.0		20.00
	cis-1,3-Dichloropropene	< 0.3	< 29.0	< 29.0	< 29.0		20.00
	Toluene	< 0.3	< 28.8	< 28.8	< 28.8		20.00
	trans-1,3-Dichloropropene	< 0.2	< 20.2	< 20.2	< 20.2		20.00
	1,1,2-Trichloroethane	< 0.2	< 20.0	< 20.0	< 20.0		20.00
	Tetrachloroethene	< 0.5	< 52.8	< 52.8	< 52.8		20.00
	Dibromochloromethane	< 0.8	< 80.6	< 80.6	< 80.6		20.00
	Chlorobenzene	< 1.0	< 96.0	< 96.0	< 96.0		20.00
	Ethylbenzene	< 0.7	< 72.0	< 72.0	< 72.0		20.00
	m-Xylene	< 1.0	< 96.0	< 96.0	< 96.0		20.00
	o-Xylene	< 1.0	< 96.0	< 96.0	< 96.0		20.00
	Bromoform	< 0.6	< 57.4	< 57.4	< 57.4		20.00
	1,1,2,2-Tetrachloroethane	< 0.9	< 92.6	< 92.6	< 92.6		20.00
	1,3-Dichlorobenzene	< 0.7	< 68.6	< 68.6	< 68.6		20.00
	1,4-Dichlorobenzene	< 0.6	< 61.8	< 61.8	< 61.8		20.00
	1,2-Dichlorobenzene	< 0.4	< 38.0	< 38.0	< 38.0		20.00

$$\text{Mean} = (A+B)/2$$

$$\text{RPD} = 100 \cdot \text{ABS}(A-B) / \text{Mean}$$

Acceptable RPD values are lower than the control limit (CL).

Approved by BSC

Huron Valley Laboratories, Inc.

QC Data for VOCs

Analysis Date: 02-28-96

Analyst: rsl

For HVLI Projects: L1283/L1255/L1277

US EPA method 8021

Sample ID	Parameter	Sample Value (µg/l)	Spike Value (µg/l)	True Value (µg/l)	% Recovery	LCL	UCL
L1277-1	1,1-Dichloroethene	< 40.0	3761	4000	94.03	80.00	120.00
	Methylene chloride	< 61.0	3728	4000	93.20	80.00	120.00
	trans-1,2-Dichloroethene	< 40.0	3814	4000	95.35	80.00	120.00
	1,1-Dichloroethane	< 44.4	3606	4000	90.15	80.00	120.00
	cis-1,2-Dichloroethene	< 40.0	3642	4000	91.05	80.00	120.00
	1,1,1-Trichloroethane	< 77.8	3542	4000	88.55	80.00	120.00
	Carbon tetrachloride	< 39.2	3547	4000	88.68	80.00	120.00
	Benzene	< 31.8	4186	4000	104.65	80.00	120.00
	1,2-Dichloroethane	< 37.2	3532	4000	88.30	80.00	120.00
	Trichloroethene	< 85.8	4407	4000	110.18	80.00	120.00
	1,2-Dichloropropane	< 32.4	3652	4000	91.30	80.00	120.00
	Bromodichloromethane	< 54.2	4151	4000	103.76	80.00	120.00
	cis-1,3-Dichloropropene	< 29.0	3670	4000	91.75	80.00	120.00
	Toluene	< 28.8	4053	4000	101.58	80.00	120.00
	1,1,2-Trichloroethane	< 20.0	3658	4000	91.45	80.00	120.00
	Tetrachloroethene	< 52.8	3579	4000	89.48	80.00	120.00
	Dibromochloromethane	< 80.6	3914	4000	97.85	80.00	120.00
	Chlorobenzene	< 96.0	3729	4000	93.23	80.00	120.00
	Ethylbenzene	< 72.0	3731	4000	93.28	80.00	120.00
	m-Xylene	< 96.0	7814	8000	97.68	80.00	120.00
	o-Xylene	< 96.0	4107	4000	102.68	80.00	120.00
	Bromoform	< 57.4	3735	4000	93.38	80.00	120.00
	1,1,2,2-Tetrachloroethane	< 92.6	3834	4000	95.85	80.00	120.00
	1,3-Dichlorobenzene	< 68.6	3677	4000	91.93	80.00	120.00
	1,4-Dichlorobenzene	< 61.8	3608	4000	90.20	80.00	120.00
	1,2-Dichlorobenzene	< 38.0	4898	4000	122.45	80.00	120.00

* % Recovery outside acceptance limits, chromatogram checked and integration is ok.

%Recovery=100*(Spike value-Sample value)/True value

Acceptable %recovery values are between the lower (LCL) and upper (UCL) control limits.

Approved by RS

Huron Valley Laboratories, Inc.

Surrogate Data for VOCs
Analysis Date: 03-03-96
Analyst: rsl
For HVLI Projects: L1283
US EPA method 8021

a,a,a-Trifluorotoluene

Sample ID	Analytical Value	True Value	% Recovery	LCL	UCL	Units
Calibration standard-1	200.0	200.0	100.00	80.00	120.00	ng
Blank	190.0	200.0	95.02	80.00	120.00	ng
L1283-2	78.5	118.3	66.34	60.00	120.00	µg/kg
L1283-5	63.5	101.5	62.58	60.00	120.00	µg/kg
L1283-7	58.5	76.3	76.63	60.00	120.00	µg/kg
L1283-8	177.9	180.2	98.72	60.00	120.00	µg/kg
L1283-8	929.4	1063.8	87.37	60.00	120.00	µg/kg
L1283-9A	52.9	83.7	63.23	60.00	120.00	µg/kg
L1283-9B	41.6	69.0	60.33	60.00	120.00	µg/kg
L1283-9SA	46.4	64.9	71.45	60.00	120.00	µg/kg
L1283-9SB	39.1	64.5	60.66	60.00	120.00	µg/kg
L1283-10	244.6	192.3	127.17	60.00	120.00	µg/kg
L1283-8	15474	21277	72.73	60.00	120.00	µg/kg
L1283-10	17621	22857	77.09	60.00	120.00	µg/kg

* Sample values out of working range. Reanalyze sample

% Recovery = $100 \times \text{Analytical value} / \text{True value}$
Acceptable % recoveries are between the lower (LCL) & upper (UCL) control limits.

Approved by RS

Huron Valley Laboratories, Inc.

QC Data for VOCs
Analysis Date: 03-03-96
Analyst: rsl
For HVLI Projects: L1283
US EPA method 8021

Sample ID	Parameter	Blank (ng)	A (µg/kg)	B (µg/kg)	Mean (µg/kg)	RPD	CL %RSD
L1283-9	Toluene	< 1.4	43.8	38.4	41.1	13.13	40.00
	Ethylbenzene	< 3.6	57.2	54.4	55.8	5.05	40.00
	m-Xylene	< 4.8	256.3	237.4	246.9	7.64	40.00
	o-Xylene	< 4.8	160.4	156.4	158.4	2.57	40.00

Sample ID	Parameter	Sample Value (µg/kg)	Spike Value (µg/kg)	True Value (µg/kg)	% Recovery	LCL	UCL
L1283-9	Toluene	41.1	75.9	37.6	92.67	60.00	120.00
	Ethylbenzene	55.8	92.6	37.6	97.93	60.00	120.00
	m-Xylene	246.9	282.4	75.2 *	47.33	60.00	120.00
	o-Xylene	158.4	169.1	37.6 *	28.31	60.00	120.00

Spike duplicate

Sample ID	Parameter	A (ng)	B (ng)	Mean (ng)	RPD	CL %RSD
L1283-9	Toluene	220.9	183.0	202.0	18.76	40.00
	Ethylbenzene	267.1	225.7	246.4	16.81	40.00
	m-Xylene	831.7	670.9	751.3	21.41	40.00
	o-Xylene	503.8	395.6	449.7	24.06	40.00

* Spikes on samples with elevated levels may result in % recoveries outside the acceptance limits

$$\text{Mean} = (A+B)/2$$

$$\text{RPD} = 100 \cdot \text{ABS}(A-B) / \text{Mean}$$

Acceptable RPD values are lower than the control limit (CL).

$$\% \text{Recovery} = 100 \cdot (\text{Spike value} - \text{Sample value}) / \text{True value}$$

Acceptable %Recovery values are between the lower (LCL) and upper (UCL) control limits.

Approved by ESL

Huron Valley Laboratories, Inc.

Surrogate Data for VOCs
 Analysis Date: 03-15-96
 Analyst: rsl
 For HVLI Projects: L1332/L1283
 US EPA method 8021

a,a,a-Trifluorotoluene

Sample ID	Analytical Value	True Value	% Recovery	LCL	UCL	Units
Calibration standard-1	200.0	200.0	100.00	80.00	120.00	ng
Blank	164.5	200.0	82.26	80.00	120.00	ng
L1332-1	36.6	40.0	91.60	80.00	120.00	µg/l
L1332-3	33.1	40.0	82.84	80.00	120.00	µg/l
L1332-4	32.1	40.0	80.23	80.00	120.00	µg/l
L1332-6	33.5	40.0	83.64	80.00	120.00	µg/l
L1332-7	35.9	40.0	89.70	80.00	120.00	µg/l
L1332-9	35.8	40.0	89.40	80.00	120.00	µg/l
L1332-10A	34.9	40.0	87.17	80.00	120.00	µg/l
L1332-10B	34.0	40.0	84.91	80.00	120.00	µg/l
L1332-10SA	34.8	40.0	86.94	80.00	120.00	µg/l
L1332-10SB	33.1	40.0	82.76	80.00	120.00	µg/l
L1332-13	32.9	40.0	82.21	80.00	120.00	µg/l
L1332-15	17.7	40.0	*	80.00	120.00	µg/l
L1283-11X	1737	2000	86.85	80.00	120.00	µg/l
L1283-11X	29.7	40.0	**	80.00	120.00	µg/l
			74.27	80.00	120.00	µg/l

* % Recovery outside acceptance limits, reanalyze sample.

** % Recovery outside acceptance limits, data from this run not used for reporting.

% Recovery = $100 \times \text{Analytical value} / \text{True value}$

Acceptable % recoveries are between the lower (LCL) & upper (UCL) control limits.

Approved by RSX

Huron Valley Laboratories, Inc.

QC Data for VOCs
Analysis Date: 03-15-96
Analyst: rsl
For HVL Projects: L1332/L1283
US EPA method 8021

Sample ID	Parameter	Blank (µg/l)	A (µg/l)	B (µg/l)	Mean (µg/l)	RPD	CL %RSD
L1332-10	Benzene	< 0.3	< 0.3	< 0.3	< 0.3		
	Toluene	< 0.3	< 1.2	< 1.4	< 1.3	12.41	20.00
	Ethylbenzene	< 0.7	< 0.7	< 0.7	< 0.7		20.00
	m-Xylene	< 1.0	< 1.0	< 1.8	< 1.4		20.00
	o-Xylene	< 1.0	< 1.0	< 1.0	< 1.0	57.51	20.00

Sample ID	Parameter	Sample Value (µg/l)	Spike Value (µg/l)	True Value (µg/l)	% Recovery	LCL	UCL
L1332-10	Benzene	< 0.3	35.8	40.0	89.47		
	Toluene	< 1.3	35.8	40.0	86.24	80.00	120.00
	Ethylbenzene	< 0.7	35.2	40.0	88.05	80.00	120.00
	m-Xylene	< 1.4	72.4	80.0	88.77	80.00	120.00
	o-Xylene	< 1.0	36.3	40.0	90.72	80.00	120.00
Spike duplicate							

Sample ID	Parameter	A (µg/l)	B (µg/l)	Mean (µg/l)	RPD	CL %RSD
L1332-10	Benzene	36.9	34.7	35.8	6.09	20.00
	Toluene	36.9	34.7	35.8	6.36	20.00
	Ethylbenzene	36.4	34.0	35.2	6.90	20.00
	m-Xylene	74.0	70.8	72.4	4.50	20.00
	o-Xylene	37.2	35.4	36.3	4.98	20.00

* Concentrations are within 5 x MQL; % RSDs not applicable within this range

$$\text{Mean} = (A+B)/2$$

$$\text{RPD} = 100 \cdot \text{ABS}(A-B) / \text{Mean}$$

Acceptable RPD values are lower than the control limit (CL).

$$\% \text{Recovery} = 100 \cdot (\text{Spike value} - \text{Sample value}) / \text{True value}$$

Acceptable %recovery values are between the lower (LCL) and upper (UCL) control limits.

Approved by RSU

C1283

CHAIN OF CUSTODY

Send report to:		Project:		Lab:		Due Date:		Parameters									
6 DeWitt		000420:0002		HVL1		3-2-96											
Sample ID	Date	Time	Grab(G)/Composite(C)	# Containers	Matrix*	Preservative**											
T.B	2/22/96	750	G	2	W												
HP1A	1105			1	S												
HP1B	1106			1													
HP2A	1145			1													
HP2B	1146			1													
HP3A	1215			1													
HP3B	1216			1													
HP4A	1237			1													
HP4B	1240			1													
HP4C	1238			1													
HP4D	1238			1													
Collected by:	Sara S. Demetris		Date:	2/22/96	Time:	4:14 PM											
Relinquished by:	Sara S. Demetris		Date:	2/22/96	Time:	15:15	Received by:		to storage								
Relinquished by:	Sara S. Demetris		Date:	2/23/96	Time:	16:40	Received by:		[Signature]		Date:	2/23/96	Time:	16:40			
Relinquished by:	[Signature]		Date:	2/23/96	Time:	18:30	Received by:		[Signature]		Date:	2/23/96	Time:	18:30			
Relinquished by:	[Signature]		Date:		Time:		Received by:				Date:		Time:				
Relinquished by:	[Signature]		Date:		Time:		Received by:				Date:		Time:				
Relinquished by:	[Signature]		Date:		Time:		Received by:				Date:		Time:				
Remarks:	HP4A 500 ppm HNU reading Act 451 limits, QA/QC, for results please																
(6) Indicate Preservative Used:																	

CHN... CORPORATION
44808 Helm Street
Plymouth, MI 48170-6026

Telephone Numbers:
(313) 454-1100
(313) 454-1233 (FAX)

L12-83

CHAIN OF CUSTODY

Send report to: G DeWitt	Project: 00042010002	Lab: HVLI	Due Date: 3-2-96			
Sample ID	Date	Time	Grab(G)/Composite(C)	# Containers	Matrix*	Preservative**
T.B	2/22/96	750	G	2	W	
HP1A	1105			1	S	
HP1B	1106			1		
HP2A	1145			1		
HP2B	1146			1		
HP3A	1215			1		
HP3B	1216			1		
HP4A	1237			1		
HP4B	1240			1		
HP4C	1238			1		
HP4D	1238			1		
HP4E	1238			1		
HP4F	1238			1		
HP4G	1238			1		
HP4H	1238			1		
HP4I	1238			1		
HP4J	1238			1		
HP4K	1238			1		
HP4L	1238			1		
HP4M	1238			1		
HP4N	1238			1		
HP4O	1238			1		
HP4P	1238			1		
HP4Q	1238			1		
HP4R	1238			1		
HP4S	1238			1		
HP4T	1238			1		
HP4U	1238			1		
HP4V	1238			1		
HP4W	1238			1		
HP4X	1238			1		
HP4Y	1238			1		
HP4Z	1238			1		
HP4AA	1238			1		
HP4AB	1238			1		
HP4AC	1238			1		
HP4AD	1238			1		
HP4AE	1238			1		
HP4AF	1238			1		
HP4AG	1238			1		
HP4AH	1238			1		
HP4AI	1238			1		
HP4AJ	1238			1		
HP4AK	1238			1		
HP4AL	1238			1		
HP4AM	1238			1		
HP4AN	1238			1		
HP4AO	1238			1		
HP4AP	1238			1		
HP4AQ	1238			1		
HP4AR	1238			1		
HP4AS	1238			1		
HP4AT	1238			1		
HP4AU	1238			1		
HP4AV	1238			1		
HP4AW	1238			1		
HP4AX	1238			1		
HP4AY	1238			1		
HP4AZ	1238			1		
HP4BA	1238			1		
HP4BB	1238			1		
HP4BC	1238			1		
HP4BD	1238			1		
HP4BE	1238			1		
HP4BF	1238			1		
HP4BG	1238			1		
HP4BH	1238			1		
HP4BI	1238			1		
HP4BJ	1238			1		
HP4BK	1238			1		
HP4BL	1238			1		
HP4BM	1238			1		
HP4BN	1238			1		
HP4BO	1238			1		
HP4BP	1238			1		
HP4BQ	1238			1		
HP4BR	1238			1		
HP4BS	1238			1		
HP4BT	1238			1		
HP4BU	1238			1		
HP4BV	1238			1		
HP4BW	1238			1		
HP4BX	1238			1		
HP4BY	1238			1		
HP4BZ	1238			1		
HP4CA	1238			1		
HP4CB	1238			1		
HP4CC	1238			1		
HP4CD	1238			1		
HP4CE	1238			1		
HP4CF	1238			1		
HP4CG	1238			1		
HP4CH	1238			1		
HP4CI	1238			1		
HP4CJ	1238			1		
HP4CK	1238			1		
HP4CL	1238			1		
HP4CM	1238			1		
HP4CN	1238			1		
HP4CO	1238			1		
HP4CP	1238			1		
HP4CQ	1238			1		
HP4CR	1238			1		
HP4CS	1238			1		
HP4CT	1238			1		
HP4CU	1238			1		
HP4CV	1238			1		
HP4CW	1238			1		
HP4CX	1238			1		
HP4CY	1238			1		
HP4CZ	1238			1		
HP4DA	1238			1		
HP4DB	1238			1		
HP4DC	1238			1		
HP4DD	1238			1		
HP4DE	1238			1		
HP4DF	1238			1		
HP4DG	1238			1		
HP4DH	1238			1		
HP4DI	1238			1		
HP4DJ	1238			1		
HP4DK	1238			1		
HP4DL	1238			1		
HP4DM	1238			1		
HP4DN	1238			1		
HP4DO	1238			1		
HP4DP	1238			1		
HP4DQ	1238			1		
HP4DR	1238			1		
HP4DS	1238			1		
HP4DT	1238			1		
HP4DU	1238			1		
HP4DV	1238			1		
HP4DW	1238			1		
HP4DX	1238			1		
HP4DY	1238			1		
HP4DZ	1238			1		
HP4EA	1238			1		
HP4EB	1238			1		
HP4EC	1238			1		
HP4ED	1238			1		
HP4EE	1238			1		
HP4EF	1238			1		
HP4EG	1238			1		
HP4EH	1238			1		
HP4EI	1238			1		
HP4EJ	1238			1		
HP4EK	1238			1		
HP4EL	1238			1		
HP4EM	1238			1		
HP4EN	1238			1		
HP4EO	1238			1		
HP4EP	1238			1		
HP4EQ	1238			1		
HP4ER	1238			1		
HP4ES	1238			1		
HP4ET	1238			1		
HP4EU	1238			1		
HP4EV	1238			1		
HP4EW	1238			1		
HP4EX	1238			1		
HP4EY	1238			1		
HP4EZ	1238			1		
HP4FA	1238			1		
HP4FB	1238			1		
HP4FC	1238			1		
HP4FD	1238			1		
HP4FE	1238			1		
HP4FF	1238			1		
HP4FG	1238			1		
HP4FH	1238			1		
HP4FI	1238			1		
HP4FJ	1238			1		
HP4FK	1238			1		
HP4FL	1238			1		
HP4FM	1238			1		
HP4FN	1238			1		
HP4FO	1238			1		
HP4FP	1238			1		
HP4FQ	1238			1		
HP4FR	1238			1		
HP4FS	1238			1		
HP4FT	1238			1		
HP4FU	1238			1		
HP4FV	1238			1		
HP4FW	1238			1		
HP4FX	1238			1		
HP4FY	1238			1		
HP4FZ	1238			1		
HP4GA	1238			1		
HP4GB	1238			1		
HP4GC	1238			1		
HP4GD	1238			1		
HP4GE	1238			1		
HP4GF	1238			1		
HP4GG	1238			1		
HP4GH	1238			1		
HP4GI	1238			1		
HP4GJ	1238			1		
HP4GK	1238			1		
HP4GL	1238			1		
HP4GM	1238			1		
HP4GN	1238			1		
HP4GO	1238			1		
HP4GP	1238			1		
HP4GQ	1238			1		
HP4GR	1238			1		
HP4GS	1238			1		
HP4GT	1238			1		
HP4GU	1238			1		
HP4GV	1238			1		
HP4GW	1238			1		
HP4GX	1238			1		
HP4GY	1238			1		
HP4GZ	1238			1		
HP4HA	1238			1		
HP4HB	1238			1		
HP4HC	1238			1		
HP4HD	1238			1		
HP4HE	1238			1		
HP4HF	1238			1		
HP4HG	1238			1		
HP4HH	1238			1		
HP4HI	1238			1		
HP4HJ	1238			1		
HP4HK	1238					

APPENDIX C

REFERENCED TABLES

TABLE 3

Phase I Sampling (August 1989)

Samples (ppb)	Grid #1	Grid #2	Grid #3	Grid #4	Grid #5
Ethylbenzene	180	<75	501	<75	<75
Methylene Chloride	<500	<500	<500	<500	<500
Toluene	582	<75	436	<75	121
1,1,1-Trichloroethane	<75	164	150	335	<75
Methyl Ethyl Ketone	521	494	<150	<150	<150
Xylenes	<250	<250	3200	<250	<250

Samples (ppb)	Grid #6	Grid #7	Grid #8	Grid #9
Ethylbenzene	<75	<75	<75	<75
Methylene Chloride	<500	<500	<500	<500
Toluene	<75	630	<75	<75
1,1,1-Trichloroethane	<75	<75	<75	<75
Methyl Ethyl Ketone	<150	600	<150	383
Xylenes	<250	<250	<250	<250

TABLE 4

Phase II Sampling: Beneath Pad (December 1989)

SB-1 (ppb)	1'-3'	3'-5'	5'-7'	7'-9'	9'-11'
Ethylbenzene	<75	<75	<75	<75	<75
Toluene	170	450	110	<75	<75
1,1,1-Trichloroethane	<75	<75	<75	<75	<75
Methyl Ethyl Ketone	<150	<150	<150	<150	<150
Xylenes	1500	730	<250	380	<250

SB-2 (ppb)	1'-3'	3'-5'	5'-7'	7'-9'
Ethylbenzene	<75	<75	<75	<75
Toluene	<75	<75	380	<75
1,1,1-Trichloroethane	<75	<75	<75	<75
Methyl Ethyl Ketone	<150	<150	<150	<150
Xylenes	<250	<250	<250	<250

SB-3 (ppb)	1'-3'	3'-5'	5'-7'	7'-9'	9'-11'
Ethylbenzene	<75	<75	<75	<75	<75
Toluene	<75	<75	190	280	<75
1,1,1-Trichloroethane	<75	<75	<75	<75	<75
Methyl Ethyl Ketone	<150	<150	<150	<150	<150
Xylenes	<250	<250	340	<250	<250

SB-4 (ppb)	1'-3'	3'-5'	5'-7'	7'-9'	9'-11'
Ethylbenzene	<75	<75	<75	<75	<75
Toluene	150	<75	<75	130	<75
1,1,1-Trichloroethane	<75	<75	<75	<75	<75
Methyl Ethyl Ketone	<150	<150	<150	<150	<150
Xylenes	<250	<250	<250	<250	<250

Reference: August 4, 1995 *General Motors Corporation North American Operations, Clark Street Facility, Detroit, Michigan, RCRA Container Storage Pad Closure Certification*, Chester Environmental, Ann Arbor, Michigan

TABLE 5

Phase II Sampling: Adjacent to Pad (December 1989)

SB-5 (ppb)	1'-3'	3'-5'	5'-7'	7'-9'
Ethylbenzene	<75	<75	<75	<75
Toluene	<75	180	<75	<75
1,1,1-Trichloroethane	<75	<75	<75	<75
Methyl Ethyl Ketone	<150	<150	<150	<150
Xylenes	<250	<250	<250	270

SB-6 (ppb)	1'-3'	3'-5'	5'-7'	7'-9'	9'-11'
Ethylbenzene	<75	<75	<75	130	<75
Toluene	190	<75	250	190	<75
1,1,1-Trichloroethane	<75	<75	<75	<75	<75
Methyl Ethyl Ketone	<150	<150	<150	<150	<150
Xylenes	<250	<250	<250	<250	<250

SB-7 (ppb)	1'-3'	3'-5'	5'-7'	7'-9'	9'-11'	11-13'
Ethylbenzene	4700	450	<75	<75	<75	<75
Toluene	790	680	160	300	<75	<75
1,1,1-Trichloroethane	<75	<75	<75	<75	<75	<75
Methyl Ethyl Ketone	<150	<150	<150	<150	<150	<150
Xylenes	1700	2300	<250	<250	<250	<250

SB-8 (ppb)	1'-3'	3'-5'	5'-7'	7'-9'
Ethylbenzene	17000	4900	<75	<75
Toluene	81000	13000	<75	<75
1,1,1-Trichloroethane	<75	<75	<75	<75
Methyl Ethyl Ketone	<150	<150	<150	<150
Xylenes	81000	35000	<250	<250

TABLE 6

Phase IIa Sampling (May 1990)

SB-9 (ppb)	2'-4'	4'-6'	6'-8'	8'-10'
Ethylbenzene	<75	<75	<75	<75
Toluene	<75	<75	<75	<75
1,1,1-Trichloroethane	<75	<75	<75	<75
Methyl Ethyl Ketone	<150	<150	<150	<150
Xylenes	<250	<250	<250	<250
SB-10 (ppb)	2'-4'	4'-6'	6'-8'	8'-10'
Ethylbenzene	<75	<75	<75	<75
Toluene	<75	<75	<75	<75
1,1,1-Trichloroethane	<75	<75	<75	<75
Methyl Ethyl Ketone	<150	<150	<150	<150
Xylenes	<250	<250	<250	<250
SB-11 (ppb)	2'-4'	4'-6'	6'-8'	8'-10'
Ethylbenzene	<75	<75	<75	<75
Toluene	<75	<75	<75	<75
1,1,1-Trichloroethane	<75	<75	<75	<75
Methyl Ethyl Ketone	<150	<150	<150	<150
Xylenes	<250	<250	<250	<250
SB-12 (ppb)	2'-4'	4'-6'	6'-8'	8'-10'
Ethylbenzene	<75	<75	<75	<75
Toluene	<75	<75	<75	<75
1,1,1-Trichloroethane	<75	<75	<75	<75
Methyl Ethyl Ketone	<150	<150	<150	<150
Xylenes	<250	<250	<250	<250

SB-MW-10 (ppb)	
Ethylbenzene	<5.0
Toluene	<5.0
1,1,1-Trichloroethane	<5.0
Methyl Ethyl Ketone	<10.0
Xylenes	<5.0
SB-MW-12 (ppb)	
Ethylbenzene	<5.0
Toluene	<5.0
1,1,1-Trichloroethane	<5.0
Methyl Ethyl Ketone	<10.0
Xylenes	<5.0

TABLE 7

Follow-Up Sampling (December 1994)

Parameter	SB-7B 1'-3'	SB-8A 1'-3'	SB-8A 3'-5'
Ethylbenzene (Mg/Kg)	ND	0.036	NA
Toluene (Mg/Kg)	NA	BDL	NA
Xylenes (Mg/Kg)	NA	0.34	0.12
TCLP Leachate			
Ethylbenzene (mg/L)	ND	0.019	NA
Toluene (mg/L)	NA	0.015	NA
Xylenes (mg/L)	NA	0.13	0.02

ND – Non-Detect

NA – Not Applicable (Original Work Plan Samples were non-detect for these constituents)

BDL – Below Detectable Limit

APPENDIX D

WASTE DOCUMENTATION

Huron Valley Laboratories, Inc.



Analytical Report
for
Techna Corporation
44808 Helm Street
Plymouth, MI 48170-6026

March 27, 1996

Techna Corporation Project:
HVLI Project:
Date Received:

00642-01M-002
L1289
February 27, 1996

⌘=Parameter not detected at or above MQL or MRL.

MQL=Minimum quantitation limit - The minimum limit at which quantitation can be achieved. This limit is dependent on both matrix and dilution factors and may vary from one report to another.

MRL=Minimum reporting limit - This is the limit below which quantitation is not required due to threshold limits and/or customer request.

Respectfully submitted,

Robert S. Lynch
Laboratory Manager

Enclosure
dhb/RSL

1 HARRISON ST.
PLYMOUTH, MI 48174
(313) 946-4990
(313) 946-4887

1689 HARBOR RD.
PETOSKEY, MI 49880
(616) 348-5410
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Huron Valley Laboratories, Inc.

Techna Corporation Project #: 00642-01M-002
HVLI Project: L1289

HVLI sample: L1289-1
Sampling date: February 22, 1996
Sample description: D1

Parameter	Results	MRL	Analysis Date	Analyst
Total Metals: $\mu\text{g/l}$				
Chromium	50	10	03/05/96	SRM
Lead	22	3	02/28/96	JSW
Volatile Organics: $\mu\text{g/l}$				
Toluene	⌘	1	03/06/96	MWB
Xylenes	⌘	3	03/06/96	MWB
Ethylbenzene	⌘	1	03/06/96	MWB
MEK	⌘	10	03/06/96	MWB
Methylene chloride	⌘	5	03/06/96	MWB
1,1,1-Trichloroethane	⌘	1	03/06/96	MWB

Analyst's initials follow dates of analysis:

MWB = Mark W. Bailey
SRM = Simone R. Mathis
KJB = Keith J. Becki

JSW = Jeffrey S. Williams
RSL = Robert S. Lynch

Huron Valley Laboratories, Inc.

Techna Corporation Project #: 00642-01M-002
HVLI Project: L1289

HVLI sample: L1289-2
Sampling date: February 22, 1996
Sample description: D2 comp

Parameter	Results	MQL
Ignitability:		
Flash point cc °F	>200	-----
Corrosivity:		
pH, S.U.	10.07	-----
Reactivity: mg/kg		
Cyanide	⌘	0.25
Sulfide*	⌘	5
TCLP Metals: mg/l extract level		
Arsenic	⌘	0.005
Barium	0.7	0.6
Cadmium	0.02	0.01
Chromium	⌘	0.02
Copper	0.04	0.02
Lead	⌘	0.08
Mercury	⌘	0.001
Selenium	0.025	0.005
Silver	⌘	0.02
Zinc	0.23	0.02

*The results for reactive sulfide are suspect due to accuracy values outside the acceptance limits.

Huron Valley Laboratories, Inc.

Techna Corporation Project #: 00642-01M-002
HVLI Project: L1289

HVLI sample: L1289-2
Sampling date: February 22, 1996
Sample description: D2 comp

Parameter	Results	ML
TCLP: mg/l extract level		
Benzene	⌘	0.02
Carbon tetrachloride	⌘	0.02
Chlorobenzene	⌘	0.05
Chloroform	⌘	0.02
1,2-Dichloroethane	⌘	0.02
1,1-Dichloroethene	⌘	0.02
1,4-Dichlorobenzene	⌘	0.05
Methyl ethyl ketone	⌘	0.10
Tetrachloroethene	⌘	0.03
Trichloroethene	⌘	0.05
Vinyl chloride	⌘	0.03
TCLP: mg/l extract level		
Pyridine	⌘	0.05
Cresols	⌘	0.02
2,4-Dinitrotoluene	⌘	0.06
Hexachlorobenzene	⌘	0.03
Hexachlorobutadiene	⌘	0.05
Hexachloroethane	⌘	0.06
Nitrobenzene	⌘	0.02
Pentachlorophenol	⌘	0.08
2,4,5-Trichlorophenol	⌘	0.09
2,4,6-Trichlorophenol	⌘	0.07

HVLI QC Report for Project No. L1289

Sample ID	Parameter	Method	Date	Analyst	Blank	A	B	Mean	RPD	CL	Spike Value	True Value	% Recovery	LCL	UCL	Units
L1289-2	Flashpoint	1010	3/6/96	KJB			>	200		20.00						°F
L1289-2	pH	9045B	3/6/96	KJB	@28.5°C	10.059	10.080	10.070	0.21	20.00						S.U.
L1324-2	Reactive Cyanide	Ch. 7	3/7/96	DJH	<0.02	< 0.25	< 0.25	< 0.25		20.00	4.89	5.00	97.80	80.00	120.00	mg/kg
L1289-2	Reactive Sulfide	4500-S ²	3/8/96	DJH	<2	< 5	< 5	< 5		20.00	<5	50	.	80.00	120.00	mg/kg
L1289-2	Reactive Sulfide	4500-S ²	3/8/96	DJH	<2	< 5	< 5	< 5		20.00	<5	50	.	80.00	120.00	mg/kg

Methods from: SW-846 Third Ed. or Standard Method 18th Edition.

Acceptable sample RPD values are lower than the control limit (CL).

Acceptable % Recovery values are between the Lower (LCL) and Upper (UCL) Control Limits.

**This sample was reanalyzed and the % recovery obtained is within +/- 20% of the original values.

% Recovery = $100 \times (\text{Spike value} - \text{Sample value}) / \text{True value}$

Mean = $(A+B)/2$

RPD = $100 \times \text{ABS}(A-B) / \text{Mean}$

Approved by

HVLI QC Report for Project No. L1262, L1263, L1272, L1289, L1291, L1302

Sample ID	Parameter	Method	Date	Analyst	Blank	A	B	Mean	RPD	CL	Spike Value	True Value	% Recovery	LCL	UCL	Units
L1269-1	Arsenic	206.3	3:5:96	SRM	<0.001	<0.005	<0.005	<0.005		20.00	0.0260	0.0250	104.00	80.00	120.00	mg/l
L1269-1	Barium	208.1	3:1:96	SRM	<0.3	<0.6	<0.6	<0.6		20.00	9.26	10.00	92.60	80.00	120.00	mg/l
L1269-1	Cadmium	213.1	3:5:96	SRM	<0.005	<0.01	<0.01	<0.01		19.54	2.096	2.000	104.80	80.00	116.74	mg/l
L1269-1	Chromium	218.1	3:5:96	SRM	<0.01	0.046	0.040	0.043	*13.95	20.00	4.428	4.000	109.63	80.00	120.00	mg/l
L1269-1	Copper	220.1	3:5:96	JSW	<0.01	<0.02	<0.02	<0.02		20.00	1.986	2.000	99.30	81.53	111.30	mg/l
L1269-1	Lead	239.1	3:5:96	SRM	<0.04	0.120	0.116	0.118	*3.39	12.75	3.920	4.000	95.05	80.00	111.06	mg/l
L1269-1	Nickel	249.1	3:5:96	SRM	<0.02	0.114	0.120	0.117	*5.13	12.82	3.938	4.000	95.53	80.00	112.66	mg/l
L1262-1	Selenium	270.3	3:5:96	SRM	<0.001	<0.005	<0.005	<0.005		20.00	0.0269	0.0250	107.60	80.00	120.00	mg/l
L1269-1	Iron	236.1	3:4:96	SRM	<0.02	1.360	1.392	1.376	2.33	20.00	3.388	2.000	100.60	80.00	120.00	mg/l

Methods from: EPA 600/4-79-020, EPA 600/4-91-010

$$\text{Mean} = (A+B)/2$$

$$\text{RPD} = 100 \times \text{ABS}(A-B)/\text{Mean}$$

$$\% \text{ Recovery} = 100 \times (\text{Spike value} - \text{Sample value}) / \text{True value}$$

Acceptable sample RPD values are lower than the control limit (CL)

Acceptable % Recovery values are between the Lower (LCL) and Upper (UCL) Control Limits

*Concentrations are within 5 times detection limit; %RSDs not applicable within this range

HVLI QC Report for Project No. L1262, L1263, L1272, L1289, L1291, L1302

Sample ID	Parameter	Method	Date	Analyst	Blank	A	B	Mean	RPD	CL	Spike Value	True Value	% Recovery	LCL	UCL	Units
L1287-1	Lead	200.9	2-28-96	JSW	<0.001	<0.001	<0.001	<0.001		20.00	0.0225	0.0200	112.50	80.00	120.00	mg/l
L1232-4	Silver	200.9	3-4-96	JSW	<0.0005	<0.0005	<0.0005	<0.0005		20.00	0.0046	0.0040	115.00	80.00	120.00	mg/l
L1272-2	Calcium	215.1	3/1/96	SRM	<0.10	64.00	64.00	64.00	0.00	20.00	89.65	25.00	102.60	80.00	120.00	mg/l
L1272-1	Magnesium	242.1	3/1/96	SRM	<0.05	14.10	14.10	14.10	0.00	20.00	24.04	10.00	99.40	80.00	120.00	mg/l
L1272-2	Sodium	273.1	3/4/96	SRM	<0.10	1.59	1.59	1.59	0.00	20.00	6.49	5.00	98.00	80.00	120.00	mg/l
L1263-3	Silver	272.1	3-1-96	SRM	<0.01	1.236	1.248	1.242	0.97	14.52	5.372	4.000	103.25	80.00	120.00	mg/l

Methods from: EPA 600/4-79-020, EPA 600/4-91-010

$$\text{Mean} = (A+B)/2$$

$$\text{RPD} = 100 \cdot \text{ABS}(A-B) / \text{Mean}$$

$$\% \text{ Recovery} = 100 \cdot (\text{Spike value} - \text{Sample value}) / \text{True value}$$

Acceptable sample RPD values are lower than the control limit (CL)

Acceptable %Recovery values are between the Lower (LCL) and Upper (UCL) Control Limits

Approved by gpi

Sample ID	Parameter	Method	Date	Analyst	Blank	A	B	Mean	RPD	CL %RSD	Spike Value	True Value	% Recovery	LCL	UCL	Units
L1289-2X	Arsenic	7061	3:11:96	SRM	<0.001	<0.005	<0.005	<0.005		20.00	0.0228	0.0250	91.20	80.00	120.00	mg/l
L1309-1X	Barium	7080	3:15:96	SRM	<0.3	1.88	1.80	1.84	*4.35	20.00	12.08	10.00	102.40	80.00	120.00	mg/l
L1309-1X	Cadmium	7130	3:8:96	JSW	<0.005	0.050	0.048	0.049	*4.08	19.54	1.984	2.000	96.75	80.00	116.74	mg/l
L1309-1X	Chromium	7190	3:8:96	JSW	<0.01	<0.02	<0.02	<0.02		20.00	4.140	4.000	103.50	80.00	120.00	mg/l
L1309-1X	Copper	7210	3:7:96	SRM	<0.01	0.118	0.112	0.115	5.22	20.00	2.200	2.000	104.25	81.53	111.30	mg/l
L1309-1X	Lead	7420	3:7:96	SRM	<0.04	0.752	0.744	0.748	1.07	12.75	4.680	4.000	98.30	80.00	111.06	mg/l
L1266-1X	Mercury	7470	3:7:96	SRM	<0.0002	<0.001	<0.001	<0.001		20.00	0.0158	0.0150	105.33	80.00	120.00	mg/l
L1309-1X	Nickel	7520	3:7:96	SRM	<0.02	0.542	0.540	0.541	0.37	12.82	4.340	4.000	94.98	80.00	112.66	mg/l
L1289-2X	Selenium	7741	3:11:96	SRM	<0.001	0.0238	0.0260	0.0249	*8.84	20.00	Dilution	0.0250	103.50	80.00	120.00	mg/l
L1290-1X	Silver	7760	3:7:96	SRM	<0.01	0.034	0.030	0.032	*12.50	14.52	4.172	4.000	103.50	80.00	120.00	mg/l
L1309-1X	Zinc	7950	3:7:96	SRM	<0.01	0.230	0.230	0.230	0.00	15.67	2.316	2.000	104.30	80.00	120.00	mg/l
L1267-1X	Iron	7380	3:11:96	SRM	<0.02	0.112	0.112	0.112	*0.00	20.00	2.070	2.000	97.90	80.00	120.00	mg/l

Methods from: SW-846 Third Edition, EPA 600/4-79-020, EPA 600/4-91-010

Mean=(A+B)/2

RPD=100*ABS(A-B)/Mean

% Recovery=100*(Spike value-Sample value)/True value

Acceptable sample RPD values are lower than the control limit (CL)

Acceptable %Recovery values are between the Lower (LCL) and Upper (UCL) Control Limits

*Concentrations are within 5 times detection limit; %RSDs not applicable within this range

Approved by Jens

HVLI QC Report for Project No. L1266, L1267, L1289, L1290, L1293, L1309

Sample ID	Parameter	Method	Date	Analyst	Blank	A	B	Mean	RPD	CL	Spike Value	True Value	% Recovery	LCL	UCL	Units
L1257-4X	Antimony	200.9	3:1:96	JSW	<0.005	0.093	0.050	0.072	60.14	20.00	0.655	0.500	118.70	80.00	120.00	mg/l
L1257-4X	Beryllium	200.9	3:1:96	JSW	<0.001	<0.002	<0.002	<0.002		20.00	0.0077	0.0080	96.25	80.00	120.00	mg/l
L1257-4X	Thallium	200.9	2:29:96	JSW	<0.005	<0.05	<0.05	<0.05		20.00	0.585	0.500	117.00	80.00	120.00	mg/l
L1309-1X	Antimony	200.9	3:1:4:96	JSW	<0.005	<0.05	<0.05	<0.05		20.00	0.584	0.500	116.80	80.00	120.00	mg/l
L1309-1X	Beryllium	200.9	3:15:96	JSW	<0.001	<0.002	<0.002	<0.002		20.00	0.0067	0.0080	83.75	80.00	120.00	mg/l
L1309-1X	Thallium	200.9	3:1:4:96	JSW	<0.005	<0.05	<0.05	<0.05		20.00	0.453	0.500	90.60	80.00	120.00	mg/l
L1267-1X	Sodium	7770	3/12/96	SRM	<0.10	41.84	41.90	41.87	0.14	20.00	51.86	10.00	99.90	80.00	120.00	mg/l

Methods from: SW-846 Third Edition, EPA 600/4-79-020, EPA 600/4-91-010

$$\text{Mean} = (A + B) / 2$$

$$\text{RPD} = 100 \times \text{ABS}(A - B) / \text{Mean}$$

$$\% \text{ Recovery} = 100 \times (\text{Spike value} - \text{Sample value}) / \text{True value}$$

Acceptable sample RPD values are lower than the control limit (CL)

Acceptable % Recovery values are between the Lower (LCL) and Upper (UCL) Control Limits

*Concentrations are within 5 times detection limit; %RSDs not applicable within this range

Approved by JSW

HURON VALLEY LABORATORIES, INC.

Surrogate QC Data for VOCs (GC/MS)
 Analysis Date: 3-6-96
 For HVLI Projects: L1287 / L1289 / L1319
 Analyst: mwb
 US EPA Method 8260

Sample ID	Parameter	Analytical Value	True Value	% Recovery	LCL	UCL	Units
Calibration Std.	Bromochloromethane	80.0	80.0	100.00	80.00	120.00	µg/ml
	2-Bromo-1-chloropropane	80.0	80.0	100.00	80.00	120.00	µg/ml
	1,4-Dichlorobutane	80.0	80.0	100.00	80.00	120.00	µg/ml
blank	Bromochloromethane	76.1	80.0	95.08	80.00	120.00	µg/ml
	2-Bromo-1-chloropropane	77.2	80.0	96.45	80.00	120.00	µg/ml
	1,4-Dichlorobutane	87.5	80.0	109.34	80.00	120.00	µg/ml
L1287-1a	Bromochloromethane	76.9	80.0	96.11	80.00	120.00	µg/ml
	2-Bromo-1-chloropropane	78.9	80.0	98.61	80.00	120.00	µg/l
	1,4-Dichlorobutane	86.2	80.0	107.73	80.00	120.00	µg/l
L1287-1b	Bromochloromethane	81.9	80.0	102.32	80.00	120.00	µg/l
	2-Bromo-1-chloropropane	80.8	80.0	101.04	80.00	120.00	µg/l
	1,4-Dichlorobutane	87.7	80.0	109.68	80.00	120.00	µg/l
L1287-1spa	Bromochloromethane	181	180	100.67	80.00	120.00	µg/l
	2-Bromo-1-chloropropane	81.4	80.0	101.81	80.00	120.00	µg/l
	1,4-Dichlorobutane	82.3	80.0	102.93	80.00	120.00	µg/l
L1287-1spb	Bromochloromethane	173	180	95.88	80.00	120.00	µg/l
	2-Bromo-1-chloropropane	77.1	80.0	96.33	80.00	120.00	µg/l
	1,4-Dichlorobutane	83.5	80.0	104.34	80.00	120.00	µg/l
L1289-1	Bromochloromethane	76.5	80.0	95.65	80.00	120.00	µg/l
	2-Bromo-1-chloropropane	77.8	80.0	97.19	80.00	120.00	µg/l
	1,4-Dichlorobutane	77.8	80.0	97.27	80.00	120.00	µg/l
L1319-1	Bromochloromethane	82.6	80.0	103.28	80.00	120.00	µg/l
	2-Bromo-1-chloropropane	80.4	80.0	100.44	80.00	120.00	µg/l
	1,4-Dichlorobutane	81.3	80.0	101.61	80.00	120.00	µg/l
L1319-2	Bromochloromethane	80.8	80.0	100.98	80.00	120.00	µg/l
	2-Bromo-1-chloropropane	80.6	80.0	100.79	80.00	120.00	µg/l
	1,4-Dichlorobutane	86.2	80.0	107.80	80.00	120.00	µg/l
L1319-3	Bromochloromethane	78.1	80.0	97.60	80.00	120.00	µg/l
	2-Bromo-1-chloropropane	78.1	80.0	97.62	80.00	120.00	µg/l
	1,4-Dichlorobutane	83.4	80.0	104.30	80.00	120.00	µg/l

%Recovery = 100 * Analytical value / True value

Acceptable %Recovery values are between the lower (LCL) and upper (UCL) control limits

Approved by _____

mwb

3/8/96
 MAR6PM.XLS

Huron Valley Laboratories, Inc.

QC Data for VOCs
 Analysis Date: 3-6-96
 For HVLI Projects: L1287 / L1289 / L1319
 Analyst: mwb
 US EPA Method 8260

Sample ID	Parameter	Blank (µg/l)	A (µg/l)	B (µg/l)	Mean (µg/l)	RPD	CL %RSD
L1287-1	Acrolein	< 8.2	< 8.2	< 8.2	< 8.2		20.00
	Acrylonitrile	< 8.2	< 8.2	< 8.2	< 8.2		20.00
	Benzene	< 0.9	< 0.9	< 0.9	< 0.9		20.00
	Bromodichloromethane	< 1.3	< 1.3	< 1.3	< 1.3		20.00
	Bromoform	< 1.1	< 1.1	< 1.1	< 1.1		20.00
	Bromomethane	< 1.4	< 1.4	< 1.4	< 1.4		20.00
	Carbon tetrachloride	< 1.1	< 1.1	< 1.1	< 1.1		20.00
	Chlorobenzene	< 1.1	< 1.1	< 1.1	< 1.1		20.00
	Chloroethane	< 0.9	< 0.9	< 0.9	< 0.9		20.00
	2-Chloroethyl vinyl ether	< 1.4	< 1.4	< 1.4	< 1.4		20.00
	Chloroform	< 0.9	< 0.9	< 0.9	< 0.9		20.00
	Chloromethane	< 1.3	< 1.3	< 1.3	< 1.3		20.00
	Dibromochloromethane	< 1.3	< 1.3	< 1.3	< 1.3		20.00
	1,2-Dichlorobenzene	< 1.1	< 1.1	< 1.1	< 1.1		20.00
	1,3-Dichlorobenzene	< 1.3	< 1.3	< 1.3	< 1.3		20.00
	1,4-Dichlorobenzene	< 1.1	< 1.1	< 1.1	< 1.1		20.00
	1,1-Dichloroethane	< 1.1	< 1.1	< 1.1	< 1.1		20.00
	1,2-Dichloroethane	< 1.1	< 1.1	< 1.1	< 1.1		20.00
	1,1-Dichloroethene	< 1.1	< 1.1	< 1.1	< 1.1		20.00
	trans-1,2-Dichloroethene	< 1.1	< 1.1	< 1.1	< 1.1		20.00
	1,2-Dichloropropane	< 1.1	< 1.1	< 1.1	< 1.1		20.00
	cis-1,3-Dichloropropane	< 0.9	< 0.9	< 0.9	< 0.9		20.00
	trans-1,3-Dichloropropane	< 1.1	< 1.1	< 1.1	< 1.1		20.00
	Ethylbenzene	< 1.3	< 1.3	< 1.3	< 1.3		20.00
	Methylene chloride	< 1.6	< 1.6	< 1.6	< 1.6		20.00
	1,1,2,2-Tetrachloroethane	< 1.3	< 1.3	< 1.3	< 1.3		20.00
	Tetrachloroethene	< 1.1	< 1.1	< 1.1	< 1.1		20.00
	Toluene	< 1.1	< 1.1	< 1.1	< 1.1		20.00
	1,1,1-Trichloroethane	< 1.1	< 1.1	< 1.1	< 1.1		20.00
	1,1,2-Trichloroethane	< 0.9	< 0.9	< 0.9	< 0.9		20.00
	Trichloroethene	< 1.1	< 1.1	< 1.1	< 1.1		20.00
	Vinyl chloride	< 1.4	< 1.4	< 1.4	< 1.4		20.00
	m + p-Xylene	< 1.3	< 1.3	< 1.3	< 1.3		20.00
	o-Xylene	< 1.3	< 1.3	< 1.3	< 1.3		20.00

Mean = (A + B)/2

RPD = 100 * ABS(A-B)/Mean

Acceptable RPD values are lower than the control limit (CL)

Approved by

3/8/96
 MAR6PM.XLS

Huron Valley Laboratories, Inc.

QC Data for VOCs

Analysis Date: 3-6-96

For HVLI Projects: L1287 / L1289 / L1319

Analyst: mwb

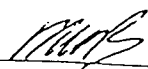
US EPA Method 8260

Sample ID	Parameter		Sample Value (µg/l)	Spike Value (µg/l)	True Value (µg/l)	% Recovery	LCL	UCL
L1287-1	1,1-Dichloroethene	<	1.1	90.4	100.0	90.45	80.00	120.00
	Methylene chloride	<	1.6	100.2	100.0	100.16	80.00	120.00
	trans-1,2-Dichloroethene	<	1.1	89.7	100.0	89.74	80.00	120.00
	1,1-Dichloroethane	<	1.1	95.0	100.0	95.02	80.00	120.00
	Chloroform	<	0.9	93.5	100.0	93.49	80.00	120.00
	1,1,1-Trichloroethane	<	1.1	94.5	100.0	94.54	80.00	120.00
	Carbon tetrachloride	<	1.1	92.0	100.0	91.99	80.00	120.00
	1,2-Dichloroethane	<	1.1	96.7	100.0	96.68	80.00	120.00
	Benzene	<	0.9	99.1	100.0	99.05	80.00	120.00
	Trichloroethene	<	1.1	96.1	100.0	96.14	80.00	120.00
	1,2-Dichloropropane	<	1.1	98.5	100.0	98.46	80.00	120.00
	Bromodichloromethane	<	1.3	99.5	100.0	99.49	80.00	120.00
	trans-1,3-Dichloropropene	<	1.1	100.8	100.0	100.84	80.00	120.00
	Toluene	<	1.1	99.0	100.0	99.00	80.00	120.00
	cis-1,3-Dichloropropene	<	0.9	105.0	100.0	104.95	80.00	120.00
	1,1,2-Trichloroethane	<	0.9	100.8	100.0	100.77	80.00	120.00
	Dibromochloromethane	<	1.3	99.2	100.0	99.19	80.00	120.00
	Tetrachloroethene	<	1.1	100.8	100.0	100.78	80.00	120.00
	Chlorobenzene	<	1.1	100.8	100.0	100.79	80.00	120.00
	Ethylbenzene	<	1.3	97.3	100.0	97.26	80.00	120.00
	m + p-Xylene	<	1.3	97.1	100.0	97.09	80.00	120.00
	o-Xylene	<	1.3	95.9	100.0	95.92	80.00	120.00
	Bromoform	<	1.1	94.4	100.0	94.36	80.00	120.00
	1,1,2,2-Tetrachloroethane	<	1.3	102.8	100.0	102.83	80.00	120.00
	1,2-Dichlorobenzene	<	1.1	101.0	100.0	100.95	80.00	120.00
	1,3-Dichlorobenzene	<	1.3	101.0	100.0	101.04	80.00	120.00
	1,4-Dichlorobenzene	<	1.1	101.0	100.0	101.00	80.00	120.00

%Recovery = 100*(Spike value-Sample value)/True value

Acceptable %Recovery values are between the lower (LCL) and upper (UCL) control limits

Approved by



3/8/96
MAR6PM.XLS

Huron Valley Laboratories, Inc.

QC Data for VOCs

Analysis Date: 3-6-96

For HVLI Projects: L1287 / L1289 / L1319

Analyst: mwb

US EPA Method 8260

Spike duplicate

Sample ID	Parameter	A ($\mu\text{g/l}$)	B ($\mu\text{g/l}$)	Mean ($\mu\text{g/l}$)	RPD	CL %RSD
L1287-1	1,1-Dichloroethane	88.7	92.1	90.4	3.76	20.00
	Methylene chloride	100.7	99.6	100.2	1.12	20.00
	trans-1,2-Dichloroethane	89.0	90.5	89.7	1.70	20.00
	1,1-Dichloroethane	95.0	95.0	95.0	0.05	20.00
	Chloroform	94.0	92.9	93.5	1.17	20.00
	1,1,1-Trichloroethane	95.2	93.9	94.5	1.37	20.00
	Carbon tetrachloride	90.5	93.5	92.0	3.20	20.00
	1,2-Dichloroethane	95.8	97.5	96.7	1.76	20.00
	Benzene	100.7	97.4	99.1	3.40	20.00
	Trichloroethene	96.3	96.0	96.1	0.27	20.00
	1,2-Dichloropropane	99.1	97.8	98.5	1.34	20.00
	Bromodichloromethane	99.5	99.4	99.5	0.11	20.00
	trans-1,3-Dichloropropene	102.6	99.1	100.8	3.46	20.00
	Toluene	99.4	98.6	99.0	0.81	20.00
	cis-1,3-Dichloropropene	106.9	103.0	105.0	3.70	20.00
	1,1,2-Trichloroethane	102.5	99.0	100.8	3.51	20.00
	Dibromochloromethane	100.6	97.7	99.2	2.93	20.00
	Tetrachloroethene	99.6	102.0	100.8	2.40	20.00
	Chlorobenzene	100.6	101.0	100.8	0.41	20.00
	Ethylbenzene	95.9	98.7	97.3	2.86	20.00
	m + p-Xylene	95.8	98.4	97.1	2.72	20.00
	o-Xylene	95.0	96.8	95.9	1.88	20.00
	Bromoform	95.5	93.2	94.4	2.45	20.00
	1,1,2,2-Tetrachloroethane	102.0	103.7	102.8	1.72	20.00
	1,2-Dichlorobenzene	102.7	99.2	101.0	3.44	20.00
	1,3-Dichlorobenzene	101.9	100.1	101.0	1.78	20.00
	1,4-Dichlorobenzene	101.9	100.1	101.0	1.85	20.00

Mean = (A + B)/2

RPD = $100 \cdot \text{ABS}(A-B)/\text{Mean}$

Acceptable RPD values are lower than the control limit (CL)

Approved by



3/8/96
MAR6 PM . XLS

Huron Valley Laboratories, Inc.

Surrogate Data for VOCs
Analysis Date: 02/06/96
Analyst: rsl
For HVLI Projects: L1289
US EPA method 8021

a,a,a-Trifluorotoluene

Sample ID	Analytical Value	True Value	% Recovery	LCL	UCL	Units
ZHE calibration standard	200.0	200.0				
Blank	208.8	200.0	100.00	80.00	120.00	ng
L1289-2xa	2082	2000	104.42	80.00	120.00	ng
L1289-2xb	2047	2000	104.08	80.00	120.00	µg/l
L1289-2xsa	2070	2000	102.35	80.00	120.00	µg/l
L1289-2xsb	2082	2000	103.49	80.00	120.00	µg/l
			104.10	80.00	120.00	µg/l

Bromochloromethane

Sample ID	Analytical Value	True Value	% Recovery	LCL	UCL	Units
ZHE calibration standard	200.0	200.0				
Blank	189.8	200.0	100.00	80.00	120.00	ng
L1289-2xa	1400	2000	94.92	80.00	120.00	ng
L1289-2xb	1662	2000	70.02	80.00	120.00	µg/l
L1289-2xsa	1620	2000	83.11	80.00	120.00	µg/l
L1289-2xsb	2137	2000	81.00	80.00	120.00	µg/l
			106.83	80.00	120.00	µg/l

2-Bromo-1-chloropropane

Sample ID	Analytical Value	True Value	% Recovery	LCL	UCL	Units
ZHE calibration standard	200.0	200.0				
Blank	203.6	200.0	100.00	80.00	120.00	ng
L1289-2xa	2013	2000	101.81	80.00	120.00	ng
L1289-2xb	2060	2000	100.65	80.00	120.00	µg/l
L1289-2xsa	2009	2000	102.99	80.00	120.00	µg/l
L1289-2xsb	2079	2000	100.45	80.00	120.00	µg/l
			103.95	80.00	120.00	µg/l

1,4-Dichlorobutane

Sample ID	Analytical Value	True Value	% Recovery	LCL	UCL	Units
ZHE calibration standard	200.0	200.0				
Blank	221.7	200.0	100.00	80.00	120.00	ng
L1289-2xa	2056.52	2000.00	110.84	80.00	120.00	ng
L1289-2xb	2298.78	2000.00	102.83	80.00	120.00	µg/l
L1289-2xsa	2225.42	2000.00	114.94	80.00	120.00	µg/l
L1289-2xsb	2249.68	2000.00	111.27	80.00	120.00	µg/l
			112.48	80.00	120.00	µg/l

* % Recovery outside acceptance limits, chromatogram checked and integration is ok.

% Recovery=100*Analytical value/True value

Acceptable % recoveries are between the lower (LCL) & upper (UCL) control limits.

Approved by RSU

Huron Valley Laboratories, Inc.

QC Data for VOCs
Analysis Date: 02-06-96
Analyst: rsl
For HVLI Projects: L1289
US EPA method 8021

Sample ID	Parameter	Blank (µg/l)	A (µg/l)	B (µg/l)	Mean (µg/l)	RPD	CL %RSD
L1289-2x	Vinyl chloride	< 3	< 30	< 30	< 30		
	1,1-Dichloroethene	< 2	< 20	< 20	< 20		20.00
	Methyl ethyl ketone	< 10	< 100	< 100	< 100		20.00
	Chloroform	< 2	< 20	< 20	< 20		20.00
	Carbon tetrachloride	< 2	< 20	< 20	< 20		20.00
	Benzene	< 2	< 20	< 20	< 20		20.00
	1,2-Dichloroethane	< 2	< 20	< 20	< 20		18.72
	Trichloroethene	< 5	< 50	< 50	< 50		20.00
	Tetrachloroethene	< 3	< 30	< 30	< 30		18.85
	Chlorobenzene	< 5	< 50	< 50	< 50		20.00
	1,4-Dichlorobenzene	< 5	< 50	< 50	< 50		20.00

Sample ID	Parameter	Sample Value (µg/l)	Spike Value (µg/l)	True Value (µg/l)	% Recovery	LCL	UCL
L1289-2x	Vinyl chloride	< 30	1907	2004	95.13	80.00	120.00
	Methyl ethyl ketone	< 100	4174	5000	83.47	80.00	120.00
	1,1-Dichloroethene	< 20	745.7	750.0	99.43	80.00	115.67
	Chloroform	< 20	732.3	750.0	97.63	80.00	113.75
	Carbon tetrachloride	< 20	752.4	750.0	100.32	80.00	107.17
	Benzene	< 20	735.2	750.0	98.02	80.00	119.28
	1,2-Dichloroethane	< 20	729.5	750.0	97.26	80.00	119.44
	Trichloroethene	< 50	717.1	750.0	95.61	80.00	112.76
	Tetrachloroethene	< 30	778.4	750.0	103.78	80.00	112.87
	Chlorobenzene	< 50	747.6	750.0	99.68	80.00	114.50
	1,4-Dichlorobenzene	< 50	778.8	750.0	103.83	80.00	116.28

Spike duplicate

Sample ID	Parameter	A (µg/l)	B (µg/l)	Mean (µg/l)	RPD	CL %RSD
L1289-2x	Vinyl chloride	1956	1857	1907	5.19	20.00
	Methyl ethyl ketone	4173	4174	4174	0.02	20.00
	1,1-Dichloroethene	773.8	717.6	745.7	7.54	20.00
	Chloroform	706.0	758.5	732.3	7.17	20.00
	Carbon tetrachloride	767.6	737.2	752.4	4.04	20.00
	Benzene	721.0	749.3	735.2	3.85	18.72
	1,2-Dichloroethane	727.5	731.4	729.5	0.53	20.00
	Trichloroethene	711.1	723.1	717.1	1.67	18.85
	Tetrachloroethene	797.1	759.6	778.4	4.82	20.00
	Chlorobenzene	759.1	736.1	747.6	3.08	20.00
	1,4-Dichlorobenzene	802.7	754.8	778.8	6.15	20.00

Mean=(A+B)/2

RPD=100*ABS(A-B)/Mean

Acceptable RPD values are lower than the control limit (UCL).

%Recovery = 100*(Spike value-Sample value)/True value

Acceptable %Recovery values are between the lower (LCL) and upper (UCL) control limits.

Approved by RS

Huron Valley Laboratories, Inc. Surrogate Data

Surrogate QC Data for BN/AE

Analysis date:3-13-96

Extraction date:3-6-96

Analyst: MWB

For HVLI Project: L1289

US EPA Method 8270A

Sample ID	Parameter	Analytical Value	True Value	% Recovery	LCL	UCL	Units
Calibration Std.	2-Fluorophenol	80.0	80.0	100.00	10.00	110.00	µg/ml
	Phenol-D5	80.0	80.0	100.00	10.00	110.00	µg/ml
	Nitrobenzene-D5	80.0	80.0	100.00	48.00	116.00	µg/ml
	2-Fluorobiphenyl	80.0	80.0	100.00	52.00	119.00	µg/ml
	Tribromophenol	80.0	80.0	100.00	46.00	119.00	µg/ml
	p-Terphenyl-D14	80.0	80.0	100.00	33.00	127.00	µg/ml
Blank	2-Fluorophenol	36.4	80.0	45.55	10.00	110.00	µg/ml
	Phenol-D5	33.9	80.0	42.40	10.00	110.00	µg/ml
	Nitrobenzene-D5	54.6	80.0	68.25	48.00	116.00	µg/ml
	2-Fluorobiphenyl	57.9	80.0	72.43	52.00	119.00	µg/ml
	Tribromophenol	52.5	80.0	65.65	46.00	119.00	µg/ml
	p-Terphenyl-D14	56.6	80.0	70.75	33.00	127.00	µg/ml
L1289-2xa	2-Fluorophenol	134	400	33.48	10.00	110.00	µg/l
	Phenol-D5	101	400	25.33	10.00	110.00	µg/l
	Nitrobenzene-D5	300	400	75.03	48.00	116.00	µg/l
	2-Fluorobiphenyl	312	400	77.93	52.00	119.00	µg/l
	Tribromophenol	312	400	78.10	37.00	119.00	µg/l
	p-Terphenyl-D14	319	400	79.83	33.00	127.00	µg/l
L1289-2xb	2-Fluorophenol	238	400	59.50	10.00	110.00	µg/l
	Phenol-D5	229	400	57.13	10.00	110.00	µg/l
	Nitrobenzene-D5	336	400	83.95	48.00	116.00	µg/l
	2-Fluorobiphenyl	327	400	81.63	52.00	119.00	µg/l
	Tribromophenol	347	400	86.80	37.00	119.00	µg/l
	p-Terphenyl-D14	317	400	79.13	33.00	127.00	µg/l
L1289-2xspa	2-Fluorophenol	208	400	52.05	10.00	110.00	µg/l
	Phenol-D5	206	400	51.50	10.00	110.00	µg/l
	Nitrobenzene-D5	333	400	83.35	48.00	116.00	µg/l
	2-Fluorobiphenyl	326	400	81.38	52.00	119.00	µg/l
	Tribromophenol	327	400	81.83	37.00	119.00	µg/l
	p-Terphenyl-D14	318	400	79.50	33.00	127.00	µg/l
L1289-2xspb	2-Fluorophenol	211	400	52.63	10.00	110.00	µg/l
	Phenol-D5	196	400	48.88	10.00	110.00	µg/l
	Nitrobenzene-D5	350	400	87.60	48.00	116.00	µg/l
	2-Fluorobiphenyl	329	400	82.13	52.00	119.00	µg/l
	Tribromophenol	334	400	83.38	37.00	119.00	µg/l
	p-Terphenyl-D14	333	400	83.28	33.00	127.00	µg/l

%Recovery = 100*Analytical value/True value

Acceptable %Recovery values are between the lower (LCL) and upper (UCL) control limits

Approved by



3/14/96

MAR13T.XLS

Huron Valley Laboratories, Inc.

QC Data for BN/AE
 Analysis date: 3-13-96
 Extraction date: 3-6-96
 Analyst: MWB
 For HVLI Project: L1289
 US EPA Method 8270A

Sample ID	Parameter	Blank	A	B	Mean	RPD	CL %RSD
TCLP: mg/l extract level							
L1289-2x	Pyridine	< 0.010	< 0.050	< 0.050	< 0.050		20.00
	Cresols	< 0.004	< 0.020	< 0.020	< 0.020		20.00
	2,4-Dinitrotoluene	< 0.012	< 0.060	< 0.060	< 0.060		20.00
	Hexachlorobenzene	< 0.006	< 0.030	< 0.030	< 0.030		20.00
	Hexachlorobutadiene	< 0.010	< 0.050	< 0.050	< 0.050		20.00
	Hexachloroethane	< 0.012	< 0.060	< 0.060	< 0.060		20.00
	Nitrobenzene	< 0.004	< 0.020	< 0.020	< 0.020		20.00
	Pentachlorophenol	< 0.016	< 0.080	< 0.080	< 0.080		20.00
	2,4,5-Trichlorophenol	< 0.018	< 0.090	< 0.090	< 0.090		20.00
	2,4,6-Trichlorophenol	< 0.014	< 0.070	< 0.070	< 0.070		20.00

Sample ID	Parameter	Sample Value	Spike Value	True Value	% Recovery	LCL	UCL
TCLP: mg/l extract level							
L1289-2x	Cresols	< 0.020	0.640	0.800	79.96	30.00	120.00
	2,4-Dinitrotoluene	< 0.060	0.339	0.400	84.80	30.00	120.00
	Hexachlorobenzene	< 0.030	0.358	0.400	89.59	30.00	120.00
	Hexachlorobutadiene	< 0.050	0.385	0.400	96.13	30.00	120.00
	Hexachloroethane	< 0.060	0.365	0.400	91.21	30.00	120.00
	Nitrobenzene	< 0.020	0.368	0.400	91.88	30.00	120.00
	2,4,5-Trichlorophenol	< 0.090	0.327	0.400	81.86	30.00	120.00
	2,4,6-Trichlorophenol	< 0.070	0.336	0.400	83.89	30.00	120.00

Spike duplicate

Sample ID	Parameter	A	B	Mean	RPD	CL %RSD
TCLP: mg/l extract level						
L1289-2x	Cresols	0.628	0.652	0.640	3.78	20.00
	2,4-Dinitrotoluene	0.328	0.350	0.339	6.37	20.00
	Hexachlorobenzene	0.355	0.362	0.358	1.93	20.00
	Hexachlorobutadiene	0.380	0.389	0.385	2.44	20.00
	Hexachloroethane	0.359	0.371	0.365	3.10	20.00
	Nitrobenzene	0.360	0.375	0.368	4.14	20.00
	2,4,5-Trichlorophenol	0.323	0.332	0.327	2.90	20.00
	2,4,6-Trichlorophenol	0.329	0.342	0.336	4.08	20.00

$$\text{Mean} = (A + B) / 2$$

$$\text{RPD} = 100 * \text{ABS}(A - B) / \text{Mean}$$

Acceptable RPD values are lower than the control limit (CL)

$$\% \text{Recovery} = 100 * (\text{Spike value} - \text{Sample value}) / \text{True value}$$

Acceptable %Recovery values are between the lower (LCL) and upper (UCL) control limits

Approved by 

3/14/96
 MAR13T.XLS

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MID005356704 CS001

3. Generator's Name and Mailing Address

GENERAL MOTORS CORP.

2860 CLARK ST
DETROIT, MI

Generator's Phone 313556-0816

MAILING ADDRESS:

M.C. 482-310-004

485 W. MILWAUKEE AVE

DETROIT, MI 48202

4. Transporter 1 Company Name

LSTS INCORPORATED

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

C.P.S.

7. Transporter 4 Company Name

Municipal Service Corp

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No. Type

11.

Total Quantity

12. Unit

Wt/Vol

13.

Waste Profile
Sheet #

a.

NON D.O.T. REGULATED MATERIAL

001DM

100

P

EM 94-
0197

b.

14. Additional Descriptions for Materials Listed Above

a) GASOLINE CONTAMINATED P.P.E.

PLT 14400

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO. 313-842-2367

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.

ON BEHALF OF GM

Printed/Typed Name

BRIDGET PITLOCK

Signature

Bridget Pitlock

Month Day Year
11 01 79

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Kenneth Smith

Signature

Kenneth Smith

Month Day Year
10 01 79

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DOREEN S BLAIR

Signature

Doreen S Blair

Month Day Year
10 11 79

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

EDWIN VOLK

Signature

Edwin Volk

Month Day Year
10 12 58

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Tara Huff

Signature

Tara Huff

Month Day Year
10 12 58

• First Copy: Return to Generator

• Third Copy: Transporter #2

• Fifth Copy: Transporter #4

• Seventh Copy: Facility Copy

• Second Copy: Transporter #1

• Fourth Copy: Transporter #3

• Sixth Copy: Generator Copy

GENERATOR

TRANSPORTER

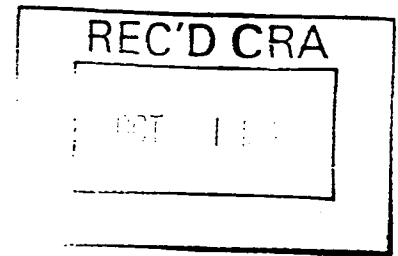
FACILITY

APPENDIX B

SEPTEMBER 27, 1996 LETTER



Worldwide Facilities Group
Environmental & Regulatory Support
Remediation Team



September 27, 1996

Mr. Daniel Dailey
Michigan Department of Environmental Quality (MDEQ)
Waste Management Division (WMD)
608 West Allegan Street
Lansing, MI 48909

Dear Mr. Dailey:

**Re: General Motors Corporation Clark Street Facility
Interim Status Hazardous Waste Container Storage Unit
MID 005356704
Remedial Action Activities/Schedule**

Pursuant to our telephone conversation on Monday, September 23, 1996, General Motors Corporation (GM) requests an extension of the closure period for the former Clark Street Facility interim status hazardous waste container storage unit (MID 005356704) to allow for completion of the interim response soil remedial measures. Per the following schedule, GM is requesting 90 days from MDEQ-WMD approval.

To expedite completion of this project, GM has elected to proceed with excavation in the limited area of soil boring SB-7 and SB-8. It is GM's understanding that submission of a Supplemental Closure Assessment Report and Interim Response Soil Excavation Work Plan are not required by the MDEQ-WMD prior to this excavation activity. It is also GM's understanding that approval of this extension request is required prior to beginning excavation. The following sections provide an update and schedule with respect to the planned closure activities of the Clark Street interim status hazardous waste container storage unit.

Closure Plan Overview

The referenced Interim Status Hazardous Waste Container Storage Unit is being closed in accordance with the Closure Plan (Chester, 1989) and MDNR stipulations from 1989 (Closure Plan). A RCRA Container Storage Pad Closure Certification Report (Chester, 1995) was submitted in August 1995. Based on that report, MDNR-WMD verbally requested additional evaluation of the areas in the vicinity of SB-7 and SB-8. Supplemental closure activities were then conducted in accordance with the February 9, 1996 Supplemental Closure Assessment letter prepared by Techna Corporation and verbally approved by MDEQ-WMD. As previously noted, GM has elected to proceed with soil excavation in this area to request clean closure, and this letter addresses the planned final activities to address and close these areas.

Work Plan

The soil at each of these locations (SB-7 and SB-8) will be excavated by Carlo Environmental Technologies (CET) under the direct supervision of Conestoga-Rovers & Associates (CRA). The initial excavations have planned dimensions of 20' x 20' x 6' (approximately 89 cubic yards). After the soil has been excavated, CRA will collect soil verification samples for toluene, ethylbenzene and xylenes (TEX). The soil samples will be collected in accordance with the Verification of Soil Remediation Guidance (April 1994, Revision 1). Samples will be collected and analyzed in a manner consistent with applicable MDEQ guidance and the approved Closure Plan. After the excavation has been verified to be excavated/remediated to the Type B Standards, CRA will direct CET to backfill the excavation.

The excavated soil will be staged/managed on Site pending final disposition.

Reporting

A Closure Report Addendum will be prepared by CRA to report on the final closure activities completed for the two referenced areas. The Closure Report Addendum will be submitted to MDEQ-WMD in accordance with the schedule presented below. GM is prepared to initiate excavation immediately upon approval.

Schedule

Notice to MDEQ-WMD	September 27, 1996
MDEQ approval to proceed	-----
Contractor mobilization	On-site awaiting MDEQ approval
Excavation activities	Immediately upon MDEQ approval
Receipt of analytical	Three weeks after excavation
Further excavation (if necessary)	Within one week of analytical receipt
Reporting	90 days from MDEQ approval

Should you have any questions or comments regarding the information presented in this letter, please do not hesitate to contact me at (313) 556-0816.

Sincerely,



Bridget R. Pitlock

c: G. Turchan, CRA

APPENDIX C

WATER DISPOSAL MANIFESTS



**MICHIGAN DEPARTMENT
OF NATURAL RESOURCES**

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Required under authority of Act 241 of 1979, as amended and Act 136, P.A. 1969.

Failure to file is punishable under section 299.548 MCL or Section 10 of Act 136, P.A. 1969.

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Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address GENERAL MOTORS CORP.		ATTN: KEN RICHARDS GM Remediation Team 485 W.M. Lumakee		A. State Manifest Document Number MI 3701150		
4. Generator's Phone (313) 556-3196		Detroit, MI 48202		B. State Generator's ID		
5. Transporter 1 Company Name Michigan Pumping		6. US EPA ID Number MIIND100612160794		C. State Transporter's ID		
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone 336757225		
9. Designated Facility Name and Site Address NAO CLARK ST-WWTP 2860 CLARK ST DETROIT MI 48232		10. US EPA ID Number MIIND101535167104		E. State Transporter's ID		
				F. Transporter's Phone		
				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 Mt/Vol	I. Waste No. N/H
a. NON-DOT REGULATED		0101111111111111		1	G	1
b.						
c.						
d.						
J. Additional Descriptions for Materials Listed Above m.p.s. Dwp # 09101696				K. Handling Codes for Wastes Listed Above a/ 1 b/ 1 c/ 1 d/ 1		
15. Special Handling Instructions and Additional Information						
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		Signature		Date		
[Signature]		[Signature]		Month Day Year 11/11/96		
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature		Date		
Printed/Typed Name		Signature		Month Day Year 11/11/96		
18. Transporter 2 Acknowledgement or Receipt of Materials		Signature		Date		
Printed/Typed Name		Signature		Month Day Year		
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name		Signature		Date		
DONATO R GUERRAS		[Signature]		Month Day Year 10/1/96		

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-392-4708 OR OUT OF STATE AT 1-800-373-7860 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-9802 24 HOURS PER DAY.



**MICHIGAN DEPARTMENT
OF NATURAL RESOURCES**

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Failure to file is punishable under section 299.548 MCL or Section 10 of Act 136, P.A. 1969.

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Form Approved. OMB No. 2050-0039 Expires 9-30-

**UNIFORM HAZARDOUS
WASTE MANIFEST**

1. Generator's US EPA ID No.

Manifest
Document No.

2. Page 1
of 1

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

3. Generator's Name and Mailing Address

General Motors Corp.

ATTN: Ken Richards

GM Remediation Team

485 W. M. I. Mackay

Detroit MI 48207

A. State Manifest Document Number

MI 3701151

B. State Generator's ID

4. Generator's Phone (313) 556-3196

5. Transporter 1 Company Name

Michigan Pumping

6. US EPA ID Number

MI ID 0000000000000000

C. State Transporter's ID

D. Transporter's Phone (313) 556-3196

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address

GM Clark St. WWTP

2960 Clark St.

Detroit MI 48232

10. US EPA ID Number

MI ID 0000000000000000

G. State Facility's ID

H. Facility's Phone (313) 842-2360

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

I. Waste
No.

N/I

a.	NON DOT - Regulated	001	T	1	500	G	029	K	N
b.									
c.									
d.									

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes
Listed Above

a/ /

b/ /

c/ /

d/ /

15. Special Handling Instructions and Additional Information

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

Signature

Date

Month Day Year
11/27/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date

Month Day Year
11/28/96

18. Transporter 2 Acknowledgement or Receipt of Materials

Printed/Typed Name

Signature

Date

Month Day Year
11/28/96

19. Discrepancy Indication Space

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

Printed/Typed Name

Signature

Date

Month Day Year
11/28/96

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

GENERATOR

TRANSPORTER

FACILITY



MICHIGAN DEPARTMENT
OF NATURAL RESOURCES

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Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address General Motors Corp		435 W. Milwaukee Detroit MI 48202		A. State Manifest Document Number MI 3701152		
4. Generator's Phone ()		6. US EPA ID Number		B. State Generator's ID		
5. Transporter 1 Company Name Michigan Pumping Service		7. US EPA ID Number		C. State Transporter's ID		
8. Transporter 2 Company Name		9. US EPA ID Number		D. Transporter's Phone (313) 75-0225		
9. Designated Facility Name and Site Address GM CLARK STREET - WWTP 2060 CLARK ST DETROIT MI 48232		10. US EPA ID Number		E. State Transporter's ID		
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER) a. Non-DOT - Regulated		12. Containers No. Type		13. Total Quantity		14. Unit M/Vol
b.		c.		d.		I. Waste No. N/H
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above a/ / b/ / c/ / d/ /				
15. Special Handling Instructions and Additional Information						
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		Signature		Date Month Day Year 11-13-16		
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature		Date Month Day Year 11-13-16		
18. Transporter 2 Acknowledgement or Receipt of Materials		Signature		Date Month Day Year		
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name Cruz Zarazua		Signature		Date Month Day Year 11-13-16		

ATT. ☐ DIS. ☐ REJ. ☐ PR ☐

Failure to file is punishable under
section 299.548 MCL or Section 10 of
Act 136, PA 1969.

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UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.									
3. Generator's Name and Mailing Address General Motors Corp				4. State Manifest Document Number MI 3701153		5. State Generator's ID											
6. Generator's Phone (313) 556-3196				7. State Transporter's ID		8. Transporter's Phone (313) 425-2225											
9. Transporter 1 Company Name Midwest Waste Service				10. US EPA ID Number MI D00024079A		11. State Transporter's ID											
12. Transporter 2 Company Name				13. US EPA ID Number		14. State Transporter's ID											
15. Designated Facility Name and Site Address 611 Clark Street - Detroit				16. US EPA ID Number MI D000535670A		17. State Facility's ID											
18. Facility's Phone (313) 442-2360																	
19. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER)						20. Containers		21. Total Quantity		22. Unit		23. Waste No.		24. N/A			
a. 100 - DOT - Regulated						No.		Type		Quantity		Unit		Waste No.			
b.																	
c.																	
d.																	
25. Additional Descriptions for Materials Listed Above						26. Handling Codes for Wastes Listed Above						a/		/			
												b/		/			
												c/		/			
												d/		/			
27. Special Handling Instructions and Additional Information																	
28. 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.																	
29. Printed/Typed Name						30. Signature						31. Date					
32. Transporter 1 Acknowledgement of Receipt of Materials						33. Signature						34. Date					
35. Printed/Typed Name						36. Signature						37. Date					
38. Transporter 2 Acknowledgement of Receipt of Materials						39. Signature						40. Date					
41. Printed/Typed Name						42. Signature						43. Date					
44. Discrepancy Indication Space																	
45. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.																	
46. Printed/Typed Name						47. Signature						48. Date					
49. Name						50. Signature						51. Date					

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GENERATOR 2nd COPY

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Rev. 10/92



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Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address General Motors Corp		485 W. Michigan St. Detroit, MI 48226		A. State Manifest Document Number MI 3701155		
4. Generator's Phone (313) 556-3866		6. US EPA ID Number		B. State Generator's ID		
5. Transporter 1 Company Name Michigan Pumping Service		8. US EPA ID Number		C. State Transporter's ID		
7. Transporter 2 Company Name		10. US EPA ID Number		D. Transporter's Phone (313) 675-0225		
9. Designated Facility Name and Site Address GM CLARK STREET-WWTP		12. Containers No. Type		E. State Transporter's ID		
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER) HM		13. Total Quantity		F. Transporter's Phone		
a. NON-DOT-REGULATED		14. Unit M/Vol		G. State Facility's ID		
b.		15. Waste No.		H. Facility's Phone (313) 942-2860		
c.		N/H				
d.						
J. Additional Descriptions for Materials Listed Above MPS # 10102896		K. Handling Codes for Wastes Listed Above		a/ / b/ / c/ / d/ /		
15. Special Handling Instructions and Additional Information						
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		Signature		Date		
17. Transporter 1 Acknowledgement of Receipt of Materials		Signature		Month Day Year		
Printed/Typed Name		Signature		Date		
18. Transporter 2 Acknowledgement or Receipt of Materials		Signature		Month Day Year		
Printed/Typed Name		Signature		Date		
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						
Printed/Typed Name		Signature		Date		



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Form Approved. OMB No. 2050-0039 Expires 9-30-9

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No.		2. Page 1 of		Information in the shaded areas is not required by Federal law.							
3. Generator's Name and Mailing Address ATM... ..				A. State Manifest Document Number MI 3701159		B. State Generator's ID									
4. Generator's Phone (313) 551-1111				6. US EPA ID Number		C. State Transporter's ID									
5. Transporter 1 Company Name M. L.				8. US EPA ID Number		D. Transporter's Phone 313 675 0225									
7. Transporter 2 Company Name				10. US EPA ID Number		E. State Transporter's ID									
9. Designated Facility Name and Site Address NAC... .. 2060 Clark St Detroit MI 48232				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		15. Waste No.		N/H	
a. 1201-DOT REGULATED						No. 1001		Type 113000X		G				N	
b.															
c.															
d.															
J. Additional Descriptions for Materials Listed Above								K. Handling Codes for Wastes Listed Above				a/ / b/ / c/ / d/ /			
15. Special Handling Instructions and Additional Information															
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								Signature				Date Month Day Year 11 12 1994			
17. Transporter 1 Acknowledgement of Receipt of Materials								Signature				Date Month Day Year 11 12 1994			
18. Transporter 2 Acknowledgement or Receipt of Materials								Signature				Date Month Day Year 11 12 1994			
19. Discrepancy Indication Space															
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.															
Printed/Typed Name DANIEL GUERRA								Signature Daniel Guerra				Date Month Day Year 11 15 94			

EPA Form 8700-22 (Rev. 9/88)

GENERATOR 2-1 COPY

PR 5110
Rev 10/92



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Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. <i>M11D005356704</i>		Manifest Document No. <i>011201</i>		2. Page 1 of		Information in the shaded areas is not required by Federal law.						
3. Generator's Name and Mailing Address <i>GENERAL MOTORS CORP ATTN: KEN RICHARDS GM REMEDIATION DEPT 475 W. MILLVARK DETROIT, MI 48202</i>						A. State Manifest Document Number <i>MI 3701201</i>								
4. Generator's Phone <i>(313) 586-2176</i>						B. State Generator's ID								
5. Transporter 1 Company Name <i>WILLIAMS</i>						C. State Transporter's ID								
7. Transporter 2 Company Name						D. Transporter's Phone <i>313.771.7215</i>								
8. US EPA ID Number						E. State Transporter's ID								
9. Designated Facility Name and Site Address <i>7800 CLARK ST - WILLY 2860 CLARK ST. DETROIT, MI 48232</i>						F. Transporter's Phone								
10. US EPA ID Number <i>M11D005356704</i>						G. State Facility's ID								
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	I. Waste No. N/H				
a. <i>NON-DOT REGULATED</i>						1011		11	4	15	NO	6		
J. Additional Descriptions for Materials Listed Above						K. Handling Codes for Wastes Listed Above								
						a/ / b/ / c/ / d/ /								
15. Special Handling Instructions and Additional Information														
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. <i>ON BEHALF OF GM</i>														
Printed/Typed Name <i>G. KATH WEST</i>						Signature <i>G. Kath West</i>			Date Month Day Year <i>11/11/94</i>					
17. Transporter 1 Acknowledgement of Receipt of Materials						Signature <i>[Signature]</i>			Date Month Day Year <i>11/11/94</i>					
Printed/Typed Name <i>RICK GILMAN</i>						Signature			Date					
18. Transporter 2 Acknowledgement or Receipt of Materials						Signature			Date					
Printed/Typed Name						Signature			Date					
19. Discrepancy Indication Space														
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.														
Printed/Typed Name <i>DONATOR GUERRA</i>						Signature <i>[Signature]</i>			Date Month Day Year <i>11/11/94</i>					

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

GENERATOR

TRANSPORTER

FACILITY



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Act 136, P.A. 1969.

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Form Approved. OMB No. 2050-0039 Expires 9-30

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. M11D005356704		Manifest Document No. MI 3701202		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address GENERAL MOTORS CORP.				ATTN: KEN RICHARDS		A. State Manifest Document Number MI 3701202			
4. Generator's Phone (313) 556-3176				5. Transporter 1 Company Name		B. State Generator's ID			
6. Transporter 1 US EPA ID Number				7. Transporter 2 Company Name		C. State Transporter's ID			
8. Transporter 2 US EPA ID Number				9. Designated Facility Name and Site Address NAD CLARK ST. - WENTZ		D. Transporter's Phone			
10. Designated Facility US EPA ID Number				11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER) NON-DOT REGULATED		12. Containers		13. Total Quantity	
14. Unit		15. Waste No.		16. No.		17. Type		18. Quantity	
a/		b/		c/		d/		e/	
J. Additional Descriptions for Materials Listed Above				K. Handling Codes for Wastes Listed Above				a/	
15. Special Handling Instructions and Additional Information				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.				Date	
Printed/Typed Name				Signature				Month Day Year	
17. Transporter 1 Acknowledgement of Receipt of Materials				Printed/Typed Name				Signature	
18. Transporter 2 Acknowledgement or Receipt of Materials				Printed/Typed Name				Signature	
19. Discrepancy Indication Space				20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.				Date	
Printed/Typed Name				Signature				Month Day Year	

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4708 OR OUT OF STATE AT 517-373-7860 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.



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Form Approved. OMB No. 2050-0039 Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No.		2. Page 1 of		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address GENERAL MOTORS CORP.		MI 10005356704		ATTN: KEN RICHARDS GM REMEDIATION TEAM 465 W. MILWAUKEE		A. State Manifest Document Number MI 4207555			
4. Generator's Phone (313) 556-3716 DETROIT, MI 48202		6. US EPA ID Number				B. State Generator's ID			
5. Transporter 1 Company Name		8. US EPA ID Number				C. State Transporter's ID			
7. Transporter 2 Company Name		10. US EPA ID Number				D. Transporter's Phone			
9. Designated Facility Name and Site Address NAO CLARK ST. - WHTP 2860 CLARK ST. DETROIT, MICH. 48232		11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER)		12. Containers		13. Total Quantity		14. Unit Wt/Vol	
		a. NON - DOT REGULATED		DD1 TT		2000 G			
		b.							
		c.							
		d.							
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above		a / /		b / /		c / /	
				d / /					
15. Special Handling Instructions and Additional Information									
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.									
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Printed/Typed Name G. Keith West		Signature G. Keith West		Date 11/15/14					
17. Transporter 1 Acknowledgement of Receipt of Materials		Printed/Typed Name T. K. Calvan		Signature T. K. Calvan		Date 11/15/14			
18. Transporter 2 Acknowledgement of Receipt of Materials		Printed/Typed Name		Signature		Date			
19. Discrepancy Indication Space									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.		Printed/Typed Name T. K. Calvan		Signature T. K. Calvan		Date 11/15/14			

DNR
MICHIGAN DEPARTMENT
OF NATURAL RESOURCES

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Form Approved. OMB No. 2050-0039 Expires 9-3-96

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No.		2. Page 1 of		Information in the shaded area is not required by Federal law.	
3. Generator's Name and Mailing Address GENERAL MOTORS CORP.		ATTN: KEVIN RICHARDS GM REMEDIATION TEAM 785 W. MILWAUKEE DETROIT, MI 48202		MID00535670407556		A. State Manifest Document Number MI 4207556			
4. Generator's Phone (313) 556-3196		6. US EPA ID Number		MID0000266751		B. State Generator's ID			
5. Transporter 1 Company Name MICHIGAN Pumping		8. US EPA ID Number				C. State Transporter's ID			
7. Transporter 2 Company Name		10. US EPA ID Number				D. Transporter's Phone 3136250225			
9. Designated Facility Name and Site Address NAO CLARK ST - WWTP 2300 CLARK ST. DETROIT, MI 48232				MID005356704		E. State Transporter's ID			
						F. Transporter's Phone			
						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	
				No. Type				I. Waste No. N	
a. NON-DOT REGULATED				001 TT		28500 G			
b.									
c.									
d.									
J. Additional Descriptions for Materials Listed Above						K. Handling Codes for Wastes Listed Above		a/ / b/ / c/ / d/ /	
15. Special Handling Instructions and Additional Information									
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Printed/Typed Name G. KATH WEST				Signature G. KATH WEST				Date 10/15/94	
17. Transporter 1 Acknowledgement of Receipt of Materials				Signature Rick Galvan				Date 10/15/94	
Printed/Typed Name KICK GALVAN				Signature				Date	
18. Transporter 2 Acknowledgement of Receipt of Materials				Signature				Date	
Printed/Typed Name				Signature				Date	
19. Discrepancy Indication Space									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.									
Printed/Typed Name GREG PAULIK				Signature Greg Paulik				Date 10/15/94	

ALL SPILLS MUST BE REPORTED TO THE MICHIGAN POLLUTION EMERGENCY ALERTING SYSTEM, IN MICHIGAN AT 1-800-292-4706 OR OUT OF STATE AT 517-373-7660 AND THE NATIONAL RESPONSE CENTER AT 1-800-424-8802 24 HOURS PER DAY.

GENERATOR
TRANSPORTER
FACILITY



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Form Approved. OMB No. 2050-0039 Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No.		2. Page 1 of		Information in the shaded areas is not required by Federal law.		
3. Generator's Name and Mailing Address <i>General Corp</i>						A. State Manifest Document Number MI 3701161				
4. Generator's Phone <i>(313) 556-3111</i>						B. State Generator's ID				
5. Transporter 1 Company Name <i>Michigan Recycling</i>						C. State Transporter's ID				
6. US EPA ID Number <i>MI0150121617914</i>						D. Transporter's Phone <i>73477-225</i>				
7. Transporter 2 Company Name						E. State Transporter's ID				
8. US EPA ID Number						F. Transporter's Phone				
9. Designated Facility Name and Site Address <i>140 WARE ST WWP</i> <i>2000 WARE ST</i>						G. State Facility's ID				
10. US EPA ID Number <i>MI0150121617914</i>						H. Facility's Phone				
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID NUMBER) <i>111 - DOT regulated</i>						12. Containers No. Type		13. Total Quantity	14. Unit Wt/Vol	I. Waste No. N/H
J. Additional Descriptions for Materials Listed Above						K. Handling Codes for Wastes Listed Above				
						a/ /				
						b/ /				
						c/ /				
						d/ /				
15. Special Handling Instructions and Additional Information										
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.										
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Printed/Typed Name <i>Michael J. Pothol</i>						Signature <i>[Signature]</i>		Date Month Day Year <i>11/15/96</i>		
17. Transporter 1 Acknowledgement of Receipt of Materials						Printed/Typed Name <i>Rich Green</i>		Signature <i>[Signature]</i>		Date Month Day Year <i>11/15/96</i>
18. Transporter 2 Acknowledgement or Receipt of Materials						Printed/Typed Name		Signature		Date Month Day Year
19. Discrepancy Indication Space										
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.										
Printed/Typed Name <i>GREG FAWLIK</i>						Signature <i>[Signature]</i>		Date Month Day Year <i>11/15/96</i>		

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APPENDIX D

ANALYTICAL DATA AND CHAIN-OF-CUSTODY



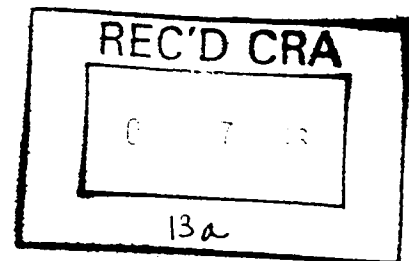
IEA

An Aquarion Company

October 16, 1996

IEA, Inc.
3000 Weston Parkway
Cary, NC 27513

Phone 919-677-0090
Fax 919-677-0427



Paul Wiseman
Conestoga Rovers Associates
11100 Metro Airport Center Drive, Suite 160
Romulus, MI 48174

IEA Project No.: 1808127\9610272
IEA Reference No.: W9610267
Client Project I.D.: 8889-40

Dear Mr. Wiseman,

Transmitted herewith are the results of analyses on six samples submitted to our laboratory.

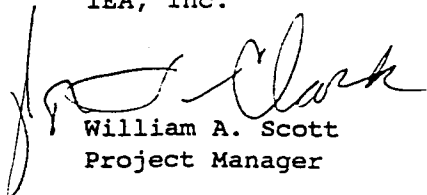
The samples were received intact.

Analyses were performed according to approved methodologies and meet the requirements of the IEA Quality Assurance Program except where noted. Please see the enclosed reports for your results and a copy of the Chain of Custody documentation.

Thank you for selecting IEA for your sample analysis. Please do not hesitate to call me at 1-919-677-0090 or 1-800-444-9919 should you have any questions regarding this report. We look forward to serving you in the future.

Very truly yours,

IEA, Inc.


William A. Scott
Project Manager





IEA

IEA-NORTH CAROLINA CERTIFICATIONS
An Aquarion Company

IEA, Inc.
3000 Weston Parkway
Cary, NC 27513

Phone 919-677-0090
Fax 919-677-0427

Certifying State	Program Type	Lab ID #
Alabama	DW	40210
Arkansas	WW	None Provided
California	DW, WW, HW Radiolog.	1763
Connecticut	DW, WW	PH-0135
Kansas	DW, HW, WW	E-158 (DW, WW) E-1189 (HW)
Kentucky	DW	90049
Maryland	DW, Radiolog.	259
Massachusetts	DW, WW	M-NC039
New Jersey	DW, WW Radiolog.	67719 67631
New York	Radiolog.	11422
North Carolina	DW WW Radiolog.	DW 37720 WW 84 Rad 37720
Ohio	Voluntary Action Program	CL00021
South Carolina	DW, WW, HW	99021
Tennessee	DW UST App List	02914
Utah	Radiolog. RCRA	E-206 E-226
Virginia	DW	00179
West Virginia	DW	9908C
Wisconsin	WW	993051010

DW=Drinking Water WW=Wastewater HW=Hazardous Waste Radiolog.=Radiological

Rev. 01/96

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Connecticut
203-261-4458

Schaumburg,
Illinois
847-705-0740

N. Billerica,
Massachusetts
508-667-1400

Whippany,
New Jersey
201-428-8181



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IEA

SDG NARRATIVE VOLATILE FRACTION

PROJECT: 1808-127

SDG: 10272

METHOD: SW-846 8020

Samples: (6) Soil Samples

The samples were received at Industrial and Environmental Analysts, Inc. (IEA) on October 11, 1996. Each sample was assigned a 9-character "IEA" lab identification number (lab ID). All analyses are performed in accordance with EPA approved methodologies and meet the requirements of the IEA Quality Assurance Program. Please see the enclosed data package for your results.

8020 ANALYSIS

The surrogate recovery and internal standard recovery was low for sample 9610272-02 due to sample matrix. This was confirmed by a second analysis. Only the original analysis has been reported.

The matrix spike/matrix spike duplicate and laboratory control sample were within the method criteria.

I certify that this data package is in compliance with the procedures and methods defined for this project, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data (if applicable) as submitted has been authorized by the laboratory manager or his designee, as verified by the following signature.

 10/16/96

Katrina L. Travis
GC Volatile Supervisor
IEA, Inc.

Industrial & Environmental Analysts, Inc. (IEA)
GC PURGEABLES SW-846 METHOD 8020

IEA Project Number: 1808-127 Date Received: 10/11/96
IEA Sample Number: 9610272-01 Date Sampled: 10/10/96
Client Name: Conestoga Rovers Assoc. Date Analyzed: 10/16/96
Client Project I.D.: 8889-40 Analysis By: Dulaney
Sample Identification: S-8889-101096-JM-406 Dilution Factor: 1.0
Associated QC Blank: VO6BK18S Matrix: Soil
QC Batch ID#: VLC657S Time of Analysis: 02:48
Moisture Correction Factor: 1.22

Number	Compound	Quantitation	Results
		Limit (ug/Kg)	Concentration (ug/Kg)
1	Ethylbenzene	10	27
2	Toluene	10	16
3	Xylenes (total)	30	110

Surrogate Compounds:	Acceptance Criteria	% Recovery
o-Chlorotoluene	60-140	277

Comments:

Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.

BQL = Below Quantitation Limit

Surrogate recovery exceeds method criteria due to suspected sample matrix interference.

Industrial & Environmental Analysts, Inc. (IEA)
GC PURGEABLES SW-846 METHOD 8020

IEA Project Number: 1808-127 Date Received: 10/11/96
IEA Sample Number: 9610272-02 Date Sampled: 10/10/96
Client Name: Conestoga Rovers Assoc. Date Analyzed: 10/16/96
Client Project I.D.: 8889-40 Analysis By: Hodges
Sample Identification: S-8889-101096-JM-407 Dilution Factor: 1.0
Associated QC Blank: VO6BK18S Matrix: Soil
QC Batch ID#: VLC657S Time of Analysis: 09:33
Moisture Correction Factor: 1.25

Number	Compound	Quantitation Limit (ug/Kg)	Results Concentration (ug/Kg)
1	Ethylbenzene	10	BQL
2	Toluene	10	BQL
3	Xylenes (total)	30	BQL

Surrogate Compounds:	Acceptance Criteria	% Recovery
o-Chlorotoluene	60-140	55

Comments:

Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.

BQL = Below Quantitation Limit

Low internal standard recovery confirmed by reanalysis.

Industrial & Environmental Analysts, Inc. (IEA)
GC PURGEABLES SW-846 METHOD 8020

IEA Project Number: 1808-127 Date Received: 10/11/96
IEA Sample Number: 9610272-03 Date Sampled: 10/10/96
Client Name: Conestoga Rovers Assoc. Date Analyzed: 10/16/96
Client Project I.D.: 8889-40 Analysis By: Hodges
Sample Identification: S-8889-101096-JM-408 Dilution Factor: 1.0
Associated QC Blank: VO6BK18S Matrix: Soil
QC Batch ID#: VLC657S Time of Analysis: 10:09
Moisture Correction Factor: 1.27

Number	Compound	Quantitation Limit (ug/Kg)	Results Concentration (ug/Kg)
1	Ethylbenzene	10	BQL
2	Toluene	10	BQL
3	Xylenes (total)	30	BQL

Surrogate Compounds:	Acceptance Criteria	% Recovery
o-Chlorotoluene	60-140	118

Comments:

Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.

BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
GC PURGEABLES SW-846 METHOD 8020

IEA Project Number: 1808-127 Date Received: 10/11/96
IEA Sample Number: 9610272-04 Date Sampled: 10/10/96
Client Name: Conestoga Rovers Assoc. Date Analyzed: 10/16/96
Client Project I.D.: 8889-40 Analysis By: Hodges
Sample Identification: S-8889-101096-JM-409 Dilution Factor: 1.0
Associated QC Blank: VO6BK18S Matrix: Soil
QC Batch ID#: VLC657S Time of Analysis: 10:47
Moisture Correction Factor: 1.26

Number	Compound	Quantitation Limit (ug/Kg)	Results Concentration (ug/Kg)
1	Ethylbenzene	10	BQL
2	Toluene	10	BQL
3	Xylenes (total)	30	BQL

Surrogate Compounds:	Acceptance Criteria	% Recovery
o-Chlorotoluene	60-140	82

Comments:

Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.

BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
GC PURGEABLES SW-846 METHOD 8020

IEA Project Number: 1808-127 Date Received: 10/11/96
IEA Sample Number: 9610272-05 Date Sampled: 10/10/96
Client Name: Conestoga Rovers Assoc. Date Analyzed: 10/16/96
Client Project I.D.: 8889-40 Analysis By: Dulaney
Sample Identification: S-8889-101096-JM-410 Dilution Factor: 1.0
Associated QC Blank: VO6BK18S Matrix: Soil
QC Batch ID#: VLC657S Time of Analysis: 05:14
Moisture Correction Factor: 1.20

Number	Compound	Quantitation Limit (ug/Kg)	Results Concentration (ug/Kg)
1	Ethylbenzene	10	BQL
2	Toluene	10	BQL
3	Xylenes (total)	30	BQL

Surrogate Compounds:	Acceptance Criteria	% Recovery
o-Chlorotoluene	60-140	88

Comments:

Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.

BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
GC PURGEABLES SW-846 METHOD 8020

IEA Project Number: 1808-127 Date Received: 10/11/96
IEA Sample Number: 9610272-06 Date Sampled: 10/10/96
Client Name: Conestoga Rovers Assoc. Date Analyzed: 10/16/96
Client Project I.D.: 8889-40 Analysis By: Dulaney
Sample Identification: S-8889-101096-JM-411 Dilution Factor: 1.0
Associated QC Blank: VO6BK18S Matrix: Soil
QC Batch ID#: VLC657S Time of Analysis: 05:50
Moisture Correction Factor: 1.27

Number	Compound	Quantitation Limit (ug/Kg)	Results Concentration (ug/Kg)
1	Ethylbenzene	10	BQL
2	Toluene	10	BQL
3	Xylenes (total)	30	BQL

Surrogate Compounds:	Acceptance Criteria	% Recovery
o-Chlorotoluene	60-140	80

Comments:

Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.

BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY
GC VOLATILE SW-846 8020

IEA Project No:	1808-127	Date Received:	10/11/96
IEA Sample No:	9610272	Date Sampled:	10/10/96
Client Name:	Conestoga Rovers Assoc.	MS Date Analyzed:	10/16/96
Sample ID:	S-8889-101096-JM-410	MSD Date Analyzed:	10/16/96
Associated QC Blank:	VO9BK18S	MS Time Analyzed:	06:27
QC Batch ID:	VLC657S	MSD Time Analyzed:	07:03
IEA MS Sample No:	9610272-05MS	Dilution Factor:	1.0
IEA MSD Sample No:	9610272-05MSD		

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC
Benzene	24	BQL	29	121	39-150
Toluene	24	BQL	28	117	46-148
Chlorobenzene	24	BQL	26	108	55-135

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC#	% RPD #	QC LIMITS RPD REC
Benzene	24	28	117	4	21 39-150
Toluene	24	27	113	4	21 46-148
Chlorobenzene	24	26	108	0	21 55-135

Corresponding Sample: 9610272-01 through 06

Industrial & Environmental Analysts, Inc. (IEA)
GC PURGEABLES SW-846 METHOD 8020
Laboratory Control Spike (LCS)

IEA Project Number:	1808-127	Date Received:	NA
IEA Sample Number:	9610272	Date Sampled:	NA
Client Name:	Conestoga Rovers Assoc.	Date Analyzed:	10/16/96
Client Project I.D.:	8889.40	Analysis By:	Dulaney
Sample Identification:	VLC657S	Dilution Factor:	1.0
Associated QC Blank:	VO6BK18S	Matrix:	Soil
QC Batch ID#:	VLC657S	Time of Analysis:	00:05

Number	Compound	Amount		LCS %REC	Control Limits		
		Spiked (ug/Kg)	Recovered (ug/Kg)		Lower %REC	Upper %REC	
1	Benzene	20	23.4	117	70	-	135
2	Toluene	20	23.6	118	75	-	130
3	Chlorobenzene	20	22.3	112	73	-	123
4	Ethyl Benzene	20	22.9	114	76	-	127
5	Xylene (Total)	40	46.5	116	10	-	200
6	1,3-Dichlorobenzene	20	22.8	114	67	-	118
7	1,4-Dichlorobenzene	20	22.4	112	68	-	121
8	1,2-Dichlorobenzene	20	22.9	114	64	-	113

Surrogate Compounds	Acceptance Criteria	% Recovery
o-Chlorotoluene	60 - 140	105

Comments:
Corresponding Samples: 9610272-01 through 06
PID6A101596_019

Industrial & Environmental Analysts, Inc. (IEA)
GC PURGEABLES SW-846 METHOD 8020

IEA Project Number: 1808-127 Date Received: NA
IEA Sample Number: 9610272 Date Sampled: NA
Client Name: Conestoga Rovers Assoc. Date Analyzed: 10/16/96
Client Project I.D.: 8889-40 Analysis By: Dulaney
Sample Identification: VO6BK18S Dilution Factor: 1.0
Associated QC Blank: VO6BK18S Matrix: Soil
QC Batch ID#: VLC657S Time of Analysis: 01:35
Moisture Correction Factor: 1.00

Number	Compound	Quantitation Limit (ug/Kg)	Results Concentration (ug/Kg)
1	Ethylbenzene	10	BQL
2	Toluene	10	BQL
3	Xylenes (total)	30	BQL

Surrogate Compounds:	Acceptance Criteria	% Recovery
o-Chlorotoluene	60-140	101

Comments:

Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.

BQL = Below Quantitation Limit

NA = Not Applicable

Corresponding Samples: 9610272-01 through 06



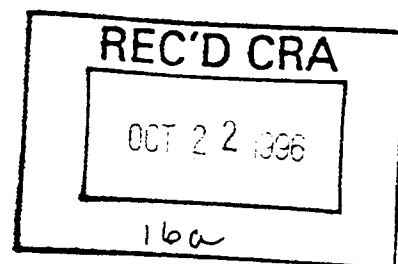
IEA

An Aquarion Company

October 21, 1996

IEA, Inc.
3000 Weston Parkway
Cary, NC 27513

Phone 919-677-0090
Fax 919-677-0427



Paul Wiseman
Conestoga Rovers Associates
11100 Metro Airport Center Drive, Suite 160
Romulus, MI 48174

IEA Project No.: 1808131\9610357
IEA Reference No.: W9610396
Client Project I.D.: 8889-40

Dear Mr. Wiseman,

Transmitted herewith are the results of analyses on six samples submitted to our laboratory.

The samples were received intact.

Analyses were performed according to approved methodologies and meet the requirements of the IEA Quality Assurance Program except where noted. Please see the enclosed reports for your results and a copy of the Chain of Custody documentation.

Thank you for selecting IEA for your sample analysis. Please do not hesitate to call me at 1-919-677-0090 or 1-800-444-9919 should you have any questions regarding this report. We look forward to serving you in the future.

Very truly yours,

IEA, Inc.

William A. Scott
Project Manager



IEA, Inc.
3000 Weston Parkway
Cary, NC 27513

Phone 919-677-0090
Fax 919-677-0427



IEA

IEA-NORTH CAROLINA CERTIFICATIONS
An Aquarion Company

Certifying State	Program Type	Lab ID #
Alabama	DW	40210
Arkansas	WW	None Provided
California	DW, WW, HW Radiolog.	1763
Connecticut	DW, WW	PH-0135
Kansas	DW, HW, WW	E-153 (DW, WW) E-1189 (HW)
Kentucky	DW	90049
Maryland	DW, Radiolog.	259
Massachusetts	DW, WW	M-NC039
New Jersey	DW, WW Radiolog.	67719 67631
New York	Radiolog.	11422
North Carolina	DW WW Radiolog.	DW 37720 WW 84 Rad 37720
Ohio	Voluntary Action Program	CL00021
South Carolina	DW, WW, HW	99021
Tennessee	DW UST App List	02914
Utah	Radiolog. RCRA	E-206 E-226
Virginia	DW	00179
West Virginia	DW	9903C
Wisconsin	WW	993051010

DW=Drinking Water WW=Wastewater HW=Hazardous Waste Radiolog.=Radiological

Rev. 04/96

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Connecticut
203-261-4458

Schaumburg,
Illinois
847-705-0740

N. Billerica,
Massachusetts
508-667-1400

Whippany,
New Jersey
201-428-8181



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Industrial & Environmental Analysts, Inc. (IEA)
GC PURGEABLES SW-846 METHOD 8020

IEA Project Number: 1808-131 Date Received: N/A
IEA Sample Number: 9610357 Date Sampled: N/A
Client Name: Conestoga Rovers Assoc. Date Analyzed: 10/18/96
Client Project I.D.: 8889-40 Analysis By: Dulaney
Sample Identification: QC Blank (VO6BK29S) Dilution Factor: 1.0
Associated QC Blank: VO6BK29S Matrix: Soil
QC Batch ID#: LCS625S Time of Analysis: 0049
Moisture Correction Factor: 1.00

Number	Compound	Quantitation Limit (ug/Kg)	Results Concentration (ug/Kg)
1	Ethylbenzene	1.0	BQL
2	Toluene	1.0	BQL
3	Xylenes (total)	1.0	BQL

Surrogate Compounds:	Acceptance Criteria	% Recovery
o-Chlorotoluene	60-140	101

Comments:

Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.

BQL = Below Quantitation Limit

N/A = Not Applicable

Corresponding Samples: 9610357-01 through 06

Industrial & Environmental Analysts, Inc. (IEA)
GC PURGEABLES SW-846 METHOD 8020

IEA Project Number: 1808-131 Date Received: 10/17/96
IEA Sample Number: 9610357-01 Date Sampled: 10/16/96
Client Name: Conestoga Rovers Assoc. Date Analyzed: 10/18/96
Client Project I.D.: 8889-40 Analysis By: Dulaney
Sample Identification: S-8889-101696-JM-412 Dilution Factor: 1.0
Associated QC Blank: VO6BK29S Matrix: Soil
QC Batch ID#: LCS625S Time of Analysis: 0126
Moisture Correction Factor: 1.2

Number	Compound	Quantitation Limit (ug/Kg)	Results Concentration (ug/Kg)
1	Ethylbenzene	1.0	BQL
2	Toluene	1.0	1.6
3	Xylenes (total)	1.0	BQL

Surrogate Compounds:	Acceptance Criteria	% Recovery
o-Chlorotoluene	60-140	75

Comments:

Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.

BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
GC PURGEABLES SW-846 METHOD 8020

IEA Project Number: 1808-131 Date Received: 10/17/96
IEA Sample Number: 9610357-02 Date Sampled: 10/16/96
Client Name: Conestoga Rovers Assoc. Date Analyzed: 10/18/96
Client Project I.D.: 8889-40 Analysis By: Dulaney
Sample Identification: S-8889-101696-JM-413 Dilution Factor: 1.0
Associated QC Blank: VO6BK29S Matrix: Soil
QC Batch ID#: LCS625S Time of Analysis: 0202
Moisture Correction Factor: 1.2

Number	Compound	Quantitation Limit (ug/Kg)	Results Concentration (ug/Kg)
1	Ethylbenzene	1.0	BQL
2	Toluene	1.0	2.6
3	Xylenes (total)	1.0	2.1

Surrogate Compounds:	Acceptance Criteria	% Recovery
o-Chlorotoluene	60-140	76

Comments:

Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.

BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
GC PURGEABLES SW-846 METHOD 8020

IEA Project Number: 1808-131 Date Received: 10/17/96
IEA Sample Number: 9610357-03 Date Sampled: 10/16/96
Client Name: Conestoga Rovers Assoc. Date Analyzed: 10/18/96
Client Project I.D.: 8889-40 Analysis By: Hodges
Sample Identification: S-8889-101696-JM-414 Dilution Factor: 1.0
Associated QC Blank: VO6BK29S Matrix: Soil
QC Batch ID#: LCS625S Time of Analysis: 1101
Moisture Correction Factor: 1.5

Number	Compound	Quantitation Limit (ug/Kg)	Results Concentration (ug/Kg)
1	Ethylbenzene	1.0	BQL
2	Toluene	1.0	BQL
3	Xylenes (total)	1.0	2.2

Surrogate Compounds:	Acceptance Criteria	% Recovery
o-Chlorotoluene	60-140	65

Comments:

Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.

BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
GC PURGEABLES SW-846 METHOD 8020

IEA Project Number: 1808-131 Date Received: 10/17/96
IEA Sample Number: 9610357-04 Date Sampled: 10/16/96
Client Name: Conestoga Rovers Assoc. Date Analyzed: 10/18/96
Client Project I.D.: 8889-40 Analysis By: Dulaney
Sample Identification: S-8889-101696-JM-415 Dilution Factor: 1.0
Associated QC Blank: VO6BK29S Matrix: Soil
QC Batch ID#: LCS625S Time of Analysis: 0314
Moisture Correction Factor: 1.2

Number	Compound	Quantitation Limit (ug/Kg)	Results Concentration (ug/Kg)
1	Ethylbenzene	1.0	BQL
2	Toluene	1.0	23
3	Xylenes (total)	1.0	2.0

Surrogate Compounds:	Acceptance Criteria	% Recovery
o-Chlorotoluene	60-140	46

Comments:

Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.

BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
GC PURGEABLES SW-846 METHOD 8020

IEA Project Number: 1808-131 Date Received: 10/17/96
IEA Sample Number: 9610357-05 Date Sampled: 10/16/96
Client Name: Conestoga Rovers Assoc. Date Analyzed: 10/18/96
Client Project I.D.: 8889-40 Analysis By: Hodges
Sample Identification: S-8889-101696-JM-416 Dilution Factor: 5.0
Associated QC Blank: VO6BK29S Matrix: Soil
QC Batch ID#: LCS625S Time of Analysis: 1207
Moisture Correction Factor: 1.1

Number	Compound	Quantitation	Results
		Limit (ug/Kg)	Concentration (ug/Kg)
1	Ethylbenzene	1.0	53
2	Toluene	1.0	36
3	Xylenes (total)	1.0	1100

Surrogate Compounds:	Acceptance Criteria	% Recovery
o-Chlorotoluene	60-140	253

Comments:

Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.

BQL = Below Quantitation Limit

Quantitation limit elevated due to sample dilution prior to analysis.

Sample diluted due to high concentration of target compounds present.

Surrogate recovery exceeds method criteria due to suspected sample matrix interference.

Industrial & Environmental Analysts, Inc. (IEA)
GC PURGEABLES SW-846 METHOD 8020

IEA Project Number: 1808-131 Date Received: 10/17/96
IEA Sample Number: 9610357-06 Date Sampled: 10/16/96
Client Name: Conestoga Rovers Assoc. Date Analyzed: 10/18/96
Client Project I.D.: 8889-40 Analysis By: Hodges
Sample Identification: S-8889-101696-JM-417 Dilution Factor: 1.0
Associated QC Blank: VO6BK29S Matrix: Soil
QC Batch ID#: LCS625S Time of Analysis: 1134
Moisture Correction Factor: 1.2

Number	Compound	Quantitation Limit (ug/Kg)	Results Concentration (ug/Kg)
1	Ethylbenzene	1.0	BQL
2	Toluene	1.0	BQL
3	Xylenes (total)	1.0	BQL

Surrogate Compounds:	Acceptance Criteria	% Recovery
o-Chlorotoluene	60-140	73

Comments:

Sample specific quantitation limits may be calculated by multiplying the quantitation limit by the dilution factor and/or moisture correction factor where reported.

BQL = Below Quantitation Limit

Industrial & Environmental Analysts, Inc. (IEA)
SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY
GC VOLATILE SW-846 8020

IEA Project No:	1808-131	Date Received:	10/17/96
IEA Sample No:	9610357	Date Sampled:	10/16/96
Client Name:	Conestoga Rovers Assoc.	MS Date Analyzed:	10/18/96
Sample ID:	S-8889-101696-JM-412	MSD Date Analyzed:	10/18/96
Associated QC Blank:	VO6BK29S	MS Time Analyzed:	1241
QC Batch ID:	LCS625S	MSD Time Analyzed:	1314
IEA MS Sample No:	9610357-01MS	Dilution Factor:	1.0
IEA MSD Sample No:	9610357-01MSD		

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC
Benzene	20	1.3	25	118	39-150
Toluene	20	1.6	23	107	46-148
Chlorobenzene	20	BQL	21	105	55-135

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC#	% RPD	#	QC LIMITS RPD REC
Benzene	20	26	124	5		21 39-150
Toluene	20	25	117	9		21 46-148
Chlorobenzene	20	22	110	5		21 55-135

Corresponding Sample: 9610357-01 through 06

Industrial & Environmental Analysts, Inc. (IEA)
 GC PURGEABLES SW-846 METHOD 8020
 Laboratory Control Spike (LCS)

IEA Project Number:	1808-131	Date Received:	NA
IEA Sample Number:	9610357	Date Sampled:	NA
Client Name:	Conestoga Rovers Assoc.	Date Analyzed:	10/17/96
Client Project I.D.:	8889.40	Analysis By:	Dulaney
Sample Identification:	VLC625S	Dilution Factor:	1.0
Associated QC Blank:	VO6BK29S	Matrix:	Soil
QC Batch ID#:	VLC625S	Time of Analysis:	23:39

Number	Compound	Amount		LCS %REC	Control Limits		
		Spiked (ug/Kg)	Recovered (ug/Kg)		Lower %REC	Upper %REC	
1	Benzene	20	22.1	111	70	-	135
2	Toluene	20	23.3	116	75	-	130
3	Chlorobenzene	20	22.9	112	73	-	123
4	Ethyl Benzene	20	23.1	114	76	-	127
5	Xylene (Total)	40	46.7	116	10	-	200
6	1,3-Dichlorobenzene	20	23.4	117	67	-	118
7	1,4-Dichlorobenzene	20	23.0	115	68	-	121
8	1,2-Dichlorobenzene	20	22.9	114	64	-	113

Surrogate Compounds	Acceptance Criteria	% Recovery
o-Chlorotoluene	60 - 140	97

Comments:
 Corresponding Samples: 9610357-01 through 06
 PID6A101796_017

CRA

CONESTOGA-ROVERS & ASSOCIATES, INC.
11100 Metro Airport Center Drive - Suite 160
Romulus, MI 48174 (313) 942-0909

CHAIN OF CUSTODY RECORD

SAMPLER'S SIGNATURE: [Signature] PRINTED NAME: Sara Anderson

SEQ. No. DATE TIME

1 101696

2

3

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5

6

SAMPLE TYPE

Soil

-412

-413

-414

-415

-416

-417

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10/16/96

CONTAINERS

1

1

1

1

1

1

PARAMETERS

10/16/96

10/16/96

10/16/96

10/16/96

10/16/96

10/16/96

CONTAINERS

1

1

1

1

1

1

PARAMETERS

10/16/96

10/16/96

10/16/96

10/16/96

10/16/96

10/16/96

CONTAINERS

1

1

1

1

1

1

PARAMETERS

10/16/96

10/16/96

10/16/96

10/16/96

10/16/96

10/16/96

CONTAINERS

1

1

1

1

1

1

PARAMETERS

10/16/96

10/16/96

10/16/96

10/16/96

10/16/96

10/16/96

CONTAINERS

1

1

1

1

1

1

PARAMETERS

10/16/96

10/16/96

APPENDIX E

DATA VALIDATION MEMORANDUM

CRA

11100 Metro Airport Center Drive
Suite 160
Romulus, MI 48174
(313) 942-0909

MEMO

TO: Sara Anderson

REFERENCE NO: 8889

FROM: Mary Cameron/dfh/15/Det. *mac*

DATE: November 13, 1996

RE: Data Quality Assessment and Validation for Soil Samples Collected
from the General Motors Clark Street Site in Detroit, Michigan

The following details a quality assessment and validation of the analytical data resulting from the October 10 and October 16, 1996, collection of 12 soil samples from the General Motors Clark Street Site in Detroit, Michigan. The samples identified in Table 1 were analyzed for toluene, ethylbenzene and total zylenes (TEX). Sample analysis was completed at IEA Inc's Cary, North Carolina facility in accordance with the Method SW-846 8020 from "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846 3rd Edition, November 1986. The quality control criteria used to assess the data were established by the methods and the quality assurance project plan (QAPP).¹

Holding Time Period and Sample Analysis

The holding time period for TEX is 14 days from sample collection to completion of analysis. The samples, as indicated by the sample collection, extraction and analysis dates on the chain-of-custody forms and analytical reports provided by IEA, were prepared and analyzed within the required holding time periods.

Method Blank Samples

Contamination of samples contributed by laboratory conditions or procedures was monitored by concurrent preparation and analysis of method blank samples. The method blank samples were reported to be free from detectable levels of target analytes, indicating no laboratory-attributable contamination occurred.

Laboratory Control Sample (LCS)

The laboratory control sample analyses serve as a monitor of the overall performance in all steps of the sample analysis. The LCS percent recoveries were within the laboratory control limits, indicating that an acceptable level of overall performance was achieved.

¹ Application of quality assurance criteria was consistent with "Draft National Functional Guideline for Organic Data Review," December, 1990, revised June, 1991.

Surrogate Compound Percent Recoveries (Surrogate Recoveries) - Organic Analyses

Individual sample performance for the organic analyses was monitored by assessing the results of surrogate compound percent recoveries. The sample analyses that violated surrogate acceptance criteria are identified and qualified in Table 2. The surrogate recovery acceptance criteria was met for the remaining samples.

Matrix Spike/Matrix Spike Duplicate Percent Recoveries - Organic Analyses

To assess the long term accuracy and precision of the analytical methods on various matrices, matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and the relative percent difference (RPD) of the recoveries were determined. The percent recoveries and RPDs acceptance criteria were met for all analyses.

Overall Assessment

The data were found to exhibit acceptable levels of accuracy and precision, based on the provided information, and may be used with the qualifications noted.

TABLE 1
SAMPLE IDENTIFICATION NUMBERS
GM CLARK STREET SITE
DETROIT, MICHIGAN

S-8889-101096-JM-406
S-8889-101096-JM-407
S-8889-101096-JM-408
S-8889-101096-JM-409
S-8889-101096-JM-410
S-8889-101096-JM-411
S-8889-101696-JM-412
S-8889-101696-JM-413
S-8889-101696-JM-414
S-8889-101696-JM-415
S-8889-101696-JM-416
S-8889-101696-JM-417

TABLE 2

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO
VIOLATION OF SURROGATE PERCENT RECOVERY CRITERIA
GM CLARK STREET SITE
DETROIT, MICHIGAN

<i>Analysis</i>	<i>Associated Samples</i>	<i>Qualifier¹</i>
TEX	S-8889-101096-JM-406	J
	S-8889-101096-JM-407	UJ
	S-8889-101696-JM-415	J, UJ
	S-8889-101696-JM-416	J

¹ The parameters associated with these analyses should be qualified for the listed samples as:

- J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample (for detected analytes).
- UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

APPENDIX F

CERTIFICATION OF CLEAN FILL

Waterland Trucking Service, Inc.

29100 Wixom Road, P.O. Box 6052

Wixom, Michigan 48393

(313) 349-1582

October 25, 1996

Carlo Environmental
44907 Trinity Drive
Clinton Township, MI 48038

RE: Class II Sand

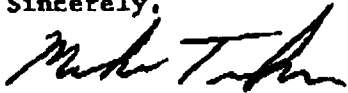
Brian St. Louis,

This letter is to certify that the Class II Sand, that you will be receiving from our Waterland Buno Road, (Pit #47-50), is a clean non-contaminated material of virgin origin. This material meets or exceeds Michigan Department of Transportation Specifications.

Enclosed, please find a copy of the recent Mechanical Analysis Report.

Samples are available upon request. If I may be of any further assistance, please call me at (313) 586-7385.

Sincerely,



Mike Truhn
Quality Control Manager

Enclosure
MT/jeb

APPENDIX G

BILLS OF LADING FOR DISPOSED SOIL

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MI D005356704 DP001

3. Generator's Name and Mailing Address

CLARK ST FACILITY

GENERAL MOTORS CORPORATION / REMEDIATION TEAM
MC 482-310-004
485 W. MILWAUKEE AVE
DETROIT MI 48202

Generator's Phone (313) 556-0816

4. Transporter 1 Company Name

LAIDLAW ENVIRONMENTAL SERVICES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES COMP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11.

Total Quantity

12. Unit

Wt/Vol

13.

Waste Profile Sheet #

a. NON DOT REGULATED

001CM

000404

U

EM 94-0197

b. Load # 55108 Box 411353

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

44,000 LBS.

NET 42620

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO. 313-842-2367

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.

Printed/Typed Name

BLDGGET PITLOCK

Signature

ON BEHALF OF GM
Budget PitlockMonth Day Year
11/1/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Robert Kuhn

Signature

Robert Kuhn

Month Day Year
11/1/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Don Smiley

Signature

D. Smiley

Month Day Year
11/1/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

MARLIN ZATNER

Signature

Marlin Zatner

Month Day Year
11/1/96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Sue Smith

Signature

Sue Smith

Month Day Year
11/1/96

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MID00535670401A00Z

3. Generator's Name and Mailing Address

CLARK ST FACILITY

GENERAL MOTORS CORPORATION REMEDIATION TEAM
MC 482 310004
485 W MILWAUKEE AVE
DETROIT MI 48202

Generator's Phone (313) 536-0816

4. Transporter 1 Company Name

LES (T.S. INC) MIR 000014530

5. Transporter 2 Company Name

CSX+

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICE CORPORATION

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No. Type

11.

Total Quantity

12. Unit

Wt/Vol

13.

Waste Profile

Sheet #

a. NON DOT REGULATED

001 CR00040 CF 0194
0197

b.

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

NET 36380

BOX #419932 ORDER #55109 load 9094

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO 3138422367

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.

Printed/Typed Name

BRIDGET PITLOK

Signature

ON BEHALF OF GM
Bridget PitlokMonth Day Year
11/13/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

ANTHONY SALES

Signature

Anthony Sales

Month Day Year
11/13/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DON SMILEY

Signature

D. Smiley

Month Day Year
11/13/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

KRALD SCHOENWALD

Signature

Krald Schoenwald

Month Day Year
11/27/96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

TAMM KUI

Signature

Tamm Kui

Month Day Year
11/27/96

• First Copy: Return to Generator

• Third Copy: Transporter #2

• Fifth Copy: Transporter #4

• Seventh Copy: Facility Copy

• Second Copy: Transporter #1

• Fourth Copy: Transporter #3

• Sixth Copy: Generator's Copy

GENERATOR

TRANSPORTER FACILITY

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MID1005356704DP004

3. Generator's Name and Mailing Address

CLARK ST FACILITY

GENERAL MOTORS CORPORATION / REMEDIATION TEAM
MC 482-310-004
485 W. M. LAURENCE AVE
DETROIT MI 48202

Generator's Phone (313) 556 0816

4. Transporter 1 Company Name

LAW ENVIRONMENTAL SERVICES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11.

Total Quantity

12. Unit

Wt/Vol

13. Waste Profile

Sheet #

a.

NON DOT REGULATED

001 CM 000

32 CY

EM 94-

0197

b.

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

Box 41640

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO 313-842-2367

Box 411289

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.

Printed/Typed Name

BRIDGET PITLOCK

Signature

ON BEHALF OF GM
Bridget Pitlock

Month Day Year
11 13 96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Kenneth Smith

Signature

[Signature]

Month Day Year
11 13 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

PETER R. SELBY

Signature

[Signature]

Month Day Year
11 13 96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Dennis Heizelner

Signature

[Signature]

Month Day Year
11 13 96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

[Signature]

Signature

[Signature]

Month Day Year
11 13 96

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MID0053567104 DP0015

3. Generator's Name and Mailing Address

Clark St Facility

GENERAL MOTORS CORPORATION / REMEDIATION TEAM

MC 482 310 004

485 W MILWAUKEE AVE

DETROIT MI 48202

Generator's Phone (313) 556-0816

4. Transporter 1 Company Name

LAIDLAW ENVIRONMENTAL SERVICES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11.

Total Quantity

12. Unit

Wt/Vol

13.

Waste Profile Sheet #

a.

NON DOT REGULATED

001 CM

32 U

EM 94-0197

b.

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

EM 94-0197

NLT 4/04/60

15. Special Handling Instructions and Additional Information

WT 39740 LB

DOT EMERGENCY RESPONSE NO. 313-842-2367

CONTAINER UPCR 411220 Load 55110

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.

ON BEHALF OF GM

Printed/Typed Name

BRIDGET PITLOCK

Signature

Bridget Pitlock

Month Day Year

11/1/3926

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Bruce Willard

Signature

Bruce Willard

Month Day Year

11/1/3926

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DORIS S BLAIR

Signature

Doris S Blair

Month Day Year

11/1/3926

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

11/1/3926

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Dennis Heidman

Signature

Dennis Heidman

Month Day Year

11/12/68K

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21

Printed/Typed Name

Tracy Smith

Signature

Tracy Smith

Month Day Year

11/1/3926

• First Copy: Return to Generator

• Third Copy: Transporter #2

• Fifth Copy: Transporter #4

• Seventh Copy: Facility Copy

• Second Copy: Transporter #1

• Fourth Copy: Transporter #3

• Sixth Copy: Generator Copy

GENERATOR

TRANSPORTER

FACILITY

DEC 13 '96 10:07 FR MSC ECHO MOUNTAIN 701 624 5624 TO 913135560003 P.02/07

Municipal Services Corporation A Laidlaw Subsidiary • Echo Mountain Facility • Sawyer, North Dakota

Shipping Bill of Lading

1. Generator's US EPA ID No. (if any)

2. Gen. BOL No.

MIDDCOAST 67040P0016

3. Generator's Name and Mailing Address

Clark ST Facility

GENERAL MOTORS CORPORATION/REMEDATION TEAM
MC 482-310-004
485 W. M. LUMBER AVE
DETROIT, MI 48202

Generator's Phone (313) 556-0816

4. Transporter 1 Company Name

LAIDLAW ENVIRONMENTAL SERVICES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11.

Total Quantity

12. Unit

Wt/Vol

13.

Waste Profile Sheet #

a.

NON D.O.T. REGULATED

COIL CM 001040 CT EM 94 0197

b.

NET 37860 Ld 9358

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

LOAD # 55378 BOX 411372

36,700 LBS

15. Special Handling Instructions and Additional Information

D.O.T. EMERGENCY NO. 313-842-2367
RESPONSE

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.

Printed/Typed Name

BRIDGET PITLOCK

Signature

ON BEHALF OF GM
Bridget Pitlock

Month

Day

Year

11/14/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Robert Kuhner

Signature

Robert Kuhner

Month

Day

Year

11/14/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DOREENS BLAIR

Signature

Doreens Blair

Month

Day

Year

11/14/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month

Day

Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Mike Cottonson

Signature

Mike Cottonson

Month

Day

Year

11/15/96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Mike Hammer

Signature

Mike Hammer

Month

Day

Year

11/15/96

• First Copy: Return to Generator

• Second Copy: Transporter #1

• Third Copy: Transporter #2

• Fourth Copy: Transporter #3

• Fifth Copy: Transporter #4

• Sixth Copy: Generator Copy

• Seventh Copy: Facility Copy

DEC 13 '96 10:07 FR MSC ECHO MOUNTAIN 701 624 5624 TO 913135560803 P.03/07

Municipal Services Corporation A Leidos Subsidiary • Echo Mountain Facility • Sawyer, North Dakota

Shipping Bill of Lading

1. Generator's US EPA ID No. (if any) MIDCO5356704
2. Gen. BOL No. DP007

3. Generator's Name and Mailing Address

CLARK ST FACILITY

Generator's Phone (313) 556-0816

GENERAL MOTORS CORPORATION / REMEDIATION TEAM
MC 482-310-004
485 W. M. LAURENCE AVE
DETROIT MI 48202

4. Transporter 1 Company Name

LAIDIAN ENVIRONMENTAL SERVICES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPLS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility
1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

a.

NON-DOT REGULATED

10. Containers
No. Type

11. Total Quantity

12. Unit
Wt/Vol

13. Waste Profile
Sheet #

09/CM000304

EM 94-0187

b.

Net 40060 Ld 9360

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SO.1

Box # 41172

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO. 313-842-2367

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.

Printed/Typed Name

BRIDGET PITLOCK

Signature

ON BEHALF OF GM
Bridget Pitlock

Month Day Year

11/14/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

KEVIN BROWN

Signature

K Brown

Month Day Year

11/14/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DOREEN S BLAIR

Signature

Doreen S Blair

Month Day Year

11/14/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Terrell Schoenwald

Signature

Terrell Schoenwald

Month Day Year

12/08/96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

MIKE HAMMER

Signature

Mike Hammer

Month Day Year

12/08/96

• First Copy: Return to Generator

• Third Copy: Transporter #2

• Fifth Copy: Transporter #4

• Seventh Copy: Facility Copy

• Fourth Copy: Transporter #3

• Sixth Copy: Generator Copy

GENERATOR

TRANSPORTER FACILITY

DEC 13 '96 10:08 FR MSC ECHO MOUNTAIN 701 624 5624 TO 913135560303 P.04/07

Municipal Services Corporation A Laidlaw Subsidiary • ECHO MOUNTAIN FACILITY • CATEGORY 1

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MID005356704 DY100B

3. Generator's Name and Mailing Address

CLARK ST FACILITY

GENERAL MOTORS CORPORATION / REMEDIATION TEAM

MC 482-310-004

485 W. MILWAUKEE AVE

Generator's Phone (313) 556-0816

DETROIT MI 48202

4. Transporter 1 Company Name

LAIDLAW ENVIRONMENTAL SERVICES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No. Type

11.

Total Quantity

12. Unit

WVd

13.

Waste Profile Sheet #

a.

NON DOT REGULATED

001CM

00040

c.

EM 44-

0157

b.

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

NET 42100

LD 9359

BOX# 411325 ORDER# 55377

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO. 313-842-2367

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.

Printed/Typed Name

BRIDGET PITLOCK

Signature

ON BEHALF OF GM
Bridget Pitlock

Month Day Year

11/1/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

ANTHONY SALES

Signature

Anthony Sales

Month Day Year

11/1/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DICKENS BLAIR

Signature

Dickens Blair

Month Day Year

11/1/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

EDWIN VOLK

Signature

Edwin Volk

Month Day Year

12/05/96

21. Discrepancy Indication Space

Fifty Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Mike Hammer

Signature

Mike Hammer

Month Day Year

11/20/96

• Third Copy: Transporter #2

• Fifth Copy: Transporter #4

• Seventh Copy: Facility Copy

GENERATOR

TRANSPORTER

FACILITY

Municipal Services Corporation A Laidlaw Subsidiary • Echo Mountain Facility • Sawyer, North Dakota

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MID005356704 DP009

3. Generator's Name and Mailing Address

CHANKST FACILITY
GENERAL MOTORS CORPORATION / REMEDIATION TEAM
MC 482-310-004
485 W. MILWAUKEE AVE.
DETROIT MI 48202

Generator's Phone

(313) 556-0816

4. Transporter 1 Company Name

LAIDLAW ENVIRONMENTAL SERVICES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11.

Total Quantity

12. Unit

Wt/Vol

13. Waste Profile Sheet #

a.

NON DOT REGULATED

32
001 cm 0001 7 Y

EM 94-0197

b.

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

Net 38420

Ld 91K

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO. 313-842-2367

UPCU 411829 LOAD# 55381

40,200 lbs

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.

Printed/Typed Name

BRIDGET PITLOCK

Signature

ON BEHALF OF GM

Bridget Pitlock

Month Day Year
11 11 96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

DAYLE F. BLAIR

Signature

Dwayne Blair

Month Day Year
11 14 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DAYLE F. BLAIR

Signature

Dwayne Blair

Month Day Year
11 14 96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Joe 3: et 3

Signature

Joe 3: et 3

Month Day Year
11 23 96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Mike Harmer

Signature

Mike Harmer

Month Day Year
11 23 96

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MID005356704 DP000

3. Generator's Name and Mailing Address

Clark St Facility

GENERAL MOTORS CORPORATION / REMEDIATION TEAM
MC 482-310-604
485 W. MILWAUKEE AVE
DETROIT MI 48202

Generator's Phone (313) 556-0816

4. Transporter 1 Company Name

LAIDLAW ENVIRONMENTAL SERVICES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No. Type

11. Total Quantity

12. Unit Wt/Vol

13. Waste Profile Sheet #

a. NON DOT REGULATED

001 CAN 000 32 4 EM 94-0197

b.

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

Net 38740

Box 411867 Lot 9149

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO. 313-842-2367

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.

Printed/Typed Name

BRIDGET PITLOCK

Signature

ON BEHALF OF GM
Bridget PitlockMonth Day Year
11/11/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Kereth Smith

Signature

Kereth Smith

Month Day Year
11/11/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Daleen S Blair

Signature

Daleen S Blair

Month Day Year
11/11/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Walter Thompson

Signature

Walter Thompson

Month Day Year
11/30/96

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Mike Hammer

Signature

Mike Hammer

Month Day Year
11/11/96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Mike Hammer

Signature

Mike Hammer

Month Day Year
11/11/96

• First Copy: Return to Generator

• Third Copy: Transporter #2

• Fifth Copy: Transporter #4

• Seventh Copy: Facility Copy

GENERATOR

TRANSPORTER

FACILITY

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

MID005356704

2. Gen. BOL No.

DPO 11

3. Generator's Name and Mailing Address

Clark St Facility

GENERAL MOTORS CORPORATION / REMEDIATION TEAM

MC 482-310-004

Generator's Phone

313 556 0816

485 W M. WATERGATE AVE

DETROIT MI 48202

4. Transporter 1 Company Name

LAIDLAW ENVIRONMENTAL SERVICES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11.

Total Quantity

12. Unit

Wt/Vol

13.

Waste Profile Sheet #

a.

NON DOT REGULATED

001 CM

32 00075

CY

EM94 0197

b.

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

NET 39040

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO. 313 842-2367

UPCU 441805

LOAA*55679

40,000/lbs

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.

Printed/Typed Name

BRIDGET PITLOCK

Signature

Bridget Pitlock

Month Day Year
11 11 1996

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

DAYLE F. BLAIR

Signature

Dwayne F. Blair

Month Day Year
11 11 1996

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DALEEN S BLAIR

Signature

Daleen S Blair

Month Day Year
11 11 1996

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

MARLIN SATHCR

Signature

Marlin Sather

Month Day Year
11 11 1996

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Tanner

Signature

Tanner

Month Day Year
11 11 1996

GENERATOR

TRANSPORTER

FACILITY

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MID005356704 DP047

3. Generator's Name and Mailing Address

CLARK ST FACILITY

GENERAL MOTORS CORPORATION / REMEDIATION TEAM
ML 482-310-004
485 W. MILWAUKEE AVE
DETROIT MI 48202

Generator's Phone (313) 556-0816

4. Transporter 1 Company Name

LADLAW ENVIRONMENTAL SERVICES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11. Total Quantity

12. Unit Wt/Vol

13. Waste Profile Sheet #

a. NON - D.O.T. REGULATED

001 CM 000 32 CY EM 94 0197

b.

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

NLT 35420

Load 9012

Box # 411957

15. Special Handling Instructions and Additional Information

D.O.T. EMERGENCY RESPONSE NO. 313 842 2367

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.

Printed/Typed Name

BRIDGET PITLOCK

Signature

ON BEHALF OF GM
Bridget R. Pitlock

Month Day Year
11/15/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

KEVIN BROWN

Signature

K. Brown

Month Day Year
11/15/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DIANE S. BLAIR

Signature

Diane S. Blair

Month Day Year
11/15/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Dennis Heizelman

Signature

Dennis Heizelman

Month Day Year
11/12/96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Signature

Month Day Year

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MD005356704 DP0037

3. Generator's Name and Mailing Address

Clark St Facility

GENERAL MOTORS CORPORATION / REMEDIATION TEAM
MC 482 310 004

Generator's Phone

(313) 5560816

485 W. MILWAUKEE AVE
DETROIT MI 48202

4. Transporter 1 Company Name

LAIDAW ENVIRONMENTAL SERVICES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11.

Total Quantity

12. Unit

Wt/Vol

13. Waste Profile

Sheet #

a. UNW DOT REGULATED

OP1 CM000 32 U
0197

EM94-
0197

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

PLT 38300

15. Special Handling Instructions and Additional Information

DOT
EMERGENCY RESPONSE NO. 313-842-2367
load # 55506 box # 411783

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.

ON BEHALF OF GM

Printed/Typed Name

BUDGET PITLOCK

Signature

Budget Pitlock

Month Day Year
11/15/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

JAMES E. GRIFFITHS

Signature

James E. Griffiths

Month Day Year
11/15/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DOLANS BLAIR

Signature

Dolans Blair

Month Day Year
11/15/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Dennis Heizen

Signature

Dennis Heizen

Month Day Year
11/12/96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Township

Signature

Township

Month Day Year
11/15/96

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MID0005356704 DPO 014

3. Generator's Name and Mailing Address

CLARK ST FACILITY

GENERAL NORMS CORPORATION/REMEDIATION

MC 482 310 004

TEAM

Generator's Phone (313) 556 0816

485 W MILWAUKEE

DETROIT MI 48202

4. Transporter 1 Company Name

AID LAW ENVIRONMENTAL SERVICES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11.

Total Quantity

12. Unit

Wt/Vol

13. Waste Profile Sheet #

a.

NON DOT REGULATED

001 0000 32

EM 94-0197

b.

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

EM 94-0197

NO + 38460

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO 313 842 2367

WT 39000 LBS

CONTAINER UPON 411768

Load 53505

Load 9073

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.

Printed/Typed Name

BRIDGET PITLOCK

Signature

ON BEHALF OF GMY
Bridget PitlockMonth Day Year
11/1/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Bruce Wilford

Signature

Bruce Wilford

Month Day Year
11/1/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DOREEN S. BLAIR

Signature

Doreen S. Blair

Month Day Year
11/1/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

EDWIN WHITE

Signature

Edwin White

Month Day Year
11/1/96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Signature

Month Day Year
11/1/96

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MID005356704 DP615

3. Generator's Name and Mailing Address

CHART ST FACILITY

GENERAL MOTORS CORPORATION / REMEDIATION TEAM

MC 482 310 004

Generator's Phone (313) 5560816

485 W MILWAUKEE AVE

DETROIT MI 48202

4. Transporter 1 Company Name

LAIDLAW ENVIRONMENTAL SERVICES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPMS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No. Type

11. Total Quantity

12. Unit Wt/Vol

13. Waste Profile Sheet #

a.

NON DOT REGULATED

001 CM

00032 CY

CY

EM 94-0197

b.

EM 94-0197

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

NET 36380

15. Special Handling Instructions and Additional Information

WT 37640 LBS

LOAD 9074

DOT EMERGENCY RESPONSE NO. 313-842-2367
CONTAINER 411766 LOAD 55507

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.

Printed/Typed Name

BRIDGET PITLOK

Signature

Bridget Pitlok

Month Day Year 11/1/15 96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Bruce Willard

Signature

Bruce Willard

Month Day Year 11/1/15 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DOREEN S. BLAIR

Signature

Doreen S Blair

Month Day Year 11/1/15 96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Terald Schoenwald

Signature

Terald Schoenwald

Month Day Year 11/1/15 96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Signature

Month Day Year 11/2/15 96

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MD0005356704 DP016

3. Generator's Name and Mailing Address

CLARK ST FACILITY

GENERAL METALS CORPORATION/REMEDATION TEAM

MC 482310004

485 W MILWAUKEE AVE

DETROIT MI 48202

Generator's Phone (313) 556-0816

4. Transporter 1 Company Name

CLARK ENVIRONMENTAL / M.P.C ENVIRONMENTAL

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CMRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11. Total Quantity

12. Unit Wt/Vol

13. Waste Profile Sheet #

a. NON DOT REGULATED

001 CM 000 32 CY EM 94 0197

b.

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

net 37360

load 9063

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE # 313842 2367

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.

Printed/Typed Name

BRIDGET PITLOCK

Signature

ON BEHALF OF GM
Bridget Pitlock

Month Day Year
11/18/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

MICHAEL McINCHAL

Signature

Michael McInchall

Month Day Year
11/18/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DOLEEN S BLAIR

Signature

Doleen S Blair

Month Day Year
11/18/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year
11/18/96

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Dennis Heizelman

Signature

Dennis Heizelman

Month Day Year
11/26/96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Signature

Month Day Year
11/26/96

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MI ID 005356704 DP0117

3. Generator's Name and Mailing Address

CLARK ST FACILITY

GENERAL MOTORS CORPORATION / REMEDIATION TEAM
MC 482310004
485 W MILWAUKEE AVE
DETROIT MI 48202

Generator's Phone 313-5560816

4. Transporter 1 Company Name

LAIDLAW ENVIRONMENTAL

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No. Type

11. Total Quantity

12. Unit Wt/Vol

13. Waste Profile Sheet #

a.	NON DOT REGULATED	001 CM	00032 CY	EM94 0197
b.				

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

Box # 411909 ORDER 55509 Ld 9175

Net 41480

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO 313-842-2367

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.

Printed/Typed Name

BUDGET PITLOCK

Signature

Budget Pitlock

Month Day Year 11/1/89

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Anthony SALES

Signature

Anthony Sales

Month Day Year 11/1/89

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DAVID L HODGE

Signature

David L Hodge

Month Day Year 11/1/89

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Ron Sutter

Signature

Ron Sutter

Month Day Year 11/2/89

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Mike Hammer

Signature

Mike Hammer

Month Day Year

11/2/89

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MI0005356704 DP018

3. Generator's Name and Mailing Address

CLARK ST FACILITY

GENERAL MOTORS CORPORATION / REMEDIATION TEAM
ML 482310004
485 W MILWAUKEE AVE
DETROIT MI 48202

Generator's Phone (313) 556 0816

4. Transporter 1 Company Name

LES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11.

Total Quantity

12. Unit

Wt/Vol

13. Waste Profile Sheet #

a.

NON DOT REGULATED

001 CM000 132 CY 0197

b.

14. Additional Descriptions for Materials Listed Above

AD GASOLINE (CONTAMINATED) SA 1
Box 411806 / order 55508

1/ Oct 43040

Ld 9173

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO (313) 842 2367

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.

Printed/Typed Name

BUDGET PITLOCK

Signature

ON BEHALF OF GM
Budget Pitlock

Month Day Year
11/18/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Donald D. Long

Signature

Donald D Long

Month Day Year
11/18/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

PETER R. SEIBY

Signature

Peter R Seiby

Month Day Year
11/18/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year
11/18/96

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

DENNIS REDDING

Signature

Dennis Redding

Month Day Year
11/20/96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

MIKE HARMER

Signature

Mike Harmer

Month Day Year
11/22/96

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MTD005356704DP0119

3. Generator's Name and Mailing Address

CLARK ST FACILITY

GENERAL MOTORS CORPORATION/REMEDATION TEAM
MC 482 310 004

Generator's Phone

313 556 0816

485 W M. I. WAJEE AVE

DETROIT MI 48202

4. Transporter 1 Company Name

LES / MPC ENVIRONMENTAL

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11. Total Quantity

12. Unit Wt/Vol

13. Waste Profile Sheet #

a.

NON DOT REGULATED

001 CM 000 B2

CY

EM94
0197

b.

14. Additional Descriptions for Materials Listed Above

A) gasoline CONTAMINATED Soil

EM94-0197

Ld 9112

14-7 39940

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO (313) 842-2367

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.

Printed/Typed Name

BRIDGET PITLOCK

Signature

ON BEHALF OF GM
Bridget Pitlock

Month Day Year

11/1/89

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

MICHAEL McFARLANE

Signature

Michael McFarlane

Month Day Year

11/1/89

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

PETER R. SEIBY

Signature

Pet R Seiby

Month Day Year

11/1/89

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

WILLIAM G. THOMPSON

Signature

Will G Thompson

Month Day Year

11/1/89

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

WILLIAM G. THOMPSON

Signature

Will G Thompson

Month Day Year

11/1/89

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

MIKE HANCOCK

Signature

Mike Hancock

Month Day Year

11/1/89

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MI D0053567104 DP020

3. Generator's Name and Mailing Address

CLARK ST FACILITY

GENERAL MOTORS CORPORATION / REMEDIATION TEAM
MC 482 310004
485 W MILWAUKEE AVE
DETROIT MI 48202

Generator's Phone (313) 556 0816

4. Transporter 1 Company Name

LES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11.

Total Quantity

12. Unit

Wt/Vol

13. Waste Profile

Sheet #

a.

NON DOT REGULATED

001 CM 00032 CY

EM 94

0197

b.

14. Additional Descriptions for Materials Listed Above

A) GASOLINE

Box # 411803 ORANGE 55928 Net 35060
CONTAMINATED SOIL
hd 9266

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO (313) 842-2367

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.

Printed/Typed Name

BUDGET PITLOCK

Signature

Budget Pitlock

Month Day Year

11/17/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

ANTHONY SALES

Signature

Anthony Sales

Month Day Year

11/17/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DOREEN S BLAIR

Signature

Doreen S Blair

Month Day Year

11/17/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Bob Guttormsen

Signature

Bob Guttormsen

Month Day Year

11/17/96

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Bob Guttormsen

Signature

Bob Guttormsen

Month Day Year

11/17/96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

MIKE HARMER

Signature

Mike Harmer

Month Day Year

12/04/96

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MD005356704 DP0311

3. Generator's Name and Mailing Address

CLARK ST FACILITY

GENERAL MOTORS CORPORATION/REMEDIATION TEAM
MC 482 310 004
485 W. MILWAUKEE AVE
DETROIT MI 48202

Generator's Phone (313) 556 0816

4. Transporter 1 Company Name

LES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPAS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11.

Total Quantity

12. Unit

Wt/Vol

13. Waste Profile

Sheet #

a.

NON DOT REGULATED

001 CM 00032 CY

EM94

0197

b.

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

Net 10640

Lt 9268

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO 3138422367

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.

WG #55925 Box 411854 ON BEHALF OF GM

Printed/Typed Name

Budget Pitlock

Signature

Budget Pitlock

Month Day Year
11 19 96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Samizs Rayburn

Signature

Samizs Rayburn

Month Day Year
12 19 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Daleen S. Blum

Signature

Daleen S. Blum

Month Day Year
11 19 96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Daleen S. Blum

Signature

Daleen S. Blum

Month Day Year
11 19 96

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year
11 19 96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Mike Hammer

Signature

Mike Hammer

Month Day Year
12 04 96

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MI DO 953567104DP022

3. Generator's Name and Mailing Address

CLARK ST FACILITY GENERAL MOTORS CORPORATION / REMEDIATION TEAM
MC 482310 004

Generator's Phone

313 556 0816

485 W. MILWAUKEE AVE
DETROIT MI 48202

4. Transporter 1 Company Name

LES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPNS

7. Transporter 4 Company Name

MUNICIPAL SERVICES COMP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers,
No. Type

11. Total Quantity

12. Unit
Wt/Vol

13. Waste Profile
Sheet #

a. NON DOT REGULATED

0101

CM

001032

CY

EM 94

0197

b. LOAD # 55926 BOX H11933

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

Net 40540

Ld 9267

41,180 LBS.

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO 313 842 2367

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.

Printed/Typed Name

Bridget Pitlock

Signature

Bridget Pitlock

Month Day Year
11/11/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Robert Luhn

Signature

Robert Luhn

Month Day Year
11/11/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

JOHN S BLAIR

Signature

John S Blair

Month Day Year
11/11/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Edwin Volk

Signature

Edwin Volk

Month Day Year
11/20/96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Mike Kosmer

Signature

Mike Kosmer

Month Day Year
11/20/96

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MI D0053567014DPO23

3. Generator's Name and Mailing Address

CLARK ST FACILITY

GENERAL MOTORS CORPORATION/ REMEDIATION TEAM
MC 482 310 004

Generator's Phone

(313) 556 0816

485 W MILWAUKEE AVE
DETROIT MI 48202

4. Transporter 1 Company Name

LES / MPC ENVIRONMENTAL

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11.

Total Quantity

12. Unit

Wt/Vol

13. Waste Profile Sheet #

a.

NON DOT REGULATED

001 CM 000132 CY

EM94
0197

b.

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

Net 39280

KG 9265

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO 313 842 2367

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.

Printed/Typed Name

Bridget P. Plock

Signature

Bridget P. Plock

Month Day Year
11/1/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

GLENN BURNHAM

Signature

Glenn Burnham

Month Day Year
11/1/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DEELEN BLAIR

Signature

Deleen Blair

Month Day Year
11/1/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

DENNIE HEISELMAN

Signature

Dennie Heizelman

Month Day Year
11/2/96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

MIKE HAMMER

Signature

Mike Hammer

Month Day Year
11/2/96

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MD005356704D1024

3. Generator's Name and Mailing Address

Clark St Facility

GENERAL MOTORS CORPORATION / REMEDIATION TEAM
MC 482 310004

Generator's Phone

(313) 5560816

485 W M. L. WALKER AVE
DETROIT MI 48202

4. Transporter 1 Company Name

LES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPAS

7. Transporter 4 Company Name

Municipal Services Corp

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11.

Total Quantity

12. Unit

Wt/Vol

13. Waste Profile
Sheet #

a.

NON DOT REGULATED

001 CM 00030 CY

EM94
0197

b.

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

H11821

Net 41660

LH 9169

15. Special Handling Instructions and Additional Information

DOT Emergency Response NO 3138422367

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.

Printed/Typed Name

BRIDGET P. TLOCK

Signature

Bridget P. Tlock

Month Day Year
11/15/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Kenneth Smith

Signature

Kenneth Smith

Month Day Year
11/19/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DOLENS BLAIR

Signature

Dolens Blair

Month Day Year
11/19/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Brent Mory

Signature

Brent Mory

Month Day Year
12/2/96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Mike Warner

Signature

Mike Warner

Month Day Year
12/2/96

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MID00535670408005

3. Generator's Name and Mailing Address

CLARK ST FACILITY

GENERAL MORAS CORPORATION / REMEDIATION TEAM
MC 482310004
485 W MILWAUKEE AVE
DETROIT MI 48202

Generator's Phone (313) 556-6816

4. Transporter 1 Company Name

LES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11.

Total Quantity

12. Unit

Wt/Vol

13. Waste Profile Sheet #

a.

NON DOT REGULATED

001 CM

0010

23 CY

CY

CM 94
0197

b.

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

Net 34240

Ld 9159

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO. 313 842 2367

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.

LOAD # 55927 UPOLE 4108N BEHALF OF GM

Printed/Typed Name

BRIDGET PITLOCK

Signature

Bridget Pitlock

Month Day Year
11/1/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

DENNIS L. BATTLE

Signature

Dennis L Battle

Month Day Year
11/1/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DEN SMILEY

Signature

Dennis Smiley

Month Day Year
11/1/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Bade Gutterman

Signature

Bade Gutterman

Month Day Year
12/2/96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Mike Harmon

Signature

Mike Harmon

Month Day Year
12/2/96

Municipal Services Corporation A Lateral Subsidiary of ECHO MOUNTAIN FACILITY

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any) 2. Gen. BOL No.

MA0005356704/0026

3. Generator's Name and Mailing Address

General Motors Corporation / Remediation Team
Gen Plant St.
MC 482 310 004

Generator's Phone ()

485 W. Milwaukee Ave
Detroit MI 48202

4. Transporter 1 Company Name

LES / MPC Environmental

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

Municipal Services Corp

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility
1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers
No. Type

11. Total Quantity

12. Unit
Wt/Vol

13. Waste Profile
Sheet #

a.

NON DOT REGULATED

CE/CM 00032 CY 0197

b.

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

Net 39020
Gt 9161

15. Special Handling Instructions and Additional Information

DOT Emergency Response NO 313842-0367

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.

Printed/Typed Name

Budget Pitlock

Signature

Budget Pitlock

Month Day Year

11/1/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

GLENN BURNHAM

Signature

Glenn Burnham

Month Day Year

11/1/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

PETER R. SELBY

Signature

Peter R. Selby

Month Day Year

11/1/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Dennis Heizelman

Signature

Dennis Heizelman

Month Day Year

12/1/96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in Item 21.

Printed/Typed Name

M. K. Forner

Signature

M. K. Forner

Month Day Year

12/1/96

- First Copy: Return to Generator
- Second Copy: Transporter #1
- Third Copy: Transporter #2
- Fourth Copy: Transporter #3
- Fifth Copy: Transporter #4
- Sixth Copy: Generator Copy
- Seventh Copy: Facility Copy

DEC 13 '96 12:18 FR MSC ECHO MOUNTAIN

701 624 5624 TO 913135560803

P.06/07

Municipal Services Corporation A Laidlaw Subsidary • Echo Mountain Facility • Sawyer, North Dakota

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MADCO05356704DPOUR7

3. Generator's Name and Mailing Address

CLARK ST FACILITY

GENERAL MOTORS CORPORATION / REMEDIATION TEAM

MC 482 310 004

485 W MILWAUKEE AVE

DETROIT MC 48202

Generator's Phone (313) 556 0816

4. Transporter 1 Company Name

LES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES INC.

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers
No. Type

11. Total Quantity

12. Unit
Wt/Vol13. Waste Profile
Sheet #

a.

NON DOT REGULATED

001CM

001032

CY

EM 94
0197

b.

14. Additional Descriptions for Materials Listed Above

A) gasoline CONTAMINATED SOIL

BOX 411878 Rd 9245

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO. (313) 842-2367

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.

ON BEHALF OF GM

Printed/Typed Name

Bridget Pitlock

Signature

Bridget Pitlock

Month Day Year

11 20 96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Kenneth Smith

Signature

Kenneth Smith

Month Day Year

11 20 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DOREEN S BLAIR

Signature

Doreen S Blair

Month Day Year

11 20 96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Edwin Clark

Signature

Edwin Clark

Month Day Year

12 13 96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Mike Harmon

Signature

Mike Harmon

Month Day Year

12 13 96

• First Copy: Return to Generator
• Second Copy: Transporter #1• Third Copy: Transporter #2
• Fourth Copy: Transporter #3• Fifth Copy: Transporter #4
• Sixth Copy: Generator Copy

• Seventh Copy: Facility Copy

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MID005356704DP0218

3. Generator's Name and Mailing Address

CLARK ST FACILITY

GENERAL MOTORS CORPORATION / REMEDIATION TEAM
MC 482 310 004

Generator's Phone

(313) 556 0816

485 W. MILWAUKEE AVE

DETROIT MI 48202

4. Transporter 1 Company Name

LES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPAS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11.

Total Quantity

12. Unit

Wt/Vol

13. Waste Profile Sheet #

a.

NON DOT REGULATED

001 CM 00032

CY

EM 94
0197

b.

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

NOT 42040
LD 9243

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO. (313) 542-2367
Box 41904 ORDER 56092

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.

Printed/Typed Name

BUDGET PITLOCK

Signature

ON BEHALF OF GM
Budget PitlockMonth Day Year
11 20 96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

STEVEN SHOOK

Signature

Steven Shook

Month Day Year
11 20 96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DREW S BLAIR

Signature

Drew S Blair

Month Day Year
11 20 96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Dennis Heitzel men

Signature

Dennis Heitzel men

Month Day Year

11 20 96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Mike Hammer

Signature

Mike Hammer

Month Day Year

11 20 96

GENERATOR

TRANSPORTER

FACILITY

DEC 13 '96 10:10 FR MSC ECHO MOUNTAIN 701 624 5624 TO 913135562823 P. 07/07

Municipal Services Corporation A Laidlaw Subsidiary • Echo Mountain Facility • Sawyer, North Dakota

Shipping Bill of Lading

1. Generator's US EPA ID No. (if any)

2. Gen. SOL No.

MTAD0063516704 Dpk 29

3. Generator's Name and Mailing Address

CHUK ST FACILITY

GENERAL MOTORS CORPORATION / REMEDIATION TEST

PO BOX 310 004

Generator's Phone 313 556 0816

485 N. MILWAUKEE AVE

DETROIT MI 48202

4. Transporter 1 Company Name

LES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No. Type

11. Total Quantity

12. Unit

WUVC

13. Waste Profile

Sheet #

a.

NON DOT REGULATED

001 CM 00032

CH

EM 94

0197

b.

14. Additional Descriptions for Materials Listed Above

A) gasoline CONTAMINATED SOIL

Net 40740

411934 L 9247

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO 313 892 2367

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.

Printed/Typed Name

Budget P. Block

Signature

Budget P. Block

Month Day Year

11/20/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Kenneth Smith

Signature

Kenneth Smith

Month Day Year

11/20/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

DAVID L HODGE

Signature

David L Hodge

Month Day Year

11/20/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Ron Sather

Signature

Ron Sather

Month Day Year

11/20/96

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in Item 21.

Printed/Typed Name

Mike Hammer

Signature

Mike Hammer

Month Day Year

11/20/96

• First Copy: Return to Generator

• Third Copy: Transporter #2

• Fifth Copy: Transporter #4

• Seventh Copy: Facility Copy

• Second Copy: Transporter #1

• Fourth Copy: Transporter #3

• Sixth Copy: Generator Copy

** TOTAL PAGE 07 **

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

MD G05356704 DPO30

3. Generator's Name and Mailing Address

CLARK ST FACILITY

GENERAL MOTORS CORPORATION / REMEDIATION
MC ~~482~~ 310004
485 W. M. LUTHER AVE
DETROIT MI 48202

Generator's Phone (313) 556 0816

4. Transporter 1 Company Name

LES / MPL ENVIRONMENTAL

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPAS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

411595

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11.

Total Quantity

12. Unit

Wt/Vol

13. Waste Profile Sheet #

a.

NON DOT REGULATED

001CM00032 CY 0197

b.

14. Additional Descriptions for Materials Listed Above

A) GASOLINE CONTAMINATED SOIL

NET 38100
LD 9263

15. Special Handling Instructions and Additional Information

DOT EMERGENCY RESPONSE NO. (313) 842 2367

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.

Printed/Typed Name

BRIDGET PITLOCK

Signature

ON BEHALF OF GM
Bridget Pitlock

Month Day Year
11/20/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

GLENN BURNHAM

Signature

G. Burnham

Month Day Year
11/20/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

PETER R. SELBY

Signature

Peter R. Selby

Month Day Year
11/20/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

RON SUTHER

Signature

Ron Suther

Month Day Year
12/04/96

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

21. Discrepancy Indication Space

22. Facility Owner or Operator, Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Mike Harmon

Signature

Mike Harmon

Month Day Year
12/04/96

Shipping Bill of Lading

1. Generator's US EPA ID No. (If any)

2. Gen. BOL No.

M1 D00S356704 DPO91

3. Generator's Name and Mailing Address

CLARK ST. FACILITY

GENERAL MOTORS CORPORATION/REMEDIATION TEAM
MC 482-310-004
485 W. MILWAUKEE AVE.
DETROIT, MI 48202

Generator's Phone

313 556-0816

4. Transporter 1 Company Name

LADLAW ENVIRONMENTAL SERVICES

5. Transporter 2 Company Name

CSXT

6. Transporter 3 Company Name

CPRS

7. Transporter 4 Company Name

MUNICIPAL SERVICES CORP

8. Designated Facility Name and Site Address

Municipal Services Corporation - Echo Mountain Facility

1 mile west of Ward County Hwy. 23 on ND 23, Sawyer, North Dakota 58781, Phone (701) 624-5622

9. U.S. DOT Description (including Proper Shipping Name)

HM

10. Containers

No.

Type

11.

Total Quantity

12. Unit

Wt/Vol

13.

Waste Profile

Sheet #

a.

NON D.O.T. REGULATED

001CM000 32 CY

EM 94-

0197

b.

14. Additional Descriptions for Materials Listed Above

a) GASOLINE CONTAMINATED SOIL

Net 3240

Ld 9294

15. Special Handling Instructions and Additional Information

D.O.T. EMERGENCY RESPONSE NO. 313-842-2367

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.

Printed/Typed Name

BRIDGET PITLOCK

Signature

Bridget Pitlock

Month Day Year

11/1/96

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

JAMES RAYBURN

Signature

James Rayburn

Month Day Year

11/1/96

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

PETER R. SELBY

Signature

Peter R. Selby

Month Day Year

11/1/96

19. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name

Dennis Heizerman

Signature

Dennis Heizerman

Month Day Year

12/04/96

20. Transporter 4 Acknowledgement of Receipt of Materials

Printed/Typed Name

Dennis Heizerman

Signature

Dennis Heizerman

Month Day Year

12/14/96

21. Discrepancy Indication Space

22. Facility Owner or Operator: Certification of Receipt of non-hazardous materials covered by this Bill of Lading except as noted in item 21.

Printed/Typed Name

Mike Hammer

Signature

Mike Hammer

Month Day Year

12/25/96