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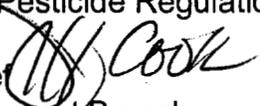
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TO: John Sanders, Ph.D., Chief
Environmental Monitoring Branch
Department of Pesticide Regulation

FROM: Jeff Cook, Chief 
Quality Management Branch
Monitoring and Laboratory Division

DATE: November 24, 2003

SUBJECT: FINAL REPORT FOR THE 2002 AMBIENT AIR MONITORING FOR
ACEPHATE AND METHAMIDOPHOS IN FRESNO COUNTY

Attached is the final report "Ambient Air Monitoring for Acephate and Methamidophos in Fresno County –Summer 2002." The report and separate volume of appendices for the report have also been forwarded to Randy Segawa and Shifang Fan of your staff. We received your June 24, 2003, comments and have made the requested changes.

If you or your staff have questions or need further information, please contact me at 322-3726 or Kevin Mongar at 322-2449.

Attachment/Separate Appendices

cc: See next page

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

California Environmental Protection Agency



**Ambient Air Monitoring for Acephate and Methamidophos
In Fresno County – Summer 2002**

Prepared by
Operations Planning and Assessment Section
Quality Management Branch
Monitoring and Laboratory Division

Project No. P-02-003

Date: November 12, 2003

This report has been reviewed by the staff of the California Air Resources Board and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Air Resources Board, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

Monitoring Report Approval

Title: Ambient Air Monitoring for Acephate and Methamidophos
in Fresno County – Summer 2002

Project Lead: Kevin Mongar, Air Pollution Specialist

Prepared by: Yun Pan-Huang, Air Pollution Specialist

Approval: The following monitoring report has been reviewed and
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Executive Summary

Ambient Air Monitoring for Acephate and Methamidophos In Fresno County - Summer 2002

In January 2002 the California Department of Pesticide Regulation (DPR) requested that the Air Resources Board (ARB) conduct ambient air monitoring for the pesticides acephate and methamidophos in Fresno County during the summer of 2002. Monitoring was conducted in Fresno County from July 8 through August 23, 2002, to coincide with the use of acephate and methamidophos as insecticides. California growers primarily use acephate and methamidophos to control a variety of plant and soil insects. According to the DPR monitoring recommendation, acephate converts to methamidophos in the environment.

Five sampling sites were selected in relatively high-population areas or in areas frequented by people (e.g., schools or school district offices, fire stations, or other public buildings). Background samples were collected at the ARB's regular air monitoring site in Fresno. At each site, 28 discrete 24-hour samples were collected, Monday through Friday (4 samples/week), during the 7-week sampling period. Collocated (replicate) samples were collected for seven dates (each Wednesday) at each sampling location.

The sites were selected by ARB personnel from areas in Fresno County where acephate and methamidophos was used in the past. Sites were selected for their proximity to the prior use areas with considerations for both accessibility and security of the sampling equipment. The ARB understands that DPR staff will verify and quantify the actual use of acephate and methamidophos that took place during the study when the information becomes available.

Acephate Results

Of the 168 ambient samples collected, one contained a concentration of acephate above the reported estimated quantitation limit (EQL) of 10 ng/m³. This concentration of 15 nanograms per cubic meter of sampled air (ng/m³) (2.0 parts per trillion by volume (pptv)) was measured at the Tranquility High School (THS) site. Four samples were found to have results of "detected," and 163 were below the method detection limit (MDL).

Seven-week average concentrations ranged from 1.1 ng/m³ (0.15 pptv) to 1.6 ng/m³ (0.21 pptv). The highest average was measured at the THS site.

Methamidophos Results

Of the 168 ambient samples collected, 10 contained concentrations of methamidophos above the reported EQL of 3.5 ng/m³, 7 were found to have results of "detected," and 151 were below the MDL.

Daily concentrations of methamidophos ranged from <MDL to 16 ng/m³ (2.8 pptv). The

highest concentration was measured at the San Joaquin Elementary School (SJS) site.

Seven-week average concentrations ranged from 0.55 ng/m³ (0.095 pptv) to 1.4 ng/m³ (0.24 pptv). The highest average was measured at the SJS site.

Acknowledgments

Assistance in sampling site selection was provided by Mr. Cliff Francone and Mr. Chuck Francone of the Fresno County Agricultural Commissioner's Office. Staff of the Air Resources Board (ARB) Air Quality Surveillance Branch (AQSB) collected the ambient samples. Mr. Steve Rider of the AQSB coordinated the fieldwork. Ms. Theresa Houston, Mr. Mike Orbanosky, and Mr. Jim Omand of the ARB Special Analysis Section laboratory performed the method development and chemical analyses. Ms. Yun Pan-Huang of the Operations Planning & Assessment Section prepared the monitoring report. Mr. Lynn Baker of the ARB Stationary Source Division provided comments on the monitoring protocol and report.

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Ambient Air Monitoring for Acephate and Methamidophos
In Fresno County - Summer 2002

I. Introduction

At the request (January 2, 2002, Memorandum, Helliker to Lloyd) of the California Department of Pesticide Regulation (DPR), the Air Resources Board (ARB) staff determined airborne concentrations of the pesticides acephate and methamidophos in Fresno County over a seven week ambient monitoring program. This monitoring was done to fulfill the requirements of Assembly Bill 1807/3219 (Food and Agricultural Code, Division 7, Chapter 3, Article 1.5) which requires the ARB "to document the level of airborne emissions ... of pesticides which may be determined to pose a present or potential hazard..." when requested by the DPR. Monitoring was conducted in Fresno County from July 8 through August 23, 2002, to coincide with the use of acephate and methamidophos as insecticides. California growers use acephate and methamidophos to control a variety of plant and soil insects. According to the DPR monitoring recommendation, acephate converts to methamidophos in the environment. The application site monitoring conducted during summer 2002 for methamidophos will be described in a separate report.

The ARB Special Analysis Section of the Northern Laboratory Branch conducted the method development and sample analyses. The ARB Air Quality Surveillance Branch staff conducted sample collections for the ambient study.

The protocol for the ambient air monitoring for acephate and methamidophos is enclosed separately as Appendix I (page 1 of the Appendices to this report). The protocol Attachments I, II, and V have not been included in Appendix I, but are available upon request. The laboratory report, "Air Sampling Cartridge Method Development and Analytical Results of Ambient Monitoring in Fresno County for Methamidophos and Acephate" is enclosed separately as Appendix II (pages 19 of the Appendices to this report). The Standard Operating Procedure (SOP) for acephate and methamidophos are also enclosed as Appendix II (page 35 of the Appendices to this report). The field data sheets for acephate and methamidophos are enclosed separately as Appendix III (page 41 of the Appendices to this report).

II. Sampling

A. Sampling Method

Air samples were collected by passing a measured volume of ambient air through XAD-2 resin. The exposed XAD-2 resin tubes (SKC #226-30-06) were stored in an ice chest (on dry ice) or in a freezer until desorbed with 10% of acetone in ethyl acetate. The tubes are 8 mm x 110 mm with 400 mg XAD-2 in the primary section and 200 mg in the secondary section. The flow rate of 3.0 standard liters per minute (slpm) was accurately measured and the sampling system operated continuously for 24 hours with the exact operating interval recorded in the logbook. The tubes were protected from direct sunlight and positioned 1.5 meters above roof tops for the ambient monitoring. At

the end of each sampling period, the tubes were placed in culture tubes with an identification label affixed. Subsequent to sampling, the sample tubes were transported on dry ice, as quickly as possible, to the ARB Monitoring and Laboratory Division laboratory for analysis. The samples were stored at or below 4 °C or extracted/analyzed immediately.

Each sample train consisted of an adsorbent tube, Teflon fittings and tubing, rain/sun shield, rotameter (or needle valve), train support, and either a 12-volt DC or a 115-volt AC vacuum pump. Tubes were prepared for use by breaking off the sealed glass ends and immediately inserting the tube into the Teflon fitting. The tubes were oriented in the sample train according to a small arrow printed on the side indicating the direction of flow. A needle valve with a range of 0-5 slpm was used to control sample flow rate. The flow rates were set using a calibrated digital mass flow meter (MFM), scaled from 0-5 slpm, before the start of each sampling period. The flow rate was also checked and recorded, using the MFM, at the end of each sampling period. Samplers were leak checked prior to each sampling period, with the sampling tubes installed. Any change in flow rates was recorded on the field log sheet. The pesticide sampling procedures for adsorbent tubes are included in Appendix I (page 15 of the Appendices to this report).

The ambient monitoring study included 168 individual sampling periods (6 sites x 28 sampling days). Collocated (duplicate) samples were collected for one day/week (each Wednesday) at each sampling location. Trip blanks were submitted once per week.

B. Sampling Site Selection

The DPR recommendations for acephate and methamidophos requested that ambient monitoring occur in Fresno County for 7 week consecutive weeks between July 8 and August 23, 2002. Monitoring was conducted in Fresno County from July 8 through August 23, 2002. Five sampling sites were selected by ARB personnel in populated areas or in areas frequented by people. Site selection was based upon considerations for accessibility, security of the sampling equipment, and compliance with technical siting requirements. Urban background samples were collected at the ARB's Fresno Ambient Air Monitoring Station. The six sites are listed in Table 1. Although the sampling sites are near areas of prior use of acephate and methamidophos it is understood that DPR staff will verify and quantify the actual use of acephate and methamidophos that occurred during the study when the information becomes available.

Table 1
Ambient Sampling Sites

FRS	ARB Fresno - First Air Monitoring Station	(559) 228-1825
	3425 North First Street	Pat Seames,
	Fresno CA 93726	Site Operator
	Section/Township/Range: SE.22/T.13S/R.20E	
	GPS Coordinates: N. 36° 46.906' W. 119°46.328'	

- HES Helm Elementary School (559) 866-5683
 13883 South Lassen Avenue Sylvia Grider
 Helm, CA 93627 Principal
 Section/Township/Range: SE.15/T.16S/R.17E
 GPS Coordinates: N. 36° 31.977' W. 120°05.903'
- SJS San Joaquin Elementary School (559) 693-4321
 West Nevada Avenue John Crider
 San Joaquin, CA 93660 Principal
 Section/Township/Range: SW.24/T.15S/R.16E
 GPS Coordinates: N. 36° 36.580' W. 120°11.201
- THS Tranquility High School (559) 698-7205
 6052 Juanche Avenue Jo Ann R. Minnite
 Tranquility, CA 93668 School Secretary
 Section/Township/Range: NW.8/T.15S/R.16E
 GPS Coordinates: N. 36° 38.735' W. 120°15.194
- CES Cantua Creek Elementary School (559) 829-3331
 19288 West Clarkson Avenue Rubin V. Castillo
 Cantua Creek, CA 93608 Principal
 Section/Township/Range: SE.27/T.16S/R.15E
 GPS Coordinates: N. 36° 30.0935' W. 120°19.192'
- WRS West Side Research and Extension (559) 884-2412
 17353 W. Oakland Avenue Jimmie H. Ross
 Five Points, CA 93624 Superintendent
 Section/Township/Range: NE.27/T.18S/R.19E
 GPS Coordinates: N. 36° 20.494' W. 120°06.515'

FRS

The urban background site was located at ARB's ambient air monitoring station in the city of Fresno. This station monitors concentrations and collects samples of most criteria gas and particulate pollutants as well as meteorological data. The site is located relatively close to the center of the metropolitan Fresno city limits in a mix of business offices, parks, and residences. Fresno has a population of approximately 450,000. The pesticide samplers were operated on top of the two-story building housing ARB's air monitoring station. The sample inlets were 34.5 ±0.5 feet above ground level. The site met all technical siting requirements. Elevation of the site is 350 ±10 feet above mean sea level (MSL). No agricultural fields were noted within a 3-mile radius.

HES

The Helm Elementary School was located in a rural agricultural/residential mixed area in the town of Helm, which has a population of approximately 200. The pesticide samplers were

operated on the roof of one of the school buildings and their inlets were 18 \pm 0.5 feet above ground level. The site met all technical siting requirements. Elevation of the site is 200 \pm 10 feet above MSL. Cotton and bean fields were located to the northeast and north within a 1.5-mile radius.

SJS

The San Joaquin Elementary School site was located in a rural, residential/agricultural mixed area near the center of the town of San Joaquin, which has a population of approximately 3,300. The pesticide samplers were operated on the roof of a shipping container and their inlets were 9.5 \pm 0.5 feet above ground level. The site met all technical siting requirements. Elevation of the site is 170 \pm 10 feet above MSL. Cotton fields surround this site within a 2-mile radius.

THS

The Tranquility High School site was located in a rural, residential/agricultural mixed area in the town of Tranquility, which has a population of approximately 200. The pesticide samplers were operated on the roof of the south wing of the gymnasium and their inlets were 10.5 \pm 0.5 feet above ground level. The site met all technical siting requirements as the roof peak was more than twice the height away. Elevation of the site is 165 \pm 10 feet above MSL. Cotton fields surround this site within a 2-mile radius.

CES

The Cantua Creek Elementary School site was located in a rural, agricultural/residential mixed area in the town of Cantua Creek, which has a population of approximately 300. The pesticide samplers were operated on the roof of one of the school buildings and their inlets were 17 \pm 0.5 feet above ground level. The site met all technical siting requirements. Elevation of the site is 310 \pm 10 feet above MSL. Multiple cotton and bean fields were located within a 1.5-mile radius.

WRS

The West Side Research & Extension site was located in a rural, agricultural/residential mixed area at the west end of the community of Calflax, which has a population of approximately 50. The pesticide samplers were operated on the roof of one of the complex's buildings, which at one time was a PM10 site, and their inlets were 16.5 \pm 0.5 feet above ground level. The site met all technical siting requirements. Elevation of the site is 325 \pm 10 feet above MSL. Multiple cotton fields surround this site within a 1.5-mile radius.

III. Analytical Methodology

The standard operating procedures for sampling and analysis of acephate and methamidophos are enclosed in Appendix II.

Per 40 CFR, Part 136, Appendix B, the method detection limit (MDL) was determined by analysis of 7 replicate cartridge spikes (near the estimated detection limit) for acephate and methamidophos. The MDL=(3.14) times standard deviation, calculated from the 7 replicate results. The analytical EQL=(5) times MDL. Based on a 3-ml extraction volume and a sample collected for 24 hours at a flow rate of 3.0 slpm, the

MDLs achieved by the laboratory were 2.2 ng/m³ and 0.86 ng/m³ for acephate and methamidophos, respectively. This corresponds to analytical EQLs of 11 ng/m³ for acephate and 4.3 ng/m³ for methamidophos. The DPR requested target 24-hour EQLs of 5.0 ng/m³ and 1.0 ng/m³ for acephate and methamidophos, respectively. However, the reported EQLs in the lab report were based on the lowest calibration standards of 45 ng/sample (10 ng/m³) and 15 ng/sample (3.5 ng/m³) for acephate and methamidophos, respectively.

The sampling and analytical method used for this study specifies that the ambient air is collected on XAD-2 cartridges for 24 hours at 3.0 slpm flow rate. The samples are stored in an ice chest on dry ice or in a refrigerator until extracted with 3 milliliters (ml) of 10% acetone in ethyl acetate. Sample extracts are analyzed on a gas chromatograph (GC) with a flame photometric detector (FPD) using internal standard method.

IV. Monitoring Results

All samples were extracted and analyzed within 21 days of collection, within the period samples were shown to be stable. Samples were stored at or below 4°C before extraction. All samples were analyzed the day of extraction and not kept in extract storage longer than a few hours.

For acephate and methamidophos, results below the MDL are reported as <MDL, results equal to or above the MDL, but below the reported EQL, are reported as "detected" (DET). Laboratory results equal to or above the reported EQL are reported to 3 significant figures in units of ng/sample, final concentrations in sampled air are reported to 2 significant figures. No sample results have been adjusted or corrected for recoveries of quality assurance spike samples.

Acephate Results

Table 2 presents the results of ambient air monitoring for acephate in units of ng/m³ and pptv. A summary of the ambient results for acephate is presented in Table 4.

The equation used to convert acephate air concentration results from units of ng/m³ to units of pptv at 1 atmosphere and 25°C is shown below:

$$\text{pptv} = (\text{ng/m}^3) \times \frac{(0.0820575 \text{ liter-atm/mole-}^\circ\text{K})(298^\circ\text{K})}{(1 \text{ atm})(183.16 \text{ gram/mole})} = (0.1335) \times (\text{ng/m}^3)$$

Of the 168 ambient samples collected (spikes, blanks, and the lower value of each collocated pair excluded), one contained a concentration of acephate above the reported EQL of 10 ng/m³. This concentration was 15 ng/m³ (2.0 pptv), measured at the THS site on August 20, 2002. Four samples were found to have results of detected, and 163 were below the MDL.

Seven-week average concentrations ranged from 1.1 ng/m³ (0.15 pptv) to 1.6 ng/m³ (0.21 pptv). The highest average was measured at the THS site.

As discussed in Section VI, Part C of this report, an increase in response is observed for acephate in the solvent extracts with time (i.e., "Re-analysis of an extract within 24 hours results in acephate values up to 2 times higher than the original value"). The laboratory report did not provide information regarding the time elapsed between extraction and analysis for the samples. The impact of this problem on the results is difficult to quantitatively assess. However, the results reported may be considered as maximum possible concentrations.

Methamidophos Results

Table 3 presents the results of ambient air monitoring for methamidophos in units of ng/m³ and pptv. A summary of the ambient results for methamidophos is presented in Table 5.

The equation used to convert methamidophos air concentration results from units of ng/m³ to units of pptv at 1 atmosphere and 25°C is shown below:

$$\text{pptv} = (\text{ng/m}^3) \times \frac{(0.0820575 \text{ liter-atm/mole-}^\circ\text{K})(298^\circ\text{K})}{(1 \text{ atm})(141.13 \text{ gram/mole})} = (0.1733) \times (\text{ng/m}^3)$$

Of the 168 ambient samples collected (spikes, blanks, and the lower value of each collocated pair excluded), 10 contained concentrations of methamidophos above the reported EQL of 3.5 ng/m³, 7 were found to have results of detected, and 151 were below the MDL.

Daily concentrations of methamidophos ranged from <MDL to 16 ng/m³ (2.8 pptv). The highest concentration was measured at the SJS site on July 31, 2002.

Seven-week average concentrations ranged from 0.55 ng/m³ (0.095 pptv) to 1.4 ng/m³ (0.24 pptv). The highest average was measured at the SJS site.

V. Quality Control (QC)

Field QC for the ambient monitoring included the following:

- 1) Seven field spikes (same environmental and experimental conditions as those occurring at the time of ambient sampling) prepared by the Special Analysis Section staff. The field spikes were obtained by sampling ambient air at the background monitoring site for 24-hour periods (collocated with an ambient sample);
- 2) Seven trip spikes;
- 3) Collocated (duplicate) samples taken once per week at each sampling location; and
- 4) 1 trip blank submitted per week;
- 5) The battery operated mass flow meters used to set and check the sampling flow rate were calibrated by the ARB's Program Evaluation and Standards Section.
- 6) A flow audit of each sampler was performed by the Quality Assurance

Section (QAS) on August 30, 2002, at the MLD's 5th Street warehouse facility. All pesticide sampler flow rates were within the QAS's $\pm 10\%$ control limit.

For each sampler using cartridges, the flow rate was set and recorded at the start of every sampling period for every sample using a calibrated, battery operated, digital mass flow meter. The flow rates were also checked and recorded at the end of each sampling period using a calibrated mass flow meter.

VI. Quality Control Results

A. Trip Blank Results

Referring to Table 3, Appendix II (page 34 of the Appendices to this report), seven trip blanks were analyzed for acephate and methamidophos and all trip blanks results were <MDL.

B. Collocated Sample Results

The relative percent difference (RPD) of the collocated results provides an indication of the precision of the monitoring method (i.e., the lower the RPD the better the precision). RPD is calculated as follows: $RPD = (| \text{difference} | / \text{average}) \times 100$.

Referring to Table 6, only one sample had an acephate result above the EQL. The corresponding collocated sample result was <MDL.

Referring to Table 7, 2 collocated pairs of samples had both methamidophos results above the EQL. The RPDs were 4.1% and 15.7%. The results indicate acceptable precision for the method.

C. Laboratory, Trip, and Field Spikes

The purpose of collecting spiked samples is to assess the accuracy (% recovery) of the sampling and analytical methods. The field spikes are collected by sampling ambient air through the previously spiked cartridges at one of the sampling sites. Thus, the field spikes provide an assessment of the accuracy of the entire method and are collected under the same environmental and experimental conditions as those occurring at the time of ambient sampling. The lab and trip spikes are used to confirm the field spike results or to help identify the source of losses (problems) when they occur in the field spikes.

Laboratory, trip, and field spikes were prepared by spiking a known amount of the target compound onto the appropriate cartridges. The spikes were made and collected in seven separate sets, one every week for the seven-week sampling period.

The laboratory spikes were placed immediately in a freezer and kept there until extraction and analysis. The trip and field spikes were kept in the lab freezer until transported to the field. The trip spikes were kept on dry ice in an ice chest (the same one used for samples) during transport to and from the field and at all times while in the

field except log-in and labeling. 300 ng of acephate and 210 ng of methamidophos were spiked onto a cartridge for all laboratory, trip, and field spikes. The extraction and analysis of each set of laboratory, trip and field spikes normally occurs at the same time. The collocated (unspiked) sample result, if above the EQL, was subtracted from the field spike sample result before calculation of percent recovery of the analytes. The lab, trip and field spikes for acephate and methamidophos are reported in Tables 8, 9 and 10 respectively.

The percent recoveries of the acephate lab, trip and field spikes ranged from 81% to 128%, 93% to 118%, and 48% to 163%, respectively.

For acephate, the lab and trip spike results are acceptable. Five of seven field spike recoveries are acceptable (86% to 126%), one is relatively low (48%) and one is high (163%). The laboratory report indicates that the high recovery field spike result may be caused by the interaction between the XAD resin and the target compound in the extraction solution and/or that the high and low results may be "outliers". The laboratory report states:

"Acephate is very unstable after extraction and there is no explanation to account for the wide variability of recovery efficiencies. While the acephate is stable on the XAD based on the storage studies, once in solution, even at low temperature it is not. The data from the laboratory and trip spike indicate that the extraction method is acceptable. The higher percentage recovery of acephate indicates that some interaction may be occurring between the XAD resin and the target compound. Re-analysis of an extract within 24 hours results in acephate values up to 2 times higher than the original value. Due to interfering peaks on the nitrogen phosphorous detector, use of this detector for confirmation was not available. The 48% and 163% recoveries of the field spikes appear to be outliers compared to the remainder of the field spike recovery data. The field spike recoveries during the method development were acceptable, although "high" for the lower spiked samples. Since the samples were predominantly <MDL, the actual values may be lower based on the "high" recoveries of the field spikes. All the samples were analyzed the day of extraction and not kept in extract storage longer than a few hours."

The percent recoveries of the methamidophos lab, trip and field spikes ranged from 80% to 96%, 86% to 96%, and 56% to 76%, respectively.

For methamidophos, the lab and trip spike results are acceptable, but the field spike recoveries are relatively low. According to lab report, random analysis of the back bed of the cartridges did not detect any methamidophos. There is no explanation for the low recoveries of methamidophos so far. During the collection and extraction efficiency study, the recoveries of methamidophos at low concentration (15 ng/sample) were good ($116.5\% \pm 12.4$), but at high concentration (210 ng/sample) were low ($46.4\% \pm 2.1$), which are consistent with the field spike recoveries (56% to 76%). The sample results for this project range from <MDL to 69 ng/sample. The consistently low recoveries of field spikes may indicate that ambient sample results reported are lower than actual.

VII. Method Development

Refer to Attachment III in Appendix I and Appendix II and IV for discussion and results of method development studies.

A. Collection and Extraction Efficiency

For acephate, the average recoveries for low (45 ng/sample) and high (300 ng/sample) spike levels were 193% and 111%, respectively. The method validation memo did not provide an explanation or discussion in regard to the high recoveries with the low-level spike. Based on the method development results, the actual concentrations of acephate in the samples may be lower than the values reported. All sample results for acephate are below the EQL of 45ng/sample except one sample with a result of 61.3 ng/sample.

For methamidophos, the average recoveries for low (15 ng/sample) and high (210 ng/sample) spike levels were 117% and 46%, respectively. The method validation memo did not provide an explanation or discussion in regard to the low recoveries with the high-level spike.

B. Storage Stability

The storage stability study results show that acephate and methamidophos are stable for up to 21 days on the XAD-2 cartridge when stored in a freezer at -20 °C. All samples were extracted and analyzed within 21 days of collection for the current project. Note however that the laboratory report states that: "Sample cartridges are stored at or below four (4) degrees centigrade (°C) before extraction."

C. Breakthrough

XAD-2 cartridges spiked with 1500 ng of acephate and methamidophos in the front tubes were sampled at a flow rate of 3 slpm for 24 hours. The analytical results show that no acephate and methamidophos were detected in the back tubes of cartridge.

Figure 1. Ambient Monitoring Area
(use map provided by DPR)

Attachment C(4): 2000 Methamidophos Use in Fresno, Madera, and Kings Counties (June 1- August 31, 2000)

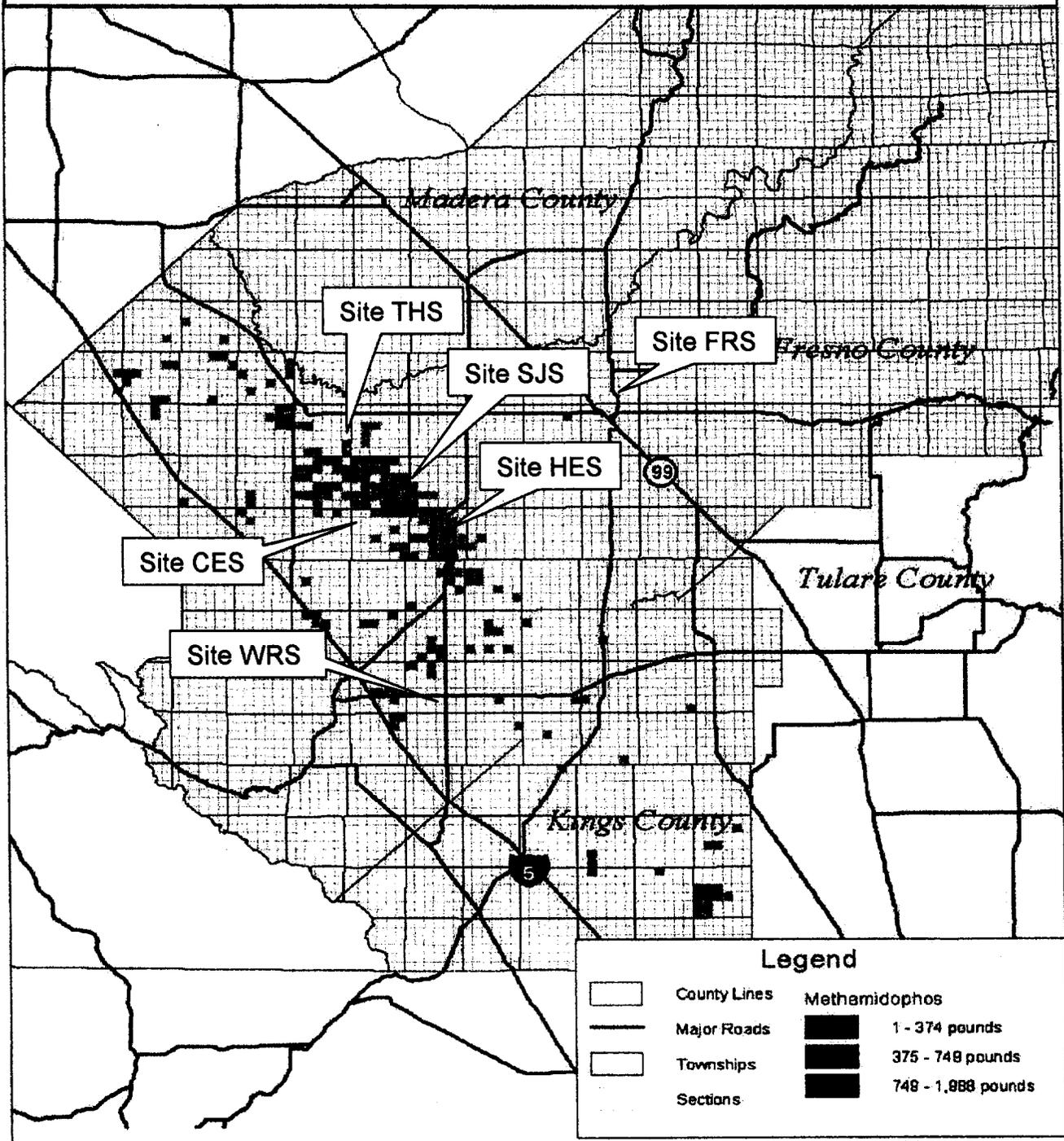


Table 2. Acephate Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Acephate		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	**(pptv)
002	FRS-AM-1	07/08/02	0727	23.1	4.15	<MDL	<MDL	<MDL
		07/09/02	0631					
003	HES-AM-1	07/08/02	0816	23.3	4.19	<MDL	<MDL	<MDL
		07/09/02	0733					
004	SJS-AM-1	07/08/02	0835	23.3	4.20	<MDL	<MDL	<MDL
		07/09/02	0754					
005	THS-AM-1	07/08/02	0853	23.8	4.28	<MDL	<MDL	<MDL
		07/09/02	0814					
006	CES-AM-1	07/08/02	0917	23.5	4.23	<MDL	<MDL	<MDL
		07/09/02	0845					
007	WRS-AM-1	07/08/02	0956	23.4	4.22	<MDL	<MDL	<MDL
		07/09/02	0923					
008	FRS-AM-2	07/09/02	0633	23.5	4.23	<MDL	<MDL	<MDL
		07/10/02	0603					
009	FRS-AM-2-C	07/09/02	0633	24.0	4.32	<MDL	<MDL	<MDL
		07/10/02	0603					
012	HES-AM-2	07/09/02	0735	23.3	4.20	<MDL	<MDL	<MDL
		07/10/02	0654					
013	HES-AM-2-C	07/09/02	0735	23.3	4.20	<MDL	<MDL	<MDL
		07/10/02	0654					
014	SJS-AM-2	07/09/02	0756	23.4	4.22	<MDL	<MDL	<MDL
		07/10/02	0721					
015	SJS-AM-2-C	07/09/02	0756	23.4	4.22	<MDL	<MDL	<MDL
		07/10/02	0721					
016	THS-AM-2	07/09/02	0819	23.4	4.21	<MDL	<MDL	<MDL
		07/10/02	0743					
017	THS-AM-2-C	07/09/02	0819	23.4	4.21	<MDL	<MDL	<MDL
		07/10/02	0743					
018	CES-AM-2	07/09/02	0847	23.5	4.23	<MDL	<MDL	<MDL
		07/10/02	0816					
019	CES-AM-2-C	07/09/02	9847	23.5	4.23	<MDL	<MDL	<MDL
		07/10/02	0816					
020	WRS-AM-2	07/09/02	0925	23.6	4.24	<MDL	<MDL	<MDL
		07/10/02	0859					
021	WRS-AM-2-C	07/09/02	0925	23.6	4.03	<MDL	<MDL	<MDL
		07/10/02	0859					

MDL=9.58 ng/sample for Acephate.

DET=Value was below the reported EQL of 45 ng/sample but \geq MDL

*Time was calculated from ETM reading.

** pptv at 1 atm and 25°C

Table 2. Acephate Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Acephate		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
022	FRS-AM-3	07/10/02	0605	24.0	4.31	<MDL	<MDL	<MDL
		07/11/02	0604					
023	HES-AM-3	07/10/02	0657	23.9	4.31	<MDL	<MDL	<MDL
		07/11/02	0654					
024	SJS-AM-3	07/10/02	0723	23.8	4.02	<MDL	<MDL	<MDL
		07/11/02	0714					
025	THS-AM-3	07/10/02	0744	23.8	4.28	<MDL	<MDL	<MDL
		07/11/02	0732					
026	CES-AM-3	07/10/02	0816	23.7	4.92	<MDL	<MDL	<MDL
		07/11/02	0758					
027	WRS-AM-3	07/10/02	0901	23.5	4.24	<MDL	<MDL	<MDL
		07/11/02	0834					
028	FRS-AM-4	07/11/02	0605	23.1	4.17	<MDL	<MDL	<MDL
		07/12/02	0513					
029	HES-AM-4	07/11/02	0654	23.1	4.16	<MDL	<MDL	<MDL
		07/12/02	0559					
030	SJS-AM-4	07/11/02	0714	23.1	4.15	<MDL	<MDL	<MDL
		07/12/02	0620					
031	THS-AM-4	07/11/02	0734	23.1	4.15	<MDL	<MDL	<MDL
		07/12/02	0636					
032	CES-AM-4	07/11/02	0800	23.0	4.15	<MDL	<MDL	<MDL
		07/12/02	0701					
033	WRS-AM-4	07/11/02	0834	23.0	4.14	<MDL	<MDL	<MDL
		07/12/02	0735					
034	FRS-AM-5	07/15/02	0654	23.9	4.30	<MDL	<MDL	<MDL
		07/16/02	0649					
038	HES-AM-5	07/15/02	0759	23.8	4.28	<MDL	<MDL	<MDL
		07/16/02	0745					
039	SJS-AM-5	07/15/02	0818	23.9	4.30	<MDL	<MDL	<MDL
		07/16/02	0811					
040	THS-AM-5	07/15/02	0833	24.0	4.32	<MDL	<MDL	<MDL
		07/16/02	0834					
041	CES-AM-5	07/15/02	0900	24.1	4.35	<MDL	<MDL	<MDL
		07/16/02	0908					
042	WRS-AM-5	07/15/02	0939	24.1	4.35	<MDL	<MDL	<MDL
		07/16/02	0947					

MDL=9.58 ng/sample for Acephate.

DET=Value was below the reported EQL of 45 ng/sample but ≥MDL

*Time was calculated from ETM reading.

** pptv at 1 atm and 25°C

Table 2. Acephate Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Acephate		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
043	FRS-AM-6	07/16/02	0654	23.6	4.24	<MDL	<MDL	<MDL
		07/17/02	0629					
044	FRS-AM-6-C	07/16/02	0654	23.6	4.24	<MDL	<MDL	<MDL
		07/17/02	0629					
045	HES-AM-6	07/16/02	0747	23.6	4.25	<MDL	<MDL	<MDL
		07/17/02	0724					
046	HES-AM-6-C	07/16/02	0747	23.6	4.25	<MDL	<MDL	<MDL
		07/17/02	0724					
047	SJS-AM-6	07/16/02	0814	23.6	4.24	<MDL	<MDL	<MDL
		07/17/02	0749					
048	SJS-AM-6-C	07/16/02	0814	23.6	4.24	<MDL	<MDL	<MDL
		07/17/02	0749					
049	THS-AM-6	07/16/02	0836	23.6	4.24	<MDL	<MDL	<MDL
		07/17/02	0811					
050	THS-AM-6-C	07/16/02	0836	23.6	4.24	<MDL	<MDL	<MDL
		07/17/02	0811					
051	CES-AM-6	07/16/02	0911	23.5	4.23	<MDL	<MDL	<MDL
		07/17/02	0842					
052	CES-AM-6-C	07/16/02	0911	23.5	4.23	<MDL	<MDL	<MDL
		07/17/02	0842					
053	WRS-AM-6	07/16/02	0950	23.5	4.24	<MDL	<MDL	<MDL
		07/17/02	0922					
054	WRS-AM-6-C	07/16/02	0950	23.5	4.24	<MDL	<MDL	<MDL
		07/17/02	0922					
055	FRS-AM-7	07/17/02	0632	23.7	4.27	<MDL	<MDL	<MDL
		07/18/02	0616					
056	HES-AM-7	07/17/02	0730	23.6	4.25	<MDL	<MDL	<MDL
		07/18/02	0706					
057	SJS-AM-7	07/17/02	0753	23.7	4.26	<MDL	<MDL	<MDL
		07/18/02	0732					
058	THS-AM-7	07/17/02	0815	23.6	4.24	<MDL	<MDL	<MDL
		07/18/02	0749					
059	CES-AM-7	07/17/02	0846	23.5	4.23	<MDL	<MDL	<MDL
		07/18/02	0815					
060	WRS-AM-7	07/17/02	0927	23.3	4.20	<MDL	<MDL	<MDL
		07/18/02	0846					

MDL=9.58 ng/sample for Acephate.

DET=Value was below the reported EQL of 45 ng/sample but \geq MDL

*Time was calculated from ETM reading.

** pptv at 1 atm and 25⁰C

Table 2. Acephate Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Acephate		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
061	FRS-AM-8	07/18/02	0618	23.8	4.28	<MDL	<MDL	<MDL
		07/19/02	0604					
062	HES-AM-8	07/18/02	0708	23.7	4.26	<MDL	<MDL	<MDL
		07/19/02	0647					
063	SJS-AM-8	07/18/02	0734	23.6	4.24	<MDL	<MDL	<MDL
		07/19/02	0707					
064	THS-AM-8	07/18/02	0750	23.5	4.24	<MDL	<MDL	<MDL
		07/19/02	0722					
065	CES-AM-8	07/18/02	0816	23.5	4.22	<MDL	<MDL	<MDL
		07/19/02	0744					
066	WRS-AM-8	07/18/02	0847	23.6	4.25	<MDL	<MDL	<MDL
		07/19/02	0824					
067	FRS-AM-9	07/22/02	0725	23.3	4.19	DET	DET	DET
		07/23/02	0640					
069	HES-AM-9	07/22/02	0817	23.3	4.20	<MDL	<MDL	<MDL
		07/23/02	0736					
070	SJS-AM-9	07/22/02	0836	23.5	4.23	<MDL	<MDL	<MDL
		07/23/02	0805					
071	THS-AM-9	07/22/02	0848	23.6	4.25	<MDL	<MDL	<MDL
		07/23/02	0825					
072	CES-AM-9	07/22/02	0911	23.8	4.28	<MDL	<MDL	<MDL
		07/23/02	0857					
073	WRS-AM-9	07/22/02	0952	23.7	4.27	<MDL	<MDL	<MDL
		07/23/02	0936					
076	FRS-AM-10	07/23/02	0644	23.2	4.18	<MDL	<MDL	<MDL
		07/24/02	0558					
077	FRS-AM-10-C	07/23/02	0644	23.2	4.18	<MDL	<MDL	<MDL
		07/24/02	0558					
078	HES-AM-10	07/23/02	0737	23.2	4.18	<MDL	<MDL	<MDL
		07/24/02	0652					
079	HES-AM-10-C	07/23/02	0737	23.2	4.18	<MDL	<MDL	<MDL
		07/24/02	0652					
080	SJS-AM-10	07/23/02	0807	23.2	4.18	<MDL	<MDL	<MDL
		07/24/02	0720					
081	SJS-AM-10-C	07/23/02	0807	23.2	3.46	<MDL	<MDL	<MDL
		07/24/02	0720					

MDL=9.58 ng/sample for Acephate.

DET=Value was below the reported EQL of 45 ng/sample but \geq MDL

*Time was calculated from ETM reading.

** pptv at 1 atm and 25°C

Table 2. Acephate Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Acephate		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
082	THS-AM-10	07/23/02	0827	23.2	4.18	<MDL	<MDL	<MDL
		07/24/02	0741					
083	THS-AM-10-C	07/23/02	0827	23.2	4.18	<MDL	<MDL	<MDL
		07/24/02	0741					
084	CES-AM-10	07/23/02	0859	23.2	4.18	<MDL	<MDL	<MDL
		07/24/02	0811					
085	CES-AM-10-C	07/23/02	0859	23.2	4.18	<MDL	<MDL	<MDL
		07/24/02	0811					
086	WRS-AM-10	07/23/02	0938	23.3	4.20	<MDL	<MDL	<MDL
		07/24/02	0859					
087	WRS-AM-10-C	07/23/02	0938	23.3	4.20	<MDL	<MDL	<MDL
		07/24/02	0859					
088	FRS-AM-11	07/24/02	0600	23.9	4.30	<MDL	<MDL	<MDL
		07/25/02	0554					
089	HES-AM-11	07/24/02	0654	23.9	4.30	<MDL	<MDL	<MDL
		07/25/02	0646					
090	SJS-AM-11	07/24/02	0722	23.8	4.28	<MDL	<MDL	<MDL
		07/25/02	0709					
091	THS-AM-11	07/24/02	0742	23.9	4.29	<MDL	<MDL	<MDL
		07/25/02	0734					
092	CES-AM-11	07/24/02	0813	23.8	4.28	<MDL	<MDL	<MDL
		07/25/02	0800					
093	WRS-AM-11	07/24/02	0901	23.6	4.24	<MDL	<MDL	<MDL
		07/25/02	0836					
094	FRS-AM-12	07/25/02	0555	23.5	4.22	<MDL	<MDL	<MDL
		07/26/02	0523					
095	HES-AM-12	07/25/02	0648	23.5	4.22	<MDL	<MDL	<MDL
		07/26/02	0616					
096	SJS-AM-12	07/25/02	0710	23.5	4.22	<MDL	<MDL	<MDL
		07/26/02	0638					
097	THS-AM-12	07/25/02	0735	23.4	4.21	<MDL	<MDL	<MDL
		07/26/02	0658					
098	CES-AM-12	07/25/02	0801	23.3	4.20	<MDL	<MDL	<MDL
		07/26/02	0720					
099	WRS-AM-12	07/25/02	0838	23.3	4.20	<MDL	<MDL	<MDL
		07/26/02	0758					

MDL=9.58 ng/sample for Acephate.

DET=Value was below the reported EQL of 45 ng/sample but \geq MDL

*Time was calculated from ETM reading.

** pptv at 1 atm and 25°C

Table 2. Acephate Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Acephate		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
100	FRS-AM-13	07/29/02	0657	23.6	4.25	<MDL	<MDL	<MDL
		07/30/02	0634					
104	HES-AM-13	07/29/02	0759	23.4	4.22	<MDL	<MDL	<MDL
		07/30/02	0726					
105	SJS-AM-13	07/29/02	0817	23.6	4.24	<MDL	<MDL	<MDL
		07/30/02	0752					
106	THS-AM-13	07/29/02	0836	23.6	4.25	<MDL	<MDL	<MDL
		07/30/02	0812					
107	CES-AM-13	07/29/02	0856	23.7	4.26	<MDL	<MDL	<MDL
		07/30/02	0838					
108	WRS-AM-13	07/29/02	0925	23.9	4.29	<MDL	<MDL	<MDL
		07/30/02	0917					
109	FRS-AM-14	07/30/02	0637	23.8	4.28	<MDL	<MDL	<MDL
		07/31/02	0623					
110	FRS-AM-14-C	07/30/02	0637	23.8	4.28	<MDL	<MDL	<MDL
		07/31/02	0623					
111	HES-AM-14	07/30/02	0728	23.8	4.28	<MDL	<MDL	<MDL
		07/31/02	0715					
112	HES-AM-14-C	07/30/02	0728	23.8	4.28	<MDL	<MDL	<MDL
		07/31/02	0715					
113	SJS-AM-14	07/30/02	0754	23.7	4.27	<MDL	<MDL	<MDL
		07/31/02	0738					
114	SJS-AM-14-C	07/30/02	0754	23.7	4.27	<MDL	<MDL	<MDL
		07/31/02	0738					
115	THS-AM-14	07/30/02	0814	23.8	4.28	<MDL	<MDL	<MDL
		07/31/02	0759					
116	THS-AM-14-C	07/30/02	0814	23.8	4.28	<MDL	<MDL	<MDL
		07/31/02	0759					
117	CES-AM-14	07/30/02	0840	23.8	4.29	<MDL	<MDL	<MDL
		07/31/02	0829					
118	CES-AM-14-C	07/30/02	0840	23.8	4.29	<MDL	<MDL	<MDL
		07/31/02	0829					
119	WRS-AM-14	07/30/02	0918	23.8	4.29	<MDL	<MDL	<MDL
		07/31/02	0908					
120	WRS-AM-14-C	07/30/02	0918	23.8	4.29	<MDL	<MDL	<MDL
		07/31/02	0908					

MDL=9.58 ng/sample for Acephate.

DET=Value was below the reported EQL of 45 ng/sample but ≥MDL

*Time was calculated from ETM reading.

** pptv at 1 atm and 25°C

Table 2. Acephate Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Acephate		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
121	FRS-AM-15	07/31/02	0627	23.9	4.31	<MDL	<MDL	<MDL
		08/01/02	0624					
122	HES-AM-15	07/31/02	0716	24.0	4.31	<MDL	<MDL	<MDL
		08/01/02	0713					
123	SJS-AM-15	07/31/02	0740	23.9	4.31	<MDL	<MDL	<MDL
		08/01/02	0737					
124	THS-AM-15	07/31/02	0800	23.9	4.30	<MDL	<MDL	<MDL
		08/01/02	0754					
125	CES-AM-15	07/31/02	0831	23.8	4.28	<MDL	<MDL	<MDL
		08/01/02	0819					
126	WRS-AM-15	07/31/02	0909	23.7	4.27	<MDL	<MDL	<MDL
		08/01/02	0852					
127	FRS-AM-16	08/01/02	0625	23.6	4.24	<MDL	<MDL	<MDL
		08/02/02	0600					
128	HES-AM-16	08/01/02	0714	23.6	4.24	<MDL	<MDL	<MDL
		08/02/02	0647					
129	SJS-AM-16	08/01/02	0738	23.5	4.22	<MDL	<MDL	<MDL
		08/02/02	0706					
130	THS-AM-16	08/01/02	0756	23.4	4.22	<MDL	<MDL	<MDL
		08/02/02	0723					
131	CES-AM-16	08/01/02	0820	23.4	4.21	<MDL	<MDL	<MDL
		08/02/02	0745					
132	WRS-AM-16	08/01/02	0853	23.5	4.22	<MDL	<MDL	<MDL
		08/02/02	0821					
133	FRS-AM-17	08/05/02	0725	23.6	4.25	<MDL	<MDL	<MDL
		08/06/02	0701					
135	HES-AM-17	08/05/02	0814	23.7	4.26	<MDL	<MDL	<MDL
		08/06/02	0756					
136	SJS-AM-17	08/05/02	0834	23.7	4.27	<MDL	<MDL	<MDL
		08/06/02	0819					
137	THS-AM-17	08/05/02	0851	23.8	4.29	<MDL	<MDL	<MDL
		08/06/02	0840					
138	CES-AM-17	08/05/02	0915	23.9	4.30	<MDL	<MDL	<MDL
		08/06/02	0908					
139	WRS-AM-17	08/05/02	0952	23.9	4.31	<MDL	<MDL	<MDL
		08/06/02	0947					

MDL=9.58 ng/sample for Acephate.

DET=Value was below the reported EQL of 45 ng/sample but \geq MDL

*Time was calculated from ETM reading.

** pptv at 1 atm and 25°C

Table 2. Acephate Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Acephate		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
142	FRS-AM-18	08/06/02	0704	23.5	4.23	<MDL	<MDL	<MDL
		08/07/02	0633					
143	FRS-AM-18-C	08/06/02	0704	23.5	4.23	<MDL	<MDL	<MDL
		08/07/02	0633					
144	HES-AM-18	08/06/02	0757	23.5	4.22	<MDL	<MDL	<MDL
		08/07/02	0726					
145	HES-AM-18-C	08/06/02	0757	23.5	4.22	<MDL	<MDL	<MDL
		08/07/02	0726					
146	SJS-AM-18	08/06/02	0822	23.6	4.24	<MDL	<MDL	<MDL
		08/07/02	0755					
147	SJS-AM-18-C	08/06/02	0822	23.6	4.24	<MDL	<MDL	<MDL
		08/07/02	0755					
148	THS-AM-18	08/06/02	0842	23.7	4.26	<MDL	<MDL	<MDL
		08/07/02	0820					
149	THS-AM-18-C	08/06/02	0842	23.7	4.26	<MDL	<MDL	<MDL
		08/07/02	0820					
150	CES-18-AM	08/06/02	0909	23.6	4.26	<MDL	<MDL	<MDL
		08/07/02	0848					
151	CES-18-AM-C	08/06/02	0909	23.6	4.26	<MDL	<MDL	<MDL
		08/07/02	0848					
152	WRS-AM-18	08/06/02	0949	23.6	4.26	<MDL	<MDL	<MDL
		08/07/02	0927					
153	WRS-AM-18-C	08/06/02	0949	23.6	4.26	<MDL	<MDL	<MDL
		08/07/02	0927					
154	FRS-AM-19	08/07/02	0635	23.5	4.24	<MDL	<MDL	<MDL
		08/08/02	0608					
155	HES-AM-19	08/07/02	0728	23.5	4.23	<MDL	<MDL	<MDL
		08/08/02	0658					
156	SJS-AM-19	08/07/02	0758	23.3	4.20	<MDL	<MDL	<MDL
		08/08/02	0718					
157	THS-AM-19	08/07/02	0823	23.2	4.18	<MDL	<MDL	<MDL
		08/08/02	0735					
158	CES-AM-19	08/07/02	0850	23.2	4.17	<MDL	<MDL	<MDL
		08/08/02	0800					
159	WRS-AM-19	08/07/02	0930	23.1	4.17	<MDL	<MDL	<MDL
		08/08/02	0838					

MDL=9.58 ng/sample for Acephate.

DET=Value was below the reported EQL of 45 ng/sample but ≥MDL

*Time was calculated from ETM reading.

** pptv at 1 atm and 25°C

Table 2. Acephate Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Acephate		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
160	FRS-AM-20	08/08/02	0609	23.2	4.18	<MDL	<MDL	<MDL
		08/09/02	0522					
161	HES-AM-20	08/08/02	0659	23.2	4.18	<MDL	<MDL	<MDL
		08/09/02	0612					
162	SJS-AM-20	08/08/02	0720	23.2	4.17	<MDL	<MDL	<MDL
		08/09/02	0630					
163	THS-AM-20	08/08/02	0737	23.1	4.16	<MDL	<MDL	<MDL
		08/09/02	0644					
164	CES-AM-20	08/08/02	0802	23.1	4.16	<MDL	<MDL	<MDL
		08/09/02	0708					
165	WRS-AM-20	08/08/02	0839	23.0	4.15	<MDL	<MDL	<MDL
		08/09/02	0742					
166	FRS-AM-21	08/12/02	0703	23.5	4.24	<MDL	<MDL	<MDL
		08/13/02	0636					
170	HES-AM-21	08/12/02	0758	23.5	4.22	<MDL	<MDL	<MDL
		08/13/02	0725					
171	SJS-AM-21	08/12/02	0819	23.5	4.23	<MDL	<MDL	<MDL
		08/13/02	0748					
172	THS-AM-21	08/12/02	0835	23.5	4.24	<MDL	<MDL	<MDL
		08/13/02	0807					
173	CES-AM-21	08/12/02	0858	23.6	4.25	<MDL	<MDL	<MDL
		08/13/02	0834					
174	WRS-AM-21	08/12/02	0929	23.6	4.26	<MDL	<MDL	<MDL
		08/13/02	0908					
175	FRS-AM-22	08/13/02	0637	23.7	4.26	<MDL	<MDL	<MDL
		08/14/02	0619					
176	FRS-AM-22-C	08/13/02	0637	23.7	4.26	<MDL	<MDL	<MDL
		08/14/02	0619					
177	HES-AM-22	08/13/02	0727	23.8	4.28	<MDL	<MDL	<MDL
		08/14/02	0712					
178	HES-AM-22-C	08/13/02	0727	23.8	4.28	<MDL	<MDL	<MDL
		08/14/02	0712					
179	SJS-AM-22	08/13/02	0750	23.8	4.28	<MDL	<MDL	<MDL
		08/14/02	0736					
180	SJS-AM-22-C	08/13/02	0750	23.8	4.28	<MDL	<MDL	<MDL
		08/14/02	0736					

MDL=9.58 ng/sample for Acephate.

DET=Value was below the reported EQL of 45 ng/sample but ≥MDL

*Time was calculated from ETM reading.

** pptv at 1 atm and 25°C

Table 2. Acephate Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Acephate		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
181	THS-AM-22	08/13/02	0808	23.8	4.28	<MDL	<MDL	<MDL
		08/14/02	0754					
182	THS-AM-22-C	08/13/02	0808	23.8	4.28	<MDL	<MDL	<MDL
		08/14/02	0754					
183	CES-AM-22	08/13/02	0835	23.8	4.28	<MDL	<MDL	<MDL
		08/14/02	0822					
184	CES-AM-22-C	08/13/02	0835	23.8	4.28	<MDL	<MDL	<MDL
		08/14/02	0822					
185	WRS-AM-22	08/13/02	0910	23.8	4.28	DET	DET	DET
		08/14/02	0856					
186	WRS-AM-22-C	08/13/02	0910	23.8	4.28	DET	DET	DET
		08/14/02	0856					
187	FRS-AM-23	08/14/02	0621	23.8	4.28	<MDL	<MDL	<MDL
		08/15/02	0607					
188	HES-AM-23	08/14/02	0714	23.7	4.27	<MDL	<MDL	<MDL
		08/15/02	0657					
189	SJS-AM-23	08/14/02	0738	23.7	4.26	<MDL	<MDL	<MDL
		08/15/02	0718					
190	THS-AM-23	08/14/02	0755	23.6	4.26	<MDL	<MDL	<MDL
		08/15/02	0734					
191	CES-AM-23	08/14/02	0824	23.6	4.25	<MDL	<MDL	<MDL
		08/15/02	0800					
192	WRS-AM-23	08/14/02	0858	23.6	4.25	<MDL	<MDL	<MDL
		08/15/02	0834					
193	FRS-AM-24	08/15/02	0608	23.9	4.31	<MDL	<MDL	<MDL
		08/16/02	0603					
194	HES-AM-24	08/15/02	0658	23.9	4.29	<MDL	<MDL	<MDL
		08/16/02	0649					
195	SJS-AM-24	08/15/02	0719	23.8	4.29	<MDL	<MDL	<MDL
		08/16/02	0707					
196	THS-AM-24	08/15/02	0735	23.8	4.29	<MDL	<MDL	<MDL
		08/16/02	0724					
197	CES-AM-24	08/15/02	0801	23.8	4.28	<MDL	<MDL	<MDL
		08/16/02	0746					
198	WRS-AM-24	08/15/02	0835	23.8	4.29	<MDL	<MDL	<MDL
		08/16/02	0824					

MDL=9.58 ng/sample for Acephate.

DET=Value was below the reported EQL of 45 ng/sample but \geq MDL

*Time was calculated from ETM reading.

** pptv at 1 atm and 25°C

Table 2. Acephate Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Acephate		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
200	FRS-AM-25	08/19/02	0725	23.8	4.28	DET	DET	DET
		08/20/02	0711					
203	HES-AM-25	08/19/02	0818	23.8	4.29	<MDL	<MDL	<MDL
		08/20/02	0806					
204	SJS-AM-25	08/19/02	0838	23.9	4.30	<MDL	<MDL	<MDL
		08/20/02	0832					
205	THS-AM-25	08/19/02	0854	24.0	4.32	<MDL	<MDL	<MDL
		08/20/02	0854					
206	CES-AM-25	08/19/02	0918	24.0	4.32	<MDL	<MDL	<MDL
		08/20/02	0919					
207	WRS-AM-25	08/19/02	0956	24.0	4.32	<MDL	<MDL	<MDL
		08/20/02	0956					
208	FRS-AM-26	08/20/02	0714	23.0	4.15	<MDL	<MDL	<MDL
		08/21/02	0616					
209	FRS-AM-26-C	08/20/02	0714	23.0	4.15	<MDL	<MDL	<MDL
		08/21/02	0616					
210	HES-AM-26	08/20/02	0809	23.0	4.15	<MDL	<MDL	<MDL
		08/21/02	0710					
211	HES-AM-26-C	08/20/02	0809	23.0	4.15	<MDL	<MDL	<MDL
		08/21/02	0710					
212	SJS-AM-26	08/20/02	0834	23.1	4.15	<MDL	<MDL	<MDL
		08/21/02	0736					
213	SJS-AM-26-C	08/20/02	0834	23.1	4.15	<MDL	<MDL	<MDL
		08/21/02	0736					
214	THS-AM-26	08/20/02	0856	23.1	4.15	<MDL	<MDL	<MDL
		08/21/02	0758					
215	THS-AM-26-C	08/20/02	0856	23.1	4.15	6.13E+01	1.5E+01	2.0E+00
		08/21/02	0758					
216	CES-AM-26	08/20/02	0921	23.2	4.18	DET	DET	DET
		08/21/02	0833					
217	CES-AM-26-C	08/20/02	0921	23.2	4.18	DET	DET	DET
		08/21/02	0833					
218	WRS-AM-26	08/20/02	0958	23.5	4.22	<MDL	<MDL	<MDL
		08/21/02	0924					
219	WRS-AM-26-C	08/20/02	0958	23.5	4.22	<MDL	<MDL	<MDL
		08/21/02	0924					

MDL=9.58 ng/sample for Acephate.

DET=Value was below the reported EQL of 45 ng/sample but ≥MDL

*Time was calculated from ETM reading.

** pptv at 1 atm and 25°C

Table 2. Acephate Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Acephate		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
220	FRS-AM-27	08/21/02	0619	24.1	4.34	<MDL	<MDL	<MDL
		08/22/02	0624					
221	HES-AM-27	08/21/02	0713	24.1	4.34	<MDL	<MDL	<MDL
		08/22/02	0720					
222	SJS-AM-27	08/21/02	0738	24.2	4.35	<MDL	<MDL	<MDL
		08/22/02	0748					
223	THS-AM-27	08/21/02	0801	24.1	4.34	<MDL	<MDL	<MDL
		08/22/02	0809					
224	CES-AM-27	08/21/02	0836	24.0	4.32	<MDL	<MDL	<MDL
		08/22/02	0835					
225	WRS-AM-27	08/21/02	0926	23.8	4.28	<MDL	<MDL	<MDL
		08/22/02	0911					
226	FRS-AM-28	08/22/02	0627	24.1	4.33	<MDL	<MDL	<MDL
		08/23/02	0630					
227	HES-AM-28	08/22/02	0721	24.0	4.31	<MDL	<MDL	<MDL
		08/23/02	0718					
228	SJS-AM-28	08/22/02	0750	23.9	4.30	<MDL	<MDL	<MDL
		08/23/02	0744					
229	THS-AM-28	08/22/02	0811	23.9	4.31	<MDL	<MDL	<MDL
		08/23/02	0807					
230	CES-AM-28	08/22/02	0837	24.2	4.36	<MDL	<MDL	<MDL
		08/23/02	0851					
231	WRS-AM-28	08/22/02	0913	24.2	4.36	<MDL	<MDL	<MDL
		08/23/02	0927					

MDL=9.58 ng/sample for Acephate.

DET=Value was below the reported EQL of 45 ng/sample but ≥MDL

*Time was calculated from ETM reading.

** pptv at 1 atm and 25°C

Table 3. Methamidophos Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Methamidophos		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
002	FRS-AM-1	07/08/02	0727	23.1	4.15	<MDL	<MDL	<MDL
		07/09/02	0631					
003	HES-AM-1	07/08/02	0816	23.3	4.19	<MDL	<MDL	<MDL
		07/09/02	0733					
004	SJS-AM-1	07/08/02	0835	23.3	4.20	<MDL	<MDL	<MDL
		07/09/02	0754					
005	THS-AM-1	07/08/02	0853	23.4	4.20	<MDL	<MDL	<MDL
		07/09/02	0814					
006	CES-AM-1	07/08/02	0917	23.5	4.23	<MDL	<MDL	<MDL
		07/09/02	0845					
007	WRS-AM-1	07/08/02	0956	23.4	4.22	<MDL	<MDL	<MDL
		07/09/02	0923					
008	FRS-AM-2	07/09/02	0633	23.5	4.23	<MDL	<MDL	<MDL
		07/10/02	0603					
009	FRS-AM-2-C	07/09/02	0633	24.0	4.32	<MDL	<MDL	<MDL
		07/10/02	0603					
012	HES-AM-2	07/09/02	0735	23.3	4.20	<MDL	<MDL	<MDL
		07/10/02	0654					
013	HES-AM-2-C	07/09/02	0735	23.3	4.20	<MDL	<MDL	<MDL
		07/10/02	0654					
014	SJS-AM-2	07/09/02	0756	23.4	4.22	<MDL	<MDL	<MDL
		07/10/02	0721					
015	SJS-AM-2-C	07/09/02	0756	23.4	4.22	<MDL	<MDL	<MDL
		07/10/02	0721					
016	THS-AM-2	07/09/02	0819	23.4	4.21	<MDL	<MDL	<MDL
		07/10/02	0743					
017	THS-AM-2-C	07/09/02	0819	23.4	4.21	<MDL	<MDL	<MDL
		07/10/02	0743					
018	CES-AM-2	07/09/02	0847	23.5	4.23	<MDL	<MDL	<MDL
		07/10/02	0816					
019	CES-AM-2-C	07/09/02	9847	23.5	4.23	<MDL	<MDL	<MDL
		07/10/02	0816					
020	WRS-AM-2	07/09/02	0925	23.6	4.24	<MDL	<MDL	<MDL
		07/10/02	0859					
021	WRS-AM-2-C	07/09/02	0925	23.6	4.03	<MDL	<MDL	<MDL
		07/10/02	0859					

MDL=3.68 ng/sample for Methamidophos.

DET=Value was below the reported EQL of 15 ng/sample but \geq MDL

*Time was calculated from ETM reading.

**pptv at 1 atm and 25°C

Table 3. Methamidophos Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Methamidophos		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
022	FRS-AM-3	07/10/02	0605	24.0	4.31	<MDL	<MDL	<MDL
		07/11/02	0604					
023	HES-AM-3	07/10/02	0657	23.9	4.31	<MDL	<MDL	<MDL
		07/11/02	0654					
024	SJS-AM-3	07/10/02	0723	23.8	4.02	<MDL	<MDL	<MDL
		07/11/02	0714					
025	THS-AM-3	07/10/02	0744	23.8	4.28	<MDL	<MDL	<MDL
		07/11/02	0732					
026	CES-AM-3	07/10/02	0816	23.7	4.92	<MDL	<MDL	<MDL
		07/11/02	0758					
027	WRS-AM-3	07/10/02	0901	23.5	4.24	<MDL	<MDL	<MDL
		07/11/02	0834					
028	FRS-AM-4	07/11/02	0605	23.1	4.17	<MDL	<MDL	<MDL
		07/12/02	0513					
029	HES-AM-4	07/11/02	0654	23.1	4.16	<MDL	<MDL	<MDL
		07/12/02	0559					
030	SJS-AM-4	07/11/02	0714	23.1	4.15	<MDL	<MDL	<MDL
		07/12/02	0620					
031	THS-AM-4	07/11/02	0734	23.1	4.15	<MDL	<MDL	<MDL
		07/12/02	0636					
032	CES-AM-4	07/11/02	0800	23.0	4.15	<MDL	<MDL	<MDL
		07/12/02	0701					
033	WRS-AM-4	07/11/02	0834	23.0	4.14	<MDL	<MDL	<MDL
		07/12/02	0735					
034	FRS-AM-5	07/15/02	0654	23.9	4.30	<MDL	<MDL	<MDL
		07/16/02	0649					
038	HES-AM-5	07/15/02	0759	23.8	4.28	<MDL	<MDL	<MDL
		07/16/02	0745					
039	SJS-AM-5	07/15/02	0818	23.9	4.30	<MDL	<MDL	<MDL
		07/16/02	0811					
040	THS-AM-5	07/15/02	0833	24.0	4.32	<MDL	<MDL	<MDL
		07/16/02	0834					
041	CES-AM-5	07/15/02	0900	24.1	4.35	<MDL	<MDL	<MDL
		07/16/02	0908					
042	WRS-AM-5	07/15/02	0939	24.1	4.35	<MDL	<MDL	<MDL
		07/16/02	0947					

MDL=3.68 ng/sample for Methamidophos.

DET=Value was below the reported EQL of 15 ng/sample but ≥MDL

*Time was calculated from ETM reading.

**pptv at 1 atm and 25°C

Table 3. Methamidophos Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Methamidophos		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
043	FRS-AM-6	07/16/02	0654	23.6	4.24	<MDL	<MDL	<MDL
		07/17/02	0629					
044	FRS-AM-6-C	07/16/02	0654	23.6	4.24	<MDL	<MDL	<MDL
		07/17/02	0629					
045	HES-AM-6	07/16/02	0747	23.6	4.25	<MDL	<MDL	<MDL
		07/17/02	0724					
046	HES-AM-6-C	07/16/02	0747	23.6	4.25	<MDL	<MDL	<MDL
		07/17/02	0724					
047	SJS-AM-6	07/16/02	0814	23.6	4.24	<MDL	<MDL	<MDL
		07/17/02	0749					
048	SJS-AM-6-C	07/16/02	0814	23.6	4.24	<MDL	<MDL	<MDL
		07/17/02	0749					
049	THS-AM-6	07/16/02	0836	23.6	4.24	<MDL	<MDL	<MDL
		07/17/02	0811					
050	THS-AM-6-C	07/16/02	0836	23.6	4.24	<MDL	<MDL	<MDL
		07/17/02	0811					
051	CES-AM-6	07/16/02	0911	23.5	4.23	<MDL	<MDL	<MDL
		07/17/02	0842					
052	CES-AM-6-C	07/16/02	0911	23.5	4.23	<MDL	<MDL	<MDL
		07/17/02	0842					
053	WRS-AM-6	07/16/02	0950	23.5	4.24	<MDL	<MDL	<MDL
		07/17/02	0922					
054	WRS-AM-6-C	07/16/02	0950	23.5	4.24	<MDL	<MDL	<MDL
		07/17/02	0922					
055	FRS-AM-7	07/17/02	0632	23.7	4.27	<MDL	<MDL	<MDL
		07/18/02	0616					
056	HES-AM-7	07/17/02	0730	23.6	4.25	<MDL	<MDL	<MDL
		07/18/02	0706					
057	SJS-AM-7	07/17/02	0753	23.7	4.26	<MDL	<MDL	<MDL
		07/18/02	0732					
058	THS-AM-7	07/17/02	0815	23.6	4.24	<MDL	<MDL	<MDL
		07/18/02	0749					
059	CES-AM-7	07/17/02	0846	23.5	4.23	<MDL	<MDL	<MDL
		07/18/02	0815					
060	WRS-AM-7	07/17/02	0927	23.3	4.20	<MDL	<MDL	<MDL
		07/18/02	0846					

MDL=3.68 ng/sample for Methamidophos.

DET=Value was below the reported EQL of 15 ng/sample but ≥MDL

*Time was calculated from ETM reading.

**pptv at 1 atm and 25°C

Table 3. Methamidophos Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Methamidophos		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
061	FRS-AM-8	07/18/02	0618	23.8	4.28	<MDL	<MDL	<MDL
		07/19/02	0604					
062	HES-AM-8	07/18/02	0708	23.7	4.26	<MDL	<MDL	<MDL
		07/19/02	0647					
063	SJS-AM-8	07/18/02	0734	23.6	4.24	<MDL	<MDL	<MDL
		07/19/02	0707					
064	THS-AM-8	07/18/02	0750	23.5	4.24	<MDL	<MDL	<MDL
		07/19/02	0722					
065	CES-AM-8	07/18/02	0816	23.5	4.22	<MDL	<MDL	<MDL
		07/19/02	0744					
066	WRS-AM-8	07/18/02	0847	23.6	4.25	<MDL	<MDL	<MDL
		07/19/02	0824					
067	FRS-AM-9	07/22/02	0725	23.3	4.19	DET	DET	DET
		07/23/02	0640					
069	HES-AM-9	07/22/02	0817	23.3	4.20	<MDL	<MDL	<MDL
		07/23/02	0736					
070	SJS-AM-9	07/22/02	0836	23.5	4.23	<MDL	<MDL	<MDL
		07/23/02	0805					
071	THS-AM-9	07/22/02	0848	23.6	4.25	<MDL	<MDL	<MDL
		07/23/02	0825					
072	CES-AM-9	07/22/02	0911	23.8	4.28	<MDL	<MDL	<MDL
		07/23/02	0857					
073	WRS-AM-9	07/22/02	0952	23.7	4.27	<MDL	<MDL	<MDL
		07/23/02	0936					
076	FRS-AM-10	07/23/02	0644	23.2	4.18	<MDL	<MDL	<MDL
		07/24/02	0558					
077	FRS-AM-10-C	07/23/02	0644	23.2	4.18	<MDL	<MDL	<MDL
		07/24/02	0558					
078	HES-AM-10	07/23/02	0737	23.2	4.18	<MDL	<MDL	<MDL
		07/24/02	0652					
079	HES-AM-10-C	07/23/02	0737	23.2	4.18	<MDL	<MDL	<MDL
		07/24/02	0652					
080	SJS-AM-10	07/23/02	0807	23.2	4.18	<MDL	<MDL	<MDL
		07/24/02	0720					
081	SJS-AM-10-C	07/23/02	0807	23.2	3.46	<MDL	<MDL	<MDL
		07/24/02	0720					

MDL=3.68 ng/sample for Methamidophos.

DET=Value was below the reported EQL of 15 ng/sample but ≥MDL

*Time was calculated from ETM reading.

**pptv at 1 atm and 25°C

Table 3. Methamidophos Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Methamidophos		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
082	THS-AM-10	07/23/02	0827	23.2	4.18	<MDL	<MDL	<MDL
		07/24/02	0741					
083	THS-AM-10-C	07/23/02	0827	23.2	4.18	<MDL	<MDL	<MDL
		07/24/02	0741					
084	CES-AM-10	07/23/02	0859	23.2	4.18	<MDL	<MDL	<MDL
		07/24/02	0811					
085	CES-AM-10-C	07/23/02	0859	23.2	4.18	<MDL	<MDL	<MDL
		07/24/02	0811					
086	WRS-AM-10	07/23/02	0938	23.3	4.20	<MDL	<MDL	<MDL
		07/24/02	0859					
087	WRS-AM-10-C	07/23/02	0938	23.3	4.20	<MDL	<MDL	<MDL
		07/24/02	0859					
088	FRS-AM-11	07/24/02	0600	23.9	4.30	<MDL	<MDL	<MDL
		07/25/02	0554					
089	HES-AM-11	07/24/02	0654	23.9	4.30	<MDL	<MDL	<MDL
		07/25/02	0646					
090	SJS-AM-11	07/24/02	0722	23.8	4.28	<MDL	<MDL	<MDL
		07/25/02	0709					
091	THS-AM-11	07/24/02	0742	23.9	4.29	<MDL	<MDL	<MDL
		07/25/02	0734					
092	CES-AM-11	07/24/02	0813	23.8	4.28	<MDL	<MDL	<MDL
		07/25/02	0800					
093	WRS-AM-11	07/24/02	0901	23.6	4.24	<MDL	<MDL	<MDL
		07/25/02	0836					
094	FRS-AM-12	07/25/02	0555	23.5	4.22	<MDL	<MDL	<MDL
		07/26/02	0523					
095	HES-AM-12	07/25/02	0648	23.5	4.22	<MDL	<MDL	<MDL
		07/26/02	0616					
096	SJS-AM-12	07/25/02	0710	23.5	4.22	<MDL	<MDL	<MDL
		07/26/02	0638					
097	THS-AM-12	07/25/02	0735	23.4	4.21	<MDL	<MDL	<MDL
		07/26/02	0658					
098	CES-AM-12	07/25/02	0801	23.3	4.20	<MDL	<MDL	<MDL
		07/26/02	0720					
099	WRS-AM-12	07/25/02	0838	23.3	4.20	<MDL	<MDL	<MDL
		07/26/02	0758					

MDL=3.68 ng/sample for Methamidophos.

DET=Value was below the reported EQL of 15 ng/sample but ≥MDL

*Time was calculated from ETM reading.

**pptv at 1 atm and 25°C

Table 3. Methamidophos Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Methamidophos		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
100	FRS-AM-13	07/29/02	0657	23.6	4.25	<MDL	<MDL	<MDL
		07/30/02	0634					
104	HES-AM-13	07/29/02	0759	23.4	4.22	2.43E+01	5.8E+00	1.0E+00
		07/30/02	0726					
105	SJS-AM-13	07/29/02	0817	23.6	4.24	<MDL	<MDL	<MDL
		07/30/02	0752					
106	THS-AM-13	07/29/02	0836	23.6	4.25	<MDL	<MDL	<MDL
		07/30/02	0812					
107	CES-AM-13	07/29/02	0856	23.7	4.26	<MDL	<MDL	<MDL
		07/30/02	0838					
108	WRS-AM-13	07/29/02	0925	23.9	4.29	<MDL	<MDL	<MDL
		07/30/02	0917					
109	FRS-AM-14	07/30/02	0637	23.8	4.28	<MDL	<MDL	<MDL
		07/31/02	0623					
110	FRS-AM-14-C	07/30/02	0637	23.8	4.28	<MDL	<MDL	<MDL
		07/31/02	0623					
111	HES-AM-14	07/30/02	0728	23.8	4.28	2.20E+01	5.1E+00	8.9E-01
		07/31/02	0715					
112	HES-AM-14-C	07/30/02	0728	23.8	4.28	2.29E+01	5.3E+00	9.3E-01
		07/31/02	0715					
113	SJS-AM-14	07/30/02	0754	23.7	4.27	1.76E+01	4.1E+00	7.1E-01
		07/31/02	0738					
114	SJS-AM-14-C	07/30/02	0754	23.7	4.27	2.06E+01	4.8E+00	8.3E-01
		07/31/02	0738					
115	THS-AM-14	07/30/02	0814	23.8	4.28	<MDL	<MDL	<MDL
		07/31/02	0759					
116	THS-AM-14-C	07/30/02	0814	23.8	4.28	<MDL	<MDL	<MDL
		07/31/02	0759					
117	CES-AM-14	07/30/02	0840	23.8	4.29	<MDL	<MDL	<MDL
		07/31/02	0829					
118	CES-AM-14-C	07/30/02	0840	23.8	4.29	<MDL	<MDL	<MDL
		07/31/02	0829					
119	WRS-AM-14	07/30/02	0918	23.8	4.29	<MDL	<MDL	<MDL
		07/31/02	0908					
120	WRS-AM-14-C	07/30/02	0918	23.8	4.29	<MDL	<MDL	<MDL
		07/31/02	0908					

MDL=3.68 ng/sample for Methamidophos.

DET=Value was below the reported EQL of 15 ng/sample but ≥MDL

*Time was calculated from ETM reading.

**pptv at 1 atm and 25°C

Table 3. Methamidophos Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Methamidophos		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
121	FRS-AM-15	07/31/02	0627	23.9	4.31	<MDL	<MDL	<MDL
		08/01/02	0624					
122	HES-AM-15	07/31/02	0716	24.0	4.31	2.32E+01	5.4E+00	9.3E-01
		08/01/02	0713					
123	SJS-AM-15	07/31/02	0740	23.9	4.31	6.87E+01	1.6E+01	2.8E+00
		08/01/02	0737					
124	THS-AM-15	07/31/02	0800	23.9	4.30	2.78E+01	6.5E+00	1.1E+00
		08/01/02	0754					
125	CES-AM-15	07/31/02	0831	23.8	4.28	<MDL	<MDL	<MDL
		08/01/02	0819					
126	WRS-AM-15	07/31/02	0909	23.7	4.27	<MDL	<MDL	<MDL
		08/01/02	0852					
127	FRS-AM-16	08/01/02	0625	23.6	4.24	<MDL	<MDL	<MDL
		08/02/02	0600					
128	HES-AM-16	08/01/02	0714	23.6	4.24	2.90E+01	6.8E+00	1.2E+00
		08/02/02	0647					
129	SJS-AM-16	08/01/02	0738	23.5	4.22	2.38E+01	5.6E+00	9.7E-01
		08/02/02	0706					
130	THS-AM-16	08/01/02	0756	23.4	4.22	DET	DET	DET
		08/02/02	0723					
131	CES-AM-16	08/01/02	0820	23.4	4.21	2.27E+01	5.4E+00	9.4E-01
		08/02/02	0745					
132	WRS-AM-16	08/01/02	0853	23.5	4.22	<MDL	<MDL	<MDL
		08/02/02	0821					
133	FRS-AM-17	08/05/02	0725	23.6	4.25	<MDL	<MDL	<MDL
		08/06/02	0701					
135	HES-AM-17	08/05/02	0814	23.7	4.26	<MDL	<MDL	<MDL
		08/06/02	0756					
136	SJS-AM-17	08/05/02	0834	23.7	4.27	<MDL	<MDL	<MDL
		08/06/02	0819					
137	THS-AM-17	08/05/02	0851	23.8	4.29	<MDL	<MDL	<MDL
		08/06/02	0840					
138	CES-AM-17	08/05/02	0915	23.9	4.30	<MDL	<MDL	<MDL
		08/06/02	0908					
139	WRS-AM-17	08/05/02	0952	23.9	4.31	<MDL	<MDL	<MDL
		08/06/02	0947					

MDL=3.68 ng/sample for Methamidophos.

DET=Value was below the reported EQL of 15 ng/sample but ≥MDL

*Time was calculated from ETM reading.

**pptv at 1 atm and 25°C

Table 3. Methamidophos Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Methamidophos		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
142	FRS-AM-18	08/06/02	0704	23.5	4.23	<MDL	<MDL	<MDL
		08/07/02	0633					
143	FRS-AM-18-C	08/06/02	0704	23.5	4.23	<MDL	<MDL	<MDL
		08/07/02	0633					
144	HES-AM-18	08/06/02	0757	23.5	4.22	<MDL	<MDL	<MDL
		08/07/02	0726					
145	HES-AM-18-C	08/06/02	0757	23.5	4.22	DET	DET	DET
		08/07/02	0726					
146	SJS-AM-18	08/06/02	0822	23.6	4.24	DET	DET	DET
		08/07/02	0755					
147	SJS-AM-18-C	08/06/02	0822	23.6	4.24	DET	DET	DET
		08/07/02	0755					
148	THS-AM-18	08/06/02	0842	23.7	4.26	<MDL	<MDL	<MDL
		08/07/02	0820					
149	THS-AM-18-C	08/06/02	0842	23.7	4.26	<MDL	<MDL	<MDL
		08/07/02	0820					
150	CES-18-AM	08/06/02	0909	23.6	4.26	<MDL	<MDL	<MDL
		08/07/02	0848					
151	CES-18-AM-C	08/06/02	0909	23.6	4.26	<MDL	<MDL	<MDL
		08/07/02	0848					
152	WRS-AM-18	08/06/02	0949	23.6	4.26	<MDL	<MDL	<MDL
		08/07/02	0927					
153	WRS-AM-18-C	08/06/02	0949	23.6	4.26	<MDL	<MDL	<MDL
		08/07/02	0927					
154	FRS-AM-19	08/07/02	0635	23.5	4.24	<MDL	<MDL	<MDL
		08/08/02	0608					
155	HES-AM-19	08/07/02	0728	23.5	4.23	<MDL	<MDL	<MDL
		08/08/02	0658					
156	SJS-AM-19	08/07/02	0758	23.3	4.20	<MDL	<MDL	<MDL
		08/08/02	0718					
157	THS-AM-19	08/07/02	0823	23.2	4.18	<MDL	<MDL	<MDL
		08/08/02	0735					
158	CES-AM-19	08/07/02	0850	23.2	4.17	<MDL	<MDL	<MDL
		08/08/02	0800					
159	WRS-AM-19	08/07/02	0930	23.1	4.17	<MDL	<MDL	<MDL
		08/08/02	0838					

MDL=3.68 ng/sample for Methamidophos.

DET=Value was below the reported EQL of 15 ng/sample but \geq MDL

*Time was calculated from ETM reading.

**pptv at 1 atm and 25⁰C

Table 3. Methamidophos Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Methamidophos		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
160	FRS-AM-20	08/08/02	0609	23.2	4.18	<MDL	<MDL	<MDL
		08/09/02	0522					
161	HES-AM-20	08/08/02	0659	23.2	4.18	<MDL	<MDL	<MDL
		08/09/02	0612					
162	SJS-AM-20	08/08/02	0720	23.2	4.17	<MDL	<MDL	<MDL
		08/09/02	0630					
163	THS-AM-20	08/08/02	0737	23.1	4.16	<MDL	<MDL	<MDL
		08/09/02	0644					
164	CES-AM-20	08/08/02	0802	23.1	4.16	<MDL	<MDL	<MDL
		08/09/02	0708					
165	WRS-AM-20	08/08/02	0839	23.0	4.15	2.68E+01	6.5E+00	1.1E+00
		08/09/02	0742					
166	FRS-AM-21	08/12/02	0703	23.5	4.24	<MDL	<MDL	<MDL
		08/13/02	0636					
170	HES-AM-21	08/12/02	0758	23.5	4.22	<MDL	<MDL	<MDL
		08/13/02	0725					
171	SJS-AM-21	08/12/02	0819	23.5	4.23	<MDL	<MDL	<MDL
		08/13/02	0748					
172	THS-AM-21	08/12/02	0835	23.5	4.24	<MDL	<MDL	<MDL
		08/13/02	0807					
173	CES-AM-21	08/12/02	0858	23.6	4.25	<MDL	<MDL	<MDL
		08/13/02	0834					
174	WRS-AM-21	08/12/02	0929	23.6	4.26	<MDL	<MDL	<MDL
		08/13/02	0908					
175	FRS-AM-22	08/13/02	0637	23.7	4.26	<MDL	<MDL	<MDL
		08/14/02	0619					
176	FRS-AM-22-C	08/13/02	0637	23.7	4.26	<MDL	<MDL	<MDL
		08/14/02	0619					
177	HES-AM-22	08/13/02	0727	23.8	4.28	<MDL	<MDL	<MDL
		08/14/02	0712					
178	HES-AM-22-C	08/13/02	0727	23.8	4.28	<MDL	<MDL	<MDL
		08/14/02	0712					
179	SJS-AM-22	08/13/02	0750	23.8	4.28	<MDL	<MDL	<MDL
		08/14/02	0736					
180	SJS-AM-22-C	08/13/02	0750	23.8	4.28	<MDL	<MDL	<MDL
		08/14/02	0736					

MDL=3.68 ng/sample for Methamidophos.

DET=Value was below the reported EQL of 15 ng/sample but ≥MDL

*Time was calculated from ETM reading.

**pptv at 1 atm and 25°C

Table 3. Methamidophos Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Methamidophos		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
181	THS-AM-22	08/13/02	0808	23.8	4.28	<MDL	<MDL	<MDL
		08/14/02	0754					
182	THS-AM-22-C	08/13/02	0808	23.8	4.28	<MDL	<MDL	<MDL
		08/14/02	0754					
183	CES-AM-22	08/13/02	0835	23.8	4.28	<MDL	<MDL	<MDL
		08/14/02	0822					
184	CES-AM-22-C	08/13/02	0835	23.8	4.28	<MDL	<MDL	<MDL
		08/14/02	0822					
185	WRS-AM-22	08/13/02	0910	23.8	4.28	<MDL	<MDL	<MDL
		08/14/02	0856					
186	WRS-AM-22-C	08/13/02	0910	23.8	4.28	<MDL	<MDL	<MDL
		08/14/02	0856					
187	FRS-AM-23	08/14/02	0621	23.8	4.28	<MDL	<MDL	<MDL
		08/15/02	0607					
188	HES-AM-23	08/14/02	0714	23.7	4.27	<MDL	<MDL	<MDL
		08/15/02	0657					
189	SJS-AM-23	08/14/02	0738	23.7	4.26	<MDL	<MDL	<MDL
		08/15/02	0718					
190	THS-AM-23	08/14/02	0755	23.6	4.26	<MDL	<MDL	<MDL
		08/15/02	0734					
191	CES-AM-23	08/14/02	0824	23.6	4.25	<MDL	<MDL	<MDL
		08/15/02	0800					
192	WRS-AM-23	08/14/02	0858	23.6	4.25	<MDL	<MDL	<MDL
		08/15/02	0834					
193	FRS-AM-24	08/15/02	0608	23.9	4.31	<MDL	<MDL	<MDL
		08/16/02	0603					
194	HES-AM-24	08/15/02	0658	23.9	4.29	<MDL	<MDL	<MDL
		08/16/02	0649					
195	SJS-AM-24	08/15/02	0719	23.8	4.29	<MDL	<MDL	<MDL
		08/16/02	0707					
196	THS-AM-24	08/15/02	0735	23.8	4.29	<MDL	<MDL	<MDL
		08/16/02	0724					
197	CES-AM-24	08/15/02	0801	23.8	4.28	<MDL	<MDL	<MDL
		08/16/02	0746					
198	WRS-AM-24	08/15/02	0835	23.8	4.29	<MDL	<MDL	<MDL
		08/16/02	0824					

MDL=3.68 ng/sample for Methamidophos.

DET=Value was below the reported EQL of 15 ng/sample but \geq MDL

*Time was calculated from ETM reading.

**pptv at 1 atm and 25°C

Table 3. Methamidophos Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Methamidophos		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
200	FRS-AM-25	08/19/02	0725	23.8	4.28	DET	DET	DET
		08/20/02	0711					
203	HES-AM-25	08/19/02	0818	23.8	4.29	<MDL	<MDL	<MDL
		08/20/02	0806					
204	SJS-AM-25	08/19/02	0838	23.9	4.30	<MDL	<MDL	<MDL
		08/20/02	0832					
205	THS-AM-25	08/19/02	0854	24.0	4.32	<MDL	<MDL	<MDL
		08/20/02	0854					
206	CES-AM-25	08/19/02	0918	24.0	4.32	<MDL	<MDL	<MDL
		08/20/02	0919					
207	WRS-AM-25	08/19/02	0956	24.0	4.32	<MDL	<MDL	<MDL
		08/20/02	0956					
208	FRS-AM-26	08/20/02	0714	23.0	4.15	<MDL	<MDL	<MDL
		08/21/02	0616					
209	FRS-AM-26-C	08/20/02	0714	23.0	4.15	<MDL	<MDL	<MDL
		08/21/02	0616					
210	HES-AM-26	08/20/02	0809	23.0	4.15	<MDL	<MDL	<MDL
		08/21/02	0710					
211	HES-AM-26-C	08/20/02	0809	23.0	4.15	<MDL	<MDL	<MDL
		08/21/02	0710					
212	SJS-AM-26	08/20/02	0834	23.1	4.15	<MDL	<MDL	<MDL
		08/21/02	0736					
213	SJS-AM-26-C	08/20/02	0834	23.1	4.15	<MDL	<MDL	<MDL
		08/21/02	0736					
214	THS-AM-26	08/20/02	0856	23.1	4.15	<MDL	<MDL	<MDL
		08/21/02	0758					
215	THS-AM-26-C	08/20/02	0856	23.1	4.15	DET	DET	DET
		08/21/02	0758					
216	CES-AM-26	08/20/02	0921	23.2	4.18	DET	DET	DET
		08/21/02	0833					
217	CES-AM-26-C	08/20/02	0921	23.2	4.18	<MDL	<MDL	<MDL
		08/21/02	0833					
218	WRS-AM-26	08/20/02	0958	23.5	4.22	<MDL	<MDL	<MDL
		08/21/02	0924					
219	WRS-AM-26-C	08/20/02	0958	23.5	4.22	<MDL	<MDL	<MDL
		08/21/02	0924					

MDL=3.68 ng/sample for Methamidophos.

DET=Value was below the reported EQL of 15 ng/sample but ≥MDL

*Time was calculated from ETM reading.

**pptv at 1 atm and 25°C

Table 3. Methamidophos Ambient Monitoring Results for Fresno County 2002

Log #	Sample ID	Date On	Time On	Time* (hours)	Volume (m ³)	Methamidophos		
		Date Off	Time Off			(ng/sample)	(ng/m ³)	** (pptv)
220	FRS-AM-27	08/21/02	0619	24.1	4.34	<MDL	<MDL	<MDL
		08/22/02	0624					
221	HES-AM-27	08/21/02	0713	24.1	4.34	<MDL	<MDL	<MDL
		08/22/02	0720					
222	SJS-AM-27	08/21/02	0738	24.2	4.35	<MDL	<MDL	<MDL
		08/22/02	0748					
223	THS-AM-27	08/21/02	0801	24.1	4.34	<MDL	<MDL	<MDL
		08/22/02	0809					
224	CES-AM-27	08/21/02	0836	24.0	4.32	<MDL	<MDL	<MDL
		08/22/02	0835					
225	WRS-AM-27	08/21/02	0926	23.8	4.28	<MDL	<MDL	<MDL
		08/22/02	0911					
226	FRS-AM-28	08/22/02	0627	24.1	4.33	<MDL	<MDL	<MDL
		08/23/02	0630					
227	HES-AM-28	08/22/02	0721	24.0	4.31	<MDL	<MDL	<MDL
		08/23/02	0718					
228	SJS-AM-28	08/22/02	0750	23.9	4.30	<MDL	<MDL	<MDL
		08/23/02	0744					
229	THS-AM-28	08/22/02	0811	23.9	4.31	<MDL	<MDL	<MDL
		08/23/02	0807					
230	CES-AM-28	08/22/02	0837	24.2	4.36	<MDL	<MDL	<MDL
		08/23/02	0851					
231	WRS-AM-28	08/22/02	0913	24.2	4.36	<MDL	<MDL	<MDL
		08/23/02	0927					

MDL=3.68 ng/sample for Methamidophos.

DET=Value was below the reported EQL of 15 ng/sample but \geq MDL

*Time was calculated from ETM reading.

**pptv at 1 atm and 25⁰C

**Table 4. Summary of Acephate Results
for Fresno County 2002 (ng/m³)**

Start Date	FRS	HES	SJS	THS	CES	WRS
07/08/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/09/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/10/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/11/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/15/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/16/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/17/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/18/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/22/02	DET	<MDL	<MDL	<MDL	<MDL	<MDL
07/23/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/24/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/25/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/29/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/30/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/31/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
08/01/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
08/05/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
08/06/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
08/07/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
08/08/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
08/12/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
08/13/02	<MDL	<MDL	<MDL	<MDL	<MDL	DET
08/14/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
08/15/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
08/19/02	DET	<MDL	<MDL	<MDL	<MDL	<MDL
08/20/02	<MDL	<MDL	<MDL	1.5E+01	DET	<MDL
08/21/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
08/22/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Maximum	DET	<MDL	<MDL	1.5E+01	DET	DET
Average	1.5E+00	1.1E+00	1.1E+00	1.6E+00	1.3E+00	1.3E+00
# Sample	28	28	28	28	28	28
# >EQL	0	0	0	1	0	0
# DET	2	0	0	0	1	1
# <MDL	26	28	28	27	27	27

Only the higher value of each collocated pair was listed in the table.

<MDL results were factored in as MDL/2= 1.11 ng/m³

DET results were factored in as (EQL+MDL)/2= 6.32 ng/m³

**Table 5. Summary of Methamidophos Results
for Fresno County 2002 (ng/m³)**

Start Date	FRS	HES	SJS	THS	CES	WRS
07/08/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/09/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/10/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/11/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/15/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/16/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/17/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/18/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/22/02	DET	<MDL	<MDL	<MDL	<MDL	<MDL
07/23/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/24/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/25/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
07/29/02	<MDL	5.8E+00	<MDL	<MDL	<MDL	<MDL
07/30/02	<MDL	5.3E+00	4.8E+00	<MDL	<MDL	<MDL
07/31/02	<MDL	5.4E+00	1.6E+01	6.5E+00	<MDL	<MDL
08/01/02	<MDL	6.8E+00	5.6E+00	DET	5.4E+00	<MDL
08/05/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
08/06/02	<MDL	DET	DET	<MDL	<MDL	<MDL
08/07/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
08/08/02	<MDL	<MDL	<MDL	<MDL	<MDL	6.5E+00
08/12/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
08/13/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
08/14/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
08/15/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
08/19/02	DET	<MDL	<MDL	<MDL	<MDL	<MDL
08/20/02	<MDL	<MDL	<MDL	DET	DET	<MDL
08/21/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
08/22/02	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL

Maximum	DET	6.8E+00	1.6E+01	6.5E+00	5.4E+00	6.5E+00
Average	5.5E-01	1.3E+00	1.4E+00	7.7E-01	6.7E-01	6.4E-01
# Sample	28	28	28	28	28	28
# >EQL	0	4	3	1	1	1
# DET	2	1	1	2	1	0
# <MDL	26	23	24	25	26	27

Only the higher value of each collocated pair was listed in the table.

<MDL results were factored in as MDL/2= 0.428 ng/m³

DET results were factored in as (EQL+MDL)/2= 2.17 ng/m³

**Table 6. Acephate Collocated Results
for Fresno County 2002**

Sample ID	Acephate			Sample ID	Acephate		
	(ng/m ³)	Ave.	Rel % D		(ng/m ³)	Ave.	Rel % D
FRS-AM-2	<MDL	<MDL	NA	THS-AM-14	<MDL	<MDL	NA
FRS-AM-2-C	<MDL			THS-AM-14-C	<MDL		
HES-AM-2	<MDL	<MDL	NA	CES-AM-14	<MDL	<MDL	NA
HES-AM-2-C	<MDL			CES-AM-14-C	<MDL		
SJS-AM-2	<MDL	<MDL	NA	WRS-AM-14	<MDL	<MDL	NA
SJS-AM-2-C	<MDL			WRS-AM-14-C	<MDL		
THS-AM-2	<MDL	<MDL	NA	FRS-AM-18	<MDL	<MDL	NA
THS-AM-2-C	<MDL			FRS-AM-18-C	<MDL		
CES-AM-2	<MDL	<MDL	NA	HES-AM-18	<MDL	<MDL	NA
CES-AM-2-C	<MDL			HES-AM-18-C	<MDL		
WRS-AM-2	<MDL	<MDL	NA	SJS-AM-18	<MDL	<MDL	NA
WRS-AM-2-C	<MDL			SJS-AM-18-C	<MDL		
FRS-AM-6	<MDL	<MDL	NA	THS-AM-18	<MDL	<MDL	NA
FRS-AM-6-C	<MDL			THS-AM-18-C	<MDL		
HES-AM-6	<MDL	<MDL	NA	CES-18-AM	<MDL	<MDL	NA
HES-AM-6-C	<MDL			CES-18-AM-C	<MDL		
SJS-AM-6	<MDL	<MDL	NA	WRS-AM-18	<MDL	<MDL	NA
SJS-AM-6-C	<MDL			WRS-AM-18-C	<MDL		
THS-AM-6	<MDL	<MDL	NA	FRS-AM-22	<MDL	<MDL	NA
THS-AM-6-C	<MDL			FRS-AM-22-C	<MDL		
CES-AM-6	<MDL	<MDL	NA	HES-AM-22	<MDL	<MDL	NA
CES-AM-6-C	<MDL			HES-AM-22-C	<MDL		
WRS-AM-6	<MDL	<MDL	NA	SJS-AM-22	<MDL	<MDL	NA
WRS-AM-6-C	<MDL			SJS-AM-22-C	<MDL		
FRS-AM-10	<MDL	<MDL	NA	THS-AM-22	<MDL	<MDL	NA
FRS-AM-10-C	<MDL			THS-AM-22-C	<MDL		
HES-AM-10	<MDL	<MDL	NA	CES-AM-22	<MDL	<MDL	NA
HES-AM-10-C	<MDL			CES-AM-22-C	<MDL		
SJS-AM-10	<MDL	<MDL	NA	WRS-AM-22	DET	DET	NA
SJS-AM-10-C	<MDL			WRS-AM-22-C	DET		
THS-AM-10	<MDL	<MDL	NA	FRS-AM-26	<MDL	<MDL	NA
THS-AM-10-C	<MDL			FRS-AM-26-C	<MDL		
CES-AM-10	<MDL	<MDL	NA	HES-AM-26	<MDL	<MDL	NA
CES-AM-10-C	<MDL			HES-AM-26-C	<MDL		
WRS-AM-10	<MDL	<MDL	NA	SJS-AM-26	<MDL	<MDL	NA
WRS-AM-10-C	<MDL			SJS-AM-26-C	<MDL		
FRS-AM-14	<MDL	<MDL	NA	THS-AM-26	<MDL	NA	NA
FRS-AM-14-C	<MDL			THS-AM-26-C	1.5E+01		
HES-AM-14	<MDL	<MDL	NA	CES-AM-26	DET	DET	NA
HES-AM-14-C	<MDL			CES-AM-26-C	DET		
SJS-AM-14	<MDL	<MDL	NA	WRS-AM-26	<MDL	<MDL	NA
SJS-AM-14-C	<MDL			WRS-AM-26-C	<MDL		

**Table 7. Methamidophos Collocated Results
for Fresno County 2002**

Sample ID	Methamidophos			Sample ID	Methamidophos		
	(ng/m ³)	Ave.	Rel % D		(ng/m ³)	Ave.	Rel % D
FRS-AM-2	<MDL	<MDL	NA	THS-AM-14	<MDL	<MDL	NA
FRS-AM-2-C	<MDL			THS-AM-14-C	<MDL		
HES-AM-2	<MDL	<MDL	NA	CES-AM-14	<MDL	<MDL	NA
HES-AM-2-C	<MDL			CES-AM-14-C	<MDL		
SJS-AM-2	<MDL	<MDL	NA	WRS-AM-14	<MDL	<MDL	NA
SJS-AM-2-C	<MDL			WRS-AM-14-C	<MDL		
THS-AM-2	<MDL	<MDL	NA	FRS-AM-18	<MDL	<MDL	NA
THS-AM-2-C	<MDL			FRS-AM-18-C	<MDL		
CES-AM-2	<MDL	<MDL	NA	HES-AM-18	<MDL	DET	NA
CES-AM-2-C	<MDL			HES-AM-18-C	DET		
WRS-AM-2	<MDL	<MDL	NA	SJS-AM-18	DET	DET	NA
WRS-AM-2-C	<MDL			SJS-AM-18-C	DET		
FRS-AM-6	<MDL	<MDL	NA	THS-AM-18	<MDL	<MDL	NA
FRS-AM-6-C	<MDL			THS-AM-18-C	<MDL		
HES-AM-6	<MDL	<MDL	NA	CES-18-AM	<MDL	<MDL	NA
HES-AM-6-C	<MDL			CES-18-AM-C	<MDL		
SJS-AM-6	<MDL	<MDL	NA	WRS-AM-18	<MDL	<MDL	NA
SJS-AM-6-C	<MDL			WRS-AM-18-C	<MDL		
THS-AM-6	<MDL	<MDL	NA	FRS-AM-22	<MDL	<MDL	NA
THS-AM-6-C	<MDL			FRS-AM-22-C	<MDL		
CES-AM-6	<MDL	<MDL	NA	HES-AM-22	<MDL	<MDL	NA
CES-AM-6-C	<MDL			HES-AM-22-C	<MDL		
WRS-AM-6	<MDL	<MDL	NA	SJS-AM-22	<MDL	<MDL	NA
WRS-AM-6-C	<MDL			SJS-AM-22-C	<MDL		
FRS-AM-10	<MDL	<MDL	NA	THS-AM-22	<MDL	<MDL	NA
FRS-AM-10-C	<MDL			THS-AM-22-C	<MDL		
HES-AM-10	<MDL	<MDL	NA	CES-AM-22	<MDL	<MDL	NA
HES-AM-10-C	<MDL			CES-AM-22-C	<MDL		
SJS-AM-10	<MDL	<MDL	NA	WRS-AM-22	<MDL	<MDL	NA
SJS-AM-10-C	<MDL			WRS-AM-22-C	<MDL		
THS-AM-10	<MDL	<MDL	NA	FRS-AM-26	<MDL	<MDL	NA
THS-AM-10-C	<MDL			FRS-AM-26-C	<MDL		
CES-AM-10	<MDL	<MDL	NA	HES-AM-26	<MDL	<MDL	NA
CES-AM-10-C	<MDL			HES-AM-26-C	<MDL		
WRS-AM-10	<MDL	<MDL	NA	SJS-AM-26	<MDL	<MDL	NA
WRS-AM-10-C	<MDL			SJS-AM-26-C	<MDL		
FRS-AM-14	<MDL	<MDL	NA	THS-AM-26	<MDL	DET	NA
FRS-AM-14-C	<MDL			THS-AM-26-C	DET		
HES-AM-14	5.1E+00	5.2E+00	4.1%	CES-AM-26	DET	DET	NA
HES-AM-14-C	5.3E+00			CES-AM-26-C	<MDL		
SJS-AM-14	4.1E+00	4.5E+00	15.7%	WRS-AM-26	<MDL	<MDL	NA
SJS-AM-14-C	4.8E+00			WRS-AM-26-C	<MDL		

Table 8. Acephate and Methamidophos Lab Spike Results

Sample ID	Acephate			Methamidophos		
	Expected (ng/sample)	Actual (ng/sample)	Percent Recovery	Expected (ng/sample)	Actual (ng/sample)	Percent Recovery
Laboratory Spike#1	300	255	85%	210	169	80%
Laboratory Spike#2	300	302	101%	210	196	93%
Laboratory Spike#3	300	328	109%	210	192	91%
Laboratory Spike#4	300	301	100%	210	170	81%
Laboratory Spike#5	300	242	81%	210	199	95%
Laboratory Spike#6	300	384	128%	210	203	96%
Laboratory Spike#7	300	357	119%	210	201	96%
		Ave.=	103%		Ave.=	90%

Table 9. Acephate and Methamidophos Trip Spike Results

Sample ID	Acephate			Methamidophos		
	Expected (ng/sample)	Actual (ng/sample)	Percent Recovery	Expected (ng/sample)	Actual (ng/sample)	Percent Recovery
FRS-AM-2-TS	300	316	105%	210	181	86%
FRS-AM-5-TS	300	279	93%	210	195	93%
FRS-AM-9-TS	300	299	100%	210	198	94%
FRS-AM-13-TS	300	278	93%	210	182	87%
FRS-AM-17-TS	300	295	98%	210	188	90%
FRS-AM-21-TS	300	329	110%	210	188	90%
FRS-AM-25-TS	300	353	118%	210	201	96%
		Ave.=	102%		Ave.=	91%

Table 10. Acephate and Methamidophos Field Spike Results

Sample ID	Acephate			Methamidophos		
	Expected (ng/sample)	Actual (ng/sample)*	Percent Recovery	Expected (ng/sample)	Actual (ng/sample)*	Percent Recovery
FRS-AM-1-FS	300	257	86%	210	117	56%
FRS-AM-5-FS	300	144	48%	210	122	58%
FRS-AM-9-FS	300	277	92%	210	121	57%
FRS-AM-13-FS	300	332	111%	210	125	59%
FRS-AM-17-FS	300	318	106%	210	152	72%
FRS-AM-21-FS	300	377	126%	210	122	58%
FRS-AM-25-FS	300	489	163%	210	160	76%
		Ave.=	105%		Ave.=	62%

*No Correction was made because all corresponding collocated sample results were below EQL.