Data Evaluation Report of Surface Water Monitoring Study

46433904

PMRA Submission Number {.....}

EPA MRID Number ~~46733904~~

Test material: Fipronil
IUPAC name: 5-amino-1-(2,6-dichloro-α,α,α-trifluoro-*p*-tolyl)-4-trifluoromethylsulfinylpyrazole-3-carbonitrile
CAS name: 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1*H*-pyrazole-3-carbonitrile

Primary Reviewer: James Hetrick, Ph.D.
EPA

Signature: James G. Hetrick
Date: 4/29/08

Secondary Reviewer: Thuy Nguyen
EPA

Signature:
Date: 6/1-8

EPA PC Code: 129121

CITATION: Lee, Robert. 2005. Chipco Topchoice® Granular Insecticide: Fipronil Natural Runoff and Surface Water Monitoring Study in Mecklenburg County, NC. Sponsored by BayerCrop Science, RTP, NC. Performed by Bayer Crop Science, Stillwell, KS and AgVise Laboratories, Northward, ND. MRID 46433904.

Data Evaluation Report of Surface Water Monitoring Study

PMRA Submission Number {.....} EPA MRID Number ~~46733904~~

EXECUTIVE SUMMARY:

The fipronil water monitoring study (MRID 46733904) provides acceptable data on the runoff potential of fipronil and its degradation products (MB46136, MB46513, and MB 46950) and its impact on fipronil residue occurrence in surface water from use of Chipco Topchoice® on turf in Mecklenburg, NC. This study was submitted to fulfill a condition of registration regarding runoff concerns of fipronil residues from broadcast use of fipronil for control of fire ants. The registrant did not provide any concurrent biological monitoring of the aquatic environment to assess the impact of fipronil and its degradation products on aquatic invertebrates.

Fipronil was broadcast applied at a rate of 0.0125 lbs ai/A in 2002 and 2003 to a small urban watershed in Mecklenburg, NC. Fipronil residue runoff was monitored in surface water (storm water, catchment pond, and stream) and sediment in an urban environment. The maximum fipronil residue concentration in catchment pond water was 0.047 µg/L for fipronil, 0.014 µg/L for MB46136, 0.008 µg/L for MB46513, and 0.015 µg/L for MB46950. The maximum fipronil residue concentration in storm water was 0.0.287 µg/L for fipronil, 0.122 µg/L for MB46136, 0.005 µg/L for MB46513, and 0.065 µg/L for MB46950. The maximum fipronil residue concentration in stream water was 0.033 µg/L for fipronil, 0.01 µg/L for MB46136, 0.008 µg/L for MB46513, and 0.005 µg/L for MB46950. No fipronil residues were detected in the culvert and downstream sediment samples except for MB46513 at 0.102 µg/kg.

I. MATERIALS AND METHODS

GUIDELINE FOLLOWED: The SETAC-Europe: Procedures for Assessing the Environmental Fate and Ecotoxicity of Pesticides (March 1995; pp. 1, 34) is not applicable.

COMPLIANCE: This study was conducted in compliance with USEPA FIFRA Good Laboratory Practices (40 CFR Part 160), which are consistent with the OECD Principles of GLP (p. 3). Signed and dated GLP, Data Confidentiality, Quality Assurance, and Certificate of Authenticity statements were provided (pp. 2-3, 5-6).

A. MATERIALS:

The objective of this study was to assess the runoff potential of fipronil and its degradation products from turf use of Chipco Topchoice® for control of fire ants.

1. Study Description

The runoff monitoring study was conducted on a 57.1 acre urban watershed in Mecklenburg, NC. Within the watershed, impervious surfaces including office buildings, multi-tenet buildings, roads, and parking lots account for approximately 17.7 acres. The watershed was selected because it has fire ants on sites with suitable drainage features (including stream and pond) for assessing fipronil runoff from turf (**Figures 13, 14, 15 and 16; pp 95-98**). The surface water hydrology of the site is controlled by an engineered storm water management runoff system. This system consists of an earthen drainage area with rock dams collecting roadway and median strip surface water drainage (**Figure 14, pp 96**). This drainage system is connected to a 6 feet corrugated culvert, which flows into a small stream. Another drainage system is an in-turf drain connected to a subsurface drainage system, which flows into a pond. The storm water runoff flows into Mc Alpine Creek, which eventually joins with Sugar Creek. Sugar Creek flows into the Catawba River. The site was irrigated using an established irrigation system. The irrigation system was not monitored during the study. Representative water samples of drainage outlet and pond water were analyzed for water quality parameters (**Appendix E, pp 263-264**).

The soils in the watershed were not classified. Soil physicochemical properties for the two surface samples (0-6 inches) show loam (pH= 6.5, 1.1% OM) and sandy loam (pH 5.4, 0.9% OM) textured soils (**pp 32; Appendix E, pp 261**). There was no discussion on the soil hydrologic grouping of soils in the watershed.

Storm water, pond water, and stream water were monitored during the study. Grab samples of pond water were taken daily for most of the 463 days post-pesticide application. Storm water sampling was conducted using an auto-sampler at the culvert of the 6 foot, subsurface corrugated pipe draining storm water from the earthen drainage area with rock dams. The culvert sampling site was also equipped with a flow-meter. Water samples were taken using the auto-sampler during periods of water flow. (The registrant stated the auto-sampler was not operational because of instrument failure for January 29, 2003 to February, 2003 (+13 days) and August 15, 2003 to September, 2003 (+25 days)). During periods of instrument breakdown, the registrant attempted to collect grab samples. There were 3,719 samples taken from September 11, 2002 and December 17, 2002.

Water flow calculations from the corrugated outlet pipe were derived using the Mannings equation for a 0.28% slope, 6 feet diameter pipe, and roughness coefficient of 0.0241.

Downstream samples were taken approximately 700 ft downstream from the storm water sampling station. Daily grab samples were taken most of the 463 days after the first fipronil application.

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1 The flow was calculated using equation Q= (k/n*r2/3*s)*A where Q=discharge (cm3/sec), k=1.486 (unit conversion), A=flow cross-sectional area (ft2), r=hydraulic radius of flow cross section (ft), s=channel slope, and n=Mannings coefficient. The reportable flow was calculated using Q1-Q2=F where Q1 = flow base on water level at time of recording and Q2=minimum base flow for ± 2 days.

Pond, storm, and stream water samples were taken from 9/10/02 to 12/17/03. Storm water samples for 9/10/02 to 7/20/03 were only analyzed because of a malfunction of the autosampler. Water samples were removed from the autosamplers daily and then stored in a refrigerator (35-40^{0}F) until transferred to the laboratory. Samples were transferred to the laboratory on blue ice and stored frozen. Water samples were stored for 17 to 222 days prior to extraction. Water samples were stored in a refrigerator for a maximum of 14 days and in a freezer for a maximum of 220 days (pp 11).

Sediment samples were taken at the culvert and downstream sampling sites. At each site, four acetate sleeve cores of sediment were collected, composited, and then a subsample of the composite sample was taken.

Additionally, a rain gauge was used to collect on-site precipitation. The on-site precipitation was comparable to the local NOAA weather data at the Douglas International Airport, Charlotte, NC . **(Figure 4, pp 36)**.

2. Site Preparation and Maintenance

The test site had well established turf. The registrant stated the turf was dense (3 to 4 inches height) at the time of fipronil application. The site management history was not described.

3. Pesticide Application

The fipronil application area accounts for 2.94 acres of well maintained turf along both sides of a roadway, center median strip, and front lawn of a large office building. Chipco Topchoice® insecticide was applied on September 11, 2002 at 0.01145 lbs ai/A (91.6% of the label application rate) and June 17, 2003 at 0.01105 lbs ai/A (88% of label application rate). The maximum label application rate was 0.0125 lbs ai/A. Applications were made using calibrated drop spreaders. A 15 –foot buffer was maintained along the small stream, curb drains, and in-turf drains. The registrant stated that one applicator applied test material on the side walk inside a 15 foot buffer zone of a storm drain. Any test substance on impervious surfaces was swept or blown off into the adjoining turf.

4. Analytical

A total of 596 storm water samples, 170 downstream samples, 181 pond samples were analyzed during this study. The maximum storage time was 761 days. The source of storage stability data are referenced from the Pickens, Arkansas water monitoring study **(MRID 46733905; Tables VIII and IX, pp 37)**. The storage stability data indicate fipronil, MB46513, MB45950, and MB46136 were stable during a 25 month storage period.

Residues of fipronil in water samples were analyzed using a LC/MS/MS method entitled Smitely, C.A. and Ibrahim. Method of Analysis for Possible Residues of Fipronil, MB46513, MB45950, and MB46136 in Water- Revisions 4 (no date) (**pp 100**). This method has a method detection limit (MDL) of 0.004 µg/L and limit of quantification (LOQ) of 0.010 µg/L. (Reviewer Note: The method procedure requires filtration through a nylon filtration disk after an acetoanitrile extraction of unfiltered runoff water (**pp 102**).

Procedural method verification in pond and stream water at concentrations of 10, 30, 50, 100 and 300 ng/L showed recoveries of 86± 11 for fipronil (n=98), 92± 9.2 for MB46513 (n=98), 90.6± 9.2 for MB45950 (n=98), and 91± 8.6 for MB46136 (n=98) (**Table 1, pp 41; Table X, pp 92**). Method verification was conducted using HPLC water, pond and stream water at the 0.010 µg/L and 0.100 µg/L. Average recoveries in pond water were 63.5% for fipronil, 74.8% for MB46513, 77.6% for MB45950, and 81.7% for MB46136. Average recoveries in stream water were 66.8% for fipronil, 71.8% for MB46513, 73.7% for MB45950, and 83.5% for MB46136 (**pp 40**). Average recoveries in HPLC water fortified with pond water were 94.1% for fipronil, 89.2% for MB46513, 85.0% for MB45950, and 86.9% for MB46136.

Field spike fortifications was conducted using HPLC water, pond and stream water at the 0.020 µg/L and 0.200 µg/L. Recoveries in pond water ranged from 78 to 93.5% for fipronil, 84 to 96.8% for MB46513, 77.5 to 89.3% for MB45950, and 72.5 to 86.6% for MB46136 (**Table V, pp 62**). Recoveries in stream water ranged from 78.6 to 90.5% for fipronil, 82 to 96.5% for MB46513, 71 to 86.5% for MB45950, and 68.5 to 83.6% for MB46136 (**Table IX, pp. 90**).

Residues of fipronil in sediment samples were analyzed using a LC/MS/MS method entitled Ibrahim, A. 1993. Method of Analysis for Possible Residues of Fipronil, MB46513, MB45950, and MB46136 in Sediment (**pp 112**). This method has method detection limit (MDL) of 0.030 µg/kg and limit of quantification (LOQ) of 0.100 µg/kg. Acceptable residue recovery was defined as 70 to 120% recovery of spike residues at concentrations above the LOQ and 60 to 130% recovery below the LOQ.

B. REPORTED RESULTS

1. Concentration of Fipronil Residues in Pond Water-

Fipronil residues were detected in pond water samples (**Figures 8 and 9, pp 42-43 ; Table IV, pp 84-89**). The peak concentration of fipronil residue was 0.047 µg/L for fipronil, 0.008 µg/L for MB 46513, 0.015 µg/L for MB 45950, and 0.014 µg/L for MB 46136.

2. **Concentration of Fipronil Residues in Storm Water-**

Fipronil residues were detected in storm water samples (**Figures 10 and 11, pp 44-45 ; Table VII, pp 65-83**). The peak concentration of fipronil residue was 0.287 µg/L for fipronil, 0.005 ug/L for MB 46513, 0.065 µg/Lfor MB 45950, and 0.122 µg/L for MB 46136.

3. **Concentration of Fipronil Residues in Stream Water**

Fipronil residues were detected in stream water samples (**Figure 12 , pp 46; Table VIII, pp 56-61**). The peak concentration of fipronil residue was 0.033 µg/L for fipronil, 0.008 ug/L for MB 46513, 0.005µg/L for MB 45950, and 0.01 µg/L for MB 46136.

4. **Concentrations of Fipronil Residues in Sediments**

Fipronil residues in a composite sediment sample from the culvert and downstream sampling sites was analyzed. MB56513 was detected at a concentration of 0.102 µg/kg. No other fipronil residues were detected in the sediment.

C. Reviewer Comments

1. The fipronil water monitoring study (MRID 46733904) provides acceptable data on the runoff potential of fipronil and its degradation products (MB46136, MB46513, and MB 46950) and its impact on fipronil residue occurrence in surface water from use of Chipco Topchoice® on turf in Mecklenburg, NC. This study was submitted to fulfill a condition of registration regarding runoff concerns of fipronil residues from broadcast use of fipronil for control of fire ants. The registrant did not provide any concurrent biological monitoring of the aquatic environment to assess the impact of fipronil and its degradation products on aquatic invertebrates.

2. The registrant referenced a storage stability study in the Pickens, Arkansas runoff study (MRID 46733905). This study, however, does not provide a detailed description of the storage stability study because it references storage stability data in a Texas runoff study (Mosier, 2005). These storage stability data are cited in MRID 46733902. The Texas runoff study does not provide a detailed description of the storage stability study.

3. The fipronil applications were made in June and September. This application period does not coincide with highest precipitation period in the region. Fipronil runoff and occurrence in surface water is expected be highest with spring (May-April) applications.

4. The registrant did not attempt to estimate the mass of applied fipronil found in surface water. This information would be helpful in predicting fipronil runoff potential.

Figure 13: Geographic Map Showing the Approximate Location of the Test Site with Respect to Other Nearby Geographical Landmarks

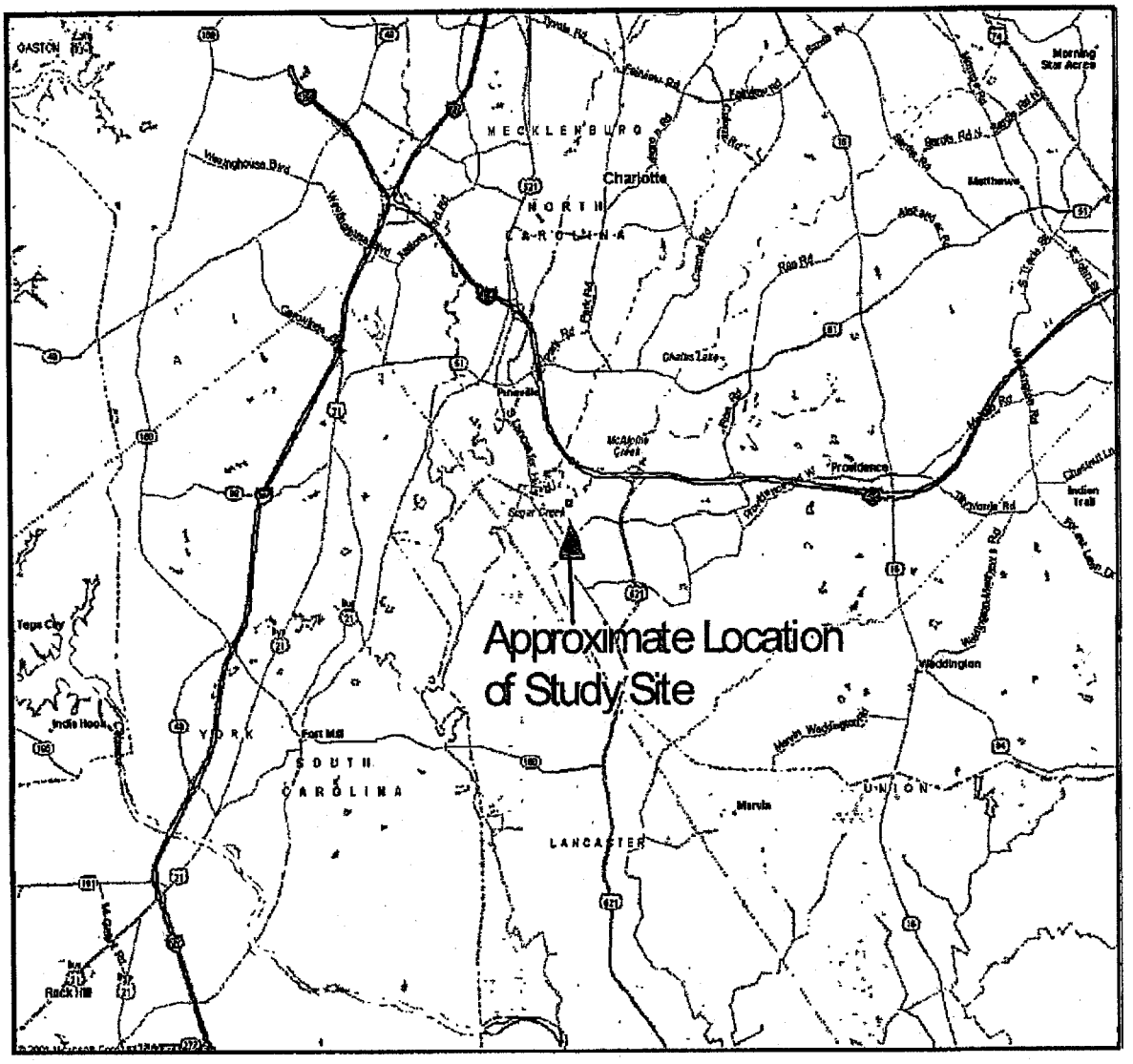


Figure 14: Base Map Depicting Features of the Charlotte, NC Potential-Runoff Site

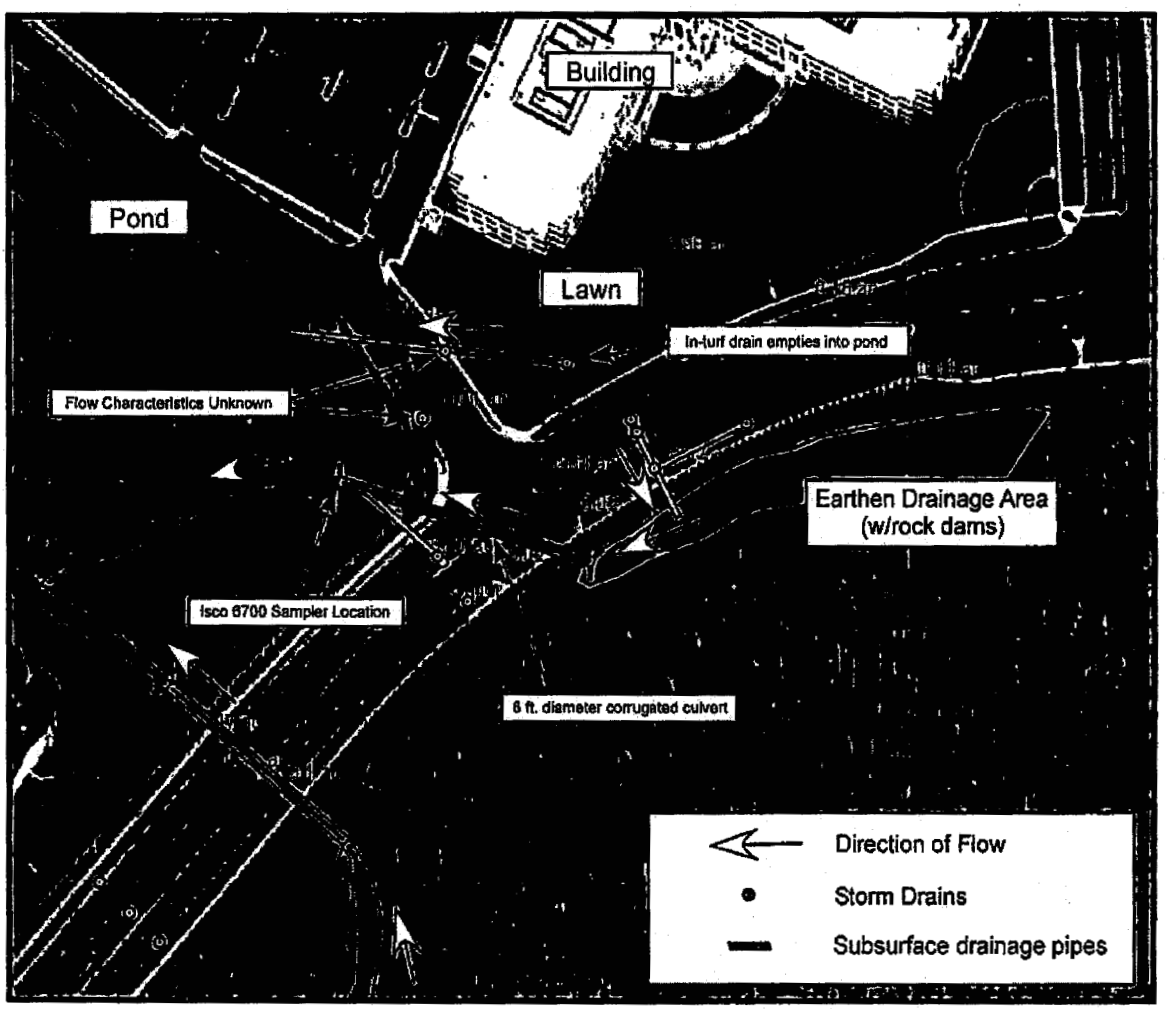


Figure 15: Topography of the Local Drainage Area

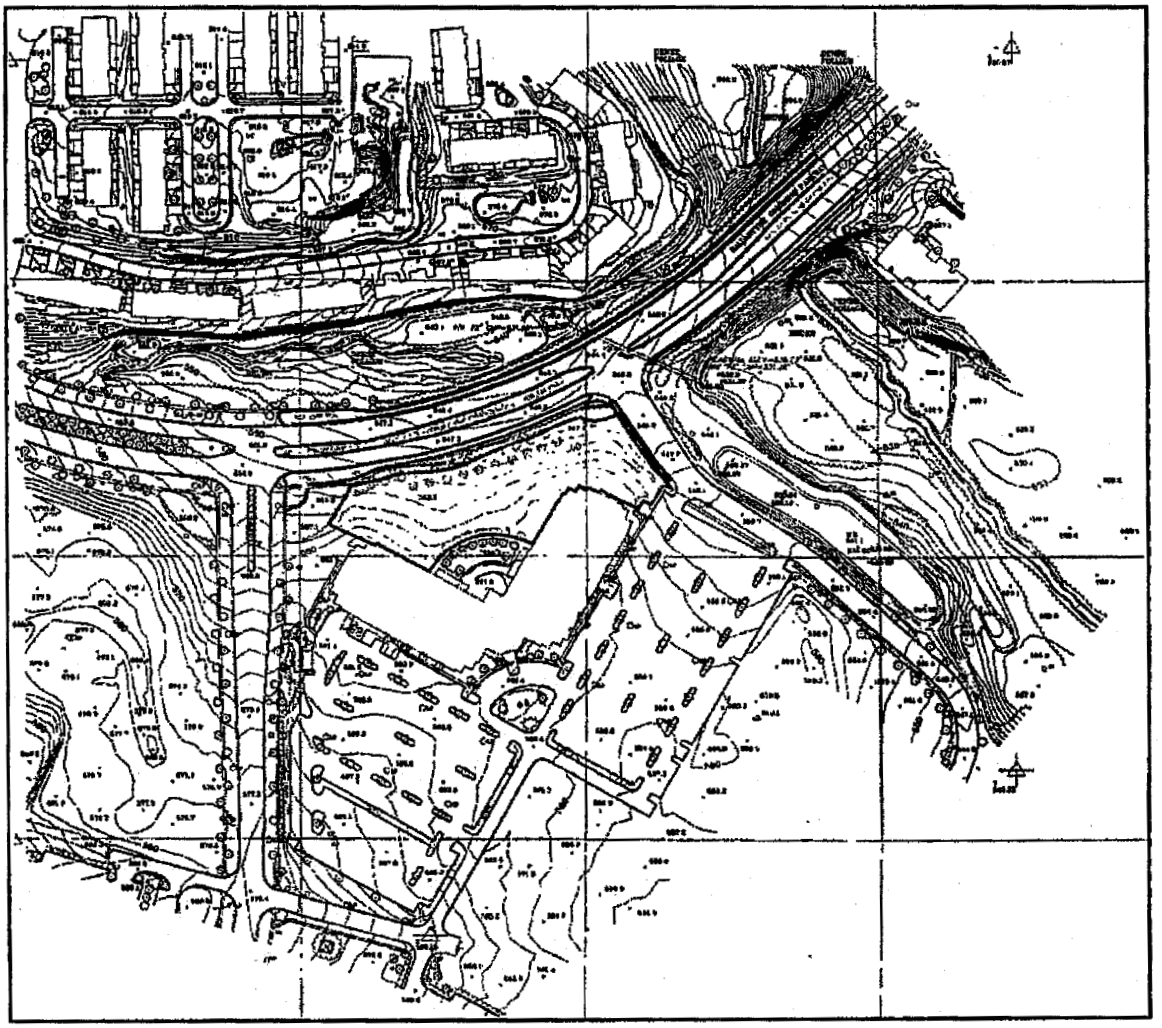
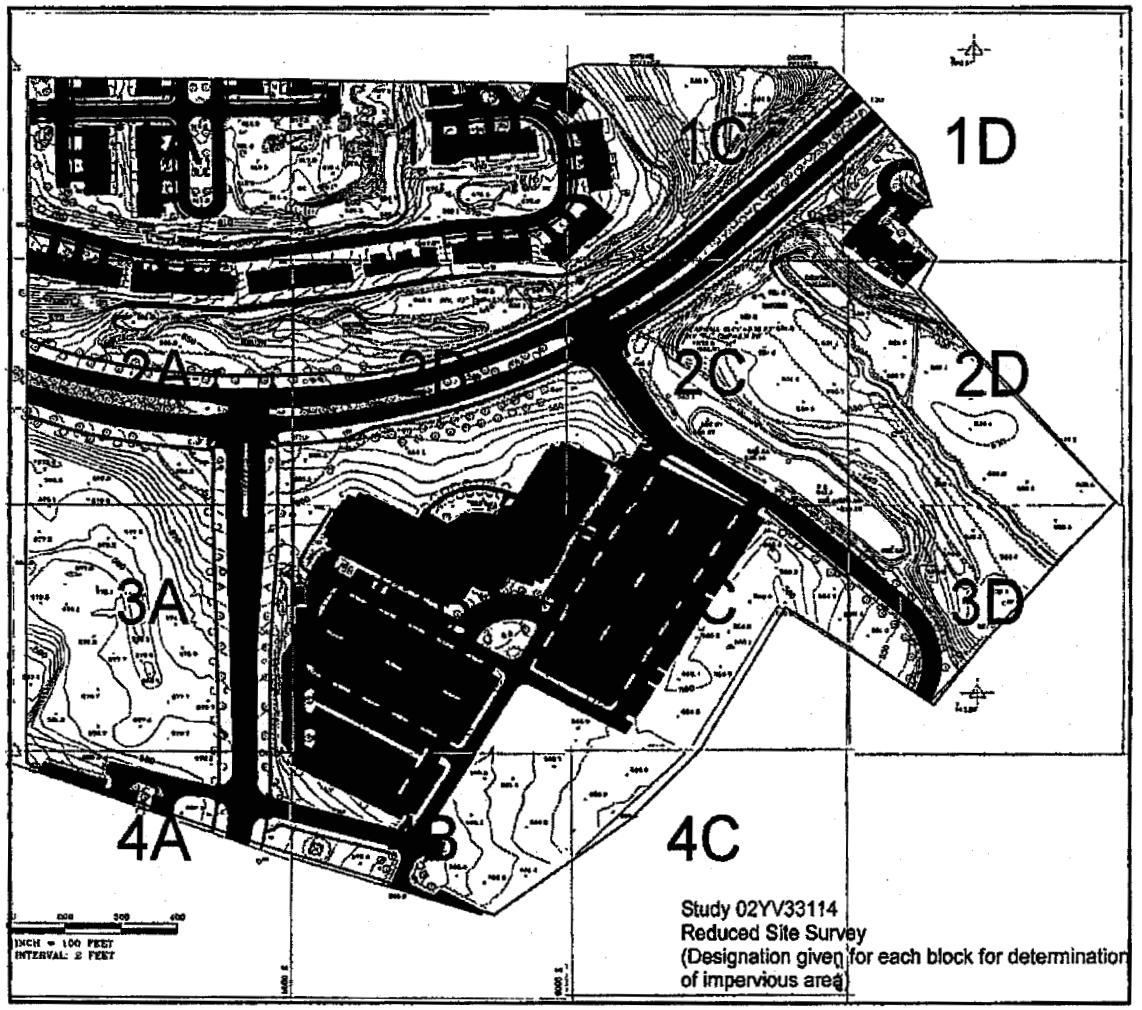


Figure 16: Topographic Map of the Local Drainage Area With Shaded Regions Representing Impervious Surfaces



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Study 02YV33114
Pond Water Characterization

AGVISE Water Characterization Report

Submitting firm:	= BAYER CROPSCIENCE
Protocol or Study No	= 02YV33114
Sample ID.	= 33114WC-02
Trial ID.	= NA
Date Received	= 3-5-03
Date Reported	= 3-7-03

AGVISE Lab No	03-0020
pH	6.8
Sodium	10 ppm
Calcium	8 ppm
Magnesium	3 ppm
Hardness mg equivalent CaCO3/L	32 ppm
Conductivity	0.21 mmhos/cm
Sodium Absorption Ratio(SAR)	0.74
Total Dissolved Solids	122 ppm
Turbidity	32.5 NTU

These tests were completed in compliance of 40 CFR Part 160.

Robert Deutsch
Soil Scientist/Analytical Investigator

3-7-03
Date

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Study 02YV33114
Stream Water Characterization

AGVISE Water Characterization Report

Submitting firm:	= BAYER CROPSCIENCE
Protocol or Study No	= 02YV33114
Sample ID.	= 33114WC-01
Trial ID.	= NA
Date Received	= 3-5-03
Date Reported	= 3-7-03

AGVISE Lab No	03-0019
pH	7.6
Sodium	11 ppm
Calcium	24 ppm
Magnesium	13 ppm
Hardness mg equivalent CaCO3/L	113 ppm
Conductivity	0.35 mmhos/cm
Sodium Absorption Ratio(SAR)	0.44
Total Dissolved Solids	274 ppm
Turbidity	207.0 NTU

These tests were completed in compliance of 40 CFR Part 160.

Robert Deutsch
Soil Scientist/Analytical Investigator

3-7-03
Date

Study 02YV33114

See diagram for sampling location.

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AGVISE Soil Characterization Report

Submitting firm = BAYER CROPSCIENCE
Protocol or Study No = 02YV33114
Sample ID. = 33114SC-02 0-6"
Trial ID. = NA
Date Received = 3-5-03
Date Reported = 03-11-2003

AGVISE Lab No	03- 247
Percent Sand	40
Percent Silt	38
Percent Clay	22
USDA Textural Class (hydrometer method)	Loam
Bulk Density (disturbed) gm/cc	0.97
Cation Exchange Capacity (meq/100 g)	11.9
% Moisture at 1/3 Bar	28.7
% Organic Matter--Walkley Black	0.9
pH in 1:1 soil:water ratio	5.4

Base Saturation Data

Cation	Percent	ppm
Calcium	39.5	937
Magnesium	30.0	428
Sodium	0.7	18
Potassium	1.6	72
Hydrogen	28.3	34

These tests were completed in compliance of 40 CFR Part 160.

Larry Wilkoff
Analytical Investigator

3/11/03
Date

5.4 Site Monitoring

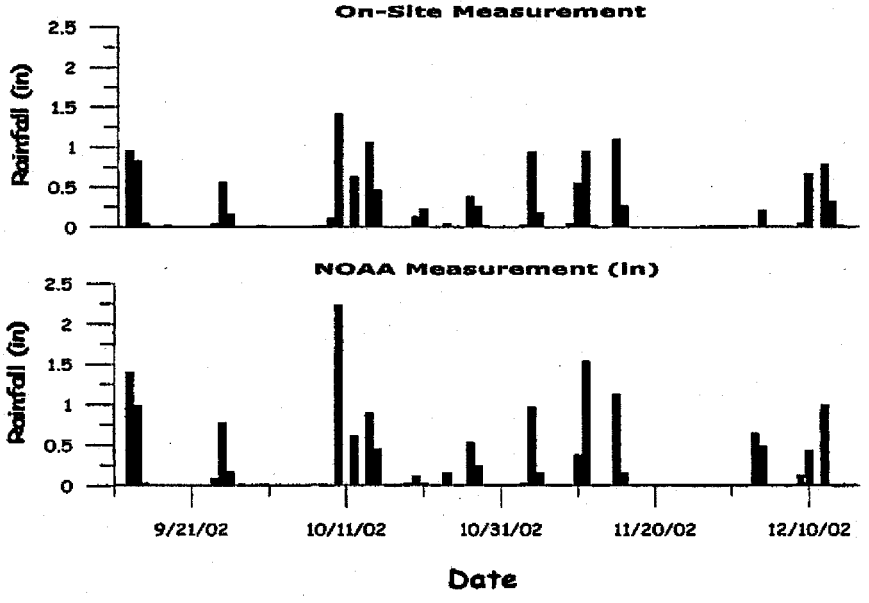
5.4.1 Precipitation Monitoring

An Isco Model 674 Tipping Bucket Rain Gauge was installed at the site with the intention of using it to monitor precipitation on a local scale. The device has an internal dual-bucket collection mechanism that tips to empty the buckets, with each tip of a bucket representing 0.01 inches of water.

Given data gaps caused by freezing temperatures, ants colonizing the interior of the tipping bucket rain gauge, and overall instrument outages, the on-site collected precipitation data for this study is retained in the raw data package, but is not used for the majority of analyses contained in the study report. Although a few discrepancies are noted between the on-site data and the NOAA data, it is believed the NOAA data provides a better overall package of data for use in this study. NOAA data was obtained from the station located at the Charlotte Douglas International Airport for September 2002 through December 2003. Complete monthly summaries of the obtained NOAA data are provided in Appendix D on page 130.

Overall, the weather data for the duration of the study showed a typical temperature and precipitation pattern in comparison with historical data. The first significant rainfall occurred three days following the initial application on September 14th. NOAA rainfall data gives the total rainfall for the 14th and 15th of September as 2.39 inches. On-site rainfall data provides a lower but substantiating reading of 1.80 inches. Assuming that a minimum of 0.25 inches of rainfall within a 48-hour period is required to create conditions conducive to run-off, there were ten (10) separate sustained rainfall events observed within the first 90 days following application.

Figure 4: Comparison of On-Site and NOAA Rainfall Measurements for 90 Days Following Initial Test Substance Application



found in study samples. These levels range from the method LOQ to at least the maximum level of residues observed in a analytical batch. In this study, the fortification levels used ranged from 10 ng/L to 300 ng/L.

As observed during the method verification, there was no bias evident in the analyses with respect to the analyte concentration.

Table I: Sample Statistics for All Procedural Recovery Values (% Recovery) Obtained at Fortification Levels of 10 ug/L, 30 ug/L, 50 ug/L, 100 ug/L and 300 ug/L

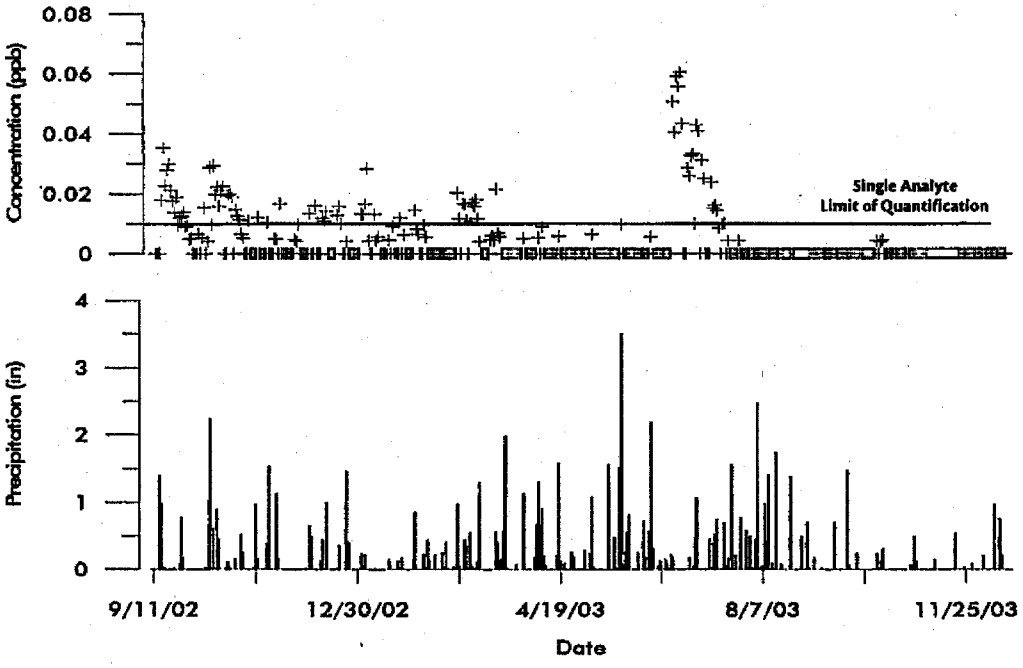
	Analyte			
	Fipronil	**MB46513**	**MB45950**	**MB46136**
Number of values	98	98	98	98
Minimum	54.0	70.7	68.3	68.9
Maximum	119.1	110.8	124.4	117.2
Mean	86.1	92.7	90.6	91.1
Std. Deviation	11.0	9.2	9.2	8.6
Std. Error	1.129	0.9383	0.9343	0.8790
Lower 95% CI of mean	83.7	90.8	88.7	89.4
Upper 95% CI of mean	88.2	94.6	92.4	92.9

Mean recoveries of each analyte are presented in Table I along with additional statistics to describe the performance of the analytical method in the recovery of each analyte from sample matrices. Overall, the data indicate the method of analysis performed adequately during the study.

5.6.4 Pond Water Sample Results

Pond samples were collected beginning September 10, 2002 and ending on December 17, 2003. A total of 181 of the pond samples collected were analyzed for fipronil-related residues, coincident with significant precipitation events. Detailed information regarding each of the individually analyzed samples is presented in Table IV on page 56. A graphical representation of these data is presented below in Figure 8.

Figure 8: Total Fipronil-Related Residues (ppb) in Analyzed Samples from the Sampled Pond vs NOAA Precipitation (in) During the Study Sampling Period



Residues above the method limit of quantification were detected in a pattern of increases following by short duration declines at the time of significant precipitation events.

While the graphical presentation of the data in Figure 8 provides an overview of the pattern of residue appearance following precipitation events, a clearer view of the association is provided in an examination of the data on a quarterly interval. Figure 9 provides a graphical representation of the precipitation and residue data for four quarterly periods following the initial test substance application.

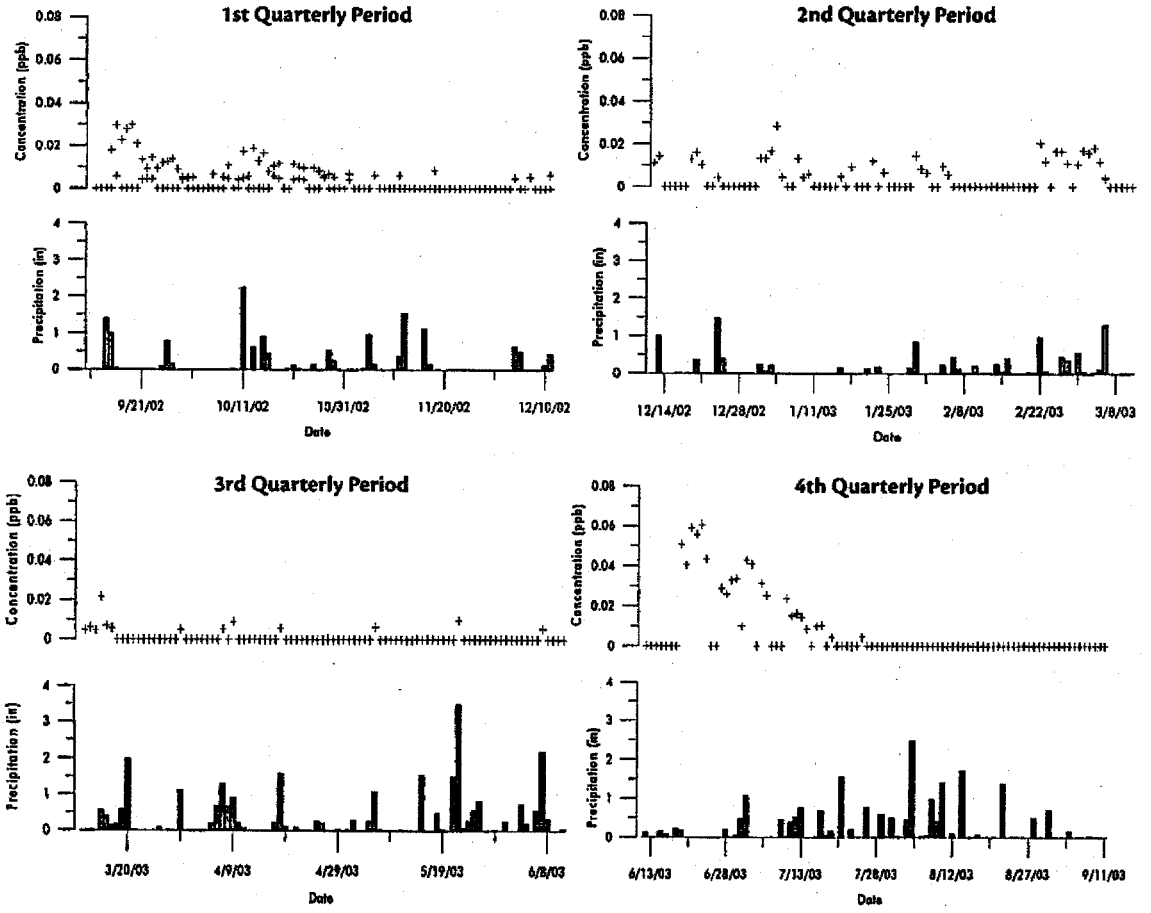
The relationship between precipitation events and the appearance of residues in study samples is clearly shown in Figure 9. Most notable are differences observed following the first and second applications with specific reference to the magnitude of the residue increase following the second application and the repetition of the appearance of residues in run-off events over time.

The primary anomaly initially appears to be the sharp increase in residues following the second application on June 17, 2003 in the absence of corresponding significant precipitation in the NOAA data; however, inspection of the site precipitation and flow data (Table XI on page 266)

shows a discrepancy between the on-site precipitation data and that provided by NOAA, with the on-site data showing a localized 2" precipitation event that is substantiated by the increase in stream height and corresponding flow.

The difference in the pattern of residue occurrence between the first and second applications is likely attributable to heavy rainfall closely following the second application.

Figure 9: Total Fipronil-Related Residues (ppb) in Analyzed Samples from the Sampled Pond vs NOAA Precipitation (in) in the Quarterly Periods Following the Initial Application



In those pond water samples in which residues were determined, parent fipronil overwhelmingly constitutes the nature of the residues found.

In the initial 90 days following the first application, metabolite concentration were typically less than the method LOQ and were found in conjunction with parent residues in the majority of samples. Beyond 90 days post-application, observed metabolite residues were still less than the method LOQ in the majority of samples; however, samples were more likely to show residues of MB46136 in the absence of parent residues. In only a couple of instances were MB46136 residues greater than the method LOQ, occurring in October 2002 (0.011 ppb on Day 32) and

Table IV: Fipronil-Related Residues in Pond Water Resulting from Runoff Following a Broadcast Application of TopChoice® brand Insecticide

Sample ID	Days Post-Initial Application	Date Sampled	Date Received	Date Extracted	Date Analyzed	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-001	Day 1	9/12/2002	9/17/2002	10/18/2002	10/18/2002	3	nd	nd	nd	nd
33114-002	Day 2	9/13/2002	9/17/2002	3/09/2004	3/16/2004	220	nd	nd	nd	nd
33114-003	Day 3	9/14/2002	9/17/2002	3/09/2004	3/16/2004	220	nd	nd	nd	nd
33114-004	Day 4	9/15/2002	9/17/2002	3/09/2004	3/16/2004	220	0.018	nd	nd	nd
33114-005	Day 5	9/16/2002	9/17/2002	10/18/2002	10/18/2002	3	0.030	<LOQ[0.006]	nd	nd
33114-006	Day 6	9/17/2002	9/25/2002	3/09/2004	3/16/2004	220	0.023	nd	nd	nd
33114-007	Day 7	9/18/2002	9/25/2002	3/09/2004	3/16/2004	220	0.028	nd	nd	nd
33114-008	Day 8	9/19/2002	9/25/2002	10/18/2002	10/18/2002	3	0.030	nd	nd	nd
33114-009	Day 9	9/20/2002	9/25/2002	3/09/2004	3/16/2004	220	0.021	nd	nd	nd
33114-010	Day 10	9/21/2002	9/25/2002	3/09/2004	3/16/2004	220	0.014	<LOQ[0.004]	nd	nd
33114-011	Day 11	9/22/2002	9/25/2002	3/09/2004	3/16/2004	220	<LOQ[0.009]	<LOQ[0.004]	nd	nd
33114-012	Day 12	9/23/2002	9/25/2002	10/18/2002	10/18/2002	3	0.015	<LOQ[0.004]	nd	nd
33114-013	Day 13	9/24/2002	9/25/2002	3/09/2004	3/16/2004	220	0.010	nd	nd	nd
33114-014	Day 14	9/25/2002	9/30/2002	3/09/2004	3/16/2004	220	0.012	nd	nd	nd
33114-015	Day 15	9/26/2002	9/30/2002	3/09/2004	3/16/2004	220	0.013	nd	nd	nd
33114-016	Day 16	9/27/2002	9/30/2002	10/18/2002	10/18/2002	3	0.014	nd	nd	nd
33114-017	Day 17	9/28/2002	9/30/2002	3/09/2004	3/16/2004	220	<LOQ[0.009]	nd	nd	nd
33114-018	Day 18	9/29/2002	9/30/2002	3/09/2004	3/16/2004	220	<LOQ[0.005]	<LOQ[0.004]	nd	nd
33114-019	Day 19	9/30/2002	10/07/2002	3/09/2004	3/16/2004	220	<LOQ[0.005]	nd	nd	nd
33114-020	Day 20	10/01/2002	10/07/2002	10/18/2002	10/18/2002	3	<LOQ[0.005]	nd	nd	nd
33114-021	Day 21	10/02/2002	10/07/2002	3/09/2004	3/16/2004	220	nd	nd	nd	nd
33114-022	Day 22	10/03/2002	10/07/2002	3/09/2004	3/16/2004	220	nd	nd	nd	nd
33114-023	Day 23	10/04/2002	10/07/2002	3/09/2004	3/16/2004	220	nd	nd	nd	nd
33114-024	Day 24	10/05/2002	10/07/2002	10/18/2002	10/18/2002	3	<LOQ[0.007]	nd	nd	nd
33114-025	Day 25	10/06/2002	10/07/2002	3/09/2004	3/16/2004	220	nd	nd	nd	nd
33114-026	Day 26	10/07/2002	10/14/2002	3/08/2004	3/18/2004	219	<LOQ[0.005]	nd	nd	nd
33114-027	Day 27	10/08/2002	10/14/2002	3/08/2004	3/18/2004	219	0.011	<LOQ[0.005]	nd	nd
33114-028	Day 28	10/09/2002	10/14/2002	10/25/2002	10/25/2002	4/5	nd	nd	nd	nd
33114-029	Day 29	10/10/2002	10/14/2002	3/08/2004	3/18/2004	219	<LOQ[0.004]	nd	nd	nd
33114-030	Day 30	10/11/2002	10/14/2002	3/08/2004	3/18/2004	219	0.017	<LOQ[0.005]	nd	<LOQ[0.007]
33114-031	Day 31	10/12/2002	10/14/2002	10/25/2002	10/25/2002	4	<LOQ[0.006]	nd	nd	<LOQ[0.004]
33114-032	Day 32	10/13/2002	10/14/2002	10/25/2002	10/25/2002	4/5	0.019	nd	nd	0.011

Table IV: (Continued) Fipronil-Related Residues in Pond Water Resulting from Runoff Following a Broadcast Application of TopChoice® brand Insecticide

Sample ID	Days Post-Initial Application	Date Sampled	Date Received	Date Extracted	Date Analyzed	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-033	Day 33	10/14/2002	10/21/2002	3/08/2004	3/18/2004	219	0.013	nd	nd	<LOQ[0.007]
33114-034	Day 34	10/15/2002	10/21/2002	3/08/2004	3/18/2004	219	0.017	nd	nd	<LOQ[0.006]
33114-035	Day 35	10/16/2002	10/21/2002	10/25/2002	10/25/2002	4	<LOQ[0.008]	nd	nd	<LOQ[0.008]
33114-036	Day 36	10/17/2002	10/30/2002	2/20/2004	2/22/2004	215	0.011	<LOQ[0.006]	nd	<LOQ[0.005]
33114-037	Day 37	10/18/2002	10/30/2002	7/20/2004	7/26/2004	237	0.012	<LOQ[0.005]	nd	<LOQ[0.006]
33114-040	Day 40	10/21/2002	10/30/2002	2/19/2004	2/21/2004	216	0.011	<LOQ[0.004]	nd	<LOQ[0.004]
33114-041	Day 41	10/22/2002	10/30/2002	2/19/2004	2/21/2004	216	0.010	<LOQ[0.005]	nd	<LOQ[0.005]
33114-042	Day 42	10/23/2002	10/30/2002	7/20/2004	7/26/2004	237	0.010	<LOQ[0.004]	nd	<LOQ[0.005]
33114-044	Day 44	10/25/2002	10/30/2002	7/22/2004	7/26/2004	237	0.010	nd	nd	<LOQ[0.005]
33114-045	Day 45	10/26/2002	10/30/2002	7/20/2004	7/26/2004	237	<LOQ[0.008]	nd	nd	<LOQ[0.005]
33114-046	Day 46	10/27/2002	10/30/2002	2/19/2004	2/21/2004	216	<LOQ[0.006]	<LOQ[0.005]	nd	nd
33114-047	Day 47	10/28/2002	10/30/2002	7/21/2004	7/26/2004	237	<LOQ[0.007]	nd	nd	nd
33114-048	Day 48	10/29/2002	10/30/2002	7/22/2004	7/26/2004	237	<LOQ[0.005]	nd	nd	nd
33114-049	Day 49	10/30/2002	11/04/2002	2/26/2003	2/26/2003	9	nd	nd	nd	nd
33114-051	Day 51	11/01/2002	11/04/2002	2/13/2004	2/15/2004	213	<LOQ[0.007]	<LOQ[0.004]	nd	nd
33114-053	Day 53	11/03/2002	11/04/2002	2/26/2003	2/26/2003	9	nd	nd	nd	nd
33114-055	Day 55	11/05/2002	11/11/2002	2/26/2003	2/26/2003	9	nd	nd	nd	nd
33114-056	Day 56	11/06/2002	11/11/2002	2/13/2004	2/15/2004	213	<LOQ[0.006]	<LOQ[0.006]	nd	nd
33114-057	Day 57	11/07/2002	11/18/2002	2/26/2003	2/26/2003	9	nd	nd	nd	nd
33114-061	Day 61	11/11/2002	11/18/2002	3/08/2004	3/18/2004	219	<LOQ[0.006]	nd	nd	<LOQ[0.004]
33114-062	Day 62	11/12/2002	11/18/2002	2/26/2003	2/26/2003	9	nd	nd	nd	nd
33114-063	Day 63	11/13/2002	11/18/2002	2/26/2003	2/26/2003	9	nd	nd	nd	nd
33114-065	Day 65	11/15/2002	11/18/2002	2/16/2004	2/20/2004	217	nd	nd	<LOQ[0.005]	nd
33114-066	Day 66	11/16/2002	11/18/2002	2/26/2003	2/26/2003	9	nd	nd	nd	<LOQ[0.005]
33114-067	Day 67	11/17/2002	11/18/2002	2/26/2003	2/26/2003	9	nd	nd	nd	nd
33114-068	Day 68	11/18/2002	11/25/2002	3/03/2004	3/18/2004	219	<LOQ[0.009]	nd	nd	<LOQ[0.008]
33114-069	Day 69	11/19/2002	11/25/2002	2/26/2003	2/26/2003	9	nd	nd	nd	nd
33114-073	Day 73	11/23/2002	12/02/2002	2/26/2003	2/26/2003	9	nd	nd	nd	nd
33114-076	Day 76	11/26/2002	12/02/2002	2/16/2004	2/20/2004	217	nd	nd	nd	<LOQ[0.005]
33114-077	Day 77	11/27/2002	12/02/2002	2/26/2003	2/26/2003	9	nd	nd	nd	<LOQ[0.004]
33114-078	Day 78	11/28/2002	12/02/2002	2/16/2004	2/20/2004	217	nd	nd	<LOQ[0.005]	<LOQ[0.005]
33114-081	Day 81	12/01/2002	12/02/2002	2/26/2003	2/26/2003	9	nd	nd	nd	nd

Table IV: (Continued) Fipronil-Related Residues in Pond Water Resulting from Runoff Following a Broadcast Application of TopChoice® brand Insecticide

Sample ID	Days Post-Initial Application	Date Sampled	Date Received	Date Extracted	Date Analyzed	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-084	Day 84	12/04/2002	12/12/2002	2/12/2004	2/15/2004	213	<LOQ[0.005]	<LOQ[0.005]	nd	<LOQ[0.004]
33114-086	Day 86	12/06/2002	12/12/2002	2/26/2003	2/26/2003	9	nd	nd	nd	nd
33114-087	Day 87	12/07/2002	12/12/2002	2/12/2004	2/15/2004	213	<LOQ[0.005]	<LOQ[0.006]	nd	<LOQ[0.005]
33114-090	Day 90	12/10/2002	12/12/2002	2/26/2003	2/26/2003	9	nd	nd	nd	nd
33114-091	Day 91	12/11/2002	12/12/2002	2/12/2004	2/15/2004	213	<LOQ[0.006]	nd	nd	<LOQ[0.006]
33114-092	Day 92	12/12/2002	12/20/2002	3/03/2004	3/18/2004	219	<LOQ[0.005]	nd	nd	<LOQ[0.006]
33114-093	Day 93	12/13/2002	12/20/2002	2/13/2004	2/15/2004	213	<LOQ[0.008]	nd	nd	<LOQ[0.006]
33114-094	Day 94	12/14/2003	12/20/2002	2/26/2003	2/26/2003	9	nd	nd	nd	nd
33114-098	Day 98	12/18/2003	12/20/2002	2/26/2003	2/26/2003	9	nd	nd	nd	nd
33114-099	Day 99	12/19/2003	12/20/2002	3/03/2004	3/18/2004	219	<LOQ[0.007]	nd	nd	<LOQ[0.006]
33114-100	Day 100	12/20/2003	1/03/2003	2/23/2004	2/23/2004	218	<LOQ[0.006]	nd	nd	0.010
33114-101	Day 101	12/21/2003	1/03/2003	2/23/2004	2/23/2004	218	<LOQ[0.005]	nd	nd	<LOQ[0.006]
33114-102	Day 102	12/22/2003	1/03/2003	2/26/2003	2/26/2003	9	nd	nd	nd	nd
33114-104	Day 104	12/24/2003	1/03/2003	2/26/2003	2/26/2003	9	nd	nd	nd	<LOQ[0.004]
33114-108	Day 108	12/28/2003	1/03/2003	2/26/2003	2/26/2003	9	nd	nd	nd	nd
33114-112	Day 112	1/01/2003	1/03/2003	2/23/2004	2/23/2004	218	<LOQ[0.004]	nd	nd	<LOQ[0.009]
33114-113	Day 113	1/02/2003	1/20/2003	3/03/2004	3/18/2004	219	<LOQ[0.006]	nd	nd	<LOQ[0.007]
33114-114	Day 114	1/03/2003	1/20/2003	3/03/2004	3/18/2004	219	<LOQ[0.007]	nd	nd	0.010
33114-115	Day 115	1/04/2003	1/20/2003	2/12/2004	2/15/2004	213	<LOQ[0.006]	<LOQ[0.004]	<LOQ[0.004]	0.014
33114-116	Day 116	1/05/2003	1/20/2003	3/14/2003	3/14/2003	13	<LOQ[0.004]	nd	nd	nd
33114-119	Day 119	1/08/2003	1/20/2003	2/12/2004	2/15/2004	213	<LOQ[0.005]	nd	nd	<LOQ[0.009]
33114-120	Day 120	1/09/2003	1/20/2003	3/14/2003	3/14/2003	13	<LOQ[0.004]	nd	nd	nd
33114-121	Day 121	1/10/2003	1/20/2003	2/12/2004	2/15/2004	213	nd	nd]	nd	<LOQ[0.006]
33114-122	Day 122	1/11/2003	1/20/2003	2/12/2004	2/15/2004	213	nd	nd	nd	nd
33114-124	Day 124	1/13/2003	1/20/2003	3/14/2003	3/14/2003	13	nd	nd	nd	nd
33114-127	Day 127	1/16/2003	2/03/2003	2/23/2004	2/23/2004	218	nd	nd	nd	<LOQ[0.005]
33114-128	Day 128	1/17/2003	2/03/2003	3/19/2003	3/19/2003	14	nd	nd	nd	nd
33114-129	Day 129	1/18/2003	2/03/2003	2/23/2004	2/23/2004	218	nd	nd	nd	<LOQ[0.009]
33114-132	Day 132	1/21/2003	2/03/2003	3/05/2003	3/05/2003	10	nd	nd	nd	nd
33114-133	Day 133	1/22/2003	2/03/2003	2/16/2004	2/20/2004	217	nd	nd	<LOQ[0.006]	<LOQ[0.006]
33114-135	Day 135	1/24/2003	2/03/2003	2/16/2004	2/20/2004	217	nd	nd	nd	<LOQ[0.006]
33114-137	Day 137	1/26/2003	2/03/2003	3/05/2003	3/05/2003	10	nd	nd	nd	nd

Table IV: (Continued) Fipronil-Related Residues in Pond Water Resulting from Runoff Following a Broadcast Application of TopChoice® brand Insecticide

Sample ID	Days Post-Initial Application	Date Sampled	Date Received	Date Extracted	Date Analyzed	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-140	Day 140	1/29/2003	2/03/2003	2/16/2004	2/20/2004	217	nd	nd	nd	nd
33114-141	Day 141	1/30/2003	2/11/2003	3/05/2003	3/05/2003	10	<LOQ[0.006]	nd	nd	<LOQ[0.009]
33114-142	Day 142	1/31/2003	2/11/2003	2/16/2004	2/20/2004	217	nd	nd	nd	<LOQ[0.008]
33114-143	Day 143	2/01/2003	2/11/2003	2/16/2004	2/20/2004	217	nd	nd	nd	<LOQ[0.007]
33114-145	Day 145	2/03/2003	2/11/2003	3/05/2003	3/05/2003	10	nd	nd	nd	nd
33114-146	Day 146	2/04/2003	2/11/2003	2/16/2004	2/20/2004	217	nd	nd	nd	<LOQ[0.009]
33114-147	Day 147	2/05/2003	2/11/2003	2/16/2004	2/20/2004	217	nd	nd	nd	<LOQ[0.006]
33114-164	Day 164	2/22/2003	3/06/2003	2/11/2004	2/11/2004	214	<LOQ[0.004]	<LOQ[0.005]	<LOQ[0.004]	<LOQ[0.007]
33114-165	Day 165	2/23/2003	3/06/2003	2/11/2004	2/11/2004	214	nd	<LOQ[0.005]	nd	<LOQ[0.007]
33114-167	Day 167	2/25/2003	3/06/2003	2/11/2004	2/11/2004	214	nd	<LOQ[0.005]	<LOQ[0.005]	<LOQ[0.007]
33114-168	Day 168	2/26/2003	3/06/2003	2/11/2004	2/11/2004	214	nd	<LOQ[0.005]	<LOQ[0.005]	<LOQ[0.007]
33114-169	Day 169	2/27/2003	3/06/2003	2/11/2004	2/11/2004	214	nd	<LOQ[0.004]	nd	<LOQ[0.007]
33114-171	Day 171	3/01/2003	3/06/2003	2/11/2004	2/11/2004	214	nd	<LOQ[0.005]	nd	<LOQ[0.006]
33114-172	Day 172	3/02/2003	3/06/2003	2/11/2004	2/11/2004	214	<LOQ[0.004]	<LOQ[0.004]	nd	<LOQ[0.008]
33114-173	Day 173	3/03/2003	3/06/2003	2/11/2004	2/11/2004	214	nd	<LOQ[0.005]	<LOQ[0.004]	<LOQ[0.007]
33114-174	Day 174	3/04/2003	3/06/2003	2/11/2004	2/11/2004	214	nd	<LOQ[0.006]	<LOQ[0.005]	<LOQ[0.007]
33114-175	Day 175	3/05/2003	3/06/2003	2/11/2004	2/11/2004	214	nd	<LOQ[0.005]	nd	<LOQ[0.007]
33114-176	Day 176	3/06/2003	3/13/2003	2/19/2004	2/21/2004	216	nd	nd	nd	<LOQ[0.004]
33114-177	Day 177	3/07/2003	3/13/2003	2/19/2004	2/21/2004	216	nd	nd	nd	nd
33114-6021	Day 182	3/12/2003	4/15/2003	6/02/2004	7/26/2004	237	nd	nd	nd	<LOQ[0.005]
33114-6022	Day 183	3/13/2003	4/15/2003	6/02/2004	7/26/2004	237	nd	nd	nd	<LOQ[0.006]
33114-6024	Day 184	3/14/2003	4/15/2003	6/02/2004	7/26/2004	237	nd	nd	nd	<LOQ[0.005]
33114-6025	Day 185	3/15/2003	4/15/2003	6/02/2004	7/26/2004	237	0.022	nd	nd	nd
33114-6026	Day 186	3/16/2003	4/15/2003	6/02/2004	7/26/2004	237	nd	nd	nd	<LOQ[0.007]
33114-6027	Day 187	3/17/2003	4/15/2003	6/02/2004	7/26/2004	237	nd	nd	nd	<LOQ[0.006]
33114-6040	Day 200	3/30/2003	4/15/2003	10/28/2004	10/29/2004	240	nd	nd	nd	<LOQ[0.005]
33114-6048	Day 208	4/07/2003	4/15/2003	10/28/2004	10/29/2004	240	nd	nd	nd	<LOQ[0.005]
33114-6050	Day 210	4/09/2003	4/15/2003	10/28/2004	10/29/2004	240	nd	nd	nd	<LOQ[0.009]
33114-6059	Day 219	4/18/2003	5/21/2003	10/28/2004	10/29/2004	240	nd	nd	nd	<LOQ[0.006]
33114-6077	Day 237	5/6/2003	5/21/2003	10/28/2004	10/29/2004	240	nd	nd	nd	<LOQ[0.007]
33114-6086	Day 246	5/15/2003	5/21/2003	10/28/2004	10/29/2004	240	nd	nd	nd	nd
33114-6093	Day 253	5/22/2003	7/1/2003	10/28/2004	10/29/2004	240	nd	nd	nd	0.010

Table IV: (Continued) Fipronil-Related Residues in Pond Water Resulting from Runoff Following a Broadcast Application of TopChoice® brand Insecticide

Sample ID	Days Post-Initial Application	Date Sampled	Date Received	Date Extracted	Date Analyzed	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-6109	Day 269	6/07/2003	7/1/2003	10/28/2004	10/29/2004	240	<LOQ[0.006]	nd	nd	nd
33114-6114	Day 274	6/12/2003	7/01/2003	7/20/2004	7/26/2004	237	nd	nd	nd	nd
33114-6118	Day 278	6/16/2003	7/01/2003	7/20/2004	7/26/2004	237	nd	nd	nd	nd
33114-6119	Day 279	6/17/2003	7/01/2003	9/26/2003	9/27/2003	202	nd	nd	nd	nd
33114-6120	Day 280	6/18/2003	7/01/2003	9/26/2003	9/27/2003	202	nd	nd	nd	nd
33114-6121	Day 281	6/19/2003	7/01/2003	9/26/2003	9/27/2003	202	0.047	nd	nd	<LOQ[0.004]
33114-6122	Day 282	6/20/2003	7/01/2003	9/26/2003	9/27/2003	202	0.040	nd	nd	nd
33114-6123	Day 283	6/21/2003	7/01/2003	6/02/2004	7/26/2004	237	0.045	<LOQ[0.004]	nd	0.010
33114-6124	Day 284	6/22/2003	7/01/2003	6/02/2004	7/26/2004	237	0.039	<LOQ[0.008]	nd	<LOQ[0.009]
33114-6125	Day 285	6/23/2003	7/01/2003	6/02/2004	7/26/2004	237	0.033	<LOQ[0.007]	0.015	<LOQ[0.005]
33114-6126	Day 286	6/24/2003	7/01/2003	6/02/2004	7/26/2004	237	0.028	0.010	nd	<LOQ[0.006]
33114-6129	Day 289	6/27/2003	7/01/2003	6/02/2004	7/26/2004	237	0.017	<LOQ[0.008]	nd	<LOQ[0.004]
33114-6130	Day 290	6/28/2003	7/01/2003	9/26/2003	9/27/2003	202	0.019	<LOQ[0.007]	nd	nd
33114-6131	Day 291	6/29/2003	7/01/2003	9/26/2003	9/27/2003	202	0.020	<LOQ[0.008]	nd	<LOQ[0.005]
33114-6132	Day 292	6/30/2003	8/01/2003	9/26/2003	9/27/2003	202	0.019	0.010	nd	<LOQ[0.005]
33114-6133	Day 293	7/01/2003	8/01/2003	9/26/2003	9/27/2003	202	0.010	nd	nd	nd
33114-6134	Day 294	7/02/2003	8/01/2003	9/26/2003	9/27/2003	202	0.028	<LOQ[0.006]	nd	<LOQ[0.008]
33114-6135	Day 295	7/03/2003	8/01/2003	9/26/2003	9/27/2003	202	0.027	<LOQ[0.006]	nd	<LOQ[0.008]
33114-6137	Day 297	7/05/2003	8/01/2003	6/02/2004	7/26/2004	237	0.018	<LOQ[0.006]	nd	<LOQ[0.007]
33114-6138	Day 298	7/06/2003	8/01/2003	6/02/2004	7/26/2004	237	0.014	<LOQ[0.005]	nd	<LOQ[0.005]
33114-6142	Day 302	7/10/2003	8/01/2003	9/26/2003	9/27/2003	202	0.014	<LOQ[0.006]	nd	<LOQ[0.004]
33114-6143	Day 303	7/11/2003	8/01/2003	9/26/2003	9/27/2003	202	0.011	nd	nd	<LOQ[0.005]
33114-6144	Day 304	7/12/2003	8/01/2003	9/26/2003	9/27/2003	202	0.011	nd	nd	<LOQ[0.005]
33114-6145	Day 305	7/13/2003	8/01/2003	9/26/2003	9/27/2003	202	0.010	nd	nd	<LOQ[0.004]
33114-6146	Day 306	7/14/2003	8/01/2003	9/26/2003	9/27/2003	202	<LOQ[0.009]	nd	nd	nd
33114-6148	Day 308	7/16/2003	8/01/2003	5/10/2004	5/19/2004	235	<LOQ[0.005]	<LOQ[0.005]	nd	nd
33114-6149	Day 309	7/17/2003	8/01/2003	5/10/2004	5/19/2004	235	<LOQ[0.006]	<LOQ[0.004]	nd	nd
33114-6151	Day 311	7/19/2003	8/01/2003	5/10/2004	5/19/2004	235	<LOQ[0.004]	nd	nd	nd
33114-6152	Day 312	7/20/2003	8/01/2003	5/10/2004	5/19/2004	235	nd	nd	nd	nd
33114-6153	Day 313	7/21/2003	8/01/2003	5/10/2004	5/19/2004	235	nd	nd	nd	nd
33114-6154	Day 314	7/22/2003	8/01/2003	5/10/2004	5/19/2004	235	nd	nd	nd	nd
33114-6155	Day 315	7/23/2003	8/01/2003	5/10/2004	5/19/2004	235	nd	nd	nd	nd

Table IV: (Continued) Fipronil-Related Residues in Pond Water Resulting from Runoff Following a Broadcast Application of TopChoice® brand Insecticide

Sample ID	Days Post-Initial Application	Date Sampled	Date Received	Date Extracted	Date Analyzed	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-6157	Day 317	7/25/2003	8/01/2003	5/10/2004	5/19/2004	235	nd	<LOQ[0.004]	nd	nd
33114-6161	Day 321	7/29/2003	8/01/2003	5/10/2004	5/19/2004	235	nd	nd	nd	nd
33114-6163	Day 323	7/31/2003	11/21/2003	6/04/2004	6/06/2004	232	nd	nd	nd	nd
33114-6167	Day 327	8/04/2003	11/21/2003	6/04/2004	6/06/2004	232	nd	nd	nd	nd
33114-6169	Day 329	8/06/2003	11/21/2003	6/04/2004	6/06/2004	232	nd	nd	nd	nd
33114-6172	Day 332	8/09/2003	11/21/2003	6/04/2004	6/06/2004	232	nd	nd	nd	nd
33114-6173	Day 333	8/10/2003	11/21/2003	6/04/2004	6/06/2004	232	nd	nd	nd	nd
33114-6174	Day 334	8/11/2003	11/21/2003	6/04/2004	6/06/2004	232	nd	nd	nd	nd
33114-6175	Day 335	8/12/2003	11/21/2003	6/04/2004	6/06/2004	232	nd	nd	nd	nd
33114-6177	Day 337	8/14/2003	11/21/2003	6/04/2004	6/06/2004	232	nd	nd	nd	nd
33114-6178	Day 338	8/15/2003	11/21/2003	6/04/2004	6/06/2004	232	nd	nd	nd	nd
33114-6185	Day 345	8/22/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6186	Day 346	8/23/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6194	Day 354	8/31/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6198	Day 358	9/04/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6209	Day 369	9/15/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6216	Day 376	9/22/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6217	Day 377	9/23/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6232	Day 392	10/8/2003	11/21/2003	7/27/2004	8/14/2004	238	nd	nd	nd	<LOQ[0.004]
33114-6234	Day 394	10/10/2003	11/21/2003	7/27/2004	8/14/2004	238	nd	nd	nd	<LOQ[0.004]
33114-6235	Day 395	10/11/2003	11/21/2003	7/27/2004	8/14/2004	238	nd	nd	nd	<LOQ[0.005]

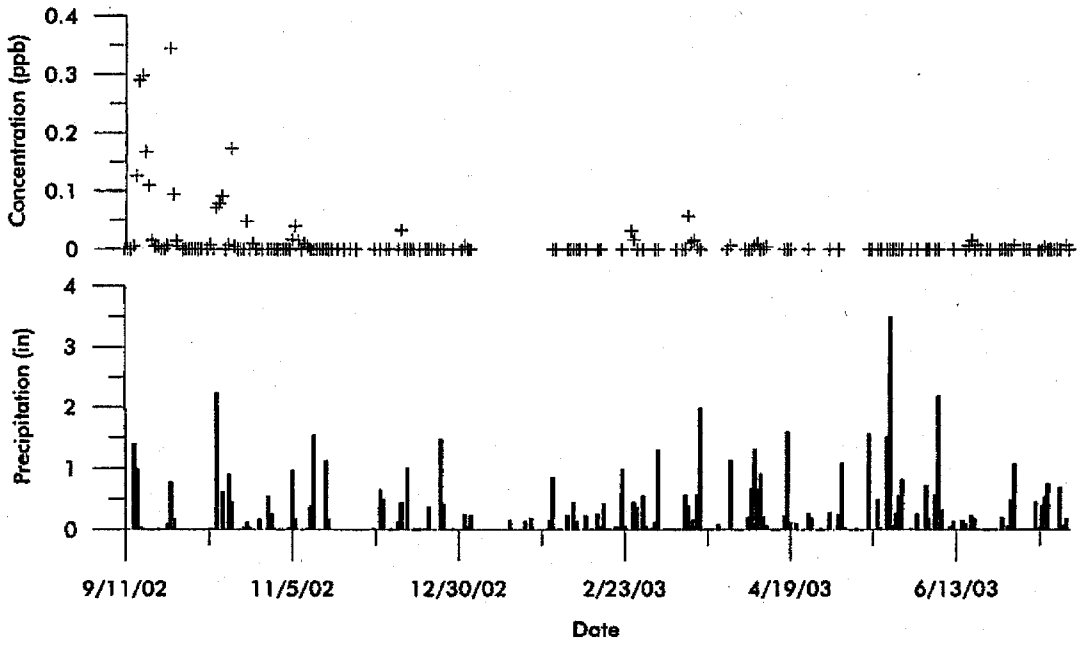
January 2003 where early in the month residues of 0.014 were determined (Day 115).

Instances of MB45950 and MB46513 were observed in concentrations at or less than the method LOQ throughout the study period. At no point in the study was MB46513 detected at a concentration greater than the method LOQ. A single instance of MB45950 at a concentration of 0.015 was determined in the 285 day (post-initial application) pond sample and represents the only occurrence of this metabolite at a concentration greater than the method LOQ.

5.6.5 Stormwater Sample Results

Stormwater samples from the culvert sampling location were collected beginning September 10, 2002 and ending on December 17, 2003. A total of 596 of the samples collected were analyzed for fipronil-related residues, coincident with significant flow events. Detailed information regarding each of the individually analyzed samples is presented in Table VII on page 65. A graphical representation of these data from September 11, 2002 to July 20, 2003 is presented below in Figure 10.

Figure 10: Total Fipronil-Related Residues (ppb) in Analyzed Samples from the Culvert Sampling Point vs NOAA Precipitation (in) Through July 2003



Fipronil-related residues were detected in stormwater samples primarily in the initial 60 days following the initial test substance application. Noteworthy, a similar pattern of detectable residues is not evident following the second application on June 17, 2003 due to instrument difficulties. Samples collected from the culvert after July 2003 were not analyzed.

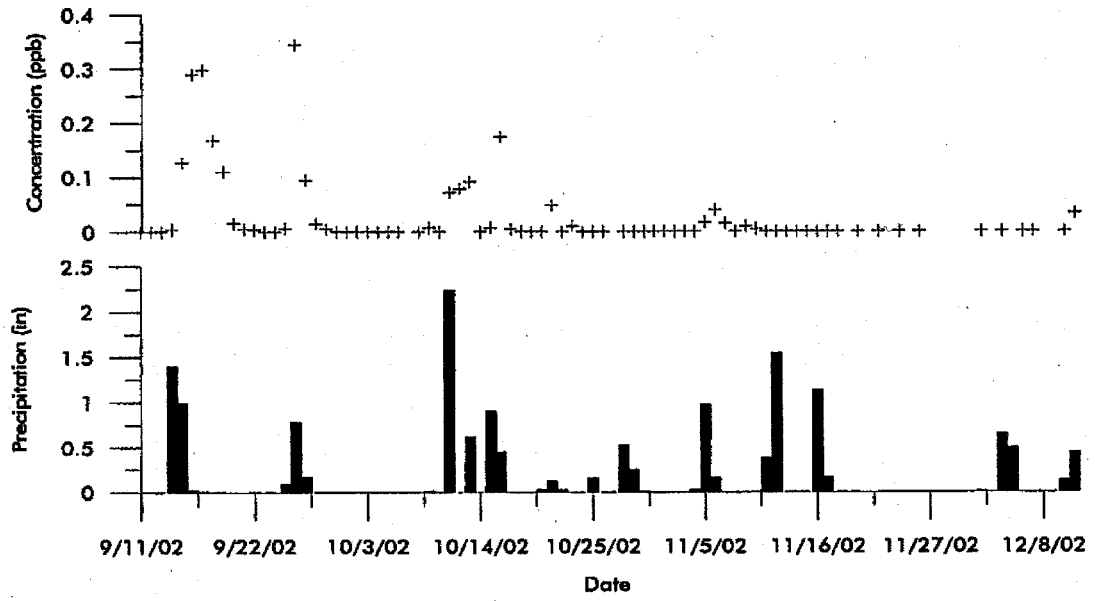
Detection of residues in samples correlated well with the occurrence of on-site precipitation events. The level of fipronil-related residues dropped to levels at or less than the method limit of quantification shortly after application. Beyond 60 days post-application, detections of residues of

the parent or metabolites were observed only sporadically until mid-March 2003 when residues reappeared in samples up to a maximum concentration of 4x the method LOQ for a brief period.

A peak concentration of 0.287 ppb of the parent, fipronil, was detected in a sample taken six days following the initial application. A maximum concentration of total fipronil-related residues of 0.344 ppb was observed 15 days following the test substance application. These residues were comprised of the parent, fipronil (0.157 ppb), as well as the metabolites MB45950 (0.065 ppb) and MB46136 (0.122 ppb).

Figure 11 provides a closer examination of the data during the initial 90-day period following the first application. It clearly shows the relationship between the appearance of residues in collected samples and rainfall at the test site.

Figure 11: Total Fipronil-Related Residues (ppb) Determined in Stormwater Samples vs NOAA Precipitation (in) During the 90-Day Post Initial Application Period



Residues of MB46513 never exceeded the method LOQ in any stormwater sample. Residues of MB46136 and MB45950 were more prevalent than what was seen in pond or stream samples. Residues of MB46136 and MB45950 were initially observed very shortly after application at significant concentrations, as high as 122 ppt 15 days post-application for MB46136, but were less than parent concentrations in nearly all cases during the first 30 days post-application.

Between 30 and 60 (mid-November 2002) days post-application, it was not uncommon to see either metabolite at concentrations greater than the method LOQ and generally in conjunction with the appearance of the parent.

The detections in March 2003 consisted of the metabolites MB46136 and MB45950 with parent residues either not detected or at concentrations less than the method LOQ. During the months following March 2003, but prior to the second application, residues of the parent and metabolites were detected only sporadically and always less than the method LOQ.

Table VII: Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-371	9/11/2002	17:44	9/17/2002	10/08/2002	10/08/2002	1	101	nd	nd	nd	nd
33114-372	9/11/2002	18:44	9/17/2002	10/08/2002	10/08/2002	1	101	nd	nd	nd	nd
33114-373	9/11/2002	19:44	9/17/2002	10/08/2002	10/08/2002	1	101	nd	nd	nd	nd
33114-374	9/11/2002	20:44	9/17/2002	10/08/2002	10/08/2002	1	101	nd	nd	nd	nd
33114-375	9/11/2002	21:44	9/17/2002	10/08/2002	10/08/2002	1	101	nd	nd	nd	nd
33114-376	9/11/2002	22:44	9/17/2002	10/08/2002	10/08/2002	1	101	nd	nd	nd	nd
33114-377	9/11/2002	23:44	9/17/2002	10/08/2002	10/08/2002	1	101	nd	nd	nd	nd
33114-378	9/12/2002	0:44	9/17/2002	10/08/2002	10/08/2002	1	101	nd	nd	nd	nd
33114-379	9/12/2002	1:44	9/17/2002	10/08/2002	10/08/2002	1	101	nd	nd	nd	nd
33114-380	9/12/2002	2:44	9/17/2002	10/08/2002	10/08/2002	1	101	nd	nd	nd	nd
33114-381	9/12/2002	3:44	9/17/2002	10/08/2002	10/08/2002	1	101	nd	nd	nd	nd
33114-382	9/12/2002	4:44	9/17/2002	10/08/2002	10/08/2002	1	101	nd	nd	nd	nd
33114-383	9/12/2002	5:44	9/17/2002	10/08/2002	10/08/2002	1	101	nd	nd	nd	nd
33114-384	9/12/2002	6:44	9/17/2002	10/08/2002	10/08/2002	1	101	nd	nd	nd	nd
33114-385	9/12/2002	7:44	9/17/2002	10/08/2002	10/08/2002	1	101	nd	nd	nd	nd
33114-386	9/12/2002	8:44	9/17/2002	10/08/2002	10/08/2002	1	101	nd	nd	nd	nd
33114-387	9/12/2002	9:44	9/17/2002	10/08/2002	10/08/2002	1	101	nd	nd	nd	nd
33114-390	9/12/2002	12:44	9/17/2002	10/11/2002	10/11/2002	1	102	nd	nd	nd	nd
33114-408	9/13/2002	13:28	9/17/2002	10/11/2002	10/11/2002	1	102	nd	nd	nd	nd
33114-416	9/14/2002	1:28	9/17/2002	12/04/2002	12/04/2002	1	5	nd	nd	nd	nd
33114-418	9/14/2002	4:28	9/17/2002	12/04/2002	12/04/2002	1	5	nd	nd	nd	nd
33114-420	9/14/2002	7:28	9/17/2002	12/04/2002	12/04/2002	1	5	nd	nd	nd	nd
33114-422	9/14/2002	10:28	9/17/2002	10/11/2002	10/11/2002	1	102	nd	nd	nd	nd
33114-424	9/14/2002	19:28	9/17/2002	12/04/2002	12/04/2002	1	5	nd	nd	nd	nd
33114-426	9/14/2002	22:28	9/17/2002	12/04/2002	12/04/2002	1	5	<LOQ[0.005]	nd	nd	nd
33114-428	9/15/2002	1:28	9/17/2002	12/04/2002	12/04/2002	1	5	0.011	nd	nd	nd
33114-430	9/15/2002	4:28	9/17/2002	12/04/2002	12/04/2002	1	5	nd	nd	nd	nd
33114-432	9/15/2002	7:28	9/17/2002	12/12/2002	12/12/2002	1	6	nd	nd	nd	nd
33114-434	9/15/2002	10:28	9/17/2002	12/12/2002	12/12/2002	1	6	nd	nd	nd	nd
33114-436	9/15/2002	13:28	9/17/2002	10/11/2002	10/11/2002	1	102	nd	nd	nd	nd
33114-438	9/15/2002	16:28	9/17/2002	12/12/2002	12/12/2002	1	6	nd	nd	nd	nd
33114-440	9/15/2002	19:28	9/17/2002	12/12/2002	12/12/2002	1	6	0.094	nd	nd	nd
33114-442	9/15/2002	22:28	9/17/2002	12/12/2002	12/12/2002	1	6	0.121	nd	nd	<LOQ[0.006]

Table VII: (Continued)Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-443	9/15/2002	22:28	9/17/2002	10/22/2003	10/26/2003	2	207	nd	nd	nd	nd
33114-444	9/16/2002	1:28	9/17/2002	10/18/2002	10/18/2002	1	3	0.151	nd	nd	<LOQ[0.006]
33114-445	9/16/2002	1:28	9/17/2002	10/22/2003	10/26/2003	2	207	<LOQ[0.007]	nd	nd	nd
33114-446	9/16/2002	4:28	9/17/2002	12/12/2002	12/12/2002	1	6	0.069	nd	nd	<LOQ[0.009]
33114-447	9/16/2002	4:28	9/17/2002	10/22/2003	10/26/2003	2	207	0.279	nd	nd	0.010
33114-448	9/16/2002	7:28	9/17/2002	12/12/2002	12/12/2002	1	6	<LOQ[0.006]	nd	nd	nd
33114-450	9/16/2002	10:28	9/17/2002	12/12/2002	12/12/2002	1	6	<LOQ[0.009]	nd	nd	nd
33114-452	9/16/2002	13:28	9/17/2002	10/11/2002	10/11/2002	1	102	nd	nd	nd	nd
33114-454	9/16/2002	16:28	9/25/2002	12/12/2002	12/12/2002	1	6	<LOQ[0.006]	nd	nd	nd
33114-456	9/16/2002	19:28	9/25/2002	12/12/2002	12/12/2002	1	6	<LOQ[0.006]	nd	nd	nd
33114-458	9/16/2002	22:28	9/25/2002	10/18/2002	10/18/2002	1	3	<LOQ[0.007]	nd	nd	nd
33114-466	9/17/2002	10:28	9/25/2002	12/12/2002	12/12/2002	1	6	0.261	nd	nd	0.011
33114-467	9/17/2002	10:28	9/25/2002	10/22/2003	10/26/2003	2	207	0.287	nd	nd	0.010
33114-468	9/17/2002	13:28	9/25/2002	10/11/2002	10/11/2002	1	102	0.123	nd	nd	<LOQ[0.007]
33114-470	9/17/2002	16:28	9/25/2002	12/12/2002	12/12/2002	1	6	0.092	nd	nd	<LOQ[0.006]
33114-472	9/17/2002	19:28	9/25/2002	12/12/2002	12/12/2002	1	6	0.084	nd	nd	<LOQ[0.004]
33114-482	9/18/2002	10:28	9/25/2002	10/22/2003	10/26/2003	1	207	0.159	nd	nd	<LOQ[0.008]
33114-484	9/18/2002	13:28	9/25/2002	10/22/2003	10/26/2003	1	207	0.079	nd	nd	nd
33114-486	9/18/2002	16:28	9/25/2002	12/12/2002	12/12/2002	1	6	0.117	nd	nd	<LOQ[0.008]
33114-488	9/18/2002	19:28	9/25/2002	10/11/2002	10/11/2002	1	102	0.081	nd	nd	<LOQ[0.006]
33114-490	9/18/2002	22:28	9/25/2002	12/12/2002	12/12/2002	1	6	0.022	nd	nd	nd
33114-492	9/19/2002	1:28	9/25/2002	10/18/2002	10/18/2002	1	3	0.012	nd	nd	nd
33114-494	9/19/2002	4:28	9/25/2002	12/12/2002	12/12/2002	1	6	<LOQ[0.006]	nd	nd	nd
33114-496	9/19/2002	7:28	9/25/2002	10/22/2003	10/26/2003	1	207	0.018	nd	nd	nd
33114-498	9/19/2002	10:28	9/25/2002	12/12/2002	12/12/2002	1	6	0.020	nd	nd	nd
33114-500	9/19/2002	13:28	9/25/2002	10/11/2002	10/11/2002	1	102	0.103	nd	nd	<LOQ[0.007]
33114-502	9/19/2002	16:28	9/25/2002	10/22/2003	10/26/2003	1	207	0.079	nd	nd	<LOQ[0.005]
33114-504	9/19/2002	19:28	9/25/2002	10/22/2003	10/26/2003	1	207	0.067	nd	nd	<LOQ[0.004]
33114-506	9/19/2002	22:28	9/25/2002	12/12/2002	12/12/2002	1	6/207	0.027[1]	nd	nd	nd
33114-510	9/20/2002	4:28	9/25/2002	10/22/2003	10/26/2003	1	207	<LOQ[0.006]	nd	nd	nd
33114-512	9/20/2002	7:28	9/25/2002	12/12/2002	12/12/2002	1	6	<LOQ[0.009]	nd	nd	nd
33114-514	9/20/2002	10:28	9/25/2002	10/22/2003	10/26/2003	1	207	0.014	nd	nd	nd
33114-516	9/20/2002	13:28	9/25/2002	10/11/2002	10/11/2002	1	102	0.015	nd	nd	nd

Table VII: (Continued)Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-518	9/20/2002	16:28	9/25/2002	10/22/2003	10/26/2003	1	207	0.013	nd	nd	nd
33114-520	9/20/2002	19:28	9/25/2002	10/22/2003	10/26/2003	1	207	0.011	nd	nd	nd
33114-522	9/20/2002	22:28	9/25/2002	12/12/2002	12/12/2002	1	6	<LOQ[0.009]	nd	nd	nd
33114-524	9/21/2002	1:28	9/25/2002	10/22/2003	10/26/2003	1	207	<LOQ[0.005]	nd	nd	nd
33114-526	9/21/2002	4:28	9/25/2002	10/22/2003	10/26/2003	1	207	<LOQ[0.004]	nd	nd	nd
33114-528	9/21/2002	7:28	9/25/2002	12/12/2002	12/12/2002	1	7	nd	nd	nd	nd
33114-532	9/21/2002	13:28	9/25/2002	10/11/2002	10/11/2002	1	102	nd	nd	nd	nd
33114-538	9/21/2002	22:28	9/25/2002	12/12/2002	12/12/2002	1	7	<LOQ[0.004]	nd	nd	nd
33114-540	9/22/2002	1:28	9/25/2002	10/22/2003	10/26/2003	1	207	nd	nd	nd	nd
33114-542	9/22/2002	4:28	9/25/2002	10/22/2003	10/26/2003	1	207	nd	nd	nd	nd
33114-544	9/22/2002	7:28	9/25/2002	12/12/2002	12/12/2002	1	7	nd	nd	nd	nd
33114-548	9/22/2002	13:28	9/25/2002	10/11/2002	10/11/2002	1	102	nd	nd	nd	nd
33114-550	9/22/2002	16:28	9/25/2002	12/12/2002	12/12/2002	1	7	nd	nd	nd	nd
33114-552	9/22/2002	19:28	9/25/2002	12/12/2002	12/12/2002	1	7	nd	nd	nd	nd
33114-558	9/23/2002	4:28	9/25/2002	12/12/2002	12/12/2002	1	7	nd	nd	nd	nd
33114-564	9/23/2002	13:28	9/25/2002	10/11/2002	10/11/2002	1	102	nd	nd	nd	nd
33114-570	9/23/2002	22:28	9/25/2002	12/12/2002	12/12/2002	1	7	nd	nd	nd	nd
33114-576	9/24/2002	7:28	9/25/2002	12/12/2002	12/12/2002	1	7	nd	nd	nd	nd
33114-582	9/24/2002	16:28	9/30/2002	12/12/2002	12/12/2002	1	102 / 7	nd	nd	nd	nd
33114-588	9/25/2002	1:28	9/30/2002	12/12/2002	12/12/2002	1	7	<LOQ[0.006]	nd	nd	nd
33114-594	9/25/2002	10:28	9/30/2002	12/12/2002	12/12/2002	1	7	nd	nd	nd	nd
33114-596	9/25/2002	14:01	9/30/2002	10/11/2002	10/11/2002	1	102	nd	nd	nd	nd
33114-600	9/25/2002	20:01	9/30/2002	12/12/2002	12/12/2002	1	7	nd	nd	nd	nd
33114-604	9/26/2002	2:01	9/30/2002	10/18/2002	10/18/2002	1	3	nd	nd	nd	nd
33114-605	9/26/2002	2:01	9/30/2002	11/03/2003	11/03/2003	2	208	nd	nd	nd	nd
33114-606	9/26/2002	5:01	9/30/2002	3/08/2004	3/18/2004	1	219	<LOQ[0.005]	nd	nd	nd
33114-608	9/26/2002	8:01	9/30/2002	12/12/2002	12/12/2002	1	7	nd	nd	nd	nd
33114-610	9/26/2002	11:01	9/30/2002	11/03/2003	11/03/2003	1	208	nd	nd	nd	nd
33114-612	9/26/2002	14:01	9/30/2002	10/11/2002	10/11/2002	1	102	0.157	nd	0.065	0.122
33114-613	9/26/2002	14:01	9/30/2002	11/03/2003	11/03/2003	2	208	nd	nd	nd	nd
33114-614	9/26/2002	17:01	9/30/2002	11/03/2003	11/03/2003	1	208	0.035	nd	0.023	0.023
33114-616	9/26/2002	20:01	9/30/2002	12/12/2002	12/12/2002	1	7	0.024	nd	<LOQ[006]	<LOQ[0.009]
33114-618	9/26/2002	23:01	9/30/2002	11/03/2003	11/03/2003	1	208	<LOQ[0.006]	nd	<LOQ[0.008]	nd

Table VII: (Continued)Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-620	9/27/2002	2:01	9/30/2002	10/18/2002	10/18/2002	1	3	0.039	nd	0.019	0.037
33114-622	9/27/2002	5:01	9/30/2002	11/03/2003	11/03/2003	1	208	nd	nd	<LOQ[0.006]	nd
33114-624	9/27/2002	8:01	9/30/2002	12/12/2002	12/12/2002	1	7	0.012	nd	nd	0.010
33114-626	9/27/2002	11:01	9/30/2002	11/03/2003	11/03/2003	1	208	nd	nd	<LOQ[0.009]	<LOQ[0.005]
33114-628	9/27/2002	14:01	9/30/2002	10/11/2002	10/11/2002	1	102	0.014	nd	<LOQ[0.007]	0.018
33114-630	9/27/2002	17:01	9/30/2002	11/03/2003	11/03/2003	1	208	0.010	nd	0.016	<LOQ[0.006]
33114-632	9/27/2002	20:01	9/30/2002	11/03/2003	11/03/2003	1	208	nd	nd	0.010	<LOQ[0.004]
33114-634	9/27/2002	23:01	9/30/2002	12/12/2002	12/12/2002	1	7	<LOQ[0.004]	nd	nd	<LOQ[0.007]
33114-636	9/28/2002	2:01	9/30/2002	11/03/2003	11/03/2003	1	208	nd	nd	0.010	<LOQ[0.004]
33114-640	9/28/2002	8:01	9/30/2002	12/12/2002	12/12/2002	1	7	nd	nd	nd	nd
33114-644	9/28/2002	14:01	9/30/2002	10/11/2002	10/11/2002	1	102	<LOQ[0.005]	nd	nd	nd
33114-646	9/28/2002	17:01	9/30/2002	11/03/2003	11/03/2003	1	208	nd	nd	0.013	nd
33114-650	9/28/2002	23:01	9/30/2002	12/12/2002	12/12/2002	1	7	<LOQ[0.005]	nd	nd	<LOQ[0.005]
33114-656	9/29/2002	8:01	9/30/2002	12/12/2002	12/12/2002	1	7	<LOQ[0.005]	nd	nd	nd
33114-658	9/29/2002	11:01	9/30/2002	11/03/2003	11/03/2003	1	208	nd	nd	<LOQ[0.005]	nd
33114-660	9/29/2002	14:01	9/30/2002	10/11/2002	10/11/2002	1	102	nd	nd	nd	nd
33114-662	9/29/2002	17:01	9/30/2002	11/03/2003	11/03/2003	1	208	nd	nd	nd	nd
33114-663	9/29/2002	17:01	9/30/2002	10/29/2004	10/29/2004	2	241	nd	nd	nd	nd
33114-666	9/29/2002	23:01	10/07/2002	12/12/2002	12/12/2002	1	7	nd	nd	nd	nd
33114-672	9/30/2002	8:01	10/07/2002	12/12/2002	12/12/2002	1	7	nd	nd	nd	nd
33114-676	9/30/2002	14:01	10/07/2002	10/18/2002	10/18/2002	1	3	nd	nd	nd	nd
33114-692	10/01/2002	14:01	10/07/2002	10/18/2002	10/18/2002	1	3	nd	nd	nd	nd
33114-708	10/02/2002	14:01	10/07/2002	10/18/2002	10/18/2002	1	3	nd	nd	nd	nd
33114-724	10/03/2002	14:01	10/07/2002	10/18/2002	10/18/2002	1	3	nd	nd	nd	nd
33114-740	10/04/2002	14:01	10/07/2002	10/18/2002	10/18/2002	1	3	nd	nd	nd	nd
33114-756	10/05/2002	14:01	10/07/2002	10/18/2002	10/18/2002	1	3	nd	nd	nd	nd
33114-772	10/06/2002	14:01	10/07/2002	10/18/2002	10/18/2002	1	3	nd	nd	nd	nd
33114-778	10/08/2002	20:01	10/14/2002	11/03/2003	11/03/2003	1	208	nd	nd	nd	nd
33114-779	10/08/2002	20:01	10/14/2002	10/29/2004	10/29/2004	2	241	nd	nd	nd	nd
33114-788	10/09/2002	11:01	10/14/2002	11/03/2003	11/03/2003	1	208	nd	nd	<LOQ[0.008]	nd
33114-789	10/09/2002	11:01	10/14/2002	10/29/2004	10/29/2004	2	241	nd	nd	nd	nd
33114-804	10/10/2002	11:01	10/14/2002	11/03/2003	11/03/2003	1	208	nd	nd	nd	nd
33114-805	10/10/2002	11:01	10/14/2002	10/29/2004	10/29/2004	2	241	nd	nd	nd	nd

Table VII: (Continued)Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-810	10/10/2002	20:01	10/14/2002	11/03/2003	11/03/2003	1	208	nd	nd	nd	nd
33114-811	10/10/2002	20:01	10/14/2002	10/29/2004	10/29/2004	2	241	nd	nd	nd	nd
33114-812	10/10/2002	23:01	10/14/2002	11/03/2003	11/03/2003	1	208	nd	nd	nd	nd
33114-813	10/10/2002	23:01	10/14/2002	10/29/2004	10/29/2004	2	241	nd	nd	nd	nd
33114-814	10/11/2002	2:01	10/14/2002	10/25/2002	10/25/2002	1	4	nd	nd	nd	nd
33114-816	10/11/2002	5:01	10/14/2002	11/03/2003	11/03/2003	1	208	<LOQ[0.004]	nd	nd	nd
33114-817	10/11/2002	5:01	10/14/2002	10/29/2004	10/29/2004	2	241	<LOQ[0.005]	nd	nd	nd
33114-818	10/11/2002	8:01	10/14/2002	11/03/2003	11/03/2003	1	208	nd	nd	nd	nd
33114-819	10/11/2002	8:01	10/14/2002	10/29/2004	10/29/2004	2	241	nd	nd	nd	nd
33114-820	10/11/2002	11:01	10/14/2002	11/03/2003	11/03/2003	1	208	nd	nd	nd	nd
33114-821	10/11/2002	11:01	10/14/2002	10/29/2004	10/29/2004	2	241	nd	nd	nd	nd
33114-822	10/11/2002	14:01	10/14/2002	10/25/2002	10/25/2002	1	4	0.016	nd	0.015	0.024
33114-824	10/11/2002	17:01	10/14/2002	11/03/2003	11/03/2003	1	208	0.014	nd	0.010	0.019
33114-825	10/11/2002	17:01	10/14/2002	10/29/2004	10/29/2004	2	241	nd	nd	nd	nd
33114-826	10/11/2002	20:01	10/14/2002	11/03/2003	11/03/2003	1	208	<LOQ[0.005]	nd	<LOQ[0.008]	0.010
33114-827	10/11/2002	20:01	10/14/2002	10/29/2004	10/29/2004	2	241	nd	nd	nd	nd
33114-828	10/11/2002	23:01	10/14/2002	11/03/2003	11/03/2003	1	208	0.010	nd	0.025	0.037
33114-829	10/11/2002	23:01	10/14/2002	10/29/2004	10/29/2004	2	241	nd	nd	nd	nd
33114-830	10/12/2002	2:01	10/14/2002	10/25/2002	10/25/2002	1	4	nd	nd	nd	<LOQ[0.007]
33114-836	10/12/2002	11:01	10/14/2002	11/03/2003	11/03/2003	1	208	<LOQ[0.006]	nd	nd	<LOQ[0.006]
33114-837	10/12/2002	11:01	10/14/2002	10/29/2004	10/29/2004	2	241	nd	nd	nd	nd
33114-838	10/12/2002	14:01	10/14/2002	10/25/2002	10/25/2002	1	4	<LOQ[0.004]	nd	<LOQ[0.007]	0.018
33114-840	10/12/2002	17:01	10/14/2002	10/06/2003	10/07/2003	1	203	0.010	nd	0.043	0.026
33114-842	10/12/2002	20:01	10/14/2002	10/06/2003	10/07/2003	1	203	nd	nd	nd	nd
33114-846	10/13/2002	2:01	10/14/2002	10/25/2002	10/25/2002	1	4	nd	nd	nd	nd
33114-850	10/13/2002	8:01	10/14/2002	10/06/2003	10/07/2003	1	203	<LOQ[0.008]	nd	0.050	0.033
33114-852	10/13/2002	11:01	10/14/2002	10/06/2003	10/07/2003	1	203	nd	nd	nd	<LOQ[0.005]
33114-854	10/13/2002	14:01	10/14/2002	10/25/2002	10/25/2002	1	4	nd	nd	nd	nd
33114-856	10/13/2002	17:01	10/21/2002	10/06/2003	10/07/2003	1	203	<LOQ[0.004]	nd	nd	nd
33114-858	10/13/2002	20:01	10/21/2002	10/06/2003	10/07/2003	1	203	nd	nd	nd	nd
33114-860	10/13/2002	23:01	10/21/2002	10/06/2003	10/07/2003	1	203	<LOQ[0.007]	nd	<LOQ[0.005]	nd
33114-862	10/14/2002	2:01	10/21/2002	10/25/2002	10/25/2002	1	4	nd	nd	nd	nd
33114-870	10/14/2002	14:01	10/21/2002	10/25/2002	10/25/2002	1	4	nd	nd	nd	nd

Table VII: (Continued)Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-878	10/15/2002	2:01	10/21/2002	10/25/2002	10/25/2002	1	4	nd	nd	nd	nd
33114-882	10/15/2002	8:01	10/21/2002	10/06/2003	10/07/2003	1	203	<LOQ[0.007]	nd	nd	nd
33114-884	10/15/2002	11:01	10/21/2002	10/06/2003	10/07/2003	1	203	nd	nd	nd	nd
33114-886	10/15/2002	14:01	10/21/2002	10/25/2002	10/25/2002	1	4	nd	nd	nd	nd
33114-888	10/15/2002	17:01	10/21/2002	10/06/2003	10/07/2003	1	203	nd	nd	nd	nd
33114-890	10/15/2002	20:01	10/21/2002	10/06/2003	10/07/2003	1	203	nd	nd	nd	nd
33114-892	10/15/2002	23:01	10/21/2002	10/06/2003	10/07/2003	1	203	nd	nd	nd	nd
33114-894	10/16/2002	2:01	10/21/2002	10/25/2002	10/25/2002	1	4	nd	nd	nd	nd
33114-896	10/16/2002	5:01	10/21/2002	10/06/2003	10/07/2003	1	203	nd	nd	nd	nd
33114-898	10/16/2002	8:01	10/21/2002	10/06/2003	10/08/2003	1	204	nd	nd	<LOQ[0.008]	nd
33114-900	10/16/2002	11:01	10/21/2002	10/06/2003	10/08/2003	1	204	0.061	nd	0.050	0.064
33114-902	10/16/2002	14:01	10/21/2002	10/25/2002	10/25/2002	1	4	0.019	nd	0.023	0.056
33114-904	10/16/2002	17:01	10/21/2002	10/06/2003	10/08/2003	1	204	nd	nd	nd	nd
33114-906	10/16/2002	20:01	10/21/2002	10/06/2003	10/08/2003	1	204	0.011	nd	0.044	0.024
33114-908	10/16/2002	23:01	10/21/2002	10/06/2003	10/08/2003	1	204	nd	nd	nd	nd
33114-910	10/17/2002	2:01	10/21/2002	10/25/2002	10/25/2002	1	4	nd	nd	nd	nd
33114-918	10/17/2002	14:01	10/21/2002	10/25/2002	10/25/2002	1	4	nd	nd	nd	<LOQ[005]
33114-920	10/17/2002	17:01	10/21/2002	10/06/2003	10/08/2003	1	204	nd	nd	nd	nd
33114-932	10/18/2002	11:01	10/21/2002	10/06/2003	10/08/2003	1	204	nd	nd	nd	nd
33114-948	10/19/2002	11:01	10/21/2002	10/06/2003	10/08/2003	1	204	nd	nd	nd	nd
33114-964	10/20/2002	11:01	10/21/2002	10/06/2003	10/08/2003	1	204	nd	nd	nd	nd
33114-980	10/21/2002	11:01	10/30/2002	10/06/2003	10/08/2003	1	204	nd	nd	0.047	nd
33114-986	10/21/2002	20:01	10/30/2002	3/06/2003	3/07/2003	1	12	nd	nd	nd	nd
33114-988	10/21/2002	23:01	10/30/2002	3/06/2003	3/07/2003	1	12	nd	nd	nd	nd
33114-990	10/22/2002	2:01	10/30/2002	3/06/2003	3/07/2003	1	12	nd	nd	nd	nd
33114-994	10/22/2002	8:01	10/30/2002	3/06/2003	3/07/2003	1	12	nd	nd	nd	nd
33114-996	10/22/2002	11:01	10/30/2002	3/06/2003	3/07/2003	1	12	nd	nd	nd	nd
33114-998	10/22/2002	14:01	10/30/2002	3/06/2003	3/07/2003	1	12	nd	nd	nd	nd
33114-1000	10/22/2002	17:01	10/30/2002	10/06/2003	10/08/2003	1	204	nd	nd	nd	nd
33114-1002	10/22/2002	20:01	10/30/2002	10/06/2003	10/08/2003	1	204	nd	nd	nd	nd
33114-1004	10/22/2002	23:01	10/30/2002	11/08/2003	11/08/2003	1	209	nd	nd	nd	nd
33114-1012	10/23/2002	11:01	10/30/2002	11/08/2003	11/08/2003	1	209	nd	nd	0.010	nd
33114-1044	10/25/2002	11:01	10/30/2002	11/08/2003	11/08/2003	1	209	nd	nd	nd	nd

Table VII: (Continued)Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-1052	10/25/2002	23:01	10/30/2002	11/08/2003	11/08/2003	1	209	nd	nd	nd	nd
33114-1054	10/26/2002	2:01	10/30/2002	11/08/2003	11/08/2003	1	209	nd	nd	nd	nd
33114-1060	10/26/2002	11:01	10/30/2002	11/08/2003	11/08/2003	1	209	nd	nd	nd	nd
33114-1092	10/28/2002	11:01	10/30/2002	7/21/2004	7/26/2004	1	237	nd	nd	nd	nd
33114-1094	10/28/2002	14:01	10/30/2002	7/22/2004	7/26/2004	1	237	nd	nd	nd	nd
33114-1096	10/28/2002	17:01	10/30/2002	6/04/2004	6/06/2004	1	232	nd	nd	nd	nd
33114-1098	10/28/2002	20:01	10/30/2002	7/21/2004	7/26/2004	1	237	nd	nd	nd	nd
33114-1100	10/28/2002	23:01	10/30/2002	7/21/2004	7/26/2004	1	237	nd	nd	nd	nd
33114-1102	10/29/2002	2:01	10/30/2002	7/20/2004	7/26/2004	1	237	nd	nd	nd	nd
33114-1104	10/29/2002	5:01	10/30/2002	7/21/2004	7/26/2004	1	237	nd	nd	nd	nd
33114-1106	10/29/2002	8:01	10/30/2002	6/04/2004	6/06/2004	1	232	nd	nd	nd	nd
33114-1108	10/29/2002	11:01	10/30/2002	7/22/2004	7/26/2004	1	237	nd	nd	nd	nd
33114-1110	10/29/2002	14:01	10/30/2002	6/04/2004	6/06/2004	1	232	nd	nd	nd	nd
33114-1112	10/29/2002	17:01	10/30/2002	7/22/2004	7/26/2004	1	237	nd	nd	nd	nd
33114-1114	10/29/2002	20:01	11/04/2002	11/08/2003	11/08/2003	1	209	nd	nd	nd	nd
33114-1116	10/29/2002	23:01	11/04/2002	3/06/2003	3/07/2003	1	11	nd	nd	nd	nd
33114-1118	10/30/2002	2:01	11/04/2002	3/06/2003	3/07/2003	1	11	nd	nd	nd	nd
33114-1124	10/30/2002	11:01	11/04/2002	11/08/2003	11/08/2003	1	209	nd	nd	nd	nd
33114-1140	10/31/2002	11:01	11/04/2002	11/08/2003	11/08/2003	1	209	nd	nd	nd	nd
33114-1156	11/01/2002	11:01	11/04/2002	11/08/2003	11/08/2003	1	209	nd	nd	nd	nd
33114-1172	11/02/2002	11:01	11/04/2002	11/08/2003	11/08/2003	1	209	nd	nd	nd	nd
33114-1188	11/03/2002	11:01	11/04/2002	11/08/2003	11/08/2003	1	209	nd	nd	nd	nd
33114-1204	11/04/2002	11:01	11/11/2002	11/08/2003	11/08/2003	1	209	nd	nd	nd	nd
33114-1220	11/05/2002	11:01	11/11/2002	3/19/2003	3/19/2003	1	14	nd	nd	nd	nd
33114-1222	11/05/2002	14:01	11/11/2002	3/19/2003	3/19/2003	1	14	nd	nd	nd	nd
33114-1224	11/05/2002	17:01	11/11/2002	3/19/2003	3/19/2003	1	14	nd	nd	<LOQ[0.006]	nd
33114-1226	11/05/2002	20:01	11/11/2002	3/19/2003	3/19/2003	1	14	nd	nd	nd	nd
33114-1228	11/05/2002	23:01	11/11/2002	3/19/2003	3/19/2003	1	14	<LOQ[0.005]	nd	<LOQ[0.006]	<LOQ[0.006]
33114-1230	11/06/2002	2:01	11/11/2002	3/19/2003	3/19/2003	1	14	0.021	nd	nd	<LOQ[0.007]
33114-1232	11/06/2002	5:01	11/11/2002	3/19/2003	3/19/2003	1	14	nd	nd	nd	nd
33114-1234	11/06/2002	8:01	11/11/2002	3/19/2003	3/19/2003	1	14	0.012	nd	<LOQ[0.007]	0.020
33114-1236	11/06/2002	11:01	11/11/2002	3/19/2003	3/19/2003	1	14	nd	nd	nd	0.011
33114-1238	11/06/2002	14:01	11/11/2002	11/08/2003	11/08/2003	1	209	<LOQ[0.004]	nd	0.015	0.016

Table VII: (Continued)Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-1240	11/06/2002	17:01	11/11/2002	11/12/2003	11/12/2003	1	210	nd	nd	<LOQ[0.006]	<LOQ[0.007]
33114-1252	11/07/2002	11:01	11/11/2002	11/12/2003	11/12/2003	1	210	nd	nd	nd	nd
33114-1254	11/07/2002	14:01	11/11/2002	11/12/2003	11/12/2003	1	210	nd	<LOQ[0.004]	<LOQ[0.005]	<LOQ[0.006]
33114-1268	11/08/2002	11:01	11/11/2002	11/12/2003	11/12/2003	1	210	nd	nd	nd	nd
33114-1284	11/09/2002	11:01	11/11/2002	11/12/2003	11/12/2003	1	210	nd	nd	<LOQ[0.004]	<LOQ[0.006]
33114-1300	11/10/2002	11:01	11/11/2002	11/12/2003	11/12/2003	1	210	nd	<LOQ[0.004]	nd	nd
33114-1312	11/11/2002	5:01	11/18/2002	3/06/2003	3/07/2003	1	11	nd	nd	nd	nd
33114-1314	11/11/2002	8:01	11/18/2002	3/06/2003	3/07/2003	1	11	nd	nd	nd	nd
33114-1316	11/11/2002	11:01	11/18/2002	3/06/2003	3/07/2003	1	11	nd	nd	nd	nd
33114-1318	11/11/2002	14:01	11/18/2002	3/06/2003	3/07/2003	1	11	nd	nd	nd	nd
33114-1320	11/11/2002	17:01	11/18/2002	3/06/2003	3/07/2003	1	11	nd	nd	nd	nd
33114-1324	11/11/2002	23:01	11/18/2002	3/06/2003	3/07/2003	1	11	nd	nd	nd	nd
33114-1326	11/12/2002	2:01	11/18/2002	3/06/2003	3/07/2003	1	11	nd	nd	nd	nd
33114-1328	11/12/2002	5:01	11/18/2002	3/06/2003	3/07/2003	1	11	nd	nd	nd	nd
33114-1330	11/12/2002	8:01	11/18/2002	3/06/2003	3/07/2003	1	11	nd	nd	nd	nd
33114-1332	11/12/2002	11:01	11/18/2002	3/06/2003	3/07/2003	1	11	nd	nd	nd	nd
33114-1334	11/12/2002	14:01	11/18/2002	3/06/2003	3/07/2003	1	11	nd	nd	nd	nd
33114-1336	11/12/2002	17:01	11/18/2002	3/06/2003	3/07/2003	1	11	nd	nd	nd	nd
33114-1338	11/12/2002	20:01	11/18/2002	3/14/2003	3/14/2003	1	13	nd	nd	nd	nd
33114-1340	11/12/2002	23:01	11/18/2002	3/14/2003	3/14/2003	1	13	nd	nd	nd	nd
33114-1348	11/13/2002	11:01	11/18/2002	11/12/2003	11/12/2003	1	210	nd	nd	nd	nd
33114-1364	11/14/2002	11:01	11/18/2002	11/12/2003	11/12/2003	1	210	nd	nd	nd	nd
33114-1380	11/15/2002	11:01	11/18/2002	11/12/2003	11/12/2003	1	210	nd	nd	nd	nd
33114-1392	11/16/2002	5:01	11/18/2002	3/06/2003	3/07/2003	1	12	nd	nd	nd	nd
33114-1394	11/16/2002	8:01	11/18/2002	3/06/2003	3/07/2003	1	12	nd	nd	nd	nd
33114-1396	11/16/2002	11:01	11/18/2002	3/06/2003	3/07/2003	1	12	nd	nd	nd	nd
33114-1398	11/16/2002	14:01	11/18/2002	3/06/2003	3/07/2003	1	12	nd	nd	nd	nd
33114-1400	11/16/2002	17:01	11/18/2002	3/06/2003	3/07/2003	1	12	nd	nd	nd	nd
33114-1402	11/16/2002	20:01	11/18/2002	3/06/2003	3/07/2003	1	12	nd	nd	nd	nd
33114-1404	11/16/2002	23:01	11/18/2002	3/06/2003	3/07/2003	1	12	nd	nd	nd	nd
33114-1406	11/17/2002	2:01	11/18/2002	3/06/2003	3/07/2003	1	12	nd	nd	nd	nd
33114-1408	11/17/2002	5:01	11/18/2002	3/06/2003	3/07/2003	1	12	nd	nd	nd	nd
33114-1410	11/17/2002	8:01	11/18/2002	3/06/2003	3/07/2003	1	12	nd	nd	nd	nd

Table VII: (Continued)Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-1412	11/17/2002	11:01	11/18/2002	3/06/2003	3/07/2003	1	12	nd	nd	nd	nd
33114-1414	11/17/2002	14:01	11/18/2002	3/06/2003	3/07/2003	1	12	nd	nd	nd	nd
33114-1416	11/17/2002	17:01	11/18/2002	11/12/2003	11/12/2003	1	210	nd	nd	nd	nd
33114-1418	11/17/2002	20:01	11/25/2002	11/12/2003	11/12/2003	1	210	nd	nd	nd	nd
33114-1420	11/17/2002	23:01	11/25/2002	11/12/2003	11/12/2003	1	210	nd	nd	nd	nd
33114-1428	11/18/2002	11:01	11/25/2002	11/13/2003	11/16/2003	1	211	nd	nd	nd	nd
33114-1460	11/20/2002	11:01	11/25/2002	11/13/2003	11/16/2003	1	211	nd	nd	nd	nd
33114-1492	11/22/2002	11:01	11/25/2002	11/13/2003	11/16/2003	1	211	nd	nd	nd	nd
33114-1524	11/24/2002	11:01	11/25/2002	11/13/2003	11/16/2003	1	211	nd	nd	nd	nd
33114-1556	11/26/2002	11:01	12/2/2002	11/13/2003	11/16/2003	1	211	nd	nd	nd	nd
33114-1660	12/02/2002	11:01	12/12/2002	11/13/2003	11/16/2003	1	211	nd	nd	nd	nd
33114-1686	12/04/2002	2:01	12/12/2002	11/13/2003	11/16/2003	1	211	nd	nd	nd	nd
33114-1688	12/04/2002	5:01	12/12/2002	11/13/2003	11/16/2003	1	211	nd	nd	nd	nd
33114-1690	12/04/2002	8:01	12/12/2002	11/13/2003	11/16/2003	1	211	nd	nd	nd	nd
33114-1692	12/04/2002	11:01	12/12/2002	11/13/2003	11/16/2003	1	211	nd	nd	nd	nd
33114-1694	12/04/2002	14:01	12/12/2002	1/15/2004	1/16/2004	1	221	nd	nd	nd	nd
33114-1696	12/04/2002	17:01	12/12/2002	1/15/2004	1/16/2004	1	221	nd	nd	nd	nd
33114-1698	12/06/2002	20:01	12/12/2002	1/15/2004	1/16/2004	1	221	nd	nd	nd	nd
33114-1700	12/06/2002	23:01	12/12/2002	1/15/2004	1/16/2004	1	221	nd	nd	nd	nd
33114-1712	12/07/2002	17:01	12/12/2002	1/15/2004	1/16/2004	1	221	nd	nd	nd	nd
33114-1756	12/10/2002	11:01	12/12/2002	1/15/2004	1/16/2004	1	221	nd	nd	nd	nd
33114-1764	12/10/2002	23:01	12/12/2002	3/14/2003	3/14/2003	1	13	nd	nd	nd	nd
33114-1766	12/11/2002	2:01	12/12/2002	3/14/2003	3/14/2003	1	13	nd	nd	nd	nd
33114-1768	12/11/2002	5:01	12/12/2002	3/05/2003	3/05/2003	1	10	nd	nd	nd	nd
33114-1770	12/11/2002	8:01	12/12/2002	3/14/2003	3/14/2003	1	13	<LOQ[0.008]	nd	0.013	0.020
33114-1772	12/11/2002	11:01	12/12/2002	3/14/2003	3/14/2003	1	13	nd	nd	nd	nd
33114-1774	12/11/2002	14:01	12/12/2002	3/14/2003	3/14/2003	1	13	nd	nd	nd	nd
33114-1788	12/12/2002	11:01	12/20/2002	1/15/2004	1/16/2004	1	221	nd	nd	nd	nd
33114-1794	12/13/2002	2:16	12/20/2002	1/15/2004	1/16/2004	1	221	nd	nd	nd	nd
33114-1796	12/13/2002	8:16	12/20/2002	1/15/2004	1/16/2004	1	221	nd	nd	nd	nd
33114-1798	12/13/2002	14:16	12/20/2002	1/15/2004	1/16/2004	1	221	nd	nd	nd	nd
33114-1800	12/13/2002	20:16	12/20/2002	1/15/2004	1/16/2004	1	221	nd	nd	nd	nd
33114-1802	12/14/2002	2:16	12/20/2002	12/08/2003	12/11/2003	1	212	nd	nd	nd	nd

Table VII: (Continued)Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-1804	12/14/2002	8:16	12/20/2002	12/08/2003	12/11/2003	1	212	nd	nd	nd	nd
33114-1806	12/14/2002	14:16	12/20/2002	12/08/2003	12/11/2003	1	212	nd	nd	nd	nd
33114-1810	12/15/2002	2:16	12/20/2002	12/08/2003	12/11/2003	1	212	nd	nd	nd	nd
33114-1822	12/17/2002	18:26	12/20/2002	12/08/2003	12/11/2003	1	212	nd	nd	nd	nd
33114-1836	12/19/2002	13:38	12/20/2002	12/08/2003	12/11/2003	1	212	nd	nd	nd	nd
33114-1840	12/20/2002	1:38	1/03/2003	12/08/2003	12/11/2003	1	212	nd	nd	nd	nd
33114-1842	12/20/2002	7:38	1/03/2003	12/08/2003	12/11/2003	1	212	nd	nd	nd	nd
33114-1844	12/20/2002	13:38	1/03/2003	12/08/2003	12/11/2003	1	212	nd	nd	nd	nd
33114-1846	12/20/2002	19:38	1/03/2003	12/08/2003	12/11/2003	1	212	nd	nd	nd	nd
33114-1848	12/21/2002	1:38	1/03/2003	12/08/2003	12/11/2003	1	212	nd	nd	nd	nd
33114-1850	12/21/2002	7:38	1/03/2003	12/08/2003	12/11/2003	1	212	nd	nd	nd	nd
33114-1852	12/21/2002	13:38	1/03/2003	12/08/2003	12/11/2003	1	212	nd	nd	nd	nd
33114-1880	12/23/2002	11:05	1/03/2003	12/08/2003	12/11/2003	1	212	nd	nd	nd	nd
33114-1892	12/24/2002	3:58	1/03/2003	3/19/2003	3/19/2003	1	14	nd	nd	nd	nd
33114-1894	12/24/2002	9:58	1/03/2003	3/19/2003	3/19/2003	1	14	nd	nd	nd	nd
33114-1896	12/24/2002	15:58	1/03/2003	3/19/2003	3/19/2003	1	14	nd	nd	nd	nd
33114-1898	12/24/2002	21:58	1/03/2003	3/19/2003	3/19/2003	1	14	nd	nd	nd	nd
33114-1900	12/25/2002	3:58	1/03/2003	3/19/2003	3/19/2003	1	14	nd	nd	nd	nd
33114-1902	12/25/2002	9:58	1/03/2003	1/23/2004	1/23/2004	1	239	nd	nd	nd	nd
33114-1904	12/25/2002	15:58	1/03/2003	1/23/2004	1/23/2004	1	239	nd	nd	nd	nd
33114-1924	12/28/2002	13:55	1/03/2003	1/23/2004	1/23/2004	1	239	nd	nd	nd	nd
33114-1958	12/31/2002	12:45	1/03/2003	2/23/2004	2/23/2004	1	218	nd	nd	nd	nd
33114-1964	1/01/2003	5:03	1/03/2003	1/23/2004	1/23/2004	1	239	nd	nd	nd	nd
33114-1966	1/01/2003	11:03	1/03/2003	2/23/2004	2/23/2004	1	218	nd	nd	nd	nd
33114-1968	1/01/2003	17:03	1/03/2003	1/23/2004	1/23/2004	1	239	nd	nd	nd	nd
33114-1970	1/01/2003	23:03	1/03/2003	2/16/2004	2/20/2004	1	217	nd	nd	nd	<LOQ[0.005]
33114-1974	1/02/2003	11:03	1/03/2003	2/16/2004	2/20/2004	1	217	nd	nd	nd	nd
33114-1982	1/03/2003	11:03	1/20/2003	7/20/2004	7/26/2004	1	237	nd	nd	nd	nd
33114-2196	1/30/2003	na	2/11/2003	2/16/2004	2/20/2004	1	217	nd	nd	nd	nd
33114-2198	1/31/2003	na	2/11/2003	2/16/2004	2/20/2004	1	217	nd	nd	nd	nd
33114-2206	2/04/2003	na	2/11/2003	2/16/2004	2/20/2004	1	217	nd	nd	nd	nd
33114-2208	2/05/2003	na	2/11/2003	2/16/2004	2/20/2004	1	217	nd	nd	nd	nd
33114-2210	2/06/2003	na	2/11/2003	2/16/2004	2/20/2004	1	217	nd	nd	nd	nd

Table VII: (Continued)Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-2212	2/07/2003	na	2/11/2003	2/16/2004	2/20/2004	1	217	nd	nd	nd	nd
33114-2214	2/08/2003	na	2/11/2003	2/16/2004	2/20/2004	1	217	nd	nd	nd	nd
33114-2218	2/10/2003	na	2/11/2003	2/16/2004	2/20/2004	1	217	nd	nd	nd	nd
33114-2240	2/14/2003	21:02	2/24/2003	2/20/2004	2/22/2004	1	215	nd	nd	nd	nd
33114-2242	2/15/2003	3:02	2/24/2003	2/20/2004	2/22/2004	1	215	nd	nd	nd	nd
33114-2244	2/15/2003	9:02	2/24/2003	2/20/2004	2/22/2004	1	215	nd	nd	nd	nd
33114-2246	2/15/2003	15:02	2/24/2003	2/20/2004	2/22/2004	1	215	nd	nd	nd	nd
33114-2268	2/22/2003	3:02	3/06/2003	6/04/2004	6/06/2004	1	232	nd	nd	nd	nd
33114-2270	2/22/2003	9:02	3/06/2003	6/04/2004	6/06/2004	1	232	nd	nd	nd	nd
33114-2272	2/22/2003	15:02	3/06/2003	6/04/2004	6/06/2004	1	232	nd	nd	nd	nd
33114-2280	2/25/2003	2:09	3/06/2003	6/04/2004	6/06/2004	1	232	nd	nd	nd	nd
33114-2282	2/25/2003	8:09	3/06/2003	6/04/2004	6/06/2004	1	232	nd	nd	nd	nd
33114-2284	2/25/2003	14:09	3/06/2003	6/04/2004	6/06/2004	1	232	0.031	nd	nd	nd
33114-2286	2/25/2003	20:09	3/06/2003	6/04/2004	6/06/2004	1	232	0.017	nd	nd	nd
33114-2288	2/26/2003	2:09	3/06/2003	6/04/2004	6/06/2004	1	232	0.015	nd	nd	nd
33114-2290	2/26/2003	8:09	3/06/2003	6/04/2004	6/06/2004	1	232	0.013	nd	nd	nd
33114-2292	2/26/2003	14:09	3/06/2003	6/04/2004	6/06/2004	1	232	0.016	nd	nd	nd
33114-2294	2/26/2003	20:09	3/06/2003	6/04/2004	6/06/2004	1	232	nd	nd	nd	nd
33114-2296	2/27/2003	2:09	3/06/2003	6/04/2004	6/06/2004	1	232	nd	nd	nd	nd
33114-2298	2/27/2003	8:09	3/06/2003	6/04/2004	6/06/2004	1	232	nd	nd	nd	nd
33114-2300	2/27/2003	14:09	3/06/2003	6/04/2004	6/06/2004	1	232	nd	nd	nd	nd
33114-2302	2/27/2003	20:09	3/06/2003	6/04/2004	6/06/2004	1	232	nd	nd	nd	nd
33114-2313	3/01/2003	2:09	3/06/2003	6/04/2004	6/06/2004	2	232	nd	nd	nd	nd
33114-2317	3/01/2003	14:09	3/06/2003	2/20/2004	2/22/2004	2	215	nd	nd	nd	nd
33114-2344	3/05/2003	3:29	3/06/2003	2/20/2004	2/22/2004	1	215	nd	nd	nd	nd
33114-2346	3/05/2003	9:29	3/06/2003	2/20/2004	2/22/2004	1	215	nd	nd	nd	nd
33114-2348	3/05/2003	15:29	3/06/2003	2/20/2004	2/22/2004	1	215	nd	nd	nd	nd
33114-2350	3/05/2003	21:29	3/06/2003	2/20/2004	2/22/2004	1	215	nd	nd	nd	nd
33114-2352	3/06/2003	3:29	3/13/2003	2/11/2004	2/11/2004	1	214	nd	nd	nd	nd
33114-2354	3/06/2003	9:29	3/13/2003	2/11/2004	2/11/2004	1	214	nd	nd	nd	nd
33114-2356	3/06/2003	15:29	3/13/2003	2/11/2004	2/11/2004	1	214	nd	nd	nd	nd
33114-2358	3/06/2003	21:29	3/13/2003	2/11/2004	2/11/2004	1	214	nd	nd	nd	nd
33114-2446	3/12/2003	15:29	3/13/2003	2/19/2004	2/21/2004	1	216	nd	nd	nd	nd

Table VII: (Continued)Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-2462	3/14/2003	15:29	4/15/2003	3/26/2004	3/27/2004	1	222	nd	nd	nd	nd
33114-2464	3/14/2003	21:29	4/15/2003	3/26/2004	3/27/2004	1	222	nd	nd	nd	nd
33114-2467	3/15/2003	3:29	4/15/2003	3/26/2004	3/27/2004	2	222	nd	nd	nd	nd
33114-2469	3/15/2003	9:29	4/15/2003	3/26/2004	3/27/2004	2	222	nd	nd	nd	nd
33114-2473	3/15/2003	21:29	4/15/2003	3/26/2004	3/27/2004	2	222	nd	nd	nd	nd
33114-2475	3/16/2003	3:29	4/15/2003	3/26/2004	3/27/2004	2	222	nd	nd	nd	nd
33114-2478	3/16/2003	15:29	4/15/2003	3/26/2004	3/27/2004	1	222	<LOQ[0.004]	nd	0.018	0.035
33114-2480	3/16/2003	21:29	4/15/2003	3/26/2004	3/27/2004	1	222	nd	nd	0.013	0.021
33114-2484	3/17/2003	9:29	4/15/2003	3/26/2004	3/27/2004	1	222	nd	nd	nd	nd
33114-2486	3/17/2003	15:29	4/15/2003	3/26/2004	3/27/2004	1	222	nd	nd	<LOQ[0.006]	<LOQ[0.006]
33114-2490	3/18/2003	3:29	4/15/2003	3/26/2004	3/27/2004	1	222	<LOQ[0.006]	<LOQ[0.005]	<LOQ[0.004]	nd
33114-2492	3/18/2003	9:29	4/15/2003	3/26/2004	3/27/2004	1	222	nd	nd	<LOQ[0.007]	<LOQ[0.006]
33114-2496	3/18/2003	21:29	4/15/2003	3/26/2004	3/27/2004	1	222	nd	nd	<LOQ[0.007]	nd
33114-2498	3/19/2003	3:29	4/15/2003	3/26/2004	3/27/2004	1	222	nd	nd	nd	nd
33114-2502	3/19/2003	15:29	4/15/2003	3/26/2004	3/27/2004	1	222	<LOQ[0.004]	nd	nd	nd
33114-2504	3/19/2003	21:29	4/15/2003	3/26/2004	3/27/2004	1	222	nd	nd	nd	nd
33114-2508	3/20/2003	9:29	4/15/2003	3/26/2004	3/27/2004	1	222	nd	nd	nd	nd
33114-2510	3/20/2003	15:29	4/15/2003	3/26/2004	3/27/2004	1	222	nd	nd	nd	nd
33114-2568	3/29/2003	3:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2570	3/29/2003	9:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2572	3/29/2003	15:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2574	3/29/2003	21:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2576	3/30/2003	3:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2578	3/30/2003	9:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	<LOQ[0.007]
33114-2580	3/30/2003	15:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2582	3/30/2003	21:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2620	4/04/2003	15:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2622	4/04/2003	21:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2626	4/05/2003	9:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2628	4/05/2003	15:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2632	4/06/2003	3:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2634	4/06/2003	9:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2638	4/06/2003	21:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd

Table VII: (Continued)Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-2640	4/07/2003	3:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2644	4/07/2003	15:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2646	4/07/2003	21:29	4/15/2003	3/29/2004	4/02/2004	1	226	<LOQ[0.006]	nd	nd	nd
33114-2650	4/08/2003	9:29	4/15/2003	3/29/2004	4/02/2004	1	226	<LOQ[0.009]	nd	nd	nd
33114-2652	4/08/2003	15:29	4/15/2003	3/29/2004	4/02/2004	1	226	<LOQ[0.006]	nd	nd	nd
33114-2656	4/9/2003	3:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2658	4/09/2003	9:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2662	4/09/2003	21:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2664	4/10/2003	3:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2668	4/10/2003	15:29	4/15/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2670	4/10/2003	21:29	5/21/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2674	4/11/2003	9:29	5/21/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2676	4/11/2003	15:29	5/21/2003	3/29/2004	4/02/2004	1	226	<LOQ[0.005]	nd	nd	nd
33114-2678	4/11/2003	21:29	5/21/2003	3/29/2004	4/02/2004	1	226	<LOQ[0.004]	nd	nd	nd
33114-2720	4/17/2003	3:29	5/21/2003	3/29/2004	4/02/2004	1	226	nd	nd	nd	nd
33114-2722	4/17/2003	9:29	5/21/2003	3/30/2004	3/31/2004	1	225	nd	nd	nd	nd
33114-2724	4/17/2003	15:29	5/21/2003	3/30/2004	3/31/2004	1	225	nd	nd	nd	nd
33114-2726	4/17/2003	21:29	5/21/2003	3/30/2004	3/31/2004	1	225	nd	nd	nd	nd
33114-2728	4/18/2003	3:29	5/21/2003	3/30/2004	3/31/2004	1	225	nd	nd	nd	nd
33114-2730	4/18/2003	9:29	5/21/2003	3/30/2004	3/31/2004	1	225	nd	nd	nd	nd
33114-2732	4/18/2003	15:29	5/21/2003	3/30/2004	3/31/2004	1	225	nd	nd	nd	nd
33114-2734	4/18/2003	21:29	5/21/2003	3/30/2004	3/31/2004	1	225	nd	nd	nd	nd
33114-2736	4/19/2003	3:29	5/21/2003	3/30/2004	3/31/2004	1	225	nd	nd	nd	nd
33114-2788	4/25/2003	15:29	5/21/2003	3/30/2004	3/31/2004	1	225	nd	nd	nd	nd
33114-2868	5/02/2003	15:29	5/21/2003	3/30/2004	3/31/2004	1	225	nd	nd	nd	nd
33114-2892	5/05/2003	15:29	5/21/2003	3/30/2004	3/31/2004	1	225	nd	nd	nd	nd
33114-2894	5/05/2003	21:29	5/21/2003	3/30/2004	3/31/2004	1	225	nd	nd	nd	nd
33114-2945	5/15/2003	3:29	5/21/2003	3/30/2004	3/31/2004	2	225	nd	nd	nd	nd
33114-2947	5/15/2003	9:29	5/21/2003	3/30/2004	3/31/2004	2	225	nd	nd	nd	nd
33114-2949	5/15/2003	15:29	5/21/2003	3/30/2004	3/31/2004	2	225	nd	nd	nd	nd
33114-2951	5/15/2003	21:29	5/21/2003	3/30/2004	3/31/2004	2	225	nd	nd	nd	nd
33114-2953	5/16/2003	3:29	5/21/2003	3/30/2004	3/31/2004	2	223	nd	nd	nd	nd
33114-2955	5/16/2003	9:29	5/21/2003	3/30/2004	3/31/2004	2	223	nd	nd	nd	nd

Table VII: (Continued)Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-2957	5/16/2003	15:29	5/21/2003	3/30/2004	3/31/2004	2	223	nd	nd	nd	nd
33114-2959	5/16/2003	21:29	5/21/2003	3/30/2004	3/31/2004	2	223	nd	nd	nd	nd
33114-2972	5/18/2003	15:29	5/21/2003	3/30/2004	3/31/2004	1	223	nd	nd	nd	nd
33114-2980	5/19/2003	15:29	7/01/2003	3/30/2004	3/31/2004	1	223	nd	nd	nd	nd
33114-2992	5/21/2003	3:29	7/01/2003	3/30/2004	3/31/2004	1	223	nd	nd	nd	nd
33114-2994	5/21/2003	9:29	7/01/2003	3/30/2004	3/31/2004	1	223	nd	nd	nd	nd
33114-2996	5/21/2003	15:29	7/01/2003	3/30/2004	3/31/2004	1	223	nd	nd	nd	nd
33114-2998	5/21/2003	21:29	7/01/2003	3/30/2004	3/31/2004	1	223	nd	nd	nd	nd
33114-3000	5/22/2003	3:29	7/01/2003	3/30/2004	3/31/2004	1	223	nd	nd	nd	nd
33114-3002	5/22/2003	9:29	7/01/2003	3/30/2004	3/31/2004	1	223	nd	nd	nd	nd
33114-3004	5/22/2003	15:29	7/01/2003	3/30/2004	3/31/2004	1	223	nd	nd	nd	nd
33114-3006	5/22/2003	21:29	7/01/2003	3/30/2004	3/31/2004	1	223	nd	nd	nd	nd
33114-3008	5/23/2003	3:29	7/01/2003	3/30/2004	3/31/2004	1	223	nd	nd	nd	nd
33114-3010	5/23/2003	9:29	7/01/2003	3/30/2004	3/31/2004	1	223	nd	nd	nd	nd
33114-3012	5/23/2003	15:29	7/01/2003	3/30/2004	3/31/2004	1	224	nd	nd	nd	nd
33114-3014	5/23/2003	21:29	7/01/2003	3/30/2004	3/31/2004	1	224	nd	nd	nd	nd
33114-3016	5/24/2003	3:29	7/01/2003	3/30/2004	3/31/2004	1	224	nd	nd	nd	nd
33114-3018	5/24/2003	9:29	7/01/2003	3/30/2004	3/31/2004	1	224	nd	nd	nd	nd
33114-3020	5/24/2003	15:29	7/01/2003	3/30/2004	3/31/2004	1	224	nd	nd	nd	nd
33114-3022	5/24/2003	21:29	7/01/2003	3/30/2004	3/31/2004	1	224	nd	nd	nd	nd
33114-3024	5/25/2003	3:29	7/01/2003	3/30/2004	3/31/2004	1	224	nd	nd	nd	nd
33114-3026	5/25/2003	9:29	7/01/2003	3/30/2004	3/31/2004	1	224	nd	nd	nd	nd
33114-3028	5/25/2003	15:29	7/01/2003	3/30/2004	3/31/2004	1	224	nd	nd	nd	nd
33114-3030	5/25/2003	21:29	7/01/2003	3/30/2004	3/31/2004	1	224	nd	nd	nd	nd
33114-3032	5/26/2003	3:29	7/01/2003	3/30/2004	3/31/2004	1	224	nd	nd	nd	nd
33114-3034	5/26/2003	9:29	7/01/2003	3/30/2004	3/31/2004	1	224	nd	nd	nd	nd
33114-3036	5/26/2003	15:29	7/01/2003	3/30/2004	3/31/2004	1	224	nd	nd	nd	nd
33114-3038	5/26/2003	21:29	7/01/2003	3/30/2004	3/31/2004	1	224	nd	nd	nd	nd
33114-3060	5/29/2003	15:29	7/01/2003	3/30/2004	3/31/2004	1	224	nd	nd	nd	nd
33114-3076	5/31/2003	15:29	7/01/2003	4/20/2004	4/20/2004	1	230	nd	nd	nd	nd
33114-3100	6/03/2003	15:29	7/01/2003	4/20/2004	4/20/2004	1	230	nd	nd	nd	nd
33114-3108	6/04/2003	15:29	7/01/2003	4/20/2004	4/20/2004	1	230	nd	nd	nd	nd
33114-3124	6/06/2003	15:29	7/01/2003	4/20/2004	4/20/2004	1	230	nd	nd	nd	nd

Table VII: (Continued)Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-3132	6/07/2003	15:29	7/01/2003	4/20/2004	4/20/2004	1	230	nd	nd	nd	nd
33114-3134	6/07/2003	21:29	7/01/2003	4/20/2004	4/20/2004	1	230	nd	nd	nd	nd
33114-3172	6/12/2003	15:29	7/01/2003	4/20/2004	4/20/2004	1	230	nd	nd	nd	nd
33114-3200	6/16/2003	3:29	7/01/2003	4/20/2004	4/20/2004	1	230	nd	nd	nd	nd
33114-3202	6/16/2003	9:29	7/01/2003	4/20/2004	4/20/2004	1	230	nd	nd	nd	nd
33114-3204	6/16/2003	15:29	7/01/2003	4/20/2004	4/20/2004	1	230	nd	nd	nd	nd
33114-3206	6/16/2003	21:29	7/01/2003	4/20/2004	4/20/2004	1	230	nd	nd	nd	nd
33114-3208	6/17/2003	3:29	7/01/2003	4/20/2004	4/20/2004	1	230	nd	nd	nd	nd
33114-3210	6/17/2003	9:29	7/01/2003	4/20/2004	4/20/2004	1	231	nd	nd	nd	nd
33114-3212	6/17/2003	14:17	7/01/2003	4/20/2004	4/20/2004	1	231	nd	nd	nd	nd
33114-3214	6/17/2003	17:17	7/01/2003	4/20/2004	4/20/2004	1	231	nd	nd	nd	nd
33114-3216	6/17/2003	20:17	7/01/2003	9/25/2003	9/26/2003	1	201	<LOQ[0.007]	nd	nd	nd
33114-3218	6/17/2003	23:17	7/01/2003	9/25/2003	9/26/2003	1	201	<LOQ[0.006]	nd	nd	nd
33114-3220	6/18/2003	2:17	7/01/2003	9/25/2003	9/26/2003	1	201	<LOQ[0.006]	nd	nd	nd
33114-3222	6/18/2003	5:17	7/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3224	6/18/2003	8:17	7/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3226	6/18/2003	11:17	7/01/2003	4/20/2004	4/20/2004	1	231	<LOQ[0.006]	nd	nd	nd
33114-3228	6/18/2003	14:17	7/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3230	6/18/2003	17:17	7/01/2003	9/25/2003	9/26/2003	1	201	0.016	nd	nd	nd
33114-3232	6/18/2003	20:17	7/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3234	6/18/2003	23:17	7/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3236	6/19/2003	2:17	7/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3238	6/19/2003	5:17	7/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3240	6/19/2003	8:17	7/01/2003	4/20/2004	4/20/2004	1	231	nd	nd	nd	nd
33114-3242	6/19/2003	11:17	7/01/2003	4/20/2004	4/20/2004	1	231	nd	nd	nd	nd
33114-3244	6/19/2003	14:17	7/01/2003	4/20/2004	4/20/2004	1	231	nd	nd	nd	nd
33114-3246	6/19/2003	17:17	7/01/2003	4/20/2004	4/20/2004	1	231	nd	nd	nd	nd
33114-3248	6/19/2003	20:17	7/01/2003	4/20/2004	4/20/2004	1	231	nd	nd	nd	nd
33114-3250	6/19/2003	23:17	7/01/2003	4/20/2004	4/20/2004	1	231	nd	nd	nd	nd
33114-3252	6/20/2003	2:17	7/01/2003	4/20/2004	4/20/2004	1	231	nd	nd	nd	nd
33114-3254	6/20/2003	5:17	7/01/2003	4/20/2004	4/20/2004	1	231	nd	nd	nd	nd
33114-3256	6/20/2003	8:17	7/01/2003	4/22/2004	4/22/2004	1	227	nd	nd	nd	nd
33114-3258	6/20/2003	11:17	7/01/2003	4/22/2004	4/22/2004	1	227	nd	nd	nd	nd

Table VII: (Continued)Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-3260	6/20/2003	14:17	7/01/2003	4/22/2004	4/22/2004	1	227	nd	nd	nd	nd
33114-3262	6/20/2003	17:17	7/01/2003	7/20/2004	7/26/2004	1	237	nd	nd	nd	nd
33114-3264	6/20/2003	20:17	7/01/2003	4/22/2004	4/22/2004	1	227	nd	nd	<LOQ[0.008]	nd
33114-3266	6/20/2003	23:17	7/01/2003	4/22/2004	4/22/2004	1	227	nd	nd	nd	nd
33114-3268	6/21/2003	2:17	7/01/2003	4/22/2004	4/22/2004	1	227	nd	nd	nd	nd
33114-3270	6/21/2003	5:17	7/01/2003	4/22/2004	4/22/2004	1	227	nd	nd	nd	nd
33114-3272	6/21/2003	8:17	7/01/2003	4/22/2004	4/22/2004	1	227	nd	nd	nd	nd
33114-3274	6/21/2003	11:17	7/01/2003	4/22/2004	4/22/2004	1	227	nd	nd	nd	nd
33114-3276	6/21/2003	14:17	7/01/2003	4/22/2004	4/22/2004	1	227	nd	nd	nd	nd
33114-3278	6/21/2003	17:17	7/01/2003	4/22/2004	4/22/2004	1	227	nd	nd	nd	nd
33114-3280	6/21/2003	20:17	7/01/2003	4/22/2004	4/22/2004	1	227	nd	nd	nd	nd
33114-3282	6/21/2003	23:17	7/01/2003	4/22/2004	4/22/2004	1	228	nd	nd	nd	nd
33114-3309	6/23/2003	14:17	7/01/2003	4/22/2004	4/22/2004	2	228	nd	nd	nd	nd
33114-3324	6/24/2003	14:17	7/01/2003	4/22/2004	4/22/2004	1	228	nd	nd	nd	nd
33114-3372	6/27/2003	14:17	7/01/2003	4/22/2004	4/22/2004	1	228	nd	nd	nd	nd
33114-3380	6/28/2003	2:17	7/01/2003	4/22/2004	4/22/2004	1	228	nd	nd	nd	nd
33114-3382	6/28/2003	5:17	7/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3384	6/28/2003	8:17	7/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3386	6/28/2003	11:17	7/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3388	6/28/2003	14:17	7/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3404	6/29/2003	14:17	7/01/2003	4/22/2004	4/22/2004	1	228	nd	nd	nd	nd
33114-3412	6/30/2003	2:17	8/01/2003	4/22/2004	4/22/2004	1	228	nd	nd	nd	nd
33114-3414	6/30/2003	5:17	8/01/2003	4/22/2004	4/22/2004	1	228	nd	nd	nd	nd
33114-3416	6/30/2003	8:17	8/01/2003	4/22/2004	4/22/2004	1	228	nd	nd	nd	nd
33114-3418	6/30/2003	11:17	8/01/2003	4/22/2004	4/22/2004	1	228	nd	nd	nd	nd
33114-3420	6/30/2003	14:17	8/01/2003	4/22/2004	4/22/2004	1	228	nd	nd	nd	nd
33114-3422	6/30/2003	17:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3424	6/30/2003	20:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3426	6/30/2003	23:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3428	7/01/2003	2:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3430	7/01/2003	5:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3432	7/01/2003	8:17	8/01/2003	4/22/2004	4/22/2004	1	228	nd	nd	nd	nd
33114-3434	7/01/2003	11:17	8/01/2003	4/13/2004	4/14/2004	1	236	nd	nd	nd	nd

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Table VII: (Continued)Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-3436	7/01/2003	14:17	8/01/2003	4/13/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3438	7/01/2003	17:17	8/01/2003	4/13/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3440	7/01/2003	20:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3442	7/01/2003	23:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3444	7/02/2003	2:17	8/01/2003	9/25/2003	9/26/2003	1	201	<LOQ[0.007]	nd	nd	nd
33114-3446	7/02/2003	5:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3448	7/02/2003	8:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3450	7/02/2003	11:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3452	7/02/2003	14:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3454	7/02/2003	17:17	8/01/2003	4/13/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3456	7/02/2003	20:17	8/01/2003	4/13/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3458	7/02/2003	23:17	8/01/2003	4/13/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3492	7/05/2003	2:17	8/01/2003	4/13/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3496	7/05/2003	8:17	8/01/2003	4/13/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3500	7/05/2003	14:17	8/01/2003	4/13/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3504	7/05/2003	20:17	8/01/2003	4/13/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3508	7/06/2003	2:17	8/01/2003	4/13/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3512	7/06/2003	8:17	8/01/2003	4/13/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3516	7/06/2003	14:17	8/01/2003	4/14/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3520	7/06/2003	20:17	8/01/2003	4/14/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3524	7/07/2003	2:17	8/01/2003	4/14/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3572	7/10/2003	2:17	8/01/2003	4/14/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3574	7/10/2003	5:17	8/01/2003	4/14/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3576	7/10/2003	8:17	8/01/2003	4/14/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3578	7/10/2003	11:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3580	7/10/2003	14:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3582	7/10/2003	17:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3584	7/10/2003	20:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3586	7/10/2003	23:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3588	7/11/2003	2:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3596	7/11/2003	14:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3598	7/11/2003	17:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd
33114-3600	7/11/2003	20:17	8/01/2003	9/25/2003	9/26/2003	1	201	nd	nd	nd	nd

Table VII: (Continued)Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-3602	7/11/2003	23:17	8/01/2003	9/26/2003	9/27/2003	1	202	nd	nd	nd	nd
33114-3604	7/12/2003	2:17	8/01/2003	9/26/2003	9/27/2003	1	202	nd	nd	nd	nd
33114-3606	7/12/2003	5:17	8/01/2003	9/26/2003	9/27/2003	1	202	nd	nd	nd	nd
33114-3608	7/12/2003	8:17	8/01/2003	9/26/2003	9/27/2003	1	202	<LOQ[0.004]	nd	nd	nd
33114-3610	7/12/2003	11:17	8/01/2003	9/26/2003	9/27/2003	1	202	<LOQ[0.005]	nd	nd	nd
33114-3612	7/12/2003	14:17	8/01/2003	9/26/2003	9/27/2003	1	202	<LOQ[0.004]	nd	nd	nd
33114-3614	7/12/2003	17:17	8/01/2003	4/14/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3616	7/12/2003	20:17	8/01/2003	4/14/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3618	7/12/2003	23:17	8/01/2003	4/14/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3620	7/13/2003	2:17	8/01/2003	4/14/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3622	7/13/2003	5:17	8/01/2003	4/14/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3624	7/13/2003	8:17	8/01/2003	4/14/2004	4/14/2004	1	236	nd	nd	nd	nd
33114-3626	7/13/2003	11:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3628	7/13/2003	14:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3630	7/13/2003	17:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3632	7/13/2003	20:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3634	7/13/2003	23:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3636	7/14/2003	2:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3638	7/14/2003	5:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3660	7/15/2003	14:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3676	7/16/2003	14:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3692	7/17/2003	14:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3716	7/19/2003	2:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3718	7/19/2003	5:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3720	7/19/2003	8:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3722	7/19/2003	11:17	8/01/2003	4/15/2004	4/15/2004	1	229	<LOQ[0.005]	nd	nd	nd
33114-3724	7/19/2003	14:17	8/01/2003	4/15/2004	4/15/2004	1	229	<LOQ[0.007]	nd	nd	nd
33114-3726	7/19/2003	17:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3728	7/19/2003	20:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3730	7/19/2003	23:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3732	7/20/2003	2:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3734	7/20/2003	5:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3736	7/20/2003	8:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd

Table VII: (Continued)Fipronil-Related Residues in Surface Water from Culvert Sampling Location Resulting from Runoff Following Broadcast Application of TopChoice® brand insecticide

Sample ID	Date Sampled	Time Sampled	Date Received	Date Extracted	Date Analyzed	Replicate	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-3738	7/20/2003	11:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3740	7/20/2003	14:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd
33114-3742	7/20/2003	17:17	8/01/2003	4/15/2004	4/15/2004	1	229	nd	nd	nd	nd

1. Result is average of duplicate determinations

There were instances of analytical data not being in agreement between replicate samples. All results obtained is reported in Table VII on page 65. The reason for the discrepancies encountered is not known.

5.6.6 Stream Water Sample Results

Stream samples were collected beginning September 10, 2002 and ending on December 17, 2003. A total of 170 of the samples collected were analyzed for fipronil-related residues, coincident with significant precipitation events. Detailed information regarding each of the individually analyzed samples is presented in Table VIII on page 84. A graphical representation of these data from September 11, 2002 to October 2003 is presented in Figure 12.

Throughout the duration of the study, there were no detections of total fipronil-related residues that exceeded 4x the method limit of quantification. Inconsistent with the detection of residues at the culvert sampling location, residues determined in the downstream samples were comprised almost exclusively of parent fipronil.

Detections of fipronil were observed shortly after the initial application, but at levels near the method limit of quantification, and rapidly dropped to levels below the method LOQ by 14 days post-application. Detection of residues increased in samples in early 2003 (March) and were consistently detected in analyzed samples through August 2003.

The pattern of residue detections observed can be seen in Figure 12.

Figure 12: Total Fipronil-Related Residues (ppb) in Analyzed Samples from the Downstream Sampling Point vs NOAA Precipitation (in) During the Study Sampling Period

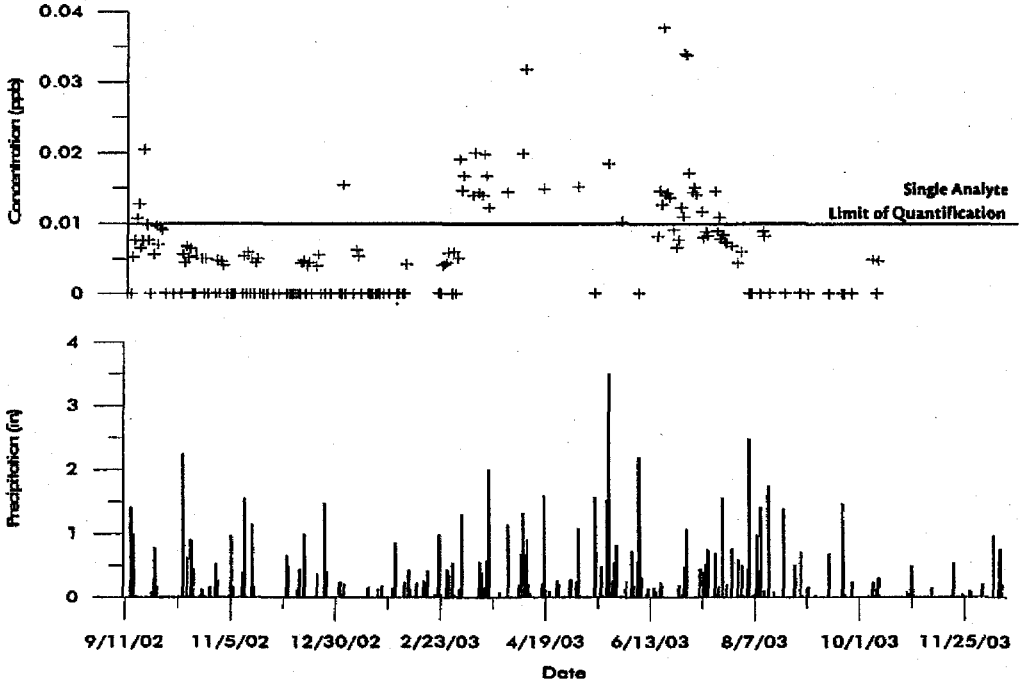


Table VIII: Fipronil-Related Residues in Stream (Downstream) Water Resulting from Runoff Following a Broadcast Application of TopChoice® brand insecticide

Sample ID	Days Post-Initial Application	Date Sampled	Date Received	Date Extracted	Date Analyzed	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-181	Day 1	9/12/2002	9/17/2002	12/4/2002	12/04/2002	5	nd	nd	nd	nd
33114-183	Day 3	9/14/2002	9/17/2002	3/08/2004	3/18/2004	219	nd	nd	nd	nd
33114-184	Day 4	9/15/2002	9/17/2002	3/08/2004	3/18/2004	219	<LOQ[0.005]	nd	nd	nd
33114-185	Day 5	9/16/2002	9/17/2002	12/4/2002	12/04/2002	5	<LOQ[0.008]	nd	nd	nd
33114-186	Day 6	9/17/2002	9/25/2002	3/08/2004	3/18/2004	219	0.011	nd	nd	nd
33114-187	Day 7	9/18/2002	9/25/2002	3/08/2004	3/18/2004	219	0.013	nd	nd	nd
33114-188	Day 8	9/19/2002	9/25/2002	3/08/2004	3/18/2004	219	<LOQ[0.007]	nd	nd	nd
33114-189	Day 9	9/20/2002	9/25/2002	12/4/2002	12/04/2002	5	<LOQ[0.008]	nd	nd	nd
33114-190	Day 10	9/21/2002	9/25/2002	3/08/2004	3/18/2004	219	0.011	<LOQ[0.004]	<LOQ[0.005]	nd
33114-191	Day 11	9/22/2002	9/25/2002	3/08/2004	3/18/2004	219	0.010	nd	nd	nd
33114-192	Day 12	9/23/2002	9/25/2002	3/08/2004	3/18/2004	219	<LOQ[0.008]	nd	nd	nd
33114-193	Day 13	9/24/2002	9/25/2002	12/4/2002	12/04/2002	5	nd	nd	nd	nd
33114-195	Day 15	9/26/2002	9/30/2002	3/08/2004	3/18/2004	219	<LOQ[0.006]	nd	nd	nd
33114-196	Day 16	9/27/2002	9/30/2002	3/08/2004	3/18/2004	219	0.010	nd	nd	nd
33114-197	Day 17	9/28/2002	9/30/2002	12/04/2002	12/04/2002	5	<LOQ[0.007]	nd	nd	nd
33114-198	Day 18	9/29/2002	9/30/2002	3/08/2004	3/18/2004	219	<LOQ[0.009]	nd	nd	nd
33114-199	Day 19	9/30/2002	10/07/2002	3/08/2004	3/18/2004	219	<LOQ[0.009]	nd	nd	nd
33114-201	Day 21	10/02/2002	10/07/2002	12/04/2002	12/04/2002	5	nd	nd	nd	nd
33114-205	Day 25	10/06/2002	10/07/2002	12/04/2002	12/04/2002	5	nd	nd	nd	nd
33114-209	Day 29	10/10/2002	10/14/2002	12/04/2002	12/04/2002	5	nd	nd	nd	nd
33114-210	Day 30	10/11/2002	10/14/2002	3/08/2004	3/18/2004	219	<LOQ[0.006]	nd	nd	nd
33114-211	Day 31	10/12/2002	10/14/2002	3/08/2004	3/18/2004	219	<LOQ[0.005]	nd	nd	nd
33114-212	Day 32	10/13/2002	10/14/2002	3/08/2004	3/18/2004	219	<LOQ[0.007]	nd	nd	nd
33114-213	Day 33	10/14/2002	10/21/2002	12/04/2002	12/04/2002	5	<LOQ[0.005]	nd	nd	nd
33114-214	Day 34	10/15/2002	10/21/2002	3/08/2004	3/18/2004	219	<LOQ[0.007]	nd	nd	nd
33114-215	Day 35	10/16/2002	10/21/2002	3/06/2003	3/07/2003	12	nd	nd	nd	nd
33114-216	Day 36	10/17/2002	10/30/2002	7/21/2004	7/26/2004	237	nd	nd	nd	nd
33114-217	Day 37	10/18/2002	10/30/2002	7/20/2004	7/26/2004	237	<LOQ[0.006]	nd	nd	nd
33114-220	Day 40	10/21/2002	10/30/2002	7/22/2004	7/26/2004	237	<LOQ[0.005]	nd	nd	nd
33114-221	Day 41	10/22/2002	10/30/2002	2/19/2004	2/21/2004	216	nd	nd	nd	nd
33114-222	Day 42	10/23/2002	10/30/2002	7/21/2004	7/26/2004	237	<LOQ[0.005]	nd	nd	nd
33114-223	Day 43	10/24/2002	10/30/2002	2/19/2004	2/21/2004	216	nd	nd	nd	nd

Table VIII: (Continued)Fipronil-Related Residues in Stream (Downstream) Water Resulting from Runoff Following a Broadcast Application of TopChoice® brand insecticide

Sample ID	Days Post-Initial Application	Date Sampled	Date Received	Date Extracted	Date Analyzed	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-227	Day 47	10/28/2002	10/30/2002	7/21/2004	7/26/2004	237	nd	nd	nd	nd
33114-228	Day 48	10/29/2002	10/30/2002	2/19/2004	2/21/2004	216	<LOQ[0.005]	nd	nd	nd
33114-229	Day 49	10/30/2002	11/4/2002	3/06/2003	3/07/2003	11	nd	nd	nd	nd
33114-230	Day 50	10/31/2002	11/4/2002	2/13/2004	2/15/2004	213	<LOQ[0.005]	nd	nd	nd
33114-231	Day 51	11/01/2002	11/4/2002	2/13/2004	2/15/2004	213	<LOQ[0.004]	nd	nd	nd
33114-233	Day 53	11/03/2002	11/4/2002	3/06/2003	3/07/2003	11	nd	nd	nd	nd
33114-235	Day 55	11/05/2002	11/11/2002	2/13/2004	2/15/2004	213	nd	nd	nd	nd
33114-236	Day 56	11/06/2002	11/11/2002	2/13/2004	2/15/2004	213	nd	nd	nd	nd
33114-237	Day 57	11/07/2002	11/18/2002	3/05/2003	3/05/2003	10	nd	nd	nd	nd
33114-241	Day 61	11/11/2002	11/18/2002	3/05/2003	3/05/2003	10	nd	nd	nd	nd
33114-242	Day 62	11/12/2002	11/18/2002	3/05/2003	3/05/2003	10	<LOQ[0.005]	nd	nd	nd
33114-243	Day 63	11/13/2002	11/18/2002	2/16/2004	2/20/2004	217	nd	nd	nd	nd
33114-244	Day 64	11/14/2002	11/18/2002	3/03/2004	3/18/2004	219	<LOQ[0.006]	nd	nd	nd
33114-245	Day 65	11/15/2002	11/18/2002	2/16/2004	2/20/2004	217	nd	nd	nd	nd
33114-246	Day 66	11/16/2002	11/18/2002	3/05/2003	3/05/2003	10	<LOQ[0.005]	nd	ndn	nd
33114-247	Day 67	11/17/2002	11/18/2002	3/05/2003	3/05/2003	10	nd	nd	nd	nd
33114-248	Day 68	11/18/2002	11/25/2002	3/03/2004	3/18/2004	219	<LOQ[0.005]	nd	nd	nd
33114-249	Day 69	11/19/2002	11/25/2002	3/03/2004	3/18/2004	219	<LOQ[0.005]	nd	nd	nd
33114-250	Day 70	11/20/2002	11/25/2002	3/14/2003	3/14/2003	13	nd	nd	nd	nd
33114-252	Day 72	11/22/2002	11/25/2002	3/14/2003	3/14/2003	13	nd	nd	nd	nd
33114-254	Day 74	11/24/2002	11/25/2002	3/14/2003	3/14/2003	13	nd	nd	nd	nd
33114-257	Day 77	11/27/2002	12/02/2002	3/05/2003	3/05/2003	10	nd	nd	nd	nd
33114-260	Day 80	11/30/2002	12/12/2002	3/05/2003	3/05/2003	10	nd	nd	nd	nd
33114-264	Day 84	12/04/2002	12/12/2002	3/14/2003	3/14/2003	13	nd	nd	nd	nd
33114-266	Day 86	12/06/2002	12/12/2002	3/14/2003	3/14/2003	13	nd	nd	nd	nd
33114-267	Day 87	12/07/2002	12/12/2002	2/12/2004	2/15/2004	213	nd	nd	nd	nd
33114-268	Day 88	12/08/2002	12/12/2002	2/12/2004	2/15/2004	213	nd	nd	nd	nd
33114-269	Day 89	12/09/2002	12/12/2002	2/12/2004	2/15/2004	213	nd	nd	nd	nd
33114-270	Day 90	12/10/2002	12/12/2002	3/14/2003	3/14/2003	13	nd	nd	nd	nd
33114-271	Day 91	12/11/2002	12/12/2002	2/12/2004	2/15/2004	213	nd	nd	nd	nd
33114-272	Day 92	12/12/2002	12/20/2002	3/03/2004	3/18/2004	219	<LOQ[0.004]	nd	nd	nd
33114-273	Day 93	12/13/2002	12/20/2002	3/19/2003	3/19/2003	14	<LOQ[0.005]	nd	nd	nd

Table VIII: (Continued)Fipronil-Related Residues in Stream (Downstream) Water Resulting from Runoff Following a Broadcast Application of TopChoice® brand insecticide

Sample ID	Days Post-Initial Application	Date Sampled	Date Received	Date Extracted	Date Analyzed	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-274	Day 94	12/14/2002	12/20/2002	2/13/2004	2/15/2004	213	nd	nd	nd	nd
33114-275	Day 95	12/15/2002	12/20/2002	2/23/2004	2/23/2004	218	<LOQ[0.004]	nd	nd	nd
33114-276	Day 96	12/16/2002	12/20/2002	2/13/2004	2/15/2004	213	<LOQ[0.005]	nd	nd	nd
33114-277	Day 97	12/17/2002	12/20/2002	3/19/2003	3/19/2003	14	nd	nd	nd	nd
33114-280	Day 100	12/20/2002	1/03/2003	2/23/2004	2/23/2004	218	<LOQ[0.004]	nd	nd	nd
33114-281	Day 101	12/21/2002	1/03/2003	2/23/2004	2/23/2004	218	<LOQ[0.006]	nd	nd	nd
33114-282	Day 102	12/22/2002	1/03/2003	2/20/2004	2/22/2004	215	nd	nd	nd	nd
33114-284	Day 104	12/24/2002	1/03/2003	2/20/2004	2/22/2004	215	nd	nd	nd	nd
33114-287	Day 107	12/27/2002	1/03/2003	2/20/2004	2/22/2004	215	nd	nd	nd	nd
33114-292	Day 112	1/01/2003	1/03/2003	2/20/2004	2/22/2004	215	nd	nd	nd	nd
33114-293	Day 113	1/02/2003	1/20/2003	2/12/2004	2/15/2004	213	nd	nd	nd	nd
33114-294	Day 114	1/03/2003	1/20/2003	3/3/2004	3/18/2004	219	<LOQ[0.006]	nd	nd	0.010
33114-295	Day 115	1/04/2003	1/20/2003	3/14/2003	3/14/2003	13	nd	nd	nd	nd
33114-299	Day 119	1/08/2003	1/20/2003	3/05/2003	3/05/2003	10	nd	nd	nd	nd
33114-301	Day 121	1/10/2003	1/20/2003	3/03/2004	3/18/2004	219	<LOQ[0.006]	nd	nd	nd
33114-302	Day 122	1/11/2003	1/20/2003	3/03/2004	3/18/2004	219	<LOQ[0.005]	nd	nd	nd
33114-303	Day 123	1/12/2003	1/20/2003	3/14/2003	3/14/2003	13	nd	nd	nd	nd
33114-307	Day 127	1/16/2003	2/03/2003	3/19/2003	3/19/2003	14	nd	nd	nd	nd
33114-308	Day 128	1/17/2003	2/03/2003	2/23/2004	2/23/2004	218	nd	nd	nd	nd
33114-309	Day 129	1/18/2003	2/03/2003	2/23/2004	2/23/2004	218	nd	nd	nd	nd
33114-311	Day 131	1/20/2003	2/03/2003	3/5/2003	3/05/2003	10	nd	nd	nd	nd
33114-312	Day 132	1/21/2003	2/03/2003	2/16/2004	2/20/2004	217	nd	nd	nd	nd
33114-313	Day 133	1/22/2003	2/03/2003	2/16/2004	2/20/2004	217	nd	nd	nd	nd
33114-315	Day 135	1/24/2003	2/03/2003	3/05/2003	3/05/2003	10	nd	nd	nd	nd
33114-318	Day 138	1/27/2003	2/03/2003	3/05/2003	3/05/2003	10	nd	nd	nd	nd
33114-322	Day 142	1/31/2003	2/11/2003	3/05/2003	3/05/2003	10	nd	nd	nd	nd
33114-323	Day 143	2/01/2003	2/11/2003	2/13/2004	2/15/2004	213	nd	nd	nd	nd
33114-325	Day 145	2/03/2003	2/11/2003	2/13/2004	2/15/2004	213	nd	nd	nd	nd
33114-326	Day 146	2/04/2003	2/11/2003	3/05/2003	3/05/2003	10	nd	nd	nd	nd
33114-327	Day 147	2/05/2003	2/11/2003	2/13/2004	2/15/2004	213	<LOQ[0.004]	nd	nd	nd
33114-344	Day 164	2/22/2003	3/06/2003	6/04/2004	6/06/2004	232	nd	nd	nd	nd
33114-345	Day 165	2/23/2003	3/06/2003	2/11/2004	2/11/2004	214	nd	nd	nd	nd

Table VIII: (Continued)Fipronil-Related Residues in Stream (Downstream) Water Resulting from Runoff Following a Broadcast Application of TopChoice® brand insecticide

Sample ID	Days Post-Initial Application	Date Sampled	Date Received	Date Extracted	Date Analyzed	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-346	Day 166	2/24/2003	3/06/2003	2/11/2004	2/11/2004	214	<LOQ[0.004]	nd	nd	nd
33114-347	Day 167	2/25/2003	3/06/2003	2/11/2004	2/11/2004	214	<LOQ[0.004]	nd	nd	nd
33114-348	Day 168	2/26/2003	3/06/2003	2/11/2004	2/11/2004	214	<LOQ[0.005]	nd	nd	nd
33114-349	Day 169	2/27/2003	3/06/2003	2/11/2004	2/11/2004	214	<LOQ[0.006]	nd	nd	nd
33114-351	Day 171	3/01/2003	3/06/2003	2/11/2004	2/11/2004	214	nd	nd	nd	nd
33114-352	Day 172	3/02/2003	3/06/2003	2/11/2004	2/11/2004	214	<LOQ[0.006]	nd	nd	nd
33114-353	Day 173	3/03/2003	3/06/2003	2/11/2004	2/11/2004	214	nd	nd	nd	nd
33114-355	Day 175	3/05/2003	3/06/2003	2/11/2004	2/11/2004	214	<LOQ[0.005]	nd	nd	nd
33114-356	Day 176	3/06/2003	3/13/2003	2/19/2004	2/21/2004	216	0.019	nd	nd	nd
33114-357	Day 177	3/07/2003	3/13/2003	2/19/2004	2/21/2004	216	0.015	nd	nd	nd
33114-358	Day 178	3/08/2003	3/13/2003	2/19/2004	2/21/2004	216	0.017	nd	nd	nd
33114-362	Day 182	3/12/2003	4/15/2003	5/28/2004	5/28/2004	233	0.014	nd	nd	nd
33114-363	Day 183	3/13/2003	4/15/2003	5/28/2004	5/28/2004	233	0.020	nd	nd	nd
33114-365	Day 185	3/15/2003	4/15/2003	5/28/2004	5/28/2004	233	0.014	nd	nd	nd
33114-367	Day 187	3/17/2003	4/15/2003	5/28/2004	5/28/2004	233	0.014	nd	nd	nd
33114-368	Day 188	3/18/2003	4/15/2003	5/28/2004	5/28/2004	233	0.020	nd	nd	nd
33114-369	Day 189	3/19/2003	4/15/2003	5/28/2004	5/28/2004	233	0.017	nd	nd	nd
33114-370	Day 190	3/20/2003	4/15/2003	5/28/2004	5/28/2004	233	0.012	nd	nd	nd
33114-6250	Day 200	3/30/2003	4/15/2003	10/28/2004	10/29/2004	240	0.014	nd	nd	nd
33114-6258	Day 208	4/07/2003	4/15/2003	10/28/2004	10/29/2004	240	0.020	nd	nd	nd
33114-6260	Day 210	4/09/2003	4/15/2003	10/28/2004	10/29/2004	240	0.032	nd	nd	nd
33114-6269	Day 219	4/18/2003	5/21/2003	10/28/2004	10/29/2004	240	0.015	nd	nd	nd
33114-6287	Day 237	5/06/2003	5/21/2003	10/28/2004	10/29/2004	240	0.015	nd	nd	nd
33114-6296	Day 246	5/15/2003	5/21/2003	10/28/2004	10/29/2004	240	nd	nd	nd	nd
33114-6303	Day 253	5/22/2003	7/01/2003	10/28/2004	10/29/2004	240	0.018	nd	nd	nd
33114-6319	Day 269	6/07/2003	7/01/2003	10/28/2004	10/29/2004	240	nd	nd	nd	nd
33114-6310	Day 260	5/29/2003	7/01/2003	5/11/2004	5/19/2004	235	0.010	nd	nd	nd
33114-6329	Day 279	6/17/2003	7/01/2003	5/11/2004	5/19/2004	235	<LOQ[0.008]	nd	nd	nd
33114-6330	Day 280	6/18/2003	7/01/2003	5/11/2004	5/19/2004	235	0.015	nd	nd	nd
33114-6331	Day 281	6/19/2003	7/01/2003	5/11/2004	5/19/2004	235	0.013	nd	nd	nd
33114-6332	Day 282	6/20/2003	7/01/2003	5/11/2004	5/19/2004	235	0.033	nd	nd	<LOQ[0.005]
33114-6333	Day 283	6/20/2003	7/01/2003	5/11/2004	5/19/2004	235	0.014	nd	nd	nd

Table VIII: (Continued)Fipronil-Related Residues in Stream (Downstream) Water Resulting from Runoff Following a Broadcast Application of TopChoice® brand insecticide

Sample ID	Days Post-Initial Application	Date Sampled	Date Received	Date Extracted	Date Analyzed	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-6334	Day 284	6/22/2003	7/01/2003	5/11/2004	5/19/2004	235	0.014	nd	nd	nd
33114-6335	Day 285	6/23/2003	7/01/2003	5/11/2004	5/19/2004	235	0.014	nd	nd	nd
33114-6337	Day 287	6/25/2003	7/01/2003	5/11/2004	5/19/2004	235	<LOQ[0.009]	nd	nd	nd
33114-6339	Day 289	6/27/2003	7/01/2003	5/11/2004	5/19/2004	235	<LOQ[0.007]	nd	nd	nd
33114-6340	Day 290	6/28/2003	7/01/2003	9/26/2003	9/27/2003	202	<LOQ[0.008]	nd	nd	nd
33114-6341	Day 291	6/29/2003	7/01/2003	9/26/2003	9/27/2003	202	0.012	nd	nd	nd
33114-6342	Day 292	6/30/2003	8/01/2003	9/26/2003	9/27/2003	202	0.011	nd	nd	nd
33114-6343	Day 293	7/01/2003	8/01/2003	9/26/2003	9/27/2003	202	0.022	<LOQ[0.007]	nd	<LOQ[0.006]
33114-6344	Day 294	7/02/2003	8/01/2003	9/26/2003	9/27/2003	202	0.021	<LOQ[0.008]	nd	<LOQ[0.005]
33114-6345	Day 295	7/03/2003	8/01/2003	9/26/2003	9/27/2003	202	0.017	nd	nd	nd
33114-6347	Day 297	7/05/2003	8/01/2003	5/11/2004	5/19/2004	235	0.014	nd	nd	nd
33114-6348	Day 298	7/06/2003	8/01/2003	5/11/2004	5/19/2004	235	0.015	nd	nd	nd
33114-6349	Day 299	7/07/2003	8/01/2003	5/11/2004	5/19/2004	235	0.014	nd	nd	nd
33114-6352	Day 302	7/10/2003	8/01/2003	9/26/2003	9/27/2003	202	0.012	nd	nd	nd
33114-6353	Day 303	7/11/2003	8/01/2003	9/26/2003	9/27/2003	202	<LOQ[0.008]	nd	nd	nd
33114-6354	Day 304	7/12/2003	8/01/2003	9/26/2003	9/27/2003	202	<LOQ[0.009]	nd	nd	nd
33114-6355	Day 305	7/13/2003	8/01/2003	9/26/2003	9/27/2003	202	<LOQ[0.008]	nd	nd	nd
33114-6359	Day 309	7/17/2003	8/01/2003	7/27/2004	8/14/2004	238	0.015	nd	nd	nd
33114-6360	Day 310	7/18/2003	8/01/2003	5/11/2004	5/19/2004	235	<LOQ[0.009]	nd	nd	nd
33114-6361	Day 311	7/19/2003	8/01/2003	7/27/2004	8/14/2004	238	0.011	nd	nd	nd
33114-6362	Day 312	7/20/2003	8/01/2003	5/11/2004	5/19/2004	235	<LOQ[0.008]	nd	nd	nd
33114-6363	Day 313	7/21/2003	8/01/2003	5/28/2004	5/28/2004	233	<LOQ[0.008]	nd	nd	nd
33114-6364	Day 314	7/22/2003	8/01/2003	5/28/2004	5/28/2004	233	<LOQ[0.008]	nd	nd	nd
33114-6365	Day 315	7/23/2003	8/01/2003	5/28/2004	5/28/2004	233	<LOQ[0.007]	nd	nd	nd
33114-6368	Day 318	7/26/2003	8/01/2003	5/28/2004	5/28/2004	233	<LOQ[0.007]	nd	nd	nd
33114-6371	Day 321	7/29/2003	8/01/2003	5/28/2004	5/28/2004	233	<LOQ[0.004]	nd	nd	nd
33114-6373	Day 323	7/31/2003	11/21/2003	6/04/2004	6/07/2004	234	<LOQ[0.006]	nd	nd	nd
33114-6377	Day 327	8/04/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6378	Day 328	8/05/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6382	Day 332	8/09/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6383	Day 333	8/10/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6384	Day 334	8/11/2003	11/21/2003	6/04/2004	6/07/2004	234	<LOQ[0.009]	nd	nd	nd

Table VIII: (Continued)Fipronil-Related Residues in Stream (Downstream) Water Resulting from Runoff Following a Broadcast Application of TopChoice® brand insecticide

Sample ID	Days Post-Initial Application	Date Sampled	Date Received	Date Extracted	Date Analyzed	Analytical Set #	Fipronil (µg/L)	MB 46513 (µg/L)	MB 45950 (µg/L)	MB 46136 (µg/L)
33114-6385	Day 335	8/12/2003	11/21/2003	6/04/2004	6/07/2004	234	<LOQ[0.008]	nd	nd	nd
33114-6388	Day 338	8/15/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6395	Day 345	8/22/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6396	Day 346	8/23/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6404	Day 354	8/31/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6408	Day 358	9/04/2003	11/21/2003	7/20/2004	7/26/2004	237	nd	nd	nd	nd
33114-6419	Day 369	9/15/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6426	Day 376	9/22/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6427	Day 377	9/23/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6431	Day 381	9/27/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6442	Day 392	10/8/2003	11/21/2003	7/27/2004	8/14/2004	238	<LOQ[0.005]	nd	nd	nd
33114-6444	Day 394	10/10/2003	11/21/2003	6/04/2004	6/07/2004	234	nd	nd	nd	nd
33114-6445	Day 395	10/11/2003	11/21/2003	7/27/2004	8/14/2004	238	<LOQ[0.005]	nd	nd	nd

Table IX: Summary Results of Field Fortifications in Stream Water Samples

					Fipronil		MB 46513		MB 45950		MB 46136	
Sample ID	Date Fortified	Date Analyzed	Set #	Fortification Level (ppt)	Conc. Recovered (ppt)	Recovery (%)	Conc. Recovered (ppt)	Recovery (%)	Conc. Recovered (ppt)	Recovery (%)	Conc. Recovered (ppt)	Recovery (%)
33114-FS2-UTC-CulvertA	2/24/2003	10/21/2003	205	-	nd	-	nd	-	nd	-	nd	-
33114-FS2-UTC-CulvertB	2/24/2003	10/21/2003	205	-	nd	-	nd	-	nd	-	nd	-
33114-FS2-Low-CulvertA	2/24/2003	10/21/2003	205	20	18.1	90.5	17.7	88.5	15.3	76.5	15.5	77.5
33114-FS2-Low-CulvertB	2/24/2003	10/21/2003	205	20	17.1	85.5	19.3	96.5	17.3	86.5	16.3	81.5
33114-FS2-High-CulvertA	2/24/2003	10/21/2003	205	200	169.2	84.6	173.7	86.9	169.4	84.7	162.7	81.4
33114-FS2-High-CulvertB	2/24/2003	10/21/2003	205	200	172.8	86.4	175.5	87.8	168.6	84.3	167.1	83.6
33114-FS3-UTC-CulvertA	2/24/2003	10/25/2003	206	-	nd	-	nd	-	nd	-	nd	-
33114-FS3-UTC-CulvertB	2/24/2003	10/25/2003	206	-	nd	-	nd	-	nd	-	nd	-
33114-FS3-Low-CulvertA	2/24/2003	10/25/2003	206	20	14.8	74.0	16.6	83.0	14.2	71.0	15.6	78.0
33114-FS3-Low-CulvertB	2/24/2003	10/25/2003	206	20	16.1	80.5	17.5	87.5	15.0	75.0	13.7	68.5
33114-FS3-High-CulvertA	2/24/2003	10/25/2003	206	200	158.2	79.1	167.3	83.7	150.3	75.2	148.5	74.3
33114-FS3-High-CulvertB	2/24/2003	10/25/2003	206	200	157.2	78.6	164.0	82.0	156.9	78.5	149.6	74.8

Table X: Procedural Recovery Values Obtained During the Analysis of Samples for Fipronil-Related Residues

					Procedural Recovery (%)			
Sample ID	Set No	Extraction Date	Analysis Date	Fortification Level (ng/L)	Fipronil	MB 46513	MB 45950	MB 46136
33114-Rec-0.03 ppb	3	10/18/2002	10/18/2002	30	82.5	72.2	82.3	89.6
33114-Rec-0.3 ppb	3	10/18/2002	10/18/2002	300	99.2	92.0	91.3	93.2
33114-Rec-0.03 ppb	4	10/25/2002	10/25/2002	30	82.1	74.8	72.6	91.3
33114-Rec-0.3 ppb	4	10/25/2002	10/25/2002	300	90.2	92.8	92.6	93.8
33114-Rec-0.03 ppb	5	12/04/2002	12/04/2002	30	85.7	88.9	103.7	117.2
33114-Rec-0.3 ppb	5	12/04/2002	12/04/2002	300	98.1	104.8	101.8	106.3
33114-Rec-0.03A ppb-a	6	12/12/2002	12/12/2002	30	76.4	90.6	81.9	86.4
33114-Rec-0.3 ppb-a	6	12/12/2002	12/12/2002	300	92.0	97.6	95.4	99.2
33114-Rec-10 ppt-b	7	12/12/2002	12/12/2002	10	110.3	89.6	86.1	91.2
33114-Rec-100 ppt-b	7	12/12/2002	12/12/2002	100	88.9	93.9	91.3	94.0
33114-Rec-10 ppt	8	2/05/2003	2/05/2003	10	79.9	83.2	80.3	87.1
33114-Rec-100 ppt	8	2/05/2003	2/05/2003	100	82.6	92.1	90.4	96.2
33114-Rec-10 ppt	9	2/26/2003	2/26/2003	10	88.8	74.3	73.5	78.1
33114-Rec-100 ppt	9	2/26/2003	2/26/2003	100	75.3	86.5	81.0	86.7
33114-Rec-10 ppt	10	3/05/2003	3/05/2003	10	74.3	96.1	94.5	99.0
33114-Rec-100 ppt	10	3/05/2003	3/05/2003	100	102.8	103.0	98.3	98.8
33114-Rec 10 ppt	11	3/06/2003	3/07/2003	10	71.6	92.1	88.5	105.8
33114-Rec 100 ppt	11	3/06/2003	3/07/2003	100	96.8	96.7	92.7	95.8
33114-Rec-10 ppt-B	12	3/06/2003	3/07/2003	10	84.0	88.5	85.8	106.0
33114-Rec-100 ppt-B	12	3/06/2003	3/07/2003	100	97.0	96.2	93.6	96.7
33114-Rec-10 ppt	13	3/14/2003	3/14/2003	10	74.2	97.6	84.7	100.1
33114-Rec-100 ppt	13	3/14/2003	3/14/2003	100	101.5	108.0	98.0	96.2
33114-Rec-10 ppt	14	3/19/2003	3/19/2003	10	54.0	70.7	68.3	80.3
33114-Rec-100 ppt	14	3/19/2003	3/19/2003	100	67.2	71.8	73.1	75.6
33114-Rec 101	101	10/08/2002	10/08/2002	10	90.4	81.6	86.8	86.8
33114-Rec 102	101	10/08/2002	10/08/2002	100	95.6	91.5	90.2	93.8
33114-Rec 103	102	10/11/2002	10/11/2002	10	86.1	88.5	82.0	85.9
33114-Rec 104	102	10/11/2002	10/11/2002	100	98.0	87.0	89.2	88.1
33114-Bulk-100ppt-1-092503	201	9/25/2003	9/26/2003	100	80.1	94.9	93.5	94.7
33114-Bulk-100ppt-2-092503	201	9/25/2003	9/26/2003	100	80.4	99.0	92.5	96.7
33114-Bulk-100ppt-3-092603	202	9/26/2003	9/27/2003	100	76.7	89.2	84.3	86.1
33114-Bulk-100ppt-4-092603	202	9/26/2003	9/27/2003	100	79.8	97.1	91.6	92.7
33114-Bulk-100ppt-1-100703	203	10/06/2003	10/07/2003	100	71.3	92.7	85.8	89.6

Table X: Procedural Recovery Values Obtained During the Analysis of Samples for Fipronil-Related Residues

					Procedural Recovery (%)			
Sample ID	Set No	Extraction Date	Analysis Date	Fortification Level (ng/L)	Fipronil	MB 46513	MB 45950	MB 46136
33114-Bulk-100ppt-2-100603	204	10/06/2003	10/08/2003	100	74.5	91.0	92.0	97.0
33114-Bulk-10ppt-101530A	205	10/15/2003	10/21/2003	10	92.8	105.6	87.2	82.7
33114-Bulk-100ppt-101530A	205	10/15/2003	10/21/2003	100	76.5	92.2	87.6	91.2
33114-Bulk-10ppt-102203B	206	10/22/2003	10/25/2003	10	83.6	88.5	75.9	79.3
33114-Bulk-100ppt-102203B	206	10/22/2003	10/25/2003	100	69.8	82.5	85.4	88.0
33114-Bulk-100ppt-2-102203	207	10/22/2003	10/26/2003	100	70.0	92.8	94.1	98.2
33114-Bulk-100ppt-1-102203	207	10/22/2003	10/26/2003	100	76.9	92.5	97.2	96.6
33114-Bulk-100ppt-2-110303-1	208	11/03/2003	11/03/2003	100	75.0	91.8	83.4	91.5
33114-Bulk-1-100ppt-110803	209	11/08/2003	11/08/2003	100	62.7	81.9	84.4	91.4
Str-PreAp100303-100ppt111203	210	11/12/2003	11/12/2003	100	90.7	107.4	91.7	89.8
Str-PreAp100303-50ppt-111303	211	11/13/2003	11/16/2003	50	94.3	102.9	99.4	96.7
33114-Str-PreAp100303-50ppt-120803	212	12/08/2003	12/11/2003	50	83.3	94.1	88.3	90.5
33114-Pond100303-100ppt-1-021204	213	2/12/2004	2/15/2004	100	85.3	87.4	88.7	87.0
33114-Pond100303-100ppt-2-021204	213	2/12/2004	2/15/2004	100	83.3	75.2	80.1	82.9
33114-Pond100303-100ppt-1-021304	213	2/13/2004	2/15/2004	100	89.5	100.3	101.5	94.0
33114-Pond100303-100ppt-2-021304	213	2/13/2004	2/15/2004	100	87.3	92.9	94.5	90.9
33114-Pond100303-100ppt-1-021104	214	2/11/2004	2/11/2004	100	89.6	79.5	81.6	83.8
33114-Pond100303-100ppt-2-021104	214	2/11/2004	2/11/2004	100	85.5	81.0	78.3	82.7
33114-Pond100303-100ppt-3-021104	214	2/11/2004	2/11/2004	100	85.1	81.4	80.9	82.0
33114-Bulk-100ppt-1-022004	215	2/20/2004	2/22/2004	100	90.7	89.2	95.3	102.4
33114-Bulk-100ppt-2-022004	215	2/20/2004	2/22/2004	100	86.3	82.8	87.6	97.6
33114-Bulk-100ppt-1-021904	216	2/19/2004	2/21/2004	100	97.0	99.2	96.5	98.7
33114-Bulk-100ppt-2-021904	216	2/19/2004	2/21/2004	100	93.0	101.2	97.7	94.0
33114-Bulk-100ppt-1-021604	217	2/16/2004	2/20/2004	100	86.4	102.4	92.6	92.7
33114-Bulk-100ppt-2-021604	217	2/16/2004	2/20/2004	100	87.7	100.0	88.0	82.3
33114-Bulk-100ppt-1-021704	217	2/17/2004	2/20/2004	100	89.3	96.4	85.9	83.9
33114-Bulk-100ppt-2-021704	217	2/17/2004	2/20/2004	100	85.0	88.6	84.9	91.4
33114-Bulk-100ppt-1-022304	218	2/23/2004	2/23/2004	100	87.7	96.4	101.3	93.6
33114-Bulk-100ppt-2-022304	218	2/23/2004	2/23/2004	100	93.4	105.4	99.2	96.5
33114-Bulk-100ppt-2-030804	219	3/08/2004	3/18/2004	100	90.4	86.4	91.6	91.0
33114-Bulk-100ppt-1-0300804	219	3/08/2004	3/18/2004	100	99.5	106.8	102.0	100.0
33114-Bulk-100ppt-2-030304	219	3/03/2004	3/18/2004	100	88.9	97.9	96.3	87.7
33114-Bulk-100ppt-20030304	219	3/03/2004	3/18/2004	100	98.9	106.9	98.7	89.7

Table X: Procedural Recovery Values Obtained During the Analysis of Samples for Fipronil-Related Residues

					Procedural Recovery (%)			
Sample ID	Set No	Extraction Date	Analysis Date	Fortification Level (ng/L)	Fipronil	MB 46513	MB 45950	MB 46136
33114-Bulk-100ppt-1-030904	220	3/09/2004	3/16/2004	100	80.7	88.8	84.3	79.7
33114-Bulk-100ppt-2-030904	220	3/09/2004	3/16/2004	100	73.0	82.9	79.7	80.9
33114-Bulk-100ppt-11504	221	1/15/2004	1/16/2004	100	87.1	87.1	79.1	86.3
33114-Bulk-100ppt-1-032604	222	3/26/2004	3/27/2004	100	87.3	97.8	92.9	89.7
33114-Bulk-10ppt-2-033004	223	3/30/2004	3/31/2004	10	97.6	104.7	109.6	94.4
33114-Bulk-10ppt-3-033004	224	3/30/2004	3/31/2004	10	86.8	102.7	100.8	89.9
33114-Bulk-10ppt-1-033004	225	3/30/2004	3/31/2004	10	73.0	79.6	84.9	86.2
33114-Bulk-10ppt-1-032904	226	3/29/2004	4/02/2004	10	119.1	102.1	124.4	98.3
33114-Bulk-10ppt-2-032904	226	3/29/2004	4/02/2004	10	95.4	85.8	112.1	111.4
33114-Bulk-100ppt-1-042204	227	4/22/2004	4/22/2004	100	98.6	104.9	103.0	98.7
33114-Bulk-100ppt-2-042204	228	4/22/2004	4/22/2004	100	71.7	110.8	89.6	81.0
33114-Bulk-10ppt-1-041504	229	4/15/2004	4/15/2004	10	94.5	99.4	94.5	99.7
33114-Bulk-100ppt-2-041504	229	4/15/2004	4/15/2004	100	106.0	108.5	102.2	106.1
33114-Bulk-100ppt-1-042004	230	4/20/2004	4/20/2004	100	96.3	104.9	101.5	96.2
33114-Bulk-10ppt-2-042004	231	4/20/2004	4/20/2004	10	64.3	78.1	77.2	76.3
33114-Bulk-10ppt-060404-1	232	6/04/2004	6/06/2004	10	68.5	88.7	78.0	77.0
33114-Bulk-10ppt-060404-2	232	6/04/2004	6/06/2004	10	79.3	92.7	91.0	87.1
33114-Bulk-10ppt-052804	233	5/28/2004	5/28/2004	10	77.3	105.0	109.2	68.9
33114-Bulk-100ppt-060404-3	234	6/04/2004	6/07/2004	100	86.1	92.1	90.7	91.1
33114-Bulk-100ppt-060404-4	234	6/04/2004	6/07/2004	100	73.4	90.7	86.0	78.1
33114-Bulk-10ppt-1-051004	235	5/10/2004	5/19/2004	10	74.5	92.2	91.9	75.4
33114-Bulk-10ppt-051104	235	5/11/2004	5/19/2004	10	75.6	86.3	101.1	74.2
33114-Bulk-100ppt-1-041304	236	4/13/2004	4/14/2004	100	98.2	101.0	100.0	103.0
33114-Bulk-100ppt-1-041404	236	4/14/2004	4/14/2004	100	88.6	91.9	85.1	88.6
33114-Bulk-10ppt-071204	237	7/12/2004	7/26/2004	10	95.8	107.5	90.5	105.0
33114-Bulk-100ppt-7220404	237	7/22/2004	7/26/2004	100	83.5	90.4	88.1	86.4
33114-Bulk-100ppt-72004	237	7/20/2004	7/26/2004	100	88.3	91.3	85.9	84.0
33114-Bulk-100ppt-72104	237	7/21/2004	7/26/2004	100	90.3	88.9	87.2	83.2
33114-Bulk-100ppt-72704	238	7/27/2004	8/14/2004	100	109.3	88.5	90.0	96.0
33114-Bulk-100ppt-012304	239	1/23/2004	1/23/2004	100	87.4	97.8	85.2	97.8
33114-Bulk-100ppt-102804	240	10/28/2004	10/29/2004	100	96.6	105.5	101.1	109.0
33114-Bulk-100ppt-102904	241	10/29/2004	10/29/2004	100	87.5	83.5	86.0	91.5

Table V: Summary Results of Field Fortifications in Pond Water Samples

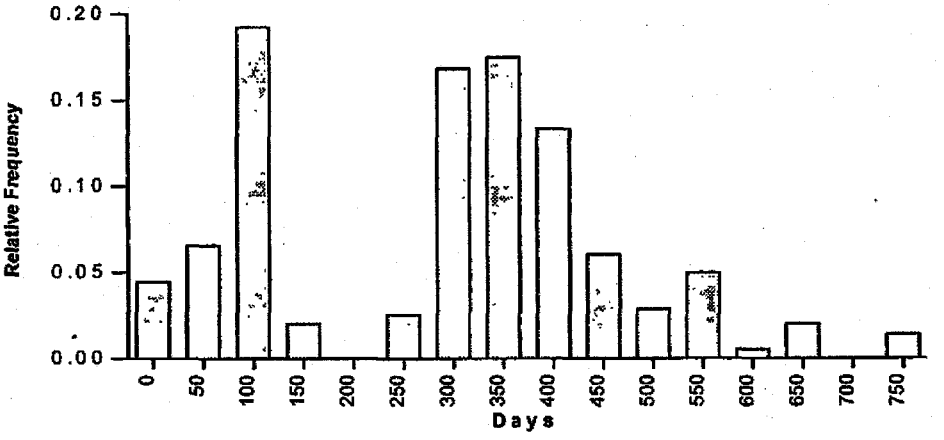
					Fipronil		MB 46513		MB 45950		MB 46136	
Sample ID	Date Fortified	Date Analyzed	Set #	Fortification Level (ppt)	Conc. Recovered (ppt)	Recovery (%)	Conc. Recovered (ppt)	Recovery (%)	Conc. Recovered (ppt)	Recovery (%)	Conc. Recovered (ppt)	Recovery (%)
33114-FS2-UTC-PondA	2/24/2003	10/21/2003	205	-	nd	-	nd	-	nd	-	nd	-
33114-FS2-UTC-PondB	2/24/2003	10/21/2003	205	-	nd	-	nd	-	nd	-	nd	-
33114-FS2-Low-PondA	2/24/2003	10/21/2003	205	20	17.5	87.5	16.8	84.0	15.5	77.5	14.9	74.5
33114-FS2-Low-PondB	2/24/2003	10/21/2003	205	20	18.3	91.5	18.6	93.0	16.8	84.0	15.8	79.0
33114-FS2-High-PondA	2/24/2003	10/21/2003	205	200	171.8	85.9	172.5	86.3	165.8	82.9	162.8	81.4
33114-FS2-High-PondB	2/24/2003	10/21/2003	205	200	176.6	88.3	177.1	88.6	170.8	85.4	163.0	81.5
33114-FS3-UTC-PondA	2/24/2003	10/25/2003	206	-	nd	-	nd	-	nd	-	nd	-
33114-FS3-UTC-PondB	2/24/2003	10/25/2003	206	-	nd	-	nd	-	nd	-	nd	-
33114-FS3-Low-PondA	2/24/2003	10/25/2003	206	20	15.6	78.0	15.5	77.5	16.7	83.5	14.5	72.5
33114-FS3-Low-PondB	2/24/2003	10/25/2003	206	20	17.2	86.0	17.6	88.0	18.3	91.5	17.3	86.5
33114-FS3-High-PondA	2/24/2003	10/25/2003	206	200	178.8	89.4	193.2	96.6	178.5	89.3	173.2	86.6
33114-FS3-High-PondB	2/24/2003	10/25/2003	206	200	187.0	93.5	193.6	96.8	171.6	85.8	168.5	84.3

5.5 Sample Storage and Residue Stability

A total of 596 stream (at the culvert), 170 downstream and 181 pond samples were analyzed as part of this study. The average storage time prior to analysis considering all study samples analyzed was 290 days, with a minimum of 8 days and a maximum of 761 days.

Figure 7 provides a frequency histogram of sample storage times for the 947 samples analyzed during the conduct of this study. Cumulatively, 82% of the samples were analyzed within the first 400 days following collection, and 96% within 550 days.

Figure 7: Frequency Histogram of Sample Storage in Days for All Analyzed Pond, Culvert and Downstream Samples



With regard to sample storage near the test site at the sampling contractors facility, the minimum storage time of samples that were analyzed was 1 day and the maximum 113 days. Cumulatively, 97% of these samples were transferred from the sampling contractor to the analytical laboratory facilities within 40 days following sampling.

Stability of fipronil-related residues in frozen water was demonstrated for up to 25 months in a separate monitoring study, Bayer CropScience Study 03RAFIX019[3].

3. "Chipco Topchoice® Turf Surface Water Runoff Monitoring Study (Pickens, Arkansas)", Bayer CropScience Study 03RAFIX019, D. Mosier.

Table II: Recovery of Fipronil and Its Metabolites from Field Spike Samples in Pond and Stream Water

Sample ID	Matrix	Sample Type	Analyte Recovered (ppb)			
			Fipronil (ppb)	MB46513 (ppb)	MB45950 (ppb)	MB46136 (ppb)
Analytical Set #205						
33114-FS2-Pond-UTCA	Pond Water	Untreated	nd	nd	nd	nd
33114-FS2-Pond-UTCB	Pond Water	Untreated	nd	nd	nd	nd
33114-FS2-Pond-LowA	Pond Water	0.02 ppb fortification	0.0175	0.0168	0.0155	0.0149
33114-FS2-Pond-LowB	Pond Water	0.02 ppb fortification	0.0183	0.0186	0.0168	0.0158
33114-FS2-Pond-HighA	Pond Water	0.20 ppb fortification	0.172	0.173	0.166	0.163
33114-FS2-Pond-HighB	Pond Water	0.20 ppb fortification	0.177	0.177	0.171	0.163
33114-FS2-Culvert-UTCA	Stream Water	Untreated	nd	nd	nd	nd
33114-FS2-Culvert-UTCB	Stream Water	Untreated	nd	nd	nd	nd
33114-FS2-Culvert-LowA	Stream Water	0.02 ppb fortification	0.0181	0.0177	0.0153	0.0155
33114-FS2-Culvert-LowB	Stream Water	0.02 ppb fortification	0.0171	0.0193	0.0173	0.0163
33114-FS2-Culvert-HighA	Stream Water	0.20 ppb fortification	0.169	0.174	0.169	0.163
33114-FS2-Culvert-HighB	Stream Water	0.20 ppb fortification	0.173	0.176	0.169	0.167
Analytical Set #206						
33114-FS3-Pond-UTCA	Pond Water	Untreated	nd	nd	nd	nd
33114-FS3-Pond-UTCB	Pond Water	Untreated	nd	nd	nd	nd
33114-FS3-Pond-LowA	Pond Water	0.02 ppb fortification	0.0156	0.0155	0.0167	0.0144
33114-FS3-Pond-LowB	Pond Water	0.02 ppb fortification	0.0172	0.0176	0.0183	0.0173
33114-FS3-Pond-HighA	Pond Water	0.20 ppb fortification	0.179	0.193	0.179	0.173
33114-FS3-Pond-HighB	Pond Water	0.20 ppb fortification	0.187	0.194	0.172	0.169
33114-FS3-Culvert-UTCA	Stream Water	Untreated	nd	nd	nd	nd
33114-FS3-Culvert-UTCB	Stream Water	Untreated	nd	nd	nd	nd
33114-FS3-Culvert-LowA	Stream Water	0.02 ppb fortification	0.0148	0.0166	0.0142	0.0156
33114-FS3-Culvert-LowB	Stream Water	0.02 ppb fortification	0.0161	0.0175	0.0150	0.0137
33114-FS3-Culvert-HighA	Stream Water	0.20 ppb fortification	0.158	0.169	0.150	0.149
33114-F33-Culvert-HighB	Stream Water	0.20 ppb fortification	0.157	0.164	0.157	0.150

Table VI: Recovery Values for the Method of Analysis Verification of Fipronil-Related Residues in Stream Water

Sample ID	Fortification Level	Extraction Date	Analysis Date	Analytical Set #	Procedural Recovery (%)			
					Fipronil	MB 46513	MB 45950	MB 46136
Stream Preapplication Rep 1	untreated	9/25/2002	10/03/2002	1	nd	nd	nd	nd
Stream Preapplication Rep 2	untreated	9/25/2002	10/03/2002	1	nd	nd	nd	nd
Stream Preapplication Spike LOQ-1	10 ppt	9/25/2002	10/03/2002	1	74.9	72.1	74.2	86.6
Stream Preapplication Spike LOQ-2	10 ppt	9/25/2002	10/03/2002	1	63.3	70.2	70.7	81.5
Stream Preapplication Spike-10XLOQ-1	100 ppt	9/25/2002	10/03/2002	1	64.2	71.8	74.6	81.9
Stream Preapplication Spike-10XLOQ-2	100 ppt	9/25/2002	10/03/2002	1	64.7	73.2	75.3	83.8
HPLC water spike LOQ	10 ppt	9/25/2002	10/03/2002	1	87.8	81.8	84.6	82.5
HPLC water spike 10XLOQ	10 ppt	9/25/2002	10/03/2002	1	86.7	84.4	76.1	77.5

Table III: Recovery Values for the Method of Analysis Verification of Fipronil-Related Residues in Pond Water

Sample ID	Fortification Level	Extraction Date	Analysis Date	Analytical Set #	Procedural Recovery (%)			
					Fipronil	MB 46513	MB 45950	MB 46136
Pond Preapplication Rep 1	Untreated	9/25/2002	10/03/2002	2	nd	nd	nd	nd
Pond Preapplication Rep 2	Untreated	9/25/2002	10/03/2002	2	nd	nd	nd	nd
Pond Preapplication Spike LOQ-1	10 ppt	9/25/2002	10/03/2002	2	64.4	72.5	76.9	80.2
Pond Preapplication Spike LOQ-2	10 ppt	9/25/2002	10/03/2002	2	64.5	74.4	79.2	78.1
Pond Preapplication Spike-10XLOQ-1	100 ppt	9/25/2002	10/03/2002	2	62.3	76.2	76.3	83.8
Pond Preapplication Spike-10XLOQ-2	100 ppt	9/25/2002	10/03/2002	2	62.9	75.9	77.8	84.7
HPLC water spike LOQ	10 ppt	9/25/2002	10/03/2002	2	94.1	90.6	80.9	89.0
HPLC water spike 10XLOQ	100 ppt	9/25/2002	10/03/2002	2	94.0	87.7	89.1	84.8

Study 02YV33114

Sample was taken near roadway just above pond. See sampling diagram.

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AGVISE Soil Characterization Report

Submitting firm = BAYER CROPSCIENCE
Protocol or Study No = 02YV33114
Sample ID. = 33114SC-01 0-6"
Trial ID. = NA
Date Received = 3-5-03
Date Reported = 03-11-2003

AGVISE Lab No	03- 246
Percent Sand	64
Percent Silt	28
Percent Clay	8
USDA Textural Class (hydrometer method)	Sandy Loam
Bulk Density (disturbed) gm/cc	1.14
Cation Exchange Capacity (meq/100 g)	15.3
% Moisture at 1/3 Bar	18.2
% Organic Matter--Walkley Black	1.1
pH in 1:1 soil:water ratio	6.5

Base Saturation Data

Cation	Percent	ppm
Calcium	50.2	1540
Magnesium	34.6	636
Sodium	0.4	13
Potassium	1.3	77
Hydrogen	13.6	21

These tests were completed in compliance of 40 CFR Part 160.

Larry Wikoff
Analytical Investigator

3/11/03
Date