L1790000000--Tazewell County
Illinois American Water
Company Wells #1 and #3
ILD981958291
Volume 2 of 2

CERCLA

Screening Site Inspection Analytical Results

Illinois Environmental Protection Agency
P.O. Box 19276
Springfield, IL 62794-9276

EPA Region 5 Records Ctr.
328295

Confidential Material May be Enclosed

APPENDIX H

ANALYTICAL RESULTS FROM IEPA COLLECTED SAMPLES

Illinois Environmental Protection Agency · P.O. Box 19276, Springfield, IL 62794-9276

MEMORANDUM

DATE: September 21, 1989

TO: Tim Murphy

FROM: Ron Turpin & Jim Shaw

SUBJECT: Review of Data Package
Tazewell County/Illinois American
Water Company Well #1 and #3

The Division of Laboratories Quality Assurance Section has reviewed the above referenced Organics analysis data package. The package is for 4 soil samples, 5 water samples and 1 trip blank for Target Compound List (TCL) Organics. The results are valid as qualified on the attached Forms I.

The Inorganics analysis data package has been delayed by instrument failure at the IEPA inorganics laboratory in Champaign. We will forward the inorganics results as soon as they are received and validated.

attachments

cc: John Hurley
Karl Reed
Tom Crause
Bob Staber

Illinois Environmental Protection Agency · P.O. Box 19276, Springfield, IL 62794-9276

MEMORANDUM

DATE: September 25, 1989

TO: Tim Murphy

FROM: Ron Turpin & Jim Shaw Ron Turpin Jim Shaw

SUBJECT: Review of Data Package
Tazewell County/Illinois American
Water Company Well #1 and #3

The Division of Laboratories Quality Assurance Section has reviewed the above referenced Inorganics analysis data package. The package is for 4 soil samples and 5 water samples for Target Compound List (TCL) Inorganics. The results are valid as qualified on the attached Forms I.

The Organics analysis data package was validated and submitted previously.

attachments

cc: Karl Reed
Tom Crause
Bob Staber

RECEIVED
SEP 26 1989
IEPA-DLPC

JUL 25 1989 D074514 Seal #: 5211

IEPA - CLP
CHAIN OF CUSTODY

Date Sealed: 7/25/89 By: AW

Facility
Name : ILL. AMER. WATER CO. WELL #1 2 #3 Site Inventory # : 1790000000
Region: CENTRAL Site Billing Code: SA-05
County: TAZEWELL Project Manager : TIM MURPHY

LABORATORY #	SAMPLE I.D.	SAMPLE DATE	SAMPLE TIME
D074514	6-101	7-25-89	8:00am

Sample Appearance: rusty to clear

Collection Comments: 30 DAY TURNAROUND

Sampler Signature: Timothy J. Murphy Division/Company: IEPA

CONTAINER No.	Code	Size	Pres	ANALYSIS	FILTERED (Y/N)	Date	Time
2	8	40ml		VOA	N	7-25-89	8:00a
2	9	80oz		BNA	N	7-25-89	8:00a
2	9	80oz		PEST/PCB	N	7-25-89	8:00a

CHAIN OF CUSTODY CHRONICLE

I certify that I received the sample shipping container with the shipping container sealed and intact.

Opened by (print): Tim Murphy Signature: Timothy J. Murphy

Date: 7-25-89 Time: 7:55a Seal #: 0005211 Intact: (Y) N

I certify that the sample listed above was collected and placed in bottles of the preservative that each bottle was placed intact in the sample shipping container and that I sealed the sample shipping container at the date and time listed below.

Sealed by (print): Tim Murphy Signature: Timothy J. Murphy

Date: 7-25-89 Time: 8:30a Seal #: 0005106

Courier - sample pickup: _____

Courier - sample delivery: _____

I certify that I received the sample shipping container from the courier listed above with the shipping container and seal intact and that each bottle in the shipping container was intact. After recording the sample in the official record book, the sample will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Opened by (print): Sally Geyston Signature: Sally Geyston

Date: JUL 25 1989 Time: 5:10pm Seal #: 5106 Intact: (Y) N

Lab Name: IEPA Springfield Comments: _____

IEPA - CLP
CHAIN OF CUSTODY

JUL 25 1989

D074515

Seal #: 5207

Date Sealed: 7/25/89 By: AL

Facility
Name : ILL. AMER. WATER CO. WELL #1 & #3
Region: CENTRAL
County: TAZEWELL

Site Inventory # : 1790000000
Site Billing Code: SA-06
Project Manager : TIM MURPHY

LABORATORY #	SAMPLE I.D.	SAMPLE DATE	SAMPLE TIME
D074515	G-102	7-25-89	10:10a

Sample Appearance : cloudy

Collector Comments: 30 DAY TURNAROUND

Sampler Signature : Timothy J. Murphy Division/Company IEPA

CONTAINER No.	Code	Size	Pres	ANALYSIS	FILTERING (Y/N)	Date	Time
2	8	40ml		VOA	N	7-25-89	10:10a
2	9	80oz		BNA	N	7-25-89	10:10a
2	9	80oz		PEST/PCB	N	7-25-89	10:10a

CHAIN OF CUSTODY CHRONICLE

I certify that I received the sample shipping container with the shipping container sealed and intact.

Opened by (print): Tim Murphy Signature: Timothy J. Murphy

Date: 7-25-89 Time: 9:50am Seal #: 0005207 Intact? Y / N

I certify that the sample listed above was collected and placed in bottles in my presence, that each bottle was placed intact in the sample shipping container and that I sealed the sample shipping container at the date and time listed below.

Sealed by (print): Tim Murphy Signature: Timothy J. Murphy

Date: 7-25-89 Time: 10:50 Seal #: 0005208

Courier - sample pickup: _____

Courier - sample delivery

I certify that I received the sample shipping container from the courier signed above with the shipping container and seal intact and that each bottle in the shipping container was intact. After relinquishing the sample to the official responsible the sample will be in the custody of Chemical Laboratory Personnel at all times or locked in a secure area.

Opened by (print): [illegible] Signature: Sally [illegible]

Date: JUL 25 1989 [illegible] 5208

Lab No: [illegible]

JUL 25 1989 D074516

IEPA - CLP
CHAIN OF CUSTODY

Seal #: 5219

Date Sealed: 7/25/89 By: AW

Facility
Name: ILL. AMER. WATER CO. WELL #1 & #3
Region: CENTRAL
County: TAZEWELL

Site Inventory #: 1790000006
Site Billing Code: 84-98
Project Manager: TIM MURPHY

LABORATORY #	SAMPLE NO.	SAMPLE DATE	SAMPLE TIME
D074516	G-103	7-25-89	9:00am

Sample Appearance: rusty orange color

Collector Comments: 30 DAY TURNAROUND

Sampler signature: Timothy J. Murphy Division/Company: IEPA

CONTAINER No.	Code	Size	Pres	ANALYSIS	FILTERED	DATE	TIME
2	18	40ml		VOA	N	7-25-89	9:00am
2	19	80oz		BNA	N	7-25-89	9:00am
2	19	80oz		PEST/PCB	N	7-25-89	9:00am

CHAIN OF CUSTODY CHRONICLE

I certify that I received the sample shipping container with the shipping container sealed and intact.

Opened by (print): Tim Murphy Signature: Timothy J. Murphy

Date: 7-25-89 Time: 8:40 am Seal #: 0005219 Intact: O

I certify that the sample listed above was collected and placed in bottles in my presence. That each bottle was filled, capped, and the sample shipping container and that I sealed the sample shipping container at the date and time stated below.

Sealed by (print): Tim Murphy Signature: Timothy J. Murphy

Date: 7-25-89 Time: 9:40am Seal #: 0005220

Courier - sample pickup: _____

Courier - sample delivery: _____

I certify that I received the sample shipping container from the courier listed above with the shipping container and seal intact and that each bottle in the shipping container was intact. After recording the sample in the official record book, the sample will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Opened by (print): Sally Geyston Signature: Sally Geyston

Date: JUL 25 1989 Time: 5:20 pm Seal #: 5220 Intact? Y / N

Lab Name: IEPA Springfield Comments: _____

JUL 25 1989 D074517 Seal #: 5221

IEPA - CLP
CHAIN OF CUSTODY

Date Sealed: 7/25/89 By: AWU

Facility
Name : ILL. AMER. WATER CO. WELL #: #3 Site Inventory # : 1790000000
Region: CENTRAL Site Billing Code: SA-CS
County: TAZEWELL Project Manager : TIM MURPHY

LABORATORY #	SAMPLE #	SAMPLE DATE	SAMPLE TIME
D074517	G-104	7-25-89	11:30A

Sample Appearance: Clear

Preservation Comments: 30 DAY TURNAROUND

Sampler Signature: Timothy J. Murphy Division Sampler: IEPA

CONTAINER No.	Code	Size	Pres	ANALYSIS	FILTERED? Y/N	Date	Time
2	8	40ml		VOA	N	7-25-89	11:30A
2	9	80oz		BNA	N	7-25-89	11:30A
2	9	80oz		PEST/PCB	N	7-25-89	11:30A

CHAIN OF CUSTODY CHRONICLE

I certify that I received the sample shipping container with the shipping container sealed and intact

Opened by (print): TIM MURPHY Signature: Timothy J. Murphy

Date: 7-25-89 Time: 11:00A Seal: 0005221 Intact: O

I certify that the sample listed above was collected into glass or plastic containers, I sealed the sample bottles and placed them into the sample shipping container and that I sealed the sample shipping container at the date and time listed below.

Sealed by (print): TIM MURPHY Signature: Timothy J. Murphy

Date: 7-25-89 Time: 11:55A Seal #: 0005222

Courier - sample pickup: _____

Courier - sample delivery: _____

I certify that I received the sample shipping container from the courier listed above with the shipping container and seal intact and that each bottle in the shipping container was intact. After recording the sample in the official record book, the sample will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Opened by (print): Sally Gapston Signature: Sally Gapston

Date: JUL 25 1989 Time: 5:25 p.m Seal #: 5222 Intact: Y / N

Lab Name: IEPA Springfield Comments: _____

IEPA - CLP
CHAIN OF CUSTODY

JUL 25 1989 D074518 Seal #: 5223

Date Sealed: 7/25/89 By: AW

Facility
Name: IL. AYER WATER CO. WELL #: A3 Site Inventory #: 1780000000
Region: CENTRAL Site Billing Code: SA-08
County: TAZEWELL Project Manager: TIM MURPHY

LABORATORY #	SAMPLE ID	SAMPLE DATE	SAMPLE TIME
D074518	G-105	7-25-89	1:45 pm

Sample Description: Clear

Sampling Comments: 30 DAY TURNAROUND

Sampler Signature: Timothy J. Murphy Division/Sample: IEPA

CONTAINER No.	Code	Size	Pres	ANALYSIS	FILTERED (Y/N)	DATE	TIME
2	8	40ml		VOA	N	7-25-89	1:45
2	9	80oz		BNA	N	7-25-89	1:45
2	9	80oz		PEST/PCB	N	7-25-89	1:45

CHAIN OF CUSTODY CHRONICLE

I certify that I received the sample shipping container with the shipping container sealed and intact.

Opened by (print): TIM MURPHY Signature: Timothy J. Murphy

Date: 7-25-89 Time: 12:50 pm Seal #: 0005223 Intact: O

I certify that the sample listed above was collected and filled all bottles in my presence, that each bottle was filled intact in the sample shipping container and that I sealed the sample shipping container and gave it to the date and time listed below.

Sealed by (print): TIM MURPHY Signature: Timothy J. Murphy

Date: 7-25-89 Time: 3:00pm Seal #: 0005224

Courier - sample pickup: _____

Courier - sample delivery: _____

I certify that I received the sample shipping container from the courier listed above with the shipping container and seal intact and that each bottle in the shipping container was intact. After recording the sample in the official record book, the sample will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Opened by (print): Sally Geyston Signature: Sally Geyston

Date: JUL 25 1989 Time: 5:30 pm Seal #: 5224 Intact?: (Y) / N

Lab Name: IEPA Springfield Comments: _____

IEPA - CLP
CHAIN OF CUSTODY

JUL 25 1989

D074519

Seal #: 5211

Date Sealed: 7/25/89 By: AWU

Facility Name: ILL. AMER. WATER CO. WELL #1 & #3
Region: CENTRAL
County: TAZEWELL

Site Inventory #: 1790000000
Site Billing Code: SA06
Project Manager: Tim MURPHY

LABORATORY #	SAMPLE I.D.	SAMPLE DATE	SAMPLE TIME
D074519	Trip blank at G101	7-25-89	8:00

Sample Appearance

Collector Comments

Sampler Signature: Timothy J. Murphy Division/Company: IEPA

CONTAINER				ANALYSIS	FILTERING		
No.	Code	Size	Pres		(Y/N)	Date	Time
2	8	40ml		TRIP BLANK	N	7-25-89	8:00

CHAIN OF CUSTODY CHRONICLE

I certify that I received the sample shipping container with the shipping container sealed and intact.

Opened by (print): Timothy J. Murphy Signature: Timothy J. Murphy

Date: 7-25-89 Time: 7:55a Seal #: 0005211 Intact: (Y) / N

I certify that the sample listed above was collected and placed in bottles in my presence, that each bottle was placed intact in the sample shipping container and that I sealed the sample shipping container at the date and time listed below.

Sealed by (print): Tim Murphy Signature: Timothy J. Murphy

Date: 7-25-89 Time: 8:30a Seal #: 0005106

Courier - sample pickup:

Courier - sample delivery:

I certify that I received the sample shipping container from the courier listed above with the shipping container and seal intact and that each bottle in the shipping container was intact. After recording the sample in the official record book, the sample will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Opened by (print): Sally Geyston Signature: Sally Geyston

Date: JUL 25 1989 Time: 5:10 p.m. Seal #: 5106 Intact? (Y) / N

Lab Name: IEPA Springfield Comments:

IEPA - CLP
CHAIN OF CUSTODY

JUL 25 1989 D074520 Seal #: 5225

Date Sealed: 7/25/89 By: Awu

Facility
Name : ILL. AMER. WATER CO. WELL#1 &#
Region: CENTRAL
County: TAZEWELL

Site Inventory # : 1790000000
Site Billing Code: SR-06
Project Manager : TIM MURPHY

LABORATORY #	SAMPLE I.D.	SAMPLE DATE	SAMPLE TIME
D074520	X-101	7-25-89	1:00p

Sample Appearance: black silty sandy

Collector Comments: 30 DAY TURNAROUND middle of unload/load area near old dock

Sampler Signature: Timothy J. Murphy Division/Company: IEPA

CONTAINER No.	Code	Size	Pres	ANALYSIS	FILTERING (Y/N)	Date	Time
2	2	2oz		VOA	N	7-25-89	1:00p
1	5	32oz		BNA, PEST/PCB	N	7-25-89	1:00p

CHAIN OF CUSTODY CHRONICLE

I certify that I received the sample shipping container with the shipping container sealed and intact.

Opened by (print): TIM MURPHY Signature: Timothy J. Murphy

Date: 7-25-89 Time: 12:45p Seal #: 0005225 Intact: (Y) / N

I certify that the sample listed above was collected and placed in bottles of my presence, that each bottle was placed intact in the sample shipping container and that I sealed the sample shipping container at the date and time listed below.

Sealed by (print): TIM MURPHY Signature: Timothy J. Murphy

Date: 7-25-89 Time: 3:40p Seal #: 0005226

Courier - sample pickup: _____

Courier - sample delivery: _____

I certify that I received the sample shipping container from the courier listed above with the shipping container and seal intact and that each bottle in the shipping container was intact. After recording the sample in the official record book, the sample will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Opened by (print): Sally Geyston Signature: Sally Geyston

Date: JUL 25 1989 Time: 5:40pm Seal #: 5226 Intact: (Y) / N

Lab Name: IEPA Springfield Comments: _____

IEPA - CLP
CHAIN OF CUSTODY

JUL 25 1989 D074521 Seal #: 5225

Date Sealed: 7/25/89 By: AWW

Facility
Name : IL. AMER. WATER CO. WELL#1 &# Site Inventory # : 1790000000
Region: CENTRAL Site Billing Code: SA-06
County: TAZEWELL Project Manager : TIM MURPHY

LABORATORY #	SAMPLE NO.	SAMPLE DATE	SAMPLE TIME
D074521	X-102	7-25-89	1:20p

Sample Appearance: slightly oily silty

Collector Comments: 30 DAY TURNAROUND 12.5' from S. fence 115' from W. RR track

Sampler Signature: Timothy J. Murphy Division/Company: IEPA

CONTAINER No.	Code	Size	Pres	ANALYSIS	FILTERED (Y/N)	Date	Time
2	12	2oz		VOA	N	7-25-89	1:20p
1	5	32oz		BNA, PEST/PCB	N	7-25-89	1:20p

CHAIN OF CUSTODY CHRONICLE

I certify that I received the sample shipping container with the shipping container sealed and intact.

Opened by (print): TIM MURPHY Signature: Timothy J Murphy

Date: 7-25-89 Time: 12:45p Seal: 0005225 Intact: O

I certify that the sample listed above was collected and placed in bottles in my presence; that each bottle was placed intact in the sample shipping container and that I sealed the sample shipping container at the date and time listed below.

Sealed by (print): TIM MURPHY Signature: Timothy J. Murphy

Date: 7-25-89 Time: 3:40p Seal: 0005226

Courier - sample pickup: _____

Courier - sample delivery: _____

I certify that I received the sample shipping container from the courier listed above with the shipping container and seal intact and that each bottle in the shipping container was intact. After recording the sample in the official record book, the sample will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Opened by (print): Sally Greyston Signature: Sally Greyston

Date: JUL 25 1989 Time: 15:40pm Seal #: 5226 Intact? (Y) / N

Lab Name: IEPA Springfield Comments: _____

IEPA - CLP
CHAIN OF CUSTODY

JUL 25 1989 D074522 Seal #: 5225

Date Sealed: 7/25/89 By: AWU

Facility
Name: ILL. AMER. WATER CO. WELL#, S#
Region: CENTRAL
County: TAZEWELL

Site Inventory #: 1780000006
Site Billing Code: SA-OS
Project Manager: TIM MURPHY

LABORATORY #	SAMPLE I.D.	SAMPLE DATE	SAMPLE TIME
D074522	X-1D3	7-25-89	1:40p

Sample appearance: sandy

Collection interval: 30 DAY TURNAROUND

middle of low spot near hydrant HNU slight increase

Sampler signature: _____ Division/Company: IEPA

CONTAINER No.	Code	Size	Preser	ANALYSIS	FILTERING (Y/N)	Date	Time
2	D	2oz		VOA	N	7-25-89	1:40p
1	E	32oz		BNA, PEST/PCB	N	7-25-89	1:40p

CHAIN OF CUSTODY CHRONICLE

I certify that I received the sample shipping container with the shipping container sealed and intact.

Opened by (print): TIM MURPHY Signature: Timothy J. Murphy

Date: 7-25-89 Time: 12:45p Seal #: 0005225 Intact: O

I certify that the sample listed above was collected and placed in bottles in my presence, that each bottle was placed intact in the sample shipping container and that I sealed the sample shipping container at the date and time listed below.

Sealed by (print): TIM MURPHY Signature: Timothy J. Murphy

Date: 7-25-89 Time: 3:40p Seal #: 0005226

Courier - sample pickup: _____

Courier - sample delivery: _____

I certify that I received the sample shipping container from the courier listed above with the shipping container and seal intact and that each bottle in the shipping container was intact. After recording the sample in the official record book, the sample will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Opened by (print): Sally Geyston Signature: Sally Geyston

Date: JUL 25 1989 Time: 5:40p.m. Seal #: 5226 Intact?: Y N

Lab Name: IEPA Springfield Comments: _____

IEPA - CLP
CHAIN OF CUSTODY

JUL 25 1989

D074523

Seal #: 5225

Date Sealed: 7/25/89 By: AWV

Facility
Name : ILL. AMER. WATER CO. WELL#1 &#
Region: CENTRAL
County: TAZEWELL

Site Inventory # : 1790000000
Site Billing Code: SA-06
Project Manager : TIM MURPHY

LABORATORY #	SAMPLE I.D.	SAMPLE DATE	SAMPLE TIME
D074523	X-104	7-25-89	2:00p

Sample Appearance

Collector Comments: 30 DAY TURNAROUND middle of tour ice lot

Sampler Signature: Timothy J. Murphy Division/Company: IEPA

CONTAINER No.	Code	Size	Pres	ANALYSIS	FILTERING (Y/N)	Date	Time
2	12	12oz		VOA	N	7-25-89	2:00p
1	5	32oz		BNA, PEST/PCB	N	7-25-89	2:00p
						~~7-25-89~~	

CHAIN OF CUSTODY CHRONICLE

I certify that I received the sample shipping container with the shipping container sealed and intact.

Opened by (print): Tim Murphy Signature: Timothy J. Murphy

Date: 7-25-89 Time: 12:45p Seal #: 0005225 Intact: Y / N

I certify that the sample listed above was collected and placed in bottles in my presence, that each bottle was placed intact in the sample shipping container and that I sealed the sample shipping container at the date and time listed below.

Sealed by (print): Tim Murphy Signature: Timothy J. Murphy

Date: 7-25-89 Time: 3:40p Seal #: 0005226

Courier - sample pickup:

Courier - sample delivery:

I certify that I received the sample shipping container from the courier listed above with the shipping container and seal intact and that each bottle in the shipping container was intact. After recording the sample in the official record book, the sample will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Opened by (print): Sally Geyston Signature: Sally Geyston

Date: JUL 25 1989 Time: 5:40p.m Seal #: 5226 Intact? Y / N

Lab Name: IEPA Springfield Comments:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G101

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974514

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0731BK05

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ Date Analyzed: 07/31/89

Column: (pack/cap) WIDE Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	~~U~~ R
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	3	J
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5 ~~5~~	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
----------	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G101

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974514

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0731BK05

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ Date Analyzed: 07/31/89

Column (pack/cap) WIDE Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

RECEIVED
SEP 14 1989
IEPA LABORATORIES
Manager's Office

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G101

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974514

Sample wt/vol: 1000 (g/mL) ML Lab File ID: AUG21GK05

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/21/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
108-95-2	Phenol	10 ~~U~~	~~U~~
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G101

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974514

Sample wt/vol: 1000 (g/mL) ML Lab File ID: AUG21GK05

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/21/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	1	J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G101

Lab Name: ILLINOIS EPA Contract: 1790000000

.b Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) _____ Lab Sample ID: D974514

Sample wt/vol: 1000 (g/mL) ML Lab File ID: AUG21GK05T

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/21/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.23	4.9	BAJ
2.	UNKNOWN ALIPHATIC ACID	13.74	3.8	J
3.	UNKNOWN ALIPHATIC ACID	16.72	0.67	J
4.	UNKNOWN PNA	16.79	0.92	BJ
5.	UNKNOWN PNA	16.95	1.9	BJ
6.	UNKNOWN	17.19	0.59	J
7.	UNKNOWN ALIP. HYDROCARBON	24.59	0.33	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

G101

Lab Name: SPRINGFIELD IEPA Contract: Tazewell

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: D974514

Sample wt/vol: 1000 (g/mL) ml Lab File ID: _____

Level: (low/med) LOW Date Received: 7/25 89

% Moisture: not dec. ____ dec. ____ Date Extracted: 7/26/89

Extraction: (SepF/Cont/Sonc) SepF Date Analyzed: 9/1/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.5	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.5	U
11104-28-2	Aroclor-1221	0.5	U
11141-16-5	Aroclor-1232	0.5	U
53469-21-9	Aroclor-1242	0.5	U
12672-29-6	Aroclor-1248	0.5	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

7

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1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: ILL AMER WATER CO WELL #1 & 3 TAZEWELL CO #1790000000 G101

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 15

Matrix (soil/water): _____ Lab Sample ID: B910413

Level (low/med): _____ Date Received: 07/26/89

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): _____

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	78	U		P
7440-36-0	Antimony	2.1	U	S	F
7440-38-2	Arsenic	1.2	U	S	F
7440-39-3	Barium	73	B		P
7440-41-7	Beryllium	0.6	U		P
7440-43-9	Cadmium	1.2	U		P
7440-70-2	Calcium	98000			P
7440-47-3	Chromium	5.7	B		P
7440-48-4	Cobalt	1.7	U		P
7440-50-8	Copper	2.9	B		P
7439-89-6	Iron	37	U		P J
7439-92-1	Lead	34		S	F
7439-95-4	Magnesium	38000			P
7439-96-5	Manganese	2.0	B		P
7439-97-6	Mercury	0.05	U		AV
7440-02-0	Nickel	4.7	B		P J
7440-09-7	Potassium	2000	B		P J
7782-49-2	Selenium	1.2	U	S	F
7440-22-4	Silver	2.3	U		P
7440-23-5	Sodium	20000			P
7440-28-0	Thallium	0.9	U	S	F
7440-62-2	Vanadium	1.8	U		P
7440-66-6	Zinc	16 U	B		P
	Cyanide	10	U		AS
	Sulfide	1000	U		T
	Sulfate	82000			

Color Before: Colorless Clarity Before: Clear Texture: _____

Color After: Colorless Clarity After: Clear Artifacts: _____

Comments:

Sulfide SW846 Methodology
Sulfate IEPA Method

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G102

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974515

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0731BK06

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ Date Analyzed: 07/31/89

Column: (pack/cap) WIDE Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	340	E
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	~~U~~R
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5~~0~~	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G102

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974515

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0731BK06

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ Date Analyzed: 07/31/89

Column (pack/cap) WIDE Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G102DL

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974515

Sample wt/vol: 1.0 (g/mL) ML Lab File ID: A0731BK12

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ Date Analyzed: 07/31/89

Column: (pack/cap) WIDE Dilution Factor: ~~1.00~~ 5.00

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	50	U
74-83-9	Bromomethane	50	U
75-01-4	Vinyl Chloride	50	U
75-00-3	Chloroethane	50	U
75-09-2	Methylene Chloride	~~25~~	~~J~~ U
67-64-1	Acetone	240	D
75-15-0	Carbon Disulfide	25	U
75-35-4	1,1-Dichloroethene	25	U
75-35-3	1,1-Dichloroethane	25	U
540-59-0	1,2-Dichloroethene (total)	25	U
67-66-3	Chloroform	25	U
107-06-2	1,2-Dichloroethane	25	U
78-93-3	2-Butanone	50	~~U~~ R
71-55-6	1,1,1-Trichloroethane	25	U
56-23-5	Carbon Tetrachloride	25	U
108-05-4	Vinyl Acetate	50	U
75-27-4	Bromodichloromethane	25	U
78-87-5	1,2-Dichloropropane	25	U
10061-01-5	cis-1,3-Dichloropropene	25	U
79-01-6	Trichloroethene	25	U
124-48-1	Dibromochloromethane	25	U
79-00-5	1,1,2-Trichloroethane	25	U
71-43-2	Benzene	25	U
10061-02-6	Trans-1,3-Dichloropropene	25	U
75-25-2	Bromoform	25	U
108-10-1	4-Methyl-2-Pentanone	50	U
591-78-6	2-Hexanone	50	U
127-18-4	Tetrachloroethene	25	U
79-34-5	1,1,2,2-Tetrachloroethane	25 ~~50~~	U
108-88-3	Toluene	25	U
108-90-7	Chlorobenzene	25	U
100-41-4	Ethylbenzene	25	U
100-42-5	Styrene	25	U
----------	Total Xylenes	25	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G102DL

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974515

Sample wt/vol: 1.0 (g/mL) ML Lab File ID: A0731BK12

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ Date Analyzed: 07/31/89

Column (pack/cap) WIDE Dilution Factor: ~~1.00~~ 5.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G102

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974515

Sample wt/vol: 1000 (g/mL) ML Lab File ID: AUG22GK10

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/22/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
95-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G102

Lab Name: ILLINOIS EPA Contract: 1790000000

o Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974515

Sample wt/vol: 1000 (g/mL) ML Lab File ID: AUG22GK10

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/22/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G102

Lab Name: ILLINOIS EPA Contract: 1790000000

b Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) _____ Lab Sample ID: D974515

Sample wt/vol: 1000 (g/mL) ML Lab File ID: AUG22GK10T

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/22/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.22	6.4	BAJ
2.	UNKNOWN	7.65	1.9	BJ
3.	UNKNOWN	7.92	9.8	J
4.	UNKNOWN	8.95	5.3	J
5.	CYCLOHEXENONE	9.32	0.78	J
6.	UNKNOWN PNA	16.77	1.5	BJ
7.	UNKNOWN PNA	16.94	2.3	BJ

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G102

Lab Name: SPRINGFIELD IEPA Contract: Tazewell

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: D974515

Sample wt/vol: 1000 (g/mL) ml Lab File ID: _____

Level: (low/med) LOW Date Received: 7/25 89

% Moisture: not dec. ___ dec. ___ Date Extracted: 7/26/89

Extraction: (SepF/Cont/Sonc) SepF Date Analyzed: 9/1/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.5	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.5	U
11104-28-2	Aroclor-1221	0.5	U
11141-16-5	Aroclor-1232	0.5	U
53469-21-9	Aroclor-1242	0.5	U
12672-29-6	Aroclor-1248	0.5	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

G102

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: ILL AMER WATER CO WELL #1 & 3 TAZEWELL CO #1790000000

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 15

Matrix (soil/water): _____ Lab Sample ID: B910414

Level (low/med): _____ Date Received: 07/26/89

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): _____

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	78	U		P	
7440-36-0	Antimony	2.1	U	S	F	
7440-38-2	Arsenic	1.2	U	S	F	
7440-39-3	Barium	84	B		P	
7440-41-7	Beryllium	0.6	U		P	
7440-43-9	Cadmium	1.2	U		P	
7440-70-2	Calcium	101000			P	
7440-47-3	Chromium	5.5	B		P	
7440-48-4	Cobalt	1.7	U		P	
7440-50-8	Copper	1.7	U		P	
7439-89-6	Iron	37	B		P	U
7439-92-1	Lead	4		S	F	
7439-95-4	Magnesium	41000	B		P	
7439-96-5	Manganese	1.4	B		P	
7439-97-6	Mercury	0.08	B		AV	
7440-02-0	Nickel	8.4	B		P	U
7440-09-7	Potassium	1200	U		P	U
7782-49-2	Selenium	1.2	U	S	F	
7440-22-4	Silver	2.3			P	
7440-23-5	Sodium	19000	U		P	
7440-28-0	Thallium	0.9	U	S	F	
7440-62-2	Vanadium	1.8	U		P	
7440-66-6	Zinc	13 U	~~B~~		P	
	Cyanide	10	U		AS	
	Sulfide	1000	U		T	
	Sulfate	91000			AS	

Color Before: Colorless Clarity Before: Clear Texture: _____

Color After: Colorless Clarity After: Clear Artifacts: _____

Comments:

Sulfide SW846 Methodology

Sulfate IEPA Method

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G103

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974516

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0731BK07

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ Date Analyzed: 07/31/89

Column: (pack/cap) WIDE Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	1300	E
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	210	J
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G103

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) _____ Lab Sample ID: D974516

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0731BK07T

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ Date Analyzed: 07/31/89

Column (pack/cap) WIDE Dilution Factor: 1.00

Number TICs found: 2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	1.77	1.1	J
2.	TETRAHYDROFURAN	3.32	9.8	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G103DL

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974516

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0731BK13

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ Date Analyzed: 07/31/89

Column: (pack/cap) WIDE Dilution Factor: 50.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	500	U
74-83-9	Bromomethane	500	U
75-01-4	Vinyl Chloride	500	U
75-00-3	Chloroethane	500	U
75-09-2	Methylene Chloride	~~250~~ 39	~~U~~
67-64-1	Acetone	1700	D
75-15-0	Carbon Disulfide	250	U
75-35-4	1,1-Dichloroethene	250	U
75-35-3	1,1-Dichloroethane	250	U
540-59-0	1,2-Dichloroethene (total)	250	U
67-66-3	Chloroform	250	U
107-06-2	1,2-Dichloroethane	250	U
78-93-3	2-Butanone	500	~~U~~ R
71-55-6	1,1,1-Trichloroethane	250	U
56-23-5	Carbon Tetrachloride	250	U
108-05-4	Vinyl Acetate	500	U
75-27-4	Bromodichloromethane	250	U
78-87-5	1,2-Dichloropropane	250	U
10061-01-5	cis-1,3-Dichloropropene	250	U
79-01-6	Trichloroethene	250	U
124-48-1	Dibromochloromethane	250	U
79-00-5	1,1,2-Trichloroethane	250	U
71-43-2	Benzene	250	U
10061-02-6	Trans-1,3-Dichloropropene	250	U
75-25-2	Bromoform	250	U
108-10-1	4-Methyl-2-Pentanone	500	U
591-78-6	2-Hexanone	500	U
127-18-4	Tetrachloroethene	250	U
79-34-5	1,1,2,2-Tetrachloroethane	250 ~~500~~	U
108-88-3	Toluene	250	U
108-90-7	Chlorobenzene	250	U
100-41-4	Ethylbenzene	250	U
100-42-5	Styrene	250	U
----------	Total Xylenes	250	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G103DL

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974516

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0731BK13

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ Date Analyzed: 07/31/89

Column (pack/cap) WIDE Dilution Factor: 50.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G103

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974516

Sample wt/vol: 1000 (g/mL) ML Lab File ID: AUG21GK06

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/21/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G103

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: EPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974516

Sample wt/vol: 1000 (g/mL) ML Lab File ID: AUG21GK06

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/21/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	210	~~U~~ J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G10I

Lab Name: ILLINOIS EPA Contract: 1790000100

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D9745_

Matrix: (soil/water) _____ Lab Sample ID: D974516

Sample wt/vol: 1000 (g/mL) ML Lab File ID: AUG21GK06T

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/21/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.23	5.8	BAJ
2.	UNKNOWN	7.65	0.66	BJ
3.	UNKNOWN PNA	16.72	1.2	BJ
4.	UNKNOWN PNA	16.87	2.4	BJ

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G103

Lab Name: SPRINGFIELD IEPA Contract: Tazewell

Lab Code: _____, Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: D974516

Sample wt/vol: 1000 (g/mL) ml Lab File ID: _____

Level: (low/med) LOW Date Received: 7/25 89

% Moisture: not dec. ____ dec. ____ Date Extracted: 7/26/89

Extraction: (SepF/Cont/Sonc) SepF Date Analyzed: 9/1/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.5	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.5	U
11104-28-2	Aroclor-1221	0.5	U
11141-16-5	Aroclor-1232	0.5	U
53469-21-9	Aroclor-1242	0.5	U
12672-29-6	Aroclor-1248	0.5	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

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U.S. EPA - CLP

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

G103

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: ILL AMER WATER CO WELL #1 & 3 TAZEWELL CO #1790000000

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 15

Matrix (soil/water): _____ Lab Sample ID: B910415

Level (low/med): _____ Date Received: 07/26/89

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): _____

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	78	U		P
7440-36-0	Antimony	2.1	U	S	F
7440-38-2	Arsenic	10 B ~~U~~	B	S	F
7440-39-3	Barium	73	B		P
7440-41-7	Beryllium	0.6	U		P
7440-43-9	Cadmium	1.2	U		P
7440-70-2	Calcium	119000			P
7440-47-3	Chromium	3.5	B		P
7440-48-4	Cobalt	1.7	U		P
7440-50-8	Copper	1.7	U		P
7439-89-6	Iron	37	U		P J
7439-92-1	Lead	4	B	S	F
7439-95-4	Magnesium	39000			P
7439-96-5	Manganese	41			P
7439-97-6	Mercury	0.12			AV
7440-02-0	Nickel	52			P J
7440-09-7	Potassium	3800	B		P
7782-49-2	Selenium	1.2	U	WS	F
7440-22-4	Silver	2.3	U		P
7440-23-5	Sodium	21000			P
7440-28-0	Thallium	0.9	U	S	F
7440-62-2	Vanadium	1.8	U		P
7440-66-6	Zinc	11	U		P
	Cyanide	10	U		AS
	Sulfide	1000	U		T
	Sulfate	98000			AS

Color Before: Colorless Clarity Before: Clear Texture: _____

Color After: Colorless Clarity After: Clear Artifacts: _____

Comments:

Sulfide SW846 Methodology
Sulfate IEPA Method

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G104

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974517

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0731BK10

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ Date Analyzed: 07/31/89

Column: (pack/cap) WIDE Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	~~U~~R
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5~~0~~	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
----------	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G104

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974517

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0731BK10

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ Date Analyzed: 07/31/89

Column (pack/cap) WIDE Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G104

Lab Name: ILLINOIS EPA Contract: 1790000000

b Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974517

Sample wt/vol: 1000 (g/mL) ML Lab File ID: AUG21GK07

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/21/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G104

Lab Name: ILLINOIS EPA Contract: 1790000000

b Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974517

Sample wt/vol: 1000 (g/mL) ML Lab File ID: AUG21GK07

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/21/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G104

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) _____ Lab Sample ID: D974517

Sample wt/vol: 1000 (g/mL) ML Lab File ID: AUG21GK07T

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/21/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	DIMETHYL FORMAMIDE	5.62	4.2	J
2.	CYCLOPENTANONE	5.88	0.93	J
3.	UNKNOWN	7.23	8.9	BAJ
4.	UNKNOWN	7.65	1.3	BJ
5.	UNKNOWN	7.93	2.7	J
6.	CYCLOHEXANOL	8.28	4.2	J
7.	CYCLOHEXANONE	8.47	2.7	J
8.	UNKNOWN ALIPHATIC ACID	13.69	3.0	J
9.	UNKNOWN PNA	16.72	1.2	BJ
10.	UNKNOWN PNA	16.87	2.3	BJ
11.	UNKNOWN ALIP. HYDROCARBON	23.39	0.62	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

6104

Lab Name: SPRINGFIELD IEPA Contract: Tazewell

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: D974517

Sample wt/vol: 1000 (g/mL) ml Lab File ID: _____

Level: (low/med) LOW Date Received: 7/25 89

% Moisture: not dec. ____ dec. ____ Date Extracted: 7/26/89

Extraction: (SepF/Cont/Sonc) SepF Date Analyzed: 9/1/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.016	J
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.5	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.5	U
11104-28-2	Aroclor-1221	0.5	U
11141-16-5	Aroclor-1232	0.5	U
53469-21-9	Aroclor-1242	0.5	U
12672-29-6	Aroclor-1248	0.5	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

7

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

G104

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: ILL AMER WATER CO WELL #1 & 3 TAZEWELL CO #1790000000

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 15

Matrix (soil/water): _____ Lab Sample ID: B910416

Level (low/med): _____ Date Received: 07/26/89

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): _____

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	78	U		P	
7440-36-0	Antimony	2.1	U	S	F	
7440-38-2	Arsenic	1.2	U	S	F	
7440-39-3	Barium	82	B		P	
7440-41-7	Beryllium	0.6	U		P	
7440-43-9	Cadmium	1.2	U		P	
7440-70-2	Calcium	99000			P	
7440-47-3	Chromium	5.6	B		P	
7440-48-4	Cobalt	1.7	U		P	
7440-50-8	Copper	1.7	U		P	
7439-89-6	Iron	37	U		P	J
7439-92-1	Lead	2	B	S	F	
7439-95-4	Magnesium	39000			P	
7439-96-5	Manganese	7.5	B		P	
7439-97-6	Mercury	0.05	U		AV	
7440-02-0	Nickel	4.3	U		P	J
7440-09-7	Potassium	900	B		P	J
7782-49-2	Selenium	1.2	U	S	F	
7440-22-4	Silver	2.3	U		P	
7440-23-5	Sodium	18000			P	
7440-28-0	Thallium	0.9	U	S	F	
7440-62-2	Vanadium	1.8	U		P	
7440-66-6	Zinc	12	B		P	
	Cyanide	10	U		AS	
	Sulfide	1000	U		T	
	Sulfate	79000			AS	

Color Before: Colorless Clarity Before: Clear Texture: _____

Color After: Colorless Clarity After: Clear Artifacts: _____

Comments:

Sulfide SW846 Methodology
Sulfate IEPA Method

FORM I - IN 7/87

Rev. IFB Amendment One

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G105

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974518

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0801BK02

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ Date Analyzed: 08/01/89

Column: (pack/cap) WIDE Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	13	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	~~U~~ R
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5 ~~10~~	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
----------	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G105

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974518

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0801BK02

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ Date Analyzed: 08/01/89

Column (pack/cap) WIDE Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G105

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974518

Sample wt/vol: 1000 (g/mL) ML Lab File ID: AUG22GK09

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/22/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

G105

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974518

Sample wt/vol: 1000 (g/mL) ML Lab File ID: AUG22GK09

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ dec. ____ Date Extracted: 07/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/22/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	3	J
129-00-0	Pyrene	4	J
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

G105

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) _____ Lab Sample ID: D974518

Sample wt/vol: 1000 (g/mL) ML Lab File ID: AUG22GK09T

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. _____ dec. _____ Date Extracted: 07/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/22/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.27	7.6	BAJ
2.	UNKNOWN	7.68	1.2	BJ
3.	UNKNOWN	7.98	1.2	J
4.	UNKNOWN PNA	16.75	1.7	BJ
5.	UNKNOWN PNA	16.92	3.2	BJ

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO: 6105

Lab Name: SPRINGFIELD IEPA Contract: Tazewell

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: D974518

Sample wt/vol: 1000 (g/mL) ml Lab File ID: _____

Level: (low/med) LOW Date Received: 7/25 89

% Moisture: not dec. ___ dec. ___ Date Extracted: 7/26/89

Extraction: (SepF/Cont/Sonc) SepF Date Analyzed: 9/1/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.5	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.5	U
11104-28-2	Aroclor-1221	0.5	U
11141-16-5	Aroclor-1232	0.5	U
53469-21-9	Aroclor-1242	0.5	U
12672-29-6	Aroclor-1248	0.5	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: ILL AMER WATER CO WELL #1 & 3 TAZEWELL CO #1790000000 G105

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 15

Matrix (soil/water): _____ Lab Sample ID: B910417

Level (low/med): _____ Date Received: 07/26/89

% Solids: _____

Concentration Units (ug/L or mg/kg dry weight): _____

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	78	U		P	
7440-36-0	Antimony	2.1	U	S	F	
7440-38-2	Arsenic	1.2	U	S	F	
7440-39-3	Barium	77	B		P	
7440-41-7	Beryllium	0.6	U		P	
7440-43-9	Cadmium	1.2	U		P	
7440-70-2	Calcium	94000			P	
7440-47-3	Chromium	4.5	B		P	
7440-48-4	Cobalt	1.7	U		P	
7440-50-8	Copper	1.7	U		P	
7439-89-6	Iron	37	U		P	D
7439-92-1	Lead	28	B	S	F	
7439-95-4	Magnesium	39000			P	
7439-96-5	Manganese	2.5	B		P	
7439-97-6	Mercury	0.05	U		AV	
7440-02-0	Nickel	4.3	U		P	D
7440-09-7	Potassium	900	B		P	D
7782-49-2	Selenium	1.2	U	W,S	F	
7440-22-4	Silver	2.3	U		P	
7440-23-5	Sodium	18000			P	
7440-28-0	Thallium	0.9	U	S	F	
7440-62-2	Vanadium	1.8	U		P	
7440-66-6	Zinc	11	U		P	
	Cyanide	10	U		AS	
	Sulfide	1000	U		T	
	Sulfate	73000			AS	

Color Before: Colorless Clarity Before: Clear Texture: _____

Color After: Colorless Clarity After: Clear Artifacts: _____

Comments:

Sulfide SW846 Methodology
Sulfate IEPA Method

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X101

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: D974520

Sample wt/vol: 5.0 (g/mL) G Lab File ID: A0803BK02

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 16 Date Analyzed: 08/03/89 .84

Column: (pack/cap) WIDE Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	UJ
74-83-9	Bromomethane	12	UJ
75-01-4	Vinyl Chloride	12	UJ
75-00-3	Chloroethane	12	UJ
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	12	UJ
75-15-0	Carbon Disulfide	6	UJ
75-35-4	1,1-Dichloroethene	6	UJ
75-35-3	1,1-Dichloroethane	6	UJ
540-59-0	1,2-Dichloroethene (total)	6	UJ
67-66-3	Chloroform	6	UJ
107-06-2	1,2-Dichloroethane	6	UJ
78-93-3	2-Butanone	12	~~UJ~~ R
71-55-6	1,1,1-Trichloroethane	6	UJ
56-23-5	Carbon Tetrachloride	6	UJ
108-05-4	Vinyl Acetate	12	UJ
75-27-4	Bromodichloromethane	6	UJ
78-87-5	1,2-Dichloropropane	6	UJ
10061-01-5	cis-1,3-Dichloropropene	6	UJ
79-01-6	Trichloroethene	1	J
124-48-1	Dibromochloromethane	6	UJ
79-00-5	1,1,2-Trichloroethane	6	UJ
71-43-2	Benzene	6	UJ
10061-02-6	Trans-1,3-Dichloropropene	6	UJ
75-25-2	Bromoform	6	UJ
108-10-1	4-Methyl-2-Pentanone	12	UJ
591-78-6	2-Hexanone	12	UJ
127-18-4	Tetrachloroethene	6 ~~12~~	7U
79-34-5	1,1,2,2-Tetrachloroethane	6 ~~12~~	UJ
108-88-3	Toluene	6	UJ
108-90-7	Chlorobenzene	6	UJ
100-41-4	Ethylbenzene	6	UJ
100-42-5	Styrene	6	UJ
----------	Total Xylenes	6	UJ

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X101

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: D974520

Sample wt/vol: 5.0 (g/mL) G Lab File ID: A0803BK02

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 16 Date Analyzed: 08/03/89

Column (pack/cap) WIDE Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	unknown	11:14	42	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X101

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: D974520

Sample wt/vol: 30.1 (g/mL) G Lab File ID: AUG14GK06

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 16 dec. ____ Date Extracted: 07/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 08/14/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	780	U
111-44-4	bis(2-Chloroethyl)Ether	780	U
95-57-8	2-Chlorophenol	780	U
541-73-1	1,3-Dichlorobenzene	780	U
106-46-7	1,4-Dichlorobenzene	780	U
100-51-6	Benzyl Alcohol	780	U
95-50-1	1,2-Dichlorobenzene	780	U
95-48-7	2-Methylphenol	780	U
39638-32-9	bis(2-Chloroisopropyl)Ether	780	U
106-44-5	4-Methylphenol	780	U
621-64-7	N-Nitroso-Di-n-Propylamine	780	U
67-72-1	Hexachloroethane	780	U
98-95-3	Nitrobenzene	780	U
78-59-1	Isophorone	780	U
88-75-5	2-Nitrophenol	780	U
105-67-9	2,4-Dimethylphenol	780	U
65-85-0	Benzoic Acid	3800	U
111-91-1	bis(2-Chloroethoxy)Methane	780	U
120-83-2	2,4-Dichlorophenol	780	U
120-82-1	1,2,4-Trichlorobenzene	780	U
91-20-3	Naphthalene	780	U
106-47-8	4-Chloroaniline	780	U
87-68-3	Hexachlorobutadiene	780	U
59-50-7	4-Chloro-3-Methylphenol	780	U
91-57-6	2-Methylnaphthalene	780	U
77-47-4	Hexachlorocyclopentadiene	780	U
88-06-2	2,4,6-Trichlorophenol	780	U
95-95-4	2,4,5-Trichlorophenol	3800	U
91-58-7	2-Chloronaphthalene	780	U
88-74-4	2-Nitroaniline	3800	U
131-11-3	Dimethyl Phthalate	780	U
208-96-8	Acenaphthylene	780	U
606-20-2	2,6-Dinitrotoluene	780	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X101

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: D974520

Sample wt/vol: 30.1 (g/mL) G Lab File ID: AUG14GK06

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 16 dec. _____ Date Extracted: 07/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 08/14/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3800	U
83-32-9	Acenaphthene	780	U
51-28-5	2,4-Dinitrophenol	3800	U
100-02-7	4-Nitrophenol	3800	U
132-64-9	Dibenzofuran	780	U
121-14-2	2,4-Dinitrotoluene	780	U
84-66-2	Diethylphthalate	780	U
7005-72-3	4-Chlorophenyl-phenylether	780	U
86-73-7	Fluorene	780	U
100-10-6	4-Nitroaniline	3800	U
534-52-1	4,6-Dinitro-2-Methylphenol	3800	UJ
86-30-6	N-Nitrosodiphenylamine (1)	780	UJ
101-55-3	4-Bromophenyl-phenylether	780	UJ
118-74-1	Hexachlorobenzene	780	UJ
87-86-5	Pentachlorophenol	3800	UJ
85-01-8	Phenanthrene	780	UJ
120-12-7	Anthracene	780	UJ
84-74-2	Di-n-Butylphthalate	780	UJ
206-44-0	Fluoranthene	780	UJ
129-00-0	Pyrene	780	U
85-68-7	Butylbenzylphthalate	780	U
91-94-1	3,3'-Dichlorobenzidine	1600	U
56-55-3	Benzo(a)Anthracene	780	U
117-81-7	bis(2-Ethylhexyl)Phthalate	780	U
218-01-9	Chrysene	780	U
117-84-0	Di-n-Octyl Phthalate	780	U
205-99-2	Benzo(b)Fluoranthene	780	U
207-08-9	Benzo(k)Fluoranthene	780	U
50-32-8	Benzo(a)Pyrene	780	U
193-39-5	Indeno(1,2,3-cd)Pyrene	780	U
53-70-3	Dibenz(a,h)Anthracene	780	U
191-24-2	Benzo(g,h,i)Perylene	780	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X101

Lab Name: ILLINOIS EPA Contract: 1790000000

b Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) _____ Lab Sample ID: D974520

Sample wt/vol: 30.1 (g/mL) ML Lab File ID: AUG14GK06T

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 16 dec. ____ Date Extracted: 07/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 08/14/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 0.0301

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.27	24000	BAJ
2.	UNKNOWN	7.63	95	BJ
3.	UNKNOWN PNA	16.85	110	BJ
4.	UNKNOWN	19.95	140	BJ

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

E.P.A. SAMPLE NO.

X101

Lab Name: I.E.P.A. - Springfield Contract: Tazwell

Lab Code:_____ Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water): Soil Lab Sample ID: D974520

Sample wt/vol: 30.070 (g/mL) g Lab File ID:

Level: (low/med) low Date Recieved: 07-25-1989

% Moisture: not dec.16.0 dec. ---- Date Extracted: 07-28-1989

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 09-02-1989

GPC Cleanup: (Y/N) Y pH: 7 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
319-84-6	alpha-BHC	19.0	U
319-85-7	beta-BHC	19.0	U
319-86-8	delta-BHC	19.0	U
58-89-9	gamma-BHC (Lindane)	19.0	U
76-44-8	Heptachlor	19.0	U
309-00-2	Aldrin	19.0	U
1024-57-3	Heptachlor epoxide	19.0	U
959-98-8	Endosulfan I	19.0	U
60-57-1	Dieldrin	38.1	U
72-55-9	4,4'-DDE	38.1	U
72-20-8	Endrin	38.1	U
33213-65-9	Endosulfan II	38.1	U
72-54-8	4,4'-DDD	38.1	U
1031-07-8	Endosulfan sulfate	38.1	U
50-29-3	4,4'-DDT	38.1	U
72-43-5	Methoxychlor	190.5	U
53494-70-5	Endrin ketone	38.1	U
5103-71-9	alpha-Chlordane	190.5	U
5106-74-2	gamma-Chlordane	190.5	U
8001-35-2	Toxaphene	381.0	U
12674-11-2	Arochlor-1016	190.5	U
11104-28-2	Aroclor-1221	190.5	U
11141-16-5	Aroclor-1232	190.5	U
53469-21-9	Aroclor-1242	190.5	U
12672-29-6	Aroclor-1248	190.5	U
11097-69-1	Aroclor-1254	381.0	U
11096-82-5	Aroclor-1260	381.0	U

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: ILL AMER WATER CO WELL #1 & 3 TAZEWELL CO #1790000000 X101

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 15

Matrix (soil/water): _____ Lab Sample ID: B910409

Level (low/med): _____ Date Received: 07/26/89

% Solids: 84.2

Concentration Units (ug/L or mg/kg dry weight): _____

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	7100			P	
7440-36-0	Antimony	0.37	U	S	F	U
7440-38-2	Arsenic	3.72		S	F	
7440-39-3	Barium	59			P	
7440-41-7	Beryllium	0.4	B		P	
7440-43-9	Cadmium	0.21	U		P	U
7440-70-2	Calcium	1400			P	
7440-47-3	Chromium	19			P	
7440-48-4	Cobalt	4.2	B		P	U
7440-50-8	Copper	7.6			P	
7439-89-6	Iron	10000			P	
7439-92-1	Lead	3.2		N,E	P	U
7439-95-4	Magnesium	1340			P	
7439-96-5	Manganese	300			P	
7439-97-6	Mercury	0.01	U		AV	
7440-02-0	Nickel	9.6			P	U
7440-09-7	Potassium	320	B		P	U
7782-49-2	Selenium	0.19	U	S	F	
7440-22-4	Silver	0.41	U		P	U
7440-23-5	Sodium	140 u	~~B~~		P	
7440-28-0	Thallium	0.15	U	S	F	
7440-62-2	Vanadium	15		E	P	
7440-66-6	Zinc	37			P	
	Cyanide	0.72	U		AS	

Color Before: Brown Clarity Before: Opaque Texture: _____

Color After: Colorless Clarity After: Clear Artifacts: _____

Comments:

FORM I - IN 7/87

Rev. IFB Amendment One

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X102

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: D974521

Sample wt/vol: 5.0 (g/mL) G Lab File ID: A0803BK04

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 10 Date Analyzed: 08/03/89

Column: (pack/cap) WIDE Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	UJ
74-83-9	Bromomethane	11	UJ
75-01-4	Vinyl Chloride	11	UJ
75-00-3	Chloroethane	11	UJ
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	19	J
75-15-0	Carbon Disulfide	6	UJ
75-35-4	1,1-Dichloroethene	6	UJ
75-35-3	1,1-Dichloroethane	6	UJ
540-59-0	1,2-Dichloroethene (total)	6	UJ
67-66-3	Chloroform	98	J
107-06-2	1,2-Dichloroethane	6	UJ
78-93-3	2-Butanone	11	~~UJ~~ R
71-55-6	1,1,1-Trichloroethane	6	UJ
56-23-5	Carbon Tetrachloride	6	UJ
108-05-4	Vinyl Acetate	11	UJ
75-27-4	Bromodichloromethane	6	UJ
78-87-5	1,2-Dichloropropane	6	UJ
10061-01-5	cis-1,3-Dichloropropene	6	UJ
79-01-6	Trichloroethene	3	J
124-48-1	Dibromochloromethane	6	UJ
79-00-5	1,1,2-Trichloroethane	6	UJ
71-43-2	Benzene	6	UJ
10061-02-6	Trans-1,3-Dichloropropene	6	UJ
75-25-2	Bromoform	6	UJ
108-10-1	4-Methyl-2-Pentanone	11	UJ
591-78-6	2-Hexanone	11	UJ
127-18-4	Tetrachloroethene	2	J
79-34-5	1,1,2,2-Tetrachloroethane	6 ~~1~~	UJ
108-88-3	Toluene	6	UJ
108-90-7	Chlorobenzene	6	UJ
100-41-4	Ethylbenzene	6	UJ
100-42-5	Styrene	6	UJ
----------	Total Xylenes	6	UJ

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X102

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: D974521

Sample wt/vol: 5.0 (g/mL) G Lab File ID: A0803BK04

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 10 Date Analyzed: 08/03/89

Column (pack/cap) WIDE Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X10I

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: D974521

Sample wt/vol: 30.1 (g/mL) G Lab File ID: AUG14GK07

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 10 dec. ____ Date Extracted: 07/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 08/14/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	730	U
111-44-4	bis(2-Chloroethyl)Ether	730	U
95-57-8	2-Chlorophenol	730	U
541-73-1	1,3-Dichlorobenzene	730	U
106-46-7	1,4-Dichlorobenzene	730	U
100-51-6	Benzyl Alcohol	730	U
95-50-1	1,2-Dichlorobenzene	730	U
95-48-7	2-Methylphenol	730	U
39638-32-9	bis(2-Chloroisopropyl)Ether	730	U
106-44-5	4-Methylphenol	730	U
621-64-7	N-Nitroso-Di-n-Propylamine	730	U
67-72-1	Hexachloroethane	730	U
98-95-3	Nitrobenzene	730	U
78-59-1	Isophorone	730	U
88-75-5	2-Nitrophenol	730	U
105-67-9	2,4-Dimethylphenol	730	U
65-85-0	Benzoic Acid	3500	U
111-91-1	bis(2-Chloroethoxy)Methane	730	U
120-83-2	2,4-Dichlorophenol	730	U
120-82-1	1,2,4-Trichlorobenzene	730	U
91-20-3	Naphthalene	730	U
106-47-8	4-Chloroaniline	730	U
87-68-3	Hexachlorobutadiene	730	U
59-50-7	4-Chloro-3-Methylphenol	730	U
91-57-6	2-Methylnaphthalene	730	U
77-47-4	Hexachlorocyclopentadiene	730	U
88-06-2	2,4,6-Trichlorophenol	730	U
95-95-4	2,4,5-Trichlorophenol	3500	U
91-58-7	2-Chloronaphthalene	730	U
88-74-4	2-Nitroaniline	3500	U
131-11-3	Dimethyl Phthalate	730	U
208-96-8	Acenaphthylene	730	U
606-20-2	2,6-Dinitrotoluene	730	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X102

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: D974521

Sample wt/vol: 30.1 (g/mL) G Lab File ID: AUG14GK07

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 10 dec. ____ Date Extracted: 07/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 08/14/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3500	U
83-32-9	Acenaphthene	730	U
51-28-5	2,4-Dinitrophenol	3500	U
100-02-7	4-Nitrophenol	3500	U
132-64-9	Dibenzofuran	730	U
121-14-2	2,4-Dinitrotoluene	730	U
84-66-2	Diethylphthalate	730	U
7005-72-3	4-Chlorophenyl-phenylether	730	U
86-73-7	Fluorene	730	U
100-10-6	4-Nitroaniline	3500	U
534-52-1	4,6-Dinitro-2-Methylphenol	3500	UJ
86-30-6	N-Nitrosodiphenylamine (1)	730	UJ
101-55-3	4-Bromophenyl-phenylether	730	UJ
118-74-1	Hexachlorobenzene	730	UJ
87-86-5	Pentachlorophenol	3500	UJ
85-01-8	Phenanthrene	730	UJ
120-12-7	Anthracene	730	UJ
84-74-2	Di-n-Butylphthalate	730	UJ
206-44-0	Fluoranthene	730	UJ
129-00-0	Pyrene	730	U
85-68-7	Butylbenzylphthalate	730	U
91-94-1	3,3'-Dichlorobenzidine	1500	U
56-55-3	Benzo(a)Anthracene	730	U
117-81-7	bis(2-Ethylhexyl)Phthalate	730	U
218-01-9	Chrysene	730	U
117-84-0	Di-n-Octyl Phthalate	730	U
205-99-2	Benzo(b)Fluoranthene	730	U
207-08-9	Benzo(k)Fluoranthene	730	U
50-32-8	Benzo(a)Pyrene	730	U
193-39-5	Indeno(1,2,3-cd)Pyrene	730	U
53-70-3	Dibenz(a,h)Anthracene	730	U
191-24-2	Benzo(g,h,i)Perylene	730	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X102

Lab Name: ILLINOIS EPA Contract: 1790000000

b Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) _____ Lab Sample ID: D974521

Sample wt/vol: 30.1 (g/mL) ML Lab File ID: AUG14GK07T

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 10 dec. _____ Date Extracted: 07/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 08/14/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 0.0301

Number TICs found: 6

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.30	18000	BAJ
2.	UNKNOWN	7.65	47	BJ
3.	UNKNOWN PNA	16.72	55	BJ
4.	UNKNOWN PNA	16.89	110	BJ
5.	UNKNOWN	19.99	160	BJ
6.	UNKNOWN ALIP. HYDROCARBON	21.30	54	J

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

E.P.A. SAMPLE NO.

Lab Name: I.E.P.A. - Springfield Contract: Tazwell X102

Lab Code:_____ Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water): Soil Lab Sample ID: D974521

Sample wt/vol: 30.030 (g/mL) g Lab File ID:

Level: (low/med) low Date Recieved: 07-25-1989

% Moisture: not dec.10.7 dec. ---- Date Extracted: 07-28-1989

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 09-02-1989

GPC Cleanup: (Y/N) Y pH: 7 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
319-84-6	alpha-BHC	17.9	U
319-85-7	beta-BHC	17.9	U
319-86-8	delta-BHC	17.9	U
58-89-9	gamma-BHC (Lindane)	17.9	U
76-44-8	Heptachlor	17.9	U
309-00-2	Aldrin	17.9	U
1024-57-3	Heptachlor epoxide	17.9	U
959-98-8	Endosulfan I	17.9	U
60-57-1	Dieldrin	35.8	U
72-55-9	4,4'-DDE	35.8	U
72-20-8	Endrin	35.8	U
33213-65-9	Endosulfan II	35.8	U
72-54-8	4,4'-DDD	35.8	U
1031-07-8	Endosulfan sulfate	35.8	U
50-29-3	4,4'-DDT	35.8	U
72-43-5	Methoxychlor	179.2	U
53494-70-5	Endrin ketone	35.8	U
5103-71-9	alpha-Chlordane	179.2	U
5106-74-2	gamma-Chlordane	179.2	U
8001-35-2	Toxaphene	358.3	U
12674-11-2	Arochlor-1016	179.2	U
11104-28-2	Aroclor-1221	179.2	U
11141-16-5	Aroclor-1232	179.2	U
53469-21-9	Aroclor-1242	179.2	U
12672-29-6	Aroclor-1248	179.2	U
11097-69-1	Aroclor-1254	358.3	U
11096-82-5	Aroclor-1260	358.3	U

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: ILL AMER WATER WELL #1 & 3 TAZEWELL CO #1790000000 CO X102

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 15

Matrix (soil/water): _____ Lab Sample ID: B910410

Level (low/med): _____ Date Received: 07/26/89

% Solids: 87.2

Concentration Units (ug/L or mg/kg dry weight): _____

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	6700			P	
7440-36-0	Antimony	0.33	U	W,S	F	J
7440-38-2	Arsenic	2.6		S	F	
7440-39-3	Barium	93			P	
7440-41-7	Beryllium	0.7	B		P	
7440-43-9	Cadmium	0.4	B		P	J
7440-70-2	Calcium	2000			P	
7440-47-3	Chromium	16			P	
7440-48-4	Cobalt	3.6	B		P	J
7440-50-8	Copper	8.6			P	
7439-89-6	Iron	10800			P	
7439-92-1	Lead	12		N,E	P	J
7439-95-4	Magnesium	940			P	
7439-96-5	Manganese	290			P	
7439-97-6	Mercury	0.03			AV	
7440-02-0	Nickel	4.4	B		P	J
7440-09-7	Potassium	350	B		P	J
7782-49-2	Selenium	0.19	U	S	F	
7440-22-4	Silver	0.36	U		P	J
7440-23-5	Sodium	710	B		P	
7440-28-0	Thallium	0.15	U	S	F	
7440-62-2	Vanadium	15		E	P	
7440-66-6	Zinc	120			P	
	Cyanide	0.49	U		AS	

Color Before: Black Clarity Before: Opaque Texture: _____

Color After: Green Clarity After: Clear Artifacts: _____

Comments:

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X103

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: D974522

Sample wt/vol: 1.0 (g/mL) G Lab File ID: A0803BK08

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 17 Date Analyzed: 08/03/89

Column: (pack/cap) WIDE Dilution Factor: ~~1.00~~ 5.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	60	U
74-83-9	Bromomethane	60	U
75-01-4	Vinyl Chloride	60	U
75-00-3	Chloroethane	60	U
75-09-2	Methylene Chloride	11	J
67-64-1	Acetone	61	J
75-15-0	Carbon Disulfide	30	U
75-35-4	1,1-Dichloroethene	30	U
75-35-3	1,1-Dichloroethane	30	U
540-59-0	1,2-Dichloroethene (total)	30	U
67-66-3	Chloroform	30	U
107-06-2	1,2-Dichloroethane	30	U
78-93-3	2-Butanone	60	~~U~~ R
71-55-6	1,1,1-Trichloroethane	30	U
56-23-5	Carbon Tetrachloride	30	U
108-05-4	Vinyl Acetate	60	U
75-27-4	Bromodichloromethane	30	U
78-87-5	1,2-Dichloropropane	30	U
10061-01-5	cis-1,3-Dichloropropene	30	U
79-01-6	Trichloroethene	30	U
124-48-1	Dibromochloromethane	30	U
79-00-5	1,1,2-Trichloroethane	30	U
71-43-2	Benzene	30	U
10061-02-6	Trans-1,3-Dichloropropene	30	U
75-25-2	Bromoform	30	U
108-10-1	4-Methyl-2-Pentanone	60	U
591-78-6	2-Hexanone	60	U
127-18-4	Tetrachloroethene	390	
79-34-5	1,1,2,2-Tetrachloroethane	30 ~~60~~	U
108-88-3	Toluene	30	U
108-90-7	Chlorobenzene	30	U
100-41-4	Ethylbenzene	30	U
100-42-5	Styrene	30	U
	Total Xylenes	30	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X103

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: D974522

Sample wt/vol: 1.0 (g/mL) G Lab File ID: A0803BK08

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 17 Date Analyzed: 08/03/89

Column (pack/cap) WIDE Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X103

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: D974522

Sample wt/vol: 30.0 (g/mL) G Lab File ID: AUG14GK08

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 17 dec. ____ Date Extracted: 07/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 08/14/89

GPC Cleanup: (Y/N) Y pH: 2.0 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	800	U
111-44-4	bis(2-Chloroethyl)Ether	800	U
95-57-8	2-Chlorophenol	800	U
541-73-1	1,3-Dichlorobenzene	800	U
106-46-7	1,4-Dichlorobenzene	800	U
100-51-6	Benzyl Alcohol	800	U
95-50-1	1,2-Dichlorobenzene	800	U
95-48-7	2-Methylphenol	800	U
39638-32-9	bis(2-Chloroisopropyl)Ether	800	U
106-44-5	4-Methylphenol	800	U
621-64-7	N-Nitroso-Di-n-Propylamine	800	U
67-72-1	Hexachloroethane	800	U
98-95-3	Nitrobenzene	800	U
78-59-1	Isophorone	800	U
88-75-5	2-Nitrophenol	800	U
105-67-9	2,4-Dimethylphenol	800	U
65-85-0	Benzoic Acid	3900 ~~800~~	~~U~~
111-91-1	bis(2-Chloroethoxy)Methane	800	U
120-83-2	2,4-Dichlorophenol	800	U
120-82-1	1,2,4-Trichlorobenzene	800	U
91-20-3	Naphthalene	800	U
106-47-8	4-Chloroaniline	800	U
87-68-3	Hexachlorobutadiene	800	U
59-50-7	4-Chloro-3-Methylphenol	800	U
91-57-6	2-Methylnaphthalene	800	U
77-47-4	Hexachlorocyclopentadiene	800	U
88-06-2	2,4,6-Trichlorophenol	800	U
95-95-4	2,4,5-Trichlorophenol	3900	U
91-58-7	2-Chloronaphthalene	800	U
88-74-4	2-Nitroaniline	3900	U
131-11-3	Dimethyl Phthalate	800	U
208-96-8	Acenaphthylene	800	U
606-20-2	2,6-Dinitrotoluene	800	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X103

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: D974522

Sample wt/vol: 30.0 (g/mL) G Lab File ID: AUG14GK08

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 17 dec. ____ Date Extracted: 07/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 08/14/89

GPC Cleanup: (Y/N) Y pH: 2.0 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3900	U
83-32-9	Acenaphthene	800	U
51-28-5	2,4-Dinitrophenol	3900	U
100-02-7	4-Nitrophenol	3900	U
132-64-9	Dibenzofuran	800	U
121-14-2	2,4-Dinitrotoluene	800	U
84-66-2	Diethylphthalate	800	U
7005-72-3	4-Chlorophenyl-phenylether	800	U
86-73-7	Fluorene	800	U
100-10-6	4-Nitroaniline	3900	U
534-52-1	4,6-Dinitro-2-Methylphenol	3900	UJ
86-30-6	N-Nitrosodiphenylamine (1)	800	UJ
101-55-3	4-Bromophenyl-phenylether	800	UJ
118-74-1	Hexachlorobenzene	800	UJ
87-86-5	Pentachlorophenol	3900	UJ
85-01-8	Phenanthrene	800	UJ
120-12-7	Anthracene	800	UJ
84-74-2	Di-n-Butylphthalate	800	UJ
206-44-0	Fluoranthene	800	UJ
129-00-0	Pyrene	800	U
85-68-7	Butylbenzylphthalate	800	U
91-94-1	3,3'-Dichlorobenzidine	1600	U
56-55-3	Benzo(a)Anthracene	800	U
117-81-7	bis(2-Ethylhexyl)Phthalate	160 ~~800~~ ~~160~~	~~U~~ J
218-01-9	Chrysene	800	U
117-84-0	Di-n-Octyl Phthalate	800	U
205-99-2	Benzo(b)Fluoranthene	800	U
207-08-9	Benzo(k)Fluoranthene	800	U
50-32-8	Benzo(a)Pyrene	800	U
193-39-5	Indeno(1,2,3-cd)Pyrene	800	U
53-70-3	Dibenz(a,h)Anthracene	800	U
191-24-2	Benzo(g,h,i)Perylene	800	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X103

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) _____ Lab Sample ID: D974522

Sample wt/vol: 30.0 (g/mL) ML Lab File ID: AUG14GK08T

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 17 dec. _____ Date Extracted: 07/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 08/14/89

GPC Cleanup: (Y/N) Y pH: 2.0 Dilution Factor: 0.0300

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.13	1600	J
2.	UNKNOWN	6.15	610	J
3.	UNKNOWN	7.30	19000	BJ
4.	UNKNOWN	13.20	990	J
5.	UNKNOWN	13.50	780	J
6.	UNKNOWN PNA	16.89	140	BJ
7.	UNKNOWN	19.35	210	J
8.	UNKNOWN	19.99	160	BJ

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

E.P.A. SAMPLE NO.

X103

Lab Name: I.E.P.A. - Springfield Contract: Tazwell

Lab Code:_____ Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water): Soil Lab Sample ID: D974522

Sample wt/vol: 30.030 (g/mL) g Lab File ID:

Level: (low/med) low Date Recieved: 07-25-1989

% Moisture: not dec.17.4 dec. ---- Date Extracted: 07-28-1989

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 09-02-1989

GPC Cleanup: (Y/N) Y pH: 2 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
319-84-6	alpha-BHC	19.4	U
319-85-7	beta-BHC	19.4	U
319-86-8	delta-BHC	19.4	U
58-89-9	gamma-BHC (Lindane)	19.4	U
76-44-8	Heptachlor	19.4	U
309-00-2	Aldrin	19.4	U
1024-57-3	Heptachlor epoxide	19.4	U
959-98-8	Endosulfan I	19.4	U
60-57-1	Dieldrin	38.7	U
72-55-9	4,4'-DDE	38.7	U
72-20-8	Endrin	38.7	U
33213-65-9	Endosulfan II	38.7	U
72-54-8	4,4'-DDD	38.7	U
1031-07-8	Endosulfan sulfate	38.7	U
50-29-3	4,4'-DDT	38.7	U
72-43-5	Methoxychlor	193.7	U
53494-70-5	Endrin ketone	38.7	U
5103-71-9	alpha-Chlordane	2.5	J
5106-74-2	gamma-Chlordane	193.7	U
8001-35-2	Toxaphene	387.4	U
12674-11-2	Arochlor-1016	193.7	U
11104-28-2	Aroclor-1221	193.7	U
11141-16-5	Aroclor-1232	193.7	U
53469-21-9	Aroclor-1242	193.7	U
12672-29-6	Aroclor-1248	193.7	U
11097-69-1	Aroclor-1254	387.4	U
11096-82-5	Aroclor-1260	387.4	U

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: ILL AMER WATER CO WELL #1 & 3 TAZEWELL CO #1790000000 X103

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 15

Matrix (soil/water): _____ Lab Sample ID: B910411

Level (low/med): _____ Date Received: 07/26/89

% Solids: 82.0

Concentration Units (ug/L or mg/kg dry weight): _____

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	1200			P	
7440-36-0	Antimony	0.36	U	S	F	J
7440-38-2	Arsenic	1.11	B	N,S	F	
7440-39-3	Barium	28	~~B~~		P	
7440-41-7	Beryllium	0.10	U		P	
7440-43-9	Cadmium	0.21	U		P	J
7440-70-2	Calcium	3000			P	
7440-47-3	Chromium	2.5			P	
7440-48-4	Cobalt	0.29	U		P	J
7440-50-8	Copper	3.5	B		P	
7439-89-6	Iron	1200			P	
7439-92-1	Lead	2.2	U	N,E	P	J
7439-95-4	Magnesium	310	B		P	
7439-96-5	Manganese	8.7			P	
7439-97-6	Mercury	0.01	U		AV	
7440-02-0	Nickel	0.74	U		P	J
7440-09-7	Potassium	390	B		P	J
7782-49-2	Selenium	0.22	U	S	F	
7440-22-4	Silver	0.40	U		P	J
7440-23-5	Sodium	1100			P	
7440-28-0	Thallium	0.17	U	S	F	
7440-62-2	Vanadium	1.7 U	~~B~~	E	P	
7440-66-6	Zinc	6.5			P	
	Cyanide	0.61	U		AS	

Color Before: Gray Clarity Before: Opaque Texture: _____

Color After: Colorless Clarity After: Cloudy Artifacts: _____

Comments:

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

X104

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: D974523

Sample wt/vol: 5.0 (g/mL) G Lab File ID: A0803BK06

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 9 Date Analyzed: 08/03/89

Column: (pack/cap) WIDE Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	~~U~~ R
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	3	J
79-34-5	1,1,2,2-Tetrachloroethane	5 ~~1~~	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
----------	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X104

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: D974523

Sample wt/vol: 5.0 (g/mL) G Lab File ID: A0803BK06

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 9 Date Analyzed: 08/03/89

Column (pack/cap) WIDE Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1104

Lab Name: ILLINOIS EPA Contract: 1P90/0000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: 097451

Matrix: (soil/water) SOIL Lab Sample ID: 0974523

Sample wt/vol: 30.1 (g/mL) G Lab File ID: AUG14GK09

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 9 dec. ____ Date Extracted: 07/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 08/14/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	720	U
111-44-4	bis(2-Chloroethyl)Ether	720	U
95-57-8	2-Chlorophenol	720	U
541-73-1	1,3-Dichlorobenzene	720	U
106-46-7	1,4-Dichlorobenzene	720	U
100-51-6	Benzyl Alcohol	720	U
95-50-1	1,2-Dichlorobenzene	720	U
95-48-7	2-Methylphenol	720	U
39638-32-9	bis(2-Chloroisopropyl)Ether	720	U
106-44-5	4-Methylphenol	720	U
621-64-7	N-Nitroso-Di-n-Propylamine	720	U
67-72-1	Hexachloroethane	720	U
98-95-3	Nitrobenzene	720	U
78-59-1	Isophorone	720	U
88-75-5	2-Nitrophenol	720	U
105-67-9	2,4-Dimethylphenol	720	U
65-85-0	Benzoic Acid	3500	U
111-91-1	bis(2-Chloroethoxy)Methane	720	U
120-83-2	2,4-Dichlorophenol	720	U
120-82-1	1,2,4-Trichlorobenzene	720	U
91-20-3	Naphthalene	720	U
106-47-8	4-Chloroaniline	720	U
87-68-3	Hexachlorobutadiene	720	U
59-50-7	4-Chloro-3-Methylphenol	720	U
91-57-6	2-Methylnaphthalene	720	U
77-47-4	Hexachlorocyclopentadiene	720	U
88-06-2	2,4,6-Trichlorophenol	720	U
95-95-4	2,4,5-Trichlorophenol	3500	U
91-58-7	2-Chloronaphthalene	720	U
88-74-4	2-Nitroaniline	3500	U
131-11-3	Dimethyl Phthalate	720	U
208-96-8	Acenaphthylene	720	U
606-20-2	2,6-Dinitrotoluene	720	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

x104

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: D974523

Sample wt/vol: 30.1 (g/mL) G Lab File ID: AUG14GK09

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 9 dec. ____ Date Extracted: 07/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 08/14/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3500	U
83-32-9	Acenaphthene	720	U
51-28-5	2,4-Dinitrophenol	3500	U
100-02-7	4-Nitrophenol	3500	U
132-64-9	Dibenzofuran	720	U
121-14-2	2,4-Dinitrotoluene	720	U
84-66-2	Diethylphthalate	720	U
7005-72-3	4-Chlorophenyl-phenylether	720	U
86-73-7	Fluorene	720	U
100-10-6	4-Nitroaniline	3500	U
534-52-1	4,6-Dinitro-2-Methylphenol	3500	U
86-30-6	N-Nitrosodiphenylamine (1)	720	U
101-55-3	4-Bromophenyl-phenylether	720	U
118-74-1	Hexachlorobenzene	720	U
87-86-5	Pentachlorophenol	3500	U
85-01-8	Phenanthrene	210	J
120-12-7	Anthracene	37	J
84-74-2	Di-n-Butylphthalate	720	U
206-44-0	Fluoranthene	720	U
129-00-0	Pyrene	720	U
85-68-7	Butylbenzylphthalate	720	U
91-94-1	3,3'-Dichlorobenzidine	1400	U
56-55-3	Benzo(a)Anthracene	230	J
117-81-7	bis(2-Ethylhexyl)Phthalate	720	U
218-01-9	Chrysene	190	J
117-84-0	Di-n-Octyl Phthalate	720	U
205-99-2	Benzo(b)Fluoranthene	720	U
207-08-9	Benzo(k)Fluoranthene	720	U
50-32-8	Benzo(a)Pyrene	720	U
193-39-5	Indeno(1,2,3-cd)Pyrene	720	U
53-70-3	Dibenz(a,h)Anthracene	720	U
191-24-2	Benzo(g,h,i)Perylene	720	U

1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

X104

Lab Name: ILLINOIS EPA Contract: 1790000000

b Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) _____ Lab Sample ID: D974523

Sample wt/vol: 30.1 (g/mL) ML Lab File ID: AUG14GK09T

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. 9 dec. ____ Date Extracted: 07/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 08/14/89

GPC Cleanup: (Y/N) Y pH: 7.0 Dilution Factor: 0.0301

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.32	21000	BAJ
2.	UNKNOWN	16.74	69	BJ
3.	UNKNOWN PNA	16.90	140	BJ
4.	UNKNOWN	20.00	170	BJ

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

E.P.A. SAMPLE NO.

Lab Name: I.E.P.A. - Springfield Contract: Tazwell X104

Lab Code:_____ Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water): Soil Lab Sample ID: D974523

Sample wt/vol: 30.060 (g/mL) g Lab File ID:

Level: (low/med) low Date Recieved: 07-25-1989

% Moisture: not dec. 9.8 dec. ---- Date Extracted: 07-28-1989

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 09-02-1989

GPC Cleanup: (Y/N) Y pH: 7 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
319-84-6	alpha-BHC	17.7	U
319-85-7	beta-BHC	17.7	U
319-86-8	delta-BHC	17.7	U
58-89-9	gamma-BHC (Lindane)	17.7	U
76-44-8	Heptachlor	17.7	U
309-00-2	Aldrin	17.7	U
1024-57-3	Heptachlor epoxide	17.7	U
959-98-8	Endosulfan I	17.7	U
60-57-1	Dieldrin	4.4	J B
72-55-9	4,4'-DDE	3.0	J
72-20-8	Endrin	35.5	U
33213-65-9	Endosulfan II	35.5	U
72-54-8	4,4'-DDD	35.5	U
1031-07-8	Endosulfan sulfate	35.5	U
50-29-3	4,4'-DDT	35.5	U
72-43-5	Methoxychlor	177.4	U
53494-70-5	Endrin ketone	35.5	U
5103-71-9	alpha-Chlordane	177.4	U
5106-74-2	gamma-Chlordane	177.4	U
8001-35-2	Toxaphene	354.8	U
12674-11-2	Arochlor-1016	177.4	U
11104-28-2	Aroclor-1221	177.4	U
11141-16-5	Aroclor-1232	177.4	U
53469-21-9	Aroclor-1242	177.4	U
12672-29-6	Aroclor-1248	177.4	U
11097-69-1	Aroclor-1254	354.8	U
11096-82-5	Aroclor-1260	379.6	

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

X104

Lab Name: ILLINOIS EPA CHAMPAIGN LAB Contract: ILL AMER WATER CO WELL #1 & 3 TAZEWELL CO #1790000000

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 15

Matrix (soil/water): _____ Lab Sample ID: B910412

Level (low/med): _____ Date Received: 07/26/89

% Solids: 90.0

Concentration Units (ug/L or mg/kg dry weight): _____

CAS No.	Analyte	Concentration	C	Q	M	
7429-90-5	Aluminum	6500			P	
7440-36-0	Antimony	0.89	B	S	F	U
7440-38-2	Arsenic	4.44		S	F	
7440-39-3	Barium	62			P	
7440-41-7	Beryllium	0.5	B		P	
7440-43-9	Cadmium	0.9			P	U
7440-70-2	Calcium	5200			P	
7440-47-3	Chromium	10			P	
7440-48-4	Cobalt	4.9	B		P	U
7440-50-8	Copper	12			P	
7439-89-6	Iron	12300			P	
7439-92-1	Lead	65		N,E	P	
7439-95-4	Magnesium	3200			P	
7439-96-5	Manganese	420			P	
7439-97-6	Mercury	0.1			AV	
7440-02-0	Nickel	11			P	U
7440-09-7	Potassium	340	B		P	U
7782-49-2	Selenium	0.18	U	S	F	
7440-22-4	Silver	0.34	U		P	U
7440-23-5	Sodium	45 U	~~B~~		P	
7440-28-0	Thallium	0.13	U	S	F	
7440-62-2	Vanadium	17		E	P	
7440-66-6	Zinc	98			P	
	Cyanide	0.64	U		AS	

Color Before: Brown Clarity Before: Opaque Texture: _____

Color After: Green Clarity After: Clear Artifacts: _____

Comments:

FORM I - IN 7/87

Rev. IFB Amendment One

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKTB

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974519

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0731BK03

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ Date Analyzed: 07/31/89

Column: (pack/cap) WIDE Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	~~U~~ R
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	~~10~~ 5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKTB

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974519

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0731BK03

Level: (low/med) LOW Date Received: 07/25/89

% Moisture: not dec. ____ Date Analyzed: 07/31/89

Column (pack/cap) WIDE Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK31

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: 073189BLK

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0731BK02

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 07/31/89

Column: (pack/cap) WIDE Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	~~U~~ R
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	~~10~~ 5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK31

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: 073189BLK

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0731BK02

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 07/31/89

Column (pack/cap) WIDE Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLFW

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974567

Sample wt/vol: 1000 (g/mL) ML Lab File ID: AUG21GK04

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ dec. _____ Date Extracted: 07/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/21/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
100-51-6	Benzyl Alcohol	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
65-85-0	Benzoic Acid	50	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	50	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	50	U
131-11-3	Dimethyl Phthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKW

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: EPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) WATER Lab Sample ID: D974567

Sample wt/vol: 1000 (g/mL) ML Lab File ID: AUG21BK04

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ dec. _____ Date Extracted: 07/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/21/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
99-09-2	3-Nitroaniline	50	U
83-32-9	Acenaphthene	10	U
51-28-5	2,4-Dinitrophenol	50	U
100-02-7	4-Nitrophenol	50	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-10-6	4-Nitroaniline	50	U
534-52-1	4,6-Dinitro-2-Methylphenol	50	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	50	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
84-74-2	Di-n-Butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
56-55-3	Benzo(a)Anthracene	10	U
117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
218-01-9	Chrysene	10	U
117-84-0	Di-n-Octyl Phthalate	10	U
205-99-2	Benzo(b)Fluoranthene	10	U
207-08-9	Benzo(k)Fluoranthene	10	U
50-32-8	Benzo(a)Pyrene	10	U
193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
53-70-3	Dibenz(a,h)Anthracene	10	U
191-24-2	Benzo(g,h,i)Perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLKW

Lab Name: ILLINOIS EPA Contract: 1/90000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) _____ Lab Sample ID: D974567

Sample wt/vol: 1000 (g/mL) ML Lab File ID: AUG21GK04T

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ dec. _____ Date Extracted: 07/26/89

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 08/21/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.27	16	AJ
2.	UNKNOWN	7.68	3.1	J
3.	UNKNOWN PNA	16.82	1.4	J
4.	UNKNOWN PNA	16.99	2.6	J

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: SPRINGFIELD IEPA Contract: Tazewell

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Matrix: (soil/water) WATER Lab Sample ID: D974634B1

Sample wt/vol: 1000 (g/mL) ml Lab File ID: _____

Level: (low/med) LOW Date Received: 7/25 89

% Moisture: not dec. ___ dec. ___ Date Extracted: 7/26/89

Extraction: (SepF/Cont/Sonc) SepF Date Analyzed: 9/1/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.05	U
319-85-7	beta-BHC	0.05	U
319-86-8	delta-BHC	0.05	U
58-89-9	gamma-BHC (Lindane)	0.05	U
76-44-8	Heptachlor	0.05	U
309-00-2	Aldrin	0.05	U
1024-57-3	Heptachlor epoxide	0.05	U
959-98-8	Endosulfan I	0.05	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.5	U
53494-70-5	Endrin ketone	0.10	U
5103-71-9	alpha-Chlordane	0.5	U
5103-74-2	gamma-Chlordane	0.5	U
8001-35-2	Toxaphene	1.0	U
12674-11-2	Aroclor-1016	0.5	U
11104-28-2	Aroclor-1221	0.5	U
11141-16-5	Aroclor-1232	0.5	U
53469-21-9	Aroclor-1242	0.5	U
12672-29-6	Aroclor-1248	0.5	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK03

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: 080389BLK

Sample wt/vol: _____ (g/mL) G Lab File ID: A0803BK01

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/03/89

Column: (pack/cap) WIDE Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	~~U~~ R
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5 ~~10~~	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK03

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: 080389BLK

Sample wt/vol: _____ (g/mL) G Lab File ID: A0803BK01

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 08/03/89

Column (pack/cap) WIDE Dilution Factor: 1

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKL3

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: D974622

Sample wt/vol: 30.0 (g/mL) G Lab File ID: AUG14GK05

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: _____

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 08/14/89

GPC Cleanup: (Y/N) Y pH: _____ Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	660	U
111-44-4	bis(2-Chloroethyl)Ether	660	U
95-57-8	2-Chlorophenol	660	U
541-73-1	1,3-Dichlorobenzene	660	U
106-46-7	1,4-Dichlorobenzene	660	U
100-51-6	Benzyl Alcohol	660	U
95-50-1	1,2-Dichlorobenzene	660	U
95-48-7	2-Methylphenol	660	U
39638-32-9	bis(2-Chloroisopropyl)Ether	660	U
106-44-5	4-Methylphenol	660	U
621-64-7	N-Nitroso-Di-n-Propylamine	660	U
67-72-1	Hexachloroethane	660	U
98-95-3	Nitrobenzene	660	U
78-59-1	Isophorone	660	U
88-75-5	2-Nitrophenol	660	U
105-67-9	2,4-Dimethylphenol	660	U
65-85-0	Benzoic Acid	3200	U
111-91-1	bis(2-Chloroethoxy)Methane	660	U
120-83-2	2,4-Dichlorophenol	660	U
120-82-1	1,2,4-Trichlorobenzene	660	U
91-20-3	Naphthalene	660	U
106-47-8	4-Chloroaniline	660	U
87-68-3	Hexachlorobutadiene	660	U
59-50-7	4-Chloro-3-Methylphenol	660	U
91-57-6	2-Methylnaphthalene	660	U
77-47-4	Hexachlorocyclopentadiene	660	U
88-06-2	2,4,6-Trichlorophenol	660	U
95-95-4	2,4,5-Trichlorophenol	3200	U
91-58-7	2-Chloronaphthalene	660	U
88-74-4	2-Nitroaniline	3200	U
131-11-3	Dimethyl Phthalate	660	U
208-96-8	Acenaphthylene	660	U
606-20-2	2,6-Dinitrotoluene	660	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKLS

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix: (soil/water) SOIL Lab Sample ID: D974622

Sample wt/vol: 30.0 (g/mL) G Lab File ID: AUG14GK05

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: _____

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 08/14/89

GPC Cleanup: (Y/N) Y pH: ____ Dilution Factor: 2.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	3200	U
83-32-9	Acenaphthene	660	U
51-28-5	2,4-Dinitrophenol	3200	U
100-02-7	4-Nitrophenol	3200	U
132-64-9	Dibenzofuran	660	U
121-14-2	2,4-Dinitrotoluene	660	U
84-66-2	Diethylphthalate	660	U
7005-72-3	4-Chlorophenyl-phenylether	660	U
86-73-7	Fluorene	660	U
100-10-6	4-Nitroaniline	3200	U
534-52-1	4,6-Dinitro-2-Methylphenol	3200	U
86-30-6	N-Nitrosodiphenylamine (1)	660	U
101-55-3	4-Bromophenyl-phenylether	660	U
118-74-1	Hexachlorobenzene	660	U
87-86-5	Pentachlorophenol	3200	U
85-01-8	Phenanthrene	14	J
120-12-7	Anthracene	660	U
84-74-2	Di-n-Butylphthalate	660	U
206-44-0	Fluoranthene	660 ~~26~~	~~J~~ U
129-00-0	Pyrene	51	J
85-68-7	Butylbenzylphthalate	660	U
91-94-1	3,3'-Dichlorobenzidine	1300	U
56-55-3	Benzo(a)Anthracene	660	U
117-81-7	bis(2-Ethylhexyl)Phthalate	660 ~~24~~	~~J~~ U
218-01-9	Chrysene	660	U
117-84-0	Di-n-Octyl Phthalate	660	U
205-99-2	Benzo(b)Fluoranthene	660	U
207-08-9	Benzo(k)Fluoranthene	660	U
50-32-8	Benzo(a)Pyrene	660	U
193-39-5	Indeno(1,2,3-cd)Pyrene	660	U
53-70-3	Dibenz(a,h)Anthracene	660	U
191-24-2	Benzo(g,h,i)Perylene	660	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK05

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: 097451

Matrix: (soil/water) _____ Lab Sample ID: D974622

Sample wt/vol: 30.0 (g/mL) ML Lab File ID: AUG14GK05T

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. _____ dec. _____ Date Extracted: _____

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 08/14/89

GPC Cleanup: (Y/N) Y pH: _____ Dilution Factor: 0.0300

Number TICs found: 8

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	7.32	24000	AJ
2.	UNKNOWN	7.67	59	J
3.	UNKNOWN	10.35	120	J
4.	UNKNOWN PNA	16.74	67	J
5.	UNKNOWN PNA	16.90	130	J
6.	UNKNOWN	20.00	210	J
7.	UNKNOWN ALIP. HYDROCARBON	21.14	200	J
8.	UNKNOWN PHTHALATE	23.15	110	J

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

E.P.A. SAMPLE NO.

D974620BL

Lab Name: I.E.P.A. - Springfield Contract: Tazwell

Lab Code:_____ Case No.:_____ SAS No.:_____ SDG No.:_____

Matrix: (soil/water): Soil Lab Sample ID: D974620BL

Sample wt/vol: 30.190 (g/mL) g Lab File ID:

Level: (low/med) low Date Recieved: 07-25-1989

% Moisture: not dec. --- dec. --- Date Extracted: 07-28-1989

Extraction: (SepF/Cont/Sonc) Sonc Date Analyzed: 09-02-1989

GPC Cleanup: (Y/N) Y pH: 7 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
319-84-6	alpha-BHC	16.0	U
319-85-7	beta-BHC	16.0	U
319-86-8	delta-BHC	16.0	U
58-89-9	gamma-BHC (Lindane)	0.7	J
76-44-8	Heptachlor	16.0	U
309-00-2	Aldrin	16.0	U
1024-57-3	Heptachlor epoxide	16.0	U
959-98-8	Endosulfan I	16.0	U
60-57-1	Dieldrin	1.4	J
72-55-9	4,4'-DDE	32.0	U
72-20-8	Endrin	32.0	U
33213-65-9	Endosulfan II	32.0	U
72-54-8	4,4'-DDD	32.0	U
1031-07-8	Endosulfan sulfate	32.0	U
50-29-3	4,4'-DDT	32.0	U
72-43-5	Methoxychlor	160.0	U
53494-70-5	Endrin ketone	32.0	U
5103-71-9	alpha-Chlordane	160.0	U
5106-74-2	gamma-Chlordane	160.0	U
8001-35-2	Toxaphene	320.0	U
12674-11-2	Arochlor-1016	160.0	U
11104-28-2	Aroclor-1221	160.0	U
11141-16-5	Aroclor-1232	160.0	U
53469-21-9	Aroclor-1242	160.0	U
12672-29-6	Aroclor-1248	160.0	U
11097-69-1	Aroclor-1254	320.0	U
11096-82-5	Aroclor-1260	320.0	U

CASE NARRATIVE IL. AMER. WATER WELLS

SAMPLE I.D : Q102
LAB SAMPLE NOS. : D971689-90

NO MATRIX/DUPLICATE MATRIX RUN WITH THIS TWO SAMPLE SET.
SEE NEW LENNOX CASE FOR THE MATRIX QC.

LAB SAMPLE NUMBER D971689 (VOC BLANK) AND D971690 (SAMPLE) WERE BOTH ASSIGNED SAMPLE I.D. Q102. THE LAB DESIGNATED THEM Q102(BLANK) AND Q102 RESPECTIVELY.

RECEIVED
JUL 17 1989
IEPA-DLPC

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

G102

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAMER SAS No.: _____ SDG No.: D97168

Matrix: (soil/water) WATER Lab Sample ID: D971690

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0331LC05

Level: (low/med) LOW Date Received: 03/21/89

% Moisture: not dec. ____ Date Analyzed: 03/31/89

Column: (pack/cap) WIDE Dilution Factor: 1.00

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	2	BJ
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	1	J
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

G102

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAMER SAS No.: _____ SDG No.: D97168

Matrix: (soil/water) WATER Lab Sample ID: D971690

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0331LC05

Level: (low/med) LOW Date Received: 03/21/89

% Moisture: not dec. ____ Date Analyzed: 03/31/89

Column (pack/cap) WIDE Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO

G102(BLANK)

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAMER SAS No.: _____ SDG No.: D97168

Matrix: (soil/water) WATER Lab Sample ID: D971689

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0331LC04

Level: (low/med) LOW Date Received: 03/21/89

% Moisture: not dec. ____ Date Analyzed: 03/31/89

Column: (pack/cap) WIDE Dilution Factor: 1.00

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	1	J
67-64-1	Acetone	3	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-35-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO

G102(BLANK)

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAMER SAS No.: _____ SDG No.: D97168

Matrix: (soil/water) WATER Lab Sample ID: D971689

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: A0331LC04

Level: (low/med) LOW Date Received: 03/21/89

% Moisture: not dec. ____ Date Analyzed: 03/31/89

Column (pack/cap) WIDE Dilution Factor: 1.00

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

	EPA SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
01	G101	92	92	89		0
02	G101MS	98	94	94		0
03	G101MSD	98	97	90		0
04	G102	94	94	90		0
05	G102DL	91	92	91		0
06	G103	91	93	89		0
07	G103DL	98	96	96		0
08	G104	92	92	83		0
09	G105	101	95	98		0
10	VBLK31	93	90	91		0
11	VBLKTB	94	93	92		0

		QC LIMITS
S1 (TOL)	= Toluene-d8	(88-110)
S2 (BFB)	= Bromofluorobenzene	(86-115)
S3 (DCE)	= 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2B
SOIL VOLATILE SURROGATE RECOVERY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
01	VBLK03	101	90	103		0
02	X101	125 *	107	94		1
03	X102	128 *	107	90		1
04	X103	104	94	107		0
05	X104	101	80	105		0
06	X104MS	106	92	114		0
07	X104MSD	107	92	110		0

	QC LIMITS
S1 (TOL) = Toluene-d8	(81-117)
S2 (BFB) = Bromofluorobenzene	(74-121)
S3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix Spike - EPA Sample No.: G101

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.0	0	55.8	112	61-145
Trichloroethene	50.0	0	52.3	105	71-120
Benzene	50.0	2.92	56.4	107	76-127
Toluene	50.0	0	53.1	106	76-125
Chlorobenzene	50.0	0	51.6	103	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.0	54.3	109	3	14	61-145
Trichloroethene	50.0	51.1	102	3	14	71-120
Benzene	50.0	57.1	108	-1	11	76-127
Toluene	50.0	53.1	106	0	13	76-125
Chlorobenzene	50.0	51.4	103	0	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix Spike - EPA Sample No.: X104 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.0	0	34.6	69	59-172
Trichloroethene	50.0	0	46.6	93	62-137
Benzene	50.0	0	50.0	100	66-142
Toluene	50.0	0	50.6	101	59-139
Chlorobenzene	50.0	0	47.5	95	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.0	36.3	73	-6	22	59-172
Trichloroethene	50.0	48.0	96	-3	24	62-137
Benzene	50.0	48.0	96	4	21	66-142
Toluene	50.0	52.4	105	-4	21	59-139
Chlorobenzene	50.0	47.7	95	0	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ILLINOIS EPA Contract: 179000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID: A0731BK02 Lab Sample ID: 073189BLK

Date Analyzed: 07/31/89 Time Analyzed: 1005

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 5100

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	G101	D974514	A0731BK05	1147
02	G101MS	D974514MS	A0731BK15	1851
03	G101MSD	D974514MSD	A0731BK16	1924
04	G102	D974515	A0731BK06	1221
05	G102DL	D974515	A0731BK12	1711
06	G103	D974516	A0731BK07	1254
07	G103	D974516	A0731BK07T	1254
08	G103DL	D974516	A0731BK13	1744
09	G104	D974517	A0731BK10	1604
10	G105	D974518	A0801BK02	1100
11	VBLKTB	D974519	A0731BK03	1038

COMMENTS:

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ILLINOIS EPA Contract: 179000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID: A0803BK01 Lab Sample ID: 080389BLK

Date Analyzed: 08/03/89 Time Analyzed: 0913

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: 5100

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	X101	D974520	A0803BK02	0947
02	X102	D974521	A0803BK04	1129
03	X103	D974522	A0803BK08	1453
04	X104	D974523	A0803BK06	1345
05	X104MS	D974523MS	A0803BK09	1527
06	X104MSD	D974523MSD	A0803BK10	1601

COMMENTS:

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID: A0731BK01 BFB Injection Date: 07/31/89

Instrument ID: 5100 BFB Injection Time: 0931

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) WIDE

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.8
75	30.0 - 60.0% of mass 95	44.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	81.1
175	5.0 - 9.0% of mass 174	5.8 (7.2)1
176	Greater than 95.0%, but less than 101.0% of mass 174	77.9 (96.1)1
177	5.0 - 9.0% of mass 176	5.1 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VBLK31	073189BLK	A0731BK02	07/31/89	1005
02	VBLKTB	D974519	A0731BK03	07/31/89	1038
03	G101	D974514	A0731BK05	07/31/89	1147
04	G102	D974515	A0731BK06	07/31/89	1221
05	G103	D974516	A0731BK07	07/31/89	1254
06	G103	D974516	A0731BK07T	07/31/89	1254
07	G104	D974517	A0731BK10	07/31/89	1604
08	G102DL	D974515	A0731BK12	07/31/89	1711
09	G103DL	D974516	A0731BK13	07/31/89	1744
10	G101MS	D974514MS	A0731BK15	07/31/89	1851
11	G101MSD	D974514MSD	A0731BK16	07/31/89	1924
12	VSTD50	073189STD	A0731BK17	07/31/89	1958

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID: A0801BK01 BFB Injection Date: 08/01/89

Instrument ID: 5100 BFB Injection Time: 1026

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) WIDE

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.2
75	30.0 - 60.0% of mass 95	45.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	76.0
175	5.0 - 9.0% of mass 174	5.2 (6.9)1
176	Greater than 95.0%, but less than 101.0% of mass 174	74.3 (97.8)1
177	5.0 - 9.0% of mass 176	4.9 (6.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	G105	D974518	A0801BK02	08/01/89	1100
02	VSTD50	080189STD	A0801BK08	08/01/89	1422

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID: A0803BK01 BFB Injection Date: 08/03/89

Instrument ID: 5100 BFB Injection Time: 0913

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) WIDE

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.9
75	30.0 - 60.0% of mass 95	42.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	83.6
175	5.0 - 9.0% of mass 174	6.1 (7.3)1
176	Greater than 95.0%, but less than 101.0% of mass 174	81.6 (97.6)1
177	5.0 - 9.0% of mass 176	5.3 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VBLK03	080389BLK	A0803BK01	08/03/89	0913
02	X101	D974520	A0803BK02	08/03/89	0947
03	X102	D974521	A0803BK04	08/03/89	1129
04	X104	D974523	A0803BK06	08/03/89	1345
05	X103	D974522	A0803BK08	08/03/89	1453
06	X104MS	D974523MS	A0803BK09	08/03/89	1527
07	X104MSD	D974523MSD	A0803BK10	08/03/89	1601
08	VSTD50	080389STD	A0803BK11	08/03/89	1707

:A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Instrument ID: 5100 Calibration Date(s): 04/17/89 04/17/89

Matrix:(soil/water) _____ Level:(low/med) _____ Column:(pack/cap) _____

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = A0417LC08 RRF50 = A0417LC07
RRF100= A0417LC10 RRF150= A0417LC13 RRF200= A0417LC14

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Chloromethane #	0.424	0.398	0.432	0.326	0.365	0.389	11.3#
Bromomethane	0.508	0.580	0.628	0.611	0.619	0.589	8.3
Vinyl Chloride *	0.784	0.856	0.858	0.798	0.740	0.807	6.2*
Chloroethane	0.368	0.347	0.344	0.424	0.382	0.373	8.7
Methylene Chloride	1.378	1.174	1.161	1.189	1.095	1.199	8.8
Acetone	0.386	0.293	0.274	0.305	0.283	0.308	14.6
Carbon Disulfide	1.563	1.320	1.587	2.090	2.005	1.713	18.9
1,1-Dichloroethene *	0.779	0.644	0.707	0.744	0.618	0.698	9.6*
1,1-Dichloroethane #	3.042	2.768	2.788	3.078	2.851	2.905	5.0#
1,2-Dichloroethene (total)	1.217	1.066	1.038	1.151	1.095	1.113	6.4
Chloroform *	3.950	3.801	4.511	4.840	5.084	4.437	12.5*
1,2-Dichloroethane	0.563	0.588	0.576	0.561	0.552	0.568	2.5
2-Butanone	0.030	0.028	0.026	0.022	0.020	0.025	16.6
1,1,1-Trichloroethane	2.126	2.156	2.651	2.889	3.042	2.573	16.3
Carbon Tetrachloride	0.300	0.276	0.317	0.323	0.290	0.301	6.4
Vinyl Acetate	0.351	0.344	0.230	0.151	0.101	0.235	47.8
Bromodichloromethane	0.436	0.452	0.508	0.565	0.585	0.509	13.0
1,2-Dichloropropane *	0.454	0.447	0.446	0.451	0.461	0.452	1.3*
cis-1,3-Dichloropropene	0.176	0.199	0.221	0.255	0.276	0.225	18.0
Trichloroethene	0.372	0.374	0.371	0.374	0.371	0.372	0.4
Dibromochloromethane	0.309	0.349	0.415	0.436	0.453	0.392	15.6
1,1,2-Trichloroethane	0.340	0.338	0.346	0.344	0.350	0.344	1.4
Benzene	1.001	0.990	1.002	0.962	0.890	0.969	4.9
Trans-1,3-Dichloropropene	0.489	0.637	0.699	0.772	0.805	0.680	18.4
Bromoform #	0.252	0.297	0.301	0.333	0.347	0.306	12.0#
4-Methyl-2-Pentanone	0.290	0.262	0.272	0.346	0.314	0.297	11.4
2-Hexanone	0.192	0.202	0.230	0.247	0.225	0.219	10.1
Tetrachloroethene	0.410	0.425	0.420	0.392	0.386	0.407	4.2
1,1,2,2-Tetrachloroethane #	0.526	0.585	0.634	0.651	0.656	0.610	9.0#
Toluene *	1.401	0.985	1.082	1.299	1.168	1.187	14.0*
Chlorobenzene #	1.020	0.981	1.009	0.989	0.948	0.989	2.8#
Ethylbenzene *	0.565	0.528	0.535	0.510	0.512	0.530	4.2*
Styrene	0.900	0.892	0.914	0.969	0.914	0.918	3.3
Total Xylenes	0.577	0.544	0.549	0.579	0.565	0.563	2.8
Toluene-d8	0.557	0.472	0.489	0.478	0.504	0.500	6.8
BFB	0.499	0.519	0.576	0.582	0.583	0.552	7.2
1,2-Dichloroethane-d4	0.230	0.236	0.250	0.258	0.263	0.247	5.7

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Instrument ID: 5100 Calibration date: 07/31/89 Time: 1958

Lab File ID: A0731BK17 Init. Calib. Date(s): 04/17/89 04/17/89

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) WIDE

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D	
Chloromethane	#	0.389	0.406	-4.4	#
Bromomethane		0.589	0.429	27.2	
Vinyl Chloride	*	0.807	0.707	12.4	*
Chloroethane		0.373	0.277	25.7	
Methylene Chloride		1.199	1.371	-14.4	
Acetone		0.308	0.289	6.2	
Carbon Disulfide		1.713	2.260	-31.9	
1,1-Dichloroethene	*	0.698	0.700	-0.3	*
1,1-Dichloroethane	#	2.905	2.869	1.2	#
1,2-Dichloroethene (total)		1.113	1.349	-21.2	
Chloroform	*	4.437	4.207	5.2	*
1,2-Dichloroethane		0.568	0.579	-1.9	
2-Butanone		0.025	0.028	-12.0	
1,1,1-Trichloroethane		2.573	2.763	-7.4	
Carbon Tetrachloride		0.301	0.354	-17.6	
Vinyl Acetate		0.235	0.333	-41.7	
Bromodichloromethane		0.509	0.501	1.6	
1,2-Dichloropropane	*	0.452	0.404	10.6	*
cis-1,3-Dichloropropene		0.225	0.185	17.8	
Trichloroethene		0.372	0.377	-1.3	
Dibromochloromethane		0.392	0.404	-3.1	
1,1,2-Trichloroethane		0.344	0.323	6.1	
Benzene		0.969	0.969	0.0	
Trans-1,3-Dichloropropene		0.680	0.925	-36.0	
Bromoform	#	0.306	0.324	-5.9	#
4-Methyl-2-Pentanone		0.297	0.250	15.8	
2-Hexanone		0.219	0.185	15.5	
Tetrachloroethene		0.407	0.364	10.6	
1,1,2,2-Tetrachloroethane	#	0.610	0.523	14.3	#
Toluene	*	1.187	1.168	1.6	*
Chlorobenzene	#	0.989	0.935	5.5	#
Ethylbenzene	*	0.530	0.481	9.2	*
Styrene		0.918	0.897	2.3	
Total Xylenes		0.563	0.595	-5.7	
Toluene-d8		0.500	0.609	-21.8	
BFB		0.552	0.448	18.8	
1,2-Dichloroethane-d4		0.247	0.264	-6.9	

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Instrument ID: 5100 Calibration date: 08/01/89 Time: 1422

Lab File ID: A0801BK08 Init. Calib. Date(s): 04/17/89 04/17/89

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) WIDE

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D	
Chloromethane	#	0.389	0.444	-14.1	#
Bromomethane		0.589	0.453	23.1	
Vinyl Chloride	*	0.807	0.619	23.3	*
Chloroethane		0.373	0.261	30.0	
Methylene Chloride		1.199	1.300	-8.4	
Acetone		0.308	0.292	5.2	
Carbon Disulfide		1.713	2.303	-34.4	
1,1-Dichloroethene	*	0.698	0.666	4.6	*
1,1-Dichloroethane	#	2.905	2.790	4.0	#
1,2-Dichloroethene (total)		1.113	1.376	-23.6	
Chloroform	*	4.437	4.102	7.6	*
1,2-Dichloroethane		0.568	0.522	8.1	
2-Butanone		0.025	0.020	20.0	
1,1,1-Trichloroethane		2.573	2.780	-8.0	
Carbon Tetrachloride		0.301	0.354	-17.6	
Vinyl Acetate		0.235	0.457	-94.5	
Bromodichloromethane		0.509	0.508	0.2	
1,2-Dichloropropane	*	0.452	0.387	14.4	*
cis-1,3-Dichloropropene		0.225	0.180	20.0	
Trichloroethene		0.372	0.402	-8.1	
Dibromochloromethane		0.392	0.393	-0.3	
1,1,2-Trichloroethane		0.344	0.292	15.1	
Benzene		0.969	0.951	1.9	
Trans-1,3-Dichloropropene		0.680	0.956	-40.6	
Bromoform	#	0.306	0.330	-7.8	#
4-Methyl-2-Pentanone		0.297	0.199	33.0	
2-Hexanone		0.219	0.150	31.5	
Tetrachloroethene		0.407	0.378	7.1	
1,1,2,2-Tetrachloroethane	#	0.610	0.478	21.6	#
Toluene	*	1.187	1.150	3.1	*
Chlorobenzene	#	0.989	0.941	4.9	#
Ethylbenzene	*	0.530	0.516	2.6	*
Styrene		0.918	0.892	2.8	
Total Xylenes		0.563	0.581	-3.2	
Toluene-d8		0.500	0.579	-15.8	
BFB		0.552	0.447	19.0	
1,2-Dichloroethane-d4		0.247	0.237	4.0	

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Instrument ID: 5100 Calibration date: 08/03/89 Time: 1707

Lab File ID: A0803BK11 Init. Calib. Date(s): 04/17/89 04/17/89

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) WIDE

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D	
Chloromethane	#	0.389	0.627	-61.2	#
Bromomethane		0.589	0.538	8.7	
Vinyl Chloride	*	0.807	0.773	4.2	*
Chloroethane		0.373	0.278	25.5	
Methylene Chloride		1.199	1.399	-16.7	
Acetone		0.308	0.387	-25.7	
Carbon Disulfide		1.713	2.342	-36.7	
1,1-Dichloroethene	*	0.698	0.659	5.6	*
1,1-Dichloroethane	#	2.905	2.939	-1.2	#
1,2-Dichloroethene (total)		1.113	1.382	-24.2	
Chloroform	*	4.437	4.277	3.6	*
1,2-Dichloroethane		0.568	0.535	5.8	
2-Butanone		0.025	0.020	20.0	
1,1,1-Trichloroethane		2.573	3.007	-16.9	
Carbon Tetrachloride		0.301	0.021	93.0	
Vinyl Acetate		0.235	0.362	-54.0	
Bromodichloromethane		0.509	0.506	0.6	
1,2-Dichloropropane	*	0.452	0.401	11.3	*
cis-1,3-Dichloropropene		0.225	0.189	16.0	
Trichloroethene		0.372	0.398	-7.0	
Dibromochloromethane		0.392	0.395	-0.8	
1,1,2-Trichloroethane		0.344	0.316	8.1	
Benzene		0.969	0.964	0.5	
Trans-1,3-Dichloropropene		0.680	0.973	-43.1	
Bromoform	#	0.306	0.325	-6.2	#
4-Methyl-2-Pentanone		0.297	0.209	29.6	
2-Hexanone		0.219	0.185	15.5	
Tetrachloroethene		0.407	0.398	2.2	
1,1,2,2-Tetrachloroethane	#	0.610	0.471	22.8	#
Toluene	*	1.187	1.183	0.3	*
Chlorobenzene	#	0.989	0.947	4.2	#
Ethylbenzene	*	0.530	0.539	-1.7	*
Styrene		0.918	0.899	2.1	
Total Xylenes		0.563	0.588	-4.4	
Toluene-d8		0.500	0.595	-19.0	
BFB		0.552	0.459	16.9	
1,2-Dichloroethane-d4		0.247	0.240	2.8	

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID (Standard): A0731BK17 Date Analyzed: 07/31/89

Instrument ID: 5100 Time Analyzed: 1958

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) WIDE

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	8290	3.18	49700	4.78	71600	15.09
	UPPER LIMIT	16580	[illegible]	99400	[illegible]	143200	15.59
	LOWER LIMIT	4145	[illegible]	24850	[illegible]	35800	[illegible]
	EPA SAMPLE NO.						
01	G101	10900	3.17	58100	4.72	89800	15.05
02	G101MS	8740	3.20	52900	4.82	75200	15.12
03	G101MSD	8720	3.18	53300	4.78	72900	15.14
04	G102	10800	3.17	57600	4.73	89000	15.04
05	G102DL	10300	3.23	55900	4.83	83100	15.17
06	G103	10600	3.23	56600	4.83	87700	15.14
07	G103DL	9500	3.23	50200	4.83	75000	15.12
08	G104	10900	3.50	61500	5.40	90200	15.57
09	VBLK31	10100	3.18	54400	4.73	83900	15.05
10	VBLKTB	10200	3.17	55600	4.72	82800	15.04

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII VOA 1/87 Rev.

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID (Standard): A0801BK08 Date Analyzed: 08/01/89

Instrument ID: 5100 Time Analyzed: 1422

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) WIDE

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	9270	3.25	58100	4.93	89100	15.27
	UPPER LIMIT	18540	[illegible]	116200	[illegible]	178200	[illegible]
	LOWER LIMIT	4635	[illegible]	29050		44550	[illegible]
	EPA SAMPLE NO.						
01	G105	10600	3.17	58400	4.72	88900	15.04

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID (Standard): A0803BK11 Date Analyzed: 08/03/89

Instrument ID: 5100 Time Analyzed: 1707

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) WIDE

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	8570	3.23	56300	4.88	84700	15.24
	UPPER LIMIT	17140	[illegible]	112600	5.38	169400	15.24
	LOWER LIMIT	4285		28150	[illegible]	42350	14.74
	EPA SAMPLE NO.						
01	VBLK03	10200	3.28	53800	4.93	77600	15.27
02	X101	11900	3.18	64200	4.78	99700	15.10
03	X102	11700	3.18	65900	4.77	100000	15.10
04	X103	9190	3.17	51900	4.72	80700	15.04
05	X104	8310	3.35	45700	5.10	63500	15.44
06	X104MS	6660	3.17	42700	4.72	64800	15.07
07	X104MSD	6380	3.15	44600	4.72	66600	15.05

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	G101	71	74	53	42	66	109		0
02	G102	74	77	66	14	23	56		0
03	G103	91	87	72	39	64	106		0
04	G104	90	93	41	39	67	122		0
05	G105	88	83	68	36	57	82		0
06	G105MS	97	89	56	34	52	87		0
07	G105MSD	87	80	61	31	57	88		0
08	SBLKW	96	102	66	38	70	84		0

		GC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl	(33-141)
S4 (PHL)	= Phenol-d5	(10-94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	SBLKLS	78	89	101	100	95	94		0
02	X101	113	90	107	92	97	67		0
03	X101MS	77	84	69	69	66	99		0
04	X101MSD	90	67	85	81	75	90		0
05	X102	106	97	91	91	96	77		0
06	X103	117	84	97	92	80	30		0
07	X104	87	95	83	89	95	79		0

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(23-120)
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)
S3 (TPH)	= Terphenyl	(18-137)
S4 (PHL)	= Phenol-d5	(24-113)
S5 (2FP)	= 2-Fluorophenol	(25-121)
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

FORM II SV-2 1/87 Rev.

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix Spike - EPA Sample No.: G105

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	100	0	30.7	31	12- 86
2-Chlorophenol	100	0	58.2	58	27-123
1,4-Dichlorobenzene	100	0	54.2	54	36 97
N-Nitroso-di-n-prop.(1)	100	0	67.4	67	41 116
1,2,4-Trichlorobenzene	100	0	65.6	66	39 98
4-Chloro-3-methylphenol	100	0	70.8	71	23 97
Acenaphthene	100	0	68.0	68	46-118
4-Nitrophenol	100	0	37.5	38	10- 80
2,4-Dinitrotoluene	100	0	87.8	88	24- 96
Pentachlorophenol	100	0	20.5	21	9-103
Pyrene	100	4.00	55.8	52	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	100	36.4	36	-15	42	12- 86
2-Chlorophenol	100	64.0	64	-10	40	27-123
1,4-Dichlorobenzene	100	46.1	46	16	28	36 97
N-Nitroso-di-n-prop.(1)	100	74.1	74	-10	38	41 116
1,2,4-Trichlorobenzene	100	72.1	72	-9	28	39 98
4-Chloro-3-methylphenol	100	63.7	64	10	42	23 97
Acenaphthene	100	61.2	61	11	31	46-118
4-Nitrophenol	100	41.3	41	-8	50	10- 80
2,4-Dinitrotoluene	100	96.6	97 *	-10	38	24- 96
Pentachlorophenol	100	22.9	23	-9	50	9-103
Pyrene	100	61.4	57	-9	31	26-127

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 1 out of 22 outside limits

COMMENTS:

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Matrix Spike - EPA Sample No.: X101 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	100	0	54.2	54	26- 90
2-Chlorophenol	100	0	46.9	47	25-102
1,4-Dichlorobenzene	100	0	48.1	48	28 104
N-Nitroso-di-n-prop.(1)	100	0	50.8	51	41 126
1,2,4-Trichlorobenzene	100	0	54.3	54	38 107
4-Chloro-3-methylphenol	100	0	55.9	56	26 103
Acenaphthene	100	0	57.3	57	31-137
4-Nitrophenol	100	0	103	103	11-114
2,4-Dinitrotoluene	100	0	78.6	79	28- 89
Pentachlorophenol	100	0	87.6	88	17-109
Pyrene	100	0	81.6	82	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	100	59.3	59	-9	35	26- 90
2-Chlorophenol	100	52.8	53	-12	50	25-102
1,4-Dichlorobenzene	100	53.1	53	-10	27	28 104
N-Nitroso-di-n-prop.(1)	100	53.2	53	-4	38	41 126
1,2,4-Trichlorobenzene	100	60.0	60	-11	23	38 107
4-Chloro-3-methylphenol	100	76.4	76	-30	33	26 103
Acenaphthene	100	60.2	60	-5	19	31-137
4-Nitrophenol	100	92.0	92	11	50	11-114
2,4-Dinitrotoluene	100	82.0	82	-4	47	28- 89
Pentachlorophenol	100	106	106	-19	47	17-109
Pyrene	100	101	101	-21	36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits

COMMENTS:

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID: AUG21GK04 Lab Sample ID: D974567

Date Extracted: 07/26/89 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 08/21/89 Time Analyzed: 1757

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: FINN

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	G101	D974514	AUG21GK05	08/21/89
02	G101	D974514	AUG21GK05T	08/21/89
03	G102	D974515	AUG22GK10	08/22/89
04	G102	D974515	AUG22GK10T	08/22/89
05	G103	D974516	AUG21GK06	08/21/89
06	G103	D974516	AUG21GK06T	08/21/89
07	G104	D974577	AUG21GK07	08/21/89
08	G104	D974577	AUG21GK07T	08/21/89
09	G105	D974518	AUG22GK09	08/22/89
10	G105	D974518	AUG22GK09T	08/22/89
11	G105MS	D974566	AUG22GK07	08/22/89
12	G105MSD	D974566R	AUG22GK11	08/22/89

COMMENTS:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID: AUG14GK05 Lab Sample ID: D974622

Date Extracted: _____ Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 08/14/89 Time Analyzed: 1938

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: FINN

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	X101	D974520	AUG14GK06	08/14/89
02	X101	D974520	AUG14GK06T	08/14/89
03	X101MS	D974621	AUG22GK03	08/22/89
04	X101MSD	D974621R	AUG22GK04	08/22/89
05	X102	D974521	AUG14GK07	08/14/89
06	X102	D974521	AUG14GK07T	08/14/89
07	X103	D974522	AUG14GK08	08/14/89
08	X103	D974522	AUG14GK08T	08/14/89
09	X104	D974523	AUG14GK09	08/14/89
10	X104	D974523	AUG14GK09T	08/14/89

COMMENTS:

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID: AUG14GK01 DFTPP Injection Date: 08/14/89

Instrument ID: FINN DFTPP Injection Time: 1617

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	32.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	41.6
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	40.0 - 60.0% of mass 198	48.3
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.1
275	10.0 - 30.0% of mass 198	23.7
365	Greater than 1.00% of mass 198	2.40
441	Present, but less than mass 443	14.5
442	Greater than 40.0% of mass 198	99.7
443	17.0 - 23.0% of mass 442	18.1 (18.2)2

1-Value is % mass 69 2-Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD50	081489STD	AUG14GK02	08/14/89	1633
02	SBLKLS	D974622	AUG14GK05	08/14/89	1938
03	SBLKLS	D974622	AUG14GK05T	08/14/89	1938
04	X101	D974520	AUG14GK06	08/14/89	2035
05	X101	D974520	AUG14GK06T	08/14/89	2035
06	X102	D974521	AUG14GK07	08/14/89	2140
07	X102	D974521	AUG14GK07T	08/14/89	2140
08	X103	D974522	AUG14GK08	08/14/89	2237
09	X103	D974522	AUG14GK08T	08/14/89	2237
10	X104	D974523	AUG14GK09	08/14/89	2334
11	X104	D974523	AUG14GK09T	08/14/89	2334

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID: AUG21GK01 DFTPP Injection Date: 08/21/89

Instrument ID: FINN DFTPP Injection Time: 1516

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	30.5
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	34.1
70	Less than 2.0% of mass 69	0.2 (0.6)1
127	40.0 - 60.0% of mass 198	45.8
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	25.9
365	Greater than 1.00% of mass 198	3.10
441	Present, but less than mass 443	15.5
442	Greater than 40.0% of mass 198	96.8
443	17.0 - 23.0% of mass 442	19.7 (20.3)2

1-Value is % mass 69 2-Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SETD50	082189STD	AUG21GK03	08/21/89	1659
02	SBLKW	D974567	AUG21GK04	08/21/89	1757
03	SBLKW	D974567	AUG21GK04T	08/21/89	1757
04	G101	D974514	AUG21GK05	08/21/89	1855
05	G101	D974514	AUG21GK05T	08/21/89	1855
06	G103	D974516	AUG21GK06	08/21/89	1953
07	G103	D974516	AUG21GK06T	08/21/89	1953
08	G104	D974577	AUG21GK07	08/21/89	2050
09	G104	D974577	AUG21GK07T	08/21/89	2050

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID: AUG22GK01 DFTPP Injection Date: 08/22/89

Instrument ID: FINN DFTPP Injection Time: 1223

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	40.1
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	42.0
70	Less than 2.0% of mass 69	0.2 (0.5)1
127	40.0 - 60.0% of mass 198	50.4
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	25.0
365	Greater than 1.00% of mass 198	3.30
441	Present, but less than mass 443	13.8
442	Greater than 40.0% of mass 198	87.9
443	17.0 - 23.0% of mass 442	19.5 (22.2)2

1-Value is % mass 69 2-Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTDMX	082289MX	AUG22GK02	08/22/89	1353
02	SSTD50	082289STD	AUG22GK08	08/22/89	1944
03	G105	D974518	AUG22GK09	08/22/89	2042
04	G105	D974518	AUG22GK09T	08/22/89	2042
05	G102	D974515	AUG22GK10	08/22/89	2144
06	G102	D974515	AUG22GK10T	08/22/89	2144

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Instrument ID: FINN Calibration Date(s): 05/26/89 05/26/89

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = MAY26G03 RRF50 = MAY26G05
RRF80 = MAY26GK01 RRF120= MAY26GK02 RRF160= MAY26GK05

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Phenol *	1.110	1.196	0.945	0.938	1.139	1.066	11.0*
bis(2-Chloroethyl)Ether	0.908	0.931	0.717	0.705	0.832	0.819	12.8
2-Chlorophenol	0.789	0.846	0.678	0.665	0.799	0.755	10.6
1,3-Dichlorobenzene	0.874	0.891	0.682	0.655	0.789	0.778	13.9
1,4-Dichlorobenzene *	0.919	0.927	0.714	0.680	0.816	0.811	14.0*
Benzyl Alcohol	0.504	0.605	0.513	0.536	0.628	0.557	10.1
1,2-Dichlorobenzene	0.834	0.845	0.657	0.636	0.755	0.745	13.0
2-Methylphenol	0.723	0.781	0.625	0.632	0.747	0.702	10.0
bis(2-Chloroisopropyl)Ether	1.319	1.373	1.089	1.073	1.252	1.221	11.1
4-Methylphenol	0.689	0.783	0.648	0.657	0.782	0.712	9.3
N-Nitroso-Di-n-Propylamine #	0.563	0.707	0.577	0.595	0.695	0.627	10.9#
Hexachloroethane	0.400	0.407	0.312	0.310	0.360	0.358	12.9
Nitrobenzene	0.425	0.469	0.377	0.396	0.535	0.440	14.4
Isophorone	0.675	0.808	0.666	0.714	0.973	0.767	16.7
2-Nitrophenol *	0.160	0.203	0.168	0.182	0.250	0.193	18.7*
2,4-Dimethylphenol	0.292	0.362	0.302	0.329	0.452	0.347	18.6
Benzoic Acid		0.072	0.098	0.110	0.144	0.106	28.2
bis(2-Chloroethoxy)Methane	0.466	0.532	0.436	0.458	0.633	0.505	15.8
2,4-Dichlorophenol *	0.227	0.283	0.242	0.264	0.367	0.277	19.8*
1,2,4-Trichlorobenzene	0.313	0.334	0.264	0.276	0.386	0.315	15.5
Naphthalene	1.054	1.117	0.857	0.896	1.175	1.024	14.1
4-Chloroaniline	0.241	0.340	0.315	0.355	0.494	0.349	26.4
Hexachlorobutadiene *	0.203	0.207	0.162	0.171	0.244	0.197	16.5*
4-Chloro-3-Methylphenol *	0.218	0.288	0.254	0.290	0.388	0.288	22.0*
2-Methylnaphthalene	0.629	0.691	0.528	0.564	0.752	0.633	14.4
Hexachlorocyclopentadiene #	0.263	0.323	0.240	0.280	0.386	0.299	19.5#
2,4,6-Trichlorophenol *	0.336	0.401	0.361	0.406	0.556	0.412	20.6*
2,4,5-Trichlorophenol		0.383	0.392	0.439	0.607	0.457	22.5
2-Chloronaphthalene	1.271	1.346	1.049	1.111	1.450	1.245	13.3
2-Nitroaniline		0.467	0.442	0.475	0.658	0.511	19.4
Dimethyl Phthalate	1.211	1.385	1.183	1.277	1.769	1.365	15.8
Acenaphthylene	1.884	2.013	1.576	1.619	2.130	1.845	12.2
2,6-Dinitrotoluene	0.281	0.319	0.282	0.305	0.405	0.327	22.0
3-Nitroaniline		0.211	0.292	0.314	0.412	0.247	23.7
Acenaphthene *	1.253	1.304	1.025	1.097	1.377	1.211	11.1*
2,4-Dinitrophenol #		0.422	0.064	0.097	0.156	0.191	17.3#
4-Nitrophenol #		0.111	0.109	0.132	0.119	0.120	7.9#

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ILLINOIS EPA Contract: L790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Instrument ID: FINN Calibration Date(s): 05/26/89 05/26/89

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = MAY26G03 RRF50 = MAY26G05
RRF80 = MAY26GK01 RRF120= MAY26GK02 RRF160= MAY26GK05

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
Dibenzofuran	1.712	1.864	1.477	1.501	2.001	1.711	13.3
2,4-Dinitrotoluene	0.318	0.396	0.371	0.402	0.579	0.413	23.8
Diethylphthalate	1.267	1.410	1.255	1.310	1.887	1.426	18.6
4-Chlorophenyl-phenylether	0.706	0.755	0.629	0.646	0.912	0.730	15.6
Fluorene	1.329	1.414	1.190	1.179	1.641	1.351	14.1
4-Nitroaniline		0.268	0.226	0.262	0.402	0.290	26.5
4,6-Dinitro-2-Methylphenol		0.113	0.075	0.092	0.157	0.110	31.3
N-Nitrosodiphenylamine (1) *		0.343	0.361	0.319	0.368	0.348	6.3*
4-Bromophenyl-phenylether	0.196	0.257	0.205	0.219	0.292	0.234	17.1
Hexachlorobenzene	0.215	0.278	0.214	0.227	0.312	0.249	17.6
Pentachlorophenol *		0.107	0.102	0.119	0.165	0.123	23.4*
Phenanthrene	0.988	1.107	0.872	0.858	1.090	0.983	11.9
Anthracene	1.092	1.091	0.678	0.878	1.112	1.002	11.5
Di-n-Butylphthalate	1.508	1.369	1.102	1.112	1.457	1.310	14.6
Fluoranthene *	1.057	1.149	0.900	0.909	1.160	1.035	12.1*
Pyrene	1.117	1.186	0.927	0.936	1.158	1.065	11.7
Butylbenzylphthalate	0.644	0.746	0.676	0.676	0.900	0.728	14.1
3,3'-Dichlorobenzidine	0.140	0.300	0.149	0.190	0.390	0.234	46.2
Benzo(a)Anthracene	0.999	1.218	0.952	0.981	1.305	1.091	14.6
bis(2-Ethylhexyl)Phthalate	0.854	0.972	0.893	0.911	1.247	0.975	16.2
Chrysene	0.979	1.269	1.014	1.042	1.404	1.142	16.3
Di-n-Octyl Phthalate *	2.524	3.116	4.606	4.394	5.049	3.938	27.1*
Benzo(b)Fluoranthene	1.212	1.591	1.436	1.463	1.891	1.523	16.3
Benzo(k)Fluoranthene	1.127	1.663	1.491	1.643	2.163	1.617	23.1
Benzo(a)Pyrene *	1.242	1.743	1.425	1.653	2.183	1.649	21.7*
Indeno(1,2,3-cd)Pyrene	1.053	1.053	0.262	0.414	0.813	0.719	50.8
Dibenz(a,h)Anthracene	0.795	0.834	0.248	0.398	0.829	0.621	44.7
Benzo(g,h,i)Perylene	1.011	1.061	0.238	0.413	0.722	0.689	52.5
Nitrobenzene-d5	0.416	0.486	0.428	0.421	0.416	0.433	6.9
2-Fluorobiphenyl	1.435	1.567	1.330	1.365	1.341	1.408	7.0
Terphenyl-d14	1.551	1.238	1.156	1.008	1.066	1.204	17.7
Phenol-d5	1.320	1.467	1.272	1.194	1.027	1.256	12.9
2-Fluorophenyl	1.431	1.569	1.274	1.166	0.982	1.284	17.6
2,4,6-Tribromophenol	0.259	0.441	0.433	0.425	0.475	0.407	20.8

(1) Cannot be separated from Diphenylamine

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Instrument ID: FINN Calibration date: 08/14/89 Time: 1633

Lab File ID: AUG14GK02 Init. Calib. Date(s): 05/26/89 05/26/89

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Phenol *	1.066	0.827	22.4 *
bis(2-Chloroethyl)Ether	0.819	0.659	19.5
2-Chlorophenol	0.755	0.742	1.7
1,3-Dichlorobenzene	0.778	0.788	-1.3
1,4-Dichlorobenzene *	0.811	0.797	1.7 *
Benzyl Alcohol	0.557	0.293	47.4
1,2-Dichlorobenzene	0.745	0.746	-0.1
2-Methylphenol	0.702	0.640	8.8
bis(2-Chloroisopropyl)Ether	1.221	0.987	19.2
4-Methylphenol	0.712	0.667	6.3
N-Nitroso-Di-n-Propylamine #	0.627	0.515	17.9 #
Hexachloroethane	0.358	0.385	-7.5
Nitrobenzene	0.440	0.340	22.7
Isophorone	0.767	0.595	22.4
2-Nitrophenol *	0.193	0.196	-1.6 *
2,4-Dimethylphenol	0.347	0.267	23.1
Benzoic Acid	0.106	0.060	43.4
bis(2-Chloroethoxy)Methane	0.505	0.405	19.8
2,4-Dichlorophenol *	0.277	0.266	4.0 *
1,2,4-Trichlorobenzene	0.315	0.276	12.4
Naphthalene	1.024	0.910	11.1
4-Chloroaniline	0.349	0.245	29.8
Hexachlorobutadiene *	0.197	0.164	16.8 *
4-Chloro-3-Methylphenol *	0.288	0.248	13.9 *
2-Methylnaphthalene	0.633	0.611	3.5
Hexachlorocyclopentadiene #	0.299	0.104	65.2 #
2,4,6-Trichlorophenol *	0.412	0.370	10.2 *
2,4,5-Trichlorophenol	0.457	0.329	28.0
2-Chloronaphthalene	1.245	1.164	6.5
2-Nitroaniline	0.511	0.351	31.3
Dimethyl Phthalate	1.383	1.228	9.2
Acenaphthylene	1.845	1.684	8.7
2,6-Dinitrotoluene	0.318	0.285	10.4
3-Nitroaniline	0.347	0.248	28.5
Acenaphthene *	1.209	1.102	8.9 *
2,4-Dinitrophenol #	0.091	0.054	40.7 #
4-Nitrophenol #	0.120	0.106	11.7 #

7E

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Instrument ID: FINN Calibration date: 08/21/89 Time: 1659

Lab File ID: AUG21GK03 Init. Calib. Date(s): 05/26/89 05/26/89

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Phenol *	1.066	0.918	13.9 *
bis(2-Chloroethyl)Ether	0.819	0.604	26.3
2-Chlorophenol	0.755	0.634	16.0
1,3-Dichlorobenzene	0.778	0.752	3.3
1,4-Dichlorobenzene *	0.811	0.798	1.6 *
Benzyl Alcohol	0.557	0.175	68.6
1,2-Dichlorobenzene	0.745	0.733	1.6
2-Methylphenol	0.702	0.556	20.8
bis(2-Chloroisopropyl)Ether	1.221	0.932	23.7
4-Methylphenol	0.712	0.560	21.4
N-Nitroso-Di-n-Propylamine #	0.627	0.446	28.9 #
Hexachloroethane	0.358	0.328	8.4
Nitrobenzene	0.440	0.349	20.7
Isophorone	0.767	0.576	24.9
2-Nitrophenol *	0.193	0.176	8.8 *
2,4-Dimethylphenol	0.347	0.241	30.6
Benzoic Acid	0.106	0.027	74.5
bis(2-Chloroethoxy)Methane	0.505	0.355	29.7
2,4-Dichlorophenol *	0.277	0.270	2.5 *
1,2,4-Trichlorobenzene	0.315	0.301	4.4
Naphthalene	1.024	0.923	9.9
4-Chloroaniline	0.349	0.250	28.4
Hexachlorobutadiene *	0.197	0.164	16.8 *
4-Chloro-3-Methylphenol *	0.288	0.313	-8.7 *
2-Methylnaphthalene	0.633	0.656	-3.9
Hexachlorocyclopentadiene #	0.299	0.286	4.3 #
2,4,6-Trichlorophenol *	0.412	0.345	16.3 *
2,4,5-Trichlorophenol	0.457	0.286	37.4
2-Chloronaphthalene	1.245	1.333	-7.1
2-Nitroaniline	0.511	0.338	33.9
Dimethyl Phthalate	1.353	1.113	17.7
Acenaphthylene	1.845	1.840	0.3
2,6-Dinitrotoluene	0.318	0.238	25.2
3-Nitroaniline	0.347	0.235	32.3
Acenaphthene *	1.209	1.080	10.7 *
2,4-Dinitrophenol #	0.091	0.072	20.9 #
4-Nitrophenol #	0.120	0.062	48.3 #

7E

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Instrument ID: FINN Calibration date: 08/22/89 Time: 1944

Lab File ID: AUG22GK08 Init. Calib. Date(s): 05/26/89 05/26/89

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Phenol *	1.066	0.944	11.4 *
bis(2-Chloroethyl)Ether	0.819	0.655	20.0
2-Chlorophenol	0.753	0.687	9.0
1,3-Dichlorobenzene	0.778	0.762	2.1
1,4-Dichlorobenzene *	0.811	0.828	-2.1 *
Benzyl Alcohol	0.557	0.235	57.8
1,2-Dichlorobenzene	0.745	0.818	-9.8
2-Methylphenol	0.702	0.614	12.5
bis(2-Chloroisopropyl)Ether	1.221	1.054	13.7
4-Methylphenol	0.712	0.596	16.3
N-Nitroso-Di-n-Propylamine #	0.627	0.515	17.9 #
Hexachloroethane	0.358	0.370	-3.4
Nitrobenzene	0.440	0.346	21.4
Isophorone	0.767	0.553	27.9
2-Nitrophenol *	0.193	0.166	14.0 *
2,4-Dimethylphenol	0.347	0.223	35.7
Benzoic Acid	0.106	0.017	84.0
bis(2-Chloroethoxy)Methane	0.505	0.373	26.1
2,4-Dichlorophenol *	0.277	0.246	11.2 *
1,2,4-Trichlorobenzene	0.315	0.296	6.0
Naphthalene	1.024	0.893	12.8
4-Chloroaniline	0.349	0.267	23.5
Hexachlorobutadiene *	0.197	0.188	4.6 *
4-Chloro-3-Methylphenol *	0.288	0.255	11.5 *
2-Methylnaphthalene	0.633	0.682	-7.7
Hexachlorocyclopentadiene #	0.299	0.237	20.7 #
2,4,6-Trichlorophenol *	0.412	0.361	12.4 *
2,4,5-Trichlorophenol	0.457	0.296	35.2
2-Chloronaphthalene	1.245	1.396	-12.1
2-Nitroaniline	0.511	0.315	38.4
Dimethyl Phthalate	1.353	1.152	14.9
Acenaphthylene	1.845	1.826	1.0
2,6-Dinitrotoluene	0.318	0.247	22.3
3-Nitroaniline	0.347	0.180	48.1
Acenaphthene *	1.209	1.120	7.4 *
2,4-Dinitrophenol #	0.091	0.080	12.1 #
4-Nitrophenol #	0.120	0.071	40.8 #

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Instrument ID: FINN Calibration date: 08/14/89 Time: 1633

Lab File ID: AUG14GK02 Init. Calib. Date(s): 05/26/89 05/26/89

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Dibenzofuran	1.711	1.524	10.9
2,4-Dinitrotoluene	0.413	0.300	27.4
Diethylphthalate	1.426	1.169	18.0
4-Chlorophenyl-phenylether	0.730	0.619	15.2
Fluorene	1.351	1.207	10.7
4-Nitroaniline	0.290	0.194	33.1
4,6-Dinitro-2-Methylphenol	0.110	0.078	29.1
N-Nitrosodiphenylamine (1) *	0.348	0.281	19.3 *
4-Bromophenyl-phenylether	0.234	0.240	-2.6
Hexachlorobenzene	0.249	0.265	-6.4
Pentachlorophenol *	0.123	0.111	9.8 *
Phenanthrene	0.983	0.954	3.0
Anthracene	1.002	0.928	7.4
Di-n-Butylphthalate	1.310	1.128	13.9
Fluoranthene *	1.035	0.827	20.1 *
Pyrene	1.065	0.820	23.0
Butylbenzylphthalate	0.728	0.895	-22.9
3,3'-Dichlorobenzidine	0.234	0.272	-16.2
Benzo(a)Anthracene	1.091	1.013	7.1
bis(2-Ethylhexyl)Phthalate	0.975	1.246	-27.8
Chrysene	1.142	1.071	6.2
Di-n-Octyl Phthalate *	3.938	3.747	4.9 *
Benzo(b)Fluoranthene	1.523	1.215	20.2
Benzo(k)Fluoranthene	1.617	1.316	18.6
Benzo(a)Pyrene *	1.649	1.580	4.2 *
Indeno(1,2,3-cd)Pyrene	0.719	0.569	20.9
Dibenz(a,h)Anthracene	0.621	0.643	-3.5
Benzo(g,h,i)Perylene	0.689	0.768	-11.5
Nitrobenzene-d5	0.433	0.510	-17.8
2-Fluorobiphenyl	1.408	2.003	-42.3
Terphenyl-d14	1.204	2.520	-99.9
Phenol-d5	1.256	1.080	14.0
2-Fluorophenyl	1.284	1.052	18.1
2,4,6-Tribromophenol	0.407	0.575	-41.3

(1) Cannot be separated from Diphenylamine

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Instrument ID: FINN Calibration date: 08/21/89 Time: 1659

Lab File ID: AUG21GK03 Init. Calib. Date(s): 05/26/89 05/26/89

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Dibenzofuran	1.711	1.645	3.9
2,4-Dinitrotoluene	0.413	0.261	36.8
Diethylphthalate	1.426	0.958	32.8
4-Chlorophenyl-phenylether	0.730	0.641	12.2
Fluorene	1.351	1.225	9.3
4-Nitroaniline	0.290	0.160	44.8
4,6-Dinitro-2-Methylphenol	0.110	0.053	51.6
N-Nitrosodiphenylamine (1) *	0.348	0.301	13.5 *
4-Bromophenyl-phenylether	0.234	0.209	10.7
Hexachlorobenzene	0.249	0.219	12.1
Pentachlorophenol *	0.123	0.126	-2.4 *
Phenanthrene	0.983	0.916	6.8
Anthracene	1.002	0.912	9.0
Di-n-Butylphthalate	1.310	0.957	27.0
Fluoranthene *	1.035	0.877	15.3 *
Pyrene	1.065	0.674	36.7
Butylbenzylphthalate	0.728	0.966	-32.7
3,3'-Dichlorobenzidine	0.234	0.266	-13.7
Benzo(a)Anthracene	1.091	0.930	14.8
bis(2-Ethylhexyl)Phthalate	0.975	1.404	-44.0
Chrysene	1.142	1.105	3.2
Di-n-Octyl Phthalate *	3.938	4.273	-8.5 *
Benzo(b)Fluoranthene	1.523	1.071	29.7
Benzo(k)Fluoranthene	1.617	1.103	31.8
Benzo(a)Pyrene *	1.649	1.435	13.0 *
Indeno(1,2,3-cd)Pyrene	0.719	0.827	-15.0
Dibenz(a,h)Anthracene	0.621	0.557	10.3
Benzo(g,h,i)Perylene	0.689	0.673	2.3
Nitrobenzene-d5	0.433	0.740	-70.9
2-Fluorobiphenyl	1.408	4.906	-99.9
Terphenyl-d14	1.204	5.081	-99.9
Phenol-d5	1.256	1.762	-40.3
2-Fluorophenyl	1.284	1.558	-21.3
2,4,6-Tribromophenol	0.407	0.539	-32.4

(1) Cannot be separated from Diphenylamine

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Instrument ID: FINN Calibration date: 08/22/89 Time: 1944

Lab File ID: AUG22GK08 Init. Calib. Date(s): 05/26/89 05/26/89

Min RRF50 for SPCC(#) = 0.050 Max %D for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Dibenzofuran	1.711	1.773	-3.6
2,4-Dinitrotoluene	0.413	0.249	39.7
Diethylphthalate	1.426	0.976	31.6
4-Chlorophenyl-phenylether	0.730	0.685	6.2
Fluorene	1.351	1.280	5.3
4-Nitroaniline	0.290	0.109	62.4
4,6-Dinitro-2-Methylphenol	0.110	0.034	69.1
N-Nitrosodiphenylamine (1) *	0.348	0.320	8.0 *
4-Bromophenyl-phenylether	0.234	0.206	12.0
Hexachlorobenzene	0.249	0.231	7.2
Pentachlorophenol *	0.123	0.120	2.4 *
Phenanthrene	0.983	0.821	16.5
Anthracene	1.002	0.790	21.2
Di-n-Butylphthalate	1.310	0.842	35.7
Fluoranthene *	1.035	0.915	11.6 *
Pyrene	1.065	0.601	43.6
Butylbenzylphthalate	0.728	0.726	0.3
3,3'-Dichlorobenzidine	0.234	0.184	21.4
Benzo(a)Anthracene	1.091	0.758	30.5
bis(2-Ethylhexyl)Phthalate	0.975	1.057	-8.4
Chrysene	1.142	0.883	22.7
Di-n-Octyl Phthalate *	3.938	3.186	19.1 *
Benzo(b)Fluoranthene	1.523	0.888	41.7
Benzo(k)Fluoranthene	1.617	0.834	48.4
Benzo(a)Pyrene *	1.649	1.448	12.2 *
Indeno(1,2,3-cd)Pyrene	0.719	0.540	24.9
Dibenz(a,h)Anthracene	0.621	0.463	25.4
Benzo(g,h,i)Perylene	0.689	0.112	83.7
Nitrobenzene-d5	0.433	0.760	-75.5
2-Fluorobiphenyl	1.408	4.889	-99.9
Terphenyl-d14	1.204	4.438	-99.9
Phenol-d5	1.256	1.681	-33.8
2-Fluorophenyl	1.384	1.476	-15.0
2,4,6-Tribromophenol	0.407	0.759	-86.5

(1) Cannot be separated from Diphenylamine

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID (Standard): AUG14GK02 Date Analyzed: 08/14/89

Instrument ID: FINN Time Analyzed: 1633

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	57500	11.02	127000	14.17	55300	18.69
	UPPER LIMIT	115000	11.70	254000	14.67	110600	19.19
	LOWER LIMIT	28750	10.70	63500	13.67	27650	18.19
	EPA SAMPLE NO.						
01	SBLKLS	32100	11.00	79500	14.15	36800	18.67
02	X101	28800	10.97	69900	14.10	30000	18.62
03	X102	32600	11.00	82100	14.14	40000	18.65
04	X103	34600	11.00	87300	14.14	40500	18.67
05	X104	33000	11.02	82100	14.15	37800	18.67

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SRFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID (Standard): AUG14GK02 Date Analyzed: 08/14/89

Instrument ID: FINN Time Analyzed: 1633

	IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
12 HOUR STD	74700	22.47	31600	29.62	11700	36.57
UPPER LIMIT	149400	22.97	63200	30.12	23400	37.07
LOWER LIMIT	37350	21.97	15800	29.12	5850	36.07
EPA SAMPLE NO.						
01 SBLKLS	36500 *	22.45	21200	29.61	16100	36.56
02 X101	23500 *	22.40	33300	29.56	11800	36.57
03 X102	34900 *	22.44	23600	29.59	6240	36.54
04 X103	33100 *	22.45	20100	29.61	8480	36.54
05 X104	30400 *	22.45	22200	29.61	6740	36.54

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII SV-2 1/87 Rev.

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID (Standard): AUG21GK03 Date Analyzed: 08/21/89

Instrument ID: FINN Time Analyzed: 1659

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	34400	10.99	69600	14.14	29200	18.65
	UPPER LIMIT	68800	11.49	139200	14.64	58400	19.15
	LOWER LIMIT	17200	10.49	34800	13.64	14600	18.15
	EPA SAMPLE NO.						
01	G101	29500	11.02	73500	14.17	34500	18.74
02	G103	33000	10.99	81100	14.12	39000	18.65
03	G104	33000	10.99	74300	14.14	29900	18.65
04	SBLKW	41400	11.05	95300	14.22	33000	18.77

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII SV-1 1/87 Rev.

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID (Standard): AUG21GK03 Date Analyzed: 08/21/89

Instrument ID: FINN Time Analyzed: 1659

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	41600	22.44	12100	29.59	5000	36.54
	UPPER LIMIT	83200	22.94	24200	30.09	10000	37.04
	LOWER LIMIT	20800	21.94	6050	29.09	2500	36.04
	EPA SAMPLE NO.						
01	G101	44900	22.55	9440	29.74	2730	36.72
02	G103	67000	22.44	11700	29.57	3140	36.54
03	G104	46600	22.44	15400	29.59	7610	36.54
04	SBLKW	35800	22.59	7440	29.79	2920	36.76

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID (Standard): AUG22GK08 Date Analyzed: 08/22/89

Instrument ID: FINN Time Analyzed: 1944

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	33200	11.04	78800	14.19	33100	18.75
	UPPER LIMIT	66400	11.54	157600	14.69	66200	19.25
	LOWER LIMIT	16600	10.54	39400	13.69	16550	18.25
	EPA SAMPLE NO.						
01	G102	36400	11.00	92200	14.17	43600	18.72
02	G105	42600	11.04	99800	14.17	45000	18.69

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

FORM VIII SV-1 1/87 Rev.

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ILLINOIS EPA Contract: 1790000000

Lab Code: SPFLD Case No.: ILAM SAS No.: _____ SDG No.: D97451

Lab File ID (Standard): AUG22GK08 Date Analyzed: 08/22/89

Instrument ID: FINN Time Analyzed: 1944

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	49600	22.55	12900	29.76	4470	36.74
	UPPER LIMIT	99200	23.05	25800	30.26	8940	37.24
	LOWER LIMIT	24800	22.05	6450	29.26	2235	36.24
	EPA SAMPLE NO.						
01	G102	52500	22.54	11700	29.74	5040	36.71
02	G105	61100	22.47	16300	29.62	7020	36.59

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

SAMPLE HOLDING TIMES AND DILUTIONS

Laboratory ILLINOIS EPA
Case Number ILAM

Sample				VOA			BNA					PEST				
number	M	L	Rcvd	Anal	Hld	Dil	Extr	Hld	Anal	Hld	Dil	Extr	Hld	Anal	Hld	Di
G101	W	L	07/25	07/31	6											
G102	W	L	07/25	07/31	6											
G102DL	W	L	07/25	07/31	6	5.00										
G103	W	L	07/25	07/31	6											
G103DL	W	L	07/25	07/31	6	50.0										
G104	W	L	07/25	07/31	6											
G105	W	L	07/25	08/01	7											
VBLKTB	W	L	07/25	07/31	6											
X101	S	L	07/25	08/03	9											
X102	S	L	07/25	08/03	9											
X103	S	L	07/25	08/03	9	5.00										
X104	S	L	07/25	08/03	9											

SAMPLE HOLDING TIMES AND DILUTIONS

Laboratory ILLINOIS EPA
Case Number ILAM

Sample				VOA			BNA					PEST				
mber	M	L	Rcvd	Anal	Hld	Dil	Extr	Hld	Anal	Hld	Dil	Extr	Hld	Anal	Hld	Dil
G101	W	L	07/25				07/26	1	08/21	26						
G102	W	L	07/25				07/26	1	08/22	27						
G103	W	L	07/25				07/26	1	08/21	26						
G104	W	L	07/25				07/26	1	08/21	26						
G105	W	L	07/25				07/26	1	08/22	27						
X101	S	L	07/25				07/28	3	08/14	17	1.99					
X102	S	L	07/25				07/28	3	08/14	17	1.99					
X103	S	L	07/25				07/28	3	08/14	17	2.00					
X104	S	L	07/25				07/28	3	08/14	17	1.99					

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: Springfield IEPA Contract: Tazwell

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

	EPA SAMPLE NO.	S1 (DBC) #	OTHER
01	6101	107	
02	6102	86	
03	6103	101	
04	6104	128	
05	6105	118	
06	M974564MS	161 F	
07	M974564MSD	154	
08	M974634B1	159 F	
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

ADVISORY QC LIMITS (24-154)

S1 (DBC) = Dibutylchlorendate

Column used to flag recovery values

* Values outside of QC limits

D Surrogates diluted out

2F

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: Springfield-I.E.P.A. Contract: Tazwell

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Level: (low/med) low

	EPA SAMPLE NO.	S1 (DBC)#	OTHER
01	X101	143	
02	X102	143	
03	X103	124	
04	X104	137	
05	D974619MS	146	
06	D974619MSD	153 #	
07	D974620B1	132	
08			
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

ADVISORY QC LIMITS (20-150)

S1 (DBC) = Dibutylchlorendate

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogates diluted out

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Springfield - I.E.P.A. **Contract:** Tazwell

Lab Code; _____ **Case No.:** _____ **SAS No.:** _____ **SDG No.:** _____

Matrix Spike - EPA Sample No.: D974564

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	0.2	0.0	0.17	85	56-12
Heptachlor	0.2	0.0	0.17	85	40-13
Aldrin	0.2	0.0	0.025	13 *	40-12
Dieldrin	0.5	0.0	0.45	90	52-12
Endrin	0.5	0.0	0.51	102	56-12
4,4'-DDT	0.5	0.0	0.49	98	38-12

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	0.2	0.15	75	13	15	56-12
Heptachlor	0.2	0.14	70	19	20	40-13
Aldrin	0.2	0.021	11 *	17	22	40-12
Dieldrin	0.5	0.43	86	5	18	52-12
Endrin	0.5	0.49	98	4	21	56-12
4,4'-DDT	0.5	0.47	94	4	27	38-12

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 2 out of 12 outside limits

COMMENTS: _____

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Springfield - I.E.P.A. **Contract:** Tazwell

Lab Code: _____ **Case No.:** _____ **SAS No.:** _____ **SDG No.:** _____

Matrix Spike - EPA Sample No.: 0974619 **Level: (low/med)** low

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	63.5	0.0	48.3	76	46-127
Heptachlor	63.5	0.0	54.1	85	35-130
Aldrin	63.5	0.0	7.67 #	12 #	34-132
Dieldrin	158.7	0.0	126.5	80	31-134
Endrin	158.7	0.0	134.0	84	42-139
4,4'-DDT	158.7	0.0	137.5	87	23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	63.5	52.7	83	9	50	46-127
Heptachlor	63.5	58.4	92	8	31	35-130
Aldrin	63.5	8.51	13 #	8	43	34-132
Dieldrin	158.7	132.7	84	5	38	31-134
Endrin	158.7	141.0	89	11	45	42-139
4,4'-DDT	158.7	147.6	93	7	50	23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 2 out of 12 outside limits

COMMENTS: _____

4C

PESTICIDE METHOD BLANK SUMMARY

Lab Name: Springfield - I.E.P.A. Contract: Tazwell

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab Sample ID: D974620 Lab File ID: _____

Matrix: (soil/water) soil Level: (low/med) low

Date Extracted: 7-28-89 Extraction: (SepF/Cont/Sonc) Sonc

Date Analyzed (1): 9-2-89 Date Analyzed (2): 9-2-89

Time Analyzed (1): 7:04:10 Time Analyzed (2): 3:38:45

Instrument ID (1): 21/V6A Instrument ID (2): 22/V6B

GC Column ID (1): DB-608 GC Column ID (2): DB-5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	X 101	D974520	9-2-89	9-1-89
02	X 102	D974521	9-2-89	9-2-89
03	X 103	D974522	9-2-89	9-2-89
04	X 104	D974523	9-2-89	9-2-89
05	D974619 MS	D974619 MS	9-2-89	9-2-89
06	D974619 MSD	D974619 MSD	9-2-89	9-2-89
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS: _____

4C

PESTICIDE METHOD BLANK SUMMARY

Lab Name: Springfield - I.E.P.A. Contract: Tazwell

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab Sample ID: D974634 Lab File ID: _____

Matrix: (soil/water) water Level: (low/med) low

Date Extracted: 7-26-89 Extraction: (SepF/Cont/Sonc) SepF

Date Analyzed (1): 9-2-89 Date Analyzed (2): 9-1-89

Time Analyzed (1): 1 28:57 Time Analyzed (2): 23:24:09

Instrument ID (1): 21/V6A Instrument ID (2): 22/V6B

GC Column ID (1): DB-608 GC Column ID (2): DB-5

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	G101	D974514	9-1-89	9-1-89
02	G102	D974515	9-1-89	9-1-89
03	G103	D974516	9-1-89	9-1-89
04	G104	D974517	9-1-89	9-1-89
05	G105	D974518	9-1-89	9-1-89
06	D974564MS	D974564MS	9-2-89	9-1-89
07	D974564MSD	D974564MSD	9-2-89	9-1-89
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS: _____

8D

PESTICIDE EVALUATION STANDARDS SUMMARY

Lab Name: Springfield I.E.P.A. Contract: Tazwell

Lab Code:_____ CaseNo.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: 21 / V6A GC Column ID: DB-608

Dates of Analyses: 09-01-1989 to 09-02-1989

Evaluation Check for Linearity

PESTICIDE	CALIBRATION FACTOR EVAL MIX A	CALIBRATION FACTOR EVAL MIX B	CALIBRATION FACTOR EVAL MIX C	%RSD (</=10.0%) (1)
ALDRIN	1288167	1400133	1448400	6.0
ENDRIN	517320	563000	583520	6.1
4,4'-DDT	306270	338953	348507	6.7
DBC	198537	210853	217680	4.6

(1) If > 10.0% RSD, plot a standard curve and determine the ng for each sample in that set from the curve.

Evaluation Check for 4,4'-DDT/Endrin Breakdown
(percent breakdown expressed as total degradation)

		DATE ANALYZED	TIME ANALYZED	ENDRIN	4,4'-DDT	COMBINED (2)
	INITIAL					
01	EVAL MIX B	09-01-1989	12:32:12	1.52	6.77	4.46
02	EVAL MIX B	09-01-1989	23:23:05	0.57	3.52	2.12
03	EVAL MIX B					
04	EVAL MIX B					
05	EVAL MIX B					
06	EVAL MIX B					
07	EVAL MIX B					
08	EVAL MIX B					
09	EVAL MIX B					
10	EVAL MIX B					
11	EVAL MIX B					
12	EVAL MIX B					
13	EVAL MIX B					
14	EVAL MIX B					

(2) See Form Instructions .

8E

PESTICIDE EVALUATION STANDARDS SUMMARY
Evaluation of Retention Time Shift for Dibutylchlorendate

Lab NAME:Springfield-I.E.P.A. Contract: Tazwell

Lab Code:_____ Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: 21 / V6A GC Column ID: DB-608

Dates of Analyses: 09-01-1989 to 09-02-1989

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	%D	*
01:EVAL A	EVAL A	09-01-1989	11:54:29	0.0	
02:EVAL B	EVAL B	09-01-1989	12:32:12	0.1	
03:EVAL C	EVAL C	09-01-1989	13:09:02	0.4	
04:IND A	IND A	09-01-1989	13:40:32	0.3	
05:IND B	IND B	09-01-1989	14:22:16	0.1	
06:TOXAPH	TOXAPH	09-01-1989	15:00:10	0.4	
07:ARO 1660	ARO 1660	09-01-1989	15:42:05	0.1	
08:ARO 1221	ARO 1221	09-01-1989	16:24:03	0.4	
09:ARO 1232	ARO 1232	09-01-1989	17:05:48	0.1	
10:ARO 1242	ARO 1242	09-01-1989	17:47:46	0.4	
11:ARO 1248	ARO 1248	09-01-1989	18:29:33	0.2	
12:ARO 1254	ARO 1254	09-01-1989	19:11:30	0.2	
13:G101	D974514	09-01-1989	19:53:28	0.1	
14:G102	D974515	09-01-1989	20:35:27	0.2	
15:G103	D974516	09-01-1989	21:17:11	0.0	
16:G104	D974517	09-01-1989	21:59:10	0.1	
17:G105	D974518	09-01-1989	22:41:08	0.1	
18:EVAL B	EVAL B	09-01-1989	23:23:05	0.1	
19:D974564MS	D974564MS	09-02-1989	00:05:02	0.0	
20:D974564MSD	D974564MSD	09-02-1989	00:46:59	0.1	
21:D974634BL	D974634BL	09-02-1989	01:28:57	0.1	
22:X101	D974520	09-02-1989	02:10:54	0.2	
23:X102	D974521	09-02-1989	02:52:36	0.3	
24:IND A	IND A	09-02-1989	03:34:35	0.2	
25:X103	D974522	09-02-1989	04:16:21	0.2	
26:X104	D974523	09-02-1989	04:58:18	0.1	
27:D974619MS	D974619MS	09-02-1989	05:40:15	0.2	
28:D974619MSD	D974619MSD	09-02-1989	06:22:13	0.1	
29:D974620BL	D974620BL	09-02-1989	07:04:10	0.2	
30:INDA	INDA	9-02-1989	7:46	0.3	
31:INDB	INDB	9-02-1989	8:27	0.2	
32:					
33:					
34:					
35:					
36:					
37:					
38:					

* Values outside of QC limits (2.0% for packed columns, 0.3% for capillary columns)

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: Springfield I.E.P.A. Contract: Tazwell

Lab Code:_____ Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID:21 / V6A GC Column ID: DB-608

DATE(S) OF ANALYSIS	FROM: 09-01-1989	DATE OF ANALYSIS	09-02-1989
	TO: 09-02-1989	TIME OF ANALYSIS	03:34:35
TIME(S) OF ANALYSIS	FROM: 11:54:29	EPA SAMPLE NO. (STANDARD)	IND A 1
	TO: 08:27:51		

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	Q: N: T:	%D
alpha-BHC	2.933	2.903	2.963	2596500				
beta-BHC	3.671	3.641	3.701	576000				
delta-BHC	4.550	4.520	4.580	1871067				
gamma-BHC	3.610	3.580	3.640	2203067	3.604	2040700	Y	7.4
Heptachlor	4.361	4.322	4.400	1425400	4.355	1447200	Y	1.5
Aldrin	5.282	5.216	5.312	1288167	5.276	1298600	Y	0.8
Hept. epoxide	7.235	7.178	7.292	985867	7.228	895933	Y	9.1
Endosulfan I	8.940	8.859	9.021	801400	8.937	735833	Y	8.2
Dieldrin	10.751	10.664	10.838	771367	10.748	739733	Y	4.1
4,4'-DDE	10.276	10.168	10.384	727817				
Endrin	13.468	13.251	13.539	517320				
Endosulfan II	15.131	14.909	15.353	454983	15.109	450683	Y	0.9
4,4'-DDD	14.804	14.667	14.941	390480				
Endo. sulfate	20.353	20.218	20.488	239383				
4,4'-DDT	18.021	17.820	18.078	306270	17.992	345375	Y	12.8
Methoxychlor	34.255	34.081	34.429	86047	34.208	94510	Y	9.8
Endrin ketone	32.858	32.687	33.029	269300				
a Chlorane	8.762	8.702	8.822	843733				
g Chlordane	7.961	7.913	8.009	908150				
Toxaphene	15.416	15.308	15.524	9273				
Arochlor-1016	3.539	3.509	3.569	30599				
Arochlor-1221	2.860	2.830	2.890	26611				
Arochlor 1232	2.853	2.823	2.883	26273				
Arochlor 1242	4.304	4.274	4.334	45877				
Arochlor 1248	4.297	4.267	4.327	33191				
Arochlor 1254	11.316	11.190	11.442	24805				
Arochlor 1260	13.438	13.360	13.516	28748				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D ,must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the QRL is a form of quantitation, and therefore, at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: Springfield I.E.P.A. Contract: Tazwell

Lab Code:____ Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID:21 / V6A GC Column ID: DB-608

DATE(S) OF ANALYSIS	FROM: 09-01-1989	DATE OF ANALYSIS	09-02-1989
	TO: 09-02-1989	TIME OF ANALYSIS	07:46:07
TIME(S) OF ANALYSIS	FROM: 11:54:29	EPA SAMPLE NO. (STANDARD)	IND A 2
	TO: 08:27:51		

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.933	2.903	2.963	2596500				
beta-BHC	3.671	3.641	3.701	576000				
delta-BHC	4.550	4.520	4.580	1871067				
gamma-BHC	3.610	3.580	3.640	2203067	3.609	2014767	Y	8.5
Heptachlor	4.361	4.322	4.400	1425400	4.358	1379700	Y	3.2
Aldrin	5.282	5.216	5.312	1288167	5.281	1276467	Y	0.9
Hept. epoxide	7.235	7.178	7.292	985867	7.234	884300	Y	10.3
Endosulfan I	8.940	8.859	9.021	801400	8.941	726567	Y	9.3
Dieldrin	10.751	10.664	10.838	771367	10.753	713083	Y	7.6
4,4'-DDE	10.276	10.168	10.384	727817				
Endrin	13.468	13.251	13.539	517320				
Endosulfan II	15.131	14.909	15.353	454983	15.103	429217	Y	5.7
4,4'-DDD	14.804	14.667	14.941	390480				
Endo. sulfate	20.353	20.218	20.488	239383				
4,4'-DDT	18.021	17.820	18.078	306270	18.034	337417	Y	10.2
Methoxychlor	34.255	34.081	34.429	86047	34.211	92387	Y	7.4
Endrin ketone	32.858	32.687	33.029	269300				
a Chlorane	8.762	8.702	8.822	843733				
g Chlordane	7.961	7.913	8.009	908150				
Toxaphene	15.416	15.308	15.524	9273				
Arochlor-1016	3.539	3.509	3.569	30599				
Arochlor-1221	2.860	2.830	2.890	26611				
Arochlor 1232	2.853	2.823	2.883	26273				
Arochlor 1242	4.304	4.274	4.334	45877				
Arochlor 1248	4.297	4.267	4.327	33191				
Arochlor 1254	11.316	11.190	11.442	24805				
Arochlor 1260	13.438	13.360	13.516	28748				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D ,must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the QRL is a form of quantitation, and therefore, at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: Springfield I.E.P.A. Contract: Tazwell

Lab Code:_____ Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID:21 / V6A GC Column ID: DB-608

DATE(S) OF ANALYSIS	FROM: 09-01-1989	DATE OF ANALYSIS	09-02-1989
	TO: 09-02-1989	TIME OF ANALYSIS	08:27:51
TIME(S) OF ANALYSIS	FROM: 11:54:29	EPA SAMPLE NO. (STANDARD)	IND B 1
	TO: 08:27:51		

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.933	2.903	2.963	2596500	2.931	2496033	Y	3.9
beta-BHC	3.671	3.641	3.701	576000	3.669	547467	Y	5.0
delta-BHC	4.550	4.520	4.580	1871067	4.547	1740633	Y	7.0
gamma-BHC	3.610	3.580	3.640	2203067				
Heptachlor	4.361	4.322	4.400	1425400				
Aldrin	5.282	5.216	5.312	1288167	5.278	1361100	Y	5.7
Hept. epoxide	7.235	7.178	7.292	985867				
Endosulfan I	8.940	8.859	9.021	801400				
Dieldrin	10.751	10.664	10.838	771367				
4,4´-DDE	10.276	10.168	10.384	727817	10.255	696583	Y	4.3
Endrin	13.468	13.251	13.539	517320	13.437	530680	Y	2.6
Endosulfan II	15.131	14.909	15.353	454983				
4,4´-DDD	14.804	14.667	14.941	390480	14.801	394193	Y	1.0
Endo. sulfate	20.353	20.218	20.488	239383	20.343	272267	Y	13.7
4,4´-DDT	18.021	17.820	18.078	306270				
Methoxychlor	34.255	34.081	34.429	86047				
Endrin ketone	32.858	32.687	33.029	269300	32.913	249600	Y	7.3
a Chlorane	8.762	8.702	8.822	843733	8.764	810433	Y	3.9
g Chlordane	7.961	7.913	8.009	908150	7.949	872883	Y	3.9
Toxaphene	15.416	15.308	15.524	9273				
Arochlor-1016	3.539	3.509	3.569	30599				
Arochlor-1221	2.860	2.830	2.890	26611				
Arochlor 1232	2.853	2.823	2.883	26273				
Arochlor 1242	4.304	4.274	4.334	45877				
Arochlor 1248	4.297	4.267	4.327	33191				
Arochlor 1254	11.316	11.190	11.442	24805				
Arochlor 1260	13.438	13.360	13.516	28748				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D ,must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the QRL is a form of quantitation, and therefore, at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

8D
PESTICIDE EVALUATION STANDARDS SUMMARY

Lab Name: Springfield I.E.P.A. Contract: Tazwell

Lab Code:_____ CaseNo.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: VA 6B GC Column ID:DB-5

Dates of Analyses: 09-01-1989 TO 09-02-1989

Evaluation Check for Linearity

PESTICIDE	CALIBRATION FACTOR EVAL MIX A	CALIBRATION FACTOR EVAL MIX B	CALIBRATION FACTOR EVAL MIX C	%RSD (</=10.0%) (1)
ALDRIN	1941525	2868500	2988300	22.0
ENDRIN	958580	1346360	1445440	20.6
4,4'-DDT	558755	789970	833920	20.3
DBC	348800	466070	493880	17.7

(1) If > 10.0% RSD, plot a standard curve and determine the ng for each sample in that set from the curve.

Evaluation Check for 4,4'-DDT/Endrin Breakdown
(percent breakdown expressed as total degradation)

		DATE ANALYZED	TIME ANALYZED	ENDRIN	4,4'-DDT	COMBINED (2)
	INITIAL					
01	EVAL MIX B	09-01-1989	13:34:19	5.30	1.60	3.34
02	EVAL MIX B	09-01-1989	21:48:34	1.67	1.10	1.38
03	EVAL MIX B					
04	EVAL MIX B					
05	EVAL MIX B					
06	EVAL MIX B					
07	EVAL MIX B					
08	EVAL MIX B					
09	EVAL MIX B					
10	EVAL MIX B					
11	EVAL MIX B					
12	EVAL MIX B					
13	EVAL MIX B					
14	EVAL MIX B					

(2) See Form Instructions .

PESTICIDE EVALUATION STANDARDS SUMMARY
Evaluation of Retention Time Shift for Dibutylchlorendate

Lab NAME: I.E.P.A. - Springfield Contract: Tazwell

Lab Code:_____ Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: 22 / V6B GC Column ID: DB-5

Dates of Analyses: 09-01-1989 to 09-02-1989

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	%D	*
01	EVAL A	EVAL A	09-01-1989	13:08:47	0.0	
02	EVAL B	EVAL B	09-01-1989	13:34:19	0.0	
03	EVAL C	EVAL C	09-01-1989	13:59:25	0.0	
04	IND A	IND A	09-01-1989	14:31:07	0.1	
05	IND B	IND B	09-01-1989	15:00:42	0.1	
06	TOXAPH	TOXAPH	09-01-1989	15:29:38	0.2	
07	ARO 1660	ARO 1660	09-01-1989	15:58:09	0.0	
08	ARO 1221	ARO 1221	09-01-1989	16:29:51	0.2	
09	ARO 1232	ARO 1232	09-01-1989	17:01:47	0.0	
10	ARO 1242	ARO 1242	09-01-1989	17:33:44	0.0	
11	ARO 1248	ARO 1248	09-01-1989	18:05:40	0.0	
12	ARO 1254	ARO 1254	09-01-1989	18:37:36	0.1	
13	G101	D974514	09-01-1989	19:09:30	0.1	
14	G102	D974515	09-01-1989	19:41:13	0.4	
15	G103	D974516	09-01-1989	20:13:09	0.0	
16	G104	D974517	09-01-1989	20:44:54	0.2	
17	G105	D974518	09-01-1989	21:16:38	0.3	
18	EVAL B	EVAL B	09-01-1989	21:48:34	0.0	
19	D974564MS	D974564MS	09-01-1989	22:20:31	0.3	
20	D974564MSD	D974564MSD	09-01-1989	22:52:31	0.5	
21	D974634BL	D974634BL	09-01-1989	23:24:09	0.4	
22	X101	D974520	09-01-1989	23:55:53	0.4	
23	X102	D974521	09-02-1989	00:27:48	0.4	
24	IND A	IND A	09-02-1989	00:59:31	0.2	
25	X103	D974522	09-02-1989	01:31:14	0.1	
26	X104	D974523	09-02-1989	02:03:10	0.4	
27	D974619MS	D974619MS	09-02-1989	02:34:52	0.1	
28	D974619MSD	D974619MSD	09-02-1989	03:06:49	0.3	
29	D974620BL	D974620BL	09-02-1989	03:38:45	0.3	
30	IND A	IND A	09-02-1989	04:10:40	0.1	
31	IND B	IND B	09-02-1989	04:42:35	0.1	
32						
33						
34						
35						
36						
37						
38						

* Values outside of QC limits (2.0% for packed columns, 0.3% for capillary columns)

PESTICIDE/PCB STANDARDS SUMMARY

R

Lab Name: Springfield I.E.P.A. Contract: Tazwell

Lab Code:_____ Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: 22 / V6B GC Column ID: DB-5

DATE(S) OF ANALYSIS	FROM: 09-01-1989	DATE OF ANALYSIS	09-02-1989
	TO: 09-02-1989	TIME OF ANALYSIS	00:59:31
TIME(S) OF ANALYSIS	FROM: 13:08:47	EPA SAMPLE NO. (STANDARD)	IND A 1
	TO: 04:42:35		

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	Q: N: T:	%D
alpha-BHC	2.395	2.365	2.425	5081850				
beta-BHC	2.633	2.603	2.663	1046275				
delta-BHC	2.988	2.958	3.018	3604950				
gamma-BHC	2.745	2.715	2.775	4716550	2.743	4527800	N	4.0
Heptachlor	3.884	3.854	3.914	3316850	3.880	3222450	N	2.8
Aldrin	4.647	4.616	4.678	3060500	4.639	2891350	N	5.5
Hept. epoxide	5.606	5.567	5.645	2238600	5.597	2136950	N	4.5
Endosulfan I	6.807	6.759	6.855	1841650	6.808	1734250	N	5.8
Dieldrin	7.826	7.772	7.880	1836425	7.808	1771975	N	3.5
4,4'-DDE	7.568	7.515	7.621	1460700				
Endrin	8.793	8.732	8.854	842350				
Endosulfan II	9.184	9.118	9.250	1205825	9.169	1177375	N	2.4
4,4'-DDD	9.605	9.537	9.673	825470				
Endo. sulfate	11.646	11.563	11.729	883650				
4,4'-DDT	12.000	11.934	12.066	833450	11.964	836875	N	0.4
Methoxychlor	17.044	16.744	17.344	253388	17.025	267120	N	5.4
Endrin ketone	15.098	14.990	15.206	905950				
a Chlorane	6.866	6.819	6.913	1848750				
g Chlordane	6.336	6.293	6.379	1944525				
Toxaphene	9.886	9.811	9.961	19602				
Arochlor-1016	3.502	3.472	3.532	79027				
Arochlor-1221	2.362	2.332	2.392	43696				
Arochlor 1232	2.364	2.334	2.394	54113				
Arochlor 1242	3.502	3.472	3.532	78213				
Arochlor 1248	3.498	3.468	3.528	53502				
Arochlor 1254	7.957	7.918	7.996	48068				
Arochlor 1260	10.539	10.474	10.604	65859				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0 % for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the QRL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identfication of such analytes is based primarily on pattern recognition

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: Springfield I.E.P.A. Contract: Tazwell

Lab Code:_____ Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: 22 / V6B GC Column ID: DB-5

DATE(S) OF ANALYSIS	FROM:	09-01-1989	DATE OF ANALYSIS	09-02-1989
	TO:	09-02-1989	TIME OF ANALYSIS	04:10:40
TIME(S) OF ANALYSIS	FROM:	13:08:47	EPA SAMPLE NO. (STANDARD)	IND A 2
	TO:	04:42:35		

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.395	2.365	2.425	5081850				
beta-BHC	2.633	2.603	2.663	1046275				
delta-BHC	2.988	2.958	3.018	3604950				
gamma-BHC	2.745	2.715	2.775	4716550	2.744	3910200	N	17.1
Heptachlor	3.884	3.854	3.914	3316850	3.884	2720200	N	18.0
Aldrin	4.647	4.616	4.678	3060500	4.644	2558550	N	16.4
Hept. epoxide	5.606	5.567	5.645	2238600	5.604	1915650	N	14.4
Endosulfan I	6.807	6.759	6.855	1841650	6.816	1569250	N	14.8
Dieldrin	7.826	7.772	7.880	1836425	7.820	1599300	N	12.9
4,4'-DDE	7.568	7.515	7.621	1460700				
Endrin	8.793	8.732	8.854	842350				
Endosulfan II	9.184	9.118	9.250	1205825	9.178	1044500	N	13.4
4,4'-DDD	9.605	9.537	9.673	825470				
Endo. sulfate	11.646	11.563	11.729	883650				
4,4'-DDT	12.000	11.934	12.066	833450	11.978	764788	N	8.2
Methoxychlor	17.044	16.744	17.344	253388	17.055	245163	N	3.2
Endrin ketone	15.098	14.990	15.206	905950				
a Chlorane	6.866	6.819	6.913	1848750				
g Chlordane	6.336	6.293	6.379	1944525				
Toxaphene	9.886	9.811	9.961	19602				
Arochlor-1016	3.502	3.472	3.532	79027				
Arochlor-1221	2.362	2.332	2.392	43696				
Arochlor 1232	2.364	2.334	2.394	54113				
Arochlor 1242	3.502	3.472	3.532	78213				
Arochlor 1248	3.498	3.468	3.528	53502				
Arochlor 1254	7.957	7.918	7.996	48068				
Arochlor 1260	10.539	10.474	10.604	65859				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0 % for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the QRL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identfication of such analytes is based primarily on pattern recognition

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: Springfield I.E.P.A. Contract: Tazwell

Lab Code:_____ Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: 22 / V6B GC Column ID: DB-5

DATE(S) OF ANALYSIS	FROM: 09-01-1989	DATE OF ANALYSIS	09-02-1989
	TO: 09-02-1989	TIME OF ANALYSIS	04:42:35
TIME(S) OF ANALYSIS	FROM: 13:08:47	EPA SAMPLE NO. (STANDARD)	IND B 1
	TO: 04:42:35		

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT	%D
alpha-BHC	2.395	2.365	2.425	5081850	2.398	5138700	N	1.1
beta-BHC	2.633	2.603	2.663	1046275	2.636	1061975	N	1.5
delta-BHC	2.988	2.958	3.018	3604950	2.990	3738900	N	3.7
gamma-BHC	2.745	2.715	2.775	4716550				
Heptachlor	3.884	3.854	3.914	3316850				
Aldrin	4.647	4.616	4.678	2900850	4.646	2957500	N	2.0
Hept. epoxide	5.606	5.567	5.645	2238600				
Endosulfan I	6.807	6.759	6.855	1841650				
Dieldrin	7.826	7.772	7.880	1836425				
4,4'-DDE	7.568	7.515	7.621	1460700	7.564	1511175	N	3.5
Endrin	8.793	8.732	8.854	1285070	8.796	1373060	Y	6.8
Endosulfan II	9.184	9.118	9.250	1205825				
4,4'-DDD	9.605	9.537	9.673	825470	9.604	869450	Y	5.3
Endo. sulfate	11.646	11.563	11.729	883650	11.665	888675	N	0.6
4,4'-DDT	12.000	11.934	12.066	641563				
Methoxychlor	17.044	16.744	17.344	253388				
Endrin ketone	15.098	14.990	15.206	905950	15.095	891325	N	1.6
a Chlorane	6.866	6.819	6.913	1848750	6.880	1904400	Y	3.0
g Chlordane	6.336	6.293	6.379	1944525	6.338	1937675	Y	0.4
Toxaphene	9.886	9.811	9.961	19602				
Arochlor-1016	3.502	3.472	3.532	79027				
Arochlor-1221	2.362	2.332	2.392	43696				
Arochlor 1232	2.364	2.334	2.394	54113				
Arochlor 1242	3.502	3.472	3.532	78213				
Arochlor 1248	3.498	3.468	3.528	53502				
Arochlor 1254	7.957	7.918	7.996	48068				
Arochlor 1260	10.539	10.474	10.604	65859				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0 % for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the QRL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identfication of such analytes is based primarily on pattern recognition

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PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

6104

-b Name: Springfield- IEPA Contract: Tazwell

ab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-608 GC Column ID (2): DB-5

nstrument ID (1): 71/V6A Instrument ID (2): 72/V6B

ab Sample ID: D974517

ab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME		RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 p,p-DDE	Column 1	10.240	10.165	10.384	Y	_
02	Column 2	7.539	7.515	7.621	N	_
03 Endrin	Column 1	13.299	13.251	13.539	N	_
04	Column 2	—	8.737	8.854	Y	_
05	Column 1				_	_
06	Column 2				_	_
07	Column 1				_	_
08	Column 2				_	_
09	Column 1				_	_
10	Column 2				_	_
11	Column 1				_	_
12	Column 2				_	_

omments: _____

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PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

X103

-b Name: Springfield- I.E.P.A. Contract: Tazwell

ab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-608 GC Column ID (2): DB-5

nstrument ID (1): 21/V6A Instrument ID (2): 22/V6B

ab Sample ID: D974522

ab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME		RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 α-Chlordane	Column 1	8.734	8.702	8.877	Y	_
02	Column 2	6.856	6.819	6.913	N	_
03	Column 1				_	_
04	Column 2				_	_
05	Column 1				_	_
06	Column 2				_	_
07	Column 1				_	_
08	Column 2				_	_
09	Column 1				_	_
10	Column 2				_	_
11	Column 1				_	_
12	Column 2				_	_

omments: _____

FORM X PEST

1/87 Rev.

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PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

X104

-b Name: Springfield- IEPA Contract: Tazwell

ab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-608 GC Column ID (2): DB-5

nstrument ID (1): 71/V6A Instrument ID (2): 72/V6B

ab Sample ID: D974573

ab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME		RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 Heptachlor Epoxide	Column 1	7.245	7.178	7.292	N	_
02	Column 2	—	5.567	5.645	Y	_
03 γ-Chlordane	Column 1	7.976	7.913	8.009	N	_
04	Column 2	—	6.293	6.379	Y	_
05 α-Chlordane	Column 1	8.730	8.707	8.872	N	_
06	Column 2	—	6.819	6.913	Y	_
07 p,p-DDE	Column 1	10.258	10.168	10.384	Y	_
08	Column 2	7.566	7.515	7.621	N	_
09 Dieldrin	Column 1	10.875	10.664	10.838	Y	_
10	Column 2	7.839	7.772	7.886	N	_
11 p,p-DDD	Column 1	14.744	14.667	14.941	N	_
12	Column 2	—	9.537	9.673	Y	_

omments: _____

FORM X PEST

1/87 Rev

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PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

X104

-b Name: Springfield- I.E.P.A. Contract: Tazwell

ab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-608 GC Column ID (2): DB-5

nstrument ID (1): 21/V6A Instrument ID (2): 22/V6B

ab Sample ID: D974573

ab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME		RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 Arochlor 1260	Column 1	13.408	13.360	13.516	Y	_
02	Column 2	10.494	10.474	10.604	N	_
03	Column 1				_	_
04	Column 2				_	_
05	Column 1				_	_
06	Column 2				_	_
07	Column 1				_	_
08	Column 2				_	_
09	Column 1				_	_
10	Column 2				_	_
11	Column 1				_	_
12	Column 2				_	_

omments: _____

10

PESTICIDE/PCB IDENTIFICATION

EPA SAMPLE NO.

-b Name: Springfield- I.E.P.A. Contract: Tazwell

.b Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column ID (1): DB-608 GC Column ID (2): DB-5

.nstrument ID (1): 21/V6A Instrument ID (2): 22/V6B

.ab Sample ID: D974670 B1

.ab File ID: _____ (only if confirmed by GC/MS)

PESTICIDE/PCB	RETENTION TIME		RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01 γ-BHC	Column 1	3.609	3.580	3.640	Y	_
02	Column 2	2.740	2.715	2.775	N	_
03 γ-Chlordane	Column 1	7.970	7.913	8.009	N	_
04	Column 2	—	6.293	6.379	Y	_
05 Dieldrin	Column 1	10.755	10.664	10.838	Y	_
06	Column 2	7.876	7.772	7.880	N	_
07	Column 1				_	_
08	Column 2				_	_
09	Column 1				_	_
10	Column 2				_	_
11	Column 1				_	_
12	Column 2				_	_

omments: _____

FORM X PEST 1/87 Rev.