R5-8710-038

US EPA RECORDS CENTER REGION 5
494948

REFERENCE 15
SITE NAME Hi-Mill Manufacturing
SITE ID MID005341714

Michigan Department of Natural Resources

Environmental Laboratory

Inorganic Unit

LOG #: 3920

Log # 3920 Sampling Location: HIMILL MANUFACTURING Matrix: WATER

Send Results To: GWQD Received 84-04-18

Proj Code GC GWQD COMPLIANCE

Lab # 37268 To 75 8 Samples Priority III

Cost Code *0*0000000000000000 Approx Cost $ 632.00

RECEIVED

MATRIX = WATER

MICHIGAN DEPT OF NATURAL RESOURCES ENVIRONMENTAL LABORATORY
ANALYSIS REQUEST SHEET

2/84

LAB LOG# 3930 PROJ CODE GC COST CENTER 90176 PR 01 RECEIVED AT LAB 4/17/84 DATE 04/18/84 TIME 1430 AM PM

LOCATION SAMPLED H.M.I. Manufacturing Oakbrook COLLECTED BY TRANSFERED TO

SAMPLE REMARKS Monitor wells SEND RESULTS TO (NAME & SECTION) Groundwater Quality Division

LAB USE ONLY	#	FIELD ID OR DESCRIPTION	SAMPLE INFORMATION	YY/MM/DD	HH:MM
37869	01	1		84/04/17	1:25
37869	02	2		84/04/17	1:15
37870	03	3		84/04/17	1:05
37871	04	4		84/04/17	12:50
37872	05	5		84/04/17	12:4[illegible]
37873	06	6		84/04/17	2:05
37874	07	Replicate (3)		84/04/17	1:08
37875	08	A		84/04/17	1:40
	09				
	10				

ORGANIC

PO1 #1 HALOCARBONS.....1 2 3 4 5 6 7 8 9 10

PO2 #2 AROMATIC HC.....1 2 3 4 5 6 7 8 9 10

OBN #3 CHLORINATED HC..1 2 3 4 5 6 7 8 9 10
#4 PCB & OC PEST...1 2 3 4 5 6 7 8 9 10
#6 PHTHALATES.....1 2 3 4 5 6 7 8 9 10
#7 PNA.....1 2 3 4 5 6 7 8 9 10
.....1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10

OA #8 PHENOLS.....1 2 3 4 5 6 7 8 9 10

OG OIL & GREASE-IR....1 2 3 4 5 6 7 8 9 10
OIL & GREASE-GRAV..1 2 3 4 5 6 7 8 9 10

1 2 3 4 5 6 7 8 9 10
.....1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
.....1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
.....1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
.....1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
.....1 2 [illegible] 7 8 9 10

INORGANIC

MA CA MG NA K.....1 2 3 4 5 6 7 8 9 10
CD CR CU NI PB ZN.1 2 3 4 5 6 7 8 9 10
HG MERCURY.....1 2 3 4 5 6 7 8 9 10
AS ARSENIC.....1 2 3 4 5 6 7 8 9 10
SE SELENIUM.....1 2 3 4 5 6 7 8 9 10
SB ANTIMONY.....1 2 3 4 5 6 7 8 9 10
OTHERS (CIRCLE)
AG AL BA BE CO FE 1 2 3 4 5 6 7 8 9 10
LI MN MO TI V.....1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10
FURNACE- CD.....1 2 3 4 5 6 7 8 9 10
" CR CU NI PB.....1 2 3 4 5 6 7 8 9 10
LAB FILTRATION.....1 2 3 4 5 6 7 8 9 10

MN PH, CONDUCTANCE....1 2 3 4 5 6 7 8 9 10
CL SO4 TOTAL ALK...1 2 3 4 5 6 7 8 9 10
FLUORIDE.....1 2 3 4 5 6 7 8 9 10
CR+6.....1 2 3 4 5 6 7 8 9 10
HCO3- CO3=.....1 2 3 4 5 6 7 8 9 10
CA MG NA K FE-DISS.1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10

MB BRINE (CIRCLE)
" CL SO4 BR 1 2 3 4 5 6 7 8 9 10
" ALK HCO3- CO3=..1 2 3 4 5 6 7 8 9 10
" CA MG NA K 1 2 3 4 5 6 7 8 9 10

GENERAL CHEMISTRY

DO DISS OXYGEN....1 2 3 4 5 6 7 8 9 10

GN O-P NO2- SI....1 2 3 4 5 6 7 8 9 10
RES-NF (SS)....1 2 3 4 5 6 7 8 9 10
RES-TF (TDS)...1 2 3 4 5 6 7 8 9
1 2 3 4 5 6 7 8 9 10
BOD TOT 5 DAY.1 2 3 4 5 6 7 8 9 10
BOD CARB 5 DAY.1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10

GA COD.....1 2 3 4 5 6 7 8 9 10
TOC.....1 2 3 4 5 6 7 8 9 10
NO3+NO2 NH3....1 2 3 4 5 6 7 8 9 10
KJELDAHL N TP..1 2 3 4 5 6 7 8 9 10
PHENOLICS.....1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10

GB TOTAL CN.....1 2 3 4 5 6 7 8 9 10
FREE CN.....1 2 3 4 5 6 7 8 9 10

BC FECAL COLI.....1 2 3 4 5 6 7 8 9 10
TOTAL COLI.....1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10

CA CHLOROPHYLL....1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10

10-84

MICHIGAN DEPT OF NATURAL RESOURCES --- ENVIRONMENTAL LABORATORY

INORGANIC UNIT EXAMINER..Nordlund......

LOG NO: 3920

LAB #	PARAMETER		RESULTS	UNITS	ANALYSIS	MATRIX	RUN #
37868	ALUMINUM	K	1000.0	UG / L	TOTAL	WATER	00330
37868	CALCIUM		142.0	MG / L	TOTAL	WATER	22300
37868	CADMIUM	K	20.0	UG / L	TOTAL	WATER	00330
37868	CHROMIUM	K	50.0	UG / L	TOTAL	WATER	00330
37868	COPPER		45.0	UG / L	TOTAL	WATER	00330
37868	IRON		655.0	UG / L	TOTAL	WATER	00330
37868	POTASSIUM		0.2	MG / L	TOTAL	WATER	22300
37868	MAGNESIUM		65.0	MG / L	TOTAL	WATER	22300
37868	SODIUM		28.5	MG / L	TOTAL	WATER	22300
37868	NICKEL	K	50.0	UG / L	TOTAL	WATER	00330
37868	LEAD	K	50.0	UG / L	TOTAL	WATER	00330
37868	ZINC	K	50.0	UG / L	TOTAL	WATER	00330
----- 37868 -----							
37869	ALUMINUM	K	1000.0	UG / L	TOTAL	WATER	00330
37869	CALCIUM		136.0	MG / L	TOTAL	WATER	22300
37869	CADMIUM	K	20.0	UG / L	TOTAL	WATER	00330
37869	CHROMIUM	K	50.0	UG / L	TOTAL	WATER	00330
37869	COPPER		30.0	UG / L	TOTAL	WATER	00330
37869	IRON		1300.0	UG / L	TOTAL	WATER	00330
37869	POTASSIUM		0.5	MG / L	TOTAL	WATER	22300
37869	MAGNESIUM		450.0	MG / L	TOTAL	WATER	22300
37869	SODIUM		106.0	MG / L	TOTAL	WATER	22300
37869	NICKEL	K	50.0	UG / L	TOTAL	WATER	00330
37869	LEAD	K	50.0	UG / L	TOTAL	WATER	00330
37869	ZINC	K	50.0	UG / L	TOTAL	WATER	00330
----- 37869 -----							
37870	ALUMINUM		15500.0	UG / L	TOTAL	WATER	00330
37870	CALCIUM		162.0	MG / L	TOTAL	WATER	22300
37870	CADMIUM	K	20.0	UG / L	TOTAL	WATER	00330
37870	CHROMIUM		170.0	UG / L	TOTAL	WATER	00330
37870	COPPER		1040.0	UG / L	TOTAL	WATER	00330
37870	IRON		13700.0	UG / L	TOTAL	WATER	00330
37870	POTASSIUM		11.2	MG / L	TOTAL	WATER	22300
37870	MAGNESIUM		46.0	MG / L	TOTAL	WATER	22300
37870	SODIUM		25.5	MG / L	TOTAL	WATER	22300
37870	NICKEL	K	50.0	UG / L	TOTAL	WATER	00330
37870	LEAD	K	50.0	UG / L	TOTAL	WATER	00330
37870	ZINC		440.0	UG / L	TOTAL	WATER	00330
----- 37870 -----							
37871	ALUMINUM		3130.0	UG / L	TOTAL	WATER	00330
37871	CALCIUM		87.7	MG / L	TOTAL	WATER	22300
37871	CADMIUM	K	20.0	UG / L	TOTAL	WATER	00330

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MICHIGAN DEPT OF NATURAL RESOURCES --- ENVIRONMENTAL LABORATORY

INORGANIC UNIT EXAMINER.....BN.....

LOG NO: 3929

LAB #	PARAMETER		RESULTS	UNITS	ANALYSIS	MATRIX	RUN #
37871	CHROMIUM	K	50.0	UG / L	TOTAL	WATER	00330
37871	COPPER		565.0	UG / L	TOTAL	WATER	00330
37871	IRON		5400.0	UG / L	TOTAL	WATER	00330
37871	POTASSIUM		1.0	MG / L	TOTAL	WATER	22300
37871	MAGNESIUM		28.8	MG / L	TOTAL	WATER	22300
37871	SODIUM		8.2	MG / L	TOTAL	WATER	22300
37871	NICKEL	K	50.0	UG / L	TOTAL	WATER	00330
37871	LEAD	K	50.0	UG / L	TOTAL	WATER	00330
37871	ZINC		50.0	UG / L	TOTAL	WATER	00330

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37872	ALUMINUM		25500.0	UG / L	TOTAL	WATER	00330
37872	CALCIUM		56.2	MG / L	TOTAL	WATER	22300
37872	CADMIUM	K	20.0	UG / L	TOTAL	WATER	00330
37872	CHROMIUM		60.0	UG / L	TOTAL	WATER	00330
37872	COPPER		150.0	UG / L	TOTAL	WATER	00330
37872	IRON		27000.0	UG / L	TOTAL	WATER	00330
37872	POTASSIUM		1.6	MG / L	TOTAL	WATER	22300
37872	MAGNESIUM		64.0	MG / L	TOTAL	WATER	22300
37872	SODIUM		30.9	MG / L	TOTAL	WATER	22300
37872	NICKEL		50.0	UG / L	TOTAL	WATER	00330
37872	LEAD	K	50.0	UG / L	TOTAL	WATER	00330
37872	ZINC		210.0	UG / L	TOTAL	WATER	00330

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37873	ALUMINUM		4010.0	UG / L	TOTAL	WATER	00330
37873	CALCIUM		60.3	MG / L	TOTAL	WATER	22300
37873	CADMIUM	K	20.0	UG / L	TOTAL	WATER	00330
37873	CHROMIUM	K	50.0	UG / L	TOTAL	WATER	00330
37873	COPPER	K	20.0	UG / L	TOTAL	WATER	00330
37873	IRON		3300.0	UG / L	TOTAL	WATER	00330
37873	POTASSIUM		0.6	MG / L	TOTAL	WATER	22300
37873	MAGNESIUM		18.2	MG / L	TOTAL	WATER	22300
37873	SODIUM		13.3	MG / L	TOTAL	WATER	22300
37873	NICKEL	K	50.0	UG / L	TOTAL	WATER	00330
37873	LEAD	K	50.0	UG / L	TOTAL	WATER	00330
37873	ZINC	K	50.0	UG / L	TOTAL	WATER	00330

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37874	ALUMINUM		42500.0	UG / L	TOTAL	WATER	00330
37874	CALCIUM		209.0	MG / L	TOTAL	WATER	22300
37874	CADMIUM	K	20.0	UG / L	TOTAL	WATER	00330
37874	CHROMIUM		605.0	UG / L	TOTAL	WATER	00330
37874	COPPER		3400.0	UG / L	TOTAL	WATER	00330
37874	IRON		35000.0	UG / L	TOTAL	WATER	00330

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MICHIGAN DEPT OF NATURAL RESOURCES --- ENVIRONMENTAL LABORATORY

INORGANIC UNIT EXAMINER..BN...............

---- LOG NO: 3920 ----

LAB #	PARAMETER		RESULTS	UNITS	ANALYSIS	MATRIX	RUN #
37874	POTASSIUM		10.4	MG / L	TOTAL	WATER	22300
37874	MAGNESIUM		62.0	MG / L	TOTAL	WATER	22300
37874	SODIUM		27.0	MG / L	TOTAL	WATER	22300
37874	NICKEL		65.0	UG / L	TOTAL	WATER	00330
37874	LEAD	K	50.0	UG / L	TOTAL	WATER	00330
37874	ZINC		1100.0	UG / L	TOTAL	WATER	00330
------ 37874 ------							
37875	ALUMINUM	K	1000.0	UG / L	TOTAL	WATER	00330
37875	CALCIUM		18.5	MG / L	TOTAL	WATER	22300
37875	CADMIUM	K	20.0	UG / L	TOTAL	WATER	00330
37875	CHROMIUM		65.0	UG / L	TOTAL	WATER	00330
37875	COPPER		1050.0	UG / L	TOTAL	WATER	00330
37875	IRON		1270.0	UG / L	TOTAL	WATER	00330
37875	POTASSIUM		0.9	MG / L	TOTAL	WATER	22300
37875	MAGNESIUM		4.0	MG / L	TOTAL	WATER	22300
37875	SODIUM		7.0	MG / L	TOTAL	WATER	22300
37875	NICKEL	K	50.0	UG / L	TOTAL	WATER	00330
37875	LEAD	K	50.0	UG / L	TOTAL	WATER	00330
37875	ZINC		170.0	UG / L	TOTAL	WATER	00330

------ 37875 ------

------ 3920 ------