SAMPLING DATA

US EPA RECORDS CENTER REGION 5
415058

I N-0055-08

ecology and environment, inc.

223 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60606, TEL. 312-663-9415

International Specialists in the Environmental Sciences

Date Received for Review: 2/15/84 Date Review Completed: 2/29/84

To: PAUL HESS

From: Cynthia Bachunas

Subject: GARY LAND DEVELOPMENT (INDIANA)
ROS-8307-04

Sample Description: CASE # 2315 - LOW WATER ORGANICS

Project Data Status: COMPLETE

FIT Data Review Findings:

1.) Contamination found in lab blanks
2.) Field blank had contamination
3.) Duplicate (Field) and (lab) good
tetrahydrofuran found in both field blanks
4.) Sample date 12/28/83, Lab date 1/6/84, due date 1/27/84
5.) Data accepted as noted above and on QC notice
Tom Gray 2/29/84

Additional Comments:

recycled paper

RECEIVED FEB 15 1984

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 2/14/84

SUBJECT: Review of Region V CLP Data
Received for Review on 2/10/84

FROM: Curtis Ross, Director
Central Regional Laboratory

TO: Data User: FIT

We have reviewed the data for the following case(s).

should be 2315

SITE NAME Gary Land Development SMO Case No. 2317

EPA Data Set No. SF169 No. of Samples 5 D.U./Activity Numbers 7985 1C48500

CRL No. 84MH03R11 to 84MH03570

SMO Traffic No. E3364 to E7168

Contract Laboratory: Aquatech Hours Required for Review: _____

Following are our findings.

Acceptable data

( ) Data are acceptable for use.
( ) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by Contractor Laboratory.
( ) Data are unacceptable.

cc: Dr. Alfred Haeberer/Joan Fisk/Gary Ward, EPA Support Services
Ross K. Robeson, EMSL-Las Vegas
Robert Pritchard, CLP/SMO

EPA FORM 1320-6 (REV. 3-76)

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
BLANKS

ORGANICS ANALYSIS DATA SHEET

RECEIVED FEB 15 1984

Laboratory Name: Aquatec, Inc.
Lab Sample ID No: See Below
Sample Matrix: Water
Data Release Authorized By: J Comran

Case No: 2315
QC Report No: 15
Contract No.: 68-01-6765
Date Sample Received: 30 December 1983

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4 January 1984
DATE ANALYZED: 23 January 1984
PERCENT MOISTURE: —

B 2315 R

PP #	CAS #		ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6- trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	10U
(24A)	95-57-8	2- chlorophenol	10U
(31A)	120-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(37A)	88-75-5	2- nitrophenol	20U
(38A)	100-02-7	4-nitrophenol	50U
(39A)	51-28-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-86-5	pentachlorophenol	10U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	5U
	108-39-4	4-methylphenol	5U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	20U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenyl ether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis (2-chloroisopropyl) ether	20U
(43B)	111-91-1	bis (2-chloroethoxy) methane	20U

PP #	CAS #		ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodipropylamine	10U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	10K
(67B)	85-68-7	benzyl butyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-32-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	218-01-9	chrysene	20U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	191-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	5U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U
		N-nitrosodimethylamine	10U

FORM II (618)

July 1983

U.S. EPA CONTRACT LABORATORY PROGRAM - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number: BLANKS

ORGANICS ANALYSIS DATA SHEET

RECEIVED FEB 15 1984

Laboratory Name: Aquatec, Inc.
Case No: 2315
Lab Sample ID No: See Below
QC Report No: 15
Sample Matrix: Water
Contract No.: 68-01-6765
Data Release Authorized By: [signature]
Date Sample Received: 30 December 1983

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: —
DATE ANALYZED: 4 January 1984
PERCENT MOISTURE: —

BLK 117A

PP #	CAS #		(ug/l) or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	1U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	10U
(16V)	75-00-3	chloroethane	10U
(19V)	110-75-8	2-chloroethylvinyl ether	10U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	10U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	5U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride 27	
(45V)	74-87-3	chloromethane	10U
(46V)	74-83-9	bromomethane	10U
(47V)	75-25-2	bromoform	10U
(48V)	75-27-4	bromodichloromethane	5U
~~(49V)~~	~~75-69-4~~	~~fluorotrichloromethane~~	~~5U~~
~~(50V)~~	~~75-71-8~~	~~dichlorodifluoromethane~~	~~5U~~
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene 5K	
(86V)	108-88-3	toluene 5K	
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	10U
	67-64-1	acetone 14	
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	1U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	~~total~~ o-xylenes 5K	

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4 January 1984
DATE ANALYZED: 2 February 1984
PERCENT MOISTURE: —

PP #	CAS #		(ug/l) or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.005U
(90P)	60-57-1	dieldrin	0.005U
(91P)	57-74-9	chlordane	0.050U
(92P)	50-29-3	4,4'-DDT	0.010U
(93P)	72-55-9	4,4'-DDE	0.005U
(94P)	72-54-8	4,4'-DDD	0.010U
(95P)	115-29-7	α-endosulfan	0.005U
(96P)	115-29-7	β-endosulfan	0.005U
(97P)	1031-07-8	endosulfan sulfate	0.010U
(98P)	72-20-8	endrin	0.005U
(99P)	7421-93-4	endrin aldehyde	0.010U
(100P)	76-44-8	heptachlor	0.005U
(101P)	1024-57-3	heptachlor epoxide	0.005U
(102P)	319-84-6	α-BHC	0.005U
(103P)	319-85-7	β-BHC	0.005U
(104P)	319-86-8	δ-BHC	0.005U
(105P)	58-89-9	γ-BHC (lindane)	0.005U
(106P)	53469-21-9	PCB-1242	0.050U
(107P)	11097-69-1	PCB-1254	0.100U
(108P)	11104-28-2	PCB-1221	0.100U
(109P)	11141-16-5	PCB-1232	0.100U
(110P)	12672-29-6	PCB-1248	0.100U
(111P)	11096-82-5	PCB-1260	0.200U
(112P)	12674-11-2	PCB-1016	0.050U
(113P)	8001-35-2	toxaphene	0.050U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4 January 1984
DATE ANALYZED: 26 January 1984
PERCENT MOISTURE: —

PP #	CAS #		(ug/l) or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.005U

ORGANICS ANALYSIS DATA SHEET - Page 3

Sample Number
BLANKS

Laboratory Name: Aquatec, Inc. Case No: 2315
QC Report No: 15

RECEIVED FEB 1 5 1984

B. Tentatively Identified Compounds

CAS #	Compound Name	Fraction	Scan No. or Retention Time	% Maximum Score Attained Mass Matching Routine: (Specify: Purdy)	Estimated Concentration (ug/L or ug/kg)
1.					
2. —	Unknown	B/N/A	4413	—	31
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

4/82

J Comer

000011

~~000211~~

FORM II (continued)

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
E3364

84MH03R11

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Aquatec, Inc.
Lab Sample ID No: 3321
Sample Matrix: Water
Data Release Authorized By: J Comia

Case No: 2315
QC Report No: 15
Contract No.: 68-01-6765
Date Sample Received: 30 December 1983

RECEIVED FEB 15 1984

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4 January 1984
DATE ANALYZED: 21 & 28 January 1984
PERCENT MOISTURE: —

PP #	CAS #		ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6- trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	10U
(24A)	95-57-8	2- chlorophenol	10U
(31A)	120-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2- nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	50U
(59A)	51-28-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-86-5	pentachlorophenol	10U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	5U
	108-39-4	4-methylphenol	5U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	40U
(5B)	92-87-5	benzidine	160U
(8B)	120-82-1	1,2,4-trichlorobenzene	40U
(9B)	118-74-1	hexachlorobenzene	40U
(12B)	67-72-1	hexachloroethane	40U
(18B)	111-44-4	bis(2-chloroethyl)ether	40U
(20B)	91-58-7	2-chloronaphthalene	40U
(25B)	95-50-1	1,2-dichlorobenzene	40U
(26B)	541-73-1	1,3-dichlorobenzene	40U
(27B)	106-46-7	1,4-dichlorobenzene	40U
(28B)	91-94-1	3,3'-dichlorobenzidine	80U
(35B)	121-14-2	2,4-dinitrotoluene	80U
(36B)	606-20-2	2,6-dinitrotoluene	80U
(37B)	122-66-7	1,2-diphenylhydrazine	80U
(39B)	206-44-0	fluoranthene	40U
(40B)	7005-72-3	4-chlorophenyl phenyl ether	40U
(41B)	101-55-3	4-bromophenyl phenyl ether	40U
(42B)	39638-32-9	bis (2-chloroisopropyl) ether	80U
(43B)	111-91-1	bis (2-chloroethoxy) methane	80U

PP #	CAS #		ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	40U
(53B)	77-47-4	hexachlorocyclopentadiene	40U
(54B)	78-59-1	isophorone	40U
(55B)	91-20-3	naphthalene	40U
(56B)	98-95-3	nitrobenzene	40U
(62B)	86-30-6	N-nitrosodiphenylamine	40U
(63B)	621-64-7	N-nitrosodipropylamine	40U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	NDB
(67B)	85-68-7	benzyl butyl phthalate	40U
(68B)	84-74-2	di-n-butyl phthalate	40U
(69B)	117-84-0	di-n-octyl phthalate	40U
(70B)	84-66-2	diethyl phthalate	40U
(71B)	131-11-3	dimethyl phthalate	40U
(72B)	56-55-3	benzo(a)anthracene	40U
(73B)	50-32-8	benzo(a)pyrene	80U
(74B)	205-99-2	benzo(b)fluoranthene	80U
(75B)	207-08-9	benzo(k)fluoranthene	80U
(76B)	218-01-9	chrysene	80U
(77B)	208-96-8	acenaphthylene	40U
(78B)	120-12-7	anthracene	40U
(79B)	191-24-2	benzo(ghi)perylene	80U
(80B)	86-73-7	fluorene	40U
(81B)	85-01-8	phenanthrene	40U
(82B)	53-70-3	dibenzo(a,h)anthracene	80U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	80U
(84B)	129-00-0	pyrene	40U
	62-53-3	aniline	20U
	100-51-6	benzyl alcohol	80U
	106-47-8	4-chloroaniline	200U
	132-64-9	dibenzofuran	40U
	91-57-6	2-methylnaphthalene	80U
	88-74-4	2-nitroaniline	400U
	99-09-2	3-nitroaniline	400U
	100-01-6	4-nitroaniline	400U
		N-nitrosodimethylamine	40U

FORM II (618) July 1983

U.S. Environmental Protection Agency - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
E336A

ORGANICS ANALYSIS DATA SHEET

RECEIVED FEB 15 1984

Laboratory Name: Aquatec, Inc.
Lab Sample ID No: 33211
Sample Matrix: Water
Data Release Authorized By: J. Simms

Case No: 2315
QC Report No: 15
Contract No.: 68-01-6765
Date Sample Received: 30 December 1983

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: —
DATE ANALYZED: 4 January 1984
PERCENT MOISTURE: —

PP #	CAS #		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	1U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	10U
(16V)	75-00-3	chloroethane	10U
(19V)	110-75-8	2-chloroethylvinyl ether	10U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	10U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	5U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride NDB	
(45V)	74-87-3	chloromethane	10U
(46V)	74-83-9	bromomethane	10U
(47V)	75-25-2	bromoform	10U
(48V)	75-27-4	bromodichloromethane	5U
~~(49V)~~	~~75-69-4~~	~~fluorotrichloromethane~~	~~5U~~
~~(50V)~~	~~75-71-8~~	~~dichlorodifluoromethane~~	~~5U~~
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene NDB	
(86V)	108-88-3	toluene 5KC	
(87V)	79-01-6	trichloroethene 6B	
(88V)	75-01-4	vinyl chloride	10U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	1U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	~~total~~ o-xylenes NDB	

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4 January 1984
DATE ANALYZED: 2 February 1984
PERCENT MOISTURE: —

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.005U
(90P)	60-57-1	dieldrin	0.005U
(91P)	57-74-9	chlordane	0.050U
(92P)	50-29-3	4,4'-DDT	0.010U
(93P)	72-55-9	4,4'-DDE	0.005U
(94P)	72-54-8	4,4'-DDD	0.010U
(95P)	115-29-7	α-endosulfan	0.005U
(96P)	115-29-7	β-endosulfan	0.005U
(97P)	1031-07-8	endosulfan sulfate	0.010U
(98P)	72-20-8	endrin	0.005U
(99P)	7421-93-4	endrin aldehyde	0.010U
(100P)	76-44-8	heptachlor	0.005U
(101P)	1024-57-3	heptachlor epoxide	0.005U
(102P)	319-84-6	α-BHC	0.005U
(103P)	319-85-7	β-BHC	0.005U
(104P)	319-86-8	δ-BHC	0.005U
(105P)	58-89-9	γ-BHC (lindane)	0.005U
(106P)	53469-21-9	PCB-1242	0.05U
(107P)	11097-69-1	PCB-1254	0.100U
(108P)	11104-28-2	PCB-1221	0.100U
(109P)	11141-16-5	PCB-1232	0.100U
(110P)	12672-29-6	PCB-1248	0.100U
(111P)	11096-82-5	PCB-1260	0.200U
(112P)	12674-11-2	PCB-1016	0.050U
(113P)	8001-35-2	toxaphene	0.050U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4 January 1984
DATE ANALYZED: 26 January 1984
PERCENT MOISTURE: —

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.005U

ORGANICS ANALYSIS DATA SHEET - Page 3

Sample Number
E 3364

Laboratory Name: Aquatec, Inc. Case No: 2315
QC Report No: 15

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B. Tentatively Identified Compounds

CAS #	Compound Name	Fraction	Scan No. or Retention Time	% Maximum Score Attained Mass Matching Routine: (Specify: Purge A)	Estimated Concentration (ug/L or ug/kg)
1. 629-59-4	Tetradecane	A	2615	85.0%	33
2. 629-59-4	Tetradecane	B/N	2625	90.8%	130
3.					
4. 544-76-3	Hexadecane	B/N	3012	90.8%	670
5.					
6. —	Unknown	B/N	4405	—	250
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
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21.					
22.					
23.					
24.					
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26.					
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28.					
29.					
30.					

4/82

J Comea

FORM II (continued)

. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
E3365

84MHC3568

ORGANICS ANALYSIS DATA SHEET

oratory Name: Aquatec, Inc.
Sample ID No: 33212
nple Matrix: water
a Release Authorized By: J Comer

Case No: 2315
QC Report No: 15
Contract No.: 68-01-6765
Date Sample Received: 30 December 1983

RECEIVED FEB 15 1984

~~000215~~

000015

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4 January 1984
DATE ANALYZED: 21 January 1984
PERCENT MOISTURE: –

PP #	CAS #		ug/l or ug/kg (circle one)
21A)	88-06-2	2,4,6- trichlorophenol	200 u
22A)	59-50-7	p-chloro-m-cresol	200 u
24A)	95-57-8	2- chlorophenol	200 u
31A)	120-83-2	2,4-dichlorophenol	200 u
34A)	105-67-9	2,4-dimethylphenol	200 u
57A)	88-75-5	2- nitrophenol	400 u
58A)	100-02-7	4-nitrophenol	1000 u
59A)	51-28-5	2,4-dinitrophenol	1000 u
60A)	534-52-1	4,6-dinitro-2-methylphenol	400 u
64A)	87-86-5	pentachlorophenol	200 u
65A)	108-95-2	phenol	200 u
	65-85-0	benzoic acid	2000 u
	95-48-7	2-methylphenol	100 u
	108-39-4	4-methylphenol	100 u
	95-95-4	2,4,5-trichlorophenol	2000 u
1B)	83-32-9	acenaphthene	200 u
5B)	92-87-5	benzidine	800 u
8B)	120-82-1	1,2,4-trichlorobenzene	200 u
9B)	118-74-1	hexachlorobenzene	200 u
12B)	67-72-1	hexachloroethane	200 u
18B)	111-44-4	bis(2-chloroethyl)ether	200 u
20B)	91-58-7	2-chloronaphthalene	200 u
(25B)	95-50-1	1,2-dichlorobenzene	200 u
(26B)	541-73-1	1,3-dichlorobenzene	200 u
(27B)	106-46-7	1,4-dichlorobenzene	200 u
(28B)	91-94-1	3,3'-dichlorobenzidine	400 u
(35B)	121-14-2	2,4-dinitrotoluene	400 u
(36B)	606-20-2	2,6-dinitrotoluene	400 u
(37B)	122-66-7	1,2-diphenylhydrazine	400 u
(39B)	206-44-0	fluoranthene	200 u
(40B)	7005-72-3	4-chlorophenyl phenyl ether	200 u
(41B)	101-55-3	4-bromophenyl phenyl ether	200 u
(42B)	39638-32-9	bis (2-chloroisopropyl) ether	400 u
(43B)	111-91-1	bis (2-chloroethoxy) methane	400 u

PP #	CAS #		ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	200 u
(53B)	77-47-4	hexachlorocyclopentadiene	200 u
(54B)	78-59-1	isophorone	200 u
(55B)	91-20-3	naphthalene	200 u
(56B)	98-95-3	nitrobenzene	200 u
(62B)	86-30-6	N-nitrosodiphenylamine	200 u
(63B)	621-64-7	N-nitrosodipropylamine	200 u
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	200 u
(67B)	85-68-7	benzyl butyl phthalate	200 u
(68B)	84-74-2	di-n-butyl phthalate	200 u
(69B)	117-84-0	di-n-octyl phthalate	200 u
(70B)	84-66-2	diethyl phthalate	200 u
(71B)	131-11-3	dimethyl phthalate	200 u
(72B)	56-55-3	benzo(a)anthracene	200 u
(73B)	50-32-8	benzo(a)pyrene	400 u
(74B)	205-99-2	benzo(b)fluoranthene	400 u
(75B)	207-08-9	benzo(k)fluoranthene	400 u
(76B)	218-01-9	chrysene	400 u
(77B)	208-96-8	acenaphthylene	200 u
(78B)	120-12-7	anthracene	200 u
(79B)	191-24-2	benzo(ghi)perylene	400 u
(80B)	86-73-7	fluorene	200 u
(81B)	85-01-8	phenanthrene	200 u
(82B)	53-70-3	dibenzo(a,h)anthracene	400 u
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	400 u
(84B)	129-00-0	pyrene	200 u
	62-53-3	aniline	100 u
	100-51-6	benzyl alcohol	400 u
	106-47-8	4-chloroaniline	1000 u
	132-64-9	dibenzofuran	200 u
	91-57-6	2-methylnaphthalene	400 u
	88-74-4	2-nitroaniline	2000 u
	99-09-2	3-nitroaniline	2000 u
	100-01-6	4-nitroaniline	2000 u
		N-nitrosodimethylamine	200 u

U.S. ENVIRONMENTAL PROTECTION AGENCY • CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
E3365

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Aquatec, Inc.
Lab Sample ID No: 33212
Sample Matrix: Water
Data Release Authorized By: J Comer

Case No: 2315
QC Report No: 15
Contract No.: 68-01-6765
Date Sample Received: 30 December 1983

RECEIVED FEB 15 1984

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: —
DATE ANALYZED: 4 January 1984
PERCENT MOISTURE: —

PP #	CAS #		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	1U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	11
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	10U
(16V)	75-00-3	chloroethane	10U
(19V)	110-75-8	2-chloroethylvinyl ether	10U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	10U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	5U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride NDB	
(45V)	74-87-3	chloromethane	10U
(46V)	74-83-9	bromomethane	10U
(47V)	75-25-2	bromoform	10U
(48V)	75-27-4	bromodichloromethane	5U
~~(49V)~~	~~75-69-4~~	~~fluorotrichloromethane~~	~~5U~~
~~(50V)~~	~~75-71-8~~	~~dichlorodifluoromethane~~	~~5U~~
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene NDB	
(87V)	79-01-6	trichloroethene 5K	5U
(88V)	75-01-4	vinyl chloride	
	67-64-1	acetone NDB	
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	1U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	~~total~~ o-xylenes	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4 January 1984
DATE ANALYZED: 2 February 1984
PERCENT MOISTURE: —

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.005U
(90P)	60-57-1	dieldrin	0.005U
(91P)	57-74-9	chlordane	0.050U
(92P)	50-29-3	4,4'-DDT	0.010U
(93P)	72-55-9	4,4'-DDE	0.005U
(94P)	72-54-8	4,4'-DDD	0.010U
(95P)	115-29-7	α-endosulfan	0.005U
(96P)	115-29-7	β-endosulfan	0.005U
(97P)	1031-07-8	endosulfan sulfate	0.010U
(98P)	72-20-8	endrin	0.005U
(99P)	7421-93-4	endrin aldehyde	0.010U
(100P)	76-44-8	heptachlor 0.05 J	
(101P)	1024-57-3	heptachlor epoxide	0.005U
(102P)	319-84-6	α-BHC	0.005U
(103P)	319-85-7	β-BHC	0.005U
(104P)	319-86-8	δ-BHC	0.005U
(105P)	58-89-9	γ-BHC (lindane)	0.005U
(106P)	53469-21-9	PCB-1242	0.050U
(107P)	11097-69-1	PCB-1254	0.100U
(108P)	11104-28-2	PCB-1221	0.100U
(109P)	11141-16-5	PCB-1232	0.100U
(110P)	12672-29-6	PCB-1248	0.100U
(111P)	11096-82-5	PCB-1260	0.200U
(112P)	12674-11-2	PCB-1016	0.050U
(113P)	8001-35-2	toxaphene	0.050U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4 January 1984
DATE ANALYZED: 26 January 1984
PERCENT MOISTURE: —

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.005U

July 1983

FORM IIA

ORGANICS ANALYSIS DATA SHEET - Page 3

Sample Number
E 3365

Laboratory Name: Aquatec, Inc. Case No: 2315

QC Report No: 15

RECEIVED FEB 15 1984

B. Tentatively Identified Compounds

	CAS #	Compound Name	Fraction	Scan No. or Retention Time	% Maximum Score Attained Mass Matching Routine: (Specify: Purity)	Estimated Concentration (ug/L or ug/kg)
1.						
2.	109-99-9	Tetrahydrofuran	✓	212	93.6	12
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						
21.						
22.						
23.						
24.						
25.						
26.						
27.						
28.						
29.						
30.						

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J Comeau

FORM II (continued)

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
E 7166

84MH03569

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Aquatec, Inc.
Lab Sample ID No: 33213
Sample Matrix: Water
Data Release Authorized By: J. Clemion

Case No: 2315
QC Report No: 15
Contract No.: 68-01-6765
Date Sample Received: 30 December 1983

SEMIVOLATILE COMPOUNDS

RECEIVED FEB 15 1984

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4 January 1984
DATE ANALYZED: 23 & 28 January 1984
PERCENT MOISTURE: —

PP #	CAS #		(ug/l or ug/kg) (circle one)
(21A)	88-06-2	2,4,6- trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	10U
(24A)	95-57-8	2- chlorophenol	10U
(31A)	120-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2- nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	50U
(59A)	51-28-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-86-5	pentachlorophenol	10U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	5U
	108-39-4	4-methylphenol	5U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	20U
(5B)	92-87-5	benzidine	80U
(8B)	120-82-1	1,2,4-trichlorobenzene	20U
(9B)	118-74-1	hexachlorobenzene	20U
(12B)	67-72-1	hexachloroethane	20U
(18B)	111-44-4	bis(2-chloroethyl)ether	20U
(20B)	91-58-7	2-chloronaphthalene	20U
(25B)	95-50-1	1,2-dichlorobenzene	20U
(26B)	541-73-1	1,3-dichlorobenzene	20U
(27B)	106-46-7	1,4-dichlorobenzene	20U
(28B)	91-94-1	3,3'-dichlorobenzidine	40U
(35B)	121-14-2	2,4-dinitrotoluene	40U
(36B)	606-20-2	2,6-dinitrotoluene	40U
(37B)	122-66-7	1,2-diphenylhydrazine	40U
(39B)	206-44-0	fluoranthene	20U
(40B)	7005-72-3	4-chlorophenyl phenyl ether	20U
(41B)	101-55-3	4-bromophenyl phenyl ether	20U
(42B)	39638-32-9	bis (2-chloroisopropyl) ether	40U
(43B)	111-91-1	bis (2-chloroethoxy) methane	40U

PP #	CAS #		(ug/l or ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	20U
(53B)	77-47-4	hexachlorocyclopentadiene	20U
(54B)	78-59-1	isophorone	20U
(55B)	91-20-3	naphthalene	20U
(56B)	98-95-3	nitrobenzene	20U
(62B)	86-30-6	N-nitrosodiphenylamine	20U
(63B)	621-64-7	N-nitrosodipropylamine	20U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	NDB
(67B)	85-68-7	benzyl butyl phthalate	20U
(68B)	84-74-2	di-n-butyl phthalate	20U
(69B)	117-84-0	di-n-octyl phthalate	20U
(70B)	84-66-2	diethyl phthalate	20U
(71B)	131-11-3	dimethyl phthalate	20U
(72B)	56-55-3	benzo(a)anthracene	20U
(73B)	50-32-8	benzo(a)pyrene	40U
(74B)	205-99-2	benzo(b)fluoranthene	40U
(75B)	207-08-9	benzo(k)fluoranthene	40U
(76B)	218-01-9	chrysene	40U
(77B)	208-96-8	acenaphthylene	20U
(78B)	120-12-7	anthracene	20U
(79B)	191-24-2	benzo(ghi)perylene	40U
(80B)	86-73-7	fluorene	20U
(81B)	85-01-8	phenanthrene	20U
(82B)	53-70-3	dibenzo(a,h)anthracene	40U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	40U
(84B)	129-00-0	pyrene	20U
	62-53-3	aniline	100U
	100-51-6	benzyl alcohol	40U
	106-47-8	4-chloroaniline	100U
	132-64-9	dibenzofuran	20U
	91-57-6	2-methylnaphthalene	40U
	88-74-4	2-nitroaniline	200U
	99-09-2	3-nitroaniline	200U
	100-01-6	4-nitroaniline	200U
		N-nitrosodimethylamine	20U

U.S. ENVIRONMENTAL PROTECTION AGENCY • CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
E 7166

ORGANICS ANALYSIS DATA SHEET

RECEIVED FEB 15 1984

Laboratory Name: Aquatec, Inc.
Lab Sample ID No: 33213
Sample Matrix: Water
Data Release Authorized By: [signature]

Case No: 2315
QC Report No: 15
Contract No.: 68-01-6765
Date Sample Received: 30 December 1983

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: —
DATE ANALYZED: 4 January 1984
PERCENT MOISTURE: —

PP #	CAS #		(ug/l) or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	1U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	15
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	10U
(16V)	75-00-3	chloroethane	10U
(19V)	110-75-8	2-chloroethylvinyl ether	10U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5K
(32V)	78-87-5	1,2-dichloropropane	10U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	5U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	NDB
(45V)	74-87-3	chloromethane	10U
(46V)	74-83-9	bromomethane	10U
(47V)	75-25-2	bromoform	10U
(48V)	75-27-4	bromodichloromethane	5U
~~(49V)~~	~~75-69-4~~	~~fluorotrichloromethane~~	~~5U~~
~~(50V)~~	~~75-71-8~~	~~dichlorodifluoromethane~~	~~5U~~
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	NDB
(86V)	108-88-3	toluene	NDB
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	10U
	67-64-1	acetone	NDB
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	1U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	~~total~~ xylenes	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4 January 1984
DATE ANALYZED: 2 February 1984
PERCENT MOISTURE: —

PP #	CAS #		(ug/l) or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.005U
(90P)	60-57-1	dieldrin	0.005U
(91P)	57-74-9	chlordane	0.050U
(92P)	50-29-3	4,4'-DDT	0.010U
(93P)	72-55-9	4,4'-DDE	0.005U
(94P)	72-54-8	4,4'-DDD	0.010U
(95P)	115-29-7	α-endosulfan	0.005U
(96P)	115-29-7	β-endosulfan	0.005U
(97P)	1031-07-8	endosulfan sulfate	0.010U
(98P)	72-20-8	endrin	0.005U
(99P)	7421-93-4	endrin aldehyde	0.010U
(100P)	76-44-8	heptachlor	0.01U
(101P)	1024-57-3	heptachlor epoxide	0.005U
(102P)	319-84-6	α-BHC	0.005U
(103P)	319-85-7	β-BHC	0.005U
(104P)	319-86-8	δ-BHC	0.005U
(105P)	58-89-9	γ-BHC (lindane)	0.005U
(106P)	53469-21-9	PCB-1242	0.050U
(107P)	11097-69-1	PCB-1254	0.100U
(108P)	11104-28-2	PCB-1221	0.100U
(109P)	11141-16-5	PCB-1232	0.100U
(110P)	12672-29-6	PCB-1248	0.100U
(111P)	11096-82-5	PCB-1260	0.200U
(112P)	12674-11-2	PCB-1016	0.050U
(113P)	8001-35-2	toxaphene	0.050U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4 January 1984
DATE ANALYZED: 26 January 1984
PERCENT MOISTURE: —

PP #	CAS #		(ug/l) or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.005U

ORGANICS ANALYSIS DATA SHEET - Page 3

Sample Number
E 7166

Laboratory Name: Aquatec, Inc. Case No: 2315
QC Report No: 15

RECEIVED FEB 15 1984

B. Tentatively Identified Compounds

	CAS #	Compound Name	Fraction	Scan No. or Retention Time	% Maximum Score Attained Mass Matching Routine: (Specify: Purify)	Estimated Concentration (ug/L or ug/kg)
1.						
2.	98-54-4	4(1,1-dimethylethyl) phenol	A	2406	86 6	26
3.						
4.	629-59-4	Tetradecane	B/N	2629	87.2	110
5.						
6.	-	Unknown	B/N	3965	-	21
7.						
8.	-	Unknown	B/N	4100	-	35
9.						
10.	-	Unknown	A	4187	-	30
11.						
12.	-	Unknown	B/N	4229	-	41
13.						
14.	-	Unknown	B/N	4354	-	49
15.						
16.	-	Unknown	B/N	4415	-	210
17.						
18.	-	Unknown	B/N	4475	-	52
19.						
20.	-	Unknown	B/N	4597	-	43
21.						
22.						
23.						
24.						
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29.						
30.						

6/82

J Comer

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~~000259~~

FORM II (continued)

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
E 7167

84MH03D68

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Aquatec Inc.
Lab Sample ID No: 33214
Sample Matrix: Water
Data Release Authorized By: J Comer

Case No: 2315
QC Report No: 15
Contract No.: 68-01-6765
Date Sample Received: 30 December 1983

SEMIVOLATILE COMPOUNDS

RECEIVED FEB 15 1984

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4 January 1984
DATE ANALYZED: 23 January 1984
PERCENT MOISTURE: —

PP #	CAS #		ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6- trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	10U
(24A)	95-57-8	2- chlorophenol	10U
(31A)	120-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2- nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	50U
(59A)	51-28-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-86-5	pentachlorophenol	10U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	5U
	108-39-4	4-methylphenol	5U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	20U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenyl ether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis (2-chloroisopropyl) ether	20U
(43B)	111-91-1	bis (2-chloroethoxy) methane	20U

PP #	CAS #		ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodipropylamine	10U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	NDB
(67B)	85-68-7	benzyl butyl phthalate	10K
(68B)	84-74-2	di-n-butyl phthalate	10U 10K
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-32-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	218-01-9	chrysene	20U
(77B)	208-96-8	acenaphthylene	10K
(78B)	120-12-7	anthracene	10U
(79B)	191-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10K
	62-53-3	aniline	5U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U
		N-nitrosodimethylamine	10U

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
E 7167

ORGANICS ANALYSIS DATA SHEET

RECEIVED FEB 15 1984

Laboratory Name: Aquatec, Inc.
Lab Sample ID No: 33214
Sample Matrix: Water
Data Release Authorized By: [signature]

Case No: 2315
QC Report No: 15
Contract No.: 68-01-6765
Date Sample Received: 30 December 1983

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: —
DATE ANALYZED: 4 January 1984
PERCENT MOISTURE: —

PP #	CAS #		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	1U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	9
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	10U
(16V)	75-00-3	chloroethane	10U
(19V)	110-75-8	2-chloroethylvinyl ether	10U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	10U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	5U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	NDB
(45V)	74-87-3	chloromethane	10U
(46V)	74-83-9	bromomethane	10U
(47V)	75-25-2	bromoform	10U
(48V)	75-27-4	bromodichloromethane	5U
~~(49V)~~	~~75-69-4~~	~~fluorotrichloromethane~~	~~5U~~
~~(50V)~~	~~75-71-8~~	~~dichlorodifluoromethane~~	~~5U~~
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	NDB
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	10U
	67-64-1	acetone	NDB
	78-93-3	2-butanone	510
	75-15-0	carbondisulfide	1U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	~~total~~ xylenes	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4 January 1984
DATE ANALYZED: 2 February 1984
PERCENT MOISTURE: —

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.005U
(90P)	60-57-1	dieldrin	0.005U
(91P)	57-74-9	chlordane	0.050U
(92P)	50-29-3	4,4'-DDT	0.010U
(93P)	72-55-9	4,4'-DDE	0.005U
(94P)	72-54-8	4,4'-DDD	0.010U
(95P)	115-29-7	α-endosulfan	0.005U
(96P)	115-29-7	β-endosulfan	0.005U
(97P)	1031-07-8	endosulfan sulfate	0.010U
(98P)	72-20-8	endrin	0.005U
(99P)	7421-93-4	endrin aldehyde	0.010U
(100P)	76-44-8	heptachlor	0.010U
(101P)	1024-57-3	heptachlor epoxide	0.005U
(102P)	319-84-6	α-BHC	0.005U
(103P)	319-85-7	β-BHC	0.005U
(104P)	319-86-8	δ-BHC	0.005U
(105P)	58-89-9	γ-BHC (lindane)	0.005U
(106P)	53469-21-9	PCB-1242	0.050U
(107P)	11097-69-1	PCB-1254	0.100U
(108P)	11104-28-2	PCB-1221	0.100U
(109P)	11141-16-5	PCB-1232	0.100U
(110P)	12672-29-6	PCB-1248	0.100U
(111P)	11096-82-5	PCB-1260	0.200U
(112P)	12674-11-2	PCB-1016	0.050U
(113P)	8001-35-2	toxaphene	0.050U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4 January 1984
DATE ANALYZED: 26 January 1984
PERCENT MOISTURE: —

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.005U

ORGANICS ANALYSIS DATA SHEET - Page 3

Sample Number
E 7167

Laboratory Name: Aquatec, Inc. Case No: 2315

QC Report No: 15

RECEIVED FEB 15 1984

B. Tentatively Identified Compounds

	CAS #	Compound Name	Fraction	Scan No. or Retention Time	% Maximum Score Attained Mass Matching Routine: (Specify: Purge)	Estimated Concentration (ug/L or ug/kg)
1.						
2.	108-94-1	Cyclohexanone	B/N/A	1339	95.6%	40
3.						
4.	98-54-4	4-(1,1-dimethylethyl)phenol	B/N/A	2410	83.5%	53
5.						
6.	109-99-9	Tetrahydrofuran	✓	205	98.5%	160
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
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21.						
22.						
23.						
24.						
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26.						
27.						
28.						
29.						
30.						

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FORM II (continued)

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
E 7168

ORGANICS ANALYSIS DATA SHEET

84MH03570

Laboratory Name: Aquatec Inc.
Lab Sample ID No: 33215
Sample Matrix: Water
Data Release Authorized By: [signature]

Case No: 2315
QC Report No: 15
Contract No.: 68-01-6765
Date Sample Received: 30 December 1983

SEMIVOLATILE COMPOUNDS

RECEIVED FEB 15 1984

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4 January 1984
DATE ANALYZED: 23 January 1984
PERCENT MOISTURE: –

PP #	CAS #		ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6- trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	10U
(24A)	95-57-8	2- chlorophenol	10U
(31A)	120-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(37A)	88-75-5	2- nitrophenol	20U
(38A)	100-02-7	4-nitrophenol	50U
(39A)	51-28-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-86-5	pentachlorophenol	10U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	5U
	108-39-4	4-methylphenol	5U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	20U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenyl ether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis (2-chloroisopropyl) ether	20U
(43B)	111-91-1	bis (2-chloroethoxy) methane	20U

PP #	CAS #		ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodipropylamine	10U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	10KC
(67B)	85-68-7	benzyl butyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10K
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-32-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	218-01-9	chrysene	20U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	191-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	5U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U
		N-nitrosodimethylamine	10U

U.S. ENVIRONMENTAL PROTECTION AGENCY • CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
E7168

ORGANICS ANALYSIS DATA SHEET

RECEIVED FEB 15 1984

Laboratory Name: Aquatec, Inc.
Lab Sample ID No: 33215
Sample Matrix: Water
Data Release Authorized By: J Romer

Case No: 2315
QC Report No: 15
Contract No.: 68-01-6765
Date Sample Received: 30 December 1983

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: —
DATE ANALYZED: 4 January 1984
PERCENT MOISTURE: —

PP #	CAS #		(ug/l) or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	1U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	10U
(16V)	75-00-3	chloroethane	10U
(19V)	110-75-8	2-chloroethylvinyl ether	10U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	10U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	5U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	NDB
(45V)	74-87-3	chloromethane	10U
(46V)	74-83-9	bromomethane	10U
(47V)	75-25-2	bromoform	10U
(48V)	75-27-4	bromodichloromethane	5U
~~(49V)~~	~~75-69-4~~	~~fluorotrichloromethane~~	~~5U~~
~~(50V)~~	~~75-71-8~~	~~dichlorodifluoromethane~~	~~5U~~
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	NDB
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	10U
	67-64-1	acetone	NDB
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	1U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	~~total~~ o xylenes	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4 January 1984
DATE ANALYZED: 2 February 1984
PERCENT MOISTURE: —

PP #	CAS #		(ug/l) or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.005U
(90P)	60-57-1	dieldrin	0.005U
(91P)	57-74-9	chlordane	0.050U
(92P)	50-29-3	4,4'-DDT	0.010U
(93P)	72-55-9	4,4'-DDE	0.005U
(94P)	72-54-8	4,4'-DDD	0.010U
(95P)	115-29-7	α-endosulfan	0.005U
(96P)	115-29-7	β-endosulfan	0.005U
(97P)	1031-07-8	endosulfan sulfate	0.010U
(98P)	72-20-8	endrin	0.005U
(99P)	7421-93-4	endrin aldehyde	0.010U
(100P)	76-44-8	heptachlor	0.005U
(101P)	1024-57-3	heptachlor epoxide	0.005U
(102P)	319-84-6	α-BHC	0.009
(103P)	319-85-7	β-BHC	0.005U
(104P)	319-86-8	δ-BHC	0.005U
(105P)	58-89-9	γ-BHC (lindane)	0.005U
(106P)	53469-21-9	PCB-1242	0.050U
(107P)	11097-69-1	PCB-1254	0.100U
(108P)	11104-28-2	PCB-1221	0.100U
(109P)	11141-16-5	PCB-1232	0.100U
(110P)	12672-29-6	PCB-1248	0.100U
(111P)	11096-82-5	PCB-1260	0.200U
(112P)	12674-11-2	PCB-1016	0.050U
(113P)	8001-35-2	toxaphene	0.050U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4 January 1984
DATE ANALYZED: 26 January 1984
PERCENT MOISTURE: —

PP #	CAS #		(ug/l) or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.005U

ORGANICS ANALYSIS DATA SHEET - Page 3

Sample Number
E 7168

Laboratory Name: Aquatec, Inc. Case No: 2315

QC Report No: 15

RECEIVED FEB 15 1984

B. Tentatively Identified Compounds

	CAS #	Compound Name	Fraction	Scan No. or Retention Time	% Maximum Score Attained Mass Matching Routine: (Specify: Purity)	Estimated Concentration (ug/L or ug/kg)
1.						
2.	98-54-4	4-(1,1-dimethylethyl)phenol	B/N/A	2411	89.9%	70
3.						
4.	–	Unknown a	B/N/A	4197	–	46
5.						
6.	107-46-0	Hexamethyldisiloxane	✓	472	80.5%	65
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						
21.						
22.						
23.						
24.						
25.						
26.						
27.						
28.						
29.						
30.						

6/82

J Comea

FORM II (continued)

SBH64-065
8/79
State Form 37488

LARRY HALAIN
219/944-7858
(7/22/82)

INDIANA STATE BOARD OF HEALTH
WATER AND WASTE SAMPLING FIELD DATA
Solid Waste Management Section

Facility and/or Project GARY LAND DEV.

Location

Collector(s) BERNAUER, COPELAND

Sampling Date 7-A-82 No. of Stations 3

Reasons for Sampling: Annual ✓ Complaint

Data Collection Enforcement

Note: Use station numbers for items listed below.

SAMPLE SOURCES:

Well(s)

Monitoring 3

Treated Supply

Untreated Supply

Stream

Upstream

Downstream

Other

Pond

Outfall

Marsh

Spring or Seep

Leachate

Sludge

Type(s)

Containerized Waste

Type(s)

Soil

Other

SAMPLING METHODS:

Pump ; Type

Bailer ✓ ; Type OWS

Grab ; Bottle types

Auger ; Sample depth(s)

Flushed casing prior to sampling _____

Filtered: Field ✓ Lab _____ Not filtered _____

Preserved: Field ✓ Lab _____ Not preserved _____

Refrigeration in field ✓ Blanks prepared _____

Samples split with _____ (please complete)

Photographs attached _____

Sample Description:

Sample No.	Color	Odor	Appearance	Other

PRECIPITATION DATA:

Rain _____ Snowmelt _____ Recent past (date) _____

Snow _____ During sampling _____ Not applicable _____

INFLUENTIAL FACTORS:

1) Proximity to other potential pollution sources (describe) ___

_____

_____

2) Well casing condition (note missing caps, casing cracks, condition of annular seals, etc.) No caps West, South, North

_____

3) Ponded water around casing(s) West, South

_____

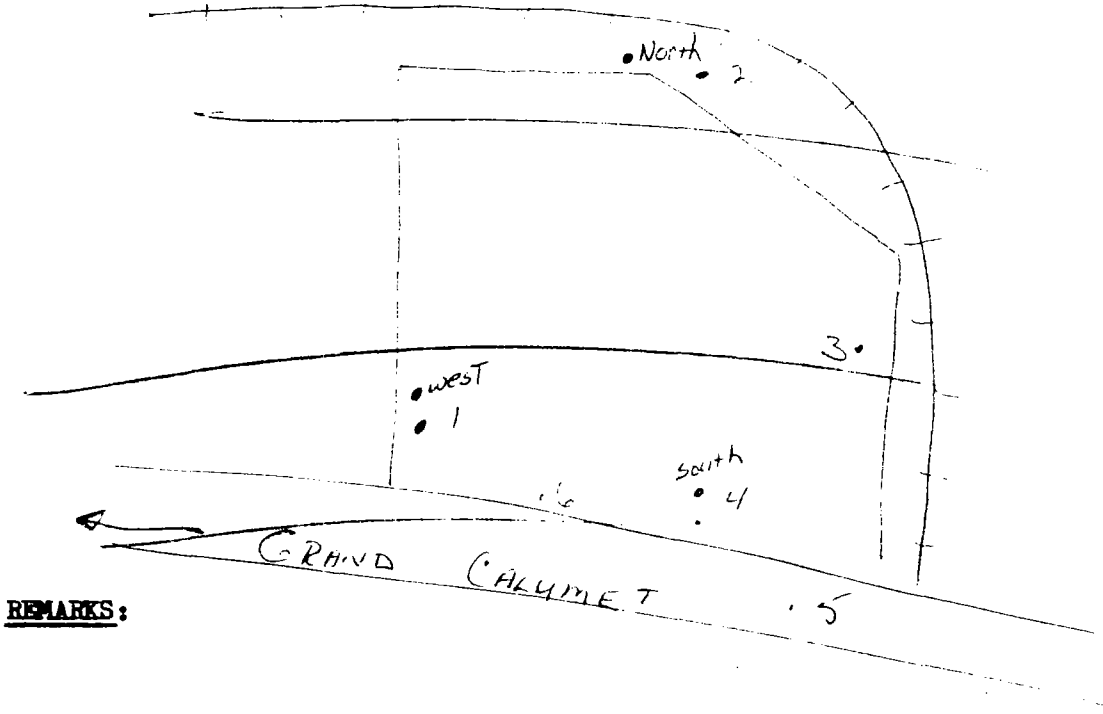
4) Water level(s) in casing(s) prior to flushing _____

_____

5) Well depth(s) _____

6) Other Well North dry

In the space below, accurately locate sampling stations on a sketch map. Include a north arrow, prominent landmarks, flow directions, potential pollution sources, and any other pertinent information.



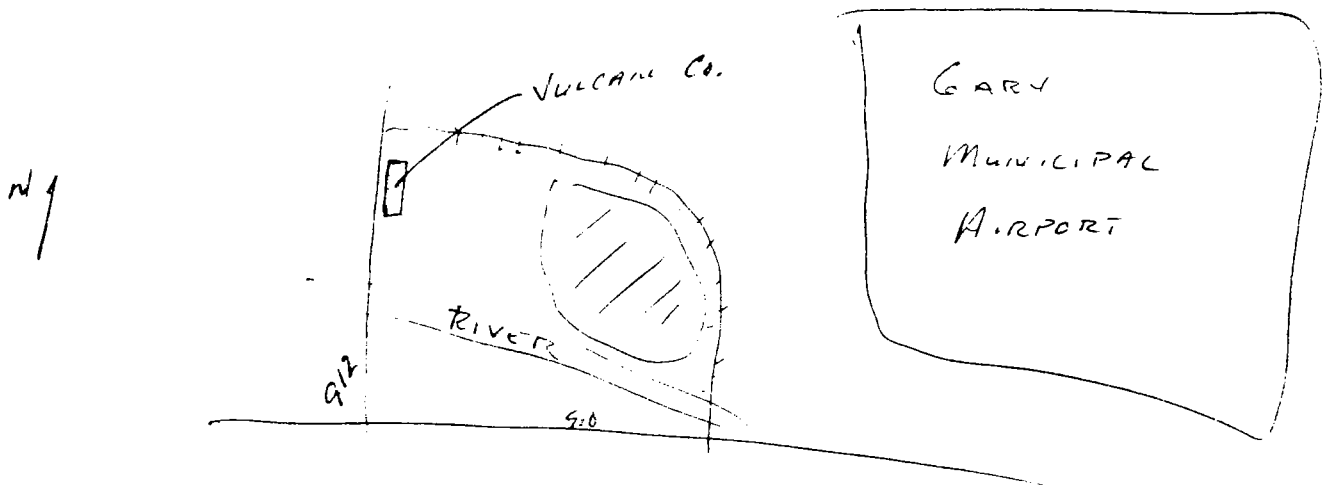
REMARKS:

Delivered to Lab: 7 (Month) 22 (Day) 82 (Year) 8:30 (Time) A.M. P.M.

By: (Name) [illegible] (Title) [illegible]

(Division) LPC

Interstate 90 & SR 912



I-94 to 912 (Cline Ave) and go North to Gary Ave

Jan. 83 Water Sampled

GULF COAST LABORATORIES, INC.
2417 Bond St., Park Forest South, Illinois 60466
Phones (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

TO: Gary Development
P. O. 6056
Gary, Indiana 46406

ATTN: Mr. Larry Hagen

DATE: February 24, 1983

RE: Monitoring Well Analysis
Sample Date: 2/08/83
North Well
GCL# 35969

PARAMETERS	RESULTS
Chloride	83 mg/l
COD	45 mg/l
Hardness	290 mg/l
Total Iron	1.1 mg/l
pH	7.2
Total Dissolved Solids	1,115 mg/l

MAR 7 2 35 PM '83
DIV. OF LAND POLLUTION CONTROL
STATE BOARD OF HEALTH

Approved Donald Lepple

Analyst _____ Date 2/24/83

GULF COAST LABORATORIES, INC.
2417 Bond St., Park Forest South, Illinois 60466
Phones (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

TO: Gary Development
P. O. 6056
Gary, Indiana 46406

ATTN: Mr. Larry Hagen

DATE: February 24, 1983

RE: Monitoring Well Analysis
Sample Date: 2/08/83
South Well
GCL# 35970

PARAMETERS	RESULTS
Chloride	245 mg/l
COD	630 mg/l
Hardness	1,060 mg/l
Total Iron	0.3 mg/l
pH	7.2
Total Dissolved Solids	1,870 mg/l

Approved Donald Shipple

Analyst _____ Date 2/24/83

GULF COAST LABORATORIES, INC.
2417 Bond St., Park Forest South, Illinois 60466
Phones (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

TO: Gary Development
P. O. 6056
Gary, Indiana 46406

ATTN: Mr. Larry Hagen

DATE: February 24, 1983

RE: Monitoring Well Analysis
Sample Date: 2/08/83
West Well
GCL# 35971

PARAMETERS	RESULTS
Chloride	325 mg/l
COD	40 mg/l
Hardness	320 mg/l
Total Iron	0.3 mg/l
pH	6.8
Total Dissolved Solids	1,070 mg/l

Approved _____ Analyst _____ Date _____

LAKE COUNTY HEALTH DEPARTMENT

LAKE COUNTY GOVERNMENT CENTER
2293 NORTH MAIN STREET
CROWN POINT, INDIANA 46307
PHONE: 738-2020 OR 663-0760

PETER STECY M.D.
HEALTH COMMISSIONER

November 3, 1982

RECEIVED
NOV 12 1982
INDIANA STATE BOARD OF HEALTH
PUBLIC WATER SUPPLY DIVISION

Gary Development Co. Inc.
Box 6056
Gary, Ind. 46406

Attention: Mr. Larry Hagen

Test data tabulated below were obtained for 4 Well samples from Sanitary land fill 45 - 2 that your personel delivered to our laboratory on November 1, 1982.

Samples	pH	Chloride	Chem Oxygen Demand	Total Hard	Total Iron	Total Dis Sol
North	7.2	500	60	240	.8	675
South	7.55	250	100	400	1.1	1125
West	8.1	350	550	80	.85	1175
Bldg.	8.5	100	60	40	.3	700

NOV 15 1 29 PM '82

Sincerely,
Andrew F. Livovich
Andrew F. Livovich
C. Chemist

AFL/lr

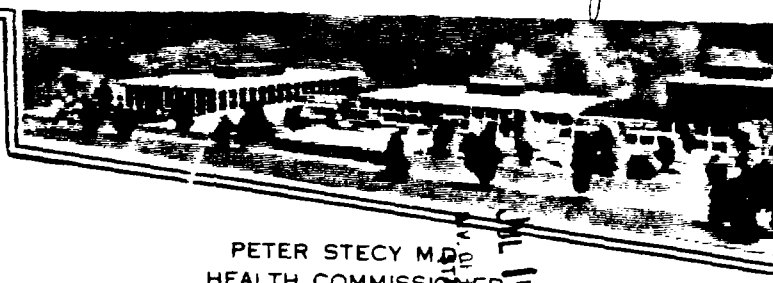
WATER SAMPLES FROM WELLS OCT. 29, 82

TO: Schmidt
Mayson

LAKE COUNTY HEALTH DEPARTMENT

LAKE COUNTY GOVERNMENT CENTER
2293 NORTH MAIN STREET
CROWN POINT, INDIANA 46307
PHONE: 738-2020 OR 663-0760

PETER STECY M.D.
HEALTH COMMISSIONER



JUL 14 11 22 AM '82
INDIANA ENVIRONMENTAL POLLUTION CONTROL BOARD OF HEALTH

July 7, 1982

Gary Development Co. Inc.
Box 6056
Gary, Indiana 46406
Attention: Mr. Larry Hagen

Test data tabulated below were obtained for 3 samples of water from Sanitary Landfill 45 - 2 that were delivered to this laboratory on July 1, 1982.

Sample No.	pH	Chloride ppm	Chemical Oxygen Demand ppm	Total Hardness ppm	Total Iron ppm	Total Dissolved Solids ppm
1	8.1	400	240	400	5.0	1800
3	7.7	200	200	600	6.5	1000
5	8.4	100	70	120	0.0	1300

July 1982
WATER SAMPLES

Sincerely,

Andrew F. Livovich
C. Chemist

AFL/lr

#1 WEST WELL BY VULCAN
#2 NORTH WELL BY ADMIXTURES PLANT - DRY - NO TEST
#3 SOUTH WELL BY RIVER
#5 WELL AT BUILDINGS 380' DEEP

(1) inspecting landfills for the State of Indiana;

(2) inspecting landfills for private organizations;

(3) managing or operating landfills;

(4) working at landfills.

38. Is it a generally accepted practice by the State and/or its Inspectors not to place "cover" on a landfill until the end of the day when the landfill stops accepting wastes for that day?

(a) If the answer to the above question is yes, how can an Inspector determine at a period of time when a landfill is continuing to accept wastes, whether cover for that day is or will be adequately applied to the landfill? Discuss this answer in detail.

(b) If the answer to the main question contained in number 38 above is no:

(i) at what point in time does the State require that cover be applied?

(ii) cite any and all regulations, and refer to any and all documents establishing, relating to, and discussing such a requirement.

(c) Produce any and all documents relating to and/or discussing the time when cover is to be applied under Indiana law.

D. SPECIAL PERMISSION LETTERS:

39. We have in our possession the following "Special Permission Letters" (as used herein, the term "Special Permission Letters" refers to those letters issued by the State granting authority to dispose of hazardous or special wastes pursuant to 320 IAC 5-5-14) issued by the State to GDL:

Date	Waste Type	Waste Quantity
1/14/81	Fly Ash ✓	80,000 cubic yards for calendar year 1981

Date	Waste Type	Waste Quantity
1/9/81	Asbestos	50 cubic yards (one-time-only basis)
12/17/80	Pipe Insulating Asbestos Waste	300 cubic yards (one-time-only basis)
12/9/80	Metal Shavings	25 cubic yards per year
10/30/80	Asbestos Contaminated Material	700 cubic yards (one-time-only basis)
8/25/80	Asbestos	100 cubic yards (one-time-only basis)
5/14/80	Asbestos	40 cubic yards per week for four weeks; 20 cubic yards every other week thereafter
5/13/80	Fly Ash	15,000 cubic yards
11/27/79	Aluminum Dross (Milling Dust and Slag)	300 tons per day until June 15, 1980
3/20/79	Furnace Brick, Pallets	Unspecified
4/28/78	Water and Vegetable Oil	4,000 gallons (one-time-only basis)
11/18/77	Herbicide	120 cubic yards (one-time-only basis)
9/6/77	Oily Waste From 6-Stand Oil Recovery Unit	1,200 gallons per day
7/22/77	Filter Cake Kiln Scrubber Mud	1,500 pounds per week 3,000 pounds per week
6/3/77	API Separator Bottoms	200 cubic yards per year
6/1/77	Lime Sludge	80,000 gallons per month (not more than 4,000 gallons per day)
5/17/77	Asbestos Paper	105 cubic yards per week
5/12/77	Filter Cake Scrubber Mud	1,500 pounds per week 3,000 pounds per week (Temporary Approval)
4/25/77	Activated Biological Sludge	Unspecified
3/14/77	Calcium Sulfate	1.5 tons per day
3/14/77	Lime Waste	80,000 gallons per month
3/4/77	Youngstown Oil Sludge	Unspecified
10/7/76	Gypsum Wastes (ph 7.9)	Quantity Unspecified
10/4/76	Calcium Carbonate	30 cubic yards per day
4/12/76	Paint Sludges	25 cubic yards per day
2/20/76	Corn Starch and Carbon Filters	Unspecified

Date	Waste Type	Waste Quantity
1/30/76	Lime Slurry	1,500 to 5,000 gallons per week
6/18/75	Neutralized Sludges X	Temporary Approval
2/24/75	Dripolene	4 to 5 truckloads per week for 6 months

(a) Are the Special Permission Letters outlined above the only such letters issued by the State granting permission to any person or company to dispose of hazardous or special wastes at GDL? If not, list all other such letters and their date; specify the type of waste involved; identify whether such waste is an industrial waste, a RCRA hazardous waste, or both; and produce copies of such letters and all documents relating thereto.

(b) Has the State ever orally granted special permission to dispose of special or hazardous waste at GDL and not followed up on such oral approval with a letter? If so, state the date of such approval; the generator and type of waste involved; and the amount and duration of the waste permitted to be disposed of.

(c) Admit or deny that the above chart accurately sets forth the Special Permission Letters granted to GDL, and the type, amount, and duration of the disposal of such wastes. If you deny this statement, specify the inaccuracies, and set forth, in detail, a correct replacement chart.

(d) Admit or deny that the State could not and would not issue the above Special Permission Letters unless it determined that disposal of such wastes at GDL would not pose an unreasonable risk of harm to the environment or health of the citizens of Indiana.

(e) If Respondent denies subpart (d) above, then state in detail under what conditions the Board would issue a Special Permission Letter knowing that disposal pursuant to said letter would pose an unreasonable risk of harm to the environment or health of the citizens of Indiana.

f. Youngstown Sheet and Tube ✓	Oil sludge	Interim approval 3/2/77
g. U.S. Steel	Wastewater sludge ✓	Interim approval 3/3/77

4. That the Respondent, Gary Land Development, shall pay a civil penalty in the amount of $1,000 to the Environmental Management Special Fund, as provided by IC 13-7-13.

5. That the Stream Pollution Control Board of the State of Indiana agrees to withdraw this action upon compliance with the above terms.

GARY LAND DEVELOPMENT
LAKE COUNTY, INDIANA

By: _____

Title: _____

Date: _____

STREAM POLLUTION CONTROL BOARD
OF THE STATE OF INDIANA

By: _____

Title: _____

Date: _____

these improper practices were observed, the potential environmental problems associated with said practices, and produce all documents relating to this Interrogatory.

44. GDL received permission to accept the following listed wastes:

Waste Type	Permission Letter Date	Amount Allowed
API Separator Bottoms	6/3/77	200 cubic yards
Paint Sludges	4/12/76	25 cubic yards
Solid Corn Starch	2/20/76	Unspecified
Carbon Filters from Corn Syrup Filtering Processes	2/20/76	Unspecified
Lime Sludges	6/1/77	80,000 gallons per month or 4,000 gallons per day
Lime Waste	3/14/77	80,000 gallons per month
Calcium Carbonate	10/4/76	30 cubic yards per day
Lime Sludge	1/30/76	1,500 to 5,000 gallons per week
Activated Biological Sludge	4/25/77	Unspecified
Calcium Sulfate	3/14/77	1.5 tons per day
Gypsum Wastes (no Cd or Pb)	10/7/76	Unspecified

For each of the above-mentioned wastes, answer the following questions:

(a) Admit or deny that permission was received by GDL to receive this waste.

(b) Is each waste listed an industrial waste, a RCRA hazardous waste, or both? Cite the authority for, and the regulations supporting, this categorization.

(c) Admit or deny that the above approvals to accept each waste listed were given on a continuing basis? If you deny this statement, discuss your response in detail.

(d) For each waste identified above, discuss in detail the anticipated adverse environmental impacts of continued disposal of these material at GDL.

4. That the Respondent, Gary Land Development, discharged contaminated water, consisting of leachate from the landfill and ground water containing heavy metals and oils which flowed into the landfill, into the Grand Calumet River on or about August 27, 1976, in violation of Stream Pollution Control Board Regulations SPC 15 and SPC 1R-3.

5. That the Respondent, Gary Land Development, accepted liquids, sludges and other hazardous wastes during the months of October, November and December 1976, in violation of Stream Pollution Control Board Regulation SPC 18.

6. That the Respondent, Gary Land Development, has failed to construct and operate the site as per Stream Pollution Control Board approval SW 133; more particularly by the failure to operate the landfill in lifts and failure to construct a clay perimeter around the site.

WHEREFORE, upon consent of the parties as aforesaid, it is hereby:

ORDERED, ADJUDGED AND DECREED as follows:

1. That the provisions of this Order shall apply to Gary Land Development its agents, servants, employees, successors and assigns, and all persons, firms, and corporations acting through or for them.

2. That the Respondent, Gary Land Development, shall submit revised plans to address the problems associated with the presence of contaminated ground water flowing into the site. Further, such plans shall include leachate treatment and/or disposal and exterior drainage of contaminated groundwater flowing into the site. Plans shall be submitted within 60 days of the effective date of this Order. Construction will commence within 30 days after Stream Pollution Control Board approval and construction will be complete within 90 days after commencement of construction.

3. That the Respondent, Gary Land Development, shall accept liquids, semi-liquids or sludges only as approved by the Stream Pollution Control Board. The Respondent presently has approval to receive liquid, semi-liquids or sludges from the following:

Company	Waste Material	Date of Approval
a. Union Carbide	Lime, sludge (1500-5000 gallons/week)	1/30/76
b. American Maize Products Company	Corn starch and carbon filters	2/20/76
c. American Chemical Service	Paint sludge (25 cu. yds./day)	4/12/76
d. E. I. duPont	Calcium Carbonate (30 cu. yds./day)	10/4/76
e. U.S. Reduction	Salt recovery plant sludge cake	6/16/76

Company	Waste Material	Date of Approval
a. Union Carbide	Lime, sludge (1500-5000 gallons/week)	1/30/76
b. American Maize Products Company	Corn starch and carbon filters	2/20/76
c. American Chemical Service	Paint sludge (25 cu. yds./day)	4/12/76
d. E. I. duPont	Calcium Carbonate (30 cu. yds./day)	10/4/76
e. U.S. Reduction	Salt recovery plant sludge cake	6/16/76
f. Youngstown Sheet and Tube	Oil sludge	Interim approval 3/2/77
g. U.S. Steel	Wastewater sludge	Interim approval 3/3/77

IN-0085-07

ecology and environment, inc.

223 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60606, TEL. 312-663-9415

International Specialists in the Environmental Sciences

Date Received for Review: 2/24/84 Date Review Completed: 2/29/84

To: PAUL HESS

From: Cynthia Bachunas

Subject: GARY LAND DEVELOPMENT (INDIANA)
R05-8307-04

Sample Description: CASE # 2315 - LOW WATER, METALS AND CYANIDE

Project Data Status: COMPLETE

FIT Data Review Findings:

NO ADDITIONAL COMMENTS - SEE ATTACHED CRL REVIEW, 2/16/84.

Additional Comments:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 2/16/84

RECEIVED FEB 24 1984

SUBJECT: Review of Region V CLP Data
Received for Review on 2/9/84

FROM: Curtis Ross, Director Chuck Ellr
Central Regional Laboratory

TO: Data User: FIT

We have reviewed the data for the following case(s).

SITE NAME Gary Land Development SMO Case No. 2315

EPA Data Set No. SF169 No. of Samples 5 D.U./Activity Numbers 1905 1C48500

CRL No. 84MH03R11 To 84MH03S70

SMO Traffic No. ME 1659 To ME 1663

Contract Laboratory: ChemTech Hours Required for Review: 1/2

Following are our findings.

- The field blank contains 12 ug Zn/l. The lab blank is not contaminated. This level of contamination is not significant compared to the data.
- Duplicate values for field dups (Al) = 760 and 1537 ug/l. Lab dups for Al were 760 and 1025 ug/l. This indicates that Al results are reliable to only ± 50%. All other dups are good. 2/15/84 AT
- All other QC is good.
- All contractual obligations were met.
- Some QC results are illegible.

( ) Data are acceptable for use.
(X) Data are acceptable for use with qualifications noted above. 2/15/84 AT
( ) Data are preliminary - pending verification by Contractor Laboratory.
( ) Data are unacceptable.

cc: Dr. Alfred Haeberer/Joan Fisk/Gary Ward, EPA Support Services
Ross K. Robeson, EMSL-Las Vegas
Robert Pritchard, CLP/SMO

EPA FORM 1320-6 (REV. 3-76)

RECEIVED

FEB 0 8 1984

US EPA CENTRAL REGIONAL LAB.
536 S. CLARK STREET
CHICAGO, ILLINOIS 60605

US ENVIRONMENTAL PROTECTION AGENCY
IWI Sample Management Office
P.O. Box 818 — Alexandria, Virginia 22313
703/557-2490 FTS 8-557-2490

Sample No.
ME 1659

84MA03R11

INORGANICS ANALYSIS DATA SHEET

SF169

LAB NAME CHEMTECH CASE NO. 2315 RECEIVED FEB 2 4 1984

LAB SAMPLE ID. NO. G2-152-01 (BLANK) QC REPORT NO. 152

TASK 1 (Elements to be Identified and Measured)

	ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
Aluminum	<100 ~~<40~~ 6K	10.	Zinc	12.0
Chromium	<10	11.	Boron	<100
Barium	<100	12.	Vanadium	<200
Beryllium	<5	13.	Silver	<10
Cobalt	<50			
Copper	<50			
Iron	<50			
Nickel	<40			
Manganese	<10			

TASK 2 (Elements to be Identified and Measured)

	ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
Arsenic	<10	5.	Mercury	<0.2
Antimony	<20	6.	Tin	<20
Selenium	<2	7.	Cadmium	<1
Thallium	<10	8.	Lead	<5

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	<10
3.	Sulfide	

COMMENTS:

Atchiffe 2/2/84

Form I

US ENVIRONMENTAL PROTECTION AGENCY
HWI Sample Management Office
P.O. Box 818 – Alexandria, Virginia 22313
703/557-2490 FTS 8-557-2490

Sample No.
ME 1660

84MHC3568

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2315 RECEIVED FEB 24 1984

LAB SAMPLE ID. NO. G2-152-02 QC REPORT NO. 152

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	760	10.	Zinc	62.6
2.	Chromium	<10	11.	Boron	21130
3.	Barium	119	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	<50			
7.	Iron	3376			
8.	Nickel	<50			
9.	Manganese	1220			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	<10	5.	Mercury	<0.2
2.	Antimony	<20	6.	Tin	<20
3.	Selenium	<2	7.	Cadmium	<1
4.	Thallium	<10	8.	Lead	20.

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	<10
3.	Sulfide	

COMMENTS:

AHelfoff 2/2/84

US ENVIRONMENTAL PROTECTION AGENCY
HWI Sample Management Office
P.O. Box 818 – Alexandria, Virginia 22313
703/557-2490 FTS 8-557-2490

Sample No.
ME1661

84MH03569

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2315 RECEIVED FEB 24 198

LAB SAMPLE ID. NO. G2-152-03 QC REPORT NO. 152

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	1208	10.	Zinc	44.6
2.	Chromium	<10	11.	Boron	535
3.	Barium	137	12.	Vanadium	<200
4.	Beryllium	6.1	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	<50			
7.	Iron	8161			
8.	Nickel	130			
9.	Manganese	1729			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	<10	5.	Mercury	<0.2
2.	Antimony	<20	6.	Tin	<20
3.	Selenium	<2	7.	Cadmium	4.9
4.	Thallium	<10	8.	Lead	16.

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	<10
3.	Sulfide	

COMMENTS:

Abelhoffer 2/2/84

US ENVIRONMENTAL PROTECTION AGENCY
HWI Sample Management Office
P.O. Box 818 — Alexandria, Virginia 22313
703/557-2490 FTS 8-557-2490

Sample No.
ME 1662

84MH03D68

INORGANICS ANALYSIS DATA SHEET

RECEIVED FEB 24

LAB NAME CHEMTECH CASE NO. 2315

LAB SAMPLE ID. NO. G2-152-04 QC REPORT NO. 152

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	1537	10.	Zinc	59.7
2.	Chromium	<10	11.	Boron	20110
3.	Barium	144	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	<50			
7.	Iron	3315			
8.	Nickel	138			
9.	Manganese	1135			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	<10	5.	Mercury	<0.2
2.	Antimony	<20	6.	Tin	<20
3.	Selenium	<2	7.	Cadmium	<1
4.	Thallium	<10	8.	Lead	21.

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	<10
3.	Sulfide	

COMMENTS:

AHelpff 2/2/84

US ENVIRONMENTAL PROTECTION AGENCY
HWI Sample Management Office
P.O. Box 818 – Alexandria, Virginia 22313
703/557-2490 FTS 8-557-2490

Sample No.
ME 1663

84MH03570

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2215

LAB SAMPLE ID. NO. G2-152-05 QC REPORT NO. 152

RECEIVED FEB 24 1984

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	2643	10.	Zinc	149
2.	Chromium	<10	11.	Boron	6725
3.	Barium	159	12.	Vanadium	<200 ~~69~~ 6K
4.	Beryllium	<.5	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	<50			
7.	Iron	2262			
8.	Nickel	266			
9.	Manganese	3522			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	10.	5.	Mercury	<0.2
2.	Antimony	<20	6.	Tin	<20
3.	Selenium	<2	7.	Cadmium	<1
4.	Thallium	<10	8.	Lead	61.

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	<10
3.	Sulfide	

COMMENTS:

Atchoff 2/2/84

IN-0085-12

ecology and environment, inc.

223 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60606, TEL. 312-663-9415

International Specialists in the Environmental Sciences

DATE: December 30, 1983

TO: File

FROM: Anne C. Sause ACS

SUBJECT: Indiana/R5-8307-04-85
Gary/Gary Land Development
Groundwater Sampling

On December 27, 1983, Paul Hess, John Angelo, Dan Cozza and the author arrived at the above referenced site in order to sample monitoring wells. Due to a lack of daylight hours, it was decided to return the next day to sample.

On December 28, 1983, samples were obtained from two monitoring wells and a ditch. Both of the monitoring wells were installed on the south side of the site between the fill and the Calumet River. The wells were several hundred feet apart. The ditch ran along the west property line of the site. A monitoring well was in the ditch, but unaccessible because water had accumulated and frozen over the well. Ice was chopped from the top and the water beneath was sampled.

Attached is a table giving the sample descriptions, their traffic report numbers, and other pertinent information. Also, attached is a site sketch showing the sample location.

The samples were preserved and packaged at the Schaumburg warehouse. Both the metals sample and the cyanide sample were decanted prior to their preservation. The organic samples were shipped to Aquatech (A.B. #696601091), and the inorganic samples were shipped to Chemtech (A.B. #696601102). Both sets were shipped via Federal Express.

ACS/db

Attachment

recycled paper

Table 1

Groundwater Sampling at

Gary Land Development, Gary, Indiana

December 30, 1983

Time [1]	Organic Traffic Report Number	Inorganic Traffic Report Number	Station Location	Sample Description
1020	E 3364	ME 1659	Blank	Blank
0945	E 3365	ME 1660	MW1	Monitoring Well #1
1050	E 7166	ME 1661	MW2	Monitoring Well #2
0950	E 7167	ME 1662	Dupl.	Duplicate[2]
1025	E 7168	ME 1663	MW3	Ditch

Legend
1-Time given in military time.
2-Duplicate sample taken from monitoring well #1.

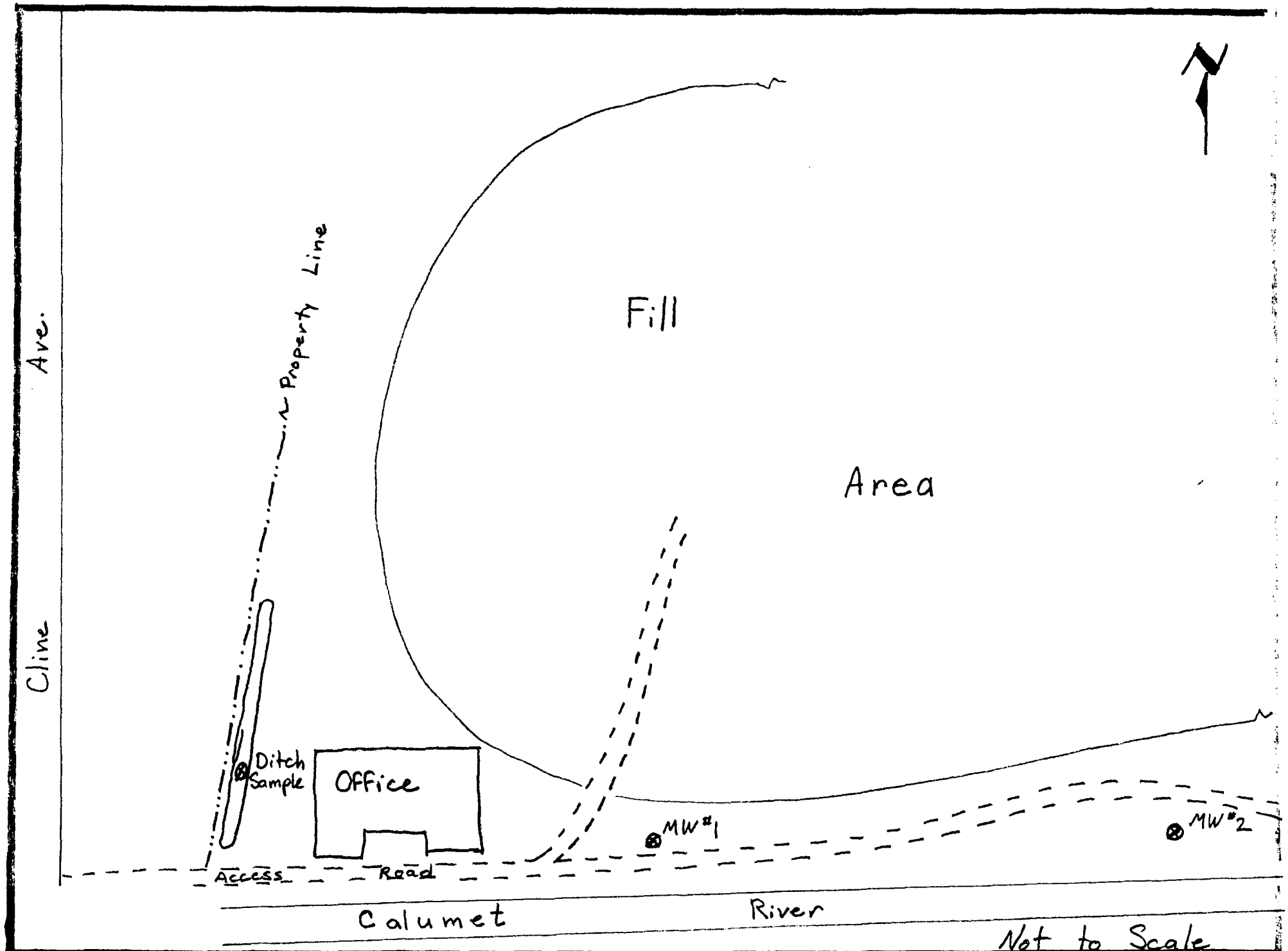


Figure 1.
Gary Land Development

IN - 0085 - 13

Site Name / TDD#: Gary Land Development / RS-8307-4

Case Number : 2315

Sampling Date: 12-28-83

Sampling Time: 1020

Sample/Station Location: Blank / Blank

Organic Traffic Number E 3364

Inorganic Traffic Number ME 1659

Tags ~~High Hazard Traffic Number E~~ S-34533 thru S-34538

Physical Description

At time of collection: Clear, distilled water.

Physical Changes (if any)

From time of collection until shipment: Same

Instrument Readings (i.e. - pH, conductivity...): None

Lot Nos: ½gal 13307032 Org to Aquatech (696601091)
VOAs 231043 Inorg to Chemtech (696601102)
Liters 323511

Sampling Date: 12-28-83

Sampling Time: 0945

Sample/Station Location: MW1 / Monitoring Well #1

Organic Traffic Number E 3365

Inorganic Traffic Number ME 1660

Tags ~~High Hazard Traffic Number E~~ S-34539 thru S-34544

Physical Description

At time of collection: Clear yellow with particulates

Physical Changes (if any)

From time of collection until shipment: Particulates settling out in a grey-brown mass on bottom of bottle. Decanted prior to metals and cyanide preservation.

Instrument Readings (i.e. - ph, conductivity...): None

Lot Nos. ½ gal 13290022 Org. to Aquatech (696601091)
VOAs 231043

Site Name / TDD#: Gary Land Development / R05-8307-04

Case Number : 2315

Sampling Date: 12-28-83

Sampling Time: 1050

Sample/Station Location: MW#2 / Monitoring Well #2

Organic Traffic Number E 7166

Inorganic Traffic Number ME 1661

Tags ~~High Hazard Traffic Number E~~ 5-34545 thru 5-34550

Physical Description

At time of collection: Clear, yellowish with particulates.

Physical Changes (if any)

From time of collection until shipment: Particulates settling out of sample. Sample decanted prior to metals and cyanide preservation.

Instrument Readings (i.e. - pH, conductivity...): None

Lot Nos. ½ gal. 13290022 Org. - Aquatech (696601091)
VOA 231043 Inorg - Chemtech (696601102)
Liter 323511

Sampling Date: 12-28-83

Sampling Time: 0950

Sample/Station Location: Dupl. / Duplicate (from MW1)

Organic Traffic Number E 7167

Inorganic Traffic Number ME 1662

Tags ~~High Hazard Traffic Number E~~ 5-35251 thru 5-35256

Physical Description

At time of collection: Clear yellowish liquid with particulates.

Physical Changes (if any)

From time of collection until shipment: Particulates settling out of sample. Sample decanted prior to metals and cyanide preservation.

Instrument Readings (i.e. - ph, conductivity...): None

Lot Nos: ½ gal 13290022 Orgi- Aquatech (6966 091)
VOA 231043 & 233 20017

Site Name / TDD#: Gary Land Development / RS-8307-04

Case Number : 2315

Sampling Date: 12-28-83

Sampling Time: 1025

Sample/Station Location: MW#3 / Ditch

Organic Traffic Number E 7168

Inorganic Traffic Number ME 1663

Top ~~High Hazard Traffic Number E~~ 5-35257 thru 5-35262

Physical Description

At time of collection: Clear

Physical Changes (if any)

From time of collection until shipment: Same. Samples decanted prior to metals and cyanide preservation.

Instrument Readings (i.e. - pH, conductivity...): None.

Lot Nos: 1/2 gals. 13290022 — Org. to Aquatech (696601091)
VOA 231043 — Inorg. to Chemtech (696601102)
Liter 323511

Sampling Date:

Sampling Time:

Sample/Station Location:

Organic Traffic Number E

Inorganic Traffic Number ME

High Hazard Traffic Number E

Physical Description

At time of collection:

Physical Changes (if any)

From time of collection until shipment:

Instrument Readings (i.e. - ph, conductivity...):

ACS 12-29-83

IU-0085-15

VIAR: Dr. Rob Pritchard 703-557-2490
NEIC: Dr. Barry North 303-234-2683

Contract (include VIAR Lab name for NEIC extracts)

SAMPLE PROPOSAL

FIT REGION V

1. Date form completed 12-8-83

2. TDD# P05-8307-04

Site Name, City, State GARY LAND DEVELOPMENT
GARY, IN.

3. Team Leader PAUL HESS Sampler ANNE

4. Number and type of samples FIVE WATER AND 4 SEDIMENTS (tentative)

5. Parameters requested NORMAL ORGANIC AND METALS and distilled cyanides

6. Expected sampling date 12-20 or 21

Expected shipment date

7. Lab used for analysis: Organic ~~Acurex~~ Water: Aquatech Low Soil: US Testing

Inorganic ~~Chemtech~~ H_2O & Soil: Chemtech

Case Number (Environmentals & Mediums) 2315

8. Projected due date of FIT analysis receipt

9. Airbill Number: Organic Lab 696601091

Inorganic Lab 696601102

CB,KG/df
7/22/81

SMP-001

Gary Land Devel.

5 Water + Blank + Dupl. > org, metal, cyanide

½ gal	=	20	7 x 2 = 14 + 6 = 20
VOA	=	20	7 x 2 = 14 + 6 = 20
Liters	=	25	7 x 3 = 21 + 4 = 25

4 Sediments + Dupl. > org, metal & cyanide

8 oz jars = 15 5 x 2 = 10 + 5 = 15

Coolers:

Water = organics in 3 (4 + 4 + 6)
Inorganics in 1 (1)

Soil = organics in 1
Inorganics in 1

Total 6

NaOH pellets
Nitric acid (50ml)
Vermin
Disp. gloves
Butyl rubber gloves
Wooden Tongue depressors
Paper Towels

Gary Development
Lake Co.

Nov 19 2 33 PM '90

Lake County Health Department Laboratory
2293 N. Main Street
Crown Point, Indiana 46307

OFFICE OF SOLID AND HAZARDOUS WASTE MGMT DEM

Date: November 14, 1990
To: Gary Development
Box 6056
Gary, IN. 46406

45-2

Attention: Mr. Larry Hagen
Re: Results on well water samples

Tabulated below are laboratory findings on well water samples collected on:

Date	Sample	pH	Chloride (ppm)	COD (ppm)	Calcium Hardness (ppm)	Total Iron (ppm)	Total Dissolved Solids (ppm)
11/16/90	South	7.4	9.2	112	120	2.5	1080
11/16/90	East	7.3	1.0	88	88	1.5	1015
11/16/90	North	6.9	1.5	92	68	12.5	1110
West well area flooded sample not taken							

11-9-90 per Chemist below KS

Thank you,

Michael Krayzik

Chemist

Gary development ~~Lake County Landfill~~ Lake County

AUG 13 9 44 AM '90

OFFICE OF SOLID AND HAZARDOUS WASTE MGMT DEM

Lake County Health Department Laboratory
2293 N. Main Street
Crown Point, Indiana 46307

Date: AUGUST 3, 1990

To: GARY DEVELOPMENT
BOX 6056
GARY, IN 46406
45-2

Attention: MR. LARRY HAGEN

Re: RESULTS ON WELL WATER SAMPLES

Tabulated below are laboratory findings on well water samples collected on:

Date	Sample	pH	Chloride (ppm)	COD (ppm)	Calcium Hardness (ppm)	Total Iron (ppm)	Total Dissolved Solids (ppm)
8/1/90	South	6.9	3.3	120	76	8.1	1522
8/1/90	EAST	7.1	0.6	62	165	1.5	1051
8/1/90	North	6.8	0.6	146	188	7.5	2110
	WEST WELL AREA UNDER STANDING WATER						

Thank you,

Michael Krajnik

Chemist

G. Development
Lake County

MAY 31 2 28 PM '90

OFFICE OF SOLID
AND HAZARDOUS
WASTE MGMT
DEM

Lake County Health Department Laboratory
2293 N. Main Street
Crown Point, Indiana 46307

Date: MAY 25, 1990
To: GARY DEVELOPMENT
BOX 6056
GARY, IN 46406

Attention:
Re: MR. LARRY HAGEN
RESULTS ON WELL WATER
SAMPLES

Tabulated below are laboratory findings on well water samples collected on:

Date	Sample	pH	Chloride (ppm)	COD (ppm)	Calcium Hardness (ppm)	Total Iron (ppm)	Total Dissolved Solids (ppm)
5/24/90	South	7.3	6.8	72	120	3.5	1105
5/24/90	East	7.6	2.2	48	24	0.9	381
5/24/90	West	7.5	8.0	68	36	0.4	552
5/24/90	North	6.9	2.4	98	124	2.5	2020

Thank you,

Michael Krajnik

Chemist

MAY 31 1990 SAMPLES

Lake, Gary Development LF 2B1

Indiana Department of Environmental Management 2B1
Office of Solid and Hazardous Waste Management Registrant #
Solid Waste Facility Inspection Report 45-0002

SM

Date 12-13-90	Time 1:30	County Lake
Facility Gary Development Landfill		Permit (Yes # 45-2) No
Location Gary and Clive Ave.		Inspected By S. Schafer

Type Of Operation: Sanitary Landfill Construction/Demolition Processing Facility Incinerator
Restricted Waste Site Type_____ Collection Container (Other closed site)

OPERATIONAL REQUIREMENTS-LAND DISPOSAL

1. ACCESS CONTROL, 2-14-1
2. ON-SITE ROADS, 2-14-2
3. SIGNS, 2-14-3
4. SANITATION, 2-14-4
5. SCAVENGING, 2-14-5
6. SALVAGING, 2-14-6
7. SAFETY REQUIREMENTS, 2-14-7
8. RECORDS, 2-14-8
9. OPEN BURNING, 2-14-9 *
10. WASTE DEPOSIT AND COMPACTION, 2-14-10
11. DIVERSION OF SURFACE WATER, 2-14-11
12. COVER-GENERAL PROVISIONS, 2-14-12 *
13. COVER-SANITARY LANDFILLS & RWS TYPE I, 2-14-13 *
14. COVER-RWS TYPE II, 2-14-14 *
15. COVER-RWS TYPE III, 2-14-15 *
16. COVER-CONST/DEMO SITES, 2-14-16 *
17. DISPERSAL CONTROL, 2-14-17
18. GRADING & SOIL STABILIZATION, 2-14-18
19. FINAL COVER, 2-14-19
20. EXPLOSIVE GASES, 2-14-20
21. LEACHATE ON SITE, 2-14-21
22. LEACHATE OFF SITE, 2-14-21 *
23. LEACHATE COLLECTION, 2-14-22 *
24. LEACHATE DISPOSAL, 2-14-23 *
25. GROUNDWATER MONITORING WELLS, 2-14-24
26. PERMIT DEVIATION/MODIFICATION, 2-8-11 *

PROCESSING FACILITIES

27. FACILITY ACCESS & ROADS, 2-19-1
28. PUBLIC HEALTH & SAFETY, 2-19-2
29. FACILITY SANITATION, 2-19-3 *
30. USE OF CONTINGENCY PLAN, 2-19-4
31. SPECIAL WASTE, 2-19-5
32. RECORDS & REPORTS, 2-19-6
33. PERMIT DEVIATION/MODIFICATION, 2-8-11 *

INCINERATORS

34. OPERATIONAL REQUIREMENTS, 2-20-3
35. ADDITIONAL OPERATIONAL REQUIREMENTS & INFECTIOUS WASTE, 2-20-4

SPECIAL WASTE

36. SPECIAL WASTE DISPOSAL, 2-21-15 *

Circled asterisk items identify major violation(s) of 329 IAC 2 or IC 13-7 and shall be corrected immediately

Comments: Our office received a request to check on a drainage pipe being installed at the site. The entrance road had been cut and a piece of culvert was placed in the road cut. The purpose is to drain the water which is trapped between the landfill and Union Materials. Took two photographs of road cut and trapped water.

#12- The north slope is covered only with "grinding fluff". Other areas are covered with fixated flyash. Cover material can only be clay type soils or other approved materials. Fluff and flyash are not approved materials.

#19- The entire site needs a minimum of two feet of final

RECEIVED BY: [signature]

Rev 2/90

cover. Only about one half of the site has received any final cover.

#21- ~~Because~~ Because the water trapped to the north is in contact with waste, it needs to be considered as contaminated with leachate. No samples were taken.

The latest approved construction plans show a culvert under the road to drain surface runoff.

Mr. Hagen asked to check on the use of flyash in the permit according to Mr. Hagen we approved ~~at that~~ flyash only needed one foot of final cover instead of a minimum of two. See American Flyash permit too or Chicago admixture Flyash stabilization facility.

Indiana Department of Environmental Management 2B1

SM Office of Solid and Hazardous Waste Management Registrant #

Solid Waste Facility Inspection Report 45-0002

Date 4-2-90	Time 12:45	County Lake
Facility Gary Development Landfill		Permit (Yes #) 45-2 No
Location Gary Ave and Cline Ave.		Inspected By S. Sellgren / SWM, IEC

Type Of Operation: Sanitary Landfill Construction/Demolition Processing Facility Incinerator Restricted Waste Site Type_____ Collection Container Other closed landfill

OPERATIONAL REQUIREMENTS-LAND DISPOSAL

1. ACCESS CONTROL, 2-14-1
2. ON-SITE ROADS, 2-14-2
3. SIGNS, 2-14-3
4. SANITATION, 2-14-4
5. SCAVENGING, 2-14-5
6. SALVAGING, 2-14-6
7. SAFETY REQUIREMENTS, 2-14-7
8. RECORDS, 2-14-8
9. OPEN BURNING, 2-14-9 *
10. WASTE DEPOSIT AND COMPACTION, 2-14-10
11. DIVERSION OF SURFACE WATER, 2-14-11
12. COVER-GENERAL PROVISIONS, 2-14-12 *
13. COVER-SANITARY LANDFILLS & RWS TYPE I, 2-14-13 *
14. COVER-RWS TYPE II, 2-14-14 *
15. COVER-RWS TYPE III, 2-14-15 *
16. COVER-CONST/DEMO SITES, 2-14-16 *
17. DISPERSAL CONTROL, 2-14-17
18. GRADING & SOIL STABILIZATION, 2-14-18
19. FINAL COVER, 2-14-19
20. EXPLOSIVE GASES, 2-14-20
21. LEACHATE ON SITE, 2-14-21
22. LEACHATE OFF SITE, 2-14-21 *
23. LEACHATE COLLECTION, 2-14-22 *
24. LEACHATE DISPOSAL, 2-14-23 *
25. GROUNDWATER MONITORING WELLS, 2-14-24
26. PERMIT DEVIATION/MODIFICATION, 2-8-11 *

PROCESSING FACILITIES

27. FACILITY ACCESS & ROADS, 2-19-1
28. PUBLIC HEALTH & SAFETY, 2-19-2
29. FACILITY SANITATION, 2-19-3 *
30. USE OF CONTINGENCY PLAN, 2-19-4
31. SPECIAL WASTE, 2-19-5
32. RECORDS & REPORTS, 2-19-6
33. PERMIT DEVIATION/MODIFICATION, 2-8-11 *

INCINERATORS

34. OPERATIONAL REQUIREMENTS, 2-20-3
35. ADDITIONAL OPERATIONAL REQUIREMENTS & INFECTIOUS WASTE, 2-20-4

SPECIAL WASTE

36. SPECIAL WASTE DISPOSAL, 2-21-15 *

Circled asterisk items identify major violation(s) of 329 IAC 2 or IC 13-7 and shall be corrected immediately

Comments: #12 - All cover material needs to be clay type soils. Areas which are covered with flyash or "grindings fluff" needs to be covered. #18 - There are areas on top of the fill where water is trapped. Previously filled areas need to be graded so they shed water. #19 - Clay cover material is being applied for final cover. The State requires at least two foot of final cover over the entire site. #21 - The water trapped to the north appears to be contaminated with leachate and needs to be treated as contaminated. No samples were taken.

RECEIVED BY: (left copy of report at front gate)

Rev 2/90

Lake, Gary Development LF

2B1

Indiana Department of Environmental Management 2B1
Office of Solid and Hazardous Waste Management Registrant *
Solid Waste Facility Inspection Report 45-0002

Date 2-20-90	Time 10:25	County Lake
Facility Gary Development Landfill		Permit (Yes *) 45-2 No
Location Gary Ave and Cline Ave.		Inspected By S. Schefly

Type Of Operation: Sanitary Landfill Construction/Demolition Processing Facility Incinerator
Restricted Waste Site Type_____ Collection Container Other_____

OPERATIONAL REQUIREMENTS-LAND DISPOSAL

1. ACCESS CONTROL, 2-14-1
2. ON-SITE ROADS, 2-14-2
3. SIGNS, 2-14-3
4. SANITATION, 2-14-4
5. SCAVENGING, 2-14-5
6. SALVAGING, 2-14-6
7. SAFETY REQUIREMENTS, 2-14-7
8. RECORDS, 2-14-8
9. OPEN BURNING, 2-14-9 *
10. WASTE DEPOSIT AND COMPACTION, 2-14-10
11. DIVERSION OF SURFACE WATER, 2-14-11
12. COVER-GENERAL PROVISIONS, 2-14-12
13. COVER-SANITARY LANDFILLS & RWS TYPE I, 2-14-13 *
14. COVER-RWS TYPE II, 2-14-14 *
15. COVER-RWS TYPE III, 2-14-15 *
16. COVER-CONST/DEMO SITES, 2-14-16 *
17. DISPERSAL CONTROL, 2-14-17
18. GRADING & SOIL STABILIZATION, 2-14-18
19. FINAL COVER, 2-14-19
20. EXPLOSIVE GASES, 2-14-20
21. LEACHATE, 2-14-21
22. LEACHATE OFF SITE, 2-14-21 *
23. LEACHATE COLLECTION, 2-14-22 *
24. LEACHATE DISPOSAL, 2-14-23 *
25. GROUNDWATER MONITORING WELLS, 2-14-24
26. PERMIT MODIFICATION, 2-8-11 *

PROCESSING FACILITIES

27. FACILITY ACCESS & ROADS, 2-19-1
28. PUBLIC HEALTH & SAFETY, 2-19-2
29. FACILITY SANITATION, 2-19-3 *
30. USE OF CONTINGENCY PLAN, 2-19-4
31. SPECIAL WASTE, 2-19-5
32. RECORDS & REPORTS, 2-19-6
33. PERMIT MODIFICATION, 2-8-11 *

INCINERATORS

34. OPERATIONAL REQUIREMENTS, 2-20-3
35. ADDITIONAL OPERATIONAL REQUIREMENTS & INFECTIOUS WASTE, 2-20-4

SPECIAL WASTE

36. SPECIAL WASTE DISPOSAL, 2-21-15 *

Circled asterisk items identify major violation(s) and shall be corrected immediately.

Comments: #12- Clay cover material was being hauled into the site during the inspection. The clay was being dumped on top of the site. The north slope is still covered with "grinding fluff" and the east slope is covered with flyash.
#19- Two foot of final cover needs to be applied over the entire site including the "grinding fluff" and flyash.
#21- The water tower on the north slope is contaminated with leachate and needs to be treated as contaminated. No samples of the water were taken.

RECEIVED BY: No responsible party on site at the time. Left copy at front gate.

Rev 1/90

Lake, Gary Development Co. LF

FRW 2-19-90

Indiana Department of Environmental Management 2B1

SM Office of Solid and Hazardous Waste Management Registrant *

Solid Waste Facility Inspection Report 45-0002

Date 1-23-90	Time 12:00	County Lake
Facility Gary Development Landfill		Permit (Yes *) 45-2 No
Location Gary and Clive Ave		Inspected By S. Schafer

Type Of Operation: (Sanitary Landfill) Construction/Demolition Processing Facility Incinerator Restricted Waste Site Type_____ Collection Container Other_____

OPERATIONAL REQUIREMENTS-LAND DISPOSAL

1. ACCESS CONTROL, 2-14-1
2. ON-SITE ROADS, 2-14-2
3. SIGNS, 2-14-3
4. SANITATION, 2-14-4
5. SCAVENGING, 2-14-5
6. SALVAGING, 2-14-6
7. SAFETY REQUIREMENTS, 2-14-7
8. RECORDS, 2-14-8
9. OPEN BURNING, 2-14-9 *
10. WASTE DEPOSIT AND COMPACTION, 2-14-10
11. DIVERSION OF SURFACE WATER, 2-14-11
12. (*) COVER - GENERAL PROVISIONS, 2-14-12 *
13. COVER - SANITARY LANDFILLS & R.W.S. TYPE I, 2-14-13 *
14. COVER - R.W.S. TYPE II, 2-14-14 *
15. COVER - R.W.S. TYPE III, 2-14-15 *
16. COVER - CONST/DEMO SITES, 2-14-16 *
17. DISPERSAL CONTROL, 2-14-17
18. GRADING AND SOIL STABILIZATION, 2-14-18
19. (*) FINAL COVER, 2-14-19
20. EXPLOSIVE GASES, 2-14-20
21. (*) LEACHATE ON-SITE, 2-14-2
22. LEACHATE OFF-SITE, 2-14-21*
23. LEACHATE COLLECTION, 2-14-22 *
24. LEACHATE DISPOSAL, 2-14-23 *
25. GROUNDWATER MONITORING WELLS, 2-14-24
26. CLOSURE PLAN, 2-15-3
27. CLOSURE CERTIFICATION, 2-15-5
28. INITIATION OF FINAL CLOSURE, 2-15-6
29. POST-CLOSURE DUTIES, 2-15-7
30. POST-CLOSURE PLAN, 2-15-8
31. REQUIREMENTS FOR MONITORING, 2-16-1
32. POST-CLOSURE FINANCIAL, 2-12-1
33. CLOSURE FINANCIAL, 2-12-1
34. PERMIT MODIFICATION, 2-8-11 *

PROCESSING FACILITIES

35. FACILITY ACCESS & ROADS, 2-19-1
36. PUBLIC HEALTH & SAFETY, 2-19-2
37. FACILITY SANITATION, 2-19-3 *
38. USE OF CONTINGENCY PLAN, 2-19-4
39. SPECIAL WASTE, 2-19-5
40. RECORDS & REPORTS, 2-19-6

INCINERATORS

41. OPERATIONAL REQUIREMENTS, 2-20-3
42. ADDITIONAL OPERATIONAL REQUIREMENTS & INFECTIOUS WASTE, 2-20-4

SPECIAL WASTE

43. SPECIAL WASTE DISPOSAL, 2-21-15 *

*Circled asterisk items identify major violation(s) of 329 IAC 2 and shall be corrected immediately.

Comments: #12 - Clay cover material is being hauled to the site today. However, the east slope is covered with flyash and the north slope, a large portion is still covered with grinding fluff.
#19 - The top of the fill is mostly covered with clay but the flyash and grinding fluff will also need two feet of final cover.
#21 - The water trapped on the north appears contaminated and needs to be treated as leachate. No samples were taken.
Keep the clay soil coming.

RECEIVED BY: (left copy of report at front gate)

Rev 9/89

Underground Sanitation Specialists

Dombrowski & Holmes 5051 S. Western Blvd. ▪ Chicago, Illinois 60609 ▪ Phone: (312) 778-1400

MAR 11 9 26 AM '81
SANITARY ENGINEERING DIVISION
STATE BOARD OF HEALTH

March 6, 1981

State Board of Health
1330 West Michigan St.
Indianapolis, In. 46206
Attn: Mr. Steve Wakefield

Dear Mr. Wakefield;

We are hereby requesting permission to dispose of 34, 55 gal. drums and 1, 5 gal. can of paint waste from Union Tank Car Co. 151st Railroad Ave. East Chicago Indiana. Permit #IND 005456058, to Gary Land Developement Co. site, permit # 45-2 as soon as possible.

The following information is submitted as per your instruction sheets for obtaining approval.

1. This waste stream is listed on the U.S. EPA hazardous list as FO 17

2. The analysis was performed by the Gabriel Labratories copy attached

3. R.R. Tank Car Manufacturing

4. Gary Land Development (GLD) Permit #45-2

5. Dombrowski & Holmes 4805 Sheffield Ave. Hammond, Indiana EPA I.D. #INT190019877

6. Approximately 2500 Drums per year

7. Union Tank Car Co. 151st & Railroad Ave. East Chicago, Indiana Raymond Laudan 312 374-5250 EPA I.D. # IND 005456058

I would appreciate notification as soon as possible in order to make arrangements for disposal. Please call Sam Luri 312 778-1400.

Thank you for your consideration. Feel free to call me if there are any questions.

Respectfully,

Sam Luri

Sam Luri
Vice President
Dombrowski & Holmes

SL/jn

Dept. of Environmental Mgmt.
Commissioner's Office
DEC 27 1989

LANDFILL--EROSION AND SEDIMENTATION REVIEW (Worksheet)

Lake County Soil & Water Conservation District

NAME OF LANDFILL Gary Development

LOCATION 479 N. Cline Av., P.O. Box 6056, Gary, IN 46406

MANAGER/OPERATOR Lawrence Hagen

1. IS THERE EVIDENCE OF EROSION? X Yes ____ No

If yes, describe the erosion Erosion is occuring on unvegetated slopes.

2. Is there evidence of off-site sedimentation? X Yes ____ No

If yes, describe the off-site sedimentation Some sediment is getting into the Grand Calumet River.

3. Recommendations and suggestions This landfill closed this summer. Therefore it is recommended that final soil cover be applied according to IDEM specifications. The landfill should also be vegetated to comply with IDEM regulations. Depending on the source of soil material being used for final cover and mixing of topsoil, subsoil, ans substratum materials, the reveiw team suggest making soil test for fertility and pH. The local Cooperative Extension Service has literature describing procedures for making soil tests. Prior to seeding, areas should be fertilized according to soil tests or apply 1000 lbs. per acre of 12-12-12 fertilizer. The optimal time for seeding will be between March 1 and May 1. This seeding date may be extended to May 15th if seeded areas are mulched with 1½ to 2 tons of straw per acres. A discs should be used, across the slope *

4. For further information, contact (name and address)
Lake County Soil & Water Conservation District
1168 N. Main St., Crown Point 46307 phone 663-0238

* as much as possible, to crimp the straw 1 to 2 inches into the soil.

Review Team _____, Supervisor, SWCD

Members: _____, Non-Ag Erosion Control Specialist, IDNR

Steven Schafer, Field Representative, DEM

Roger Manney, District Conservationist, SCS

This report compiled by: Harry Molchan Date 12-14-89
(Signature) Supervisor, SWCD

Copies of this report furnished to:
1. Commissioner
Dept. of Environmental Management
105 S. Meridian Street, P. O. Box 6015
Indianapolis, IN 46205-6015
2 copies - one for Steve Shafer
2. Director
Division of Soil Conservation, IDNR
FLX 1 Building, Purdue University
West Lafayette, IN 47907
3. Chairman, Board of County Commissioners
4. Landfill
5. IDNR-Non-Ag Erosion Control Specialist

Lake, Gary Development 401

Lake County Soil and Water Conservation District

1168 North Main Street - Crown Point, Indiana 46307 - 663-0238

December 14, 1989

Gary Development
479 N. Cline Av.
P.O. Box 6056
Gary, IN 46406

Dear Mr. Hagan:

Final soil cover should be applied according to IDEM specifications.

As discussed with the manager of the landfill, Ed Tongue, all permits must be obtained from IDEM before sewage sludge can be applied. After securing permits, the sludge can be applied. At the time of sludge application or immediately following application, the sludge should be incorporated into the upper two to four inches of final soil cover. Following incorporation of sludge, a seedbed can be prepared and the area seeded and mulched. Technical specifications regarding seeding and mulching can be obtained from the Lake County Soil and Water Conservation District office at 1168 N. Main Street in Crown Point.

Larry Osterholtz
Non-Ag Erosion Control Specialist, IDNR

Lake, Gary Development Co
281

LANDFILL--EROSION AND SEDIMENTATION REVIEW (Worksheet)

LAKE County Soil & Water Conservation District

NAME OF LANDFILL Gary Development

LOCATION 479 N. Cline Avenue, P.O. Box 6056, Gary, IN

MANAGER/OPERATOR Lawrence Hagen

1. IS THERE EVIDENCE OF EROSION? X Yes ____ No

If yes, describe the erosion Most areas of the landfill are unprotected and are subject to sheet and rill erosion from surface water runoff.

2. Is there evidence of off-site sedimentation? X Yes ____ No

If yes, describe the off-site sedimentation One area along the entrace road has the potential for continued off-site sedimentation into the Grand Calumet River.

3. Recommendations and suggestions The east slope was graded last summer and some topsoil spread in places. The review team suggests that all completed slopes be covered with topsoil and seeded as soon as possible. As indicated in our inspection report dated November 15, 1988, no lime is needed (ph was in 8.0+ range.) Also refer to that report for seeding recommendations.

It is also recommended that soil tests for fertility be done or that 1000 lbs per acre of 12-12-12 fertilizer be applied prior to seeding.

4. For further information, contact (name and address) Roger Nanney 1168 N. Main St., Crown Point, IN 46307 phone 663-0238

Review Team Larry McKinney, Supervisor, SWCD

Members: Larry Osterholz, Non-Ag Erosion Control Specialist, IDNR

[illegible], Field Representative, DEM

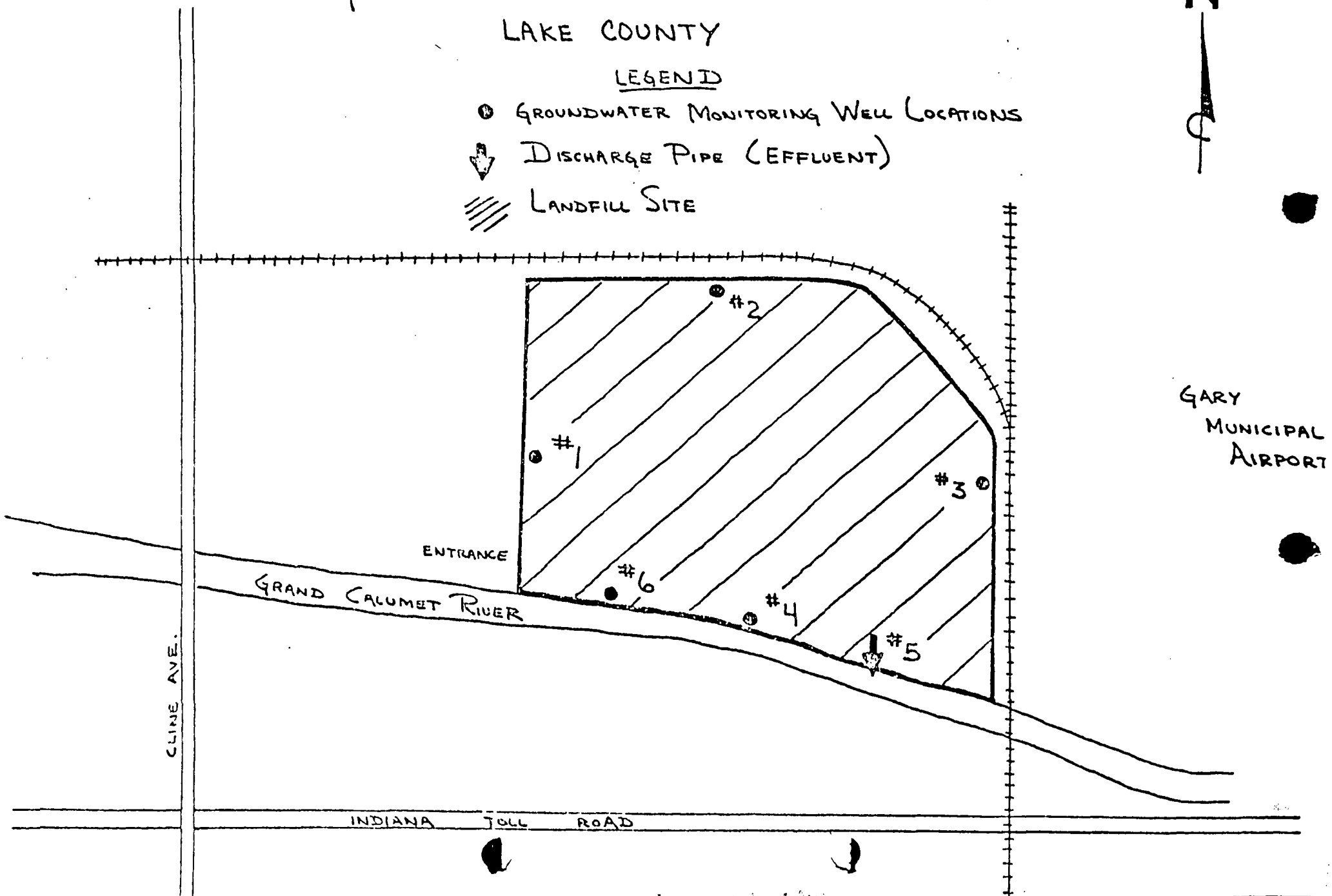
Roger Nanney, District Conservationist, SCS

This report compiled by: Larry McKinney Date 5-18-89
(Signature) Supervisor, SWCD

Copies of this report furnished to:

1. Commissioner
   Dept. of Environmental Management
   105 S. Meridian Street, P. O. Box 6015
   Indianapolis, IN 46205-6015
   (2 copies - one for Steve Shafer)
2. Director
   Division of Soil Conservation, IDNR
   FLX 1 Building, Purdue University
   West Lafayette, IN 47907
3. Chairman, Board of County Commissioners
4. Landfill operator
5. DNR - NERCS

GARY LAND DEVELOPMENT LANDFILL
LAKE COUNTY



Dpt. of Environmental Mgmt.
Commissioner's Office
DEC 27 1989

LANDFILL--EROSION AND SEDIMENTATION REVIEW (Worksheet)

Lake County Soil & Water Conservation District

NAME OF LANDFILL Gary Development

LOCATION 479 N. Cline Av., P.O. Box 6056, Gary, IN 46406

MANAGER/OPERATOR Lawrence Hagen

1. IS THERE EVIDENCE OF EROSION? X Yes ____ No

If yes, describe the erosion Erosion is occuring on unvegetated slopes.

2. Is there evidence of off-site sedimentation? X Yes ____ No

If yes, describe the off-site sedimentation Some sediment is getting into the Grand Calumet River.

3. Recommendations and suggestions This landfill closed this summer. Therefore it is recommended that final soil cover be applied according to IDEM specifications. The landfill should also be vegetated to comply with IDEM regulations. Depending on the source of soil material being used for final cover and mixing of topsoil, subsoil, ans substratum materials, the reveiw team suggest making soil test for fertility and pH. The local Cooperative Extension Service has literature describing procedures for making soil tests. Prior to seeding, areas should be fertilized according to soil tests or apply 1000 lbs. per acre of 12-12-12 fertilizer. The optimal time for seeding will be between March 1 and May 1. This seeding date may be extended to May 15th if seeded areas are mulched with 1½ to 2 tons of straw per acres. A discs should be used, across the slope *

4. For further information, contact (name and address)
Lake County Soil & Water Conservation District
1168 N. Main St., Crown Point 46307 phone 663-0238

* as much as possible, to crimp the straw 1 to 2 inches into the soil.

Review Team _____, Supervisor, SWCD

Members: _____, Non-Ag Erosion Control Specialist, IDNR

Steven Schafer, Field Representative, DEM

Roger Nanney, District Conservationist, SCS

This report compiled by: Harry Molchan Date 12-14-87
(Signature) Supervisor, SWCD

Copies of this report furnished to:

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2 copies - one for Steve Shafer
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Division of Soil Conservation, IDNR
FLX 1 Building, Purdue University
West Lafayette, IN 47907
3. Chairman, Board of County Commissioners
4. Landfill
5. IDNR-Non-Ag Erosion Control Specialist

Lake, Gary Development Co
2B1

LANDFILL--EROSION AND SEDIMENTATION REVIEW (Worksheet)

LAKE County Soil & Water Conservation District

NAME OF LANDFILL Gary Development

LOCATION 479 N. Cline Avenue, P.O. Box 6056, Gary, IN

MANAGER/OPERATOR Lawrence Hagen

1. IS THERE EVIDENCE OF EROSION? X Yes ____ No

If yes, describe the erosion Most areas of the landfill are unprotected and are subject to sheet and rill erosion from surface water runoff.

2. Is there evidence of off-site sedimentation? X Yes ____ No

If yes, describe the off-site sedimentation One area along the entrace road has the potential for continued off-site sedimentation into the Grand Calumet River.

3. Recommendations and suggestions The east slope was graded last summer and some topsoil spread in places. The review team suggests that all completed slopes be covered with topsoil and seeded as soon as possible. As indicated in our inspection report dated November 15, 1988, no lime is needed (ph was in 8.0+ range.) Also refer to that report for seeding recommendations.

It is also recommended that soil tests for fertility be done or that 1000 lbs per acre of 12-12-12 fertilizer be applied prior to seeding.

4. For further information, contact (name and address) Roger Nanney 1168 N. Main St., Crown Point, IN 46307 phone 663-0238

Review Team Harry McCleskey, Supervisor, SWCD

Members: Larry Osterholz, Non-Ag Erosion Control Specialist, IDNR

[illegible], Field Representative, DEM

Roger Nanney, District Conservationist, SCS

This report compiled by: Harry McCleskey Date 5-18-89
(Signature) Supervisor, SWCD

Copies of this report furnished to:

1. Commissioner
   Dept. of Environmental Management
   105 S. Meridian Street, P. O. Box 6015
   Indianapolis, IN 46205-6015
   (2 copies - one for Steve Shafer)
2. Director
   Division of Soil Conservation, IDNR
   FLX 1 Building, Purdue University
   West Lafayette, IN 47907
3. Chairman, Board of County Commissioners
4. Landfill operator
5. [illegible]

Lake, Gary Development LF 2B1

Indiana Department of Environmental Management 2B1
Office of Solid and Hazardous Waste Management Registrant #
SM Solid Waste Facility Inspection Report 45-0002

Date 12-13-90	Time 1:30	County Lake
Facility Gary Development Landfill		Permit (Yes # 45-2) No
Location Gary and Clive Ave		Inspected By S. Schafer

Type Of Operation: Sanitary Landfill Construction/Demolition Processing Facility Incinerator
Restricted Waste Site Type_____ Collection Container (Other closed site)

OPERATIONAL REQUIREMENTS-LAND DISPOSAL

1. ACCESS CONTROL, 2-14-1
2. ON-SITE ROADS, 2-14-2
3. SIGNS, 2-14-3
4. SANITATION, 2-14-4
5. SCAVENGING, 2-14-5
6. SALVAGING, 2-14-6
7. SAFETY REQUIREMENTS, 2-14-7
8. RECORDS, 2-14-8
9. OPEN BURNING, 2-14-9 *
10. WASTE DEPOSIT AND COMPACTION, 2-14-10
11. DIVERSION OF SURFACE WATER, 2-14-11
12. COVER-GENERAL PROVISIONS, 2-14-12 *
13. COVER-SANITARY LANDFILLS & RWS TYPE I, 2-14-13 *
14. COVER-RWS TYPE II, 2-14-14 *
15. COVER-RWS TYPE III, 2-14-15 *
16. COVER-CONST/DEMO SITES, 2-14-16 *
17. DISPERSAL CONTROL, 2-14-17
18. GRADING & SOIL STABILIZATION, 2-14-18
19. FINAL COVER, 2-14-19
20. EXPLOSIVE GASES, 2-14-20
21. LEACHATE ON SITE, 2-14-21
22. LEACHATE OFF SITE, 2-14-21 *
23. LEACHATE COLLECTION, 2-14-22 *
24. LEACHATE DISPOSAL, 2-14-23 *
25. GROUNDWATER MONITORING WELLS, 2-14-24
26. PERMIT DEVIATION/MODIFICATION, 2-8-11 *

PROCESSING FACILITIES

27. FACILITY ACCESS & ROADS, 2-19-1
28. PUBLIC HEALTH & SAFETY, 2-19-2
29. FACILITY SANITATION, 2-19-3 *
30. USE OF CONTINGENCY PLAN, 2-19-4
31. SPECIAL WASTE, 2-19-5
32. RECORDS & REPORTS, 2-19-6
33. PERMIT DEVIATION/MODIFICATION, 2-8-11 *

INCINERATORS

34. OPERATIONAL REQUIREMENTS, 2-20-3
35. ADDITIONAL OPERATIONAL REQUIREMENTS & INFECTIOUS WASTE, 2-20-4

SPECIAL WASTE

36. SPECIAL WASTE DISPOSAL, 2-21-15 *

Circled asterisk items identify major violation(s) of 329 IAC 2 or IC 13-7 and shall be corrected immediately

Comments: Our office received a request to check on a drainage pipe being installed at the site. The entrance road had been cut and the piece of culvert was placed in the road cut. The purpose is to drain the water which is trapped between the landfill and Vulcan Materials. Took two photographs of road cut and trapped water.
#12- The north slope is covered only with "grinding fluff". Other areas are covered with fly ash. Cover material can only be clay type soils or other approved materials. Fluff and fly ash are not approved materials.
#19- The entire site needs a minimum of two feet of final

RECEIVED BY: [signature]

Indiana Department of Environmental Management 2B1
Office of Solid and Hazardous Waste Management Registrant #
SM
Solid Waste Facility Inspection Report 45-0002

Date 4-2-90	Time 12:45	County Lake
Facility Gary Development Landfill		Permit (Yes #) 45-2 No
Location Gary Ave and Clive Ave.		Inspected By S. Schafer / SWM, IEC

Type Of Operation: Sanitary Landfill Construction/Demolition Processing Facility Incinerator
Restricted Waste Site Type____ Collection Container Other closed landfill

OPERATIONAL REQUIREMENTS-LAND DISPOSAL

1. ACCESS CONTROL, 2-14-1
2. ON-SITE ROADS, 2-14-2
3. SIGNS, 2-14-3
4. SANITATION, 2-14-4
5. SCAVENGING, 2-14-5
6. SALVAGING, 2-14-6
7. SAFETY REQUIREMENTS, 2-14-7
8. RECORDS, 2-14-8
9. OPEN BURNING, 2-14-9 *
10. WASTE DEPOSIT AND COMPACTION, 2-14-10
11. DIVERSION OF SURFACE WATER, 2-14-11
12. COVER-GENERAL PROVISIONS, 2-14-12 *
13. COVER-SANITARY LANDFILLS & RWS TYPE I, 2-14-13 *
14. COVER-RWS TYPE II, 2-14-14 *
15. COVER-RWS TYPE III, 2-14-15 *
16. COVER-CONST/DEMO SITES, 2-14-16 *
17. DISPERSAL CONTROL, 2-14-17
18. GRADING & SOIL STABILIZATION, 2-14-18
19. FINAL COVER, 2-14-19
20. EXPLOSIVE GASES, 2-14-20
21. LEACHATE ON SITE, 2-14-21
22. LEACHATE OFF SITE, 2-14-21 *
23. LEACHATE COLLECTION, 2-14-22 *
24. LEACHATE DISPOSAL, 2-14-23 *
25. GROUNDWATER MONITORING WELLS, 2-14-24
26. PERMIT DEVIATION/MODIFICATION, 2-8-11 *

PROCESSING FACILITIES

27. FACILITY ACCESS & ROADS, 2-19-1
28. PUBLIC HEALTH & SAFETY, 2-19-2
29. FACILITY SANITATION, 2-19-3 *
30. USE OF CONTINGENCY PLAN, 2-19-4
31. SPECIAL WASTE, 2-19-5
32. RECORDS & REPORTS, 2-19-6
33. PERMIT DEVIATION/MODIFICATION, 2-8-11 *

INCINERATORS

34. OPERATIONAL REQUIREMENTS, 2-20-3
35. ADDITIONAL OPERATIONAL REQUIREMENTS & INFECTIOUS WASTE, 2-20-4

SPECIAL WASTE

36. SPECIAL WASTE DISPOSAL, 2-21-15 *

Circled asterisk items identify major violation(s) of 329 IAC 2 or IC 13-7 and shall be corrected immediately

Comments: #12 - All cover material needs to be clay type soils. Areas which are covered with flyash, originally "fluff" needs to be covered. #18 - There are areas on top of the fill where water is trapped. Previously filled areas need to be graded so they shed water. #19 - Clay cover material is being applied for final cover. The State requires at least two foot of final cover over the entire site. #21 - The water trapped to the north appears to be contaminated with leachate and needs to be treated as contaminated. No samples were taken.

RECEIVED BY: left copy of report at front gate

Rev 2/90

Lake, Gary Development LF

2B1

Indiana Department of Environmental Management 2B1
Office of Solid and Hazardous Waste Management Registrant
Solid Waste Facility Inspection Report 45-0002

Date 2-20-90	Time 10:25	County Lake
Facility Gary Development Landfill		Permit (Yes #) 45-2 No
Location Gary Ave and Clive Ave.		Inspected By S. Sebelius

Type Of Operation: Sanitary Landfill Construction/Demolition Processing Facility Incinerator Restricted Waste Site Type____ Collection Container Other____

OPERATIONAL REQUIREMENTS-LAND DISPOSAL

1. ACCESS CONTROL, 2-14-1
2. ON-SITE ROADS, 2-14-2
3. SIGNS, 2-14-3
4. SANITATION, 2-14-4
5. SCAVENGING, 2-14-5
6. SALVAGING, 2-14-6
7. SAFETY REQUIREMENTS, 2-14-7
8. RECORDS, 2-14-8
9. OPEN BURNING, 2-14-9 *
10. WASTE DEPOSIT AND COMPACTION, 2-14-10
11. DIVERSION OF SURFACE WATER, 2-14-11
12. COVER-GENERAL PROVISIONS, 2-14-12 *
13. COVER-SANITARY LANDFILLS & RWS TYPE I, 2-14-13 *
14. COVER-RWS TYPE II, 2-14-14 *
15. COVER-RWS TYPE III, 2-14-15 *
16. COVER-CONST/DEMO SITES, 2-14-16 *
17. DISPERSAL CONTROL, 2-14-17
18. GRADING & SOIL STABILIZATION, 2-14-18
19. FINAL COVER, 2-14-19 *
20. EXPLOSIVE GASES, 2-14-20
21. LEACHATE, 2-14-21 *
22. LEACHATE OFF SITE, 2-14-21 *
23. LEACHATE COLLECTION, 2-14-22 *
24. LEACHATE DISPOSAL, 2-14-23 *
25. GROUNDWATER MONITORING WELLS, 2-14-24
26. PERMIT MODIFICATION, 2-8-11 *

PROCESSING FACILITIES

27. FACILITY ACCESS & ROADS, 2-19-1
28. PUBLIC HEALTH & SAFETY, 2-19-2
29. FACILITY SANITATION, 2-19-3 *
30. USE OF CONTINGENCY PLAN, 2-19-4
31. SPECIAL WASTE, 2-19-5
32. RECORDS & REPORTS, 2-19-6
33. PERMIT MODIFICATION, 2-8-11 *

INCINERATORS

34. OPERATIONAL REQUIREMENTS, 2-20-3
35. ADDITIONAL OPERATIONAL REQUIREMENTS & INFECTIOUS WASTE, 2-20-4

SPECIAL WASTE

36. SPECIAL WASTE DISPOSAL, 2-21-15 *

Circled asterisk items identify major violation(s) and shall be corrected immediately.

Comments: #12- Clay cover material was being hauled into the site during the inspection. The clay was being dumped on top of the site. The north slope is still covered with "grinding fluff" and the east slope is covered with flyash.

#19- Two foot of final cover needs to be applied over the entire site including the "grinding fluff" and flyash.

#21- The water trapped on the north slope is contaminated with leachate and needs to be treated as contaminated. No samples of the water were taken.

RECEIVED BY: No responsible party on site at the time. Left copy at front gate.

Rev 1/90

Lake, Gary Development Co. LDI
FRW 2-19-90

SM

Indiana Department of Environmental Management 2B1
Office of Solid and Hazardous Waste Management Registrant *
Solid Waste Facility Inspection Report 45-0002

Date 1-23-90	Time 12:00	County Lake
Facility Gary Development Landfill		Permit (Yes *) 45-2 No
Location Gary and Clive Ave		Inspected By S. Schafer

Type Of Operation: (Sanitary Landfill) Construction/Demolition Processing Facility Incinerator
Restricted Waste Site Type_____ Collection Container Other_____

OPERATIONAL REQUIREMENTS-LAND DISPOSAL

1. ACCESS CONTROL, 2-14-1
2. ON-SITE ROADS, 2-14-2
3. SIGNS, 2-14-3
4. SANITATION, 2-14-4
5. SCAVENGING, 2-14-5
6. SALVAGING, 2-14-6
7. SAFETY REQUIREMENTS, 2-14-7
8. RECORDS, 2-14-8
9. OPEN BURNING, 2-14-9 *
10. WASTE DEPOSIT AND COMPACTION, 2-14-10
11. DIVERSION OF SURFACE WATER, 2-14-11
12. (COVER - GENERAL PROVISIONS, 2-14-12 *)
13. COVER - SANITARY LANDFILLS & R.W.S. TYPE I, 2-14-13 *
14. COVER - R.W.S. TYPE II, 2-14-14 *
15. COVER - R.W.S. TYPE III, 2-14-15 *
16. COVER - CONST/DEMO SITES, 2-14-16 *
17. DISPERSAL CONTROL, 2-14-17
18. GRADING AND SOIL STABILIZATION, 2-14-18
19. (FINAL COVER, 2-14-19)
20. EXPLOSIVE GASES, 2-14-20
21. (LEACHATE ON-SITE, 2-14-2)
22. LEACHATE OFF-SITE, 2-14-21*
23. LEACHATE COLLECTION, 2-14-22 *
24. LEACHATE DISPOSAL, 2-14-23 *
25. GROUNDWATER MONITORING WELLS, 2-14-24
26. CLOSURE PLAN, 2-15-3
27. CLOSURE CERTIFICATION, 2-15-5
28. INITIATION OF FINAL CLOSURE, 2-15-6
29. POST-CLOSURE DUTIES, 2-15-7
30. POST-CLOSURE PLAN, 2-15-8
31. REQUIREMENTS FOR MONITORING, 2-16-1
32. POST-CLOSURE FINANCIAL, 2-12-1
33. CLOSURE FINANCIAL, 2-12-1
34. PERMIT MODIFICATION, 2-8-11 *

PROCESSING FACILITIES

35. FACILITY ACCESS & ROADS, 2-19-1
36. PUBLIC HEALTH & SAFETY, 2-19-2
37. FACILITY SANITATION, 2-19-3 *
38. USE OF CONTINGENCY PLAN, 2-19-4
39. SPECIAL WASTE, 2-19-5
40. RECORDS & REPORTS, 2-19-6

INCINERATORS

41. OPERATIONAL REQUIREMENTS, 2-20-3
42. ADDITIONAL OPERATIONAL REQUIREMENTS & INFECTIOUS WASTE, 2-20-4

SPECIAL WASTE

43. SPECIAL WASTE DISPOSAL, 2-21-15 *

*Circled asterisk items identify major violation(s) of 329 IAC 2 and shall be corrected immediately.

Comments: #12 - Clay cover material is being hauled to the site today. However, the east slope is covered with flyash and the north slope, a large portion is still covered with grinding fluff.
#19 - The top of the fill is mostly covered with clay but the flyash and grinding fluff will also need two feet of final cover.
#21 - The water trapped on the north appears contaminated and needs to be tested as leachate. No samples were taken.
Keep the clay coming.

RECEIVED BY: (left copy of report at front gate)

Rev 9/89

Senior High 326 W Main ---------- 896-2512
Admn Office ---------- 894-9612

GOVERNMENT OFFICES

STATE INFORMATION CENTER 232-3140
CITY COUNTY BLDG INFORMATION 633-3200

INDIANA STATE OFFICES

EMPLOYMENT SECURITY DIVISION
INDIANAPOLIS LOCAL OFFICES
Augusta Office
7007 Michigan Rd NW ------ 232-7656
Castleton Office 6302 E 82 ----- 842-1580
Domestic Placement Service
141 W Georgia ---------- 232-7275
Downtown Placement Office
141 W Georgia ---------- 232-7309
Downtown Unemployment Compensation Office
205 S Capitol ---------- 232-7213
Eagledale Plaza Office
2851 Merchants Dr --------- 232-6794
Job Bank Order Taking Office
141 W Georgia ---------- 232-7214
Linwood Office 4401 E 10------ 232-7191
Meadows Office
4169 Millersville Rd -------- 232-7150
Southtown Office
509 E National Av---------- 232-7635
Spot Labor-Temporary Work
215 S Capitol ---------- 232-7273
ADMINISTRATIVE OFFICES
Information 10 N Senate ------ 232-7670
Statistics Section 10 N Senate -- 232-7701
Tax Section 309 W Washington - 232-7237
Teachers Placement Service
10 N Senate ---------- 232-7380
Veterans Employment Service
10 N Senate ---------- 232-6805

ENERGY GROUP
440 N Meridian ---------- 232-8940
POLICY & RESOURCE DEVELOPMENT DIVISION
440 N Meridian ---------- 232-8981
INFORMATION & EDUCATION DIVISION 440 N Meridian ----- 232-8959
TECHNICAL PROGRAMS DIVISION
440 N Meridian ---------- 232-8966
EMERGENCY FUEL ASSISTANCE --- 232-8980

ENGINEERS & LAND SURVEYORS REGISTRATION BOARD
SECRETARY State Ofc Bldg ------- 232-1840

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FINANCIAL INSTITUTIONS
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FIRE MARSHAL
FIRE MARSHAL State Ofc Bldg ---- 232-2222
FIREFIGHTERS' PENSION FUND
1977 143 W Market ---------- 232-1600

G

GIRLS SCHOOL
2596 Girls School Rd---------- 244-3387

GOVERNOR
GOVERNOR OTIS R BOWEN+MD
State Capitol ---------- 232-4567

GOVERNORS VOLUNTARY ACTION PROGRAM ---------- 232-2503

H

HEALTH BOARD OF
INFORMATION-STATE BOARD Of HEALTH 1330 W Michigan------ 633-0100
EMERGENCY CALLS
Between 4:45 PM & 8:15 AM Weekdays,Saturdays,Sundays & Holidays---------- 633-0144
Poison Information ---------- 630-7351
Chemical Response Air-Water--- 633-0682
Radiological Response -------- 633-0150
AIR POLLUTION---------- 633-0600
BIRTH AND DEATH RECORDS----- 633-0274
DAIRY PRODUCTS ---------- 633-0338
DENTAL HEALTH ---------- 633-8417
DRUG CONTROL ---------- 633-0332
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HEALTH DATA ---------- 633-0307
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LABORATORIES-WATER--------- 633-0232
MEAT & POULTRY ---------- 633-0319
MOBILE HOME PARKS---------- 633-0175
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NUTRITION ---------- 633-0122
PERSONNEL ---------- 633-0393
PLANNING-HEALTH ---------- 633-8507
PUBLIC WATER SUPPLY -------- 633-0174
RETAIL & MANUFACTURED FOODS- 633-0360
SOLID WASTE ---------- 633-0176
STREAM POLLUTION CONTROL - - 633-0167
WATER POLLUTION CONTROL----- 633-0700
Construction Grants---------- 633-0710
WEIGHTS & MEASURES --------- 633-0350

HEALTH FACILITY ADMS BD
700 N High School RD ---------- 232-1105

HIGHER EDUCATION COMMISSION FOR
143 W Market ---------- 232-1900

HIGHWAY COMMISSION
MAINTENANCE COMPLAINT OFFICE State Ofc Bldg -------- 232-5503
ROAD CONDITIONS
State Office Bldg---------- 232-5512
PUBLIC INFORMATION
State Office Bldg---------- 232-5115
PERMITS
Overweight-Oversize
State Ofc Bldg---------- 232-5425
DRIVEWAY State Ofc Bldg ----- 232-5436
COMMISSION OFFICES
State Ofc Bldg---------- 232-5533
EXECUTIVE DIRECTOR
State Ofc Bldg---------- 232-5535
SECRETARY TO THE COMMISSION
State Ofc Bldg---------- 232-5524
ACCOUNTING & CONTROL
State Ofc Bldg---------- 232-5360
Purchasing State Ofc Bldg ----- 232-5400
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7100 E Troy ---------- 356-2411
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120 S Shortridge Rd---------- 232-5280
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LICENSE BRANCHES AUTO
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