

RECEIVED
SEP 1 1984
Region III Headquarters

Michigan Department of Natural Resources
Environmental Laboratory
Inorganic Unit

Genesee Co.

Log # 4570 Sampling Location: LINDEN RD. LANDFILL Matrix: WATER
Send Results To: D. CUMMINS, GWQD Received 84-08-03
Proj Code GC GWQD COMPLIANCE
Lab # 40942 To 45 4 Samples Priority II
P-ALK'S
Cost Code *0*0000000**00*00000 Approx Cost \$ 404.00

RECEIVED
AUG 30 1984
GWQD-COMPLIANCE

MICHIGAN DEPARTMENT OF NATURAL RESOURCES
 ENVIRONMENTAL LABORATORY
 INORGANIC UNIT

EXAMINER

Nordlund

LOG #	LAB #	ELEMENT	RESULTS	UNITS	ANALYSIS	MATRIX	RUN #
=====	=====	=====	=====	=====	=====	=====	=====
4570	40942	ALKALINITY	207.0	MG/L	TOTAL	WATER	80
4570	40942	ALK, CO3=	58.0	MG/L	TOTAL	WATER	21
4570	40942	CADMIUM	K 20.0	UG/L	TOTAL	WATER	00400
4570	40942	CHLORIDE	7.1	MG/L	TOTAL	WATER	80
4570	40942	CHROMIUM	K 50.0	UG/L	TOTAL	WATER	00400
4570	40942	COPPER	K 20.0	UG/L	TOTAL	WATER	00400
4570	40942	CONDUCTIVITY	452.0	UMHOS/CM	TOTAL	WATER	63
60 4570	40942	IRON	110.0	UG/L	TOTAL	WATER	00400
4570	40942	ALK, HCO3-	83.0	MG/L	TOTAL	WATER	21
4570	40942	NICKEL	K 50.0	UG/L	TOTAL	WATER	00400
4570	40942	LEAD	K 50.0	UG/L	TOTAL	WATER	00400
4570	40942	PH	HT 9.4	PH	TOTAL	WATER	63
4570	40942	SULFATE	31.6	MG/L	TOTAL	WATER	80
4570	40942	ZINC	K 50.0	UG/L	TOTAL	WATER	00400
4570	40942 D	CALCIUM	6.0	MG/L	DISSOLVED	WATER	26200
4570	40942 D	POTASSIUM	4.2	MG/L	DISSOLVED	WATER	26200
4570	40942 D	MAGNESIUM	30.1	MG/L	DISSOLVED	WATER	26200
4570	40942 D	SODIUM	48.7	MG/L	DISSOLVED	WATER	26200
4570	40943	ALKALINITY	141.0	MG/L	TOTAL	WATER	80
4570	40943	ALK, CO3=	10.0	MG/L	TOTAL	WATER	21
4570	40943	CADMIUM	K 20.0	UG/L	TOTAL	WATER	00400
4570	40943	CHLORIDE	1.4	MG/L	TOTAL	WATER	80
4570	40943	CHROMIUM	K 50.0	UG/L	TOTAL	WATER	00400
4570	40943	COPPER	K 20.0	UG/L	TOTAL	WATER	00400
90 4570	40943	CONDUCTIVITY	312.0	UMHOS/CM	TOTAL	WATER	63
4570	40943	IRON	K 100.0	UG/L	TOTAL	WATER	00400
4570	40943	ALK, HCO3-	131.0	MG/L	TOTAL	WATER	21
4570	40943	NICKEL	K 50.0	UG/L	TOTAL	WATER	00400
- 4570	40943	LEAD	230.0	UG/L	TOTAL	WATER	00400
4570	40943	PH	HT 8.8	PH	TOTAL	WATER	63
4570	40943	SULFATE	7.7	MG/L	TOTAL	WATER	80
4570	40943	ZINC	95.0	UG/L	TOTAL	WATER	00400
4570	40943 D	CALCIUM	11.6	MG/L	DISSOLVED	WATER	26200
4570	40943 D	POTASSIUM	2.2	MG/L	DISSOLVED	WATER	26200
4570	40943 D	MAGNESIUM	10.5	MG/L	DISSOLVED	WATER	26200
4570	40943 D	SODIUM	41.8	MG/L	DISSOLVED	WATER	26200
4570	40944	ALKALINITY	13.0	MG/L	TOTAL	WATER	80
4570	40944	ALK, CO3=	K 5.0	MG/L	TOTAL	WATER	21
4570	40944	CADMIUM	K 20.0	UG/L	TOTAL	WATER	00400
4570	40944	CHLORIDE	5.4	MG/L	TOTAL	WATER	80
4570	40944	CHROMIUM	K 50.0	UG/L	TOTAL	WATER	00400
4570	40944	COPPER	K 20.0	UG/L	TOTAL	WATER	00400
4570	40944	CONDUCTIVITY	251.0	UMHOS/CM	TOTAL	WATER	63
4570	40944	IRON	930.0	UG/L	TOTAL	WATER	00400
4570	40944	ALK, HCO3-	K 5.0	MG/L	TOTAL	WATER	21
4570	40944	NICKEL	K 50.0	UG/L	TOTAL	WATER	00400
4570	40944	LEAD	K 50.0	UG/L	TOTAL	WATER	00400
4570	40944	PH	HT 10.5	PH	TOTAL	WATER	63
4570	40944	SULFATE	3.6	MG/L	TOTAL	WATER	80

28-Aug-84

MICHIGAN DEPARTMENT OF NATURAL RESOURCES
 ENVIRONMENTAL LABORATORY
 INORGANIC UNIT

EXAMINER

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LOG #	LAB #	ELEMENT	RESULTS	UNITS	ANALYSIS	MATRIX	RUN #
=====	=====	=====	=====	=====	=====	=====	=====
4570	40944	ZINC	60.0	UG/L	TOTAL	WATER	00400
4570	40944 D	CALCIUM	4.0	MG/L	DISSOLVED	WATER	26200
4570	40944 D	POTASSIUM	1.7	MG/L	DISSOLVED	WATER	26200
4570	40944 D	MAGNESIUM	K 1.0	MG/L	DISSOLVED	WATER	26200
4570	40944 D	SODIUM	42.8	MG/L	DISSOLVED	WATER	26200
4570	40945	ALKALINITY	140.0	MG/L	TOTAL	WATER	80
4570	40945	ALK, CO3=	110.0	MG/L	TOTAL	WATER	21
4570	40945	CADMIUM	K 20.0	UG/L	TOTAL	WATER	00400
4570	40945	CHLORIDE	3.0	MG/L	TOTAL	WATER	80
4570	40945	CHROMIUM	K 50.0	UG/L	TOTAL	WATER	00400
4570	40945	COPPER	K 20.0	UG/L	TOTAL	WATER	00400
4570	40945	CONDUCTIVITY	326.0	UMHOS/CM	TOTAL	WATER	63
4570	40945	IRON	230.0	UG/L	TOTAL	WATER	00400
4570	40945	ALK, HCO3-	30.0	MG/L	TOTAL	WATER	21
4570	40945	NICKEL	K 50.0	UG/L	TOTAL	WATER	00400
4570	40945	LEAD	110.0	UG/L	TOTAL	WATER	00400
4570	40945	PH	HT 10.3	PH	TOTAL	WATER	63
4570	40945	SULFATE	5.1	MG/L	TOTAL	WATER	80
4570	40945	ZINC	50.0	UG/L	TOTAL	WATER	00400
4570	40945 D	CALCIUM	6.9	MG/L	DISSOLVED	WATER	26200
4570	40945 D	POTASSIUM	2.7	MG/L	DISSOLVED	WATER	26200
4570	40945 D	MAGNESIUM	2.8	MG/L	DISSOLVED	WATER	26200
4570	40945 D	SODIUM	56.5	MG/L	DISSOLVED	WATER	26200

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MICHIGAN DEPT OF NATURAL RESOURCES ENVIRONMENTAL LABORATORY
ANALYSIS REQUEST SHEET

COM

4/84

MATRIX = WATER

LAB LOG# 1570 PRJ CODE GC COST CENTER 90176 PR ~~II~~ RECEIVED AT LAB DATE 08/23/84 11:20 AM PM

LOCATION SAMPLED LINDEN RD. L.F. Genesee Co COLLECTED BY M. VALACAK TRANSFERRED TO

SAMPLE REMARKS MT & EA were field filtered SAND RESULTS TO D. Cummins Region III Groundwater
Keck pump used to collect

LAB USE ONLY	FIELD ID OR DESCRIPTION	SAMPLE INFORMATION	YY/MM/DD	HH:MM
40942	01 6D		84/8/2	
40943	02 9D			
40944	03 10D			
40945	04 11D			
	05			
	06			
	07			
	08			
	09			
	10			

RECEIVED AUG 31 1984 Region III Headquarters
Note one vial only/seen F.C.

ORGANIC III	INORGANIC II	GENERAL CHEMISTRY III
P01 #1 HALOCARBONS... 1 2 3 4 5 6 7 8 9 10	HAD FIELD FILTER+PRES... 1 2 3 4 5 6 7 8 9 10	DO DISS OXYGEN... 1 2 3 4 5 6 7 8 9 10
P02 #2 AROMATIC HC... 1 2 3 4 5 6 7 8 9 10	MD LAB FILTRATION... 1 2 3 4 5 6 7 8 9 10	6N D-PHOS NO2... 1 2 3 4 5 6 7 8 9 10
DBN #3 CHLORINATED HC... 1 2 3 4 5 6 7 8 9 10	MA CA MG NA K... 1 2 3 4 5 6 7 8 9 10	RES-NF (SS)... 1 2 3 4 5 6 7 8 9 10
#4 PCB & DC PEST... 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	RES-TF (TDS)... 1 2 3 4 5 6 7 8 9 10
#6 PHTHALATES... 1 2 3 4 5 6 7 8 9 10	HG MERCURY... 1 2 3 4 5 6 7 8 9 10	BOD TOT 5 DAY... 1 2 3 4 5 6 7 8 9 10
#7 PNA... 1 2 3 4 5 6 7 8 9 10	AS ARSENIC... 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	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)	
DA #8 PHENOLS... 1 2 3 4 5 6 7 8 9 10	AG AL BA BE CO FE... 1 2 3 4 5 6 7 8 9 10	6A COD... 1 2 3 4 5 6 7 8 9 10
	LI MN ND TI V... 1 2 3 4 5 6 7 8 9 10	TOC... 1 2 3 4 5 6 7 8 9 10
	FURNACE- CD... 1 2 3 4 5 6 7 8 9 10	NO3+NO2 NH3... 1 2 3 4 5 6 7 8 9 10
OG OIL & GREASE-IR... 1 2 3 4 5 6 7 8 9 10	" CR CU NI PB... 1 2 3 4 5 6 7 8 9 10	KJEL N, TOT P... 1 2 3 4 5 6 7 8 9 10
OIL & GREASE-BRAV... 1 2 3 4 5 6 7 8 9 10		PHENOLICS... 1 2 3 4 5 6 7 8 9 10
	MN PH, CONDUCTANCE... 1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10
	CL SD4 TOTAL ALK... 1 2 3 4 5 6 7 8 9 10	
	FLUORIDE... 1 2 3 4 5 6 7 8 9 10	6B TOTAL CN... 1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10	CR+6... 1 2 3 4 5 6 7 8 9 10	FREE CN... 1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10	HCO3- CO3=... 1 2 3 4 5 6 7 8 9 10	
1 2 3 4 5 6 7 8 9 10	CA MG NA K -DISS... 1 2 3 4 5 6 7 8 9 10	6C FECAL COLI... 1 2 3 4 5 6 7 8 9 10
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	MB BRINE (CIRCLE)	1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10	" CL SD4 BR 1 2 3 4 5 6 7 8 9 10	
1 2 3 4 5 6 7 8 9 10	" ALK HCO3- CO3=... 1 2 3 4 5 6 7 8 9 10	6A CHLOROPHYLL... 1 2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8 9 10	" CA MG NA K ... 1 2 3 4 5 6 7 8 9 10	1 2 3 4 5 6 7 8 9 10

WISCONSIN DNR ENVIRONMENTAL LAB
ORGANIC RESULTS FOR LAB LOG #4570
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LAB# 40942 ug/L SCAN 1 COMMENTS

1.00 Detection limit this run

LAB# 40942 ug/L SCAN 2 COMMENTS

5.00 Detection limit this run

LAB# 40943 ug/L SCAN 1 COMMENTS

1.00 Detection limit this run

LAB# 40943 ug/L SCAN 2 COMMENTS

5.00 Detection limit this run

LAB# 40944 ug/L SCAN 1 COMMENTS

10.00 Detection limit this run

LAB# 40944 ug/L SCAN 2 COMMENTS

5.00 Detection limit this run

LAB# 40945 ug/L SCAN 1 COMMENTS

1.00 Detection limit this run

LAB LOG #4570 cont.
=====

LAB# 40945

ug/L

SCAN 2

COMMENTS

5.00

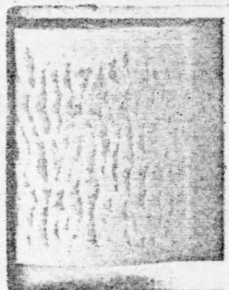
Detection limit this run

Unless noted above under COMMENTS, analyses were performed for the compounds on attached scan list. Concentrations are rounded to 2 significant figures.

Approved



AUG 7 1984



ORGANIC SCAN LIST

MATRIX: WATER

JUNE 1984

SCAN 1 - Purgeable Halocarbons

Bromodichloromethane	1,2-Dichloroethene (cis & trans)
Bromoform	1,2-Dichloropropane
Carbon tetrachloride	1,3-Dichloropropene (cis & trans)
Chlorobenzene	Methylene chloride (request only)
Chloroform	1,1,2,2-Tetrachloroethane
Dibromochloromethane	Tetrachloroethene
1,1-Dichloroethane	1,1,1-Trichloroethane
1,2-Dichloroethane	1,1,2-Trichloroethane
1,1-Dichloroethene	Trichloroethene

SCAN 2 - Purgeable Aromatic Hydrocarbons

Benzene	Toluene
Ethylbenzene	Xylene isomers (o, m, and p)
Styrene	

SCAN 3 - Chlorinated Hydrocarbons

g-BHC (lindane)	Hexachlorobutadiene
2-Chloronaphthalene	Hexachlorocyclopentadiene
1,2-Dichlorobenzene	Hexachloroethane
1,3-Dichlorobenzene	Octachlorocyclopentene
1,4-Dichlorobenzene	Pentachlorobenzene
Hexachlorobenzene	Pentachloronitrobenzene
	1,2,4-Trichlorobenzene

SCAN 4 - Polychlorinated Biphenyl & Organochlorine Pesticide

Aroclor 1242	4,4'-DDE
Aroclor 1254	1,4'-DDT
Aroclor 1260	4,4'-DDT
Aldrin	Heptachlor
BP-6 (PBB)	Heptachlor epoxide
a-Chlordane	Hexabromobenzene
g-Chlordane	Methoxychlor
4,4'-DDD	Mirex

SCAN 6 - Phthalate Esters & Polar Pesticides

Bis (2-ethylhexyl) phthalate	Di-n-octyl phthalate
Butyl benzyl phthalate	Dieldrin
Di-n-butyl phthalate	Endosulfan I
Diethyl phthalate	Endrin
Dimethyl phthalate	

SCAN 7 - Polynuclear Aromatic Hydrocarbons

Acenaphthene	Chrysene
Acenaphthylene	Dibenzo(a,h)anthracene
Anthracene	Fluoranthene
Benzo(a)anthracene	Fluorene
Benzo(b)fluoranthene	Indeno(1,2,3-cd)pyrene
Benzo(k)fluoranthene	Naphthalene
Benzo(ghi)perylene	Phenanthrene
Benzo(a)pyrene	Pyrene

SCAN 8 - Phenols

4-Chloro-3-methylphenol*	2-Nitrophenol
2-Chlorophenol	4-Nitrophenol
2,4-Dichlorophenol	Pentachlorophenol
2,4-Dimethylphenol	Phenol
2,4-Dinitrophenol	2,4,5-Trichlorophenol
2-Methyl-4,6-dinitrophenol**	2,4,6-Trichlorophenol

SCAN 9 - Aromatic Amines (method not validated)

Curene(4,4'-Methylene(bis)2-chloroaniline)
3,3'-Dichlorobenzidine

*Reported as 4-Chloro-m-cresol

**Reported as 4,6-Dinitro-o-cresol

