

**CBS Corporation**

Bloomington Project
P.O. Box 997
Bloomington, IN 47402
(812) 334-0030
(812) 334-7855 (Fax)

February 17, 2000

BP-00-0019

To: DISTRIBUTION LIST

Subject: Post-Excavation Groundwater Monitoring Results for Neal's Landfill

CBS Corporation performed post-excavation ground water sampling at monitoring wells, area springs and residential wells around Neal's Landfill in Monroe County, Indiana, on December 17 and 18, 1999. This sampling event is in accordance with what CBS agreed to in the Neal's Landfill Statement of Work (SOW) of March 5, 1999.

This report contains the analytical results and field data associated with this sampling event. A sample location map of springs and residential wells (Figure 1) and a location map of on-site monitoring wells (Figure 2) are included.

Ground water samples were collected from four monitor wells in accordance with approved sampling protocols. Prior to sample collection, the water level in each well was measured and the volume of water in well storage was calculated. Each well was then purged dry or until field parameters (temperature, pH, and specific conductance) stabilized to allow representative samples to be obtained.

Samples were collected upon completion of purging. Each sample was withdrawn with the dedicated bailer or tubing used to purge each respective well and added directly to the sample bottles.

Grab samples were collected from one residential well in accordance with approved procedures. The former Branam residence is now vacant. Samples from the Conard residential well were taken at the well-head spigot.

Grab samples were collected from South spring, North spring, Branam spring, and Taylor spring branch in accordance with approved procedures for grab sampling of surface water samples. Pig Pen spring is a sub-colluvial spring which only discharges on the surface during storm events. There is a 4" PVC slotted pipe which intersects the sub-colluvial channel through which the non-storm samples were taken. An ISCO Model 2900 peristaltic pump was used to withdraw the water from the sub-colluvial channel.

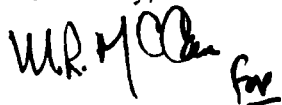
The field parameters of the samples were also measured and recorded. For quality assurance purposes, a duplicate sample, a matrix spike, and a field blank were also collected during monitoring well sampling. All samples were labeled and logged onto a chain-of-custody form. These samples were stored and transported in insulated coolers containing wet ice. Custody of the water samples was maintained by CBS Corporation until delivery to the analytical laboratory.

The water samples and quality assurance samples were analyzed by Heritage Laboratories, Inc., in Indianapolis, Indiana. The samples were analyzed to a detection limit of 0.1 parts per billion (ppb) for all PCB parameters, except as noted, by EPA Method 608/SW-846 Method 8082.

Attachment 1 contains Figure 1- Sample Location Map and Figure 2- Monitoring Well Locations. Field measurements and PCB analytical results for the monitoring wells are presented in Table 1, and the results for the springs and residential wells are presented in Table 2, which are also included in Attachment 1. Laboratory reports for the sampling events are included in Attachment 2, and corresponding field log sheets are contained in Attachment 3. Attachment 4 contains the validation reports for the lab analyses.

If you have any questions, please call Mike McCann at (812) 334-0030.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Alke", followed by a small "for" written below it.

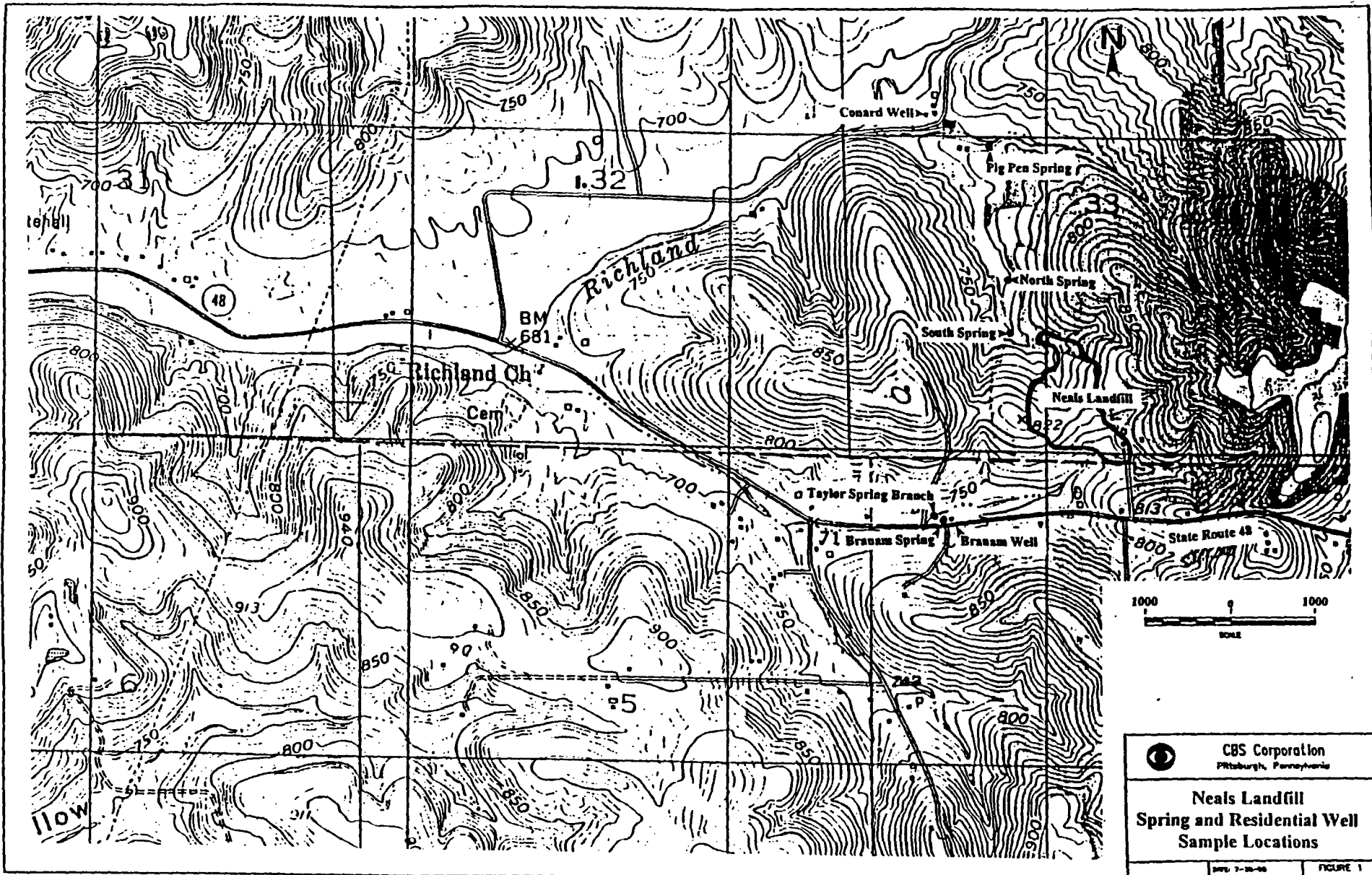
Dorothy M. Alke
Project Director

Attachment 1

Sample Location Map

Monitoring Well Location Map

Summary Tables of Sampling Results



CBS Corporation
Pittsburgh, Pennsylvania

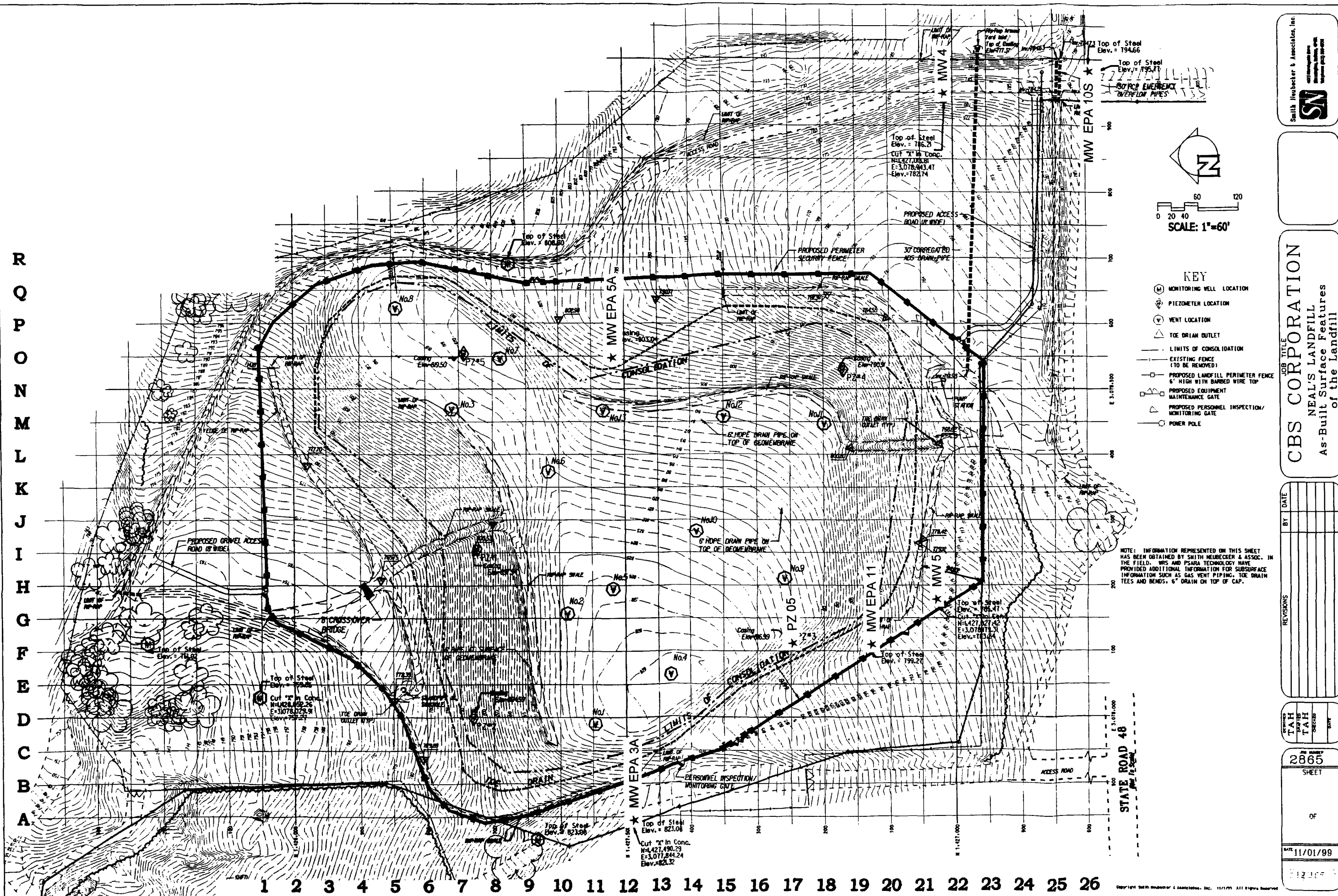
**Neals Landfill
Spring and Residential Well
Sample Locations**

DATE: 7-20-88

FIGURE 1

CBS-88-001 000/000 000-000-000

R
Q
P
O
N
M
L
K
J
I
H
G
F
E
D
C
B
A



Smith News

CBS CORPORATION
JOB TITLE
NEAL'S LANDFILL
As-Built Surface Features
of the Landfill

REVISIONS	BY	DATE
-----------	----	------

DISPENSED

2865
SHEET

OF

DATE 11/01/99

1975

Copyright © 1991 by McGraw-Hill, Inc. All Rights Reserved.

Table 1 - Neals Landfill Monitoring Well Sampling, December 17, 1999

Location	Sample Number	TOC Elevation (feet)	Depth to Water (feet)	Water Elevation (feet)	Temperature (deg C)	Conductivity (us/cm)	pH	PCB (ppb)	TSS (ppm)	Comments
MW-5	NL1091	785.66	38.75	746.91	12.6	845	6.4	0.37	13	
MW-4	NL1092	786.36	39.75	746.61	12.9	504	6.6	1.1	3	
EPA-5A	NL1093	803.04	63.68	739.36	13.0	606	6.7	2.3	11	Datum is TIC, top of inner casing
EPA-5A	NL1094	803.04	63.68	739.36	13.0	606	6.7	2.4	6	Duplicate
EPA-3A	NL1095	823.34	81.08	742.26	12.2	836	6.6	10	3	
Blank	NL1096	n/a	n/a	n/a	n/a	n/a	n/a	BDL	BDL	Field blank

BDL - below detection limit

Table 2
Neal's Landfill & Vicinity
Springs & Residential Well Water Sampling, Non-storm Conditions

Location	Date	Time	Sample ID	PCB ppb	TSS mg/L	Cond uS/cm	Temp deg C	Comments
South Sp.	2/24/99	13:40	NL1017	2.0	2	568	11.8	
North Sp.	2/24/99	13:50	NL1018	0.70	BDL	481	10.7	
Branam Sp.	2/24/99	12:35	NL1015	BDL	70	670	8.6	
Taylor Sp.(branch)	2/24/99	12:30	NL1014	BDL	BDL	606	6.8	
Pig Pen Sp.	2/24/99	14:15	NL1019	BDL	260	425	9.1	
Branam Res. well	2/24/99	12:20	NL1013	BDL	BDL	498	6.5	sample collected at kitchen faucet
Conard Res. well	2/24/99	13:00	NL1016	BDL	BDL	700	12.5	sample collected at pump house spigot
South Sp.	3/5/99	12:00	NL1020	1.3	BDL	503	11.8	
North Sp.	3/5/99	12:10	NL1021	0.56	BDL	410	10.9	
Branam Sp.	3/5/99	12:40	NL1023	BDL	29	667	8.6	
Taylor Sp.(branch)	3/5/99	12:30	NL1022	BDL	BDL	593	8.3	
Pig Pen Sp.	3/5/99	12:50	NL1024	BDL	38	393	11.4	
South Sp.	3/12/99	13:00	NL1025	1.0	BDL	452	11.5	
North Sp.	3/12/99	13:10	NL1026	0.25	3	353	11.0	
Branam Sp.	3/12/99	13:25	NL1027	BDL	BDL	660	9.1	
Taylor Sp.(branch)	3/12/99	13:30	NL1028	BDL	BDL	554	10.5	
Pig Pen Sp.	3/12/99	13:45	NL1029	BDL	37	355	10.7	
South Sp.	3/19/99	13:30	NL1030	1.6	BDL	540	11.7	
North Sp.	3/19/99	13:45	NL1031	0.66	BDL	438	10.8	
Branam Sp.	3/19/99	13:55	NL1032	BDL	24	646	10.4	
Taylor Sp.(branch)	3/19/99	14:00	NL1033	BDL	BDL	576	12.4	
Pig Pen Sp.	3/19/99	14:15	NL1034	BDL	26	412	11.2	
South Sp.	3/26/99	14:15	NL1035	1.9		576	12.0	No TSS analysis due to lab error
North Sp.	3/26/99	14:45	NL1036	0.95	9	478	11.2	
Branam Sp.	3/26/99	15:25	NL1038	BDL	31	656	9.3	
Taylor Sp.(branch)	3/26/99	15:15	NL1037	BDL	29	580	12.8	
Pig Pen Sp.	3/26/99	15:45	NL1039	BDL	BDL	427	10.0	
South Sp.	5/4/99	15:40	NL1046	1.3	6	517	12.1	
North Sp.	5/4/99	16:00	NL1047	0.63	3	433	11.6	
Branam Sp.	5/4/99	16:50	NL1050	BDL	42	656	11.7	
Taylor Sp.(branch)	5/4/99	16:45	NL1049	BDL	5	575	20.7	
Pig Pen Sp.	5/4/99	16:20	NL1048	BDL	5	422	12.3	
Conard Res. well	5/4/99	17:10	NL1051	BDL	BDL	685	14.1	sample collected at pump house spigot
Branam Res. well								Not able to schedule with resident.
South Sp.	6/22/99	10:00	NL1058	3	8	645	13	
North Sp.	6/22/99	10:15	NL1059	1.5	3	621	13.6	
Branam Sp.	6/22/99	10:35	NL1061	BDL	120	780	15.5	
Taylor Sp.(branch)	6/22/99	10:35						DRY
Pig Pen Sp.	6/22/99	10:30	NL1060	BDL	24	495	14.9	
Branam Res. well	6/22/99	18:00	NL1063	BDL	3			sample collected at kitchen faucet
Conard Res. well	6/22/99	11:45	NL1062	BDL	BDL	710	14.4	sample collected at pump house spigot
South Sp.	8/11/99	13:00						Trickle flow - too low to sample
North Sp.	8/11/99	13:20	NL1071	1.9	6	650	15.2	
Branam Sp.	8/11/99	14:10						DRY
Taylor Sp.(branch)	8/11/99	14:00						DRY
Pig Pen Sp.	8/11/99	13:30	NL1072	BDL	130	518	16.2	
Branam Res. well	8/11/99	14:15						House vacant; no outside spigot.
Conard Res. well	8/11/99	13:45	NL1073	BDL	2	681	14.1	
South Sp.	8/16/99	9:10	NL1074	2.8	BDL	677	13.7	Sampled from collection pipe.
South Sp.	11/1/99	10:15	NL1083	1.0	5	347	13.9	
South Sp.	11/1/99	10:15	NL1084	1.1	2	347	13.9	
North Sp.	11/1/99	10:45	NL1085	1.2	2	400	14.1	
Branam Sp.	11/1/99	12:30	NL1089	BDL	62	392	14.7	
Field Blank	11/1/99	12:30	NL1090	BDL	BDL			
Taylor Sp.(branch)	11/1/99	12:15	NL1088	BDL	BDL	556	13.3	
Pig Pen Sp.	11/1/99	11:10	NL1086	BDL	2	514	14	
Conard Res. well	11/1/99	11:30	NL1087	BDL	BDL	682	13.3	sample collected at pump house spigot
South Sp.	12/18/99	15:45	NL1097	2.4	5	603	12.2	
North Sp.	12/18/99	16:00	NL1098	2.1	10	599	12.1	
Branam Sp.	12/18/99	17:10	NL1102	BDL	49	686	10.2	
Taylor Sp.(branch)	12/18/99	17:00	NL1101	BDL	6	635	5.8	
Pig Pen Sp.	12/18/99	16:15	NL1099	BDL	7	513	10.6	
Conard Res. well	12/18/99	16:30	NL1100	BDL	BDL	684	12.4	sample collected at pump house spigot

Attachment 2

Laboratory Certificates of Analysis

C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	Received	Project	Lab ID
	20-DEC-99	4602	A504046
	Complete	PO Number	
	04-JAN-00***	
	Printed	Sampled	
	05-JAN-00	17-DEC-99 13:00	

Report To JIM PATRICK CBS CORPORATION ONE CITY CENTRE - SUITE 210 P.O. BOX 997 BLOOMINGTON, IN 47404-0997	Bill To ACCOUNTS PAYABLE CBS CORPORATION ONE CITY CENTRE - SUITE 108 PO BOX 997 BLOOMINGTON, IN 47402-0997
---	--

CLIENT ID: NL1091 MATRIX: WG SITE: NEAL'S LANDFILL	Sample Description
---	---------------------------

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B			
Analyst: J. RADER	Analysis Date: 20-DEC-99	Instrument: PREP	Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	900		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082			
Analyst: G. CLOUSE	Analysis Date: 21-DEC-99	Instrument: GC/ECD	Test: 0301.7.0
Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P230.1.0			

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.50	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	0.37	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
... SURROGATE RECOVERY			
----- DECACHLOROBIPHENYL (DCB)	106.0		% Rec

TOTAL PCB CALCULATION HLI3			
Analyst: G. CLOUSE	Analysis Date: 21-DEC-99	Instrument: GC/ECD	Test: 0301.3.0

Parameter	Result	Det. Limit	Units
TOTAL PCBs	0.37	0.10	ug/L

TOTAL PCB DETECTION LIMIT DOES NOT INCLUDE AROCLOR 1221

TOTAL SUSPENDED SOLIDS EPA 160.2			
Analyst: K. DOEDEN		Analysis Date: 21-DEC-99 10:05	
		Test: G403.7.0	
Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	13	1	mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice.

Sample chain of custody number 86619.

*This Certificate shall not be reproduced, except in full,
without the written approval of the lab.*

*The sample results relate only to the analytes of interest tested
or to the sample as received by the lab.*

Additional copies of this report sent to:

RUSS CEPKO, CBS CORPORATION

11 STANWIX STREET, PITTSBURG, PA 15222-1384

C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	Received	Project	Lab ID
	20-DEC-99	4602	A504047
	Complete	PO Number	
	04-JAN-00	*****	
	Printed	Sampled	
	05-JAN-00	17-DEC-99 14:45	

Report To	Bill To
JIM PATRICK CBS CORPORATION ONE CITY CENTRE - SUITE 210 P.O. BOX 997 BLOOMINGTON, IN 47404-0997	ACCOUNTS PAYABLE CBS CORPORATION ONE CITY CENTRE - SUITE 108 PO BOX 997 BLOOMINGTON, IN 47402-0997
Sample Description CLIENT ID: NL1092 MATRIX: WG SITE: NEAL'S LANDFILL	

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B			
Analyst: J. RADER	Analysis Date: 20-DEC-99	Instrument: PREP	Test: P230.1.0
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	890		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082			
Analyst: G. CLOUSE	Analysis Date: 21-DEC-99	Instrument: GC/ECD	Test: 0301.7.0
Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P230.1.0			
Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.50	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	1.1	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	108.0		% Rec

TOTAL PCB CALCULATION HLI3			
Analyst: G. CLOUSE	Analysis Date: 21-DEC-99	Instrument: GC/ECD	Test: 0301.3.0
Parameter	Result	Det. Limit	Units
TOTAL PCBs	1.1	0.10	ug/L
TOTAL PCB DETECTION LIMIT DOES NOT INCLUDE AROCLOR 1221			

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. DOEDEN

Analysis Date: 21-DEC-99 10:05

Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	3	1	mg/L

Sample Comments

*BDL Below Detection Limit**Sample was received on ice.**Sample chain of custody number 86619.**This Certificate shall not be reproduced, except in full,
without the written approval of the lab.**The sample results relate only to the analytes of interest tested
or to the sample as received by the lab.**Additional copies of this report sent to:**RUSS CEPKO, CBS CORPORATION**11 STANWIX STREET, PITTSBURG, PA 15222-1384*

C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	Received	Project	Lab ID
	20-DEC-99	4602	A504048
	Complete	PO Number	
	04-JAN-00***	
	Printed	Sampled	
	05-JAN-00	17-DEC-99 16:05	

Report To JIM PATRICK CBS CORPORATION ONE CITY CENTRE - SUITE 210 P.O. BOX 997 BLOOMINGTON, IN 47404-0997	Bill To ACCOUNTS PAYABLE CBS CORPORATION ONE CITY CENTRE - SUITE 108 PO BOX 997 BLOOMINGTON, IN 47402-0997
---	--

CLIENT ID: NL1093 MATRIX: WG SITE: NEAL'S LANDFILL	Sample Description
---	---------------------------

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B			
Analyst: T. PINCKERT	Analysis Date: 21-DEC-99	Instrument: PREP	Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082			
Analyst: M. WRIGHT	Analysis Date: 22-DEC-99	Instrument: GC/ECD	Test: 0301.7.0
Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P230.1.0			

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.50	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	2.3	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	116		% Rec

AROCLOR 1242 IS HIGHLY DEGRADED AND SHOWED SOME CHARACTERISTICS OF AROCLOR 1016.
 HOWEVER, AROCLOR 1242 WAS MORE DOMINANT AROCLOR.

TOTAL PCB CALCULATION HLI3			
Analyst: M. WRIGHT	Analysis Date: 22-DEC-99	Instrument: GC/ECD	Test: 0301.3.0

HERITAGE ENVIRONMENTAL SERVICES, LLC

Sample ID: A504048 NL1093

Parameter	Result	Det. Limit	Units
TOTAL PCBS	2.3	0.10	ug/L
TOTAL PCB DETECTION LIMIT DOES NOT INCLUDE AROCLOR 1221			

TOTAL SUSPENDED SOLIDS EPA 160.2			
Analyst: K. DOEDEN		Analysis Date: 21-DEC-99 10:05	
Test: G403.7.0			
Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	11	1	mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice.
Sample chain of custody number 86619.

This Certificate shall not be reproduced, except in full,
without the written approval of the lab.
The sample results relate only to the analytes of interest tested
or to the sample as received by the lab.

Additional copies of this report sent to:
RUSS CEPKO, CBS CORPORATION
11 STANWIX STREET, PITTSBURG, PA 15222-1384

Approved :

C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	Received	Project	Lab ID
	20-DEC-99	4602	A504049
	Complete	PO Number	
	04-JAN-00***	
	Printed	Sampled	
	05-JAN-00	17-DEC-99 16:05	

Report To JIM PATRICK CBS CORPORATION ONE CITY CENTRE - SUITE 210 P.O. BOX 997 BLOOMINGTON, IN 47404-0997	Bill To ACCOUNTS PAYABLE CBS CORPORATION ONE CITY CENTRE - SUITE 108 PO BOX 997 BLOOMINGTON, IN 47402-0997
Sample Description CLIENT ID: NL1094 MATRIX: WG SITE: NEAL'S LANDFILL	

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B			
Analyst: T. PINCKERT	Analysis Date: 21-DEC-99	Instrument: PREP	Test: P230.1.0
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082			
Analyst: M. WRIGHT	Analysis Date: 22-DEC-99	Instrument: GC/ECD	Test: 0301.7.0
Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P230.1.0			
Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.50	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	2.4	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	122		% Rec
AROCLOR 1242 IS HIGHLY DEGRADED AND SHOWED SOME CHARACTERISTICS OF AROCLOR 1016. HOWEVER, AROCLOR 1242 WAS MORE DOMINANT AROCLOR.			

TOTAL PCB CALCULATION HLI3			
Analyst: M. WRIGHT	Analysis Date: 22-DEC-99	Instrument: GC/ECD	Test: 0301.3.0

Parameter	Result	Det. Limit	Units
TOTAL PCBS	2.4	0.10	ug/L
TOTAL PCB DETECTION LIMIT DOES NOT INCLUDE AROCLOR 1221			

TOTAL SUSPENDED SOLIDS EPA 160.2			
Analyst: K. DOEDEN		Analysis Date: 21-DEC-99 10:05	
Test: G403.7.0			
SUSPENDED SOLIDS	Parameter	Result	Det. Limit
		6	1
			Units
			mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice.

Sample chain of custody number 86619.

This Certificate shall not be reproduced, except in full,
without the written approval of the lab.

The sample results relate only to the analytes of interest tested
or to the sample as received by the lab.

Additional copies of this report sent to:
RUSS CEPKO, CBS CORPORATION
11 STANWIX STREET, PITTSBURG, PA 15222-1384

C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	Received	Project	Lab ID
	20-DEC-99	4602	A504050
	Complete	PO Number	
	04-JAN-00***	
	Printed	Sampled	
	05-JAN-00	17-DEC-99 17:00	

Report To	Bill To
JIM PATRICK CBS CORPORATION ONE CITY CENTRE - SUITE 210 P.O. BOX 997 BLOOMINGTON, IN 47404-0997	ACCOUNTS PAYABLE CBS CORPORATION ONE CITY CENTRE - SUITE 108 PO BOX 997 BLOOMINGTON, IN 47402-0997

Sample Description
CLIENT ID: NL1095 MATRIX: WG SITE: NEAL'S LANDFILL

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B			
Analyst: T. PINCKERT	Analysis Date: 21-DEC-99	Instrument: PREP	Test: P230.1.0
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082			
Analyst: D. EISELE	Analysis Date: 23-DEC-99	Instrument: GC/ECD	Test: 0301.7.0
Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P230.1.0			
Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.50	ug/L
PCB AROCLOR 1221	10	2.5	ug/L
PCB AROCLOR 1232	BDL	0.50	ug/L
PCB AROCLOR 1242	BDL	0.50	ug/L
PCB AROCLOR 1248	BDL	0.50	ug/L
PCB AROCLOR 1254	BDL	0.50	ug/L
PCB AROCLOR 1260	BDL	0.50	ug/L
PCB AROCLOR 1262	BDL	0.50	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	120.0		% Rec
1:5 DILUTION			
DUE TO HIGH LEVEL OF AROCLOR 1221 IN SAMPLE, AROCLORS 1242, 1248, OR 1232(IF ANY WAS PRESENT) WAS DILUTED OUT AND COULD NOT BE REPORTED.			

TOTAL PCB CALCULATION HLI3			
Analyst: D. EISELE	Analysis Date: 23-DEC-99	Instrument: GC/ECD	Test: 0301.3.0

Parameter	Result	Det. Limit	Units
TOTAL PCBS	10	0.50	ug/L
TOTAL PCB DETECTION LIMIT DOES NOT INCLUDE AROCLOR 1221 1:5 DILUTION			

TOTAL SUSPENDED SOLIDS EPA 160.2			
Analyst: K. DOEDEN		Analysis Date: 21-DEC-99 10:05	
Test: G403.7.0			
SUSPENDED SOLIDS	Parameter	Result	Det. Limit
		3	1
			Units
			mg/L

Sample Comments
<p>BDL Below Detection Limit</p> <p>Sample was received on ice. Sample chain of custody number 86619.</p> <p>This Certificate shall not be reproduced, except in full, without the written approval of the lab. The sample results relate only to the analytes of interest tested or to the sample as received by the lab.</p> <p>Additional copies of this report sent to: RUSS CEPKO, CBS CORPORATION 11 STANWIX STREET, PITTSBURG, PA 15222-1384</p>

C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	Received	Project	Lab ID
	20-DEC-99	4602	A504051
	Complete	PO Number	
	04-JAN-00	*****	
	Printed	Sampled	
	05-JAN-00	17-DEC-99 16:45	

Report To JIM PATRICK CBS CORPORATION ONE CITY CENTRE - SUITE 210 P.O. BOX 997 BLOOMINGTON, IN 47404-0997	Bill To ACCOUNTS PAYABLE CBS CORPORATION ONE CITY CENTRE - SUITE 108 PO BOX 997 BLOOMINGTON, IN 47402-0997
--	---

CLIENT ID: NL1096 MATRIX: WG SITE: NEAL'S LANDFILL	Sample Description
--	--------------------

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B			
Analyst: T. PINCKERT	Analysis Date: 21-DEC-99	Instrument: PREP	Test: P230.1.0
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082			
Analyst: M. WRIGHT	Analysis Date: 22-DEC-99	Instrument: GC/ECD	Test: 0301.7.0
Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P230.1.0			
Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.50	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	BDL	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
... SURROGATE RECOVERY			
----- DECACHLOROBIPHENYL (DCB)	120		% Rec

TOTAL PCB CALCULATION HLI3			
Analyst: M. WRIGHT	Analysis Date: 22-DEC-99	Instrument: GC/ECD	Test: 0301.3.0
Parameter	Result	Det. Limit	Units
TOTAL PCBs	BDL	0.10	ug/L
TOTAL PCB DETECTION LIMIT DOES NOT INCLUDE AROCLOR 1221			

TOTAL SUSPENDED SOLIDS EPA 160.2

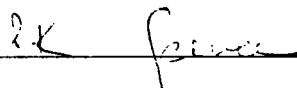
Analyst: K. DOEDEN

Analysis Date: 21-DEC-99 10:05

Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	BDL	1	mg/L

Sample Comments

*BDL Below Detection Limit**Sample was received on ice.**Sample chain of custody number 86619.**This Certificate shall not be reproduced, except in full,
without the written approval of the lab.**The sample results relate only to the analytes of interest tested
or to the sample as received by the lab.**Additional copies of this report sent to:**RUSS CEPKO, CBS CORPORATION**11 STANWIX STREET, PITTSBURG, PA 15222-1384*

C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	Received	Project	Lab ID
	20-DEC-99	4602	A504052
	Complete	PO Number	
	04-JAN-00	*****	
	Printed	Sampled	
	05-JAN-00	17-DEC-99 15:45	

Report To JIM PATRICK CBS CORPORATION ONE CITY CENTRE - SUITE 210 P.O. BOX 997 BLOOMINGTON, IN 47404-0997	Bill To ACCOUNTS PAYABLE CBS CORPORATION ONE CITY CENTRE - SUITE 108 PO BOX 997 BLOOMINGTON, IN 47402-0997
---	--

CLIENT ID: NL1097 MATRIX: WG SITE: NEAL'S LANDFILL	Sample Description
---	---------------------------

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B			
Analyst: T. PINCKERT	Analysis Date: 21-DEC-99	Instrument: PREP	Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082			
Analyst: M. WRIGHT	Analysis Date: 22-DEC-99	Instrument: GC/ECD	Test: 0301.7.0
Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P230.1.0			

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.50	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	2.4	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	120		% Rec

AROCLOR 1242 IS DEGRADED AND SHOWS CHARACTERISTICS OF AROCLOR 1248 AND AROCLOR 1016. HOWEVER AROCLOR 1242 IS MORE DOMINANT AROCLOR.

TOTAL PCB CALCULATION HL13			
Analyst: M. WRIGHT	Analysis Date: 22-DEC-99	Instrument: GC/ECD	Test: 0301.3.0

HERITAGE ENVIRONMENTAL SERVICES, LLC

Sample ID: A504052 NL1097

Parameter	Result	Det. Limit	Units
TOTAL PCBS	2.4	0.10	ug/L
TOTAL PCB DETECTION LIMIT DOES NOT INCLUDE AROCLOR 1221			

TOTAL SUSPENDED SOLIDS EPA 160.2			
Analyst: K. DOEDEN		Analysis Date: 21-DEC-99 10:05	
Test: G403.7.0			
SUSPENDED SOLIDS	Parameter	Result	Det. Limit
		5	1
			Units
			mg/L

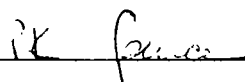
Sample Comments

BDL Below Detection Limit

Sample was received on ice.
Sample chain of custody number 86619.

This Certificate shall not be reproduced, except in full,
without the written approval of the lab.
The sample results relate only to the analytes of interest tested
or to the sample as received by the lab.

Additional copies of this report sent to:
RUSS CEPKO, CBS CORPORATION
11 STANWIX STREET, PITTSBURG, PA 15222-1384



CERTIFICATE OF ANALYSIS

Service Location HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	Received 20-DEC-99	Project 4602	Lab ID A504053
	Complete 04-JAN-00	PO Number***	
	Printed 05-JAN-00	Sampled 17-DEC-99 16:00	

Report To JIM PATRICK CBS CORPORATION ONE CITY CENTRE - SUITE 210 P.O. BOX 997 BLOOMINGTON, IN 47404-0997	Bill To ACCOUNTS PAYABLE CBS CORPORATION ONE CITY CENTRE - SUITE 108 PO BOX 997 BLOOMINGTON, IN 47402-0997
Sample Description CLIENT ID: NL1098 MATRIX: WG SITE: NEAL'S LANDFILL	

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B			
Analyst: T. PINCKERT	Analysis Date: 21-DEC-99	Instrument: PREP	Test: P230.1.0
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	880		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082			
Analyst: M. WRIGHT	Analysis Date: 22-DEC-99	Instrument: GC/ECD	Test: 0301.7.0
Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P230.1.0			
Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.50	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	2.1	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
... SURROGATE RECOVERY			
----- DECACHLOROBIPHENYL (DCB)	122		% Rec
AROCLOR 1242 IS DEGRADED AND SHOWS CHARACTERISTICS OF AROCLOR 1248 AND AROCLOR 1016. HOWEVER, AROCLOR 1242 IS MORE DOMINANT AROCLOR.			

TOTAL PCB CALCULATION HLI3			
Analyst: M. WRIGHT	Analysis Date: 22-DEC-99	Instrument: GC/ECD	Test: 0301.3.0

Parameter	Result	Det. Limit	Units
TOTAL PCBS	2.1	0.10	ug/L
TOTAL PCB DETECTION LIMIT DOES NOT INCLUDE AROCLOR 1221			

TOTAL SUSPENDED SOLIDS EPA 160.2			
Analyst: K. DOEDEN		Analysis Date: 21-DEC-99 10:05	
Test: G403.7.0			
SUSPENDED SOLIDS	Parameter	Result	Det. Limit
		10	1
			Units
			mg/L

Sample Comments

BDL Below Detection Limit

Sample was received on ice.

Sample chain of custody number 86619.

This Certificate shall not be reproduced, except in full,
without the written approval of the lab.

The sample results relate only to the analytes of interest tested
or to the sample as received by the lab.

Additional copies of this report sent to:

RUSS CEPKO, CBS CORPORATION

11 STANWIX STREET, PITTSBURG, PA 15222-1384

C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	Received	Project	Lab ID
	20-DEC-99	4602	A504054
	Complete	PO Number	
	04-JAN-00	*****	
	Printed	Sampled	
	05-JAN-00	17-DEC-99 16:15	

Report To JIM PATRICK CBS CORPORATION ONE CITY CENTRE - SUITE 210 P.O. BOX 997 BLOOMINGTON, IN 47404-0997	Bill To ACCOUNTS PAYABLE CBS CORPORATION ONE CITY CENTRE - SUITE 108 PO BOX 997 BLOOMINGTON, IN 47402-0997
---	--

Sample Description CLIENT ID: NL1099 MATRIX: WG SITE: NEAL'S LANDFILL

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B			
Analyst: T. PINCKERT	Analysis Date: 21-DEC-99	Instrument: PREP	Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	900		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082			
Analyst: M. WRIGHT	Analysis Date: 22-DEC-99	Instrument: GC/ECD	Test: 0301.7.0
Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P230.1.0			

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.50	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	BDL	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	70		% Rec

TOTAL PCB CALCULATION HLI3			
Analyst: M. WRIGHT	Analysis Date: 22-DEC-99	Instrument: GC/ECD	Test: 0301.3.0

Parameter	Result	Det. Limit	Units
TOTAL PCBS	BDL	0.10	ug/L

TOTAL PCB DETECTION LIMIT DOES NOT INCLUDE AROCLOR 1221

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. DOEDEN

Analysis Date: 21-DEC-99 10:05

Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	7	1	mg/L

Sample Comments

*BDL Below Detection Limit**Sample was received on ice.**Sample chain of custody number 86619.**This Certificate shall not be reproduced, except in full,
without the written approval of the lab.**The sample results relate only to the analytes of interest tested
or to the sample as received by the lab.**Additional copies of this report sent to:**RUSS CEPKO, CBS CORPORATION**11 STANWIX STREET, PITTSBURG, PA 15222-1384**JK Jones*

C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	Received	Project	Lab ID
	20-DEC-99	4602	A504055
	Complete	PO Number	
	04-JAN-00	*****	
	Printed	Sampled	
	05-JAN-00	17-DEC-99 16:30	

Report To JIM PATRICK CBS CORPORATION ONE CITY CENTRE - SUITE 210 P.O. BOX 997 BLOOMINGTON, IN 47404-0997	Bill To ACCOUNTS PAYABLE CBS CORPORATION ONE CITY CENTRE - SUITE 108 PO BOX 997 BLOOMINGTON, IN 47402-0997
---	--

CLIENT ID: NL1100 MATRIX: WG SITE: NEAL'S LANDFILL	Sample Description
---	---------------------------

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B			
Analyst: T. PINCKERT	Analysis Date: 21-DEC-99	Instrument: PREP	Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082			
Analyst: M. WRIGHT	Analysis Date: 22-DEC-99	Instrument: GC/ECD	Test: 0301.7.0
Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P230.1.0			

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.50	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	BDL	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
...			
SURROGATE RECOVERY			

DECACHLOROBIPHENYL (DCB)	76		% Rec

TOTAL PCB CALCULATION HLI3			
Analyst: M. WRIGHT	Analysis Date: 22-DEC-99	Instrument: GC/ECD	Test: 0301.3.0

Parameter	Result	Det. Limit	Units
TOTAL PCBs	BDL	0.10	ug/L

TOTAL PCB DETECTION LIMIT DOES NOT INCLUDE AROCLOR 1221

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. DOEDEN

Analysis Date: 21-DEC-99 10:05

Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	4	1	mg/L

Sample Comments

*BDL Below Detection Limit**Sample was received on ice.**Sample chain of custody number 86619.**This Certificate shall not be reproduced, except in full,
without the written approval of the lab.**The sample results relate only to the analytes of interest tested
or to the sample as received by the lab.**Additional copies of this report sent to:**RUSS CEPKO, CBS CORPORATION**11 STANWIX STREET, PITTSBURG, PA 15222-1384*

C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	Received	Project	Lab ID
	20-DEC-99	4602	A504056
	Complete	PO Number	
	04-JAN-00	*****	
	Printed	Sampled	
	05-JAN-00	17-DEC-99 17:00	

Report To JIM PATRICK CBS CORPORATION ONE CITY CENTRE - SUITE 210 P.O. BOX 997 BLOOMINGTON, IN 47404-0997	Bill To ACCOUNTS PAYABLE CBS CORPORATION ONE CITY CENTRE - SUITE 108 PO BOX 997 BLOOMINGTON, IN 47402-0997
Sample Description CLIENT ID: NL1101 MATRIX: WG SITE: NEAL'S LANDFILL	

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B			
Analyst: T. PINCKERT	Analysis Date: 21-DEC-99	Instrument: PREP	Test: P230.1.0
Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	920		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082			
Analyst: M. WRIGHT	Analysis Date: 22-DEC-99	Instrument: GC/ECD	Test: 0301.7.0
Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P230.1.0			
Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.50	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	BDL	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
... SURROGATE RECOVERY			
----- DECACHLOROBIPHENYL (DCB)	60		% Rec

TOTAL PCB CALCULATION HL13			
Analyst: M. WRIGHT	Analysis Date: 22-DEC-99	Instrument: GC/ECD	Test: 0301.3.0
Parameter	Result	Det. Limit	Units
TOTAL PCBS	BDL	0.10	ug/L
TOTAL PCB DETECTION LIMIT DOES NOT INCLUDE AROCLOR 1221			

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. DOEDEN

Analysis Date: 21-DEC-99 10:05

Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	6	1	mg/L

Sample Comments

*BDL Below Detection Limit**Sample was received on ice.**Sample chain of custody number 86619.**This Certificate shall not be reproduced, except in full,
without the written approval of the lab.**The sample results relate only to the analytes of interest tested
or to the sample as received by the lab.**Additional copies of this report sent to:**RUSS CEPKO, CBS CORPORATION**11 STANWIX STREET, PITTSBURG, PA 15222-1384*

C E R T I F I C A T E O F A N A L Y S I S

Service Location HERITAGE ENVIRONMENTAL SERVICES, LLC COMMERCIAL LABORATORY OPERATIONS 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8304	Received	Project	Lab ID
	20-DEC-99	4602	A504057
	Complete	PO Number	
	04-JAN-00	*****	
	Printed	Sampled	
	05-JAN-00	17-DEC-99 17:10	

Report To JIM PATRICK CBS CORPORATION ONE CITY CENTRE - SUITE 210 P.O. BOX 997 BLOOMINGTON, IN 47404-0997	Bill To ACCOUNTS PAYABLE CBS CORPORATION ONE CITY CENTRE - SUITE 108 PO BOX 997 BLOOMINGTON, IN 47402-0997
---	--

CLIENT ID: NL1102 MATRIX: WG SITE: NEAL'S LANDFILL	Sample Description
---	---------------------------

PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B			
Analyst: T. PINCKERT	Analysis Date: 21-DEC-99	Instrument: PREP	Test: P230.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	5		mL

PCB AROCLORS BY GAS CHROMATOGRAPHY/ECD SW846-8082			
Analyst: M. WRIGHT	Analysis Date: 22-DEC-99	Instrument: GC/ECD	Test: 0301.7.0
Prep: PCB SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION SW846-3510B P230.1.0			

Parameter	Result	Det. Limit	Units
PCB AROCLOR 1016	BDL	0.10	ug/L
PCB AROCLOR 1221	BDL	0.50	ug/L
PCB AROCLOR 1232	BDL	0.10	ug/L
PCB AROCLOR 1242	BDL	0.10	ug/L
PCB AROCLOR 1248	BDL	0.10	ug/L
PCB AROCLOR 1254	BDL	0.10	ug/L
PCB AROCLOR 1260	BDL	0.10	ug/L
PCB AROCLOR 1262	BDL	0.10	ug/L
... SURROGATE RECOVERY			
----- DECACHLOROBIPHENYL (DCB)	76		% Rec

TOTAL PCB CALCULATION HLI3			
Analyst: M. WRIGHT	Analysis Date: 22-DEC-99	Instrument: GC/ECD	Test: 0301.3.0

Parameter	Result	Det. Limit	Units
TOTAL PCBS	BDL	0.10	ug/L

TOTAL PCB DETECTION LIMIT DOES NOT INCLUDE AROCLOR 1221

TOTAL SUSPENDED SOLIDS EPA 160.2

Analyst: K. DOEDEN

Analysis Date: 21-DEC-99 10:05

Test: G403.7.0

Parameter	Result	Det. Limit	Units
SUSPENDED SOLIDS	49	1	mg/L

Sample Comments

*BDL Below Detection Limit**Sample was received on ice.**Sample chain of custody number 86619.**This Certificate shall not be reproduced, except in full,
without the written approval of the lab.**The sample results relate only to the analytes of interest tested
or to the sample as received by the lab.**Additional copies of this report sent to:**RUSS CEPKO, CBS CORPORATION**11 STANWIX STREET, PITTSBURG, PA 15222-1384**Re [Signature]*

Attachment 3

Field Log Sheets

000027

WESTINGHOUSE ELECTRIC CORPORATION
GROUND WATER SAMPLING FIELD LOG
BLOOMINGTON, INDIANA

Site NLF Well No. 3A
Sampling Purpose GMON
Date/Time: 12-17-79 In 16:30 Out 17:05
Sampling Personnel NV, AS
HNU Background _____ Well NA Weather Sunny, 45°

I. Well Information

Reference Pt. (casing & height above grade) TOC
Well Diameter 2" Well Depth from RP 102.5'
Water Depth from RP 81.08'

II. Well Volume Information

Length of Water Column 21.42 Volume of Water Column 3.4 gal

III. Evacuation Information

Evacuation Method BLADDER

Redline	Calibration Stds:			
	T	pH	SpC	Time
Purge Volume (Gals)				
3.5	12.2	5.5	862	16:44
4.2	12.2	6.2	823	16:49
4.5	12.2	low battery 6.6 NV	826	16:53
5.1	12.2	6.6	836	16:59

IV. Sample Data

Container(s)	Preservation	Time Collected	Sample ID No.	Analysis
4	ICE	17:00	NL1095	PCB
2	ICE	16:45	NL1096	PCB

V. Field Measurements

Temp. 12.2°C pH 6.6 SpC 836 μ S/cm Film none

VI. Remarks/Miscellaneous Observations

MATRIX SPIKE TAKEN
NL1096 IS FIELD BLANK

VII. Sample Destination

EMS Laboratory Via Courier By _____

Neill Vaughan
Field Services Coordinator

000027

WESTINGHOUSE ELECTRIC CORPORATION
GROUND WATER SAMPLING FIELD LOG
BLOOMINGTON, INDIANA

Site NLF Well No. MW-5
Sampling Purpose GMOU
Date/Time: 12-17-99 In 11:15 Out 13:05
Sampling Personnel NV, KA
HNu Background _____ Well NA Weather Sunny, 45°

I. Well Information

Reference Pt. (casing & height above grade) TOC
Well Diameter 6" Well Depth from RP 68.37
Water Depth from RP 39.31 - 56 = 38.75

II. Well Volume Information

Length of Water Column 29.62 Volume of Water Column 19.25 gal

III. Evacuation Information

Evacuation Method bladder

Redline	Calibration Stds:			
	T	pH	SpC	Time
<u>20</u>	<u>12.8</u>	<u>6.5</u>	<u>853</u>	<u>12:49</u>
<u>21.3</u>	<u>12.6</u>	<u>6.4</u>	<u>871</u>	<u>12:51</u>
<u>22</u>	<u>12.6</u>	<u>6.4</u>	<u>852</u>	<u>12:53</u>
<u>23</u>	<u>12.6</u>	<u>6.4</u>	<u>845</u>	<u>12:55</u>

IV. Sample Data

Container(s)	Preservation	Time Collected	Sample ID No.	Analysis
<u>2</u>	<u>ICE</u>	<u>1300</u>	<u>NL1091</u>	<u>P&B</u>

V. Field Measurements

Temp. 12.6 pH 6.4 SpC 845 Film none

VI. Remarks/Miscellaneous Observations

clear

VII. Sample Destination

EMS Laboratory Via Courier By _____

Neil Vaughan
Field Services Coordinator

WESTINGHOUSE ELECTRIC CORPORATION
GROUND WATER SAMPLING FIELD LOG
BLOOMINGTON, INDIANA

Site NLF Well No. MW-4
Sampling Purpose GMON
Date/Time: NV, AS 12-17-99 In 13:30 Out 14:50
Sampling Personnel NV, AS
HNU Background _____ Well NA Weather Sunny, 45°

I. Well Information

Reference Pt. (casing & height above grade) TOC
Well Diameter 6" Well Depth from RP 54.76'
Water Depth from RP 40.28 - 0.53 = 39.75'

II. Well Volume Information

Length of Water Column 15.01' Volume of Water Column 9.75 gal

III. Evacuation Information

Evacuation Method Bladder pump

Redline	Calibration Stds:		SpC	Time
	T	pH		
Purge Volume (Gals)				
11	13.3	6.6	576	14:35
11.5	13.0	6.6	532	14:37
NV 11.8 12	13.0	6.6	529	14:40
12.8	12.9	6.6	504	14:44

IV. Sample Data

Container(s)	Preservation	Time Collected	Sample ID No.	Analysis
<u>2</u>	<u>ICE</u>	<u>14:45</u>	<u>NL1092</u>	<u>PCB</u>

V. Field Measurements

Temp. 12.9 pH 6.6 SpC 504 Film NONE

VI. Remarks/Miscellaneous Observations clear

VII. Sample Destination

EMS Laboratory Via Carrier By _____

Neill Vaughan
Field Services Coordinator

C00026

WESTINGHOUSE ELECTRIC CORPORATION
GROUND WATER SAMPLING FIELD LOG
BLOOMINGTON, INDIANA

Site NLF Well No. 5A
Sampling Purpose GWMON
Date/Time: 12-17-99 In 15:25 Out 16:20
Sampling Personnel NV, AS
HNU Background _____ Well NA Weather Sunny, 48°

I. Well Information

Reference Pt. (casing & height above grade) TIC
Well Diameter 2" Well Depth from RP 85.9'
Water Depth from RP 63.68'

II. Well Volume Information

Length of Water Column 22.22' Volume of Water Column 3.5 gal

III. Evacuation Information

Evacuation Method BLADDER

Redline	Calibration Stds:			
	T	pH	SpC	Time
Purge Volume (Gals)				
<u>4.0</u>	<u>13.2</u>	<u>6.7</u>	<u>657</u>	<u>15:58</u>
<u>4.4</u>	<u>12.9</u>	<u>6.7</u>	<u>604</u>	<u>16:00</u>
<u>4.7</u>	<u>13.0</u>	<u>6.7</u>	<u>606</u>	<u>16:02</u>
<u>5.0</u>	<u>13.0</u>	<u>6.7</u>	<u>606</u>	<u>16:04</u>

IV. Sample Data

Container(s)	Preservation	Time Collected	Sample ID No.	Analysis
<u>2</u>	<u>ICE</u>	<u>16:05</u>	<u>NL1093</u>	<u>PCB</u>
<u>2</u>	<u>ICE</u>	<u>16:05</u>	<u>NL1094</u>	<u>PCB</u>

V. Field Measurements

Temp. 13.0°C pH 6.7 SpC 606 μ S/cm Film none

VI. Remarks/Miscellaneous Observations

clear

NL1094 is DUPLICATE

VII. Sample Destination

EMS Laboratory Via courier By _____

Neill Vanhook
Field Services Coordinator

Attachment 4

Validation Reports for

Laboratory Certificates of Analysis

Validation Results for the December 1999 Neal's Landfill Springs, Monitoring and Residential Well Samples

1. Validation of the following samples has been completed:

- o NL 1091-1102

2. Validation was performed per the requirements for level 4 data in the project QAPjP. This includes a check for ; Holding Time, Calibration, Blank Contamination, Precision, Accuracy, and Accuracy of Nominal Reporting Limits against method requirements. Based on this review all method requirements were met and no data qualification flags are recommended.

3. The QAPjP requires an assessment of the overall data quality with respect to Precision, Accuracy, Representativeness, Completeness and Comparability (PARCC).

- o Precision and accuracy: Precision and accuracy were assessed by reviewing the lab performance on lab spiked samples, lab spike duplicates and field duplicates. All requirements were met.
- o Representativeness: The representativeness requirement involves an assessment of the field sampling and lab analytical techniques. The field sampling locations and techniques as well as lab procedures were in accordance with the approved sampling plan and QAPjP. There were no deviations and the representativeness requirement was met.
- o Completeness: The completeness goal for the project was for all project data to be 90% accepted. Completeness is calculated by dividing the total number of acceptable analyses by the total performed. An acceptable analysis is defined as one that conformed to QC protocols and is not rejected. All the noted sample analyses in this batch were accepted so the completeness goal was met.
- o Comparability: All the samples taken, analyzed and validated by CBS were taken by CBS sampling crews using the same procedures and analyzed by the same laboratory. Therefore within the samples taken by CBS there are no comparability issues.

Overall, the main objective of the sampling event was to determine if PCBs are present at a concentration of .1 ppb or more. This data is of sufficient quality to satisfy this goal.