# DAILY ACTIVITY REPORT

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL RESPONSE DIVISION

| ACTIVITY | PROGRAM |
|---|---|
| Investigation | Act 641/64 |

| | | |
|---|---|---|
| Date: 7-15-93 | Time: 2:00 PM | DNR District: Jackson |
| Site Name: Jackson Drop Forge | Address: Wellworth Ave. | |
| City/Twp: Jackson | County: Jackson | |
| Project Mgr: P. Masson | Staff on Site: Parsons/Masson | |

Remarks: Dowe and I sampled four barrels from the property on Wellworth Ave across from the drop forge. Level B protective gear was worn. We opened several barrels and checked them with the HNu. Four had readings in the tens of ppm, and so we sampled these. Samples B-1 and B-2 may be product. B-1 was very thick and may have been mold release compound. B-2 was a clear yellow liquid that acted much like a light weight oil. Sample B-3 was water that was standing in a barrel on top of a sludge. Sample B-4 was a solid, possibly a paint sludge. All barrels sampled had quick release clamps that allowed for the entire top of the barrel to be removed. The samples will be taken to the DNR lab 7-16 by Dowe. They will be refrigerated overnight.

| | |
|---|---|
| Signature: | Date: 7/15/93 |

cc:Dowe Parsons
District File

EPA Region 5 Records Ctr.
247463

EL 068
3/92
MATRIX = SEDIMENT/ SOIL

MICHIGAN DEPT OF NATURAL RESOURCES
ENVIRONMENTAL LABORATORY
ANALYSIS REQUEST SHEET

#### SAFETY WARNING ####
YES NO - INFO ON BACK

LAB ORDER# _____ PROJ CODE _____ PRIORITY _____ RECEIVED AT LAB BY _____ DATE TIME ___/___/___ _____ AM PM

SUBMITTER DIVISION ERD DISTRICT OR OFFICE Jackson CONTACT PERSON FOR QUESTIONS Peter Massa PHONE (517) - 780 7432

LOCATION SAMPLED Jackson Drop Forge COLLECTED BY P. Massa TRANS TO _____

COST CENTER 4541- 3IJ96 SEND RESULTS TO ATTENTION OF P. Massa AT ADDRESS (if different than above office) _____

SAMPLE REMARKS Barrel Sample

| SAMPLE NUMBER | FIELD ID OR DESCRIPTION | SAMPLE COLLECTED YY/MM/DD | HH:MM | SAMPLE INFORMATION |
|---|---|---|---|---|
| 01 | B-4 | 93/7/15 | 2:00P | Barrel Sample |
| 02 | | | | |
| 03 | | | | |
| 04 | | | | |
| 05 | | | | |
| 06 | | | | |
| 07 | | | | |
| 08 | | | | |

GENERAL CHEMISTRY

GS COD ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
KJEL N, Tot P . 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Phenolics ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Total CN ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
% Total Solids 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8

ORGANICS

POV VOLATILES
8260 (Sc 1&2 ).. 1 2 3 4 5 6 7 8

OS CHLORO HC +PEST & PCB
8081/8121 (Sc3). 1 2 3 4 5 6 7 8
PCB (only)..... 1 2 3 4 5 6 7 8

8270 ( B/N )..... 1 2 3 4 5 6 7 8

SPECIAL REQUESTS
Lib Search (Qualitative)
Volatiles ... 1 2 3 4 5 6 7 8
Base Neutral 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8

INORGANIC

MS Ca Mg Na K ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Cd Cr Cu Ni Pb Zn ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Fe Co Li Mn ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Al Ba Be Mo Ti V ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Hg - Mercury ..... 1 2 3 4 5 6 7 8
As - Arsenic ..... 1 2 3 4 5 6 7 8
Se - Selenium..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
% Total Solids ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8

**SAMPLE HAZARD INFORMATION**
**FOR EMPLOYE SAFETY**

If you checked (✓) yes on the front side of this form indicating a safety warning, please complete the information below:

I. Type of Samples:

____ Environmental (surface, groundwater, soil, bottom sediment)
____ Waste Water
____ Municipal Sludge
____ Industrial Sludge
____ Landfill Leachate
____ Contaminated Soil
____ Spill Material
✓ Waste Drums
____ Other, specify _____

II. Which of these causes you to think these samples are potentially hazardous?

____ Site Use History
____ Site Inspections
____ Critical Materials Report(s)
____ Permit Application(s)
____ Monthly Operating Reports
____ Citizen Complaint
____ Previous Analyses (results pending)
____ Previous Analyses - Log No.'s if known: _____
____ Inspection Crew Reaction: _____
✓ Other Unknown Sludge

III. Indicate the type of potential hazard:

____ Highly Acidic
____ Highly Caustic
____ Ignitible
✓ Toxic
____ Bio-Hazard
____ Reactive (generates HCN, H S, etc.)
____ Other _____

ARE VOLATILE TOXICS KNOWN OR LIKELY TO BE PRESENT IN CONCENTRATIONS OF CONCERN?
✓ Yes ____ No

PLEASE SPECIFY IF KNOWN: Unknown

WHAT SPECIAL PRECAUTIONS WERE TAKEN DURING THE COLLECTION OF THESE SAMPLES? Level B gear

EL 070
7/88
MATRIX = WATER

MICHIGAN DEPT OF NATURAL RESOURCES
ENVIRONMENTAL LABORATORY
ANALYSIS REQUEST SHEET

#### SAFETY WARNING ####
YES / NO - INFO ON BACK

LAB ORDER# _____ PROJ CODE _____ PRIORITY _____ RECEIVED AT LAB BY _____ DATE TIME ___/___/___ _____ AM PM

SUBMITTER DIVISION ERD DISTRICT OR OFFICE Jackson CONTACT PERSON FOR QUESTIONS Peter Massa PHONE 517-780-7932

LOCATION SAMPLED Jackson Drop Forge COLLECTED BY P. Massa TRANS TO _____

COST CENTER 4591 35396 SEND RESULTS TO ATTENTION OF P. Massa AT ADDRESS (if different than above office) _____

SAMPLE REMARKS Barrel Sample

| SAMPLE NUMBER | FIELD ID OR DESCRIPTION (25 Characters) | SAMPLE COLLECTED YY/MM/DD | HH:MM | SAMPLE INFORMATION |
|---|---|---|---|---|
| 01 | B-3 | 93/7/15 | 2:00P | Barrel Sample |
| 02 | | | | |
| 03 | | | | |
| 04 | | | | |
| 05 | | | | |

GENERAL CHEMISTRY

DO Diss Oxygen ... 1 2 3 4 5 -J-

GN NO2, o-Phos ... 1 2 3 4 5 -K-
Residue SS .... 1 2 3 4 5
Residue TDS ... 1 2 3 4 5
..... 1 2 3 4 5
BOD Tot 5 day 1 2 3 4 5
BOD Carb 5 day 1 2 3 4 5
..... 1 2 3 4 5 -O-

CA Chlorophyll ... 1 2 3 4 5 -L-

GA COD ..... 1 2 3 4 5
TOC ..... 1 2 3 4 5
NO3+NO2, NH3 .. 1 2 3 4 5
KJEL N, Tot P . 1 2 3 4 5
..... 1 2 3 4 5 -M-

GG Phenolics ..... 1 2 3 4 5 -N-

GB Total CN ..... 1 2 3 4 5
Free CN ..... 1 2 3 4 5
..... 1 2 3 4 5

ORGANICS

PO1 #1 Halocarbons 1 2 3 4 5 -R-
PO2 #2 Aromatic HC 1 2 3 4 5
..... 1 2 3 4 5 -S-

ON #3 Chloro HC + Pest & PCB . 1 2 3 4 5
..... 1 2 3 4 5 -T-

OB GC/MS Base Neut 1 2 3 4 5
..... 1 2 3 4 5 -U-

OA #8 Phenols .... 1 2 3 4 5
..... 1 2 3 4 5
..... 1 2 3 4 5 -V-
..... 1 2 3 4 5
..... 1 2 3 4 5
..... 1 2 3 4 5
..... 1 2 3 4 5
..... 1 2 3 4 5

INORGANIC

MA Total Metals ..... 1 2 3 4 5 -X-
MAD Diss-Field Filtered .... 1 2 3 4 5
MD Diss-Lab Filtered ..... 1 2 3 4 5

Ca Mg Na K ..... 1 2 3 4 5
Cd Cr Cu Ni Pb Zn ..... 1 2 3 4 5
Fe Co Li Mn ..... 1 2 3 4 5
Al Ba Be Mo Ti V ..... 1 2 3 4 5
..... 1 2 3 4 5
Hg - Mercury ..... 1 2 3 4 5
Se - Selenium ..... 1 2 3 4 5
Sb - Antimony ..... 1 2 3 4 5
..... 1 2 3 4 5
LOW LEVEL Ag ..... 1 2 3 4 5
" " As ..... 1 2 3 4 5
" " Cd Cr Cu Ni Pb 1 2 3 4 5
" " Zn Fe..... 1 2 3 4 5 -Y-

MN pH, Conductance ..... 1 2 3 4 5
Cl, SO4, Total Alk .... 1 2 3 4 5
HCO3- CO3= ..... 1 2 3 4 5
CR+6 ..... 1 2 3 4 5
..... 1 2 3 4 5

OG Oil and Grease ..... 1 2 3 4 5 -Z-

Initial to indicate that you will accept "HT" coded results for late arriving samples.

SAMPLE HAZARD INFORMATION
FOR EMPLOYEE SAFETY

If you checked (✓) yes on the front side of this form indicating a safety warning, please complete the information below.

I. Type of Samples:

____ Environmental (surface, groundwater, soil, bottom sediment)
____ Waste Water
____ Municipal Sludge
____ Industrial Sludge
____ Landfill Leachate
____ Contaminated Soil
____ Spill Material
✓ Waste Drums
____ Other, specify _____

II. Which of these causes you to think these samples are potentially hazardous?

____ Site Use History
____ Site Inspections
____ Critical Materials Report(s)
____ Permit Application(s)
____ Monthly Operating Reports
____ Citizen Complaint
____ Previous Analyses (results pending)
____ Previous Analyses - Log No's. if known: _____
____ Inspection Crew Reaction: _____
✓ Other Water that has in contact with sludge

III. Indicate the type of potential hazard:

____ Highly Acidic
____ Highly Caustic
____ Ignitable
✓ Toxic
____ Bio-Hazard
____ Reactive (generates HCN, H S, etc.)
____ Other _____

ARE VOLATILE TOXICS KNOWN OR LIKELY TO BE PRESENT IN CONCENTRATIONS OF CONCERN?
✓ Yes ____ No

PLEASE SPECIFY IF KNOWN: Unknown

WHAT SPECIAL PRECAUTIONS WERE TAKEN DURING THE COLLECTION OF THESE SAMPLES? Level B Gear

EL 085
4/87
MATRIX = ORGANIC / OIL

MICHIGAN DEPT OF NATURAL RESOURCES
ENVIRONMENTAL LABORATORY
ANALYSIS REQUEST SHEET

##### SAFETY WARNING ####
YES / NO - INFO ON BACK

LAB ORDER# _____ PROJ CODE _____ PRIORITY _____ RECEIVED AT LAB BY _____ DATE TIME ___/___/___ _____ AM PM

SUBMITTER DIVISION ERD DISTRICT OR OFFICE Jackson CONTACT PERSON FOR QUESTIONS Peter Massan PHONE (517) - 780-7932

LOCATION SAMPLED JACKSON DROP FORGE COLLECTED BY P. Massan TRANS TO _____

COST CENTER 4541-3JJ56 SEND RESULTS TO ATTENTION OF P. Massan AT ADDRESS (if different than above office) _____

SAMPLE REMARKS Barrel Samples

| SAMPLE NUMBER | FIELD ID OR DESCRIPTION | SAMPLE COLLECTED YY/MM/DD | HH:MM | SAMPLE INFORMATION |
|---|---|---|---|---|
| 01 | B-1 | 93/7/15 | 2:00P | Barrel Sample |
| 02 | B-2 | 93/7/15 | 2:00P | Barrel Sample |
| 03 | | | | |
| 04 | | | | |
| 05 | | | | |
| 06 | | | | |
| 07 | | | | |
| 08 | | | | |

GENERAL CHEMISTRY

HW FLASH POINT ... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8

ORGANICS

DL #1 Halocarbons (Quantitative) 1 2 3 4 5 6 7 8
#2 Aromatic HC (Quantitative) 1 2 3 4 5 6 7 8
#1 Halocarbons (Qualitative) 1 2 3 4 5 6 7 8
#2 Aromatic HC (Qualitative) 1 2 3 4 5 6 7 8
#3 Chloro HC + Pest & PCB 1 2 3 4 5 6 7 8
PCB Only ..... 1 2 3 4 5 6 7 8
IR Scan ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8

INORGANIC

MO Ca Mg Na K ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Cd Cr Cu Ni Pb Zn ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Fe Co Li Mn ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Al Ba Be Mo Ti V ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Hg - Mercury ..... 1 2 3 4 5 6 7 8
As - Arsenic ..... 1 2 3 4 5 6 7 8
Se - Selenium..... 1 2 3 4 5 6 7 8
Sb - Antimony ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
% Cl ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8

SAMPLE HAZARD INFORMATION
FOR EMPLOYEE SAFETY

If you checked (✓) yes on the front side of this form indicating a safety warning, please complete the information below.

I. Type of Samples:

_____ Environmental (surface, groundwater, soil, bottom sediment)
_____ Waste Water
_____ Municipal Sludge
_____ Industrial Sludge
_____ Landfill Leachate
_____ Contaminated Soil
_____ Spill Material
✓ Waste Drums
_____ Other, specify _____

II. Which of these causes you to think these samples are potentially hazardous?

_____ Site Use History
_____ Site Inspections
_____ Critical Materials Report(s)
_____ Permit Application(s)
_____ Monthly Operating Reports
_____ Citizen Complaint
_____ Previous Analyses (results pending)
_____ Previous Analyses--Log No's. if known: _____
_____ Inspection Crew Reaction: _____
✓ Other Could be product of some sort.

III. Indicate the type of potential hazard:

_____ Corrosive
✓ Toxic
_____ Pathogenic
✓ Flammable
_____ Reactive (generates HCN, $H_2S$, etc.)

ARE VOLATILE TOXICS KNOWN OR LIKELY TO BE PRESENT IN CONCENTRATIONS OF CONCERN?
✓ Yes _____ No

PLEASE SPECIFY IF KNOWN: Unknown

WHAT SPECIAL PRECAUTIONS WERE TAKEN DURING THE COLLECTION OF THESE SAMPLES?
Level B gear.

EL 068
3/92
MATRIX = SEDIMENT/ SOIL

MICHIGAN DEPT OF NATURAL RESOURCES
ENVIRONMENTAL LABORATORY
ANALYSIS REQUEST SHEET

##### SAFETY WARNING ####
YES / NO - INFO ON BACK

LAB ORDER# 93-07-085 PROJ CODE _____ PRIORITY II RECEIVED AT LAB BY DL DATE TIME 7/16/93 1510 AM PM

SUBMITTER DIVISION ERD DISTRICT OR OFFICE Jackson CONTACT PERSON FOR QUESTIONS Peter Massa PHONE (517) - 780 7932

LOCATION SAMPLED Jackson Drop Forge COLLECTED BY P. Massa TRANS TO Parsons

COST CENTER 4541- 3IJ96 SEND RESULTS TO ATTENTION OF P. Massa AT ADDRESS (if different than above office)

SAMPLE REMARKS Barrel Sample

| SAMPLE NUMBER | FIELD ID OR DESCRIPTION | SAMPLE COLLECTED YY/MM/DD | HH:MM | SAMPLE INFORMATION |
|---|---|---|---|---|
| 01 | B-4 | 93/7/15 | 2:00P | Barrel Sample |
| 02 | | | | |
| 03 | | | | |
| 04 | | | | |
| 05 | | | | |
| 06 | | | | |
| 07 | | | | |
| 08 | | | | |

GENERAL CHEMISTRY

GS COD ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
KJEL N, Tot P . 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Phenolics ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Total CN ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
% Total Solids 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8

ORGANICS

POV VOLATILES
8260 (Sc 1&2 ).. 1 2 3 4 5 6 7 8

OS CHLORO HC +PEST & PCB
8081/8121 (Sc3). 1 2 3 4 5 6 7 8
PCB (only)..... 1 2 3 4 5 6 7 8

8270 ( B/N )..... 1 2 3 4 5 6 7 8

SPECIAL REQUESTS
Lib Search (Qualitative)
Volatiles ... 1 2 3 4 5 6 7 8
Base Neutral 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8

INORGANIC

MS Ca Mg Na K ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Cd Cr Cu Ni Pb Zn ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Fe Co Li Mn ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Al Ba Be Mo Ti V ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Hg - Mercury ..... 1 2 3 4 5 6 7 8
As - Arsenic ..... 1 2 3 4 5 6 7 8
Se - Selenium..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
% Total Solids ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8

TOXIC

EL 070
7/88
MATRIX = WATER

MICHIGAN DEPT OF NATURAL RESOURCES
ENVIRONMENTAL LABORATORY
ANALYSIS REQUEST SHEET

##### SAFETY WARNING ####
YES / NO - INFO ON BACK

LAB ORDER# 93-07-054 PROJ CODE _____ PRIORITY II RECEIVED AT LAB BY DH DATE TIME 7/16/93 1510 AM PM

SUBMITTER DIVISION ERD DISTRICT OR OFFICE Jackson CONTACT PERSON FOR QUESTIONS Peter Massey PHONE 517 - 780-7932

LOCATION SAMPLED Jackson Drop Forge COLLECTED BY P. Massey TRANS TO _____

COST CENTER 4591-35396 SEND RESULTS TO ATTENTION OF P. Massey AT ADDRESS (if different than above office) _____

SAMPLE REMARKS Barrel Sample

| SAMPLE NUMBER | FIELD ID OR DESCRIPTION (25 Characters) | SAMPLE COLLECTED YY/MM/DD | HH:MM | SAMPLE INFORMATION |
|---|---|---|---|---|
| 01 | B-3 | 93/7/15 | 2:00P | Barrel Sample |
| 02 | | | | |
| 03 | | | | |
| 04 | | | | |
| 05 | | | | |

GENERAL CHEMISTRY

| | | | |
|---|---|---|---|
| DO | Diss Oxygen | 1 2 3 4 5 | -J- |
| GN | NO2, o-Phos | 1 2 3 4 5 | -K- |
| | Residue SS | 1 2 3 4 5 | |
| | Residue TDS | 1 2 3 4 5 | |
| | ..... | 1 2 3 4 5 | |
| | BOD Tot 5 day | 1 2 3 4 5 | |
| | BOD Carb 5 day | 1 2 3 4 5 | |
| | ..... | 1 2 3 4 5 | |
| CA | Chlorophyll | 1 2 3 4 5 | -Q- |
| GA | COD | 1 2 3 4 5 | -L- |
| | TOC | 1 2 3 4 5 | |
| | NO3+NO2, NH3 | 1 2 3 4 5 | |
| | KJEL N, Tot P | 1 2 3 4 5 | |
| | ..... | 1 2 3 4 5 | |
| GG | Phenolics | 1 2 3 4 5 | -M- |
| GB | Total CN | 1 2 3 4 5 | -N- |
| | Free CN | 1 2 3 4 5 | |
| | ..... | 1 2 3 4 5 | |

ORGANICS

| | | | |
|---|---|---|---|
| PO1 | #1 Halocarbons | 1 2 3 4 5 | -R- |
| PO2 | #2 Aromatic HC | 1 2 3 4 5 | |
| | ..... | 1 2 3 4 5 | |
| ON | #3 Chloro HC + Pest & PCB | 1 2 3 4 5 | -S- |
| | ..... | 1 2 3 4 5 | |
| OB | GC/MS Base Neut | 1 2 3 4 5 | -T- |
| | ..... | 1 2 3 4 5 | |
| OA | #8 Phenols | 1 2 3 4 5 | -U- |
| | ..... | 1 2 3 4 5 | |
| | ..... | 1 2 3 4 5 | -V- |
| | ..... | 1 2 3 4 5 | |
| | ..... | 1 2 3 4 5 | |
| | ..... | 1 2 3 4 5 | |
| | ..... | 1 2 3 4 5 | |
| | ..... | 1 2 3 4 5 | |

INORGANIC

| | | | |
|---|---|---|---|
| MA | Total Metals | 1 2 3 4 5 | -X- |
| MAD | Diss-Field Filtered | 1 2 3 4 5 | |
| MD | Diss-Lab Filtered | 1 2 3 4 5 | |
| | Ca Mg Na K | 1 2 3 4 5 | |
| | Cd Cr Cu Ni Pb Zn | 1 2 3 4 5 | |
| | Fe Co Li Mn | 1 2 3 4 5 | |
| | Al Ba Be Mo Ti V | 1 2 3 4 5 | |
| | ..... | 1 2 3 4 5 | |
| | Hg - Mercury | 1 2 3 4 5 | |
| | Se - Selenium | 1 2 3 4 5 | |
| | Sb - Antimony | 1 2 3 4 5 | |
| | ..... | 1 2 3 4 5 | |
| | LOW LEVEL Ag | 1 2 3 4 5 | |
| | " " As | 1 2 3 4 5 | |
| | " " Cd Cr Cu Ni Pb | 1 2 3 4 5 | |
| | " " Zn Fe | 1 2 3 4 5 | |
| MN | pH, Conductance | 1 2 3 4 5 | -Y- |
| | Cl, SO4, Total Alk | 1 2 3 4 5 | |
| | HCO3- CO3= | 1 2 3 4 5 | |
| | CR+6 | 1 2 3 4 5 | |
| | ..... | 1 2 3 4 5 | |
| OG | Oil and Grease | 1 2 3 4 5 | -Z- |

Initial to indicate that you will accept "HT" coded results for late arriving samples.

Received: 07/16/93

DNR Laboratory REPORT
Results by Sample

Work Order # 93-07-085

SAMPLE ID B5 FRACTION 01A TEST CODE S VOL NAME Volatile 8260 Sediments
Date & Time Collected 07/15/93 Category

ANALYST GRINWIS
ANALYZED 07/29/93
DILUTION 1196

Total Solids 76

UNITS ug/Kg ppb

| CAS# | COMPOUND | RESULT | REMARK | REPORTED DETECTION LIMIT |
|---|---|---|---|---|
| 74-87-3 | Chloromethane | ND | | 16000 |
| 75-01-4 | Vinyl chloride | ND | | 16000 |
| 74-83-9 | Bromomethane | ND | | 16000 |
| 75-00-3 | Chloroethane | ND | | 16000 |
| 67-64-1 | 2-Propanone (Acetone) | ND | | 16000 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 7800 |
| 75-09-2 | Methylene chloride | ND | | 16000 |
| 75-15-0 | Carbon Disulfide | ND | | 16000 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 7800 |
| 1634-04-4 | Methyl Tert. Butyl Ether | ND | | 16000 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 7800 |
| 78-93-3 | 2-Butanone (MEK) | ND | | 16000 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 7800 |
| 67-66-3 | Chloroform | ND | | 7800 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 7800 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 7800 |
| 71-43-2 | Benzene | ND | | 7800 |
| 56-23-5 | Carbon tetrachloride | ND | | 7800 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 7800 |
| 79-01-6 | Trichloroethene | ND | | 7800 |
| 75-27-4 | Bromodichloromethane | ND | | 7800 |
| 591-78-6 | 2-Hexanone | ND | | 16000 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 7800 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 7800 |
| 108-88-3 | Toluene | ND | | 7800 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 7800 |
| 108-10-1 | 4-Methyl-2-Propanone (MIBK) | ND | | 16000 |
| 124-48-1 | Dibromochloromethane | ND | | 7800 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 7800 |
| 127-18-4 | Tetrachloroethene | ND | | 7800 |
| 108-90-7 | Chlorobenzene | ND | | 7800 |
| 100-41-4 | Ethylbenzene | 43000 | | 7800 |
| 108-38-3 & 106-42-3 | m & p Xylene | 350000 | | 20000 |
| 75-25-2 | Bromoform | ND | | 7800 |
| 100-42-5 | Styrene | ND | | 7800 |
| 95-47-6 | o-Xylene | 130000 | | 7800 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 7800 |

COMMENTS

ND = not detected at the specified detection limit.

EL 085
4/87
MATRIX = ORGANIC / OIL

MICHIGAN DEPT OF NATURAL RESOURCES
ENVIRONMENTAL LABORATORY
ANALYSIS REQUEST SHEET

##### SAFETY WARNING ####
YES / NO - INFO ON BACK

LAB ORDER# 93-07-083 PROJ CODE _____ PRIORITY H RECEIVED AT LAB BY DH DATE TIME 7-16-93 15-10 AM PM

SUBMITTER DIVISION ERD DISTRICT OR OFFICE Jackson CONTACT PERSON FOR QUESTIONS Peter Massa PHONE (517) - 780-7932

LOCATION SAMPLED JACKSON DROP FORGE COLLECTED BY P. Massa TRANS TO _____

COST CENTER 4541-3JJ96 SEND RESULTS TO ATTENTION OF P. Massa AT ADDRESS (if different than above office) _____

SAMPLE REMARKS Barrel Samples

| SAMPLE NUMBER | FIELD ID OR DESCRIPTION | SAMPLE COLLECTED YY/MM/DD | HH:MM | SAMPLE INFORMATION |
|---|---|---|---|---|
| 01 | B-1 | 93/7/15 | 2:00P | Barrel Sample |
| 02 | B-2 | 93/7/15 | 2:00P | Barrel Sample |
| 03 | | | | |
| 04 | | NOTE: please save samples for possible quantitative analysis | | |
| 05 | | | | |
| 06 | | | | |
| 07 | | | | |
| 08 | | | | |

GENERAL CHEMISTRY

HC FLASH POINT ... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8

ORGANICS

OL #1 Halocarbons (Quantitative) 1 2 3 4 5 6 7 8
#2 Aromatic HC (Quantitative) 1 2 3 4 5 6 7 8
#1 Halocarbons (Qualitative) 1 2 3 4 5 6 7 8
#2 Aromatic HC (Qualitative) 1 2 3 4 5 6 7 8
#3 Chloro HC + Pest & PCB 1 2 3 4 5 6 7 8
PCB Only ..... 1 2 3 4 5 6 7 8
IR Scan ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8

INORGANIC

MO Ca Mg Na K ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Cd Cr Cu Ni Pb Zn ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Fe Co Li Mn ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Al Ba Be Mo Ti V ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
Hg - Mercury ..... 1 2 3 4 5 6 7 8
As - Arsenic ..... 1 2 3 4 5 6 7 8
Se - Selenium..... 1 2 3 4 5 6 7 8
Sb - Antimony ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
% Cl ..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8
..... 1 2 3 4 5 6 7 8

# SITE SCORING DOCUMENTATION SHEET

Site Name: Jackson Drop Forge

A. Environmental Contamination Category:

SOILS: 3 pt(s). N

GW: 1 pt(s). N

SW: 3 pt(s). N

AIR: 3 pt(s). N

B. Mobility Rating Category:

3 pt(s). N

C. Sensitive Environmental Resource Category:

None

D. Population Category:

Population density from map = 1519 persons/sq. mi
4 point(s)

E. Institutional Population Category:

Honer School : 1 point

F. Toxicity/Quantity Category:

Method B:
480000 ppb of Xylene with potential toxicity of 24 scored 11 point(s).

JACKSON SOUTH QUADRANGLE
MICHIGAN–JACKSON CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
NW/4 JACKSON 15' QUADRANGLE

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

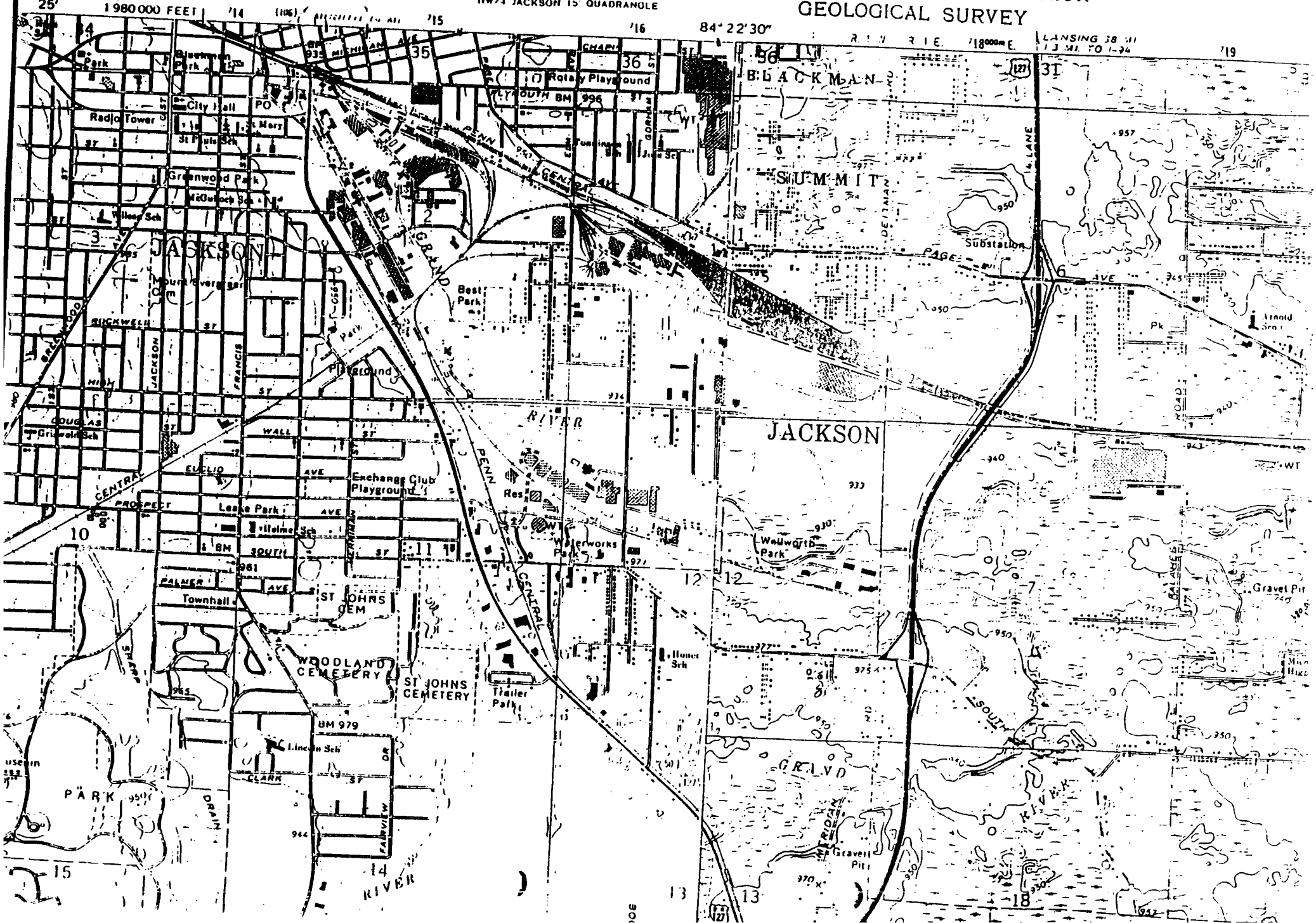


FIGURE 1
Site Scoring Sheet

| Jackson Drop Forge | 380266 | Jackson | 29 |
|---|---|---|---|
| Site Name | Site ID | County | Score |

CATEGORY — CATEGORY SUB-SCORE

| Environmental Contamination (20 points Max) | Environmental Media | Potential Contamination | Suspected Contamination | Confirmed Contamination | Human Exposure |
|---|---|---|---|---|---|
| | Soil | 1 | 3 | 6 | 9 |
| | Ground Water | 1 | 3 | 6 | 9 or 20 |
| | Surface Water | 1 | 3 | 6 | 9 or 20 |
| | Air | 1 | 3 | 6 | 9 or 20 |

| 10 |

Mobility Ratings

Mobility Rating (5 points Max): 1 or 3 or 5

| 3 |

| Sensitive Environmental Resource (3 points Max) | Natural Communities | Uncommon | Rare | Extremely Rare |
|---|---|---|---|---|
| | Plants / Animals | Special concern | Threatened | Endangered |
| | One occurrence | 1 | 2 | 3 |
| | Two occurrence | 2 | 3 | 3 |
| | Three or more | 3 | 3 | 3 |

| 0 |

Population (4 points Max)

| Density per square mile | Points |
|---|---|
| 1-10 | 1 |
| 11-100 | 2 |
| 101-1,000 | 3 |
| 1001 or more | 4 |

Institutional Population (1 point Max): Presence of one or more institutions in target area — 1

FIGURE 1 Continued
Site Scoring Sheet

TOXICITY/QUANTITY

CATEGORY SUB-SCORE

| Method A | Chemical Quantity (Kilograms) | <10 | Potential 10-19 | Toxicity 20-29 | Score 30-50 | >50 |
|---|---|---|---|---|---|---|
| Identified Chemical(s) | <25 | 1 | 3 | 5 | 7 | 9 |
| | 25 - 2,500 | 3 | 5 | 7 | 9 | 11 |
| | 2,501 - 20,000 | 5 | 7 | 9 | 11 | 13 |
| | > 20,000 | 7 | 9 | 11 | 13 | 15 |

| Method B | Chemical Concentration (parts per billion) | <10 | Potential 10-19 | Toxicity 20-29 | Score 30-50 | >50 |
|---|---|---|---|---|---|---|
| Unquantified Chemical | 1 - 100 | 1 | 3 | 5 | 7 | 9 |
| | 101 - 1,000 | 3 | 5 | 7 | 9 | 11 |
| | 1,001 - 10,000 | 5 | 7 | 9 | 11 | 13 |
| | > 10,000 | 7 | 9 | 11 | 13 | 15 |

Contaminant and concentration on which unquantifiable site toxicity was based:

| Method C | Quantity of Waste (cubic meters) | or (acres) | Waste Class D | C | B | A |
|---|---|---|---|---|---|---|
| Unidentified Chemical(s) | < 50 | < 0.5 | 3 | 5 | 7 | 9 |
| | 50 - 500 | 0.5 - 10 | 5 | 7 | 9 | 11 |
| | 501 - 2,500 | 11 - 60 | 7 | 9 | 11 | 13 |
| | > 2,500 | > 60 | 9 | 11 | 13 | 15 |

Waste source on which unknown contaminant waste characterization was based:

Special Waste Severely Toxic Waste = 15

Toxicity/Quantity Category Score | 11 |

Total Possible Points = 48

Total Site Points | 29 |

Scored By [signature] Date 8/26/93

QA By _____ Date _____

# ACT 307 MASTER DATA FORM

ENVIRONMENTAL RESPONSE DIVISION

## SECTION A-SITE LOCATION INFORMATION

| | | | | |
|---|---|---|---|---|
| SITE NAME: Jackson Drop Forge | | | SITE ID: 380266 | |
| STREET NUMBER AND NAME: Wellworth Ave 2001 | | | | |
| CITY: Jackson | | STATE: MI | ZIP CODE: 49203 | |
| TOWNSHIP: Summit | | | STATE COUNTY CODE 38 | FEDERAL COUNTY CODE |
| COUNTY: Jackson | | | | |
| LATITUDE: | LONGITUDE: | HOUSE:050 | SENATE:19 | CONGRESS:02 |
| LOCATION CODE:38-03S-01W-12BD | | DNR DISTRICT: Jackson | | |

DIRECTIONS TO SITE (USE REVERSE SIDE IF NECESSARY)
Take South St to Losey to Wellworth Ave

## SECTION B-ACT 307 LIST INFORMATION

| | | | |
|---|---|---|---|
| PROPOSED SCORE: | DATE: | SOURCE OF CONTAMINATION | |
| FINAL SCORE: 35 | DATE: 08/26/93 | SIC CODE: 3325 | CATEGORY:Steel Foundries |
| PREVIOUS SCORE: | DATE: | | |

POINT OF RELEASE
[ ] PILE [ ] ABOVE GROUND TANK
[ ] GEOLOGIC FORMATION [ ] UNDER GROUND TANK
[ ] LAGOON [ ] PIPELINE
[ ] CONTAINER [ ] LANDFILL
[X] BARREL [ ] UNKNOWN
[ ] PIT [ ] DUMP [ ] SURFACE DISCHARGE

POLLUTANT - BY Name/Waste Category
[ ] SOLVENT SPECIFY:
[ ] GASOLINE/DIESEL [ ] PESTICIDE/HERBIC.
[ ] METALS [ ] SOLID WASTE
[ ] PCBs
[ ] BRINE/CHLORIDE

CHEMICALS BY NAME
Xylene Toluene
Ethybenzene

| RESOURCES | AFFECTED | POTENTIALLY AFFECTED | SUSPECTED |
|---|---|---|---|
| SEDIMENT | [ ] | [X] | [ ] |
| SURFACE WATER | [X] | [ ] | [ ] |
| GROUNDWATER | [ ] | [X] | [ ] |
| AIR | [X] | [ ] | [ ] |
| SOIL | [X] | [ ] | [ ] |
| WETLAND | [X] | [ ] | [ ] |
| MUNICIPAL WELL | [ ] | [ ] | [ ] |
| RESIDENTIAL WELL | [ ] | [ ] | [ ] |
| FAUNA | [ ] | [ ] | [ ] |
| FLORA | [ ] | [ ] | [ ] |

| SITE ACTIVITIES | SOURCE OF FUNDING |
|---|---|
| [ ] INTERIM RESPONSE | [ ] |
| [ ] REMEDIAL INVES. | [ ] |
| [ ] FEASIBILITY STUDY | [ ] |
| [ ] FINAL CLEANUP | [ ] |
| [ ] O & M | [ ] |

S = State
F = Federal
P = PRP
SP=State/Feds
SP=State/PRP
FP=Feds/PRP

OTHER PROGRAM LISTS
[ ] LUST [ ] SUPERFUND [ ] BOND

SITE OWNERSHIP
[ ] FEDERAL [X] PRIVATE [ ] STATE [ ] LOCAL

CODE:1 LIST CATEGORY:No Actions Taken

PREPARED BY:

FIGURE 1
Site Scoring Sheet

| Site Name | Site ID | County | Score |
|---|---|---|---|
| Jackson Drop Forge | 380266 | Jackson | 35 |

| CATEGORY | | | | | | CATEGORY SUB-SCORE |
|---|---|---|---|---|---|---|
| Environmental Contamination (20 points Max) | Environmental Media | Potential Contamination | Suspected Contamination | Confirmed Contamination | Human Exposure | |
| | Soil | 1 | 3 | 6 | 9 | |
| | Ground Water | 1 | 3 | 6 | 9 or 20 | |
| | Surface Water | 1 | 3 | 6 | 9 or 20 | |
| | Air | 1 | 3 | 6 | 9 or 20 | |
| | | | | | | 16 |

| | Mobility Ratings | | | | | |
|---|---|---|---|---|---|---|
| Mobility Rating (5 points Max) | 1 | or | 3 | or | 5 | 3 |

| | | | | | |
|---|---|---|---|---|---|
| Sensitive Environmental Resource (3 points Max) | Natural Communities | Uncommon | Rare | Extremely Rare | |
| | Plants / Animals | Special concern | Threatened | Endangered | |
| | One occurrence | 1 | 2 | 3 | |
| | Two occurrence | 2 | 3 | 3 | |
| | Three or more | 3 | 3 | 3 | |
| | | | | | 0 |

| | | | |
|---|---|---|---|
| Population (4 points Max) | Density per square mile | Points | |
| | 1-10 | 1 | |
| | 11-100 | 2 | |
| | 101-1,000 | 3 | |
| | 1001 or more | 4 | |
| | | | 4 |

| | | | |
|---|---|---|---|
| Institutional Population (1 point Max) | Presence of one or more institutions in target area | 1 | |
| | | | 1 |

FIGURE 1 Continued
Site Scoring Sheet

TOXICITY/QUANTITY

CATEGORY SUB-SCORE

| Method A<br>Identified Chemical(s) | Chemical Quantity (Kilograms) | <10 | Potential Toxicity Score<br>10-19 | 20-29 | 30-50 | >50 |
|---|---|---|---|---|---|---|
| | <25 | 1 | 3 | 5 | 7 | 9 |
| | 25 - 2,500 | 3 | 5 | 7 | 9 | 11 |
| | 2,501 - 20,000 | 5 | 7 | 9 | 11 | 13 |
| | > 20,000 | 7 | 9 | 11 | 13 | 15 |

| Method B<br>Unquantified Chemical | Chemical Concentration (parts per billion) | <10 | Potential Toxicity Score<br>10-19 | 20-29 | 30-50 | >50 |
|---|---|---|---|---|---|---|
| | 1 - 100 | 1 | 3 | 5 | 7 | 9 |
| | 101 - 1,000 | 3 | 5 | 7 | 9 | 11 |
| | 1,001 - 10,000 | 5 | 7 | 9 | 11 | 13 |
| | > 10,000 | 7 | 9 | 11 | 13 | 15 |

Contaminant and concentration on which unquantifiable site toxicity was based:

| Method C<br>Unidentified Chemical(s) | Quantity of Waste (cubic meters) | or (acres) | Waste Class<br>D | C | B | A |
|---|---|---|---|---|---|---|
| | < 50 | < 0.5 | 3 | 5 | 7 | 9 |
| | 50 - 500 | 0.5 - 10 | 5 | 7 | 9 | 11 |
| | 501 - 2,500 | 11 - 60 | 7 | 9 | 11 | 13 |
| | > 2,500 | > 60 | 9 | 11 | 13 | 15 |

Waste source on which unknown contaminant waste characterization was based:

Special Waste Severely Toxic Waste = 15

Toxicity/Quantity Category Score | 11 |

Total Possible Points = 48

Total Site Points | 35 |

Scored By [signature] Date 8/31/93

QA By [signature] Date

# SITE SCORING DOCUMENTATION SHEET

Site Name: Jackson Drop Forge

A. Environmental Contamination Category:

SOILS: 9 pt(s). Sampling Results

GW: 1 pt(s). None

SW: 3 pt(s). Site Inspection

AIR: 3 pt(s). Site Inspection

B. Mobility Rating Category:

3 pt(s).

C. Sensitive Environmental Resource Category:

None

D. Population Category:

Population density from map = 1519 persons/sq. mi
4 point(s)

E. Institutional Population Category:

Honer School : 1 point

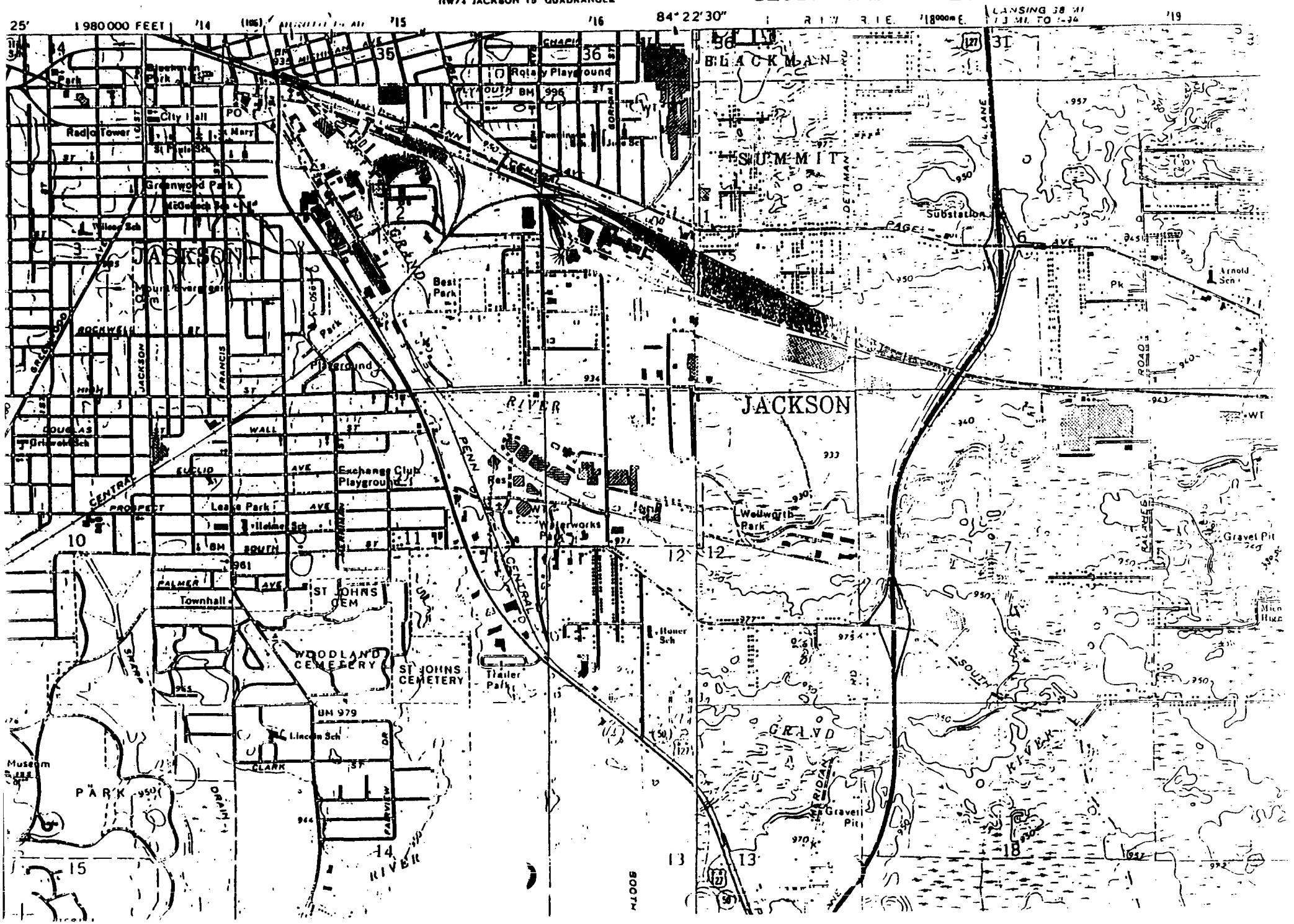
F. Toxicity/Quantity Category:

Method B:
480000 ppb of Xylene with potential toxicity of 24 scored 11 point(s).

JACKSON SOUTH QUADRANGLE
MICHIGAN–JACKSON CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
NW/4 JACKSON 15' QUADRANGLE

380266

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



Received: 07/16/93

DNR Laboratory · REPORT
Results by Sample

Work Order # 93-07-085

SAMPLE ID B5 FRACTION 01A TEST CODE S VOL NAME Volatile 8260 Sediments
Date & Time Collected 07/15/93 Category

ANALYST GRINNIS
ANALYZED 07/29/93
DILUTION 1196

Total Solids 76

UNITS ug/Kg ppb

| CAS# | COMPOUND | RESULT | REMARK | REPORTED DETECTION LIMIT |
|---|---|---|---|---|
| 74-87-3 | Chloromethane | ND | | 16000 |
| 75-01-4 | Vinyl chloride | ND | | 16000 |
| 74-83-9 | Bromomethane | ND | | 16000 |
| 75-00-3 | Chloroethane | ND | | 16000 |
| 67-64-1 | 2-Propanone (Acetone) | ND | | 16000 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 7800 |
| 75-09-2 | Methylene chloride | ND | | 16000 |
| 75-15-0 | Carbon Disulfide | ND | | 16000 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 7800 |
| 1634-04-4 | Methyl Tert. Butyl Ether | ND | | 16000 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 7800 |
| 78-93-3 | 2-Butanone (MEK) | ND | | 16000 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 7800 |
| 67-66-3 | Chloroform | ND | | 7800 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 7800 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 7800 |
| 71-43-2 | Benzene | ND | | 7800 |
| 56-23-5 | Carbon tetrachloride | ND | | 7800 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 7800 |
| 79-01-6 | Trichloroethene | ND | | 7800 |
| 75-27-4 | Bromodichloromethane | ND | | 7800 |
| 591-78-6 | 2-Hexanone | ND | | 16000 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 7800 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 7800 |
| 108-88-3 | Toluene | ND | | 7800 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 7800 |
| 108-10-1 | 4-Methyl-2-Propanone (MIBK) | ND | | 16000 |
| 124-48-1 | Dibromochloromethane | ND | | 7800 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 7800 |
| 127-18-4 | Tetrachloroethene | ND | | 7800 |
| 108-90-7 | Chlorobenzene | ND | | 7800 |
| 100-41-4 | Ethylbenzene | 43000 | | 7800 |
| 108-38-3 & 106-42-3 | m & p Xylene | 350000 | | 20000 |
| 75-25-2 | Bromoform | ND | | 7800 |
| 100-42-5 | Styrene | ND | | 7800 |
| 95-47-6 | o-Xylene | 130000 | | 7800 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 7800 |

COMMENTS

ND = not detected at the specified detection limit.

MICHIGAN DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL LABORATORY

REPORT Environmental Response Div.
TO District #13
301 E. Lewis Glick Hwy.
Jackson, MI 49201
ATTEN PETER MASSON

LABORATORY WORK ORDER # 93-07-083
WORK ID JACKSON DROP FORGE
P.O. # 3IJ96 COST $ 185.60
RECEIVED 07/16/93 CLIENT ER JACKSON
REPORTED _____ NUMBER OF SAMPLES 2
LAB CONTACT OR MATRIX OIL

Report prepared By: D Hartig 8-13-93

RECEIVED
AUG 17 1993
DNR
DISTRICT 13 HDQTS

Received: 07/16/93

DNR Laboratory REPORT
Results by Sample

Work Order # 93-07-083

SAMPLE ID B-1 FRACTION 01A TEST CODE 0 SC 1 NAME Scan 1 Oil/Organic
Date & Time Collected 07/15/93 Category

ANALYST STOKES
ANALYZED 07/26/93
DILUTION 4

UNITS mg/Kg ppm

| CAS# | COMPOUND | RESULT | REMARK | REPORTED DETECTION LIMIT |
|---|---|---|---|---|
| 75-35-4 | 1,1-Dichloroethene | ND | | 20 |
| 75-09-2 | Methylene chloride | ND | | 100 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 20 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 20 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 20 |
| 67-66-3 | Chloroform | ND | | 20 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 20 |
| 56-23-5 | Carbon tetrachloride | ND | | 20 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 20 |
| 79-01-6 | Trichloroethene | ND | | 20 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 20 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 20 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 20 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 20 |
| 127-18-4 | Tetrachloroethene | ND | | 20 |
| 108-90-7 | Chlorobenzene | ND | | 20 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 20 |

COMMENTS

ND = not detected at the specified detection limit.
Analytical methodology not validated for this matrix.

Received: 07/16/93

DNR Laboratory REPORT
Results by Sample

Work Order # 93-07-083

SAMPLE ID B-1 FRACTION 01A TEST CODE 0 SC 2 NAME Scan 2 Oil/Organic
Date & Time Collected 07/15/93 Category

ANALYST STOKES
ANALYZED 07/28/93
DILUTION 10

UNITS ug/Kg ppm

| CAS# | COMPOUND | RESULT | REMARK | REPORTED DETECTION LIMIT |
|---|---|---|---|---|
| 71-43-2 | Benzene | ND | | 50 |
| 108-88-3 | Toluene | 170 | | 20 |
| 100-41-4 | Ethylbenzene | 700 | | 50 |
| 108-38-3 | Xylene isomers | 2100 | | 100 |

COMMENTS Octane,cyclohexane, & long chain hydrocarbon ind. by MS

ND = not detected at the specified detection limit.
Analytical methodology not validated for this matrix.

Received: 07/16/93

DNR Laboratory REPORT Work Order # 93-07-083
Results by Sample

SAMPLE ID B-2 FRACTION 02A TEST CODE 0 SC 1 NAME Scan 1 Oil/Organic
Date & Time Collected 07/15/93 Category

ANALYST STOKES
ANALYZED 07/20/93
DILUTION 1

UNITS ug/Kg ppm

| CAS# | COMPOUND | RESULT | REMARK | REPORTED DETECTION LIMIT |
|---|---|---|---|---|
| 75-35-4 | 1,1-Dichloroethene | 14 | UC | 5.0 |
| 75-09-2 | Methylene chloride | ND | | 25 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 5.0 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 5.0 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 5.0 |
| 67-66-3 | Chloroform | ND | | 5.0 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 5.0 |
| 56-23-5 | Carbon tetrachloride | ND | | 5.0 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 5.0 |
| 79-01-6 | Trichloroethene | ND | | 5.0 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 5.0 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 5.0 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 5.0 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 5.0 |
| 127-18-4 | Tetrachloroethene | ND | | 5.0 |
| 108-90-7 | Chlorobenzene | ND | | 5.0 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 5.0 |

COMMENTS

ND = not detected at the specified detection limit.
Analytical methodology not validated for this matrix.

Received: 07/16/93

DNR Laboratory REPORT
Results by Sample

Work Order # 93-07-083

SAMPLE ID B-2 FRACTION 02A TEST CODE O SC 2 NAME Scan 2 Oil/Organic
Date & Time Collected 07/15/93 Category

ANALYST STOKES
ANALYZED 07/21/93
DILUTION 2

UNITS ug/Kg ppm

| CAS# | COMPOUND | RESULT | REMARK | REPORTED DETECTION LIMIT |
|---|---|---|---|---|
| 71-43-2 | Benzene | ND | | 10 |
| 108-88-3 | Toluene | 10 | | 5.0 |
| 100-41-4 | Ethylbenzene | 57 | | 10 |
| 108-38-3 | Xylene isomers | 280 | | 20 |

COMMENTS Octane indicated by MSD.

ND = not detected at the specified detection limit.
Analytical methodology not validated for this matrix.

MICHIGAN DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL LABORATORY

REPORT Environmental Response Div.
TO District #13
301 E. Lewis Glick Hwy.
Jackson, MI 49201
ATTEN PETER MASSON

LABORATORY WORK ORDER # 93-07-084
WORK ID JACKSON DROP FORGE
P.O. # 31J96 COST $ 66.00
RECEIVED 07/16/93 CLIENT ER JACKSON
REPORTED _____ NUMBER OF SAMPLES 1
LAB CONTACT OR MATRIX WATER

Report prepared By: D Hartig 7/29/93

AUG 0 5 1993

MICHIGAN DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL LABORATORY

REPORT Environmental Response Div.
TO District #13
301 E. Lewis Glick Hwy.
Jackson, MI 49201
ATTEN PETER MASSON

LABORATORY WORK ORDER # 93-07-085
WORK ID JACKSON DROP FORGE
P.O. # 3IJ96 COST $ 95.00
RECEIVED 07/16/93 CLIENT ER JACKSON
REPORTED _____ NUMBER OF SAMPLES 1
LAB CONTACT OR MATRIX SEDIMENT

Report prepared By: D Hartig 8-4-93

AUG 09 1993

Received: 07/16/93

DNR Laboratory REPORT
Results by Sample

Work Order # 93-07-085

SAMPLE ID B5 FRACTION 01A TEST CODE S VOL NAME Volatile 8260 Sediments
Date & Time Collected 07/15/93 Category

ANALYST GRINNIS
ANALYZED 07/29/93
DILUTION 1196

Total Solids 76

UNITS ug/Kg ppb

| CAS# | COMPOUND | RESULT | REMARK | REPORTED DETECTION LIMIT |
|---|---|---|---|---|
| 74-87-3 | Chloromethane | ND | | 16000 |
| 75-01-4 | Vinyl chloride | ND | | 16000 |
| 74-83-9 | Bromomethane | ND | | 16000 |
| 75-00-3 | Chloroethane | ND | | 16000 |
| 67-64-1 | 2-Propanone (Acetone) | ND | | 16000 |
| 75-35-4 | 1,1-Dichloroethene | ND | | 7800 |
| 75-09-2 | Methylene chloride | ND | | 16000 |
| 75-15-0 | Carbon Disulfide | ND | | 16000 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 7800 |
| 1634-04-4 | Methyl Tert. Butyl Ether | ND | | 16000 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 7800 |
| 78-93-3 | 2-Butanone (MEK) | ND | | 16000 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 7800 |
| 67-66-3 | Chloroform | ND | | 7800 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 7800 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 7800 |
| 71-43-2 | Benzene | ND | | 7800 |
| 56-23-5 | Carbon tetrachloride | ND | | 7800 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 7800 |
| 79-01-6 | Trichloroethene | ND | | 7800 |
| 75-27-4 | Bromodichloromethane | ND | | 7800 |
| 591-78-6 | 2-Hexanone | ND | | 16000 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 7800 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 7800 |
| 108-88-3 | Toluene | ND | | 7800 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 7800 |
| 108-10-1 | 4-Methyl-2-Propanone (MIBK) | ND | | 16000 |
| 124-48-1 | Dibromochloromethane | ND | | 7800 |
| 106-93-4 | 1,2-Dibromoethane | ND | | 7800 |
| 127-18-4 | Tetrachloroethene | ND | | 7800 |
| 108-90-7 | Chlorobenzene | ND | | 7800 |
| 100-41-4 | Ethylbenzene | 43000 | | 7800 |
| 108-38-3 & 106-42-3 | m & p Xylene | 350000 | | 20000 |
| 75-25-2 | Bromoform | ND | | 7800 |
| 100-42-5 | Styrene | ND | | 7800 |
| 95-47-6 | o-Xylene | 130000 | | 7800 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 7800 |

COMMENTS

ND = not detected at the specified detection limit.

Received: 07/16/93

DNR Laboratory REPORT
Results by Sample

Work Order # 93-07-084

SAMPLE ID B-3 FRACTION 01A TEST CODE SC 1 NAME Scan 1 Water
Date & Time Collected 07/15/93 Category

ANALYST STOKES
ANALYZED 07/20/93
DILUTION 25

UNITS ug/L ppb

| CAS# | COMPOUND | RESULT | REMARK | REPORTED DETECTION LIMIT |
|---|---|---|---|---|
| 75-01-4 | Vinyl chloride | ND | | 130 |
| 74-83-9 | Bromomethane | ND | | 130 |
| 75-00-3 | Chloroethane | ND | | 130 |
| 75-69-4 | Trichlorofluoromethane | ND | | 130 |
| 75-35-4 | 1,1-Dichloroethene | 34 | UC | 25 |
| 75-09-2 | Methylene chloride | ND | | 130 |
| 156-60-5 | trans-1,2-Dichloroethene | ND | | 25 |
| 75-34-3 | 1,1-Dichloroethane | ND | | 25 |
| 156-59-2 | cis-1,2-Dichloroethene | ND | | 25 |
| 67-66-3 | Chloroform | ND | | 25 |
| 71-55-6 | 1,1,1-Trichloroethane | ND | | 25 |
| 56-23-5 | Carbon tetrachloride | ND | | 25 |
| 107-06-2 | 1,2-Dichloroethane | ND | | 25 |
| 79-01-6 | Trichloroethene | ND | | 25 |
| 78-87-5 | 1,2-Dichloropropane | ND | | 25 |
| 75-27-4 | Bromodichloromethane | ND | | 25 |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | | 25 |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | | 25 |
| 79-00-5 | 1,1,2-Trichloroethane | ND | | 25 |
| 127-18-4 | Tetrachloroethene | ND | | 25 |
| 124-48-1 | Dibromochloromethane | ND | | 25 |
| 108-90-7 | Chlorobenzene | 31 | | 25 |
| 75-25-2 | Bromoform | ND | | 25 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | | 25 |

COMMENTS

ND = not detected at the specified detection limit.

Received: 07/16/93

DNR Laboratory REPORT Work Order # 93-07-084
Results by Sample

SAMPLE ID B-3 FRACTION 01A TEST CODE SC 2 NAME Scan 2 Water
Date & Time Collected 07/15/93 Category

ANALYST STOKES
ANALYZED 07/22/93
DILUTION 5000

UNITS ug/L ppb

| CAS# | COMPOUND | RESULT | REMARK | REPORTED DETECTION LIMIT |
|---|---|---|---|---|
| 71-43-2 | Benzene | 38 | UC | 25 |
| 108-88-3 | Toluene | 720 | | 100 |
| 100-41-4 | Ethylbenzene | 13000 | | 5000 |
| 108-38-3 | Xylene isomers | 53000 | | 5000 |

COMMENTS

ND = not detected at the specified detection limit.