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Pesticide Ground Water Monitoring Project Phase VIII

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Arkansas Water Resources Center

PESTICIDE GROUND WATER MONITORING PROJECT PHASE VIII

Arkanas State Plant Board
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Arkansas State Plant Board

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COMPLETION REPORT:
ARKANSAS STATE PLANT BOARD
PESTICIDE GROUND WATER MONITORING PROJECT
PHASE VIII

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I. Summary

During Phase VIII monitoring (March 24, 2000 to June 30, 2001), 86 samples were collected from 77 new wells and 9 samples were collected from wells with previous detectable herbicide. The new wells were collected in ten counties that included:

13 wells in Arkansas County,
4 in Cross County,
10 in Drew County,
6 in Independence County,
7 in Jefferson County,
7 in Lincoln County,
5 in Phillips County,
8 in Prairie County,
7 St. Francis County, and
10 White County.

Re-sampled wells included one sample from inside the house and two samples from an exterior faucet at Woodruff #7. Single repeat samples were collected from Woodruff #11, #25, and #26; Jefferson #2 and #5, and St. Francis #1. The samples at St. Francis #1 and Jefferson #5 were confirmation samples. There were no pesticide detections for any of the new wells and only the repeat samples for Woodruff #7 (outside), #25, #26 had detectable pesticides. Woodruff #7 had bentazon concentrations of 3.666 μg/L on January 30, 2001, 1.528 μg/L on February 16, 2001 from the standard outside faucet and <0.345 μg/L from inside the house. Woodruff # 25 and #26 had bentazon present (0.412 and 0.389 μg/L, respectively). Woodruff #11 had no detectable bentazon. The Practical Quantitation Limit is defined as 3.18 times the detection limit (Rosecrance, 2000) and should be the value used to report concentrations. For bentazon in the samples above, the practical quantitation limit is 1.097. The only reportable concentration is for Woodruff #7 on January 30, 2001. All of the other concentrations are between the detection limit and the practical quantitation limit and therefore should be reported as present but not quantifiable.

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The monitoring program to date totals 424 samples collected from 381 wells. Table 1 lists all the pesticide detections for all phases of monitoring. All detections from Phase VIII appear in bold type in Table 1. Table 2 shows a listing of all counties where monitoring has occurred and the number of wells sampled in each county.

All samples were analyzed for 61 pesticides, and all but two samples were analyzed for nitrate-nitrogen. A listing of all the analytes is given in the Quality Assurance Report (QAR), which is attached as an appendix. The QAR also includes detection limits for all analytes as well as quality control (QC) data.

Nitrate-nitrogen was analyzed in 84 of the samples. Two repeat samples from Woodruff #7 were not analyzed for nitrate-nitrogen. Sixteen of the samples had levels of nitrate-nitrogen below the detection limit (0.002 to 0.005 mg/L). Nine wells had nitrate-nitrogen levels greater than 1 mg/L. None were above the Maximum Contaminant of 10 mg/L.

II. Background

In 1990 the U. S. Environmental Protection Agency (EPA) released its first report on its National Pesticide Survey. The report demonstrated that ground water contamination by pesticides is a widespread problem in the U. S. In response, the EPA initiated its "Pesticides in Ground-Water Strategy" which included the State Management Plan (SMP) concept (EPA, 1991). The EPA guidelines called for a monitoring plan and methods to ameliorate any pesticide contamination. Arkansas completed its generic SMP--The Arkansas Agricultural Chemical Ground-Water Management Plan--in 1992. The SMP called for monitoring of ground water for pesticides in those areas of the state most vulnerable to pesticide contamination of ground water.

In order to identify the areas where the ground water is vulnerable, a vulnerability map for the Arkansas Delta was developed using a combination of pesticide DRASTIC and pesticide-use information. The Arkansas Soil and Water Conservation Commission coordinated the development of the vulnerability map (Fugitt, 1992). Estimates of county pesticide usage was provided by the Arkansas Cooperative Extension Service.

DRASTIC (Aller, et al., 1987) is a method for determining areas sensitive to ground-water contamination developed for EPA. DRASTIC determines ground-water sensitivity to contamination based on seven factors:

Table 1. Pesticide Detections during Phases I-VIII.*

Well ID#	Date(s) Sampled	Chemical	Conc. (µg/L)
Clay #2	July 29, 1997	Bromacil	1.66
	Sep. 23, 1997	Bromacil	1.85
Clay #7	Aug. 13, 1997	Acifluorfen	1.70
	Sep. 24, 1997	Acifluorfen	0.95
CH #4 (Craighead)	Nov. 22, 1993	Fluometuron	0.5
	Mar. 29, 1994	no detection	
Desha #12	June 10, 1999	Molinate	1.42
Drew #1	Apr. 22, 1993	Metolachlor	0.7
	May 20, 1993	no detection	
Jefferson #2	Feb. 26, 1999	Bentazon	0.92
	June 11, 1999	Bentazon	0.72
	June 12, 2001	**no detection**	
Jefferson #5	June 11, 1999	Molinate	0.29
	June 12, 2001	**no detection**	
Miss #4	Nov. 2, 1993 closed	Bentazon	2.5
Miss #5	Nov. 2, 1993	Bentazon	0.3
	Mar. 29, 1994	no detection	
Monroe #1	Mar. 28, 1996	Acifluorfen	148
		Bentazon	97
	Apr. 17, 1996	Acifluorfen	180
		Bentazon	103
	June 17, 1996	Acifluorfen	374
		Bentazon	145
	Jan 12, 1998	Acifluorfen	58.8
		Bentazon	152
	May 8, 1998	Acifluorfen	14.3
		Bentazon	13

Table 1. Pesticide Detections during Phases I-VIII (continued).*

Well ID#	Date(s) Sampled	Chemical	Conc. (µg/L)
Poin #1	Dec. 6, 1993	Bentazon	0.2
	Mar. 29, 1994	no detection	
Pulaski #14	Jun. 19, 1995	Acifluorfen	27
		Bentazon	135
		Fluometuron	24
		Metribuzin	4
	Sep. 28, 1995	Acifluorfen	11
		Bentazon	57
		Fluometuron	19
		Metribuzin	2
	Feb. 18, 1996	Acifluorfen	9.3
		Bentazon	58
		Metribuzin	1.3
	June 18, 1997	Acifluorfen	30.0
		Bentazon	92.3
St. Francis #1	May 12, 1999	Bentazon	7.97
	Feb. 16, 2001	**no detection**	
Wood #7	May 23, 1994	Bentazon	55
	June 29, 1994	Bentazon	66
		Fluometuron	0.4
	July 27, 1994 (inside)	Bentazon	78
	July 27, 1994 (outside)	Bentazon	69
	May 15, 1995	Bentazon	21
	Oct. 12, 1995	Bentazon	38
	Jan. 12, 1998	Bentazon	11.35
	Apr. 23, 1998	Bentazon	16.50
	Jan. 30, 2001	**Bentazon**	**3.666**
	Feb. 16, 2001 (outside)	**Bentazon**	**1.528**
	Feb. 16, 2001 (inside)	**no detection**	

Table 1. Pesticide Detections during Phases I-VIII (continued).*

Well ID#	Date(s) Sampled	Chemical	Conc. (µg/L)
Wood #9	May 24, 1994	Bentazon	25
		Acifluorfen	1.7
		Fluometuron	0.9
	June 29, 1994	Bentazon	88
		Acifluorfen	8.6
		Fluometuron	0.8
	May 15, 1995	Bentazon	37
		Acifluorfen	6.8
		Fluometuron	0.4
	Oct. 12, 1995	Bentazon	26
		Acifluorfen	4
	Sep. 27, 1997	Bentazon	2.73
		Acifluorfen	1.58
Wood #11	Jul. 26, 1994	Metolachlor	13
	Feb. 20, 1995	Metolachlor	11.5
	July 10, 1996	Metolachlor	7.1
	Sep. 25, 1998	Metolachlor	4.42
	Jan. 30, 2001	**no detection**	
Wood #25	Sep. 15, 1994	Bentazon	4.4
	Feb. 20, 1995	Bentazon	1.9
	June 18, 1997	Bentazon	0.34
	Jan. 30, 2001	**Bentazon**	**present (0.412)**
Wood #26	Sep. 15, 1994	Bentazon	1.5
	Feb. 20, 1995	Bentazon	0.9
	June 18, 1997	Bentazon	0.55
	Jan. 30, 2001	**Bentazon**	**present (0.389)**
Wood #29	Sep. 29, 1994	Metribuzin	0.4
	Feb. 20, 1995	Metribuzin	0.4
	closed		
Wood #34(PB)	Feb. 20, 1995	Alachlor	1.5
	May 15, 1995	Bentazon	1.5
		Acifluorfen	0.5

* Phase VIII detections shown in bold face type.

Depth to Ground Water
net **R**echarge
Aquifer media
Soil media
Topography
Impact of the vadose zone, and
hydraulic **C**onductivity

With the Arkansas State Plant Board (ASPB) as lead agency, monitoring under the SMP began in September 1992. Eight phases of monitoring have been performed, including this phase. As Table 1 shows, about 5% (20 of the 381) of the wells tested were contaminated with pesticides. None of the concentrations are above acceptable U.S. Environmental Protection Agency maximum contaminant or health advisory limits.

III. The Study Area.

Phase VIII included new wells in the following ten counties:

13 wells in Arkansas County,
4 in Cross County,
10 in Drew County,
6 in Independence County,
7 in Jefferson County,
7 in Lincoln County,
5 in Phillips County,
8 in Prairie County,
7 St. Francis County, and
10 White County.

A summary of all wells and samples by county is presented in Table 2.

Eleven sensitivity maps based on pesticide DRASTIC are included on the following pages. The first of these is the sensitivity map for the entire Arkansas Delta. Reds and yellows show the areas of highest sensitivity. The blue and green areas have lower sensitivity. This map shows sensitive areas, not vulnerable areas (sensitivity combined with actual pesticide usage). However, as pesticide use in the delta is so ubiquitous, the sensitive areas are highly correlated with vulnerability. Following the Delta sensitivity map are maps of all the counties investigated during Phase VIII. On these maps, "X" indicates where wells were sampled. These maps show the relationship of the wells to the degree of sensitivity of the ground water to contamination.

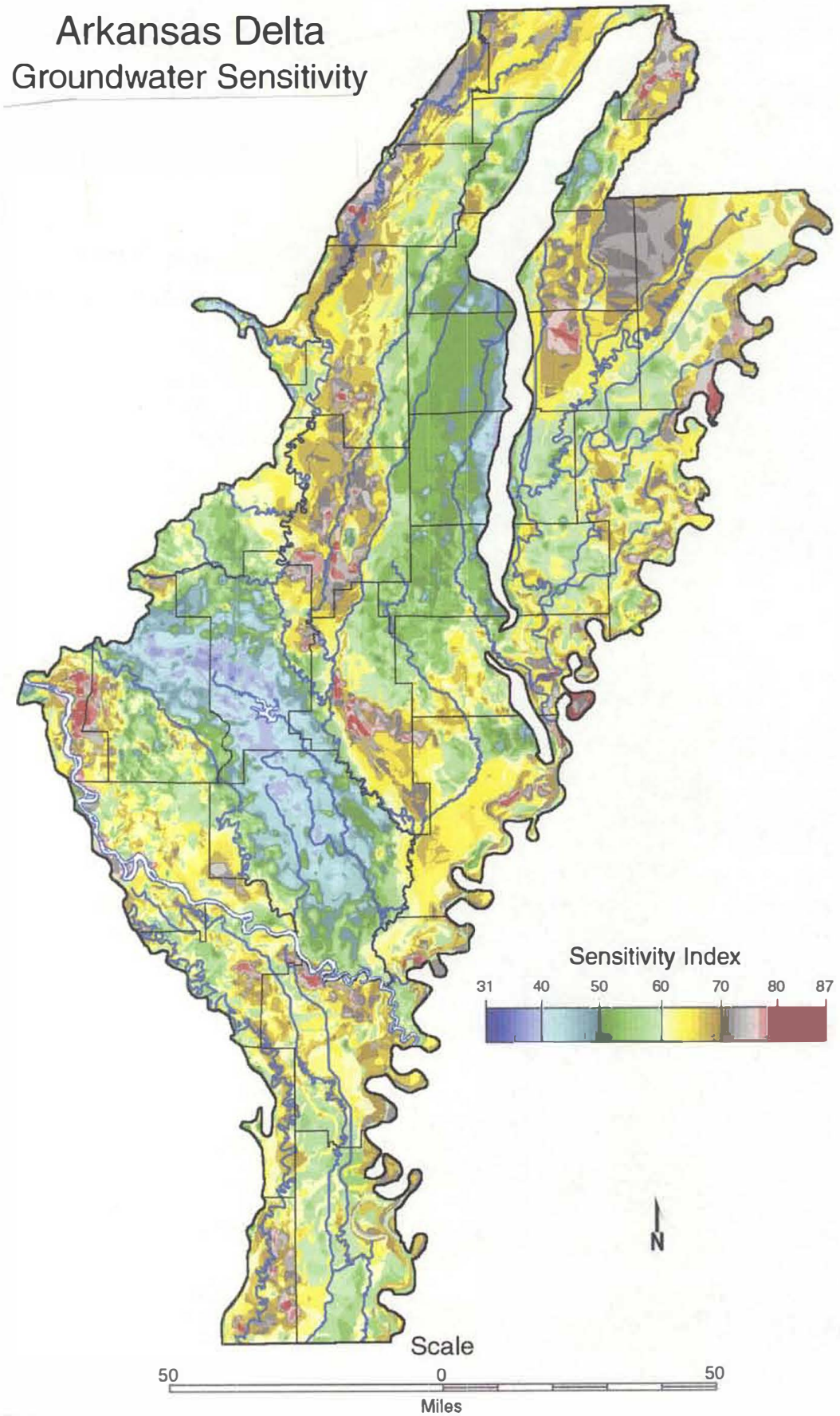

Figure 1. Sensitivity map of eastern Arkansas.

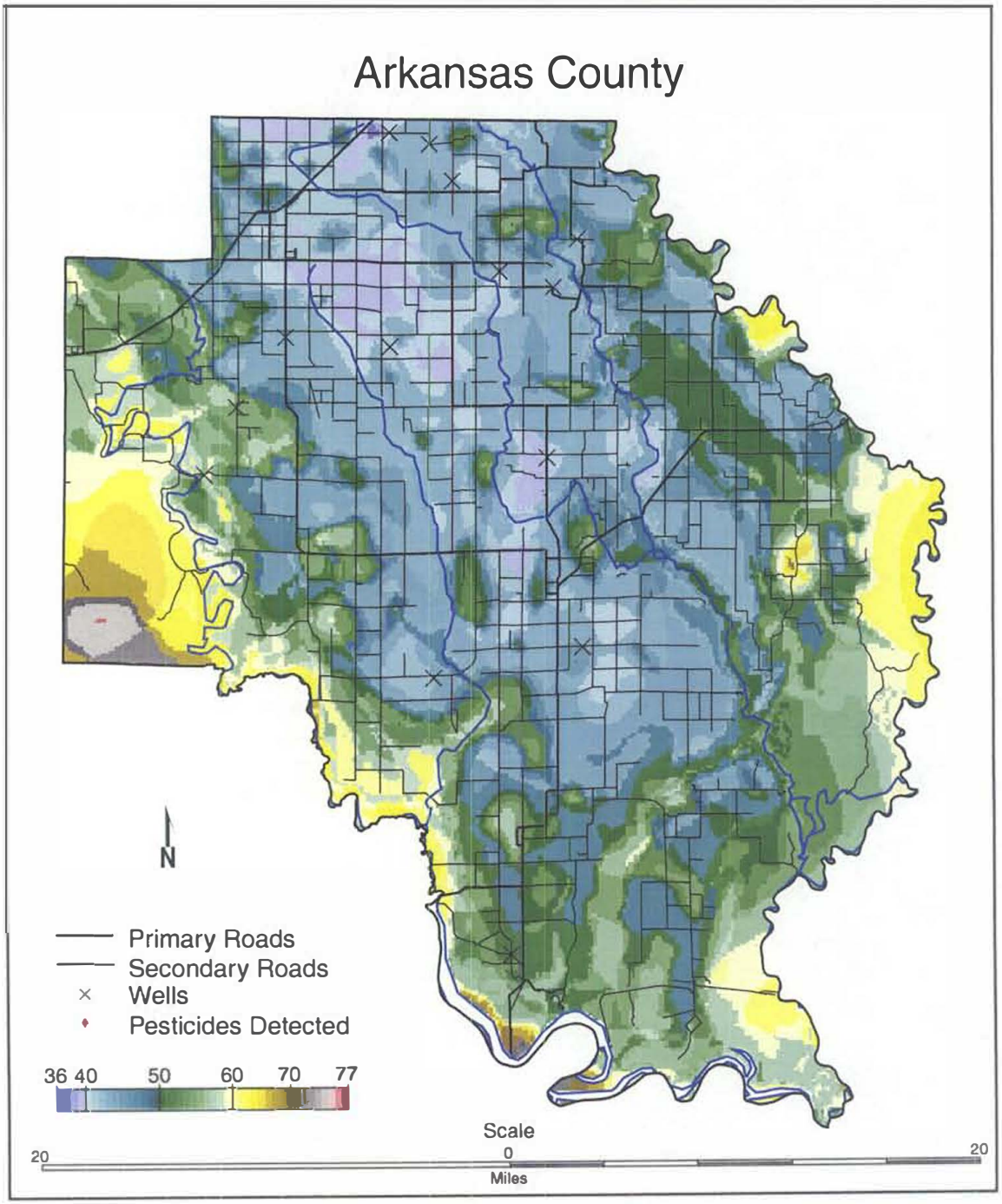

Figure 2. Sensitivity map of Arkansas County.

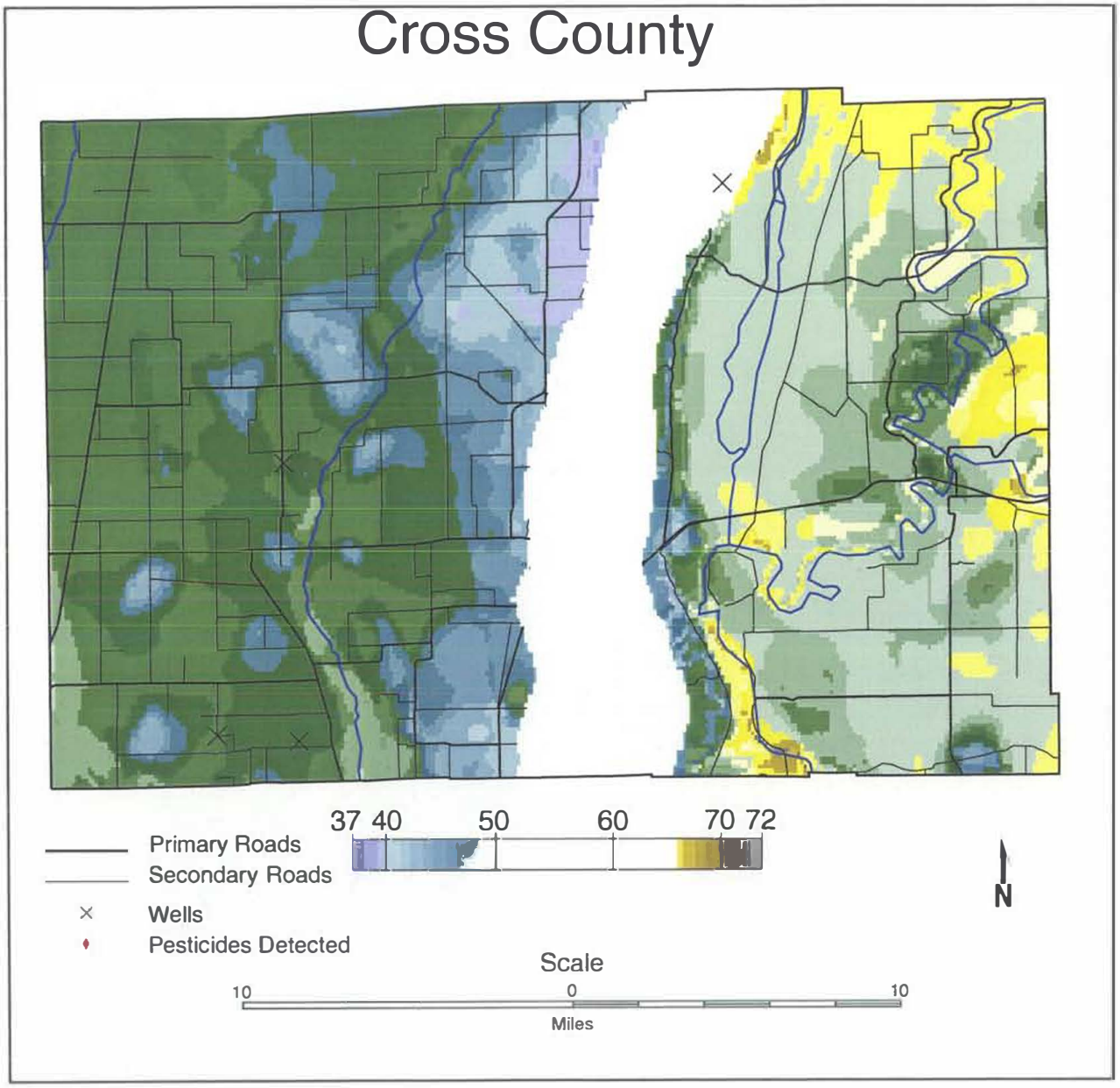

Figure 3. Sensitivity map of Cross County.

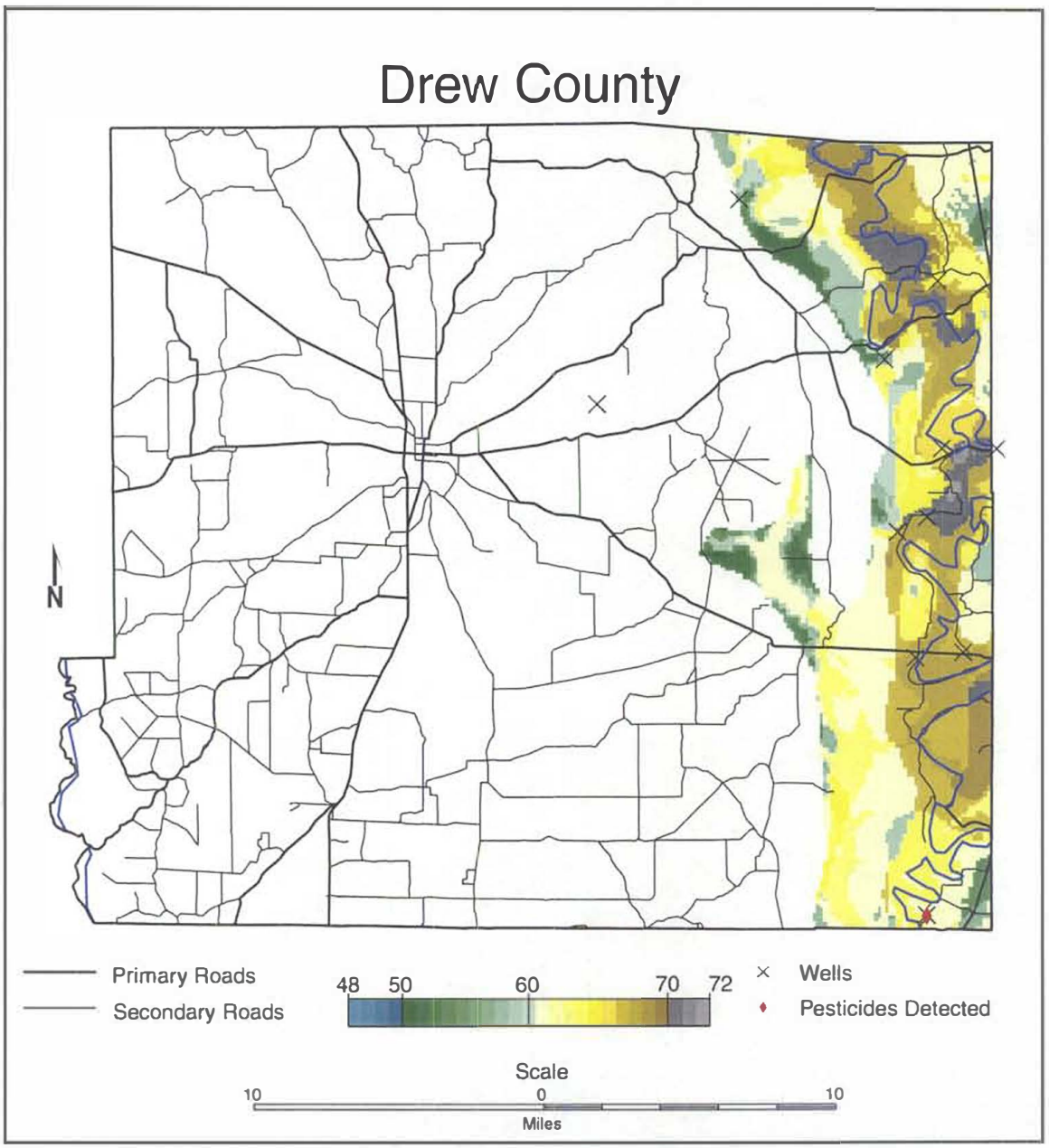

Figure 4. Sensitivity map of Drew County.

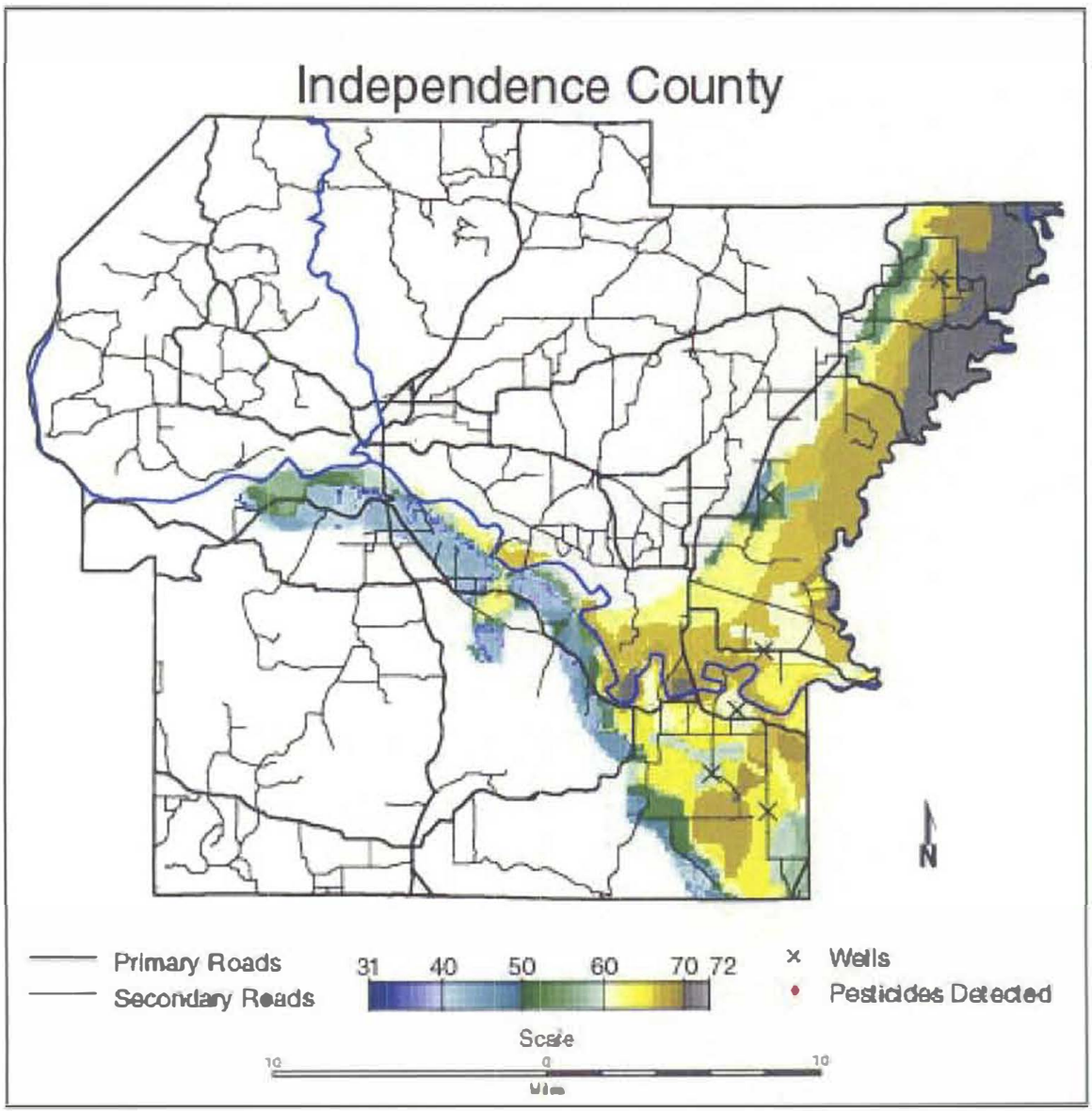

Figure 5. Sensitivity map of Independence County.

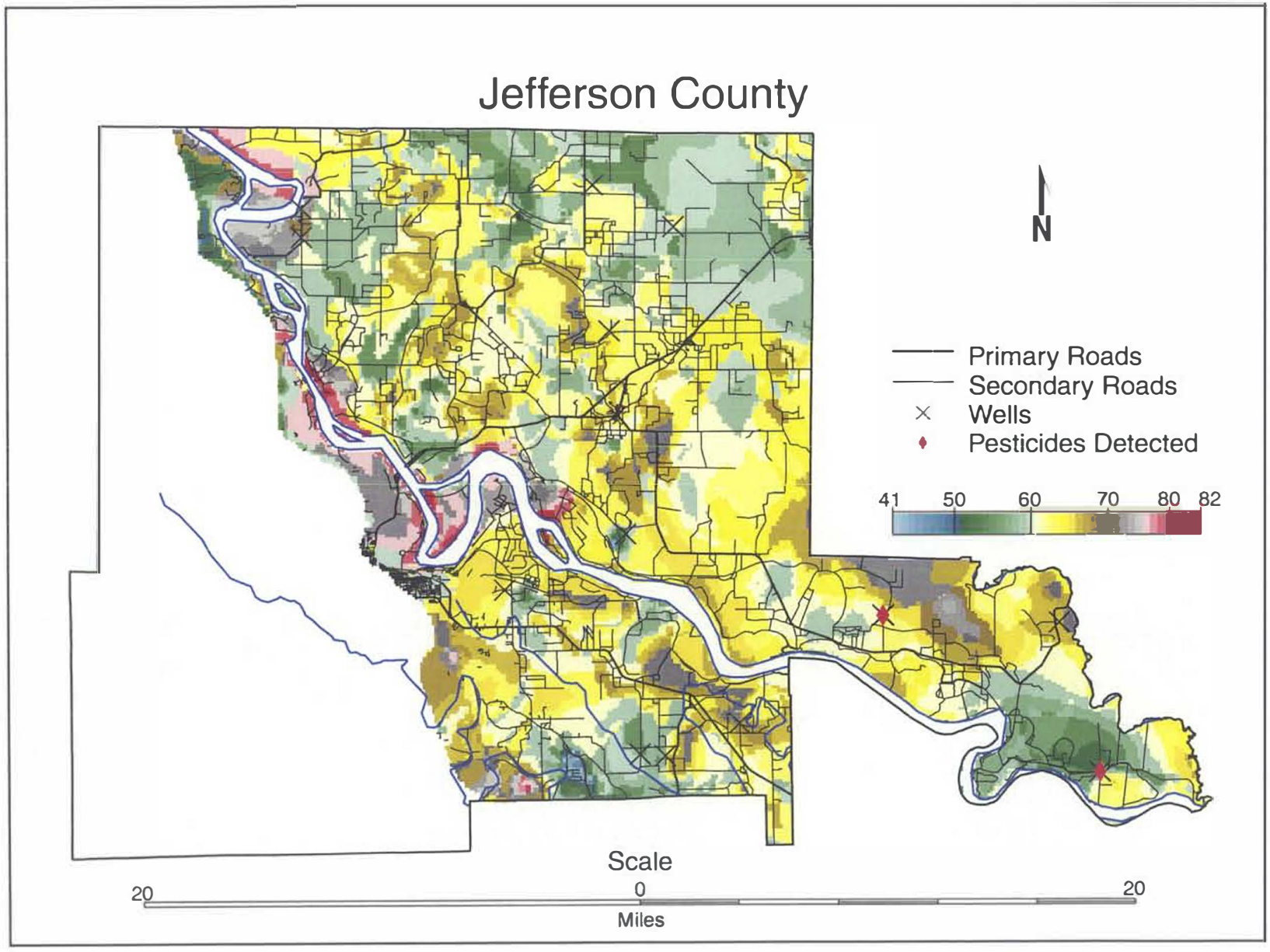

Figure 6. Sensitivity map of Jefferson County.

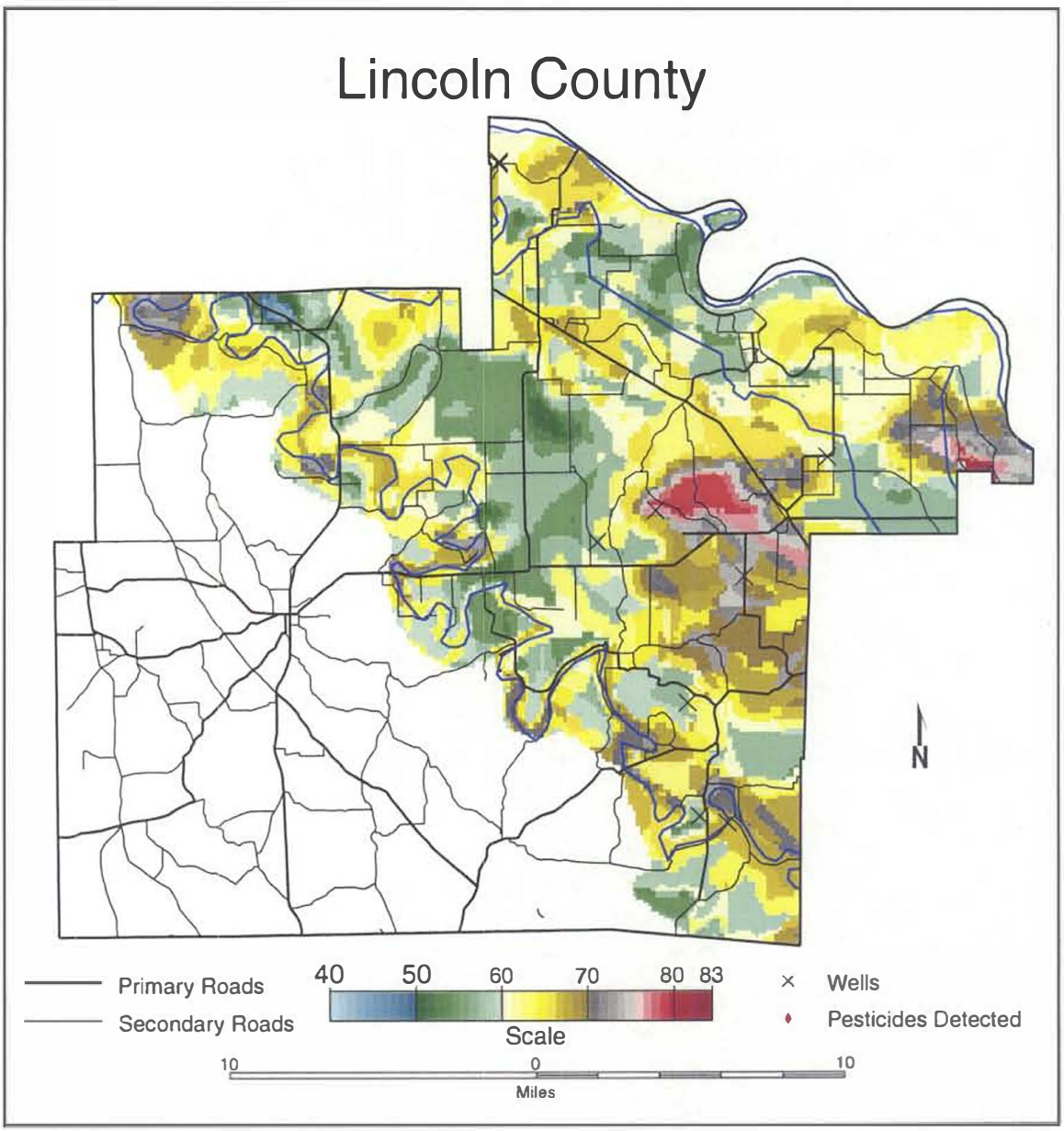

Figure 7. Sensitivity map of Lincoln County.

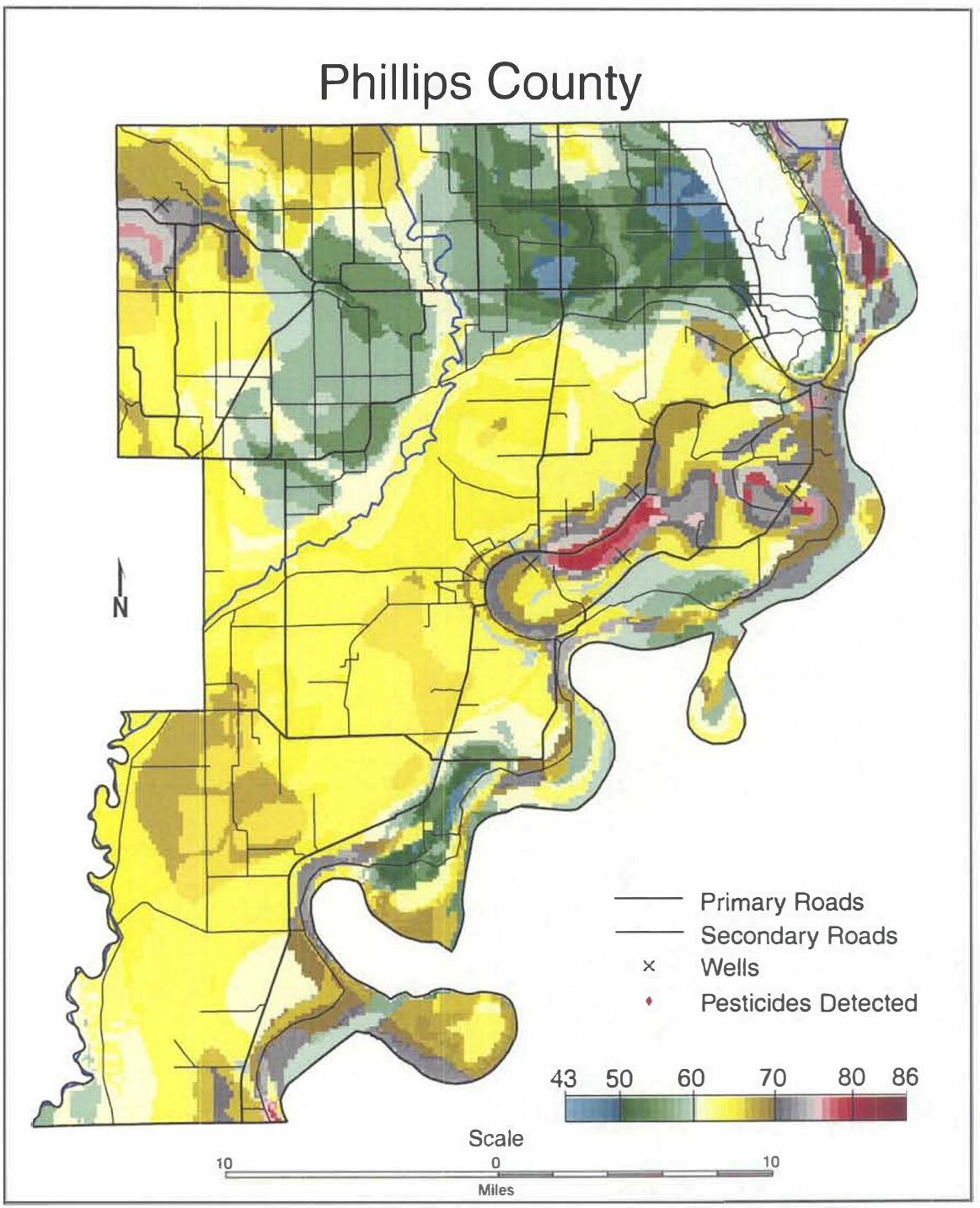

Figure 8. Sensitivity map of Phillips County.

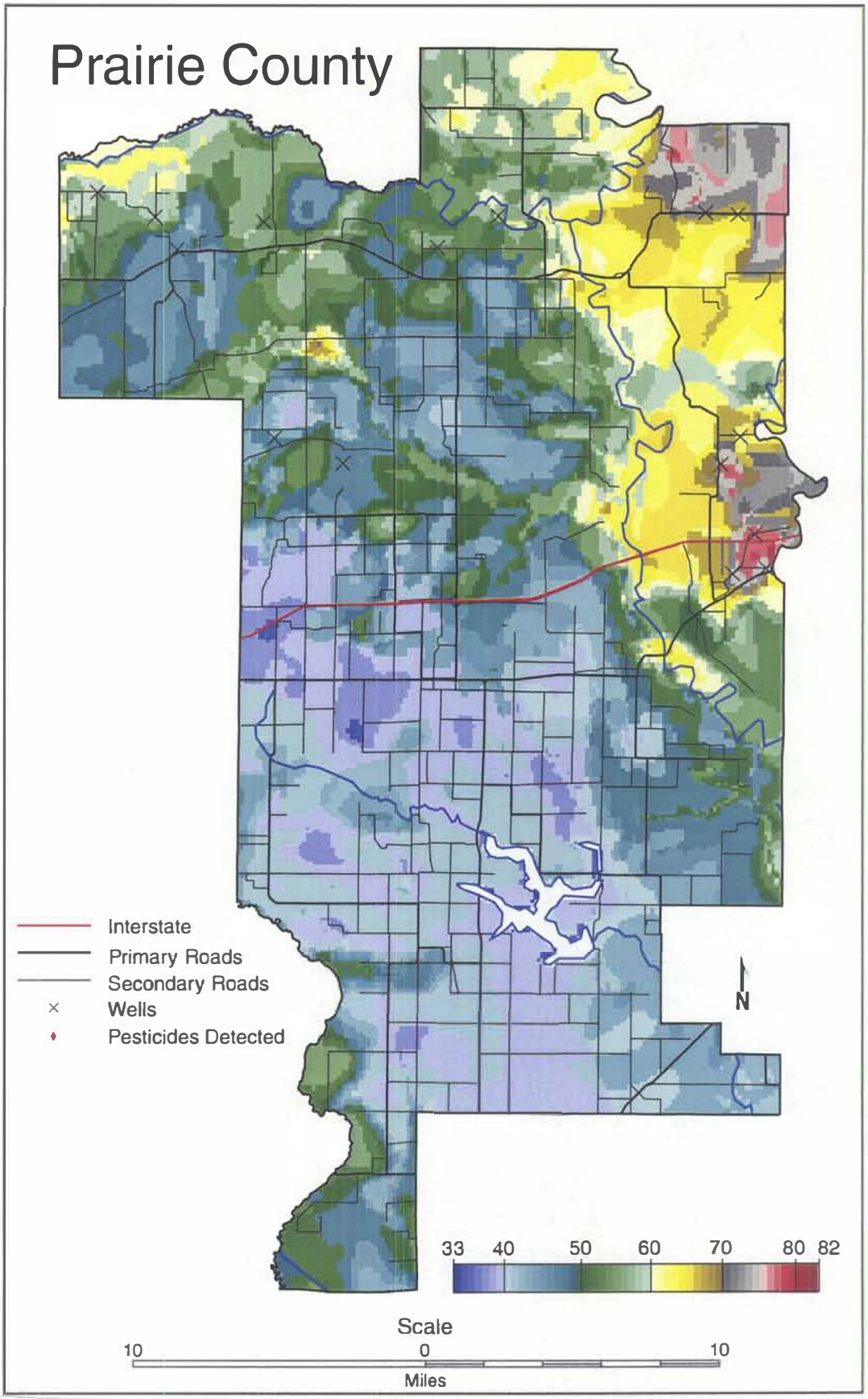

Figure 9. Sensitivity map of Prairie County.

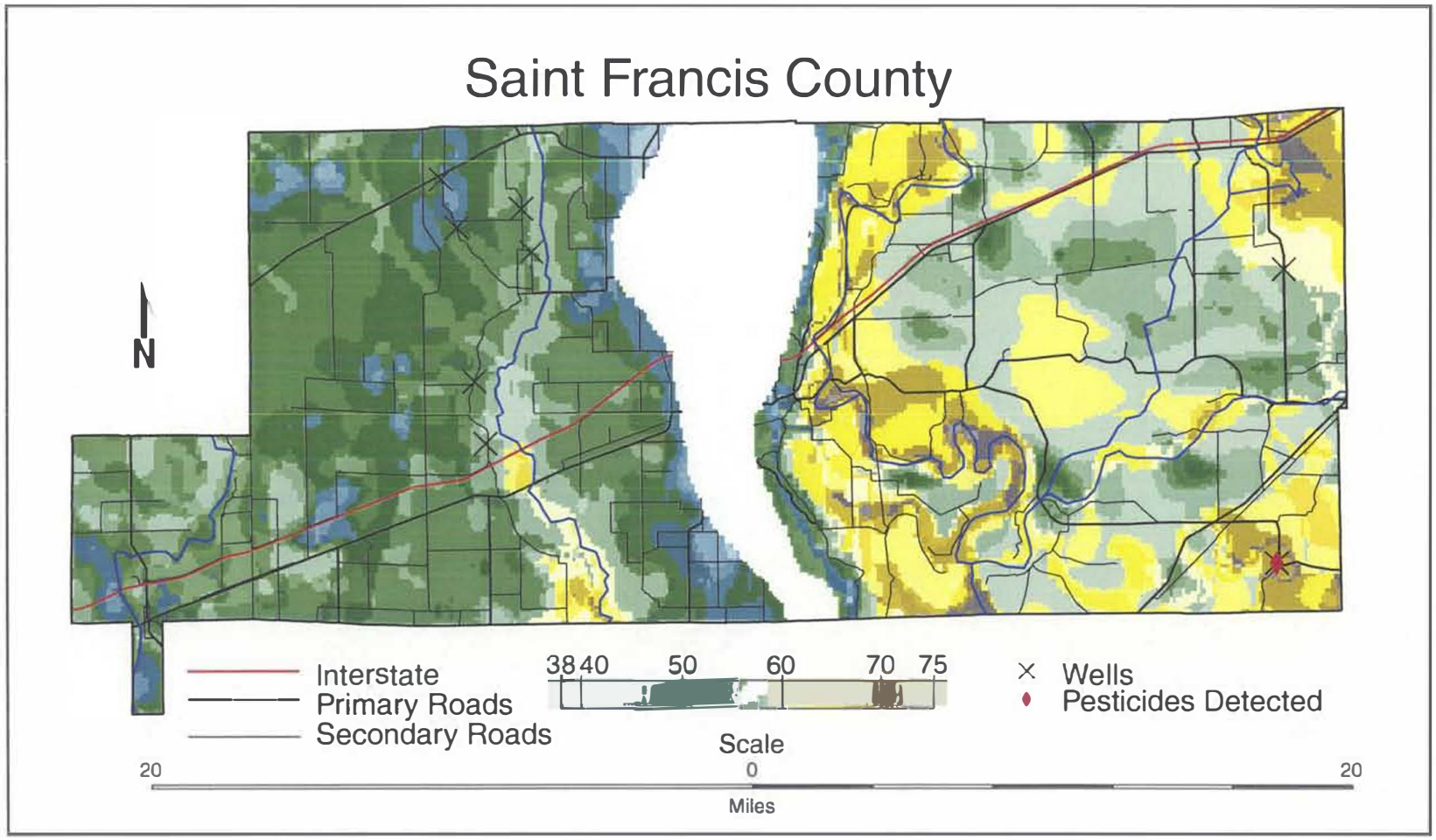

Figure 10. Sensitivity map of St. Francis County.

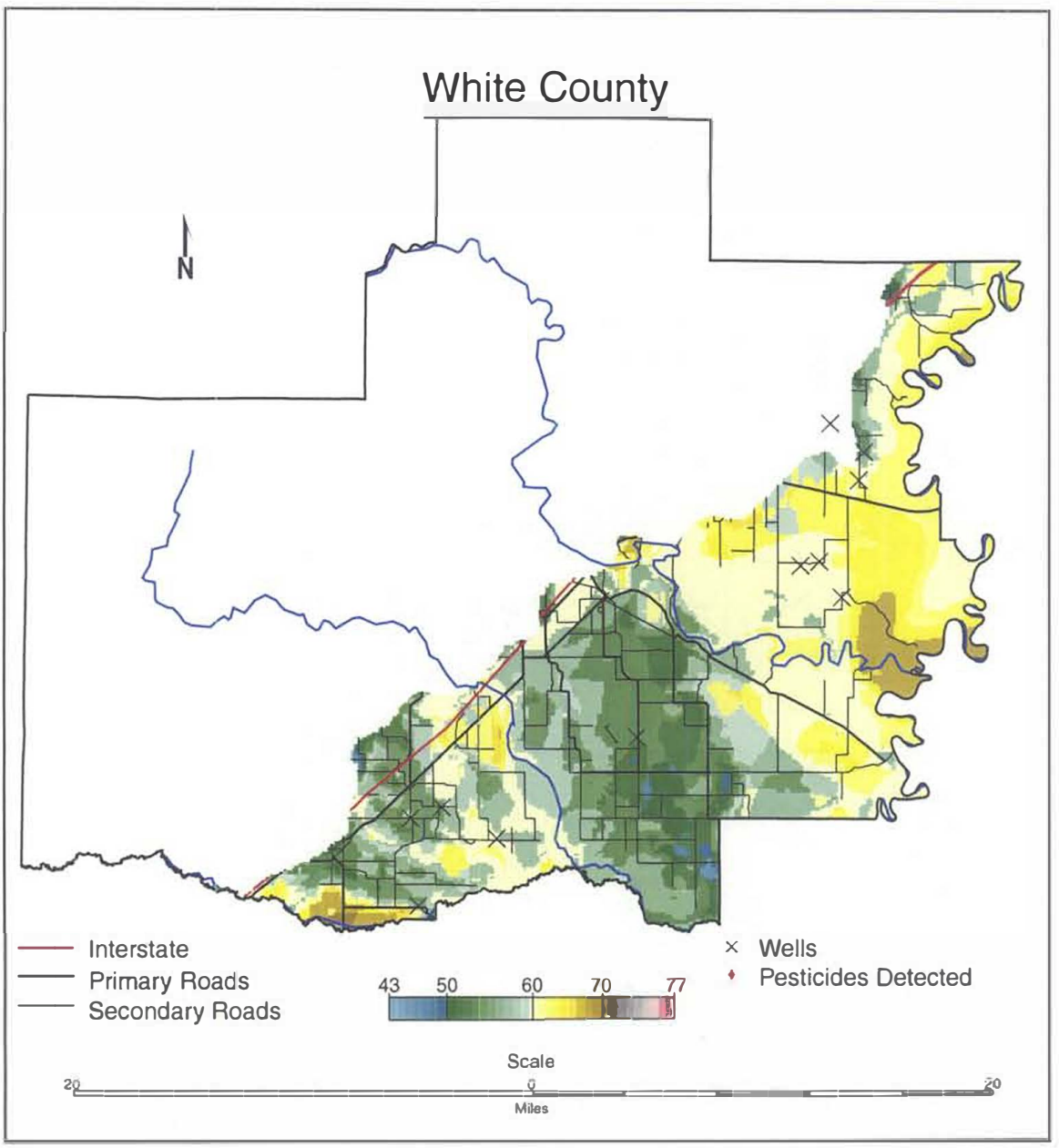

Figure 11. Sensitivity map of White County.

Table 2. Counties and number of wells monitored during Phases I-VIII.

	Number of Sites	Number of Samples
Arkansas	14 (13)	14 (13)
Ashley	17	17
Chicot	8	8
Clay	14	16
Craighead	12	13
Crittenden	7	7
Cross	4 (4)	4 (4)
Desha	13	13
Drew	11 (10)	12 (10)
Greene	6	6
Independence	6 (6)	6 (6)
Jackson	26	26
Jefferson	13 (7)	16 (9)
Lawrence	12	12
Lee	11	11
Lincoln	9 (7)	9 (7)
Lonoke	15	15
Mississippi	18	20
Monroe	30	34
Phillips	5 (5)	5 (5)
Poinsett	12	12
Prairie	15 (8)	15 (8)
Pulaski	19	22
Randolph	5	5
St. Francis	8 (7)	9 (8)
White	11 (10)	11 (10)
Woodruff	60	86 (6)
Total	**381 (77)**	**424 (86)**

Note: ( ) indicates number of wells for Phase VIII.

IV. Monitoring Results

Table 3 provides general information about all the wells sampled in Phase VIII and results for pH, conductance, temperature and nitrate-nitrogen. It also indicates if pesticides were detected. Table 4 is a listing of all the wells in which pesticides were detected at the Arkansas Water Resources Center Water Quality Laboratory (WQL). This table shows the concentrations of the pesticides. Note that only wells with previous contamination had detectable pesticides during re-sampling in Phase VIII. This table also indicates whether the results were confirmed at the Arkansas State Plant Board (ASPB) laboratory. Full analytical results, along with all quality assurance data are contained in Appendix A.

In 1996, ADEQ monitored 77 irrigation wells in east-central Arkansas, including 19 in Jefferson County and 21 in Desha County. Seven wells were contaminated with trace levels (0.02-0.25 ug/L) of molinate (Kresse, et al., 1997). During Phase VII monitoring, two samples, one each in Jefferson and

Table 3. PHASE VIII Data Report (con't)

Site Data

Site	Date	Lab #	Well Type	Crop	Detection	Latitude	Longitude	pH pH units	Conductivity uS/cm	Temperature deg. C	Nitrate-N mg/L	Depth ft.
PHIL#1	3/24/00	1084-01	domestic	wheat, rice	NO	34° 36' 13"	91° 01' 27"	--	--	--	0.002	100
PHIL#2	3/24/00	1084-02	domestic	wheat, soybeans	NO	34° 26' 38.3'	90° 37' 23.8'	8.26	722	17.0	0.002	20
PHIL#3	3/24/00	1084-03	domestic	rice	NO	34° 24' 46.7"	90° 43' 56.1"	8.60	552	18.0	<0.002	?
PHIL#4	3/24/00	1084-04	domestic	cotton, soybeans, wheat	NO	34° 24' 35.0"	90° 47' 30.0"	7.75	555	19.2	3.672	shallow
PHIL#5	3/24/00	1084.05	?	soybeans, wheat	NO	34° 26' 51.2"	90° 43' 31.6"	8.10	482	20.2	0.025	?
IND#1	5/9/00	1232-01	garden	soybeans	NO	35° 34'23.4"	91°23' 42.2"	7.30	192	21.8	2.063	28
IND#2	5/9/00	1232-02	domestic	soybeans, wheat	NO	35° 37' 36.9"	91°24' 48.7"	6.60	404	21.0	2.063	42
IND#3	5/9/00	1232-03	domestic	milo, soybeans	NO	35°35' 36.9"	91° 25' 50.8"	8.14	305	20.6	0.003	30
IND#4	5/9/00	1232-04	domestic	rice	NO	35° 39' 28.3"	91° 23' 43.6"	7.61	419	20.3	2.574	65
IND#5	5/9/00	1232-05	irrigation	rice	NO	35° 51' 06.3"	91° 16' 40.5"	--	525	16.5	0.006	100+
IND#6	5/9/00	1232-06	garden	rice	NO	35° 44' 24.8"	91° 23' 23.4"	8.86	326	20.9	0.472	8
ARK #2	6/7/00	1315-01	irrigation	rice	NO	34° 21' 17.4"	91° 20' 51.3."	7.50	878	20.1	0.002	115
ARK #3	6/7/00	1325-02	garden	rice, soybeans, wheat	NO	34° 23' 18.6"	91° 34' 47.4"	7.60	654	21.1	0.184	98
ARK #4	6/7/00	1325-03	irrigation	rice	NO	34° 20' 51.2"	91° 36' 15.7"	--	--	--	0.006	?
ARK #5	6/7/00	1325-04	irrigation	rice	NO	34° 25' 53.2"	91° 32' 30.6"	6.90	809	18.2	<0.003	120
ARK #6	6/7/00	1325-05	irrigation	rice	NO	34° 13' 13.6"	91° 26' 07.9"	7.20	1386	20.1	0.117	?
ARK#7	6/7/00	1325-06	irrigation	rice, soybeans, wheat	NO	34° 14'17.8"	91° 19' 26.0"	7.60	796	20.2	0.014	120
CROSS #1	1/31/01	10417-05	domestic	rice, soybeans, wheat	NO	35° 24' 30"	90° 40' 33"	6.06	97	14.9	0.310	108
CROSS #2	1/31/01	10417-06	domestic	rice, soybeans, wheat	NO	35° 17' 21.5"	90° 54' 51.0"	7.18	964	11.2	0.044	60-80
ST. FRANCIS #2	2/16/01	10476-01	domestic	rice	NO	34° 59' 39.8"	90° 54' 27.6"	7.37	853	12.7	0.002	90

Table 3. PHASE VIII Data Report (con't)

Site Data

Site	Date	Lab #	Well Type	Crop	Detection	Latitude	Longitude	pH pH units	Conductivity uS/cm	Temperature deg. C	Nitrate-N mg/L	Depth ft.
ST. FRANCIS #3	2/16/01	10476-02	garden	-	NO	35° 01' 29.3"	90° 54' 47.6"	7.33	719	14.9	0.562	110
ST. FRANICIS #4	2/16/01	10476-03	garden	rice, soybeans, wheat	NO	35° 04' 14.2"	90° 26' 15.5"	7.24	589	15.0	0.004	80
ST. FRANCIS #5	4/17/01	10602-01	domestic	rice, soybeans, wheat	NO	35° 06' 29.18'	90° 53' 2.89"	7.43	666	17.0	0.444	55
ST. FRANCIS #6	4/17/01	10602-02	garden	rice, soybeans	NO	35° 05' 14.49'	90° 52' 43.36'	7.50	338	17.8	<0.005	<50
ST. FRANCIS #7	4/17/01	10602-03	garden	wheat	NO	35° 58' 58.85'	90° 55' 17.91'	7.52	892	17.2	0.464	80
ST. FRANCIS #8	4/17/01	10602-04	-	rice	NO	35° 07' 23.78'	90° 55' 48.98'	7.22	736	19.0	0.038	80
CROSS #3	4/17/01	10602-05	garden	rice, soybeans, wheat	NO	35° 09' 58.8"	90° 54' 34.57'	7.31	762	17.0	<0.005	-
CROSS #4	4/17/01	10602-06	garden	-	NO	35° 10' 11.28'	90° 57' 11.97'	7.12	1079	16.1	0.032	85
DREW #2	5/7/01	10652-01	domestic	-	NO	33° 37' 41"	91° 26' 59"	6.94	243	21.9	0.001	shallow
DREW #3	5/7/01	10652-02	-	-	NO	33° 37' 43"	91° 28' 57"	8.80	329	23.9	<0.005	-
DREW #4	5/7/01	10652-03	irrigation	-	NO	33° 40' 24"	91° 30' 57"	8.77	517	23.9	0.005	>400
DREW #5	5/7/01	10652-04	irrigation	-	NO	33° 42' 43"	91° 29' 01"	8.86	372	23.9	0.002	deep
DREW #6	5/7/01	10652-05	-	cotton	NO	33° 35' 41"	91° 29' 31"	8.85	390	25.0	0.007	150
DREW #7	5/7/01	10652-06	irrigation	peas, wheat, soybeans, rice	NO	33° 35' 15"	91° 30' 34"	8.80	404	19.6	0.804	>470
DREW #8	5/7/01	10652-07	domestic	rice	NO	33° 31' 30"	91° 30' 0"	7.02	125	17.2	<0.005	100
DREW #9	5/7/01	10652-08	domestic	-	NO	33° 31' 38"	91° 28' 18"	8.71	376	22.0	0.015	-
PRAIRE #8	5/21/01	10694-01	domestic	soybeans, wheat	NO	35° 01' 21.06'	91° 46' 47.18'	7.27	724	18.3	0.053	-
PRAIRE #9	5/21/01	10694-02	domestic	-	NO	35° 00' 35.59'	91° 44' 42.67'	7.10	254	17.3	0.956	85
PRAIRIE #10	5/22/01	10694-03	irrigation	rice	NO	34° 59' 37.82'	91° 43' 55.91'	7.24	445	15.9	1.198	120
PRAIRE #11	5/22/01	10694-04	-	rice, soybeans, wheat	NO	35° 00' 25.53'	91° 40' 46.73'	7.04	752	17.6	0.078	150
PRAIRE #12	5/22/01	10694-05	shop	rice	NO	34° 59' 35.62'	91° 34' 30.29'	7.43	688	20.4	0.056	120

Table 3. PHASE VIII Data Report (con't)

Site Data

Site	Date	Lab #	Well Type	Crop	Detection	Latitude	Longitude	pH	Conductivity	Temperature	Nitrate-N	Depth
								pH units	uS/cm	deg. C	mg/L	ft.
PRAIRE #13	5/22/01	10694-06	garden	-	NO	35° 00' 30.99'	91° 32' 17.20'	6.86	367	18.2	0.001	75
PRAIRE #14	5/22/01	10694-07	irrigation	pond	NO	34° 54' 01"	91° 40' 30"	6.89	782	17.0	0.001	120
PRAIRE #15	5/22/01	10694-08	garden	soybeans, corn, rice, wheat	NO	34° 53' 15"	91° 38' 02"	7.44	760	23.0	0.003	100
WHITE #2	5/30/01	10725-01	garden	wheat, soybeans	NO	35° 05' 39.39'	91° 49' 15.3"	6.53	88	21.3	0.002	73
WHITE #3	5/30/01	10725-02	garden	-	NO	35° 06' 2.65"	91° 47' 48.37'	6.90	454	22.0	0.020	-
WHITE #4	5/30/01	10725-03	domestic/garden	-	NO	35° 04' 51.36'	91° 45' 16.72'	6.93	820	28.5	0.242	78
WHITE #5	5/30/01	10725-04	irrigation	-	NO	35° 08' 36.44'	91° 38' 45.10'	6.63	235	21.4	0.004	-
WHITE #6	5/30/01	10725-05	domestic	wheat, soybeans	NO	35° 18' 10.39'	91° 28' 24.69'	6.77	1434	18.2	0.646	60-65
WHITE #7	5/30/01	10725-06	domestic	rice	NO	35° 19' 13.63'	91° 28' 09.31'	7.15	1440	17.5	0.583	75
WHITE #8	5/30/01	10725-07	irrigation	rice	NO	35° 20' 19.99'	91° 29' 40.65'	6.95	560	19.0	0.127	-
WHITE #9	5/30/01	10725-08	irrigation	rice	NO	35° 13' 46"	91° 29' 17"	7.10	1449	19.6	0.046	-
WHITE #10	5/30/01	10725-09	garden	-	NO	35° 15' 08"	91° 30' 16"	7.02	5100	19.2	<0.005	40
WHITE #11	5/30/01	10725-10	domestic	soybeans	NO	35° 14' 59"	91° 31' 08"	7.35	1631	22.5	5.429	25-30
ARK #8	6/11/01	10740-01	irrigation	rice	NO	34° 33' 24"	91° 27' 42"	7.24	773	20.3	<0.005	-
ARK #9	6/11/01	10740-02	irrigation	rice	NO	34° 32' 57"	91° 25' 54"	6.87	835	20.6	0.029	-
ARK #10	6/11/01	10740-03	irrigation	rice	NO	34° 31' 35"	91° 24' 54"	7.20	794	20.8	0.015	-
ARK #11	6/11/01	10740-04	domestic	rice, soybeans, wheat	NO	34° 29' 22"	91° 19' 20"	7.70	776	not purged	0.043	-
ARK #12	6/11/01	10740-05	garden	-	NO	34° 27' 36"	91° 20' 26"	7.82	888	not purged	0.083	75
ARK #13	6/11/01	10740-06	irrigation	rice	NO	34° 28' 13"	91° 22' 50"	7.58	732	20.8	<0.005	-
ARK #14	6/11/01	10740-07	-	-	NO	34° 25' 28"	91° 27' 50"	7.37	875	21.5	<0.005	-
JEFF #7	6/18/01	10765-01	-	-	NO	34° 07' 09"	91° 49' 59"	6.60	1145	18.5	0.065	-
JEFF #8	6/18/01	10765-02	irrigation	rice	NO	34° 07' 05"	91° 48' 55"	6.59	910	18.5	0.037	-
JEFF #9	6/18/01	10765-03	domestic	-	NO	34° 08' 11"	91° 45' 46"	7.97	208	24 (no purge)	0.009	700
JEFF #10	6/18/01	10765-04	irrigation	-	NO	34° 12' 59"	91° 55' 36"	6.50	293	19.0	<0.005	-
JEFF #11	6/18/01	10765-05	irrigation	rice, soybeans	NO	34° 22' 06"	91° 51' 02"	7.10	540	19.0	0.015	-

Table 3. PHASE VIII Data Report (con't)

Site Data

Site	Date	Lab #	Well Type	Crop	Detection	Latitude	Longitude	pH	Conductivity	Temperature	Nitrate-N	Depth
								pH units	uS/cm	deg. C	mg/L	ft.
JEFF #12	6/18/01	10765-06	irrigation	rice	NO	34° 25' 45"	91° 48' 16"	7.00	554	18.5	<0.005	80
JEFF #13	6/18/01	10765-07	irrigation	rice	NO	34° 27' 15"	91° 51' 40"	-	604	-	0.038	-
LINCOLN #3	6/18/01	10765-10	irrigation	rice	NO	34° 09' 07"	91° 43' 18"	6.80	796	19.0	0.021	-
LINCOLN #4	6/25/01	10780-01	irrigation	rice	NO	33° 50' 29.07'	91° 35' 49.96'	6.73	290	18.5	<0.005	-
LINCOLN #5	6/25/01	10780-02	pond	-	NO	33° 50' 40.80'	91° 36' 45.52'	6.80	335	18.5	<0.005	-
LINCOLN #6	6/25/01	10780-03	irrigation	rice	NO	33° 53' 52.85'	91° 37' 07.35'	6.20	271	18.5	0.003	-
LINCOLN #7	6/25/01	10780-04	irrigation	rice	NO	33° 57' 26.17'	91° 35' 08.75'	6.85	400	18.5	0.013	-
LINCOLN #8	6/25/01	10780-05	irrigation	rice	NO	33° 58' 27"	91° 40' 07"	7.02	855	18.5	<0.005	-
LINCOLN #9	6/25/01	10780-06	irrigation	rice	NO	33° 59' 19"	91° 38' 07"	7.14	813	18.5	3.999	-
DREW #10	6/25/01	10780-07	irrigation	rice	NO	33° 39' 10"	91° 41' 12"	6.47	1255	19.0	0.543	-
DREW #11	6/25/01	10780-08	irrigation	rice	NO	33° 45' 13.89'	91° 36' 01.87'	6.29	185	18.0	0.017	-
RESAMPLED												
WOOD #7R	1/30/01	10417-01	domestic	-	YES	35° 19' 27"	91° 18' 20"	6.54	145	17.0	0.009	-
WOOD #7Rout	2/16/01	10476-05	domestic	-	YES	35° 19' 27"	91° 18' 20"	6.70	154	14.0	-	-
WOOD #7Rin	2/16/01	10476-06	domestic	-	NO	35° 19' 27"	91° 18' 20"	-	-	-	-	-
WOOD #11R	1/30/01	10417-02	domestic	-	NO	35° 09' 23"	91° 20' 33"	6.00	134	18.2	3.812	35
WOOD #25R	1/30/01	10417-03	domestic	-	YES	35° 17' 08"	91° 24' 08"	6.11	210	18.3	2.928	45
WOOD #26R	1/30/01	10417-04	domestic	-	YES	35° 03' 51"	91° 14' 39"	6.99	583	17.0	0.307	60
ST. FRANCIS #1 R	2/16/01	10476-04	shop	cotton	NO	34° 55' 40"	90° 26' 44"	7.40	509	15.0	0.006	shallow
JEFF 2R1	6/11/01	not analyzed in lab			NO	34° 11' 54"	91° 38' 39"	7.21	1000	15.0		22
JEFF 2R1	6/11/01	not purged and not analyzed in lab			--			7.42	905	21.0		
JEFF 2R2	6/12/01	10765-08	garden	soybeans	NO	34° 11' 54"	91° 38' 39"	7.52	925	21.5	0.093	22
JEFF 5R1	6/12/01	10765-09	irrigation	rice	NO	34° 06' 18"	91° 30' 35"	7.40	1361	18.0	<0.005	100
JEFF 5R2	6/12/01	not analyzed in lab			--			7.30	1155	19.5		
JEFF 5R3	6/13/01	not analyzed in lab			--			8.30	1156	20.5		
JEFF 5R4	6/14/01	not analyzed in lab			--			9.30	1157	21.5		
JEFF 5R5	6/15/01	not analyzed in lab			--			10.30	1158	22.5		
JEFF 5R6	6/16/01	not analyzed in lab			--			11.30	1159	23.5		
JEFF 5R7	6/17/01	not analyzed in lab			--			12.30	1160	24.5		

Table 3. PHASE VIII Data Report (con't)

507 Analytes

SITE	Alachlor ug/L	Ametryn ug/L	Atraton ug/L	Atrazine ug/L	Bromacil ug/L	Butachlor ug/L	Butylate ug/L	Carboxin ug/L	Chlorpropham ug/L	Devrinol ug/L	Dichlorvos ug/L	Diphenamid ug/L
PHIL#1	< 0.452	< 0.208	< 0.381	< 0.199	< 0.543	< 0.655	< 0.257	< 0.491	< 0.332	< 1.359	< 0.560	< 0.201
PHIL#2	< 0.452	< 0.208	< 0.381	< 0.199	< 0.543	< 0.655	< 0.257	< 0.491	< 0.332	< 1.359	< 0.560	< 0.201
PHIL#3	< 0.452	< 0.208	< 0.381	< 0.199	< 0.543	< 0.655	< 0.257	< 0.491	< 0.332	< 1.359	< 0.560	< 0.201
PHIL#4	< 0.452	< 0.208	< 0.381	< 0.199	< 0.543	< 0.655	< 0.257	< 0.491	< 0.332	< 1.359	< 0.560	< 0.201
PHIL#5	< 0.452	< 0.208	< 0.381	< 0.199	< 0.543	< 0.655	< 0.257	< 0.491	< 0.332	< 1.359	< 0.560	< 0.201
IND#1	< 0.452	< 0.208	< 0.381	< 0.199	< 0.543	< 0.655	< 0.257	< 0.491	< 0.332	< 1.359	< 0.560	< 0.201
IND#2	< 0.452	< 0.208	< 0.381	< 0.199	< 0.543	< 0.655	< 0.257	< 0.491	< 0.332	< 1.359	< 0.560	< 0.201
IND#3	< 0.452	< 0.208	< 0.381	< 0.199	< 0.543	< 0.655	< 0.257	< 0.491	< 0.332	< 1.359	< 0.560	< 0.201
IND#4	< 0.452	< 0.208	< 0.381	< 0.199	< 0.543	< 0.655	< 0.257	< 0.491	< 0.332	< 1.359	< 0.560	< 0.201
IND#5	< 0.452	< 0.208	< 0.381	< 0.199	< 0.543	< 0.655	< 0.257	< 0.491	< 0.332	< 1.359	< 0.560	< 0.201
IND#6	< 0.452	< 0.208	< 0.381	< 0.199	< 0.543	< 0.655	< 0.257	< 0.491	< 0.332	< 1.359	< 0.560	< 0.201
ARK #2	< 0.452	< 0.208	< 0.381	< 0.199	< 0.543	< 0.655	< 0.257	< 0.491	< 0.332	< 1.359	< 0.560	< 0.201
ARK #3	< 0.452	< 0.208	< 0.381	< 0.199	< 0.543	< 0.655	< 0.257	< 0.491	< 0.332	< 1.359	< 0.560	< 0.201
ARK #4	< 0.452	< 0.208	< 0.381	< 0.199	< 0.543	< 0.655	< 0.257	< 0.491	< 0.332	< 1.359	< 0.560	< 0.201
ARK #5	< 0.452	< 0.208	< 0.381	< 0.199	< 0.543	< 0.655	< 0.257	< 0.491	< 0.332	< 1.359	< 0.560	< 0.201
ARK #6	< 0.452	< 0.208	< 0.381	< 0.199	< 0.543	< 0.655	< 0.257	< 0.491	< 0.332	< 1.359	< 0.560	< 0.201
ARK#7	< 0.452	< 0.208	< 0.381	< 0.199	< 0.543	< 0.655	< 0.257	< 0.491	< 0.332	< 1.359	< 0.560	< 0.201
CROSS #1	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
CROSS #2	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
ST. FRANCIS #2	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8

Table 3. PHASE VIII Data Report (con't)

507 Analytes

SITE	Alachlor ug/L	Ametryn ug/L	Atraton ug/L	Atrazine ug/L	Bromacil ug/L	Butachlor ug/L	Butylate ug/L	Carboxin ug/L	Chlorpropham ug/L	Devrinol ug/L	Dichlorvos ug/L	Diphenamid ug/L
ST. FRANCIS #3	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
ST. FRANICIS #4	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
ST. FRANCIS #5	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
ST. FRANCIS #6	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
ST. FRANCIS #7	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
ST. FRANCIS #8	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
CROSS #3	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
CROSS #4	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
DREW #2	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
DREW #3	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
DREW #4	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
DREW #5	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
DREW #6	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
DREW #7	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
DREW #8	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
DREW #9	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
PRAIRE #8	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
PRAIRE #9	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
PRAIRIE #10	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
PRAIRE #11	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
PRAIRE #12	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8

Table 3. PHASE VIII Data Report (con't)

507 Analytes

SITE	Alachlor ug/L	Ametryn ug/L	Atraton ug/L	Atrazine ug/L	Bromacil ug/L	Butachlor ug/L	Butylate ug/L	Carboxin ug/L	Chlorpropham ug/L	Devrinol ug/L	Dichlorvos ug/L	Diphenamid ug/L
PRAIRE #13	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
PRAIRE #14	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
PRAIRE #15	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
WHITE #2	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
WHITE #3	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
WHITE #4	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
WHITE #5	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
WHITE #6	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
WHITE #7	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
WHITE #8	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
WHITE #9	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
WHITE #10	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
WHITE #11	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
ARK #8	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
ARK #9	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
ARK #10	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
ARK #11	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
ARK #12	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
ARK #13	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
ARK #14	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
JEFF #7	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
JEFF #8	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
JEFF #9	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
JEFF #10	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
JEFF #11	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8

Table 3. PHASE VIII Data Report (con't)

507 Analytes

SITE	Alachlor ug/L	Ametryn ug/L	Atraton ug/L	Atrazine ug/L	Bromacil ug/L	Butachlor ug/L	Butylate ug/L	Carboxin ug/L	Chlorpropham ug/L	Devrinol ug/L	Dichlorvos ug/L	Diphenamid ug/L
JEFF #12	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
JEFF #13	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
LINCOLN #3	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
LINCOLN #4	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
LINCOLN #5	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
LINCOLN #6	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
LINCOLN #7	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
LINCOLN #8	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
LINCOLN #9	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
DREW #10	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
DREW #11	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
WOOD #7	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
WOOD #7 R outside	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
WOOD #7 R inside	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
WOOD #11	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
WOOD #25	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
WOOD #26	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
ST. FRANCIS #1	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
JEFF 2R1	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
JEFF 2R1	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
JEFF 2R2	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
JEFF 5R1	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
JEFF 5R2	<0.509	<0.441	<0.483	<0.79	<0.436	<0.58	<1.166	<0.894	<1.119	<0.091	<0.392	<0.8
JEFF 5R3	<0.510	<0.442	<0.484	<0.80	<0.437	<0.59	<1.167	<0.895	<1.120	<0.092	<0.393	<0.9
JEFF 5R4	<0.511	<0.443	<0.485	<0.81	<0.438	<0.60	<1.168	<0.896	<1.121	<0.093	<0.394	<0.10
JEFF 5R5	<0.512	<0.444	<0.486	<0.82	<0.439	<0.61	<1.169	<0.897	<1.122	<0.094	<0.395	<0.11
JEFF 5R6	<0.513	<0.445	<0.487	<0.83	<0.440	<0.62	<1.170	<0.898	<1.123	<0.095	<0.396	<0.12
JEFF 5R7	<0.514	<0.446	<0.488	<0.84	<0.441	<0.63	<1.171	<0.899	<1.124	<0.096	<0.397	<0.13

Table 3. PHASE VIII Data Report (con't)

507 Analytes (con't)

SITE	EPTC ug/L	Fenarimol ug/L	Metolachlor ug/L	Metribuzin ug/L	MGK 264 ug/L	Molinate ug/L	Norflurazon ug/L	Pebulate ug/L	Phenamiphos ug/L	Phosdrin ug/L	Prometon ug/L
PHIL#1	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
PHIL#2	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
PHIL#3	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
PHIL#4	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
PHIL#5	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
IND#1	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
IND#2	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
IND#3	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
IND#4	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
IND#5	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
IND#6	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
ARK #2	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
ARK #3	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
ARK #4	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
ARK #5	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
ARK #6	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
ARK#7	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
CROSS #1	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
CROSS #2	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
T. FRANCIS i	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346

Table 3. PHASE VIII Data Report (con't)

507 Analytes (con't)

SITE	EPTC ug/L	Fenarimol ug/L	Metolachlor ug/L	Metribuzin ug/L	MGK 264 ug/L	Molinate ug/L	Norflurazon ug/L	Pebulate ug/L	Phenamiphos ug/L	Phosdrin ug/L	Prometon ug/L
T. FRANCIS ;	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
T. FRANICIS	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
T. FRANCIS ;	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
T. FRANCIS ;	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
T. FRANCIS ;	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
T. FRANCIS ;	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
CROSS #3	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
CROSS #4	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
DREW #2	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
DREW #3	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
DREW #4	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
DREW #5	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
DREW #6	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
DREW #7	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
DREW #8	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
DREW #9	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
PRAIRE #8	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
PRAIRE #9	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
PRAIRIE #10	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
PRAIRE #11	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
PRAIRE #12	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346

Table 3. PHASE VIII Data Report (con't)

507 Analytes (con't)

SITE	EPTC ug/L	Fenarimol ug/L	Metolachlor ug/L	Metribuzin ug/L	MGK 264 ug/L	Molinate ug/L	Norflurazon ug/L	Pebulate ug/L	Phenamiphos ug/L	Phosdrin ug/L	Prometon ug/L
PRAIRE #13	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
PRAIRE #14	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
PRAIRE #15	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
WHITE #2	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
WHITE #3	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
WHITE #4	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
WHITE #5	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
WHITE #6	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
WHITE #7	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
WHITE #8	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
WHITE #9	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
WHITE #10	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
WHITE #11	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
ARK #8	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
ARK #9	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
ARK #10	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
ARK #11	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
ARK #12	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
ARK #13	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
ARK #14	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
JEFF #7	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
JEFF #8	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
JEFF #9	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
JEFF #10	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
JEFF #11	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346

Table 3. PHASE VIII Data Report (con't)

507 Analytes (con't)

SITE	EPTC ug/L	Fenarimol ug/L	Metolachlor ug/L	Metribuzin ug/L	MGK 264 ug/L	Molinate ug/L	Norflurazon ug/L	Pebulate ug/L	Phenamiphos ug/L	Phosdrin ug/L	Prometon ug/L
JEFF #12	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
JEFF #13	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
LINCOLN #3	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
LINCOLN #4	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
LINCOLN #5	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
LINCOLN #6	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
LINCOLN #7	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
LINCOLN #8	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
LINCOLN #9	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
DREW #10	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
DREW #11	n/a	<0.117	<0.288	<0.625	<1.571	<0.6	<0.395	<0.258	<0.592	<0.977	<0.346
WOOD #7R	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
VOOD #7Rou	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
WOOD #7Rir	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
WOOD #11R	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
WOOD #25R	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
WOOD #26R	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
. FRANCIS #	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
JEFF 2R1	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
JEFF 2R1	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
JEFF 2R2	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
JEFF 5R1	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
JEFF 5R2	< 0.348	< 4.301	< 1.025	< 0.594	< 0.844	< 0.401	< 0.523	< 0.466	< 0.445	< 0.190	< 0.261
JEFF 5R3	< 0.349	< 4.302	< 1.026	< 0.595	< 0.845	< 0.402	< 0.524	< 0.467	< 0.446	< 0.191	< 0.262
JEFF 5R4	< 0.350	< 4.303	< 1.027	< 0.596	< 0.846	< 0.403	< 0.525	< 0.468	< 0.447	< 0.192	< 0.263
JEFF 5R5	< 0.351	< 4.304	< 1.028	< 0.597	< 0.847	< 0.404	< 0.526	< 0.469	< 0.448	< 0.193	< 0.264
JEFF 5R6	< 0.352	< 4.305	< 1.029	< 0.598	< 0.848	< 0.405	< 0.527	< 0.470	< 0.449	< 0.194	< 0.265
JEFF 5R7	< 0.353	< 4.306	< 1.030	< 0.599	< 0.849	< 0.406	< 0.528	< 0.471	< 0.450	< 0.195	< 0.266

Table 3. PHASE VIII Data Report (con't)

507 Analytes (con't)

SITE	Prometryn ug/L	Propazine ug/L	Prophos ug/L	Simazine ug/L	Simetryn ug/L	Tebuthiuron ug/L	Terbutryn ug/L	Tetrachlorvinphos ug/L	Triadimefon ug/L	Tributylphos ug/L	Velpar ug/L	Vernolate ug/L
PHIL#1	< 0.211	< 0.200	< 0.255	< 0.122	< 0.861	< 0.916	< 0.168	< 0.736	< 0.201	< 0.359	< 0.482	< 0.888
PHIL#2	< 0.211	< 0.200	< 0.255	< 0.122	< 0.861	< 0.916	< 0.168	< 0.736	< 0.201	< 0.359	< 0.482	< 0.888
PHIL#3	< 0.211	< 0.200	< 0.255	< 0.122	< 0.861	< 0.916	< 0.168	< 0.736	< 0.201	< 0.359	< 0.482	< 0.888
PHIL#4	< 0.211	< 0.200	< 0.255	< 0.122	< 0.861	< 0.916	< 0.168	< 0.736	< 0.201	< 0.359	< 0.482	< 0.888
PHIL#5	< 0.211	< 0.200	< 0.255	< 0.122	< 0.861	< 0.916	< 0.168	< 0.736	< 0.201	< 0.359	< 0.482	< 0.888
IND#1	< 0.211	< 0.200	< 0.255	< 0.122	< 0.861	< 0.916	< 0.168	< 0.736	< 0.201	< 0.359	< 0.482	< 0.888
IND#2	< 0.211	< 0.200	< 0.255	< 0.122	< 0.861	< 0.916	< 0.168	< 0.736	< 0.201	< 0.359	< 0.482	< 0.888
IND#3	< 0.211	< 0.200	< 0.255	< 0.122	< 0.861	< 0.916	< 0.168	< 0.736	< 0.201	< 0.359	< 0.482	< 0.888
IND#4	< 0.211	< 0.200	< 0.255	< 0.122	< 0.861	< 0.916	< 0.168	< 0.736	< 0.201	< 0.359	< 0.482	< 0.888
IND#5	< 0.211	< 0.200	< 0.255	< 0.122	< 0.861	< 0.916	< 0.168	< 0.736	< 0.201	< 0.359	< 0.482	< 0.888
IND#6	< 0.211	< 0.200	< 0.255	< 0.122	< 0.861	< 0.916	< 0.168	< 0.736	< 0.201	< 0.359	< 0.482	< 0.888
ARK #2	< 0.211	< 0.200	< 0.255	< 0.122	< 0.861	< 0.916	< 0.168	< 0.736	< 0.201	< 0.359	< 0.482	< 0.888
ARK #3	< 0.211	< 0.200	< 0.255	< 0.122	< 0.861	< 0.916	< 0.168	< 0.736	< 0.201	< 0.359	< 0.482	< 0.888
ARK #4	< 0.211	< 0.200	< 0.255	< 0.122	< 0.861	< 0.916	< 0.168	< 0.736	< 0.201	< 0.359	< 0.482	< 0.888
ARK #5	< 0.211	< 0.200	< 0.255	< 0.122	< 0.861	< 0.916	< 0.168	< 0.736	< 0.201	< 0.359	< 0.482	< 0.888
ARK #6	< 0.211	< 0.200	< 0.255	< 0.122	< 0.861	< 0.916	< 0.168	< 0.736	< 0.201	< 0.359	< 0.482	< 0.888
ARK#7	< 0.211	< 0.200	< 0.255	< 0.122	< 0.861	< 0.916	< 0.168	< 0.736	< 0.201	< 0.359	< 0.482	< 0.888
CROSS #1	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
CROSS #2	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
ST. FRANCIS #2	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59

Table 3. PHASE VIII Data Report (con't)

507 Analytes (con't)

SITE	Prometryn ug/L	Propazine ug/L	Prophos ug/L	Simazine ug/L	Simetryn ug/L	Tebuthiuron ug/L	Terbutryn ug/L	Tetrachlorvinphos ug/L	Triadimefon ug/L	Tributylphos ug/L	Velpar ug/L	Vernolate ug/L
ST. FRANCIS #3	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
ST. FRANICIS #4	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
ST. FRANCIS #5	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
ST. FRANCIS #6	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
ST. FRANCIS #7	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
ST. FRANCIS #8	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
CROSS #3	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
CROSS #4	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
DREW #2	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
DREW #3	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
DREW #4	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
DREW #5	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
DREW #6	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
DREW #7	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
DREW #8	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
DREW #9	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
PRAIRE #8	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
PRAIRE #9	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
PRAIRIE #10	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
PRAIRE #11	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
PRAIRE #12	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59

Table 3. PHASE VIII Data Report (con't)

507 Analytes (con't)

SITE	Prometryn ug/L	Propazine ug/L	Prophos ug/L	Simazine ug/L	Simetryn ug/L	Tebuthiuron ug/L	Terbutryn ug/L	Tetrachlorvinphos ug/L	Triadimefon ug/L	Tributylphos ug/L	Velpar ug/L	Vernolate ug/L
PRAIRE #13	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
PRAIRE #14	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
PRAIRE #15	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
WHITE #2	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
WHITE #3	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
WHITE #4	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
WHITE #5	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
WHITE #6	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
WHITE #7	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
WHITE #8	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
WHITE #9	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
WHITE #10	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
WHITE #11	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
ARK #8	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
ARK #9	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
ARK #10	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
ARK #11	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
ARK #12	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
ARK #13	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
ARK #14	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
JEFF #7	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
JEFF #8	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
JEFF #9	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
JEFF #10	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
JEFF #11	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59

Table 3. PHASE VIII Data Report (con't)

507 Analytes (con't)

SITE	Prometryn ug/L	Propazine ug/L	Prophos ug/L	Simazine ug/L	Simetryn ug/L	Tebuthiuron ug/L	Terbutryn ug/L	Tetrachlorvinphos ug/L	Triadimefon ug/L	Tributylphos ug/L	Velpar ug/L	Vernolate ug/L
JEFF #12	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
JEFF #13	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
LINCOLN #3	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
LINCOLN #4	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
LINCOLN #5	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
LINCOLN #6	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
LINCOLN #7	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
LINCOLN #8	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
LINCOLN #9	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
DREW #10	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
DREW #11	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
WOOD #7R	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
WOOD #7Rout	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
WOOD #7Rin	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
WOOD #11R	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
WOOD #25R	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
WOOD #26R	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
ST. FRANCIS #1 I	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
JEFF 2R1	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
JEFF 2R1	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
JEFF 2R2	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
JEFF 5R1	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
JEFF 5R2	<0.897	<0.834	<1.104	<0.013	<0.145	<0.079	<0.928	<0.697	<0.8027	<0.656	<0.434	<0.59
JEFF 5R3	<0.898	<0.835	<1.105	<0.014	<0.146	<0.080	<0.929	<0.698	<0.8028	<0.657	<0.435	<0.60
JEFF 5R4	<0.899	<0.836	<1.106	<0.015	<0.147	<0.081	<0.930	<0.699	<0.8029	<0.658	<0.436	<0.61
JEFF 5R5	<0.900	<0.837	<1.107	<0.016	<0.148	<0.082	<0.931	<0.700	<0.8030	<0.659	<0.437	<0.62
JEFF 5R6	<0.901	<0.838	<1.108	<0.017	<0.149	<0.083	<0.932	<0.701	<0.8031	<0.660	<0.438	<0.63
JEFF 5R7	<0.902	<0.839	<1.109	<0.018	<0.150	<0.084	<0.933	<0.702	<0.8032	<0.661	<0.439	<0.64

Table 3. PHASE VIII Data Report (con't)

515 Analytes

SITE	2,4,5-T ug/L	2,4-D ug/L	2,4-DB ug/L	3,5-D ug/L	Aciflurofen ug/L	Bentazon ug/L	Dacthal ug/L	Dicamba ug/L	Dichlorprop ug/L	Dinoseb ug/L	PCP# ug/L	Picloram ug/L	Silvex ug/L
PHIL#1	< 0.116	< 0.145	< 0.814	< 0.494	< 0.228	< 1.048	< 0.104	< 0.376	< 5.302	< 0.184	n/a	< 0.284	< 0.059
PHIL#2	< 0.116	< 0.145	< 0.814	< 0.494	< 0.228	< 1.048	< 0.104	< 0.376	< 5.302	< 0.184	n/a	< 0.284	< 0.059
PHIL#3	< 0.116	< 0.145	< 0.814	< 0.494	< 0.228	< 1.048	< 0.104	< 0.376	< 5.302	< 0.184	n/a	< 0.284	< 0.059
PHIL#4	< 0.116	< 0.145	< 0.814	< 0.494	< 0.228	< 1.048	< 0.104	< 0.376	< 5.302	< 0.184	n/a	< 0.284	< 0.059
PHIL#5	< 0.116	< 0.145	< 0.814	< 0.494	< 0.228	< 1.048	< 0.104	< 0.376	< 5.302	< 0.184	n/a	< 0.284	< 0.059
IND#1	< 0.116	< 0.145	< 0.814	< 0.494	< 0.228	< 1.048	< 0.104	< 0.376	< 5.302	< 0.184	n/a	< 0.284	< 0.059
IND#2	< 0.116	< 0.145	< 0.814	< 0.494	< 0.228	< 1.048	< 0.104	< 0.376	< 5.302	< 0.184	n/a	< 0.284	< 0.059
IND#3	< 0.116	< 0.145	< 0.814	< 0.494	< 0.228	< 1.048	< 0.104	< 0.376	< 5.302	< 0.184	n/a	< 0.284	< 0.059
IND#4	< 0.116	< 0.145	< 0.814	< 0.494	< 0.228	< 1.048	< 0.104	< 0.376	< 5.302	< 0.184	n/a	< 0.284	< 0.059
IND#5	< 0.116	< 0.145	< 0.814	< 0.494	< 0.228	7.97	< 0.104	< 0.376	< 5.302	< 0.184	n/a	< 0.284	< 0.059
IND#6	< 0.116	< 0.145	< 0.814	< 0.494	< 0.228	< 1.048	< 0.104	< 0.376	< 5.302	< 0.184	n/a	< 0.284	< 0.059
ARK #2	< 0.116	< 0.145	< 0.814	< 0.494	< 0.228	< 1.048	< 0.104	< 0.376	< 5.302	< 0.184	n/a	< 0.284	< 0.059
ARK #3	< 0.116	< 0.145	< 0.814	< 0.494	< 0.228	< 1.048	< 0.104	< 0.376	< 5.302	< 0.184	n/a	< 0.284	< 0.059
ARK #4	< 0.116	< 0.145	< 0.814	< 0.494	< 0.228	< 1.048	< 0.104	< 0.376	< 5.302	< 0.184	n/a	< 0.284	< 0.059
ARK #5	< 0.116	< 0.145	< 0.814	< 0.494	< 0.228	< 1.048	< 0.104	< 0.376	< 5.302	< 0.184	n/a	< 0.284	< 0.059
ARK #6	< 0.116	< 0.145	< 0.814	< 0.494	< 0.228	< 1.048	< 0.104	< 0.376	< 5.302	< 0.184	n/a	< 0.284	< 0.059
ARK#7	< 0.116	< 0.145	< 0.814	< 0.494	< 0.228	< 1.048	< 0.104	< 0.376	< 5.302	< 0.184	n/a	< 0.284	< 0.059
CROSS #1	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
CROSS #2	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
ST. FRANCIS #2	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058

Table 3. PHASE VIII Data Report (con't)

515 Analytes

SITE	2,4,5-T ug/L	2,4-D ug/L	2,4-DB ug/L	3,5-D ug/L	Aciflurofen ug/L	Bentazon ug/L	Dacthal ug/L	Dicamba ug/L	Dichlorprop ug/L	Dinoseb ug/L	PCP# ug/L	Picloram ug/L	Silvex ug/L
ST. FRANCIS #3	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
ST. FRANICIS #4	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
ST. FRANCIS #5	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
ST. FRANCIS #6	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
ST. FRANCIS #7	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
ST. FRANCIS #8	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
CROSS #3	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
CROSS #4	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
DREW #2	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
DREW #3	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
DREW #4	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
DREW #5	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
DREW #6	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
DREW #7	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
DREW #8	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
DREW #9	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
PRAIRE #8	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
PRAIRE #9	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
PRAIRIE #10	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
PRAIRE #11	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
PRAIRE #12	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058

Table 3. PHASE VIII Data Report (con't)

515 Analytes

SITE	2,4,5-T ug/L	2,4-D ug/L	2,4-DB ug/L	3,5-D ug/L	Aciflurofen ug/L	Bentazon ug/L	Dacthal ug/L	Dicamba ug/L	Dichlorprop ug/L	Dinoseb ug/L	PCP# ug/L	Picloram ug/L	Silvex ug/L
PRAIRE #13	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
PRAIRE #14	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
PRAIRE #15	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
WHITE #2	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
WHITE #3	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
WHITE #4	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
WHITE #5	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
WHITE #6	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
WHITE #7	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
WHITE #8	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
WHITE #9	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
WHITE #10	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
WHITE #11	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
ARK #8	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
ARK #9	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
ARK #10	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
ARK #11	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
ARK #12	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
ARK #13	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
ARK #14	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
JEFF #7	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
JEFF #8	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
JEFF #9	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
JEFF #10	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
JEFF #11	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058

Table 3. PHASE VIII Data Report (con't)

515 Analytes

SITE	2,4,5-T ug/L	2,4-D ug/L	2,4-DB ug/L	3,5-D ug/L	Aciflurofen ug/L	Bentazon ug/L	Dacthal ug/L	Dicamba ug/L	Dichlorprop ug/L	Dinoseb ug/L	PCP# ug/L	Picloram ug/L	Silvex ug/L
JEFF #12	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
JEFF #13	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
LINCOLN #3	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
LINCOLN #4	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
LINCOLN #5	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
LINCOLN #6	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
LINCOLN #7	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
LINCOLN #8	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
LINCOLN #9	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
DREW #10	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
DREW #11	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
WOOD #7R	<0.103	<0.716	<0.701	<0.908	<0.132	3.666	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
WOOD #7Rout	<0.103	<0.716	<0.701	<0.908	<0.132	1.528	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
WOOD #7Rin	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
WOOD #11R	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
WOOD #25R	<0.103	<0.716	<0.701	<0.908	<0.132	0.412	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
WOOD #26R	<0.103	<0.716	<0.701	<0.908	<0.132	0.389	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
;T. FRANCIS #1 I	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
JEFF 2R1	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
JEFF 2R1	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
JEFF 2R2	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
JEFF 5R1	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
JEFF 5R2	<0.103	<0.716	<0.701	<0.908	<0.132	<0.345	<0.041	<0.458	<0.503	<0.192	<0.113	<0.595	<0.058
JEFF 5R3	<0.104	<0.717	<0.702	<0.909	<0.133	<0.346	<0.042	<0.459	<0.504	<0.193	<0.113	<0.596	<0.059
JEFF 5R4	<0.105	<0.718	<0.703	<0.910	<0.134	<0.347	<0.043	<0.460	<0.505	<0.194	<0.113	<0.597	<0.060
JEFF 5R5	<0.106	<0.719	<0.704	<0.911	<0.135	<0.348	<0.044	<0.461	<0.506	<0.195	<0.113	<0.598	<0.061
JEFF 5R6	<0.107	<0.720	<0.705	<0.912	<0.136	<0.349	<0.045	<0.462	<0.507	<0.196	<0.113	<0.599	<0.062
JEFF 5R7	<0.108	<0.721	<0.706	<0.913	<0.137	<0.350	<0.046	<0.463	<0.508	<0.197	<0.113	<0.600	<0.063

Table 3. PHASE VIII Data Report (con't)

NPS4 Analytes

SITE	Barban ug/L	Cyanazine ug/L	Diuron ug/L	Fluometuron ug/L	Linuron ug/L	Propanil ug/L	Propham ug/L	Swep ug/L
PHIL#1	< 0.329	< 0.329	< 0.089	< 0.104	< 0.141	< 0.090	< 0.712	<0.436
PHIL#2	< 0.329	< 0.329	< 0.089	< 0.104	< 0.141	< 0.090	< 0.712	<0.436
PHIL#3	< 0.329	< 0.329	< 0.089	< 0.104	< 0.141	< 0.090	< 0.712	<0.436
PHIL#4	< 0.329	< 0.329	< 0.089	< 0.104	< 0.141	< 0.090	< 0.712	<0.436
PHIL#5	< 0.329	< 0.329	< 0.089	< 0.104	< 0.141	< 0.090	< 0.712	<0.436
IND#1	< 0.329	< 0.329	< 0.089	< 0.104	< 0.141	< 0.090	< 0.712	<0.436
IND#2	< 0.329	< 0.329	< 0.089	< 0.104	< 0.141	< 0.090	< 0.712	<0.436
IND#3	< 0.329	< 0.329	< 0.089	< 0.104	< 0.141	< 0.090	< 0.712	<0.436
IND#4	< 0.329	< 0.329	< 0.089	< 0.104	< 0.141	< 0.090	< 0.712	<0.436
IND#5	< 0.329	< 0.329	< 0.089	< 0.104	< 0.141	< 0.090	< 0.712	<0.436
IND#6	< 0.329	< 0.329	< 0.089	< 0.104	< 0.141	< 0.090	< 0.712	<0.436
ARK #2	< 0.329	< 0.329	< 0.089	< 0.104	< 0.141	< 0.090	< 0.712	<0.436
ARK #3	< 0.329	< 0.329	< 0.089	< 0.104	< 0.141	< 0.090	< 0.712	<0.436
ARK #4	< 0.329	< 0.329	< 0.089	< 0.104	< 0.141	< 0.090	< 0.712	<0.436
ARK #5	< 0.329	< 0.329	< 0.089	< 0.104	< 0.141	< 0.090	< 0.712	<0.436
ARK #6	< 0.329	< 0.329	< 0.089	< 0.104	< 0.141	< 0.090	< 0.712	<0.436
ARK#7	< 0.329	< 0.329	< 0.089	< 0.104	< 0.141	< 0.090	< 0.712	<0.436
CROSS #1	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
CROSS #2	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
ST. FRANCIS #2	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735

Table 3. PHASE VIII Data Report (con't)

NPS4 Analytes

SITE	Barban ug/L	Cyanazine ug/L	Diuron ug/L	Fluometuron ug/L	Linuron ug/L	Propanil ug/L	Propham ug/L	Swep ug/L
ST. FRANCIS #3	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
ST. FRANICIS #4	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
ST. FRANCIS #5	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
ST. FRANCIS #6	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
ST. FRANCIS #7	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
ST. FRANCIS #8	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
CROSS #3	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
CROSS #4	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
DREW #2	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
DREW #3	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
DREW #4	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
DREW #5	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
DREW #6	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
DREW #7	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
DREW #8	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
DREW #9	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
PRAIRE #8	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
PRAIRE #9	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
PRAIRIE #10	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
PRAIRE #11	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
PRAIRE #12	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735

Table 3. PHASE VIII Data Report (con't)

NPS4 Analytes

SITE	Barban ug/L	Cyanazine ug/L	Diuron ug/L	Fluometuron ug/L	Linuron ug/L	Propanil ug/L	Propham ug/L	Swep ug/L
PRAIRE #13	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
PRAIRE #14	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
PRAIRE #15	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
WHITE #2	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
WHITE #3	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
WHITE #4	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
WHITE #5	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
WHITE #6	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
WHITE #7	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
WHITE #8	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
WHITE #9	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
WHITE #10	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
WHITE #11	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
ARK #8	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
ARK #9	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
ARK #10	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
ARK #11	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
ARK #12	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
ARK #13	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
ARK #14	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
JEFF #7	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
JEFF #8	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
JEFF #9	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
JEFF #10	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
JEFF #11	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735

Table 3. PHASE VIII Data Report (con't)

NPS4 Analytes

SITE	Barban ug/L	Cyanazine ug/L	Diuron ug/L	Fluometuron ug/L	Linuron ug/L	Propanil ug/L	Propham ug/L	Swep ug/L
JEFF #12	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
JEFF #13	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
LINCOLN #3	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
LINCOLN #4	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
LINCOLN #5	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
LINCOLN #6	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
LINCOLN #7	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
LINCOLN #8	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
LINCOLN #9	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
DREW #10	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
DREW #11	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
WOOD #7R	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
WOOD #7Rout	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
WOOD #7Rin	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
WOOD #11R	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
WOOD #25R	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
WOOD #26R	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
T. FRANCIS #1	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
JEFF 2R1	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
JEFF 2R1	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
JEFF 2R2	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
JEFF 5R1	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
JEFF 5R2	<0.776	<0.288	<0.038	<0.08	<0.256	<0.112	<0.599	<0.735
JEFF 5R3	<0.777	<0.289	<0.039	<0.09	<0.257	<0.113	<0.600	<0.736
JEFF 5R4	<0.778	<0.290	<0.040	<0.10	<0.258	<0.114	<0.601	<0.737
JEFF 5R5	<0.779	<0.291	<0.041	<0.11	<0.259	<0.115	<0.602	<0.738
JEFF 5R6	<0.780	<0.292	<0.042	<0.12	<0.260	<0.116	<0.603	<0.739
JEFF 5R7	<0.781	<0.293	<0.043	<0.13	<0.261	<0.117	<0.604	<0.740

Desha counties, had low concentrations (about 1 ug/L of molinate). As noted above, the confirmation sample for Jefferson #5 was below detection, and none of the other nine samples from Jefferson County had any pesticide detections. The lower number of molinate detections by AWRC relative to ADEQ is probably, at least in part, due to the much lower detection limit at ADEQ.

Table 4 is a listing of all the wells in which pesticides were detected at the WQL. The Practical Quantitation Limit is defined as 3.18 times the detection limit (Rosecrance, 2000) and should be the value used to report concentrations. For bentazon, the practical quantitation limit is 1.097. The only reportable concentrations are for Woodruff #7 on January 30, and February 16, 2001(outside faucet), 3.666 and 1.528, respectively. All of the other concentrations are between the detection limit and the practical quantitation limit and therefore are reported as present but not quantifiable.

One column shows the concentration of the pesticide. The next column indicates if the results were confirmed at the ASPB laboratory. For new pesticide detections, a further column indicates if the detection has been verified by the analysis of another sample from the same well. These data are also in the main body of the Completion Report.

Table 4. Pesticide detections for Phase VIII.

					REPEAT DETECTIONS	
SITE	DATE COLLECTED	ANALYTE FOUND	CONC. (µg/L)	CONFIRMED	VERIFI-CATION	ACTION STATUS
WOOD #7R	1/30/01	bentazon	3.666	No	yes	continued monitoring
WOOD #7Rout	2/16/01	bentazon	1.528	No	yes	continued monitoring
WOOD #25R	1/30/01	bentazon	present (0.412)	No, Below ASPB DL.	yes	continued monitoring
WOOD #26R	1/30/01	bentazon	present (0.389)	No, Below ASPB DL.	yes	continued monitoring

V. 1. Nitrate Results

Table 5 shows the distribution of nitrate-nitrogen in the 84 wells tested during Phase VIII. The maximum contamination limit (MCL) for nitrate in drinking water is 10 mg/L as nitrogen. The highest concentration of nitrate-nitrogen during Phase VIII monitoring was 5.429 mg/L (White #10). Phase VI had 48% of its wells with 1 or more mg/L nitrate-nitrogen (the highest percentage for all phases of monitoring); whereas, Phase VII had only 9%,and this phase has

Table 5. Distribution of nitrate concentrations among Phase VIII wells.

Concentration (mg/L, NO_3-N)	Number of Wells
Less than detection (<0.002 or <0.005 depending on run)	16
0.004 to 0.99	59
1.0 to 4.99	8
5.0 to 9.99	1
10.0 or more	0
Not analyzed	2
Total	84

11%. These last two monitoring phases have relatively low values compared to all previous phases that had 30% of the nitrate-nitrogen concentrations equal to or greater than 1 mg/L nitrate-nitrogen. It is not clear why this phase of monitoring and the previous phase have relatively low nitrate values. It may be related variation in sampling dates relative to fertilizer application, septic tank effluent or recharge variation.

IV. 2. Changes in Pesticide Concentrations

Essentially all of the wells with previous pesticide detections are exhibiting decreasing concentrations with time, and, in some cases, the pesticides are no longer detectable; e.g., the wells resampled during this phase of monitoring. Jefferson #2 was sampled twice in 1999 and had bentazon present (about 0.9 and 0.7 ug/L bentazon which is below the practical quantitation limit which is 1.083 ug/L). In 2001 bentazon was no longer detectable. Jefferson #5 had molinate present (detected at 0.3 but the practical quanititation limit is 0.6 x 3.18 = 1.908 ug/L) in 1999, but the confirmation sample in 2001 was below detection. The first sample from St. Francis #1 obtained on May 12, 1999 during Phase VIII monitoring had a bentazon concentration of 7.97 ug/L. The confirmation sample collected on February 16, 2001 during this phase of monitoring did not have any detectable pesticides. Wood #7 had decreased from about 70 ug/L bentazon in 1994, to about 30

ug/L in 1995, to about 12 ug/L in 1998, to about 2 ug/L in 2001. The reason that there was no detection from a faucet inside the house on February 16, 2001 is most likely due to sample and analytical variation since the concentration at the outside faucet was only about 1.5 ug/L. A graph of these concentrations produces a logarithmic curve (Figure 13).

Woodruff #25 and # 26 have original concentrations of bentazon that consistently decreased over four sampling periods (1994 -2001) from 4.4 and 1.5 ug/L, respectively to less than the practical quantitation limit is about 1.3 ug/L. Wood # 11 has an original concentration of metolachlor that decreased from 13 ug/L to no detection (over a seven-year period.

IV. 3. Source of Contamination

If the ASPB monitored wells with pesticide contamination are responding to movement of a plume of pesticide contaminated ground water, one would expect approximately half of the sites to be located on the leading edge of a plume and half to be on the backside of the plume. Most of the wells are behaving as though they are on the back side of the plume. This situation of most of the wells being on the backside of contamination plumes seems unlikely; however, the possibility of non-point source plumes cannot be eliminated. Another explanation is that the wells are responding to "local" contamination of the well or soil near the well that is being dissipated over time. This dissipation ultimately is due to degradation and/or dispersion.

IV. 4. Sensitivity Indices.

The sensitivity index (SI) ranges from 31 (low sensitivity to pesticide contamination) to 87 (greater sensitivity) in the Arkansas Delta. The initial goal of the project was to monitor areas with highest SI values, those most susceptible to contamination. Most of the hot spots have been sampled, where feasible, in earlier phases of the monitoring program. Because some of the hot spots are in swamps or in areas without wells, some high SI locations have not been sampled.

Because most of the hot spots (SI >70) had been monitored where feasible, during previous phases of the monitoring program. The goal for Phase VIII was to expand coverage within counties that had few previous samples. The SI for the area around the 77 wells in this phase of monitoring ranged from 40 to 73. The distribution of the wells with respect to SI is provided in Table 6.

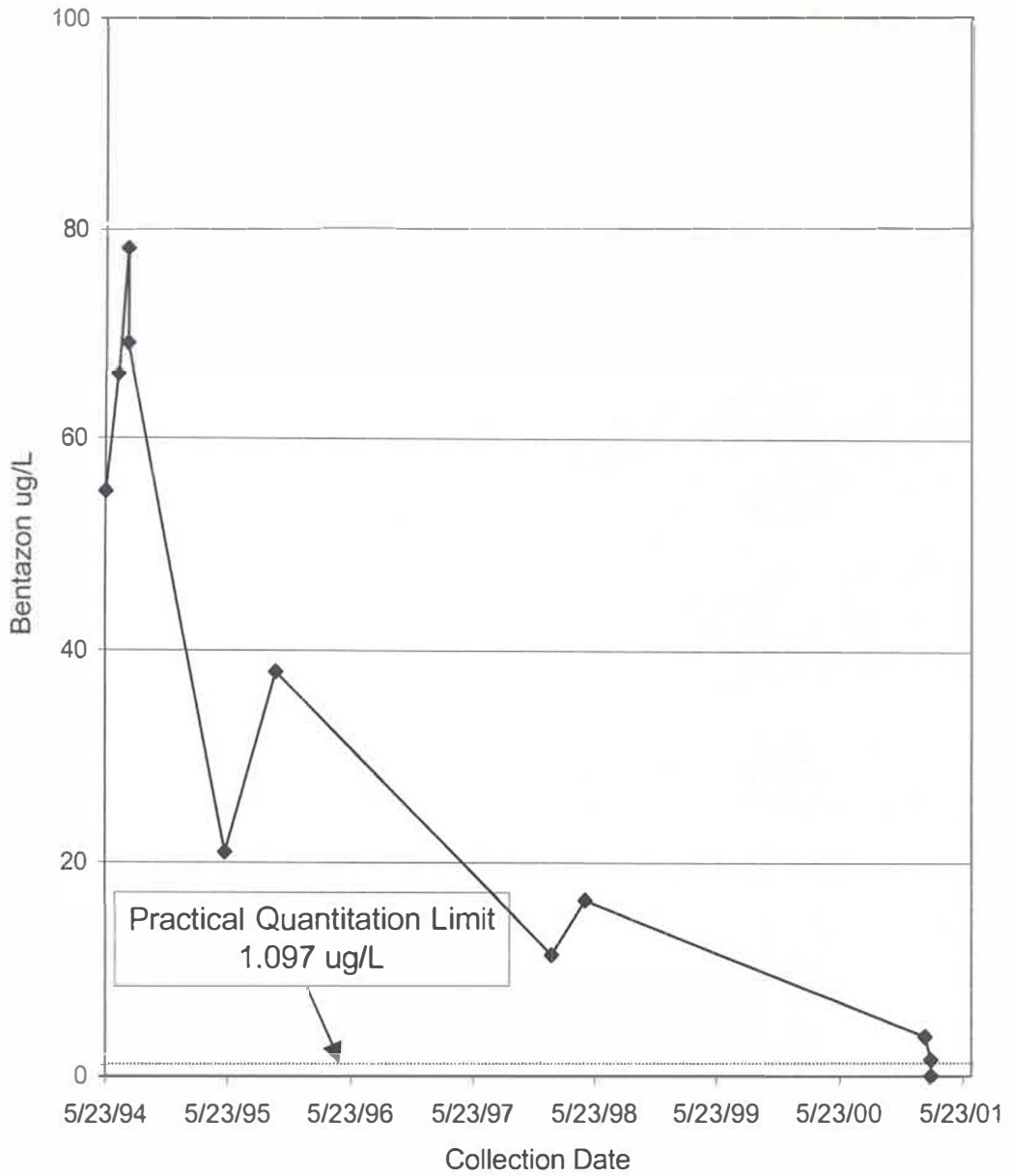

Figure 12. Change in bentazon concentration with time at site Woodruff #7.

Table 6. Sensitivity indices for new Phase VIII wells.

Number of Wells	Sensitivity Index
3	locations without SI data
16	40-49
26	50-59
25	60-69
7	70-73

An earlier study (Steele et al., 1996) determined that a SI of 70 or greater indicated greater nitrate concentrations and more pesticide contamination in wells in Woodruff County. Ninety-one percent of the wells sampled during this phase of monitoring had SI less than 70. The lack of pesticide detection and relatively low nitrate concentrations are consistent with the results from Woodruff County.

V. Rain Events

The vertical hydraulic gradient should be too small to allow significant quick movement of recharge water to the water table due to individual or closely spaced rain events. The relationship of multiple recharge events is very complex based on varying rates of recharge for each rain event and the possibility of different wetting fronts mixing. Despite these statements, if recharge water were to move along the annulus of the well or along other macropores near the well, then rain events could potentially change pesticide concentrations in wells rather quickly.

Table 7. Cumulative rain prior to sample collection dates and corresponding bentazon concentrations.

DATE	5-DAY	10-DAY	15-DAY	20-DAY	30-DAY	40-DAY	BENTAZON ug/L
5/23/94	0.19	2.30	8.62	10.42	11.32	14.09	55
6/29/94	0.00	0.00	0.77	9.29	9.53	9.53	66
7/27/94	1.47	2.00	2.28	8.77	9.54	9.54	74
5/15/95	0.12	0.96	2.25	3.92	5.95	9.29	21
10/12/95	0.00	0.98	1.64	1.81	2.42	2.79	38
01/12/95	0.43	2.31	2.54	4.23	4.86	5.48	11
4/23/98	0.33	0.38	0.38	0.48	1.64	3.33	17

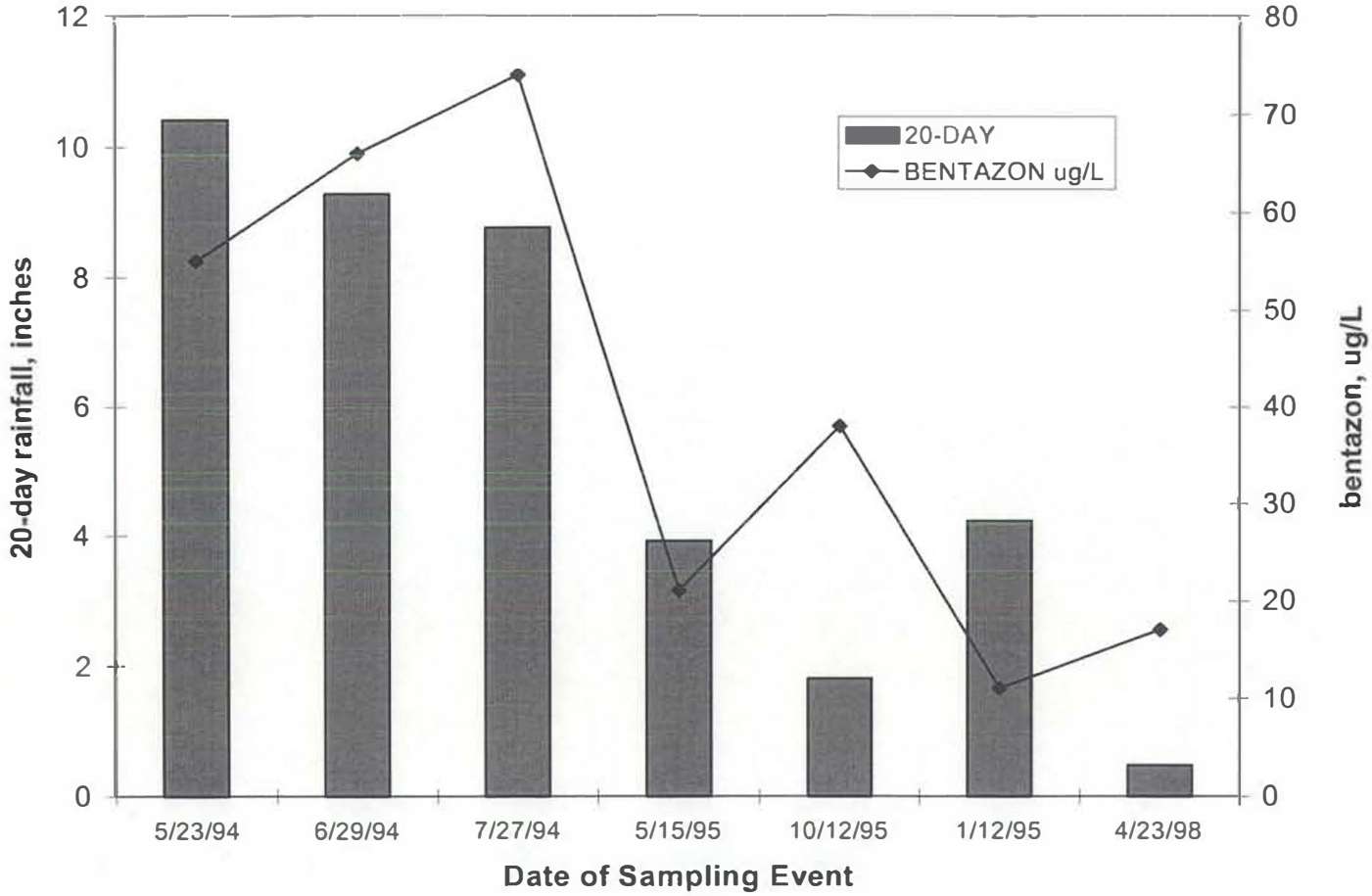

Figure 13. 20-day rainfall and bentazon data by sampling event.

Changes in depth of the water table in response to rain events could allow the ground water to encounter a contamination point source that would be expected to occur at relatively shallow depths. During periods of little rain (little to no recharge) the water table will be lowered effectively removing the contamination source from the ground water. During periods of heavy rain (recharge), the water table would be raised and the ground water could come in contact with the contaminant.

Woodruff #7 was used to investigate this potential impact of rain events on pesticide concentrations in ground water because of its long term monitoring record. Table 7 provides the cumulative rain for 5 to 40 days prior to seven sampling dates from 1994 to 1998. There is no discernable relationship between cumulative rain and bentazon concentration. The best relationship is for cumulative rain 20 and 30 days prior to sample collection (e.g., Figure 14). Although there is a general increase in bentazon concentration with rain amount in Figure 14, the relationship is far from ideal, especially for 7/27/94 and 10/112/95 where the increase in bentazon concentration does not correlate with an increase in rain.

VI. Conclusions

Phase VIII monitoring had no new detections of pesticides and many of the repeat samples are lower concentration than previous samples. This decrease in concentration is attributed to either contamination of soil near the well (point source) or a plume of ground water contamination (non-point source). Because of the prevalent decrease in concentration among the contaminated well over a period of a few years, it appears that many of the contaminated sites are related to local point sources. The lack of detecting any pesticide contamination during this phase of the monitoring program is consistent with the sensitivity index (SI) for 91% of the wells being below SI = 70.

VII. References

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APPENDIX A

DATA QUALITY ASSURANCE REPORT

ARKANSAS STATE PLANT BOARD

PESTICIDE GROUND WATER MONITORING PROJECT

FOR MOST VULNERABLE AREAS OF ARKANSAS

PHASE VIII

Appendix
Table of Contents

DATA QUALITY ASSURANCE REPORT
ARKANSAS STATE PLANT BOARD
PESTICIDE GROUND WATER MONITORING PROJECT
FOR VULNERABLE AREAS OF ARKANSAS
PHASE VIII

Introduction

This appendix presents a summary of the pesticide and nitrate data collected during Phase VIII monitoring and the associated quality assurance data including all quality control checks. The parameters analyzed in this project are provided in Table A1. Each analyte is listed with the method of analysis and the Water Quality Laboratory's detection limit for the pesticide. Data to support the detection limits were presented in the Phase VI report. Table A2 is a listing of all the wells in which pesticides were detected at the WQL.

Phase VIII monitoring for pesticides was conducted as a series of 12 distinct batches or collection trips. Samples for each trip were collected over a period of one or two days. Separate aliquots of sample water were collected for each of three methods of pesticide analysis and for one nitrate-nitrogen method. Sample aliquots for each method were extracted and analyzed as a group. Quality control checks were done separately for each method for each trip. Surrogate standard (Surr) is an analyte picked by the EPA that is extremely unlikely to be found in any sample but that is similar to the analytes of interest in chemical composition, extraction, and chromatorgraphy. Surrogate is used to show overall extraction performance. Recoveries must be acceptable to show "control". Internal standard (IS) is an analyte selected by the EPA that is extremely unlikely to be in a sample and is added after the extraction process. The IS is used to measure relative responses of method analytes and surrogates used in that method. Recoveries must be acceptable to demonstrate "control" (Table A3).

The data and quality assurance information in this report are presented by trip with each trip subdivided by method. Data and quality control information are listed by trip and by method beginning on page A16. A brief summary of the monitoring data is given in the following section.

Data Summary

Table 3 (in the first section of the report) is a listing of all the sites sampled during this phase. For each site, along with identifying information, results are given for pH, specific conductance, temperature, nitrate and all pesticides. Table A2 is a listing of all the wells in which pesticides were detected at the WQL. One column shows the concentration of the pesticide. The next column indicates if the results were confirmed at the ASPB laboratory. For new pesticide detections a further column indicates if the detection has been verified by the analysis of another sample from the same well. These data are also in the main body of the Completion Report . They are included here for those who might only read this appendix.

Table A1. Methods, analytes and detection limits.

Method	Analyte	WQL_DL (µg/L)	
		Year 2000	Year 2001
EPA507	Alachlor	0.452	0.509
	Ametryn	0.208	0.441
	Atraton	0.381	0.483
	Atrazine	0.199	0.79
	Bromacil	0.543	0.436
	Butachlor	0.655	0.58
	Butylate	0.257	1.166
	Carboxin	0.491	0.894
	Chlorpropham	0.332	1.119
	Devrinol (Napropamide)	1.359	0.091
	Dichlorvos	0.560	0.392
	Diphenamid	0.201	0.8
	EPTC	0.348	n/a
	Fenarimol	4.301	0.117
	Metolachlor	1.025	0.288
	Metribuzin	0.594	0.625
	MGK 264	0.844	1.571
	Molinate	0.401	0.6
	Norflurazon	0.523	0.395
	Pebulate	0.466	0.258
	Phenamiphos	0.445	0.592
	Phosdrin (Mevinphos)	0.190	0.977
	Prometon	0.261	0.346
	Prometryn	0.211	0.897
	Propazine	0.200	0.834
	Prophos (Ethoprop)	0.255	1.104
	Simazine	0.122	0.013
	Simetryn	0.861	0.145
	Tebuthiuron	0.916	0.079
	Terbutryn	0.168	0.928
	Tetrachlorvinphos (Stirofos)	0.736	0.697
	Trademefon	0.201	0.8027
	Tributylphos	0.359	0.656
	Velpar (Hexazinone)	0.482	0.434
	Vernolate	0.888	0.59

Table A1. Methods, analytes and detection limits (continued).

Method	Analyte	WQL_DL (µg/L)	
		Year 2000	Year 2001
EPA515.	2,4,5-T	0.116	0.103
	2,4-D	0.145	0.716
	2,4-DB	0.814	0.701
	3,5-Dichlorobenzoic acid	0.494	0.908
	Acifluorfen	0.228	0.132
	Bentazon	1.048	0.345
	Dacthal (DCPA)	0.104	0.041
	Dicamba	0.376	0.458
	Dichlorprop	5.302	0.503
	Dinoseb	0.184	0.192
	Pentachlorophenol (PCP)	n/a	0.113
	Picloram	0.284	0.595
	Silvex (2,4,5-TP)	0.059	0.058
NPS4	Barban	0.329	0.776
	Cyanazine	0.329	0.288
	Diuron	0.089	0.038
	Fluometuron	0.104	0.08
	Linuron	0.141	0.256
	Propanil	0.090	0.112
	Propham	0.712	0.599
	Swep	0.436	0.735
EPA300	nitrate-nitrogen	Variable but less than (mg/L) see individual trips for appropriate detection limit.	0.005

Table A2. Pesticide detections for Phase VIII.

SITE	DATE COLLECTED	ANALYTE FOUND	CONC. (µg/L)	CONFIRMED	REPEAT DETECTIONS VERIFICATION	REPEAT DETECTIONS ACTION STATUS
WOOD #7R	1/30/01	bentazon	3.666	No	yes	continued monitoring
WOOD #7Rout	2/16/01	bentazon	1.528	No	yes	continued monitoring
WOOD #25R	1/30/01	bentazon	0.412	No, Below ASPB DL.	yes	continued monitoring
WOOD #26R	1/30/01	bentazon	0.389	No, Below ASPB DL.	yes	continued monitoring

Explanation of Quality Control Data

The major QA/QC concern of this study is to demonstrate an ongoing ability to detect small amounts of pesticides in various ground waters. For this it is necessary to demonstrate that the methods are "in control." For each of the three major methods, EPA507, EPA515 and NPS4, one or more lab fortified blanks (LFB) for each batch was run along with the samples. For each LFB, a known amount (s) of surrogate and analytes were added before extraction and a known amount of an internal standard was added after extraction was complete. For an LFB to pass QC it had to show acceptable recoveries for the surrogate and internal standard as well as for the analytes with which it was fortified. If acceptable recoveries are not obtained for any of the analytes in a LFB, the laboratory must move to a corrective action for that analyte and must move to corrective action for that analyte(s). Table A3 shows acceptable recoveries for surrogates, internal standards and analytes as specified in the methods. If the recovery for one or more analytes in an LFM is outside the acceptable range then the results for those analytes in unfortied samples from the same matrix are labeled as suspect because of potential matrix interference. Matrix interference can be caused by analytes in the sample, chemicals in the ground water, and/or colloids and clay particles in the sample.

Table A3. Required recoveries for methods to be in control.

Method	Surrogate Recov. %	Int. Std. Recov. %	Analyte Recovs. %
EPA507	70-130	70-130	70-130
EPA515	60-140	70-130	70-130
NPS4	70-130	70-130	70-130

For each trip, at least one Lab Fortified Sample Matrix (LFM) was analyzed for each method. This is a check for matrix interference. Assuming the method is in control as indicated by good recoveries on an LFB and if the recovery for one or more

analytes in an LFM is outside the acceptable range, then the results for those analytes are considered suspect due to matrix interference.

The non-fortified samples for pesticide analysis are also required to pass QC checks for surrogate and internal standard recovery. All results reported are reported with percent recoveries for both the surrogate and internal standard. Any results associated with low recoveries on either the surrogate or the internal standard are reported as suspect due to matrix interference.

In addition, at least one Lab Blank (LB) was analyzed for each method for each trip. All results on the LBs are reported as part of the "trip," i.e., sample collection event. QC. To be acceptable LBs must have good surrogate and internal standard recoveries with no analytes detected. Results for field and instrument duplicates are also reported.

Standards are available commercially and are combined in several mixes to avoid over lapping chromatographic peaks. These standards are diluted to make LFB and LFM which are analyzed using a calibration curve based on standards from different sources. Diluted standards and extracted diluted standards were analyzed. The concentration of the extracted standard mixes are reported as a percent of the non-extracted standards. The various mixes with each method are provided in Table A4.

QC for nitrate-nitrogen results for each trip are reported with estimates of accuracy and precision in the form of percent recovery for a lab spike (90 to 110% required) and percent relative standard deviation (%RSD<10% required) for two duplicates analyzed with the batch.

Summary of QA/QC

Sampling procedures set out in the QAPP for this project were followed on all sample collection trips. Sample bottles were thoroughly cleaned before use and appropriate preservatives were pipeted into the bottles in the lab prior to each sampling trip. Samples were iced immediately and kept iced until delivered to the lab. Sample custody forms were maintained through sample delivery and are on file with the records of this project. EPA holding times for samples and extracts were met and samples and extracts were held in the lab at 4°C, or below, at all times. No detectable levels of pesticide were found in any of the laboratory "blanks."

Table A4. Analytics and standard mixes for the EPA methods—NPS4, 515.2 and 507.

NPS4

mix1	mix 2
Cyanazine	Propham
Fluometuron	Propanil
Diuron	Swep
Linuron	Barban
Surr- Carbazole	
IS- Ethylbenzene	

Instrument: HPLC

515.2

mix1	mix2
3,5-D	Dacthal
Dichloroprop	Dicamba
Pentachlorophenol	2,4-D
2,4,5-T	Silvex
Dinoseb	2,4-DB
	Bentazon
Surr- DCAA	Picloram
IS- DBOB	Acifluorfen

Instrument: GC/ECD detector

507

mix1	mix2	mix3	mix4	mix5
Prometon	S-edpthiocarb	Vernolate	Butylate	Dichlorvos
Ametryn	Phosdrin	Metribuzin	Molinate	Pebulate
Phenamiphos	Prophos	Metolachlor	Chlorpropham	Tebuthiuron
Tributylphos	Atrazine	MGK 264	Atraton	Simazine
	Propazine	Butachlor	Alachlor	Simetryn
	Prometryn	Carboxin	Bromacil	Devrinol
	Terbutryn	Norflurazon	Tetrachlorvinphos	Fenarimol
	Triadimefon		Velpar	
	Diphenamid			

Surr- 1,3 Dimethyl-2-nitrobenzene

IS- Triphenylphosphate

Instument: GC/FTD detector

The following paragraphs summarize the QA data on a trip by trip basis. Data that are reported as suspect for any reason, are itemized and discussed in these trip summaries. A table of "failed" QA is provided for each trip following a text description of the problems.

Trip 1. For method NPS4 the surrogate recoveries for Phillips #1 duplicate and the Phillips #2 with matrix mix1, as well as the cyanzine recovery for the latter sample are slightly below the lower acceptable level of 70%.

For method 515 the surrogate recovery is much too high for both Phillips #1 and #5. This situation may be the result of an analyte in the ground water matrix having a retention time similar to that for the surrogate. The fact that the surrogate fo the duplicate of Phillips #5 is almost in the acceptable range weakens this argument, however. The surrogate recovery for the LFB mix1 and its duplicate, and LFB mix2 are all slightly below the acceptable recovery limit of 60%. The internal standard recovery is low for two of the three LFBs and Phillips #2 and #3. The matrix samples had poor recoveries for many of the analytes. The cause of this problem is not known.

For method 507, the surrogate recovery is slightly low for Phillips #3 and #4. Also one of the two blank internal standards is 1% below the accepted recovery of 70%.

In summary there are potential problems with the results from Trip 1.

Trip 1	Surrogate % Recovery	Internal Standard % Recovery	Matrix-mix Analyte % recovery
NPS4			
Phillips #1dup	67		60 cyanzine
Phillips #2 mix1	64		
515			
Phillips #1	1414		
Phillips #5	945		
Phillips#1dup	131	55	4 out of 6
LFB mix 1	34	52	6 out of 6
LFB mix 1 dup		69	5 out of 6
LFB mix 2		56	6 out of 7
Phillips #2 mix1	61	55	4 out of 6
Phillips #3 mix2	138	54	6 out of 7
507			
Phillips #3	60		
Phillips #4	69		
Blank2	69		

Trip 2. The surrogate recovery for IND #2 mix2 is low for method NPS4.

In general the method 515 surrogate recoveries for samples is high with the exception of IND#4 which has no recovery. Apparently there is some sort of interference associated with the sample matrix because in general blank and LFB recoveries are acceptable or very close to the the acceptable limit. The most likely explanation of the zero recovery of IND #4 is that the surrogate was inadvertly left out of this sample. Acifluorfen and picloram were slightly out of acceptable range for three matrix mix (spike) samples.

All of the QA data for method 507 are acceptable.

Overall the data from Trip 2 are acceptable with the exceptions noted.

Trip 2	Surrogate % Recovery	Internal Standard % Recovery	Matrix-mix Analyte % recovery
NPS4			
IND#2 mix2	43		
515			
IND#1	408		
IND#3	181		
IND#4	0		
IND#5	336		
IND#1 mix1	549		
IND#3 mix2	1645		acuifluorfen - 132
LFB mix2			Picloram - 67
LFB mix2 duplicate			Picloram - 66

Trip 3. One blank for method NPS4 had zero recovery which is most likely explained by omission of the surrogate from this sample. Two other blanks had acceptable limits for surrogate recovery.

For method 515, some samples, and matrix spike samples had poor surrogate recovery. One spiked sample and one LFB had low recoveries for picloram and acifluorfen. All of the internal standard recoveries were zero which indicates that the internal standard was omitted for this run (Trip 3).

All of method 507 data are within acceptable limits.

Trip 3	Surrogate % Recovery	Internal Standard % Recovery	Matrix-mix Analyte % recovery
NPS4			
blank1	0		
515			
		all internal standards 0	
Ark#2 mix1	53		
Ark#3 mix2			picloram – 58
Ark#4	158		
Ark#7	167		
LFB mix1	46		
LFB mix2			acifluorfen – 136

Trip 4. For method NPS4 the only problem with QA is that linuron was slightly out of range for analyte recovery.

Method 515 QA problems were limited to poor recovery of dacthal (17 and 16.9%) on Wood #7.

High recovery of the surrogate for Cross#2 was the only analysis that was out of acceptable limits for method 507.

Trip 4	Surrogate % Recovery	Internal Standard % Recovery	Matrix-mix Analyte % recovery
NPS4			
Wood #26			linuron – 68
Wood #26 dup			linuron - 68
LFB mix1			linuron - 69
515			
Wood #7			dacthal – 17
Wood #7 dup			dacthal – 17
507			
Cross #2	165		

Trip 5. There were several problems with QA associated with analyte recovery for LFB for methods NPS4 and 515. There were no problems with matrix spike samples. All of method 507 QA results were acceptable.

Trip 5	Surrogate % Recovery	Internal Standard % Recovery	Matrix-mix Analyte % recovery
NPS4			
LFB mix1			4 out of 4
LFB mix1 2x			4 out of 4
LFB mix2			propham - 67
515			
LFB mix1			dacthal – 15
LFB mix2			picloram - 41
LFB mix2 dup			picloram - 42

Trip 6. The QA problems with this trip centered on non-acceptable recoveries for picloram, MGK 264 and carboxin.

Trip 6	Surrogate % Recovery	Internal Standard % Recovery	Matrix-mix Analyte % recovery
515			
LFB mix2			picloram - 59
LFB mix2 dup			picloram - 59
SFC#6			picloram - 61
SFC#6 dup			picloram - 55
507			
SFC#5			MGK-24 carboxin-47
SFC#5 dup			MGK-24 carboxin-37

Trip 7. All QA results for this trip were acceptable.

Trip 7	Surrogate % Recovery	Internal Standard % Recovery	Matrix-mix Analyte % recovery
All QA results acceptable			

Trip 8. The QA problems with this trip are restricted to low matrix (spike) recoveries for picloram for Prairie #14 analyzed using method 515. For method 507, one LFB blank had a slightly low recovery (58%-acceptable % = 60) and slightly low recoveries of butylate in two LFBs.

Trip 8	Surrogate % Recovery	Internal Standard % Recovery	Matrix-mix Analyte % recovery
515			
Prairie #14			picloram – 22
Prairie #14 dup			picloram - 38
507			
LFB mix4	58		butylate - 63
LFB mix4 2x			butylate – 68

Trip 9. For method 515, there were high surrogate recoveries for three ground water samples including a matrix (mix 1) spike and duplicate matric (mix1) for Ark #13. In addition the two matrix (mix1) spikes for Ark #13 had low recoveries for dacthal. There were also low recoveries of dacthal for LFB mix 1 and for picloram for LFB mix 2/

The recovery for tributylphos (64%) in ALFB mix 1 was slightly lower than the acceptable value of 70 for LFB mix 1 for (64%) for tributylphos. Surrogate recovery for LFB mix 2 was low.

Trip 9	Surrogate % Recovery	Internal Standard % Recovery	Matrix-mix Analyte % recovery
515			
Ark#11	228		
Ark#12	150		
Ark#13	179		
Ark#13 mix1	154		dacthal -- 17
Ark#13 mix1dup	161		dacthal – 10
LFB mix1			dacthal – 12
LFB mix2			picloram -- 40
507			
LFB mix1			tributylphos - 64
LFB mix2	57		

Trip 10. There is only a slightly low recovery value for linuron under method NPS4. For method 515 there were high surrogate recoveries for three ground water samples — White #7,#9, and #11. The only problems with LFB were low recoveries of dacthal and picloram. One blank was slightly low regarding surrogate recovery.

Trip 10	Surrogate % Recovery	Internal Standard % Recovery	Matrix-mix Analyte % recovery
NPS4			
LFB mix1			linuron – 69
515			
White#7	845		
White#9	165		
White#11	184		
LFB mix1			dacthal - 12
LFB mix2			picloram 42
Blank5725	56		
White#8 mix1			dacthal – 5
White# mix1 dup			dacthal – 10

Trip 11. The only QA problem with method NPS4 is a low recovery for linuron in Linc#3. The duplicate of this sample had a linuron recovery of 96%. For method 515, there were low dacthal recoveries for Jeff#7 and its duplicate, as well as for LFB mix1.

Trip 11	Surrogate % Recovery	Internal Standard % Recovery	Matrix-mix Analyte % recovery
NPS4			
Linc#3			linuron – 36
515			
LFB mix1			dacthaol – 18
Jeff#7			dacthal – 10
Jeff#7 dup			dacthal – 11
507			
Jeff #12 mix4			butylate – 64
Jeff #12 mix4 dup			butylate - 55

Trip 12. All of method NPS4 QA met EPA acceptable values. For method 515 two matrix spike samples had low dacthal recoveries. For method 507 there were low surrogate recoveries for ground water samples and ground water samples with matrix spike, as well as one blank (the other blank value was acceptable.) A LFB mix1 and Drew #5 had slightly low analyte recoveries for ametryne (68%) and pebulate (61%), respectively.

Trip 12	Surrogate % Recovery	Internal Standard % Recovery	Matrix-mix Analyte % recovery
515			
Linc#9			dacthal – 4
Linc#9 dup			dacthal -10
507			
Drew#10	57		
Drew#11	50		
LFB mix1			ametryne - 68
blank9780	56		
Drew mix5	30		pebulate – 61
Drew mix5 dup	48		

Conclusions

The QA for the first two trips is poorer than for later trips. The cause for this poor QA is unknown; however, new procedures for gas chromatographic maintenance were initiated after Trip 2. Beginning with Trip 4 , the AWRC Water Quality Laboratory used an autoextractor instead of a vacuum manifold. Since the change in extraction methods, dacthal recoveries have been low (20% or less). Often there are indications that matrix samples have poor recoveries because of interferences from the matrix.

PHASE VIII QC DATA TABLES

BY TRIP

TRIP 1

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project: ASPB-pesticides

Lab Number: 1084
Date Reported: 10/16/01
Date Received: 3/27/00 9:05

Sample	Client ID	Date Sampled	Det. Limit	Result	Units	Date Analyzed
Nitrate		**Method: EPA 300.0**		**Holding Time Expires**		**3/29/2000**
1084-01	Phillips #1	3/23/00 0:00	0.002	**0.002**	mg/l as N	3/28/00
1084-02	Phillips # 2	3/24/00 0:00	0.002	**0.002**	mg/l as N	3/28/00
1084-03	Phillips # 3	3/24/00 0:00	0.002	**0.000**	mg/l as N	3/28/00
1084-04	Phillips # 4	3/24/00 0:00	0.002	**3.672**	mg/l as N	3/28/00
1084-05	Phillips # 5	3/24/00 0:00	0.002	**0.025**	mg/l as N	3/28/00

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

DATA REPORT
Page1

Project ASPB-pesticides

NPS METHOD 4

Lab Number: 1084
Date Received: 03/27/2000
Date_Extracted: 4/1/00
Date_Analyzed: 4/14/00
Date Reported: 01/24/2001

{all results in ug/L (ppb)}

Sample_ Number:	Client_Sample_ID:	SURR-CARBAZOLE %rec.	IS-ETHYL BENZENE % rec.	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
Sample Results											
1084-01	Phillips #1	100%	98%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1084-02	Phillips # 2	77%	100%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1084-03	Phillips # 3	88%	99%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1084-04	Phillips # 4	100%	82%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1084-05	Phillips # 5	100%	93%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Duplicates											
1084-01d		67%	94%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

DATA REPORT
Page 2

Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB-pesticides Phase 8-Trip 1

NPS METHOD 4

Lab Number: 1084
Date Received: 03/27/2000
Date_Extracted: 4/1/00
Date_Analyzed: 4/14/00
Date Reported: 01/24/2001

MATRIX AND REAGENT WATER SPIKES- % RECOVERY

Spikes*	Date:	SURR-CARBAZOLE	IS-ETHYLBENZENE:	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
1084-02s1	4/14/00	64%	78%		60%	75%	72%	88%			
1084-05s2	4/14/00	99%	79%	112%					120%	113%	109%
lfb1	4/14/00	93%	82%		74%	115%	91%	109%			
lfb2	4/14/00	80%	99%	91%					108%	113%	113%

BLANKS

	Date:	SURR-CARBAZOLE	IS-ETHYLBENZENE:	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
blank1	4/14/00	87%	95%	0	0	0	0	0	0	0	0
blank2	4/14/00	80%	95%	0	0	0	0	0	0	0	0

** s#=matrix spike(mix#)*
lfb#=lab fortified blank(mix#)

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Projec ASPB-pesticide Phase 8-Trip 1

Lab Number: 1084
Date Received: 03/27/2000
Date_Prepared: 5/15/00
Date_Performed: 3/30/00
Date Reported: 01/29/2001

EPA 515 Pesticides* *all results in ug/L (ppb)

Sample_ Number:	Client_Sample_ID:	DBOB -IS: %REC	DCAA- SURR: %REC.	3,5-D:	DICHLOR- PROP:	PENTA- CHLORO- PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT- AZON:	PIC- LORAM:	ACI - FLUOR- FEN:
1084-01	Phillips #1	114%	1414%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1084-02	Phillips # 2	93%	77%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1084-03	Phillips # 3	104%	42%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1084-04	Phillips # 4	99%	91%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1084-05	Phillips # 5	105%	945%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

DUPLICATES

Standard	DBOB -IS: %REC	DCAA- SURR: %REC.	3,5-D:	DICHLOR- PROP:	PENTA- CHLORO- PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT- AZON:	PIC- LORAM:	ACI - FLUOR- FEN:
1084-01d	55%	131%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Projec ASPB-pesticide Phase 8-Trip 1

Lab Number: 1084
Date Received: 03/27/2000
Date_Prepared: 5/15/00
Date_Performed: 3/30/00
Date Reported: 01/29/2001

EPA 515 Pesticides* *all results in ug/L (ppb)

MATRIX AND REAGENT WATER SPIKES - %RECOVERY

Standard	Date	DBOB-IS: %REC	DCAA-SURR: %REC.	3,5-D:	DICHLOR-PROP:	PENTA-CHLORO-PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT-AZON:	PIC-LORAM:	ACI-FLUOR-FEN:
lfb1	3/30/00	52%	34%	222%	246%	145%	262%	152%	227%							
1084-02s1	3/30/00	55%	61%	156%	174%	96%	128%	132%	208%							
1084-03s2	3/30/00	54%	138%							148%	140%	144%	148%	141%	92%	229%
lfb1	3/30/00	118%	69%	145%	155%	142%	148%	149%	123%							
lfb2	3/30/00	56%	124%							138%	133%	136%	140%	133%	88%	207%

BLANKS

blank8401	3/30/00	102%	69%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project **ASPB-pesticides** **Phase 8**

Lab Number: 1084
Date Received: 03/27/2000
Date_Extracted: 4/7/00
Date_Analyzed: 4/18/00
Date Reported: 01/22/2001

EPA Method 507* all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number:	Client_ Sample_ID:	SURR: NITRO-XYLENE:	IS:TRI-PHENYL-PHOS:	PRO-METON	AME-TRYNE:	PHE-NAM-IPHOS:	TRI-BUTYL-PHOS:	S-EDP-THIO-CARB:	PHOS-DRIN:	PRO-PHOS:	ATRA-ZINE:	PROPA-ZINE:	PRO-ME-TRYNE:	TERBU-TRYNE:	TRIAD-IMEFON	DIPHEN-AMID:	VERNO-LATE:	METRI-BUZIN:	METO A CHLO
1084-01	Phillips #1	118%	109%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1084-02	Phillips # 2	80%	101%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1084-03	Phillips # 3	60%	112%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1084-04	Phillips # 4	69%	106%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1084-05	Phillips # 5	96%	104%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Duplicates

	SURR-NITRO-XYLENE %Rec.	IS-TPP % Rec	PROM ETON	AME-TRYN	PHENAM-IPHOS:	TRIBUTYL-PHOS:	S-EDP-THIO-CARB	PHOS DRIN	PRO-PHOS	ATRA-ZINE:	PROPA-ZINE:	PROME-TRYNE:	TERBU-TRYNE:	TRIAD-IMEFON	DIPHEN-AMID:	VERNO-LATE:	METRI-BUZIN:	METOLA-CHLOR:
1084-05d	75%	107%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB-pesticides

Lab Number: 1084
Date Received: 03/27/2000
Date_Extracted: 4/7/00
Date_Analyzed: 4/18/00
Date Reported: 01/22/2001

EPA Method 507* * all results in ug/L (ppb)

Sample_ Number:	MGK 264	BUTA-CHLOR	CAR-BOXIN	NORFLUR-AZON	BUTYL-ATE	MOLIN-ATE	CHLOR-PROPHAM	ATRA-TON;	ALA-CHLOR	BROM-AZIL:	TETRACHLOR-VINPHOS:	VEL PAR:	DICHLOR-VOS:	PEB-ULAT	TEBU-THIRON	SIMA-ZINE:	SIME-TRYNE:	DEV-RINOL	FENAR-IMOL:
1084-01	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1084-02	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1084-03	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1084-04	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1084-05	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Duplicates

	MGK 264	BUTA-CHLOR	CAR-BOXIN	NORFLUR-AZON	BUTYL-ATE	MOLIN-ATE	CHLOR-PROPHAM	ATRA-TON:	ALA-CHLOR	BROM-AZIL:	TETRACHLOR-VINPHOS:	VEL PAR:	DICHLOR-VOS:	PEB-ULAT	TEBU-THIRON	SIMA-ZINE:	SIME-TRYNE:	DEV-RINOL	FENAR-IMOL:
1084-05d	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

DATA REPORT

Project ASPB-pesticides

EPA METHOD 507

Lab Number: 1084
Date Received: 03/27/2000
Date_Extracted: 4/7/00
Date_Analyzed: 4/18/00
Date Reported: 05/25/2001

MATRIX AND REAGENT WATER SPIKES- % RECOVERY

Spikes*	Date	SURR-NITRO XYLENE % REC.	IS-TRI PHENYL PHOS. % REC.	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR
1084-02	4/18/00	103%	82%					100%	96%	100%	109%	111%	114%	117%	113%	109%			
1084-03s	4/18/00	73%	80%	79%	75%	92%	82%												
lfb2	4/18/00	96%	79%					105%	102%	94%	106%	108%	112%	113%	105%	104%			
lfb4	4/18/00	90%	75%																
lfb4md	4/18/00	85%	78%																

** s#=matrix spike(mix#)*
lfb#=lab fortified blank(mix#)

BLANKS

BLANK1	4/18/0	79%	95%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BLANK2	4/18/0	76%	69%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

MATRIX AND REAGENT WATER SPIKES- % RECOVERY (con't)

Spikes*	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR	BRO MACIL	TETRA CHLOR VINPHO S	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
1084-02S																			
1084-03s					95%	101%	97%	102%	106%	114%	107%								
lfb2																			
lfb4					109%	111%	105%	105%	105%	115%	104%								
lfb4md					104%	108%	106%	107%	107%	119%	107%								

BLANKS

BLANK1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
BLANK2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TRIP 2

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project: phase 8, ASPB

Lab Number: 1232
Date Reported: 10/16/01
Date Received: 5/11/00 10:05

Sample	Client ID	Date Sampled	Det. Limit	Result	Units	Date Analyzed
Nitrate		Method: EPA 300.0		Holding Time Expires		5/13/2000
1232-01	IND #1	5/9/00 0:00	0.003	2.063	mg/l as N	5/12/00
1232-02	IND #2	5/9/00 0:00	0.003	2.603	mg/l as N	5/12/00
1232-03	IND #3	5/9/00 0:00	0.003	0.003	mg/l as N	5/12/00
1232-04	IND #4	5/9/00 0:00	0.003	2.574	mg/l as N	5/12/00
1232-05	IND #5	5/10/00 0:00	0.003	0.006	mg/l as N	5/12/00
1232-06	IND #6	5/10/00 0:00	0.003	0.472	mg/l as N	5/12/00

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

DATA REPORT
Page1

Project phase 8, ASPB

NPS METHOD 4

Lab Number: 1232
Date Received: 05/11/2000
Date_Extracted: 5/15/2000
Date_Analyzed: 5/22/2000
Date Reported: 01/18/2001

{all results in ug/L (ppb)}

Sample_ Number:	Client_Sample_ID:	SURR-CARBAZOLE %rec.	IS-ETHYL BENZENE % rec.	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
Sample Results											
1232-01	IND #1	92%	110%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-02	IND #2	132%	110%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-03	IND #3	71%	97%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-04	IND #4	89%	106%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-05	IND #5	93%	98%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-06	IND #6	107%	100%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Duplicates											
1232-03dup		63%	90%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

DATA REPORT
Page 2

Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project phase 8, ASPB Phase 8-Trip 1

Lab Number: 1232
Date Received: 05/11/2000
Date_Extracted: 5/15/2000
Date_Analyzed: 5/22/2000
Date Reported: 01/19/2001

NPS METHOD 4

MATRIX AND REAGENT WATER SPIKES- % RECOVERY

Spikes*	Date:	SURR-CARBAZOLE	IS-ETHYLBENZENE:	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
1232-01s1	5/22/2000	85%	115%		100%	77%	103%	82%			
1232-02s2	5/22/2000	43%	98%	57%					50%	40%	40%
lfb m1 /m2	5/22/2000	88%	97%	87%	96%	84%	102%	84%	89%	85%	90%

BLANKS

	Date:	SURR-CARBAZOLE	IS-ETHYLBENZENE:	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
blank	5/22/2000	88%	103%	0	0	0	0	0	0	0	0

** s#=matrix spike(mix#)*
lfb#=lab fortified blank(mix#)

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Projec phase 8, ASPB

Lab Number: 1232
Date Received: 05/11/2000
Date_Prepared: 5/11/00
Date_Performed: 5/19/00
Date Reported: 05/25/2001

EPA 515 Pesticides* *all results in ug/L (ppb)

Sample_ Number:	Client_Sample_I D:	DBOB -IS: %REC	DCAA- SURR: %REC.	3,5-D:	DICHLOR- PROP:	PENTA- CHLORO- PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT- AZON:	PIC- LORAM:	ACI - FLUOR- FEN:
1232-01	IND #1	110%	408%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-02	IND #2	98%	76%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-03	IND #3	100%	181%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-04	IND #4	100%	0%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-05	IND #5	103%	336%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-06	IND #6	92%	108%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

DUPLICATES

Standard	DBOB -IS: %REC	DCAA- SURR: %REC.	3,5-D:	DICHLOR- PROP:	PENTA- CHLORO- PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT- AZON:	PIC- LORAM:	ACI - FLUOR- FEN:
1232-04d	102%	107%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Projec phase 8, ASPB

Lab Number: 1232
Date Received: 05/11/2000
Date_Prepared: 5/11/00
Date_Performed: 5/19/00
Date Reported: 05/25/2001

EPA 515 Pesticides* *all results in ug/L (ppb)

MATRIX AND REAGENT WATER SPIKES - %RECOVERY

Standard	Date	DBOB-IS: %REC	DCAA-SURR: %REC.	3,5-D:	DICHLOR-PROP:	PENTA-CHLORO-PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT-AZON:	PIC-LORAM:	ACI-FLUOR-FEN:
1232-01s1	5/19/00	105%	549%	102%	104%	101%	109%	99%	73%							
1232-03s2	5/19/00	104%	1645%							102%	110%	101%	109%	100%	70%	132%
lfb1	5/19/00	97%	88%	102%	106%	102%	103%	104%	79%		0%		0%	0%		0%
lfb2	5/19/00	97%	103%							97%	102%	99%	105%	97%	67%	126%
lfb2md	5/19/00	98%	97%							97%	100%	98%	105%	96%	66%	123%

BLANKS

blank3202	5/19/00	100%	85%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project phase 8, ASPB

Lab Number: 1232
Date Received: 05/11/2000
Date_Extracted: 5/16/00
Date_Analyzed: 6/1/00
Date Reported: 01/22/2001

EPA Method 507* all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number:	Client_ Sample_ID:	SURR: NITRO-XYLENE:	IS:TRI-PHENYL-PHOS.	PRO-METON	AME-TRYNE:	PHE-NAM-IPHOS:	TRI-BUTYL-PHOS:	S-EDP-THIO-CARB:	PHOS-DRIN:	PRO-PHOS:	ATRA-ZINE:	PROPA-ZINE:	PRO-ME-TRYNE:	TERBU-TRYNE:	TRIAD-IMEFON:	DIPHEN-AMID:	VERNO-LATE:	METRI-BUZIN:	METO A CHLO
1232-01	IND #1	76%	116%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-02	IND #2	105%	118%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-03	IND #3	103%	112%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-04	IND #4	73%	91%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-05	IND #5	90%	98%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-06	IND #6	106%	93%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Duplicates

	SURR-NITRO-XYLENE %Rec	IS-TPP % Rec	PROM ETON	AME-TRYN	PHENAM-IPHOS:	TRIBUTYL-PHOS:	S-EDP-THIO-CARB	PHOS DRIN	PRO-PHOS	ATRA-ZINE:	PROPA-ZINE:	PROME-TRYNE:	TERBU-TRYNE:	TRIAD-IMEFON	DIPHEN-AMID:	VERNO-LATE:	METRI-BUZIN:	METOLA-CHLOR:
1232-04d	76%	97%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project phase 8, ASPB

Lab Number: 1232
Date Received: 05/11/2000
Date_Extracted: 5/16/00
Date_Analyzed: 6/1/00
Date Reported: 01/22/2001

EPA Method 507*

Sample_ Number:	MGK 264	BUTA-CHLOR	CAR-BOXIN	NORFLUR-AZON	BUTYL-ATE	MOLIN-ATE	CHLOR-PROPHAM	ATRA-TON;	ALA-CHLOR	BROM-AZIL:	TETRACHLOR-VINPHOS:	VEL PAR:	DICHLOR-VOS:	PEB-ULAT	TEBU-THIRON	SIMA-ZINE:	SIME-TRYNE:	DEV-RINOL	FENAR-IMOL:
1232-01	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-02	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-03	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-04	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-05	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1232-06	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

* all results in ug/L (ppb)

507_DUPS2report

Duplicates

	MGK 264	BUTA-CHLOR	CAR-BOXIN	NORFLUR-AZON	BUTYL-ATE	MOLIN-ATE	CHLOR-PROPHAM	ATRA-TON:	ALA-CHLOR	BROM-AZIL:	TETRACHLOR-VINPHOS:	VEL PAR:	DICHLOR-VOS:	PEB-ULAT	TEBU-THIRON	SIMA-ZINE:	SIME-TRYNE:	DEV-RINOL	FENAR-IMOL:
1232-04d	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

DATA REPORT

Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project phase 8, ASPB

Lab Number: 1232
Date Received: 05/11/2000
Date_Extracted: 5/16/00
Date_Analyzed: 6/1/00
Date Reported: 01/22/2001

EPA METHOD 507

MATRIX AND REAGENT WATER SPIKES- % RECOVERY

Spikes* Date:	SURR-NITRO XYLENE % REC.	IS-TRI PHENYL PHOS. % REC.	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR
1232-01s 6/1/0	78%	96%	113%	114%	107%	93%												
1232-03s 6/1/0	98%	90%					124%	106%	109%	121%	120%	122%	122%	119%	117%			
lfb2 6/1/0	79%	89%					117%	107%	108%	120%	119%	120%	119%	117%	113%			
BLANKS																		
blank 6/1	103%	93%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

** s#=matrix spike(mix#)*
lfb#=lab fortified blank(mix#)

MATRIX AND REAGENT WATER SPIKES- % RECOVERY

Spikes*	MGK 264	BUTACHLOR	CARBOXIN	NORFLURAZON	BUTYLATE	MOLINATE	CHLORPROPHAM	ATRATON	ALACHLOR	BROMAZIL	TETRACHLORVINPHOS	VELPAR	DICHLORVOS	PEBULATE	TEBUTHIRON	SIMAZINE	SIMETRYNE	DEVRINOL	FENARIMOL
1232-01s																			
1232-03s																			
lfb2																			

BLANKS

blank	0.00	0.00	0.00	0.00

TRIP 3

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project: ASPB PEST

Lab Number: 1315
Date Reported: 10/16/01
Date Received: 6/8/00 11:36

Sample	Client ID	Date Sampled	Det. Limit	Result	Units	Date Analyzed
Nitrate		**Method: EPA 300.0**		**Holding Time Expires**		**6/10/2000**
1315-01	Ark #2	6/7/00 0:00	0.003	**0.002**	mg/l as N	6/8/00
1315-02	Ark #3	6/6/00 0:00	0.003	**0.184**	mg/l as N	6/8/00
1315-03	Ark #4	6/6/00 0:00	0.003	**0.006**	mg/l as N	6/8/00
1315-04	Ark #5	6/6/00 0:00	0.003	**0.000**	mg/l as N	6/8/00
1315-05	Ark #6	6/7/00 0:00	0.003	**0.117**	mg/l as N	6/8/00
1315-06	Ark #7	6/7/00 0:00	0.003	**0.014**	mg/l as N	6/8/00

Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB PEST **Phase 8-Trip 1**

Lab Number: 1315
Date Received: 06/08/2000
Date_Extracted:
Date_Analyzed: 6/23/2000
Date Reported: 01/18/2001

NPS METHOD 4
Page1

DATA REPORT {all results in ug/L (ppb)}

Sample_ Number:	Client_Sample_ID:	SURR-CARBAZOLE %rec.	IS-ETHYL BENZENE % rec.	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
1315-01	Ark #2	98%	103%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-02	Ark #3	97%	104%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-03	Ark #4	91%	104%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-04	Ark #5	89%	104%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-05	Ark #6	71%	99%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-06	Ark #7	98%	106%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Duplicates

DATA REPORT
Page 2

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB PEST **Phase 8-Trip 1**

Lab Number: 1315
Date Received: 06/08/2000
Date_Extracted:
Date_Analyzed: 6/23/2000
Date Reported: 01/19/2001

NPS METHOD 4

MATRIX AND REAGENT WATER SPIKES- % RECOVERY

Spikes*	Date:	SURR-CARBAZOLE	IS-ETHYLBENZENE:	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
1315-02 m1s	6/23/2000	81%	104%		91%	110%	116%	92%			
1315-03 m2s	6/23/2000	75%	103%	114%					106%	81%	77%

BLANKS

	Date:	SURR-CARBAZOLE	IS-ETHYLBENZENE:	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
blank1	6/23/2000	0%	73%	0	0	0	0	0	0	0	0
blank2	6/23/2000	135%	103%	0	0	0	0	0	0	0	0
blank3	6/23/2000	93%	101%	0	0	0	0	0	0	0	0

** s#=matrix spike(mix#)*
lfb#=lab fortified blank(mix#)

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Projec ASPB PEST **Phase 8-Trip 3**

Lab Number: 1315
Date Received: 06/08/2000
Date_Prepared: 6/12/00
Date_Performed: 6/16/00
Date Reported: 01/24/2001

EPA 515 Pesticides* *all results in ug/L (ppb)

Sample_ Number:	Client_Sample_I D:	DBOB -IS: %REC	DCAA- SURR: %REC.	3,5-D:	DICHLOR- PROP:	PENTA- CHLORO- PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT- AZON:	PIC- LORAM:	ACI - FLUOR- FEN:
1315-01	Ark #2	0%	80%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-02	Ark #3	0%	74%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-03	Ark #4	0%	158%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-04	Ark #5	0%	99%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-05	Ark #6	0%	119%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-06	Ark #7	0%	167%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

515_DUPS

DUPLICATES

Standard	DBOB -IS: %REC	DCAA- SURR: %REC.	3,5-D:	DICHLOR- PROP:	PENTA- CHLORO- PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT- AZON:	PIC- LORAM:	ACI - FLUOR- FEN:
1315-03d		119%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Projec ASPB PEST **Phase 8-Trip 1**

Lab Number: 1315
Date Received: 06/08/2000
Date_Prepared: 6/12/00
Date_Performed: 6/16/00
Date Reported: 01/24/2001

EPA 515 Pesticides* *all results in ug/L (ppb)

MATRIX AND REAGENT WATER SPIKES - %RECOVERY

Standard	Date	DBOB -IS: %REC	DCAA-SURR: %REC.	3,5-D:	DICHLOR-PROP:	PENTA-CHLORO-PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT-AZON:	PIC-LORAM:	ACI - FLUOR-FEN:
1315-01s	6/16/00		53%	0.860	0.810	0.834	0.878	0.847	0.696							
1315-02s	6/16/00		72%							0.911	0.966	0.883	0.921	0.872	0.579	1.155
lfb1	6/16/00		46%	0.770	0.649	0.698	0.695	0.702	0.502							
lfb2	6/16/00		73%							1.005	1.025	0.982	1.046	0.995	0.697	1.364

BLANKS

blank	6/16/00		71%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB PEST **Phase 8**

Lab Number: 1315
Date Received: 06/08/2000
Date_Extracted: 6/19/00
Date_Analyzed: 12/11/00
Date Reported: 01/24/2001

EPA Method 507* all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number:	Client_ Sample_ID:	SURR: NITRO-XYLENE:	IS:TRI-PHENYL-PHOS.	PRO-METON	AME-TRYNE:	PHE-NAM-IPHOS:	TRI-BUTYL-PHOS:	S-EDP-THIO-CARB:	PHOS-DRIN:	PRO-PHOS:	ATRA-ZINE:	PROPA-ZINE:	PRO-ME-TRYNE:	TERBU-TRYNE:	TRIAD-IMEFON	DIPHEN-AMID:	VERNO-LATE:	METRI-BUZIN:	METO A CHLO
1315-01	Ark #2	91%	110%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-02	Ark #3	111%	104%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-03	Ark #4	120%	90%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-04	Ark #5	93%	106%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-05	Ark #6	96%	97%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-06	Ark #7	108%	101%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Duplicates

	SURR-NITRO-XYLENE %Rec.	IS-TPP % Rec	PROM ETON	AME-TRYN	PHENAM-IPHOS:	TRIBUTYL-PHOS:	S-EDP-THIO-CARB	PHOS DRIN	PRO-PHOS	ATRA-ZINE:	PROPA-ZINE:	PROME-TRYNE:	TERBU-TRYNE:	TRIAD-IMEFON	DIPHEN-AMID:	VERNO-LATE:	METRI-BUZIN:	METOLA-CHLOR:
1315-06dm	109%	101%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB PEST Phase 8-

Lab Number: 1315
Date Received: 06/08/2000
Date_Extracted: 6/19/00
Date_Analyzed: 12/11/00
Date Reported: 01/22/2001

EPA Method 507* * all results in ug/L (ppb)

Sample_ Number:	MGK 264	BUTA-CHLOR	CAR-BOXIN	NORFLUR-AZON	BUTYL-ATE	MOLIN-ATE	CHLOR-PROPHAM	ATRA-TON:	ALA-CHLOR	BROM-AZIL:	TETRACHLOR-VINPHOS:	VEL PAR:	DICHLOR-VOS:	PEB-ULAT	TEBU-THIRON	SIMA-ZINE:	SIME-TRYNE:	DEV-RINOL	FENAR-IMOL:
1315-01	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-02	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-03	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-04	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-05	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1315-06	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Duplicates

	MGK 264	BUTA-CHLOR	CAR-BOXIN	NORFLUR-AZON	BUTYL-ATE	MOLIN-ATE	CHLOR-PROPHAM	ATRA-TON:	ALA-CHLOR	BROM-AZIL:	TETRACHLOR-VINPHOS:	VEL PAR:	DICHLOR-VOS:	PEB-ULAT	TEBU-THIRON	SIMA-ZINE:	SIME-TRYNE:	DEV-RINOL	FENAR-IMOL:
1315-06d	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

DATA REPORT

Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB PEST

EPA METHOD 507

Lab Number: 1315
Date Received: 06/08/2000
Date_Extracted: 6/19/00
Date_Analyzed: 12/11/00
Date Reported: 01/22/2001

MATRIX AND REAGENT WATER SPIKES- % RECOVERY

Spikes*	Date:	SURR-NITRO XYLENE % REC.	IS-TRI PHENYL PHOS. % REC.	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR
LFB2	12/1	121%	92%					118%	94%	92%	108%	109%	113%	110%	111%	120%			
BLANKS																			
blank	12/	104%	91%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

** s#=matrix spike(mix#)*
lfb#=lab fortified blank(mix#)

MATRIX AND REAGENT WATER SPIKES- % RECOVERY

Spikes*	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR	BRO MAZIL	TETRA CHLOR VINPHO S	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
LFB2																			
BLANKS																			
blank	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TRIP 4

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB-Phase9

Lab Number: 10417
Date Reported: 6/13/01
Date Received: 2/1/01 11:33
Description:

Sample	Method	Result	Units	Date	Analyst
10417-01	Date_Sampled:	1/30/01 , 13 : 30			
Nitrate	EPA 300.0	0.009	mg/l as	2/2/01	Keith Trost
10417-02	Date_Sampled:	1/30/01 , 14 : 00			
Nitrate	EPA 300.0	3.812	mg/l as	2/2/01	Keith Trost
10417-03	Date_Sampled:	1/30/01 , 14 : 30			
Nitrate	EPA 300.0	2.928	mg/l as	2/2/01	Keith Trost
10417-04	Date_Sampled:	1/30/01 , 15 : 00			
Nitrate	EPA 300.0	0.307	mg/l as	2/2/01	Keith Trost
10417-05	Date_Sampled:	1/31/01 , 10 : 00			
Nitrate	EPA 300.0	0.310	mg/l as	2/2/01	Keith Trost
10417-06	Date_Sampled:	1/31/01 , 12 : 01			
Nitrate	EPA 300.0	0.044	mg/l as	2/2/01	Keith Trost

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

LabQCReport

For Lab Number: 10417 Tuesday, June 19, 2001

Analysis Nitrate mg/l

Standard	Date_Performed:	Standard_Result	True_Value	Percent Recovery
vhg	2/2/01 0:00	0.984	0.900	109%
vhg	2/2/01 0:00	1.008	0.900	112%
vhg	2/2/01 0:00	0.997	0.900	111%
vhg	2/2/01 0:00	0.982	0.900	109%
			AVG* =	110%
			RPD=**	1.2%

BLANKS	Date_Performed:	Measured Value	True_Value:
	2/2/01 0:00	0.014	0.000

*The average % Recovery is a measure of accuracy.
**RPD=Relative Percent Deviation, a measure of Precisison.

NB: These QC checks pertain to all samples in the instrument run(s) which contained your sample(s).

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

DATA REPORT

Project ASPB-Phase9

Trip 1

NPS METHOD 4

Lab Number: 10417
Date Received: 02/01/2001
Date_Extracted: 2/2/2001
Date_Analyzed: 2/12/2001
Date Reported: 09/10/2001

{all results in ug/L (ppb)}

Sample_ Number	Client_Sample_ID	SURR-CARBAZOLE %rec	IS-ETHYL BENZENE % rec.	BARBAN	CYANAZINE	DIURON	FLUOMETURON	LINURON	PROPANIL	PROPHAM	SWEP
Sample Results											
10417-01	Wood#7	86%	119%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10417-02	Wood #11	92%	114%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10417-03	Wood#25	101%	100%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10417-04	Wood#26	83%	121%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10417-05	Cross#1	104%	101%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10417-06	Cross#2	103%	102%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center

Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

QUALITY ASSURANCE DATA REPORT

Project ASPB-Phase9
Trip 1

Lab Number: 10417
Date Received: 02/01/2001
Date_Extracted: 2/2/2001
Date_Analyzed: 2/12/2001
Date Reported: 09/10/2001

NPS METHOD 4

REAGENT WATER SPIKES- % RECOVERY

Spikes*	SURR-CARBAZOLE	IS-ETHYLBENZENE:	BARBAN	CYANAZINE	DIURON	FLUOMETURON	LINURON	PROPANIL	PROPHAM	SWEP
lfb1	116%	92%		104%	117%	102%	69%			
lfb2	123%	87%	115%					124%	122%	119%

BLANKS

	SURR-CARBAZOLE	IS-ETHYLBENZENE:	BARBAN	CYANAZINE	DIURON	FLUOMETURON	LINURON	PROPANIL	PROPHAM	SWEP
blank4417	113%	92%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

lfb#=lab fortified blank(mix#)

If no percent recovery reported, then no spike performed

AWRC - Water Quality Laboratory
University of Arkansas,
Chemistry 101
Fayetteville, AR 72701
(501) 575-7317, Fax (501) 575-6720

Matrix Spikes

Lab Number	CYAN AZINE	FLUO MET URON	DIURON	LIN URON	PRO PHAM	PRO PANIL	SWEP	BAR BAN
10417-04	0.000	0.000	0.000	0.000	no	no	no	no
10417-04s	7.543	2.164	1.228	2.12	spike	spike	spike	spike
Spike	6.487	2.058	1.003	3.126	performed	performed	performed	performed
%Recovery	116.3%	105.2%	122.4%	67.8%				

Lab Number	CYAN AZINE	FLUO MET URON	DIURON	LIN URON	PRO PHAM	PRO PANIL	SWEP	BAR BAN
10417-04	0.000	0.000	0.000	0.000	no	no	no	no
10417-04sd	7.825	2.139	1.208	2.109	spike	spike	spike	spike
Spike	6.487	2.058	1.003	3.126	performed	performed	performed	performed
%Recovery	120.6%	103.9%	120.4%	67.5%				

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR CARBA ZOLE	IS ETHYL BENZENE
10417-04	83.0%	121.1%
10417-04s	114.2%	89.5%
10417-04sd	114.4%	89.7%

Surr acceptability	70% to 130%
Analyte acceptability	70% to 130%
IS acceptability	70% to 130%

DATA
REPORT

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project: ASPB-Phase9

Lab Number: 10417
Date Received: 02/01/2001
Date_Prepared: 2/2/01
Date_Performed: 2/8/01
Date Reported: 08/28/2001
Date_Sampled: 1/30/01 13:30

EPA 515 Pesticides* *all results in ug/L (ppb)

Sample_ Number:	Client_Sample_ID:	DBOB -IS: %REC	DCAA- SURR: %REC.	3,5-D:	DICHLOR- PROP:	PENTA- CHLORO-' PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT- AZON:	PIC- LORAM:	ACI - FLUOR- FEN:
10417-01	Wood#7	112%	95%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.666	0.000	0.000
10417-02	Wood #11	104%	101%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10417-03	Wood#25	104%	92%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.412	0.000	0.000
10417-04	Wood#26	106%	105%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.389	0.000	0.000
10417-05	Cross#1	105%	95%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10417-06	Cross#2	101%	94%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

ALITY
ASSURANCE
DATA
REPORT

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Projec ASPB-Phase9

Lab Number: 10417
Date Received: 02/01/2001
Date_Prepared: 2/2/01
Date_Performed: 2/8/01
Date Reported: 08/24/2001
Date_Sampled: 1/30/01 13:30

EPA 515 Pesticides* *all results in ug/L (ppb)

LAB FORTIFIED BLANKS (REAGENT WATER SPIKES) - %RECOVERY

Standard	DBOB -IS: %REC	DCAA- SURR: %REC.	3,5-D:	DICHLOR- PROP:	PENTA- CHLORO- PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT- AZON:	PIC- LORAM:	ACI - FLUOR- FEN:
lfb1	92%	73%	81%	100%	84%	84%	78%	19%							
lfb2	87%	61%							73%	62%	63%	60%	72%	40%	68%
BLANKS															
blank141	106%	104%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

If no percent recovery reported, then no spike performed

AWRC - Water Quality Laboratory
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Chemistry 101
Fayetteville, AR 72701
(501) 575-7317, Fax (501) 575-6720

Matrix Spikes

Lab Number	3,5-D	DICHLOR PROP	PENTA CHLORO PHENAL	2,4,5-T	DINO SEB	DAC THAL	DICAM BA	2,4-D	SILVEX	2,4-DB	BENTA ZON	PICLO RAM	ACI FLOUR FEN
10417-01	0.000	0.000	0.000	0.000	0.000	0.000	no	no	no	no	no	no	no
10417-01s	10.807	2.483	2.287	2.174	4.133	0.34	spike	spike	spike	spike	spike	spike	spike
Spike	10.000	2.000	2.000	2.000	4.000	2.000	performed	performed	performed	performed	performed	performed	performed
%Recovery	108.1%	124.2%	114.4%	108.7%	103.3%	17.0%							

Lab Number	3,5-D	DICHLOR PROP	PENTA CHLORO PHENAL	2,4,5-T	DINO SEB	DAC THAL	DICAM BA	2,4-D	SILVEX	2,4-DB	BENTA ZON	PICLO RAM	ACI FLOUR FEN
10417-01	0.000	0.000	0.000	0.000	0.000	0.000	no	no	no	no	no	no	no
10417-01sd	8.886	2.094	1.911	1.846	3.468	0.337	spike	spike	spike	spike	spike	spike	spike
Spike	10.000	2.000	2.000	2.000	4.000	2.000	performed	performed	performed	performed	performed	performed	performed
%Recovery	88.9%	104.7%	95.6%	92.3%	86.7%	16.9%							

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR DCAA	IS DBOB
10417-01	94.7%	112.0%
10417-01s	100.1%	86.1%
10417-01sd	79.7%	93.5%

Surr acceptability	60% to 140%
Analyte acceptability	70% to 130%
InterStd acceptability	70% to 130%

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

EPA Method 507*
Project ASPB-Phase9

Lab Number: 10417
Date Received: 02/01/2001
Date_Extracted: 2/6/01
Date_Analyzed: 3/2/01
Date Reported: 08/23/2001

all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number	Client_ Sample_ID	SURR: NITRO-XYLENE:	IS:TRI-PHENYL-PHOS.	PRO-METON	AME-TRYNE:	PHE-NAM-IPHOS:	TRI-BUTYL-PHOS:	S-EDP-THIO-CARB:	PHOS-DRIN:	PRO-PHOS:	ATRA-ZINE:	PROPA-ZINE:	PRO-ME-TRYNE:	TERBU-TRYNE:	TRIAD-IMEFON	DIPHEN-AMID:	VERNO-LATE:	METRI-BUZIN:	METOL A CHLOR:
10417-01	Wood#7	102%	104%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10417-02	Wood #11	112%	105%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10417-03	Wood#25	92%	100%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10417-04	Wood#26	129%	105%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10417-05	Cross#1	119%	95%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10417-06	Cross#2	165%	103%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

EPA Method 507*

Project ASPB-Phase9

Lab Number: 10417
Date Received: 02/01/2001
Date_Extracted: 2/6/01
Date_Analyzed: 3/2/01
Date Reported: 08/23/2001

* all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number:	MGK 264	BUTA-CHLOR	CAR-BOXIN	NORFLUR-AZON	BUTYL-ATE	MOLIN-ATE	CHLOR-PRO PHAM	ATRA-TON:	ALA-CHLOR	BROM-AZIL:	TETRACHLOR-VINPHOS:	VEL PAR:	DICHLOR-VOS:	PEB-ULAT	TEBU-THIRON	SIMA-ZINE:	SIME-TRYNE:	DEV-RINOL	FENAR-IMOL:
10417-01	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10417-02	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10417-03	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10417-04	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10417-05	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10417-06	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

QUALITY
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DATA REPORT

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB-Phase9

Lab Number: 10417
Date Received: 02/01/2001
Date_Extracted: 2/6/01
Date_Analyzed: 3/2/01
Date Reported: 08/23/2001

EPA METHOD 507

REAGENT WATER SPIKES- % RECOVERY

Spikes*	SURR-NITRO XYLENE % REC.	IS-TRI PHENYL PHOS. % REC.	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR
lfb1	121%	96%	95%	95%	101%	98%												
lfb2	130%	100%					122%	112%	99%	106%	104%	98%	98%	57%	53%			
BLANKS																		
blank 2417	120%	95%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
blank3417	114%	97%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

QUALITY ASSURANCE DATA REPORT CON'T

Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB-Phase9

Lab Number: 10417
Date Received: 02/01/2001
Date_Extracted: 2/6/01
Date_Analyzed: 3/2/01
Date Reported: 08/23/2001

EPA METHOD 507

REAGENT WATER SPIKES - % RECOVERY (con't)

Spikes*	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR	BRO MAZIL	TETRA CHLOR VINPHO S	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
lfb1																			
lfb2																			
BLANKS																			
blank 24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
blank341	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Matrix Spikes

Lab Number	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON
10417-02	0.000	0.000	0.000	0.000	no	no	no	no	no	no	no	no
10417-02s	19.964	19.870	20.651	13.561	spike	spike	spike	spike	spike	spike	spike	spike
Spike	20.000	20.000	20.000	20.000	performed	performed	performed	performed	performed	performed	performed	performed
%Recovery	99.8%	99.4%	103.3%	67.8%								

Lab Number	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON
10417-02	0.000	0.000	0.000	0.000	no	no	no	no	no	no	no	no
10417-02sd	18.95	19.068	19.899	12.746	spike	spike	spike	spike	spike	spike	spike	spike
Spike	20.000	20.000	20.000	20.000	performed	performed	performed	performed	performed	performed	performed	performed
%Recovery	94.8%	95.3%	99.5%	63.7%								

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR-NITRO XYLENE	IS-TRI PHENYL PHOS.
10417-02	112.1%	105.0%
10417-02s	118.8%	90.0%
10417-02sd	110.2%	95.0%

Surr acceptability 70% to 130%
Analyte acceptability 70% to 130%
IS acceptability is related to response not % recovery

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Matrix Spikes

Lab Number	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA TON
10417-02	no	no	no	no	no	no	no	no	no	no	no	no	no
10417-02s	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

Lab Number	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA TON
10417-02	no	no	no	no	no	no	no	no	no	no	no	no	no
10417-02sd	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

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Matrix Spikes

Lab Number	ALA CHLOR	BRO MAZIL	TETRA CHLOR VINPHO	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
10417-02	no	no	no	no	no	no	no	no	no	no	no
10417-02s	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

Lab Number	ALA CHLOR	BRO MAZIL	TETRA CHLOR VINPHO	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
10417-02	no	no	no	no	no	no	no	no	no	no	no
10417-02sd	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

TRIP 5

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB Pesticides pgT2

Lab Number: 10476
Date Reported: 6/13/01
Date Received: 2/19/01 16:21
Description:

Sample	Method	Result	Units	Date	Analyst
10476-01	Date_Sampled:	2/17/01 , 0 : 00			
Nitrate	EPA 300.0	0.002	mg/l as	2/20/01	Keith Trost
10476-02	Date_Sampled:	2/17/01 , 0 : 00			
Nitrate	EPA 300.0	0.562	mg/l as	2/20/01	Keith Trost
10476-03	Date_Sampled:	2/17/01 , 0 : 00			
Nitrate	EPA 300.0	0.004	mg/l as	2/20/01	Keith Trost
10476-04	Date_Sampled:	2/17/01 , 0 : 00			
Nitrate	EPA 300.0	0.006	mg/l as	2/20/01	Keith Trost

Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

LabQCReport

For Lab Number: 10476 Friday, June 15, 2001

Analysis Nitrate mg/l

Standard	Date_Performed:	Standard_Result	True_Value	Percent Recovery
vhg	2/20/01 0:00	0.904	0.900	100%
vhg	2/20/01 0:00	0.884	0.900	98%
vhg	2/20/01 0:00	0.897	0.900	100%
vhg	2/20/01 0:00	0.878	0.900	98%
			AVG* =	99%
			RPD=**	1.4%

BLANKS	Date_Performed:	Measured Value	True_Value:
	2/20/01 0:00	0.001	0.000

*The average % Recovery is a measure of accuracy.
**RPD=Relative Percent Deviation, a measure of Precisison.

NB: These QC checks pertain to all samples in the instrument run(s) which contained your sample(s).

Arkansas Water Resources Center
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DATA REPORT
Page1

Project ASPB Pesticides p

NPS METHOD 4

Lab Number: 10476
Date Received: 02/19/2001
Date_Extracted: 2/23/01
Date_Analyzed: 3/2/01
Date Reported: 09/17/2001

{all results in ug/L (ppb)}

Sample_ Number:	Client_Sample_ID:	SURR-CARBAZOLE %rec.	IS-ETHYL BENZENE % rec.	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
Sample Results											
10476-01	STF #2	98%	87%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10476-02	STF #3	97%	92%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10476-03	STF #4	122%	94%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10476-04	STF #1 r1	117%	90%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center

Water Quality Lab
University of Arkansas, Chemistry 101
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501-575-7317

QUALITY ASSURANCE DATA REPORT

Project ASPB Pesticides p9t2

Lab Number: 10476
Date Received: 02/19/2001
Date_Extracted: 2/23/01
Date_Analyzed: 3/2/01
Date Reported: 09/17/2001

NPS METHOD 4

REAGENT WATER SPIKES- % RECOVERY

Spikes*	SURR-CARBAZOLE	IS-ETHYLBENZENE	BARBAN	CYANAZINE	DIURON	FLUOMETURON	LINURON	PROPANIL	PROPHAM	SWEP
lfb1	106%	105%		68%	64%	53%	67%			
lfb1 2x	98%	109%		47%	51%	43%	65%			
lfb2	84%	122%	82%					83%	67%	81%

BLANKS

	SURR-CARBAZOLE	IS-ETHYLBENZENE	BARBAN	CYANAZINE	DIURON	FLUOMETURON	LINURON	PROPANIL	PROPHAM	SWEP
blank3476	123%	86%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank4467	87%	119%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

lfb#=lab fortified blank(mix#)

If no percent recovery reported, then no spike performed

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Matrix Spikes

Lab Number	CYAN AZINE	FLUO MET URON	DIURON	LIN URON	PRO PHAM	PRO PANIL	SWEP	BAR BAN
10476-02	no	no	no	no	0.000	0.000	0.000	0.000
10476-02s	spike	spike	spike	spike	5.238	1.158	5.803	7.36
Spike	performed	performed	performed	performed	7.497	1.476	7.531	7.714
%Recovery					69.9%	78.5%	77.1%	95.4%

Lab Number	CYAN AZINE	FLUO MET URON	DIURON	LIN URON	PRO PHAM	PRO PANIL	SWEP	BAR BAN
10476-02	no	no	no	no	0.000	0.000	0.000	0.000
10476-02sd	spike	spike	spike	spike	6.982	1.497	7.453	9.409
Spike	performed	performed	performed	performed	7.497	1.476	7.531	7.714
%Recovery					93.1%	101.4%	99.0%	122.0%

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR CARBA ZOLE	IS ETHYL BENZENE
10476-02	97.4%	92.2%
10476-02s	80.6%	104.4%
10476-02sd	105.0%	85.0%

Surr acceptability	70% to 130%
Analyte acceptability	70% to 130%
IS acceptability	70% to 130%

DATA REPORT

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project: ASPB Pesticides p9t2

Lab Number: 10476
Date Received: 02/19/2001
Date_Prepared: 2/27/01
Date_Performed: 4/25/01
Date Reported: 08/28/2001
Date_Sampled: 2/17/01 0:00

EPA 515 Pesticides* *all results in ug/L (ppb)

Sample_ Number:	Client_Sample_I D:	DBOB -IS: %REC	DCAA-SURR: %REC.	3,5-D:	DICHLOR-PROP:	PENTA-CHLORO-PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT-AZON:	PIC-LORAM:	ACI-FLUOR-FEN:
10476-01	STF #2	93%	104%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10476-02	STF #3	104%	81%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10476-03	STF #4	106%	66%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10476-04	STF #1 r1	112%	67%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10476-05	Wood #7(outs	111%	41%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.528	0.000	0.000
10476-06	wood #7(insid	107%	104%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

QUALITY
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Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Projec ASPB Pesticide

Lab Number: 10476
Date Received: 02/19/2001
Date_Prepared: 2/27/01
Date_Performed: 4/25/01
Date Reported: 08/28/2001
Date_Sampled: 2/17/01 0:00

EPA 515 Pesticides* *all results in ug/L (ppb)

LAB FORTIFIED BLANKS (REAGENT WATER SPIKES) - %RECOVERY

Standard	DBOB -IS: %REC	DCAA-SURR: %REC	3,5-D:	DICHLOR-PROP:	PENTA-CHLORO-PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT-AZON:	PIC-LORAM:	ACI - FLUOR-FEN:
lfb1	103%	111%	103%	118%	98%	130%	100%	15%							
lfb2	105%	87%							88%	88%	88%	79%	84%	42%	86%
lfb2md	105%	90%							88%	85%	87%	76%	83%	41%	85%
BLANKS															
blank547	108%	69%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank649	103%	112%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

If no percent recovery reported, then no spike performed

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Chemistry 101
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Matrix Spikes

Lab Number	3,5-D	DICHLOR PROP	PENTA CHLORO PHENAL	2,4,5-T	DINO SEB	DAC THAL	DICAM BA	2,4-D	SILVEX	2,4-DB	BENTA ZON
10476-01	0.000	0.000	0.000	0.000	0.000	0.000	no	no	no	no	no
10476-01s	10.087	2.132	1.939	2.422	3.945	0.25	spike	spike	spike	spike	spike
Spike	10.000	2.000	2.000	2.000	4.000	2.000	performed	performed	performed	performed	performed
%Recovery	100.9%	106.6%	97.0%	121.1%	98.6%	12.5%					

Lab Number	3,5-D	DICHLOR PROP	PENTA CHLORO PHENAL	2,4,5-T	DINO SEB	DAC THAL	DICAM BA	2,4-D	SILVEX	2,4-DB	BENTA ZON
10476-01	0.000	0.000	0.000	0.000	0.000	0.000	no	no	no	no	no
10476-01sd	9.295	2.138	1.77	2.367	3.689	0.189	spike	spike	spike	spike	spike
Spike	10.000	2.000	2.000	2.000	4.000	2.000	performed	performed	performed	performed	performed
%Recovery	93.0%	106.9%	88.5%	118.4%	92.2%	9.5%					

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR DCAA	IS DBOB
10476-01	103.7%	93.0%
10476-01s	118.8%	102.5%
10476-01sd	103.3%	107.5%

Surr acceptability	60% to 140%
Analyte acceptability	70% to 130%
InterStd acceptability	70% to 130%

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
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EPA Method 507*

Project ASPB Pesticides p

Lab Number: 10476
Date Received: 02/19/2001
Date_Extracted: 2/21/01
Date_Analyzed: 3/6/01
Date Reported: 09/06/2001

all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number:	Client_ Sample_ID:	SURR: NITRO-XYLENE:	IS:TRI-PHENYL-PHOS.	PRO-METON	AME-TRYNE:	PHE-NAM-IPHOS:	TRI-BUTYL-PHOS:	S-EDP-THIO-CARB:	PHOS-DRIN:	PRO-PHOS:	ATRA-ZINE:	PROPA-ZINE:	PRO-ME-TRYNE:	TERBU-TRYNE:	TRIAD-IMEFON :	DIPHEN -AMID:	VERNO-LATE:	METRI-BUZIN:	METOL A CHLOR:
10476-01	STF #2	122%	104%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10476-02	STF #3	106%	103%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000,	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10476-03	STF #4	92%	102%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10476-04	STF #1 r1	66%	95%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

EPA Method 507*

Project ASPB Pesticides p

Lab Number: 10476
Date Received: 02/19/2001
Date_Extracted: 2/21/01
Date_Analyzed: 3/6/01
Date Reported: 09/06/2001

* all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number:	MGK 264	BUTA-CHLOR	CARBOXIN	NORFLUR-AZON	BUTYLATE	MOLIN-ATE	CHLOR-PROPHAM	ATRATON:	ALACHLOR	BROM-AZIL:	TETRACHLOR-VINPHOS:	VEL PAR:	DICHLOR-VOS:	PEBULAT	TEBUTHIRON	SIMAZINE:	SIMETRYNE:	DEVRINOL	FENARIMOL:
10476-01	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10476-02	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10476-03	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000,	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10476-04	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Approved By: _____

QUALITY
ASSURANCE
DATA REPORT

Arkansas Water Resources Center
Water Quality Lab

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Project ASPB Pesticides p9t2

Lab Number: 10476
Date Received: 02/19/2001
Date_Extracted: 2/21/01
Date_Analyzed: 3/6/01
Date Reported: 09/06/2001

EPA METHOD 507

REAGENT WATER SPIKES- % RECOVERY

Spikes*	SURR-NITRO XYLENE % REC.	IS-TRI PHENYL PHOS. % REC.	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR
lfb3	75%	99%														77%	100%	93%
lfb4	65%	97%																
BLANKS																		
blank1476	88%	98%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
blank2476	89%	96%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

QUALITY ASSURANCE DATA REPORT CON'T

Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
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Project ASPB Pesticides p9t2

Lab Number: 10476
Date Received: 02/19/2001
Date Extracted: 2/21/01
Date Analyzed: 3/6/01
Date Reported: 09/06/2001

EPA METHOD 507

REAGENT WATER SPIKES - % RECOVERY (con't)

Spikes*	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR	BRO MAZIL	TETRA CHLOR VINPHO S	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
lfb3	94%	92%	90%	101%															
lfb4					87%	97%	117%	98%	102%	103%	103%	107%							

BLANKS

blank147	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
blank247	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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Matrix Spikes

Lab Number	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON
10476-01	0.000	0.000	0.000	0.000	no	no	no	no	no	no	no	no
10476-01s	19.607	19.837	20.226	15.070	spike	spike	spike	spike	spike	spike	spike	spike
Spike	20.000	20.000	20.000	20.000	performed	performed	performed	performed	performed	performed	performed	performed
%Recovery	98.0%	99.2%	101.1%	75.4%								

Lab Number	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON
10476-01	0.000	0.000	0.000	0.000	no	no	no	no	no	no	no	no
10476-01sd	17.79	18.001	19.133	13.928	spike	spike	spike	spike	spike	spike	spike	spike
Spike	20.000	20.000	20.000	20.000	performed	performed	performed	performed	performed	performed	performed	performed
%Recovery	89.0%	90.0%	95.7%	69.6%								

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR-NITRO XYLENE	IS-TRI PHENYL PHOS.
10476-01	121.6%	104.0%
10476-01s	102.4%	98.0%
10476-01sd	88.8%	101.0%

Surr acceptability 70% to 130%
Analyte acceptability 70% to 130%
IS acceptability is related to response not % recovery

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Matrix Spikes

Lab Number	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA TON
10476-01	no	no	no	no	no	no	no	no	no	no	no	no	no
10476-01s	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed
%Recovery													

Lab Number	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA TON
10476-01	no	no	no	no	no	no	no	no	no	no	no	no	no
10476-01sd	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed
%Recovery													

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Matrix Spikes

Lab Number	ALA CHLOR	BRO MAZIL	TETRA CHLOR VINPHO	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
10476-01	no	no	no	no	no	no	no	no	no	no	no
10476-01s	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

Lab Number	ALA CHLOR	BRO MAZIL	TETRA CHLOR VINPHO	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
10476-01	no	no	no	no	no	no	no	no	no	no	no
10476-01sd	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

TRIP 6

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB PesticidesP9-t3

Lab Number: 10602
Date Reported: 06/22/2001
Date Received: 04/18/2001

Sample	Client ID	Date Sampled	Det. Limit	Result	Units	Date Analyzed
Nitrate		**Method: EPA 300.0**		**Holding Time Expires**		**4/20/01**
10602-01	SFC #5	4/16/01 , 13 : 00	0.005	0.444	mg/l as N	04/19/2001
10602-02	SFC #6	4/16/01 , 14 : 00	0.005	0.000	mg/l as N	04/19/2001
10602-03	SFC #7	4/16/01 , 15 : 00	0.005	0.464	mg/l as N	04/19/2001
10602-04	SFC #8	4/16/01 , 17 : 00	0.005	0.038	mg/l as N	04/19/2001
10602-05	CROSS #3	4/17/01 , 9 : 00	0.005	0.000	mg/l as N	04/19/2001
10602-06	CROSS #4	4/17/01 , 11 : 00	0.005	0.032	mg/l as N	04/19/2001

Arkansas Water Resources Center
Water Quality Lab

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LabQCReport

For Lab Number: 10602 Friday, June 22, 2001

Analysis Nitrate mg/l

Standard	Date_Performed:	Standard_Result	True_Value	Percent Recovery
vhg	4/19/01 0:00	0.904	0.900	100%
vhg	4/19/01 0:00	0.905	0.900	101%
vhg	4/19/01 0:00	0.830	0.900	92%
vhg	4/19/01 0:00	0.892	0.900	99%
			AVG* =	98%
			RPD=**	4.0%

BLANKS	Date_Performed:	Measured Value	True_Value:
	4/19/01 0:00	0.000	0.000

*The average % Recovery is a measure of accuracy.
**RPD=Relative Percent Deviation, a measure of Precisison.

NB: These QC checks pertain to all samples in the instrument run(s) which contained your sample(s).

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Water Quality Lab

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DATA REPORT
Page1

Project ASPB PesticidesP

NPS METHOD 4

Lab Number: 10602
Date Received: 04/18/2001
Date_Extracted: 4/30/01
Date_Analyzed: 5/1/01
Date Reported: 09/18/2001

{all results in ug/L (ppb)}

Sample_ Number:	Client_Sample_ID:	SURR-CARBAZOLE %rec.	IS-ETHYL BENZENE % rec.	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
Sample Results											
10602-01	SFC #5	85%	75%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-02	SFC #6	89%	100%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-03	SFC #7	85%	100%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-04	SFC #8	84%	102%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-05	CROSS #3	91%	98%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-06	CROSS #4	98%	90%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

QUALITY ASSURANCE DATA REPORT

Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
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Project ASPB PesticidesP9-t3

Lab Number: 10602
Date Received: 04/18/2001
Date_Extracted: 4/30/01
Date_Analyzed: 5/1/01
Date Reported: 09/18/2001

NPS METHOD 4

REAGENT WATER SPIKES- % RECOVERY

Spikes*	SURR-CARBAZOLE	IS-ETHYLBENZENE:	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
lfb1	79%	106%		89%	72%	97%	82%			
lfb2	87%	99%	97%					90%	88%	90%
lfb2md	87%	99%	98%					91%	90%	91%

BLANKS

	SURR-CARBAZOLE	IS-ETHYLBENZENE:	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
blank4602	74%	97%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

lfb#=lab fortified blank(mix#)

If no percent recovery reported, then no spike performed

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Matrix Spikes

Lab Number	CYAN AZINE	FLUO MET URON	DIURON	LIN URON	PRO PHAM	PRO PANIL	SWEP	BAR BAN
10602-03	no	no	no	no	0.000	0.000	0.000	0.000
10602-03s	spike	spike	spike	spike	6.01	1.21	6.05	6.98
Spike	performed	performed	performed	performed	7.497	1.476	7.531	7.714
%Recovery					80.2%	82.0%	80.3%	90.5%

Lab Number	CYAN AZINE	FLUO MET URON	DIURON	LIN URON	PRO PHAM	PRO PANIL	SWEP	BAR BAN
10602-03	no	no	no	no	0.000	0.000	0.000	0.000
10602-03sd	spike	spike	spike	spike	6.23	1.15	5.99	6.84
Spike	performed	performed	performed	performed	7.497	1.476	7.531	7.714
%Recovery					83.1%	77.9%	79.5%	88.7%

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR CARBA ZOLE	IS ETHYL BENZENE
10602-03	85.0%	100.0%
10602-03s	78.0%	101.0%
10602-03sd	76.0%	103.0%

Surr acceptability	70% to 130%
Analyte acceptability	70% to 130%
IS acceptability	70% to 130%

DATA
REPORT

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project: ASPB PesticidesP9-t3

Lab Number: 10602
Date Received: 04/18/2001
Date_Prepared: 4/23/01
Date_Performed: 4/26/01
Date Reported: 09/17/2001
Date_Sampled: 4/16/01 13:00

EPA 515 Pesticides* *all results in ug/L (ppb)

Sample_ Number:	Client_Sample_ID:	DBOB -IS: %REC	DCAA-SURR: %REC	3,5-D:	DICHLOR-PROP:	PENTA-CHLORO-PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT-AZON:	PIC-LORAM:	ACI - FLUOR-FEN:
10602-01	SFC #5	104%	118%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-02	SFC #6	98%	96%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-03	SFC #7	101%	104%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-04	SFC #8	97%	95%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-05	CROSS #3	103%	79%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-06	CROSS #4	102%	88%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
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Projec ASPB Pesticide

Lab Number: 10602
Date Received: 04/18/2001
Date_Prepared: 4/23/01
Date_Performed: 4/26/01
Date Reported: 09/17/2001
Date_Sampled: 4/16/01 13:00

EPA 515 Pesticides* *all results in ug/L (ppb)

LAB FORTIFIED BLANKS (REAGENT WATER SPIKES) - %RECOVERY

Standard	DBOB -IS: %REC	DCAA-SURR: %REC.	3,5-D:	DICHLOR-PROP:	PENTA-CHLORO-PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT-AZON:	PIC-LORAM:	ACI - FLUOR-FEN:
lfb1	101%	81%	84%	98%	75%	79%	80%	10%							
lfb2	100%	97%							88%	80%	82%	80%	86%	59%	82%
lfb2md	104%	96%							86%	79%	81%	79%	84%	59%	81%
BLANKS															
blank160	96%	89%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

If no percent recovery reported, then no spike performed

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Matrix Spikes

Lab Number	3,5-D	DICHLOR PROP	PENTA CHLORO PHENAL	2,4,5-T	DINO SEB	DAC THAL	DICAM BA	2,4-D	SILVEX	2,4-DB	BENTA ZON	PICLO RAM	ACI FLOUR FEN
10602-02	no	no	no	no	no	no	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-02s	spike	spike	spike	spike	spike	spike	6.057	1.927	1.988	19.455	20.035	3.687	4.143
Spike	performed	performed	performed	performed	performed	performed	6.000	2.000	2.000	20.000	20.000	6.000	4.000
%Recovery							101.0%	96.4%	99.4%	97.3%	100.2%	61.5%	103.6%

Lab Number	3,5-D	DICHLOR PROP	PENTA CHLORO PHENAL	2,4,5-T	DINO SEB	DAC THAL	DICAM BA	2,4-D	SILVEX	2,4-DB	BENTA ZON	PICLO RAM	ACI FLOUR FEN
10602-02	no	no	no	no	no	no	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-02sd	spike	spike	spike	spike	spike	spike	5.89	1.881	1.954	18.886	20.009	3.281	4.126
Spike	performed	performed	performed	performed	performed	performed	6.000	2.000	2.000	20.000	20.000	6.000	4.000
%Recovery							98.2%	94.1%	97.7%	94.4%	100.0%	54.7%	103.2%

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR DCAA	IS DBOB
10602-02	95.6%	98.0%
10602-02s	95.7%	94.0%
10602-02sd	91.5%	94.0%

Surr acceptability	60% to 140%
Analyte acceptability	70% to 130%
InterStd acceptability	70% to 130%

Arkansas Water Resources Center
Water Quality Lab

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EPA Method 507*

Project ASPB PesticidesP

Lab Number: 10602
Date Received: 04/18/2001
Date_Extracted: 4/25/01
Date_Analyzed: 5/3/01
Date Reported: 09/06/2001

all results in ug/L (ppb)

SAMPLE RESULTS

Sample_Number:	Client_Sample_ID:	SURR: NITRO-XYLENE:	IS:TRI-PHENYL-PHOS.	PRO-METON	AME-TRYNE:	PHE-NAM-IPHOS:	TRI-BUTYL-PHOS:	S-EDP-THIO-CARB:	PHOS-DRIN:	PRO-PHOS:	ATRA-ZINE:	PROPA-ZINE:	PRO-ME-TRYNE:	TERBU-TRYNE:	TRIAD-IMEFON:	DIPHEN-AMID:	VERNO-LATE:	METRI-BUZIN:	METOL A CHLOR:
10602-01	SFC #5	87%	105%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-02	SFC #6	104%	106%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-03	SFC #7	87%	101%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-04	SFC #8	75%	98%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-05	CROSS #3	82%	95%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-06	CROSS #4	97%	87%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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EPA Method 507*

Project ASPB PesticidesP

Lab Number: 10602
Date Received: 04/18/2001
Date_Extracted: 4/25/01
Date_Analyzed: 5/3/01
Date Reported: 09/06/2001

* all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number:	MGK 264	BUTA-CHLOR	CARBOXIN	NORFLUR-AZON	BUTYLATE	MOLIN-ATE	CHLORPROPHAM	ATRATON:	ALACHLOR	BROM-AZIL:	TETRACHLOR-VINPHOS:	VELPAR:	DICHLOR-VOS:	PEBULAT	TEBUTHIRON	SIMAZINE:	SIMETRYNE:	DEVRINOL	FENARIMOL:
10602-01	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-02	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-03	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-04	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-05	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10602-06	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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Project ASPB PesticidesP9-t3

Lab Number: 10602
Date Received: 04/18/2001
Date_Extracted: 4/25/01
Date_Analyzed: 5/3/01
Date Reported: 09/18/2001

EPA METHOD 507

REAGENT WATER SPIKES- % RECOVERY

Spikes*	SURR-NITRO XYLENE % REC.	IS-TRI PHENYL PHOS. % REC.	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR
lfb1	114%	88%	113%	117%	101%	70%												
Lfb2	100%	79%					112%	105%	109%	117%	116%	106%	105%	107%	110%			
BLANKS																		
blank2602	99%	93%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank3602	101%	81%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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CON'T

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Water Quality Lab
University of Arkansas, Chemistry 101
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501-575-7317

Project ASPB PesticidesP9-43

Lab Number: 10602
Date Received: 04/18/2001
Date_Extracted: 4/25/01
Date_Analyzed: 5/3/01
Date Reported: 09/18/2001

EPA METHOD 507

REAGENT WATER SPIKES - % RECOVERY (con't)

Spikes*	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR	BRO MAZIL	TETRA CHLOR VINPHO S	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
lfb1																			
Lfb2																			
BLANKS																			
blank260	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank360	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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Matrix Spikes

Lab Number	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON	DIPH AMI
10602-01	no	no	no	no	no	no	no	no	no	no	no	no	no
10602-01s	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spik
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	perfor

Lab Number	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON	DIPH AMI
10602-01	no	no	no	no	no	no	no	no	no	no	no	no	no
10602-01sd	spike	spike	spike	spike	spike	spike	spike'	spike	spike	spike	spike	spike	spik
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	perfor

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR-NITRO XYLENE	IS-TRI PHENYL PHOS.
10602-01	87.2%	105.0%
10602-01s	113.8%	82.0%
10602-01sd	108.4%	86.0%

Surr acceptability 70% to 130%
Analyte acceptability 70% to 130%
IS acceptability is related to response not % recovery

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Matrix Spikes

Lab Number	VERNOLATE	METRIBUZIN	METOLACHLOR	MGK 264	BUTACHLOR	CARBOXIN	NORFLURAZON	BUTYLATE	MOLINATE	CHLORPROPHAM	ATRATON	ALATON	ALACHLOR
10602-01	0.000	0.000	0.000	0.000	0.000	0.000	0.000	no	no	no	no	no	no
10602-01s	21.78	22.04	22.14	4.87	21.46	9.432	20.6	spike	spike	spike	spike	spike	spike
Spike	20.000	20.000	20.000	20.000	20.000	20.000	20.000	performed	performed	performed	performed	performed	performed
%Recovery	108.9%	110.2%	110.7%	24.4%	107.3%	47.2%	103.0%						

Lab Number	VERNOLATE	METRIBUZIN	METOLACHLOR	MGK 264	BUTACHLOR	CARBOXIN	NORFLURAZON	BUTYLATE	MOLINATE	CHLORPROPHAM	ATRATON	ALATON	ALACHLOR
10602-01	0.000	0.000	0.000	0.000	0.000	0.000	0.000	no	no	no	no	no	no
10602-01sd	19.47	20.94	20.64	4.77	20.36	7.424	19.286	spike	spike	spike	spike	spike	spike
Spike	20.000	20.000	20.000	20.000	20.000	20.000	20.000	performed	performed	performed	performed	performed	performed
%Recovery	97.4%	104.7%	103.2%	23.9%	101.8%	37.1%	96.4%						

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Matrix Spikes

Lab Number	BRO MAZIL	TETRA CHLOR VINPHO	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
10602-01	no	no	no	no	no	no	no	no	no	no
10602-01s	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

Lab Number	BRO MAZIL	TETRA CHLOR VINPHO	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
10602-01	no	no	no	no	no	no	no	no	no	no
10602-01sd	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

TRIP 7

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project aspb pesticides p9t4

Lab Number: 10652
Date Reported: 06/27/2001
Date Received: 05/09/2001

Sample	Client ID	Date Sampled	Det. Limit	Result	Units	Date Analyzed
Nitrate		**Method: EPA 300.0**		**Holding Time Expires**		**5/11/01**
10652-01	Drew #2	5/7/01 , 0 : 00	0.005	0.001	mg/l as N	05/10/2001
10652-02	Drew #3	5/7/01 , 0 : 00	0.005	0.000	mg/l as N	05/10/2001
10652-03	Drew #4	5/7/01 , 0 : 00	0.005	0.005	mg/l as N	05/10/2001
10652-04	Drew #5	5/7/01 , 0 : 00	0.005	0.002	mg/l as N	05/10/2001
10652-05	Drew #6	5/8/01 , 0 : 00	0.005	0.007	mg/l as N	05/10/2001
10652-06	Drew #7	5/8/01 , 0 : 00	0.005	0.804	mg/l as N	05/10/2001
10652-07	Drew #8	5/8/01 , 0 : 00	0.005	0.000	mg/l as N	05/10/2001
10652-08	Drew #9	5/8/01 , 0 : 00	0.005	0.015	mg/l as N	05/10/2001

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Fayetteville, AR 72701
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LabQCReport

For Lab Number: 10652 Wednesday, June 27, 20

Analysis Nitrate mg/l

Standard	Date_Performed:	Standard_Result	True_Value	Percent Recovery
vhg	5/10/01 0:00	0.873	0.900	97%
vhg	5/10/01 0:00	0.868	0.900	96%
			AVG* =	97%
			RPD=**	0.4%

BLANKS	Date_Performed:	Measured Value	True_Value:
	5/10/01 0:00	0.005	0.000

*The average % Recovery is a measure of accuracy.
**RPD=Relative Percent Deviation, a measure of Precisison.

NB: These QC checks pertain to all samples in the instrument run(s) which contained your sample(s).

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DATA REPORT
Page1

Project aspb pesticides p

NPS METHOD 4

Lab Number: 10652
Date Received: 05/09/2001
Date_Extracted: 5/20/01
Date_Analyzed: 5/23/01
Date Reported: 09/27/2001

{all results in ug/L (ppb)}

Sample_ Number:	Client_Sample_ID:	SURR-CARBAZOLE %rec.	IS-ETHYL BENZENE % rec.	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
Sample Results											
10652-01	Drew #2	81%	86%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-02	Drew #3	83%	79%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-03	Drew #4	88%	79%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-04	Drew #5	78%	79%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-05	Drew #6	92%	78%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-06	Drew #7	91%	65%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-07	Drew #8	87%	76%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-08	Drew #9	92%	79%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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QUALITY ASSURANCE DATA REPORT

Project aspb pesticides p9t4

Lab Number: 10652
Date Received: 05/09/2001
Date_Extracted: 5/20/01
Date_Analyzed: 5/23/01
Date Reported: 09/27/2001

NPS METHOD 4

REAGENT WATER SPIKES- % RECOVERY

Spikes*	SURR-CARBAZOLE	IS-ETHYLBENZENE	BARBAN	CYANAZINE	DIURON	FLUOMETURON	LINURON	PROPANIL	PROPHAM	SWEP
lfb1	77%	121%		146%	133%	152%	110%			
lfb2	103%	129%	81%					117%	117%	94%
lfb2 2x	110%	133%	0%					112%	121%	102%

BLANKS

	SURR-CARBAZOLE	IS-ETHYLBENZENE	BARBAN	CYANAZINE	DIURON	FLUOMETURON	LINURON	PROPANIL	PROPHAM	SWEP
blank1652	87%	74%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank3652	97%	136%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank6652	91%	132%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

lfb#=lab fortified blank(mix#)

If no percent recovery reported, then no spike performed
lfb# 2x is 1/5 the concentration of the lfb#

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Matrix Spikes

Lab Number	CYAN AZINE	FLUO MET URON	DIURON	LIN URON	PRO PHAM	PRO PANIL	SWEP	BAR BAN
10652-02	no	no	no	no	0.000	0.000	0.000	0.000
10652-02s	spike	spike	spike	spike	9.92	1.83	7.56	7.33
Spike	performed	performed	performed	performed	7.497	1.476	7.531	7.714
%Recovery					132.3%	124.0%	100.4%	95.0%

Lab Number	CYAN AZINE	FLUO MET URON	DIURON	LIN URON	PRO PHAM	PRO PANIL	SWEP	BAR BAN
10652-02	no	no	no	no	0.000	0.000	0.000	0.000
10652-02sd	spike	spike	spike	spike	7.91	1.72	7.34	9.93
Spike	performed	performed	performed	performed	7.497	1.476	7.531	7.714
%Recovery					105.5%	116.5%	97.5%	128.7%

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR CARBA ZOLE	IS ETHYL BENZENE
10652-02	83.0%	78.7%
10652-02s	104.0%	128.3%
10652-02sd	100.0%	126.6%

Surr acceptability	70% to 130%
Analyte acceptability	70% to 130%
IS acceptability	70% to 130%

DATA
REPORT

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project: aspb pesticides p9t4

Lab Number: 10652
Date Received: 05/09/2001
Date_Prepared: 5/21/01
Date_Performed: 5/31/01
Date Reported: 09/10/2001
Date_Sampled: 5/7/01 0:00

EPA 515 Pesticides* *all results in ug/L (ppb)

Sample_ Number:	Client_Sample_ID:	DBOB -IS: %REC	DCAA- SURR: %REC	3,5-D:	DICHLOR- PROP:	PENTA- CHLORO- PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT- AZON:	PIC- LORAM:	ACI - FLUOR- FEN:
10652-01	Drew #2	93%	78%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-02	Drew #3	98%	83%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-03	Drew #4	94%	107%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-04	Drew #5	95%	91%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-05	Drew #6	103%	95%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-06	Drew #7	93%	100%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-07	Drew #8	92%	90%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-08	Drew #9	94%	99%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Projec aspb pesticides

Lab Number: 10652
Date Received: 05/09/2001
Date_Prepared: 5/21/01
Date_Performed: 5/31/01
Date Reported: 09/10/2001
Date_Sampled: 5/7/01 0:00

EPA 515 Pesticides* *all results in ug/L (ppb)

LAB FORTIFIED BLANKS (REAGENT WATER SPIKES) - %RECOVERY

Standard	DBOB -IS: %REC	DCAA- SURR: %REC.	3,5-D:	DICHLOR- PROP:	PENTA- CHLORO- PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT- AZON:	PIC- LORAM:	ACI - FLUOR- FEN:
lfb1	97%	83%	90%	93%	83%	84%	80%	7%							
lfb1 2x	108%	90%	93%	101%	76%	91%	87%	14%							
lfb2	96%	90%							88%	91%	89%	89%	94%	39%	96%
lfb2 2x	105%	98%							105%	104%	98%	111%	96%	88%	97%
BLANKS															
blank365	95%	99%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank765	99%	81%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

If no percent recovery reported, then no spike performed
lfb# 2x is 1/5 the concentration of the lfb#

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Matrix Spikes

Lab Number	3,5-D	DICHLOR PROP	PENTA CHLORO PHENAL	2,4,5-T	DINO SEB	DAC THAL	DICAM BA	2,4-D	SILVEX	2,4-DB	BENTA ZON	PICLO RAM	ACI FLOUR FEN
10652-03	no	no	no	no	no	no	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-03s	spike	spike	spike	spike	spike	spike	5.133	1.946	1.783	18.137	17.933	2.386	3.713
Spike	performed	performed	performed	performed	performed	performed	6.000	2.000	2.000	20.000	20.000	6.000	4.000
%Recovery							85.6%	97.3%	89.2%	90.7%	89.7%	39.8%	92.8%

Lab Number	3,5-D	DICHLOR PROP	PENTA CHLORO PHENAL	2,4,5-T	DINO SEB	DAC THAL	DICAM BA	2,4-D	SILVEX	2,4-DB	BENTA ZON	PICLO RAM	ACI FLOUR FEN
10652-03	no	no	no	no	no	no	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-03sd	spike	spike	spike	spike	spike	spike	5.502	1.972	1.885	19.321	18.942	2.977	3.759
Spike	performed	performed	performed	performed	performed	performed	6.000	2.000	2.000	20.000	20.000	6.000	4.000
%Recovery							91.7%	98.6%	94.3%	96.6%	94.7%	49.6%	94.0%

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR DCAA	IS DBOB
10652-03	107.0%	94.0%
10652-03s	93.5%	103.0%
10652-03sd	102.1%	104.0%

Surr acceptability	60% to 140%
Analyte acceptability	70% to 130%
InterStd acceptability	70% to 130%

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Matrix Spikes

Lab Number	BRO MAZIL	TETRA CHLOR VINPHO	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
10652-01	no	no	no	no	no	no	no	no	no	no
10652-01s	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

Lab Number	BRO MAZIL	TETRA CHLOR VINPHO	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
10652-01	no	no	no	no	no	no	no	no	no	no
10652-01sd	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

Arkansas Water Resources Center
Water Quality Lab

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501-575-7317

EPA Method 507*

Project aspb pesticides p

Lab Number: 10652
Date Received: 05/09/2001
Date_Extracted: 5/15/01
Date_Analyzed: 5/17/01
Date Reported: 09/18/2001

all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number:	Client_ Sample_ID:	SURR: NITRO-XYLENE:	IS:TRI-PHENYL-PHOS.	PRO-METON	AME-TRYNE:	PHE-NAM-IPHOS:	TRI-BUTYL-PHOS:	S-EDP-THIO-CARB:	PHOS-DRIN:	PRO-PHOS:	ATRA-ZINE:	PROPA-ZINE:	PRO-ME-TRYNE:	TERBU-TRYNE:	TRIAD-IMEFON	DIPHEN-AMID:	VERNO-LATE:	METRI-BUZIN:	METOL A CHLOR:
10652-01	Drew #2	92%	108%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-02	Drew #3	76%	106%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-03	Drew #4	89%	102%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-04	Drew #5	91%	103%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-05	Drew #6	116%	103%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-06	Drew #7	91%	101%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-07	Drew #8	95%	96%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-08	Drew #9	105%	95%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

EPA Method 507*

Project aspb pesticides p

Lab Number: 10652
Date Received: 05/09/2001
Date_Extracted: 5/15/01
Date_Analyzed: 5/17/01
Date Reported: 09/18/2001

* all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number:	MGK 264	BUTA-CHLOR	CAR-BOXIN	NORFLUR-AZON	BUTYL-ATE	MOLIN-ATE	CHLOR-PROPHAM	ATRA-TON:	ALA-CHLOR	BROM-AZIL:	TETRACHLOR-VINPHOS:	VEL PAR:	DICHLOR-VOS:	PEB-ULAT	TEBU-THIRON	SIMA-ZINE:	SIME-TRYNE:	DEV-RINOL	FENAR-IMOL:
10652-01	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-02	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-03	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-04	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-05	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-06	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-07	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-08	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

QUALITY ASSURANCE DATA REPORT

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project aspb pesticides p9t4

Lab Number: 10652
Date Received: 05/09/2001
Date_Extracted: 5/15/01
Date_Analyzed: 5/17/01
Date Reported: 09/18/2001

EPA METHOD 507

REAGENT WATER SPIKES- % RECOVERY

Spikes*	SURR-NITRO XYLENE % REC.	IS-TRI PHENYL PHOS. % REC.	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR
lfb3(2x)	93%	110%														93%	82%	84%
lfb4	159%	93%																
lfb5	168%	99%																
BLANKS																		
blank2652	123%	96%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank3652	86%	88%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank4652	103%	109%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

QUALITY ASSURANCE DATA REPORT CON'T

Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project aspb pesticides p9t4

Lab Number: 10652
Date Received: 05/09/2001
Date_Extracted: 5/15/01
Date_Analyzed: 5/17/01
Date Reported: 09/18/2001

EPA METHOD 507

REAGENT WATER SPIKES - % RECOVERY (con't)

Spikes*	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR	BRO MAZIL	TETRA CHLOR VINPHO S	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
lfb3(2x)	71%	82%	80%	87%															
lfb4					126%	131%	129%	100%	116%	114%	103%	104%							
lfb5													122%	160%	133%	117%	118%	119%	111%

BLANKS

blank2652	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank3652	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank4652	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

AWRC - Water Quality Laboratory
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Chemistry 101
Fayetteville, AR 72701
(501) 575-7317, Fax (501) 575-6720

Matrix Spikes

Lab Number	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON	DIPHEN AMID
10652-01	no	no	no	no	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-01s	spike	spike	spike	spike	22.397	21.222	19.067	19.259	19.175	18.175	18.033	17.899	18.32
Spike	performed	performed	performed	performed	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000
%Recovery					112.0%	106.1%	95.3%	96.3%	95.9%	90.9%	90.2%	89.5%	91.6%

Lab Number	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON	DIPHEN AMID
10652-01	no	no	no	no	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10652-01sd	spike	spike	spike	spike	20.751	19.594	17.625	18.05	17.993	17.414	17.034	17.095	17.548
Spike	performed	performed	performed	performed	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000
%Recovery					103.8%	98.0%	88.1%	90.3%	90.0%	87.1%	85.2%	85.5%	87.7%

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR-NITRO XYLENE	IS-TRI PHENYL PHOS.
10652-01	92.0%	108.0%
10652-01s	91.5%	105.0%
10652-01sd	81.6%	112.0%

Surr acceptability 70% to 130%
Analyte acceptability 70% to 130%
IS acceptability is related to response not % recovery

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Matrix Spikes

Lab Number	VERNOLATE	METRIBUZIN	METOLACHLOR	MGK 264	BUTACHLOR	CARBOXIN	NORFLURAZON	BUTYLATE	MOLINATE	CHLORPROPHAM	ATRATON	ALATON	ALACHLOR
10652-01	no	no	no	no	no	no	no	no	no	no	no	no	no
10652-01s	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

Lab Number	VERNOLATE	METRIBUZIN	METOLACHLOR	MGK 264	BUTACHLOR	CARBOXIN	NORFLURAZON	BUTYLATE	MOLINATE	CHLORPROPHAM	ATRATON	ALATON	ALACHLOR
10652-01	no	no	no	no	no	no	no	no	no	no	no	no	no
10652-01sd	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

TRIP 8

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB pesticides 09 E 5

Lab Number: 10694
Date Reported: 06/22/2001
Date Received: 05/23/2001

Sample	Client ID	Date Sampled	Det. Limit	Result	Units	Date Analyzed
Nitrate		**Method: EPA 300.0**		**Holding Time Expires**		**5/25/01**
10694-01	Praire #8	5/21/01 , 0 : 00	0.005	0.053	mg/l as N	05/24/2001
10694-02	Praire #9	5/21/01 , 0 : 00	0.005	0.956	mg/l as N	05/24/2001
10694-03	Praire #10	5/22/01 , 0 : 00	0.005	1.198	mg/l as N	05/24/2001
10694-04	Praire #11	5/22/01 , 0 : 00	0.005	0.078	mg/l as N	05/24/2001
10694-05	Praire #12	5/22/01 , 0 : 00	0.005	0.056	mg/l as N	05/24/2001
10694-06	Praire #13	5/22/01 , 0 : 00	0.005	0.001	mg/l as N	05/24/2001
10694-07	Praire #14	5/22/01 , 0 : 00	0.005	0.001	mg/l as N	05/24/2001
10694-08	Praire #15	5/22/01 , 0 : 00	0.005	0.003	mg/l as N	05/24/2001

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

LabQCReport

For Lab Number: 10694 Friday, June 22, 2001

Analysis Nitrate mg/l

Standard	Date_Performed:	Standard_Result	True_Value	Percent Recovery
vhg	5/24/01 0:00	0.808	0.900	90%
vhg	5/24/01 0:00	0.849	0.900	94%
			AVG* =	92%
			RPD=**	3.5%

SPIKES:

Sample	Date_Performed:	Result:	Spike Amount:	Spike_Result:	ms %recovery:
10694-01s	5/24/01 0:00	0.0532	0.98	1.004	97

SPIKES RSD=

BLANKS

Date_Performed:	Measured Value	True_Value:
5/24/01 0:00	0.004	0.000

*The average % Recovery is a measure of accuracy.
**RPD=Relative Percent Deviation, a measure of Precisison.

NB: These QC checks pertain to all samples in the instrument run(s) which contained your sample(s).

DATA REPORT
Page1

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB pesticides p

NPS METHOD 4

Lab Number: 10694
Date Received: 05/23/2001
Date_Extracted: 5/31/01
Date_Analyzed: 6/13/01
Date Reported: 09/26/2001

{all results in ug/L (ppb)}

Sample_ Number:	Client_Sample_ID:	SURR-CARBAZOLE %rec.	IS-ETHYL BENZENE % rec.	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
Sample Results											
10694-01	Praire #8	92%	104%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-02	Praire #9	90%	105%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-03	Praire #10	94%	101%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-04	Praire #11	93%	105%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-05	Praire #12	92%	107%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-06	Praire #13	94%	99%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-07	Praire #14	90%	104%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-08	Praire #15	100%	95%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

QUALITY
ASSURANCE
DATA REPORT

Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB pesticides p9t5

Lab Number: 10694
Date Received: 05/23/2001
Date_Extracted: 5/31/01
Date_Analyzed: 6/13/01
Date Reported: 09/26/2001

NPS METHOD 4

REAGENT WATER SPIKES- % RECOVERY

Spikes*	SURR-CARBAZOLE	IS-ETHYLBENZENE:	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
lfb1	96%	103%		73%	101%	110%	81%			
lfb1 2x	93%	106%		74%	89%	94%	71%			
lfb1md	95%	99%		88%	103%	111%	80%			
lfb2	91%	103%	101%					95%	117%	93%
lfb2 2x	94%	104%	102%					108%	108%	94%

BLANKS

	SURR-CARBAZOLE	IS-ETHYLBENZENE:	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
blank 6694	89%	99%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank4694	94%	106%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

lfb#=lab fortified blank(mix#)

If no percent recovery reported, then no spike performed
lfb# 2x is 1/5 the concentration of the lfb#

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Chemistry 101
Fayetteville, AR 72701
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Matrix Spikes

Lab Number	CYAN AZINE	FLUO MET URON	DIURON	LIN URON	PRO PHAM	PRO PANIL	SWEP	BAR BAN
10694-01	no	no	no	no	0.000	0.000	0.000	0.000
10694-01s	spike	spike	spike	spike	9.049	1.688	7.271	8.825
Spike	performed	performed	performed	performed	7.497	1.476	7.531	7.714
%Recovery					120.7%	114.4%	96.5%	114.4%

Lab Number	CYAN AZINE	FLUO MET URON	DIURON	LIN URON	PRO PHAM	PRO PANIL	SWEP	BAR BAN
10694-01	no	no	no	no	0.000	0.000	0.000	0.000
10694-01sd	spike	spike	spike	spike	8.723	1.623	7.023	8.655
Spike	performed	performed	performed	performed	7.497	1.476	7.531	7.714
%Recovery					116.4%	110.0%	93.3%	112.2%

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR CARBA ZOLE	IS ETHYL BENZENE
10694-01	92.1%	103.5%
10694-01s	95.6%	94.5%
10694-01sd	95.7%	101.5%

Surr acceptability	70% to 130%
Analyte acceptability	70% to 130%
IS acceptability	70% to 130%

DATA REPORT

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project: ASPB pesticides p9t5

Lab Number: 10694
Date Received: 05/23/2001
Date_Prepared: 5/29/01
Date_Performed: 6/1/01
Date Reported: 09/20/2001
Date_Sampled: 5/21/01 0:00

EPA 515 Pesticides* *all results in ug/L (ppb)

Sample_ Number:	Client_Sample_I D:	DBOB -IS: %REC	DCAA- SURR: %REC.	3,5-D:	DICHLOR- PROP:	PENTA- CHLORO- PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT- AZON:	PIC- LORAM:	ACI - FLUOR- FEN:
10694-01	Praire #8	111%	114%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-02	Praire #9	108%	97%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-03	Praire #10	100%	123%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-04	Praire #11	100%	111%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-05	Praire #12	103%	77%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-06	Praire #13	109%	96%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-07	Praire #14	107%	94%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-08	Praire #15	114%	86%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

QUALITY
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Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Projec ASPB pesticide

Lab Number: 10694
Date Received: 05/23/2001
Date_Prepared: 5/29/01
Date_Performed: 6/1/01
Date Reported: 09/25/2001
Date_Sampled: 5/21/01 0:00

EPA 515 Pesticides* *all results in ug/L (ppb)

LAB FORTIFIED BLANKS (REAGENT WATER SPIKES) - %RECOVERY

Standard	DBOB -IS: %REC	DCAA-SURR: %REC.	3,5-D:	DICHLOR-PROP:	PENTA-CHLORO-PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT-AZON:	PIC-LORAM:	ACI - FLUOR-FEN:
lfb1	114%	75%	80%	81%	72%	76%	71%	7%							
lfb2	117%	91%							85%	100%	89%	88%	89%	33%	93%
lfb2 2x	114%	104%							100%	129%	101%	100%	96%	43%	96%
BLANKS															
blank1694	103%	119%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank2694	115%	80%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank3694	110%	114%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

If no percent recovery reported, then no spike performed
lfb# 2x is 1/5 the concentration of the lfb#

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Matrix Spikes

Lab Number	3,5-D	DICHLOR PROP	PENTA CHLORO PHENAL	2,4,5-T	DINO SEB	DAC THAL	DICAM BA	2,4-D	SILVEX	2,4-DB	BENTA ZON	PICLO RAM	ACI FLOUR FEN
10694-07	no	no	no	no	no	no	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-07s	spike	spike	spike	spike	spike	spike	4.824	1.957	1.781	17.668	17.439	1.326	3.637
Spike	performed	performed	performed	performed	performed	performed	6.000	2.000	2.000	20.000	20.000	6.000	4.000
%Recovery							80.4%	97.9%	89.1%	88.3%	87.2%	22.1%	90.9%

Lab Number	3,5-D	DICHLOR PROP	PENTA CHLORO PHENAL	2,4,5-T	DINO SEB	DAC THAL	DICAM BA	2,4-D	SILVEX	2,4-DB	BENTA ZON	PICLO RAM	ACI FLOUR FEN
10694-07	no	no	no	no	no	no	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-07sd	spike	spike	spike	spike	spike	spike	5.492	2.15	1.973	19.406	19.398	2.292	4.019
Spike	performed	performed	performed	performed	performed	performed	6.000	2.000	2.000	20.000	20.000	6.000	4.000
%Recovery							91.5%	107.5%	98.7%	97.0%	97.0%	38.2%	100.5%

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR DCAA	IS DBOB
10694-07	94.2%	107.0%
10694-07s	104.8%	113.5%
10694-07sd	108.7%	108.0%

Surr acceptability	60% to 140%
Analyte acceptability	70% to 130%
InterStd acceptability	70% to 130%

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

EPA Method 507*

Project ASPB pesticides p

Lab Number: 10694
Date Received: 05/23/2001
Date_Extracted: 6/3/01
Date_Analyzed: 6/6/01
Date Reported: 09/19/2001

all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number:	Client_ Sample_ID:	SURR: NITRO-XYLENE:	IS:TRI-PHENYL-PHOS.	PRO-METON	AME-TRYNE:	PHE-NAM-IPHOS:	TRI-BUTYL-PHOS:	S-EDP-THIO-CARB:	PHOS-DRIN:	PRO-PHOS:	ATRA-ZINE:	PROPA-ZINE:	PRO-ME-TRYNE:	TERBU-TRYNE:	TRIAD-IMEFON	DIPHEN-AMID:	VERNO-LATE:	METRI-BUZIN:	METOL A CHLOR:
10694-01	Praire #8	105%	99%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-02	Praire #9	97%	107%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-03	Praire #10	73%	95%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-04	Praire #11	85%	103%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-05	Praire #12	103%	100%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-06	Praire #13	82%	99%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-07	Praire #14	94%	98%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-08	Praire #15	66%	99%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

EPA Method 507*

Project ASPB pesticides p

Lab Number: 10694
Date Received: 05/23/2001
Date_Extracted: 6/3/01
Date_Analyzed: 6/6/01
Date Reported: 09/19/2001

* all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number:	MGK 264	BUTA-CHLOR	CAR-BOXIN	NORFLU R-AZON	BUTYL-ATE	MOLIN -ATE	CHLOR-PRO PHAM	ATRA-TON:	ALA-CHLOR	BROM -AZIL:	TETRACHLOR -VINPHOS:	VEL PAR:	DICHLO R-VOS:	PEB-ULAT	TEBU-THIRON	SIMA-ZINE:	SIME-TRYNE:	DEV-RINOL	FENAR -IMOL:
10694-01	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-02	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-03	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-04	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-05	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-06	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-07	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10694-08	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB pesticides p9t5

Lab Number: 10694
Date Received: 05/23/2001
Date_Extracted: 6/3/01
Date_Analyzed: 6/6/01
Date Reported: 09/19/2001

EPA METHOD 507

REAGENT WATER SPIKES- % RECOVERY

Spikes*	SURR-NITRO XYLENE % REC.	IS-TRI PHENYL PHOS. % REC.	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR
lfb4	58%	97%																
lfb4 2x	78%	99%																
lfb5	93%	99%																
BLANKS																		
blank5694	99%	98%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank7694	76%	101%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank8694	75%	97%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB pesticides p9t5

Lab Number: 10694
Date Received: 05/23/2001
Date_Extracted: 6/3/01
Date_Analyzed: 6/6/01
Date Reported: 09/19/2001

EPA METHOD 507

REAGENT WATER SPIKES - % RECOVERY (con't)

Spikes*	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR	BRO MAZIL	TETRA CHLOR VINPHO S	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
lfb4					63%	78%	89%	99%	91%	99%	96%	105%							
lfb4 2x					68%	81%	75%	106%	84%	82%	111%	89%							
lfb5													96%	97%	94%	98%	96%	97%	98%

BLANKS

blank5694	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank7694	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank8694	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

AWRC - Water Quality Laboratory
University of Arkansas,
Chemistry 101
Fayetteville, AR 72701
(501) 575-7317, Fax (501) 575-6720

Matrix Spikes

Lab Number	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON
10694-04	no	no	no	no	no	no	no	no	no	no	no	no
10694-04s	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

Lab Number	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON
10694-04	no	no	no	no	no	no	no	no	no	no	no	no
10694-04sd	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR-NITRO XYLENE	IS-TRI PHENYL PHOS.
10694-04	85.5%	103.0%
10694-04sd	85.6%	103.0%
10694-04sd	76.4%	101.0%

Surr acceptability 70% to 130%
Analyte acceptability 70% to 130%
IS acceptability is related to response not % recovery

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Fayetteville, AR 72701
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Matrix Spikes

Lab Number	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR
10694-04	no	no	no	no	no	no	no	no	0.000	0.000	0.000	0.000	0.000
10694-04s	spike	spike	spike	spike	spike	spike	spike	spike	19.896	21.661	20.724	21.55	20.76
Spike	performed	performed	performed	performed	performed	performed	performed	performed	20.000	20.000	20.000	20.000	20.000
%Recovery									99.5%	108.3%	103.6%	107.8%	103.8%

Lab Number	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR
10694-04	no	no	no	no	no	no	no	no	0.000	0.000	0.000	0.000	0.000
10694-04sd	spike	spike	spike	spike	spike	spike	spike	spike	15.257	20.616	19.258	19.668	19.063
Spike	performed	performed	performed	performed	performed	performed	performed	performed	20.000	20.000	20.000	20.000	20.000
%Recovery									76.3%	103.1%	96.3%	98.3%	95.3%

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Chemistry 101
Fayetteville, AR 72701
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Matrix Spikes

Lab Number	BRO MAZIL	TETRA CHLOR VINPHO	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
10694-04	0.000	0.000	0.000	no	no	no	no	no	no	no
10694-04s	20.947	19.473	21.64	spike	spike	spike	spike	spike	spike	spike
Spike	20.000	20.000	20.000	performed	performed	performed	performed	performed	performed	performed
%Recovery	104.7%	97.4%	108.2%							

Lab Number	BRO MAZIL	TETRA CHLOR VINPHO	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
10694-04	0.000	0.000	0.000	no	no	no	no	no	no	no
10694-04sd	18.12	18.376	19.298	spike	spike	spike	spike	spike	spike	spike
Spike	20.000	20.000	20.000	performed	performed	performed	performed	performed	performed	performed
%Recovery	90.6%	91.9%	96.5%							

TRIP 9

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB Pesticides-p9t7

Lab Number: 10740
Date Reported: 06/28/2001
Date Received: 06/12/2001

Sample	Client ID	Date Sampled	Det. Limit	Result	Units	Date Analyzed
Nitrate		**Method: EPA 300.0**		**Holding Time Expires**		**6/14/01**
10740-01	ARK #8	6/11/01 , 0 : 00	0.005	0.000	mg/l as N	06/18/2001
10740-02	ARK #9	6/11/01 , 0 : 00	0.005	0.029	mg/l as N	06/18/2001
10740-03	ARK #10	6/11/01 , 0 : 00	0.005	0.015	mg/l as N	06/18/2001
10740-04	ARK #11	6/11/01 , 0 : 00	0.005	0.043	mg/l as N	06/18/2001
10740-05	ARK #12	6/11/01 , 0 : 00	0.005	0.083	mg/l as N	06/18/2001
10740-06	ARK #13	6/11/01 , 0 : 00	0.005	0.000	mg/l as N	06/18/2001
10740-07	ARK #14	6/11/01 , 0 : 00	0.005	0.000	mg/l as N	06/18/2001

Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

LabQCReport

For Lab Number: 10740 Thursday, June 28, 2001

Analysis Nitrate mg/l

Standard	Date_Performed:	Standard_Result	True_Value	Percent Recovery
vhg	6/18/01 0:00	0.912	0.900	101%
vhg	6/18/01 0:00	0.919	0.900	102%
vhg	6/18/01 0:00	0.904	0.900	100%
vhg	6/18/01 0:00	0.899	0.900	100%
vhg	6/18/01 0:00	0.937	0.900	104%
			AVG* =	102%
			RPD**=	1.6%

SPIKES:

Sample	Date_Performed:	Result:	Spike Amount:	Spike_Result:	ms %recovery:
10740-01s	6/18/01 0:00	0	1.92	1.903	99

SPIKES RSD=

BLANKS	Date_Performed:	Measured Value	True_Value:
	6/18/01 0:00	0.000	0.000

*The average % Recovery is a measure of accuracy.
**RPD=Relative Percent Deviation, a measure of Precisison.

NB: These QC checks pertain to all samples in the instrument run(s) which contained your sample(s).

Arkansas Water Resources Center
Water Quality Lab

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DATA REPORT
Page1

Project ASPB Pesticides-p

Lab Number: 10740
Date Received: 06/12/2001
NPS METHOD 4
Date_Extracted: 6/14/01
Date_Analyzed: 6/21/01
Date Reported: 09/26/2001

{all results in ug/L (ppb)}

Sample_ Number:	Client_Sample_ID:	SURR-CARBAZOLE %rec.	IS-ETHYL BENZENE % rec.	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
Sample Results											
10740-01	ARK #8	98%	91%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-02	ARK #9	89%	97%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-03	ARK #10	84%	96%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-04	ARK #11	92%	95%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-05	ARK #12	94%	103%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-06	ARK #13	94%	95%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-07	ARK #14	106%	91%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB Pesticides-p9t7

Lab Number: 10740
Date Received: 06/12/2001
Date_Extracted: 6/14/01
Date_Analyzed: 6/21/01
Date Reported: 09/26/2001

NPS METHOD 4

REAGENT WATER SPIKES- % RECOVERY

Spikes*	SURR-CARBAZOLE	IS-ETHYLBENZENE:	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
lfb1	95%	89%		82%	99%	107%	85%			
lfb2	104%	84%	81%					93%	106%	81%

BLANKS

	SURR-CARBAZOLE	IS-ETHYLBENZENE:	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
blank2740	95%	100%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

lfb#=lab fortified blank(mix#)

If no percent recovery reported, then no spike performed

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Chemistry 101
Fayetteville, AR 72701
(501) 575-7317, Fax (501) 575-6720

Matrix Spikes

Lab Number	CYAN AZINE	FLUO MET URON	DIURON	LIN URON	PRO PHAM	PRO PANIL	SWEP	BAR BAN
10740-07	no	no	no	no	0.000	0.000	0.000	0.000
10740-07s	spike	spike	spike	spike	8.242	1.421	6.142	7.827
Spike	performed	performed	performed	performed	7.497	1.476	7.531	7.714
%Recovery					109.9%	96.3%	81.6%	101.5%

Lab Number	CYAN AZINE	FLUO MET URON	DIURON	LIN URON	PRO PHAM	PRO PANIL	SWEP	BAR BAN
10740-07	no	no	no	no	0.000	0.000	0.000	0.000
10740-07sd	spike	spike	spike	spike	8.404	1.393	6.13	6.851
Spike	performed	performed	performed	performed	7.497	1.476	7.531	7.714
%Recovery					112.1%	94.4%	81.4%	88.8%

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR CARBA ZOLE	IS ETHYL BENZENE
10740-07	105.8%	91.0%
10740-07s	100.1%	85.0%
10740-07sd	95.6%	89.0%

Surr acceptability	70% to 130%
Analyte acceptability	70% to 130%
IS acceptability	70% to 130%

DATA
REPORT

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project: ASPB Pesticides-p9t7

Lab Number: 10740
Date Received: 06/12/2001
Date_Prepared: 6/18/01
Date_Performed: 6/21/01
Date Reported: 09/25/2001
Date_Sampled: 6/11/01 0:00

EPA 515 Pesticides* *all results in ug/L (ppb)

Sample_ Number:	Client_Sample_ID:	DBOB -IS: %REC	DCAA- SURR: %REC.	3,5-D:	DICHLOR- PROP:	PENTA- CHLORO- PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT- AZON:	PIC- LORAM:	ACI - FLUOR- FEN:
10740-01	ARK #8	102%	128%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-02	ARK #9	100%	128%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-03	ARK #10	101%	119%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-04	ARK #11	108%	228%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-05	ARK #12	102%	150%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-06	ARK #13	108%	179%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-07	ARK #14	108%	92%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

QUALITY
ASSURANCE
DATA
REPORT

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Projec ASPB Pesticide

Lab Number: 10740
Date Received: 06/12/2001
Date_Prepared: 6/18/01
Date_Performed: 6/21/01
Date Reported: 09/25/2001
Date_Sampled: 6/11/01 0:00

EPA 515 Pesticides* *all results in ug/L (ppb)

LAB FORTIFIED BLANKS (REAGENT WATER SPIKES) - %RECOVERY

Standard	DBOB -IS: %REC	DCAA- SURR: %REC.	3,5-D:	DICHLOR- PROP:	PENTA- CHLORO- PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT- AZON:	PIC- LORAM:	ACI - FLUOR- FEN:
lfb1	101%	109%	122%	117%	125%	119%	108%	12%							
lfb2	108%	112%							100%	86%	101%	94%	103%	40%	94%
BLANKS															
blank1740	108%	101%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

If no percent recovery reported, then no spike performed

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Chemistry 101
Fayetteville, AR 72701
(501) 575-7317, Fax (501) 575-6720

Matrix Spikes

Lab Number	3,5-D	DICHLOR PROP	PENTA CHLORO PHENAL	2,4,5-T	DINO SEB	DAC THAL	DICAM BA	2,4-D	SILVEX	2,4-DB	BENTA ZON	PICLO RAM	ACI FLOUR FEN
10740-06	0.000	0.000	0.000	0.000	0.000	0.000	no	no	no	no	no	no	no
10740-06s	11.594	2.169	2.376	2.22	4.014	0.337	spike	spike	spike	spike	spike	spike	spike
Spike	10.000	2.000	2.000	2.000	4.000	2.000	performed	performed	performed	performed	performed	performed	performed
%Recovery	115.9%	108.5%	118.8%	111.0%	100.4%	16.9%							

Lab Number	3,5-D	DICHLOR PROP	PENTA CHLORO PHENAL	2,4,5-T	DINO SEB	DAC THAL	DICAM BA	2,4-D	SILVEX	2,4-DB	BENTA ZON	PICLO RAM	ACI FLOUR FEN
10740-06	0.000	0.000	0.000	0.000	0.000	0.000	no	no	no	no	no	no	no
10740-06sd	11.462	2.142	2.438	2.107	3.838	0.201	spike	spike	spike	spike	spike	spike	spike
Spike	10.000	2.000	2.000	2.000	4.000	2.000	performed	performed	performed	performed	performed	performed	performed
%Recovery	114.6%	107.1%	121.9%	105.4%	96.0%	10.1%							

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR DCAA	IS DBOB
10740-06	179.3%	107.5%
10740-06s	153.8%	112.0%
10740-06sd	161.4%	123.5%

Surr acceptability	60% to 140%
Analyte acceptability	70% to 130%
InterStd acceptability	70% to 130%

Arkansas Water Resources Center
Water Quality Lab

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501-575-7317

EPA Method 507*

Project ASPB Pesticides-p

Lab Number: 10740
Date Received: 06/12/2001
Date_Extracted: 6/20/01
Date_Analyzed: 6/23/01
Date Reported: 09/19/2001

all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number:	Client_ Sample_ID:	SURR: NITRO-XYLENE:	IS:TRI-PHENYL-PHOS.	PRO-METON	AME-TRYNE:	PHE-NAM-IPHOS:	TRI-BUTYL-PHOS:	S-EDP-THIO-CARB:	PHOS-DRIN:	PRO-PHOS:	ATRA-ZINE:	PROPA-ZINE:	PRO-ME-TRYNE:	TERBU-TRYNE:	TRIAD-IMEFON :	DIPHEN -AMID:	VERNO-LATE:	METRI-BUZIN:	METOL A CHLOR:
10740-01	ARK #8	96%	113%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-02	ARK #9	85%	111%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-03	ARK #10	73%	113%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-04	ARK #11	69%	109%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-05	ARK #12	73%	109%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-06	ARK #13	83%	106%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-07	ARK #14	72%	110%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
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501-575-7317

EPA Method 507*

Project ASPB Pesticides-p

Lab Number: 10740
Date Received: 06/12/2001
Date_Extracted: 6/20/01
Date_Analyzed: 6/23/01
Date Reported: 09/19/2001

* all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number:	MGK 264	BUTA-CHLOR	CAR-BOXIN	NORFLUR-AZON	BUTYL-ATE	MOLIN-ATE	CHLOR-PRO PHAM	ATRA-TON:	ALA-CHLOR	BROM-AZIL:	TETRACHLOR-VINPHOS:	VEL PAR:	DICHLOR-VOS:	PEB-ULAT	TEBU-THIRON	SIMA-ZINE:	SIME-TRYNE:	DEV-RINOL	FENAR-IMOL:
10740-01	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-02	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-03	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-04	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-05	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-06	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10740-07	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
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Project ASPB Pesticides-p9t7

Lab Number: 10740
Date Received: 06/12/2001
Date_Extracted: 6/20/01
Date_Analyzed: 6/23/01
Date Reported: 09/20/2001

EPA METHOD 507

REAGENT WATER SPIKES- % RECOVERY

Spikes*	SURR-NITRO XYLENE % REC.	IS-TRI PHENYL PHOS. % REC.	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR
lfb1	71%	97%	89%	97%	98%	64%												
lfb2	57%	105%					78%	96%	100%	102%	102%	99%	98%	98%	96%			
BLANKS																		
blank3740	75%	107%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB Pesticides-p9t7

Lab Number: 10740
Date Received: 06/12/2001
Date_Extracted: 6/20/01
Date_Analyzed: 6/23/01
Date Reported: 09/20/2001

EPA METHOD 507

REAGENT WATER SPIKES - % RECOVERY (con't)

Spikes*	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR	BRO MAZIL	TETRA CHLOR VINPHO S	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
lfb1																			
lfb2																			
BLANKS																			
blank3740	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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Matrix Spikes

Lab Number	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON
10740-05	no	no	no	no	no	no	no	no	no	no	no	no
10740-05s	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed
%Recovery												

Lab Number	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON
10740-05	no	no	no	no	no	no	no	no	no	no	no	no
10740-05sd	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed
%Recovery												

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR-NITRO XYLENE	IS-TRI PHENYL PHOS.
10740-05	73.0%	109.2%
10740-05s	73.2%	107.2%
10740-05sd	75.0%	101.6%

Surr acceptability 70% to 130%
Analyte acceptability 70% to 130%
IS acceptability is related to response not % recovery

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Matrix Spikes

Lab Number	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR
10740-05	no	0.000	0.000	0.000	0.000	0.000	0.000	0.000	no	no	no	no	no
10740-05s	spike	13.102	18.85	18.555	16.939	14.706	21.775	17.55	spike	spike	spike	spike	spike
Spike	performed	20.000	20.000	20.000	20.000	20.000	20.000	20.000	performed	performed	performed	performed	performed
%Recovery		65.5%	94.3%	92.8%	84.7%	73.5%	108.9%	87.8%					

Lab Number	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR
10740-05	no	0.000	0.000	0.000	0.000	0.000	0.000	0.000	no	no	no	no	no
10740-05sd	spike	14.704	19.219	19.28	17.413	17.976	24.414	19.603	spike	spike	spike	spike	spike
Spike	performed	20.000	20.000	20.000	20.000	20.000	20.000	20.000	performed	performed	performed	performed	performed
%Recovery		73.5%	96.1%	96.4%	87.1%	89.9%	122.1%	98.0%					

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Matrix Spikes

Lab Number	BRO MAZIL	TETRA CHLOR VINPHO	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
10740-05	no	no	no	no	no	no	no	no	no	no
10740-05s	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

Lab Number	BRO MAZIL	TETRA CHLOR VINPHO	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
10740-05	no	no	no	no	no	no	no	no	no	no
10740-05sd	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

TRIP 10

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project **ASPB Pesticides-p9t6**

Lab Number: 10725
Date Reported: 06/27/2001
Date Received:

Sample	Client ID	Date Sampled	Det. Limit	Result	Units	Date Analyzed
Nitrate		**Method: EPA 300.0**		**Holding Time Expires**		
10725-01	WHITE #2	5/31/01 , 13 : 00	0.005	0.002	mg/l as N	06/07/2001
10725-02	WHITE #3	5/31/01 , 14 : 00	0.005	0.020	mg/l as N	06/07/2001
10725-03	WHITE #4	5/31/01 , 16 : 00	0.005	0.242	mg/l as N	06/07/2001
10725-04	WHITE #5	5/31/01 , 18 : 00	0.005	0.004	mg/l as N	06/07/2001
10725-05	WHITE #6	6/1/01 , 9 : 00	0.005	0.646	mg/l as N	06/07/2001
10725-06	WHITE #7	6/1/01 , 10 : 00	0.005	0.583	mg/l as N	06/07/2001
10725-07	WHITE #8	6/1/01 , 12 : 01	0.005	0.127	mg/l as N	06/07/2001
10725-08	WHITE #9	6/1/01 , 14 : 00	0.005	0.046	mg/l as N	06/07/2001
10725-09	WHITE #10	6/1/01 , 16 : 00	0.005	0.000	mg/l as N	06/07/2001
10725-10	WHITE #11	6/1/01 , 17 : 30	0.005	5.429	mg/l as N	06/07/2001

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

LabQCReport

For Lab Number: 10725 Wednesday, June 27, 20

Analysis Nitrate mg/l

Standard	Date_Performed:	Standard_Result	True_Value	Percent Recovery
vhg	6/7/01 0:00	0.880	0.900	98%
vhg	6/7/01 0:00	0.897	0.900	100%
			AVG* =	99%
			RPD=**	1.4%

BLANKS	Date_Performed:	Measured Value	True_Value:
	6/7/01 0:00	0.004	0.000

*The average % Recovery is a measure of accuracy.
**RPD=Relative Percent Deviation, a measure of Precisison.

NB: These QC checks pertain to all samples in the instrument run(s) which contained your sample(s).

Arkansas Water Resources Center
Water Quality Lab

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DATA REPORT
Page1

Project ASPB Pesticides-p

NPS METHOD 4

Lab Number: 10725
Date Received: 06/14/2001
Date_Extracted: 6/8/01
Date_Analyzed: 6/14/01
Date Reported: 09/26/2001

{all results in ug/L (ppb)}

Sample_ Number:	Client_Sample_ID:	SURR-CARBAZOLE %rec.	IS-ETHYL BENZENE % rec.	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
Sample Results											
10725-01	WHITE #2	93%		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-02	WHITE #3	92%		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-03	WHITE #4	100%		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-04	WHITE #5	94%		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-05	WHITE #6	96%		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-06	WHITE #7	92%		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-07	WHITE #8	93%		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-08	WHITE #9	105%		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-09	WHITE #10	101%		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

External standard calibration, no internal standard used

QUALITY
ASSURANCE
DATA REPORT

Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB Pesticides-p9t6

Lab Number: 10725
Date Received: 06/14/2001
Date_Extracted: 6/8/01
Date_Analyzed: 6/14/01
Date Reported: 09/26/2001

NPS METHOD 4

REAGENT WATER SPIKES- % RECOVERY

Spikes*	SURR-CARBAZOLE	IS-ETHYLBENZENE	BARBAN	CYANAZINE	DIURON	FLUOMETURON	LINURON	PROPANIL	PROPHAM	SWEP
lfb1	91%			78%	90%	98%	69%			
lfb2	87%		85%					90%	99%	77%
lfb2 2x	86%		101%					111%	108%	90%
lfb2md	86%		85%					89%	96%	76%

BLANKS

	SURR-CARBAZOLE	IS-ETHYLBENZENE	BARBAN	CYANAZINE	DIURON	FLUOMETURON	LINURON	PROPANIL	PROPHAM	SWEP
blank4725	90%		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank8725	103%		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

lfb#=lab fortified blank(mix#)

External standard calibration, no internal standard used
If no percent recovery reported, then no spike performed
lfb# 2x is 1/5 the concentration of the lfb#

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Fayetteville, AR 72701
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Matrix Spikes

Lab Number	CYAN AZINE	FLUO MET URON	DIURON	LIN URON	PRO PHAM	PRO PANIL	SWEP	BAR BAN
10725-02	no	no	no	no	0.000	0.000	0.000	0.000
10725-02s	spike	spike	spike	spike	8.546	1.618	6.974	8.472
Spike	performed	performed	performed	performed	7.497	1.476	7.531	7.714
%Recovery					114.0%	109.6%	92.6%	109.8%

Lab Number	CYAN AZINE	FLUO MET URON	DIURON	LIN URON	PRO PHAM	PRO PANIL	SWEP	BAR BAN
10725-02	no	no	no	no	0.000	0.000	0.000	0.000
10725-02s	spike	spike	spike	spike	7.243	1.288	5.598	6.427
Spike	performed	performed	performed	performed	7.497	1.476	7.531	7.714
%Recovery					96.6%	87.3%	74.3%	83.3%

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR CARBA ZOLE	IS ETHYL BENZENE
10752-02	92.5%	
10725-02s	92.0%	
10725-02sd	75.0%	

External Calibration
No Internal Standard used
Surr acceptability 70% to 130%
Analyte acceptability 70% to 130%

DATA
REPORT

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project: ASPB Pesticides-p9t6

Lab Number: 10725
Date Received: 06/14/2001
Date_Prepared: 6/13/01
Date_Performed: 6/20/01
Date Reported: 09/25/2001
Date_Sampled: 5/31/01 13:00

EPA 515 Pesticides* *all results in ug/L (ppb)

Sample_ Number:	Client_Sample_ID:	DBOB -IS: %REC	DCAA- SURR: %REC.	3,5-D:	DICHLOR- PROP:	PENTA- CHLORO- PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT- AZON:	PIC- LORAM:	ACI - FLUOR- FEN:
10725-01	WHITE #2	104%	133%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-02	WHITE #3	100%	99%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-03	WHITE #4	110%	130%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-04	WHITE #5	99%	114%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-05	WHITE #6	101%	110%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-06	WHITE #7	105%	845%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-07	WHITE #8	98%	124%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-08	WHITE #9	97%	165%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-09	WHITE #10	104%	184%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-10	WHITE #11	103%	115%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.672	0.000	0.000

QUALITY
ASSURANCE
DATA
REPORT

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Projec ASPB Pesticide

Lab Number: 10725
Date Received: 06/14/2001
Date_Prepared: 6/13/01
Date_Performed: 6/20/01
Date Reported: 09/25/2001
Date_Sampled: 5/31/01 13:00

EPA 515 Pesticides* *all results in ug/L (ppb)

LAB FORTIFIED BLANKS (REAGENT WATER SPIKES) - %RECOVERY

Standard	DBOB -IS: %REC	DCAA- SURR: %REC.	3,5-D:	DICHLOR- PROP:	PENTA- CHLORO- PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT- AZON:	PIC- LORAM:	ACI - FLUOR- FEN:
lfb1	100%	97%	115%	111%	111%	108%	102%	12%							
lfb2	108%	80%							93%	81%	87%	77%	93%	42%	86%
lfb2 2x	106%	81%							90%	105%	69%	68%	78%	82%	70%
BLANKS															
blank5725	94%	56%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank6725	106%	91%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank7725	96%	92%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

If no percent recovery reported, then no spike performed
lfb# 2x is 1/5 the concentration of the lfb#

AWRC - Water Quality Laboratory
University of Arkansas,
Chemistry 101
Fayetteville, AR 72701
(501) 575-7317, Fax (501) 575-6720

Matrix Spikes

Lab Number	3,5-D	DICHLOR PROP	PENTA CHLORO PHENAL	2,4,5-T	DINO SEB	DAC THAL	DICAM BA	2,4-D	SILVEX	2,4-DB	BENTA ZON	PICLO RAM	ACI FLOUR FEN
10725-07	0.000	0.000	0.000	0.000	0.000	0.000	no	no	no	no	no	no	no
10725-07s	12.979	2.473	2.625	2.469	4.585	0.105	spike	spike	spike	spike	spike	spike	spike
Spike	10.000	2.000	2.000	2.000	4.000	2.000	performed	performed	performed	performed	performed	performed	performed
%Recovery	129.8%	123.7%	131.3%	123.5%	114.6%	5.3%							

Lab Number	3,5-D	DICHLOR PROP	PENTA CHLORO PHENAL	2,4,5-T	DINO SEB	DAC THAL	DICAM BA	2,4-D	SILVEX	2,4-DB	BENTA ZON	PICLO RAM	ACI FLOUR FEN
10725-07	0.000	0.000	0.000	0.000	0.000	0.000	no	no	no	no	no	no	no
10725-07sd	11.892	1.933	2.265	2.115	3.996	0.189	spike	spike	spike	spike	spike	spike	spike
Spike	10.000	2.000	2.000	2.000	4.000	2.000	performed	performed	performed	performed	performed	performed	performed
%Recovery	118.9%	96.7%	113.3%	105.8%	99.9%	9.5%							

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR DCAA	IS DBOB
10725-07	123.8%	97.5%
10725-07s	123.1%	97.0%
10725-07sd	114.7%	99.5%

Surr acceptability	60% to 140%
Analyte acceptability	70% to 130%
InterStd acceptability	70% to 130%

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

EPA Method 507*

Project ASPB Pesticides-p

Lab Number: 10725
Date Received: 06/14/2001
Date_Extracted: 6/6/01
Date_Analyzed: 6/7/01
Date Reported: 09/21/2001

all results in ug/L (ppb)

SAMPLE RESULTS

Sample_Client_ Number:	Sample_ID:	SURR: NITRO-XYLENE:	IS:TRI-PHENYL-PHOS.	PRO-METON	AME-TRYNE:	PHE-NAM-IPHOS:	TRI-BUTYL-PHOS:	S-EDP-THIO-CARB:	PHOS-DRIN:	PRO-PHOS:	ATRA-ZINE:	PROPA-ZINE:	PRO-ME-TRYNE:	TERBU-TRYNE:	TRIAD-IMEFON:	DIPHEN-AMID:	VERNO-LATE:	METRI-BUZIN:	METOL A CHLOR:
10725-01	WHITE #2	97%	99%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-02	WHITE #3	85%	95%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-03	WHITE #4	86%	95%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-04	WHITE #5	72%	95%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-05	WHITE #6	89%	98%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-06	WHITE #7	81%	94%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-07	WHITE #8	79%	95%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-08	WHITE #9	89%	93%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-09	WHITE #10	74%	102%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-10	WHITE #11	82%	94%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

EPA Method 507*
Project ASPB Pesticides-p

Lab Number: 10725
Date Received: 06/14/2001
Date_Extracted: 6/6/01
Date_Analyzed: 6/7/01
Date Reported: 09/21/2001

* all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number:	MGK 264	BUTA-CHLOR	CAR-BOXIN	NORFLU R-AZON	BUTYL-ATE	MOLIN -ATE	CHLOR-PRO PHAM	ATRA-TON:	ALA-CHLOR	BROM -AZIL:	TETRACHLOR -VINPHOS:	VEL PAR:	DICHLO R-VOS:	PEB-ULAT	TEBU-THIRON	SIMA-ZINE:	SIME-TRYNE:	DEV-RINOL	FENAR -IMOL:
10725-01	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-02	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-03	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-04	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-05	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-06	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-07	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-08	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-09	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10725-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

QUALITY ASSURANCE DATA REPORT

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project **ASPB Pesticides-p9t6**

Lab Number: 10725
Date Received: 06/14/2001
Date_Extracted: 6/6/01
Date_Analyzed: 6/7/01
Date Reported: 09/21/2001

EPA METHOD 507

REAGENT WATER SPIKES- % RECOVERY

Spikes*	SURR-NITRO XYLENE % REC.	IS-TRI PHENYL PHOS. % REC.	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR
lfb3	80%	95%														88%	102%	100%
lfb4	90%	98%																
BLANKS																		
blank1725	91%	90%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank2725	93%	106%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

QUALITY
ASSURANCE
DATA REPORT
CON'T

Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB Pesticides-p9t6

Lab Number: 10725
Date Received: 06/14/2001
Date_Extracted: 6/6/01
Date_Analyzed: 6/7/01
Date Reported: 09/21/2001

EPA METHOD 507

REAGENT WATER SPIKES - % RECOVERY (con't)

Spikes*	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR	BRO MAZIL	TETRA CHLOR VINPHO S	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
lfb3	99%	97%	106%	93%															
lfb4					78%	107%	101%	100%	101%	96%	101%	97%							

BLANKS

blank1725	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank2725	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

AWRC - Water Quality Laboratory
University of Arkansas,
Chemistry 101
Fayetteville, AR 72701
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Matrix Spikes

Lab Number	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON
10725-10	no	no	no	no	no	no	no	no	no	no	no	no
10725-10s	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

Lab Number	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON
10725-10	no	no	no	no	no	no	no	no	no	no	no	no
10725-10sd	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR-NITRO XYLENE	IS-TRI PHENYL PHOS.
10725-10	82.2%	94.0%
10725-10s	73.2%	105.0%
10725-10sd	92.0%	106.0%

Surr acceptability 70% to 130%
Analyte acceptability 70% to 130%
IS acceptability is related to response not % recovery

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Matrix Spikes

Lab Number	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR
10725-10	no	no	no	no	no	no	no	no	0.000	0.000	0.000	0.000	0.000
10725-10s	spike	spike	spike	spike	spike	spike	spike	spike	12.173	20.108	17.458	19.173	19.53
Spike	performed	performed	performed	performed	performed	performed	performed	performed	20.000	20.000	20.000	20.000	20.000
%Recovery									60.9%	100.5%	87.3%	95.9%	97.7%

Lab Number	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR
10725-10	no	no	no	no	no	no	no	no	0.000	0.000	0.000	0.000	0.000
10725-10sd	spike	spike	spike	spike	spike	spike	spike	spike	15.24	22.048	21.146	20.098	20.957
Spike	performed	performed	performed	performed	performed	performed	performed	performed	20.000	20.000	20.000	20.000	20.000
%Recovery									76.2%	110.2%	105.7%	100.5%	104.8%

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Chemistry 101
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Matrix Spikes

Lab Number	BRO MAZIL	TETRA CHLOR VINPHO	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
10725-10	0.000	0.000	0.000	no	no	no	no	no	no	no
10725-10s	17.996	19.292	19.104	spike	spike	spike	spike	spike	spike	spike
Spike	20.000	20.000	20.000	performed	performed	performed	performed	performed	performed	performed
%Recovery	90.0%	96.5%	95.5%							

Lab Number	BRO MAZIL	TETRA CHLOR VINPHO	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
10725-10	0.000	0.000	0.000	no	no	no	no	, no	no	no
10725-10sd	20.881	20.662	20.892	spike	spike	spike	spike	spike	spike	spike
Spike	20.000	20.000	20.000	performed	performed	performed	performed	performed	performed	performed
%Recovery	104.4%	103.3%	104.5%							

Trip 11

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB P9T8

Lab Number: 10765
Date Reported: 06/28/2001
Date Received: 06/19/2001

Sample	Client ID	Date Sampled	Det. Limit	Result	Units	Date Analyzed
Nitrate		**Method: EPA 300.0**		**Holding Time Expires**		**6/21/01**
10765-01	JEFF 7	6/18/01 , 0 : 00	0.005	0.065	mg/l as N	06/21/2001
10765-02	JEFF 8	6/18/01 , 0 : 00	0.005	0.037	mg/l as N	06/21/2001
10765-03	JEFF 9	6/18/01 , 0 : 00	0.005	0.009	mg/l as N	06/21/2001
10765-04	JEFF 10	6/18/01 , 0 : 00	0.005	0.000	mg/l as N	06/21/2001
10765-05	JEFF 11	6/18/01 , 0 : 00	0.005	0.015	mg/l as N	06/21/2001
10765-06	JEFF 12	6/18/01 , 0 : 00	0.005	0.000	mg/l as N	06/21/2001
10765-07	JEFF 13	6/18/01 , 0 : 00	0.005	0.038	mg/l as N	06/21/2001
10765-08	JEFF 2R2	6/17/01 , 0 : 00	0.005	0.093	mg/l as N	06/21/2001
10765-09	JEFF 5R1	6/17/01 , 0 : 00	0.005	0.000	mg/l as N	06/21/2001
10765-10	LINC 3	6/18/01 , 0 : 00	0.005	0.021	mg/l as N	06/21/2001

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

LabQCReport

For Lab Number: 10765 Thursday, June 28, 2001

Analysis Nitrate mg/l

Standard	Date_Performed:	Standard_Result	True_Value	Percent Recovery
vhg	6/21/01 0:00	0.870	0.900	97%
vhg	6/21/01 0:00	0.865	0.900	96%
			AVG* =	96%
			RPD=**	0.4%

SPIKES:

Sample	Date_Performed:	Result:	Spike Amount:	Spike_Result:	ms %recovery:
10765-01s	6/21/01 0:00	0.0654	1.92	1.843	93

SPIKES RSD=

BLANKS

Date_Performed:	Measured Value	True_Value:
6/21/01 0:00	0.000	0.000

*The average % Recovery is a measure of accuracy.
**RPD=Relative Percent Deviation, a measure of Precisison.

NB: These QC checks pertain to all samples in the instrument run(s) which contained your sample(s).

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

DATA REPORT
Page1

Project ASPB P9T8

NPS METHOD 4

Lab Number: 10765
Date Received: 06/19/2001
Date_Extracted: 6/21/01
Date_Analyzed: 6/26/01
Date Reported: 09/26/2001

{all results in ug/L (ppb)}

Sample_ Number:	Client_Sample_ID:	SURR-CARBAZOLE %rec.	IS-ETHYL BENZENE % rec.	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
Sample Results											
10765-01	JEFF 7	103%	96%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-02	JEFF 8	103%	96%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-03	JEFF 9	88%	101%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-04	JEFF 10	96%	90%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-05	JEFF 11	105%	91%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-06	JEFF 12	85%	111%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-07	JEFF 13	89%	104%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-08	JEFF 2R2	90%	93%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-09	JEFF 5R1	90%	92%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-10	LINC 3	94%	100%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

QUALITY
ASSURANCE
DATA REPORT

Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB P9T8

Lab Number: 10765
Date Received: 06/19/2001
Date_Extracted: 6/21/01
Date_Analyzed: 6/26/01
Date Reported: 09/26/2001

NPS METHOD 4

REAGENT WATER SPIKES- % RECOVERY

Spikes*	SURR-CARBAZOLE	IS-ETHYLBENZENE:	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
lfb1	72%	101%		97%	69%	89%	73%			
lfb2	84%	100%	96%					101%	106%	84%
lfb2 2x	86%	96%	85%					87%	102%	81%

BLANKS

	SURR-CARBAZOLE	IS-ETHYLBENZENE:	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
blank1765	102%	96%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank3765	80%	94%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

lfb#=lab fortified blank(mix#)

If no percent recovery reported, then no spike performed
lfb# 2x is 1/5 the concentration of the lfb#

AWRC - Water Quality Laboratory
University of Arkansas,
Chemistry 101
Fayetteville, AR 72701
(501) 575-7317, Fax (501) 575-6720

Matrix Spikes

Lab Number	CYAN AZINE	FLUO MET URON	DIURON	LIN URON	PRO PHAM	PRO PANIL	SWEP	BAR BAN
10765-10	0.000	0.000	0.000	0.000	no	no	no	no
10765-10s	2.983	1.256	0.491	1.118	spike	spike	spike	spike
Spike	6.487	2.058	1.003	3.126	performed	performed	performed	performed
%Recovery	46.0%	61.0%	49.0%	35.8%				

Lab Number	CYAN AZINE	FLUO MET URON	DIURON	LIN URON	PRO PHAM	PRO PANIL	SWEP	BAR BAN
10765-10	0.000	0.000	0.000	0.000	no	no	no	no
10765-10sd	6.932	2.834	1.214	2.992	spike	spike	spike	spike
Spike	6.487	2.058	1.003	3.126	performed	performed	performed	performed
%Recovery	106.9%	137.7%	121.0%	95.7%				

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR CARBA ZOLE	IS ETHYL BENZENE
10765-10	94.2%	100.0%
10765-10s	39.3%	92.5%
10765-10sd	85.8%	88.5%

Surr acceptability	70% to 130%
Analyte acceptability	70% to 130%
IS acceptability	70% to 130%

DATA REPORT

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project: ASPB P9T8

Lab Number: 10765
Date Received: 06/19/2001
Date_Prepared: 6/24/01
Date_Performed: 7/3/01
Date Reported: 09/20/2001
Date_Sampled: 6/18/01 0:00

EPA 515 Pesticides* *all results in ug/L (ppb)

Sample_ Number:	Client_Sample_ID:	DBOB -IS: %REC	DCAA-SURR: %REC.	3,5-D:	DICHLOR-PROP:	PENTA-CHLORO-PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT-AZON:	PIC-LORAM:	ACI-FLUOR-FEN:
10765-01	JEFF 7	84%	126%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-02	JEFF 8	86%	100%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-03	JEFF 9	80%	121%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-04	JEFF 10	79%	108%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-05	JEFF 11	77%	109%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-06	JEFF 12	81%	120%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-07	JEFF 13	81%	104%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-08	JEFF 2R2	79%	117%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-09	JEFF 5R1	79%	123%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-10	LINC 3	79%	119%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Projec ASPB P9T8

Lab Number: 10765
Date Received: 06/19/2001
Date_Prepared: 6/24/01
Date_Performed: 7/3/01
Date Reported: 09/25/2001
Date_Sampled: 6/18/01 0:00

EPA 515 Pesticides* *all results in ug/L (ppb)

LAB FORTIFIED BLANKS (REAGENT WATER SPIKES) - %RECOVERY

Standard	DBOB -IS: %REC	DCAA- SURR: %REC.	3,5-D:	DICHLOR- PROP:	PENTA- CHLORO- PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT- AZON:	PIC- LORAM:	ACI - FLUOR- FEN:
lfb1	78%	112%	117%	129%	105%	115%	106%	18%							
lfb2	80%	122%							124%	113%	118%	109%	115%	77%	113%
lfb2 2x	77%	120%							128%	128%	126%	113%	120%	98%	113%
BLANKS															
blank4765	77%	113%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank6765	78%	100%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

If no percent recovery reported, then no spike performed
lfb# 2x is 1/5 the concentration of the lfb#

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Chemistry 101
Fayetteville, AR 72701
(501) 575-7317, Fax (501) 575-6720

Matrix Spikes

Lab Number	3,5-D	DICHLOR PROP	PENTA CHLORO PHENAL	2,4,5-T	DINO SEB	DAC THAL	DICAM BA	2,4-D	SILVEX	2,4-DB	BENTA ZON	PICLO RAM	ACI FLOUR FEN
10765-01	0.000	0.000	0.000	0.000	0.000	0.000	no	no	no	no	no	no	no
10765-01s	12.8	2.096	2.523	2.473	4.645	0.2	spike	spike	spike	spike	spike	spike	spike
Spike	10.000	2.000	2.000	2.000	4.000	2.000	performed	performed	performed	performed	performed	performed	performed
%Recovery	128.0%	104.8%	126.2%	123.7%	116.1%	10.0%							

Lab Number	3,5-D	DICHLOR PROP	PENTA CHLORO PHENAL	2,4,5-T	DINO SEB	DAC THAL	DICAM BA	2,4-D	SILVEX	2,4-DB	BENTA ZON	PICLO RAM	ACI FLOUR FEN
10765-01	0.000	0.000	0.000	0.000	0.000	0.000	no	no	no	no	no	no	no
10765-01sd	12.01	2.198	1.973	2.355	4.326	0.21	spike	spike	spike	spike	spike	spike	spike
Spike	10.000	2.000	2.000	2.000	4.000	2.000	performed	performed	performed	performed	performed	performed	performed
%Recovery	120.1%	109.9%	98.7%	117.8%	108.2%	10.5%							

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR DCAA	IS DBOB
10765-01	126.4%	83.5%
10765-01s	128.4%	77.5%
10765-01sd	139.5%	76.0%

Surr acceptability	60% to 140%
Analyte acceptability	70% to 130%
InterStd acceptability	70% to 130%

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

EPA Method 507*
Project ASPB P9T8

Lab Number: 10765
Date Received: 06/19/2001
Date_Extracted: 6/21/01
Date_Analyzed: 6/24/01
Date Reported: 09/20/2001

all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number:	Client_ Sample_ID:	SURR: NITRO-XYLENE:	IS:TRI-PHENYL-PHOS.	PRO-METON	AME-TRYNE:	PHE-NAM-IPHOS:	TRI-BUTYL-PHOS:	S-EDP-THIO-CARB:	PHOS-DRIN:	PRO-PHOS:	ATRA-ZINE:	PROPA-ZINE:	PRO-ME-TRYNE:	TERBU-TRYNE:	TRIAD-IMEFON	DIPHEN-AMID:	VERNO-LATE:	METRI-BUZIN:	METOL A CHLOR:
10765-01	JEFF 7	51%	94%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-02	JEFF 8	69%	89%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-03	JEFF 9	58%	94%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-04	JEFF 10	58%	100%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-05	JEFF 11	78%	90%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-06	JEFF 12	66%	106%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-07	JEFF 13	75%	104%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-08	JEFF 2R2	97%	96%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-09	JEFF 5R1	90%	100%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-10	LINC 3	69%	102%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

EPA Method 507*
Project ASPB P9T8

Lab Number: 10765
Date Received: 06/19/2001
Date_Extracted: 6/21/01
Date_Analyzed: 6/24/01
Date Reported: 09/20/2001

* all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number:	MGK 264	BUTA-CHLOR	CAR-BOXIN	NORFLU R-AZON	BUTYL-ATE	MOLIN -ATE	CHLOR-PRO PHAM	ATRA-TON:	ALA-CHLOR	BROM -AZIL:	TETRACHLOR -VINPHOS:	VEL PAR:	DICHLO R-VOS:	PEB-ULAT	TEBU-THIRON	SIMA-ZINE:	SIME-TRYNE:	DEV-RINOL	FENAR -IMOL:
10765-01	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-02	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-03	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-04	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-05	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-06	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-07	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-08	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-09	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10765-10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

QUALITY
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DATA REPORT

Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB P9T8

Lab Number: 10765
Date Received: 06/19/2001
Date Extracted: 6/21/01
Date Analyzed: 6/24/01
Date Reported: 09/20/2001

EPA METHOD 507

REAGENT WATER SPIKES- % RECOVERY

Spikes*	SURR-NITRO XYLENE % REC.	IS-TRI PHENYL PHOS. % REC.	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR
lfb1	83%	95%	83%	88%	93%	60%												
lfb2	78%	102%					90%	97%	100%	96%	97%	92%	93%	92%	90%			
lfb2 2x	79%	95%					94%	98%	124%	100%	101%	95%	95%	90%	85%			
BLANKS																		
blank2765	76%	90%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank5765	71%	102%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank7765	89%	93%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

QUALITY
ASSURANCE
DATA REPORT
CON'T

Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB P9T8

Lab Number: 10765
Date Received: 06/19/2001
Date_Extracted: 6/21/01
Date_Analyzed: 6/24/01
Date Reported: 09/20/2001

EPA METHOD 507

REAGENT WATER SPIKES - % RECOVERY (con't)

Spikes*	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR	BRO MAZIL	TETRA CHLOR VINPHO S	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
lfb1																			
lfb2																			
lfb2 2x																			
BLANKS																			
blank2765	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank5765	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank7765	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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Matrix Spikes

Lab Number	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON
10765-06	no spike performed	no spike performed	no spike performed	no spike performed	no spike performed	no spike performed	no spike performed	no spike performed	no spike performed	no spike performed	no spike performed	no spike performed
10765-06s Spike %Recovery												

Lab Number	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON
10765-06	no spike performed	no spike performed	no spike performed	no spike performed	no spike performed	no spike performed	no spike performed	no spike performed	no spike performed	no spike performed	no spike performed	no spike performed
10765-06sd Spike %Recovery												

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR-NITRO XYLENE	IS-TRI PHENYL PHOS.
10765-06	65.9%	106.4%
10765-06s	81.8%	98.4%
10765-06sd	80.0%	99.8%

Surr acceptability 70% to 130%
Analyte acceptability 70% to 130%
IS acceptability is related to response not % recovery

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Matrix Spikes

Lab Number	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR
10765-06	no	no	no	no	no	no	no	no	0.000	0.000	0.000	0.000	0.000
10765-06s	spike	spike	spike	spike	spike	spike	spike	spike	12.718	19.927	19.879	20.375	20.657
Spike	performed	performed	performed	performed	performed	performed	performed	performed	20.000	20.000	20.000	20.000	20.000
%Recovery									63.6%	99.6%	99.4%	101.9%	103.3%

Lab Number	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR
10765-06	no	no	no	no	no	no	no	no	0.000	0.000	0.000	0.000	0.000
10765-06sd	spike	spike	spike	spike	spike	spike	spike	spike	11.016	18.082	18.132	19.699	19.69
Spike	performed	performed	performed	performed	performed	performed	performed	performed	20.000	20.000	20.000	20.000	20.000
%Recovery									55.1%	90.4%	90.7%	98.5%	98.5%

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Chemistry 101
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Matrix Spikes

Lab Number	BRO MAZIL	TETRA CHLOR VINPHO	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
10765-06	0.000	0.000	0.000	no	no	no	no	no	no	no
10765-06s	20.605	19.09	20.158	spike	spike	spike	spike	spike	spike	spike
Spike	20.000	20.000	20.000	performed	performed	performed	performed	performed	performed	performed
%Recovery	103.0%	95.5%	100.8%							

Lab Number	BRO MAZIL	TETRA CHLOR VINPHO	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
10765-06	0.000	0.000	0.000	no	no	no	no	no	no	no
10765-06sd	19.95	19.342	19.237	spike	spike	spike	spike	spike	spike	spike
Spike	20.000	20.000	20.000	performed	performed	performed	performed	performed	performed	performed
%Recovery	99.8%	96.7%	96.2%							

Trip 12

Arkansas Water Resources Center
Water Quality Lab

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Fayetteville, AR 72701
501-575-7317

Project ASPB P9T9

Lab Number: 10780
Date Reported: 06/28/2001
Date Received: 06/26/2094

Sample	Client ID	Date Sampled	Det. Limit	Result	Units	Date Analyzed
Nitrate		**Method: EPA 300.0**		**Holding Time Expires**		**6/28/94**
10780-01	LINC 4	6/25/01 , 0 : 00	0.005	0.000	mg/l as N	06/27/2001
10780-02	LINC 5	6/25/01 , 0 : 00	0.005	0.000	mg/l as N	06/27/2001
10780-03	LINC 6	6/25/01 , 0 : 00	0.005	0.003	mg/l as N	06/27/2001
10780-04	LINC 7	6/25/01 , 0 : 00	0.005	0.013	mg/l as N	06/27/2001
10780-05	LINC 8	6/25/01 , 0 : 00	0.005	0.000	mg/l as N	06/27/2001
10780-06	LINC 9	6/25/01 , 0 : 00	0.005	3.999	mg/l as N	06/27/2001
10780-07	DREW 10	6/25/01 , 0 : 00	0.005	0.543	mg/l as N	06/27/2001
10780-08	DREW 11	6/25/01 , 0 : 00	0.005	0.017	mg/l as N	06/27/2001

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

LabQCReport

For Lab Number: 10780 Thursday, June 28, 2001

Analysis Nitrate mg/l

Standard	Date_Performed:	Standard_Result	True_Value	Percent Recovery
vhg	6/27/01 0:00	0.846	0.900	94%
vhg	6/27/01 0:00	0.864	0.900	96%
			AVG* =	95%
			RPD=**	1.5%

SPIKES:

Sample	Date_Performed:	Result:	Spike Amount:	Spike_Result:	ms %recovery:
10780-08s	6/27/01 0:00	0.0169	1.92	1.774	92

SPIKES RSD=

BLANKS

Date_Performed:	Measured Value	True_Value:
6/27/01 0:00	0.001	0.000

*The average % Recovery is a measure of accuracy.
**RPD=Relative Percent Deviation, a measure of Precisison.

NB: These QC checks pertain to all samples in the instrument run(s) which contained your sample(s).

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

DATA REPORT
Page1

Project ASPB P9T9

NPS METHOD 4

Lab Number: 10780
Date Received: 06/26/2094
Date_Extracted: 7/2/01
Date_Analyzed: 7/12/01
Date Reported: 09/26/2001

{all results in ug/L (ppb)}

Sample_ Number:	Client_Sample_ID:	SURR-CARBAZOLE %rec.	IS-ETHYL BENZENE % rec.	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
Sample Results											
10780-01	LINC 4	82%	105%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-02	LINC 5	80%	107%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-03	LINC 6	81%	107%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-04	LINC 7	95%	104%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-05	LINC 8	100%	107%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-06	LINC 9	93%	111%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-07	DREW 10	95%	106%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-08	DREW 11	77%	111%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

QUALITY
ASSURANCE
DATA REPORT

Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB P9T9

NPS METHOD 4

Lab Number: 10780
Date Received: 06/26/2094
Date_Extracted: 7/2/01
Date_Analyzed: 7/12/01
Date Reported: 09/26/2001

REAGENT WATER SPIKES- % RECOVERY

Spikes*	SURR-CARBAZOLE	IS-ETHYLBENZENE:	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
lfb1	99%	104%		86%	118%	125%	100%			
lfb2	86%	114%	99%					105%	108%	89%
lfb2 2x	91%	109%	122%					102%	106%	91%

BLANKS

	SURR-CARBAZOLE	IS-ETHYLBENZENE:	BARBAN:	CYANAZINE:	DIURON:	FLUOMETURON:	LINURON:	PROPANIL:	PROPHAM:	SWEP:
blank3780	101%	103%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank4780	76%	109%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

lfb#=lab fortified blank(mix#)

If no percent recovery reported, then no spike performed
lfb# 2x is 1/5 the concentration of the lfb#

AWRC - Water Quality Laboratory
University of Arkansas,
Chemistry 101
Fayetteville, AR 72701
(501) 575-7317, Fax (501) 575-6720

Matrix Spikes

Lab Number	CYAN AZINE	FLUO MET URON	DIURON	LIN URON	PRO PHAM	PRO PANIL	SWEP	BAR BAN
10780-06	0.000	0.000	0.000	0.000	no	no	no	no
10780-06s	4.647	2.311	1.106	2.901	spike	spike	spike	spike
Spike	6.487	2.058	1.003	3.126	performed	performed	performed	performed
%Recovery	71.6%	112.3%	110.3%	92.8%				

Lab Number	CYAN AZINE	FLUO MET URON	DIURON	LIN URON	PRO PHAM	PRO PANIL	SWEP	BAR BAN
10780-06	0.000	0.000	0.000	0.000	no	no	no	no
10780-06sd	5.035	2.349	1.116	2.91	spike	spike	spike	spike
Spike	6.487	2.058	1.003	3.126	performed	performed	performed	performed
%Recovery	77.6%	114.1%	111.3%	93.1%				

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR CARBA ZOLE	IS ETHYL BENZENE
10780-06	93.2%	111.0%
10780-06s	90.5%	114.0%
10780-06sd	87.3%	107.0%

Surr acceptability	70% to 130%
Analyte acceptability	70% to 130%
IS acceptability	70% to 130%

DATA
REPORT

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project: ASPB P9T9

Lab Number: 10780
Date Received: 06/26/2094
Date_Prepared: 6/29/01
Date_Performed: 7/4/01
Date Reported: 09/21/2001
Date_Sampled: 6/25/01 0:00

EPA 515 Pesticides* *all results in ug/L (ppb)

Sample_ Number:	Client_Sample_ID:	DBOB -IS: %REC	DCAA- SURR: %REC.	3,5-D:	DICHLOR- PROP:	PENTA- CHLORO- PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT- AZON:	PIC- LORAM:	ACI - FLUOR- FEN:
10780-01	LINC 4	85%	100%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-02	LINC 5	83%	112%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-03	LINC 6	80%	106%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-04	LINC 7	87%	96%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-05	LINC 8	80%	78%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-06	LINC 9	84%	99%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-07	DREW 10	80%	99%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-08	DREW 11	80%	86%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

University of Arkansas, Chemistry 101
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Projec ASPB P9T9

Lab Number: 10780
Date Received: 06/26/2094
Date_Prepared: 6/29/01
Date_Performed: 7/4/01
Date Reported: 09/25/2001
Date_Sampled: 6/25/01 0:00

EPA 515 Pesticides* *all results in ug/L (ppb)

LAB FORTIFIED BLANKS (REAGENT WATER SPIKES) - %RECOVERY

Standard	DBOB-IS: %REC	DCAA-SURR: %REC.	3,5-D:	DICHLOR-PROP:	PENTA-CHLORO-PHENOL:	2,4,5-T:	DINOSEB:	DACTHAL:	DICAMBA:	2,4-D:	SILVEX:	2,4-DB:	BENT-AZON:	PIC-LORAM:	ACI-FLUOR-FEN:
lfb1	80%	113%	133%	128%	133%	128%	110%	19%							
lfb2	83%	98%							114%	102%	111%	101%	112%	87%	102%
lfb2 2x	82%	92%							102%	96%	118%	115%	121%	50%	100%
BLANKS															
blank1780	77%	88%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
blank2780	80%	97%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

If no percent recovery reported, then no spike performed
lfb# 2x is 1/5 the concentration of the lfb#

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Matrix Spikes

Lab Number	3,5-D	DICHLOR PROP	PENTA CHLORO PHENAL	2,4,5-T	DINO SEB	DAC THAL	DICAMBA	2,4-D	SILVEX	2,4-DB	BENTA ZON	PICLO RAM	ACI FLOUR FEN
10780-06	0.000	0.000	0.000	0.000	0.000	0.000	no	no	no	no	no	no	no
10780-06s	9.736	1.939	1.858	1.943	3.339	0.087	spike	spike	spike	spike	spike	spike	spike
Spike	10.000	2.000	2.000	2.000	4.000	2.000	performed	performed	performed	performed	performed	performed	performed
%Recovery	97.4%	97.0%	92.9%	97.2%	83.5%	4.4%							

Lab Number	3,5-D	DICHLOR PROP	PENTA CHLORO PHENAL	2,4,5-T	DINO SEB	DAC THAL	DICAMBA	2,4-D	SILVEX	2,4-DB	BENTA ZON	PICLO RAM	ACI FLOUR FEN
10780-06	0.000	0.000	0.000	0.000	0.000	0.000	no	no	no	no	no	no	no
10780-06sd	9.325	1.867	1.691	1.886	3.196	0.208	spike	spike	spike	spike	spike	spike	spike
Spike	10.000	2.000	2.000	2.000	4.000	2.000	performed	performed	performed	performed	performed	performed	performed
%Recovery	93.3%	93.4%	84.6%	94.3%	79.9%	10.4%							

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR DCAA	IS DBOB
10780-06	99.5%	83.5%
10780-06s	94.9%	90.5%
10780-06sd	84.8%	86.0%

Surr acceptability	60% to 140%
Analyte acceptability	70% to 130%
InterStd acceptability	70% to 130%

Arkansas Water Resources Center
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EPA Method 507*
Project ASPB P9T9

Lab Number: 10780
Date Received: 06/26/2094
Date_Extracted: 7/2/01
Date_Analyzed: 7/28/01
Date Reported: 09/20/2001

all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number:	Client_ Sample_ID:	SURR: NITRO-XYLENE:	IS:TRI-PHENYL-PHOS.	PRO-METON	AME-TRYNE:	PHE-NAM-IPHOS:	TRI-BUTYL-PHOS:	S-EDP-THIO-CARB:	PHOS-DRIN:	PRO-PHOS:	ATRA-ZINE:	PROPA-ZINE:	PRO-ME-TRYNE:	TERBU-TRYNE:	TRIAD-IMEFON	DIPHEN -AMID:	VERNO-LATE:	METRI-BUZIN:	METOL A CHLOR:
10780-01	LINC 4	72%	90%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-02	LINC 5	73%	92%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-03	LINC 6	71%	92%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-04	LINC 7	73%	92%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-05	LINC 8	60%	94%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-06	LINC 9	66%	92%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-07	DREW 10	57%	96%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-08	DREW 11	50%	94%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
Water Quality Lab

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EPA Method 507*
Project ASPB P9T9

Lab Number: 10780
Date Received: 06/26/2094
Date_Extracted: 7/2/01
Date_Analyzed: 7/28/01
Date Reported: 09/20/2001

* all results in ug/L (ppb)

SAMPLE RESULTS

Sample_ Number:	MGK 264	BUTA-CHLOR	CARBOXIN	NORFLUR-AZON	BUTYLATE	MOLIN-ATE	CHLOR-PROPHAM	ATRATON:	ALACHLOR	BROM-AZIL:	TETRACHLOR-VINPHOS:	VELPAR:	DICHLOR-VOS:	PEBULAT	TEBUTHIRON	SIMAZINE:	SIMETRYNE:	DEVRINOL	FENARIMOL:
10780-01	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-02	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-03	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-04	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-05	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-06	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-07	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-08	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Arkansas Water Resources Center
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Project ASPB P9T9

Lab Number: 10780
Date Received: 06/26/2094
Date_Extracted: 7/2/01
Date_Analyzed: 7/28/01
Date Reported: 09/20/2001

EPA METHOD 507

REAGENT WATER SPIKES- % RECOVERY

Spikes	SURR-NITRO XYLENE % REC.	IS-TRI PHENYL PHOS. % REC.	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR
lfb1	70%	94%	70%	68%	86%	81%												
lfb2	109%	106%					85%	89%	89%	88%	90%	89%	88%	89%	87%			
lfb3	95%	104%														74%	91%	83%
BLANKS																		
blank9780	56%	94%	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

If no percent recovery reported, then no spike performed

QUALITY ASSURANCE DATA REPORT CON'T

Arkansas Water Resources Center
Water Quality Lab
University of Arkansas, Chemistry 101
Fayetteville, AR 72701
501-575-7317

Project ASPB P9T9

Lab Number: 10780
Date Received: 06/26/2094
Date_Extracted: 7/2/01
Date_Analyzed: 7/28/01
Date Reported: 09/20/2001

EPA METHOD 507

REAGENT WATER SPIKES - % RECOVERY (con't)

Spikes*	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR	BRO MAZIL	TETRA CHLOR VINPHO S	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
lfb1																			
lfb2																			
lfb3	76%	82%	96%	82%															
BLANKS																			
blank9780	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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Matrix Spikes

Lab Number	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON
10780-07	no	no	no	no	no	no	no	no	no	no	no	no
10780-07s	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

Lab Number	PRO METON	AME TRYNE	PHENA MIPHOS	TRI BUTYL PHOS	S-EDP THIO CARB	PHOS DRIN	PRO PHOS	ATRA ZINE	PROPA ZINE	PROME TRYNE	TERBU TRYNE	TRIADI MEFON
10780-07	no	no	no	no	no	no	no	no	no	no	no	no
10780-07sd	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

Surrogate and Internal Standard Recoveries for Matrix Spikes

	SURR-NITRO XYLENE	IS-TRI PHENYL PHOS.
10780-07	57.3%	96.0%
10780-07s	30.5%	93.0%
10780-07sd	48.3%	94.0%

Surr acceptability 70% to 130%
Analyte acceptability 70% to 130%
IS acceptability is related to response not % recovery

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Matrix Spikes

Lab Number	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR
10780-07	no	no	no	no	no	no	no	no	no	no	no	no	no
10780-07s	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

Lab Number	DIPHEN AMID	VERNOL ATE	METRIB UZIN	METOL ACHLOR	MGK 264	BUTA CHLOR	CARBOX IN	NOR FLURA ZON	BUTYL ATE	MOLIN ATE	CHLOR PRO PHAM	ATRA TON	ALA CHLOR
10780-07	no	no	no	no	no	no	no	no	no	no	no	no	no
10780-07sd	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike	spike
Spike %Recovery	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed	performed

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Matrix Spikes

Lab Number	BRO MAZIL	TETRA CHLOR VINPHO	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
10780-07	no	no	no	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-07s	spike	spike	spike	15.37	12.14	15.06	1.134	15.42	14.26	15.57
Spike	performed	performed	performed	20.000	20.000	20.000	1.500	20.000	20.000	20.000
%Recovery				76.9%	60.7%	75.3%	75.6%	77.1%	71.3%	77.9%

Lab Number	BRO MAZIL	TETRA CHLOR VINPHO	VELPAR	DICHLO RVOS	PEBU LATE	TEBU THIRON	SIM AZINE	SIME TRYNE	DEV RINOL	FENAR IMOL
10780-07	no	no	no	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10780-07sd	spike	spike	spike	17.572	14.773	15.95	1.128	15.52	14.923	15.36
Spike	performed	performed	performed	20.000	20.000	20.000	1.500	20.000	20.000	20.000
%Recovery				87.9%	73.9%	79.8%	75.2%	77.6%	74.6%	76.8%