

**Data Evaluation Report of Water Monitoring Study**

PMRA Submission Number {.....}

EPA MRID Number 46490305

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**Test material:** Fipronil

**IUPAC name:** 5-amino-1-(2,6-dichloro- $\alpha,\alpha,\alpha$ -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: \_\_\_\_\_  
Date: \_\_\_\_\_



**Secondary Reviewer:** Thuy Nguyen  
EPA

Signature: \_\_\_\_\_  
Date: \_\_\_\_\_



**CITATION:** Hurst, Kenneth M. 2004. Chipco Topchoice® Insecticide: Surface Water Runoff Monitoring Study at a Residential Setting in Mecklenburg County, NC. Sponsored by BayerCrop Science, RTP, NC. Performed by BayerCrop Science, RTP, NC and AgVise Laboratories, Northward, ND. MRID 46490305.



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## EXECUTIVE SUMMARY:

The fipronil water monitoring study (MRID 46490305) provides supplemental 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® in a residential setting 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.

The data are deemed supplemental because there is an insufficient description of the storage stability study. To upgrade the study, the registrant should provide a complete description of the storage stability study.

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 occurrence was monitored at the entry point and exit point of a small stream transecting a fipronil-treated catchment area in a residential setting. There was one detection of fipronil ( $< 0.010 \mu\text{g/L}$  @ 15 days post fipronil application) in an exit water sample. All other samples had fipronil residue concentrations  $< 0.004 \mu\text{g/L}$ . There were no detections of fipronil residues in sediment except for MB46136 ( $< 0.100 \mu\text{g/kg}$ ) in two samples from the entry point location.

## 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).

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## A. MATERIALS:

The objective of this study was to assess the runoff potential of fipronil and its degradation products from use of Chipco Topchoice® in residential settings.

### 1. Study Description

The runoff monitoring study was conducted at an apartment complex in Mecklenburg, NC. This study was selected because it represents a residential area with turf, impervious surfaces, and natural area with a small stream (**Figures 1, 2, 3, 4, 5; pp 67-71**). A unnamed small stream flows east to west through a catchment area of 5.45 acres and drains into Brier Creek. Runoff from the site is channeled into the stream through curb drains, in-turf drains, and surface water flow. Representative samples of drainage water and in-turf drainage water were analyzed for water quality parameters (**Table II**).

The soils in the catchment area were classified as a Monacan soil series (fine -loamy, mixed, Thermic Fluvaquentic Eutrochrepts) and Arens. These soils were used as backfill material around the apartment complex. Soil physicochemical properties are shown in **Table 1 (pp 87)**.

The soil hydrologic grouping for the site is C. The steepest slope in the catchment area is 10%.

The fipronil application area accounts for 1.78 acres of turf and natural space with pine straw mulch; the remaining area (3.7 acres) was impervious surfaces and buffer zone. Two locations were monitored in the stream. The stream entry point into the catchment area was located east of a rectangular culvert under Randolph Road. This sampling location was selected to assess background concentrations of fipronil and its degradation products. The stream exit point from the catchment area was the point where the small stream transecting the catchment area enters Brier Creek.

The sampling locations (Entry and Exit sites) were equipped with an autosampler and flowmeter. The autosamplers were programmed to collect duplicate 100 ml samples at 3 hour intervals for the first 3 month and 6 hour intervals for the remaining 3 months of the study. Grab samples were taken for some samples to compensate for instrument malfunction, low stream flow, or weather conditions. Stream flow data including water level and average velocity of stream flow are shown in **Table II (pp 97-106) and Figure 2 (pp 26)**. Flow rate of the stream was calculated by multiplying the cross-sectional area by the velocity of the stream flow. Water samples at the Entry site were taken from 3 to 55 days after application of fipronil (**Appendix G1, pp 108-109**). Water samples at the Exit site were taken from 1 to 180 days after the fipronil application (**Appendix G2, pp 110-122**). Water samples were removed from

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the autosamplers daily and then stored under refrigeration (35-40°F) until transferred to the laboratory. Samples were transferred to the laboratory on blue ice and stored frozen..

Sediment samples were taken at the Entry and Exit sampling sites on June 20, 2003. Eight acetate sleeve cores of sediment were collected, composited, and then a subsample of the composite sample was placed into a 250 ml Nalgene bottle. Sediment samples were transported on blue ice and then stored in a freezer until analysis.

A rain gauge was used to collect on-site precipitation. The on-site cumulative rainfall was 21.6 inches for the duration of the study. The on-site precipitation was comparable to the local NOAA weather data at the Douglas International Airport, Charlotte, NC (**Table III, pp 24**).

## 2. Site Preparation and Maintenance

The test site had well established fescue turf. It was mowed weekly during the study. The turf was aerated and fertilized during the study (1 week after fipronil application). The turf had also been spot treated with AMDRO® several years prior to this study. Although the test site had an in-ground irrigation system, they were not used because of local water use restrictions for the 2002 drought.

## 3. Pesticide Application

Chipco Topchoice® insecticide was applied on September 12, 2002. The 1.78 acre treated area received 164.3 pounds of Chipco TopChoice® insecticide (0.0137 % fipronil). The calculated application rate was 0.0126 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. Granulars on any impervious surfaces were swept or blown onto the turf.

## 4. Analytical

Water samples were stored frozen for a maximum time period of 90 days (**Appendix G2, pp 111-122**). The source of storage stability data were referenced to Texas runoff study (**MRID 46733902; Tables VIII and IX, pp 37**). The storage stability data indicate fipronil, MB46513, MB45950, and MB46136 were stable during a 25 month storage period. [The reviewer notes there is an incomplete description of the storage stability study in the Texas runoff study (MRID 46733902)].

Residues of fipronil in water samples were analyzed using a LC/MS/MS method entitled "Method of Analysis for Possible Residues of Fipronil, MB46513, MB45950, and MB46136 in Water-Revision 2000- Revision 4" issued May 21, 2002. 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 (**Bayer Crop Study 02YV36530, page 126**).

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Procedural method verification in HPCL water at concentrations of 0.005, 0.01, and 0.1 µg/L showed recoveries of  $86 \pm 13$  for fipronil ( $n=36$ ),  $87 \pm 12$  for MB46513 ( $n=36$ ),  $86 \pm 11$  for MB45950 ( $n=36$ ), and  $90 \pm 11$  for MB46136 ( $n=36$ ) (**Table V, pp 28**). Method verification was conducted using stream water and HPLC water at 0.010 and 0.100 µg/L. Residue recoveries ranged from  $78\% \pm 11$  to  $85\% \pm 4$  (**Table IV, pp 27**). Bulk water for the field spike analysis was collected for field spike samples. The field spike samples were prepared at 0, 0.010, 0.020, 0.100, and 0.200 µg/L. Field spike samples were handled in a similar manner as the water samples. Recoveries of the field spikes were 74 -84% for fipronil, 84%-90% for MB46513, 78-80% for MB45950, and 81-89% for MB46136 (**Table VIII, pp 30**).

Residues of fipronil in sediment samples were analyzed using a LC/MS/MS method entitled "Method of Analysis for Possible Residues of Fipronil, MB46513, MB45950, and MB46136 in Sediment" issued November 19, 2003. 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.

Method verification was conducted using sediment spike at 0.500 µg/L. Residue recoveries ranged from 85.8% to 96.2 (**Table IX, pp 31**).

Mass loss of fipronil residues was estimated using sample concentration multiplied by the mean flow rate (gallons/minute).

### B. REPORTED RESULTS

- 1. Concentration of Fipronil Residues in Stream Water-** There were no fipronil residue detections in the Entry test site (**Table VII, pp 35-36**). There was only one sample (36530A-2089) with a detection ( $< 0.010$  µg/L) of fipronil at the Exit test site (**Table VIII, pp 37-50**). All other samples had fipronil residue concentrations of  $< 0.004$  µg/L.
- 2. Mass Loss of Fipronil Residues from the Application Site-** The mass loss of fipronil was estimated for Sample 36530A-2089 (9/27 /02, 01:26) over a 6 hour flow period. The estimated mass loss was  $< 11.1$  mg of applied fipronil. This loss is equivalent to  $< 0.11\%$  of the applied fipronil (**pp 32**).
- 3. Concentration of Fipronil Residues in Sediment-** There were no detections of fipronil residues in sediment except for MB46136 ( $< 0.100$  µg/kg) in two samples from the entry point location (**Table IX, pp 31**).

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### C. REVIEWER COMMENTS

1. The registrant referenced a storage stability study in a Texas runoff study (MRID 46733902). The Texas runoff study does not provide a detailed description of the storage stability study.
2. The fipronil water monitoring study (MRID 46490305) provides supplemental 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® in a residential setting in Mecklenburg, NC. The data are deemed supplemental because there is an insufficient description of the storage stability study. 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.
3. The fipronil application was made in September. This application period does not coincide with highest precipitation months. Therefore, fipronil runoff and occurrence in surface water is expected to be higher with spring (April-May) applications.
4. MB46136 detections in sediment at the stream entry point suggest that fipronil was being used upstream from the catchment area.



Figure 1. Study Site Location

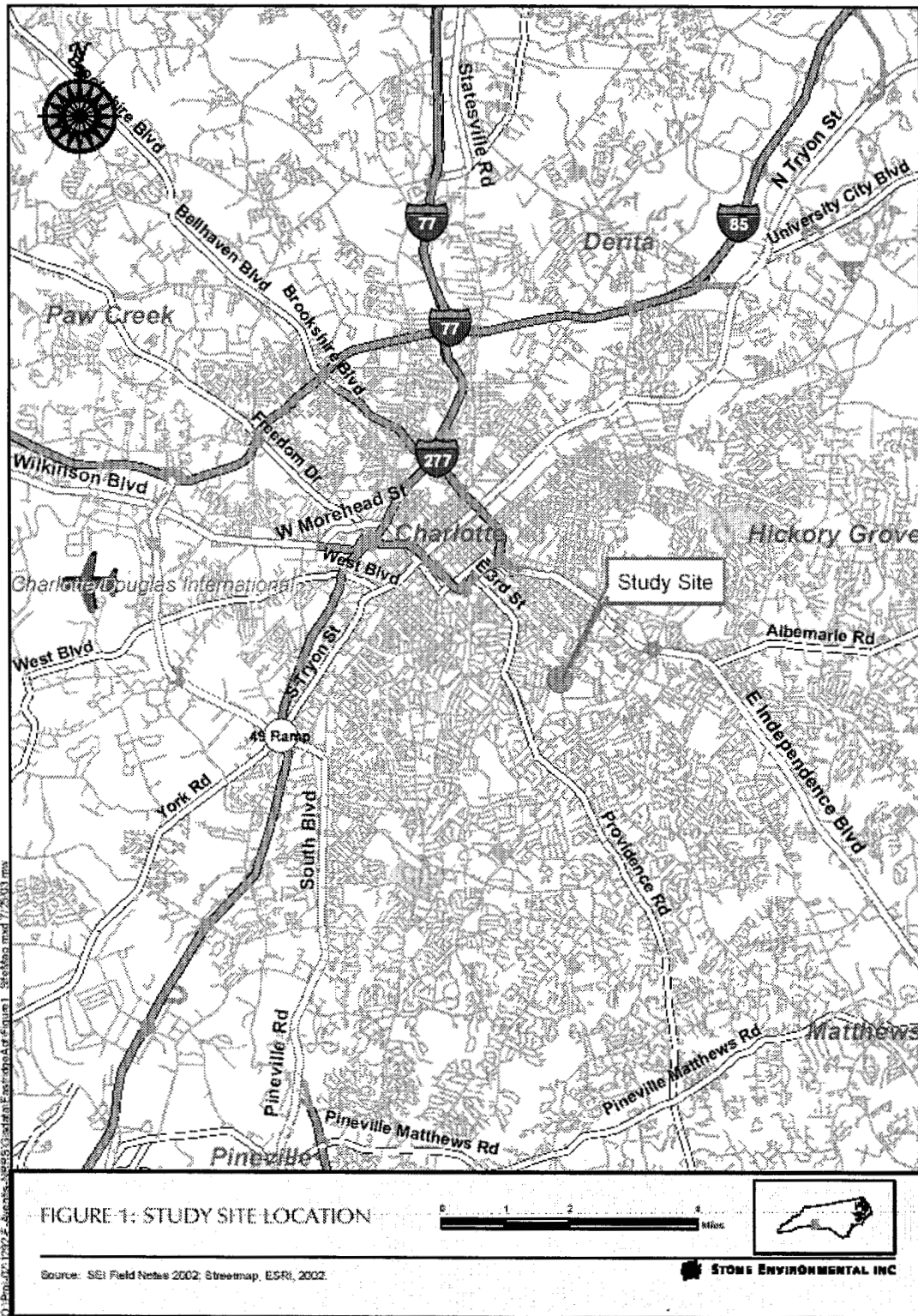




Figure 2. Test Site Topography







Figure 3. Stormwater Drainage Network





Figure 4. Application Area

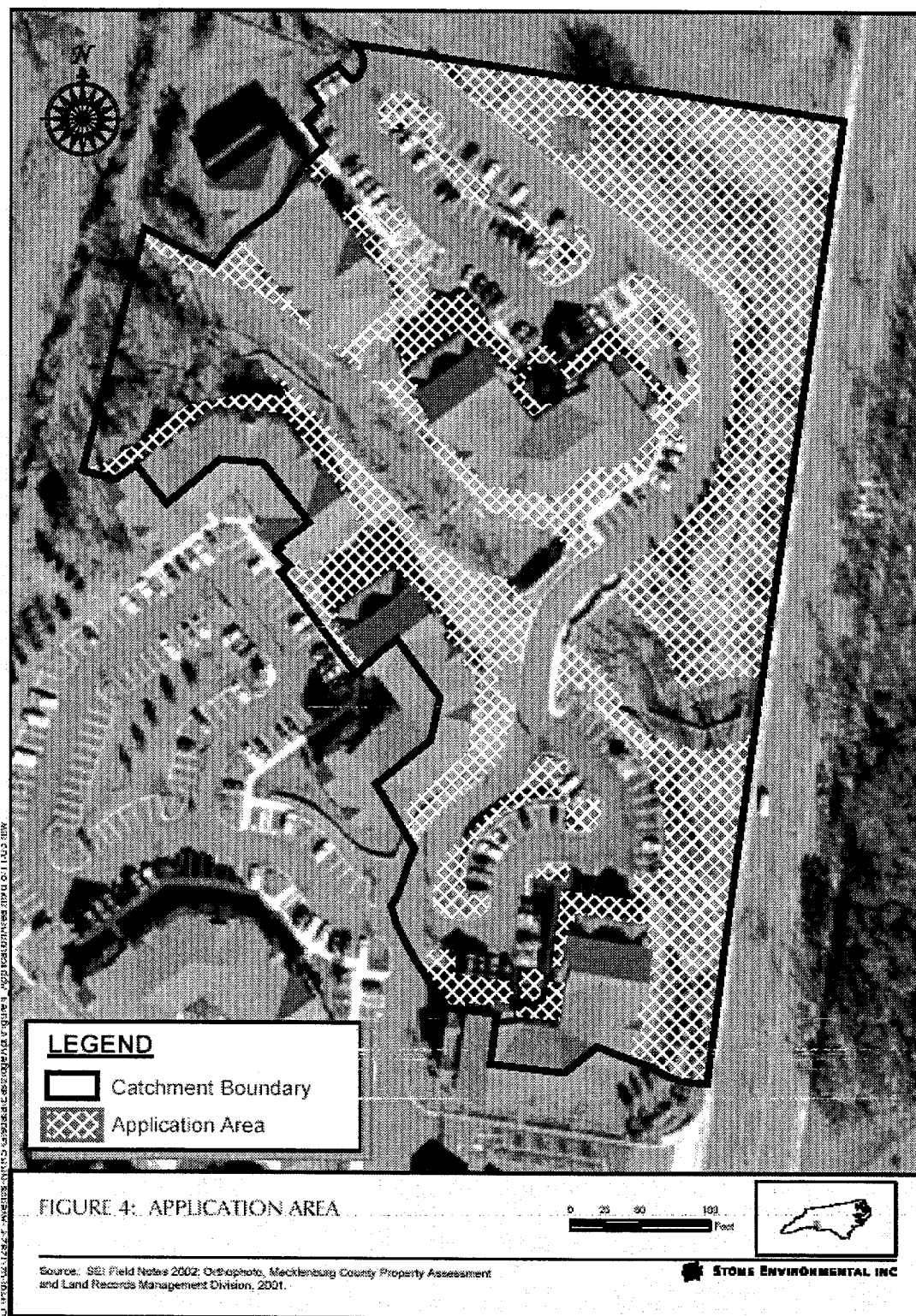
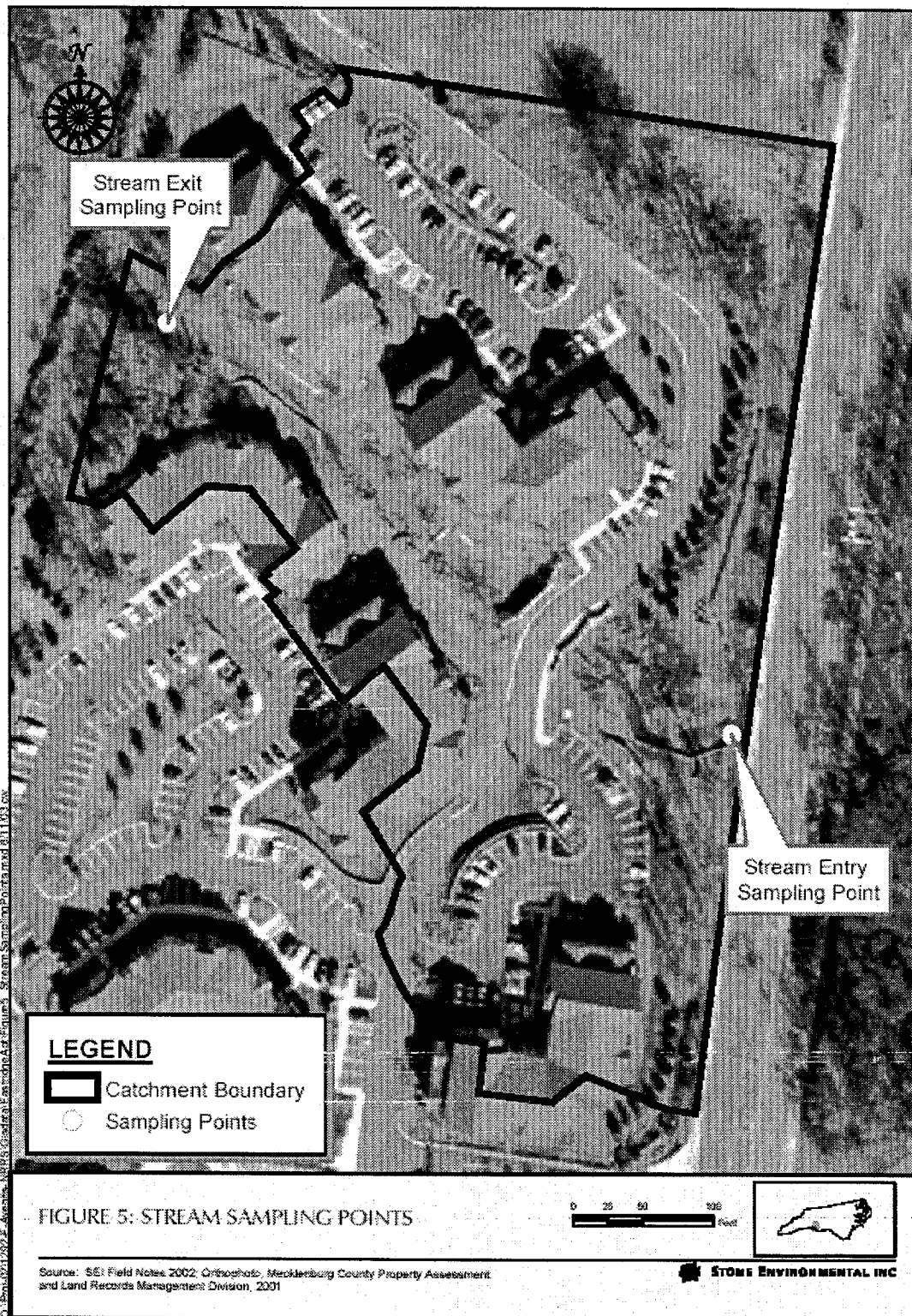




Figure 5. Stream Sampling Points



**Water**

Water samples for characterization were collected on 6 March 2003 from three locations within the treated area. They were collected from a drainage swale and in-turf drains following a rainfall and are representative of runoff from the catchment area. They were shipped to Agvise Laboratories on 10 March 2003 and received the next day. The results are listed in Table II. Copies of the laboratory reports are included in this Appendix.

**Table II: Water Characterization**

| Parameter                                            | Analytical Result |                |                |
|------------------------------------------------------|-------------------|----------------|----------------|
| Sample ID                                            | 36530A-Water-1    | 36530A-Water-2 | 36530A-Water-3 |
| pH                                                   | 6.3               | 6.9            | 7.3            |
| Sodium (ppm)                                         | 1                 | 1              | 0.3            |
| Calcium (ppm)                                        | 7                 | 8              | 11             |
| Magnesium (ppm)                                      | 2                 | 2              | 3              |
| Hardness<br>mg equivalent<br>CaCO <sub>3</sub> (ppm) | 27                | 28             | 42             |
| Conductivity<br>(mmhos/cm)                           | 0.11              | 0.08           | 0.09           |
| Sodium Absorption<br>Ratio                           | 0.05              | 0.04           | 0.02           |
| Total Dissolved<br>Solids (ppm)                      | 98                | 108            | 88             |
| Turbidity (NTU)                                      | 10.8              | 21.9           | 27.6           |

**Soil**

Soil samples for characterization were collected on 6 March 2003 from three locations within the treated area. The samples were obtained from the top 6 inches of soil after removal of the turf and roots. The samples contained gravel, an obvious indication of soil disturbance during construction of the apartment complex. They were shipped to Agvise Laboratories on 10 March 2003 and received the next day. The results are listed in Table I. Copies of the laboratory reports are included in this Appendix.

**Table I: Soil Characterization**

| Parameter                     | Analytical Result |               |               |
|-------------------------------|-------------------|---------------|---------------|
| Sample ID                     | 36530A-Soil-1     | 36530A-Soil-2 | 36530A-Soil-3 |
| Percent Sand                  | 52                | 58            | 56            |
| Percent Silt                  | 28                | 26            | 32            |
| Percent Clay                  | 20                | 16            | 12            |
| USDA Texture                  | Sandy Loam        | Sandy Loam    | Sandy Loam    |
| Bulk Density<br>(gm/cc)       | 1.13              | 1.09          | 1.21          |
| CEC (meq/100 g)               | 9.5               | 9.0           | 9.6           |
| Percent Moisture<br>(1/3 bar) | 20.2              | 18.6          | 18.0          |
| Percent Organic<br>Matter     | 1.6               | 1.1           | 1.6           |
| pH                            | 6.8               | 6.6           | 7.2           |
| Calcium (ppm)                 | 1090              | 996           | 1300          |
| Magnesium (ppm)               | 174               | 185           | 150           |
| Sodium (ppm)                  | 16                | 20            | 14            |
| Potassium (ppm)               | 91                | 78            | 90            |
| Hydrogen (ppm)                | 23                | 22            | 16            |





The "Entry" and "Exit" samplers were equipped with Isco Model 750 Area-Velocity Modules. The area velocity sensor detects the average velocity of the stream flow as it moves up or downstream. The sensor, equipped with an internal pressure transducer, also measures the level of the flow stream. The cross-sectional area of the channel is programmed into the unit. The module determines the flow rate by multiplying the channel cross-sectional area by the velocity of the stream flow.

The "Entry" flow sensor was placed in the rectangular culvert carrying the stream under Randolph Road and into the apartment complex. The culvert was 9.0 feet wide with the sensor placed 9 inches from the bottom of the culvert to allow for possible silting. The instrumentation was programmed to collect velocity and flow data at 10-minute intervals.

The "Exit" flow sensor was placed in the bed of the stream as it left the catchment area. The stream bed was irregular in its cross-sectional area. Thus the cross-sectional area of the channel was determined at various segment heights, and the module was programmed with the height and area as shown below in Table I. The instrumentation was programmed to collect velocity and flow data at 10-minute intervals.

**Table I. Cross-Sectional Area of Stream Channel at "Exit" Sampler**

| Height<br>(inches) | Segment<br>Height<br>(inches) | Width<br>(feet) | Cross-<br>Sectional<br>Area of<br>Segment<br>(square feet) | Total<br>Cross-<br>Sectional<br>Area<br>(square feet) |
|--------------------|-------------------------------|-----------------|------------------------------------------------------------|-------------------------------------------------------|
| 3                  | 3                             | 8.33            | 2.08                                                       | 2.08                                                  |
| 4                  | 1                             | 9.00            | 0.75                                                       | 2.83                                                  |
| 6                  | 2                             | 11.08           | 1.85                                                       | 4.68                                                  |
| 8                  | 2                             | 12.00           | 2.00                                                       | 6.68                                                  |
| 10                 | 2                             | 12.75           | 2.13                                                       | 8.80                                                  |
| 12                 | 2                             | 13.08           | 2.18                                                       | 10.98                                                 |
| 15                 | 3                             | 15.50           | 3.88                                                       | 14.86                                                 |
| 18                 | 3                             | 16.08           | 4.02                                                       | 18.88                                                 |
| 24                 | 6                             | 18.25           | 9.13                                                       | 28.00                                                 |
| 30                 | 6                             | 20.92           | 10.46                                                      | 38.46                                                 |
| 36                 | 6                             | 22.50           | 11.25                                                      | 49.71                                                 |
| 42                 | 6                             | 23.58           | 11.79                                                      | 61.50                                                 |
| 48                 | 6                             | 24.25           | 12.13                                                      | 73.63                                                 |

A summary of the daily average level, velocity and flow data from the "Entry" and "Exit" samplers is contained in Table II of this Appendix.



Table II. Flow Data for "Entry" and "Exit" Location

| Days After Application | Date      | On-Site Daily Rainfall (in) | Stream Conditions at "Entry" Location |                                |                         | Stream Conditions at "Exit" Location |                                |                         |
|------------------------|-----------|-----------------------------|---------------------------------------|--------------------------------|-------------------------|--------------------------------------|--------------------------------|-------------------------|
|                        |           |                             | Average Stream Level (ft)             | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) | Average Stream Level (ft)            | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) |
| 0                      | 12 Sep 02 | 0.00                        | 0.988                                 | 0.04                           | 143                     | 0.023                                | NA                             | NA                      |
| 1                      | 13 Sep 02 | 0.00                        | 0.983                                 | 0.19                           | 744                     | 0.026                                | NA                             | NA                      |
| 2                      | 14 Sep 02 | 0.56                        | 1.107                                 | 0.07                           | 449                     | 0.079                                | NA                             | NA                      |
| 3                      | 15 Sep 02 | 0.86                        | 1.671                                 | 0.37                           | 2803                    | 0.390                                | 2.97                           | 5407                    |
| 4                      | 16 Sep 02 | 0.02                        | 1.378                                 | 0.10                           | 657                     | 0.268                                | 1.69                           | 2153                    |
| 5                      | 17 Sep 02 | 0.17                        | 1.273                                 | 0.07                           | 375                     | 0.227                                | 1.21                           | 1112                    |
| 6                      | 18 Sep 02 | 0.01                        | 1.117                                 | 0.05                           | 241                     | 0.152                                | 0.63                           | 348                     |
| 7                      | 19 Sep 02 | 0.00                        | 1.089                                 | 0.09                           | 399                     | 0.166                                | 0.38                           | 224                     |
| 8                      | 20 Sep 02 | 0.00                        | 1.063                                 | 0.07                           | 293                     | 0.156                                | 0.29                           | 143                     |
| 9                      | 21 Sep 02 | 0.00                        | 1.051                                 | 0.04                           | 181                     | 0.088                                | 0.51                           | 157                     |
| 10                     | 22 Sep 02 | 0.00                        | 1.039                                 | 0.01                           | 38                      | 0.086                                | 0.40                           | 119                     |
| 11                     | 23 Sep 02 | 0.00                        | 1.039                                 | 0.12                           | 496                     | 0.089                                | 0.38                           | 119                     |
| 12                     | 24 Sep 02 | 0.00                        | 1.010                                 | 0.80                           | 3287                    | 0.054                                | 0.27                           | 53                      |
| 13                     | 25 Sep 02 | 0.00                        | 1.012                                 | -0.47                          | -1908                   | 0.005                                | 0.26                           | 4                       |
| 14                     | 26 Sep 02 | 0.56                        | 1.412                                 | 0.22                           | 1331                    | 0.283                                | 2.04                           | 2686                    |
| 15                     | 27 Sep 02 | 0.17                        | 1.319                                 | 0.04                           | 218                     | 0.255                                | 0.97                           | 945                     |
| 16                     | 28 Sep 02 | 0.00                        | 1.193                                 | -0.13                          | -649                    | 0.203                                | 0.89                           | 662                     |
| 17                     | 29 Sep 02 | 0.00                        | 1.084                                 | 0.26                           | 1126                    | 0.137                                | 0.59                           | 292                     |



Table II. Flow Data for "Entry" and "Exit" Location (continued)

| Days After Application | Date      | On-Site Daily Rainfall (in) | Stream Conditions at "Entry" Location |                                |                         | Stream Conditions at "Exit" Location |                                |                         |
|------------------------|-----------|-----------------------------|---------------------------------------|--------------------------------|-------------------------|--------------------------------------|--------------------------------|-------------------------|
|                        |           |                             | Average Stream Level (ft)             | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) | Average Stream Level (ft)            | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) |
| 18                     | 30 Sep 02 | 0.00                        | 1.062                                 | 0.17                           | 730                     | 0.112                                | 0.50                           | 199                     |
| 19                     | 01 Oct 02 | 0.02                        | 1.094                                 | -0.06                          | -270                    | 0.141                                | 0.56                           | 286                     |
| 20                     | 02 Oct 02 | 0.00                        | 1.086                                 | 0                              | -17                     | 0.129                                | 0.46                           | 214                     |
| 21                     | 03 Oct 02 | 0.00                        | 1.065                                 | -0.06                          | -260                    | 0.101                                | 0.48                           | 172                     |
| 22                     | 04 Oct 02 | 0.00                        | 1.056                                 | -0.12                          | -525                    | 0.069                                | 0.75                           | 178                     |
| 23                     | 05 Oct 02 | 0.00                        | 1.056                                 | 0                              | 19                      | 0.075                                | 0.45                           | 120                     |
| 24                     | 06 Oct 02 | 0.00                        | 1.032                                 | 0.14                           | 568                     | 0.054                                | 0.46                           | 88                      |
| 25                     | 07 Oct 02 | 0.00                        | 1.023                                 | 0.11                           | 436                     | 0.037                                | 0.46                           | 58                      |
| 26                     | 08 Oct 02 | 0.00                        | 1.008                                 | -0.10                          | -398                    | 0.024                                | 0.12                           | 15                      |
| 27                     | 09 Oct 02 | 0.02                        | 1.007                                 | 0.08                           | 334                     | 0.012                                | 0.09                           | 4                       |
| 28                     | 10 Oct 02 | 0.05                        | 1.023                                 | 0.33                           | 1360                    | 0.045                                | 0.15                           | 50                      |
| 29                     | 11 Oct 02 | 1.70                        | 1.814                                 | 0.52                           | 5286                    | 0.545                                | 1.07                           | 4069                    |
| 30                     | 12 Oct 02 | 0.00                        | 1.181                                 | 0.04                           | 209                     | 0.191                                | 1.02                           | 721                     |
| 31                     | 13 Oct 02 | 0.66                        | 1.542                                 | 0.44                           | 3408                    | 0.411                                | 2.27                           | 5225                    |
| 32                     | 14 Oct 02 | 0.00                        | 1.191                                 | -0.05                          | -252                    | 0.221                                | 0.92                           | 764                     |
| 33                     | 15 Oct 02 | 0.77                        | 1.438                                 | 0.23                           | 1743                    | 0.319                                | 2.30                           | 3940                    |
| 34                     | 16 Oct 02 | 0.53                        | 1.682                                 | 0.39                           | 3489                    | 0.415                                | 3.29                           | 7672                    |
| 35                     | 17 Oct 02 | 0.00                        | 1.183                                 | -0.13                          | -629                    | 0.209                                | 0.90                           | 691                     |
| 36                     | 18 Oct 02 | 0.00                        | 1.114                                 | -0.05                          | -242                    | 0.160                                | 0.46                           | 260                     |





Table II. Flow Data for "Entry" and "Exit" Location (continued)

| Days After Application | Date      | On-Site Daily Rainfall (in) | Stream Conditions at "Entry" Location |                                |                         | Stream Conditions at "Exit" Location |                                |                         |
|------------------------|-----------|-----------------------------|---------------------------------------|--------------------------------|-------------------------|--------------------------------------|--------------------------------|-------------------------|
|                        |           |                             | Average Stream Level (ft)             | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) | Average Stream Level (ft)            | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) |
| 37                     | 19 Oct 02 | 0.00                        | 1.170                                 | 0.40                           | 1915                    | 0.138                                | 0.45                           | 222                     |
| 38                     | 20 Oct 02 | 0.01                        | 1.177                                 | 1.08                           | 5122                    | 0.138                                | 0.39                           | 194                     |
| 39                     | 21 Oct 02 | 0.40                        | 1.372                                 | 0.15                           | 957                     | 0.241                                | 1.53                           | 2195                    |
| 40                     | 22 Oct 02 | 0.09                        | 1.398                                 | 0.14                           | 887                     | 0.289                                | 1.89                           | 2522                    |
| 41                     | 23 Oct 02 | 0.00                        | 1.167                                 | 0.03                           | 152                     | 0.181                                | 0.89                           | 593                     |
| 42                     | 24 Oct 02 | 0.00                        | 1.127                                 | -0.01                          | -25                     | 0.148                                | 0.55                           | 296                     |
| 43                     | 25 Oct 02 | 0.06                        | 1.133                                 | 0.10                           | 470                     | 0.144                                | 0.47                           | 248                     |
| 44                     | 26 Oct 02 | 0.00                        | 1.21                                  | 0.54                           | 2640                    | 0.197                                | 0.82                           | 592                     |
| 45                     | 27 Oct 02 | 0.00                        | 1.157                                 | 0.10                           | 461                     | 0.165                                | 0.59                           | 351                     |
| 46                     | 28 Oct 02 | 0.52                        | 1.432                                 | 0.20                           | 1613                    | 0.288                                | 0.99                           | 1408                    |
| 47                     | 29 Oct 02 | 0.12                        | 1.365                                 | 0.07                           | 358                     | 0.262                                | 1.04                           | 1031                    |
| 48                     | 30 Oct 02 | 0.01                        | 1.229                                 | -0.12                          | -596                    | 0.218                                | 0.98                           | 787                     |
| 49                     | 31 Oct 02 | 0.00                        | 1.158                                 | -0.12                          | -561                    | 0.194                                | 0.74                           | 527                     |
| 50                     | 01 Nov 02 | 0.00                        | 1.128                                 | -0.12                          | -558                    | 0.180                                | 0.56                           | 364                     |
| 51                     | 02 Nov 02 | 0.00                        | 1.143                                 | -0.13                          | -600                    | 0.177                                | 0.54                           | 349                     |
| 52                     | 03 Nov 02 | 0.00                        | 1.155                                 | -0.13                          | -606                    | 0.173                                | 0.45                           | 285                     |
| 53                     | 04 Nov 02 | 0.01                        | 1.177                                 | -0.12                          | -553                    | 0.191                                | 0.36                           | 241                     |
| 54                     | 05 Nov 02 | 1.00                        | 1.474                                 | 0.21                           | 1995                    | 0.358                                | 1.70                           | 4618                    |
| 55                     | 06 Nov 02 | 0.15                        | 1.557                                 | 0.36                           | 2780                    | 0.408                                | 2.39                           | 5412                    |



Table II. Flow Data for "Entry" and "Exit" Location (continued)

| Days After Application | Date      | On-Site Daily Rainfall (in) | Stream Conditions at "Entry" Location |                                |                         | Stream Conditions at "Exit" Location |                                |                         |
|------------------------|-----------|-----------------------------|---------------------------------------|--------------------------------|-------------------------|--------------------------------------|--------------------------------|-------------------------|
|                        |           |                             | Average Stream Level (ft)             | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) | Average Stream Level (ft)            | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) |
| 56                     | 07 Nov 02 | 0.00                        | 1.172                                 | -0.10                          | -473                    | 0.248                                | 0.32                           | 303                     |
| 57                     | 08 Nov 02 | 0.00                        | 1.163                                 | -0.06                          | -285                    | 0.248                                | 0.29                           | 258                     |
| 58                     | 09 Nov 02 | 0.00                        | 1.169                                 | 0.05                           | 236                     | 0.246                                | 0.06                           | 61                      |
| 59                     | 10 Nov 02 | 0.02                        | 1.196                                 | 0.03                           | 152                     | 0.234                                | -0.30                          | -258                    |
| 60                     | 11 Nov 02 | 0.53                        | 1.498                                 | 0.34                           | 2454                    | 0.375                                | -0.88                          | -1655                   |
| 61                     | 12 Nov 02 | 0.22                        | 1.908                                 | 0.66                           | 5582                    | 0.595                                | 3.08                           | 7773                    |
| 62                     | 13 Nov 02 | 0.01                        | 1.351                                 | -0.03                          | -115                    | 0.291                                | 1.08                           | 1316                    |
| 63                     | 14 Nov 02 | 0.00                        | 1.199                                 | -0.16                          | -775                    | 0.233                                | 0.54                           | 467                     |
| 64                     | 15 Nov 02 | 0.00                        | 1.18                                  | -0.16                          | -762                    | 0.224                                | 0.57                           | 455                     |
| 65                     | 16 Nov 02 | 0.01                        | 1.682                                 | 0.25                           | 2339                    | 0.506                                | 2.05                           | 7008                    |
| 66                     | 17 Nov 02 | 0.00                        | 1.58                                  | 0.18                           | 1107                    | 0.403                                | 3.26                           | 5643                    |
| 67                     | 18 Nov 02 | 0.48                        | 1.235                                 | 0.18                           | 898                     | 0.246                                | 0.93                           | 850                     |
| 68                     | 19 Nov 02 | 0.77                        | 1.153                                 | 0.18                           | 839                     | 0.231                                | 0.91                           | 762                     |
| 69                     | 20 Nov 02 | 0.12                        | 1.172                                 | 0.18                           | 852                     | 0.252                                | 0.53                           | 503                     |
| 70                     | 21 Nov 02 | 0.01                        | 1.205                                 | 0.11                           | 544                     | 0.249                                | 0.40                           | 360                     |
| 71                     | 22 Nov 02 | 0.00                        | 1.195                                 | -0.01                          | -26                     | 0.249                                | 0.19                           | 174                     |
| 72                     | 23 Nov 02 | 0.01                        | 1.193                                 | 0.05                           | 254                     | 0.305                                | 0.49                           | 732                     |
| 73                     | 24 Nov 02 | 0.00                        | 1.183                                 | 0.06                           | 287                     | 0.334                                | 0.63                           | 828                     |
| 74                     | 25 Nov 02 | 0.00                        | 1.172                                 | -0.12                          | -580                    | 0.278                                | 0.22                           | 221                     |



Table II. Flow Data for "Entry" and "Exit" Location (continued)

| Days After Application | Date      | On-Site Daily Rainfall (in) | Stream Conditions at "Entry" Location |                                |                         | Stream Conditions at "Exit" Location |                                |                         |
|------------------------|-----------|-----------------------------|---------------------------------------|--------------------------------|-------------------------|--------------------------------------|--------------------------------|-------------------------|
|                        |           |                             | Average Stream Level (ft)             | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) | Average Stream Level (ft)            | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) |
| 75                     | 26 Nov 02 | 0.00                        | 1.169                                 | -0.12                          | -563                    | 0.243                                | 0.27                           | 246                     |
| 76                     | 27 Nov 02 | 0.00                        | 1.175                                 | -0.01                          | -43                     | 0.246                                | 0.26                           | 239                     |
| 77                     | 28 Nov 02 | 0.00                        | 1.053                                 | 0.10                           | 434                     | 0.234                                | 0.30                           | 251                     |
| 78                     | 29 Nov 02 | 0.00                        | 1.058                                 | 0.08                           | 342                     | 0.205                                | 0.44                           | 328                     |
| 79                     | 30 Nov 02 | 0.00                        | 1.180                                 | 0                              | 2                       | 0.215                                | 0.44                           | 351                     |
| 80                     | 01 Dec 02 | 0.00                        | 1.097                                 | -0.18                          | -787                    | 0.211                                | 0.44                           | 338                     |
| 81                     | 02 Dec 02 | 0.01                        | 1.070                                 | -0.11                          | -462                    | 0.211                                | 0.51                           | 396                     |
| 82                     | 03 Dec 02 | 0.00                        | 1.125                                 | -0.10                          | -441                    | 0.206                                | 0.57                           | 431                     |
| 83                     | 04 Dec 02 | 0.06                        | 1.164                                 | -0.04                          | -114                    | 0.253                                | 0.93                           | 1172                    |
| 84                     | 05 Dec 02 | 0.18                        | 1.728                                 | 0.40                           | 3110                    | 0.548                                | 3.94                           | 9488                    |
| 85                     | 06 Dec 02 | 0.20                        | 1.283                                 | 0.14                           | 723                     | 0.301                                | 1.26                           | 1483                    |
| 86                     | 07 Dec 02 | 0.01                        | 1.099                                 | 0.05                           | 222                     | 0.246                                | 0.86                           | 792                     |
| 87                     | 08 Dec 02 | 0.00                        | 1.057                                 | 0.05                           | 213                     | 0.233                                | 0.95                           | 820                     |
| 88                     | 09 Dec 02 | 0.00                        | 1.151                                 | 0.05                           | 232                     | 0.230                                | 1.09                           | 929                     |
| 89                     | 10 Dec 02 | 0.05                        | 1.148                                 | 0.05                           | 240                     | 0.230                                | 1.01                           | 855                     |
| 90                     | 11 Dec 02 | 0.47                        | 1.524                                 | 0.39                           | 2630                    | 0.406                                | 2.59                           | 5296                    |
| 91                     | 12 Dec 02 | 0.00                        | 1.235                                 | 0.30                           | 1496                    | 0.241                                | 1.04                           | 919                     |
| 92                     | 13 Dec 02 | 1.06                        | 1.784                                 | 0.55                           | 5089                    | 0.537                                | 3.69                           | 12513                   |
| 93                     | 14 Dec 02 | 0.00                        | 1.351                                 | -0.04                          | -163                    | 0.294                                | 1.40                           | 1725                    |



Table II. Flow Data for "Entry" and "Exit" Location (continued)

| Days After Application | Date      | On-Site Daily Rainfall (in) | Stream Conditions at "Entry" Location |                                |                         | Stream Conditions at "Exit" Location |                                |                         |
|------------------------|-----------|-----------------------------|---------------------------------------|--------------------------------|-------------------------|--------------------------------------|--------------------------------|-------------------------|
|                        |           |                             | Average Stream Level (ft)             | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) | Average Stream Level (ft)            | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) |
| 94                     | 15 Dec 02 | 0.00                        | 1.116                                 | -0.29                          | -1308                   | 0.234                                | 0.87                           | 751                     |
| 95                     | 16 Dec 02 | 0.00                        | 1.105                                 | -0.29                          | -1295                   | 0.229                                | 0.76                           | 645                     |
| 96                     | 17 Dec 02 | 0.00                        | 1.16                                  | -0.26                          | -1217                   | 0.224                                | 0.58                           | 483                     |
| 97                     | 18 Dec 02 | 0.00                        | 1.167                                 | -0.14                          | -684                    | 0.221                                | 0.53                           | 430                     |
| 98                     | 19 Dec 02 | 0.00                        | 1.176                                 | -0.14                          | -665                    | 0.224                                | 0.44                           | 366                     |
| 99                     | 20 Dec 02 | 0.55                        | 1.604                                 | 0.27                           | 2265                    | 0.404                                | 2.48                           | 5494                    |
| 100                    | 21 Dec 02 | 0.00                        | 1.222                                 | -0.08                          | -410                    | 0.236                                | 1.00                           | 868                     |
| 101                    | 22 Dec 02 | 0.00                        | 1.188                                 | -0.08                          | -384                    | 0.216                                | 1.07                           | 853                     |
| 102                    | 23 Dec 02 | 0.00                        | 1.169                                 | -0.08                          | -378                    | 0.231                                | 0.66                           | 562                     |
| 103                    | 24 Dec 02 | 1.17                        | 1.943                                 | 0.44                           | 5330                    | 0.685                                | 2.83                           | 15614                   |
| 104                    | 25 Dec 02 | 0.46                        | 2.022                                 | 0.33                           | 3275                    | 0.506                                | 3.99                           | 10041                   |
| 105                    | 26 Dec 02 | 0.00                        | 1.494                                 | 0.09                           | 568                     | 0.279                                | 0.87                           | 937                     |
| 106                    | 27 Dec 02 | 0.00                        | 1.402                                 | 0.07                           | 415                     | 0.252                                | 0.81                           | 760                     |
| 107                    | 28 Dec 02 | 0.00                        | 1.407                                 | 0.08                           | 455                     | 0.246                                | 0.82                           | 755                     |
| 108                    | 29 Dec 02 | 0.00                        | 1.456                                 | 0.08                           | 470                     | 0.242                                | 0.93                           | 834                     |
| 109                    | 30 Dec 02 | 0.00                        | 1.435                                 | 0.07                           | 432                     | 0.247                                | 0.75                           | 692                     |
| 110                    | 31 Dec 02 | 0.00                        | 1.495                                 | -0.06                          | -392                    | 0.247                                | 0.75                           | 695                     |
| 111                    | 01 Jan 03 | 0.11                        | 1.593                                 | 0.02                           | 137                     | 0.288                                | 0.58                           | 642                     |
| 112                    | 02 Jan 03 | 0.00                        | 1.471                                 | -0.06                          | -366                    | 0.260                                | 0.68                           | 666                     |



Table II. Flow Data for "Entry" and "Exit" Location (continued)

| Days After Application | Date      | On-Site Daily Rainfall (in) | Stream Conditions at "Entry" Location |                                |                         | Stream Conditions at "Exit" Location |                                |                         |
|------------------------|-----------|-----------------------------|---------------------------------------|--------------------------------|-------------------------|--------------------------------------|--------------------------------|-------------------------|
|                        |           |                             | Average Stream Level (ft)             | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) | Average Stream Level (ft)            | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) |
| 113                    | 03 Jan 03 | 0.13                        | 1.633                                 | 0.05                           | 327                     | 0.306                                | 0.99                           | 1217                    |
| 114                    | 04 Jan 03 | 0.00                        | 1.353                                 | -0.10                          | -561                    | 0.244                                | 0.91                           | 824                     |
| 115                    | 05 Jan 03 | 0.00                        | 1.319                                 | 0.02                           | 108                     | 0.237                                | 0.89                           | 786                     |
| 116                    | 06 Jan 03 | 0.00                        | 1.378                                 | -0.06                          | -352                    | 0.249                                | 0.80                           | 747                     |
| 117                    | 07 Jan 03 | 0.00                        | 1.315                                 | -0.11                          | -592                    | 0.245                                | 0.75                           | 685                     |
| 118                    | 08 Jan 03 | 0.00                        | 1.400                                 | -0.09                          | -508                    | 0.251                                | 0.69                           | 642                     |
| 119                    | 09 Jan 03 | 0.00                        | 1.439                                 | -0.1                           | -602                    | 0.26                                 | 0.58                           | 562                     |
| 120                    | 10 Jan 03 | 0.00                        | 1.463                                 | -0.03                          | -139                    | 0.265                                | 0.56                           | 558                     |
| 121                    | 11 Jan 03 | 0.00                        | 1.38                                  | -0.03                          | -195                    | 0.263                                | 0.52                           | 510                     |
| 122                    | 12 Jan 03 | 0.00                        | 1.353                                 | -0.10                          | -546                    | 0.254                                | 0.62                           | 586                     |
| 123                    | 13 Jan 03 | 0.00                        | 1.372                                 | 0                              | 50                      | 0.263                                | 0.77                           | 764                     |
| 124                    | 14 Jan 03 | 0.00                        | 1.440                                 | -0.04                          | -242                    | 0.258                                | 0.75                           | 722                     |
| 125                    | 15 Jan 03 | 0.00                        | 1.379                                 | -0.03                          | -167                    | 0.252                                | 0.56                           | 529                     |
| 126                    | 16 Jan 03 | 0.01                        | 1.350                                 | 0.01                           | 57                      | 0.253                                | 0.68                           | 644                     |
| 127                    | 17 Jan 03 | 0.15                        | 1.376                                 | -0.02                          | -70                     | 0.261                                | 0.71                           | 694                     |
| 128                    | 18 Jan 03 | 0.00                        | 1.227                                 | 0                              | 33                      | 0.242                                | 0.55                           | 496                     |
| 129                    | 19 Jan 03 | 0.00                        | 1.232                                 | 0.08                           | 398                     | 0.241                                | 0.59                           | 524                     |
| 130                    | 20 Jan 03 | 0.00                        | 1.366                                 | 0.09                           | 485                     | 0.251                                | 0.52                           | 481                     |
| 131                    | 21 Jan 03 | 0.09                        | 1.392                                 | 0.09                           | 541                     | 0.242                                | 0.62                           | 560                     |



Table II. Flow Data for "Entry" and "Exit" Location (continued)

| Days After Application | Date      | On-Site Daily Rainfall (in) | Stream Conditions at "Entry" Location |                                |                         | Stream Conditions at "Exit" Location |                                |                         |
|------------------------|-----------|-----------------------------|---------------------------------------|--------------------------------|-------------------------|--------------------------------------|--------------------------------|-------------------------|
|                        |           |                             | Average Stream Level (ft)             | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) | Average Stream Level (ft)            | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) |
| 132                    | 22 Jan 03 | 0.00                        | 1.361                                 | 0.17                           | 934                     | 0.246                                | 0.57                           | 523                     |
| 133                    | 23 Jan 03 | 0.00                        | 1.283                                 | 0.14                           | 758                     | 0.26                                 | 1.10                           | 1310                    |
| 134                    | 24 Jan 03 | 0.05                        | 1.175                                 | 0.16                           | 745                     | 0.244                                | 0.93                           | 845                     |
| 135                    | 25 Jan 03 | 0.04                        | 1.204                                 | 0.10                           | 486                     | 0.233                                | 1.02                           | 883                     |
| 136                    | 26 Jan 03 | 0.00                        | 1.284                                 | 0.10                           | 519                     | 0.222                                | 1.16                           | 948                     |
| 137                    | 27 Jan 03 | 0.00                        | 1.238                                 | 0.10                           | 500                     | 0.213                                | 1.20                           | 944                     |
| 138                    | 28 Jan 03 | 0.00                        | 1.18                                  | 0.10                           | 476                     | 0.193                                | 1.06                           | 745                     |
| 139                    | 29 Jan 03 | 0.12                        | 1.429                                 | 0.19                           | 1198                    | 0.236                                | 1.23                           | 1195                    |
| 140                    | 30 Jan 03 | 1.02                        | 2.230                                 | 0.37                           | 3334                    | 0.554                                | 3.72                           | 10096                   |
| 141                    | 31 Jan 03 | 0.00                        | 1.635                                 | 0.22                           | 1434                    | 0.310                                | 1.54                           | 2006                    |
| 142                    | 01 Feb 03 | 0.00                        | 1.501                                 | 0.10                           | 606                     | 0.245                                | 1.08                           | 984                     |
| 143                    | 02 Feb 03 | 0.00                        | 1.396                                 | 0.11                           | 601                     | 0.228                                | 1.25                           | 1051                    |
| 144                    | 03 Feb 03 | 0.00                        | 1.555                                 | 0.11                           | 664                     | 0.222                                | 1.14                           | 937                     |
| 145                    | 04 Feb 03 | 0.12                        | 1.744                                 | 0.11                           | 756                     | 0.267                                | 1.01                           | 1038                    |
| 146                    | 05 Feb 03 | 0.00                        | 1.549                                 | 0.12                           | 751                     | 0.227                                | 1.10                           | 920                     |
| 147                    | 06 Feb 03 | 0.38                        | 1.612                                 | 0.11                           | 677                     | 0.253                                | 1.42                           | 1887                    |
| 148                    | 07 Feb 03 | 0.22                        | 2.053                                 | 0.24                           | 1964                    | 0.425                                | 2.81                           | 5716                    |
| 149                    | 08 Feb 03 | 0.00                        | 1.488                                 | 0.21                           | 1262                    | 0.233                                | 1.03                           | 879                     |
| 150                    | 09 Feb 03 | 0.00                        | 1.526                                 | 0.20                           | 1263                    | 0.217                                | 1.16                           | 927                     |



Table II. Flow Data for "Entry" and "Exit" Location (continued)

| Days After Application | Date      | On-Site Daily Rainfall (in) | Stream Conditions at "Entry" Location |                                |                         | Stream Conditions at "Exit" Location |                                |                         |
|------------------------|-----------|-----------------------------|---------------------------------------|--------------------------------|-------------------------|--------------------------------------|--------------------------------|-------------------------|
|                        |           |                             | Average Stream Level (ft)             | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) | Average Stream Level (ft)            | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) |
| 151                    | 10 Feb 03 | 0.23                        | 1.876                                 | 0.16                           | 1240                    | 0.322                                | 2.15                           | 3102                    |
| 152                    | 11 Feb 03 | 0.00                        | 1.508                                 | 0.10                           | 605                     | 0.233                                | 0.96                           | 826                     |
| 153                    | 12 Feb 03 | 0.00                        | 1.572                                 | 0.08                           | 482                     | 0.225                                | 0.97                           | 809                     |
| 154                    | 13 Feb 03 | 0.00                        | 1.450                                 | 0.06                           | 351                     | 0.236                                | 0.57                           | 503                     |
| 155                    | 14 Feb 03 | 0.17                        | 1.571                                 | 0.08                           | 505                     | 0.264                                | 0.93                           | 1018                    |
| 156                    | 15 Feb 03 | 0.04                        | 1.786                                 | 0.09                           | 627                     | 0.275                                | 0.84                           | 871                     |
| 157                    | 16 Feb 03 | 0.03                        | 1.570                                 | 0.09                           | 555                     | 0.269                                | 1.63                           | 1868                    |
| 158                    | 17 Feb 03 | 0.00                        | 1.652                                 | 0.12                           | 841                     | 0.331                                | 2.25                           | 3298                    |
| 159                    | 18 Feb 03 | 0.36                        | 1.866                                 | 0.15                           | 1162                    | 0.359                                | 2.89                           | 4317                    |
| 160                    | 19 Feb 03 | 0.00                        | 1.664                                 | 0.15                           | 1008                    | 0.279                                | 1.11                           | 1201                    |
| 161                    | 20 Feb 03 | 0.02                        | 1.840                                 | 0.15                           | 1115                    | 0.248                                | 0.91                           | 848                     |
| 162                    | 21 Feb 03 | 0.02                        | 1.786                                 | 0.15                           | 1052                    | 0.238                                | 0.97                           | 855                     |
| 163                    | 22 Feb 03 | 0.77                        | 2.386                                 | 0.45                           | 4852                    | 0.505                                | 3.62                           | 11206                   |
| 164                    | 23 Feb 03 | 0.02                        | 1.965                                 | 0.76                           | 6034                    | 0.313                                | 1.55                           | 2053                    |
| 165                    | 24 Feb 03 | 0.00                        | 1.679                                 | 0.76                           | 5155                    | 0.239                                | 0.94                           | 835                     |
| 166                    | 25 Feb 03 | 0.00                        | 1.763                                 | 0.76                           | 5413                    | 0.233                                | 0.98                           | 849                     |
| 167                    | 26 Feb 03 | 0.33                        | 1.883                                 | 0.76                           | 5779                    | 0.290                                | 1.60                           | 2385                    |
| 168                    | 27 Feb 03 | 0.54                        | 2.353                                 | 0.76                           | 7225                    | 0.561                                | 4.34                           | 10699                   |
| 169                    | 28 Feb 03 | 0.01                        | 1.905                                 | 0.76                           | 5849                    | 0.318                                | 1.50                           | 2087                    |





Table II. Flow Data for "Entry" and "Exit" Location (continued)

| Days After Application | Date      | On-Site Daily Rainfall (in) | Stream Conditions at "Entry" Location |                                |                         | Stream Conditions at "Exit" Location |                                |                         |
|------------------------|-----------|-----------------------------|---------------------------------------|--------------------------------|-------------------------|--------------------------------------|--------------------------------|-------------------------|
|                        |           |                             | Average Stream Level (ft)             | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) | Average Stream Level (ft)            | Average Flow Velocity (ft/sec) | Average Flow Rate (gpm) |
| 170                    | 01 Mar 03 | 0.38                        | 2.014                                 | 0.76                           | 6184                    | 0.351                                | 1.84                           | 3827                    |
| 171                    | 02 Mar 03 | 0.08                        | 2.135                                 | 0.76                           | 6554                    | 0.422                                | 2.75                           | 5480                    |
| 172                    | 03 Mar 03 | 0.00                        | 1.785                                 | 0.76                           | 5479                    | 0.257                                | 0.91                           | 869                     |
| 173                    | 04 Mar 03 | 0.00                        | 1.899                                 | 0.76                           | 5829                    | 0.237                                | 0.98                           | 861                     |
| 174                    | 05 Mar 03 | 0.11                        | 2.075                                 | 0.76                           | 6371                    | 0.305                                | 1.13                           | 1369                    |
| 175                    | 06 Mar 03 | 1.19                        | 2.187                                 | 0.64                           | 6267                    | 0.738                                | 3.81                           | 17968                   |
| 176                    | 07 Mar 03 | 0.00                        | 1.452                                 | 0.15                           | 871                     | 0.277                                | 0.85                           | 923                     |
| 177                    | 08 Mar 03 | 0.00                        | 1.306                                 | 0                              | 30                      | 0.240                                | 0.94                           | 837                     |
| 178                    | 09 Mar 03 | 0.00                        | 1.363                                 | 0.12                           | 658                     | 0.241                                | 1.01                           | 905                     |
| 179                    | 10 Mar 03 | 0.00                        | 1.337                                 | 0.11                           | 594                     | 0.235                                | 0.94                           | 818                     |
| 180                    | 11 Mar 03 | 0.00                        | 1.323                                 | 0.11                           | 588                     | 0.234                                | 0.87                           | 754                     |
| 181                    | 12 Mar 03 | 0.00                        | 1.321                                 | 0.11                           | 587                     | 0.235                                | 0.81                           | 709                     |



## Appendix G

### Critical Dates



## APPENDIX G1, Critical Dates for "Entry" Samples

| Sample ID   | Sampling Date | Sampling Time | Days After Application | Shipping and Receipt Date | Analytical Set ID | Extraction Date | Analysis Date | Storage Interval (Days) |
|-------------|---------------|---------------|------------------------|---------------------------|-------------------|-----------------|---------------|-------------------------|
| 36530A-0011 | 15 Sep 02     | 0559          | 3                      | 17 Sep 02                 | 20                | 24 Apr 03       | 25 Apr 03     | 222                     |
| 36530A-0033 | 16 Sep 02     | 1159          | 4                      | 17 Sep 02                 | 19                | 28 Mar 03       | 28 Mar 03     | 193                     |
| 36530A-0047 | 17 Sep 02     | 1159          | 5                      | 25 Sep 02                 | 19                | 28 Mar 03       | 28 Mar 03     | 192                     |
| 36530A-0049 | 18 Sep 02     | 1811          | 6                      | 25 Sep 02                 | 3                 | 22 Oct 02       | 22 Oct 02     | 34                      |
| 36530A-0051 | 19 Sep 02     | 1820          | 7                      | 25 Sep 02                 | 3                 | 22 Oct 02       | 22 Oct 02     | 33                      |
| 36530A-0053 | 20 Sep 02     | 1804          | 8                      | 25 Sep 02                 | 3                 | 22 Oct 02       | 22 Oct 02     | 32                      |
| 36530A-0055 | 21 Sep 02     | 1857          | 9                      | 25 Sep 02                 | 3                 | 22 Oct 02       | 22 Oct 02     | 31                      |
| 36530A-0057 | 22 Sep 02     | 2130          | 10                     | 25 Sep 02                 | 3                 | 22 Oct 02       | 22 Oct 02     | 30                      |
| 36530A-0059 | 23 Sep 02     | 2051          | 11                     | 25 Sep 02                 | 3                 | 22 Oct 02       | 22 Oct 02     | 29                      |
| 36530A-0061 | 24 Sep 02     | 1821          | 12                     | 25 Sep 02                 | 3                 | 22 Oct 02       | 22 Oct 02     | 28                      |
| 36530A-0063 | 25 Sep 02     | 2204          | 13                     | 30 Sep 02                 | 3                 | 22 Oct 02       | 22 Oct 02     | 27                      |
| 36530A-0065 | 26 Sep 02     | 0420          | 14                     | 30 Sep 02                 | 3                 | 22 Oct 02       | 22 Oct 02     | 26                      |
| 36530A-0067 | 26 Sep 02     | 0530          | 14                     | 30 Sep 02                 | 3                 | 22 Oct 02       | 22 Oct 02     | 26                      |
| 36530A-0073 | 26 Sep 02     | 1159          | 14                     | 30 Sep 02                 | 20                | 24 Apr 03       | 25 Apr 03     | 211                     |
| 36530A-0091 | 27 Sep 02     | 1350          | 15                     | 30 Sep 02                 | 19                | 28 Mar 03       | 28 Mar 03     | 182                     |
| 36530A-0127 | 10 Oct 02     | 1730          | 28                     | 14 Oct 02                 | 20                | 24 Apr 03       | 25 Apr 03     | 197                     |
| 36530A-0135 | 11 Oct 02     | 0859          | 29                     | 14 Oct 02                 | 20                | 24 Apr 03       | 25 Apr 03     | 196                     |
| 36530A-0147 | 12 Oct 02     | 0259          | 30                     | 14 Oct 02                 | 20                | 24 Apr 03       | 25 Apr 03     | 195                     |
| 36530A-0153 | 13 Oct 02     | 1159          | 31                     | 14 Oct 02                 | 19                | 28 Mar 03       | 28 Mar 03     | 166                     |
| 36530A-0165 | 14 Oct 02     | 0259          | 32                     | 21 Oct 02                 | 20                | 24 Apr 03       | 25 Apr 03     | 193                     |
| 36530A-0169 | 15 Oct 02     | 1159          | 33                     | 21 Oct 02                 | 20                | 24 Apr 03       | 25 Apr 03     | 192                     |
| 36530A-0189 | 16 Oct 02     | 1459          | 34                     | 21 Oct 02                 | 20                | 24 Apr 03       | 25 Apr 03     | 191                     |

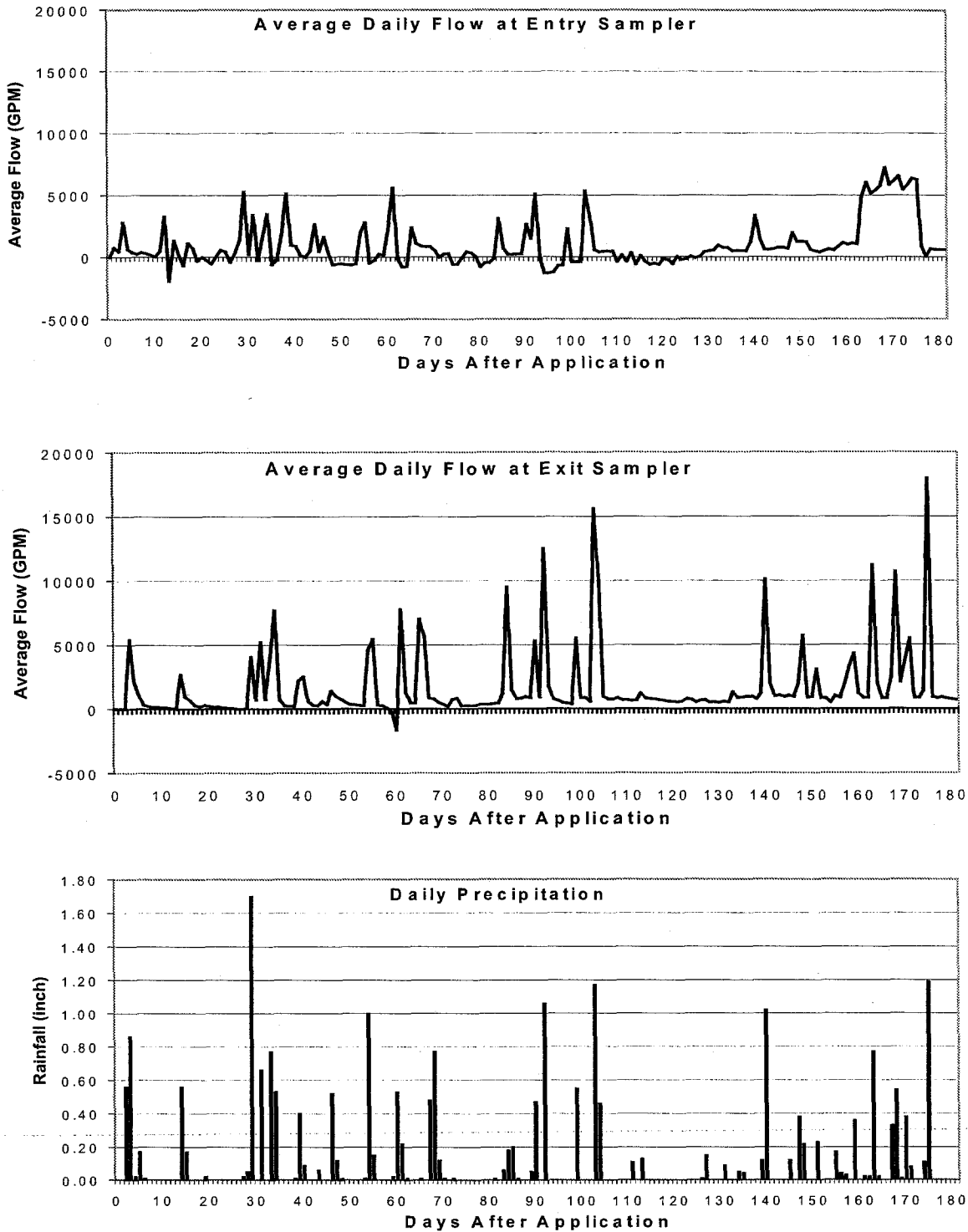


**APPENDIX G1, Critical Dates for "Entry" Samples (continued)**

| Sample ID   | Sampling Date | Sampling Time | Days After Application | Shipping and Receipt Date | Analytical Set ID | Extraction Date | Analysis Date | Storage Interval (Days) |
|-------------|---------------|---------------|------------------------|---------------------------|-------------------|-----------------|---------------|-------------------------|
| 36530A-0195 | 16 Oct 02     | 2359          | 34                     | 21 Oct 02                 | 19                | 28 Mar 03       | 28 Mar 03     | 163                     |
| 36530A-0197 | 18 Oct 02     | 1650          | 36                     | 21 Oct 02                 | 20                | 24 Apr 03       | 25 Apr 03     | 189                     |
| 36530A-0199 | 19 Oct 02     | 1746          | 37                     | 21 Oct 02                 | 20                | 24 Apr 03       | 25 Apr 03     | 188                     |
| 36530A-0201 | 20 Oct 02     | 1818          | 38                     | 21 Oct 02                 | 20                | 24 Apr 03       | 25 Apr 03     | 187                     |
| 36530A-0219 | 22 Oct 02     | 0859          | 40                     | 30 Oct 02                 | 20                | 24 Apr 03       | 25 Apr 03     | 185                     |
| 36530A-0227 | 23 Oct 02     | 1751          | 41                     | 30 Oct 02                 | 20                | 24 Apr 03       | 25 Apr 03     | 184                     |
| 36530A-0257 | 29 Oct 02     | 0859          | 47                     | 30 Oct 02                 | 20                | 24 Apr 03       | 25 Apr 03     | 178                     |
| 36530A-0299 | 06 Nov 02     | 1159          | 55                     | 11 Nov 02                 | 20                | 24 Apr 03       | 25 Apr 03     | 170                     |



Figure 2. Precipitation and Stream Flow





## APPENDIX G2, Critical Dates for "Exit" Samples

| Sample ID   | Sampling Date | Sampling Time | Days After Application | Shipping and Receipt Date | Analytical Set ID | Extraction Date | Analysis Date | Storage Interval (Days) |
|-------------|---------------|---------------|------------------------|---------------------------|-------------------|-----------------|---------------|-------------------------|
| 36530A-2001 | 13 Sep 02     | 1835          | 1                      | 17 Sep 02                 | 2                 | 10 Oct 02       | 11 Oct 02     | 28                      |
| 36530A-2003 | 14 Sep 02     | 1723          | 2                      | 17 Sep 02                 | 2                 | 10 Oct 02       | 11 Oct 02     | 27                      |
| 36530A-2005 | 14-15 Sep 02  | Not Available | 2-3                    | 17 Sep 02                 | 2                 | 10 Oct 02       | 11 Oct 02     | 26-27                   |
| 36530A-2007 | 14-15 Sep 02  | Not Available | 2-3                    | 17 Sep 02                 | 2                 | 10 Oct 02       | 11 Oct 02     | 26-27                   |
| 36530A-2009 | 14-15 Sep 02  | Not Available | 2-3                    | 17 Sep 02                 | 2                 | 10 Oct 02       | 11 Oct 02     | 26-27                   |
| 36530A-2011 | 15 Sep 02     | 1849          | 3                      | 17 Sep 02                 | 2                 | 10 Oct 02       | 11 Oct 02     | 26                      |
| 36530A-2013 | 15 Sep 02     | 2149          | 3                      | 17 Sep 02                 | 2                 | 10 Oct 02       | 11 Oct 02     | 26                      |
| 36530A-2015 | 16 Sep 02     | 0049          | 4                      | 17 Sep 02                 | 2                 | 10 Oct 02       | 11 Oct 02     | 25                      |
| 36530A-2017 | 16 Sep 02     | 0349          | 4                      | 17 Sep 02                 | 2                 | 10 Oct 02       | 11 Oct 02     | 25                      |
| 36530A-2019 | 16 Sep 02     | 0649          | 4                      | 17 Sep 02                 | 2                 | 10 Oct 02       | 11 Oct 02     | 25                      |
| 36530A-2021 | 16 Sep 02     | 0949          | 4                      | 17 Sep 02                 | 2                 | 10 Oct 02       | 11 Oct 02     | 25                      |
| 36530A-2023 | 16 Sep 02     | 1249          | 4                      | 17 Sep 02                 | 2                 | 10 Oct 02       | 11 Oct 02     | 25                      |
| 36530A-2025 | 16 Sep 02     | 1549          | 4                      | 17 Sep 02                 | 2                 | 10 Oct 02       | 11 Oct 02     | 25                      |
| 36530A-2027 | 16 Sep 02     | 1849          | 4                      | 17 Sep 02                 | 2                 | 10 Oct 02       | 11 Oct 02     | 25                      |
| 36530A-2029 | 16 Sep 02     | 2149          | 4                      | 25 Sep 02                 | 2                 | 10 Oct 02       | 11 Oct 02     | 25                      |
| 36530A-2031 | 17 Sep 02     | 0049          | 5                      | 25 Sep 02                 | 2                 | 10 Oct 02       | 11 Oct 02     | 24                      |
| 36530A-2033 | 17 Sep 02     | 0130          | 5                      | 25 Sep 02                 | 2                 | 10 Oct 02       | 11 Oct 02     | 24                      |
| 36530A-2035 | 17 Sep 02     | 0349          | 5                      | 25 Sep 02                 | 3                 | 22 Oct 02       | 22 Oct 02     | 35                      |
| 36530A-2037 | 17 Sep 02     | 0649          | 5                      | 25 Sep 02                 | 3                 | 22 Oct 02       | 22 Oct 02     | 35                      |
| 36530A-2039 | 17 Sep 02     | 0949          | 5                      | 25 Sep 02                 | 3                 | 22 Oct 02       | 22 Oct 02     | 35                      |
| 36530A-2041 | 17 Sep 02     | 1249          | 5                      | 25 Sep 02                 | 3                 | 22 Oct 02       | 22 Oct 02     | 35                      |
| 36530A-2043 | 17 Sep 02     | 1549          | 5                      | 25 Sep 02                 | 3                 | 22 Oct 02       | 22 Oct 02     | 35                      |



## APPENDIX G2, Critical Dates for "Exit" Samples (continued)

| Sample ID   | Sampling Date | Sampling Time | Days After Application | Shipping and Receipt Date | Analytical Set ID | Extraction Date | Analysis Date | Storage Interval (Days) |
|-------------|---------------|---------------|------------------------|---------------------------|-------------------|-----------------|---------------|-------------------------|
| 36530A-2045 | 17 Sep 02     | 1849          | 5                      | 25 Sep 02                 | 3                 | 22 Oct 02       | 22 Oct 02     | 35                      |
| 36530A-2047 | 17 Sep 02     | 2149          | 5                      | 25 Sep 02                 | 3                 | 22 Oct 02       | 22 Oct 02     | 35                      |
| 36530A-2049 | 19 Sep 02     | 1150          | 7                      | 25 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 34                      |
| 36530A-2051 | 19 Sep 02     | 1249          | 7                      | 25 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 34                      |
| 36530A-2053 | 19 Sep 02     | 1549          | 7                      | 25 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 34                      |
| 36530A-2055 | 19 Sep 02     | 1840          | 7                      | 25 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 34                      |
| 36530A-2057 | 19 Sep 02     | 1849          | 7                      | 25 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 34                      |
| 36530A-2059 | 19 Sep 02     | 2149          | 7                      | 25 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 34                      |
| 36530A-2061 | 20 Sep 02     | 0049          | 8                      | 25 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 33                      |
| 36530A-2063 | 20 Sep 02     | 0349          | 8                      | 25 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 33                      |
| 36530A-2065 | 20 Sep 02     | 0649          | 8                      | 25 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 33                      |
| 36530A-2067 | 20 Sep 02     | 0949          | 8                      | 25 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 33                      |
| 36530A-2069 | 20 Sep 02     | 1249          | 8                      | 25 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 33                      |
| 36530A-2071 | 20 Sep 02     | 1549          | 8                      | 25 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 33                      |
| 36530A-2073 | 21 Sep 02     | 1907          | 9                      | 25 Sep 02                 | 7                 | 18 Dec 02       | 19 Dec 02     | 89                      |
| 36530A-2075 | 22 Sep 02     | 2120          | 10                     | 25 Sep 02                 | 7                 | 18 Dec 02       | 19 Dec 02     | 88                      |
| 36530A-2077 | 23 Sep 02     | 2100          | 11                     | 25 Sep 02                 | 7                 | 18 Dec 02       | 19 Dec 02     | 87                      |
| 36530A-2079 | 24 Sep 02     | 1829          | 12                     | 25 Sep 02                 | 7                 | 18 Dec 02       | 19 Dec 02     | 86                      |
| 36530A-2081 | 25 Sep 02     | 2223          | 13                     | 30 Sep 02                 | 7                 | 18 Dec 02       | 19 Dec 02     | 85                      |
| 36530A-2083 | 26 Sep 02     | 1845          | 14                     | 30 Sep 02                 | 7                 | 18 Dec 02       | 19 Dec 02     | 84                      |
| 36530A-2085 | 26 Sep 02     | 1926          | 14                     | 30 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 27                      |
| 36530A-2087 | 26 Sep 02     | 2226          | 14                     | 30 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 27                      |



## APPENDIX G2, Critical Dates for "Exit" Samples (continued)

| Sample ID   | Sampling Date | Sampling Time | Days After Application | Shipping and Receipt Date | Analytical Set ID | Extraction Date | Analysis Date | Storage Interval (Days) |
|-------------|---------------|---------------|------------------------|---------------------------|-------------------|-----------------|---------------|-------------------------|
| 36530A-2089 | 27 Sep 02     | 0126          | 15                     | 30 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 26                      |
| 36530A-2091 | 27 Sep 02     | 0426          | 15                     | 30 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 26                      |
| 36530A-2093 | 27 Sep 02     | 0726          | 15                     | 30 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 26                      |
| 36530A-2095 | 27 Sep 02     | 1026          | 15                     | 30 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 26                      |
| 36530A-2097 | 27 Sep 02     | 1326          | 15                     | 30 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 26                      |
| 36530A-2099 | 27 Sep 02     | 1626          | 15                     | 30 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 26                      |
| 36530A-2101 | 27 Sep 02     | 1926          | 15                     | 30 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 26                      |
| 36530A-2103 | 27 Sep 02     | 2226          | 15                     | 30 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 26                      |
| 36530A-2105 | 28 Sep 02     | 0126          | 16                     | 30 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 25                      |
| 36530A-2111 | 28 Sep 02     | 1026          | 16                     | 30 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 25                      |
| 36530A-2113 | 28 Sep 02     | 1326          | 16                     | 30 Sep 02                 | 4                 | 23 Oct 02       | 23 Oct 02     | 25                      |
| 36530A-2115 | 28 Sep 02     | 1626          | 16                     | 30 Sep 02                 | 7                 | 18 Dec 02       | 19 Dec 02     | 82                      |
| 36530A-2119 | 30 Sep 02     | 1225          | 18                     | 07 Oct 02                 | 7                 | 18 Dec 02       | 19 Dec 02     | 80                      |
| 36530A-2137 | 01 Oct 02     | 1026          | 19                     | 07 Oct 02                 | 7                 | 18 Dec 02       | 19 Dec 02     | 79                      |
| 36530A-2153 | 02 Oct 02     | 1026          | 20                     | 07 Oct 02                 | 7                 | 18 Dec 02       | 19 Dec 02     | 78                      |
| 36530A-2167 | 03 Oct 02     | 0726          | 21                     | 07 Oct 02                 | 7                 | 18 Dec 02       | 19 Dec 02     | 77                      |
| 36530A-2171 | 04 Oct 02     | 1753          | 22                     | 07 Oct 02                 | 7                 | 18 Dec 02       | 19 Dec 02     | 76                      |
| 36530A-2173 | 05 Oct 02     | 0943          | 23                     | 07 Oct 02                 | 7                 | 18 Dec 02       | 19 Dec 02     | 75                      |
| 36530A-2175 | 06 Oct 02     | 1932          | 24                     | 07 Oct 02                 | 7                 | 18 Dec 02       | 19 Dec 02     | 74                      |
| 36530A-2177 | 07 Oct 02     | 1755          | 25                     | 14 Oct 02                 | 7                 | 18 Dec 02       | 19 Dec 02     | 73                      |
| 36530A-2179 | 08 Oct 02     | 1800          | 26                     | 14 Oct 02                 | 7                 | 18 Dec 02       | 19 Dec 02     | 72                      |
| 36530A-2181 | 09 Oct 02     | 1755          | 27                     | 14 Oct 02                 | 7                 | 18 Dec 02       | 19 Dec 02     | 71                      |



APPENDIX G2, Critical Dates for "Exit" Samples (continued)

| Sample ID   | Sampling Date | Sampling Time | Days After Application | Shipping and Receipt Date | Analytical Set ID | Extraction Date | Analysis Date | Storage Interval (Days) |
|-------------|---------------|---------------|------------------------|---------------------------|-------------------|-----------------|---------------|-------------------------|
| 36530A-2183 | 10 Oct 02     | 1744          | 28                     | 14 Oct 02                 | 7                 | 18 Dec 02       | 19 Dec 02     | 70                      |
| 36530A-2193 | 11 Oct 02     | 1709          | 29                     | 14 Oct 02                 | 5                 | 07 Nov 02       | 08 Nov 02     | 28                      |
| 36530A-2195 | 11 Oct 02     | 2009          | 29                     | 14 Oct 02                 | 5                 | 07 Nov 02       | 08 Nov 02     | 28                      |
| 36530A-2197 | 11 Oct 02     | 2309          | 29                     | 14 Oct 02                 | 5                 | 07 Nov 02       | 08 Nov 02     | 28                      |
| 36530A-2207 | 12 Oct 02     | 1409          | 30                     | 14 Oct 02                 | 5                 | 07 Nov 02       | 08 Nov 02     | 27                      |
| 36530A-2209 | 12 Oct 02     | 1709          | 30                     | 14 Oct 02                 | 5                 | 07 Nov 02       | 08 Nov 02     | 27                      |
| 36530A-2211 | 12 Oct 02     | 2009          | 30                     | 14 Oct 02                 | 5                 | 07 Nov 02       | 08 Nov 02     | 27                      |
| 36530A-2213 | 12 Oct 02     | 2309          | 30                     | 14 Oct 02                 | 6                 | 26 Nov 02       | 26 Nov 02     | 45                      |
| 36530A-2215 | 13 Oct 02     | 0209          | 31                     | 14 Oct 02                 | 6                 | 26 Nov 02       | 26 Nov 02     | 44                      |
| 36530A-2225 | 13 Oct 02     | 1709          | 31                     | 21 Oct 02                 | 6                 | 26 Nov 02       | 26 Nov 02     | 44                      |
| 36530A-2227 | 13 Oct 02     | 2009          | 31                     | 21 Oct 02                 | 6                 | 26 Nov 02       | 26 Nov 02     | 44                      |
| 36530A-2229 | 14 Oct 02     | 1402          | 32                     | 21 Oct 02                 | 6                 | 26 Nov 02       | 26 Nov 02     | 43                      |
| 36530A-2231 | 14 Oct 02     | 1702          | 32                     | 21 Oct 02                 | 6                 | 26 Nov 02       | 26 Nov 02     | 43                      |
| 36530A-2233 | 14-15 Oct 02  | Not Available | 32-33                  | 21 Oct 02                 | 6                 | 26 Nov 02       | 26 Nov 02     | 42-43                   |
| 36530A-2235 | 16 Oct 02     | 1758          | 34                     | 21 Oct 02                 | 5                 | 07 Nov 02       | 08 Nov 02     | 23                      |
| 36530A-2237 | 16 Oct 02     | 1753          | 34                     | 21 Oct 02                 | 5                 | 07 Nov 02       | 08 Nov 02     | 23                      |
| 36530A-2239 | 16 Oct 02     | 2053          | 34                     | 21 Oct 02                 | 5                 | 07 Nov 02       | 08 Nov 02     | 23                      |
| 36530A-2241 | 16 Oct 02     | 2353          | 34                     | 21 Oct 02                 | 5                 | 07 Nov 02       | 08 Nov 02     | 23                      |
| 36530A-2249 | 17 Oct 02     | 1153          | 35                     | 21 Oct 02                 | 5                 | 07 Nov 02       | 08 Nov 02     | 22                      |
| 36530A-2251 | 17 Oct 02     | 1453          | 35                     | 21 Oct 02                 | 5                 | 07 Nov 02       | 08 Nov 02     | 22                      |
| 36530A-2253 | 17 Oct 02     | 1753          | 35                     | 21 Oct 02                 | 6                 | 26 Nov 02       | 26 Nov 02     | 40                      |
| 36530A-2255 | 17 Oct 02     | 2053          | 35                     | 21 Oct 02                 | 6                 | 26 Nov 02       | 26 Nov 02     | 40                      |



## APPENDIX G2, Critical Dates for "Exit" Samples (continued)

| Sample ID   | Sampling Date | Sampling Time | Days After Application | Shipping and Receipt Date | Analytical Set ID | Extraction Date | Analysis Date | Storage Interval (Days) |
|-------------|---------------|---------------|------------------------|---------------------------|-------------------|-----------------|---------------|-------------------------|
| 36530A-2257 | 17 Oct 02     | 2353          | 35                     | 21 Oct 02                 | 6                 | 26 Nov 02       | 26 Nov 02     | 40                      |
| 36530A-2265 | 18 Oct 02     | 1153          | 36                     | 21 Oct 02                 | 6                 | 26 Nov 02       | 26 Nov 02     | 39                      |
| 36530A-2267 | 18 Oct 02     | 1453          | 36                     | 21 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 77                      |
| 36530A-2269 | 18 Oct 02     | 1753          | 36                     | 21 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 77                      |
| 36530A-2271 | 18 Oct 02     | 2053          | 36                     | 21 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 77                      |
| 36530A-2273 | 18 Oct 02     | 2353          | 36                     | 21 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 77                      |
| 36530A-2277 | 19 Oct 02     | 0553          | 37                     | 21 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 76                      |
| 36530A-2283 | 19 Oct 02     | 1453          | 37                     | 21 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 76                      |
| 36530A-2295 | 20 Oct 02     | 0853          | 38                     | 21 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 75                      |
| 36530A-2311 | 21 Oct 02     | 0853          | 39                     | 30 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 74                      |
| 36530A-2319 | 21 Oct 02     | 2053          | 39                     | 30 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 74                      |
| 36530A-2321 | 21 Oct 02     | 2353          | 39                     | 30 Oct 02                 | 5                 | 07 Nov 02       | 08 Nov 02     | 18                      |
| 36530A-2323 | 22 Oct 02     | 0253          | 40                     | 30 Oct 02                 | 5                 | 07 Nov 02       | 08 Nov 02     | 17                      |
| 36530A-2325 | 22 Oct 02     | 0553          | 40                     | 30 Oct 02                 | 5                 | 07 Nov 02       | 08 Nov 02     | 17                      |
| 36530A-2327 | 22 Oct 02     | 0853          | 40                     | 30 Oct 02                 | 5                 | 07 Nov 02       | 08 Nov 02     | 17                      |
| 36530A-2329 | 22 Oct 02     | 1153          | 40                     | 30 Oct 02                 | 5                 | 07 Nov 02       | 08 Nov 02     | 17                      |
| 36530A-2331 | 22 Oct 02     | 1453          | 40                     | 30 Oct 02                 | 5                 | 07 Nov 02       | 08 Nov 02     | 17                      |
| 36530A-2333 | 22 Oct 02     | 1753          | 40                     | 30 Oct 02                 | 6                 | 26 Nov 02       | 26 Nov 02     | 35                      |
| 36530A-2335 | 22 Oct 02     | 2053          | 40                     | 30 Oct 02                 | 6                 | 26 Nov 02       | 26 Nov 02     | 35                      |
| 36530A-2337 | 22 Oct 02     | 2353          | 40                     | 30 Oct 02                 | 6                 | 26 Nov 02       | 26 Nov 02     | 35                      |
| 36530A-2339 | 23 Oct 02     | 0253          | 41                     | 30 Oct 02                 | 6                 | 26 Nov 02       | 26 Nov 02     | 34                      |
| 36530A-2341 | 23 Oct 02     | 0553          | 41                     | 30 Oct 02                 | 6                 | 26 Nov 02       | 26 Nov 02     | 34                      |



## APPENDIX G2, Critical Dates for "Exit" Samples (continued)

| Sample ID   | Sampling Date | Sampling Time | Days After Application | Shipping and Receipt Date | Analytical Set ID | Extraction Date | Analysis Date | Storage Interval (Days) |
|-------------|---------------|---------------|------------------------|---------------------------|-------------------|-----------------|---------------|-------------------------|
| 36530A-2343 | 23 Oct 02     | 0853          | 41                     | 30 Oct 02                 | 6                 | 26 Nov 02       | 26 Nov 02     | 34                      |
| 36530A-2345 | 23 Oct 02     | 1153          | 41                     | 30 Oct 02                 | 6                 | 26 Nov 02       | 26 Nov 02     | 34                      |
| 36530A-2359 | 24 Oct 02     | 0853          | 42                     | 30 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 71                      |
| 36530A-2375 | 25 Oct 02     | 0853          | 43                     | 30 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 70                      |
| 36530A-2395 | 26 Oct 02     | 1453          | 44                     | 30 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 69                      |
| 36530A-2409 | 27 Oct 02     | 1153          | 45                     | 30 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 68                      |
| 36530A-2425 | 28 Oct 02     | 1153          | 46                     | 30 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 67                      |
| 36530A-2435 | 29 Oct 02     | 0253          | 47                     | 30 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 66                      |
| 36530A-2437 | 29 Oct 02     | 0553          | 47                     | 30 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 66                      |
| 36530A-2439 | 29 Oct 02     | 0853          | 47                     | 30 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 66                      |
| 36530A-2441 | 29 Oct 02     | 1153          | 47                     | 30 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 66                      |
| 36530A-2443 | 29 Oct 02     | 1453          | 47                     | 30 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 66                      |
| 36530A-2445 | 29 Oct 02     | 1753          | 47                     | 30 Oct 02                 | 8                 | 03 Jan 03       | 03 Jan 03     | 66                      |
| 36530A-2447 | 29 Oct 02     | 2053          | 47                     | 04 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 69                      |
| 36530A-2449 | 29 Oct 02     | 2353          | 47                     | 04 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 69                      |
| 36530A-2451 | 30 Oct 02     | 0253          | 48                     | 04 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 68                      |
| 36530A-2455 | 30 Oct 02     | 0853          | 48                     | 04 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 68                      |
| 36530A-2459 | 30 Oct 02     | 1453          | 48                     | 04 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 68                      |
| 36530A-2463 | 30 Oct 02     | 2053          | 48                     | 04 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 68                      |
| 36530A-2473 | 31 Oct 02     | 1153          | 49                     | 04 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 67                      |
| 36530A-2487 | 01 Nov 02     | 0853          | 50                     | 04 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 66                      |
| 36530A-2501 | 02 Nov 02     | 0553          | 51                     | 04 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 65                      |



## APPENDIX G2, Critical Dates for "Exit" Samples (continued)

| Sample ID   | Sampling Date | Sampling Time | Days After Application | Shipping and Receipt Date | Analytical Set ID | Extraction Date | Analysis Date | Storage Interval (Days) |
|-------------|---------------|---------------|------------------------|---------------------------|-------------------|-----------------|---------------|-------------------------|
| 36530A-2515 | 03 Nov 02     | 0253          | 52                     | 04 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 64                      |
| 36530A-2537 | 04 Nov 02     | 1153          | 53                     | 11 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 63                      |
| 36530A-2551 | 05 Nov 02     | 0853          | 54                     | 11 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 62                      |
| 36530A-2557 | 05 Nov 02     | 1753          | 54                     | 11 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 62                      |
| 36530A-2563 | 06 Nov 02     | 0253          | 55                     | 11 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 61                      |
| 36530A-2565 | 06 Nov 02     | 0553          | 55                     | 11 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 61                      |
| 36530A-2567 | 06 Nov 02     | 0853          | 55                     | 11 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 61                      |
| 36530A-2569 | 06 Nov 02     | 1153          | 55                     | 11 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 61                      |
| 36530A-2571 | 06 Nov 02     | 1453          | 55                     | 11 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 61                      |
| 36530A-2573 | 06 Nov 02     | 1753          | 55                     | 11 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 61                      |
| 36530A-2575 | 06 Nov 02     | 2053          | 55                     | 11 Nov 02                 | 9                 | 06 Jan 03       | 06 Jan 03     | 61                      |
| 36530A-2577 | 06 Nov 02     | 2353          | 55                     | 11 Nov 02                 | 10                | 08 Jan 03       | 08 Jan 03     | 63                      |
| 36530A-2579 | 07 Nov 02     | 0253          | 56                     | 11 Nov 02                 | 10                | 08 Jan 03       | 08 Jan 03     | 62                      |
| 36530A-2581 | 07 Nov 02     | 0553          | 56                     | 11 Nov 02                 | 10                | 08 Jan 03       | 08 Jan 03     | 62                      |
| 36530A-2585 | 07 Nov 02     | 1153          | 56                     | 11 Nov 02                 | 10                | 08 Jan 03       | 08 Jan 03     | 62                      |
| 36530A-2589 | 07 Nov 02     | 1753          | 56                     | 11 Nov 02                 | 10                | 08 Jan 03       | 08 Jan 03     | 62                      |
| 36530A-2591 | 07 Nov 02     | 2053          | 56                     | 11 Nov 02                 | 10                | 08 Jan 03       | 08 Jan 03     | 62                      |
| 36530A-2597 | 08 Nov 02     | 0553          | 57                     | 11 Nov 02                 | 10                | 08 Jan 03       | 08 Jan 03     | 61                      |
| 36530A-2615 | 09 Nov 02     | 0853          | 58                     | 11 Nov 02                 | 10                | 08 Jan 03       | 08 Jan 03     | 60                      |
| 36530A-2633 | 10 Nov 02     | 1153          | 59                     | 11 Nov 02                 | 10                | 08 Jan 03       | 08 Jan 03     | 59                      |
| 36530A-2645 | 11-12 Nov 02  | Not Available | 60-61                  | 18 Nov 02                 | 10                | 08 Jan 03       | 08 Jan 03     | 57                      |
| 36530A-2649 | 11-12 Nov 02  | Not Available | 60-61                  | 18 Nov 02                 | 10                | 08 Jan 03       | 08 Jan 03     | 57                      |



## APPENDIX G2, Critical Dates for "Exit" Samples (continued)

| Sample ID   | Sampling Date | Sampling Time | Days After Application | Shipping and Receipt Date | Analytical Set ID | Extraction Date | Analysis Date | Storage Interval (Days) |
|-------------|---------------|---------------|------------------------|---------------------------|-------------------|-----------------|---------------|-------------------------|
| 36530A-2653 | 11-12 Nov 02  | Not Available | 60-61                  | 18 Nov 02                 | 10                | 08 Jan 03       | 08 Jan 03     | 57                      |
| 36530A-2657 | 12-13 Nov 02  | Not Available | 61-62                  | 18 Nov 02                 | 10                | 08 Jan 03       | 08 Jan 03     | 57                      |
| 36530A-2661 | 12-13 Nov 02  | Not Available | 61-62                  | 18 Nov 02                 | 10                | 08 Jan 03       | 08 Jan 03     | 56                      |
| 36530A-2665 | 12-13 Nov 02  | Not Available | 61-62                  | 18 Nov 02                 | 10                | 08 Jan 03       | 08 Jan 03     | 56                      |
| 36530A-2669 | 12-13 Nov 02  | Not Available | 61-62                  | 18 Nov 02                 | 10                | 08 Jan 03       | 08 Jan 03     | 56                      |
| 36530A-2673 | 13-14 Nov 02  | Not Available | 62-63                  | 18 Nov 02                 | 10                | 08 Jan 03       | 08 Jan 03     | 56                      |
| 36530A-2685 | 13-14 Nov 02  | Not Available | 62-63                  | 18 Nov 02                 | 11                | 08 Jan 03       | 08 Jan 03     | 55                      |
| 36530A-2689 | 14-15 Nov 02  | Not Available | 63-64                  | 18 Nov 02                 | 11                | 08 Jan 03       | 08 Jan 03     | 55                      |
| 36530A-2691 | 15 Nov 02     | 1755          | 64                     | 18 Nov 02                 | 11                | 08 Jan 03       | 08 Jan 03     | 54                      |
| 36530A-2699 | 16 Nov 02     | 0555          | 65                     | 18 Nov 02                 | 11                | 08 Jan 03       | 08 Jan 03     | 53                      |
| 36530A-2709 | 16 Nov 02     | 2055          | 65                     | 18 Nov 02                 | 11                | 08 Jan 03       | 08 Jan 03     | 53                      |
| 36530A-2713 | 17 Nov 02     | 0255          | 66                     | 18 Nov 02                 | 11                | 08 Jan 03       | 08 Jan 03     | 52                      |
| 36530A-2717 | 17 Nov 02     | 0855          | 66                     | 18 Nov 02                 | 11                | 08 Jan 03       | 08 Jan 03     | 52                      |
| 36530A-2721 | 17 Nov 02     | 1455          | 66                     | 18 Nov 02                 | 11                | 08 Jan 03       | 08 Jan 03     | 52                      |
| 36530A-2725 | 17 Nov 02     | 2055          | 66                     | 25 Nov 02                 | 11                | 08 Jan 03       | 08 Jan 03     | 52                      |
| 36530A-2729 | 18 Nov 02     | 0255          | 67                     | 25 Nov 02                 | 11                | 08 Jan 03       | 08 Jan 03     | 51                      |
| 36530A-2733 | 18 Nov 02     | 0855          | 67                     | 25 Nov 02                 | 11                | 08 Jan 03       | 08 Jan 03     | 51                      |
| 36530A-2737 | 18 Nov 02     | 1455          | 67                     | 25 Nov 02                 | 11                | 08 Jan 03       | 08 Jan 03     | 51                      |
| 36530A-2741 | 18 Nov 02     | 2055          | 67                     | 25 Nov 02                 | 11                | 08 Jan 03       | 08 Jan 03     | 51                      |
| 36530A-2745 | 19 Nov 02     | 0255          | 68                     | 25 Nov 02                 | 11                | 08 Jan 03       | 08 Jan 03     | 50                      |
| 36530A-2751 | 19 Nov 02     | 1155          | 68                     | 25 Nov 02                 | 12                | 13 Jan 03       | 14 Jan 03     | 56                      |
| 36530A-2767 | 20 Nov 02     | 1155          | 69                     | 25 Nov 02                 | 11                | 08 Jan 03       | 08 Jan 03     | 49                      |



## APPENDIX G2, Critical Dates for "Exit" Samples (continued)

| Sample ID   | Sampling Date | Sampling Time | Days After Application | Shipping and Receipt Date | Analytical Set ID | Extraction Date | Analysis Date | Storage Interval (Days) |
|-------------|---------------|---------------|------------------------|---------------------------|-------------------|-----------------|---------------|-------------------------|
| 36530A-2783 | 21 Nov 02     | 1155          | 70                     | 25 Nov 02                 | 11                | 08 Jan 03       | 08 Jan 03     | 48                      |
| 36530A-2799 | 22 Nov 02     | 1155          | 71                     | 25 Nov 02                 | 11                | 08 Jan 03       | 08 Jan 03     | 47                      |
| 36530A-2815 | 23 Nov 02     | 1155          | 72                     | 25 Nov 02                 | 12                | 13 Jan 03       | 14 Jan 03     | 52                      |
| 36530A-2829 | 24 Nov 02     | 0855          | 73                     | 25 Nov 02                 | 12                | 13 Jan 03       | 14 Jan 03     | 51                      |
| 36530A-2847 | 25 Nov 02     | 1155          | 74                     | 02 Dec 02                 | 12                | 13 Jan 03       | 14 Jan 03     | 50                      |
| 36530A-2863 | 26 Nov 02     | 1155          | 75                     | 02 Dec 02                 | 12                | 13 Jan 03       | 14 Jan 03     | 49                      |
| 36530A-2879 | 27 Nov 02     | 1155          | 76                     | 02 Dec 02                 | 12                | 13 Jan 03       | 14 Jan 03     | 48                      |
| 36530A-2897 | 28 Nov 02     | 1455          | 77                     | 02 Dec 02                 | 12                | 13 Jan 03       | 14 Jan 03     | 47                      |
| 36530A-2913 | 29 Nov 02     | 1455          | 78                     | 02 Dec 02                 | 12                | 13 Jan 03       | 14 Jan 03     | 46                      |
| 36530A-2925 | 30 Nov 02     | 0855          | 79                     | 02 Dec 02                 | 12                | 13 Jan 03       | 14 Jan 03     | 45                      |
| 36530A-2939 | 01 Dec 02     | 0555          | 80                     | 02 Dec 02                 | 12                | 13 Jan 03       | 14 Jan 03     | 44                      |
| 36530A-2965 | 02 Dec 02     | 2055          | 81                     | 12 Dec 02                 | 12                | 13 Jan 03       | 14 Jan 03     | 43                      |
| 36530A-2975 | 03 Dec 02     | 1155          | 82                     | 12 Dec 02                 | 12                | 13 Jan 03       | 14 Jan 03     | 42                      |
| 36530A-2989 | 04 Dec 02     | 0855          | 83                     | 12 Dec 02                 | 12                | 13 Jan 03       | 14 Jan 03     | 41                      |
| 36530A-2995 | 06 Dec 02     | 1755          | 85                     | 12 Dec 02                 | 13                | 13 Jan 03       | 14 Jan 03     | 39                      |
| 36530A-2999 | 06 Dec 02     | 2355          | 85                     | 12 Dec 02                 | 13                | 13 Jan 03       | 14 Jan 03     | 39                      |
| 36530A-3007 | 07 Dec 02     | 1155          | 86                     | 12 Dec 02                 | 13                | 13 Jan 03       | 14 Jan 03     | 38                      |
| 36530A-3011 | 07 Dec 02     | 1755          | 86                     | 12 Dec 02                 | 13                | 13 Jan 03       | 14 Jan 03     | 38                      |
| 36530A-3015 | 07 Dec 02     | 2355          | 86                     | 12 Dec 02                 | 13                | 13 Jan 03       | 14 Jan 03     | 38                      |
| 36530A-3027 | 08 Dec 02     | 1755          | 87                     | 12 Dec 02                 | 13                | 13 Jan 03       | 14 Jan 03     | 37                      |
| 36530A-3039 | 09 Dec 02     | 1155          | 88                     | 12 Dec 02                 | 13                | 13 Jan 03       | 14 Jan 03     | 36                      |
| 36530A-3057 | 10 Dec 02     | 1455          | 89                     | 12 Dec 02                 | 13                | 13 Jan 03       | 14 Jan 03     | 35                      |



## APPENDIX G2, Critical Dates for "Exit" Samples (continued)

| Sample ID   | Sampling Date           | Sampling Time | Days After Application | Shipping and Receipt Date | Analytical Set ID | Extraction Date | Analysis Date | Storage Interval (Days) |
|-------------|-------------------------|---------------|------------------------|---------------------------|-------------------|-----------------|---------------|-------------------------|
| 36530A-3075 | 11 Dec 02               | 1755          | 90                     | 12 Dec 02                 | 13                | 13 Jan 03       | 14 Jan 03     | 34                      |
| 36530A-3079 | 11 Dec 02               | 2355          | 90                     | 20 Dec 02                 | 13                | 13 Jan 03       | 14 Jan 03     | 34                      |
| 36530A-3083 | 12 Dec 02               | 0555          | 91                     | 20 Dec 02                 | 13                | 13 Jan 03       | 14 Jan 03     | 33                      |
| 36530A-3087 | 12 Dec 02               | 1155          | 91                     | 20 Dec 02                 | 13                | 13 Jan 03       | 14 Jan 03     | 33                      |
| 36530A-3097 | 13 Dec 02               | 1155          | 92                     | 20 Dec 02                 | 15                | 14 Mar 03       | 14 Mar 03     | 91                      |
| 36530A-3105 | 14 Dec 02               | 1155          | 93                     | 20 Dec 02                 | 15                | 14 Mar 03       | 14 Mar 03     | 90                      |
| 36530A-3115 | 15 Dec 02               | 1755          | 94                     | 20 Dec 02                 | 15                | 14 Mar 03       | 14 Mar 03     | 89                      |
| 36530A-3121 | 16 Dec 02               | 1155          | 95                     | 20 Dec 02                 | 15                | 14 Mar 03       | 14 Mar 03     | 88                      |
| 36530A-3129 | 17 Dec 02               | 1155          | 96                     | 20 Dec 02                 | 15                | 14 Mar 03       | 14 Mar 03     | 87                      |
| 36530A-3137 | 18 Dec 02               | 1155          | 97                     | 20 Dec 02                 | 15                | 14 Mar 03       | 14 Mar 03     | 86                      |
| 36530A-3145 | 19 Dec 02               | 1155          | 98                     | 20 Dec 02                 | 15                | 14 Mar 03       | 14 Mar 03     | 85                      |
| 36530A-3153 | 20 Dec 02               | 1155          | 99                     | 03 Jan 03                 | 15                | 14 Mar 03       | 14 Mar 03     | 84                      |
| 36530A-3163 | 21-22 Dec 02            | Not Available | 100-101                | 03 Jan 03                 | 15                | 14 Mar 03       | 14 Mar 03     | 82-83                   |
| 36530A-3175 | 22-23 Dec 02            | Not Available | 101-102                | 03 Jan 03                 | 15                | 14 Mar 03       | 14 Mar 03     | 81-82                   |
| 36530A-3183 | 23-24 Dec 02            | Not Available | 102-103                | 03 Jan 03                 | 15                | 14 Mar 03       | 14 Mar 03     | 80-81                   |
| 36530A-3187 | 27-28 Dec 02            | Not Available | 106-107                | 03 Jan 03                 | 15                | 14 Mar 03       | 14 Mar 03     | 76-77                   |
| 36530A-3199 | 28-29 Dec 02            | Not Available | 107-108                | 03 Jan 03                 | 15                | 14 Mar 03       | 14 Mar 03     | 75-76                   |
| 36530A-3207 | 29-30 Dec 02            | Not Available | 108-109                | 03 Jan 03                 | 15                | 14 Mar 03       | 14 Mar 03     | 74-75                   |
| 36530A-3215 | 30-31 Dec 02            | Not Available | 109-110                | 03 Jan 03                 | 15                | 14 Mar 03       | 14 Mar 03     | 73-74                   |
| 36530A-3221 | 31 Dec 02-<br>01 Jan 03 | Not Available | 110-111                | 03 Jan 03                 | 15                | 14 Mar 03       | 14 Mar 03     | 72-73                   |
| 36530A-3233 | 02 Jan 03               | 1412          | 112                    | 03 Jan 03                 | 16                | 19 Mar 03       | 19 Mar 03     | 76                      |



## APPENDIX G2, Critical Dates for "Exit" Samples (continued)

| Sample ID   | Sampling Date | Sampling Time | Days After Application | Shipping and Receipt Date | Analytical Set ID | Extraction Date | Analysis Date | Storage Interval (Days) |
|-------------|---------------|---------------|------------------------|---------------------------|-------------------|-----------------|---------------|-------------------------|
| 36530A-3239 | 03 Jan 03     | 0812          | 113                    | 20 Jan 03                 | 16                | 19 Mar 03       | 19 Mar 03     | 75                      |
| 36530A-3247 | 04 Jan 03     | 0812          | 114                    | 20 Jan 03                 | 16                | 19 Mar 03       | 19 Mar 03     | 74                      |
| 36530A-3257 | 05 Jan 03     | 1412          | 115                    | 20 Jan 03                 | 16                | 19 Mar 03       | 19 Mar 03     | 73                      |
| 36530A-3263 | 06 Jan 03     | 0812          | 116                    | 20 Jan 03                 | 16                | 19 Mar 03       | 19 Mar 03     | 72                      |
| 36530A-3273 | 07 Jan 03     | 1412          | 117                    | 20 Jan 03                 | 16                | 19 Mar 03       | 19 Mar 03     | 71                      |
| 36530A-3281 | 08 Jan 03     | 1412          | 118                    | 20 Jan 03                 | 16                | 19 Mar 03       | 19 Mar 03     | 70                      |
| 36530A-3289 | 09 Jan 03     | 1412          | 119                    | 20 Jan 03                 | 16                | 19 Mar 03       | 19 Mar 03     | 69                      |
| 36530A-3295 | 10 Jan 03     | 0812          | 120                    | 20 Jan 03                 | 16                | 19 Mar 03       | 19 Mar 03     | 68                      |
| 36530A-3305 | 11 Jan 03     | 1412          | 121                    | 20 Jan 03                 | 16                | 19 Mar 03       | 19 Mar 03     | 67                      |
| 36530A-3315 | 12 Jan 03     | 2012          | 122                    | 20 Jan 03                 | 16                | 19 Mar 03       | 19 Mar 03     | 66                      |
| 36530A-3323 | 13 Jan 03     | 2012          | 123                    | 20 Jan 03                 | 16                | 19 Mar 03       | 19 Mar 03     | 65                      |
| 36530A-3329 | 14 Jan 03     | 1412          | 124                    | 20 Jan 03                 | 16                | 19 Mar 03       | 19 Mar 03     | 64                      |
| 36530A-3333 | 15 Jan 03     | 0212          | 125                    | 20 Jan 03                 | 16                | 19 Mar 03       | 19 Mar 03     | 63                      |
| 36530A-3345 | 16 Jan 03     | 1412          | 126                    | 20 Jan 03                 | 16                | 19 Mar 03       | 19 Mar 03     | 62                      |
| 36530A-3353 | 17 Jan 03     | 1412          | 127                    | 20 Jan 03                 | 16                | 19 Mar 03       | 19 Mar 03     | 61                      |
| 36530A-3358 | 19 Jan 03     | 1412          | 129                    | 03 Feb 03                 | 17                | 27 Mar 03       | 27 Mar 03     | 67                      |
| 36530A-3367 | 20 Jan 03     | 1412          | 130                    | 03 Feb 03                 | 17                | 27 Mar 03       | 27 Mar 03     | 66                      |
| 36530A-3371 | 21 Jan 03     | 0212          | 131                    | 03 Feb 03                 | 17                | 27 Mar 03       | 27 Mar 03     | 65                      |
| 36530A-3381 | 22 Jan 03     | 0812          | 132                    | 03 Feb 03                 | 17                | 27 Mar 03       | 27 Mar 03     | 64                      |
| 36530A-3389 | 22-24 Jan 03  | Not Available | 132-134                | 03 Feb 03                 | 17                | 27 Mar 03       | 27 Mar 03     | 62-64                   |
| 36530A-3435 | 28 Jan 03     | 1412          | 138                    | 03 Feb 03                 | 17                | 27 Mar 03       | 27 Mar 03     | 58                      |
| 36530A-3443 | 29 Jan 03     | 1412          | 139                    | 03 Feb 03                 | 17                | 27 Mar 03       | 27 Mar 03     | 57                      |





## APPENDIX G2, Critical Dates for "Exit" Samples (continued)

| Sample ID   | Sampling Date | Sampling Time | Days After Application | Shipping and Receipt Date | Analytical Set ID | Extraction Date | Analysis Date | Storage Interval (Days) |
|-------------|---------------|---------------|------------------------|---------------------------|-------------------|-----------------|---------------|-------------------------|
| 36530A-3451 | 30 Jan 03     | 1412          | 140                    | 03 Feb 03                 | 17                | 27 Mar 03       | 27 Mar 03     | 56                      |
| 36530A-3455 | 31 Jan 03     | 0212          | 141                    | 03 Feb 03                 | 17                | 27 Mar 03       | 27 Mar 03     | 55                      |
| 36530A-3465 | 01 Feb 03     | 0812          | 142                    | 03 Feb 03                 | 17                | 27 Mar 03       | 27 Mar 03     | 54                      |
| 36530A-3475 | 02 Feb 03     | 1412          | 143                    | 03 Feb 03                 | 17                | 27 Mar 03       | 27 Mar 03     | 53                      |
| 36530A-3483 | 03 Feb 03     | 1412          | 144                    | 11 Feb 03                 | 17                | 27 Mar 03       | 27 Mar 03     | 52                      |
| 36530A-3489 | 04 Feb 03     | 0812          | 145                    | 11 Feb 03                 | 17                | 27 Mar 03       | 27 Mar 03     | 51                      |
| 36530A-3497 | 05 Feb 03     | 0812          | 146                    | 11 Feb 03                 | 17                | 27 Mar 03       | 27 Mar 03     | 50                      |
| 36530A-3505 | 06 Feb 03     | 0812          | 147                    | 11 Feb 03                 | 17                | 27 Mar 03       | 27 Mar 03     | 49                      |
| 36530A-3513 | 07 Feb 03     | 0812          | 148                    | 11 Feb 03                 | 17                | 27 Mar 03       | 27 Mar 03     | 48                      |
| 36530A-3523 | 08 Feb 03     | 1412          | 149                    | 11 Feb 03                 | 20                | 24 Apr 03       | 25 Apr 03     | 76                      |
| 36530A-3529 | 09 Feb 03     | 0812          | 150                    | 11 Feb 03                 | 18                | 27 Mar 03       | 27 Mar 03     | 46                      |
| 36530A-3537 | 10 Feb 03     | 0812          | 151                    | 11 Feb 03                 | 18                | 27 Mar 03       | 27 Mar 03     | 45                      |
| 36530A-3547 | 11 Feb 03     | 1412          | 152                    | 24 Feb 03                 | 18                | 27 Mar 03       | 27 Mar 03     | 44                      |
| 36530A-3553 | 12 Feb 03     | 0812          | 153                    | 24 Feb 03                 | 18                | 27 Mar 03       | 27 Mar 03     | 43                      |
| 36530A-3563 | 13 Feb 03     | 1412          | 154                    | 24 Feb 03                 | 20                | 24 Apr 03       | 25 Apr 03     | 71                      |
| 36530A-3569 | 14 Feb 03     | 0812          | 155                    | 24 Feb 03                 | 18                | 27 Mar 03       | 27 Mar 03     | 41                      |
| 36530A-3577 | 15 Feb 03     | 0812          | 156                    | 24 Feb 03                 | 18                | 27 Mar 03       | 27 Mar 03     | 40                      |
| 36530A-3585 | 19 Feb 03     | 0812          | 160                    | 24 Feb 03                 | 18                | 27 Mar 03       | 27 Mar 03     | 36                      |
| 36530A-3593 | 20 Feb 03     | 0812          | 161                    | 24 Feb 03                 | 18                | 27 Mar 03       | 27 Mar 03     | 35                      |
| 36530A-3601 | 21 Feb 03     | 0812          | 162                    | 24 Feb 03                 | 18                | 27 Mar 03       | 27 Mar 03     | 34                      |
| 36530A-3609 | 22 Feb 03     | 0812          | 163                    | 24 Feb 03                 | 18                | 27 Mar 03       | 27 Mar 03     | 33                      |
| 36530A-3617 | 23 Feb 03     | 0812          | 164                    | 24 Feb 03                 | 18                | 27 Mar 03       | 27 Mar 03     | 32                      |



## APPENDIX G2, Critical Dates for "Exit" Samples (continued)

| Sample ID   | Sampling Date | Sampling Time | Days After Application | Shipping and Receipt Date | Analytical Set ID | Extraction Date | Analysis Date | Storage Interval (Days) |
|-------------|---------------|---------------|------------------------|---------------------------|-------------------|-----------------|---------------|-------------------------|
| 36530A-3627 | 24 Feb 03     | 0812          | 165                    | 06 Mar 03                 | 18                | 27 Mar 03       | 27 Mar 03     | 31                      |
| 36530A-3633 | 25 Feb 03     | 0212          | 166                    | 06 Mar 03                 | 19                | 28 Mar 03       | 28 Mar 03     | 31                      |
| 36530A-3635 | 25 Feb 03     | 0812          | 166                    | 06 Mar 03                 | 18                | 27 Mar 03       | 27 Mar 03     | 30                      |
| 36530A-3641 | 26 Feb 03     | 0212          | 167                    | 06 Mar 03                 | 19                | 28 Mar 03       | 28 Mar 03     | 30                      |
| 36530A-3643 | 26 Feb 03     | 0812          | 167                    | 06 Mar 03                 | 18                | 27 Mar 03       | 27 Mar 03     | 29                      |
| 36530A-3651 | 27 Feb 03     | 0812          | 168                    | 06 Mar 03                 | 19                | 28 Mar 03       | 28 Mar 03     | 29                      |
| 36530A-3659 | 28 Feb 03     | 0812          | 169                    | 06 Mar 03                 | 19                | 28 Mar 03       | 28 Mar 03     | 28                      |
| 36530A-3667 | 01 Mar 03     | 0812          | 170                    | 06 Mar 03                 | 19                | 28 Mar 03       | 28 Mar 03     | 27                      |
| 36530A-3679 | 02 Mar 03     | 2012          | 171                    | 06 Mar 03                 | 19                | 28 Mar 03       | 28 Mar 03     | 26                      |
| 36530A-3683 | 03 Mar 03     | 0812          | 172                    | 06 Mar 03                 | 19                | 28 Mar 03       | 28 Mar 03     | 25                      |
| 36530A-3691 | 04 Mar 03     | 0812          | 173                    | 13 Mar 03                 | 19                | 28 Mar 03       | 28 Mar 03     | 24                      |
| 36530A-3701 | 05 Mar 03     | 1412          | 174                    | 13 Mar 03                 | 19                | 28 Mar 03       | 28 Mar 03     | 23                      |
| 36530A-3706 | 06 Mar 03     | 0212          | 175                    | 13 Mar 03                 | 19                | 28 Mar 03       | 28 Mar 03     | 22                      |
| 36530A-3715 | 07 Mar 03     | 0812          | 176                    | 13 Mar 03                 | 19                | 28 Mar 03       | 28 Mar 03     | 21                      |
| 36530A-3725 | 08 Mar 03     | 1412          | 177                    | 13 Mar 03                 | 19                | 28 Mar 03       | 28 Mar 03     | 20                      |
| 36530A-3733 | 09 Mar 03     | 1412          | 178                    | 13 Mar 03                 | 20                | 24 Apr 03       | 25 Apr 03     | 47                      |
| 36530A-3741 | 10 Mar 03     | 1412          | 179                    | 13 Mar 03                 | 20                | 24 Apr 03       | 25 Apr 03     | 46                      |
| 36530A-3749 | 11 Mar 03     | 0812          | 180                    | 13 Mar 03                 | 19                | 28 Mar 03       | 28 Mar 03     | 17                      |



## 5.2 Sample Collection

A total of 1056 samples (duplicates at 528 timings) were collected from the "Entry" sampler and 1752 samples (duplicates at 876 timings) from the "Exit" sampler during the study period. The collection interval was 3 hours for the initial 3 months of the study and 6 hours for the remainder. Duplicate samples of 100 mL were collected at each sampling time and placed in 125 mL amber Nalgene® bottles. Occasionally the automated samplers malfunctioned due to power supply problems or freezing temperatures. Under these circumstances samples were collected manually, and a note was placed in the field record. The dates of sample collection are found in Appendix G of this report.

## 5.3 Weather Data

Rainfall data were collected at the test site. These were supplemented by NOAA data collected at Charlotte's Douglas International Airport about 7 miles away. A spring and summer drought was broken by abundant rainfall in the autumn. The rains in the first half of the study exceeded the historical average. This early rainfall after the application of the test substance maximized the possibility for surface runoff and transport of the test substance into the monitored receiving stream. Both historical and study period precipitation data are summarized in Table III. Daily rainfall and temperature data are presented in Appendix D.

**Table III. Monthly Precipitation**

| Month     | Normal<br>Monthly<br>Precipitation<br>(1961-1990)* | NOAA<br>Precipitation<br>Data<br>(2002-2003)* | On-Site<br>Precipitation<br>Data<br>(2002-2003) |
|-----------|----------------------------------------------------|-----------------------------------------------|-------------------------------------------------|
| September | 3.83 in                                            | 3.48 in<br>(12-30 September 2002)             | 2.35 in<br>(12-30 September 2002)               |
| October   | 3.66 in                                            | 5.43 in                                       | 4.96 in                                         |
| November  | 3.36 in                                            | 4.38 in                                       | 3.34 in                                         |
| December  | 3.18 in                                            | 4.96 in                                       | 4.22 in                                         |
| January   | 4.00 in                                            | 1.96 in                                       | 1.72 in                                         |
| February  | 3.55 in                                            | 3.61 in                                       | 3.26 in                                         |
| March     | 4.39 in                                            | 2.04 in<br>(1-13 March 2003)                  | 1.76 in<br>(1-13 March 2003)                    |

\* From NOAA weather station, Douglas International Airport, Charlotte, NC.

During the study period, a total of 21.6 inches of precipitation were recorded at the test site. Assuming uniform rainfall over the 5.45-acre site, this is equivalent to 3.2 million gallons of water that could be potential run-off into the receiving stream.



### 5.5.2 Procedural Recoveries

Each sample set contained at least one control sample (HPLC grade water) fortified with a mixture of fipronil, MB46513, MB45950 and MB46136. The fortification levels were 0.005, 0.010 or 0.100 ng/mL. The procedural recoveries are summarized in Table V. In addition, all quantitative data for the procedural recoveries are included in Appendix J.

**Table V. Mean Procedural Recoveries from Fortified HPLC Water**

| Analyte  | Fortification Level (ng/mL) | Number    | Mean Percent Recovery |
|----------|-----------------------------|-----------|-----------------------|
| Fipronil | 0.005                       | 1         | 87                    |
|          | 0.010                       | 17        | 84                    |
|          | 0.100                       | 18        | 88                    |
|          | <b>Mean</b>                 | <b>36</b> | <b>86 ± 13</b>        |
| MB46513  | 0.005                       | 1         | 96                    |
|          | 0.010                       | 17        | 84                    |
|          | 0.100                       | 18        | 90                    |
|          | <b>Mean</b>                 | <b>36</b> | <b>87 ± 12</b>        |
| MB45950  | 0.005                       | 1         | 90                    |
|          | 0.010                       | 17        | 85                    |
|          | 0.100                       | 18        | 87                    |
|          | <b>Mean</b>                 | <b>36</b> | <b>86 ± 11</b>        |
| MB46136  | 0.005                       | 1         | 109                   |
|          | 0.010                       | 17        | 90                    |
|          | 0.100                       | 18        | 89                    |
|          | <b>Mean</b>                 | <b>36</b> | <b>90 ± 11</b>        |

### 5.5.3 Analytical Results of Water Samples

Samples from the "Entry" and "Exit" samplers were analyzed to evaluate the possibility of runoff containing fipronil related residues. The LOQ was 0.010 ng/mL, and the MDL was 0.004 ng/mL for fipronil and its metabolites, MB46513, MB45950, and MB46136. All quantitative data for the analysis of the "Entry" and "Exit" samples is provided in Appendix J.



## 5.5 Water Analysis

### 5.5.1 Method Verification

The analytical method for water has been validated internally and has undergone a successful independent laboratory validation. The results of these studies are presented in separate reports (References 2 and 3).

The analytical method was verified prior to beginning analysis of the field samples using a fortification solution of a mixture of fipronil and its metabolites. The verification set consisted of 1 control sample of HPLC water, 2 control samples of onsite water, 2 samples of onsite water fortified at the LOQ (0.01 ng/mL), 2 samples of onsite water fortified at 10XLOQ (0.10 ng/mL), 1 sample of HPLC water fortified at the LOQ and 1 sample of HPLC water fortified at 10XLOQ. The results of the method verification were satisfactory and are shown in Table IV. In addition, all quantitative data for the method verification is provided in Appendix J.

**Table IV. Water Method Verification Results**

| Sample Identification        | Fortification Level (ng/mL) | Percent Recovery |               |               |               |
|------------------------------|-----------------------------|------------------|---------------|---------------|---------------|
|                              |                             | Fipronil         | MB46513       | MB45950       | MB46136       |
| HPLC Water                   | 0                           | ND               | ND            | ND            | ND            |
| 36530A Bulk-1 Rep 1          | 0                           | ND               | ND            | ND            | ND            |
| 36530A Bulk-1 Rep 2          | 0                           | ND               | ND            | ND            | ND            |
| 36530A Bulk-1 Spike LOQ-1    | 0.01                        | 73               | 86            | 77            | 83            |
| 36530A Bulk-1 Spike LOQ-2    | 0.01                        | 75               | 74            | 72            | 86            |
| 36530A Bulk-1 Spike 10XLOQ-1 | 0.10                        | 70               | 79            | 75            | 83            |
| 36530A Bulk-1 Spike 10XLOQ-2 | 0.10                        | 68               | 72            | 76            | 84            |
| HPLC Water Spike LOQ         | 0.01                        | 90               | 92            | 85            | 93            |
| HPLC Water Spike 10XLOQ      | 0.10                        | 93               | 91            | 85            | 84            |
| Mean Recovery                |                             | 78 ± 11<br>n=6   | 82 ± 8<br>n=6 | 78 ± 6<br>n=6 | 85 ± 4<br>n=6 |



Table VIII. Recoveries from Field Fortified Water Samples

| Sample            | Fortification Level (ng/mL) | Percent Recovery |         |         |         |
|-------------------|-----------------------------|------------------|---------|---------|---------|
|                   |                             | Fipronil         | MB46513 | MB45950 | MB46136 |
| HPLC Water Blank* | 0                           | ND               | ND      | ND      | ND      |
| 36530-Rec 25**    | 0.01                        | 74               | 87      | 86      | 94      |
| 36530-Rec 26**    | 0.10                        | 89               | 97      | 94      | 100     |
| 36530A-FS-01      | 0                           | ND               | ND      | ND      | ND      |
| 36530A-FS-02      | 0                           | ND               | ND      | ND      | ND      |
| 36530A-FS-03      | 0.02                        | 81               | 90      | 80      | 87      |
| 36530A-FS-04      | 0.02                        | 74               | 84      | 79      | 89      |
| 36530A-FS-05      | 0.20                        | 84               | 87      | 78      | 82      |
| 36530A-FS-06      | 0.20                        | 82               | 84      | 77      | 81      |

\* Control sample for the analytical set.

\*\* Fresh procedural fortification samples for the analytical set.

### 5.5.5 Storage Stability

The majority of water samples were analyzed within 95 days of collection. A few samples were analyzed late in the study with a maximum storage interval of 222 days. Storage stability studies in water have been initiated for other studies within the Chipco Topchoice® Insecticide program. These ongoing studies will demonstrate the stability of fipronil and its metabolites in water over typical storage periods.

## 5.6 Sediment Analysis

### 5.6.1 Method of Analysis

During the course of this study, a method of analysis was developed for the sediment samples. The acceptable recoveries observed in the sample set demonstrated the capability of the method to extract fipronil-related residues from sediment. The procedural recoveries in this study are provided in Table IX.

### 5.6.2 Analytical Results of Sediment Samples

The "Entry" and "Exit" sediment samples, collected 9 months after the application of the test substance, were analyzed to evaluate the possibility of fipronil-related residues to accumulate in the stream sediment. The results are summarized in Table IX.



Table IX. Analytical Results of Sediment Samples

| Sample Identification      | Sampling Location | Analytical Results (ppb) |         |         |         |
|----------------------------|-------------------|--------------------------|---------|---------|---------|
|                            |                   | Fipronil                 | MB46513 | MB45950 | MB46136 |
| 36530A-Sediment-01-500ppt* | Fresh Spike       | 0.434                    | 0.431   | 0.429   | 0.481   |
| 36530A-Sediment-01         | "Entry"           | ND                       | ND      | ND      | <LOQ    |
| 36530A-Sediment-02         | "Entry"           | ND                       | ND      | ND      | <LOQ    |
| 36530A-Sediment-03         | "Exit"            | ND                       | ND      | ND      | ND      |
| 36530A-Sediment-04         | "Exit"            | ND                       | ND      | ND      | ND      |

\* Freshly fortified at 0.500 ppb to serve as a method recovery sample.

The two sediment samples from the "Entry" location contained metabolite MB46136 at levels below the Limit of Quantification. No other fipronil-related residues were observed in the "Entry" samples. No fipronil-related residues were detected in the "Exit" samples.

## 5.7 Mass Transport of Fipronil-Related Residues

Multiplication of the stream flows and residue concentrations can provide an estimate of the mass transport of fipronil-related residues from the test site. The single water sample in this study containing residues had a concentration of fipronil at <0.010 ng/mL and no detectable metabolite residues. The sample (36530A-2089) was collected at 0126 hours on 27 September 2002. The preceding and succeeding samples contained no detectable residues. For the purposes of this calculation, it was assumed that all water flow for the three hours preceding and three hours succeeding that sample contained fipronil at that level. This calculation procedure provides a conservative upper-limit estimate of the potential mass introduced into the stream.

The ten-minute flow rates at the "Exit" sampler for that time period are presented in Table X.



Table VII. Analytical Results of "Entry" Water Samples

| Days After Application | Sample ID   | Collection Date | Collection Time | Analytical Results (ppb) |         |         |         |
|------------------------|-------------|-----------------|-----------------|--------------------------|---------|---------|---------|
|                        |             |                 |                 | Fipronil                 | MB46513 | MB45950 | MB46136 |
| 3                      | 36530A-0011 | 15 Sep 02       | 0559            | ND                       | ND      | ND      | ND      |
| 4                      | 36530A-0033 | 16 Sep 02       | 1159            | ND                       | ND      | ND      | ND      |
| 5                      | 36530A-0047 | 17 Sep 02       | 1159            | ND                       | ND      | ND      | ND      |
| 6                      | 36530A-0049 | 18 Sep 02       | 1811            | ND                       | ND      | ND      | ND      |
| 7                      | 36530A-0051 | 19 Sep 02       | 1820            | ND                       | ND      | ND      | ND      |
| 8                      | 36530A-0053 | 20 Sep 02       | 1804            | ND                       | ND      | ND      | ND      |
| 9                      | 36530A-0055 | 21 Sep 02       | 1857            | ND                       | ND      | ND      | ND      |
| 10                     | 36530A-0057 | 22 Sep 02       | 2130            | ND                       | ND      | ND      | ND      |
| 11                     | 36530A-0059 | 23 Sep 02       | 2051            | ND                       | ND      | ND      | ND      |
| 12                     | 36530A-0061 | 24 Sep 02       | 1821            | ND                       | ND      | ND      | ND      |
| 13                     | 36530A-0063 | 25 Sep 02       | 2204            | ND                       | ND      | ND      | ND      |
| 14                     | 36530A-0065 | 26 Sep 02       | 0420            | ND                       | ND      | ND      | ND      |
| 14                     | 36530A-0067 | 26 Sep 02       | 0530            | ND                       | ND      | ND      | ND      |
| 14                     | 36530A-0073 | 26 Sep 02       | 1159            | ND                       | ND      | ND      | ND      |
| 15                     | 36530A-0091 | 27 Sep 02       | 1350            | ND                       | ND      | ND      | ND      |
| 28                     | 36530A-0127 | 10 Oct 02       | 1730            | ND                       | ND      | ND      | ND      |
| 29                     | 36530A-0135 | 11 Oct 02       | 0859            | ND                       | ND      | ND      | ND      |
| 30                     | 36530A-0147 | 12 Oct 02       | 0259            | ND                       | ND      | ND      | ND      |
| 31                     | 36530A-0153 | 13 Oct 02       | 1159            | ND                       | ND      | ND      | ND      |
| 32                     | 36530A-0165 | 14 Oct 02       | 0259            | ND                       | ND      | ND      | ND      |
| 33                     | 36530A-0169 | 15 Oct 02       | 1159            | ND                       | ND      | ND      | ND      |



**Table VII. Analytical Results of "Entry Water Samples" (continued)**

| Days After Application | Sample ID   | Collection Date | Collection Time | Analytical Results (ppb) |         |         |         |
|------------------------|-------------|-----------------|-----------------|--------------------------|---------|---------|---------|
|                        |             |                 |                 | Fipronil                 | MB46513 | MB45950 | MB46136 |
| 34                     | 36530A-0189 | 16 Oct 02       | 1459            | ND                       | ND      | ND      | ND      |
| 34                     | 36530A-0195 | 16 Oct 02       | 2359            | ND                       | ND      | ND      | ND      |
| 36                     | 36530A-0197 | 18 Oct 02       | 1650            | ND                       | ND      | ND      | ND      |
| 37                     | 36530A-0199 | 19 Oct 02       | 1746            | ND                       | ND      | ND      | ND      |
| 38                     | 36530A-0201 | 20 Oct 02       | 1818            | ND                       | ND      | ND      | ND      |
| 40                     | 36530A-0219 | 22 Oct 02       | 0859            | ND                       | ND      | ND      | ND      |
| 41                     | 36530A-0227 | 23 Oct 02       | 1751            | ND                       | ND      | ND      | ND      |
| 47                     | 36530A-0257 | 29 Oct 02       | 0859            | ND                       | ND      | ND      | ND      |
| 55                     | 36530A-0299 | 06 Nov 02       | 1159            | ND                       | ND      | ND      | ND      |



Table VIII. Analytical Results of "Exit Water Samples"

| Days After Application | Sample ID   | Collection Date | Collection Time | Analytical Results (ppb) |         |         |         |
|------------------------|-------------|-----------------|-----------------|--------------------------|---------|---------|---------|
|                        |             |                 |                 | Fipronil                 | MB46513 | MB45950 | MB46136 |
| 1                      | 36530A-2001 | 13 Sep 02       | 1635            | ND                       | ND      | ND      | ND      |
| 2                      | 36530A-2003 | 14 Sep 02       | 1723            | ND                       | ND      | ND      | ND      |
| 2-3                    | 36530A-2005 | 14-15 Sep 02    | Not Available   | ND                       | ND      | ND      | ND      |
| 2-3                    | 36530A-2007 | 14-15 Sep 02    | Not Available   | ND                       | ND      | ND      | ND      |
| 2-3                    | 36530A-2009 | 14-15 Sep 02    | Not Available   | ND                       | ND      | ND      | ND      |
| 3                      | 36530A-2011 | 15 Sep 02       | 1849            | ND                       | ND      | ND      | ND      |
| 3                      | 36530A-2013 | 15 Sep 02       | 2149            | ND                       | ND      | ND      | ND      |
| 4                      | 36530A-2015 | 16 Sep 02       | 0049            | ND                       | ND      | ND      | ND      |
| 4                      | 36530A-2017 | 16 Sep 02       | 0349            | ND                       | ND      | ND      | ND      |
| 4                      | 36530A-2019 | 16 Sep 02       | 0649            | ND                       | ND      | ND      | ND      |
| 4                      | 36530A-2021 | 16 Sep 02       | 0949            | ND                       | ND      | ND      | ND      |
| 4                      | 36530A-2023 | 16 Sep 02       | 1249            | ND                       | ND      | ND      | ND      |
| 4                      | 36530A-2025 | 16 Sep 02       | 1549            | ND                       | ND      | ND      | ND      |
| 4                      | 36530A-2027 | 16 Sep 02       | 1849            | ND                       | ND      | ND      | ND      |
| 4                      | 36530A-2029 | 16 Sep 02       | 2149            | ND                       | ND      | ND      | ND      |
| 5                      | 36530A-2031 | 17 Sep 02       | 0049            | ND                       | ND      | ND      | ND      |
| 5                      | 36530A-2033 | 17 Sep 02       | 0130            | ND                       | ND      | ND      | ND      |
| 5                      | 36530A-2035 | 17 Sep 02       | 0349            | ND                       | ND      | ND      | ND      |
| 5                      | 36530A-2037 | 17 Sep 02       | 0649            | ND                       | ND      | ND      | ND      |



Table VIII. Analytical Results of "Exit Water Samples" (continued)

| Days After Application | Sample ID   | Collection Date | Collection Time | Analytical Results (ppb) |         |         |         |
|------------------------|-------------|-----------------|-----------------|--------------------------|---------|---------|---------|
|                        |             |                 |                 | Fipronil                 | MB46513 | MB45950 | MB46136 |
| 5                      | 36530A-2039 | 17 Sep 02       | 0949            | ND                       | ND      | ND      | ND      |
| 5                      | 36530A-2041 | 17 Sep 02       | 1249            | ND                       | ND      | ND      | ND      |
| 5                      | 36530A-2043 | 17 Sep 02       | 1549            | ND                       | ND      | ND      | ND      |
| 5                      | 36530A-2045 | 17 Sep 02       | 1849            | ND                       | ND      | ND      | ND      |
| 5                      | 36530A-2047 | 17 Sep 02       | 2149            | ND                       | ND      | ND      | ND      |
| 7                      | 36530A-2049 | 19 Sep 02       | 1150            | ND                       | ND      | ND      | ND      |
| 7                      | 36530A-2051 | 19 Sep 02       | 1249            | ND                       | ND      | ND      | ND      |
| 7                      | 36530A-2053 | 19 Sep 02       | 1549            | ND                       | ND      | ND      | ND      |
| 7                      | 36530A-2055 | 19 Sep 02       | 1840            | ND                       | ND      | ND      | ND      |
| 7                      | 36530A-2057 | 19 Sep 02       | 1849            | ND                       | ND      | ND      | ND      |
| 7                      | 36530A-2059 | 19 Sep 02       | 2149            | ND                       | ND      | ND      | ND      |
| 8                      | 36530A-2061 | 20 Sep 02       | 0049            | ND                       | ND      | ND      | ND      |
| 8                      | 36530A-2063 | 20 Sep 02       | 0349            | ND                       | ND      | ND      | ND      |
| 8                      | 36530A-2065 | 20 Sep 02       | 0649            | ND                       | ND      | ND      | ND      |
| 8                      | 36530A-2067 | 20 Sep 02       | 0949            | ND                       | ND      | ND      | ND      |
| 8                      | 36530A-2069 | 20 Sep 02       | 1249            | ND                       | ND      | ND      | ND      |
| 8                      | 36530A-2071 | 20 Sep 02       | 1549            | ND                       | ND      | ND      | ND      |
| 9                      | 36530A-2073 | 21 Sep 02       | 1907            | ND                       | ND      | ND      | ND      |
| 10                     | 36530A-2075 | 22 Sep 02       | 2120            | ND                       | ND      | ND      | ND      |
| 11                     | 36530A-2077 | 23 Sep 02       | 2100            | ND                       | ND      | ND      | ND      |
| 12                     | 36530A-2079 | 24 Sep 02       | 1829            | ND                       | ND      | ND      | ND      |



Table VIII. Analytical Results of "Exit Water Samples" (continued)

| Days After Application | Sample ID   | Collection Date | Collection Time | Analytical Results (ppb) |         |         |         |
|------------------------|-------------|-----------------|-----------------|--------------------------|---------|---------|---------|
|                        |             |                 |                 | Fipronil                 | MB46513 | MB45950 | MB46136 |
| 13                     | 36530A-2081 | 25 Sep 02       | 2223            | ND                       | ND      | ND      | ND      |
| 14                     | 36530A-2083 | 26 Sep 02       | 1845            | ND                       | ND      | ND      | ND      |
| 14                     | 36530A-2085 | 26 Sep 02       | 1926            | ND                       | ND      | ND      | ND      |
| 14                     | 36530A-2087 | 26 Sep 02       | 2226            | ND                       | ND      | ND      | ND      |
| 15                     | 36530A-2089 | 27 Sep 02       | 0126            | <LOQ ✓                   | ND      | ND      | ND      |
| 15                     | 36530A-2091 | 27 Sep 02       | 0426            | ND                       | ND      | ND      | ND      |
| 15                     | 36530A-2093 | 27 Sep 02       | 0726            | ND                       | ND      | ND      | ND      |
| 15                     | 36530A-2095 | 27 Sep 02       | 1026            | ND                       | ND      | ND      | ND      |
| 15                     | 36530A-2097 | 27 Sep 02       | 1326            | ND                       | ND      | ND      | ND      |
| 15                     | 36530A-2099 | 27 Sep 02       | 1626            | ND                       | ND      | ND      | ND      |
| 15                     | 36530A-2101 | 27 Sep 02       | 1926            | ND                       | ND      | ND      | ND/     |
| 15                     | 36530A-2103 | 27 Sep 02       | 2226            | ND                       | ND      | ND      | ND      |
| 16                     | 36530A-2105 | 28 Sep 02       | 0126            | ND                       | ND      | ND      | ND      |
| 16                     | 36530A-2111 | 28 Sep 02       | 1026            | ND                       | ND      | ND      | ND      |
| 16                     | 36530A-2113 | 28 Sep 02       | 1326            | ND                       | ND      | ND      | ND      |
| 16                     | 36530A-2115 | 28 Sep 02       | 1626            | ND                       | ND      | ND      | ND      |
| 18                     | 36530A-2119 | 30 Sep 02       | 1225            | ND                       | ND      | ND      | ND      |
| 19                     | 36530A-2137 | 01 Oct 02       | 1026            | ND                       | ND      | ND      | ND      |
| 20                     | 36530A-2153 | 02 Oct 02       | 1026            | ND                       | ND      | ND      | ND      |
| 21                     | 36530A-2167 | 03 Oct 02       | 0726            | ND                       | ND      | ND      | ND      |
| 22                     | 36530A-2171 | 04 Oct 02       | 1753            | ND                       | ND      | ND      | ND      |



Table VIII. Analytical Results of "Exit Water Samples" (continued)

| Days After Application | Sample ID   | Collection Date | Collection Time | Analytical Results (ppb) |         |         |         |
|------------------------|-------------|-----------------|-----------------|--------------------------|---------|---------|---------|
|                        |             |                 |                 | Fipronil                 | MB46513 | MB45950 | MB46136 |
| 23                     | 36530A-2173 | 05 Oct 02       | 0943            | ND                       | ND      | ND      | ND      |
| 24                     | 36530A-2175 | 06 Oct 02       | 1932            | ND                       | ND      | ND      | ND      |
| 25                     | 36530A-2177 | 07 Oct 02       | 1755            | ND                       | ND      | ND      | ND      |
| 26                     | 36530A-2179 | 08 Oct 02       | 1800            | ND                       | ND      | ND      | ND      |
| 27                     | 36530A-2181 | 09 Oct 02       | 1755            | ND                       | ND      | ND      | ND      |
| 28                     | 36530A-2183 | 10 Oct 02       | 1744            | ND                       | ND      | ND      | ND      |
| 29                     | 36530A-2193 | 11 Oct 02       | 1709            | ND                       | ND      | ND      | ND      |
| 29                     | 36530A-2195 | 11 Oct 02       | 2009            | ND                       | ND      | ND      | ND      |
| 29                     | 36530A-2197 | 11 Oct 02       | 2309            | ND                       | ND      | ND      | ND      |
| 30                     | 36530A-2207 | 12 Oct 02       | 1409            | ND                       | ND      | ND      | ND      |
| 30                     | 36530A-2209 | 12 Oct 02       | 1709            | ND                       | ND      | ND      | ND      |
| 30                     | 36530A-2211 | 12 Oct 02       | 2009            | ND                       | ND      | ND      | ND      |
| 30                     | 36530A-2213 | 12 Oct 02       | 2309            | ND                       | ND      | ND      | ND      |
| 31                     | 36530A-2215 | 13 Oct 02       | 0209            | ND                       | ND      | ND      | ND      |
| 31                     | 36530A-2225 | 13 Oct 02       | 1709            | ND                       | ND      | ND      | ND      |
| 31                     | 36530A-2227 | 13 Oct 02       | 2009            | ND                       | ND      | ND      | ND      |
| 32                     | 36530A-2229 | 14 Oct 02       | 1402            | ND                       | ND      | ND      | ND      |
| 32                     | 36530A-2231 | 14 Oct 02       | 1702            | ND                       | ND      | ND      | ND      |
| 32-33                  | 36530A-2233 | 14-15 Oct 02    | Not Available   | ND                       | ND      | ND      | ND      |
| 34                     | 36530A-2235 | 16 Oct 02       | 1758            | ND                       | ND      | ND      | ND      |
| 34                     | 36530A-2237 | 16 Oct 02       | 1753            | ND                       | ND      | ND      | ND      |



Table VIII. Analytical Results of "Exit Water Samples" (continued)

| Days After Application | Sample ID   | Collection Date | Collection Time | Analytical Results (ppb) |         |         |         |
|------------------------|-------------|-----------------|-----------------|--------------------------|---------|---------|---------|
|                        |             |                 |                 | Fipronil                 | MB46513 | MB45950 | MB46136 |
| 34                     | 36530A-2239 | 16 Oct 02       | 2053            | ND                       | ND      | ND      | ND      |
| 34                     | 36530A-2241 | 16 Oct 02       | 2353            | ND                       | ND      | ND      | ND      |
| 35                     | 36530A-2249 | 17 Oct 02       | 1153            | ND                       | ND      | ND      | ND      |
| 35                     | 36530A-2251 | 17 Oct 02       | 1453            | ND                       | ND      | ND      | ND      |
| 35                     | 36530A-2253 | 17 Oct 02       | 1753            | ND                       | ND      | ND      | ND      |
| 35                     | 36530A-2255 | 17 Oct 02       | 2053            | ND                       | ND      | ND      | ND      |
| 35                     | 36530A-2257 | 17 Oct 02       | 2353            | ND                       | ND      | ND      | ND      |
| 36                     | 36530A-2265 | 18 Oct 02       | 1153            | ND                       | ND      | ND      | ND      |
| 36                     | 36530A-2267 | 18 Oct 02       | 1453            | ND                       | ND      | ND      | ND      |
| 36                     | 36530A-2269 | 18 Oct 02       | 1753            | ND                       | ND      | ND      | ND      |
| 36                     | 36530A-2271 | 18 Oct 02       | 2053            | ND                       | ND      | ND      | ND      |
| 36                     | 36530A-2273 | 18 Oct 02       | 2353            | ND                       | ND      | ND      | ND      |
| 37                     | 36530A-2277 | 19 Oct 02       | 0553            | ND                       | ND      | ND      | ND      |
| 37                     | 36530A-2283 | 19 Oct 02       | 1453            | ND                       | ND      | ND      | ND      |
| 38                     | 36530A-2295 | 20 Oct 02       | 0853            | ND                       | ND      | ND      | ND      |
| 39                     | 36530A-2311 | 21 Oct 02       | 0853            | ND                       | ND      | ND      | ND      |
| 39                     | 36530A-2319 | 21 Oct 02       | 2053            | ND                       | ND      | ND      | ND      |
| 39                     | 36530A-2321 | 21 Oct 02       | 2353            | ND                       | ND      | ND      | ND      |
| 40                     | 36530A-2323 | 22 Oct 02       | 0253            | ND                       | ND      | ND      | ND      |
| 40                     | 36530A-2325 | 22 Oct 02       | 0553            | ND                       | ND      | ND      | ND      |
| 40                     | 36530A-2327 | 22 Oct 02       | 0853            | ND                       | ND      | ND      | ND      |



Table VIII. Analytical Results of "Exit Water Samples" (continued)

| Days After Application | Sample ID   | Collection Date | Collection Time | Analytical Results (ppb) |         |         |         |
|------------------------|-------------|-----------------|-----------------|--------------------------|---------|---------|---------|
|                        |             |                 |                 | Fipronil                 | MB46513 | MB45950 | MB46136 |
| 40                     | 36530A-2329 | 22 Oct 02       | 1153            | ND                       | ND      | ND      | ND      |
| 40                     | 36530A-2331 | 22 Oct 02       | 1453            | ND                       | ND      | ND      | ND      |
| 40                     | 36530A-2333 | 22 Oct 02       | 1753            | ND                       | ND      | ND      | ND      |
| 40                     | 36530A-2335 | 22 Oct 02       | 2053            | ND                       | ND      | ND      | ND      |
| 40                     | 36530A-2337 | 22 Oct 02       | 2353            | ND                       | ND      | ND      | ND      |
| 41                     | 36530A-2339 | 23 Oct 02       | 0253            | ND                       | ND      | ND      | ND      |
| 41                     | 36530A-2341 | 23 Oct 02       | 0553            | ND                       | ND      | ND      | ND      |
| 41                     | 36530A-2343 | 23 Oct 02       | 0853            | ND                       | ND      | ND      | ND      |
| 41                     | 36530A-2345 | 23 Oct 02       | 1153            | ND                       | ND      | ND      | ND      |
| 42                     | 36530A-2359 | 24 Oct 02       | 0853            | ND                       | ND      | ND      | ND      |
| 43                     | 36530A-2375 | 25 Oct 02       | 0853            | ND                       | ND      | ND      | ND      |
| 44                     | 36530A-2395 | 26 Oct 02       | 1453            | ND                       | ND      | ND      | ND      |
| 45                     | 36530A-2409 | 27 Oct 02       | 1153            | ND                       | ND      | ND      | ND      |
| 46                     | 36530A-2425 | 28 Oct 02       | 1153            | ND                       | ND      | ND      | ND      |
| 47                     | 36530A-2435 | 29 Oct 02       | 0253            | ND                       | ND      | ND      | ND      |
| 47                     | 36530A-2437 | 29 Oct 02       | 0553            | ND                       | ND      | ND      | ND      |
| 47                     | 36530A-2439 | 29 Oct 02       | 0853            | ND                       | ND      | ND      | ND      |
| 47                     | 36530A-2441 | 29 Oct 02       | 1153            | ND                       | ND      | ND      | ND      |
| 47                     | 36530A-2443 | 29 Oct 02       | 1453            | ND                       | ND      | ND      | ND      |
| 47                     | 36530A-2445 | 29 Oct 02       | 1753            | ND                       | ND      | ND      | ND      |
| 47                     | 36530A-2447 | 29 Oct 02       | 2053            | ND                       | ND      | ND      | ND      |



Table VIII. Analytical Results of "Exit Water Samples" (continued)

| Days After Application | Sample ID   | Collection Date | Collection Time | Analytical Results (ppb) |         |         |         |
|------------------------|-------------|-----------------|-----------------|--------------------------|---------|---------|---------|
|                        |             |                 |                 | Fipronil                 | MB46513 | MB45950 | MB46136 |
| 47                     | 36530A-2449 | 29 Oct 02       | 2353            | ND                       | ND      | ND      | ND      |
| 48                     | 36530A-2451 | 30 Oct 02       | 0253            | ND                       | ND      | ND      | ND      |
| 48                     | 36530A-2455 | 30 Oct 02       | 0853            | ND                       | ND      | ND      | ND      |
| 48                     | 36530A-2459 | 30 Oct 02       | 1453            | ND                       | ND      | ND      | ND      |
| 48                     | 36530A-2463 | 30 Oct 02       | 2053            | ND                       | ND      | ND      | ND      |
| 49                     | 36530A-2473 | 31 Oct 02       | 1153            | ND                       | ND      | ND      | ND      |
| 50                     | 36530A-2487 | 01 Nov 02       | 0853            | ND                       | ND      | ND      | ND      |
| 51                     | 36530A-2501 | 02 Nov 02       | 0553            | ND                       | ND      | ND      | ND      |
| 52                     | 36530A-2515 | 03 Nov 02       | 0253            | ND                       | ND      | ND      | ND      |
| 53                     | 36530A-2537 | 04 Nov 02       | 1153            | ND                       | ND      | ND      | ND      |
| 54                     | 36530A-2551 | 05 Nov 02       | 0853            | ND                       | ND      | ND      | ND      |
| 54                     | 36530A-2557 | 05 Nov 02       | 1753            | ND                       | ND      | ND      | ND      |
| 55                     | 36530A-2563 | 06 Nov 02       | 0253            | ND                       | ND      | ND      | ND      |
| 55                     | 36530A-2565 | 06 Nov 02       | 0553            | ND                       | ND      | ND      | ND      |
| 55                     | 36530A-2567 | 06 Nov 02       | 0853            | ND                       | ND      | ND      | ND      |
| 55                     | 36530A-2569 | 06 Nov 02       | 1153            | ND                       | ND      | ND      | ND      |
| 55                     | 36530A-2571 | 06 Nov 02       | 1453            | ND                       | ND      | ND      | ND      |
| 55                     | 36530A-2573 | 06 Nov 02       | 1753            | ND                       | ND      | ND      | ND      |
| 55                     | 36530A-2575 | 06 Nov 02       | 2053            | ND                       | ND      | ND      | ND      |
| 55                     | 36530A-2577 | 06 Nov 02       | 2353            | ND                       | ND      | ND      | ND      |
| 56                     | 36530A-2579 | 07 Nov 02       | 0253            | ND                       | ND      | ND      | ND      |





Table VIII. Analytical Results of "Exit Water Samples" (continued)

| Days After Application | Sample ID   | Collection Date | Collection Time | Analytical Results (ppb) |         |         |         |
|------------------------|-------------|-----------------|-----------------|--------------------------|---------|---------|---------|
|                        |             |                 |                 | Fipronil                 | MB46513 | MB45950 | MB46136 |
| 56                     | 36530A-2581 | 07 Nov 02       | 0553            | ND                       | ND      | ND      | ND      |
| 56                     | 36530A-2585 | 07 Nov 02       | 1153            | ND                       | ND      | ND      | ND      |
| 56                     | 36530A-2589 | 07 Nov 02       | 1753            | ND                       | ND      | ND      | ND      |
| 56                     | 36530A-2591 | 07 Nov 02       | 2053            | ND                       | ND      | ND      | ND      |
| 57                     | 36530A-2597 | 08 Nov 02       | 0553            | ND                       | ND      | ND      | ND      |
| 58                     | 36530A-2615 | 09 Nov 02       | 0853            | ND                       | ND      | ND      | ND      |
| 59                     | 36530A-2633 | 10 Nov 02       | 1153            | ND                       | ND      | ND      | ND      |
| 60-61                  | 36530A-2645 | 11-12 Nov 02    | Not Available   | ND                       | ND      | ND      | ND      |
| 60-61                  | 36530A-2649 | 11-12 Nov 02    | Not Available   | ND                       | ND      | ND      | ND      |
| 60-61                  | 36530A-2653 | 11-12 Nov 02    | Not Available   | ND                       | ND      | ND      | ND      |
| 61-62                  | 36530A-2657 | 12-13 Nov 02    | Not Available   | ND                       | ND      | ND      | ND      |
| 61-62                  | 36530A-2661 | 12-13 Nov 02    | Not Available   | ND                       | ND      | ND      | ND      |
| 61-62                  | 36530A-2665 | 12-13 Nov 02    | Not Available   | ND                       | ND      | ND      | ND      |
| 61-62                  | 36530A-2669 | 12-13 Nov 02    | Not Available   | ND                       | ND      | ND      | ND      |
| 62-63                  | 36530A-2673 | 13-14 Nov 02    | Not Available   | ND                       | ND      | ND      | ND      |
| 62-63                  | 36530A-2685 | 13-14 Nov 02    | Not Available   | ND                       | ND      | ND      | ND      |
| 63-64                  | 36530A-2689 | 14-15 Nov 02    | Not Available   | ND                       | ND      | ND      | ND      |
| 64                     | 36530A-2691 | 15 Nov 02       | 1755            | ND                       | ND      | ND      | ND      |
| 65                     | 36530A-2699 | 16 Nov 02       | 0555            | ND                       | ND      | ND      | ND      |
| 65                     | 36530A-2709 | 16 Nov 02       | 2055            | ND                       | ND      | ND      | ND      |
| 66                     | 36530A-2713 | 17 Nov 02       | 0255            | ND                       | ND      | ND      | ND      |



Table VIII. Analytical Results of "Exit Water Samples" (continued)

| Days After Application | Sample ID   | Collection Date | Collection Time | Analytical Results (ppb) |         |         |         |
|------------------------|-------------|-----------------|-----------------|--------------------------|---------|---------|---------|
|                        |             |                 |                 | Fipronil                 | MB46513 | MB45950 | MB46136 |
| 66                     | 36530A-2717 | 17 Nov 02       | 0855            | ND                       | ND      | ND      | ND      |
| 66                     | 36530A-2721 | 17 Nov 02       | 1455            | ND                       | ND      | ND      | ND      |
| 66                     | 36530A-2725 | 17 Nov 02       | 2055            | ND                       | ND      | ND      | ND      |
| 67                     | 36530A-2729 | 18 Nov 02       | 0255            | ND                       | ND      | ND      | ND      |
| 67                     | 36530A-2733 | 18 Nov 02       | 0855            | ND                       | ND      | ND      | ND      |
| 67                     | 36530A-2737 | 18 Nov 02       | 1455            | ND                       | ND      | ND      | ND      |
| 67                     | 36530A-2741 | 18 Nov 02       | 2055            | ND                       | ND      | ND      | ND      |
| 68                     | 36530A-2745 | 19 Nov 02       | 0255            | ND                       | ND      | ND      | ND      |
| 68                     | 36530A-2751 | 19 Nov 02       | 1155            | ND                       | ND      | ND      | ND      |
| 69                     | 36530A-2767 | 20 Nov 02       | 1155            | ND                       | ND      | ND      | ND      |
| 70                     | 36530A-2783 | 21 Nov 02       | 1155            | ND                       | ND      | ND      | ND      |
| 71                     | 36530A-2799 | 22 Nov 02       | 1155            | ND                       | ND      | ND      | ND      |
| 72                     | 36530A-2815 | 23 Nov 02       | 1155            | ND                       | ND      | ND      | ND      |
| 73                     | 36530A-2829 | 24 Nov 02       | 0855            | ND                       | ND      | ND      | ND      |
| 74                     | 36530A-2847 | 25 Nov 02       | 1155            | ND                       | ND      | ND      | ND      |
| 75                     | 36530A-2863 | 26 Nov 02       | 1155            | ND                       | ND      | ND      | ND      |
| 76                     | 36530A-2879 | 27 Nov 02       | 1155            | ND                       | ND      | ND      | ND      |
| 77                     | 36530A-2897 | 28 Nov 02       | 1455            | ND                       | ND      | ND      | ND      |
| 78                     | 36530A-2913 | 29 Nov 02       | 1455            | ND                       | ND      | ND      | ND      |
| 79                     | 36530A-2925 | 30 Nov 02       | 0855            | ND                       | ND      | ND      | ND      |
| 80                     | 36530A-2939 | 01 Dec 02       | 0555            | ND                       | ND      | ND      | ND      |



Table VIII. Analytical Results of "Exit Water Samples" (continued)

| Days After Application | Sample ID   | Collection Date | Collection Time | Analytical Results (ppb) |         |         |         |
|------------------------|-------------|-----------------|-----------------|--------------------------|---------|---------|---------|
|                        |             |                 |                 | Fipronil                 | MB46513 | MB45950 | MB46136 |
| 81                     | 36530A-2965 | 02 Dec 02       | 2055            | ND                       | ND      | ND      | ND      |
| 82                     | 36530A-2975 | 03 Dec 02       | 1155            | ND                       | ND      | ND      | ND      |
| 83                     | 36530A-2989 | 04 Dec 02       | 0855            | ND                       | ND      | ND      | ND      |
| 85                     | 36530A-2995 | 06 Dec 02       | 1755            | ND                       | ND      | ND      | ND      |
| 85                     | 36530A-2999 | 06 Dec 02       | 2355            | ND                       | ND      | ND      | ND      |
| 86                     | 36530A-3007 | 07 Dec 02       | 1155            | ND                       | ND      | ND      | ND      |
| 86                     | 36530A-3011 | 07 Dec 02       | 1755            | ND                       | ND      | ND      | ND      |
| 86                     | 36530A-3015 | 07 Dec 02       | 2355            | ND                       | ND      | ND      | ND      |
| 87                     | 36530A-3027 | 08 Dec 02       | 1755            | ND                       | ND      | ND      | ND      |
| 88                     | 36530A-3039 | 09 Dec 02       | 1155            | ND                       | ND      | ND      | ND      |
| 89                     | 36530A-3057 | 10 Dec 02       | 1455            | ND                       | ND      | ND      | ND      |
| 90                     | 36530A-3075 | 11 Dec 02       | 1755            | ND                       | ND      | ND      | ND      |
| 90                     | 36530A-3079 | 11 Dec 02       | 2355            | ND                       | ND      | ND      | ND      |
| 91                     | 36530A-3083 | 12 Dec 02       | 0555            | ND                       | ND      | ND      | ND      |
| 91                     | 36530A-3087 | 12 Dec 02       | 1155            | ND                       | ND      | ND      | ND      |
| 92                     | 36530A-3097 | 13 Dec 02       | 1155            | ND                       | ND      | ND      | ND      |
| 93                     | 36530A-3105 | 14 Dec 02       | 1155            | ND                       | ND      | ND      | ND      |
| 94                     | 36530A-3115 | 15 Dec 02       | 1755            | ND                       | ND      | ND      | ND      |
| 95                     | 36530A-3121 | 16 Dec 02       | 1155            | ND                       | ND      | ND      | ND      |
| 96                     | 36530A-3129 | 17 Dec 02       | 1155            | ND                       | ND      | ND      | ND      |
| 97                     | 36530A-3137 | 18 Dec 02       | 1155            | ND                       | ND      | ND      | ND      |



Table VIII. Analytical Results of "Exit Water Samples" (continued)

| Days After Application | Sample ID   | Collection Date         | Collection Time | Analytical Results (ppb) |         |         |         |
|------------------------|-------------|-------------------------|-----------------|--------------------------|---------|---------|---------|
|                        |             |                         |                 | Fipronil                 | MB46513 | MB45950 | MB46136 |
| 98                     | 36530A-3145 | 19 Dec 02               | 1155            | ND                       | ND      | ND      | ND      |
| 99                     | 36530A-3153 | 20 Dec 02               | 1155            | ND                       | ND      | ND      | ND      |
| 100-101                | 36530A-3163 | 21-22 Dec 02            | Not Available   | ND                       | ND      | ND      | ND      |
| 101-102                | 36530A-3175 | 22-23 Dec 02            | Not Available   | ND                       | ND      | ND      | ND      |
| 102-103                | 36530A-3183 | 23-24 Dec 02            | Not Available   | ND                       | ND      | ND      | ND      |
| 106-107                | 36530A-3187 | 27-28 Dec 02            | Not Available   | ND                       | ND      | ND      | ND      |
| 107-108                | 36530A-3199 | 28-29 Dec 02            | Not Available   | ND                       | ND      | ND      | ND      |
| 108-109                | 36530A-3207 | 29-30 Dec 02            | Not Available   | ND                       | ND      | ND      | ND      |
| 109-110                | 36530A-3215 | 30-31 Dec 02            | Not Available   | ND                       | ND      | ND      | ND      |
| 110-111                | 36530A-3221 | 31 Dec 02-<br>01 Jan 03 | Not Available   | ND                       | ND      | ND      | ND      |
| 112                    | 36530A-3233 | 02 Jan 03               | 1412            | ND                       | ND      | ND      | ND      |
| 113                    | 36530A-3239 | 03 Jan 03               | 0812            | ND                       | ND      | ND      | ND      |
| 114                    | 36530A-3247 | 04 Jan 03               | 0812            | ND                       | ND      | ND      | ND      |
| 115                    | 36530A-3257 | 05 Jan 03               | 1412            | ND                       | ND      | ND      | ND      |
| 116                    | 36530A-3263 | 06 Jan 03               | 0812            | ND                       | ND      | ND      | ND      |
| 117                    | 36530A-3273 | 07 Jan 03               | 1412            | ND                       | ND      | ND      | ND      |
| 118                    | 36530A-3281 | 08 Jan 03               | 1412            | ND                       | ND      | ND      | ND      |
| 119                    | 36530A-3289 | 09 Jan 03               | 1412            | ND                       | ND      | ND      | ND      |
| 120                    | 36530A-3295 | 10 Jan 03               | 0812            | ND                       | ND      | ND      | ND      |
| 121                    | 36530A-3305 | 11 Jan 03               | 1412            | ND                       | ND      | ND      | ND      |



Table VIII. Analytical Results of "Exit Water Samples" (continued)

| Days After Application | Sample ID   | Collection Date | Collection Time | Analytical Results (ppb) |         |         |         |
|------------------------|-------------|-----------------|-----------------|--------------------------|---------|---------|---------|
|                        |             |                 |                 | Fipronil                 | MB46513 | MB45950 | MB46136 |
| 122                    | 36530A-3315 | 12 Jan 03       | 2012            | ND                       | ND      | ND      | ND      |
| 123                    | 36530A-3323 | 13 Jan 03       | 2012            | ND                       | ND      | ND      | ND      |
| 124                    | 36530A-3329 | 14 Jan 03       | 1412            | ND                       | ND      | ND      | ND      |
| 125                    | 36530A-3333 | 15 Jan 03       | 0212            | ND                       | ND      | ND      | ND      |
| 126                    | 36530A-3345 | 16 Jan 03       | 1412            | ND                       | ND      | ND      | ND      |
| 127                    | 36530A-3353 | 17 Jan 03       | 1412            | ND                       | ND      | ND      | ND      |
| 129                    | 36530A-3358 | 19 Jan 03       | 1412            | ND                       | ND      | ND      | ND      |
| 130                    | 36530A-3367 | 20 Jan 03       | 1412            | ND                       | ND      | ND      | ND      |
| 131                    | 36530A-3371 | 21 Jan 03       | 0212            | ND                       | ND      | ND      | ND      |
| 132                    | 36530A-3381 | 22 Jan 03       | 0812            | ND                       | ND      | ND      | ND      |
| 132-134                | 36530A-3389 | 22-24 Jan 03    | Not Available   | ND                       | ND      | ND      | ND      |
| 138                    | 36530A-3435 | 28 Jan 03       | 1412            | ND                       | ND      | ND      | ND      |
| 139                    | 36530A-3443 | 29 Jan 03       | 1412            | ND                       | ND      | ND      | ND      |
| 140                    | 36530A-3451 | 30 Jan 03       | 1412            | ND                       | ND      | ND      | ND      |
| 141                    | 36530A-3455 | 31 Jan 03       | 0212            | ND                       | ND      | ND      | ND      |
| 142                    | 36530A-3465 | 01 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 143                    | 36530A-3475 | 02 Feb 03       | 1412            | ND                       | ND      | ND      | ND      |
| 144                    | 36530A-3483 | 03 Feb 03       | 1412            | ND                       | ND      | ND      | ND      |
| 145                    | 36530A-3489 | 04 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 146                    | 36530A-3497 | 05 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 147                    | 36530A-3505 | 06 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 148                    | 36530A-3513 | 07 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |



Table VIII. Analytical Results of "Exit Water Samples" (continued)

| Days After Application | Sample ID   | Collection Date | Collection Time | Analytical Results (ppb) |         |         |         |
|------------------------|-------------|-----------------|-----------------|--------------------------|---------|---------|---------|
|                        |             |                 |                 | Fipronil                 | MB46513 | MB45950 | MB46136 |
| 149                    | 36530A-3523 | 08 Feb 03       | 1412            | ND                       | ND      | ND      | ND      |
| 150                    | 36530A-3529 | 09 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 151                    | 36530A-3537 | 10 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 152                    | 36530A-3547 | 11 Feb 03       | 1412            | ND                       | ND      | ND      | ND      |
| 153                    | 36530A-3553 | 12 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 154                    | 36530A-3563 | 13 Feb 03       | 1412            | ND                       | ND      | ND      | ND      |
| 155                    | 36530A-3569 | 14 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 156                    | 36530A-3577 | 15 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 160                    | 36530A-3585 | 19 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 161                    | 36530A-3593 | 20 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 162                    | 36530A-3601 | 21 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 163                    | 36530A-3609 | 22 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 164                    | 36530A-3617 | 23 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 165                    | 36530A-3627 | 24 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 166                    | 36530A-3635 | 25 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 167                    | 36530A-3643 | 26 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 168                    | 36530A-3651 | 27 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 169                    | 36530A-3659 | 28 Feb 03       | 0812            | ND                       | ND      | ND      | ND      |
| 170                    | 36530A-3667 | 01 Mar 03       | 0812            | ND                       | ND      | ND      | ND      |
| 171                    | 36530A-3679 | 02 Mar 03       | 2012            | ND                       | ND      | ND      | ND      |
| 172                    | 36530A-3683 | 03 Mar 03       | 0812            | ND                       | ND      | ND      | ND      |
| 173                    | 36530A-3691 | 04 Mar 03       | 0812            | ND                       | ND      | ND      | ND      |



Table VIII. Analytical Results of "Exit Water Samples" (continued)

| Days After Application | Sample ID   | Collection Date | Collection Time | Analytical Results (ppb) |         |         |         |
|------------------------|-------------|-----------------|-----------------|--------------------------|---------|---------|---------|
|                        |             |                 |                 | Fipronil                 | MB46513 | MB45950 | MB46136 |
| 174                    | 36530A-3701 | 05 Mar 03       | 1412            | ND                       | ND      | ND      | ND      |
| 175                    | 36530A-3706 | 06 Mar 03       | 0212            | ND                       | ND      | ND      | ND      |
| 176                    | 36530A-3715 | 07 Mar 03       | 0812            | ND                       | ND      | ND      | ND      |
| 177                    | 36530A-3725 | 08 Mar 03       | 1412            | ND                       | ND      | ND      | ND      |
| 178                    | 36530A-3733 | 09 Mar 03       | 1412            | ND                       | ND      | ND      | ND      |
| 179                    | 36530A-3741 | 10 Mar 03       | 1412            | ND                       | ND      | ND      | ND      |
| 180                    | 36530A-3749 | 11 Mar 03       | 0812            | ND                       | ND      | ND      | ND      |

**Table X. Flow Rates Preceding and Succeeding the Sample Containing Detectable Fipronil Residues**

| Date and Time   | Flow Rate (gpm) | Date and Time  | Flow Rate (gpm) |
|-----------------|-----------------|----------------|-----------------|
| 9/26/2002 22:30 | 707             | 9/27/2002 1:40 | 657             |
| 9/26/2002 22:40 | 837             | 9/27/2002 1:50 | 532             |
| 9/26/2002 22:50 | 737             | 9/27/2002 2:00 | 703             |
| 9/26/2002 23:00 | 869             | 9/27/2002 2:10 | 671             |
| 9/26/2002 23:10 | 984             | 9/27/2002 2:20 | 851             |
| 9/26/2002 23:20 | 749             | 9/27/2002 2:30 | 949             |
| 9/26/2002 23:30 | 847             | 9/27/2002 2:40 | 941             |
| 9/26/2002 23:40 | 693             | 9/27/2002 2:50 | 1006            |
| 9/26/2002 23:50 | 842             | 9/27/2002 3:00 | 974             |
| 9/27/2002 0:00  | 644             | 9/27/2002 3:10 | 982             |
| 9/27/2002 0:10  | 985             | 9/27/2002 3:20 | 956             |
| 9/27/2002 0:20  | 672             | 9/27/2002 3:30 | 956             |
| 9/27/2002 0:30  | 692             | 9/27/2002 3:40 | 792             |
| 9/27/2002 0:40  | 735             | 9/27/2002 3:50 | 995             |
| 9/27/2002 0:50  | 735             | 9/27/2002 4:00 | 1097            |
| 9/27/2002 1:00  | 659             | 9/27/2002 4:10 | 987             |
| 9/27/2002 1:10  | 695             | 9/27/2002 4:20 | 995             |
| 9/27/2002 1:20  | 706             | 9/27/2002 4:30 | 726             |
| 9/27/2002 1:30* | 607             | <b>Mean</b>    | <b>815</b>      |

\* Sample 36530A-2089 collected at 9/27/02, 01:26

The mass transport or loss during this 6-hour period is calculated by:

$$\text{Mass Loss in mg} = \text{Sample Concentration (ng/mL)} \times \text{Mean Flow Rate (gal/min)} \\ \times 360 \text{ min} \times 3785 \text{ mL/gal} \times 10^{-6} \text{ mg/ng}$$

$$\text{Mass Loss} = <0.010 \text{ ng/mL} \times 815 \text{ gal/min} \times 360 \text{ min} \times 3785 \text{ mL/gal} \times 10^{-6} \text{ mg/ng}$$

$$\text{Mass Loss} = <11.1 \text{ mg}$$

This calculation, using conservative assumptions, estimates an upper limit of <11.1 mg of fipronil has been lost from the test site in the runoff water. This corresponds to <0.11% of the 10.2 grams of the active ingredient, fipronil, applied to the test site.