rpt: 326195-239
326267-446

Done

see Invoice Info below

PROJECT ID: PMN06011997

SAMPLE ID: ~~NO SAMPLE ID~~ PN 132

DESCRIPTOR: PESTICIDE MONITORING NETWORK

ntal
ntories

11790-798
L# 35285
all other # 35284

IDEM

DK 11734 - DK 11749/DK 10786 - DK 10792

DK 11734 - DK 11749/DK 10786 - DK 10792

11790 - DK 11798

DK 11857-11867 DK 10967-DK 10968

* #35284	24	Carb	525	515	531
10786-92					
10967-68					
11734-49					
11857-67					

		(immunoassay) 2,4D	Carbo	525.2	515.1 ~~515.1~~	531.1
4.	11790-798	✓	✓	✓	11793	11791
3.	11734-749	✓	✓	✓	11740	11742, 11749
1.	10786-792	✓	✓	✓	(10787)	
5.	11857-11867	✓	✓	✓	11865	11861
2.	10967-10968	✓	✓	✓		

326195239

326267

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INDIANAPOLIS

OFFICE MEMORANDUM

DATE: November 2, 1998

TO: Mike Yarling **THRU:** Rob Duncan RTD

FROM: Mitt Denney

SUBJECT: Samples DK10786-DK10792, DK10967-DK10968, DK11734-DK11749, DK10786-DK10792, & DK11790-DK11798

Sample Comments

I have reviewed the attached results and have determined that the results are acceptable for use. The results have been evaluated for the quality criteria contained in the Ground Water Quality Assurance Program Plan and BAA 97-044. Any qualifications for the acceptance of these results will be identified in the memorandum. This memorandum should remain attached to the original results.

Since multiple groups of sample number sets are submitted to the lab, QC discussions are grouped by the analytical run as presented in the report submitted by the lab. The sample numbers do not follow a consistent grouping across each of the methods performed.

QA/QC Samples

Enzyme Immunoassay

All sample sets

Enzyme immunoassay was utilized for screening chlorinated acids and carbamate class pesticides. 2,4-D and carbofuran are the target immunoassay compounds. EPA methods 515.1 (chlorinated acids) and 531.1 (carbamates) were used to analyze ten percent of samples taken and any sample with a positive immunoassay response.

Immunoassay results are reported with concentrations; however, concentration data is suitable only for qualitative purposes. Concentration data is not evaluated for QC suitability, due to the variable nature of the results.

2,4-D

Samples DK10786-DK10792, DK10967-DK10968, DK11734-DK11749, DK11790-DK11798, and DK11857-DK11867

QC samples correctly indicated the presence or absence of 2,4-D. Sample results are acceptable

for qualitative evaluation.

Carbofuran
Samples DK10786-DK10792, DK10967-DK10968, DK11734-DK11749, DK11790-DK11798, and DK11857-DK11867
QC samples correctly indicated the presence or absence of carbofuran. Sample results are acceptable for qualitative evaluation.

EPA Methods

Chlorinated Acids (515.1)
Samples DK10787, DK11740, DK11793, and DK11865
Samples DK10787, DK11740, DK11793, and DK11865 were analyzed as ten percent check samples. The IS was low biased for the CCC for samples DK10787 and DK11865. Sample data for DK10787 and DK11865 are acceptable for qualitative evaluation. All other QC samples were within acceptable parameters. All other chlorinated acids data are acceptable for quantitative evaluation.

Carbamates (531.1)
Samples DK11791, DK11742, DK11749 and DK11861
Samples DK11791, DK11742, DK11749 and DK11861 were analyzed as ten percent check samples. Aldicarb was high biased in the LFB for sample DK11791. All other QC samples were within acceptable parameters. Carbamates data are acceptable for quantitative evaluation.

General Pesticides (525.2)
Samples DK11790-DK11793
Metribuzin and prometon were low biased in the LFB and the LFM. Metribuzin and prometon data are acceptable for qualitative evaluation. All other pesticides data are acceptable for quantitative evaluation.

Samples DK111794-DK11798
Prometon was low biased in the LFB. Cyanazine was low biased in the second CCC. Cyanazine, metribuzin and simazine were low biased in the matrix spike (sample DK11797), due to matrix interferences. The internal standard was high biased in the matrix spike. Metribuzin data is acceptable for qualitative purposes only in DK11797. Cyanazine and prometon data are acceptable for qualitative evaluation for all samples (DK11794-798). All other pesticides data are acceptable for quantitative evaluation.

Samples DK11734-DK11737
Prometon was low biased in the LFB. Cyanazine was low biased in the second CCC. All other QC data were within acceptable parameters. Pesticides data are acceptable for quantitative evaluation.

Samples DK11738-DK11747
Metribuzin was low biased in the LFB and the LFM. Prometon was low biased in the LFB. All other QC data were within acceptable parameters. Metribuzin data are acceptable for qualitative evaluation for all samples (DK11738-747). All other pesticides data are acceptable for quantitative evaluation.

Samples DK11748-DK11749, DK10786-DK10792, and DK11857
Prometon was low biased in the LFB. Prometon data is acceptable for quantitative evaluation, due to its response in CCCs. Bromacil and cyanazine were low biased in the second CCC. Bromacil and cyanazine data are acceptable for quantitative evaluation since their responses were acceptable in the the first CCC and the LFB. All other QC data were within acceptable parameters. Pesticides data are acceptable for quantitative evaluation.

Samples DK11858-DK11867
Metribuzin and prometon were low biased in the LFB. Metribuzin and prometon data are acceptable for quantitative evaluation due the acceptability of their response in the first CCC and the second CCC. Alachlor and trifluralin were high biased in the second CCC. Alachlor and trifluralin data are acceptable for quantitative evaluation. Bromacil and cyanazine were low biased in the second CCC; their response was acceptable in the first CCC and LFB. Bromacil and cyanazine data are acceptable for quantitative evaluation. The IS was low for samples DK11865 and DK11866 and for the second CCC. Sample results for DK11865 and DK11866 are acceptable for qualitative purposes. All other QC items were with control. All other pesticides data are acceptable for quantitative purposes.

Samples DK10967 and DK10968
Metribuzin and prometon were low biased in the LFB. Metribuzin and prometon data are acceptable for quantitative evaluation due the acceptability of their response in the first CCC and the second CCC. Cyanazine and endosulfan sulfate were low biased in the second CCC. Cyanazine and endosulfan sulfate data are acceptable since their recoveries were within acceptable parameters in the first CCC and the LFB. All other QC items were with control. All other pesticides data are acceptable for quantitative purposes.

General Pesticides, Comments
Bench testing has demonstrated an attenuation of the concentration of cyanazine, diazinon, fenamiphos, metribuzin, prometon, and simazine with hydrochloric acid (HCL) preservation. This attenuation becomes severe within a short period of time. This will affect the determination of concentration; however, because of the sensitivity of the ion trap mass spectrometer, the detection of the presence of these parameters will not be affected for original concentrations on the order of magnitude of the maximum contaminant levels (MCL). Reviews are under way to examine data at the instrumental detection limit to see if there were any indications of these compounds. Testing of unpreserved sample duplicates (samples taken in July 1998) have not indicated any detection of a pesticide, that was not detected in a preserved sample. A time based study is currently underway to evaluate the stability of unpreserved pesticide samples verses preserved samples over the holding time prior to extraction.

Environmental Health Laboratories

110 S. Hill Street
South Bend, IN 46617-2702
(219) 233-4777
(219) 233-3272
FAX (219) 233-8207

LABORATORY REPORT

Client: IDEM
Attn: Mitt Denney
Groundwater Section
100 North Senate Avenue
P. O. Box 6015
Indianapolis, IN 46206-6015

Report #: 326195-239

Priority: Standard Written

Status: Final

Project : DK 11790 - DK11798

Samples Submitted: Nine groundwater samples

Copies to: None

Collected: 05/19 to 05/22/98 By: Client Received: 05/26/98

REPORT SUMMARY

Nine groundwater samples were submitted for analysis of Task 4A, 2,4-D and Carbofuran (Enzyme Immunoassay), Chlorinated Pesticides (Method 515.1), Pesticides (Method 525.2) and Carbamates (Method 531.1).

Note: Sample containers were provided by the client.

The following is a summary of the results by sample. Any compounds that are not part of the requested parameter list are indicated by an asterisk(*).

2,4-D Enzyme Immunoassay

None of the quality control samples in the analytical run were outside the limits specified in the method.

DK11790	2,4-D was not detected in the sample submitted for analysis.
DK11791	2,4-D was not detected in the sample submitted for analysis.
DK11792	2,4-D was not detected in the sample submitted for analysis.
DK11793	2,4-D was not detected in the sample submitted for analysis.
DK11794	2,4-D was not detected in the sample submitted for analysis.
DK11795	2,4-D was not detected in the sample submitted for analysis.
DK11796	2,4-D was not detected in the sample submitted for analysis.
DK11797	2,4-D was not detected in the sample submitted for analysis.
DK11798	2,4-D was not detected in the sample submitted for analysis.

RECEIVED
AUG - 6 1998
IDEM-Water Mgmt.
Drinking Water Branch

Division of MAS Technology Corporation

Carbofuran Enzyme Immunoassay-05/26/98

	None of the quality control samples in the analytical run were outside the limits specified in the method.
DK11790	Carbofuran was not detected in the sample submitted for analysis.
DK11791	Carbofuran was not detected in the sample submitted for analysis.
DK11792	Carbofuran was not detected in the sample submitted for analysis.
DK11793	Carbofuran was not detected in the sample submitted for analysis.
DK11794	Carbofuran was not detected in the sample submitted for analysis.
DK11795	Carbofuran was not detected in the sample submitted for analysis.
DK11796	Carbofuran was not detected in the sample submitted for analysis.
DK11797	Carbofuran was not detected in the sample submitted for analysis.
DK11798	Carbofuran was not detected in the sample submitted for analysis.

EPA 515.1

	None of the quality control samples in the analytical run were outside the limits specified in the method.
DK11793	None of the method parameters were detected in the sample submitted for analysis.

EPA 525.2-A060198A

	Metribuzin and prometon recoveries in the LFB and the LFM were outside the method 525.2 acceptance limits of 70-130% recovery, but were within the EHL statistically determined 95th percentile. One of four surrogate standard recoveries in sample DK11793 was low biased outside the acceptance limits of 70-130% recovery due to matrix interference. This data was acceptable based on the recoveries of the other three surrogate standards. None of the other quality control samples in the analytical run were outside the limits specified in the method.
DK11790	None of the method parameters were detected in the sample submitted for analysis.
DK11791	None of the method parameters were detected in the sample submitted for analysis.
DK11792	None of the method parameters were detected in the sample submitted for analysis.
DK11793	None of the method parameters were detected in the sample submitted for analysis.

Client: IDEM

Report #: 326195-239

EPA 525.2-A060498A

Prometon recovery in the LFB was outside the method 525.2 acceptance limits of 70-130% recovery, but was within the EHL statistically determined 95th percentile. Metribuzin and simazine recoveries in the MS were outside the method 525.2 acceptance limits of 70-130% recovery, but were within the EHL statistically determined 95th percentile. Cyanazine recoveries in the MS and the second CCC were low biased outside the acceptance limits. This compound has had historically poor recovery by this methodology. The IS area in the MS was high biased, but this data is acceptable based on the recoveries of the surrogate standards. None of the other quality control samples in the analytical run were outside the limits specified in the method.

DK11794 None of the method parameters were detected in the sample submitted for analysis.

DK11795 None of the method parameters were detected in the sample submitted for analysis.

DK11796 None of the method parameters were detected in the sample submitted for analysis.

DK11797 None of the method parameters were detected in the sample submitted for analysis.

DK11798 None of the method parameters were detected in the sample submitted for analysis.

EPA 531.1

Aldicarb recovery in the LFB was high biased outside of the method 531.1 acceptance limits of 70-130% recovery. This compound had acceptable recoveries in the CCC and the QCS, and was not detected in the LMB or the sample submitted for analysis. None of the other quality control samples in the analytical run were outside the limits specified in the method.

DK11791 None of the method parameters were detected in the sample submitted for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call us at (219) 233-4777.

REVIEWED BY: _____ DATE: 7/24/98

FINALIZED BY: John E. George III DATE: 8/6/98

Environmental Health Laboratories 110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

Please see the back for instructions

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE 1 OF 4

CLIENT/COMPANY ORDERING TEST: IDEM 1

LOCATION/ADDRESS:

SAMPLER (Signature): MY 1

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME		SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran	OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SEAL
390195	5/19	1228	A/P	DK 11790	1		✓								
390196			A/P		1			✓							
390197			A/P		2				✓						
390198			A/P		1					✓					
390199			A/P		1						✓				
390200		1326	A/P	DK11791	1		✓								
390201			A/P		1			✓							
390202			A/P		2				✓						
390203			A/P		1					✓					
390204			A/P		1						✓				
390205		1513	A/P	DK11792	1		✓								
390206			A/P		1			✓							

2 3 4 5

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

In House COC

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
	6				
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
	6		[signature]	5-26-98	0900

LAB COMMENTS 7

SHIPPING CONDITIONS: (Check One) ☒ Iced ☒ Ambient

TEMPERATURE ____ °C Lowest ____ °C Highest 13-17 °C Receipt

MATRIX CODES:

- **RW** = REAGENT WATER
- **DW** = DRINKING WATER
- **GW** = GROUNDWATER
- **SW** = SURFACE WATER
- **WW** = WASTEWATER
- **PW** = POOL WATER
- **O** = OTHER
- **SO** = SOIL

CONTAMINATION LEVEL

- **L** = LOW (NO ODOR)
- **M** = MEDIUM
- **H** = HIGH
- **U** = UNKNOWN

TURN-AROUND-TIME (TAT) - SURCHARGES

SW = STANDARD (10-15 WORKING DAYS) WRITTEN	0%		**IV** = IMMEDIATE (48-72 HOURS) VERBAL	**100%**	
RV = RUSH (3-5 WORKING DAYS) VERBAL	50%		***IW*** = *IMMEDIATE (48-72 HOURS) WRITTEN*	***125%***	
RW = *RUSH (3-5 WORKING DAYS) WRITTEN*	*75%*		**SP** = WEEKEND, HOLIDAY OR STAT	**Call**	

Environmental Health Laboratories 110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

Please see the back for instructions

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE 2 OF _____

CLIENT/COMPANY ORDERING TEST: IDEM 1

LOCATION/ADDRESS:

SAMPLER (Signature): MY 1

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME		SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran	OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SEAL
326607	5/19	1513	A/P	DK11792	2				✓						
326608			A/P		1				✓	✓					
326609			A/P		1					✓					
326610		1557	A/P	DK11793	1		✓								
326611			A/P		1			✓							
326612			A/P		2				✓						
326613			A/P		1					✓					
326614			A/P		1					✓					
326615	5/20	1025	A/P	DK11794	1		✓								
326616			A/P		1			✓							
326617			A/P		2				✓						
326618			A/P		1					✓					

TESTS REQUESTED (✓)

2 3 4 5

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

In House COC

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
	6				
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
			[signature]	5/26	0900

LAB COMMENTS: 7

SHIPPING CONDITIONS: (check one) ☐ Iced ☐ Ambient

TEMPERATURE: °C Lowest °C Highest 13-17 °C Receipt

MATRIX CODES:

- **RW** = REAGENT WATER
- **DW** = DRINKING WATER
- **GW** = GROUNDWATER
- **SW** = SURFACE WATER
- **WW** = WASTEWATER
- **PW** = POOL WATER
- **O** = OTHER
- **SO** = SOIL

CONTAMINATION LEVEL

- **L** = LOW (NO ODOR)
- **M** = MEDIUM
- **H** = HIGH
- **U** = UNKNOWN

TURN-AROUND-TIME (TAT) - SURCHARGES

- **SW** = STANDARD (10-15 WORKING DAYS) WRITTEN 0%
- **RV** = RUSH (3-5 WORKING DAYS) VERBAL 50%
- **RW** = RUSH (3-5 WORKING DAYS) WRITTEN 75%
- **IV** = IMMEDIATE (48-72 HOURS) VERBAL **100%**
- **IW** = IMMEDIATE (48-72 HOURS) WRITTEN **125%**
- **SP** = WEEKEND, HOLIDAY OR STAT **Call**

Environmental Health Laboratories 110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

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SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE 3 X ss OF _____

CLIENT/COMPANY ORDERING TEST: IDEM 1

LOCATION/ADDRESS:

SAMPLER (Signature): MY

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME		SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran								OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SEAL
[illegible]	5/20	1035	A/P	DK11794	1						✓											
[illegible]		1117	A/P	DK11795	1		✓															
[illegible]			A/P		1			✓														
[illegible]			A/P		2				✓													
[illegible]			A/P		1					✓												
[illegible]			A/P		1						✓											
[illegible]		1238	A/P	DK117[illegible]	1		✓															
[illegible]			A/P		1			✓														
[illegible]			A/P		2				✓													
[illegible]			A/P		1					✓												
[illegible]			A/P		1						✓											
[illegible]	5/21	1712	A/P	DK11797	2 X ss		✓															

TESTS REQUESTED (✓)

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

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RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
			[signature]	5-26-98	0900

LAB COMMENTS

SHIPPING CONDITIONS (Check One) ☒ Iced ☐ Ambient

TEMPERATURE ____ °C Lowest ____ °C Highest 13-17 °C Receipt

MATRIX CODES:

- RW = REAGENT WATER
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- SW = SURFACE WATER
- WW = WASTEWATER
- PW = POOL WATER
- O = OTHER
- SO = SOIL

CONTAMINATION LEVEL

- L = LOW (NO ODOR)
- M = MEDIUM
- H = HIGH
- U = UNKNOWN

TURN-AROUND-TIME (TAT) - SURCHARGES

- SW = STANDARD (10-15 WORKING DAYS) WRITTEN 0%
- RV = RUSH (3-5 WORKING DAYS) VERBAL 50%
- RW = RUSH (3-5 WORKING DAYS) WRITTEN 75%
- IV = IMMEDIATE (48-72 HOURS) VERBAL 100%
- IW = IMMEDIATE (48-72 HOURS) WRITTEN 125%
- SP = WEEKEND, HOLIDAY OR STAT Call

Environmental Health Laboratories 110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

Please see the back of instruction

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE 4 OF _____

CLIENT/COMPANY ORDERING TEST: IDEM 1

LOCATION/ADDRESS:

SAMPLER (Signature): MY 1

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME		SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran	OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SEAL
[redacted]	5/21	1712	A/P	DK11797	1			✓							
[redacted]	↓	↓	A/P	↓	2				✓						
[redacted]			A/P		1					✓					
[redacted]			A/P		1						✓				
[redacted]	5/22	0830	A/P	DK11798 2	~~2~~ 2 AB		✓								
[redacted]	↓	↓	A/P	↓	1			✓							
[redacted]			A/P		2				✓						
[redacted]			A/P		1					✓					
[redacted]	↓	↓	A/P	↓	1						✓				
[redacted]			A/P												
[redacted]			A/P												
[redacted]			A/P												

TESTS REQUESTED (✓)

3 4

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

5 In House COC

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
	6				
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
			[signature]	5/26	980900

LAB COMMENTS: 7

SHIPPING CONDITIONS (Check One) ☐ Iced ☐ Ambient

TEMPERATURE °C Lowest °C Highest 13-17 °C Receipt

MATRIX CODES:

- RW = REAGENT WATER
- DW = DRINKING WATER
- GW = GROUNDWATER
- SW = SURFACE WATER
- WW = WASTEWATER
- PW = POOL WATER
- O = OTHER
- SO = SOIL

CONTAMINATION LEVEL

- L = LOW (NO ODOR)
- M = MEDIUM
- H = HIGH
- U = UNKNOWN

TURN-AROUND-TIME (TAT) - SURCHARGES

- SW = STANDARD (10-15 WORKING DAYS) WRITTEN 0%
- RV = RUSH (3-5 WORKING DAYS) VERBAL 50%
- RW = RUSH (3-5 WORKING DAYS) WRITTEN 75%
- IV = IMMEDIATE (48-72 HOURS) VERBAL 100%
- IW = IMMEDIATE (48-72 HOURS) WRITTEN 125%
- SP = WEEKEND, HOLIDAY OR STAT Call

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

☒ OWM ☐ OSHWM ☐ OER ☐ OAM

CHAIN OF CUSTODY

5/22/98

I certify that the sample(s) listed below was/were collected by me or in my presence.

Date: 5 / 22 / 98

Signature: [signature]

Section: Ground Water

LAB NUMBER ASSIGNED	IDEM CONTROL NUMBER	2000 ml P.N.M.	1000 ml P.N.M.	1000 ml G.N.M.	500 ml G.W.M.	40 ml VIAL	120 ml G.(B.O.)	500 ml P.N.M.	250 ml P.N.M.				DATE AND TIME COLLECTED
	11790			2		4							5/19/98 12:28 AM/PM
	11791			2		4							5/19/98 1:26 AM/PM
	11792			2		4							5/19/98 3:13 AM/PM
	11793			2		4							5/19/98 3:57 AM/PM
	11794			2		4							5/20/98 10:25 AM/PM
	11795			2		4							5/20/98 11:17 AM/PM
	11796			2		4							5/20/98 12:38 AM/PM
	11797			3		4							5/21/98 5:12 AM/PM
	11798			3		4							5/22/98 8:30 AM/PM
													/ / : AM/PM
													/ / : AM/PM
													/ / : AM/P

P - Plastic G - Glass N.M. - Narrow Mouth W.M. - Wide Mouth B.O. - Bacti. Only

CARRIERS

Should samples be iced? Y N

I certify that I received the above sample(s).

SIGNATURE	DATE AND TIME	SEALS INTACT		COMMENTS
RELINQUISHED BY: [signature]	5/22/98	Y	N	No Seals
RECEIVED BY: [signature] 5-26-98	09 00 AM/PM			
RELINQUISHED BY:	/ /	Y	N	13°C-17°C upon receipt SS 5-26-98
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	OK TO PROCEED PER MIT DANNEY 5/26/98-JW
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			

LAB CUSTODIAN

I certify that I received the above sample(s) and is/are recorded in the official record book. The same sample(s) will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Signature: _____ Date: ___ / ___ / ___ Time: ___ : ___ AM

Lab: _____ Address: _____

INDIANA DEPARTMENT of ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER MANAGEMENT
GROUND WATER SECTION

ASSIGNED LAB: EHL

Date Submitted:		**Sample Nos Submitted Today:**	**DK** 11790 **to DK** 11798
Project:	MONITORING NETWORK	**Assigned IDEM Sample Nos:**	DK11787 to DK11846
Matrix:	Ground Water	**Sampler:**	YARLING

TASKS &/OR PARAMETERS TO DETERMINE

TASK	PARAMETER	TASK	PARAMETER
4A	PESTICIDES		
4A	CHLORINATED PESTICIDES		
4A	CARBAMATES		

APPROXIMATE CONCENTRATIONS: 10ppm **REPORTING TIME REQUIRED: 30 DAYS**

Comments:

2 bottles marked NA (1 l glass)
these are unpreserved to be used
for Terbufos % ____ recovery

Please Send Report To:

Mitt Denney
IDEM
Shadeland, Ground Water Section
P.O. Box 6015
Indianapolis, IN 46206-6015

ENVIRONMENTAL HEALTH LABORATORIES

2,4-D ANALYSIS RESULT SHEET

Method: Enzyme Immunoassay - Qualitative
Analyst: NM
Instrument ID: B&L Spec21
Run Date: 05/27/98 Run Time: 15:16
Project(s): DK 11790 - DK 11798
LOT # Standard 1: 712563
Standard 2: 712564
Standard 3: NA
Control Solution: 712566
Diluent / Zero Solution: 7K2778
Enzyme Conjugate: 8C1017
Stopping Soln.: 712630
Washing Solution: 7L3052
Color Solution: 8B1151
Magnetic Particles: 8C1016
Spec 21 setting: 450

Seq Num	Lab ID #	Client	Sample Description	Sample Type	Matrix	Absorbance (nm) Bx	B'	B/B x 100 B'	Calc'd ug/L	Final Result	% Rec	Q
1			Diluent/Zero 0.0 ug/L	LMB	RW	1.270	1.296	98.0				
2			Diluent/Zero 0.0 ug/L	LMB	RW	1.322	1.296	102.0				
3			Standard 1 1.0 ug/L	ICS	RW	1.203	1.296	92.8	0.9	Present	90	78.5
4			Standard 1 1.0 ug/L	ICS	RW	1.156	1.296	89.2	1.2	Present	120	
5			Control 3.5 ug/L	QCS	RW	1.005	1.296	77.5	3.2	Present	91	
6	326198	IDEM	DK 11790	FS	GW	1.468	1.296	113.3	< 0.7	Absent		
7	326203	IDEM	DK 11791	FS	GW	1.434	1.296	110.6	< 0.7	Absent		
8	326203-S	IDEM	DK 11791 Matrix Spike/7.0 ug/L	MS	GW	0.888	1.296	68.5	6.7	Present	96	18%
9	326203SD	IDEM	DK 11791 Matrix Spike Duplicate/7.0 ug/L	MSD	GW	0.916	1.296	70.7	5.6	Present	80	
10	326208	IDEM	DK 11792	FS	GW	1.420	1.296	109.6	< 0.7	Absent		
11	326213	IDEM	DK 11793	FS	GW	1.377	1.296	106.3	< 0.7	Absent		
12	326218	IDEM	DK 11794	FS	GW	1.440	1.296	111.1	< 0.7	Absent		
13	326223	IDEM	DK 11795	FS	GW	1.366	1.296	105.4	< 0.7	Absent		
14	326228	IDEM	DK 11796	FS	GW	1.403	1.296	108.3	< 0.7	Absent		
15	326233	IDEM	DK 11797	FS	GW	1.347	1.296	103.9	< 0.7	Absent		
16	326238	IDEM	DK 11798	FS	GW	1.465	1.296	113.0	< 0.7	Absent		
17			Diluent/Zero 0.0 ug/L	LMB	RW	1.425	1.296	110.0	< 0.7	Absent		
18			Standard 1 1.0 ug/L	CCC	RW	1.106	1.296	85.3	1.7	Present	170	
19			Diluent/Zero 0.0 ug/L	LMB	RW	1.370	1.296	105.7	< 0.7	Absent		
20			Standard 1 1.0 ug/L	CCC	RW	1.149	1.296	88.7	1.3	Present	125	
21												
22												

Comments:

Reviewed By: Date: 7/14/98 Finalized By: John E. Deange III Date: 8/6/98

ENVIRONMENTAL HEALTH LABORATORIES

CARBOFURAN ANALYSIS RESULT SHEET

Method: Enzyme Immunoassay - Qualitative
Analyst: NM
Instrument ID: B&L Spec21
Run Date: 05/27/98 Run Time: 10:19
Project(s): DK 11790 - DK 11798
LOT # Standard 1: NA
Enzyme Conjugate: 7C2110
Spec 21 setting: 450
Standard 2: 7D1335
Stopping Soln.: 7C2034
Standard 3: 7D1336
Washing Solution: 7C1229a
Control Solution: 7D1337
Color Solution: 7C2117
Diluent / Zero Solution: 7C1276
Magnetic Particles: 7C2111

Seq Num	Lab ID #	Client	Sample Description	Sample Type	Matrix	Absorbance (nm) Bx	B°	Bx x 100 / B°	Calcd. ug/L	Final Result	% Rec	Q
1			Diluent/Zero 0.0 ug/L	LMB	RW	1.015	1.093	92.9				
2			Diluent/Zero 0.0 ug/L	LMB	RW	1.170	1.093	107.1				
3			Standard 2 1.0 ug/L	ICS	RW	0.483	1.093	44.2	1.1	Present	110	
4			Standard 2 1.0 ug/L	ICS	RW	0.473	1.093	43.3	1.1	Present	110	
5			Control 2.0 ug/L	QCS	RW	0.394	1.093	36.1	1.7	Present	85	
6	326199	IDEM	DK 11790	FS	GW	0.948	1.093	86.8	< 1.0	Absent		
7	326204	IDEM	DK 11791	FS	GW	0.842	1.093	77.1	< 1.0	Absent		
8	326204-S	IDEM	DK 11791 Matrix Spike/1.0 ug/L	MS	GW	0.646	1.093	59.1	0.44	Present	44	
9	326204SD	IDEM	DK 11791 Matrix Spike Duplicate/1.0 ug/L	MSD	GW	0.469	1.093	42.9	1.1	Present	110	
10			Diluent/Zero 0.0 ug/L	LMB	RW	1.073	1.093	98.2	< 1.0	Absent		
11			Standard 2 1.0 ug/L	CCC	RW	0.482	1.093	44.1	1.05	Present	105	
12	326209	IDEM	DK 11792	FS	GW	1.108	1.093	101.4	< 1.0	Absent		
13	326214	IDEM	DK 11793	FS	GW	1.075	1.093	98.4	< 1.0	Absent		
14	326219	IDEM	DK 11794	FS	GW	1.047	1.093	95.8	< 1.0	Absent		
15	326224	IDEM	DK 11795	FS	GW	1.052	1.093	96.3	< 1.0	Absent		
16	326229	IDEM	DK 11796	FS	GW	1.050	1.093	96.1	< 1.0	Absent		
17	326234	IDEM	DK 11797	FS	GW	1.068	1.093	97.8	< 1.0	Absent		
18	326239	IDEM	DK 11798	FS	GW	1.034	1.093	94.6	< 1.0	Absent		
19			Diluent/Zero 0.0 ug/L	LMB	RW	1.083	1.093	99.1	< 1.0	Absent		
20			Standard 2 1.0 ug/L	CCC	RW	0.487	1.093	44.6	1.00	Present	100	
21												
22												

Comments:

Reviewed By: Date: 7/24/98 Finalized By: John E. George III Date: 8/6/98.

CHLORINATED ACID PESTICIDES - GC/MS TUNING AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)

Tech: CW
Date: 06/04/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060398B
Contract:	BAA 97-044	Task:	4A	Data Directory:	N\060398B
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0603F0N
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	515.1	Instrument ID:	GC/MS - N

m/e	Ion Abundance Criteria	% Rel Abundance	Q
51	10 to 80% of base peak	30.81	
68	< 2% of Mass 69	0.00	
70	< 2% of Mass 69	0.00	
127	10 to 80% of base peak	26.99	
197	< 2% of Mass 198	0.00	
198	base peak or > 50 % of mass 442	100.00	
199	5 to 9% of mass 198	6.17	
275	10 to 60% of base peak	16.49	
365	> 1% of base peak	1.40	
441	Present and < mass 443	7.96	
442	base peak or > 50 % of mass 198	52.39	
443	15 to 24% of mass 442	16.89	

Tune Date: 06/03/98

Tune Time: 16:51

Hours Since Last Tune

Matrix	Code
Reagent Water	RW
Surface Water	SW
Drinking Water	DW
Ground Water	GW
Waste Water	WW
Sediment	SE
Soil	SO
Sludge	SL
Other Solvents	OS
TCLP Leachate	TC
Hazardous Waste	HW

Contamination Levels: L=Low M=Medium H=High

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Tune 1	TI-DFN1	06/03/98	16:51	OS	
2	SPCC	S-515A	06/03/98	17:08	OS	
3	Laboratory Method Blank B	MB-515B	06/03/98	23:03	RW	
4	Laboratory Fortified Blank B	FB-515B	06/03/98	23:25	RW	
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Q = A flag or qualifier indicating possible cause for an out of ra

Comments: _____

CHLORINATED ACID PESTICIDES
LABORATORY PERFORMANCE CHECK

Tech: CW
Date: 06/04/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060398B
Contract:	BAA 97-044	Task:	4A	Data Directory:	N\060398B
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0603F0N
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	515.1	Instrument ID:	GC/MS - N
Data File:	S-515A	LPC Soln Lot #:	021798-021798		

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
Dinoseb	Sensitivity	0.05	Detection of analyte: S/N > 3	84.3	Pass	
4 - Nitrophenol	Chromatographic Performance	5.00	0.70 < PGF < 1.05 (a)	1.00	Pass	
4 - Nitrophenol 3,5-Dichlorobenzoic acid	Column Performance	0.15 0.30	Resolution > 0.40 (b)	0.64	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$PGF = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where W(1/2) is the peak width at half height and W(1/10) is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where t is the difference in elution times between the two peaks and W is the average peak width, at the baseline, of the two peaks.

Comments: _____

CHLORINATED ACID PESTICIDES
METHOD BLANK SUMMARY

Tech: CW
Date: 06/04/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060398B
Contract:	BAA 97-044	Task:	4A	Data Directory:	N\060398B
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0603F0N
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	515.1	Instrument ID:	GC/MS - N
Blank File:	MB-515B	Ext Date:	05/28/98	Ext Method:	Solid Phase Extraction

This method blank applies to the following samples, ms, msd, blanks, standards.

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Laboratory Method Blank B	MB-515B	06/03/98	23:03	RW	
2	Laboratory Fortified Blank B	FB-515B	06/03/98	23:25	RW	
3	Continuing Calibration Check B	C-1-06B	06/04/98	01:55	OS	
4	DK 11793	326211	06/04/98	05:19	GW	L
5	QCS B	Q-515B	06/04/98	06:03	RW	
6	Continuing Calibration Check C	C-2-06C	06/04/98	06:25	OS	
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Comments:

CHLORINATED ACID PESTICIDES DATA SHEET

Tech: CW
Date: 06/04/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11790 - DK 11798
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: RW
Data File/Smpl ID: MB-515B
Data File/Dupl ID:
Sample Number/Description: Laboratory Method Blank B

Lab ID: unknown
Task: 4A
Case: n/a
Method: 515.1
Smpl Vol: 500 ml
Dil. Factor: 2
Dupl Type:

Acq. File: A060398B
Data Directory: N\060398B
Initial Cali File: 0603F0N
Instrument ID: GC/MS - N
Date Received: n/a
Date Analyzed: 06/03/98
Contm. Level:

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
50594-66-6	Acifluorfen	< 0.1	ug/L			
25057-89-0	Bentazon	< 0.1	ug/L			
94-75-7	2,4-D	< 0.1	ug/L			
94-82-6	2,4-DB	< 0.1	ug/L			
1918-00-9	Dicamba	< 0.1	ug/L			
94-74-6	MCPA	< 0.1	ug/L			
7085-19-0	Mecoprop	< 0.1	ug/L			
1918-02-1	Picloram	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES
LABORATORY FORTIFIED BLANK

Tech: CW
Date: 06/04/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060398B
Contract: BAA 97-044
Task: 4A
Data Directory: N\060398B
Project: DK 11790 - DK 11798
Case: n/a
Initial Cali File: 0603F0N
Column: Restek XTI-5 30m x 0.25mm ID
Method: 515.1
Instrument ID: GC/MS - N
LFB Soln Lot#: Mix 1: P7038C-051398
Mix 2:
Mix 3:
LFB Data File: FB-515B

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acifluorfen	10.0	9.069	90.7	70 - 130	Pass	
Bentazon	10.0	10.695	107.0	70 - 130	Pass	
2,4-D	10.0	10.792	107.9	70 - 130	Pass	
2,4-DB	10.0	10.156	101.6	70 - 130	Pass	
Dicamba	10.0	8.812	88.1	70 - 130	Pass	
MCPA	10.0	9.230	92.3	70 - 130	Pass	
Mecoprop	10.0	9.265	92.6	70 - 130	Pass	
Picloram	10.0	12.133	121.3	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES - GC/MS TUNING AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)

Tech: CW
Date: 06/04/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060398B
Contract:	BAA 97-044	Task:	4A	Data Directory:	N\060398B
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0603F0N
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	515.1	Instrument ID:	GC/MS - N

m/e	Ion Abundance Criteria	% Rel Abundance	Q
51	10 to 80% of base peak	26.43	
68	< 2% of Mass 69	0.00	
70	< 2% of Mass 69	0.00	
127	10 to 80% of base peak	22.77	
197	< 2% of Mass 198	0.00	
198	base peak or > 50 % of mass 442	100.00	
199	5 to 9% of mass 198	7.66	
275	10 to 60% of base peak	22.50	
365	> 1% of base peak	1.93	
441	Present and < mass 443	9.59	
442	base peak or > 50 % of mass 198	66.18	
443	15 to 24% of mass 442	18.41	

Tune Date: 06/04/98

Tune Time: 01:35

Hours Since Last Tune 08:44

Matrix	Code
Reagent Water	RW
Surface Water	SW
Drinking Water	DW
Ground Water	GW
Waste Water	WW
Sediment	SE
Soil	SO
Sludge	SL
Other Solvents	OS
TCLP Leachate	TC
Hazardous Waste	HW

Contamination Levels: L=Low M=Medium H=High

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Tune 2	TI-DFN2	06/04/98	01:35	OS	
2	Continuing Calibration Check B	C-1-06B	06/04/98	01:55	OS	
3	DK 11793	326211	06/04/98	05:19	GW	L
4	QCS B	Q-515B	06/04/98	06:03	RW	
5	Continuing Calibration Check C	C-2-06C	06/04/98	06:25	OS	
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Q = A flag or qualifier indicating possible cause for an out of ra

Comments: _____

CHLORINATED ACID PESTICIDES
CONTINUING CALIBRATION CHECK

Tech: CW
Date: 06/04/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060398B
Contract: BAA 97-044
Task: 4A
Data Directory: N\060398B
Project: DK 11790 - DK 11798
Case: n/a
Initial Cali File: 0603F0N
Column: Restek XTI-5 30m x 0.25mm ID
Method: 515.1
Instrument ID: GC/MS - N
CCC Soln Lot#: Mix 1: P7038C-051398
Mix 2:
Mix 3:
CCC Data File: C-1-06B

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acifluorfen	1.0	1.064	106.4	70 - 130	Pass	
Bentazon	1.0	1.073	107.3	70 - 130	Pass	
2,4-D	1.0	1.117	111.7	70 - 130	Pass	
2,4-DB	1.0	1.190	119.0	70 - 130	Pass	
Dicamba	1.0	0.982	98.2	70 - 130	Pass	
MCPA	1.0	1.072	107.2	70 - 130	Pass	
Mecoprop	1.0	1.122	112.2	70 - 130	Pass	
Picloram	1.0	1.171	117.1	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES DATA SHEET

Tech: CW
Date: 06/04/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11790 - DK 11798
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326211
Data File/Dupl ID:
Sample Number/Description: DK 11793

Lab ID: unknown
Task: 4A
Case: n/a
Method: 515.1
Smpl Vol: 500 ml
Dil. Factor: 2
Dupl Type:

Acq. File: A060398B
Data Directory: N\060398B
Initial Cali File: 0603F0N
Instrument ID: GC/MS - N
Date Received: 05/26/98
Date Analyzed: 06/04/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
50594-66-6	Acifluorfen	< 0.1	ug/L			
25057-89-0	Bentazon	< 0.1	ug/L			
94-75-7	2,4-D	< 0.1	ug/L			
94-82-6	2,4-DB	< 0.1	ug/L			
1918-00-9	Dicamba	< 0.1	ug/L			
94-74-6	MCPA	< 0.1	ug/L			
7085-19-0	Mecoprop	< 0.1	ug/L			
1918-02-1	Picloram	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES
QUALITY CONTROL SAMPLE

Tech: CW
Date: 06/04/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060398B
Contract: BAA 97-044
Task: 4A
Data Directory: N\060398B
Project: DK 11790 - DK 11798
Case: n/a
Initial Cali File: 0603F0N
Column: Restek XTI-5 30m x 0.25mm ID
Method: 515.1
Instrument ID: GC/MS - N
QCS Soln Lot#: Mix 1: Q1207-050898
Mix 2:
Mix 3:
QCS Data File: Q-515B

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acifluorfen	2.0	1.885	94.3	70 - 130	Pass	
Bentazon	2.0	1.799	90.0	70 - 130	Pass	
2,4-D	2.0	2.120	106.0	70 - 130	Pass	
2,4-DB	2.0	2.358	117.9	70 - 130	Pass	
Dicamba	2.0	1.889	94.5	70 - 130	Pass	
MCPA	2.0	1.999	100.0	70 - 130	Pass	
Mecoprop	2.0	2.381	119.1	70 - 130	Pass	
Picloram	2.0	2.119	106.0	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES
CONTINUING CALIBRATION CHECK

Tech: CW
Date: 06/04/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060398B
Contract: BAA 97-044
Task: 4A
Data Directory: N\060398B
Project: DK 11790 - DK 11798
Case: n/a
Initial Cali File: 0603F0N
Column: Restek XTI-5 30m x 0.25mm ID
Method: 515.1
Instrument ID: GC/MS - N
CCC Soln Lot#: Mix 1: P7038C-051398
Mix 2:
Mix 3:
CCC Data File: C-2-06C

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acifluorfen	2.0	1.854	92.7	70 - 130	Pass	
Bentazon	2.0	2.499	125.0	70 - 130	Pass	
2,4-D	2.0	2.035	101.8	70 - 130	Pass	
2,4-DB	2.0	2.373	118.7	70 - 130	Pass	
Dicamba	2.0	2.009	100.5	70 - 130	Pass	
MCPA	2.0	1.977	98.9	70 - 130	Pass	
Mecoprop	2.0	2.024	101.2	70 - 130	Pass	
Picloram	2.0	2.559	128.0	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES
SURROGATE RECOVERY

Tech: CW
Date: 06/04/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060398B
Contract:	BAA 97-044	Task:	4A	Data Directory:	N\060398B
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0603F0N
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	515.1	Instrument ID:	GC/MS - N

Surrogate Soln Lot #: A7120222-052298

	EPA Sample No. / Sample Description	Data File/ Sample ID	Surrogate Percent Recovery SS1	Q	SS2	Q	SS3	Q	Total Out	Matrix Code	Contm. Level
1	Laboratory Method Blank B	MB-515B	122.0						0	RW	
2	Laboratory Fortified Blank B	FB-515B	106.3						0	RW	
3	DK 11793	326211	106.8						0	GW	L
4	QCS B	Q-515B	125.6						0	RW	
5											
6											
7											
8											
9											
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26											
27											
28											

Surrogates	Target Conc.	% Recovery Limits
SS1 = 2,4-Dichlorophenylacetic Acid	10.0	70 - 130
SS2 = n/a		
SS3 = n/a		

% Recovery = (Calculated Concentration / Target Concentration) *100

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

CHLORINATED ACID PESTICIDES
INTERNAL STANDARD AREA SUMMARY

Tech: CW
Date: 06/04/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060398B
Contract:	BAA 97-044	Task:	4A	Data Directory:	N\060398B
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0603F0N
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	515.1	Instrument ID:	GC/MS - N
IS Soln Lot#:	A7090334-052698				

	IS1 Area	IS1 RT	IS2 Area	IS2 RT
12 Hour CCC Standard	44206	8:56		
CCC Upper Limit	57468	9:26		
CCC Lower Limit	30944	8:26		

	Sample No. / Sample Description	Data File / Sample ID	IS1 Area	Q	IS1 RT	Q	IS2 Area	Q	IS2 RT	Q	Matrix Code	Contm. Level
1	Laboratory Method Blank B	MB-515B	48534		8:56						RW	
2	Laboratory Fortified Blank B	FB-515B	46223		8:57						RW	
3	DK 11793	326211	37566		8:56						GW	L
4	QCS B	Q-515B	51239		8:56						RW	
5	Continuing Calibration Check C	C-2-06C	32743		8:56						OS	
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

IS1 = 4,4'-Dibromooctafluorobiphenyl
IS2 = n/a

CCC Upper / Lower Limit: Area: CCC std IS area +/- 30%; RT: CCC std IS RT +/- 30 seconds
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

CHLORINATED ACID PESTICIDES
INITIAL CALIBRATION

Tech: CW
Date: 06/04/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11790 - DK 11798
Column: Restek XTI-5 30m x 0.25mm ID
IC Soln Lot#: Mix 1: P7038C-052998

Lab ID: unknown
Task: 4A
Case: n/a
Method: 515.1
Mix 2:

Acq. File: A060398B
Data Directory: N\060398B
Initial Cali File: 0603F0N
Instrument ID: GC/MS - N
Mix 3:

Data File / Sample ID:	I-01-06A	I-05-06A	I-1-06A	I-2-06A	I-5-06A	I-10-06A	I-25-06A				
Concentration:	0.1 ug/L	0.5 ug/L	1 ug/L	2 ug/L	5 ug/L	10 ug/L	25 ug/L	Avg	%	Corr	
Compound	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	RSD	Coeff	Q
Acifluorfen	3.467	3.0945	2.589	2.452	2.368	2.379	2.360	2.673	16.3	1.000	
Bentazon	----	9.187	8.491	9.343	8.469	7.425	----	8.583	8.8	0.997	
2,4-D	----	3.1169	3.078	3.266	3.308	3.506	3.680	3.326	6.9	1.000	
2,4-DB	----	4.961	4.118	5.262	6.488	7.236	7.548	5.935	23.0	1.000	*
Dicamba	----	6.130	5.084	6.069	6.374	6.073	6.169	5.983	7.6	1.000	
MCPA	----	2.503	1.699	2.010	2.269	2.466	2.668	2.269	15.8	1.000	
Mecoprop	----	2.1717	1.329	1.597	1.979	2.249	----	1.865	21.0	0.998	*
Picloram	----	4.631	3.792	4.216	3.786	3.464	----	3.978	11.4	0.999	

Avg RF = Average response factor
Max %RSD = 20% for a linear fit
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

DETERMINATION OF METHOD DETECTION LIMITS
METHOD 515.1 - CHLORINATED ACID PESTICIDES

Tech: CAW
Date: 01/07/98

Lab Name:	Environmental Health Laboratories	Extract. Vol:	500 mL	Acq. File:	A010798A
Project:	Routine MDL	Disk:	47 mm	Data Directory:	N\010798A
Column:	Restek XTI-5 30m x 0.25um ID	Cartridge:	NA	Initial Cali Data:	1231E0N
Extraction Technique:	LSE	Method:	515.1	Instrument ID:	GC/MS - N
Matrix Code:	RW	LSE Matrix:	RPS	Extraction Tech:	JH

			Data File	M-02-06A	M-02-06B	M-02-06C	M-02-06D	M-02-06E	M-02-06F	M-02-06G			
			Analysis Date	01/07/98	01/07/98	01/07/98	01/07/98	01/07/98	01/07/98	01/07/98			
				Observed Recovery (ug/L)							Std.	Calc.	
Method	CAS #	Parameter	Target	Rep - 1	Rep - 2	Rep - 3	Rep - 4	Rep -5	Rep - 6	Rep - 7	Deviation	MDL	Units
515.1	50594-66-6	Acifluorfen	0.2	0.279	0.265	0.249	0.290	0.248	0.268	0.265	0.015	0.047	ug/L
515.1	25057-89-0	Bentazone	0.2	0.156	0.162	0.183	0.168	0.175	0.181	0.166	0.010	0.031	ug/L
515.1	94-75-7	2,4-D	0.2	0.242	0.205	0.277	0.219	0.260	0.210	0.244	0.027	0.084	ug/L
515.1	94-82-6	2,4-DB	0.2	0.359	0.346	0.377	0.360	0.348	0.350	0.347	0.011	0.035	ug/L
515.1	1918-00-9	Dicamba	0.2	0.296	0.289	0.290	0.298	0.281	0.273	0.290	0.009	0.027	ug/L
515.1	94-74-6	MCPA	0.2	0.452	0.446	0.447	0.461	0.441	0.452	0.462	0.008	0.024	ug/L
515.1	7085-19-0	MCPP (Mecoprop)	0.2	0.525	0.523	0.527	0.533	0.522	0.529	0.531	0.004	0.013	ug/L
515.1	1918-02-1	Picloram	0.2	0.238	0.241	0.228	0.238	0.251	0.228	0.240	0.008	0.025	ug/L

Q = A flag or qualifier indicating possible cause for an out of range or failed result.
LSE = Liquid / solid extraction; LLE = Liquid / Liquid extraction

LSE Matrix = C8, C18, SDVB, Biorex-5, AG-1X-8, RPS

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED - GC/MS TUNING AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)

Tech: AT
Date: 06/03/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060198A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060198A
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0507F1AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	GC/MS-AE

m/e	Ion Abundance Criteria	% Rel Abundance	Q
51	10 to 80% of base peak	30.53	
68	< 2% of Mass 69	0.00	
70	< 2% of Mass 69	0.00	
127	10 to 80% of base peak	34.64	
197	< 2% of Mass 198	0.00	
198	base peak or > 50 % of mass 442	96.27	
199	5 to 9% of mass 198	5.86	
275	10 to 60% of base peak	20.86	
365	> 1% of base peak	2.49	
441	Present and < mass 443	11.87	
442	base peak or > 50 % of mass 198	100.00	
443	15 to 24% of mass 442	17.42	

Tune Date: 06/01/98

Tune Time: 10:04

Hours Since Last Tune

Matrix	Code
Reagent Water	RW
Surface Water	SW
Drinking Water	DW
Ground Water	GW
Waste Water	WW
Sediment	SE
Soil	SO
Sludge	SL
Other Solvents	OS
TCLP Leachate	TC
Hazardous Waste	HW

Contamination Levels: L=Low M=Medium H=High

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Tune 1	TI-DFN1	06/01/98	10:04	OS	
2	SPCC	S-525A	06/01/98	10:27	OS	
3	Continuing Calibration Check A	C-1-18A	06/01/98	11:11	OS	
4	Laboratory Method Blank A	MB-525A	06/01/98	12:10	RW	
5	Laboratory Fortified Blank A	FB-525A	06/01/98	12:44	RW	
6	DK 11790	326195	06/01/98	16:45	GW	L
7	DK 11791	326200	06/01/98	17:20	GW	L
8	DK 11792	326205	06/01/98	17:54	GW	L
9	DK 11793	326210	06/01/98	18:29	GW	L
10	Laboratory Fortified Matrix A	FM-525A	06/01/98	19:03	DW	
11	Continuing Calibration Check B	C-1-18B	06/01/98	19:38	OS	
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED LABORATORY PERFORMANCE CHECK

Tech: AT
Date: 06/03/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060198A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060198A
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0507F1AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	GC/MS-AE
Data File:	S-525A	LPC Soln Lot #:	112597-112597		

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
Bromacil	Chromatographic Performance	5.0	0.80 < PGF < 1.20 (a)	1.04	Pass	
Atrazine Prometon	Column Performance	0.15 0.30	Resolution > 0.7 (b)	1.20	Pass	
Endrin	Abundance of degradation to Endrin Aldehyde	2.0	< 10% endrin aldehyde	< 10 %	Pass	
4,4' - DDT	Abundance of degradation to 4,4' - DDD & 4,4' - DDE		< 10% 4,4'-DDD & 4,4'-DDE	< 10 %	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$PGF = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where W(1/2) is the peak width at half height and W(1/10) is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where t is the difference in elution times between the two peaks and W is the average peak width, at the baseline, of the two peaks.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED CONTINUING CALIBRATION CHECK

Tech: AT
Date: 06/03/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060198A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060198A
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0507F1AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	GC/MS-AE
CCC Soln Lot#:	Mix 1: W980505012-050698	Mix 2:		Mix 3:	
CCC Data File:	C-1-18A				

Target Concentration: 1.0 ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	1.0	1.096	109.6	70 - 130	Pass	
Alachlor	1.0	1.080	108.0	70 - 130	Pass	
Atrazine	1.0	1.088	108.8	70 - 130	Pass	
Bromacil	1.0	1.073	107.3	70 - 130	Pass	
Cyanazine	1.0	1.077	107.7	70 - 130	Pass	
Diazinon	1.0	1.080	108.0	70 - 130	Pass	
Endosulfan I	1.0	0.982	98.2	70 - 130	Pass	
Endosulfan II	1.0	1.080	108.0	70 - 130	Pass	
Endosulfan sulfate	1.0	1.064	106.4	70 - 130	Pass	
Fenamiphos	1.0	1.151	115.1	70 - 130	Pass	
Metolachlor	1.0	1.076	107.6	70 - 130	Pass	
Metribuzin	1.0	1.069	106.9	70 - 130	Pass	
Pendimethalin	1.0	1.055	105.5	70 - 130	Pass	
Prometon	1.0	1.097	109.7	70 - 130	Pass	
Propachlor	1.0	1.122	112.2	70 - 130	Pass	
Simazine	1.0	1.036	103.6	70 - 130	Pass	
Terbufos	1.0	1.006	100.6	70 - 130	Pass	
Trifluralin	1.0	1.111	111.1	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED METHOD BLANK SUMMARY

Tech: AT
Date: 06/03/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060198A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060198A
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0507F1AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	GC/MS-AE
Blank File:	MB-525A	Ext Date:	05/28/98	Ext Method:	Solid Phase Extraction

This method blank applies to the following samples, ms, msd, blanks, standards.

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Continuing Calibration Check A	C-1-18A	06/01/98	11:11	OS	
2	Laboratory Method Blank A	MB-525A	06/01/98	12:10	RW	
3	Laboratory Fortified Blank A	FB-525A	06/01/98	12:44	RW	
4	DK 11790	326195	06/01/98	16:45	GW	L
5	DK 11791	326200	06/01/98	17:20	GW	L
6	DK 11792	326205	06/01/98	17:54	GW	L
7	DK 11793	326210	06/01/98	18:29	GW	L
8	Laboratory Fortified Matrix A	FM-525A	06/01/98	19:03	DW	
9	Continuing Calibration Check B	C-1-18B	06/01/98	19:38	OS	
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/03/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060198A
Contract: BAA 97-044
Task: 4A
Data Directory: AE\060198A
Project: DK 11790 - DK 11798
Case: n/a
Initial Cali File: 0507F1AE
Column: Restek XTI-5 30m x 0.25mm ID
Method: 525.2
Instrument ID: GC/MS-AE
Matrix Code: RW
Smpl Vol: 1000 ml
Date Received: n/a
Data File/Smpl ID: MB-525A
Dil. Factor: 1
Date Analyzed: 06/01/98
Data File/Dupl ID:
Dupl Type:
Contm. Level:
Sample Number/Description: Laboratory Method Blank A

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
LABORATORY FORTIFIED BLANK

Tech: AT
Date: 06/03/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11790 - DK 11798
Column: Restek XTI-5 30m x 0.25mm ID
LFB Soln Lot#: Mix 1: W980505012-050698
LFB Data File: FB-525A

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Mix 2:

Acq. File: A060198A
Data Directory: AE\060198A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS-AE
Mix 3:

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	1.0	0.973	97.3	70 - 130	Pass	
Alachlor	1.0	1.010	101.0	70 - 130	Pass	
Atrazine	1.0	1.006	100.6	70 - 130	Pass	
Bromacil	1.0	0.927	92.7	70 - 130	Pass	
Cyanazine	1.0	0.992	99.2	70 - 130	Pass	
Diazinon	1.0	0.806	80.6	70 - 130	Pass	
Endosulfan I	1.0	1.227	122.7	70 - 130	Pass	
Endosulfan II	1.0	1.108	110.8	70 - 130	Pass	
Endosulfan sulfate	1.0	1.152	115.2	70 - 130	Pass	
Fenamiphos	1.0	1.213	121.3	70 - 130	Pass	
Metolachlor	1.0	1.005	100.5	70 - 130	Pass	
Metribuzin	1.0	0.630	63.0	70 - 130	Fail	*
Pendimethalin	1.0	1.047	104.7	70 - 130	Pass	
Prometon	1.0	0.528	52.8	70 - 130	Fail	*
Propachlor	1.0	1.062	106.2	70 - 130	Pass	
Simazine	1.0	0.853	85.3	70 - 130	Pass	
Terbufos	1.0	1.022	102.2	70 - 130	Pass	
Trifluralin	1.0	1.070	107.0	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments: * These compound recoveries were outside the method 525.2 acceptance limits of 70-130% recovery, but were within the EHL statistically determined 95th percentile.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/03/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11790 - DK 11798
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326195
Data File/Dupl ID:
Sample Number/Description: DK 11790

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060198A
Data Directory: AE\060198A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/01/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/03/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11790 - DK 11798
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326200
Data File/Dupl ID:
Sample Number/Description: DK 11791

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060198A
Data Directory: AE\060198A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/01/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/03/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11790 - DK 11798
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326205
Data File/Dupl ID:
Sample Number/Description: DK 11792

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060198A
Data Directory: AE\060198A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/01/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/03/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11790 - DK 11798
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326210
Data File/Dupl ID:
Sample Number/Description: DK 11793

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060198A
Data Directory: AE\060198A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/01/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments: One of four surrogate standard recoveries in the method 525.2 analysis was low biased outside the acceptance limits of 70-130% recovery due to matrix interference. This data was acceptable based on the recoveries of the other three surrogate standards.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
LABORATORY FORTIFIED MATRIX

Tech: AT
Date: 06/03/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060198A
Contract: BAA 97-044
Task: 4A
Data Directory: AE\060198A
Project: DK 11790 - DK 11798
Case: n/a
Initial Cali File: 0507F1AE
Column: Restek XTI-5 30m x 0.25mm ID
Method: 525.2
Instrument ID: GC/MS-AE
LFM Soln Lot#: Mix 1: W980505012-050698
Mix 2:
Mix 3:
LFM Data File: FM-525A

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	1.0	1.066	106.6	70 - 130	Pass	
Alachlor	1.0	1.047	104.7	70 - 130	Pass	
Atrazine	1.0	1.133	113.3	70 - 130	Pass	
Bromacil	1.0	0.844	84.4	70 - 130	Pass	
Cyanazine	1.0	1.181	118.1	70 - 130	Pass	
Diazinon	1.0	0.908	90.8	70 - 130	Pass	
Endosulfan I	1.0	1.228	122.8	70 - 130	Pass	
Endosulfan II	1.0	1.099	109.9	70 - 130	Pass	
Endosulfan sulfate	1.0	1.225	122.5	70 - 130	Pass	
Fenamiphos	1.0	1.144	114.4	70 - 130	Pass	
Metolachlor	1.0	1.052	105.2	70 - 130	Pass	
Metribuzin	1.0	0.638	63.8	70 - 130	Fail	*
Pendimethalin	1.0	0.985	98.5	70 - 130	Pass	
Prometon	1.0	0.652	65.2	70 - 130	Fail	*
Propachlor	1.0	1.096	109.6	70 - 130	Pass	
Simazine	1.0	1.052	105.2	70 - 130	Pass	
Terbufos	1.0	1.065	106.5	70 - 130	Pass	
Trifluralin	1.0	1.118	111.8	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments: * These compound recoveries were outside the method 525.2 acceptance limits of 70-130% recovery, but were within the EHL statistically determined 95th percentile.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED CONTINUING CALIBRATION CHECK

Tech: AT
Date: 06/03/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060198A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060198A
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0507F1AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	GC/MS-AE
CCC Soln Lot#:	Mix 1: W980505012-050698	Mix 2:		Mix 3:	
CCC Data File:	C-1-18B				

Target Concentration: 1.0 ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	1.0	0.927	92.7	70 - 130	Pass	
Alachlor	1.0	0.994	99.4	70 - 130	Pass	
Atrazine	1.0	1.070	107.0	70 - 130	Pass	
Bromacil	1.0	1.254	125.4	70 - 130	Pass	
Cyanazine	1.0	0.803	80.3	70 - 130	Pass	
Diazinon	1.0	1.014	101.4	70 - 130	Pass	
Endosulfan I	1.0	1.084	108.4	70 - 130	Pass	
Endosulfan II	1.0	1.191	119.1	70 - 130	Pass	
Endosulfan sulfate	1.0	1.212	121.2	70 - 130	Pass	
Fenamiphos	1.0	0.913	91.3	70 - 130	Pass	
Metolachlor	1.0	0.981	98.1	70 - 130	Pass	
Metribuzin	1.0	0.920	92.0	70 - 130	Pass	
Pendimethalin	1.0	1.013	101.3	70 - 130	Pass	
Prometon	1.0	0.937	93.7	70 - 130	Pass	
Propachlor	1.0	1.038	103.8	70 - 130	Pass	
Simazine	1.0	1.115	111.5	70 - 130	Pass	
Terbufos	1.0	1.001	100.1	70 - 130	Pass	
Trifluralin	1.0	1.170	117.0	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED SURROGATE RECOVERY

Tech: AT
Date: 06/03/98

Lab Name: Environmental Health Laboratories Lab ID: unknown Acq. File: A060198A
Contract: BAA 97-044 Task: 4A Data Directory: AE\060198A
Project: DK 11790 - DK 11798 Case: n/a Initial Call File: 0507F1AE
Column: Restek XTI-5 30m x 0.25mm ID Method: 525.2 Instrument ID: GC/MS - AE
Surrogate Soln Lot #: A6100287-052898

	EPA Sample No. / Sample Description	Data File/ Sample ID	Surrogate Percent Recovery SS1	Q	SS2	Q	SS3	Q	SS4	Q	Total Out	Matrix Code	Contm Level
1	Laboratory Method Blank A	MB-525A	103.7		106.4		104.7		97.9		0	RW	
2	Laboratory Fortified Blank A	FB-525A	103.5		103.9		109.8		104.1		0	RW	
3	DK 11790	326195	94.6		99.2		89.7		81.9		0	GW	L
4	DK 11791	326200	89.5		97.2		89.8		87.7		0	GW	L
5	DK 11792	326205	92.8		104.4		95.8		96.9		0	GW	L
6	DK 11793	326210	52.4	*	96.9		93.4		88.2		1	GW	L
7	Laboratory Fortified Matrix A	FM-525A	91.2		90.8		94.6		83.2		0	DW	
8													
9													
10													
11													
12													
13													
14													
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25													
26													
27													
28													

Surrogates		Target Conc.	% Recovery Limits
SS1	= 2,4,5,6-Tetrachloro-m-xylene	5.0	70 - 130
SS2	= Pentachloronitrobenzene	5.0	70 - 130
SS3	= 4,4'-Dichlorobiphenyl	5.0	70 - 130
SS4	= Triphenyl Phosphate	5.0	70 - 130

% Recovery = (Calculated Concentration / Target Concentration) *100

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: * The low biased surrogate standard recovery is due to matrix interference.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
INTERNAL STANDARD AREA SUMMARY

Tech: AT
Date: 06/03/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060198A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060198A
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0507F1AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	GC/MS - AE
IS Soln Lot#:	A7090314-052898				

	IS1 Area	IS1 RT	IS2 Area	IS2 RT
12 Hour CCC Standard	1295254	17:41		
CCC Upper Limit	1683830	18:11		
CCC Lower Limit	906678	17:11		
Init Cali Lower Limit	2625627	17:28		

	Sample No. / Sample Description	Data File / Sample ID	IS1 Area	Q	IS1 RT	Q	IS2 Area	Q	IS2 RT	Q	Matrix Code	Confirm. Level
1	Laboratory Method Blank A	MB-525A	1222595		17:41						RW	
2	Laboratory Fortified Blank A	FB-525A	972320		17:41						RW	
3	DK 11790	326195	1268601		17:44						GW	L
4	DK 11791	326200	1394921		17:44						GW	L
5	DK 11792	326205	1409815		17:44						GW	L
6	DK 11793	326210	1211541		17:44						GW	L
7	Laboratory Fortified Matrix A	FM-525A	1070550		17:44						DW	
8	Continuing Calibration Check B	C-1-18B	1286371		17:44						OS	
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

IS1 = Pyrene-d10
IS2 = n/a

CCC Upper / Lower Limit: Area: 12 hr CCC std IS area +/- 30%; RT: 12 hr CCC std IS RT +/- 30 seconds
Init Cali Lower Limit: Area: Init Cali IS area - 50%; RT: Init Cali IS RT - 30 seconds
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED INITIAL CALIBRATION

Tech: AT
Date: 06/03/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060198A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060198A
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0507F1AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	GC/MS - AE
IC Soln Lot#:	Mix 1: W980505012-050698	Mix 2:		Mix 3:	

Data File / Sample ID:	I005-18A	I-01-18A	I-05-18A	I-1-18A	I-2-18A	I-5-18A	I-10-18A	I-25-18A	I-50-18A	I-100-18A				
Concentration (ug/L):	0.05	0.1	0.5	1	2	5	10	25	50	100	Avg	%	Corr	
Compound	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	RSD	Coeff	Q
Acetochlor	0.376	0.165	0.216	0.231	0.257	0.282	0.288	0.283	----	----	0.262	23.6	1.0000	
Alachlor	1.968	0.788	0.875	0.948	1.017	1.140	1.133	1.120	----	----	1.124	32.5	0.9999	*
Atrazine	0.505	0.201	0.283	0.307	0.339	0.338	0.314	----	----	----	0.327	28.0	0.9992	
Bromacil	----	0.353	0.296	0.521	0.662	0.787	0.752	0.768	----	----	0.591	34.5	0.9999	*
Cyanazine	0.360	0.151	0.172	0.229	0.263	0.302	0.308	0.327	----	----	0.264	28.3	0.9997	
Diazinon	----	0.965	0.820	0.755	0.848	0.801	0.758	----	----	----	0.824	9.4	0.9994	
Endosulfan I	0.493	0.178	0.180	0.214	0.195	0.226	0.214	0.207	----	----	0.238	43.7	1.0000	*
Endosulfan II	----	0.184	0.211	0.253	0.222	0.254	0.244	0.245	----	----	0.230	11.3	1.0000	
Endosulfan sulfate	0.405	0.171	0.148	0.182	0.176	0.204	0.193	0.186	----	----	0.208	39.0	1.0000	*
Fenamiphos	0.557	0.243	0.303	0.444	0.526	0.616	0.619	0.619	----	----	0.491	30.1	1.0000	*
Metolachlor	2.985	1.293	1.728	2.012	2.168	2.338	2.304	2.167	----	----	2.124	23.1	1.0000	
Metribuzin	0.658	0.299	0.344	0.416	0.488	0.538	0.537	0.546	----	----	0.478	24.7	1.0000	
Pendimethalin	0.588	0.340	0.369	0.419	0.447	0.469	0.466	0.459	----	----	0.445	16.8	1.0000	
Prometon	----	0.484	0.670	0.683	0.806	0.819	0.741	----	----	----	0.701	17.5	0.9980	
Propachlor	0.941	0.434	0.507	0.573	0.607	0.674	0.650	0.677	----	----	0.633	23.8	1.0000	
Simazine	0.395	0.149	0.147	0.181	0.232	0.235	0.241	0.232	----	----	0.227	34.7	1.0000	*
Terbufos	----	0.921	0.930	1.033	1.078	1.186	1.184	1.251	----	----	1.083	12.0	1.0000	
Trifluralin	1.058	0.697	0.709	0.771	0.787	0.956	0.911	1.043	----	----	0.867	16.7	0.9990	

Avg RF = Average response factor
Max %RSD = 30% for a linear fit
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

DETERMINATION OF METHOD DETECTION LIMITS
METHOD 525.2 Extended - BROAD SPECTRUM PESTICIDES

Tech: RD
Date: 05/02/98

Lab Name:	Environmental Health Laboratories	Extract. Vol:	1000 mL	Acq. File:	A032598A
Project:	Routine MDL	Disk:	47 mm	Data Directory:	AE\032598A
Column:	Restek XTI-5 30m x 0.25um ID	Cartridge:	n/a	Initial Cali Data:	0220F0AE
Extraction Technique:	LSE	Method:	525.2C	Instrument ID:	GC/MS - AE
Matrix Code:	RW	LSE Matrix:	C18		

			Data File*	M-01-01A	M-01-01B	M-01-01C	M-01-01D	M-01-01E	M-01-01F	M-01-01G			
			Analysis Date	03/25/98	03/25/98	03/26/98	03/26/98	03/27/98	03/27/98	03/27/98			
				Observed Recovery							Std.	Calc.	
Method	CAS #	Parameter	Target	Rep - 1	Rep - 2	Rep - 3	Rep - 4	Rep - 5	Rep - 6	Rep - 7	Deviation	MDL	Units
525.2	34256-82-1	Acetochlor	0.1	0.097	0.111	0.096	0.086	0.103	0.104	0.099	0.0078	0.025	ug/L
525.2	15972-60-8	Alachlor	0.1	0.124	0.119	0.128	0.120	0.129	0.121	0.127	0.0041	0.013	ug/L
525.2	1912-24-9	Atrazine	0.1	0.101	0.098	0.110	0.097	0.101	0.105	0.103	0.0044	0.014	ug/L
525.2	314-40-9	Bromacil	0.1	0.216	0.223	0.208	0.211	0.205	0.222	0.216	0.0068	0.021	ug/L
525.2	21725-46-2	Cyanazine	0.1	0.108	0.121	0.096	0.109	0.108	0.110	0.109	0.0073	0.023	ug/L
525.2	959-98-8	Endosulfan I	0.1	0.142	0.142	0.123	0.140	0.129	0.130	0.130	0.0075	0.024	ug/L
525.2	33213-65-9	Endosulfan II	0.1	0.104	0.119	0.090	0.129	0.086	0.100	0.094	0.0157	0.049	ug/L
525.2	1031-07-8	Endosulfan sulfate	0.1	0.096	0.097	0.095	0.110	0.099	0.092	0.128	0.0126	0.040	ug/L
525.2	22224-92-6	Fenamiphos	0.1	0.108	0.118	0.129	0.122	0.127	0.116	0.118	0.0071	0.022	ug/L
525.2	51218-45-2	Metolachlor	0.1	0.122	0.118	0.125	0.122	0.120	0.126	0.126	0.0031	0.010	ug/L
525.2	21087-64-9	Metribuzin	0.1	0.093	0.091	0.096	0.091	0.099	0.095	0.093	0.0029	0.009	ug/L
525.2	40487-42-1	Pendimethalin	0.1	0.095	0.099	0.096	0.102	0.103	0.096	0.094	0.0035	0.011	ug/L
525.2	1610-18-0	Prometon	0.1	0.084	0.069	0.068	0.070	0.057	0.046	0.066	0.0118	0.037	ug/L
525.2	1918-16-7	Propachlor	0.1	0.119	0.106	0.119	0.103	0.117	0.119	0.119	0.0070	0.022	ug/L
525.2	122-34-9	Simazine	0.1	0.122	0.113	0.103	0.096	0.102	0.109	0.111	0.0085	0.027	ug/L
525.2	13071-79-9	Terbufos	0.1	0.117	0.103	0.128	0.097	0.132	0.126	0.126	0.0135	0.042	ug/L
525.2	1582-09-8	Trifluralin	0.1	0.139	0.138	0.140	0.129	0.134	0.143	0.145	0.0054	0.017	ug/L

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments *Analyzed 05/02/98

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED - GC/MS TUNING AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)

Tech: AT
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060498A
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0507F1AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	GC/MS-AE

m/e	Ion Abundance Criteria	% Rel Abundance	Q
51	10 to 80% of base peak	32.17	
68	< 2% of Mass 69	0.00	
70	< 2% of Mass 69	0.00	
127	10 to 80% of base peak	33.02	
197	< 2% of Mass 198	0.00	
198	base peak or > 50 % of mass 442	100.00	
199	5 to 9% of mass 198	5.83	
275	10 to 60% of base peak	23.14	
365	> 1% of base peak	2.07	
441	Present and < mass 443	13.17	
442	base peak or > 50 % of mass 198	78.65	
443	15 to 24% of mass 442	18.06	

Tune Date: 06/04/98

Tune Time: 10:02

Hours Since Last Tune

Matrix	Code
Reagent Water	RW
Surface Water	SW
Drinking Water	DW
Ground Water	GW
Waste Water	WW
Sediment	SE
Soil	SO
Sludge	SL
Other Solvents	OS
TCLP Leachate	TC
Hazardous Waste	HW

Contamination Levels: L=Low M=Medium H=High

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Tune 1	TI-DFN1	06/04/98	10:02	OS	
2	SPCC	S-525A	06/04/98	10:43	OS	
3	Continuing Calibration Check A	C-2-18A	06/04/98	11:44	OS	
4	Laboratory Method Blank A	MB-525A	06/04/98	13:18	RW	
5	Laboratory Fortified Blank A	FB-525A	06/04/98	14:13	RW	
6	DK 11794	326215	06/04/98	15:08	GW	L
7	DK 11795	326220	06/04/98	16:03	GW	L
8	DK 11796	326225	06/04/98	16:58	GW	L
9	DK 11797	326230	06/04/98	17:53	GW	L
10	DK 11797 Matrix Spike	326230-S	06/04/98	18:48	GW	
11	DK 11798	326235	06/04/98	19:43	GW	L
12	Continuing Calibration Check B	C-2-18B	06/05/98	00:16	OS	
13						
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23						
24						

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED LABORATORY PERFORMANCE CHECK

Tech: AT
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060498A
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0507F1AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	
Data File:	S-525A	LPC Soln Lot #:	112597-112597		

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
Bromacil	Chromatographic Performance	5.0	0.80 < PGF < 1.20 (a)	0.98	Pass	
Atrazine Prometon	Column Performance	0.15 0.30	Resolution > 0.7 (b)	1.06	Pass	
Endrin	Abundance of degradation to Endrin Aldehyde	2.0	< 10% endrin aldehyde	< 10 %	Pass	
4,4' - DDT	Abundance of degradation to 4,4' - DDD & 4,4' - DDE		< 10% 4,4'-DDD & 4,4'-DDE	< 10 %	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$PGF = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where W(1/2) is the peak width at half height and W(1/10) is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where t is the difference in elution times between the two peaks and W is the average peak width, at the baseline, of the two peaks.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED CONTINUING CALIBRATION CHECK

Tech: AT
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060498A
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0507F1AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	GC/MS - AE
CCC Soln Lot#:	Mix 1: W980505012-050698	Mix 2:		Mix 3:	
CCC Data File:	C-2-18A				

Target Concentration: 2.0 ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	2.0	2.254	112.7	70 - 130	Pass	
Alachlor	2.0	2.211	110.6	70 - 130	Pass	
Atrazine	2.0	2.237	111.9	70 - 130	Pass	
Bromacil	2.0	2.073	103.7	70 - 130	Pass	
Cyanazine	2.0	2.230	111.5	70 - 130	Pass	
Diazinon	2.0	2.252	112.6	70 - 130	Pass	
Endosulfan I	2.0	2.193	109.7	70 - 130	Pass	
Endosulfan II	2.0	2.071	103.6	70 - 130	Pass	
Endosulfan sulfate	2.0	2.285	114.3	70 - 130	Pass	
Fenamiphos	2.0	2.478	123.9	70 - 130	Pass	
Metolachlor	2.0	2.257	112.9	70 - 130	Pass	
Metribuzin	2.0	2.197	109.9	70 - 130	Pass	
Pendimethalin	2.0	2.195	109.8	70 - 130	Pass	
Prometon	2.0	2.179	109.0	70 - 130	Pass	
Propachlor	2.0	2.240	112.0	70 - 130	Pass	
Simazine	2.0	2.169	108.5	70 - 130	Pass	
Terbufos	2.0	2.042	102.1	70 - 130	Pass	
Trifluralin	2.0	2.379	119.0	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED METHOD BLANK SUMMARY

Tech: AT
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060498A
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0507F1AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	GC/MS - AE
Blank File:	MB-525A	Ext Date:	05/29/98	Ext Method:	Solid Phase Extraction

This method blank applies to the following samples, ms, msd, blanks, standards.

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Continuing Calibration Check A	C-2-18A	06/04/98	11:44	OS	
2	Laboratory Method Blank A	MB-525A	06/04/98	13:18	RW	
3	Laboratory Fortified Blank A	FB-525A	06/04/98	14:13	RW	
4	DK 11794	326215	06/04/98	15:08	GW	L
5	DK 11795	326220	06/04/98	16:03	GW	L
6	DK 11796	326225	06/04/98	16:58	GW	L
7	DK 11797	326230	06/04/98	17:53	GW	L
8	DK 11797 Matrix Spike	326230-S	06/04/98	18:48	GW	
9	DK 11798	326235	06/04/98	19:43	GW	L
10	Continuing Calibration Check B	C-2-18B	06/05/98	00:16	OS	
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11790 - DK 11798
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: RW
Data File/Smpl ID: MB-525A
Data File/Dupl ID:
Sample Number/Description: Laboratory Method Blank A

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060498A
Data Directory: AE\060498A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: n/a
Date Analyzed: 06/04/98
Contm. Level:

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
LABORATORY FORTIFIED BLANK

Tech: AT
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060498A
Contract: BAA 97-044
Task: 4A
Data Directory: AE\060498A
Project: DK 11790 - DK 11798
Case: n/a
Initial Cali File: 0507F1AE
Column: Restek XTI-5 30m x 0.25mm ID
Method: 525.2
Instrument ID: GC/MS - AE
LFB Soln Lot#: Mix 1: W980505012-050698
Mix 2:
Mix 3:
LFB Data File: FB-525A

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	1.0	1.150	115.0	70 - 130	Pass	
Alachlor	1.0	1.075	107.5	70 - 130	Pass	
Atrazine	1.0	1.097	109.7	70 - 130	Pass	
Bromacil	1.0	1.053	105.3	70 - 130	Pass	
Cyanazine	1.0	1.133	113.3	70 - 130	Pass	
Diazinon	1.0	0.990	99.0	70 - 130	Pass	
Endosulfan I	1.0	1.238	123.8	70 - 130	Pass	
Endosulfan II	1.0	1.117	111.7	70 - 130	Pass	
Endosulfan sulfate	1.0	1.187	118.7	70 - 130	Pass	
Fenamiphos	1.0	1.292	129.2	70 - 130	Pass	
Metolachlor	1.0	1.092	109.2	70 - 130	Pass	
Metribuzin	1.0	0.725	72.5	70 - 130	Pass	
Pendimethalin	1.0	1.159	115.9	70 - 130	Pass	
Prometon	1.0	0.692	69.2	70 - 130	Fail	*
Propachlor	1.0	1.137	113.7	70 - 130	Pass	
Simazine	1.0	0.943	94.3	70 - 130	Pass	
Terbufos	1.0	1.145	114.5	70 - 130	Pass	
Trifluralin	1.0	1.177	117.7	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments: * Prometon recovery was outside the method 525.2 acceptance limits of 70-130% recovery, but was within the EHL statistically determined 95th percentile.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11790 - DK 11798
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326215
Data File/Dupl ID:
Sample Number/Description: DK 11794

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060498A
Data Directory: AE\060498A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/04/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11790 - DK 11798
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326220
Data File/Dupl ID:
Sample Number/Description: DK 11795

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060498A
Data Directory: AE\060498A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/04/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11790 - DK 11798
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326225
Data File/Dupl ID:
Sample Number/Description: DK 11796

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060498A
Data Directory: AE\060498A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/04/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11790 - DK 11798
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326230
Data File/Dupl ID:
Sample Number/Description: DK 11797

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060498A
Data Directory: AE\060498A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/04/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

Tech: AT
Date: 05/29/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11790 - DK 11798
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Spike Soln Lot#: W980505012-050698
Sample Number/Description: DK 11797 / EHL 326230

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Matrix: GW

Acq. File: A060498A
Data Directory: AE\060498A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
MS Data File: 326230-S

Compound	Spike Added	Sample Conc	MS Conc	MS % Rec	% Recovery Limits	Q
Acetochlor	1.0	NF	1.139	113.9	70 - 130	
Alachlor	1.0	NF	1.131	113.1	70 - 130	
Atrazine	1.0	NF	1.025	102.5	70 - 130	
Bromacil	1.0	NF	1.101	110.1	70 - 130	
Cyanazine	1.0	NF	0.094	9.4	70 - 130	^
Diazinon	1.0	NF	0.851	85.1	70 - 130	
Endosulfan I	1.0	NF	1.083	108.3	70 - 130	
Endosulfan II	1.0	NF	0.983	98.3	70 - 130	
Endosulfan sulfate	1.0	NF	1.151	115.1	70 - 130	
Fenamiphos	1.0	NF	1.149	114.9	70 - 130	
Metolachlor	1.0	NF	1.114	111.4	70 - 130	
Metribuzin	1.0	NF	0.533	53.3	70 - 130	*
Pendimethalin	1.0	NF	1.169	116.9	70 - 130	
Prometon	1.0	NF	0.708	70.8	70 - 130	
Propachlor	1.0	NF	1.191	119.1	70 - 130	
Simazine	1.0	NF	0.645	64.5	70 - 130	*
Terbufos	1.0	NF	1.010	101.0	70 - 130	
Trifluralin	1.0	NF	1.153	115.3	70 - 130	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result. NF = Not Found

% Rec = % Recovery = (MS Conc - Sample Conc) x 100 / Spike Added

RPD = Relative Percent Difference = abs(MS Conc - MSD Conc) x 100 / (MS Conc + MSD Conc) / 2

Comments: * These compound recoveries were outside the method 525.2 acceptance limits of 70-130% recovery, but were within the EHL statistically determined 95th percentile. ^ Cyanazine has had historically poor recovery by this methodology.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11790 - DK 11798
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326235
Data File/Dupl ID:
Sample Number/Description: DK 11798

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060498A
Data Directory: AE\060498A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/04/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED CONTINUING CALIBRATION CHECK

Tech: AT
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060498A
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0507F1AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	GC/MS - AE
CCC Soln Lot#:	Mix 1: W980505012-050698	Mix 2:		Mix 3:	
CCC Data File:	C-2-18B				

Target Concentration: 2.0 ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	2.0	1.739	87.0	70 - 130	Pass	
Alachlor	2.0	1.991	99.6	70 - 130	Pass	
Atrazine	2.0	1.899	95.0	70 - 130	Pass	
Bromacil	2.0	1.899	95.0	70 - 130	Pass	
Cyanazine	2.0	0.882	44.1	70 - 130	Fail	^
Diazinon	2.0	2.188	109.4	70 - 130	Pass	
Endosulfan I	2.0	2.511	125.6	70 - 130	Pass	
Endosulfan II	2.0	2.100	105.0	70 - 130	Pass	
Endosulfan sulfate	2.0	1.805	90.3	70 - 130	Pass	
Fenamiphos	2.0	1.886	94.3	70 - 130	Pass	
Metolachlor	2.0	1.732	86.6	70 - 130	Pass	
Metribuzin	2.0	1.705	85.3	70 - 130	Pass	
Pendimethalin	2.0	2.156	107.8	70 - 130	Pass	
Prometon	2.0	1.497	74.9	70 - 130	Pass	
Propachlor	2.0	2.077	103.9	70 - 130	Pass	
Simazine	2.0	1.638	81.9	70 - 130	Pass	
Terbufos	2.0	2.019	101.0	70 - 130	Pass	
Trifluralin	2.0	2.518	125.9	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments: ^ Cyanazine recovery has had historically poor recovery by this methodology.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED SURROGATE RECOVERY

Tech: AT
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060498A
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0507F1AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	GC/MS - AE

Surrogate Soln Lot #: A6100287-052898

	EPA Sample No. / Sample Description	Data File/ Sample ID	Surrogate Percent Recovery SS1	Q	SS2	Q	SS3	Q	SS4	Q	Total Out	Matrix Code	Contm. Level
1	Laboratory Method Blank A	MB-525A	100.3		107.2		99.6		100.6		0	RW	
2	Laboratory Fortified Blank A	FB-525A	116.0		105.5		113.4		104.9		0	RW	
3	DK 11794	326215	108.7		104.3		103.9		104.8		0	GW	L
4	DK 11795	326220	105.8		105.1		102.0		95.5		0	GW	L
5	DK 11796	326225	110.4		113.7		110.1		94.7		0	GW	L
6	DK 11797	326230	111.4		109.8		109.0		100.6		0	GW	L
7	DK 11797 Matrix Spike	326230-S	101.6		104.6		106.2		90.3		0	GW	
8	DK 11798	326235	121.0		106.9		102.9		84.8		0	GW	L
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
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22													
23													
24													
25													
26													
27													
28													

Surrogates		5	% Recovery Limits
SS1	= 2,4,5,6-Tetrachloro-m-xylene	5.0	70 - 130
SS2	= Pentachloronitrobenzene	5.0	70 - 130
SS3	= 4,4'-Dichlorobiphenyl	5.0	70 - 130
SS4	= Triphenyl Phosphate	5.0	70 - 130

% Recovery = (Calculated Concentration / Target Concentration) *100

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
INTERNAL STANDARD AREA SUMMARY

Tech: AT
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060498A
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0507F1AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	GC/MS - AE
IS Soln Lot#:	A7090314-052898				

CCA

	IS1 Area	IS1 RT	IS2 Area	IS2 RT
12 Hour CCC Standard	1038949	17:38		
CCC Upper Limit	1350634	18:08		
CCC Lower Limit	727264	17:08		
Init Cali Lower Limit	2625627	17:28		

	Sample No. / Sample Description	Data File / Sample ID	IS1 Area	Q	IS1 RT	Q	IS2 Area	Q	IS2 RT	Q	Matrix Code	Confirm Level
1	Laboratory Method Blank A	MB-525A	1134206		17:38						RW	
2	Laboratory Fortified Blank A	FB-525A	1005323		17:38						RW	
3	DK 11794	326215	1275859		17:38						GW	L
4	DK 11795	326220	1118907		17:38						GW	L
5	DK 11796	326225	1162732		17:39						GW	L
6	DK 11797	326230	1285318		17:38						GW	L
7	DK 11797 Matrix Spike	326230-S	1642708	*	17:38						GW	
8	DK 11798	326235	1179323		17:38						GW	L
9	Continuing Calibration Check B	C-2-18B	1128477		17:41						OS	
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

IS1 = Pyrene-d10
IS2 = n/a

CCC Upper / Lower Limit: Area: 12 hr CCC std IS area +/- 30%; RT: 12 hr CCC std IS RT +/- 30 seconds
Init Cali Lower Limit: Area: Init Cali IS area - 50%; RT: Init Cali IS RT - 30 seconds
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: * The IS area in the matrix spike was high biased, but all the surrogate standard recoveries were within acceptance limits.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED INITIAL CALIBRATION

Tech: AT
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060498A
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	0507F1AE
Column:	Restek XTI-5 30m x 0.25mm ID	Method:	525.2	Instrument ID:	GC/MS - AE
IC Soln Lot#:	Mix 1: W980505012-050698	Mix 2:		Mix 3:	

Data File / Sample ID:	I005-18A	I-01-18A	I-05-18A	I-1-18A	I-2-18A	I-5-18A	I-10-18A	I-25-18A	I-50-18A	I-100-18A				
Concentration (ug/L):	0.05	0.1	0.5	1	2	5	10	25	50	100	Avg	%	Corr	
Compound	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	RSD	Coeff	Q
Acetochlor	0.376	0.165	0.216	0.231	0.257	0.282	0.288	0.283	----	----	0.262	23.6	1.0000	
Alachlor	1.968	0.788	0.875	0.948	1.017	1.140	1.133	1.120	----	----	1.124	32.5	0.9999	*
Atrazine	0.505	0.201	0.283	0.307	0.339	0.338	0.314	----	----	----	0.327	28.0	0.9992	
Bromacil	----	0.353	0.296	0.521	0.662	0.787	0.752	0.768	----	----	0.591	34.5	0.9999	*
Cyanazine	0.360	0.151	0.172	0.229	0.263	0.302	0.308	0.327	----	----	0.264	28.3	0.9997	
Diazinon	----	0.965	0.820	0.755	0.848	0.801	0.758	----	----	----	0.824	9.4	0.9994	
Endosulfan I	0.493	0.178	0.180	0.214	0.195	0.226	0.214	0.207	----	----	0.238	43.7	1.0000	*
Endosulfan II	----	0.184	0.211	0.253	0.222	0.254	0.244	0.245	----	----	0.230	11.3	1.0000	
Endosulfan sulfate	0.405	0.171	0.148	0.182	0.176	0.204	0.193	0.186	----	----	0.208	39.0	1.0000	*
Fenamiphos	0.557	0.243	0.303	0.444	0.526	0.616	0.619	0.619	----	----	0.491	30.1	1.0000	*
Metolachlor	2.985	1.293	1.728	2.012	2.168	2.338	2.304	2.167	----	----	2.124	23.1	1.0000	
Metribuzin	0.658	0.299	0.344	0.416	0.488	0.538	0.537	0.546	----	----	0.478	24.7	1.0000	
Pendimethalin	0.588	0.340	0.369	0.419	0.447	0.469	0.466	0.459	----	----	0.445	16.8	1.0000	
Prometon	----	0.484	0.670	0.683	0.806	0.819	0.741	----	----	----	0.701	17.5	0.9980	
Propachlor	0.941	0.434	0.507	0.573	0.607	0.674	0.650	0.677	----	----	0.633	23.8	1.0000	
Simazine	0.395	0.149	0.147	0.181	0.232	0.235	0.241	0.232	----	----	0.227	34.7	1.0000	*
Terbufos	----	0.921	0.930	1.033	1.078	1.186	1.184	1.251	----	----	1.083	12.0	1.0000	
Trifluralin	1.058	0.697	0.709	0.771	0.787	0.956	0.911	1.043	----	----	0.867	16.7	0.9990	

Avg RF = Average response factor
Max %RSD = 30% for a linear fit
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

DETERMINATION OF METHOD DETECTION LIMITS
METHOD 525.2 Extended - BROAD SPECTRUM PESTICIDES

Tech: RD
Date: 05/02/98

Lab Name:	Environmental Health Laboratories	Extract. Vol:	1000 mL	Acq. File:	A032598A
Project:	Routine MDL	Disk:	47 mm	Data Directory:	AE\032598A
Column:	Restek XTI-5 30m x 0.25um ID	Cartridge:	n/a	Initial Cali Data:	0220F0AE
Extraction Technique:	LSE	Method:	525.2C	Instrument ID:	GC/MS - AE
Matrix Code:	RW	LSE Matrix:	C18		

			Data File*	M-01-01A	M-01-01B	M-01-01C	M-01-01D	M-01-01E	M-01-01F	M-01-01G			
			Analysis Date	03/25/98	03/25/98	03/26/98	03/26/98	03/27/98	03/27/98	03/27/98			
				Observed Recovery							Std.	Calc.	
Method	CAS #	Parameter	Target	Rep - 1	Rep - 2	Rep - 3	Rep - 4	Rep -5	Rep - 6	Rep - 7	Deviation	MDL	Units
525.2	34256-82-1	Acetochlor	0.1	0.097	0.111	0.096	0.086	0.103	0.104	0.099	0.0078	0.025	ug/L
525.2	15972-60-8	Alachlor	0.1	0.124	0.119	0.128	0.120	0.129	0.121	0.127	0.0041	0.013	ug/L
525.2	1912-24-9	Atrazine	0.1	0.101	0.098	0.110	0.097	0.101	0.105	0.103	0.0044	0.014	ug/L
525.2	314-40-9	Bromacil	0.1	0.216	0.223	0.208	0.211	0.205	0.222	0.216	0.0068	0.021	ug/L
525.2	21725-46-2	Cyanazine	0.1	0.108	0.121	0.096	0.109	0.108	0.110	0.109	0.0073	0.023	ug/L
525.2	959-98-8	Endosulfan I	0.1	0.142	0.142	0.123	0.140	0.129	0.130	0.130	0.0075	0.024	ug/L
525.2	33213-65-9	Endosulfan II	0.1	0.104	0.119	0.090	0.129	0.086	0.100	0.094	0.0157	0.049	ug/L
525.2	1031-07-8	Endosulfan sulfate	0.1	0.096	0.097	0.095	0.110	0.099	0.092	0.128	0.0126	0.040	ug/L
525.2	22224-92-6	Fenamiphos	0.1	0.108	0.118	0.129	0.122	0.127	0.116	0.118	0.0071	0.022	ug/L
525.2	51218-45-2	Metolachlor	0.1	0.122	0.118	0.125	0.122	0.120	0.126	0.126	0.0031	0.010	ug/L
525.2	21087-64-9	Metribuzin	0.1	0.093	0.091	0.096	0.091	0.099	0.095	0.093	0.0029	0.009	ug/L
525.2	40487-42-1	Pendimethalin	0.1	0.095	0.099	0.096	0.102	0.103	0.096	0.094	0.0035	0.011	ug/L
525.2	1610-18-0	Prometon	0.1	0.084	0.069	0.068	0.070	0.057	0.046	0.066	0.0118	0.037	ug/L
525.2	1918-16-7	Propachlor	0.1	0.119	0.106	0.119	0.103	0.117	0.119	0.119	0.0070	0.022	ug/L
525.2	122-34-9	Simazine	0.1	0.122	0.113	0.103	0.096	0.102	0.109	0.111	0.0085	0.027	ug/L
525.2	13071-79-9	Terbufos	0.1	0.117	0.103	0.128	0.097	0.132	0.126	0.126	0.0135	0.042	ug/L
525.2	1582-09-8	Trifluralin	0.1	0.139	0.138	0.140	0.129	0.134	0.143	0.145	0.0054	0.017	ug/L

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments *Analyzed 05/02/98

CARBAMATE PESTICIDES
METHOD BLANK SUMMARY

Tech: CM
Date: 06/01/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A052998
Contract:	BAA 97-044	Task:	4A	Data Directory:	Q\A052998
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	Q\A052998
Column:	Supelcosil LC-18-DB 15cm x 4.6mm	Method:	531.1	Instrument ID:	HPLC - Q
Blank File:	Q0529005	Ext Date:	05/29/98	Ext Method:	Filtration

This method blank applies to the following samples, ms, msd, blanks, standards.

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Laboratory Performance Check	Q0529002	05/29/98	15:11	RW	
2	Single Point Calibration	Q0529003	05/29/98	15:47	RW	
3	Laboratory Fortified Blank	Q0529004	05/29/98	16:23	RW	
4	Laboratory Method Blank	Q0529005	05/29/98	17:00	RW	
5	DK 11791 / EHL 326202	Q0529011	05/29/98	20:38	GW	L
6	Continuing Calibration Check	Q0529018	05/30/98	00:52	RW	
7	Quality Control Sample	Q0529038	05/30/98	12:58	RW	
8						
9						
10						
11						
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13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						

Comments:

CARBAMATE PESTICIDES
LABORATORY PERFORMANCE CHECK

Tech: CM
Date: 06/01/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A052998
Contract:	BAA 97-044	Task:	4A	Data Directory:	Q\A052998
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	Q\A052998
Column:	Supelcosil LC-18-DB 15cm x 4.6mm ID	Method:	531.1	Instrument ID:	HPLC - Q
Data File:	Q0529002	LPC Soln Lot #:	H0149-032598		

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
3-Hydroxycarbofuran	Sensitivity	2.0	Detection of analyte: S/N > 3	> 3	Pass	
Aldicarb Sulfoxide	Chromatographic Performance	100	0.90 < PGF < 1.10 (a)	0.915	Pass	
Methiocarb		20				
4-Bromo-3,5-dimethyl phenyl N-methylcarbamate	Column Performance	10	Resolution > 1.0 (b)	1.17	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$PGF = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where W(1/2) is the peak width at half height and W(1/10) is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where t is the difference in elution times between the two peaks and W is the average peak width, at the baseline, of the two peaks.

Comments: _____

CARBAMATE PESTICIDES
SINGLE POINT CALIBRATION

Tech: CM
Date: 06/01/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A052998
Contract: BAA 97-044
Task: 4A
Data Directory: Q\A052998
Project: DK 11790 - DK 11798
Case: n/a
Initial Cali File: Q\A052998
Column: Supelcosil LC-18-DB 15cm x 4.6mm
Method: 531.1
Instrument ID: HPLC - Q
IC Soln Lot#: Mix 1: L-0804-021998
Mix 2:
Mix 3:
IC Data File: Q0529003

All concentrations are in ug/L

Compound	Target Conc	Rf		Q
Aldicarb	10.0	0.463		
Carbofuran	10.0	0.503		
Methiocarb	10.0	0.876		
Methomyl	10.0	0.247		
Oxamyl	10.0	0.391		

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CARBAMATE PESTICIDES
LABORATORY FORTIFIED BLANK

Tech: CM
Date: 06/01/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A052998
Contract: BAA 97-044
Task: 4A
Data Directory: Q\A052998
Project: DK 11790 - DK 11798
Case: n/a
Initial Cali File: Q\A052998
Column: Supelcosil LC-18-DB 15cm x 4.6mm
Method: 531.1
Instrument ID: HPLC - Q
LFB Soln Lot#: Mix 1: L-0804-021998
Mix 2:
Mix 3:
LFB Data File: Q0529004

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Aldicarb	10.0	13.206	132.1	70 - 130	Fail	*
Carbofuran	10.0	10.738	107.4	70 - 130	Pass	
Methiocarb	10.0	10.705	107.0	70 - 130	Pass	
Methomyl	10.0	10.763	107.7	70 - 130	Pass	
Oxamyl	10.0	11.036	110.3	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments: * Aldicarb recovery was outside the method 531.1 acceptance limits of 70-130% recovery, but was within the EHL statistically determined 95th percentile.

CARBAMATE PESTICIDES DATA SHEET

Tech: CM
Date: 06/01/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A052998
Contract: BAA 97-044
Task: 4A
Data Directory: Q\A052998
Project: DK 11790 - DK 11798
Case: n/a
Initial Cali File: Q\A052998
Column: Supelcosil LC-18-DB 15cm x 4.6mm I
Method: 531.1
Instrument ID: HPLC - Q
Matrix Code: RW
Smpl Vol: 500 ul
Date Received: n/a
Data File/Smpl ID: Q0529005
Dil. Factor: 1
Date Analyzed: 05/29/98
Data File/Dupl ID:
Dupl Type:
Contm. Level:
Sample Number/Description: Laboratory Method Blank

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
116-06-3	Aldicarb	< 0.5	ug/L			
1563-66-2	Carbofuran	< 0.9	ug/L			
2032-65-7	Methiocarb	< 1.0	ug/L			
16752-77-5	Methomyl	< 0.5	ug/L			
23135-22-0	Oxamyl	< 1.0	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CARBAMATE PESTICIDES DATA SHEET

Tech: CM
Date: 06/01/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A052998
Contract:	BAA 97-044	Task:	4A	Data Directory:	Q\A052998
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	Q\A052998
Column:	Supelcosil LC-18-DB 15cm x 4.6mm	Method:	531.1	Instrument ID:	HPLC - Q
Matrix Code:	GW	Smpl Vol:	500 ul	Date Received:	05/26/98
Data File/Smpl ID:	Q0529011	Dil. Factor:	1	Date Analyzed:	05/29/98
Data File/Dupl ID:		Dupl Type:		Contm. Level:	L

Sample Number/Description: DK 11791 / EHL 326202

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
116-06-3	Aldicarb	< 0.5	ug/L			
1563-66-2	Carbofuran	< 0.9	ug/L			
2032-65-7	Methiocarb	< 1.0	ug/L			
16752-77-5	Methomyl	< 0.5	ug/L			
23135-22-0	Oxamyl	< 1.0	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CARBAMATE PESTICIDES
CONTINUING CALIBRATION CHECK

Tech: CM
Date: 06/01/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A052998
Contract: BAA 97-044
Task: 4A
Data Directory: Q\A052998
Project: DK 11790 - DK 11798
Case: n/a
Initial Cali File: Q\A052998
Column: Supelcosil LC-18-DB 15cm x 4.6mm
Method: 531.1
Instrument ID: HPLC - Q
CCC Soln Lot#: Mix 1: L-0804-021998
Mix 2:
Mix 3:
CCC Data File: Q0529018

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Aldicarb	2.0	1.918	95.9	80 - 120	Pass	
Carbofuran	2.0	2.006	100.3	80 - 120	Pass	
Methiocarb	2.0	2.005	100.3	80 - 120	Pass	
Methomyl	2.0	1.853	92.7	80 - 120	Pass	
Oxamyl	2.0	2.054	102.7	80 - 120	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CARBAMATE PESTICIDES
QUALITY CONTROL SAMPLE

Tech: CM
Date: 06/01/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A052998
Contract: BAA 97-044
Task: 4A
Data Directory: Q\A052998
Project: DK 11790 - DK 11798
Case: n/a
Initial Cali File: Q\A052998
Column: Supelcosil LC-18-DB 15cm x 4.6mm
Method: 531.1
Instrument ID: HPLC - Q
QCS Soln Lot#: Mix 1: 076-319-121097
Mix 2:
Mix 3:
QCS Data File: Q0529038

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Aldicarb	10.0	11.668	116.7	70 - 130	Pass	
Carbofuran	10.0	8.640	86.4	70 - 130	Pass	
Methiocarb	10.0	8.397	84.0	70 - 130	Pass	
Methomyl	10.0	8.708	87.1	70 - 130	Pass	
Oxamyl	10.0	8.636	86.4	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CARBAMATE PESTICIDES
INTERNAL STANDARD AREA SUMMARY

Tech: CM
Date: 06/01/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A052998
Contract:	BAA 97-044	Task:	4A	Data Directory:	Q\A052998
Project:	DK 11790 - DK 11798	Case:	n/a	Initial Cali File:	Q\A052998
Column:	Supelcosil LC-18-DB 15cm x 4.6mm ID	Method:	531.1	Instrument ID:	HPLC - Q
IS Soln Lot#:	M-0200-051598				

	IS1 Area	IS1 RT	IS2 Area	IS2 RT
12 Hour CCC Standard	184847	26:23		
CCC Upper Limit	240301	26:53		
CCC Lower Limit	129393	25:53		

	Sample No. / Sample Description	Data File / Sample ID	IS1 Area	Q	IS1 RT	Q	IS2 Area	Q	IS2 RT	Q	Matrix Code	Confirm Level
1	Laboratory Fortified Blank	Q0529004	182601		26:16						RW	
2	Laboratory Method Blank	Q0529005	170004		26:19						RW	
3	DK 11791 / EHL 326202	Q0529011	194943		26:22						GW	L
4	Quality Control Sample	Q0529038	176468		26:20						RW	
5												
6												
7												
8												
9												
10												
11												
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15												
16												
17												
18												
19												
20												

IS1 = 4-Bromo-3,5-dimethylphenyl n-methylcarbamate
IS2 = n/a

CCC Upper / Lower Limit: Area: CCC std IS area +/- 30%; RT: CCC std IS RT +/- 30 seconds
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

DETERMINATION OF METHOD DETECTION LIMITS
METHOD 531.1- CARBAMATES

Tech: TML
Date: 10/25/97

					Q\A101697 Q\A101997 Q\A102497
Lab Name:	Environmental Health Laboratories	Extract.Vol:	n/a	Acq. File:	A101697 A101997 A102497
Project:	Routine MDL	Disk:	n/a	Data Directory:	Q\A101697 Q\A101997 Q\A102497
Column:	Supelco C-18DB 150 x 4.6 mm	Cartridge:	n/a	Initial Cali Data:	Q\A101597
Extraction Technique:	Filtration	Method:	531.1	Instrument ID:	HLPC-Q
Matrix Code:	RW	LSE Matrix:	n/a	Extraction Technician:	TML

				Data File	Q1016028	Q1016029	Q1016030	Q1021033	Q1021034	Q1021035	Q1024037			
				Analysis Date	10/17/97	10/17/97	10/17/97	10/22/97	10/22/97	10/22/97	10/24/97			
			Target	Observed Recovery								Std.	Calc.	
Method	CAS #	Parameter	Conc. (ug/L)	Rep - 1	Rep - 2	Rep - 3	Rep - 4	Rep -5	Rep - 6	Rep - 7	Deviation	MDL	Units
531.1	116-06-3	Aldicarb	1.00	0.841	0.821	0.736	0.924	0.976	0.973	0.841	0.088	0.278	ug/L
531.1	1563-66-2	Carbofuran	1.00	1.050	0.830	1.056	0.981	0.865	0.936	0.983	0.086	0.272	ug/L
531.1	2032-65-7	Methiocarb	1.00	1.108	0.977	1.085	1.075	1.084	1.047	0.996	0.049	0.154	ug/L
531.1	16752-77-5	Methomyl	1.00	1.115	0.969	0.972	1.078	0.965	1.037	0.946	0.065	0.205	ug/L
531.1	23135-22-0	Oxamyl	1.00	0.891	0.936	0.830	0.848	0.967	0.955	0.871	0.0538	0.169	ug/L

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

LSE = Liquid / solid extraction; LLE = Liquid / Liquid extraction
LSE Matrix = C8, C18, SDVB, Biorex-5, AG-1X-8

COMMENTS:

Environmental Health Laboratories

110 S. Hill Street
South Bend, IN 46617-2702
(219) 233-4777
(219) 233-3272
FAX (219) 233-8207

LABORATORY REPORT

Client: IDEM
Attn: Mitt Denney
Groundwater Section
100 North Senate Avenue
P. O. Box 6015
Indianapolis, IN 46206-6015

Report #: 326267-446

Priority: Standard Written

Status: Final

Project : DK 11734 - DK 11749, DK 10786 - DK 10792,
DK 11857 - DK 11867 & DK 10967 - DK 10968

Samples Submitted: Thirty-six groundwater samples

Copies to: None

Collected: 05/18 to 05/22/98 By: Client Received: 05/26/98

REPORT SUMMARY

Thirty-six groundwater samples were submitted for analysis of Task 4A, 2,4-D and Carbofuran (Enzyme Immunoassay), Chlorinated Pesticides (Method 515.1), Pesticides (Method 525.2) and Carbamates (Method 531.1).

Note: Sample containers were provided by the client.

The following is a summary of the results by sample. Any compounds that are not part of the requested parameter list are indicated by an asterisk(*).

2,4-D Enzyme Immunoassay-05/27/98

None of the quality control samples in the analytical run were outside the limits specified in the method.

DK11734	2,4-D was not detected in the sample submitted for analysis.
DK11735	2,4-D was not detected in the sample submitted for analysis.
DK11736	2,4-D was not detected in the sample submitted for analysis.
DK11737	2,4-D was not detected in the sample submitted for analysis.
DK11738	2,4-D was not detected in the sample submitted for analysis.
DK11739	2,4-D was not detected in the sample submitted for analysis.
DK11740	2,4-D was not detected in the sample submitted for analysis.
DK11741	2,4-D was not detected in the sample submitted for analysis.
DK11742	2,4-D was not detected in the sample submitted for analysis.
DK11743	2,4-D was not detected in the sample submitted for analysis.

Division of MAD Technology Corporation

2,4-D Enzyme Immunoassay-05/27/98-Cont'd

DK11744	2,4-D was not detected in the sample submitted for analysis.

2,4-D Enzyme Immunoassay-05/29/98

None of the quality control samples in the analytical run were outside the limits specified in the method.

DK11745	2,4-D was not detected in the sample submitted for analysis.
DK11746	2,4-D was not detected in the sample submitted for analysis.
DK11747	2,4-D was not detected in the sample submitted for analysis.
DK10786	2,4-D was not detected in the sample submitted for analysis.
DK10787	2,4-D was not detected in the sample submitted for analysis.
DK10791	2,4-D was not detected in the sample submitted for analysis.
DK10792	2,4-D was not detected in the sample submitted for analysis.
DK11857	2,4-D was not detected in the sample submitted for analysis.
DK11858	2,4-D was not detected in the sample submitted for analysis.
DK11859	2,4-D was not detected in the sample submitted for analysis.
DK11860	2,4-D was not detected in the sample submitted for analysis.
DK11861	2,4-D was not detected in the sample submitted for analysis.
DK11862	2,4-D was not detected in the sample submitted for analysis.
DK11863	2,4-D was not detected in the sample submitted for analysis.
DK11864	2,4-D was not detected in the sample submitted for analysis.
DK11865	2,4-D was not detected in the sample submitted for analysis.
DK11866	2,4-D was not detected in the sample submitted for analysis.
DK11867	2,4-D was not detected in the sample submitted for analysis.
DK10967	2,4-D was not detected in the sample submitted for analysis.
DK10968	2,4-D was not detected in the sample submitted for analysis.

2,4-D Enzyme Immunoassay-06/01/98

None of the quality control samples in the analytical run were outside the limits specified in the method.

DK11748	2,4-D was not detected in the sample submitted for analysis.
DK11749	2,4-D was not detected in the sample submitted for analysis.

2,4-D Enzyme Immunoassay-06/01/98-Cont'd

DK10788	2,4-D was not detected in the sample submitted for analysis.
DK10789	2,4-D was not detected in the sample submitted for analysis.
DK10790	2,4-D was not detected in the sample submitted for analysis.

Carbofuran Enzyme Immunoassay-05/27/98

None of the quality control samples in the analytical run were outside the limits specified in the method.

DK11734	Carbofuran was not detected in the sample submitted for analysis.
DK11735	Carbofuran was not detected in the sample submitted for analysis.
DK11736	Carbofuran was not detected in the sample submitted for analysis.

Carbofuran Enzyme Immunoassay-06/01/98 10:05

None of the quality control samples in the analytical run were outside the limits specified in the method.

DK11737	Carbofuran was not detected in the sample submitted for analysis.
DK11738	Carbofuran was not detected in the sample submitted for analysis.
DK11739	Carbofuran was not detected in the sample submitted for analysis.
DK11740	Carbofuran was not detected in the sample submitted for analysis.
DK11741	Carbofuran was not detected in the sample submitted for analysis.
DK11742	Carbofuran was not detected in the sample submitted for analysis.
DK11743	Carbofuran was not detected in the sample submitted for analysis.
DK11744	Carbofuran was not detected in the sample submitted for analysis.
DK11745	Carbofuran was not detected in the sample submitted for analysis.
DK11746	Carbofuran was not detected in the sample submitted for analysis.
DK11747	Carbofuran was not detected in the sample submitted for analysis.
DK11748	Carbofuran was not detected in the sample submitted for analysis.
DK11749	Carbofuran was not detected in the sample submitted for analysis.
DK10786	Carbofuran was not detected in the sample submitted for analysis.
DK10787	Carbofuran was not detected in the sample submitted for analysis.
DK10791	Carbofuran was not detected in the sample submitted for analysis.
DK10792	Carbofuran was not detected in the sample submitted for analysis.

Carbofuran Enzyme Immunoassay-06/01/98 10:05-Cont'd

DK11857	Carbofuran was not detected in the sample submitted for analysis.
DK11858	Carbofuran was not detected in the sample submitted for analysis.
DK11859	Carbofuran was not detected in the sample submitted for analysis.

Carbofuran Enzyme Immunoassay-06/01/98 13:10

	None of the quality control samples in the analytical run were outside the limits specified in the method.
DK10788	Carbofuran was not detected in the sample submitted for analysis.
DK10789	Carbofuran was not detected in the sample submitted for analysis.
DK10790	Carbofuran was not detected in the sample submitted for analysis.
DK11860	Carbofuran was not detected in the sample submitted for analysis.
DK11861	Carbofuran was not detected in the sample submitted for analysis.
DK11862	Carbofuran was not detected in the sample submitted for analysis.
DK11863	Carbofuran was not detected in the sample submitted for analysis.
DK11864	Carbofuran was not detected in the sample submitted for analysis.
DK11865	Carbofuran was not detected in the sample submitted for analysis.
DK11866	Carbofuran was not detected in the sample submitted for analysis.
DK11867	Carbofuran was not detected in the sample submitted for analysis.
DK10967	Carbofuran was not detected in the sample submitted for analysis.
DK10968	Carbofuran was not detected in the sample submitted for analysis.

EPA 515.1-A060398B

	None of the quality control samples in the analytical run were outside the limits specified in the method.
DK11740	None of the method parameters were detected in the sample submitted for analysis.

EPA 515.1-A060498A

	The IS area in the first CCC was low biased, but this data is acceptable based on the recoveries of the targeted parameters in this CCC. None of the other quality control samples in the analytical run were outside the limits specified in the method.
DK10787	None of the method parameters were detected in the sample submitted for analysis.

EPA 515.1-A060498A-Cont'd

DK11865 None of the method parameters were detected in the sample submitted for analysis.

EPA 525.2-A060498A

Prometon recovery in the LFB was outside the method 525.2 acceptance limits of 70-130% recovery, but was within the EHL statistically determined 95th percentile. Cyanazine recovery in the second CCC was low biased outside the acceptance limits. This compound has had historically poor recovery by this methodology. The IS areas in samples DK11734 and DK11737 were high biased, but this data is acceptable based on the recoveries of the surrogate standards. None of the other quality control samples in the analytical run were outside the limits specified in the method.

DK11734 None of the method parameters were detected in the sample submitted for analysis.

DK11735 None of the method parameters were detected in the sample submitted for analysis.

DK11736 None of the method parameters were detected in the sample submitted for analysis.

DK11737 None of the method parameters were detected in the sample submitted for analysis.

EPA 525.2-A060598A

Trifluralin recovery in the first CCC was high biased outside the acceptance limits of 70-130% recovery. Trifluralin recovery was acceptable in the second CCC. This compound was not detected in the LMB or any of the samples submitted for analysis. Metribuzin recoveries in the LFB and the LFM and prometon recovery in the LFB were outside the method 525.2 acceptance limits of 70-130% recovery, but were within the EHL statistically determined 95th percentile. The IS areas in samples DK11741, DK11744 and DK11747 were high biased, but this data is acceptable based on the recoveries of the surrogate standards. None of the other quality control samples in the analytical run were outside the limits specified in the method.

DK11738 None of the method parameters were detected in the sample submitted for analysis.

DK11739 None of the method parameters were detected in the sample submitted for analysis.

DK11740 None of the method parameters were detected in the sample submitted for analysis.

DK11741 None of the method parameters were detected in the sample submitted for analysis.

DK11742 None of the method parameters were detected in the sample submitted for analysis.

EPA 525.2-A060598A-Cont'd

DK11743	None of the method parameters were detected in the sample submitted for analysis.
DK11744	None of the method parameters were detected in the sample submitted for analysis.
DK11745	None of the method parameters were detected in the sample submitted for analysis.
DK11746	None of the method parameters were detected in the sample submitted for analysis.
DK11747	None of the method parameters were detected in the sample submitted for analysis.

EPA 525.2-A060898A

Prometon recovery in the LFB was outside the method 525.2 acceptance limits of 70-130% recovery, but was within the EHL statistically determined 95th percentile. Cyanazine recovery in the second CCC was low biased outside the acceptance limits. This compound has had historically poor recovery by this methodology. Bromacil recovery in the second CCC was low biased outside the acceptance limits, but its recoveries in the first CCC and the LFB were acceptable. None of the other quality control samples in the analytical run were outside the limits specified in the method.

DK11748	None of the method parameters were detected in the sample submitted for analysis.
DK11749	None of the method parameters were detected in the sample submitted for analysis.
DK10786	None of the method parameters were detected in the sample submitted for analysis.
DK10787	None of the method parameters were detected in the sample submitted for analysis.
DK10788	None of the method parameters were detected in the sample submitted for analysis.
DK10789	None of the method parameters were detected in the sample submitted for analysis.
DK10790	None of the method parameters were detected in the sample submitted for analysis.
DK10791	None of the method parameters were detected in the sample submitted for analysis.
DK10792	None of the method parameters were detected in the sample submitted for analysis.
DK11857	None of the method parameters were detected in the sample submitted for analysis.

EPA 525.2-A060998A

Metribuzin and prometon recoveries in the LFB were outside the method 525.2 acceptance limits of 70-130% recovery, but were within the EHL statistically determined 95th percentile. Cyanazine recovery in the second CCC was low biased outside the acceptance limits. This compound has had historically poor recovery by this methodology. Bromacil recovery in the second CCC was low biased outside the acceptance limits, but its recoveries in the first CCC and the LFB were acceptable. Alachlor and trifluralin recoveries in the second CCC were high biased outside the acceptance limits of 70-130% recovery. Alachlor and trifluralin recoveries in the first CCC and the LFB were acceptable. These compounds were not detected in the LMB or the samples submitted for analysis. The IS areas in samples DK11865 and DK11866 and the second CCC were high biased, but this data is acceptable based on the recoveries of the surrogate standards in the samples and the targeted compounds in the CCC. None of the other quality control samples in the analytical run were outside the limits specified in the method.

DK11858	None of the method parameters were detected in the sample submitted for analysis.
DK11859	None of the method parameters were detected in the sample submitted for analysis.
DK11860	None of the method parameters were detected in the sample submitted for analysis.
DK11861	None of the method parameters were detected in the sample submitted for analysis.
DK11862	None of the method parameters were detected in the sample submitted for analysis.
DK11863	None of the method parameters were detected in the sample submitted for analysis.
DK11864	None of the method parameters were detected in the sample submitted for analysis.
DK11865	None of the method parameters were detected in the sample submitted for analysis.
DK11866	None of the method parameters were detected in the sample submitted for analysis.
DK11867	None of the method parameters were detected in the sample submitted for analysis.

EPA 525.2-A061198A

Metribuzin and prometon recoveries in the LFB were outside the method 525.2 acceptance limits of 70-130% recovery, but were within the EHL statistically determined 95th percentile. Cyanazine recovery in the second CCC was low biased outside the acceptance limits. This compound has had historically poor recovery by this methodology. Endosulfan sulfate recovery in the second CCC was low biased outside the acceptance limits, but its recoveries in the first CCC and the LFB were acceptable. None of the other quality control samples in the analytical run were outside the limits specified in the method.

DK10967 None of the method parameters were detected in the sample submitted for analysis.

DK10968 None of the method parameters were detected in the sample submitted for analysis.

EPA 531.1

None of the quality control samples in the analytical run were outside the limits specified in the method.

DK11742 None of the method parameters were detected in the sample submitted for analysis.

DK11749 None of the method parameters were detected in the sample submitted for analysis.

DK11861 None of the method parameters were detected in the sample submitted for analysis.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call us at (219) 233-4777.

REVIEWED BY: _____ DATE: 7/29/98

FINALIZED BY: John E. Hoge III DATE: 8/6/98

Environmental Health Laboratories 110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE 1 OF _____

CLIENT/COMPANY ORDERING TEST: IDEM

LOCATION/ADDRESS:

SAMPLER (Signature): RH

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME		SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran								OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SEAL
326867	5/18	1224	A/P	DK 11734	1		✓															
326868			A/P		1			✓														
326869			A/P		2				✓													
326870			A/P		1					✓												
326871			A/P		1						✓											
326872		1325	A/P	DK 11735	1		✓															
326873			A/P		1			✓														
326874			A/P		2				✓													
326875			A/P		1					✓												
326876			A/P		1						✓											
326877		1412	A/P	DK 11736	1		✓															
326878			A/P		1			✓														

TESTS REQUESTED (✓)

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

In House COC

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
			[signature]	5/26/98	0900

LAB COMMENTS

SHIPPING CONDITIONS: (Check One) ☒ Iced ☐ Ambient

TEMPERATURE: _____ °C Lowest _____ °C Highest 13-17 °C Receipt

MATRIX CODES:

- **RW** = REAGENT WATER
- **DW** = DRINKING WATER
- **GW** = GROUNDWATER
- **SW** = SURFACE WATER
- **WW** = WASTEWATER
- **PW** = POOL WATER
- **O** = OTHER
- **SO** = SOIL

CONTAMINATION LEVEL

- **L** = LOW (NO ODOR)
- **M** = MEDIUM
- **H** = HIGH
- **U** = UNKNOWN

TURN-AROUND-TIME (TAT) - SURCHARGES

- **SW** = STANDARD (10-15 WORKING DAYS) WRITTEN 0%
- **RV** = RUSH (3-5 WORKING DAYS) VERBAL 50%
- **RW** = RUSH (3-5 WORKING DAYS) WRITTEN 75%
- **IV** = IMMEDIATE (48-72 HOURS) VERBAL **100%**
- **IW** = IMMEDIATE (48-72 HOURS) WRITTEN **125%**
- **SP** = WEEKEND, HOLIDAY OR STAT **Call**

Environmental Health Laboratories 110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE 2 OF

CLIENT/COMPANY ORDERING TEST: IDEM

LOCATION/ADDRESS:

SAMPLER (Signature): RH

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME		SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran	OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SEAL
326279	5/18	1412	A/P	DK11736	1			✓							
326280	↓	↓	A/P	↓	1				✓						
326281			A/P		1					✓					
326282		1516	A/P	DK11737	1		✓								
326283			A/P		1			✓							
326284			A/P		2			✓							
326285			A/P		1				✓						
326286			A/P		1					✓					
326287	5/19	1135	A/P	DK11738	1		✓								
326288			A/P		1			✓							
326289			A/P		2			✓							
326290			A/P		1				✓						

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RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
				5/20/98	0900

LAB COMMENTS

SHIPPING CONDITIONS (Check One) ☒ Iced ☐ Ambient

TEMPERATURE: °C Lowest °C Highest 13-17 °C Receipt

MATRIX CODES:

- **RW** = REAGENT WATER
- **DW** = DRINKING WATER
- **GW** = GROUNDWATER
- **SW** = SURFACE WATER
- **WW** = WASTEWATER
- **PW** = POOL WATER
- **O** = OTHER
- **SO** = SOIL

CONTAMINATION LEVEL

- **L** = LOW (NO ODOR)
- **M** = MEDIUM
- **H** = HIGH
- **U** = UNKNOWN

TURN-AROUND-TIME (TAT) - SURCHARGES

- **SW** = STANDARD (10-15 WORKING DAYS) WRITTEN 0%
- **RV** = RUSH (3-5 WORKING DAYS) VERBAL 50%
- **RW** = RUSH (3-5 WORKING DAYS) WRITTEN 75%
- **IV** = IMMEDIATE (48-72 HOURS) VERBAL **100%**
- **IW** = IMMEDIATE (48-72 HOURS) WRITTEN **125%**
- **SP** = WEEKEND, HOLIDAY OR STAT **Call**

Environmental Health Laboratories 110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

Please see the back for instructions

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CHAIN OF CUSTODY RECORD

PAGE 3 OF __

CLIENT/COMPANY ORDERING TEST: IDEM 4

LOCATION/ADDRESS:

SAMPLER (Signature): RH 1

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME		SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran								OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SEAL
326291	5/19	1135	A/P	DK11738	1						✓											
326292		1347	A/P	DK11739	1		✓															
326293		↓	A/P	↓	1			✓														
326294			A/P		2				✓													
326295			A/P		1					✓												
326296			A/P		1						✓											
326297		1612	A/P	DK11	1		✓															
326298			A/P		1			✓														
326299			A/P		2				✓													
326300			A/P		1					✓												
326301			A/P		1						✓											
326302		1731	A/P	DK11741	1		✓															

TESTS REQUESTED (✓)

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

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RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
			[signature]	5/26/98	0900

LAB COMMENTS:

SHIPPING CONDITIONS: (Check One) ☒ Iced ☐ Ambient

TEMPERATURE: °C Lowest °C Highest 13-17 °C Receipt

MATRIX CODES:

- **RW** = REAGENT WATER
- **DW** = DRINKING WATER
- **GW** = GROUNDWATER
- **SW** = SURFACE WATER
- **WW** = WASTEWATER
- **PW** = POOL WATER
- **O** = OTHER
- **SO** = SOIL

CONTAMINATION LEVEL

- **L** = LOW (NO ODOR)
- **M** = MEDIUM
- **H** = HIGH
- **U** = UNKNOWN

TURN-AROUND-TIME (TAT) - SURCHARGES

- **SW** = STANDARD (10-15 WORKING DAYS) WRITTEN 0%
- **RV** = RUSH (3-5 WORKING DAYS) VERBAL 50%
- ***RW*** = *RUSH (3-5 WORKING DAYS) WRITTEN* *75%*
- **IV** = IMMEDIATE (48-72 HOURS) VERBAL **100%**
- ***IW*** = *IMMEDIATE (48-72 HOURS) WRITTEN* ***125%***
- **SP** = WEEKEND, HOLIDAY OR STAT **Call**

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CHAIN OF CUSTODY RECORD

PAGE 4 OF _____

CLIENT/COMPANY ORDERING TEST: IDEM 1

LOCATION/ADDRESS:

SAMPLER (Signature): RH

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME		SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran								OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SEAL
326303	5/19	1731	A/P	DK11741	1			✓														
326304			A/P		1	SS			✓													
326305			A/P		1					✓												
326306			A/P		1						✓											
326307		0950	A/P	DK11742	1		✓															
326308			A/P		1			✓														
326309			A/P		2				✓													
326310			A/P		1					✓												
326311			A/P		1						✓											
326312		1104	A/P	DK11743	1		✓															
326313			A/P		1			✓														
326314			A/P		2				✓													

TESTS REQUESTED (✓)

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

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RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
			[signature]	5/26/98	0900

LAB COMMENTS

SHIPPING CONDITIONS: (check one) ☒ Iced ☐ Ambient

TEMPERATURE: °C Lowest °C Highest 13-17 °C Receipt

MATRIX CODES:

- **RW** = REAGENT WATER
- **DW** = DRINKING WATER
- **GW** = GROUNDWATER
- **SW** = SURFACE WATER
- **WW** = WASTEWATER
- **PW** = POOL WATER
- **O** = OTHER
- **SO** = SOIL

CONTAMINATION LEVEL

- **L** = LOW (NO ODOR)
- **M** = MEDIUM
- **H** = HIGH
- **U** = UNKNOWN

TURN-AROUND-TIME (TAT) - SURCHARGES

- **SW** = STANDARD (10-15 WORKING DAYS) WRITTEN 0%
- **RV** = RUSH (3-5 WORKING DAYS) VERBAL 50%
- ***RW*** = *RUSH (3-5 WORKING DAYS) WRITTEN* 75%
- **IV** = IMMEDIATE (48-72 HOURS) VERBAL **100%**
- ***IW*** = *IMMEDIATE (48-72 HOURS) WRITTEN* ***125%***
- **SP** = WEEKEND, HOLIDAY OR STAT **Call**

Environmental Health Laboratories 110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

Please see the back of this form

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE 5 OF _____

CLIENT/COMPANY ORDERING TEST: IDEM 1

LOCATION/ADDRESS:

SAMPLER (Signature): RH 1

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME		SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran								OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SEAL
326315	5/20	1109	A/P	DK11743	1					✓												
326316	↓	↓	A/P	↓	1					✓												
326317		1240	A/P	DK11744	1		✓															
326318		↓	A/P	↓	1			✓														
326319			A/P		2				✓													
326320			A/P		1					✓												
326321		↓	A/P		1					✓												
326322		1355	A/P	DK11745	1		✓															
326323		↓	A/P	↓	1			✓														
326324			A/P		2				✓													
326325			A/P		1					✓												
326326	↓	↓	A/P	↓	1					✓												

TESTS REQUESTED (✓)

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

In House COC

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
			[signature]	5/26/98	0900

LAB COMMENTS

SHIPPING CONDITIONS: (Check one) ☒ Iced ☐ Ambient

TEMPERATURE °C Lowest °C Highest 13-17 °C Receipt

MATRIX CODES:

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- **GW** = GROUNDWATER
- **SW** = SURFACE WATER
- **WW** = WASTEWATER
- **PW** = POOL WATER
- **O** = OTHER
- **SO** = SOIL

CONTAMINATION LEVEL

- **L** = LOW (NO ODOR)
- **M** = MEDIUM
- **H** = HIGH
- **U** = UNKNOWN

TURN-AROUND-TIME (TAT) - SURCHARGES

- **SW** = STANDARD (10-15 WORKING DAYS) WRITTEN 0%
- **RV** = RUSH (3-5 WORKING DAYS) VERBAL 50%
- ***RW*** = *RUSH (3-5 WORKING DAYS) WRITTEN* *75%*
- **IV** = IMMEDIATE (48-72 HOURS) VERBAL **100%**
- ***IW*** = *IMMEDIATE (48-72 HOURS) WRITTEN* ***125%***
- **SP** = WEEKEND, HOLIDAY OR STAT **Call**

Environmental Health Laboratories 110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE 6 OF _____

CLIENT/COMPANY ORDERING TEST: IDEM

LOCATION/ADDRESS:

SAMPLER (Signature): RH

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME		SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran	OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SEAL
326327	5/20	1455	A/P	DK11746	1		✓								
326328			A/P		1			✓							
326329			A/P		2				✓						
326330			A/P		1					✓					
326331			A/P		1						✓				
326332		1536	A/P	DK11747	1		✓								
326333			A/P		1			✓							
326334			A/P		2				✓						
326335			A/P		1					✓					
326336			A/P		1						✓				
326337	5/22	1001	A/P	DK11748	1		✓								
326338			A/P		1			✓							

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

In House COC

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
			[signature]	5/26/98	0900

LAB COMMENTS

SHIPPING CONDITIONS: (Check One) ☒ Iced ☐ Ambient

TEMPERATURE: °C Lowest °C Highest 13-17 °C Receipt

MATRIX CODES:

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- **SW** = SURFACE WATER
- **WW** = WASTEWATER
- **PW** = POOL WATER
- **O** = OTHER
- **SO** = SOIL

CONTAMINATION LEVEL

- **L** = LOW (NO ODOR)
- **M** = MEDIUM
- **H** = HIGH
- **U** = UNKNOWN

TURN-AROUND-TIME (TAT) - SURCHARGES

- **SW** = STANDARD (10-15 WORKING DAYS) WRITTEN 0%
- **RV** = RUSH (3-5 WORKING DAYS) VERBAL 50%
- ***RW*** = *RUSH (3-5 WORKING DAYS) WRITTEN* 75%
- **IV** = IMMEDIATE (48-72 HOURS) VERBAL **100%**
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Environmental Health Laboratories 110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

Please see the back of this form for instructions

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE 7 OF _____

CLIENT/COMPANY ORDERING TEST: IDEM

LOCATION/ADDRESS:

SAMPLER (Signature): RH

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME		SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran	OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY
326339	5/22	1001	A/P	DK 11748	2			✓							
326340	↓	↓	A/P	↓	1				✓						
326341			A/P		1					✓					
326342		1050	A/P	DK 11749	1		✓								
326343			A/P		1			✓							
326344			A/P		2				✓						
326345			A/P		1					✓					
326346	↓	↓	A/P	↓	1						✓				
			A/P												
			A/P												
			A/P												
			A/P												

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

In house COC

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
			[signature]	5/26/98	0900

LAB COMMENTS:

SHIPPING CONDITIONS (Check One): ☒ Iced ☐ Ambient

TEMPERATURE: _____ °C Lowest _____ °C Highest 13-17 °C Receipt

MATRIX CODES:

- RW = REAGENT WATER
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- GW = GROUNDWATER
- SW = SURFACE WATER
- WW = WASTEWATER
- PW = POOL WATER
- O = OTHER
- SO = SOIL

CONTAMINATION LEVEL

- L = LOW (NO ODOR)
- M = MEDIUM
- H = HIGH
- U = UNKNOWN

TURN-AROUND-TIME (TAT) - SURCHARGES

- SW = STANDARD (10-15 WORKING DAYS) WRITTEN 0%
- RV = RUSH (3-5 WORKING DAYS) VERBAL 50%
- RW = RUSH (3-5 WORKING DAYS) WRITTEN 75%
- IV = IMMEDIATE (48-72 HOURS) VERBAL 100%
- IW = IMMEDIATE (48-72 HOURS) WRITTEN 125%
- SP = WEEKEND, HOLIDAY OR STAT Call

Environmental Health Laboratories 110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE 8 OF _____

CLIENT/COMPANY ORDERING TEST: IDEM

LOCATION/ADDRESS:

SAMPLER (Signature): JH

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME		SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran	OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SEAL
326347	5/19	1700	A/P	DK 10786	1		✓								
326348	↓	↓	A/P	↓	1			✓							
326349			A/P		2				✓						
326350			A/P		1					✓					
326351	↓	↓	A/P	↓	1						✓				
326354	5/20	1130	A/P	DK 10	1		✓								
326355	↓	↓	A/P	↓	1			✓							
326356			A/P		2				✓						
326335			A/P		1					✓					
326357	↓	↓	A/P	↓	1						✓				
326358	5/21	1045	A/P	DK 10788	1		✓								
326359	↓	↓	A/P	↓	1			✓							

TESTS REQUESTED (✓)

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

Intake COC

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
			[signature]	5/26/98	0900

LAB COMMENTS

SHIPPING CONDITIONS (check one): ☒ Iced ☐ Ambient

TEMPERATURE: °C Lowest °C Highest 13-17 °C Receipt

MATRIX CODES:

- RW = REAGENT WATER
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- GW = GROUNDWATER
- SW = SURFACE WATER
- WW = WASTEWATER
- PW = POOL WATER
- O = OTHER
- SO = SOIL

CONTAMINATION LEVEL

- L = LOW (NO ODOR)
- M = MEDIUM
- H = HIGH
- U = UNKNOWN

TURN-AROUND-TIME (TAT) - SURCHARGES

- SW = STANDARD (10-15 WORKING DAYS) WRITTEN 0%
- RV = RUSH (3-5 WORKING DAYS) VERBAL 50%
- RW = RUSH (3-5 WORKING DAYS) WRITTEN 75%
- IV = IMMEDIATE (48-72 HOURS) VERBAL 100%
- IW = IMMEDIATE (48-72 HOURS) WRITTEN 125%
- SP = WEEKEND, HOLIDAY OR STAT Call

Environmental Health Laboratories 110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE 9 OF _____

CLIENT/COMPANY ORDERING TEST: IDEM

LOCATION/ADDRESS:

SAMPLER (Signature): JH

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME		SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran								OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SEAL
326359	5/21	1045	A/P	DK10788	2				✓													
326360			A/P		1					✓												
326361			A/P		1						✓											
326362		1130	A/P	DK10789	1		✓															
326363			A/P		1			✓														
326364			A/P		2				✓													
326365			A/P		1					✓												
326366			A/P		1						✓											
326367		1200	A/P	DK10790	1		✓															
326368			A/P		1			✓														
326369			A/P		2				✓													
326370			A/P		1					✓												

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

Inhouse COC

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
			[signature]	5/26/98	0900

LAB COMMENTS:

SHIPPING CONDITIONS: Check One: ☒ Iced ☐ Ambient

TEMPERATURE °C Lowest °C Highest 13-17 °C Receipt

MATRIX CODES:

- **RW** = REAGENT WATER
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- **GW** = GROUNDWATER
- **SW** = SURFACE WATER
- **WW** = WASTEWATER
- **PW** = POOL WATER
- **O** = OTHER
- **SO** = SOIL

CONTAMINATION LEVEL

- **L** = LOW (NO ODOR)
- **M** = MEDIUM
- **H** = HIGH
- **U** = UNKNOWN

TURN-AROUND-TIME (TAT) - SURCHARGES

- **SW** = STANDARD (10-15 WORKING DAYS) WRITTEN 0%
- **RV** = RUSH (3-5 WORKING DAYS) VERBAL 50%
- ***RW*** = *RUSH (3-5 WORKING DAYS) WRITTEN* *75%*
- **IV** = IMMEDIATE (48-72 HOURS) VERBAL **100%**
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Environmental Health Laboratories 110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE 10 OF _____

CLIENT/COMPANY ORDERING TEST: IDEM 1

LOCATION/ADDRESS:

SAMPLER (Signature): JH 1

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME		SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran								OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SEAL
326377	5/21	1200	A/P	DK10790	1						✓											
326378		1315	A/P	DK 10791	1		✓															
326379			A/P		1			✓														
326380			A/P		2				✓													
326381			A/P		1					✓												
326382			A/P		1						✓											
326383		1400	A/P	DK10[illegible]	1		✓															
326384			A/P		1			✓														
326385			A/P		2				✓													
326386			A/P		1					✓												
326387			A/P		1						✓											
			A/P																			

TESTS REQUESTED (✓)

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

In House COC

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
			[signature]	5/26/98	0900

LAB COMMENTS

SHIPPING CONDITIONS: (Check one) ☒ Iced ☐ Ambient

TEMPERATURE: °C Lowest °C Highest 13-17 °C Receipt

MATRIX CODES:

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- **SO** = SOIL

CONTAMINATION LEVEL

- **L** = LOW (NO ODOR)
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- **H** = HIGH
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TURN-AROUND-TIME (TAT) - SURCHARGES

- **SW** = STANDARD (10-15 WORKING DAYS) WRITTEN 0%
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- ***RW*** = *RUSH (3-5 WORKING DAYS) WRITTEN* 75%
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Environmental Health Laboratories 110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE 11 OF ___

CLIENT/COMPANY ORDERING TEST: IDEM

LOCATION/ADDRESS:

SAMPLER (Signature): MB

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME		SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran	OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SEAL
[illegible]	5/19	11.20	A/P	DK 11857	2		✓								
[illegible]			A/P		1			✓							
[illegible]			A/P		2				✓						
[illegible]			A/P		1					✓					
[illegible]			A/P		1						✓				
[illegible]		1.230	A/P	DK 11858	1		✓								
[illegible]			A/P		1			✓							
[illegible]			A/P		2				✓						
[illegible]			A/P		1					✓					
[illegible]			A/P		1						✓				
[illegible]		1318	A/P	DK 11859	1		✓								
[illegible]			A/P		1			✓							

TESTS REQUESTED (✓)

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

In house COC

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
			[signature]	5/26/98	0900

LAB COMMENTS:

SHIPPING CONDITIONS: (Check one) ☒ Iced ☐ Ambient

TEMPERATURE: °C Lowest °C Highest 13-17 °C Receipt

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TURN-AROUND-TIME (TAT) - SURCHARGES

- SW = STANDARD (10-15 WORKING DAYS) WRITTEN 0%
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- RW = RUSH (3-5 WORKING DAYS) WRITTEN 75%
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Environmental Health Laboratories 110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE 12 OF ___

CLIENT/COMPANY ORDERING TEST	LOCATION/ADDRESS
IDEM	
SAMPLER (Signature) MB	PWS ID# / PO#

EHL LAB#	COLLECTION DATE	COLLECTION TIME		SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran	OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SEAL
326394	5/19	1318	A/P	DK 11859	2				✓						
326395	↓	↓	A/P	↓	1					✓					
326396			A/P		1						✓				
326397		1412	A/P	DK 11860	1		✓								
326398			A/P		1			✓							
326399			A/P		2				✓						
326400			A/P		1					✓					
326401			A/P		1						✓				
326402		1510	A/P	DK 11861	1		✓								
326403			A/P		1			✓							
326404			A/P		2				✓						
326405			A/P		1					✓					

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

In House COC

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RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
			[signature]	5/26/98	0900

LAB COMMENTS

SHIPPING CONDITIONS: Check One ☒ Iced ☐ Ambient

TEMPERATURE: °C Lowest °C Highest 13-17 °C Receipt

MATRIX CODES:

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- **SW** = SURFACE WATER
- **WW** = WASTEWATER
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- **O** = OTHER
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CONTAMINATION LEVEL

- **L** = LOW (NO ODOR)
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TURN-AROUND-TIME (TAT) - SURCHARGES

- **SW** = STANDARD (10-15 WORKING DAYS) WRITTEN 0%
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- ***RW*** = *RUSH (3-5 WORKING DAYS) WRITTEN* 75%
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Environmental Health Laboratories 110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

Please see the back of this form for instructions

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE 13 OF _____

CLIENT/COMPANY ORDERING TEST: IDEM 1

LOCATION/ADDRESS:

SAMPLER (Signature): MA 1

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME	A/P	SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran								OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SEAL
[redacted]	5/19	1510	A/P	DK 11861	1						✓											
[redacted]		1600	A/P	DK 11862	1		✓															
[redacted]			A/P		1			✓														
[redacted]			A/P		2				✓													
[redacted]			A/P		1					✓												
[redacted]			A/P		1						✓											
[redacted]		1650	A/P	DK 11[redacted]	1		✓															
[redacted]			A/P		1			✓														
[redacted]			A/P		2				✓													
[redacted]			A/P		1					✓												
[redacted]			A/P		1						✓											
[redacted]	5/20	1040	A/P	DK 11864	1		✓															

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

In House COC

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
			[signature]	5/26/98	0900

LAB COMMENTS

SHIPPING CONDITION: Check one ☒ Iced ☐ Ambient

TEMPERATURE: °C Lowest °C Highest 13-17 °C Receipt

MATRIX CODES:

- **RW** = REAGENT WATER
- **DW** = DRINKING WATER
- **GW** = GROUNDWATER
- **SW** = SURFACE WATER
- **WW** = WASTEWATER
- **PW** = POOL WATER
- **O** = OTHER
- **SO** = SOIL

CONTAMINATION LEVEL

- **L** = LOW (NO ODOR)
- **M** = MEDIUM
- **H** = HIGH
- **U** = UNKNOWN

TURN-AROUND-TIME (TAT) - SURCHARGES

- **SW** = STANDARD (10-15 WORKING DAYS) WRITTEN 0%
- **RV** = RUSH (3-5 WORKING DAYS) VERBAL 50%
- **RW** = *RUSH (3-5 WORKING DAYS) WRITTEN* 75%
- **IV** = IMMEDIATE (48-72 HOURS) VERBAL **100%**
- **IW** = *IMMEDIATE (48-72 HOURS) WRITTEN* **125%**
- **SP** = WEEKEND, HOLIDAY OR STAT **Call**

Please see the back for instructions

Environmental Health Laboratories

110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE 14 OF __

CLIENT/COMPANY ORDERING TEST: IDEM 1

LOCATION/ADDRESS:

SAMPLER (Signature): MG 1

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME		SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran	OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SEAL
326418	5/20	1040	A/P	DK 118664	1			✓							
[illegible]	↓	↓	A/P	↓	2				✓						
[illegible]			A/P		1					✓					
[illegible]		↓	A/P	↓	1						✓				
326[illegible]		1136	A/P	DK 118665	1		✓								
326[illegible]		↓	A/P	↓	1			✓							
[illegible]			A/P		2				✓						
[illegible]			A/P		1					✓					
[illegible]		↓	A/P	↓	1						✓				
326[illegible]		1355	A/P	DK 118666	1		✓								
[illegible]		↓	A/P	↓	1			✓							
326[illegible]	↓	↓	A/P	↓	2				✓						

TESTS REQUESTED (✓)

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

In House COC

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
			[signature]	5/26/98	0900

LAB COMMENTS

SHIPPING CONDITION (Check one) ☒ Iced ☐ Ambient

TEMPERATURE °C Lowest °C Highest 13-17 °C Receipt

MATRIX CODES:

- **RW** = REAGENT WATER
- **DW** = DRINKING WATER
- **GW** = GROUNDWATER
- **SW** = SURFACE WATER
- **WW** = WASTEWATER
- **PW** = POOL WATER
- **O** = OTHER
- **SO** = SOIL

CONTAMINATION LEVEL

- **L** = LOW (NO ODOR)
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TURN-AROUND-TIME (TAT) - SURCHARGES

- **SW** = STANDARD (10-15 WORKING DAYS) WRITTEN 0%
- **RV** = RUSH (3-5 WORKING DAYS) VERBAL 50%
- ***RW*** = *RUSH (3-5 WORKING DAYS) WRITTEN* 75%
- **IV** = IMMEDIATE (48-72 HOURS) VERBAL **100%**
- ***IW*** = *IMMEDIATE (48-72 HOURS) WRITTEN* ***125%***
- **SP** = WEEKEND, HOLIDAY OR STAT **Call**

Environmental Health Laboratories 110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

Client Sample Number/Information:

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

PAGE 15 OF _____

CLIENT/COMPANY ORDERING TEST: IDEM 1

LOCATION/ADDRESS:

SAMPLER (Signature): M

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME		SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran								OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SF 41
32[illegible]30	5/20	1355	A/P	DK 11866	1				✓													
32[illegible]		↓	A/P	↓	1					✓												
32[illegible]		1440	A/P	DK 11867	1		✓															
[illegible]			A/P		1			✓														
32[illegible]			A/P		2				✓													
32[illegible]			A/P		1					✓												
32[illegible]		↓	A/P	↓	1						✓											
32[illegible]		1550	A/P	DK ~~11868~~ ~~119~~ 11867 SS SS	1		✓															
32[illegible]			A/P		1			✓														
32[illegible]			A/P		2				✓													
32[illegible]			A/P		1					✓												
32[illegible]		↓	A/P	↓	1						✓											

TESTS REQUESTED (✓)

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

In house COC

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
			[signature]	5/26/98	0900

LAB COMMENTS:

SHIPPING CONDITIONS: (Check One) ☒ Iced ☐ Ambient

TEMPERATURE: °C Lowest °C Highest 13-17 °C Receipt

MATRIX CODES:

- **RW** = REAGENT WATER
- **DW** = DRINKING WATER
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- **SW** = SURFACE WATER
- **WW** = WASTEWATER
- **PW** = POOL WATER
- **O** = OTHER
- **SO** = SOIL

CONTAMINATION LEVEL

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- **M** = MEDIUM
- **H** = HIGH
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- **RV** = RUSH (3-5 WORKING DAYS) VERBAL 50%
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Please see the back for instructions

Environmental Health Laboratories 110 S. Hill Street · South Bend, IN 46617 · Phone (219) 233-4777 · (800) 332-4345 ORDER # _____

SHADED AREA FOR LAB USE ONLY

CHAIN OF CUSTODY RECORD

CLIENT/COMPANY ORDERING TEST: IDEM 1

LOCATION/ADDRESS:

SAMPLER (Signature): MB 1

PWS ID#:

PO#:

EHL LAB#	COLLECTION DATE	COLLECTION TIME	A/P	SAMPLING POINT/LAB ID #	# OF CONTAINERS	MATRIX CODE	525.2	515.1	531.1	2,4-D	Carbofuran	OTHER SAMPLE RELATED REMARKS	CONTAMINATION LEVELS	TURNAROUND TIME	CUSTODY SEAL
32[illegible]	5/20	1705	A/P	DK10968	1		✓								
3[illegible]	↓	↓	A/P	↓	1			✓							
32[illegible]			A/P		2				✓						
3[illegible]			A/P		1					✓					
32[illegible]			A/P		1						✓				
			A/P												
			A/P												
			A/P												
			A/P												
			A/P												
			A/P												
			A/P												

2

3

FIELD COMMENTS: CARRIER _____ AIRBILL NO. _____ COOLER NO. _____ DATE SHIPPED _____

5 In House COC

LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
	6				
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
	6		[signature]	5/26/98	0900

LAB COMMENTS 7

SHIPPING CONDITIONS: (Check One) ☒ Iced ☐ Ambient

TEMPERATURE: °C Lowest °C Highest 13-17 °C Receipt

MATRIX CODES:

- **RW** = REAGENT WATER
- **DW** = DRINKING WATER
- **GW** = GROUNDWATER
- **SW** = SURFACE WATER
- **WW** = WASTEWATER
- **PW** = POOL WATER
- **O** = OTHER
- **SO** = SOIL

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- **SP** = WEEKEND, HOLIDAY OR STAT **Call**

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

☒ OWM ☐ OSHWM ☐ OER ☐ OAM

CHAIN OF CUSTODY

I certify that the sample(s) listed below was/were collected by me or in my presence.

Date: 5 / 22 / 98

Signature: Melinda Brondyke

Section: Ground Water

LAB NUMBER ASSIGNED	IDEM CONTROL NUMBER	CONSISTING OF THE INDICATED NUMBER OF BOTTLES													DATE AND TIME COLLECTED
		2000 ml P.N.M.	1000 ml P.N.M.	1000 ml G.N.M.	500 ml G.W.M.	40 ml VIAL	120 ml G.(B.O.)	500 ml P.N.M.	250 ml P.N.M.						
	DK11857			3		4									5/19/98 11:20 AM/PM
	DK11858			2		4									5/19/98 12:20 AM/PM
	DK11859			2		4									5/19/98 1:18 AM/PM
	DK11860			2		4									5/19/98 2:12 AM/PM
	DK11861			2		4									5/19/98 3:10 AM/PM
	DK11862			2		4									5/19/98 4:00 AM/PM
	DK11863			2		4									5/19/98 4:50 AM/PM
	DK11864			2		4									5/20/98 10:40 AM/PM
	DK11865			2		4									5/20/98 11:36 AM/PM
	DK11866			2		4									5/20/98 1:55 AM/PM
	DK11867			2		4									5/20/98 2:40 AM/PM
	DK10967			2		4									5/20/98 3:50 AM/PM
	DK10968			2		4									5/20/98 5:05 AM/PM

P - Plastic G - Glass N.M. - Narrow Mouth W.M. - Wide Mouth B.O. - Bacti. Only

CARRIERS

Should samples be iced? Y N

I certify that I received the above sample(s).

SIGNATURE	DATE AND TIME	SEALS INTACT		COMMENTS
RELINQUISHED BY: Melinda Brondyke	/ /	Y	N	No seals
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	3 1-L amber samples for DK11852, one bottle
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	had chipped orifice
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	OK TO PROCEED PER MITT DENNEY 5/26/98
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			

LAB CUSTODIAN

I certify that I received the above sample(s) and is/are recorded in the official record book. The same sample(s) will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Signature: _____ Date: ___ / ___ / ___ Time: ___ : ___ AM/

Lab: _____ Address: _____

INDIANA DEPARTMENT of ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER MANAGEMENT
GROUND WATER SECTION

ASSIGNED LAB: EHL

Date Submitted:		**Sample Nos Submitted Today:**	DK 11857 to DK 11867
Project:	MONITORING NETWORK	**Assigned IDEM Sample Nos:**	DK11847 to DK11906
Matrix:	Ground Water	**Sampler:**	BRONDYKE

TASKS &/OR PARAMETERS TO DETERMINE

TASK	PARAMETER	TASK	PARAMETER
4A	PESTICIDES		
4A	CHLORINATED PESTICIDES		
4A	CARBAMATES		

APPROXIMATE CONCENTRATIONS: 10ppm **REPORTING TIME REQUIRED: 30 DAYS**

Comments:

Please Send Report To:

Mitt Denney
IDEM
Shadeland, Ground Water Section
P.O. Box 6015
Indianapolis, IN 46206-6015

INDIANA DEPARTMENT of ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER MANAGEMENT
GROUND WATER SECTION

ASSIGNED LAB: EHL

Date Submitted:		**Sample Nos Submitted Today:**	DK 10967 to DK 10968
Project:	MONITORING NETWORK	**Assigned IDEM Sample Nos:**	DK10951 to DK10975
Matrix:	Ground Water	**Sampler:**	BRONDYKE

TASKS &/OR PARAMETERS TO DETERMINE

TASK	PARAMETER	TASK	PARAMETER
4A	PESTICIDES		
4A	CHLORINATED PESTICIDES		
4A	CARBAMATES		

APPROXIMATE CONCENTRATIONS: 10ppm **REPORTING TIME REQUIRED: 30 DAYS**

Comments:

DK 10967 + DK 10968 are resampled sites due to bottle breakage

Please Send Report To:

Mitt Denney
IDEM
Shadeland, Ground Water Section
P.O. Box 6015
Indianapolis, IN 46206-6015

31751
32034

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

☒ OWM ☐ OSHWM ☐ OER ☐ OAM

CHAIN OF CUSTODY

I certify that the sample(s) listed below was/were collected by me or in my presence. Date: 5 / 22 / 98

Signature: [illegible] Section: Ground Water

LAB NUMBER ASSIGNED	IDEM CONTROL NUMBER	2000 ml P.N.M.	1000 ml P.N.M.	1000 ml G.N.M.	500 ml G.W.M.	40 ml VIAL	120 ml G.(B.O.)	500 ml P.N.M.	250 ml P.N.M.				DATE AND TIME COLLECTED
	DK11734			2		4							5/18/98 12:24 AM/PM
	DK11735			2		4							5/18/98 1:25 AM/PM
	DK11736			2		4 3	1 vial broke in transit ss 5/26/98						5/18/98 2:12 AM/PM
	DK11737			2		4							5/18/98 3:16 AM/PM
	DK11738			2		4							5/19/98 11:35 AM/PM
	DK11739			2		4							5/19/98 1:47 AM/PM
	DK11740			2		4							5/19/98 4:12 AM/PM
	DK11741			2		4							5/19/98 5:31 AM/PM
	DK11742			2		4							5/20/98 9:50 AM/PM
	DK11743			2		4							5/20/98 11:09 AM/PM
	DK11744			2		4							5/20/98 12:40 AM/PM
	DK11745			2		4							5/20/98 1:55 AM/PM

P - Plastic G - Glass N.M. - Narrow Mouth W.M. - Wide Mouth B.O. - Bacti. Only

CARRIERS

Should samples be Iced? Y N

I certify that I received the above sample(s).

SIGNATURE	DATE AND TIME	SEALS INTACT		COMMENTS
RELINQUISHED BY: [illegible]	5/22/98	Y	N	No Seals
RECEIVED BY: [illegible] 5/26/98	0900 : AM/PM			
RELINQUISHED BY:	/ /	Y	N	13°C - 17°C upon receipt SS
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	OK TO PROCEED PER MITT DENNEY 5/24/98 JVV
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			

LAB CUSTODIAN

I certify that I received the above sample(s) and is/are recorded in the official record book. The same sample(s) will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Signature: _____ Date: ___ / ___ / ___ Time: ___ : ___ AM/

Lab: _____ Address: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

☒ OWM ☐ OSHWM ☐ OER ☐ OAM

CHAIN OF CUSTODY

I certify that the sample(s) listed below was/were collected by me or in my presence. Date: 5 / 22 / 98

Signature: Robert P. Hamilton Jr. Section: Ground Water

LAB NUMBER ASSIGNED	IDEM CONTROL NUMBER	2000 ml P.N.M.	1000 ml P.N.M.	1000 ml G.N.M.	500 ml G.W.M.	40 ml VIAL	120 ml G.(B.O.)	500 ml P.N.M.	250 ml P.N.M.				DATE AND TIME COLLECTED
	DK11746			2		4							5/20/98 2:55 AM/PM
	DK11747			2		4							5/20/98 3:36 AM/PM
	DK11748			2		4							5/22/98 10:01 AM/PM
	DK11749			2		4							5/22/98 10:50 AM/PM
													/ / : AM/PM
													/ / : AM/PM
													/ / : AM/PM
													/ / : AM/PM
													/ / : AM/PM
													/ / : AM/PM
													/ / : AM/PM
													/ / : AM/PM

P - Plastic G - Glass N.M. - Narrow Mouth W.M. - Wide Mouth B.O. - Bacti. Only

CARRIERS

Should samples be Iced? Y N

I certify that I received the above sample(s).

SIGNATURE	DATE AND TIME	SEALS INTACT		COMMENTS
RELINQUISHED BY: Robert P. Hamilton Jr.	5/22/98	Y	N	No Gacs
RECEIVED BY: [illegible] 5-26-98 0900	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	13°C-17°C upon receipt SS
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	OK TO PROCEED PER MITT DENNEY 5/26/98 JVV
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			

LAB CUSTODIAN

I certify that I received the above sample(s) and is/are recorded in the official record book. The same sample(s) will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Signature: _____ Date: ___ / ___ / ___ Time: ___ : ___ AM/

Lab: _____ Address: _____

INDIANA DEPARTMENT of ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER MANAGEMENT
GROUND WATER SECTION

ASSIGNED LAB: EHL

Date Submitted:	5/22/98	**Sample Nos Submitted Today:**	DK 11734 to DK 11749
Project:	MONITORING NETWORK	**Assigned IDEM Sample Nos:**	DK11727 to DK11786
Matrix:	Ground Water	**Sampler:**	HAMILTON

TASKS &/OR PARAMETERS TO DETERMINE

TASK	PARAMETER	TASK	PARAMETER
4A	PESTICIDES		
4A	CHLORINATED PESTICIDES		
4A	CARBAMATES		

APPROXIMATE CONCENTRATIONS: 10ppm **REPORTING TIME REQUIRED: 30 DAYS**

Comments:

Please Send Report To:

Mitt Denney
IDEM
Shadeland, Ground Water Section
P.O. Box 6015
Indianapolis, IN 46206-6015

32034
31751

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

☒ OWM ☐ OSHWM ☐ OER ☐ OAM

CHAIN OF CUSTODY

I certify that the sample(s) listed below was/were collected by me or in my presence. Date: 5 / 21 / 98

Signature: James L. Harris Section: Ground Water

LAB NUMBER ASSIGNED	IDEM CONTROL NUMBER	2000 ml P.N.M.	1000 ml P.N.M.	1000 ml G.N.M.	500 ml G.W.M.	40 ml VIAL	120 ml G.(B.O.)	500 ml P.N.M.	250 ml P.N.M.				DATE AND TIME COLLECTED
	DK10786			2		4							5/19/98 5:00 AM/PM
	DK10787			2		4							5/20/98 11:30 AM/PM
	DK10788			2		4							5/21/98 10:45 AM/PM
	DK10789			2		4							5/21/98 11:30 AM/PM
	DK10790			2		4							5/21/98 12:00 AM/PM
	DK10791			2		4							5/21/98 1:15 AM/PM
	DK10792			2		4							5/21/98 2:00 AM/PM
													/ / : AM/PM
													/ / : AM/PM
													/ / : AM/PM
													/ / : AM/PM
													/ / : AM/PM

P - Plastic G - Glass N.M. - Narrow Mouth W.M. - Wide Mouth B.O. - Bacti. Only

CARRIERS

Should samples be Iced? Y N

I certify that I received the above sample(s).

SIGNATURE	DATE AND TIME	SEALS INTACT		COMMENTS
RELINQUISHED BY: James Harris	5/22/98	Y	N	13°C - 17°C upon receipt ss
RECEIVED BY: [signature]	5/26/98 09:00 AM/PM			
RELINQUISHED BY:	/ /	Y	N	OK TO PROCEED PER MOS DENNIS - 5/26/98 JW
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			
RELINQUISHED BY:	/ /	Y	N	
RECEIVED BY:	: AM/PM			

LAB CUSTODIAN

I certify that I received the above sample(s) and is/are recorded in the official record book. The same sample(s) will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Signature: _____ Date: ___ / ___ / ___ Time: ___ : ___ AM/PM

Lab: _____ Address: _____

INDIANA DEPARTMENT of ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER MANAGEMENT
GROUND WATER SECTION

ASSIGNED LAB: EHL

Date Submitted:		**Sample Nos Submitted Today:**	DK 10786 to DK 10792
Project:	MONITORING NETWORK	**Assigned IDEM Sample Nos:**	DK10775 to DK10799
Matrix:	Ground Water	**Sampler:**	HARRIS

TASKS &/OR PARAMETERS TO DETERMINE

TASK	PARAMETER	TASK	PARAMETER
4A	PESTICIDES		
4A	CHLORINATED PESTICIDES		
4A	CARBAMATES		

APPROXIMATE CONCENTRATIONS: 10ppm **REPORTING TIME REQUIRED: 30 DAYS**

Comments:

Please Send Report To:

Mitt Denney
IDEM
Shadeland, Ground Water Section
P.O. Box 6015
Indianapolis, IN 46206-6015

ENVIRONMENTAL HEALTH LABORATORIES

2,4-D ANALYSIS RESULT SHEET

Method: Enzyme Immunoassay - Qualitative
Analyst: NM
Instrument ID: B&L Spec21
Run Date: 05/27/98
Run Time: 15:16
Project(s): DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968

LOT #
Standard 1: 7J2563
Standard 2: 7J2564
Standard 3: n/a
Control Solution: 7J2566
Diluent / Zero Solution: 7K2778

Enzyme Conjugate: 8C1017
Stopping Soln.: 7J2630
Washing Solution: 7L3052
Color Solution: 8B1151
Magnetic Particles: 8C1016

Spec 21 setting: 450

Seq Num	Lab ID #	Client	Sample Description		Sample Type	Matrix	Absorbance (nm) Bx	B'	Bx x 100 / B'	Calcd. ug/L	Final Result	% Rec	Q
1			Diluent/Zero	0.0 ug/L	LMB	RW	1.270	1.296	98.0				
2			Diluent/Zero	0.0 ug/L	LMB	RW	1.322	1.296	102.0				
3			Standard 1	1.0 ug/L	ICS	RW	1.203	1.296	92.8	0.9	Present	90	
4			Standard 1	1.0 ug/L	ICS	RW	1.156	1.296	89.2	1.2	Present	120	
5			Control	3.5 ug/L	QCS	RW	1.005	1.296	77.5	3.2	Present	91	
6	326270	IDEM	DK 11734		FS	GW	1.356	1.296	104.6	< 0.7	Absent		
7			Diluent/Zero	0.0 ug/L	LMB	RW	1.425	1.296	110.0	< 0.7	Absent		
8			Standard 1	1.0 ug/L	CCC	RW	1.106	1.296	85.3	1.7	Present	170	
9	326275	IDEM	DK 11735		FS	GW	1.295	1.296	99.9	< 0.7	Absent		
10	326280	IDEM	DK 11736		FS	GW	1.375	1.296	106.1	< 0.7	Absent		
11	326285	IDEM	DK 11737		FS	GW	1.415	1.296	109.2	< 0.7	Absent		
12	326290	IDEM	DK 11738		FS	GW	1.417	1.296	109.3	< 0.7	Absent		
13	326295	IDEM	DK 11739		FS	GW	1.346	1.296	103.9	< 0.7	Absent		
14	326300	IDEM	DK 11740		FS	GW	1.283	1.296	99.0	< 0.7	Absent		
15	326305	IDEM	DK 11741		FS	GW	1.337	1.296	103.2	< 0.7	Absent		
16	326310	IDEM	DK 11742		FS	GW	1.343	1.296	103.6	< 0.7	Absent		
17	326315	IDEM	DK 11743		FS	GW	1.409	1.296	108.7	< 0.7	Absent		
18	326320	IDEM	DK 11744		FS	GW	1.287	1.296	99.3	< 0.7	Absent		
19			Diluent/Zero	0.0 ug/L	LMB	RW	1.370	1.296	105.7	< 0.7	Absent		
20			Standard 1	1.0 ug/L	CCC	RW	1.149	1.296	88.7	1.25	Present	125	
21													
22													

Comments:

Reviewed By: [signature] Date: 7/29/98

Finalized By: John E. Deange III Date: 8/6/98

ENVIRONMENTAL HEALTH LABORATORIES

2,4-D ANALYSIS RESULT SHEET

Method: Enzyme Immunoassay - Qualitative
Analyst: NM
Instrument ID: B&L Spec21
Run Date: 05/29/98 Run Time: 10:13
Project(s): DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968

LOT #
Standard 1: 7J2564
Standard 2: 7J2564
Standard 3: n/a
Control Solution: 712566
Diluent / Zero Solution: 7K2778

Enzyme Conjugate: 8C1017
Stopping Soln.: 7J2630
Washing Solution: 7L3052
Color Solution: 8B1151
Magnetic Particles: 8C1016

Spec 21 setting: 450

Present, not quantifiable?

Seq Num	Lab ID #	Client	Sample Description	Sample Type	Matrix	Absorbance (nm) Bx	B	Bx x 100 / B	Calcd. ug/L	Final Result	% Rec	Q
1			Diluent/Zero 0.0 ug/L	LMB	RW	1.312	1.295	101.3				
2			Diluent/Zero 0.0 ug/L	LMB	RW	1.278	1.295	98.7				
3			Standard 1 1.0 ug/L	ICS	RW	1.209	1.295	93.4	0.9	Present	90	
4			Standard 1 1.0 ug/L	ICS	RW	1.124	1.295	86.8	1.5	Present	150	
5			Control 3.5 ug/L	QCS	RW	0.961	1.295	74.2	4.1	Present	117	
6	326325	IDEM	DK 11745	FS	GW	1.327	1.295	102.5	< 0.7	< 0.7	Absent	
7	326330	IDEM	DK 11746	FS	GW	1.369	1.295	105.7	< 0.7	< 0.7	Absent	
8	326335	IDEM	DK 11747	FS	GW	1.266	1.295	97.8	< 0.7	< 0.7		
9	326350	IDEM	DK 10786	FS	GW	1.423	1.295	109.9	< 0.7	< 0.7		
10	326355	IDEM	DK 10787	FS	GW	1.401	1.295	108.2	< 0.7	< 0.7		
11	326375	IDEM	DK 10791	FS	GW	1.349	1.295	104.2	< 0.7	< 0.7		
12	326380	IDEM	DK 10792	FS	GW	1.366	1.295	105.5	< 0.7	< 0.7		
13	326385	IDEM	DK 11857	FS	GW	1.379	1.295	106.5	< 0.7	< 0.7		
14	326390	IDEM	DK 11858	FS	GW	1.292	1.295	99.8	< 0.7	< 0.7		
15	326395	IDEM	DK 11859	FS	GW	1.318	1.295	101.8	< 0.7	< 0.7		
16	326395-S	IDEM	DK 11859 Matrix Spike/7.0 ug/L	MS	GW	0.900	1.295	69.5	6.0	Present	86	
17	326395SD	IDEM	DK 11859 Matrix Spike Duplicate/7.0 ug/L	MSD	GW	0.863	1.295	66.6	8.0	Present	114	
18			Diluent/Zero 0.0 ug/L	LMB	RW	1.260	1.295	97.3	< 0.7	Absent		
19			Standard 1 1.0 ug/L	CCC	RW	1.162	1.295	89.7	1.2	Present	120	
20	326400	IDEM	DK 11860	FS	GW	1.391	1.295	107.4	< 0.7	Absent		
21	326405	IDEM	DK 11861	FS	GW	1.322	1.295	102.1	< 0.7	Absent		
22	326410	IDEM	DK 11862	FS	GW	1.360	1.295	105.0	< 0.7	Absent		

88-90 in back

Comments:

Reviewed By: Date: 7/29/98 Finalized By: John E. George III Date: 8/6/98.

ENVIRONMENTAL HEALTH LABORATORIES

2,4-D ANALYSIS RESULT SHEET

Method: Enzyme Immunoassay - Qualitative
Analyst: NM
Instrument ID: B&L Spec21
Run Date: 05/29/98 Run Time: 10:13
Project(s): DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
LOT # Standard 1: 7J2564
Standard 2: 7J2564
Standard 3: n/a
Control Solution: 712566
Diluent / Zero Solution: 7K2778
Enzyme Conjugate: 8C1017
Spec 21 setting: 450
Stopping Soln.: 7J2630
Washing Solution: 7L3052
Color Solution: 8B1151
Magnetic Particles: 8C1016

Seq Num	Lab ID #	Client	Sample Description	Sample Type	Matrix	Absorbance (nm) Bx	B	Bx x 100 / B	Calc'd ug/L	Final Result	% Rec	Q
23	326415	IDEM	DK 11863	FS	GW	1.316	1.295	101.6	< 0.7	Absent		
24	326420	IDEM	DK 11864	FS	GW	1.332	1.295	102.9	< 0.7	Absent		
25	326425	IDEM	DK 11865	FS	GW	1.335	1.295	103.1	< 0.7	Absent		
26	326430	IDEM	DK 11866	FS	GW	1.364	1.295	105.3	< 0.7	Absent		
27	326435	IDEM	DK 11867	FS	GW	1.292	1.295	99.8	< 0.7	Absent		
28	326440	IDEM	DK 10967	FS	GW	1.300	1.295	100.4	< 0.7	Absent		
29	326445	IDEM	DK 10968	FS	GW	1.350	1.295	104.2	< 0.7	Absent		
30			Diluent/Zero 0.0 ug/L	LMB	RW	1.178	1.295	91.0	< 0.7	Absent		
31			Standard 1 1.0 ug/L	CCC	RW	1.134	1.295	87.6	1.4	Present	140	
32												
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42												
43												
44												

Comments:

ENVIRONMENTAL HEALTH LABORATORIES

2,4-D ANALYSIS RESULT SHEET

Method: Enzyme Immunoassay - Qualitative
Analyst: NM
Instrument ID: B&L Spec21
Run Date: 06/01/98 Run Time: 15:31
Project(s): DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
LOT # Standard 1: n/a
Enzyme Conjugate: 8C1017
Spec 21 setting: 450
Standard 2: 7J2564
Stopping Soln.: 7J2630
Standard 3: n/a
Washing Solution: 7L3052
Control Solution: 712566
Color Solution: 8B1151
Diluent / Zero Solution: 7K2778
Magnetic Particles: 8C1016

Seq Num	Lab ID #	Client	Sample Description		Sample Type	Matrix	Absorbance (nm) Bx	B°	Bx x 100 / B°	Calcd. ug/L	Final Result	% Rec	Q
1			Diluent/Zero	0.0 ug/L	LMB	RW	1.222	1.222	100.0				
2			Standard 1	1.0 ug/L	ICS	RW	1.076	1.222	88.1	1.3	Present	130	
3			Standard 1	1.0 ug/L	ICS	RW	1.140	1.222	93.3	0.8	Present	80	
4			Control	3.5 ug/L	QCS	RW	0.976	1.222	79.9	2.6	Present	74	
5	326340	IDEM	DK 11748		FS	GW	1.332	1.222	109.0	< 0.7	Absent	117	
6	326345	IDEM	DK 11749		FS	GW	1.338	1.222	109.5	< 0.7	Absent		
7	326360	IDEM	DK 10788		FS	GW	1.329	1.222	108.8	< 0.7	Absent		
8	326365	IDEM	DK 10789		FS	GW	1.304	1.222	106.7	< 0.7	Absent		
9	326370	IDEM	DK 10790		FS	GW	1.380	1.222	112.9	< 0.7	Absent		
10			Diluent/Zero	0.0 ug/L	LMB	RW	1.256	1.222	102.8	< 0.7	Absent		
11			Standard 1	1.0 ug/L	CCC	RW	1.128	1.222	92.3	0.9	Present	90	
12			Diluent/Zero	0.0 ug/L	LMB	RW	1.210	1.222	99.0	< 0.7	Absent		
13			Standard 1	1.0 ug/L	CCC	RW	1.166	1.222	95.4	0.7	Present	70	
14													
15													
16													
17													
18													
19													
20													
21													
22													

Comments:

Reviewed By: Date: 7/29/98 Finalized By: John E. Hoage III Date: 8/6/98.

ENVIRONMENTAL HEALTH LABORATORIES

CARBOFURAN ANALYSIS RESULT SHEET

Method: Enzyme Immunoassay - Qualitative
Analyst: NM
Instrument ID: B&L Spec21
Run Date: 05/27/98 Run Time: 10:27
Project(s): DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
LOT # Standard 1: n/a
Enzyme Conjugate: 7C2110
Spec 21 setting: 450
Standard 2: 7D1335
Stopping Soln.: 7C2034
Standard 3: 7D1336
Washing Solution: 7C1229a
Control Solution: 7D1337
Color Solution: 7C2117
Diluent / Zero Solution: 7C1276
Magnetic Particles: 7C2111

Seq Num	Lab ID #	Client	Sample Description		Sample Type	Sample Matrix	Absorbance (nm) Bx	Absorbance (nm) B'	Bx x 100 / B'	Calcd. ug/L	Final Result	% Rec	Q
1			Diluent/Zero	0.0 ug/L	LMB	RW	1.015	1.093	92.9				
2			Diluent/Zero	0.0 ug/L	LMB	RW	1.170	1.093	107.1				
3			Standard 2	1.0 ug/L	ICS	RW	0.483	1.093	44.2	1.1	Present	110	
4			Standard 2	1.0 ug/L	ICS	RW	0.473	1.093	43.3	1.1	Present	110	
5			Control	2.0 ug/L	QCS	RW	0.394	1.093	36.1	1.7	Present	85	
6			Diluent/Zero	0.0 ug/L	LMB	RW	1.073	1.093	98.2	< 1.0	Absent		
7			Standard 2	1.0 ug/L	CCC	RW	0.482	1.093	44.1	1.05	Present	105	
8	326271	IDEM	DK 11734		FS	GW	0.944	1.093	86.4	< 1.0	Absent		
9	326276	IDEM	DK 11735		FS	GW	1.009	1.093	92.4	< 1.0	Absent		
10	326281	IDEM	DK 11736		FS	GW	1.048	1.093	95.9	< 1.0	Absent		
11			Diluent/Zero	0.0 ug/L	LMB	RW	1.083	1.093	99.1	< 1.0	Absent		
12			Standard 2	1.0 ug/L	CCC	RW	0.487	1.093	44.6	1.0	Present	100	
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

Comments:

Reviewed By: [signature] Date: 7/29/98 Finalized By: John E. George III Date: 8/6/98

ENVIRONMENTAL HEALTH LABORATORIES

CARBOFURAN ANALYSIS RESULT SHEET

Method: Enzyme Immunoassay - Qualitative
Analyst: NM
Instrument ID: B&L Spec21
Run Date: 06/01/98 Run Time: 10:05
Project(s): DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
LOT # Standard 1: n/a
Enzyme Conjugate: 7C2110
Spec 21 setting: 450
Standard 2: 7D1335
Stopping Soln.: 7C2034
Standard 3: 7D1336
Washing Solution: 7C1229a
Control Solution: 7D1337
Color Solution: 7C2117
Diluent / Zero Solution: 7C1276
Magnetic Particles: 7C2111

Seq Num	Lab ID #	Client	Sample Description		Sample Type	Sample Matrix	Absorbance (nm) Bx	Absorbance (nm) B'	Bx x 100 / B'	Calcd. ug/L	Final Result	% Rec	Q
1			Diluent/Zero	0.0 ug/L	LMB	RW	0.996	1.025	97.2				
2			Diluent/Zero	0.0 ug/L	LMB	RW	1.054	1.025	102.8				
3			Standard 2	1.0 ug/L	ICS	RW	0.455	1.025	44.4	1.0	Present	100	
4			Standard 2	1.0 ug/L	ICS	RW	0.478	1.025	46.6	0.95	Present	95	
5			Control	2.0 ug/L	QCS	RW	0.358	1.025	34.9	1.8	Present	90	
6	326286	IDEM	DK 11737		FS	GW	1.067	1.025	104.1	< 1.0	Absent		
7	326291	IDEM	DK 11738		FS	GW	1.024	1.025	99.9	< 1.0	Absent		
8	326296	IDEM	DK 11739		FS	GW	0.991	1.025	96.7	< 1.0	Absent		
9	326301	IDEM	DK 11740		FS	GW	0.982	1.025	95.8	< 1.0	Absent		
10	326306	IDEM	DK 11741		FS	GW	1.017	1.025	99.2	< 1.0	Absent		
11	326311	IDEM	DK 11742		FS	GW	0.999	1.025	97.5	< 1.0	Absent		
12	326316	IDEM	DK 11743		FS	GW	0.974	1.025	95.0	< 1.0	Absent		
13	326321	IDEM	DK 11744		FS	GW	1.017	1.025	99.2	< 1.0	Absent		
14	326326	IDEM	DK 11745		FS	GW	1.068	1.025	104.2	< 1.0	Absent		
15	326331	IDEM	DK 11746		FS	GW	0.942	1.025	91.9	< 1.0	Absent		
16			Diluent/Zero	0.0 ug/L	LMB	RW	1.028	1.025	100.3	< 1.0	Absent		
17			Standard 2	1.0 ug/L	CCC	RW	0.432	1.025	42.1	1.1	Present	110	
18	326336	IDEM	DK 11747		FS	GW	0.976	1.025	95.2	< 1.0	Absent		
19	326341	IDEM	DK 11748		FS	GW	0.975	1.025	95.1	< 1.0	Absent		
20	326346	IDEM	DK 11749		FS	GW	1.015	1.025	99.0	< 1.0	Absent		
21	326351	IDEM	DK 10786		FS	GW	0.867	1.025	84.6	< 1.0	Absent		
22	326356	IDEM	DK 10787		FS	GW	1.014	1.025	98.9	< 1.0	Absent		

Comments:

Reviewed By: [signature] Date: 7/29/98 Finalized By: John E. Deange III Date: 8/6/98

ENVIRONMENTAL HEALTH LABORATORIES

CARBOFURAN ANALYSIS RESULT SHEET

Method: Enzyme Immunoassay - Qualitative
Analyst: NM
Instrument ID: B&L Spec21
Run Date: 06/01/98 Run Time: 10:05
Project(s): DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
LOT # Standard 1: n/a
Standard 2: 7D1335
Standard 3: 7D1336
Control Solution: 7D1337
Diluent / Zero Solution: 7C1276
Enzyme Conjugate: 7C2110
Spec 21 setting: 450
Stopping Soln.: 7C2034
Washing Solution: 7C1229a
Color Solution: 7C2117
Magnetic Particles: 7C2111

Seq Num	Lab ID #	Client	Sample Description	Sample Type	Sample Matrix	Absorbance (nm) Bx	B	Bx x 100 / B	Calcd. ug/L	Final Result	% Rec	Q
23	326376	IDEM	DK 10791	FS	GW	0.999	1.025	97.5	< 1.0	Absent		
24	326381	IDEM	DK 10792	FS	GW	1.023	1.025	99.8	< 1.0	Absent		
25	326386	IDEM	DK 11857	FS	GW	0.907	1.025	88.5	< 1.0	Absent		
26	326391	IDEM	DK 11858	FS	GW	0.982	1.025	95.8	< 1.0	Absent		
27	326396	IDEM	DK 11859	FS	GW	1.026	1.025	100.1	< 1.0	Absent		
28	326396-S	IDEM	DK 11859 Matrix Spike/2.0 ug/L	MS	GW	0.466	1.025	45.5	0.95	Present	48	
29	326396SD	IDEM	DK 11859 Matrix Spike Duplicate/2.0 ug/L	MSD	GW	0.358	1.025	34.9	1.8	Present	90	
30			Diluent/Zero 0.0 ug/L	LMB	RW	1.064	1.025	103.8	< 1.0	Absent		
31			Standard 2 1.0 ug/L	CCC	RW	0.480	1.025	46.8	0.90	Present	90	
32												
33												
34												
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37												
38												
39												
40												
41												
42												
43												
44												

Comments:

ENVIRONMENTAL HEALTH LABORATORIES

CARBOFURAN ANALYSIS RESULT SHEET

Method: Enzyme Immunoassay - Qualitative
Analyst: NM
Instrument ID: B&L Spec21
Run Date: 06/01/98
Run Time: 13:10
Project(s): DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
LOT # Standard 1: 7D1334
Standard 2: 7D1335
Standard 3: 7D1336
Control Solution: 7D1337
Diluent / Zero Solution: 7C1276
Enzyme Conjugate: 7C2110
Stopping Soln.: 7C2034
Washing Solution: 7C1229a
Color Solution: 7C2117
Magnetic Particles: 7C2111
Spec 21 setting: 450

Seq Num	Lab ID #	Client	Sample Description		Sample Type	Matrix	Absorbance (nm) Bx	B	Bx x 100 / B	Calcd. ug/L	Final Result	% Rec	Q
1			Diluent/Zero	0.0 ug/L	LMB	RW	1.085	1.111	97.7				
2			Diluent/Zero	0.0 ug/L	LMB	RW	1.136	1.111	102.3				
3			Standard 2	1.0 ug/L	ICS	RW	0.508	1.111	45.7	0.95	Present	95	
4			Standard 2	1.0 ug/L	ICS	RW	0.408	1.111	36.7	1.6	Present	160	
5			Control	2.0 ug/L	QCS	RW	0.417	1.111	37.6	1.6	Present	80	
6	326361	IDEM	DK 10788		FS	GW	1.058	1.111	95.3	< 1.0	Absent		
7	326366	IDEM	DK 10789		FS	GW	1.182	1.111	106.4	< 1.0	Absent		
8	326371	IDEM	DK 10790		FS	GW	1.157	1.111	104.2	< 1.0	Absent		
9	326401	IDEM	DK 11860		FS	GW	1.108	1.111	99.8	< 1.0	Absent		
10	326406	IDEM	DK 11861		FS	GW	1.054	1.111	94.9	< 1.0	Absent		
11	326411	IDEM	DK 11862		FS	GW	1.011	1.111	91.0	< 1.0	Absent		
12	326416	IDEM	DK 11863		FS	GW	1.113	1.111	100.2	< 1.0	Absent		
13	326421	IDEM	DK 11864		FS	GW	1.082	1.111	97.4	< 1.0	Absent		
14	326426	IDEM	DK 11865		FS	GW	1.071	1.111	96.4	< 1.0	Absent		
15	326431	IDEM	DK 11866		FS	GW	1.169	1.111	105.3	< 1.0	Absent		
16			Diluent/Zero	0.0 ug/L	LMB	RW	1.088	1.111	98.0	< 1.0	Absent		
17			Standard 2	1.0 ug/L	CCC	RW	0.490	1.111	44.1	1.0	Present	100	
18	326436	IDEM	DK 11867		FS	GW	1.119	1.111	100.8	< 1.0	Absent		
19	326441	IDEM	DK 10967		FS	GW	1.082	1.111	97.4	< 1.0	Absent		
20	326446	IDEM	DK 10968		FS	GW	1.176	1.111	105.9	< 1.0	Absent		
21			Diluent/Zero	0.0 ug/L	LMB	RW	1.090	1.111	98.2	< 1.0	Absent		
22			Standard 2	1.0 ug/L	CCC	RW	0.547	1.111	49.3	0.80	Present	80	

Comments:

Reviewed By: Date: 7/29/98 Finalized By: John E. Dengel III Date: 8/6/98

CHLORINATED ACID PESTICIDES - GC/MS TUNING AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)

Tech: CW
Date: 06/04/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060398B
Contract:	BAA 97-044	Task:	4A	Data Directory:	N\060398B
Project:	DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0603F0N
		Method:	515.1	Instrument ID:	GC/MS - N
Column:	Restek XTI-5 30m x 0.25mm ID				

m/e	Ion Abundance Criteria	% Rel Abundance	Q
51	10 to 80% of base peak	30.81	
68	< 2% of Mass 69	0.00	
70	< 2% of Mass 69	0.00	
127	10 to 80% of base peak	26.99	
197	< 2% of Mass 198	0.00	
198	base peak or > 50 % of mass 442	100.00	
199	5 to 9% of mass 198	6.17	
275	10 to 60% of base peak	16.49	
365	> 1% of base peak	1.40	
441	Present and < mass 443	7.96	
442	base peak or > 50 % of mass 198	52.39	
443	15 to 24% of mass 442	16.89	

Tune Date: 06/03/98

Tune Time: 16:51

Hours Since Last Tune

Matrix	Code
Reagent Water	RW
Surface Water	SW
Drinking Water	DW
Ground Water	GW
Waste Water	WW
Sediment	SE
Soil	SO
Sludge	SL
Other Solvents	OS
TCLP Leachate	TC
Hazardous Waste	HW

Contamination Levels: L=Low M=Medium H=High

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Tune 1	TI-DFN1	06/03/98	16:51	OS	
2	SPCC	S-515A	06/03/98	17:08	OS	
3	Laboratory Method Blank B	MB-515B	06/03/98	23:03	RW	
4	Laboratory Fortified Blank B	FB-515B	06/03/98	23:25	RW	
5						
6						
7						
8						
9						
10						
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Q = A flag or qualifier indicating possible cause for an out of ra

Comments:

CHLORINATED ACID PESTICIDES
LABORATORY PERFORMANCE CHECK

Tech: CW
Date: 06/04/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060398B
Contract:	BAA 97-044	Task:	4A	Data Directory:	N\060398B
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0603F0N
		Method:	515.1	Instrument ID:	GC/MS - N
Column:	Restek XTI-5 30m x 0.25mm ID				
Data File:	S-515A	LPC Soln Lot #:	021798-021798		

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
Dinoseb	Sensitivity	0.05	Detection of analyte: S/N > 3	84.3	Pass	
4 - Nitrophenol	Chromatographic Performance	5.00	0.70 < PGF < 1.05 (a)	1.00	Pass	
4 - Nitrophenol 3,5-Dichlorobenzoic acid	Column Performance	0.15 0.30	Resolution > 0.40 (b)	0.64	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$PGF = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where W(1/2) is the peak width at half height and W(1/10) is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where t is the difference in elution times between the two peaks and W is the average peak width, at the baseline, of the two peaks.

Comments: _____

CHLORINATED ACID PESTICIDES
METHOD BLANK SUMMARY

Tech: CW
Date: 06/04/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060398B
Contract:	BAA 97-044	Task:	4A	Data Directory:	N\060398B
Project:	DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0603F0N
		Method:	515.1	Instrument ID:	GC/MS - N
Column:	Restek XTI-5 30m x 0.25mm ID	Ext Date:	05/28/98	Ext Method:	Solid Phase Extraction
Blank File:	MB-515B				

This method blank applies to the following samples, ms, msd, blanks, standards.

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Laboratory Method Blank B	MB-515B	06/03/98	23:03	RW	
2	Laboratory Fortified Blank B	FB-515B	06/03/98	23:25	RW	
3	Continuing Calibration Check B	C-1-06B	06/04/98	01:55	OS	
4	DK 11740	326298	06/04/98	05:41	GW	L
5	QCS B	Q-515B	06/04/98	06:03	RW	
6	Continuing Calibration Check C	C-2-06C	06/04/98	06:25	OS	
7						
8						
9						
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28						

Comments:

CHLORINATED ACID PESTICIDES DATA SHEET

Tech: CW
Date: 06/04/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: RW
Data File/Smpl ID: MB-515B
Data File/Dupl ID:
Sample Number/Description: Laboratory Method Blank B

Lab ID: unknown
Task: 4A
Case: n/a
Method: 515.1
Smpl Vol: 500 ml
Dil. Factor: 2
Dupl Type:

Acq. File: A060398B
Data Directory: N\060398B
Initial Cali File: 0603F0N
Instrument ID: GC/MS - N
Date Received: n/a
Date Analyzed: 06/03/98
Contm. Level:

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
50594-66-6	Acifluorfen	< 0.1	ug/L			
25057-89-0	Bentazon	< 0.1	ug/L			
94-75-7	2,4-D	< 0.1	ug/L			
94-82-6	2,4-DB	< 0.1	ug/L			
1918-00-9	Dicamba	< 0.1	ug/L			
94-74-6	MCPA	< 0.1	ug/L			
7085-19-0	Mecoprop	< 0.1	ug/L			
1918-02-1	Picloram	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES
LABORATORY FORTIFIED BLANK

Tech: CW
Date: 06/04/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060398B
Contract: BAA 97-044
Task: 4A
Data Directory: N\060398B
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0603F0N
Method: 515.1
Instrument ID: GC/MS - N
Column: Restek XTI-5 30m x 0.25mm ID
LFB Soln Lot#: Mix 1: P7038C-051398
Mix 2:
Mix 3:
LFB Data File: FB-515B

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acifluorfen	10.0	9.069	90.7	70 - 130	Pass	
Bentazon	10.0	10.695	107.0	70 - 130	Pass	
2,4-D	10.0	10.792	107.9	70 - 130	Pass	
2,4-DB	10.0	10.156	101.6	70 - 130	Pass	
Dicamba	10.0	8.812	88.1	70 - 130	Pass	
MCPA	10.0	9.230	92.3	70 - 130	Pass	
Mecoprop	10.0	9.265	92.6	70 - 130	Pass	
Picloram	10.0	12.133	121.3	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES - GC/MS TUNING AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)

Tech: CW
Date: 06/04/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060398B
Contract:	BAA 97-044	Task:	4A	Data Directory:	N\060398B
Project:	DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0603F0N
		Method:	515.1	Instrument ID:	GC/MS - N
Column:	Restek XTI-5 30m x 0.25mm ID				

m/e	Ion Abundance Criteria	% Rel Abundance	Q
51	10 to 80% of base peak	26.43	
68	< 2% of Mass 69	0.00	
70	< 2% of Mass 69	0.00	
127	10 to 80% of base peak	22.77	
197	< 2% of Mass 198	0.00	
198	base peak or > 50 % of mass 442	100.00	
199	5 to 9% of mass 198	7.66	
275	10 to 60% of base peak	22.50	
365	> 1% of base peak	1.93	
441	Present and < mass 443	9.59	
442	base peak or > 50 % of mass 198	66.18	
443	15 to 24% of mass 442	18.41	

Tune Date: 06/04/98

Tune Time: 01:35

Hours Since Last Tune 08:44

Matrix	Code
Reagent Water	RW
Surface Water	SW
Drinking Water	DW
Ground Water	GW
Waste Water	WW
Sediment	SE
Soil	SO
Sludge	SL
Other Solvents	OS
TCLP Leachate	TC
Hazardous Waste	HW

Contamination Levels: L=Low M=Medium H=High

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Tune 2	TI-DFN2	06/04/98	01:35	OS	
2	Continuing Calibration Check B	C-1-06B	06/04/98	01:55	OS	
3	DK 11740	326298	06/04/98	05:41	GW	L
4	QCS B	Q-515B	06/04/98	06:03	RW	
5	Continuing Calibration Check C	C-2-06C	06/04/98	06:25	OS	
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Q = A flag or qualifier indicating possible cause for an out of ra

Comments:

CHLORINATED ACID PESTICIDES
CONTINUING CALIBRATION CHECK

Tech: CW
Date: 06/04/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060398B
Contract: BAA 97-044
Task: 4A
Data Directory: N\060398B
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0603F0N
Method: 515.1
Instrument ID: GC/MS - N
Column: Restek XTI-5 30m x 0.25mm ID
CCC Soln Lot#: Mix 1: P7038C-051398
Mix 2:
Mix 3:
CCC Data File: C-1-06B

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acifluorfen	1.0	1.064	106.4	70 - 130	Pass	
Bentazon	1.0	1.073	107.3	70 - 130	Pass	
2,4-D	1.0	1.117	111.7	70 - 130	Pass	
2,4-DB	1.0	1.190	119.0	70 - 130	Pass	
Dicamba	1.0	0.982	98.2	70 - 130	Pass	
MCPA	1.0	1.072	107.2	70 - 130	Pass	
Mecoprop	1.0	1.122	112.2	70 - 130	Pass	
Picloram	1.0	1.171	117.1	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES DATA SHEET

Tech: CW
Date: 06/04/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326298
Data File/Dupl ID:
Sample Number/Description: DK 11740

Lab ID: unknown
Task: 4A
Case: na
Method: 515.1
Smpl Vol: 500 ml
Dil. Factor: 2
Dupl Type:

Acq. File: A060398B
Data Directory: N\060398B
Initial Cali File: 0603F0N
Instrument ID: GC/MS - N
Date Received: 05/26/98
Date Analyzed: 06/04/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
50594-66-6	Acifluorfen	< 0.1	ug/L			
25057-89-0	Bentazon	< 0.1	ug/L			
94-75-7	2,4-D	< 0.1	ug/L			
94-82-6	2,4-DB	< 0.1	ug/L			
1918-00-9	Dicamba	< 0.1	ug/L			
94-74-6	MCPA	< 0.1	ug/L			
7085-19-0	Mecoprop	< 0.1	ug/L			
1918-02-1	Picloram	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES
QUALITY CONTROL SAMPLE

Tech: CW
Date: 06/04/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060398B
Contract: BAA 97-044
Task: 4A
Data Directory: N\060398B
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0603F0N
Method: 515.1
Instrument ID: GC/MS - N
Column: Restek XTI-5 30m x 0.25mm ID
QCS Soln Lot#: Mix 1: Q1207-050898
Mix 2:
Mix 3:
QCS Data File: Q-515B

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acifluorfen	2.0	1.885	94.3	70 - 130	Pass	
Bentazon	2.0	1.799	90.0	70 - 130	Pass	
2,4-D	2.0	2.120	106.0	70 - 130	Pass	
2,4-DB	2.0	2.358	117.9	70 - 130	Pass	
Dicamba	2.0	1.889	94.5	70 - 130	Pass	
MCPA	2.0	1.999	100.0	70 - 130	Pass	
Mecoprop	2.0	2.381	119.1	70 - 130	Pass	
Picloram	2.0	2.119	106.0	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES
CONTINUING CALIBRATION CHECK

Tech: CW
Date: 06/04/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060398B
Contract: BAA 97-044
Task: 4A
Data Directory: N\060398B
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0603F0N
Method: 515.1
Instrument ID: GC/MS - N
Column: Restek XTI-5 30m x 0.25mm ID
CCC Soln Lot#: Mix 1: P7038C-051398
Mix 2:
Mix 3:
CCC Data File: C-2-06C

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acifluorfen	2.0	1.854	92.7	70 - 130	Pass	
Bentazon	2.0	2.499	125.0	70 - 130	Pass	
2,4-D	2.0	2.035	101.8	70 - 130	Pass	
2,4-DB	2.0	2.373	118.7	70 - 130	Pass	
Dicamba	2.0	2.009	100.5	70 - 130	Pass	
MCPA	2.0	1.977	98.9	70 - 130	Pass	
Mecoprop	2.0	2.024	101.2	70 - 130	Pass	
Picloram	2.0	2.559	128.0	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES
SURROGATE RECOVERY

Tech: CW
Date: 06/04/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060398B
Contract:	BAA 97-044	Task:	4A	Data Directory:	\N\060398B\
Project:	DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	na	Initial Cali File:	0603F0N
		Method:	515.1	Instrument ID:	GC/MS - N
Column:	Restek XTI-5 30m x 0.25mm ID	Surrogate Soln Lot #:	A7120222-052298		

	EPA Sample No. / Sample Description	Data File/ Sample ID	Surrogate Percent Recovery SS1	Q	SS2	Q	SS3	Q	Total Out	Matrix Code	Contm. Level
1	Laboratory Method Blank B	MB-515B	122.0						0	RW	
2	Laboratory Fortified Blank B	FB-515B	106.3						0	RW	
3	DK 11740	326298	117.1						0	GW	L
4	QCS B	Q-515B	125.6						0	RW	
5											
6											
7											
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Surrogates	Target Conc.	% Recovery Limits
SS1 = 2,4-Dichlorophenylacetic Acid	10.0	70 - 130
SS2 = n/a		
SS3 = n/a		

% Recovery = (Calculated Concentration / Target Concentration) *100

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

CHLORINATED ACID PESTICIDES
INTERNAL STANDARD AREA SUMMARY

Tech: CW
Date: 06/04/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060398B
Contract:	BAA 97-044	Task:	4A	Data Directory:	N\060398B
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0603F0N
		Method:	515.1	Instrument ID:	GC/MS - N
Column:	Restek XTI-5 30m x 0.25mm ID				
IS Soln Lot#:	A7090334-052698				

	IS1 Area	IS1 RT	IS2 Area	IS2 RT
12 Hour CCC Standard	44206	8:56		
CCC Upper Limit	57468	9:26		
CCC Lower Limit	30944	8:26		

	Sample No. / Sample Description	Data File / Sample ID	IS1 Area	Q	IS1 RT	Q	IS2 Area	Q	IS2 RT	Q	Matrix Code	Contrn. Level
1	Laboratory Method Blank B	MB-515B	48534		8:56						RW	
2	Laboratory Fortified Blank B	FB-515B	46223		8:57						RW	
3	DK 11740	326298	54239		8:56						GW	L
4	QCS B	Q-515B	51239		8:56						RW	
5	Continuing Calibration Check C	C-2-06C	32743		8:56						OS	
6												
7												
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14												
15												
16												
17												
18												
19												
20												

IS1 = 4,4'-Dibromooctafluorobiphenyl
IS2 = n/a

CCC Upper / Lower Limit: Area: CCC std IS area +/- 30%; RT: CCC std IS RT +/- 30 seconds
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

CHLORINATED ACID PESTICIDES
INITIAL CALIBRATION

Tech: CW
Date: 06/04/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
IC Soln Lot#: Mix 1: P7038C-052998

Lab ID: unknown
Task: 4A
Case: n/a
Method: 515.1
Mix 2:

Acq. File: A060398B
Data Directory: N\060398B
Initial Cali File: 0603F0N
Instrument ID: GC/MS - N
Mix 3:

Data File / Sample ID:	I-01-06A	I-05-06A	I-1-06A	I-2-06A	I-5-06A	I-10-06A	I-25-06A				
Concentration:	0.1 ug/L	0.5 ug/L	1 ug/L	2 ug/L	5 ug/L	10 ug/L	25 ug/L	Avg	%	Corr	
Compound	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	RSD	Coeff	Q
Acifluorfen	3.467	3.0945	2.589	2.452	2.368	2.379	2.360	2.673	16.3	1.000	
Bentazon	----	9.187	8.491	9.343	8.469	7.425	----	8.583	8.8	0.997	
2,4-D	----	3.1169	3.078	3.266	3.308	3.506	3.680	3.326	6.9	1.000	
2,4-DB	----	4.961	4.118	5.262	6.488	7.236	7.548	5.935	23.0	1.000	*
Dicamba	----	6.130	5.084	6.069	6.374	6.073	6.169	5.983	7.6	1.000	
MCPA	----	2.503	1.699	2.010	2.269	2.466	2.668	2.269	15.8	1.000	
Mecoprop	----	2.1717	1.329	1.597	1.979	2.249	----	1.865	21.0	0.998	*
Picloram	----	4.631	3.792	4.216	3.786	3.464	----	3.978	11.4	0.999	

Avg RF = Average response factor
Max %RSD = 20% for a linear fit
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

DETERMINATION OF METHOD DETECTION LIMITS
METHOD 515.1 - CHLORINATED ACID PESTICIDES

Tech: CAW
Date: 01/07/98

Lab Name:	Environmental Health Laboratories	Extract. Vol:	500 mL	Acq. File:	A010798A
Project:	Routine MDL	Disk:	47 mm	Data Directory:	N\010798A
Column:	Restek XTI-5 30m x 0.25um ID	Cartridge:	NA	Initial Cali Data:	1231E0N
Extraction Technique:	LSE	Method:	515.1	Instrument ID:	GC/MS - N
Matrix Code:	RW	LSE Matrix:	RPS	Extraction Tech:	JH

			Data File	M-02-06A	M-02-06B	M-02-06C	M-02-06D	M-02-06E	M-02-06F	M-02-06G			
			Analysis Date	01/07/98	01/07/98	01/07/98	01/07/98	01/07/98	01/07/98	01/07/98			
				Observed Recovery (ug/L)							Std.	Calc.	
Method	CAS #	Parameter	Target	Rep - 1	Rep - 2	Rep - 3	Rep - 4	Rep -5	Rep - 6	Rep - 7	Deviation	MDL	Units
515.1	50594-66-6	Acifluorfen	0.2	0.279	0.265	0.249	0.290	0.248	0.268	0.265	0.015	0.047	ug/L
515.1	25057-89-0	Bentazone	0.2	0.156	0.162	0.183	0.168	0.175	0.181	0.166	0.010	0.031	ug/L
515.1	94-75-7	2,4-D	0.2	0.242	0.205	0.277	0.219	0.260	0.210	0.244	0.027	0.084	ug/L
515.1	94-82-6	2,4-DB	0.2	0.359	0.346	0.377	0.360	0.348	0.350	0.347	0.011	0.035	ug/L
515.1	1918-00-9	Dicamba	0.2	0.296	0.289	0.290	0.298	0.281	0.273	0.290	0.009	0.027	ug/L
515.1	94-74-6	MCPA	0.2	0.452	0.446	0.447	0.461	0.441	0.452	0.462	0.008	0.024	ug/L
515.1	7085-19-0	MCPP (Mecoprop)	0.2	0.525	0.523	0.527	0.533	0.522	0.529	0.531	0.004	0.013	ug/L
515.1	1918-02-1	Picloram	0.2	0.238	0.241	0.228	0.238	0.251	0.228	0.240	0.008	0.025	ug/L

Q = A flag or qualifier indicating possible cause for an out of range or failed result.
LSE = Liquid / solid extraction; LLE = Liquid / Liquid extraction

LSE Matrix = C8, C18, SDVB, Biorex-5, AG-1X-8, RPS

Comments:

CHLORINATED ACID PESTICIDES - GC/MS TUNING AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)

Tech: CW
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	N\060498A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0603F0N
		Method:	515.1	Instrument ID:	GC/MS-N
Column:	Restek XTI-5 30m x 0.25mm ID				

m/e	Ion Abundance Criteria	% Rel Abundance	Q
51	10 to 80% of base peak	29.51	
68	< 2% of Mass 69	0.00	
70	< 2% of Mass 69	0.00	
127	10 to 80% of base peak	28.16	
197	< 2% of Mass 198	0.00	
198	base peak or > 50 % of mass 442	100.00	
199	5 to 9% of mass 198	5.87	
275	10 to 60% of base peak	21.95	
365	> 1% of base peak	2.03	
441	Present and < mass 443	9.37	
442	base peak or > 50 % of mass 198	67.27	
443	15 to 24% of mass 442	17.87	

Tune Date: 06/04/98

Tune Time: 10:56

Hours Since Last Tune

Matrix	Code
Reagent Water	RW
Surface Water	SW
Drinking Water	DW
Ground Water	GW
Waste Water	WW
Sediment	SE
Soil	SO
Sludge	SL
Other Solvents	OS
TCLP Leachate	TC
Hazardous Waste	HW

Contamination Levels: L=Low M=Medium H=High

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Tune 1	TI-DFN1	06/04/98	10:56	OS	
2	SPCC	S-515A	06/04/98	11:27	OS	
3	Laboratory Method Blank A	MB-515A	06/04/98	12:35	RW	
4						
5						
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Q = A flag or qualifier indicating possible cause for an out of ra

Comments: _____

CHLORINATED ACID PESTICIDES
LABORATORY PERFORMANCE CHECK

Tech: CW
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	N\060498A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0603F0N
		Method:	515.1	Instrument ID:	GC/MS-N
Column:	Restek XTI-5 30m x 0.25mm ID	LPC Soln Lot #:	021798-021798		
Data File:	S-515A				

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
Dinoseb	Sensitivity	0.05	Detection of analyte: S/N > 3	115.4	Pass	
4 - Nitrophenol	Chromatographic Performance	5.00	0.70 < PGF < 1.05 (a)	1.0	Pass	
4 - Nitrophenol 3,5-Dichlorobenzoic acid	Column Performance	0.15 0.30	Resolution > 0.40 (b)	0.67	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$PGF = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where W(1/2) is the peak width at half height and W(1/10) is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where t is the difference in elution times between the two peaks and W is the average peak width, at the baseline, of the two peaks.

Comments: _____

CHLORINATED ACID PESTICIDES
METHOD BLANK SUMMARY

Tech: CW
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	N\060498A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0603F0N
		Method:	515.1	Instrument ID:	GC/MS-N
Column:	Restek XTI-5 30m x 0.25mm ID	Ext Date:	06/02/98	Ext Method:	Solid Phase Extraction
Blank File:	MB-515A				

This method blank applies to the following samples, ms, msd, blanks, standards.

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Laboratory Method Blank A	MB-515A	06/04/98	12:35	RW	
2	Continuing Calibration Blank B	C-2-06B	06/04/98	20:43	OS	
3	DK 10787	326353	06/05/98	02:23	GW	L
4	DK 11865	326423	06/05/98	02:44	GW	L
5	QCS A	Q-515A	06/05/98	03:29	RW	
6	Laboratory Fortified Blank B	FB-515B	06/05/98	03:07	RW	
7	QCS A	Q-515A	06/05/98	03:29	RW	
8	Continuing Calibration Blank C	C-5-06C	06/05/98	03:51	OS	
9						
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27						
28						

Comments:

CHLORINATED ACID PESTICIDES DATA SHEET

Tech: CW
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: RW
Data File/Smpl ID: MB-515A
Data File/Dupl ID:
Sample Number/Description: Laboratory Method Blank A

Lab ID: unknown
Task: 4A
Case: n/a
Method: 515.1
Smpl Vol: 500 ml
Dil. Factor: 2
Dupl Type:

Acq. File: A060498A
Data Directory: N\060498A
Initial Cali File: 0603F0N
Instrument ID: GC/MS - N
Date Received: n/a
Date Analyzed: 06/04/98
Contm. Level:

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
50594-66-6	Acifluorfen	< 0.1	ug/L			
25057-89-0	Bentazon	< 0.1	ug/L			
94-75-7	2,4-D	< 0.1	ug/L			
94-82-6	2,4-DB	< 0.1	ug/L			
1918-00-9	Dicamba	< 0.1	ug/L			
94-74-6	MCPA	< 0.1	ug/L			
7085-19-0	Mecoprop	< 0.1	ug/L			
1918-02-1	Picloram	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES - GC/MS TUNING AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)

Tech: CW
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	N\060498A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0603F0N
		Method:	515.1	Instrument ID:	GC/MS-N
Column:	Restek XTI-5 30m x 0.25mm ID				

m/e	Ion Abundance Criteria	% Rel Abundance	Q
51	10 to 80% of base peak	28.71	
68	< 2% of Mass 69	0.00	
70	< 2% of Mass 69	0.00	
127	10 to 80% of base peak	29.33	
197	< 2% of Mass 198	0.00	
198	base peak or > 50 % of mass 442	100.00	
199	5 to 9% of mass 198	6.03	
275	10 to 60% of base peak	22.05	
365	> 1% of base peak	3.46	
441	Present and < mass 443	11.12	
442	base peak or > 50 % of mass 198	71.73	
443	15 to 24% of mass 442	20.14	

Tune Date: 06/04/98

Tune Time: 20:21

Hours Since Last Tune 09:25

Matrix	Code
Reagent Water	RW
Surface Water	SW
Drinking Water	DW
Ground Water	GW
Waste Water	WW
Sediment	SE
Soil	SO
Sludge	SL
Other Solvents	OS
TCLP Leachate	TC
Hazardous Waste	HW

Contamination Levels: L=Low M=Medium H=High

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Tune 2	TI-DFN2	06/04/98	20:21	OS	
2	Continuing Calibration Blank B	C-2-06B	06/04/98	20:43	OS	
3	DK 10787	326353	06/05/98	02:23	GW	L
4	DK 11865	326423	06/05/98	02:44	GW	L
5	Laboratory Fortified Blank B	FB-515B	06/05/98	03:07	RW	
6	QCS A	Q-515A	06/05/98	03:29	RW	
7	Continuing Calibration Blank C	C-5-06C	06/05/98	03:51	OS	
8						
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Q = A flag or qualifier indicating possible cause for an out of ra

Comments:

CHLORINATED ACID PESTICIDES
CONTINUING CALIBRATION CHECK

Tech: CW
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060498A
Contract: BAA 97-044
Task: 4A
Data Directory: N\060498A
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0603F0N
Method: 515.1
Instrument ID: GC/MS - N
Column: Restek XTI-5 30m x 0.25mm ID
CCC Soln Lot#: Mix 1: P7038C-052998
Mix 2:
Mix 3:
CCC Data File: C-2-06B

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acifluorfen	2.0	2.177	108.9	70 - 130	Pass	
Bentazon	2.0	2.385	119.3	70 - 130	Pass	
2,4-D	2.0	2.223	111.2	70 - 130	Pass	
2,4-DB	2.0	2.525	126.3	70 - 130	Pass	
Dicamba	2.0	1.949	97.5	70 - 130	Pass	
MCPA	2.0	2.108	105.4	70 - 130	Pass	
Mecoprop	2.0	2.123	106.2	70 - 130	Pass	
Picloram	2.0	2.573	128.7	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES DATA SHEET

Tech: CW
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326353
Data File/Dupl ID:
Sample Number/Description: DK 10787

Lab ID: unknown
Task: 4A
Case: n/a
Method: 515.1
Smpl Vol: 500 ml
Dil. Factor: 2
Dupl Type:

Acq. File: A060498A
Data Directory: N\060498A
Initial Cali File: 0603F0N
Instrument ID: GC/MS - N
Date Received: 05/26/98
Date Analyzed: 06/05/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
50594-66-6	Acifluorfen	< 0.1	ug/L			
25057-89-0	Bentazon	< 0.1	ug/L			
94-75-7	2,4-D	< 0.1	ug/L			
94-82-6	2,4-DB	< 0.1	ug/L			
1918-00-9	Dicamba	< 0.1	ug/L			
94-74-6	MCPA	< 0.1	ug/L			
7085-19-0	Mecoprop	< 0.1	ug/L			
1918-02-1	Picloram	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES DATA SHEET

Tech: CW
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326423
Data File/Dupl ID:
Sample Number/Description: DK 11865

Lab ID: unknown
Task: 4A
Case: n/a
Method: 515.1
Smpl Vol: 500 ml
Dil. Factor: 2
Dupl Type:

Acq. File: A060498A
Data Directory: N\060498A
Initial Cali File: 0603F0N
Instrument ID: GC/MS - N
Date Received: 05/26/98
Date Analyzed: 06/05/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
50594-66-6	Acifluorfen	< 0.1	ug/L			
25057-89-0	Bentazon	< 0.1	ug/L			
94-75-7	2,4-D	< 0.1	ug/L			
94-82-6	2,4-DB	< 0.1	ug/L			
1918-00-9	Dicamba	< 0.1	ug/L			
94-74-6	MCPA	< 0.1	ug/L			
7085-19-0	Mecoprop	< 0.1	ug/L			
1918-02-1	Picloram	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES
LABORATORY FORTIFIED BLANK

Tech: CW
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060498A
Contract: BAA 97-044
Task: 4A
Data Directory: N\060498A
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0603F0N
Method: 515.1
Instrument ID: GC/MS - N
Column: Restek XTI-5 30m x 0.25mm ID
LFB Soln Lot#: Mix 1: P7038C-052998
Mix 2:
Mix 3:
LFB Data File: FB-515B

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acifluorfen	10.0	7.110	71.1	70 - 130	Pass	
Bentazon	10.0	9.928	99.3	70 - 130	Pass	
2,4-D	10.0	9.217	92.2	70 - 130	Pass	
2,4-DB	10.0	9.936	99.4	70 - 130	Pass	
Dicamba	10.0	8.878	88.8	70 - 130	Pass	
MCPA	10.0	9.300	93.0	70 - 130	Pass	
Mecoprop	10.0	8.537	85.4	70 - 130	Pass	
Picloram	10.0	9.838	98.4	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES
QUALITY CONTROL SAMPLE

Tech: CW
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060498A
Contract: BAA 97-044
Task: 4A
Data Directory: N\060498A
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0603F0N
Method: 515.1
Instrument ID: GC/MS - N
Column: Restek XTI-5 30m x 0.25mm ID
QCS Soln Lot#: Mix 1: Q1207-050898
Mix 2:
Mix 3:
QCS Data File: Q-515A

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acifluorfen	2.0	1.681	84.1	70 - 130	Pass	
Bentazon	2.0	1.774	88.7	70 - 130	Pass	
2,4-D	2.0	1.429	71.5	70 - 130	Pass	
2,4-DB	2.0	2.024	101.2	70 - 130	Pass	
Dicamba	2.0	1.561	78.1	70 - 130	Pass	
MCPA	2.0	1.447	72.4	70 - 130	Pass	
Mecoprop	2.0	1.623	81.2	70 - 130	Pass	
Picloram	2.0	1.917	95.9	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES
CONTINUING CALIBRATION CHECK

Tech: CW
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060498A
Contract: BAA 97-044
Task: 4A
Data Directory: N\060498A
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0603F0N
Method: 515.1
Instrument ID: GC/MS - N
Column: Restek XTI-5 30m x 0.25mm ID
CCC Soln Lot#: Mix 1: P7038C-052998
Mix 2:
Mix 3:
CCC Data File: C-5-06C

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acifluorfen	5.0	5.069	101.4	70 - 130	Pass	
Bentazon	5.0	5.420	108.4	70 - 130	Pass	
2,4-D	5.0	4.834	96.7	70 - 130	Pass	
2,4-DB	5.0	5.115	102.3	70 - 130	Pass	
Dicamba	5.0	5.697	113.9	70 - 130	Pass	
MCPA	5.0	4.784	95.7	70 - 130	Pass	
Mecoprop	5.0	4.630	92.6	70 - 130	Pass	
Picloram	5.0	6.220	124.4	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CHLORINATED ACID PESTICIDES
SURROGATE RECOVERY

Tech: CW
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	N\060498A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0603F0N
		Method:	515.1	Instrument ID:	GC/MS - N
Column:	Restek XTI-5 30m x 0.25mm ID	Surrogate Soln Lot #:	A7120222-060298		

	EPA Sample No. / Sample Description	Data File/ Sample ID	Surrogate Percent Recovery SS1	Q	SS2	Q	SS3	Q	Total Out	Matrix Code	Contm. Level
1	Laboratory Method Blank A	MB-515A	124.3						0	RW	
2	DK 10787	326353	113.3						0	GW	L
3	DK 11865	326423	123.4						0	GW	L
4	Laboratory Fortified Blank B	FB-515B	123.8						0	RW	
5	QCS A	Q-515A	74.0						0	RW	
6											
7											
8											
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28											

Surrogates	Target Conc.	% Recovery Limits
SS1 = 2,4-Dichlorophenylacetic Acid	10.0	70 - 130
SS2 = n/a		
SS3 = n/a		

% Recovery = (Calculated Concentration / Target Concentration) *100

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

CHLORINATED ACID PESTICIDES
INTERNAL STANDARD AREA SUMMARY

Tech: CW
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	N\060498A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0603F0N
		Method:	515.1	Instrument ID:	GC/MS - N
Column:	Restek XTI-5 30m x 0.25mm ID				
IS Soln Lot#:	A7090334-052898				

	IS1 Area	IS1 RT	IS2 Area	IS2 RT
12 Hour CCC Standard	42010	8:56		
CCC Upper Limit	54613	9:26		
CCC Lower Limit	29407	8:26		

	Sample No. / Sample Description	Data File / Sample ID	IS1 Area	Q	IS1 RT	Q	IS2 Area	Q	IS2 RT	Q	Matrix Code	Contm. Level
1	Laboratory Method Blank A	MB-515A	42656		8:56						RW	
2	Continuing Calibration Blank B	C-2-06B	28388	*	8:56						OS	
3	DK 10787	326353	51567		8:56						GW	L
4	DK 11865	326423	42689		8:56						GW	L
5	Laboratory Fortified Blank B	FB-515B	46884		8:56						RW	
6	QCS A	Q-515A	51303		8:56						RW	
7												
8	CCC-C											
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

IS1 = 4,4'-Dibromooctafluorobiphenyl
IS2 = n/a

CCC Upper / Lower Limit: Area: CCC std IS area +/- 30%; RT: CCC std IS RT +/- 30 seconds
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: * The IS area in CCC B was low biased, but this data is acceptable based on the recoveries of the targeted parameters.

CHLORINATED ACID PESTICIDES
INITIAL CALIBRATION

Tech: CW
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
IC Soln Lot#: Mix 1: P7038C-052998

Lab ID: unknown
Task: 4A
Case: n/a
Method: 515.1
Mix 2:

Acq. File: A060498A
Data Directory: N\060498A
Initial Cali File: 0603F0N
Instrument ID: GC/MS - N
Mix 3:

Data File / Sample ID:	I-01-06A	I-05-06A	I-1-06A	I-2-06A	I-5-06A	I-10-06A	I-25-06A				
Concentration:	0.1 ug/L	0.5 ug/L	1 ug/L	2 ug/L	5 ug/L	10 ug/L	25 ug/L	Avg	%	Corr	
Compound	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	RSD	Coeff	Q
Acifluorfen	3.467	3.0945	2.589	2.452	2.368	2.379	2.360	2.673	16.3	1.000	
Bentazon	----	9.187	8.491	9.343	8.469	7.425	----	8.583	8.8	0.997	
2,4-D	----	3.1169	3.078	3.266	3.308	3.506	3.680	3.326	6.9	1.000	
2,4-DB	----	4.961	4.118	5.262	6.488	7.236	7.548	5.935	23.0	1.000	*
Dicamba	----	6.130	5.084	6.069	6.374	6.073	6.169	5.983	7.6	1.000	
MCPA	----	2.503	1.699	2.010	2.269	2.466	2.668	2.269	15.8	1.000	
Mecoprop	----	2.1717	1.329	1.597	1.979	2.249	----	1.865	21.0	0.998	*
Picloram	----	4.631	3.792	4.216	3.786	3.464	----	3.978	11.4	0.999	

Avg RF = Average response factor
Max %RSD = 20% for a linear fit
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

DETERMINATION OF METHOD DETECTION LIMITS
METHOD 515.1 - CHLORINATED ACID PESTICIDES

Tech: CAW
Date: 01/07/98

Lab Name:	Environmental Health Laboratories	Extract. Vol:	500 mL	Acq. File:	A010798A
Project:	Routine MDL	Disk:	47 mm	Data Directory:	N\010798A
Column:	Restek XTI-5 30m x 0.25um ID	Cartridge:	NA	Initial Cali Data:	1231E0N
Extraction Technique:	LSE	Method:	515.1	Instrument ID:	GC/MS - N
Matrix Code:	RW	LSE Matrix:	RPS	Extraction Tech:	JH

			Data File	M-02-06A	M-02-06B	M-02-06C	M-02-06D	M-02-06E	M-02-06F	M-02-06G			
			Analysis Date	01/07/98	01/07/98	01/07/98	01/07/98	01/07/98	01/07/98	01/07/98			
				Observed Recovery (ug/L)							Std.	Calc.	
Method	CAS #	Parameter	Target	Rep - 1	Rep - 2	Rep - 3	Rep - 4	Rep -5	Rep - 6	Rep - 7	Deviation	MDL	Units
515.1	50594-66-6	Acifluorfen	0.2	0.279	0.265	0.249	0.290	0.248	0.268	0.265	0.015	0.047	ug/L
515.1	25057-89-0	Bentazone	0.2	0.156	0.162	0.183	0.168	0.175	0.181	0.166	0.010	0.031	ug/L
515.1	94-75-7	2,4-D	0.2	0.242	0.205	0.277	0.219	0.260	0.210	0.244	0.027	0.084	ug/L
515.1	94-82-6	2,4-DB	0.2	0.359	0.346	0.377	0.360	0.348	0.350	0.347	0.011	0.035	ug/L
515.1	1918-00-9	Dicamba	0.2	0.296	0.289	0.290	0.298	0.281	0.273	0.290	0.009	0.027	ug/L
515.1	94-74-6	MCPA	0.2	0.452	0.446	0.447	0.461	0.441	0.452	0.462	0.008	0.024	ug/L
515.1	7085-19-0	MCPP (Mecoprop)	0.2	0.525	0.523	0.527	0.533	0.522	0.529	0.531	0.004	0.013	ug/L
515.1	1918-02-1	Picloram	0.2	0.238	0.241	0.228	0.238	0.251	0.228	0.240	0.008	0.025	ug/L

Q = A flag or qualifier indicating possible cause for an out of range or failed result.
LSE = Liquid / solid extraction; LLE = Liquid / Liquid extraction

LSE Matrix = C8, C18, SDVB, Biorex-5, AG-1X-8, RPS

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED - GC/MS TUNING AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)

Tech: AT
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060498A
Project:	DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS-AE
Column:	Restek XTI-5 30m x 0.25mm ID				

m/e	Ion Abundance Criteria	% Rel Abundance	Q
51	10 to 80% of base peak	32.17	
68	< 2% of Mass 69	0.00	
70	< 2% of Mass 69	0.00	
127	10 to 80% of base peak	33.02	
197	< 2% of Mass 198	0.00	
198	base peak or > 50 % of mass 442	100.00	
199	5 to 9% of mass 198	5.83	
275	10 to 60% of base peak	23.14	
365	> 1% of base peak	2.07	
441	Present and < mass 443	13.17	
442	base peak or > 50 % of mass 198	78.65	
443	15 to 24% of mass 442	18.06	

Tune Date: 06/04/98

Tune Time: 10:02

Hours Since Last Tune

Matrix	Code
Reagent Water	RW
Surface Water	SW
Drinking Water	DW
Ground Water	GW
Waste Water	WW
Sediment	SE
Soil	SO
Sludge	SL
Other Solvents	OS
TCLP Leachate	TC
Hazardous Waste	HW

Contamination Levels: L=Low M=Medium H=High

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Tune 1	TI-DFN1	06/04/98	10:02	OS	
2	SPCC	S-525A	06/04/98	10:43	OS	
3	Continuing Calibration Check A	C-2-18A	06/04/98	11:44	OS	
4	Laboratory Method Blank A	MB-525A	06/04/98	13:18	RW	
5	Laboratory Fortified Blank A	FB-525A	06/04/98	14:13	RW	
6	DK 11734	326267	06/04/98	20:38	GW	L
7	DK 11735	326272	06/04/98	21:32	GW	L
8	DK 11736	326277	06/04/98	22:27	GW	L
9	DK 11737	326282	06/04/98	23:21	GW	L
10	Continuing Calibration Check B	C-2-18B	06/05/98	00:16	OS	
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED LABORATORY PERFORMANCE CHECK

Tech: AT
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060498A
Project:	DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	
Column:	Restek XTI-5 30m x 0.25mm ID	LPC Soln Lot #:	112597-112597		
Data File:	S-525A				

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
Bromacil	Chromatographic Performance	5.0	0.80 < PGF < 1.20 (a)	0.98	Pass	
Atrazine Prometon	Column Performance	0.15 0.30	Resolution > 0.7 (b)	1.06	Pass	
Endrin	Abundance of degradation to Endrin Aldehyde	2.0	< 10% endrin aldehyde	< 10 %	Pass	
4,4' - DDT	Abundance of degradation to 4,4' - DDD & 4,4' - DDE		< 10% 4,4'-DDD & 4,4'-DDE	< 10 %	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$PGF = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where W(1/2) is the peak width at half height and W(1/10) is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where t is the difference in elution times between the two peaks and W is the average peak width, at the baseline, of the two peaks.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED CONTINUING CALIBRATION CHECK

Tech: AT
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060498A
Project:	DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS - AE

Column: Restek XTI-5 30m x 0.25mm ID
CCC Soln Lot#: Mix 1: W980505012-050698
CCC Data File: C-2-18A

Target Concentration: 2.0 ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	2.0	2.254	112.7	70 - 130	Pass	
Alachlor	2.0	2.211	110.6	70 - 130	Pass	
Atrazine	2.0	2.237	111.9	70 - 130	Pass	
Bromacil	2.0	2.073	103.7	70 - 130	Pass	
Cyanazine	2.0	2.230	111.5	70 - 130	Pass	
Diazinon	2.0	2.252	112.6	70 - 130	Pass	
Endosulfan I	2.0	2.193	109.7	70 - 130	Pass	
Endosulfan II	2.0	2.071	103.6	70 - 130	Pass	
Endosulfan sulfate	2.0	2.285	114.3	70 - 130	Pass	
Fenamiphos	2.0	2.478	123.9	70 - 130	Pass	
Metolachlor	2.0	2.257	112.9	70 - 130	Pass	
Metribuzin	2.0	2.197	109.9	70 - 130	Pass	
Pendimethalin	2.0	2.195	109.8	70 - 130	Pass	
Prometon	2.0	2.179	109.0	70 - 130	Pass	
Propachlor	2.0	2.240	112.0	70 - 130	Pass	
Simazine	2.0	2.169	108.5	70 - 130	Pass	
Terbufos	2.0	2.042	102.1	70 - 130	Pass	
Trifluralin	2.0	2.379	119.0	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED METHOD BLANK SUMMARY

Tech: AT
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060498A
Project:	DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS - AE
Column:	Restek XTI-5 30m x 0.25mm ID	Ext Date:	05/29/98	Ext Method:	Solid Phase Extraction
Blank File:	MB-525A				

This method blank applies to the following samples, ms, msd, blanks, standards.

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Continuing Calibration Check A	C-2-18A	06/04/98	11:44	OS	
2	Laboratory Method Blank A	MB-525A	06/04/98	13:18	RW	
3	Laboratory Fortified Blank A	FB-525A	06/04/98	14:13	RW	
4	DK 11734	326267	06/04/98	20:38	GW	L
5	DK 11735	326272	06/04/98	21:32	GW	L
6	DK 11736	326277	06/04/98	22:27	GW	L
7	DK 11737	326282	06/04/98	23:21	GW	L
8	Continuing Calibration Check B	C-2-18B	06/05/98	00:16	OS	
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: RW
Data File/Smpl ID: MB-525A
Data File/Dupl ID:
Sample Number/Description: Laboratory Method Blank A

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060498A
Data Directory: AE\060498A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: n/a
Date Analyzed: 06/04/98
Contm. Level:

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
LABORATORY FORTIFIED BLANK

Tech: AT
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060498A
Contract: BAA 97-044
Task: 4A
Data Directory: AE\060498A
Project: DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0507F1AE
Method: 525.2
Instrument ID: GC/MS - AE
Column: Restek XTI-5 30m x 0.25mm ID
LFB Soln Lot#: Mix 1: W980505012-050698
LFB Data File: FB-525A

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	1.0	1.150	115.0	70 - 130	Pass	
Alachlor	1.0	1.075	107.5	70 - 130	Pass	
Atrazine	1.0	1.097	109.7	70 - 130	Pass	
Bromacil	1.0	1.053	105.3	70 - 130	Pass	
Cyanazine	1.0	1.133	113.3	70 - 130	Pass	
Diazinon	1.0	0.990	99.0	70 - 130	Pass	
Endosulfan I	1.0	1.238	123.8	70 - 130	Pass	
Endosulfan II	1.0	1.117	111.7	70 - 130	Pass	
Endosulfan sulfate	1.0	1.187	118.7	70 - 130	Pass	
Fenamiphos	1.0	1.292	129.2	70 - 130	Pass	
Metolachlor	1.0	1.092	109.2	70 - 130	Pass	
Metribuzin	1.0	0.725	72.5	70 - 130	Pass	
Pendimethalin	1.0	1.159	115.9	70 - 130	Pass	
Prometon	1.0	0.692	69.2	70 - 130	Fail	*
Propachlor	1.0	1.137	113.7	70 - 130	Pass	
Simazine	1.0	0.943	94.3	70 - 130	Pass	
Terbufos	1.0	1.145	114.5	70 - 130	Pass	
Trifluralin	1.0	1.177	117.7	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments: * Prometon recovery was outside the method 525.2 acceptance limits of 70-130% recovery, but was within the EHL statistically determined 95th percentile.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326267
Data File/Dupl ID:
Sample Number/Description: DK 11734

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060498A
Data Directory: AE\060498A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/04/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326272
Data File/Dupl ID:
Sample Number/Description: DK 11735

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060498A
Data Directory: AE\060498A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/04/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326277
Data File/Dupl ID:
Sample Number/Description: DK 11736

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060498A
Data Directory: AE\060498A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/04/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326282
Data File/Dupl ID:
Sample Number/Description: DK 11737

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060498A
Data Directory: AE\060498A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/04/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED CONTINUING CALIBRATION CHECK

Tech: AT
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060498A
Contract: BAA 97-044
Task: 4A
Data Directory: AE\060498A
Project: DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0507F1AE
Method: 525.2
Instrument ID: GC/MS - AE
Column: Restek XTI-5 30m x 0.25mm ID
CCC Soln Lot#: Mix 1: W980505012-050698
Column: C-2-18B
Target Concentration: 2.0 ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	2.0	1.739	87.0	70 - 130	Pass	
Alachlor	2.0	1.991	99.6	70 - 130	Pass	
Atrazine	2.0	1.899	95.0	70 - 130	Pass	
Bromacil	2.0	1.899	95.0	70 - 130	Pass	
Cyanazine	2.0	0.882	44.1	70 - 130	Fail	^
Diazinon	2.0	2.188	109.4	70 - 130	Pass	
Endosulfan I	2.0	2.511	125.6	70 - 130	Pass	
Endosulfan II	2.0	2.100	105.0	70 - 130	Pass	
Endosulfan sulfate	2.0	1.805	90.3	70 - 130	Pass	
Fenamiphos	2.0	1.886	94.3	70 - 130	Pass	
Metolachlor	2.0	1.732	86.6	70 - 130	Pass	
Metribuzin	2.0	1.705	85.3	70 - 130	Pass	
Pendimethalin	2.0	2.156	107.8	70 - 130	Pass	
Prometon	2.0	1.497	74.9	70 - 130	Pass	
Propachlor	2.0	2.077	103.9	70 - 130	Pass	
Simazine	2.0	1.638	81.9	70 - 130	Pass	
Terbufos	2.0	2.019	101.0	70 - 130	Pass	
Trifluralin	2.0	2.518	125.9	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments: ^ Cyanazine recovery has had historically poor recovery by this methodology.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED SURROGATE RECOVERY

Tech: AT
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060498A
Project:	DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS-AE
Column:	Restek XTI-5 30m x 0.25mm ID	Surrogate Soln Lot #:	A6100287-052898		

	EPA Sample No. / Sample Description	Data File/ Sample ID	Surrogate Percent Recovery SS1	Q	SS2	Q	SS3	Q	SS4	Q	Total Out	Matrix Code	Contm. Level
1	Laboratory Method Blank A	MB-525A	100.3		107.2		99.6		100.6		0	RW	
2	Laboratory Fortified Blank A	FB-525A	116.0		105.5		113.4		104.9		0	RW	
3	DK 11734	326267	100.6		102.8		92.6		90.0		0	GW	L
4	DK 11735	326272	110.7		109.9		100.8		90.7		0	GW	L
5	DK 11736	326277	109.0		104.2		100.8		89.9		0	GW	L
6	DK 11737	326282	105.7		111.7		99.6		92.4		0	GW	L
7													
8													
9													
10													
11													
12													
13													
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26													
27													
28													

Surrogates		Target Conc.	% Recovery Limits
SS1	= 2,4,5,6-Tetrachloro-m-xylene	5.0	70 - 130
SS2	= Pentachloronitrobenzene	5.0	70 - 130
SS3	= 4,4'-Dichlorobiphenyl	5.0	70 - 130
SS4	= Triphenyl Phosphate	5.0	70 - 130

% Recovery = (Calculated Concentration / Target Concentration) *100

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
INTERNAL STANDARD AREA SUMMARY

Tech: AT
Date: 06/05/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
IS Soln Lot#: A7090314-052898

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2

Acq. File: A060498A
Data Directory: AE\060498A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE

	IS1 Area	IS1 RT	IS2 Area	IS2 RT
12 Hour CCC Standard	1038949	17:38		
CCC Upper Limit	1350634	18:08		
CCC Lower Limit	727264	17:08		
Init Cali Lower Limit	2625627	17:28		

	Sample No. / Sample Description	Data File / Sample ID	IS1 Area	Q	IS1 RT	Q	IS2 Area	Q	IS2 RT	Q	Matrix Code	Contm. Level
1	Laboratory Method Blank A	MB-525A	1134206		17:38						RW	
2	Laboratory Fortified Blank A	FB-525A	1005323		17:38						RW	
3	DK 11734	326267	1585057	*	17:38						GW	L
4	DK 11735	326272	1230773		17:39						GW	L
5	DK 11736	326277	1138858		17:38						GW	L
6	DK 11737	326282	1560076	*	17:38						GW	L
7	Continuing Calibration Check B	C-2-18B	1128477		17:41						OS	
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

IS1 = Pyrene-d10
IS2 = n/a

CCC Upper / Lower Limit: Area: 12 hr CCC std IS area +/- 30%; RT: 12 hr CCC std IS RT +/- 30 seconds
Init Cali Lower Limit: Area: Init Cali IS area - 50%; RT: Init Cali IS RT - 30 seconds
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: * These IS areas were high biased, but all the surrogate standard recoveries were within acceptance limits.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED INITIAL CALIBRATION

Tech: AT
Date: 06/05/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060498A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060498A
Project:	DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS - AE
Column:	Restek XTI-5 30m x 0.25mm ID	Mix 2:		Mix 3:	

IC Soln Lot#: Mix 1: W980505012-050698

Data File / Sample ID:	I005-18A	I-01-18A	I-05-18A	I-1-18A	I-2-18A	I-5-18A	I-10-18A	I-25-18A	I-50-18A	I-100-18A				
Concentration (ug/L):	0.05	0.1	0.5	1	2	5	10	25	50	100	Avg	%	Corr	
Compound	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	RSD	Coeff	Q
Acetochlor	0.376	0.165	0.216	0.231	0.257	0.282	0.288	0.283	----	----	0.262	23.6	1.0000	
Alachlor	1.968	0.788	0.875	0.948	1.017	1.140	1.133	1.120	----	----	1.124	32.5	0.9999	*
Atrazine	0.505	0.201	0.283	0.307	0.339	0.338	0.314	----	----	----	0.327	28.0	0.9992	
Bromacil	----	0.353	0.296	0.521	0.662	0.787	0.752	0.768	----	----	0.591	34.5	0.9999	*
Cyanazine	0.360	0.151	0.172	0.229	0.263	0.302	0.308	0.327	----	----	0.264	28.3	0.9997	
Diazinon	----	0.965	0.820	0.755	0.848	0.801	0.758	----	----	----	0.824	9.4	0.9994	
Endosulfan I	0.493	0.178	0.180	0.214	0.195	0.226	0.214	0.207	----	----	0.238	43.7	1.0000	*
Endosulfan II	----	0.184	0.211	0.253	0.222	0.254	0.244	0.245	----	----	0.230	11.3	1.0000	
Endosulfan sulfate	0.405	0.171	0.148	0.182	0.176	0.204	0.193	0.186	----	----	0.208	39.0	1.0000	*
Fenamiphos	0.557	0.243	0.303	0.444	0.526	0.616	0.619	0.619	----	----	0.491	30.1	1.0000	*
Metolachlor	2.985	1.293	1.728	2.012	2.168	2.338	2.304	2.167	----	----	2.124	23.1	1.0000	
Metribuzin	0.658	0.299	0.344	0.416	0.488	0.538	0.537	0.546	----	----	0.478	24.7	1.0000	
Pendimethalin	0.588	0.340	0.369	0.419	0.447	0.469	0.466	0.459	----	----	0.445	16.8	1.0000	
Prometon	----	0.484	0.670	0.683	0.806	0.819	0.741	----	----	----	0.701	17.5	0.9980	
Propachlor	0.941	0.434	0.507	0.573	0.607	0.674	0.650	0.677	----	----	0.633	23.8	1.0000	
Simazine	0.395	0.149	0.147	0.181	0.232	0.235	0.241	0.232	----	----	0.227	34.7	1.0000	*
Terbufos	----	0.921	0.930	1.033	1.078	1.186	1.184	1.251	----	----	1.083	12.0	1.0000	
Trifluralin	1.058	0.697	0.709	0.771	0.787	0.956	0.911	1.043	----	----	0.867	16.7	0.9990	

Avg RF = Average response factor
Max %RSD = 30% for a linear fit
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

DETERMINATION OF METHOD DETECTION LIMITS
METHOD 525.2 Extended - BROAD SPECTRUM PESTICIDES

Tech: RD
Date: 05/02/98

Lab Name:	Environmental Health Laboratories	Extract. Vol:	1000 mL	Acq. File:	A032598A
Project:	Routine MDL	Disk:	47 mm	Data Directory:	AE\032598A
Column:	Restek XTI-5 30m x 0.25um ID	Cartridge:	n/a	Initial Cali Data:	0220F0AE
Extraction Technique:	LSE	Method:	525.2C	Instrument ID:	GC/MS - AE
Matrix Code:	RW	LSE Matrix:	C18		

			Data File*	M-01-01A	M-01-01B	M-01-01C	M-01-01D	M-01-01E	M-01-01F	M-01-01G			
			Analysis Date	03/25/98	03/25/98	03/26/98	03/26/98	03/27/98	03/27/98	03/27/98			
				Observed Recovery									
Method	CAS #	Parameter	Target	Rep - 1	Rep - 2	Rep - 3	Rep - 4	Rep - 5	Rep - 6	Rep - 7	Std. Deviation	Calc. MDL	Units
525.2	34256-82-1	Acetochlor	0.1	0.097	0.111	0.096	0.086	0.103	0.104	0.099	0.0078	0.025	ug/L
525.2	15972-60-8	Alachlor	0.1	0.124	0.119	0.128	0.120	0.129	0.121	0.127	0.0041	0.013	ug/L
525.2	1912-24-9	Atrazine	0.1	0.101	0.098	0.110	0.097	0.101	0.105	0.103	0.0044	0.014	ug/L
525.2	314-40-9	Bromacil	0.1	0.216	0.223	0.208	0.211	0.205	0.222	0.216	0.0068	0.021	ug/L
525.2	21725-46-2	Cyanazine	0.1	0.108	0.121	0.096	0.109	0.108	0.110	0.109	0.0073	0.023	ug/L
525.2	959-98-8	Endosulfan I	0.1	0.142	0.142	0.123	0.140	0.129	0.130	0.130	0.0075	0.024	ug/L
525.2	33213-65-9	Endosulfan II	0.1	0.104	0.119	0.090	0.129	0.086	0.100	0.094	0.0157	0.049	ug/L
525.2	1031-07-8	Endosulfan sulfate	0.1	0.096	0.097	0.095	0.110	0.099	0.092	0.128	0.0126	0.040	ug/L
525.2	22224-92-6	Fenamiphos	0.1	0.108	0.118	0.129	0.122	0.127	0.116	0.118	0.0071	0.022	ug/L
525.2	51218-45-2	Metolachlor	0.1	0.122	0.118	0.125	0.122	0.120	0.126	0.126	0.0031	0.010	ug/L
525.2	21087-64-9	Metribuzin	0.1	0.093	0.091	0.096	0.091	0.099	0.095	0.093	0.0029	0.009	ug/L
525.2	40487-42-1	Pendimethalin	0.1	0.095	0.099	0.096	0.102	0.103	0.096	0.094	0.0035	0.011	ug/L
525.2	1610-18-0	Prometon	0.1	0.084	0.069	0.068	0.070	0.057	0.046	0.066	0.0118	0.037	ug/L
525.2	1918-16-7	Propachlor	0.1	0.119	0.106	0.119	0.103	0.117	0.119	0.119	0.0070	0.022	ug/L
525.2	122-34-9	Simazine	0.1	0.122	0.113	0.103	0.096	0.102	0.109	0.111	0.0085	0.027	ug/L
525.2	13071-79-9	Terbufos	0.1	0.117	0.103	0.128	0.097	0.132	0.126	0.126	0.0135	0.042	ug/L
525.2	1582-09-8	Trifluralin	0.1	0.139	0.138	0.140	0.129	0.134	0.143	0.145	0.0054	0.017	ug/L

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments *Analyzed 05/02/98

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED - GC/MS TUNING AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)

Tech: AT
Date: 06/08/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060598A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060598A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS-AE
Column:	Restek XTI-5 30m x 0.25mm ID				

m/e	Ion Abundance Criteria	% Rel Abundance	Q
51	10 to 80% of base peak	33.33	
68	< 2% of Mass 69	0.00	
70	< 2% of Mass 69	0.00	
127	10 to 80% of base peak	37.55	
197	< 2% of Mass 198	0.00	
198	base peak or > 50 % of mass 442	98.31	
199	5 to 9% of mass 198	6.76	
275	10 to 60% of base peak	28.48	
365	> 1% of base peak	4.96	
441	Present and < mass 443	16.03	
442	base peak or > 50 % of mass 198	100.00	
443	15 to 24% of mass 442	20.99	

Tune Date: 06/05/98

Tune Time: 09:12

Hours Since Last Tune

Matrix	Code
Reagent Water	RW
Surface Water	SW
Drinking Water	DW
Ground Water	GW
Waste Water	WW
Sediment	SE
Soil	SO
Sludge	SL
Other Solvents	OS
TCLP Leachate	TC
Hazardous Waste	HW

Contamination Levels: L=Low M=Medium H=High

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Tune 1	TI-DFN1	06/05/98	09:12	OS	
2	SPCC	S-525A	06/05/98	09:29	OS	
3	Continuing Calibration Check A	C-2-18A	06/05/98	10:10	OS	
4	Laboratory Method Blank A	MB-525A	06/05/98	11:06	RW	
5	Laboratory Fortified Blank A	FB-525A	06/05/98	11:40	RW	
6	DK 11738	326287	06/05/98	12:14	GW	L
7	DK 11739	326292	06/05/98	12:48	GW	L
8	DK 11740	326297	06/05/98	13:23	GW	L
9	DK 11741	326302	06/05/98	13:57	GW	L
10	DK 11742	326307	06/05/98	14:32	GW	L
11	DK 11743	326312	06/05/98	15:06	GW	L
12	DK 11744	326317	06/05/98	15:40	GW	L
13	DK 11745	326322	06/05/98	16:15	GW	L
14	DK 11746	326327	06/05/98	16:49	GW	L
15	DK 11747	326332	06/05/98	17:24	GW	L
16	Laboratory Fortified Matrix A	FM-525A	06/05/98	17:58	DW	
17	Continuing Calibration Check B	C-2-18B	06/05/98	18:33	OS	
18						
19						
20						
21						
22						
23						
24						

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED LABORATORY PERFORMANCE CHECK

Tech: AT
Date: 06/08/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060598A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060598A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS-AE
Column:	Restek XTI-5 30m x 0.25mm ID	LPC Soln Lot #:	112597-112597		
Data File:	S-525A				

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
Bromacil	Chromatographic Performance	5.0	0.80 < PGF < 1.20 (a)	1.06	Pass	
Atrazine Prometon	Column Performance	0.15 0.30	Resolution > 0.7 (b)	1.10	Pass	
Endrin	Abundance of degradation to Endrin Aldehyde	2.0	< 10% endrin aldehyde	< 10 %	Pass	
4,4' - DDT	Abundance of degradation to 4,4' - DDD & 4,4' - DDE		< 10% 4,4'-DDD & 4,4'-DDE	< 10 %	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$PGF = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where W(1/2) is the peak width at half height and W(1/10) is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where t is the difference in elution times between the two peaks and W is the average peak width, at the baseline, of the two peaks.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED CONTINUING CALIBRATION CHECK

Tech: AT
Date: 06/08/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060598A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060598A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS - AE
Column:	Restek XTI-5 30m x 0.25mm ID	Mix 2:		Mix 3:	

CCC Soln Lot#: Mix 1: W980505012-050698
CCC Data File: C-2-18A

Target Concentration: 2.0 ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	2.0	2.405	120.3	70 - 130	Pass	
Alachlor	2.0	2.283	114.2	70 - 130	Pass	
Atrazine	2.0	2.270	113.5	70 - 130	Pass	
Bromacil	2.0	2.178	113.5	70 - 130	Pass	
Cyanazine	2.0	2.347	117.4	70 - 130	Pass	
Diazinon	2.0	2.345	117.3	70 - 130	Pass	
Endosulfan I	2.0	2.209	110.5	70 - 130	Pass	
Endosulfan II	2.0	2.048	102.4	70 - 130	Pass	
Endosulfan sulfate	2.0	2.166	108.3	70 - 130	Pass	
Fenamiphos	2.0	2.560	128.0	70 - 130	Pass	
Metolachlor	2.0	2.286	114.3	70 - 130	Pass	
Metribuzin	2.0	2.312	115.6	70 - 130	Pass	
Pendimethalin	2.0	2.170	108.5	70 - 130	Pass	
Prometon	2.0	2.255	112.8	70 - 130	Pass	
Propachlor	2.0	2.412	120.6	70 - 130	Pass	
Simazine	2.0	2.306	115.3	70 - 130	Pass	
Terbufos	2.0	2.080	104.0	70 - 130	Pass	
Trifluralin	2.0	2.623	131.2	70 - 130	Fail	*

Not in list

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments: * Trifluralin recovery was high biased outside the acceptance limits of 70-130% recovery. Trifluralin recovery was acceptable in the second CCC. This compound was not detected in the LMB or any of the samples submitted for analysis.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED METHOD BLANK SUMMARY

Tech: AT
Date: 06/08/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060598A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060598A
Project:	DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS - AE
Column:	Restek XTI-5 30m x 0.25mm ID	Ext Date:	05/29/98	Ext Method:	Solid Phase Extraction
Blank File:	MB-525A				

This method blank applies to the following samples, ms, msd, blanks, standards.

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Continuing Calibration Check A	C-2-18A	06/05/98	10:10	OS	
2	Laboratory Method Blank A	MB-525A	06/05/98	11:06	RW	
3	Laboratory Fortified Blank A	FB-525A	06/05/98	11:40	RW	
4	DK 11738	326287	06/05/98	12:14	GW	L
5	DK 11739	326292	06/05/98	12:48	GW	L
6	DK 11740	326297	06/05/98	13:23	GW	L
7	DK 11741	326302	06/05/98	13:57	GW	L
8	DK 11742	326307	06/05/98	14:32	GW	L
9	DK 11743	326312	06/05/98	15:06	GW	L
10	DK 11744	326317	06/05/98	15:40	GW	L
11	DK 11745	326322	06/05/98	16:15	GW	L
12	DK 11746	326327	06/05/98	16:49	GW	L
13	DK 11747	326332	06/05/98	17:24	GW	L
14	Laboratory Fortified Matrix A	FM-525A	06/05/98	17:58	DW	
15	Continuing Calibration Check B	C-2-18B	06/05/98	18:33	OS	
16						
17						
18						
19						
20						
21						
22						
23						
24						

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: RW
Data File/Smpl ID: MB-525A
Data File/Dupl ID:
Sample Number/Description: Laboratory Method Blank A

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060598A
Data Directory: AE\060598A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: n/a
Date Analyzed: 06/05/98
Contm. Level:

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
LABORATORY FORTIFIED BLANK

Tech: AT
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060598A
Contract: BAA 97-044
Task: 4A
Data Directory: AE\060598A
Project: DK 11734 - DK 11749, DK10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0507F1AE
Method: 525.2
Instrument ID: GC/MS - AE
Column: Restek XTI-5 30m x 0.25mm ID
LFB Soln Lot#: Mix 1: W980505012-050698
Mix 2:
Mix 3:
LFB Data File: FB-525A

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	1.0	1.042	104.2	70 - 130	Pass	
Alachlor	1.0	1.045	104.5	70 - 130	Pass	
Atrazine	1.0	1.099	109.9	70 - 130	Pass	
Bromacil	1.0	0.983	98.3	70 - 130	Pass	
Cyanazine	1.0	1.035	103.5	70 - 130	Pass	
Diazinon	1.0	0.992	99.2	70 - 130	Pass	
Endosulfan I	1.0	1.256	125.6	70 - 130	Pass	
Endosulfan II	1.0	1.053	105.3	70 - 130	Pass	
Endosulfan sulfate	1.0	1.202	120.2	70 - 130	Pass	
Fenamiphos	1.0	1.285	128.5	70 - 130	Pass	
Metolachlor	1.0	1.069	106.9	70 - 130	Pass	
Metribuzin	1.0	0.677	67.7	70 - 130	Fail	*
Pendimethalin	1.0	1.114	111.4	70 - 130	Pass	
Prometon	1.0	0.668	66.8	70 - 130	Fail	*
Propachlor	1.0	1.143	114.3	70 - 130	Pass	
Simazine	1.0	0.920	92.0	70 - 130	Pass	
Terbufos	1.0	1.134	113.4	70 - 130	Pass	
Trifluralin	1.0	1.115	111.5	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments: * These compound recoveries were outside the method 525.2 acceptance limits of 70-130% recovery, but were within the EHL statistically determined 95th percentile.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326287
Data File/Dupl ID:
Sample Number/Description: DK 11738

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060598A
Data Directory: AE\060598A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/05/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326292
Data File/Dupl ID:
Sample Number/Description: DK 11739

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060598A
Data Directory: AE\060598A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/05/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326297
Data File/Dupl ID:
Sample Number/Description: DK 11740

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060598A
Data Directory: AE\060598A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/05/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326302
Data File/Dupl ID:
Sample Number/Description: DK 11741

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060598A
Data Directory: AE\060598A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/05/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326307
Data File/Dupl ID:
Sample Number/Description: DK 11742

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060598A
Data Directory: AE\060598A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/05/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326312
Data File/Dupl ID:
Sample Number/Description: DK 11743

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060598A
Data Directory: AE\060598A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/05/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326317
Data File/Dupl ID:
Sample Number/Description: DK 11744

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060598A
Data Directory: AE\060598A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/05/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326322
Data File/Dupl ID:
Sample Number/Description: DK 11745

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060598A
Data Directory: AE\060598A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/05/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326327
Data File/Dupl ID:
Sample Number/Description: DK 11746

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060598A
Data Directory: AE\060598A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/05/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326332
Data File/Dupl ID:
Sample Number/Description: DK 11747

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060598A
Data Directory: AE\060598A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/05/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
LABORATORY FORTIFIED MATRIX

Tech: AT
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060598A
Contract: BAA 97-044
Task: 4A
Data Directory: AE\060598A
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0507F1AE
Method: 525.2
Instrument ID: GC/MS-AE
Column: Restek XTI-5 30m x 0.25mm ID
LFM Soln Lot#: Mix 1: W980505012-050698
Mix 2:
Mix 3:
LFM Data File: FM-525A

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	1.0	1.089	108.9	70 - 130	Pass	
Alachlor	1.0	1.128	112.8	70 - 130	Pass	
Atrazine	1.0	1.105	110.5	70 - 130	Pass	
Bromacil	1.0	0.836	83.6	70 - 130	Pass	
Cyanazine	1.0	0.954	95.4	70 - 130	Pass	
Diazinon	1.0	1.087	108.7	70 - 130	Pass	
Endosulfan I	1.0	1.137	113.7	70 - 130	Pass	
Endosulfan II	1.0	1.137	113.7	70 - 130	Pass	
Endosulfan sulfate	1.0	1.271	127.1	70 - 130	Pass	
Fenamiphos	1.0	1.170	117.0	70 - 130	Pass	
Metolachlor	1.0	1.089	108.9	70 - 130	Pass	
Metribuzin	1.0	0.630	63.0	70 - 130	Fail	*
Pendimethalin	1.0	1.062	106.2	70 - 130	Pass	
Prometon	1.0	0.736	73.6	70 - 130	Pass	
Propachlor	1.0	1.129	112.9	70 - 130	Pass	
Simazine	1.0	1.029	102.9	70 - 130	Pass	
Terbufos	1.0	1.261	126.1	70 - 130	Pass	
Trifluralin	1.0	1.193	119.3	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments: * Metribuzin recovery was outside the method 525.2 acceptance limits of 70-130% recovery, but was within the EHL statistically determined 95th percentile.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED CONTINUING CALIBRATION CHECK

Tech: AT
Date: 06/08/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060598A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060598A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS-AE
Column:	Restek XTI-5 30m x 0.25mm ID	Mix 2:		Mix 3:	

CCC Soln Lot#: Mix 1: W980505012-050698

CCC Data File: C-2-18B

Target Concentration: 2.0 ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	2.0	2.292	114.6	70 - 130	Pass	
Alachlor	2.0	2.255	112.8	70 - 130	Pass	
Atrazine	2.0	2.415	120.8	70 - 130	Pass	
Bromacil	2.0	1.709	85.5	70 - 130	Pass	
Cyanazine	2.0	1.505	75.3	70 - 130	Pass	
Diazinon	2.0	2.205	110.3	70 - 130	Pass	
Endosulfan I	2.0	2.290	114.5	70 - 130	Pass	
Endosulfan II	2.0	2.087	104.4	70 - 130	Pass	
Endosulfan sulfate	2.0	2.133	106.7	70 - 130	Pass	
Fenamiphos	2.0	1.670	83.5	70 - 130	Pass	
Metolachlor	2.0	2.213	110.7	70 - 130	Pass	
Metribuzin	2.0	2.174	108.7	70 - 130	Pass	
Pendimethalin	2.0	2.118	105.9	70 - 130	Pass	
Prometon	2.0	1.935	96.8	70 - 130	Pass	
Propachlor	2.0	2.317	115.9	70 - 130	Pass	
Simazine	2.0	2.211	110.6	70 - 130	Pass	
Terbufos	2.0	2.091	104.6	70 - 130	Pass	
Trifluralin	2.0	2.505	125.3	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED SURROGATE RECOVERY

Tech: AT
Date: 06/08/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060598A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060598A
Project:	DK 11734 - DK 11749,DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS - AE
Column:	Restek XTI-5 30m x 0.25mm ID	Surrogate Soln Lot #:	A6100287-052898		

	EPA Sample No. / Sample Description	Data File/ Sample ID	Surrogate Percent Recovery SS1	Q	SS2	Q	SS3	Q	SS4	Q	Total Out	Matrix Code	Contm. Level
1	Laboratory Method Blank A	MB-525A	100.5		101.2		101.1		99.7		0	RW	
2	Laboratory Fortified Blank A	FB-525A	102.7		111.7		107.0		106.7		0	RW	
3	DK 11738	326287	105.1		108.3		100.6		95.8		0	GW	L
4	DK 11739	326292	100.3		109.0		99.3		96.3		0	GW	L
5	DK 11740	326297	104.0		102.3		97.7		90.0		0	GW	L
6	DK 11741	326302	99.7		103.7		105.3		98.9		0	GW	L
7	DK 11742	326307	103.7		112.8		103.8		93.9		0	GW	L
8	DK 11743	326312	100.1		108.3		105.2		86.8		0	GW	L
9	DK 11744	326317	91.8		100.5		95.7		93.3		0	GW	L
10	DK 11745	326322	106.4		110.0		106.9		96.4		0	GW	L
11	DK 11746	326327	96.0		100.9		99.3		89.7		0	GW	L
12	DK 11747	326332	106.0		112.6		108.6		100.0		0	GW	L
13	Laboratory Fortified Matrix A	FM-525A	100.1		110.5		107.0		96.1		0	DW	
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													

Surrogates		Target Conc.	% Recovery Limits
SS1	= 2,4,5,6-Tetrachloro-m-xylene	5.0	70 - 130
SS2	= Pentachloronitrobenzene	5.0	70 - 130
SS3	= 4,4'-Dichlorobiphenyl	5.0	70 - 130
SS4	= Triphenyl Phosphate	5.0	70 - 130

% Recovery = (Calculated Concentration / Target Concentration) *100

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
INTERNAL STANDARD AREA SUMMARY

Tech: AT
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
IS Soln Lot#: A7090314-052898

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2

Acq. File: A060598A
Data Directory: AE\060598A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS-AE

	IS1 Area	IS1 RT	IS2 Area	IS2 RT
12 Hour CCC Standard	1321503	17:37		
CCC Upper Limit	1717954	18:07		
CCC Lower Limit	925052	17:07		
Init Cali Lower Limit	2625627	17:28		

	Sample No. / Sample Description	Data File / Sample ID	IS1 Area	Q	IS1 RT	Q	IS2 Area	Q	IS2 RT	Q	Matrix Code	Contm. Level
1	Continuing Calibration Check A	C-2-18A	1159765		17:32						OS	
2	Laboratory Method Blank A	MB-525A	1189042		17:32						RW	
3	Laboratory Fortified Blank A	FB-525A	1153638		17:34						RW	
4	DK 11738	326287	1055668		17:34						GW	L
5	DK 11739	326292	1139848		17:34						GW	L
6	DK 11740	326297	1335962		17:34						GW	L
7	DK 11741	326302	1835542	*	17:37						GW	L
8	DK 11742	326307	1562600		17:35						GW	L
9	DK 11743	326312	1453570		17:35						GW	L
10	DK 11744	326317	1737877	*	17:37						GW	L
11	DK 11745	326322	1384945		17:35						GW	L
12	DK 11746	326327	1321336		17:35						GW	L
13	DK 11747	326332	1743653	*	17:35						GW	L
14	Laboratory Fortified Matrix A	FM-525A	1246099		17:35						DW	
15												
16												
17												
18												
19												
20												

IS1 = Pyrene-d10
IS2 = n/a

CCC Upper / Lower Limit: Area: 12 hr CCC std IS area +/- 30%; RT: 12 hr CCC std IS RT +/- 30 seconds
Init Cali Lower Limit: Area: Init Cali IS area - 50%; RT: Init Cali IS RT - 30 seconds
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: * These IS areas were high biased, but all the surrogate standard recoveries were within acceptance limits.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED INITIAL CALIBRATION

Tech: AT
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
IC Soln Lot#: Mix 1: W980505012-050698

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Mix 2:

Acq. File: A060598A
Data Directory: AE\060598A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Mix 3:

Data File / Sample ID:	I005-18A	I-01-18A	I-05-18A	I-1-18A	I-2-18A	I-5-18A	I-10-18A	I-25-18A	I-50-18A	I-100-18A				
Concentration (ug/L):	0.05	0.1	0.5	1	2	5	10	25	50	100	Avg	%	Corr	
Compound	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	RSD	Coeff	Q
Acetochlor	0.376	0.165	0.216	0.231	0.257	0.282	0.288	0.283	----	----	0.262	23.6	1.0000	
Alachlor	1.968	0.788	0.875	0.948	1.017	1.140	1.133	1.120	----	----	1.124	32.5	0.9999	*
Atrazine	0.505	0.201	0.283	0.307	0.339	0.338	0.314	----	----	----	0.327	28.0	0.9992	
Bromacil	----	0.353	0.296	0.521	0.662	0.787	0.752	0.768	----	----	0.591	34.5	0.9999	*
Cyanazine	0.360	0.151	0.172	0.229	0.263	0.302	0.308	0.327	----	----	0.264	28.3	0.9997	
Diazinon	----	0.965	0.820	0.755	0.848	0.801	0.758	----	----	----	0.824	9.4	0.9994	
Endosulfan I	0.493	0.178	0.180	0.214	0.195	0.226	0.214	0.207	----	----	0.238	43.7	1.0000	*
Endosulfan II	----	0.184	0.211	0.253	0.222	0.254	0.244	0.245	----	----	0.230	11.3	1.0000	
Endosulfan sulfate	0.405	0.171	0.148	0.182	0.176	0.204	0.193	0.186	----	----	0.208	39.0	1.0000	*
Fenamiphos	0.557	0.243	0.303	0.444	0.526	0.616	0.619	0.619	----	----	0.491	30.1	1.0000	*
Metolachlor	2.985	1.293	1.728	2.012	2.168	2.338	2.304	2.167	----	----	2.124	23.1	1.0000	
Metribuzin	0.658	0.299	0.344	0.416	0.488	0.538	0.537	0.546	----	----	0.478	24.7	1.0000	
Pendimethalin	0.588	0.340	0.369	0.419	0.447	0.469	0.466	0.459	----	----	0.445	16.8	1.0000	
Prometon	----	0.484	0.670	0.683	0.806	0.819	0.741	----	----	----	0.701	17.5	0.9980	
Propachlor	0.941	0.434	0.507	0.573	0.607	0.674	0.650	0.677	----	----	0.633	23.8	1.0000	
Simazine	0.395	0.149	0.147	0.181	0.232	0.235	0.241	0.232	----	----	0.227	34.7	1.0000	*
Terbufos	----	0.921	0.930	1.033	1.078	1.186	1.184	1.251	----	----	1.083	12.0	1.0000	
Trifluralin	1.058	0.697	0.709	0.771	0.787	0.956	0.911	1.043	----	----	0.867	16.7	0.9990	

Avg RF = Average response factor
Max %RSD = 30% for a linear fit
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

DETERMINATION OF METHOD DETECTION LIMITS
METHOD 525.2 Extended - BROAD SPECTRUM PESTICIDES

Tech: RD
Date: 05/02/98

Lab Name:	Environmental Health Laboratories	Extract. Vol:	1000 mL	Acq. File:	A032598A
Project:	Routine MDL	Disk:	47 mm	Data Directory:	AE\032598A
Column:	Restek XTI-5 30m x 0.25um ID	Cartridge:	n/a	Initial Cali Data:	0220F0AE
Extraction Technique:	LSE	Method:	525.2C	Instrument ID:	GC/MS - AE
Matrix Code:	RW	LSE Matrix:	C18		

			Data File*	M-01-01A	M-01-01B	M-01-01C	M-01-01D	M-01-01E	M-01-01F	M-01-01G			
			Analysis Date	03/25/98	03/25/98	03/26/98	03/26/98	03/27/98	03/27/98	03/27/98			
				Observed Recovery							Std.	Calc.	
Method	CAS #	Parameter	Target	Rep - 1	Rep - 2	Rep - 3	Rep - 4	Rep - 5	Rep - 6	Rep - 7	Deviation	MDL	Units
525.2	34256-82-1	Acetochlor	0.1	0.097	0.111	0.096	0.086	0.103	0.104	0.099	0.0078	0.025	ug/L
525.2	15972-60-8	Alachlor	0.1	0.124	0.119	0.128	0.120	0.129	0.121	0.127	0.0041	0.013	ug/L
525.2	1912-24-9	Atrazine	0.1	0.101	0.098	0.110	0.097	0.101	0.105	0.103	0.0044	0.014	ug/L
525.2	314-40-9	Bromacil	0.1	0.216	0.223	0.208	0.211	0.205	0.222	0.216	0.0068	0.021	ug/L
525.2	21725-46-2	Cyanazine	0.1	0.108	0.121	0.096	0.109	0.108	0.110	0.109	0.0073	0.023	ug/L
525.2	959-98-8	Endosulfan I	0.1	0.142	0.142	0.123	0.140	0.129	0.130	0.130	0.0075	0.024	ug/L
525.2	33213-65-9	Endosulfan II	0.1	0.104	0.119	0.090	0.129	0.086	0.100	0.094	0.0157	0.049	ug/L
525.2	1031-07-8	Endosulfan sulfate	0.1	0.096	0.097	0.095	0.110	0.099	0.092	0.128	0.0126	0.040	ug/L
525.2	22224-92-6	Fenamiphos	0.1	0.108	0.118	0.129	0.122	0.127	0.116	0.118	0.0071	0.022	ug/L
525.2	51218-45-2	Metolachlor	0.1	0.122	0.118	0.125	0.122	0.120	0.126	0.126	0.0031	0.010	ug/L
525.2	21087-64-9	Metribuzin	0.1	0.093	0.091	0.096	0.091	0.099	0.095	0.093	0.0029	0.009	ug/L
525.2	40487-42-1	Pendimethalin	0.1	0.095	0.099	0.096	0.102	0.103	0.096	0.094	0.0035	0.011	ug/L
525.2	1610-18-0	Prometon	0.1	0.084	0.069	0.068	0.070	0.057	0.046	0.066	0.0118	0.037	ug/L
525.2	1918-16-7	Propachlor	0.1	0.119	0.106	0.119	0.103	0.117	0.119	0.119	0.0070	0.022	ug/L
525.2	122-34-9	Simazine	0.1	0.122	0.113	0.103	0.096	0.102	0.109	0.111	0.0085	0.027	ug/L
525.2	13071-79-9	Terbufos	0.1	0.117	0.103	0.128	0.097	0.132	0.126	0.126	0.0135	0.042	ug/L
525.2	1582-09-8	Trifluralin	0.1	0.139	0.138	0.140	0.129	0.134	0.143	0.145	0.0054	0.017	ug/L

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments *Analyzed 05/02/98

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED - GC/MS TUNING AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)

Tech: AT
Date: 06/09/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060898A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060898A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS-AE
Column:	Restek XTI-5 30m x 0.25mm ID				

m/e	Ion Abundance Criteria	% Rel Abundance	Q
51	10 to 80% of base peak	27.21	
68	< 2% of Mass 69	0.00	
70	< 2% of Mass 69	0.00	
127	10 to 80% of base peak	32.87	
197	< 2% of Mass 198	0.00	
198	base peak or > 50 % of mass 442	100.00	
199	5 to 9% of mass 198	6.48	
275	10 to 60% of base peak	22.62	
365	> 1% of base peak	2.95	
441	Present and < mass 443	13.28	
442	base peak or > 50 % of mass 198	93.85	
443	15 to 24% of mass 442	17.82	

Tune Date: 06/08/98

Tune Time: 11:19

Hours Since Last Tune

Matrix	Code
Reagent Water	RW
Surface Water	SW
Drinking Water	DW
Ground Water	GW
Waste Water	WW
Sediment	SE
Soil	SO
Sludge	SL
Other Solvents	OS
TCLP Leachate	TC
Hazardous Waste	HW

Contamination Levels: L=Low M=Medium H=High

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Tune 1	TI-DFN1	06/08/98	11:19	OS	
2	SPCC	S-525A	06/08/98	11:42	OS	
3	Continuing Calibration Check A	C-2-18A	06/08/98	12:23	OS	
4	Laboratory Method Blank A	MB-525A	06/08/98	13:20	RW	
5	Laboratory Fortified Blank A	FB-525A	06/08/98	13:54	RW	
6	DK 11748	326337	06/08/98	14:28	GW	L
7	DK 11749	326342	06/08/98	15:03	GW	L
8	DK 10786	326347	06/08/98	15:37	GW	L
9	DK 10787	326352	06/08/98	16:11	GW	L
10	DK 10788	326357	06/08/98	16:46	GW	L
11	DK 10789	326362	06/08/98	17:20	GW	L
12	DK 10790	326367	06/08/98	17:55	GW	L
13	DK 10791	326372	06/08/98	18:29	GW	L
14	DK 10792	326377	06/08/98	19:04	GW	L
15	DK 11857	326382	06/08/98	19:38	GW	L
16	Continuing Calibration Check B	C-2-18B	06/08/98	20:48	OS	
17						
18						
19						
20						
21						
22						
23						
24						

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED LABORATORY PERFORMANCE CHECK

Tech: AT
Date: 06/09/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060898A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060898A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS-AE
Column:	Restek XTI-5 30m x 0.25mm ID	LPC Soln Lot #:	112597-112597		
Data File:	S-525A				

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
Bromacil	Chromatographic Performance	5.0	0.80 < PGF < 1.20 (a)	1.05	Pass	
Atrazine Prometon	Column Performance	0.15 0.30	Resolution > 0.7 (b)	0.95	Pass	
Endrin	Abundance of degradation to Endrin Aldehyde	2.0	< 10% endrin aldehyde	< 10 %	Pass	
4,4' - DDT	Abundance of degradation to 4,4' - DDD & 4,4' - DDE		< 10% 4,4'-DDD & 4,4'-DDE	< 10 %	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$PGF = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where W(1/2) is the peak width at half height and W(1/10) is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where t is the difference in elution times between the two peaks and W is the average peak width, at the baseline, of the two peaks.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED CONTINUING CALIBRATION CHECK

Tech: AT
Date: 06/09/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060898A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060898A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS-AE
Column:	Restek XTI-5 30m x 0.25mm ID				
CCC Soln Lot#:	Mix 1: W980505012-050698	Mix 2:		Mix 3:	
CCC Data File:	C-2-18A				

Target Concentration: 2.0 ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	2.0	2.395	119.8	70 - 130	Pass	
Alachlor	2.0	2.309	115.5	70 - 130	Pass	
Atrazine	2.0	2.260	113.0	70 - 130	Pass	
Bromacil	2.0	2.228	111.4	70 - 130	Pass	
Cyanazine	2.0	2.392	119.6	70 - 130	Pass	
Diazinon	2.0	2.211	110.6	70 - 130	Pass	
Endosulfan I	2.0	2.393	119.7	70 - 130	Pass	
Endosulfan II	2.0	2.185	109.3	70 - 130	Pass	
Endosulfan sulfate	2.0	2.206	110.3	70 - 130	Pass	
Fenamiphos	2.0	2.504	125.2	70 - 130	Pass	
Metolachlor	2.0	2.280	114.0	70 - 130	Pass	
Metribuzin	2.0	2.370	118.5	70 - 130	Pass	
Pendimethalin	2.0	2.216	110.8	70 - 130	Pass	
Prometon	2.0	2.206	110.3	70 - 130	Pass	
Propachlor	2.0	2.426	121.3	70 - 130	Pass	
Simazine	2.0	2.276	113.8	70 - 130	Pass	
Terbufos	2.0	2.173	108.7	70 - 130	Pass	
Trifluralin	2.0	2.556	127.8	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
METHOD BLANK SUMMARY

Tech: AT
Date: 06/09/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060898A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060898A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS - AE
Column:	Restek XTI-5 30m x 0.25mm ID	Ext Date:	05/29/98	Ext Method:	Solid Phase Extraction
Blank File:	MB-525A				

This method blank applies to the following samples, ms, msd, blanks, standards.

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Continuing Calibration Check A	C-2-18A	06/08/98	12:23	OS	
2	Laboratory Method Blank A	MB-525A	06/08/98	13:20	RW	
3	Laboratory Fortified Blank A	FB-525A	06/08/98	13:54	RW	
4	DK 11748	326337	06/08/98	14:28	GW	L
5	DK 11749	326342	06/08/98	15:03	GW	L
6	DK 10786	326347	06/08/98	15:37	GW	L
7	DK 10787	326352	06/08/98	16:11	GW	L
8	DK 10788	326357	06/08/98	16:46	GW	L
9	DK 10789	326362	06/08/98	17:20	GW	L
10	DK 10790	326367	06/08/98	17:55	GW	L
11	DK 10791	326372	06/08/98	18:29	GW	L
12	DK 10792	326377	06/08/98	19:04	GW	L
13	DK 11857	326382	06/08/98	19:38	GW	L
14	Continuing Calibration Check B	C-2-18B	06/08/98	20:48	OS	
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/09/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: RW
Data File/Smpl ID: MB-525A
Data File/Dupl ID:
Sample Number/Description: Laboratory Method Blank A

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060898A
Data Directory: AE\060898A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: n/a
Date Analyzed: 06/08/98
Contm. Level:

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
LABORATORY FORTIFIED BLANK

Tech: AT
Date: 06/09/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060898A
Contract: BAA 97-044
Task: 4A
Data Directory: AE\060898A
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0507F1AE
Method: 525.2
Instrument ID: GC/MS - AE
Column: Restek XTI-5 30m x 0.25mm ID
LFB Soln Lot#: Mix 1: W980505012-050698
Mix 2:
Mix 3:
LFB Data File: FB-525A

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	1.0	1.139	113.9	70 - 130	Pass	
Alachlor	1.0	1.055	105.5	70 - 130	Pass	
Atrazine	1.0	1.152	115.2	70 - 130	Pass	
Bromacil	1.0	1.040	104.0	70 - 130	Pass	
Cyanazine	1.0	1.115	111.5	70 - 130	Pass	
Diazinon	1.0	1.051	105.1	70 - 130	Pass	
Endosulfan I	1.0	1.264	126.4	70 - 130	Pass	
Endosulfan II	1.0	1.035	103.5	70 - 130	Pass	
Endosulfan sulfate	1.0	1.246	124.6	70 - 130	Pass	
Fenamiphos	1.0	1.269	126.9	70 - 130	Pass	
Metolachlor	1.0	1.089	108.9	70 - 130	Pass	
Metribuzin	1.0	0.710	71.0	70 - 130	Pass	
Pendimethalin	1.0	1.095	109.5	70 - 130	Pass	
Prometon	1.0	0.687	68.7	70 - 130	Fail	*
Propachlor	1.0	1.072	107.2	70 - 130	Pass	
Simazine	1.0	0.953	95.3	70 - 130	Pass	
Terbufos	1.0	1.162	116.2	70 - 130	Pass	
Trifluralin	1.0	1.198	119.8	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments: * Prometon recovery was outside the method 525.2 acceptance limits of 70-130% recovery, but was within the EHL statistically determined 95th percentile.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/09/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326337
Data File/Dupl ID:
Sample Number/Description: DK 11748

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060898A
Data Directory: AE\060898A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/08/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/09/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326342
Data File/Dupl ID:
Sample Number/Description: DK 11749

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060898A
Data Directory: AE\060898A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/08/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/09/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326347
Data File/Dupl ID:
Sample Number/Description: DK 10786

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060898A
Data Directory: AE\060898A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/08/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/09/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326352
Data File/Dupl ID:
Sample Number/Description: DK 10787

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060898A
Data Directory: AE\060898A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/08/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/09/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326357
Data File/Dupl ID:
Sample Number/Description: DK 10788

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060898A
Data Directory: AE\060898A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/08/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/09/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326362
Data File/Dupl ID:
Sample Number/Description: DK 10789

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060898A
Data Directory: AE\060898A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/08/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/09/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326367
Data File/Dupl ID:
Sample Number/Description: DK 10790

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060898A
Data Directory: AE\060898A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/08/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/09/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326372
Data File/Dupl ID:
Sample Number/Description: DK 10791

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060898A
Data Directory: AE\060898A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/08/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/09/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326377
Data File/Dupl ID:
Sample Number/Description: DK 10792

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060898A
Data Directory: AE\060898A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/08/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/09/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326382
Data File/Dupl ID:
Sample Number/Description: DK 11857

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060898A
Data Directory: AE\060898A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/08/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED CONTINUING CALIBRATION CHECK

Tech: AT
Date: 06/09/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060898A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060898A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS-AE
Column:	Restek XTI-5 30m x 0.25mm ID				
CCC Soln Lot#:	Mix 1: W980505012-050698	Mix 2:		Mix 3:	
CCC Data File:	C-2-18B				

Target Concentration: 2.0 ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	2.0	2.135	106.8	70 - 130	Pass	
Alachlor	2.0	2.216	110.8	70 - 130	Pass	
Atrazine	2.0	1.715	85.8	70 - 130	Pass	
Bromacil	2.0	0.720	36.0	70 - 130	Fail	@
Cyanazine	2.0	0.569	28.5	70 - 130	Fail	^
Diazinon	2.0	2.290	114.5	70 - 130	Pass	
Endosulfan I	2.0	2.409	120.5	70 - 130	Pass	
Endosulfan II	2.0	2.128	106.4	70 - 130	Pass	
Endosulfan sulfate	2.0	2.294	114.7	70 - 130	Pass	
Fenamiphos	2.0	1.731	86.6	70 - 130	Pass	
Metolachlor	2.0	2.153	107.7	70 - 130	Pass	
Metribuzin	2.0	1.728	86.4	70 - 130	Pass	
Pendimethalin	2.0	2.094	104.7	70 - 130	Pass	
Prometon	2.0	1.736	86.8	70 - 130	Pass	
Propachlor	2.0	2.246	112.3	70 - 130	Pass	
Simazine	2.0	1.558	77.9	70 - 130	Pass	
Terbufos	2.0	2.058	102.9	70 - 130	Pass	
Trifluralin	2.0	2.490	124.5	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments: ^ Cyanazine has had historically poor recoveries by this methodology.
@ Bromacil recovery in the second CCC was low biased outside the acceptance limits of 70-130% recovery, but its recoveries in the first CCC and the LFB were acceptable.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED SURROGATE RECOVERY

Tech: AT
Date: 06/09/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060898A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060898A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS - AE
Column:	Restek XTI-5 30m x 0.25mm ID	Surrogate Soln Lot #:	A6100287-052898		

	EPA Sample No. / Sample Description	Data File/ Sample ID	Surrogate Percent Recovery SS1	Q	SS2	Q	SS3	Q	SS4	Q	Total Out	Matrix Code	Contm. Level
1	Laboratory Method Blank A	MB-525A	119.8		115.5		107.1		97.2		0	RW	
2	Laboratory Fortified Blank A	FB-525A	105.4		105.7		113.3		104.7		0	RW	
3	DK 11748	326337	100.8		108.7		103.9		97.8		0	GW	L
4	DK 11749	326342	96.4		100.8		98.4		93.9		0	GW	L
5	DK 10786	326347	107.1		100.8		96.7		93.3		0	GW	L
6	DK 10787	326352	90.4		86.8		79.9		78.9		0	GW	L
7	DK 10788	326357	98.6		108.9		96.8		98.6		0	GW	L
8	DK 10789	326362	109.9		105.3		99.9		96.0		0	GW	L
9	DK 10790	326367	105.1		109.2		101.3		99.4		0	GW	L
10	DK 10791	326372	99.1		102.2		97.1		94.1		0	GW	L
11	DK 10792	326377	98.7		105.5		96.7		92.8		0	GW	L
12	DK 11857	326382	95.4		103.2		98.2		95.8		0	GW	L
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													

Surrogates		Target Conc.	% Recovery Limits
SS1	= 2,4,5,6-Tetrachloro-m-xylene	5.0	70 - 130
SS2	= Pentachloronitrobenzene	5.0	70 - 130
SS3	= 4,4'-Dichlorobiphenyl	5.0	70 - 130
SS4	= Triphenyl Phosphate	5.0	70 - 130

% Recovery = (Calculated Concentration / Target Concentration) *100

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
INTERNAL STANDARD AREA SUMMARY

Tech: AT
Date: 06/09/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
IS Soln Lot#: A7090314-052898

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2

Acq. File: A060898A
Data Directory: AE\060898A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE

	IS1 Area	IS1 RT	IS2 Area	IS2 RT
12 Hour CCC Standard	1352300	17:32		
CCC Upper Limit	1757990	18:02		
CCC Lower Limit	946610	17:02		
Init Cali Lower Limit	2625627	17:28		

	Sample No. / Sample Description	Data File / Sample ID	IS1 Area	Q	IS1 RT	Q	IS2 Area	Q	IS2 RT	Q	Matrix Code	Contm. Level
1	Laboratory Method Blank A	MB-525A	1429050		17:32						RW	
2	Laboratory Fortified Blank A	FB-525A	1334391		17:32						RW	
3	DK 11748	326337	1620556		17:32						GW	L
4	DK 11749	326342	1344891		17:32						GW	L
5	DK 10786	326347	1147308		17:32						GW	L
6	DK 10787	326352	1216245		17:33						GW	L
7	DK 10788	326357	1279816		17:34						GW	L
8	DK 10789	326362	1287884		17:33						GW	L
9	DK 10790	326367	1068368		17:34						GW	L
10	DK 10791	326372	1241996		17:35						GW	L
11	DK 10792	326377	1399328		17:34						GW	L
12	DK 11857	326382	1703710		17:35						GW	L
13	Continuing Calibration Check B	C-2-18B	1250937		17:34						OS	
14												
15												
16												
17												
18												
19												
20												

IS1 = Pyrene-d10
IS2 = n/a

CCC Upper / Lower Limit: Area: 12 hr CCC std IS area +/- 30%; RT: 12 hr CCC std IS RT +/- 30 seconds
Init Cali Lower Limit: Area: Init Cali IS area - 50%; RT: Init Cali IS RT - 30 seconds
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED INITIAL CALIBRATION

Tech: AT
Date: 06/09/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060898A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060898A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS - AE
Column:	Restek XTI-5 30m x 0.25mm ID	Mix 2:		Mix 3:	

IC Soln Lot#: Mix 1: W980505012-050698

Data File / Sample ID:	I005-18A	I-01-18A	I-05-18A	I-1-18A	I-2-18A	I-5-18A	I-10-18A	I-25-18A	I-50-18A	I-100-18A				
Concentration (ug/L):	0.05	0.1	0.5	1	2	5	10	25	50	100	Avg	%	Corr	
Compound	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	RSD	Coeff	Q
Acetochlor	0.376	0.165	0.216	0.231	0.257	0.282	0.288	0.283	----	----	0.262	23.6	1.0000	
Alachlor	1.968	0.788	0.875	0.948	1.017	1.140	1.133	1.120	----	----	1.124	32.5	0.9999	*
Atrazine	0.505	0.201	0.283	0.307	0.339	0.338	0.314	----	----	----	0.327	28.0	0.9992	
Bromacil	----	0.353	0.296	0.521	0.662	0.787	0.752	0.768	----	----	0.591	34.5	0.9999	*
Cyanazine	0.360	0.151	0.172	0.229	0.263	0.302	0.308	0.327	----	----	0.264	28.3	0.9997	
Diazinon	----	0.965	0.820	0.755	0.848	0.801	0.758	----	----	----	0.824	9.4	0.9994	
Endosulfan I	0.493	0.178	0.180	0.214	0.195	0.226	0.214	0.207	----	----	0.238	43.7	1.0000	*
Endosulfan II	----	0.184	0.211	0.253	0.222	0.254	0.244	0.245	----	----	0.230	11.3	1.0000	
Endosulfan sulfate	0.405	0.171	0.148	0.182	0.176	0.204	0.193	0.186	----	----	0.208	39.0	1.0000	*
Fenamiphos	0.557	0.243	0.303	0.444	0.526	0.616	0.619	0.619	----	----	0.491	30.1	1.0000	*
Metolachlor	2.985	1.293	1.728	2.012	2.168	2.338	2.304	2.167	----	----	2.124	23.1	1.0000	
Metribuzin	0.658	0.299	0.344	0.416	0.488	0.538	0.537	0.546	----	----	0.478	24.7	1.0000	
Pendimethalin	0.588	0.340	0.369	0.419	0.447	0.469	0.466	0.459	----	----	0.445	16.8	1.0000	
Prometon	----	0.484	0.670	0.683	0.806	0.819	0.741	----	----	----	0.701	17.5	0.9980	
Propachlor	0.941	0.434	0.507	0.573	0.607	0.674	0.650	0.677	----	----	0.633	23.8	1.0000	
Simazine	0.395	0.149	0.147	0.181	0.232	0.235	0.241	0.232	----	----	0.227	34.7	1.0000	*
Terbufos	----	0.921	0.930	1.033	1.078	1.186	1.184	1.251	----	----	1.083	12.0	1.0000	
Trifluralin	1.058	0.697	0.709	0.771	0.787	0.956	0.911	1.043	----	----	0.867	16.7	0.9990	

Avg RF = Average response factor
Max %RSD = 30% for a linear fit
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

DETERMINATION OF METHOD DETECTION LIMITS
METHOD 525.2 Extended - BROAD SPECTRUM PESTICIDES

Tech: RD
Date: 05/02/98

Lab Name:	Environmental Health Laboratories	Extract. Vol:	1000 mL	Acq. File:	A032598A
Project:	Routine MDL	Disk:	47 mm	Data Directory:	AE\032598A
Column:	Restek XTI-5 30m x 0.25um ID	Cartridge:	n/a	Initial Cali Data:	0220F0AE
Extraction Technique:	LSE	Method:	525.2C	Instrument ID:	GC/MS - AE
Matrix Code:	RW	LSE Matrix:	C18		

				M-01-01A	M-01-01B	M-01-01C	M-01-01D	M-01-01E	M-01-01F	M-01-01G			
			Data File*										
			Analysis Date	03/25/98	03/25/98	03/26/98	03/26/98	03/27/98	03/27/98	03/27/98			
				Observed Recovery									
Method	CAS #	Parameter	Target	Rep - 1	Rep - 2	Rep - 3	Rep - 4	Rep - 5	Rep - 6	Rep - 7	Std. Deviation	Calc. MDL	Units
525.2	34256-82-1	Acetochlor	0.1	0.097	0.111	0.096	0.086	0.103	0.104	0.099	0.0078	0.025	ug/L
525.2	15972-60-8	Alachlor	0.1	0.124	0.119	0.128	0.120	0.129	0.121	0.127	0.0041	0.013	ug/L
525.2	1912-24-9	Atrazine	0.1	0.101	0.098	0.110	0.097	0.101	0.105	0.103	0.0044	0.014	ug/L
525.2	314-40-9	Bromacil	0.1	0.216	0.223	0.208	0.211	0.205	0.222	0.216	0.0068	0.021	ug/L
525.2	21725-46-2	Cyanazine	0.1	0.108	0.121	0.096	0.109	0.108	0.110	0.109	0.0073	0.023	ug/L
525.2	959-98-8	Endosulfan I	0.1	0.142	0.142	0.123	0.140	0.129	0.130	0.130	0.0075	0.024	ug/L
525.2	33213-65-9	Endosulfan II	0.1	0.104	0.119	0.090	0.129	0.086	0.100	0.094	0.0157	0.049	ug/L
525.2	1031-07-8	Endosulfan sulfate	0.1	0.096	0.097	0.095	0.110	0.099	0.092	0.128	0.0126	0.040	ug/L
525.2	22224-92-6	Fenamiphos	0.1	0.108	0.118	0.129	0.122	0.127	0.116	0.118	0.0071	0.022	ug/L
525.2	51218-45-2	Metolachlor	0.1	0.122	0.118	0.125	0.122	0.120	0.126	0.126	0.0031	0.010	ug/L
525.2	21087-64-9	Metribuzin	0.1	0.093	0.091	0.096	0.091	0.099	0.095	0.093	0.0029	0.009	ug/L
525.2	40487-42-1	Pendimethalin	0.1	0.095	0.099	0.096	0.102	0.103	0.096	0.094	0.0035	0.011	ug/L
525.2	1610-18-0	Prometon	0.1	0.084	0.069	0.068	0.070	0.057	0.046	0.066	0.0118	0.037	ug/L
525.2	1918-16-7	Propachlor	0.1	0.119	0.106	0.119	0.103	0.117	0.119	0.119	0.0070	0.022	ug/L
525.2	122-34-9	Simazine	0.1	0.122	0.113	0.103	0.096	0.102	0.109	0.111	0.0085	0.027	ug/L
525.2	13071-79-9	Terbufos	0.1	0.117	0.103	0.128	0.097	0.132	0.126	0.126	0.0135	0.042	ug/L
525.2	1582-09-8	Trifluralin	0.1	0.139	0.138	0.140	0.129	0.134	0.143	0.145	0.0054	0.017	ug/L

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments *Analyzed 05/02/98

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED - GC/MS TUNING AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)

Tech: AT
Date: 06/10/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060998A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060998A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS-AE
Column:	Restek XTI-5 30m x 0.25mm ID				

m/e	Ion Abundance Criteria	% Rel Abundance	Q
51	10 to 80% of base peak	37.70	
68	< 2% of Mass 69	0.00	
70	< 2% of Mass 69	0.00	
127	10 to 80% of base peak	32.48	
197	< 2% of Mass 198	0.00	
198	base peak or > 50 % of mass 442	100.00	
199	5 to 9% of mass 198	6.71	
275	10 to 60% of base peak	23.43	
365	> 1% of base peak	5.54	
441	Present and < mass 443	10.12	
442	base peak or > 50 % of mass 198	82.85	
443	15 to 24% of mass 442	19.28	

Tune Date: 06/09/98

Tune Time: 11:43

Hours Since Last Tune

Matrix	Code
Reagent Water	RW
Surface Water	SW
Drinking Water	DW
Ground Water	GW
Waste Water	WW
Sediment	SE
Soil	SO
Sludge	SL
Other Solvents	OS
TCLP Leachate	TC
Hazardous Waste	HW

Contamination Levels: L=Low M=Medium H=High

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Tune 1	TI-DFN1	06/09/98	11:43	OS	
2	SPCC	S-525A	06/09/98	12:16	OS	
3	Continuing Calibration Check A	C-2-18A	06/09/98	12:57	OS	
4	Laboratory Method Blank A	MB-525A	06/09/98	13:54	RW	
5	Laboratory Fortified Blank A	FB-525A	06/09/98	14:29	RW	
6	DK 11858	326387	06/09/98	15:03	GW	L
7	DK 11859	326392	06/09/98	15:37	GW	L
8	DK 11860	326397	06/09/98	16:12	GW	L
9	DK 11861	326402	06/09/98	16:46	GW	L
10	DK 11862	326407	06/09/98	17:21	GW	L
11	DK 11863	326412	06/09/98	17:55	GW	L
12	DK 11864	326417	06/09/98	18:30	GW	L
13	DK 11865	326422	06/09/98	19:04	GW	L
14	DK 11866	326427	06/09/98	19:39	GW	L
15	DK 11867	326432	06/09/98	20:13	GW	L
16	Continuing Calibration Check B	C-2-18B	06/09/98	21:23	OS	
17						
18						
19						
20						
21						
22						
23						
24						

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED LABORATORY PERFORMANCE CHECK

Tech: AT
Date: 06/10/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060998A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060998A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS-AE
Column:	Restek XTI-5 30m x 0.25mm ID	LPC Soln Lot #:	112597-112597		
Data File:	S-525A				

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
Bromacil	Chromatographic Performance	5.0	0.80 < PGF < 1.20 (a)	1.00	Pass	
Atrazine Prometon	Column Performance	0.15 0.30	Resolution > 0.7 (b)	1.17	Pass	
Endrin	Abundance of degradation to Endrin Aldehyde	2.0	< 10% endrin aldehyde	< 10 %	Pass	
4,4' - DDT	Abundance of degradation to 4,4' - DDD & 4,4' - DDE		< 10% 4,4'-DDD & 4,4'-DDE	< 10 %	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$PGF = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where W(1/2) is the peak width at half height and W(1/10) is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where t is the difference in elution times between the two peaks and W is the average peak width, at the baseline, of the two peaks.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED CONTINUING CALIBRATION CHECK

Tech: AT
Date: 06/10/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060998A
Contract: BAA 97-044
Task: 4A
Data Directory: AE\060998A
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0507F1AE
Method: 525.2
Instrument ID: GC/MS-AE
Column: Restek XTI-5 30m x 0.25mm ID
CCC Soln Lot#: Mix 1: W980505012-050698
Mix 2:
Mix 3:
CCC Data File: C-2-18A

Target Concentration: 2.0 ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	2.0	2.435	121.8	70 - 130	Pass	
Alachlor	2.0	2.278	113.9	70 - 130	Pass	
Atrazine	2.0	2.282	114.1	70 - 130	Pass	
Bromacil	2.0	2.222	111.1	70 - 130	Pass	
Cyanazine	2.0	2.429	121.5	70 - 130	Pass	
Diazinon	2.0	2.219	111.0	70 - 130	Pass	
Endosulfan I	2.0	2.261	113.1	70 - 130	Pass	
Endosulfan II	2.0	2.104	105.2	70 - 130	Pass	
Endosulfan sulfate	2.0	2.313	115.7	70 - 130	Pass	
Fenamiphos	2.0	2.556	127.8	70 - 130	Pass	
Metolachlor	2.0	2.206	110.3	70 - 130	Pass	
Metribuzin	2.0	2.305	115.3	70 - 130	Pass	
Pendimethalin	2.0	2.178	108.9	70 - 130	Pass	
Prometon	2.0	2.225	111.3	70 - 130	Pass	
Propachlor	2.0	2.315	115.8	70 - 130	Pass	
Simazine	2.0	2.311	115.6	70 - 130	Pass	
Terbufos	2.0	2.109	105.5	70 - 130	Pass	
Trifluralin	2.0	2.483	124.2	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED METHOD BLANK SUMMARY

Tech: AT
Date: 06/10/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060998A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060998A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS - AE
Column:	Restek XTI-5 30m x 0.25mm ID	Ext Date:	05/29/98	Ext Method:	Solid Phase Extraction
Blank File:	MB-525A				

This method blank applies to the following samples, ms, msd, blanks, standards.

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Continuing Calibration Check A	C-2-18A	06/09/98	12:57	OS	
2	Laboratory Method Blank A	MB-525A	06/09/98	13:54	RW	
3	Laboratory Fortified Blank A	FB-525A	06/09/98	14:29	RW	
4	DK 11858	326387	06/09/98	15:03	GW	L
5	DK 11859	326392	06/09/98	15:37	GW	L
6	DK 11860	326397	06/09/98	16:12	GW	L
7	DK 11861	326402	06/09/98	16:46	GW	L
8	DK 11862	326407	06/09/98	17:21	GW	L
9	DK 11863	326412	06/09/98	17:55	GW	L
10	DK 11864	326417	06/09/98	18:30	GW	L
11	DK 11865	326422	06/09/98	19:04	GW	L
12	DK 11866	326427	06/09/98	19:39	GW	L
13	DK 11867	326432	06/09/98	20:13	GW	L
14	Continuing Calibration Check B	C-2-18B	06/09/98	21:23	OS	
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/10/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: RW
Data File/Smpl ID: MB-525A
Data File/Dupl ID:
Sample Number/Description: Laboratory Method Blank A

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060998A
Data Directory: AE\060998A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: n/a
Date Analyzed: 06/09/98
Contm. Level:

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
LABORATORY FORTIFIED BLANK

Tech: AT
Date: 06/10/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060998A
Contract: BAA 97-044
Task: 4A
Data Directory: AE\060998A
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0507F1AE
Method: 525.2
Instrument ID: GC/MS - AE
Column: Restek XTI-5 30m x 0.25mm ID
LFB Soln Lot#: Mix 1: W980505012-050698
Mix 2:
Mix 3:
LFB Data File: FB-525A

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	1.0	1.160	116.0	70 - 130	Pass	
Alachlor	1.0	1.144	114.4	70 - 130	Pass	
Atrazine	1.0	1.130	113.0	70 - 130	Pass	
Bromacil	1.0	1.011	101.1	70 - 130	Pass	
Cyanazine	1.0	1.045	104.5	70 - 130	Pass	
Diazinon	1.0	1.072	107.2	70 - 130	Pass	
Endosulfan I	1.0	1.185	118.5	70 - 130	Pass	
Endosulfan II	1.0	1.100	110.0	70 - 130	Pass	
Endosulfan sulfate	1.0	1.241	124.1	70 - 130	Pass	
Fenamiphos	1.0	1.290	129.0	70 - 130	Pass	
Metolachlor	1.0	1.072	107.2	70 - 130	Pass	
Metribuzin	1.0	0.681	68.1	70 - 130	Fail	*
Pendimethalin	1.0	1.053	105.3	70 - 130	Pass	
Prometon	1.0	0.649	64.9	70 - 130	Fail	*
Propachlor	1.0	1.167	116.7	70 - 130	Pass	
Simazine	1.0	0.922	92.2	70 - 130	Pass	
Terbufos	1.0	1.141	114.1	70 - 130	Pass	
Trifluralin	1.0	1.201	120.1	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments: * These compound recoveries were outside the method 525.2 acceptance limits of 70-130% recovery, but were within the EHL statistically determined 95th percentile.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/10/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326387
Data File/Dupl ID:
Sample Number/Description: DK 11858

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060998A
Data Directory: AE\060998A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/09/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/10/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326392
Data File/Dupl ID:
Sample Number/Description: DK 11859

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060998A
Data Directory: AE\060998A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/09/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/10/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326397
Data File/Dupl ID:
Sample Number/Description: DK 11860

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060998A
Data Directory: AE\060998A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/09/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/10/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326402
Data File/Dupl ID:
Sample Number/Description: DK 11861

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060998A
Data Directory: AE\060998A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/09/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/10/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326407
Data File/Dupl ID:
Sample Number/Description: DK 11862

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060998A
Data Directory: AE\060998A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/09/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/10/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326412
Data File/Dupl ID:
Sample Number/Description: DK 11863

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060998A
Data Directory: AE\060998A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/09/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/10/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326417
Data File/Dupl ID:
Sample Number/Description: DK 11864

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060998A
Data Directory: AE\060998A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/09/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/10/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326422
Data File/Dupl ID:
Sample Number/Description: DK 11865

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060998A
Data Directory: AE\060998A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/09/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/10/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326427
Data File/Dupl ID:
Sample Number/Description: DK 11866

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060998A
Data Directory: AE\060998A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/09/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/10/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326432
Data File/Dupl ID:
Sample Number/Description: DK 11867

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A060998A
Data Directory: AE\060998A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/09/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED CONTINUING CALIBRATION CHECK

Tech: AT
Date: 06/10/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060998A
Contract: BAA 97-044
Task: 4A
Data Directory: AE\060998A
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0507F1AE
Method: 525.2
Instrument ID: GC/MS-AE
Column: Restek XTI-5 30m x 0.25mm ID
CCC Soln Lot#: Mix 1: W980505012-050698
Mix 2:
Mix 3:
CCC Data File: C-2-18B

Target Concentration: 2.0 ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	2.0	1.990	99.5	70 - 130	Pass	
Alachlor	2.0	2.642	132.1	70 - 130	Fail	!
Atrazine	2.0	2.196	109.8	70 - 130	Pass	
Bromacil	2.0	0.736	36.8	70 - 130	Fail	@
Cyanazine	2.0	0.617	30.9	70 - 130	Fail	^
Diazinon	2.0	2.547	127.4	70 - 130	Pass	
Endosulfan I	2.0	2.370	118.5	70 - 130	Pass	
Endosulfan II	2.0	2.353	117.7	70 - 130	Pass	
Endosulfan sulfate	2.0	1.867	93.4	70 - 130	Pass	
Fenamiphos	2.0	1.563	78.2	70 - 130	Pass	
Metolachlor	2.0	2.375	118.8	70 - 130	Pass	
Metribuzin	2.0	1.802	90.1	70 - 130	Pass	
Pendimethalin	2.0	2.374	118.7	70 - 130	Pass	
Prometon	2.0	1.606	80.3	70 - 130	Pass	
Propachlor	2.0	2.491	124.6	70 - 130	Pass	
Simazine	2.0	1.575	78.8	70 - 130	Pass	
Terbufos	2.0	2.527	126.4	70 - 130	Pass	
Trifluralin	2.0	2.794	139.7	70 - 130	Fail	!

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments: ^ Cyanazine has had historically poor recoveries by this methodology.
@ Bromacil recovery in the second CCC was low biased outside the acceptance limits of 70-130% recovery, but its recoveries in the first CCC and the LFB were acceptable.
! These compound recoveries were high biased outside the acceptance limits of 70-130% recovery, but these compounds were not detected in the LMB or the samples submitted for analysis.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED SURROGATE RECOVERY

Tech: AT
Date: 06/10/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060998A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\060998A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS - AE
Column:	Restek XTI-5 30m x 0.25mm ID	Surrogate Soln Lot #:	A6100287-052898		

	EPA Sample No. / Sample Description	Data File/ Sample ID	Surrogate Percent Recovery SS1	Q	SS2	Q	SS3	Q	SS4	Q	Total Out	Matrix Code	Contm. Level
1	Laboratory Method Blank A	MB-525A	106.6		112.1		104.7		96.6		0	RW	
2	Laboratory Fortified Blank A	FB-525A	101.7		106.1		109.7		98.1		0	RW	
3	DK 11858	326387	103.2		102.4		100.1		97.5		0	GW	L
4	DK 11859	326392	96.9		96.1		85.8		89.1		0	GW	L
5	DK 11860	326397	112.0		119.4		96.0		99.2		0	GW	L
6	DK 11861	326402	102.2		108.6		82.7		99.4		0	GW	L
7	DK 11862	326407	113.8		112.3		86.8		110.2		0	GW	L
8	DK 11863	326412	119.2		121.8		91.3		115.6		0	GW	L
9	DK 11864	326417	113.3		115.6		79.3		104.6		0	GW	L
10	DK 11865	326422	113.2		121.5		73.7		98.3		0	GW	L
11	DK 11866	326427	114.1		108.2		76.7		123.5		0	GW	L
12	DK 11867	326432	100.0		103.9		77.2		94.3		0	GW	L
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													

Surrogates			Target Conc.	% Recovery Limits
SS1	=	2,4,5,6-Tetrachloro-m-xylene	5.0	70 - 130
SS2	=	Pentachloronitrobenzene	5.0	70 - 130
SS3	=	4,4'-Dichlorobiphenyl	5.0	70 - 130
SS4	=	Triphenyl Phosphate	5.0	70 - 130

% Recovery = (Calculated Concentration / Target Concentration) *100

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
INTERNAL STANDARD AREA SUMMARY

Tech: AT
Date: 06/10/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
IS Soln Lot#: A7090334-052198

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2

Acq. File: A060998A
Data Directory: AE\060998A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE

	IS1 Area	IS1 RT	IS2 Area	IS2 RT
12 Hour CCC Standard	1433049	17:35		
CCC Upper Limit	1862964	18:05		
CCC Lower Limit	1003134	17:05		
Init Cali Lower Limit	2625627	17:28		

	Sample No. / Sample Description	Data File / Sample ID	IS1 Area	Q	IS1 RT	Q	IS2 Area	Q	IS2 RT	Q	Matrix Code	Contm. Level
1	Laboratory Method Blank A	MB-525A	1549879		17:35						RW	
2	Laboratory Fortified Blank A	FB-525A	1403925		17:35						RW	
3	DK 11858	326387	1261767		17:35						GW	L
4	DK 11859	326392	1372271		17:37						GW	L
5	DK 11860	326397	1283881		17:37						GW	L
6	DK 11861	326402	1347523		17:37						GW	L
7	DK 11862	326407	1191785		17:38						GW	L
8	DK 11863	326412	1043729		17:38						GW	L
9	DK 11864	326417	1229859		17:38						GW	L
10	DK 11865	326422	932606	*	17:38						GW	L
11	DK 11866	326427	984384	*	17:38						GW	L
12	DK 11867	326432	1192079		17:38						GW	L
13	Continuing Calibration Check B	C-2-18B	921277	*	17:37						OS	
14												
15												
16												
17												
18												
19												
20												

IS1 = Pyrene-d10
IS2 = n/a

CCC Upper / Lower Limit: Area: 12 hr CCC std IS area +/- 30%; RT: 12 hr CCC std IS RT +/- 30 seconds
Init Cali Lower Limit: Area: Init Cali IS area - 50%; RT: Init Cali IS RT - 30 seconds
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: * These IS areas are low biased, but this data is acceptable based on the surrogate standard recoveries.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED INITIAL CALIBRATION

Tech: AT
Date: 06/10/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060998A
Contract: BAA 97-044
Task: 4A
Data Directory: AE\060998A
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0507F1AE
Method: 525.2
Instrument ID: GC/MS - AE
Column: Restek XTI-5 30m x 0.25mm ID
Mix 2:
Mix 3:
IC Soln Lot#: Mix 1: W980505012-050698

Data File / Sample ID:	I005-18A	I-01-18A	I-05-18A	I-1-18A	I-2-18A	I-5-18A	I-10-18A	I-25-18A	I-50-18A	I-100-18A				
Concentration (ug/L):	0.05	0.1	0.5	1	2	5	10	25	50	100	Avg	%	Corr	
Compound	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	RSD	Coeff	Q
Acetochlor	0.376	0.165	0.216	0.231	0.257	0.282	0.288	0.283	----	----	0.262	23.6	1.0000	
Alachlor	1.968	0.788	0.875	0.948	1.017	1.140	1.133	1.120	----	----	1.124	32.5	0.9999	*
Atrazine	0.505	0.201	0.283	0.307	0.339	0.338	0.314	----	----	----	0.327	28.0	0.9992	
Bromacil	----	0.353	0.296	0.521	0.662	0.787	0.752	0.768	----	----	0.591	34.5	0.9999	*
Cyanazine	0.360	0.151	0.172	0.229	0.263	0.302	0.308	0.327	----	----	0.264	28.3	0.9997	
Diazinon	----	0.965	0.820	0.755	0.848	0.801	0.758	----	----	----	0.824	9.4	0.9994	
Endosulfan I	0.493	0.178	0.180	0.214	0.195	0.226	0.214	0.207	----	----	0.238	43.7	1.0000	*
Endosulfan II	----	0.184	0.211	0.253	0.222	0.254	0.244	0.245	----	----	0.230	11.3	1.0000	
Endosulfan sulfate	0.405	0.171	0.148	0.182	0.176	0.204	0.193	0.186	----	----	0.208	39.0	1.0000	*
Fenamiphos	0.557	0.243	0.303	0.444	0.526	0.616	0.619	0.619	----	----	0.491	30.1	1.0000	*
Metolachlor	2.985	1.293	1.728	2.012	2.168	2.338	2.304	2.167	----	----	2.124	23.1	1.0000	
Metribuzin	0.658	0.299	0.344	0.416	0.488	0.538	0.537	0.546	----	----	0.478	24.7	1.0000	
Pendimethalin	0.588	0.340	0.369	0.419	0.447	0.469	0.466	0.459	----	----	0.445	16.8	1.0000	
Prometon	----	0.484	0.670	0.683	0.806	0.819	0.741	----	----	----	0.701	17.5	0.9980	
Propachlor	0.941	0.434	0.507	0.573	0.607	0.674	0.650	0.677	----	----	0.633	23.8	1.0000	
Simazine	0.395	0.149	0.147	0.181	0.232	0.235	0.241	0.232	----	----	0.227	34.7	1.0000	*
Terbufos	----	0.921	0.930	1.033	1.078	1.186	1.184	1.251	----	----	1.083	12.0	1.0000	
Trifluralin	1.058	0.697	0.709	0.771	0.787	0.956	0.911	1.043	----	----	0.867	16.7	0.9990	

Avg RF = Average response factor
Max %RSD = 30% for a linear fit
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

DETERMINATION OF METHOD DETECTION LIMITS
METHOD 525.2 Extended - BROAD SPECTRUM PESTICIDES

Tech: RD
Date: 05/02/98

Lab Name:	Environmental Health Laboratories	Extract. Vol:	1000 mL	Acq. File:	A032598A
Project:	Routine MDL	Disk:	47 mm	Data Directory:	AE\032598A
Column:	Restek XTI-5 30m x 0.25um ID	Cartridge:	n/a	Initial Cali Data:	0220F0AE
Extraction Technique:	LSE	Method:	525.2C	Instrument ID:	GC/MS - AE
Matrix Code:	RW	LSE Matrix:	C18		

			Data File*	M-01-01A	M-01-01B	M-01-01C	M-01-01D	M-01-01E	M-01-01F	M-01-01G			
			Analysis Date	03/25/98	03/25/98	03/26/98	03/26/98	03/27/98	03/27/98	03/27/98			
				Observed Recovery									
Method	CAS #	Parameter	Target	Rep - 1	Rep - 2	Rep - 3	Rep - 4	Rep -5	Rep - 6	Rep - 7	Std. Deviation	Calc. MDL	Units
525.2	34256-82-1	Acetochlor	0.1	0.097	0.111	0.096	0.086	0.103	0.104	0.099	0.0078	0.025	ug/L
525.2	15972-60-8	Alachlor	0.1	0.124	0.119	0.128	0.120	0.129	0.121	0.127	0.0041	0.013	ug/L
525.2	1912-24-9	Atrazine	0.1	0.101	0.098	0.110	0.097	0.101	0.105	0.103	0.0044	0.014	ug/L
525.2	314-40-9	Bromacil	0.1	0.216	0.223	0.208	0.211	0.205	0.222	0.216	0.0068	0.021	ug/L
525.2	21725-46-2	Cyanazine	0.1	0.108	0.121	0.096	0.109	0.108	0.110	0.109	0.0073	0.023	ug/L
525.2	959-98-8	Endosulfan I	0.1	0.142	0.142	0.123	0.140	0.129	0.130	0.130	0.0075	0.024	ug/L
525.2	33213-65-9	Endosulfan II	0.1	0.104	0.119	0.090	0.129	0.086	0.100	0.094	0.0157	0.049	ug/L
525.2	1031-07-8	Endosulfan sulfate	0.1	0.096	0.097	0.095	0.110	0.099	0.092	0.128	0.0126	0.040	ug/L
525.2	22224-92-6	Fenamiphos	0.1	0.108	0.118	0.129	0.122	0.127	0.116	0.118	0.0071	0.022	ug/L
525.2	51218-45-2	Metolachlor	0.1	0.122	0.118	0.125	0.122	0.120	0.126	0.126	0.0031	0.010	ug/L
525.2	21087-64-9	Metribuzin	0.1	0.093	0.091	0.096	0.091	0.099	0.095	0.093	0.0029	0.009	ug/L
525.2	40487-42-1	Pendimethalin	0.1	0.095	0.099	0.096	0.102	0.103	0.096	0.094	0.0035	0.011	ug/L
525.2	1610-18-0	Prometon	0.1	0.084	0.069	0.068	0.070	0.057	0.046	0.066	0.0118	0.037	ug/L
525.2	1918-16-7	Propachlor	0.1	0.119	0.106	0.119	0.103	0.117	0.119	0.119	0.0070	0.022	ug/L
525.2	122-34-9	Simazine	0.1	0.122	0.113	0.103	0.096	0.102	0.109	0.111	0.0085	0.027	ug/L
525.2	13071-79-9	Terbufos	0.1	0.117	0.103	0.128	0.097	0.132	0.126	0.126	0.0135	0.042	ug/L
525.2	1582-09-8	Trifluralin	0.1	0.139	0.138	0.140	0.129	0.134	0.143	0.145	0.0054	0.017	ug/L

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments *Analyzed 05/02/98

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED - GC/MS TUNING AND MASS CALIBRATION - Decafluorotriphenylphosphine (DFTPP)

Tech: AT
Date: 06/15/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A061198A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\061198A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS-AE
Column:	Restek XTI-5 30m x 0.25mm ID				

m/e	Ion Abundance Criteria	% Rel Abundance	Q
51	10 to 80% of base peak	28.71	
68	< 2% of Mass 69	0.00	
70	< 2% of Mass 69	0.00	
127	10 to 80% of base peak	27.73	
197	< 2% of Mass 198	0.00	
198	base peak or > 50 % of mass 442	100.00	
199	5 to 9% of mass 198	6.55	
275	10 to 60% of base peak	13.43	
365	> 1% of base peak	3.60	
441	Present and < mass 443	9.93	
442	base peak or > 50 % of mass 198	57.53	
443	15 to 24% of mass 442	23.34	

Tune Date: 06/11/98

Tune Time: 13:30

Hours Since Last Tune

Matrix	Code
Reagent Water	RW
Surface Water	SW
Drinking Water	DW
Ground Water	GW
Waste Water	WW
Sediment	SE
Soil	SO
Sludge	SL
Other Solvents	OS
TCLP Leachate	TC
Hazardous Waste	HW

Contamination Levels: L=Low M=Medium H=High

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Tune 1	TI-DFN1	06/11/98	13:30	OS	
2	SPCC	S-525A	06/11/98	13:53	OS	
3	Continuing Calibration Check A	C-5-18A	06/11/98	14:35	OS	
4	Laboratory Method Blank A	MB-525A	06/11/98	15:32	RW	
5	Laboratory Fortified Blank A	FB-525A	06/11/98	16:07	RW	
6	DK 10967	326437	06/11/98	16:42	GW	L
7	DK 10968	326442	06/11/98	17:17	GW	L
8	Continuing Calibration Check B	C-5-18B	06/11/98	23:05	OS	
9						
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12						
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Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED LABORATORY PERFORMANCE CHECK

Tech: AT
Date: 06/15/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A061198A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\061198A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS-AE
Column:	Restek XTI-5 30m x 0.25mm ID	LPC Soln Lot #:	112597-112597		
Data File:	S-525A				

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
Bromacil	Chromatographic Performance	5.0	0.80 < PGF < 1.20 (a)	0.96	Pass	
Atrazine Prometon	Column Performance	0.15 0.30	Resolution > 0.7 (b)	1.12	Pass	
Endrin	Abundance of degradation to Endrin Aldehyde	2.0	< 10% endrin aldehyde	< 10 %	Pass	
4,4' - DDT	Abundance of degradation to 4,4' - DDD & 4,4' - DDE		< 10% 4,4'-DDD & 4,4'-DDE	< 10 %	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$PGF = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where W(1/2) is the peak width at half height and W(1/10) is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where t is the difference in elution times between the two peaks and W is the average peak width, at the baseline, of the two peaks.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED CONTINUING CALIBRATION CHECK

Tech: AT
Date: 06/15/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A061198A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\061198A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS-AE
Column:	Restek XTI-5 30m x 0.25mm ID				
CCC Soln Lot#:	Mix 1: W980505012-050698	Mix 2:		Mix 3:	
CCC Data File:	C-5-18A				

Target Concentration: 5.0 ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	5.0	5.035	100.7	70 - 130	Pass	
Alachlor	5.0	4.780	95.6	70 - 130	Pass	
Atrazine	5.0	5.008	100.2	70 - 130	Pass	
Bromacil	5.0	4.669	93.4	70 - 130	Pass	
Cyanazine	5.0	4.830	96.6	70 - 130	Pass	
Diazinon	5.0	4.738	94.8	70 - 130	Pass	
Endosulfan I	5.0	4.485	89.7	70 - 130	Pass	
Endosulfan II	5.0	4.421	88.4	70 - 130	Pass	
Endosulfan sulfate	5.0	4.411	88.2	70 - 130	Pass	
Fenamiphos	5.0	4.984	99.7	70 - 130	Pass	
Metolachlor	5.0	4.696	93.9	70 - 130	Pass	
Metribuzin	5.0	5.016	100.3	70 - 130	Pass	
Pendimethalin	5.0	4.625	92.5	70 - 130	Pass	
Prometon	5.0	4.382	87.6	70 - 130	Pass	
Propachlor	5.0	4.660	93.2	70 - 130	Pass	
Simazine	5.0	4.977	99.5	70 - 130	Pass	
Terbufos	5.0	4.754	95.1	70 - 130	Pass	
Trifluralin	5.0	4.681	93.6	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED METHOD BLANK SUMMARY

Tech: AT
Date: 06/15/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A061198A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\061198A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS - AE
Column:	Restek XTI-5 30m x 0.25mm ID	Ext Date:	06/03/98	Ext Method:	Solid Phase Extraction
Blank File:	MB-525A				

This method blank applies to the following samples, ms, msd, blanks, standards.

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Continuing Calibration Check A	C-5-18A	06/11/98	14:35	OS	
2	Laboratory Method Blank A	MB-525A	06/11/98	15:32	RW	
3	Laboratory Fortified Blank A	FB-525A	06/11/98	16:07	RW	
4	DK 10967	326437	06/11/98	16:42	GW	L
5	DK 10968	326442	06/11/98	17:17	GW	L
6	Continuing Calibration Check B	C-5-18B	06/11/98	23:05	OS	
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24						

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/12/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: RW
Data File/Smpl ID: MB-525A
Data File/Dupl ID:
Sample Number/Description: Laboratory Method Blank A

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A061198A
Data Directory: AE\061198A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: n/a
Date Analyzed: 06/11/98
Contm. Level:

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
LABORATORY FORTIFIED BLANK

Tech: AT
Date: 06/15/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A061198A
Contract: BAA 97-044
Task: 4A
Data Directory: AE\061198A
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0507F1AE
Method: 525.2
Instrument ID: GC/MS - AE
Column: Restek XTI-5 30m x 0.25mm ID
LFB Soln Lot#: Mix 1: W980505012-050698
Mix 2:
Mix 3:
LFB Data File: FB-525A

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	1.0	1.083	108.3	70 - 130	Pass	
Alachlor	1.0	1.062	106.2	70 - 130	Pass	
Atrazine	1.0	1.103	110.3	70 - 130	Pass	
Bromacil	1.0	0.919	91.9	70 - 130	Pass	
Cyanazine	1.0	1.055	105.5	70 - 130	Pass	
Diazinon	1.0	0.809	80.9	70 - 130	Pass	
Endosulfan I	1.0	1.059	105.9	70 - 130	Pass	
Endosulfan II	1.0	0.987	98.7	70 - 130	Pass	
Endosulfan sulfate	1.0	1.139	113.9	70 - 130	Pass	
Fenamiphos	1.0	1.180	118.0	70 - 130	Pass	
Metolachlor	1.0	1.074	107.4	70 - 130	Pass	
Metribuzin	1.0	0.612	61.2	70 - 130	Fail	*
Pendimethalin	1.0	1.049	104.9	70 - 130	Pass	
Prometon	1.0	0.542	54.2	70 - 130	Fail	*
Propachlor	1.0	1.124	112.4	70 - 130	Pass	
Simazine	1.0	0.872	87.2	70 - 130	Pass	
Terbufos	1.0	1.170	117.0	70 - 130	Pass	
Trifluralin	1.0	1.135	113.5	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments: * These compound recoveries were outside the method 525.2 acceptance limits of 70-130% recovery, but were within the EHL statistically determined 95th percentile.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/15/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326437
Data File/Dupl ID:
Sample Number/Description: DK 10967

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A061198A
Data Directory: AE\061198A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/11/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED DATA SHEET

Tech: AT
Date: 06/15/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Restek XTI-5 30m x 0.25mm ID
Matrix Code: GW
Data File/Smpl ID: 326442
Data File/Dupl ID:
Sample Number/Description: DK 10968

Lab ID: unknown
Task: 4A
Case: n/a
Method: 525.2
Smpl Vol: 1000 ml
Dil. Factor: 1
Dupl Type:

Acq. File: A061198A
Data Directory: AE\061198A
Initial Cali File: 0507F1AE
Instrument ID: GC/MS - AE
Date Received: 05/26/98
Date Analyzed: 06/11/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
34256-82-1	Acetochlor	< 0.1	ug/L			
15972-60-8	Alachlor	< 0.1	ug/L			
1912-24-9	Atrazine	< 0.1	ug/L			
314-40-9	Bromacil	< 0.1	ug/L			
21725-46-2	Cyanazine	< 0.1	ug/L			
333-41-5	Diazinon	< 0.1	ug/L			
959-98-8	Endosulfan I	< 0.1	ug/L			
33213-65-9	Endosulfan II	< 0.1	ug/L			
1031-07-8	Endosulfan sulfate	< 0.1	ug/L			
22224-92-6	Fenamiphos	< 0.1	ug/L			
51218-45-2	Metolachlor	< 0.1	ug/L			
21087-64-9	Metribuzin	< 0.1	ug/L			
40487-42-1	Pendimethalin	< 0.1	ug/L			
1610-18-0	Prometon	< 0.1	ug/L			
1918-16-7	Propachlor	< 0.1	ug/L			
122-34-9	Simazine	< 0.07	ug/L			
13071-79-9	Terbufos	< 0.1	ug/L			
1582-09-8	Trifluralin	< 0.1	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED CONTINUING CALIBRATION CHECK

Tech: AT
Date: 06/15/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A061198A
Contract: BAA 97-044
Task: 4A
Data Directory: AE\061198A
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: 0507F1AE
Method: 525.2
Instrument ID: GC/MS-AE
Column: Restek XTI-5 30m x 0.25mm ID
CCC Soln Lot#: Mix 1: W980505012-050698
Mix 2:
Mix 3:
CCC Data File: C-5-18B

Target Concentration: 5.0 ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Acetochlor	5.0	4.397	87.9	70 - 130	Pass	
Alachlor	5.0	4.649	93.0	70 - 130	Pass	
Atrazine	5.0	5.013	100.3	70 - 130	Pass	
Bromacil	5.0	4.328	86.6	70 - 130	Pass	
Cyanazine	5.0	0.661	13.2	70 - 130	Fail	^
Diazinon	5.0	5.669	113.4	70 - 130	Pass	
Endosulfan I	5.0	5.781	115.6	70 - 130	Pass	
Endosulfan II	5.0	4.520	90.4	70 - 130	Pass	
Endosulfan sulfate	5.0	3.434	68.7	70 - 130	Fail	@
Fenamiphos	5.0	4.844	96.9	70 - 130	Pass	
Metolachlor	5.0	3.970	79.4	70 - 130	Pass	
Metribuzin	5.0	4.042	80.8	70 - 130	Pass	
Pendimethalin	5.0	4.658	93.2	70 - 130	Pass	
Prometon	5.0	3.709	74.2	70 - 130	Pass	
Propachlor	5.0	5.107	102.1	70 - 130	Pass	
Simazine	5.0	4.393	87.9	70 - 130	Pass	
Terbufos	5.0	5.197	103.9	70 - 130	Pass	
Trifluralin	5.0	5.354	107.1	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments: ^ Cyanazine has had historically poor recoveries by this methodology.
@ Endosulfan sulfate recovery in the second CCC was low biased outside the acceptance limits of 70-130% recovery, but its recoveries in the first CCC and the LFB were acceptable.

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED SURROGATE RECOVERY

Tech: AT
Date: 06/15/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A061198A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\061198A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS - AE
Column:	Restek XTI-5 30m x 0.25mm ID	Surrogate Soln Lot #:	A6100287-052898		

	EPA Sample No. / Sample Description	Data File/ Sample ID	Surrogate Percent Recovery SS1	Q	SS2	Q	SS3	Q	SS4	Q	Total Out	Matrix Code	Contm Level
1	Laboratory Method Blank A	MB-525A	101.8		95.1		90.8		86.6		0	RW	
2	Laboratory Fortified Blank A	FB-525A	89.6		101.4		96.9		93.5		0	RW	
3	DK 10967	326437	99.7		107.0		104.9		96.2		0	GW	L
4	DK 10968	326442	100.3		104.7		97.2		97.0		0	GW	L
5													
6													
7													
8													
9													
10													
11													
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26													
27													
28													

Surrogates		Target Conc.	% Recovery Limits
SS1	= 2,4,5,6-Tetrachloro-m-xylene	5.0	70 - 130
SS2	= Pentachloronitrobenzene	5.0	70 - 130
SS3	= 4,4'-Dichlorobiphenyl	5.0	70 - 130
SS4	= Triphenyl Phosphate	5.0	70 - 130

% Recovery = (Calculated Concentration / Target Concentration) *100

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED
INTERNAL STANDARD AREA SUMMARY

Tech: AT
Date: 06/15/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A061198A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\061198A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS - AE
Column:	Restek XTI-5 30m x 0.25mm ID				
IS Soln Lot#:	A7090314-052898				

	IS1 Area	IS1 RT	IS2 Area	IS2 RT
12 Hour CCC Standard	1402903	17:34		
CCC Upper Limit	1823774	18:04		
CCC Lower Limit	982032	17:04		
Init Cali Lower Limit	2625627	17:28		

	Sample No. / Sample Description	Data File / Sample ID	IS1 Area	Q	IS1 RT	Q	IS2 Area	Q	IS2 RT	Q	Matrix Code	Contm. Level
1	Laboratory Method Blank A	MB-525A	1060854		17:34						RW	
2	Laboratory Fortified Blank A	FB-525A	1219886		17:35						RW	
3	DK 10967	326437	1367225		17:35						GW	L
4	DK 10968	326442	1170130		17:35						GW	L
5	Continuing Calibration Check B	C-5-18B	1244794		17:38						OS	
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

IS1 = Pyrene-d10
IS2 = n/a

CCC Upper / Lower Limit: Area: 12 hr CCC std IS area +/- 30%; RT: 12 hr CCC std IS RT +/- 30 seconds
Init Cali Lower Limit: Area: Init Cali IS area - 50%; RT: Init Cali IS RT - 30 seconds
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

PESTICIDES & INDUSTRIAL CHEMICALS EXTENDED INITIAL CALIBRATION

Tech: AT
Date: 06/15/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A061198A
Contract:	BAA 97-044	Task:	4A	Data Directory:	AE\061198A
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	0507F1AE
		Method:	525.2	Instrument ID:	GC/MS - AE
Column:	Restek XTI-5 30m x 0.25mm ID	Mix 2:		Mix 3:	

IC Soln Lot#: Mix 1: W980505012-050698

Data File / Sample ID:	I005-18A	I-01-18A	I-05-18A	I-1-18A	I-2-18A	I-5-18A	I-10-18A	I-25-18A	I-50-18A	I-100-18A				
Concentration (ug/L):	0.05	0.1	0.5	1	2	5	10	25	50	100	Avg	%	Corr	
Compound	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	Rf	RSD	Coeff	Q
Acetochlor	0.376	0.165	0.216	0.231	0.257	0.282	0.288	0.283	----	----	0.262	23.6	1.0000	
Alachlor	1.968	0.788	0.875	0.948	1.017	1.140	1.133	1.120	----	----	1.124	32.5	0.9999	*
Atrazine	0.505	0.201	0.283	0.307	0.339	0.338	0.314	----	----	----	0.327	28.0	0.9992	
Bromacil	----	0.353	0.296	0.521	0.662	0.787	0.752	0.768	----	----	0.591	34.5	0.9999	*
Cyanazine	0.360	0.151	0.172	0.229	0.263	0.302	0.308	0.327	----	----	0.264	28.3	0.9997	
Diazinon	----	0.965	0.820	0.755	0.848	0.801	0.758	----	----	----	0.824	9.4	0.9994	
Endosulfan I	0.493	0.178	0.180	0.214	0.195	0.226	0.214	0.207	----	----	0.238	43.7	1.0000	*
Endosulfan II	----	0.184	0.211	0.253	0.222	0.254	0.244	0.245	----	----	0.230	11.3	1.0000	
Endosulfan sulfate	0.405	0.171	0.148	0.182	0.176	0.204	0.193	0.186	----	----	0.208	39.0	1.0000	*
Fenamiphos	0.557	0.243	0.303	0.444	0.526	0.616	0.619	0.619	----	----	0.491	30.1	1.0000	*
Metolachlor	2.985	1.293	1.728	2.012	2.168	2.338	2.304	2.167	----	----	2.124	23.1	1.0000	
Metribuzin	0.658	0.299	0.344	0.416	0.488	0.538	0.537	0.546	----	----	0.478	24.7	1.0000	
Pendimethalin	0.588	0.340	0.369	0.419	0.447	0.469	0.466	0.459	----	----	0.445	16.8	1.0000	
Prometon	----	0.484	0.670	0.683	0.806	0.819	0.741	----	----	----	0.701	17.5	0.9980	
Propachlor	0.941	0.434	0.507	0.573	0.607	0.674	0.650	0.677	----	----	0.633	23.8	1.0000	
Simazine	0.395	0.149	0.147	0.181	0.232	0.235	0.241	0.232	----	----	0.227	34.7	1.0000	*
Terbufos	----	0.921	0.930	1.033	1.078	1.186	1.184	1.251	----	----	1.083	12.0	1.0000	
Trifluralin	1.058	0.697	0.709	0.771	0.787	0.956	0.911	1.043	----	----	0.867	16.7	0.9990	

Avg RF = Average response factor

Max %RSD = 30% for a linear fit

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments:

DETERMINATION OF METHOD DETECTION LIMITS
METHOD 525.2 Extended - BROAD SPECTRUM PESTICIDES

Tech: RD
Date: 05/02/98

Lab Name:	Environmental Health Laboratories	Extract. Vol:	1000 mL	Acq. File:	A032598A
Project:	Routine MDL	Disk:	47 mm	Data Directory:	AE\032598A
Column:	Restek XTI-5 30m x 0.25um ID	Cartridge:	n/a	Initial Cali Data:	0220F0AE
Extraction Technique:	LSE	Method:	525.2C	Instrument ID:	GC/MS - AE
Matrix Code:	RW	LSE Matrix:	C18		

			Data File*	M-01-01A	M-01-01B	M-01-01C	M-01-01D	M-01-01E	M-01-01F	M-01-01G			
			Analysis Date	03/25/98	03/25/98	03/26/98	03/26/98	03/27/98	03/27/98	03/27/98			
				Observed Recovery							Std.	Calc.	
Method	CAS #	Parameter	Target	Rep - 1	Rep - 2	Rep - 3	Rep - 4	Rep -5	Rep - 6	Rep - 7	Deviation	MDL	Units
525.2	34256-82-1	Acetochlor	0.1	0.097	0.111	0.096	0.086	0.103	0.104	0.099	0.0078	0.025	ug/L
525.2	15972-60-8	Alachlor	0.1	0.124	0.119	0.128	0.120	0.129	0.121	0.127	0.0041	0.013	ug/L
525.2	1912-24-9	Atrazine	0.1	0.101	0.098	0.110	0.097	0.101	0.105	0.103	0.0044	0.014	ug/L
525.2	314-40-9	Bromacil	0.1	0.216	0.223	0.208	0.211	0.205	0.222	0.216	0.0068	0.021	ug/L
525.2	21725-46-2	Cyanazine	0.1	0.108	0.121	0.096	0.109	0.108	0.110	0.109	0.0073	0.023	ug/L
525.2	959-98-8	Endosulfan I	0.1	0.142	0.142	0.123	0.140	0.129	0.130	0.130	0.0075	0.024	ug/L
525.2	33213-65-9	Endosulfan II	0.1	0.104	0.119	0.090	0.129	0.086	0.100	0.094	0.0157	0.049	ug/L
525.2	1031-07-8	Endosulfan sulfate	0.1	0.096	0.097	0.095	0.110	0.099	0.092	0.128	0.0126	0.040	ug/L
525.2	22224-92-6	Fenamiphos	0.1	0.108	0.118	0.129	0.122	0.127	0.116	0.118	0.0071	0.022	ug/L
525.2	51218-45-2	Metolachlor	0.1	0.122	0.118	0.125	0.122	0.120	0.126	0.126	0.0031	0.010	ug/L
525.2	21087-64-9	Metribuzin	0.1	0.093	0.091	0.096	0.091	0.099	0.095	0.093	0.0029	0.009	ug/L
525.2	40487-42-1	Pendimethalin	0.1	0.095	0.099	0.096	0.102	0.103	0.096	0.094	0.0035	0.011	ug/L
525.2	1610-18-0	Prometon	0.1	0.084	0.069	0.068	0.070	0.057	0.046	0.066	0.0118	0.037	ug/L
525.2	1918-16-7	Propachlor	0.1	0.119	0.106	0.119	0.103	0.117	0.119	0.119	0.0070	0.022	ug/L
525.2	122-34-9	Simazine	0.1	0.122	0.113	0.103	0.096	0.102	0.109	0.111	0.0085	0.027	ug/L
525.2	13071-79-9	Terbufos	0.1	0.117	0.103	0.128	0.097	0.132	0.126	0.126	0.0135	0.042	ug/L
525.2	1582-09-8	Trifluralin	0.1	0.139	0.138	0.140	0.129	0.134	0.143	0.145	0.0054	0.017	ug/L

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments *Analyzed 05/02/98

CARBAMATE PESTICIDES
METHOD BLANK SUMMARY

Tech: CM
Date: 06/08/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060598
Contract:	BAA 97-044	Task:	4A	Data Directory:	Q\A060598
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	Q\A060598
		Method:	531.1	Instrument ID:	HPLC - Q
Column:	Supelcosil LC-18-DB 15cm x 4.6mm	Ext Date:	06/04/98	Ext Method:	Filtration
Blank File:	Q0604005				

This method blank applies to the following samples, ms, msd, blanks, standards.

	Sample No. / Sample Description	Data File / Sample ID	Date Analyzed	Time Analyzed	Matrix Code	Contm. Level
1	Laboratory Performance Check	Q0604002	06/05/98	18:30	RW	
2	Single Point Calibration	Q0604003	06/05/98	19:06	RW	
3	Laboratory Fortified Blank	Q0604004	06/05/98	19:43	RW	
4	Laboratory Method Blank	Q0604005	06/05/98	20:19	RW	
5	DK 11742 / EHL 326309	Q0604006	06/05/98	20:55	GW	L
6	DK 11749 / EHL 326344	Q0604007	06/05/98	21:32	GW	L
7	DK 11861 / EHL 326404	Q0604008	06/05/98	22:08	GW	L
8	Continuing Calibration Check	Q0604018	06/06/98	04:11	RW	
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						

Comments:

CARBAMATE PESTICIDES
LABORATORY PERFORMANCE CHECK

Tech: CM
Date: 06/08/98

Lab Name:	Environmental Health Laboratories	Lab ID:	unknown	Acq. File:	A060598
Contract:	BAA 97-044	Task:	4A	Data Directory:	Q\A060598
Project:	DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968	Case:	n/a	Initial Cali File:	Q\A060598
		Method:	531.1	Instrument ID:	HPLC - Q
Column:	Supelcosil LC-18-DB 15cm x 4.6mm ID	LPC Soln Lot #:	H-0149-032598		
Data File:	Q0604002				

Compound	Test	Conc. ug/ml	Requirements	Result	Pass/Fail	Q
3-Hydroxycarbofuran	Sensitivity	2.0	Detection of analyte: S/N > 3	> 3	Pass	
Aldicarb Sulfoxide	Chromatographic Performance	100	0.90 < PGF < 1.10 (a)	0.915	Pass	
Methiocarb		20				
4-Bromo-3,5-dimethyl phenyl N-methylcarbamate	Column Performance	10	Resolution > 1.0 (b)	1.09	Pass	

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

(a) PGF - peak Gaussian factor. Calculated using the equation:

$$PGF = \frac{1.83 \times W(1/2)}{W(1/10)}$$

where W(1/2) is the peak width at half height and W(1/10) is the peak width at tenth height.

(b) Resolution between the two peaks as defined by the equation:

$$R = \frac{t}{w}$$

where t is the difference in elution times between the two peaks and W is the average peak width, at the baseline, of the two peaks.

Comments: _____

CARBAMATE PESTICIDES
SINGLE POINT CALIBRATION

Tech: CM
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060598
Contract: BAA 97-044
Task: 4A
Data Directory: Q\A060598
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: Q\A060598
Method: 531.1
Instrument ID: HPLC - Q
Column: Supelcosil LC-18-DB 15cm x 4.6mm
Mix 2:
Mix 3:
IC Soln Lot#: Mix 1: L-0804-021998
IC Data File: Q0604003

All concentrations are in ug/L

Compound	Target Conc	Rt		Q
Aldicarb	10.0	0.356		
Carbofuran	10.0	0.504		
Methiocarb	10.0	0.847		
Methomyl	10.0	0.243		
Oxamyl	10.0	0.377		

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CARBAMATE PESTICIDES
LABORATORY FORTIFIED BLANK

Tech: CM
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060598
Contract: BAA 97-044
Task: 4A
Data Directory: Q\A060598
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: Q\A060598
Method: 531.1
Instrument ID: HPLC - Q
Column: Supelcosil LC-18-DB 15cm x 4.6mm ID
LFB Soln Lot#: Mix 1: L-0804-021998
Mix 2:
Mix 3:
LFB Data File: Q0604004

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Aldicarb	10.0	9.342	93.4	70 - 130	Pass	
Carbofuran	10.0	9.587	95.9	70 - 130	Pass	
Methiocarb	10.0	9.077	90.8	70 - 130	Pass	
Methomyl	10.0	9.519	95.2	70 - 130	Pass	
Oxamyl	10.0	9.439	94.4	70 - 130	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CARBAMATE PESTICIDES DATA SHEET

Tech: CM
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Supelcosil LC-18-DB 15cm x 4.6mm
Matrix Code: RW
Data File/Smpl ID: Q0604005
Data File/Dupl ID:
Sample Number/Description: Laboratory Method Blank

Lab ID: unknown
Task: 4A
Case: n/a
Method: 531.1
Smpl Vol: 500 ul
Dil. Factor: 1
Dupl Type:

Acq. File: A060598
Data Directory: Q\A060598
Initial Cali File: Q\A060598
Instrument ID: HPLC - Q
Date Received: n/a
Date Analyzed: 06/05/98
Contm. Level:

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
116-06-3	Aldicarb	< 0.5	ug/L			
1563-66-2	Carbofuran	< 0.9	ug/L			
2032-65-7	Methiocarb	< 1.0	ug/L			
16752-77-5	Methomyl	< 0.5	ug/L			
23135-22-0	Oxamyl	< 1.0	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CARBAMATE PESTICIDES
DATA SHEET

Tech: CM
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Supelcosil LC-18-DB 15cm x 4.6mm
Matrix Code: GW
Data File/Smpl ID: Q0604006
Data File/Dupl ID:
Sample Number/Description: DK 11742 / EHL 326309

Lab ID: unknown
Task: 4A
Case: n/a
Method: 531.1
Smpl Vol: 500 ul
Dil. Factor: 1
Dupl Type:

Acq. File: A060598
Data Directory: Q\A060598
Initial Cali File: Q\A060598
Instrument ID: HPLC - Q
Date Received: 05/26/98
Date Analyzed: 06/05/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
116-06-3	Aldicarb	< 0.5	ug/L			
1563-66-2	Carbofuran	< 0.9	ug/L			
2032-65-7	Methiocarb	< 1.0	ug/L			
16752-77-5	Methomyl	< 0.5	ug/L			
23135-22-0	Oxamyl	< 1.0	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CARBAMATE PESTICIDES
DATA SHEET

Tech: CM
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Supelcosil LC-18-DB 15cm x 4.6mm
Matrix Code: GW
Data File/Smpl ID: Q0604007
Data File/Dupl ID:
Sample Number/Description: DK 11749 / EHL 326344

Lab ID: unknown
Task: 4A
Case: n/a
Method: 531.1
Smpl Vol: 500 ul
Dil. Factor: 1
Dupl Type:

Acq. File: A060598
Data Directory: Q\A060598
Initial Cali File: Q\A060598
Instrument ID: HPLC - Q
Date Received: 05/26/98
Date Analyzed: 06/05/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
116-06-3	Aldicarb	< 0.5	ug/L			
1563-66-2	Carbofuran	< 0.9	ug/L			
2032-65-7	Methiocarb	< 1.0	ug/L			
16752-77-5	Methomyl	< 0.5	ug/L			
23135-22-0	Oxamyl	< 1.0	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CARBAMATE PESTICIDES
DATA SHEET

Tech: CM
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Supelcosil LC-18-DB 15cm x 4.6mm I
Matrix Code: GW
Data File/Smpl ID: Q0604008
Data File/Dupl ID:
Sample Number/Description: DK 11861 / EHL 326404

Lab ID: unknown
Task: 4A
Case: n/a
Method: 531.1
Smpl Vol: 500 ul
Dil. Factor: 1
Dupl Type:

Acq. File: A060598
Data Directory: Q\A060598
Initial Cali File: Q\A060598
Instrument ID: HPLC - Q
Date Received: 05/26/98
Date Analyzed: 06/05/98
Contm. Level: L

CAS Number	Compound	Sample Concentration	Units	Duplicate Concentration	Units	Q
116-06-3	Aldicarb	< 0.5	ug/L			
1563-66-2	Carbofuran	< 0.9	ug/L			
2032-65-7	Methiocarb	< 1.0	ug/L			
16752-77-5	Methomyl	< 0.5	ug/L			
23135-22-0	Oxamyl	< 1.0	ug/L			

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CARBAMATE PESTICIDES
CONTINUING CALIBRATION CHECK

Tech: CM
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Lab ID: unknown
Acq. File: A060598
Contract: BAA 97-044
Task: 4A
Data Directory: Q\A060598
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Case: n/a
Initial Cali File: Q\A060598
Method: 531.1
Instrument ID: HPLC - Q
Column: Supelcosil LC-18-DB 15cm x 4.6mm ID
CCC Soln Lot#: Mix 1: L-0804-021998
Mix 2:
Mix 3:
CCC Data File: Q0604018

All concentrations are in ug/L

Compound	Target Conc	Observed Conc	Percent Recovery	Acceptance Limits	P / F	Q
Aldicarb	2.0	1.957	97.9	80 - 120	Pass	
Carbofuran	2.0	1.890	94.5	80 - 120	Pass	
Methiocarb	2.0	2.012	100.6	80 - 120	Pass	
Methomyl	2.0	2.029	101.5	80 - 120	Pass	
Oxamyl	2.0	2.106	105.3	80 - 120	Pass	

Q = A flag or qualifier indicating possible cause(s) for an out of range or failed result.

Comments:

CARBAMATE PESTICIDES
INTERNAL STANDARD AREA SUMMARY

Tech: CM
Date: 06/08/98

Lab Name: Environmental Health Laboratories
Contract: BAA 97-044
Project: DK 11734 - DK 11749, DK 10786 - DK 10792, DK 11857 - DK 11867 & DK 10967 - DK 10968
Column: Supelcosil LC-18-DB 15cm x 4.6mm ID
IS Soln Lot#: M-0200-052998

Lab ID: unknown
Task: 4A
Case: n/a
Method: 531.1

Acq. File: A060598
Data Directory: Q\A060598
Initial Cali File: Q\A060598
Instrument ID: HPLC - Q

	IS1 Area	IS1 RT	IS2 Area	IS2 RT
12 Hour CCC Standard	178720	26:16		
CCC Upper Limit	232336	26:46		
CCC Lower Limit	125104	25:46		

	Sample No. / Sample Description	Data File / Sample ID	IS1 Area	Q	IS1 RT	Q	IS2 Area	Q	IS2 RT	Q	Matrix Code	Contm. Level
1	Laboratory Fortified Blank	Q0604004	184542		26:20						RW	
2	Laboratory Method Blank	Q0604005	162759		26:23						RW	
3	DK 11742 / EHL 326309	Q0604006	196557		26:20						DW	L
4	DK 11749 / EHL 326344	Q0604007	198424		26:21						DW	L
5	DK 11861 / EHL 326404	Q0604008	210182		26:21						DW	L
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

IS1 = 4-Bromo-3,5-dimethylphenyl n-methylcarbamate
IS2 = n/a

CCC Upper / Lower Limit: Area: CCC std IS area +/- 30%; RT: CCC std IS RT +/- 30 seconds
Q = A flag or qualifier indicating possible cause for an out of range or failed result.

Comments: _____

DETERMINATION OF METHOD DETECTION LIMITS
METHOD 531.1- CARBAMATES

Tech: TML
Date: 10/25/97

					Q\A101697 Q\A101997 Q\A102497
Lab Name:	Environmental Health Laboratories	Extract.Vol:	n/a	Acq. File:	A101697 A101997 A102497
Project:	Routine MDL	Disk:	n/a	Data Directory:	Q\A101697 Q\A101997 Q\A102497
Column:	Supelco C-18DB 150 x 4.6 mm	Cartridge:	n/a	Initial Cali Data:	Q\A101597
Extraction Technique:	Filtration	Method:	531.1	Instrument ID:	HLPC-Q
Matrix Code:	RW	LSE Matrix:	n/a	Extraction Technician:	TML

			Data File	Q1016028	Q1016029	Q1016030	Q1021033	Q1021034	Q1021035	Q1024037			
			Analysis Date	10/17/97	10/17/97	10/17/97	10/22/97	10/22/97	10/22/97	10/24/97			
			Target	Observed Recovery							Std.	Calc.	
Method	CAS #	Parameter	Conc. (ug/L)	Rep - 1	Rep - 2	Rep - 3	Rep - 4	Rep - 5	Rep - 6	Rep - 7	Deviation	MDL	Units
531.1	116-06-3	Aldicarb	1.00	0.841	0.821	0.736	0.924	0.976	0.973	0.841	0.088	0.278	ug/L
531.1	1563-66-2	Carbofuran	1.00	1.050	0.830	1.056	0.981	0.865	0.936	0.983	0.086	0.272	ug/L
531.1	2032-65-7	Methiocarb	1.00	1.108	0.977	1.085	1.075	1.084	1.047	0.996	0.049	0.154	ug/L
531.1	16752-77-5	Methomyl	1.00	1.115	0.969	0.972	1.078	0.965	1.037	0.946	0.065	0.205	ug/L
531.1	23135-22-0	Oxamyl	1.00	0.891	0.936	0.830	0.848	0.967	0.955	0.871	0.0538	0.169	ug/L

Q = A flag or qualifier indicating possible cause for an out of range or failed result.

LSE = Liquid / solid extraction; LLE = Liquid / Liquid extraction
LSE Matrix = C8, C18, SDVB, Biorex-5, AG-1X-8

COMMENTS: